PLANNING COMMISSION AGENDA

March 12, 2015

PLANNING COMMISSION MEETING – 7:00 P.M.

CITY OF MORENO VALLEY
City Hall Council Chambers
14177 Frederick Street
Moreno Valley, California 92553

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

APPROVAL OF MINUTES
1. January 8, 2015

PUBLIC ADVISED OF THE PROCEDURES TO BE FOLLOWED IN THE MEETING
(ON DISPLAY AT THE REAR OF THE ROOM)

COMMENTS BY ANY MEMBER OF THE PUBLIC ON ANY MATTER WHICH IS NOT LISTED ON THE AGENDA AND WHICH IS WITHIN THE SUBJECT MATTER JURISDICTION OF THE COMMISSION

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, in compliance with the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Mark Sambito, ADA Coordinator, at 951.413.3120 at least 48 hours before the meeting. The 48-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

NON-PUBLIC HEARING ITEMS

PUBLIC HEARING ITEMS

1. Case Description: PA13-0063 (Plot Plan)
P13-130 (Environmental Impact Report (EIR))

Applicant: Kearny Real Estate Company
Owner: Kearny Real Estate Company
Representative: Jason Rosin, Kearny Real Estate Company
Location: 17300 Perris Blvd (NEC of Perris Boulevard and Modular Way)
Proposal: A Plot Plan for the construction of a 1,109,378 square foot warehouse building on 50.68 net acres with the demolition of the existing warehouse facility. The project site is in the Moreno Valley Industrial Area Specific Plan 208. Approval of this project will require the review and certification of an EIR.
Case Planner: Claudia Manrique

Recommendation: APPROVE Resolution No. 2015-03 and Resolution No. 2015-04, and thereby:

1. CERTIFY that Final Environmental Impact Report (EIR), P13-130, for the Modular Logistics Center on file with the Community & Economic Development Department, has been completed in compliance with the California Environmental Quality Act, the Planning Commission reviewed and considered the information contained in the Final EIR, and the Final EIR reflects the City's independent judgment and analysis as provided for in Planning Commission Resolution No. 2015-03.
2. ADOPT the Findings and Statement of Overriding Considerations regarding the Final EIR for the Modular Logistics Center, attached hereto as Exhibit A to Resolution 2015-03.
3. APPROVE the Mitigation Monitoring Program for the Final EIR for the proposed Modular Logistics Center, attached hereto as Exhibit B to Resolution 2015-03.
4. APPROVE PA13-0063 Plot Plan, subject to the attached Conditions of Approval included as Exhibit A to Resolution 2015-04.

2. Case Description: PA14-0042 (Plot Plan)
PA14-0043 (General Plan Amendment)
PA14-0044 (Zone Change)

Applicant: Latco Enterprises

Owner: Jim Kimmel

Representative: Pacific Development Solutions Group

Location: Southeast corner of Eucalyptus Avenue and Edgemont Street

Proposal: General Plan Amendment from Commercial (C) to Residential 20 (R20) and Zone Change from Community Commercial (CC) to Residential 20 (R20) for development of a Plot Plan for a 112 unit apartment project on 6.63 acres. The project proposes 14 two-story buildings with a mix of 1 and 2 bedroom units and with covered parking to include carports and garages.

Case Planner: Jeff Bradshaw

Recommendation: APPROVE Resolution No. 2015-06 and thereby RECOMMEND that the City Council:

1. ADOPT a Mitigated Negative Declaration for General Plan Amendment application PA14-0043, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. APPROVE General Plan Amendment application PA14-0043 based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

Recommendation: APPROVE Resolution No. 2015-07 and thereby RECOMMEND that the City Council:

1. ADOPT a Mitigated Negative Declaration for Zone Change application PA14-0044, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. APPROVE Zone Change application PA14-0044 based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

Recommendation: APPROVE Resolution No. 2015-07 and thereby RECOMMEND that the City Council:

1. ADOPT a Mitigated Negative Declaration for Plot Plan application PA14-0042, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. APPROVE Plot Plan application PA14-0042 based on the findings contained in this resolution, and subject to the attached conditions of approval included as Exhibit A.

OTHER BUSINESS

STAFF COMMENTS

PLANNING COMMISSIONER COMMENTS

ADJOURNMENT

NEXT MEETING:
Planning Commission Regular Meeting, March 26, 2015 at 7:00 P.M., City Hall Council Chamber, 14177 Frederick Street, Moreno Valley, CA 92553.

CITY OF MORENO VALLEY
PLANNING COMMISSION
REGULAR MEETING

CITY HALL COUNCIL CHAMBER – 14177 FREDERICK STREET

Thursday January 8th, 2015, 7:00 PM

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF THE AGENDA

CHAIR SIMS – Okay Commissioner Barnes is absent today. It is an excused one; right? Okay, so for the Consent Calendar we have nothing on the docket. There are no minutes to approve. So we do have to do an approval of the Agenda, so I'd like to get a motion for that.

COMMISSIONER VAN NATTA – Move to approve the Agenda.

COMMISSIONER BAKER – I'll second

COMMISSIONER BAKER – Yes

COMMISSIONER VAN NATTA – Yes

COMMISSIONER RAMIREZ – Yes

VICE CHAIR LOWELL – Yes

CHAIR SIMS – Yes

CONSENT CALENDAR

All Matters listed under Consent Calendar are considered to be routine and all will be enacted by one roll call vote. There will be no discussion of these items unless Members of the Planning Commission request specific items to be removed from the Consent Calendar for separate action.

APPROVAL OF MINUTES

None

PUBLIC COMMENTS PROCEDURE

Any person wishing to address the Commission on any matter either under the Public Comment Section of the Agenda or scheduled items or public hearing must fill out a request to speak form available at the door. The completed form must be submitted to the secretary prior to the Agenda item being called by the Chairperson. In speaking to the Commission, a member of the public shall be limited to three minutes per person except for the Applicant for entitlement. The Commission may establish an overall time limit for comments on a particular Agenda item. Members of the public must direct their questions to the Chairperson of the Commission and not to other members of the Commission, the Applicant, the Staff or the audience.

NON-PUBLIC HEARING ITEMS

None

PUBLIC HEARING ITEMS

1. Case Description: PA14-0032 Tentative Tract Map 34544
   PA14-0033 Conditional Use Permit for PUD

Applicant:	Frontier Communities
Owner:	FH II, LLC
Representative:	Doug Stewart
Location:	North side of Cottonwood Ave. east of Perris Boulevard, Assessor Parcel Number 479-140-022
Proposal:	A Conditional Use Permit for a Planned Unit Development with a 72 unit condominium complex including common recreation areas and a Tentative Tract Map for Condominium purposes
Case Planner:	Julia Descoteaux

Recommended Action:

APPROVE Resolution No. 2015-01 and thereby:

1. **ADOPT** a Negative Declaration for PA14-0033, Conditional Use Permit for a Planned Unit Development in that this project will not result in significant environmental impacts; and,
2. **APPROVE** PA14-033 Conditional Use Permit for (PUD) based on the findings contained in this resolution and subject to the attached conditions of approval with no modifications included as Exhibit A; or

Recommended Action:

APPROVE Resolution No. 2015-02 and thereby:

1. **ADOPT** a Negative Declaration for PA14-0032 Tentative Tract Map 34544 in that this project will not result in significant environmental impacts; and,
2. **APPROVE** PA14-0032, Tentative Tract Map 34544, based on the findings contained in this resolution and subject to the attached conditions of approval with no modifications included as Exhibit A; or

CHAIR SIMS – So moving on to our Public Hearing Items. We have our one and only case for tonight.

PLANNING OFFICIAL SANDZIMIER – Mr. Chair, you may just want to ask for the record if there is any who has asked to speak on any non-agendized items.

CHAIR SIMS – Very good, is there anyone who like to speak on non-public hearing items? There are none, so nobody has submitted a request card to speak, so we'll move on to the Public Hearing Items, which the case description is PA14-0033 which is a Conditional Use Permit and Tentative Tract No. 34544, case number PA14-0032. The Applicant is Frontier Communities, so I'll ask Staff to give a Staff Report.

PLANNING OFFICIAL SANDZIMIER – I'd like to introduce Julia Descoteaux our Planner who has been the lead on this project and is going to make the presentation for you and we have the rest of our Staff is available to answer questions afterwards.

ASSOCIATE PLANNER DESCOTEAUX – Good evening Commissioners. I'm Julia Descoteaux and just for clarification before I begin, prior to the meeting you were provided with revised conditions of approval and they have the salmon color, but they also have the strike out, line out copy for your review as well. The Applicant, Frontier Communities has submitted applications for a Tentative Tract Map and a Conditional Use Permit for a Planned Unit Development, located on the north side of Cottonwood Avenue, east of Perris Boulevard. The site is 9.4 acres and zoned Residential 10, which typically includes multi-family attached products. The density regulation for R10 zoning calls for 8 to 10 dwelling units per acre. With the approval of the Conditional Use Permit for the Planned Unit Development, the City's Municipal Code provides the opportunity for development to vary from the strict code regulations allowing for a variation of housing possibilities with the City. It is the PUD flexibility which will allow this project to provide detached residential units within the multi-family zoning area.

The project as designed and conditioned will have between 72 and 76 units, which will be within the allowable density for the zone. The Tentative Tract Map covers the entire 9.4 acre site. The conditions of approval have been included to

provide improvements to Watson Way, providing a cul-de-sac for fire ingress and egress and a 24 foot drive aisle along the west property line for the Fire Division providing a connection from the interior upper streets to Watson Way. The Tentative Tract Map includes street improvements to Cottonwood Avenue and reverse frontage along Patricia Lane and Watson Way.

The proposed project includes a Conditional Use Permit for a Planned Unit Development. The purpose of the PUD again is to provide for specific development guidelines for this project while creating an innovation in housing developments, including a variation in lot areas, design and amenities not found in a standard housing tract. The proposed project provides detached housing with several housing styles that include multiple elevations and color combinations. The design includes two neighborhood parks with tot lot and recreation features. All driveways will be a minimum of 18 feet deep to allow for onsite vehicle parking with an HOA requirement that all garages be used for parking as well, with some on-street parking provided. Access will be to the site from Cottonwood Avenue, with circulation throughout the development. The project has been conditioned to revise the plans to include the cul-de-sac at Watson Way with fire ingress and egress. The site is currently a vacant lot that has been previously planned for a multi-family residential project that was not built. Properties to the north, east and west are all Residential 5 zoning with existing single-family development. Properties to the south include Office, and Residential 5 zoned properties with existing uses that include a Church, an industrial type facility and a Riverside County yard which has fueling facilities for County vehicles. The site is generally an infill site with existing development on all sides of the project. A Burrowing Owl Survey was conducted and no evidence of owls were found. A Traffic Study was not required as the project is below the threshold and no other additional studies were required. A preliminary Water Quality Management Plan was completed for the project to meet the requirements of a Regulatory Permit. During the improvement plan review the Applicant will be conditioned to provide a Water Quality Management Plan with all the details and calculations for construction. An Initial Study was completed and it was determined that the project will not result in a potential for significant impacts to the environment and therefore the adoption of a Negative Declaration is recommended.

Notification was sent to the property owners within 300 feet of the project, noticed on the site and in the Press Enterprise. To date I have had several residents contact me for information on the project and they are here this evening. As stated, the plans are conditioned to be revised to meet the City standard for Watson Way. Should the applicant agree to the conditions, Staff would recommend approval of the project. In the event they do not agree, Staff would recommend denial of the project.

This concludes my presentation and at this time the applicant is here to provide information for you. Thank you.

CHAIR SIMS – Thank you. Does any Commissioners have questions of Staff at this point?

VICE CHAIR LOWELL – I have a question for Julia. Could you repeat what you said about Watson Way?

ASSOCIATE PLANNER DESCOTEAUX – The condition has been placed on the project to provide a cul-de-sac at Watson Way with a fire connection to the site so that Fire can go in and out at Watson Way and also vehicles can turn around on Watson Way with a cul-de-sac.

VICE CHAIR LOWELL – Thank you. I just didn't hear you clearly.

ASSOCIATE PLANNER DESCOTEAUX – Okay

CHAIR SIMS – I have a question. As far as the cul-de-sac on Watson Way, is the cul-de-sac contemplated to be fully enclosed within the existing public right-of-way that the City currently at that's dedicated to the City, so there would be some change in the you know to be able to get a cul-de-sac within the existing right-of-way to meet whatever the minimums, so there would have to be some kind of a change in what would be a normal cul-de-sac or is it anticipated that a cul-de-sac would be built internally on the project, because you can't see with the drawings.

PLANNING OFFICIAL SANDZIMIER – The intention is that the existing right-of-way within Watson Way which terminates now as a dead end kind of square-offed condition, there is not a sufficient right-of-way within Watson Way to accommodate a cul-de-sac, so it would require land from the particular project that is before you to actually make way for that cul-de-sac condition. We do have Michael Lloyd from our Traffic group who is here who can answer any more specific questions about the cul-de-sac.

COMMISSIONER VAN NATTA – Excuse me, I think we skipped a step here when we got started. I need to mention that I have had several conversations with the applicant prior to this evening.

CHAIR SIMS – I have as well. I have spoken prior to the meeting with the applicant.

COMMISSIONER RAMIREZ – I have also for the record.

VICE CHAIR LOWELL – And myself included. I spoke with the applicant before the last meeting. I haven't spoken to him since.

CHAIR SIMS – Okay, any other questions of Staff at this point by the Commissioners?

COMMISSIONER VAN NATTA – Is there any drawing or plans or anything that would show how that cul-de-sac on Watson Way would affect the project?

PLANNING OFFICIAL SANDZIMIER – Not at this point. We have not seen that. We have previous versions of the project that had a knuckle condition and a cul-de-sac condition from a different kind of layout which shows there is some consideration of the kind of land that would be needed to make various transportation improvements, but for the specific cul-de-sac we've conditioned, no we have not.

VICE CHAIR LOWELL – Is the concern with the cul-de-sac along Watson Way for the emergency access external to the project or is that concern regarding emergency vehicles once they enter the project?

PLANNING OFFICIAL SANDZIMIER – The condition for the cul-de-sac is both. The emergency response that takes place along Watson Way and Birchwood. Currently emergency vehicles or large trash trucks or street sweepers, if they get down to the end of street and they come to the end of Watson Way they have to back out of that small neck on Watson Way and leave. The cul-de-sac condition would allow the larger vehicles to make a turn, so it does provide a benefit for emergency response or large vehicles that are not necessarily coming to the project, but in the event they do come to the project it does provide; accommodates them as well because they'll be a gate installed at that particular location.

VICE CHAIR LOWELL – Is it possible to achieve the same goal with a hammerhead turnaround internally on G Street as opposed to actually having a cul-de-sac?

PLANNING OFFICIAL SANDZIMIER – I would say that it is possible; that there is other alternative designs that could be presented to us and we have talked to the applicant and said that we would entertain those conditions. Our Traffic Staff has put together the conditions that we worked with them on that we shared with the applicant, because we know that the 28 foot radius configuration would work. We have not had the opportunity to kind of outline what a hammerhead condition and what the dimensions of what a hammerhead would be to make it work, but it is possible. We just have not looked at that. Michael Lloyd from our Staff and our Fire Staff are here that might want to add a little bit of information to that, but we don't have the benefit of any plans or drawings to know.

COMMISSIONER VAN NATTA – So with the project the way it is drawn right now, is there an access out to Watson Way? Is that one of the planned exits for the project or for fire or emergency vehicles?

PLANNING OFFICIAL SANDZIMIER – As configured now, if I'm wrong Julia, but there is no access to Watson Way. The condition would make the connection to

Watson Way work and that's why in our recommendation in the Staff Report is if the applicant is not willing to accommodate that particular condition, we would have to recommend denial because it would not be able to satisfy the two ingress and egress points for the development which is required for a development of this size. So it puts us in a position where we don't have the opportunity. If we don't come up with another alternate location, but we haven't vetted that.

CHAIR SIMS – So on a secondary access… I have two questions. My first question is what is the typical limits of Fire Department or traffic for large emergency vehicles to back up, because I seem to recall in a recent approval that came through, there was small… yes, I can't remember what the length of the access that the vehicle would be allowed to go in and have to back up. What's typically the standard on that?

PLANNING OFFICIAL SANDZIMIER – I'm going to defer to Adria or Fire Marshall and her Staff.

FIRE DEPARTMENT REPRESENTATIVE REINERSTON – Yes, for dead end streets the current regulation per today's Fire Code is 150 feet in which some sort of turnaround or hammerhead would have to be placed for new construction.

CHAIR SIMS – So the knuckle that is already existing on Watson a little bit further to the west of the property line, that is insufficient, so it doesn't look like that it's more than hundred fifty feet from the terminus of Watson, back into the knuckle that's at Watson, so a fire truck; that would be insufficient for them to do the maneuver to get turned around?

FIRE DEPARTMENT REPRESENTATIVE REINERSTON – It's hard to tell with the existing tract without having any conceptual drawings that would meet that condition, so our usual; you know the street widths have to be 24, the turning radius has to meet our templates and anything in today's construction would be 150 feet or less would be required to have some sort of turnaround. Applying that to the existing development on Watson Way, it would apply to the new project, but Watson Way would be grandfathered as per our regulations as to when it was built.

PLANNING OFFICIAL SANDZIMIER – I'd like add a clarification. I may have maybe misspoke a little bit. The large vehicles that would be turning around. The Fire Department, with the 28 foot radius, but also having the option to open the gate, gives them maneuverability. They still could… the distance between that gate and the area of Watson that you're talking about, I don't believe exceeds the 150 feet, but it is an accommodation. I understand the radius for a full fire truck to turnaround I believe is 38 feet. We're only requiring 28 feet. I believe that is one of the accommodations we're trying to make to work with the developer.

CHAIR SIMS – And my other question would be is on… so let me just clarify that. So where Watson terminates at the west boundary of the project property that is being developed is less than 150 feet, so we don't know whether or not that is sufficient or not for them to maneuver to do a three point turn or turnaround in. I guess I don't know if I heard the answer to that. I don't know if it's a yes. I heard it depends. I don't know if it was a yes or no.

PLANNING OFFICIAL SANDZIMIER – I don't know the answer to that I can tell you that the conditions existed for a long period of time, so the fact that emergency call-outs have probably occurred on that street and they are accommodating the emergency response in some capacity. The tract was built you know many years ago, so it is an existing condition today, so we don't have trucks that stuck down there, so somehow they'll be able to get out.

COMMISSIONER VAN NATTA – How many years has Watson Way been a dead end?

PLANNING OFFICIAL SANDZIMIER – We don't have that data.

COMMISSIONER VAN NATTA – Ever since it was built and the houses were built what in the 70's, 80's. Oh okay.

CHAIR SIMS – My second question on this was on the requirement for the secondary access. So the secondary access requirement; it's for emergency only. It's not to provide a secondary normal ingress/egress to the project. The main normal ingress/egress would remain off and I can't see what is it; H Street and Cottonwood; right?

ASSOCIATE PLANNER DESCOTEAUX – That's correct

CHAIR SIMS – So, even if there was a cul-de-sac that was built onto the project within the project proper at the end of Watson, there still would have to be some kind of a gate deal that would limit so that folks in the project wouldn't go through Watson or vice versa.

ASSOCIATE PLANNER DESCOTEAUX – That's correct

CHAIR SIMS – Okay

COMMISSIONER VAN NATTA – Okay, but if what you are looking for is a way for the fire truck to get out without turning around and you have a gate there, is there any reason why the fire truck couldn't just use the gate and exit on Cottonwood?

ASSOCIATE PLANNER DESCOTEAUX – That wouldn't create two points of access.

PLANNING OFFICIAL SANDZIMIER – For clarification, I think your question is if they are providing an emergency call-out to Watson Way or Birchwood, once they get down there could they open up the gate to this particular development and then go through the development to get out to Cottonwood. I guess the answer would be yes.

CHAIR SIMS – Any other questions of the Commission to the Staff?

COMMISSIONER VAN NATTA – And that wouldn't… okay I'm just still a little confused and that wouldn't provide a secondary egress for emergency vehicles on this project?

PLANNING OFFICIAL SANDZIMIER – It does. The cul-de-sac condition is also satisfying another interest for compatibility of a new infill development. We're looking at the ability to provide for a better interface between that existing development and this development and it also provides an opportunity to correct some deficient conditions on a public street, so the turnaround as I mentioned for vehicles like trash trucks, street sweepers and possibly small moving trucks and those sorts of things, we wouldn't want to be giving them access to the Knox box to be able to drive through this new development, so it is accommodating those sorts of trips, which will probably be a lot more frequent than an emergency call-out and so our Traffic folks are dealing with those sorts of calls and concerns on a daily basis and have been since that development has been in place and so this does provide the opportunity. When you are looking for a new development; an infill development in particular to try and address those conditions. It provides the opportunity for again some improved conditions between the new and the old.

VICE CHAIR LOWELL – So this is trying to rectify a 60 year old problem basically?

PLANNING OFFICIAL SANDZIMIER – In part; yes.

COMMISSIONER VAN NATTA – Okay, what I'm thinking of, the integration of an infill development with existing development, I'm thinking more of you know like an example that was brought up on another project. Someone was talking about that a tract was built that cut off an equestrian path and so the equestrian path stopped there and then started on the other side and it should had some flow through, but if by doing this accommodation here, we're not providing any kind of flow through or integration that way to where people would be crossing over from one development into the other. All we're doing is just allowing for vehicles to be able to make a turnaround more easily at the end of Watson Way. I understand.

CHAIR SIMS – I understand I guess I would tend to add onto that and just from I can see is… it would appear that what is happening here is the remedy of this thing is it still doesn't fix anything of the neighborhood to be able to circulate

between the old and the new because that's not the intent of the secondary access. It's strictly for public access. It is more for the City's benefit, for the fire and also for the trash and the municipal services rather than used for ingress/egress traffic that would benefit any of the property owners out here, except in the event if there was a problem on Cottonwood that would eliminate access to the project I suppose, then the private entities that live in the… the new people that live in this neighborhood they would want to get the lock box and open it up and it would be an emergency then.

PLANNING OFFICIAL SANDZIMIER – And you're absolutely right. That's exactly the way of articulating. We did give some consideration to a different solution at that location rather than having this Knox box type of gate control to actually maybe have an automated gate that the residents of this new development would have an opportunity to use their remotes and get out of the gate. We believe that would present a greater impact on the residents on Watson Way and so we would recommend against that. So we're trying to satisfy the interests. Now down the road it does provide the opportunity having this condition that should this new development run into some problems with the single access off of Cottonwood, a reconfiguration of the gate to something like I just described could be a solution. If you don't accommodate it now though it makes it difficult to have that sort of remedy down the road.

VICE CHAIR LOWELL – I had a couple of questions to keep going along the same avenue of thought. We're talking about secondary access. Is this project going to be required to have two points of access, because Cottonwood seems to be the only point right now?

ASSOCIATE PLANNER DESCOTEAUX – Yes they are required to have two points of access.

VICE CHAIR LOWELL – And Watson appears to be the only point of access that we're looking to possibly grant secondary access?

ASSOCIATE PLANNER DESCOTEAUX – That's correct

PLANNING OFFICIAL SANDZIMIER – Two points of access to satisfy emergency response.

VICE CHAIR LOWELL – I was just talking about actual residents

PLANNING OFFICIAL SANDZIMIER – You were just talking about residents. The residents are going to have one single point of general access which would be off of Cottonwood. There is an exit only gate that also exits out at that location, so there are two gate conditions.

VICE CHAIR LOWELL – Right off of that little entry, cul-de-sac type of circle.

PLANNING OFFICIAL SANDZIMIER – Right. There is two points of ingress and egress; ingress 1 and egress with two locations at that front entrance for fire emergency access. The exit off of Watson Way is important because that other exit gate does not satisfy the Fire Department's requirement. There is an option that we did talk with the developer about access to Patricia Lane, which is a public street.

VICE CHAIR LOWELL – I was just going to ask that

PLANNING OFFICIAL SANDZIMIER – But we have not vetted that fully because of the configuration of Patricia Lane, which as you can see on the map there, has some interesting curves going on. There is a lot C, which is a pedestrian paseo that goes through for the development. We could possibly be able build off that. We did talk to the developer about that and we believe that if they want to look at or explore that option, that is something that we could work with them on down the road, but the conditions as stated in the resolution for Watson Way are something we know can work, because we've looked at it. The stuff on Patricia Lane, we do not know about it and in good conscious I couldn't stand here before you tonight and I don't believe our Traffic Staff or our Fire Department Staff could say it would all work without impacting the development even more, possibly losing more lots.

VICE CHAIR LOWELL – And it would be problematic to project G Street to Cottonwood? It already fronts Cottonwood and that would be a secondary point of access. The far west property line; the north/south street against Cottonwood, next to lot 29 and 38.

PLANNING OFFICIAL SANDZIMIER – That would be another option and we talked about it a little bit and I think it was actually brought up the night we talked about continuing this item. There are some issues with the Church activities on the south side of Cottonwood that is currently possibly parking in the existing neighborhood. I'm not sure how they're walking there; maybe across the dirt lot, but the concern was any additional access point you put off into Cottonwood into this development could see some and I'll call it parking poaching or something coming from the adjacent Church, so we tried to steer away from that.

VICE CHAIR LOWELL – Correct, but this is a gated community, so that gate would nullify that concern I believe.

PLANNING OFFICIAL SANDZIMIER – That's a possibility; yes.

VICE CHAIR LOWELL – My second comment is there is small gap just to west of this property. I think it's about three or four houses wide. It's between the improved area next to Perris and Cottonwood and this project. There are already residential houses there, so the odds of getting those four homes to improve the right-of-way that is on the rear lot line is pretty negligible. I don't think we're

going to be able to get them to do that. Could we condition this project to fill in the last four feet of asphalt and curb and gutter that little stretch of road? I think that would greatly improve the traffic flow there.

ASSOCIATE PLANNER DESCOTEAUX – Yes, I'll defer to Land Development to answer that question for you.

TRANSPORTATION DIVISION ENGINEER LLOYD – Good evening Chair and Commissioners. Condition TE1 is structured and it's addressing Cottonwood Avenue and I'll read in part, "improvements to Cottonwood Avenue shall connect to the existing street improvements, for example curb and gutter, pavement etc. to the west of the project", which I believe addresses the infill condition in that you just described.

VICE CHAIR LOWELL – So that condition says "any improvements to the roadway shall be per City standards or as approved by the City Engineer. Improvements to Cottonwood Avenue shall connect to the existing street improvements i.e. curb and gutter, pavement etc." There are no curb, gutter and it's just edge of asphalt. The road is full width right up against Perris and then to east of this project is full width and right in front of this project and about 200 feet to the west of it the road tapers down to one lane, so it's a bottleneck right here and if they were conditioned to tie into the existing improvements, it'll remain a bottleneck.

TRANSPORTATION DIVISION ENGINEER LLOYD – There was a Capital Project just recently completed where improvements were made just to the west of the homes that you are referring to. There is a vacant lot on the northeast corner of Perris and Cottonwood, which extended the curb and gutter and pavement, so…

VICE CHAIR LOWELL – Correct. I was referring to that gap between that set of improvements and this property.

TRANSPORTATION DIVISION ENGINEER LLOYD – Correct, so the intent of the condition and maybe it was not worded in the best manner, but the intent of the condition was to connect from this project frontage and fill in the gap to where the Capital Project that was recently completed, fill in that missing portion.

VICE CHAIR LOWELL – I think we should try to reword that condition TE1 to better state that, because it doesn't read that way, but I appreciate it because I that what I was hoping to do because there is that stretch of road that since it is already developed, it will never get filled in.

LAND DEVELOPMENT ENGINEER SAMBITO – Mr. Commissioner, if I could, Mark Sambito, Land Development Division Manager. LD condition 85a, addresses it a little bit more clearly than our counterparts over in Transportation.

Any missing off-site improvements from the project's westerly properly line, west for approximately 215 feet shall join the existing improvements, which are mainly east of Perris Boulevard, so we think we're talking about the same thing about filling in that gap.

VICE CHAIR LOWELL – That's exactly it right there. As a point of clarity, we have two sets of conditions here. One is for the Conditional Use Permit and one is for the tentative. I assume there is a lot of overlap between the two. Is there other conditions in here that are only in one set of conditions? It is kind of hard to read through both of these since we were given them about half an hour beforehand.

ASSOCIATE PLANNER DESCOTEAUX – The Planning conditions will be different on both of them and the remaining Staff's conditions will be the same.

VICE CHAIR LOWELL – Thank you.

COMMISSIONER VAN NATTA – Can you expand a little bit on the A and B gaps on the north side exactly what is intended to happen there.

ASSOCIATE PLANNER DESCOTEAUX – Currently those are connections to… they are gated connections to the private streets to the north, however the applicant will have the opportunity to keep those in and they have been conditioned to work with the property owners with reciprocal access or they can close them off and redesign the northern portion of the lots because they would not be required for fire access.

COMMISSIONER VAN NATTA – Okay, so there is no concern with those being dead end streets from that direction then?

PLANNING OFFICIAL SANDZIMIER – There is still concern with regard to the lack of a turnaround if that is what you're asking about, however the difference is those are private streets and Watson Way is a public street and our Traffic Staff for all candor here would probably ideally like to see a turnaround condition put on those streets as well, however we recognize that does put additional burden on the applicant and we're trying to make sure that we try to minimize the burden on the applicant and so we're giving them the option the way the conditions are written. If they want to keep those access points there, the conditions that you have before you do actually require the turnaround. If they eliminate lots A and B, the requirement for the turnaround goes away. So it's their choice. We're not mandating it.

COMMISSIONER VAN NATTA – So they could just eliminate those lots and build houses there.

PLANNING OFFICIAL SANDZIMIER – They could eliminate the lots and possibly pick up a lot or they lose it in order to accommodate Watson Way. That's what we've talked to them about; yes.

COMMISSIONER VAN NATTA – Okay, what about having a fire access. They couldn't have a fire access out onto the private street then?

PLANNING OFFICIAL SANDZIMIER – I'll let our Fire Marshall address that.

FIRE DEPARTMENT REPRESENTATIVE REINERSTON – Our concern with that is as stated. Those are private streets, which means they are not mandated to be maintained, so they would not be publicly maintained to a condition where our fire engines and fire trucks could rely on them as our secondary access point.

CHAIR SIMS – I have one last question on this Watson, G Street… I think its G Street interface. Has anybody looked an actual… like a hammerhead actually work, so instead of having to build a cul-de-sac, if it's simply just for municipal use and emergency, will a hammerhead fit in there? Is there the geometrics available for a hammerhead?

ASSOCIATE PLANNER DESCOTEAUX – The geometrics I would think is there, but we haven't seen a plan that shows that.

CHAIR SIMS – Any other questions by the Commissioners?

COMMISSIONER VAN NATTA – I'm sure I'll have more once we talk to the applicant.

CHAIR SIMS – Alright, so I guess we're ready to hear from the applicant then.

APPLICANT ROWBERRY – Good evening. My name is J.B. Rowberry, here representing Frontier Communities and we are grateful that you have taken the opportunity to have this meeting today. We're very excited for his project. We currently own this and three other pieces of property in Moreno Valley. We're looking for more. We love the community. We love the area and we're very excited to work with the City to continue to build and improve various areas in the City. We have been working with Staff on this project for a long time.

Our first submission I believe was in June of last year on the map and we have been working with them… there has been a lot of work put in by the Staff and by us. We've gone back no less than six times to our engineer to redesign this project and the map to go ahead and comply with different conditions that we have received after discussing with the Staff. We've tried to be responsive to all of them and unfortunately we find ourselves here tonight without a map that actually complies with the conditions of approval that have been given to accompany it and I'd like to point out that I think that we are very interested in

moving forward with this and I think there are four areas in the conditions or approval that if we make modifications to, we can go ahead and have consistency between the conditions of approval and the map and we can be responsive to all of the items that have been raised by Staff tonight and that have been discussed between the Planning Commission and Staff.

The first one you've already discussed and that is the Watson Way cul-de-sac. We believe with a gate there, that it satisfies all the emergency access requirements and neither a hammerhead nor a cul-de-sac is required because of the outlet that is available through the main entrance off of Cottonwood. We believe that that provides an excellent throughway for fire access coming from either direction. We also think there are a handful of those conditions by the way. I do have a list with revised conditions if you're interested in taking a look at those now or at any point during the night and it simply puts the access gate there so that fire can come through. We don't think… we think that that community; that neighborhood is in a good condition. At these meetings we've had the opportunity to interact with many neighbors and they enjoy their neighborhood as it exists today and I think creating any type of a throughway there or anything that may impact traffic would be negative for that neighborhood.

The second item that we have is throughout the conditions of approval it talks about the interior streets and it talks about the map clearly and for as long as we've been dealing with this project we have been anticipating private streets on this project. The conditions of approval at various points apply the standard of public streets to the private interior streets. We would ask that although we do meet the width requirements of the public streets; the code for public streets as well as some of the other engineering facets of them, we would ask that we not be held to the public street standards. A couple of those items for your information that we are concerned about is my understanding is the public code requires six foot sidewalks. We contemplate by our map and always have four foot sidewalks. The code also may apply to have sidewalks on both sides of the street. Our site map has and currently contemplates sidewalks on one side of the street in several locations. Also the code would apply a parkway standard so there is grass or trees along the side of the street. The nature of this community is such that the streets front the homes and the standards require that there is a tree in each yard. Those act as a parkway along the streets and so there are a handful of those conditions that we would ask be reworded so that although we meet the engineering requirements and width requirements of the public streets, we're not burdened by the additional requirements of the public streets in this community at the density that it has.

The third area is actually a change that was made just yesterday to the conditions of approval and it is regarding the density to the project and the credit for density. The TUMF and City standards both apply saying that if there is a project in excess of 8 units per acre that it is a multi-family for purposes of determining the fee credits. Staff yesterday included a condition that states that

for purposes of those fee credits, this project shall be considered single family, even though that contradicts both TUMF requirements as well as the City code. We would ask that condition be reversed so that it states very clearly that for TUMF purposes as well as for purposes of the City credits, that this is a multi-family project.

The final aspect to go ahead and conform the map to the conditions of approval is regarding the right-of-way improvements that we are planning to put between our project and Perris Avenue on Cottonwood. Those are the items that you've been discussing recently. We are absolutely planning on putting those in. One of the issues that we have though is it appears in the right-of-way there may be some electrical poles or other items and in the event that there is additional right-of-way required to put those improvements in, we would ask that we not be required to acquire that or deal with adjacent property owners to go ahead and acquire that extra land. Pay for the improvements, we have no problem with that. We're actually excited to do that. We think that it will be a good addition to that area and the community as a whole.

Those four areas I think are the key to getting this map approved so that we can put those issues to bed. We feel that it addresses the fire access. We feel that it addresses the quality of the community with the interior streets and the trees in each of the yards with the density and credits as well as the right-of-way improvements that we will be putting in-between our project and Cottonwood. I'm sorry and Perris on Cottonwood. I'm happy to answer any of the questions that you may have about this. We will plan to… we would love to move forward and begin this project as soon as we can.

VICE CHAIR LOWELL – You said that you have specific conditions that you would like to revise. If it's okay with the rest of the Planning Commission, can we talk about the specific items and how you would like them revised?

APPLICANT ROWBERRY- Absolutely.

VICE CHAIR LOWELL – Now is the time to do it. If we wait…

APPLICANT ROWBERRY – I have a handout. Would you mind if I provided you with the paper handout for the conditions?

VICE CHAIR LOWELL – By all means

COMMISSIONER VAN NATTA – But these would all… what you summarized in the four items, these are just to clean up the details that would apply to those four conditions?

APPLICANT ROWBERRY – That's correct. We can walk through them right now. I'm happy to do so. We've spent a considerable amount of time since last

Friday when we received the first conditions to go through these and make sure that the conforming changes are made in each of the conditions of approval from each of the departments. The first one is and I've grouped them topically on the page that you see before. The Watson Way cul-de-sac requirement is covered in the CUP Planning Commission conditions; condition 18. The language that I've included on my sheet simply removes the condition that the cul-de-sac be placed on our property but maintains the requirement that the emergency ingress and egress be granted so that the project can maintain that emergency access. TE2 also was essentially the same condition requirement of the cul-de-sac so we've requested that be deleted. The Tentative Tract Map Planning condition no. 9 was substantially similar to the CUP Planning condition 18 and you'll see the language is very similar; the revised language. LD74c was a right-of-way dedication for the extension of Watson, so we've requested to have that one deleted and for fire; the condition about the two access areas, we included that and made sure that it was clear that as long as there was access from Watson Way or another public road that condition would be satisfied.

VICE CHAIR LOWELL – You said LD47c is talking about Watson. That's actually referring to Patricia.

APPLICANT ROWBERRY – One moment, I'm sorry

PLANNING OFFICIAL SANDZIMIER - It should be Patricia. We talked to them yesterday about that and it was correct. It should be Patricia.

VICE CHAIR LOWELL – Because in the conditions, it shows Patricia.

CITY ATTORNEY EARLY – That's a change from the original. If you look at the red lined white copies, you'll see that is the b and c changed. He might be referring to the original.

APPLICANT ROWBERRY – I'm sorry, I was referring to the original.

COMMISSIONER VAN NATTA – So there wouldn't be a necessity to delete.

APPLICANT ROWBERRY – I think it would 74b. Hang on one second and let me go ahead and double check the revised conditions. 74b now on the orange copy reads, the appropriate street right-of-way dedication for the extension of Watson per City standard plan and the cul-de-sac at the mid street terminus north of Cottonwood per City standard plan or as approved by the City Engineer. As we're requesting that that cul-de-sac no longer be required, we would request the deletion of that condition and the replacement of that with the language that we've included on that paper.

VICE CHAIR LOWELL – Does Staff have any comment on these items?

COMMISSIONER VAN NATTA – Let's let him finish go through all his things.

APPLICANT ROWBERRY – Shall I continue to the next topic?

VICE CHAIR LOWELL – I was just wondering if you want do each item as you on the list because these items are all for the same topic.

COMMISSIONER VAN NATTA – However you want to do it.

APPLICANT ROWBERRY – Shall I continue with the next topic? Fair enough. The next topic is interior streets and this first Traffic condition number 7, I've included a simple carve-out at the end that it will include but not be limited to street widths and structural sections and curb and gutter, but have carved out that it's not applicable to the width of the sidewalks, the location of the sidewalks or inclusions of parkways or landscape requirements. Traffic 11; this is for cut-outs typically found at the corners of public streets. The site plan does not contemplate cut-outs for any of the interior private streets and so I have changed that condition number 11 to reflect that there will be no cut-outs required for the interior private streets, although we are putting cut-outs you can see off of Cottonwood at the main entrance. You can see the corner cut-outs that are required and that we will complying with for the public street access and turn-in into the private community.

COMMISSIONER VAN NATTA – That may have also been on an earlier one because it is not showing here on the salmon colored one.

APPLICANT ROWBERRY – I'm sorry.

COMMISSIONER VAN NATTA – Yes, currently they're the TE11 on the salmon and the TE11 on yours are identical.

APPLICANT ROWBERRY – I think the difference is I added the word public streets and public driveways to my condition as opposed to the original which reads the project plan shall demonstrate that sight distance at proposed streets and driveways. It now reads public streets and public driveways so as to not be applicable to the interior private streets.

COMMISSIONER VAN NATTA – Oh I see

VICE CHAIR LOWELL – You already have a radius. You already have a curve on each of the corners, so what's the difference? It's a curve versus a straight line. You're arguing over a couple square feet of land.

APPLICANT ROWBERRY – We may be, we want to make sure that there is conformity between the plan and the conditions and we're very hopeful to move forward with the plan that we have and so we think it is a safe condition in the

way that we have it, but we're hoping not to have is another redesign of the plan after so many. We feel that we've been responsive to the safety concerns and to the other requirements and I'm not suggesting that we're not going to square the corners. That's not the intent. The intent is that there is a very specific engineering standard for the cut-outs that is not technically being met by those curved corners and we suggest that it should not be required considering they are private streets in the community.

VICE CHAIR LOWELL – Well I guess my question is what's the damage of having the actual corner cutback versus a curved corner? It doesn't... unless you're trying to get a square footage per lot. I mean that's…

APPLICANT ROWBERRY – I think it may impact the building envelope for each of the homes and it also will probably decrease the amount of front yard open space for the corner lots. We think that space is better left to the discretion and use of the homeowners rather than as the cutout. The next condition in Land Development 42a… again the only difference there is that it clarifies that it's public streets on that first line; corner cutbacks on all public streets and Land condition 74e, the same thing, corner cutbacks on public streets and CUP; the Conditional Use Permit Planning Condition 37b and c, these are requirements for trees that would not apply considering that the front yards already have a separate requirement in that same condition to include a tree in the front yard. So it will seem as if as though there is already a parkway with trees based on the front yard trees being included, but there shouldn't be a separate requirement for those trees. I believe the other condition c is one that lists the number of trees that need to be put into Patricia Lane on the reverse frontage there, but it conflicts with a condition on the next page. I can find that number for you and so we wanted to make sure that again the conditions of approval were not contradictory and consistent with each other, so we deleted that one and kept the one on the following page. I can tell you right now what the number is for the tree condition for the reverse frontage. The standard is one per 40 feet.

VICE CHAIR LOWELL – I don't understand what you're arguing on that point.

APPLICANT ROWBERRY – I'm sorry on the…

VICE CHAIR LOWELL – 37b and c

APPLICANT ROWBERRY – Hold on… so it has a tree requirement for a parkway. Hang on, let me pull it up. So street trees shall be provided every 40 feet on center in the right-of-way. Well there is no right-of-way here because they are public streets. I'm sorry they are private streets.

VICE CHAIR LOWELL – But there is a right-of-way. You have Cottonwood and Patricia.

APPLICANT ROWBERRY – Correct and those conditions are separate from this. So let me tell you where that is. On P39, street trees planted every 40 feet on center shall be installed on the right-of-way on Cottonwood and the reverse frontage area of Patricia Lane and Watson Way and be shown the project landscape plans. And so the conditions in 37 appear not to be that same condition and we didn't think they were applicable to the private streets.

ASSOCIATE PLANNER DESCOTEAUX – It was the same condition. It can be clarified. Street trees are required every 40 feet in the right-of-way and then the one tree in every yard.

VICE CHAIR LOWELL – Yes, it's the same condition, so you're asking us to remove a duplicate condition, but it doesn't matter because there are lots of duplicate conditions in here.

APPLICANT ROWBERRY – We did not read it as a duplicate condition.

VICE CHAIR LOWELL – There is no right-of-way on the private streets, then it's a moot point.

APPLICANT ROWGERRY – If that's the way that it reads.

VICE CHAIR LOWELL – You're saying its private streets, so there is no public right-of-way so that wouldn't apply to the interior private streets.

APPLICANT ROWBERRY – Fair enough. We were concerned with all the other conditions that treated our roads as if they were the private roads as if they were right-of-ways. This would be condition that would be applied the same way.

VICE CHAIR LOWELL – And c you said; P37c you're saying trees every 30 feet could be clustered. What's the problem with that condition?

APPLICANT ROWBERRY – It appears contradictory with the other conditions.

VICE CHAIR LOWELL – No, because one is referring to the right-of-way and one is referring to the non-right-of-way.

ASSOCIATE PLANNER DESCOTEAUX – The 30 feet is in the 20 foot setback that you have along Cottonwood only.

APPLICANT ROWBERRY – And 39 does not refer to that?

ASSOCIATE PLANNER DESCOTEAUX – 39 is talking about only the street trees.

APPLICANT ROWBERRY– Fair enough if I've misunderstood it.

VICE CHAIR LOWELL – Those do argue with one another; 39 and 37c argue.

APPLICANT ROWBERRY – They appeared to, to us.

ASSOCIATE PLANNER DESCOTEAUX – We can clarify it. The intention is to have the street trees and then have additional trees in the 20 foot setback area and then on-site they only have the one tree in the yards. It is not in addition to any street trees within the development.

APPLICANT ROWBERRY – We are pro trees. We're happy to put the trees both in the right-of-way and the reverse setback area and the front yards.

COMMISSIONER VAN NATTA – I have to admit the P37…

CHAIR SIMS – I mean just sitting here listening to all this. I find all this a bit troubling myself as I've never been for two years been in a situation where there is this massive confusion at a point of trying to get an entitlement. It seems like I think we talked about this at the last meeting that we were rushing to get this thing through and I don't really know what we're trying to approve. I mean we've got two pages of changes to the conditions and I don't know what we're really getting ourselves into. This is one of those deals where it seems like there should be more time that the applicant needs to work with the City to bring to the Commission an agreed upon project. It doesn't seem like we have satisfaction here.

VICE CHAIR LOWELL – I think that what Staff was referring last time.

COMMISSIONER VAN NATTA – Well it seems to me like the longer they work on it the more conditions are added to the project that weren't there initially.

CHAIR SIMS – I don't know that answer because I haven't had those discussions, but I just think it inappropriate that it's almost a negotiation at the Planning Commission on what the conditions should be. It seems like…

COMMISSIONER VAN NATTA – I don't see that that's necessarily a problem. I think the Planning Commission is here to help resolve disputes between an applicant and the Planning Department, not to simply let them work everything out and us to just rubber stamp something that they've worked out. If they're not able to come to an agreement, then we're here to make that happen.

CHAIR SIMS – I guess what's troubling to me is there is technical issues here that are very fundamental to yield to the project to public safety that aren't figured out yet that go core to the configuration of the tract and I don't know if it's… you know street trees here and there or a sidewalk here or there or a corner cutback; that's non-substantive in my personal opinion, but the access and core conditions that would affect yield of the project to the good or bad to either the developer or

the City, seems like that's a fundamental thing that should be better sorted out prior to getting to the point of approval. That's just my opinion.

COMMISSIONER VAN NATTA – I would like to hear Staff's response to these requests from the Applicant.

PLANNING OFFICIAL SANDZIMIER – Sure, just with regard to the process and the Chair's comments and the other Commissioner's comments. In an ideal circumstance we would have a map that actually matches the interest of the applicant and the Staff together. We are in a position where we've been working very hard and the applicant's team has been working very hard. I want to give respect to the applicant's team because it has been a lot of work that has been done. The best way to do this was to draft the conditions to ensure that both interests were going to be met. There was not enough time to actually develop a new map and so that's why you are seeing more conditions and massaging to the new conditions all the way up to this time. Now with regard to the specific comments on the requests of the applicant, I believe I'd be happy to answer them, but this is a public hearing and I think for the interest to the public hearing, I think what we need to do is we need to open up the public hearing and hear the public testimony because it may actually shed light on these issues in a different way and before we take a position on that, I would like the benefit of my team to hear what the interests of the community are that we may not be aware of. That would be my request.

CHAIR SIMS – Yes and also I think we're still going through you're…

APPLICANT ROWBERRY – I don't think we've quite finished. There is just a couple more.

CHAIR SIMS – We haven't got to page 2 yet

APPLICANT ROWBERRY –Yes, Tentative Tract Map, Planning condition 28. This was the one that said despite the density qualifying for multi-family for both DIF, credit as well as TUMF, the project would be considered single-family. This was raised; it was given to us yesterday as an add-on condition and we don't understand the purpose for it. The code we feel, as well as the TUMF enabling ordinance should stand on their own. I'm not really sure how it ended up in the conditions of approval. If it is there at all it should be consistent with the code and with the enabling ordinance. And the right-of-way LD4; this is the requirement that we acquire any right-of-way necessary for those improvements. We believe the right-of-way, as does the City in our discussions, we believe that the right-of-way exists in the proper dimensions to build these improvements, but in the event that we are short by a minor amount, we would expect that we not be required to enter into a negotiation with a private land-owner in order to secure the small area of land required to build to full width for example or to move for example the utility poles. And you know, I do think that we had submitted a

map…we spent upwards of six figures on simply the engineering plans for the map. We've spent almost seven months working with the City to try and get this moving forward and the last time we were here and talked to the Staff we had mentioned to them that you know with or without their recommendation for approval that we wanted to come to Planning Commission to show that we have taken care of the access, the safety, with the map that we currently have and typically the way that would work then is the conditions would be set to the map that we submit and a recommendation would be given, but in this event; it's the first time I've ever seen it, Staff has decided to give conditions that do not; are not consistent with the map and I guess a duel recommendation if then. What we're trying to do is simply return the conditions to a state that matches the map and we feel we can do that with four simple ways; change the conditions regarding the cul-de-sac on our property; two, change the condition requiring the private streets internally to be considered in all ways public streets because they are not; third, make sure that we don't over-ride any ordinances regarding density and fourth, make sure that if we are a foot or inches short on the land that the project not be held up while we negotiate with a third party to complete those improvements.

CHAIR SIMS – Thank you. Alright, so we'll open it up for the public hearing portion for comments. We would ask the comments to be limited to three minutes each. We have the first up is Pete Bleckert.

SPEAKER BLECKERT – My name is Pete and we own property on the south side of this project, which is heavily industrial. One condition I would like you to try to put on there is that they notify all the owners of these homes that there is heavy industrial and the County's yard being there with fuel tanks and all the other heavy industrial that is being used across the street, so we don't wind up like it was before where you have people complaining after they move in, well I didn't notice it was over there. So I would like to see a condition or something that they have to notify every homeowner that there is a problem. That was all grandfathered in way before this was ever a City.

And the second thing is I want to be notified or a condition of whatever it takes on the electricity, because we've got 440 power going in there and it's on their side of the street and that means there is going to be transformers or whatever they have to do. It is going to be some type of construction that they are going to have to put in there to accommodate our power, so I need to know or work with them or whatever they want to do to generate our concern of how it is going to affect our property, because with 440 power, it's not just like any others where you just underground a small line, you've got to come in there with some heavy transformers and what have you that is hanging up on the poles. Now that will probably have to be on our side of the road and I'd like to know what and when. I've asked for that from your Planning Department and they have no clue what is going to come there, so those are my two concerns. I'm not concerned about them building the project, it's just that I want to make sure that it's well

conditioned that they one being like I said it has already been a problem, that nobody tells anybody that there is a pre-existing heavy industrial across the street from them on the south side of the road and I want to make sure everybody knows that who is moving into that project and also on the Edison for power. So, those two I would to see somehow that you protect our side of the properties that we own. Thank you.

CHAIR SIMS – Kathleen Dale is the next speaker.

SPEAKER DALE – Thank you. Kathleen Dale. Is there any possibility of getting some indulgence on the three minutes, maybe to five minutes considering how long things have dragged on?

CHAIR SIMS – Try to keep it no more than five minutes please.

SPEAKER DALE – Thank you. My name is Kathleen Dale. I'm a lifelong resident of Moreno Valley. I have a 34 year career as a Planner and an Environmental Consultant. Normally I wouldn't be here tonight but my friend Laurie got involved with an issue with a project just like this, that was recently before you at Perris and Cactus and so I came over here to see what this one was about and while I was out here, I ran into one of the neighbors and when I got to speaking with him it was clear he needed a voice because he couldn't voice to you his concerns in a technical manner that needed to be done, so that's why I'm here; not just to stir up trouble as some people might think.

A general comment on the noticing of this. I know the hearing was continued, but the Agenda materials were only posted on Tuesday sometime between 11 and 4, and then now you've got new conditions of approval that you guys have been discussing and it's really confusing to try to follow that, when we don't have copies of it and I mean there are lots and lots of loose ends and I know that there is at least two residents on the north that are here tonight that are very concerned about this project and they really deserve the courtesy of being able to see those conditions and what this map actually looks like with all these changes that are being talked about before it is approved. The concern on this one is the same thing with the Perris and Cactus and I mean I don't think the project should not be approved, but there is more work to be done, particularly on the north boundary because there really has been no respect shown to the existing residents on the north side. The PUD process laid out in your code specifically requires that projects consider the perimeter conditions and I just want to read it to you. Planned Unit Developments may deviate from the Site Development standards set forth in the applicable zoning district regarding lot area, lot dimensions, lot coverage setbacks and building height. Any such deviation shall be the minimum. One of the required conditions of approval for PUD's is that the setbacks around the exterior of the Planned Unit Development shall be compatible with any adjacent residential developments. That's in 903060h and then there is some provisions in other parts of the development

code compatible is defined and elements to be considered in the evaluation of compatibility includes style, mass, bulk, size, use, occupancy, improvements, characters, scale, texture, color and other principals of design. And then in the residential development standards, besides the standards that are in the table, there are special standards and in the R10, R15, R20 and R30 districts, special requirements is buildings exceeding one story in height shall maintain a minimum building setback of 50 feet from any single family district. Single story has to have a 20 foot setback. Well, Mr. (?) property on Bencliff, just to give you an example. I don't know if you can put the exhibit up, but his property sides on to this. The interface condition that is being created is he is having three properties back on to him. He is basically going to have a two story house, 15 feet off his front yard, 15 feet off his house and 15 feet off of his back yard and I don't think by any stretch of the imagination that is compatible. There are some issues with the CEQA document. The air quality exclusion refers to an obsolete Air Quality Management Handbook and all of that aside, the grading plan shows there is 20,000 yards of input for this and 40,000 odd yards of over-excavation. So just that amount of earth-moving and the 1,200 to 2,000 trucks that are going to come in to bring that dirt in. That's enough to warrant an evaluation of the construction air quality period impacts as well as the traffic and noise impacts along that Hall route. Also there is two big above ground storage tanks. If anybody actually went out to the site, just across Cottonwood and those create both a fire and explosion hazard. There is HUD evaluation method to address whether or not there is an adequate setback or whether barriers are needed to protect both structures and people from that hazard. And then I guess; I'm sorry there are some issues with the conditions. The mandatory conditions for PUD's don't seem to be included. That is in the PUD code as well and there is lots of other stuff too if I could have more time. I appreciate it.

CHAIR SIMS – We've given you an extra two minutes. Thank you. Okay, Jeri Roberts is our next speaker.

SPEAKER ROBERTS – I'm Jeri Roberts. I did speak on several occasions trying to get the information to us so that we could actually review this information. I live north on Tacoma. It has been said several times in there that… interesting, I didn't get any of these additions that were given to you guys tonight. I asked for some of them before I came here. I asked them to email them to me. Understanding that they just requested that you guys approve that these are going to be private streets and therefore no longer up against City regulations about things, sidewalk sides, this and that, because they weren't going to be private streets and you are still requiring two exits for fire. Their plan is to cut off my street; dead end it; put a wall up there. I have no other way; one way off my street. I thought the new regulation said we had to have two ways off of our streets. They are talking about houses that have been there since 1956. I'm still required to update all kinds of codes. Laws change. We have to be able to do that. I'm still required to pay my taxes, but they're going to be allowed to put in because it is a private street; that is my understanding I just understood, but they

are not going to be made to provide for my safety because I'm a private street. On Watson Way, it was opposed that they were going to do a turnaround so people could get off there safely, but now they don't have to. That's their request that they don't have to do that. We were talking about several families who can't get off our streets if you allow this project to go through as it is planned right now. They have the option. We don't have a plan to look at. We don't have anything in our hands to go through to see what it is going to look like and they have the ability to just block off our exits with only one way off of our street. I'm not sure if you can answer that for me. Can you answer that? It is still required that they have two ways out of the project?

CHAIR SIMS – I don't think we're at liberty to try to answer these questions right now.

SPEAKER ROBERTS – You can't, okay, alright, can we postpone this please? That's my request.

COMMISSIONER VAN NATTA - Can I ask the speaker a question?

SPEAKER ROBERTS – Sure

COMMISSIONER VAN NATTA - Is Tacoma a dead end street now?

SPEAKER ROBERTS – Tacoma is a street that has been there. I've lived on it since '73. It has never been a dead end street. It was never finished. There was a wheat field when I moved there in '73, so it was never planned as a dead end street. Allowing a brick wall to go up there would make it a dead end street. I was under the understanding that the City was not going to allow that to happen any longer. The last project they had, had hammerheads put in there; not bad, but right now, you put in a brick wall at the end of my street. We have no access to the fire hydrant that is there. There is no sewer access to where it's at. Our street drains off into that field. They put up a burr there when they did the weed abatement over the summer. The houses flooded at the end because the burr was allowed to be put up. They tried to say it was the neighbors. I was there that day. It was the guy who was doing the weed abatement, pulled all that dirt up at the end of our street. We used to put the trash cans down there. That's what we did to try and stop people going out in the field and dumping trash, garbage and stuff like that. Would I like to see it developed; yes. This one just doesn't work for me. There are too many things that are just… sidewalks on one street and not on the other.

COMMISSIONER VAN NATTA – That answered my question. Thank you.

SPEAKER ROBERTS – Thank you.

CHAIR SIMS – The next speaker is Lori Nickel.

SPEAKER NICKEL – Hi. Lori Nickel. Gee I thought my situation was bad on the 11th of December. What I really want to encourage to you as Planning Commissioners and as you serve the residents as well as coordinating with Planning Staff, as projects come before you that may be coming only to you and circumventing Council, that there is an added burden on your shoulders to get the best possible project out there and since… I'm going to be frank with you. I filed an appeal over the December 11th and you know what is really great, the developer and I are really working well together and we may have a far more superior product that comes out to benefit their investor, benefits the neighbors, benefits the City of Moreno Valley.

What I don't like is when somebody comes in and they are trying to fit a square peg in a round hole, having you make exceptions for them. They knew what the size of the property was, but the thing was they kept saying about how they worked with Staff; the developer; how they worked with Staff. They had an obligation to work with these residents. They've been there longer than I've been at my home 30 years and Pete is probably than that, but you know you are here to serve the residents as well and encourage a good product, a good outcome, so that there aren't problems down the road, so residents aren't forced to put out 750 dollars for an appeal to get the benefit of Council; City Council to look at it and they are an elected representative for their district to see what is being put in to their district. So that's one thing I want to really hopefully have you think about, because it is their burden to work with the residents. You know, like I said, I've been working with the developer. He's been at my home. We are doing really well. Staff has been kept apprised and we've come up with something that as I said it is probably going to be a much better thing and it is just because you know they don't live here; developers; we live here, so we know how the traffic is. We know where people go; the routes; all of those things, so the residents know what they are living with and I want to just say the one thing about the knockdown fire gates. Who is going to enforce the parking that the vehicles aren't… from those tracts aren't parked in front of that gate?

CHAIR SIMS – Thank you your comments. You have exceeded your time.

GRACE ESPINO-SALCEDO – We have no more speakers.

CHAIR SIMS – Okay, no more speakers then, so I guess we can close…

PLANNING OFFICIAL SANDZIMIER – Before you close the public hearing, you may want to allow the applicant an opportunity to rebut. I believe that is allowed in the…

CHAIRS SIMS – Would the applicant like to come up?

APPLICANT ROWBERRY – Thank you. We have been listening at the Council meeting to the residents. That's the main reason we're here tonight because the

recommendations that we received from the Staff were to put in a throughway from Watson Way to Cottonwood and that was not in the residents best interest and we moved forward with that. Since that time we've been informed by the City that the two streets to the north are in fact private streets and that in order to connect to them there is a significantly different process and procedure than there would be if those streets were public and while we would love to come in and basically you know improve everything surrounding our community and redo the streets for everybody, it's simply outside the scope of this project. We have not impacted by our project the adjacent communities, the traffic flow, the access. None of that has changed based on our development plan. The map that we put forward is consistent with the objectives that the City is looking for and although I guess there perhaps is you know some perfect way to do the community, we think that this current plan; the plan that we've submitted is a very good plan that is an excellent area and opportunity for people in Moreno Valley to have a home at a very reasonable price and in an excellent area, but the fact remains that we don't think there is any connection between us developing our project and the transportation needs of the surrounding streets that have been without dual access for 50 plus years. Again we are asking that the map be approved with the slight revisions that were included on the two pages of revised language for the conditions of approval tonight.

CHAIR SIMS – Okay, with that we close the public hearing. We'll open it up to the Commissioners for questions.

COMMISSIONER VAN NATTA – Actually I'd like to have a response from Staff on the four items of concern that the applicant brought forth on the conditions of approval, so can we get a response from Staff on that.

PLANNING OFFICIAL SANDZIMIER – Sure, let me take a shot at a couple of the planning ones and then I'll defer to Julia on a couple of the other planning ones and then our technical staff. Starting on the second page of the applicant's request. On the density credit, the condition P28 which has to do with TUMF and DIF fees. We had a lot of dialogue with the applicant on this one. We actually reviewed the TUMF regulations and we reviewed the DIF fee regulations and what we reflected in the condition was to provide the clarification, because the applicant has consistently wanted to pay at the multi-family rate. It is a lower rate, but it isn't consistent with the regulations, so we can support the suggested language that the applicant came up with, which would be to modify condition P28 to strike the words at the end that say "the per unit fee for single family" and replace that with "as dictated in the respective program regulations". I think that would be consistent. I think we're saying the same thing and just let the regulations speak for themselves. That would be our recommendation there. With regard to "Other" under condition P26, where they'd like to change it to "prior to issuance of building permit, the tract map shall be recorded". Our recommendation was for it to be "prior to the issuance of grading permit". I would say that we'd like to stay with the grading permit because we would like the map

to be recorded before you do anything else. If you allow the grading to proceed and they get to the point of building permit and there is something wrong or materially wrong with the tract map, you've kind of lost your opportunity, so it's better to do it earlier before the grading actually occurs, so I would recommend that we stay with the grading rather than building permit. With regard to the first condition on the Watson Way cul-de-sac, I am open from a planning standpoint to work with the applicant to identify the second appropriate access point.

We want to recognize that there has to be access point somewhere; Watson Way like I described earlier in the discussion was the appropriate location. This particular language is key. I think it requires some input from our other technical staff from Traffic because all of the conditions he has listed under there on Watson Way is going beyond just P18. I would like to point out that one of the public speakers who indicated they have 34 years of planning experience. I appreciate what she said with regard to identifying the PUD regulations and I think she reiterated what we tried to say in the Staff Report, which is we are looking for compatibility between this new community and the old community and so we believe as I indicated earlier that the cul-de-sac condition on Watson Way does actually meet that standard. We did look at it very carefully; all the things that she indicated are important and we believe that we are complying with that in the conditions that we presented, so with that I'd like to defer to our Traffic Staff; Michael Lloyd to discuss the interest from a traffic standpoint and then I'll defer to Adria in Fire with regard to eliminating the cul-de-sac and just leaving it as a gate, so I'll start with Mike.

TRANSPORTATION DIVISION ENGINEER LLOYD – Good evening. Michael Lloyd with Transportation. With regards to condition TE2, which deals with the cul-de-sac on Watson Way, it's our position that it's our preference that we still would request or would like to request a cul-de-sac at the end of the current dead end situation. We believe it serves a purpose. We also believe that the intent when the roadway was dead ended as it currently is, that it would be extended at some point in time through this tract. They're not proposing a project to do so, which we're not opposed to, but we believe the solution to meet the original intent is to provide the cul-de-sac so that we have some means to provide a turnaround for trash pickup or street sweepers, delivery trucks; those types of vehicles. That is the intent of the condition and that's why we requested it and that's our position. With regards to TE7 which deals with the interior streets, I think we have some flexibility in terms of sidewalks.

The Municipal Code and I'm looking at it right now. The Municipal Code states for private streets that sidewalks shall be required to be constructed in conjunction with private streets unless it is determined by the approving body to be unnecessary, considering the design of the development. Sidewalk construction shall be in accordance with City improvement standards. This is from the Municipal Code, so I would suggest that it would be prudent for those areas where we have sidewalks recommended that it meets our current City

standard. In areas where they are not proposed, it is consistent with the development. I would further go along that the way the Municipal Code is structured, it is talking about curb to curb widths and sidewalks. There is no discussion about right-of-way because it's a private street and parkway is outside the discussion that is provided within the Municipal Codes, so we're not talking about parkways. There is no request as part of conditions at least from Transportation. There is no discussion of parkways. There is no expectation of parkways where we are talking about curb to curb width of the private street as well as where or where not there are sidewalks, so I would be open to modifying condition TE7 as the applicant has requested, however I would request that we would strike the phrase "shall not apply to width as sidewalks" because that's not consistent with our Municipal Code. TE11 is dealing with site distance. This is a safety issue. I'm not opposed to the way it's currently proposed; public streets and public driveways, however given the current map, we basically only have three "T" intersections onsite as it is currently shown. Site distance deals with those types of conditions intersections; the "T" intersections onsite. I think it's wise and prudent that the applicant go ahead and try to accommodate the site distance at those locations, however I'm willing to accept the proposed change that we further refine it so that it states public streets and public driveways. And I believe those were the requests that were made of Transportation.

LAND DEVELOPMENT ENGINEER SAMBITO – Mark Sambito, Land Development. With regards to Watson Way, LD74c, for the reasons that Transportation stated, Land Development does support the City Traffic Engineer's recommendations for again the same reasons for the cul-de-sac. With regards to LD42 and LD74, as Michael had stated, it's our understanding that the Municipal Code, Section 914.020 indicates that even though the streets are private, that the geometrics and the design standards meet our City standards, so that would include a six foot wide sidewalk. The width; there doesn't seem to be a question about the width, the geometry, grades, as long as those all meet our City standards, we're very happy with it. And the elimination of LD4. We do not support the elimination of that. The purpose of that is that in the event that the project has any offsite needs for right-of-way or easements or some sort of reservation, whether it be Cottonwood, whether it be Watson or any of the other streets, possibly Patricia. We don't know where we're going yet, that the developer make every effort to obtain that right-of-way or easement or access as necessary to build whatever improvements that they're proposing. If they are unable to obtain that, then they would fund the City's effort to go after through an administrative process to try to acquire the right-of-way or access for that improvement that is proposed, but as Mr. Sandzimier indicated, we don't yet know exactly what the details are for some of those connection points, so it's slightly vague in the sense that we don't know where, if at all, there is going to be a need for more public property right-of-way or what have you. So we do not for that reason do not support it because if they are unable to through some design, obtain the right-of-way or dedication that is necessary you know, it leaves the

project short. They didn't do what was required and then it puts the burden on either the residents or the City. Thank you.

ASSOCIATE PLANNER DESCOTEAUX – Conditional Use Permit, condition P37 b and c. We can certainly clarify that to the street trees are required on the public streets and the interior streets. The private streets would only have the one tree per yard.

PLANNING OFFICIAL SANDZIMIER – And if I could ask Adria to look at F1.

FIRE DEPARTMENT REPRESENTATIVE REINERSTON – In regards to the applicant's correction to F1, I don't have any particular issue with the language that is presented here because it address the need for our two access points and does address the two public street potentials, however it would be my recommendation as has been with other Staff to provide that turnaround for Watson Way as it gives emergency vehicles and non-emergency vehicles much better access to Watson Way while maintaining a flow through for the new development with meeting our secondary access as well.

CHAIR SIMS – Have you got all that?

COMMISSIONER VAN NATTA – Yes somewhat. It kind of left me confused on a few points and additional questions. If there were a cul-de-sac at the end of Watson Way, would that necessarily eliminate some of the… it probably would. I guess the question is how many units would that eliminate in this project?

PLANNING OFFICIAL SANDZIMIER – Without the benefit of some plans we did try and work that through with the Applicant to talk about what the opportunities might be if you lost some lots. We believe that you will probably lose I think lot 38 and 29 if I remember them correctly in that location. You've got to remember a requested condition for a 24 foot easement between where the Watson Way connection and G Street occurs and the streets to the north part of the tract, so there could be some encroachment on the lots there. The applicant had looked at that condition before and had picked up the room by a smaller rec area, so there is some areas in the public open space where they pick up some lost land and then also the elimination of lots A and B give them the opportunity to pick up a lot, so that's why our Staff Report indicates that the likelihood is it will not result in 76 units but shouldn't result in anything less than 72. So the original project they were going to bring here I think had 70, 71, 72. Those were different versions. When we eliminated the knuckle, that was the first opportunity for applicant to try to squeeze as many lots onto the site as possible, so that's where they got to the 76. Yes, they can look at it say they are losing some lots based on the highest number of lots that were ever envisioned out there now, but most of the time what we've been looking at was a development that had about 72 lots and we think they'll end up with 73 maybe. So they'll lose some but I think they're still going to be at or higher than what they originally proposed.

COMMISSIONER VAN NATTA – Which brings me to another question and that is an exit only on Watson Way for the residents to avoid coming out on Cottonwood Avenue on a Sunday for example.

PLANNING OFFICIAL SANDZIMIER – Are you saying you'd like to see that opportunity?

COMMISSIONER VAN NATTA – I'm saying was that an option?

PLANNING OFFICIAL SANDZIMIER – It's always an option at this point if there is an opening at Watson Way, however we have not vetted what the possible impact could be to that adjacent neighborhood. We don't know how many trips would want to take that route rather than going out at Cottonwood, so not knowing that, we wanted to make sure that we satisfied the emergency access requirement rather than opening up the other issue. Now once the development is in place; say it's been operating for six months or a year or maybe longer and we start recognizing that the residents themselves are complaining that hey you know if would be beneficial if I could get out onto Watson Way on occasion, then we may be able to go back in if we developed it with the cul-de-sac and a gate condition to possibility retrofit it with an appropriate gate that opens for them. So I don't think we lose that opportunity but instead of putting it up front, I think putting it up front maybe has more downsides than we vetted.

COMMISSIONER VAN NATTA – But then if Watson Way is going to be the approved exit or secondary access for emergency vehicles, then what is the purpose of leaving lot c?

PLANNING OFFICIAL SANDZIMIER – Lot c is a pedestrian paseo. It satisfies the open space requirement for a PUD.

COMMISSIONER VAN NATTA – Okay

PLANNING OFFICIAL SANDZIMIER – The PUD is required to have a certain amount of square footage per unit. I believe it is 300 square feet per unit of common open space and then they have 150 square feet of private open space and lot C satisfies the common open space or part of the common open space.

ASSOCIATE PLANNER DESCOTEAUX – And also the connection to Patricia. It's a walkway; pedestrian.

COMMISSIONER VAN NATTA – The pedestrian walkway at this point, so it sounds like that some of these things would not be a problem to accommodate the applicant on and some of the things are still…

CHAIR SIMS – On the map if lots A and B, that would be the ends of Bencliff and Tacoma, so if those are as proposed go away; those lots, it looks like there is a

sewer that comes down out of those two streets that is going to be picked up, so would the idea there I would assume that's an Eastern Municipal Water District, so how wide is that. I guess the question would be is how wide is the easement and in fact could that land really be recaptured into the creation of an additional lot?

LAND DEVELOPMENT ENGINEER SAMBITO – Land Development again. The EMWD easement is 20 feet or twice the depth and according to EMWD staff, it would make that easement along the westerly property line approximately 22 feet wide.

CHAIR SIMS – Lot A is 30 feet wide and Lot B is 30 feet, so you're saying you only pick up 8 feet then essentially?

LAND DEVELOPMENT ENGINEER SAMBITO – That's correct. It's 20 foot minimum or twice the depth if it is larger.

CHAIR SIMS – So the second question is, is there any flexibility in the row of lots 1 through 11 with the additional 16 feet that you would pick up to squeeze another lot in there?

LAND DEVELOPMENT ENGINEER SAMBITO – We'd have to ask the developer's engineer on that.

CHAIR SIMS – So if I understand the… what we're looking at here, the conditions are set up to do a secondary access the way the conditions are written is to be at Watson. There is no flexibility to put… the conditions are written such that it's Watson and if it's not Watson… if the cul-de-sac thing really doesn't work for us to move over and do something off of Patricia for the secondary access.

PLANNING OFFICIAL SANDZIMIER – Yes and we discussed that with the applicant and the reason we stuck with the Watson Way conditioned as it is, we were very clear with the applicant that in all circumstances, we would still be requiring a condition that had a cul-de-sac on Watson Way because that is a public street, so they lose land on Watson Way, because of the Watson Way cul-de-sac and if they made a connection onto Patricia Lane, we told them very clearly you are going to lose additional lots, so we thought it was in your best interest to try and work with us to find the solution on Watson Way. It doesn't preclude them from going back to Patricia, but I think it's going to have a bigger impact. Now at the discretion of the Planning Commission this evening, the cul-de-sac on Watson Way may not be the requirement and maybe the lots they might lose go away, but again I think we made it pretty clear that Staff's recommendation has been to maintain the cul-de-sac and so in any case, they'll probably lose some lots if you support our recommendation.

COMMISSIONER VAN NATTA – Okay moving onto the interior streets being private and I was listening to what was read about that where it said that… it's kind of like it sounded like you said you don't have to have sidewalks if the development does not call for them, but if you do have sidewalks, they have to be six feed wide? Was that kind of summary of it?

LAND DEVELOPMENT ENGINEER SAMBITO – That would be a very good summary. We need to maintain the City standards per the Municipal Code. The current standard for sidewalks is six feet wide. It doesn't talk about what side of the street or how many sidewalks each street has. What would give Staff a higher level of confidence is if the applicant could more readily address ADA accessibility and path of travel. That would certainly go a long way to help Staff support their request for one-sided sidewalk.

COMMISSIONER VAN NATTA – So the ADA requirement would be the six foot wide then?

LAND DEVELOPMENT ENGINEER SAMBITO – The current City standard for all sidewalks is six feet wide; for all public sidewalks.

COMMISSIONER VAN NATTA – Is that also the ADA requirement or is that just City?

LAND DEVELOPMENT ENGINEER SAMBITO – I believe that it meets the ADA requirements. That's correct.

COMMISSIONER VAN NATTA – So if they had like sidewalk on one side of the street throughout the development that would suit...

LAND DEVELOPMENT ENGINEER SAMBITO – I'm sorry. Was there a question?

COMMISSIONER VAN NATTA – No he just commented that the ADA was five feet. I guess my question is that comparing this in my mind to a similar development that is alongside Nason and Fir and I'm trying to remember from seeing that as many times as I have, how they solved the same solution and I don't recall that they have the six foot sidewalks there.

LAND DEVELOPMENT ENGINEER SAMBITO – The City standard for sidewalk widths did change about three years ago; about three years ago. It used to be five foot wide and the City standard has been updated to six foot wide.

COMMISSIONER VAN NATTA – Okay, and so that even on a private street if you're going to have a sidewalk you want it to meet City standards.

LAND DEVELOPMENT ENGINEER SAMBITO – Yes ma'am. That takes into account street furniture, lights, what have you and still provides for the ADA access.

COMMISSIONER VAN NATTA – But in a development such as this, it could be determined that sidewalks aren't even necessary.

LAND DEVELOPMENT ENGINEER SAMBITO – That's correct.

VICE CHAIR LOWELL – Going down that same avenue, on condition TE7, the way the applicant suggested to revise it on the white sheet, first page, the very last line of TE7 says, "Interior streets shall be designed and constructed per City standards or to the reasonable satisfaction of the City Engineer". I don't think the word reasonable should be in there. That adds vagueness. I think it should be specific to the satisfaction of the City Engineer.

TRAFFIC DIVISION ENGINEER LLOYD – I would agree with that. Thank you for pointing that out.

VICE CHAIR LOWELL – In a situation like this, the tentative site plan that we have in front of us shows some of the housing islands have a complete circle of sidewalk on all four sides. On the southern block from lots 22 to 38, it looks like there is a complete encompassing sidewalk. Then you move up to the next middle row of houses and there is only sidewalk on the southern property line, lots 39 to 49, so there is sidewalk on both sides of E Street and if you move up to the next street; D Street, there is only sidewalk on the northern portion. There is sidewalk along B Street along the southern side of C Street. It seems very; it doesn't seem uniform throughout the project. It looks like we're accommodating sidewalk on all four sides on one block, one side on one block and three sides on the other block. It seems not continuous. I would like that to be more homogenous throughout the entire site. It just seems like there is a lot of work that still needs to be done and this project is before us, with a whole bunch of questions about conditions. They have a map that doesn't match any of the conditions. It just seems like we have half an item here and it seems like when Staff last month recommended us to postpone this item to a date certain, being the fourth Thursday of January, it seems like the Staff was right on point that this project needs a little bit more time to cook and that the applicant made a very good faith effort to get something in front of us but it's not quite there, so I have doubts on this project. I really like this project. I want to see it go through. It just seems like there are some key issues that still need to be addressed.

COMMISSIONER RAMIREZ – I agree with Commissioner Lowell. I think we have something in front of us that is specific that addresses the rules and regulations that City has of standards. We definitely want something that has the most updated standards. We heard the residents here tonight. Some of them spoke. I'd like to see a cul-de-sac on Watson. Personally I think it's necessary

there. But I do need to see some answers for space A and space B with regards to what we're going to do as far as another private street. Are we going to do a cul-de-sac there? Are we going to do a hammerhead or we just going to block it off? I mean all that's pretty much in the air. This whole project is pretty much very vague and up in the air, so like I said I agree with Commissioner Lowell.

COMMISSIONER VAN NATTA – When we last spoke about the site, it seemed as though everything else had been worked out to everyone's satisfaction except for that knuckle off of Watson Way going out to Cottonwood, which we didn't like because of the extra exposure to Cottonwood and now we're back here looking at you know a bunch of other questions, brought up a bunch of other conditions added on that I don't recall were there before and I still have a question on the calculation of the TUMF and DIF fees. I mean there seems to be some disagreement about whether this should be treated as multi-family or single-family residential and you're suggestion about just saying that make it consistent with the code without answering what the code calls for, leaves me kind of up in the air about that, so is it eight units or more and considered multi-family or is it less than eight units and considered single-family.

PLANNING OFFICIAL SANDZIMIER – Let me answer that. The DIF fees are specific to the product type, which is single-family detached units. We spoke with the applicant, is it well we're in a multi-family zoning district and we made it very clear and we showed them where in DIF fee study that was done, the background information on the assumptions that were made, were based on product type; single-family detached units falls into this particular category. The TUMF program; we are a passer. We collect the TUMF so WRCOG would have to rule in on how they want to determine or calculate those fees, but our interpretation of the TUMF program and regulations we read also show that it fell into the single-family category. It has been a point of contention with the applicant. We recognize that it is a cost issue for them and they have wanted to not maybe specify it but then they also said let's have some clarity in what we're going to be required for this project, so we put this in as a clarification in that measure. They had asked also to change the timing, so if you look at the revised condition, we were revising the condition anyways to identify an actually a delay or deferred timing, so we were clarifying timing and the type of fee that needed to be collected, so if this project is developed next week; it's clear if it is developed two years from now; three years from now, Staff turns over; there is no question. Everybody knows exactly what was intended.

COMMISSIONER VAN NATTA – Now, okay, maybe it's the just the… (Inaudible) we're talking about, but this is a condominium project right?

PLANNING OFFICIAL SANDZIMIER – It's a condominium project, but in the context of real estate and condominiums you can also have a condominium development that has single-family homes. It would be a condominium single-family unit type of development. It doesn't have to be an attached product. A lot

of people believe that a condominium product is always an attached product and in a multi-family zone here in the City and I think Julia did a good job articulating the Staff Report that it's the PUD guidelines within our regulations that allow for us to deviate from that housing type to let us work with the developer who told us very clearly the market isn't looking for attached product. The market is looking for single-family detached in this price point and we believe that this is the type of development that will work well in Moreno Valley and we support that. That is what we've come up with. That is what this development is all about.

CHAIR SIMS – Well I tend to agree with... You guys said this half hour ago or so. I totally agree with Commissioners Ramirez and Lowell that there is a lot of work that still needs to be done. There is fundamental issues that result in very significant cost consequences to the developer depending on this issue with Watson Way. It just seems that it's fundamental to the project that needs to be decided and it's hard for me to make a decision personally without seeing the alternative on something this fundamental as this. I thought there would have been an exhibit showing the impact of the cul-de-sac or not and to kind of vet this out and we don't have that, so it's hard to make a clear decision on this. I guess I would look for some direction is you know if we proceed to go down and vote for this with the conditions as presented to us by Staff, we'll have a decision yes or no by the Planning Commission or is there an opportunity to look at postponing and give it another two weeks or whatever an appropriate amount to get this right for full vet by the Commission.

PLANNING OFFICIAL SANDZIMIER – We have done everything in our power to try and have item before you this evening so that you can take an action. It was the direction we took from the last meeting and we've done everything we possibly could to do that. That is why you have the conditions structured the way they are. We believe that it's meeting the interest of the applicant to have the timely decision, so you have everything before you we believe to make a decision, but what you would have to do is you would have to ask the applicant how much time would be required for them to produce the exhibit that shows what the physical impact on the site is. We asked them to do that and they indicated they did not want to make any more changes to the map. They wanted to go forward with the map that you are seeing here this evening and we told them clearly that without the benefit of a revised map, nobody knows exactly what's going to happen, so the only thing we can do is draft these conditions and it's going to be up to the discretion of the Planning Commission to decide if that is enough, so I would say if you can ask the applicant how long it would take them to produce a revised exhibit that matches the conditions we've asked, then you would have maybe the benefit of the exhibit maybe you need, but I don't if that is going to be two weeks or a month. I really don't know.

CHAIR SIMS – Before we ask the applicant that, I'm just trying to go through the scenarios here if we call for the motion and we approve… you know if it is approved, then the project doesn't meet perhaps the needs of the applicant, so

there is potential for an appeal going down that path. If we deny the project, which would and I say that. I guess I've got myself confused, but it's like a conundrum in either case. If we go with Staff's recommendation the applicant perhaps doesn't achieve their desired goals. If we adopt City Staff then it is vice versa, so it's kind of a conundrum.

PLANNING OFFICIAL SANDZIMIER – If I may address the options that you laid out there. Staff recommendation would not be to have a denial. It is one of the options that you have before you, but if you deny the project I would expect that the applicant would appeal that decision to the City Council and the City Council would then be making the decision, which is almost the same thing as if you continue the item. It is going to require another hearing anyways and so I would be recommending either work through the conditions this evening and take an action or do a continuance, but I would not be recommending a denial. I think the project has a lot of merit. I think a lot of the comments this evening are stating that the City needs product types like this. We believe that it could be a good fit for the community, so I don't want to see the project not happen. I still like to see us work through it.

COMMISSIONER VAN NATTA – I kinda have some opinions. I usually do. Okay, what I'm seeing here as far as compromise between what the Staff has come up with on their conditions of approval and the objections that the applicant had to some of those conditions, that one of the big things we're looking at is Watson Way and what is going to happen with that, because if Watson Way ends up being a cul-de-sac, the construction of a cul-de-sac is going to make a strong change in the project and yet Watson Way has been a dead end there for 50 years or more and…

CHAIR SIMS – We need to take a five minute break because I guess the computers are goofy. We've got technical issues.

COMMISSIONER VAN NATTA – Technical issues?

CHAIR SIMS - Sorry, right in the middle of your…

COMMISSIONER VAN NATTA – Right in the middle of my thought… okay

CHAIR SIMS – If you could hold those thoughts, we'll take a five minute break.

COMMISSIONER VAN NATTA – I'll hold those thoughts for five minutes and come back.

CHAIR SIMS – So, we'll take a five minute break. Okay, we're back in session from our recess. So, Commissioner Van Natta…

COMMISSIONER VAN NATTA – Mr. Sandzimier, I had a question. When we were talking about P28 on the TUMF fees and you said you were okay with changing the end of that, instead of saying per unit for single-family, you said per regulation or per something.

VICE CHAIR LOWELL – I believe your words were as directed in the program regulations.

COMMISSIONER VAN NATTA – As directed…

VICE CHAIR LOWELL – in the program regulations. That's what I wrote down.

COMMISSIONER VAN NATTA – Okay, thank you.

CITY ATTORNEY EARLY – He said as dictated is what I have

VICE CHAIR LOWELL – Ah, dictated, yes, that's what I have too.

PLANNING OFFICIAL SANDZIMIER – I was trying to reflect what I thought the applicant's representative said too. Just make it consistent with the regulations. That was what I was trying to reflect.

COMMISSIONER VAN NATTA – As directed by the program regulations? That says the same thing. I put dictated; okay as dictated. I'd like to discuss here as my suggestion and then you guys can all dispute it with me if you like. I would recommend approval subject to the conditions as modified in a couple of items; the condition of approval under CUP P18 be as modified by the applicant in the paper that he gave us for that cul-de-sac instead of having a cul-de-sac there, having access to the property through a gate for emergency access. Now the reason that I say that about Watson Way as well as the two private streets is that those have been the end of the road on those streets for many, many, many years. It's not like it was just developed last year and was intended to go through. They have been that way since before this was the City of Moreno Valley and as one of the speakers even mentioned on Tacoma, that they've even blocked that street off themselves with trash cans and so forth so that people wouldn't drive through there and use that vacant field for a trash dump and we've seen this on other applicants for other projects too, where the existence of a vacant lot is sometimes more troublesome to a neighborhood than having it developed even if the development means that there is no longer access to that lot or access on that side there, so that was there before we even put together a General Plan for the City of Moreno Valley. I don't see any problem with leaving those streets to end the way that they end now, as long as there is access by a gate on Watson Way for emergency vehicles to go in and out and so the modification to the conditions of approval under CUP P18 and TE2 and the TTM P9 whatever… yes TTM P9 where it refers to a cul-de-sac, I would like to just see that be a gate.

It's not going to impact the project as much. It's certainly not going to change anything in the way that the streets are currently being used. The other thing on the interior streets under TE7 and TE11, I think those can stand the way that they were requested to be modified by the applicant with the modification that the width of the sidewalks; that sentence to be or that phrase be taken out, so that if there are sidewalks they would meet the City code and if the applicant then just chooses to just put walks on one side on the street instead of on both in order to preserve the room and the open space that they wanted to have, then that could be done. I don't see that any of the other items on there need to modify what the conditions of approval were that were put forward by Staff and on TMP 28 for the calculating of TUMF and DIF fees, then that one would only be modified to where at the end instead of saying for the per unit fee for single family, it would be as dictated in the program regulations and I think that would bring us to a good compromise between what Staff has brought forward and what meets the applicants needs without sacrificing safety or viability of the project.

CHAIR SIMS – So is that your motion?

COMMISSIONER VAN NATTA – I guess I didn't say it in the way of a motion, but that's my suggestion open for discussion from the other Commissioners.

CHAIR SIMS – Well if it's not a motion, it is still up for discussion. I will go with all your suggestions except for Watson I'm okay with. I think just because something has been the way it has been, doesn't mean it has to be that way forever and there are a few times when you can fix things and this is the time and I'm not sold that it has to be a cul-de-sac, but I guess for me is I would have… with the investment here to do a significant project like this, which I think is a very good project. I think it is a great infill project. I support the project, but at the end of the day is I would like to have seen that applicant bring us the alternatives to Watson. What is a hammerhead look like? Show the traffic? How if we were to put a hammerhead here, you really don't change anything per say? If you could put in a gate at the end of Watson and you have a hammerhead, show that that can physically work with the fire engine or a trash truck. I get it that it would be easier with a cul-de-sac so you wouldn't have to… it would be there for municipal use but anyhow, I think just because it is doesn't mean it has to stay that way. I think we have an opportunity to fix it and we should do that.

COMMISSIONER VAN NATTA – But if the hammerhead is just for the emergency vehicles then how is that any easier than just going through the gate there and exiting on Cottonwood?

CHAIR SIMS – I'm not saying a hammerhead per say has to be the specific of what a hammerhead looks like you know if we all went to the fire code. If the way the layout is would work as consistent as a hammerhead, then I'm okay with that, but I don't have nothing here to show me that it works. (Inaudible – no sound) So I guess if I was to, I would go along with your modifications but for the

Watson and I would ask that the condition be written as a cul-de-sac or hammerhead or type of geometric that would work sufficiently to meet the requirements for fire truck or whatever the requirement is fire, for traffic to make that work. If Staff comes back and says that physically they've already checked that, then I would say I would think differently on that.

COMMISSIONER VAN NATTA – From your little drawing there, you were trying to show what a hammerhead would look like, wouldn't that still eliminate the access to those lots for …without providing room for other than emergency vehicles to turn around, because if they still have to go through the gate to turn around then it's not going to help anybody except the emergency vehicles anyway.

VICE CHAIR LOWELL – There is an existing easement against… there is an existing 15 foot easement along the westerly property line that could be a dual use, dual purpose where you could have a fire gate or a hammerhead turnaround kind of superimposed along the sewer easement. There is a lot of things that can be done. One of the options they could look into is making a narrower smaller radius cul-de-sac in the existing right-of-way on Watson. I've seen that done in the past. There are options that can be explored and I don't think we have a coherent plan in front of us that addresses all the conditions and I'm kind of disappointed because I was really looking forward to seeing this plan go through tonight and I'm kind of on the fence. I don't think we have a set in stone plan in front of us. I would really like to see a second point of connection. We have only one point of access. If you look at it on the property line, there is only one place along all four property lines that you can drive in and out of the property. That is a big concern of mine. The other project that went through last Planning Commission, we spoke about that and we had multiple points of exiting the property and only one site of entering the property, which I'm perfectly fine with.

COMMISSIONER VAN NATTA – The only problem with that is that you were actually having another exit onto a main street instead of having an exit into a residential tract.

VICE CHAIR LOWELL – Well if you look at what was presented to us last time… well it wasn't actually presented to us because it was postponed, but there was a knuckle that connected Cottonwood to Watson. I don't see why we can't pursue that similar idea where we have a second point of connection to Cottonwood without having the knuckle. So basically G Street will head due south to Cottonwood, so you'd have two points of connection. That would solve a lot of the problems. Then you could still have fire access along Watson with a remote controlled gate if you wanted to. It wouldn't resolve the traffic issue along Watson that has been inherent issue for the last 60 years, but it would solve a lot of the confusion on site and it wouldn't cause any more lots to be lost. You wouldn't have to worry after Patricia or any of the private streets to the north. I'm

being quite blunt. I kind of disappointed that this was presented to us tonight in this fashion. The City went above and beyond to get all this paperwork in front of us and I commend the City 100 percent. I think the applicant actually fell short. That's my opinion. I see some questions of Staff.

TRANSPORTATION DIVISION ENGINEER LLOYD – Commissioner, the concept that you've brought forward with a secondary access point to Cottonwood, Staff I don't think would be opposed to that, but there are some wrinkles that we would need to work through. Unfortunately Fire is not here, but they do have a standard where the gate has to be a 60 foot setback from the curb and I don't know with the layout as it is being proposed right now, we would be able to meet that 60 foot setback again without having to go in and massage the plan to make it work. That doesn't mean it's not worth trying, I just wanted to at least bring that potential issue forward so that it's not a complete slam dunk, but it might be a layout, but you know it's possible, but it would need some further review.

VICE CHAIR LOWELL – Well like Mr. Sandzimier pointed out that this is the highest number of lots configuration of this plan that has ever been created; 76 lots, so if lot 29 became extra open space, I don't see it as being a negative. The street is forty something wide, plus there is a big setback along the frontage, so it looks like we have a 44 foot wide F Street, plus we have a 16 ½ foot wide easement, so that's almost 60 feet right there. I mean that would solve a lot of problems and we are already conditioned to have all-weather access between B Street and F Street along the westerly property line, so that would be another interior not everyday use if the other street on the other side which is A Street becomes blocked, there is still… there is a loop in there that you can get around should all heck break loose. So I really think the applicant needs to do a little more fine tuning on this.

COMMISSIONER VAN NATTA – I just don't see any advantage to having another exit right there on Cottonwood Avenue, especially since you're going to be coming out right where all the traffic comes out.

VICE CHAIR LOWELL – Say there is a catastrophic accident right along the main entrance on Cottonwood because there is a lot of car traffic from the Church and say there is a 100 car pileup right at that entrance. How are you going to get out? How is anybody else going to get in or out?

COMMISSIONER VAN NATTA – With that logic, we should have an exit somewhere else besides Cottonwood. If Cottonwood is blocked off then where else are you going to exit and the other exit could either be Watson Way.

VICE CHAIR LOWELL – There needs to be two points of connection and I agree.

COMMISSIONER VAN NATTA – Watson Way could be an emergency exit that could be opened to allow the residents to exit if there was an accident.

VICE CHAIR LOWELL – I was actually kind of talking about everyday access, not just emergency, because if you opened up G Street to connect to Cottonwood and made that an everyday access it would take a lot of the load off of the main entrance.

COMMISSIONER VAN NATTA – There are only 76 properties in there. There isn't going to be that much.

VICE CHAIR LOWELL – Seventy six properties and there is 8 to 10 trips a day, which works out to over 700 car trips a day. That's a lot for one access with one gate doing all the load. If that gate breaks; if it breaks shut you're stuck. You can leave but can't. (Inaudible – no sound) I wouldn't want to move into this project if this were built (inaudible).

COMMISSIONER VAN NATTA – Watson should be a gate with exit.

CHAIR SIMS – I think that poses a CEQA problem because then we don't have the traffic impacts on that. I don't think we can make that decision in the absence of the impacts to the neighborhood for 60 years that hasn't had that traffic before.

COMMISSIONER VAN NATTA – I can see if I had been on that street and it was a nice quiet street that had a dead end on it and all of a sudden 76 households had the access to come out, I wouldn't like that either, but in that case I would be just happy to have it be a closed street like it had been all along.

VICE CHAIR LOWELL – Can I ask the applicant a question? There are a lot of options we have. We have approve, deny, postpone. Should postpone come to fruition what would your timeline be to create a map that would address most of our concerns, address the comments that you have in the conditions of approval and everything basically we've discussed tonight. Would it be two weeks from now in time for the next Planning Commission meeting? Would it be a month from now? What's your timeline?

APPLICANT ROWBERRY – Well I think just like we did at the last Planning Commission meeting, I think we could respond very quickly. I think the last time we turned around a map within three days from the Planning Commission that reflected the changes that we thought were requested. The problem is I don't see where that gets us? It's been eight months. We continue to revise it. The plan that was approved by the City of Moreno Valley before this one had one public access entrance to it and it was approved. We never saw a duel entrance for the residences being an issue. We've responded to the two fire access points. We're doing our best to respond. I don't see how more time solves the situation which is why when they told us put a cul-de-sac in, we said listen, we've

done this. We've done this a hundred thousand dollars over. We cannot continue to just spin our wheels and not figure out an answer to this, so let's go and try and figure it out. Are there other ways and other things that we can do for this community? Of course. There is an infinite number of possibilities of how to put this community together, but the plan that we put forward is a fantastic plan. The houses are excellent houses. It's an excellent development and its intended; this was always intended to be a high density project and this is an excellent way to maintain the high density and allow for single family homes. It is ideal for the young families and the older families at a very reasonable price point to get into a new home. I think it is a very unique offering for the City and it honestly has been a little bit disappointing that it is taking so long to get to this point.

VICE CHAIR LOWELL – I don't believe I'm speaking out of place here. I don't believe any of the Planning Commissioners here believe this is a bad project or bad architecture or bad construction. For the most part I believe we really like this project and we'd like to see it go through. I do think there are some key issues that need addressing. The fact that you came to us with two pages of conditions of approval revisions because the applicant doesn't agree with the conditions, I completely support, but I believe that should have been hashed out before it came to us and I think calling for this meeting was a little premature and as Staff recommended last meeting that we should have postponed it another two weeks and I think would have been a better project.

APPLICANT ROWBERRY – I hear that. We've been very responsive and have I feel worked hard with Staff since we received the conditions of approval on Friday. We've had a number of different conversations with them, but unfortunately we've just hit loggerheads on a couple of issues. One of those I think as you've heard is the density credit. I actually brought with me both the code and the TUMF ordinance and I'm a little bit concerned with the proposed language because in the way that it reads in the regulatory document, it does not make mention of the code, which reads like this, "multi-family residential unit means a development project that has a density of greater than 8 residential dwelling units per gross acre". We're fine with that, but limiting it not including the code in how we interpret the multi-family definition, I think is a mistake and I think that it's not an appropriate way to condition it. We would prefer to have no condition with regard the density credit than the one proposed by Staff. We don't feel that that would take into consideration either the enabling ordinance of TUMF or the code of Moreno Valley, which states that multi-family is defined by density.

COMMISSIONER VAN NATTA – And if we removed any reference to the TUMF fees and how they were calculated from the conditions of approval, that would still leave it with just nothing to do with how this project goes forward, but only on how the fees are calculated, which then could be worked out between the applicant and Staff in looking at the ordinances and rules and everything and

determining how it needed to be treated and probably does not even need to be in the conditions of approval one way or the other except that it was a point of contention.

PLANNING OFFICIAL SANDZIMIER – If I may address the comment there. On reading the TUMF ordinance, he's referencing the density. He is absolutely right. The problem is TUMF is based on gross acres. Our calculations for density for multi-family in our zoning is based on net acres. We made that clear to them before and so when you calculate it based on that 9.4 acres, he doesn't get to the 8.1 dwelling units to the acre, unless the hits 76 units, which he never had 76 until he tried to squeeze as many lots as he possibly could on there because we eliminated the knuckle and we know as we discussed in the Staff Report that in order to make the other accommodations that we need; the easement for fire; the possible cul-de-sac we've been talking about, he's not going the 76, so he will not accommodate the TUMF regulations, which is based on gross acres and again we are a pass-through with regard to TUMF, so we collect the fees and we pass them on, so if he wants to have the discussion, he can have the discussion with WRCOG and we just put the language in that we suggested it and we'll leave it at that. So we believe that we are being consistent with the regulations.

APPLICANT ROWBERRY – The language I read was from the City of Moreno Valley code, not the TUMF regulation.

COMMISSIONER VAN NATTA – But either way the point I was trying to get at was that, that is an issue that can be settled aside from the approval of the project, because that just has to do with fees and how they are assessed and does not need to be a condition of approval for the project because it is going to be settled according to what the code says.

PLANNING OFFICIAL SANDZIMIER – It is usually a standard condition of a development to address the fees that will have to be paid. That's a standard condition.

COMMISSIONER VAN NATTA – So if we leave it the way you recommended the change where it says that it will be assessed according to that wording that I came up with earlier that I probably lost now… as determined by the program regulations and then that would solve the problem. We're not stating in our approval which way it is being considered, it would be applied as is appropriate depending on the number of units you end up with and all the other regulations.

APPLICANT ROWBERRY – Program regulations is a specific reference that we feel might exclude the code. We don't want that technical difference to get in the way of… if we qualify; great. If we don't qualify; fine. We came in with every intention of not qualifying for the multi-family when the knuckle was being proposed, but that was a plan that was objected to strongly by the neighboring community and so that's why we made the change. We weren't angling to try to

do something different. We came in and wanted to move forward and it was clear at that point in time, it was not to the benefit of the adjacent neighborhood.

COMMISSIONER VAN NATTA – And part of that reason was because of having another access onto Cottonwood that would have impacted that neighborhood.

CHAIR SIMS – I guess on this issue of the TUMF thing, I would like legal counsel to reply and what would be the appropriate language that would cover you know to write it in such a way...

CITY ATTORNEY EARLY – Yes I was just thinking about that. For starters, I would have to advise strongly against removing it completely and even stronger against adopting the applicant's version where we took an opinion with respect to WRCOG. What I'm proposing is similar to what the Planning Official proposes, but I think addresses what Council's concern was and that is that this… and also I need to point out that the proposed language here in P28 on the white sheets distributed by Council doesn't make this clear, but I'm going to suggest or make the assumption that the only proposed changes to the final sentence of P28, not that P28 be reduced to solely this sentence because P28 is a full paragraph, so in the other examples he restated the entire paragraph, but in this one, seemed to only have changed that sentence, so assuming that assumption is correct, that final sentence I would suggest read, for purposes of calculating TUMF and DIF fees, the rates shall be in accordance with all applicable laws and regulations. I don't think that we disagree that the Municipal Code, State laws and applicable regulations shall apply, we simply disagree on the legal interpretation of how those apply, which doesn't need to be addressed at this point.

COMMISSIONER VAN NATTA – I have a question then. Is there any reason for that final sentence to even be in that paragraph because earlier in the paragraph it says the developer shall pay applicable impact fee, including but not limited to TUMF and so forth and so on and if that last sentence was just removed entirely, would that just then not leave it up to the fact that they are going to pay all the applicable fees.

CITY ATTORNEY EARLY – The difference is one is stating they have to pay the fees. The other is setting what the rates of the fees are and I know were leaving it somewhat ambiguous with that final statement, but they do address; they do have slightly different meanings.

COMMISSIONER VAN NATTA – So you said in accordance with all…

CITY ATTORNEY EARLY – Shall be in accordance with all applicable laws and regulations. And we may eventually agree on what those are, but certainly not something we can do a full legal analysis of here in this hearing.

COMMISSIONER VAN NATTA – And I wouldn't have a problem with leaving that to be determined at some time in the future when everybody gets their head together and looks at all of the different fees and determines which ones apply. I would guess that kind of leaves the one big point of difference here is whether having a gate at Watson Way for emergency vehicle access would be sufficient for this project rather than impacting it with a full cul-de-sac.

VICE CHAIR LOWELL – As a question for Staff, how problematic would it be to put a hammerhead on G street, but putting gate access at the terminus at each end of the hammerhead, so basically making the hammerhead on the private side of things, but leaving it open connected to Watson, so everybody has the opportunity to turn around. So instead of having a gate right at the property line, either have an easement or dedicated hammerhead on G Street to the City for ingress and egress.

COMMISSIONER VAN NATTA – But then that would leave the…

CHAIR SIMS – You don't meet the 150 feet for whatever the street F…

VICE CHAIR LOWELL – No you would have a hammerhead right here. On these streets you would have a gate here and here.

CHAIR SIMS – But if there is a fire at 28, how does he get out.

VICE CHAIR LOWELL – Because the gate would be remote. You could access the gate, so there would be two gates at top and bottom.

COMMISSIONER VAN NATTA – No, because then what… yes

VICE CHAIR LOWELL – It's a gray area

COMMISSIONER VAN NATTA – Then that would give all those people access to exit onto Watson Way.

VICE CHAIR LOWELL – Not if it's a fire access.

CHAIR SIMS – If it's a fire access it would have a lock on it.

COMMISSIONER LOWELL – Watson would just have hammerhead at the end of it instead of a cul-de-sac.

COMMISSIONER VAN NATTA – So if you're on E Street and you want to go around to F Street, you would not be able to use that.

VICE CHAIR LOWELL - You have to go; yes you'd have to go out…

COMMISSIONER VAN NATTA - You would have to go the other way, so you'd only have one way to get out instead of two. The simplest thing is to just put a gate there. The simplest thing is to put a gate there.

CHAIR SIMS –Well I guess you know we're at a point where someone needs to make a motion and we can vote on it. That's what it sounds like.

COMMISSIONER VAN NATTA – I'll make a motion and I just… I hate to make a motion without having worked out the details of what…

CHAIR SIMS – Ray you haven't chimed in here. Have you got anything?

COMMISSIONER BAKER – Well it just seems very incomplete to me. I don't know. I think it's a good project, it's just the egress and ingress is going to be a real problem any way we look at it. I don't know how to get around it for sure.

CHAIR SIMS – Well maybe what we should do; should we talk it through? Comments first before we make a motion?

COMMISSIONER VAN NATTA – Let's hear all the comments

COMMISSIONER BAKER – Well I think it's a good project. There is a lot of unknowns here that have been brought up and I don't know how we're going to deal with it tonight? I know we … I would like to see another exit and it doesn't make much sense to put two right on Cottonwood, but I don't know if we extend that G Street, if that makes sense to do that or not, but that's my problem is getting people in and out of there and I think with the curbs and sidewalks, we can work with that and I don't totally understand the cul-de-sac concept but I guess the thing is you're going to have service people in there and they are going to have to be able to navigate the area and I guess what I wish I had more experience in going into some other condominium projects like this. I know we've got these all over town and most of them are gated so you can't get in and see what is going on, but I'm sure there is some way we worked through this in other areas, but typically we always have at least one in and one out and we don't in this case, so that is my big problem with it. The product looks good on paper, but I know we've got some concerned residents on this thing and I don't know where to go from here, I really don't. I've never been… I've done this a bunch of years. I've never been up against something like this before to be real honest.

COMMISSIONER LOWELL – Like I stated before, I really like the idea of this property; this project. I like the architecture. I like the design. I think this is a great project. I think there is some wrinkles that need to be ironed out. In trying to iron out the details at the twelfth hour right before we vote on something where we aren't 100 percent positive on how things should be worded, the design is not nailed down. I really there are some issues that … We're also calling for fire

access between B Street and G Street, which doesn't show up on here anywhere and the minimum fire access I think is 22 or 24 feet wide, but we have a 15 foot easement, so there is just a bunch of issues that need addressing and I really want to approve this project, but I don't think that I can do that.

CHAIR SIMS – Like I said earlier, I think the project is a good project. I think it is a great infill project. I like the idea of the detached condominium concept. I think it's good. I'm not that hung up on the access issues on these private streets to the north. For a matter of fact for Watson, I'm not that hung up on it. I think 76 homes or 72 homes or whatever the net is, but if it is somewhere in that neighborhood there is going to be hundreds of car traffic coming in and out of that small area and if there is any problem with access out with only one access point, is built in problem and I personally think the project should have been designed with an access out to whatever Patricia Street and you know not really worry about Watson myself. I think it would be cleaner. I think two accesses onto Cottonwood with the Church traffic is a problem and it just seems like it's a mess. At least it needs a secondary exit out of the project. You know it has just one entrance that's fine, but I just think there are issues that need to be resolved. I certainly appreciate; I used to do subdivision work in my prior life and you know there is a bazillion ways to do these things and I get it and I'm sorry that we're making sausage at the dais here, but it could have been done; it should have been done sooner and that's why I think at the December whatever the meeting was, I think there were opinions expressed off of the dais that we should get this right and worked out and not try to rush it, so yes.

COMMISSIONER RAMIREZ – Well I think it's a great project also. I'm just very concerned with the access points? Obviously…

SPEAKER ROWBERRY – Emergency or residential… I'm sorry?

COMMISSIONER RAMIREZ – Emergency… emergency. Personally I think that just the residential access point on Cottonwood is good to go; one is fine, but for emergency purposes, like Commissioner Sims said, either Patricia or Watson… it seems like it would be more suitable to do Watson. I mean those are my two cents.

COMMISSIONER VAN NATTA – I'm very sensitive to the fact that this has been around for a while and it's gone back and forth and I just at some point you have to think no matter how hard you work on it you're not going to please everybody and there is no way to make it perfect as much as people who have engineering training and background and like to see things that are perfect. I appreciate the fact that sometimes you do need to make decisions and go forward with something that is not going to please everybody and I think the project has always had just one residential entrance and exit and that has been fine with everybody up to this point. There is no reason to go back and try to re-work all of that. If Watson Way seems to be the best additional access for emergency

vehicles and all of the study had been done rather than Patricia, then there was a reason for that and that was why that was targeted all along. When we looked at this to consider postponing it in December we were only looking at the fact that that knuckle was not a good option and we wanted to see it reworked to where there was not a knuckle there from Watson Way coming out to Cottonwood and this plan here solves that problem, so there is a bunch of other issues that have come up that maybe would have been issues back then or not, but it seemed like that was the one major thing that we were looking at and now there is a whole bunch of other issues that have come in. Now as I said, I don't really see a problem with the streets that have been dead ended for 50 or 60 years continuing to be dead ended. I know all of the drainage problems and everything like that will be taken care of with the plans on this. That has already been worked out and I just don't see an issue with it. I would like to go ahead with a motion to approve this subject to conditions with some modifications and I would just hope that the rest of the Planning Commission would see that it's just been sitting on the stove for too long and when you let something cook too long, things start changing and morphing and more problems come up than what we're being solved. Okay I will make a motion.

PLANNING OFFICIAL SANDZIMIER – I recognize there are two separate resolutions. One is for the CUP and one is for the Tentative Tract Map, so if you make a motion we're looking for separate motions on each application.

COMMISSIONER VAN NATTA – Okay, now what I'm trying to figure out here is which of these items were for the first resolution and which were for the second because they kind of got blended together on here. Okay, so this CUP has to do with the first one, so the others; the TE and TTM's would go on the second one?

APPLICANT ROWBERRY – The P conditions with CUP are for the conditional use. The P conditions for TTM are on the map and all other conditions are for both.

COMMISSIONER VAN NATTA – Are for what?

APPLICANT ROWBERRY – Both

COMMISSIONER VAN NATTA – Both, okay I'm looking at the… before I word it I want to make sure I have it right. So the CUP P18, that would be on that Conditional Use Permit, that would be on the first one? The TE2 and the TTM; the P9 that would be on the Tentative Tract Map?

VICE CHAIR LOWELL – Can I interject real quickly? Could the Planning Official clarify the difference between the TTM and CUP just for everybody's knowledge so we know what we are voting on?

PLANNING OFFICIAL SANDZIMIER – The CUP is what is required to allow for the Planned Unit Development, which is basically setting up the development standards that may deviate from the standard underlying zoning regulations, so it's basically allowing for some modification to the use of the property. The Tentative Tract Map is identifying that this is intended to be a single lot condominium tract with x number of units on it and it identifies what the primary access will be off of Cottonwood and then it identifies in the exhibits that go with the Tentative Tract Map what the condominium plan would look like in terms of an effective lot condition; while it's not lots, it will be units, but effectively there are boundaries drawn on the supporting TT maps that show the size of individual spaces and unit configuration, so the map is dividing up the property. The CUP is identifying the zoning regulations.

VICE CHAIR LOWELL – And the tentative map that we have in front of us does not 100 percent address the conditions of approval, so if we vote yes on the tentative map, we would be saying okay that this map works even though it doesn't work?

PLANNING OFFICIAL SANDZIMIER – You're saying that the map works so long as the conditions become satisfied and the timing of the conditions would say that they have to submit things back to the City for our concurrence before it is recorded that will satisfy those… so at some point we will have to see a revised exhibit.

VICE CHAIR LOWELL – Thank you.

COMMISSIONER VAN NATTA – Okay, so if I'm referring to the items that were brought up on the applicant's response to the conditions of approval; the one that I would recommend on the Conditional Use Permit portion of the motion would be the CUP P18 and the other ones that I spoke about would be on Tentative Tract Map?

CITY ATTORNEY EARLY – If I could suggest if you do them one at a time if you start with the CUP and read the motion as stated in the Staff Report or in the Agenda and then condition it upon the changes as proposed by the applicant and then you would read the ones that you want that led with CUP and/or that led with nothing. You would ignore the ones that said TTM.

PLANNING OFFICIAL SANDZIMIER – May I ask for one clarification because when the applicant was speaking we had handed out the packet of information to you this evening that has a lot of red line corrections to the condition. I want to make sure that the applicant's modifications are saying we agree to all the red line corrections in this document that was presented to the Commission this evening with the exception of what we've proposed as modifications or the other option that may be going forward here is the Staff Report that was actually distributed to you, had an earlier resolution with a list of conditions and their

modifications may only be to that resolution, so I just want to make sure we are talking about the same thing.

COMMISSIONER VAN NATTA – The amended resolution that we received…

PLANNING OFFICIAL SANDZIMIER – The amended resolution with these modifications that you are going to announce. That's what we're looking at.

APPLICANT ROWBERRY – Except for the comments on our list, we were okay with the red line changes.

PLANNING OFFICIAL SANDZIMIER – Okay, perfect, thank you.

COMMISSIONER VAN NATTA – Okay I'm going to try this. If we have to correct it, we have to correct it. Okay I move that we **APPROVE** Resolution No. 2015-01 and thereby:

1. **ADOPT** a Negative Declaration for PA14-0033 Conditional Use Permit for a Planned Unit Development in that this project will not result in significant environmental impacts; and,
2. **APPROVE** PA14-0033 Conditional Use Permit PUD based on the findings contained in this Resolution and subject to the revised conditions of approval modified on CUP P18 as requested by the applicant that the emergency ingress and egress to Watson Way not necessarily be through a cul-de-sac but could be through a gated entry, and;

Also recommend that we **APPROVE**; also move that we **APPROVE** Resolution No. 2015-02 and thereby;

1. **ADOPT** a Negative Declaration for PA14-0032, Tentative Tract Map 34544 in that this project will not result in significant environmental impacts and;

2. **APPROVE** PA14-0032 Tentative Tract Map 34544 based on the findings contained in this resolution and subject to the revised conditions of approval that were presented with the modification to TE7 as proposed by the applicant with the exclusion of the width of the sidewalks and TE11 as proposed by the applicant.

CITY ATTORNEY EARLY – I'm sorry we have… those two appear on both the CUP and the Tentative Tract Map. Did you want to make the same modification to the CUP resolution as well?

COMMISSIONER VAN NATTA – Yes I would like to make that modification also to the recommended approval to the CUP. That's my motion.

CITY ATTORNEY EARLY – Might I also suggest to be consistent, you have CUP P18 in the CUP, but TTM P9 is the same language for the Tentative Tract Map. Did you want to include that as well?

COMMISSIONER VAN NATTA – Yes I'd like to also include TTM P9 in the recommendation for the approval of the Conditional Use Permit and also under the second recommendation on TTM P28, the last sentence will read, "for purposes of calculating TUMF and DIF fees, the rates shall be in accordance with all applicable laws and regulations".

PLANNING OFFICIAL SANDZIMIER – Just to be clear, there is also condition P35 in the Conditional Use Permit that has the exact same language.

COMMISSIONER VAN NATTA – And we include that. What was the number?

PLANNING OFFICIAL SANDZIMIER – P35 in the Conditional Use Permit would be modified consistently with P28 in the Tentative Tract Map.

COMMISSIONER VAN NATTA – Yes can we add that please then to the Conditional Use Permit modification. Did we cover it all? That ends my motion.

PLANNING OFFICIAL SANDZIMIER – It would just die for the lack of a second.

CITY ATTORNEY EARLY – We haven't announced it yet

CHAIR SIMS – So do we have a second?

COMMISSIONER RAMIREZ – Nay

COMMISSIONER BAKER – No

CHAIR SIMS – No second, so the motion fails. Can we have an alternative motion?

VICE CHAIR LOWELL – I'd like to make a motion after a comment. In the obscurity of what we just did and nobody in this room knows anything of what was just said, there are too many revisions to the conditions. There are crossed over conditions. There are conditions specific to the CUP and to the Tentative. I do not feel comfortable voting yes or no on this project today because I have no idea on what we are voting on. I would make a motion to postpone this action to the next Planning Commission or date certain, which I believe is the 22nd of January. I do hope that will be enough time, based on the Planning Department to get this stuff together in the right order so we can make a knowledgeable vote and a knowledgeable decision on this project. I really want to see this project go through, but I don't think today is the day, so I motion to postpone this action to the next meeting.

CHAIR SIMS – I guess this is all kind of new grounds for me, so I would just ask is that a legit motion that we can proceed with?

PLANNING OFFICIAL SANDZIMIER – He's making a recommendation to continue to a date certain. That is a legitimate motion. There could be some difficulty in being here by the 22nd because I don't know if the applicant is going to produce the evidence which I thought was part of the discussion before, otherwise we could be back here again just sifting through conditions to the development without the exhibit, so I'm not sure if your motion is intended for us to have any other exhibits.

VICE CHAIR LOWELL – Then let's discuss real quick; I don't think this is going to pass yes or no tonight. What would be a good time for us to revisit this with a finished map and revised conditions so we know what we are talking about; either Staff or the applicant?

APPLICANT ROWBERRY – Yes I mean we kind of feel like we're back where we were a week… we don't feel that there is a single condition with regards to health and safety, transportation, fire and any of the other items and I understand the conditions are confusing because the conditions do not match the map that we submitted and we can't impact that as the applicant. We submit the map. We say please respond to our map and they put conditions on our map that don't match the map and we don't have any control over that. This is the best we can do. This is an excellent plan for this land. We've been through seven months of options on it. This is as good as it gets. When we talked to them on Monday, one of the things that we asked for is hey if Watson Way doesn't work as the emergency ingress/egress, can we put it on Patricia. They said we're not willing to make that change to the conditions.

VICE CHAIR LOWELL – Well based on what you just said, you said you've been working on this for seven months. The conditions that are in front of us that have been here since probably day one, at least since the last time we spoke, said you have to have two points of fire egress and I don't see it on here.

APPLICANT ROWBERRY – Yes they are included, but until they were… Staff approved them on the north side of the project to the private roads, which doesn't work. There are two fire accesses on the north side of the property which is why we changed the condition to read the way it does or the way we propose that it will, so that we can go ahead and adjust it to Watson Way. We were open to any public road. That's why we tried to make that change to the condition. Where they were requested to be located on the north side of the project won't work because the roads are private. That's where they are currently located on the map.

PLANNING OFFICIAL SANDZIMIER – The motion you have on the floor is a legitimate motion. If the applicant wants to have that map come back with a

recommendation in our Staff Report earlier without the benefit of two fire accesses, we'd have to be recommending denial. With regard to the two fire access roads on the top, it is my understanding having been involved in the project and talking with the Staff that the intent for those two access points was always to benefit the adjacent neighborhood, not necessarily to satisfy the requirement for the secondary ingress/egress for fire for this project. It was identified as the fire access road but it was for the benefit of the adjacent development and not this one, so they never had two points of access.

VICE CHAIR LOWELL – I do believe we are fine with the conditions as they are proposed. I'm more concerned about the revisions to the conditions that were presented tonight which makes a mud of everything because we don't really know what's going on. The map doesn't quite address the conditions, so we kind of have half a thing, so I want to approve this project, but I don't in good faith feel like I could do that tonight. If we deny it tonight, it is going to get petitioned to the City Council. If we postpone it tonight it is going to go to the next meeting, which I think most of us will have a better feeling of what would we be approved and it will be the same timeframe, so it can either cost you guys money by petitioning it to City Council or we can postpone it to the next meeting and it will be the result, so I think we need to get our act together. This is not a complete picture. Either the applicant side or the City side, something fell through here; these revisions; the two different conditions of approval, plus the map. It's a mess, so I would feel more comfortable voting on something that is a complete picture.

CHAIR SIMS – So I guess a comment I have is Brian if we just… there was a motion that just adopted the conditions as presented, assuming that Staff has written them in a sense that best matches the needs that the City has proposed needed except for the condition that we would make a change on P28 about the calculations as applicable, then if everybody was comfortable making a vote based on the conditions as presented by Staff, maybe we could get a vote one way or the other and if the applicant doesn't like it then they still have the opportunity to appeal.

CHAIR VAN NATTA – Well I think…

VICE CHAIR LOWELL – There is still a motion on the floor so we need to deal with that first.

COMMISSIONER VAN NATTA – Well I think there was also the thing about the interior private streets that Staff said they were okay with that change except for the sidewalks.

CHAIR SIMS – Well we have a motion on the floor here to postpone this Brian if I may restate that.

VICE CHAIR LOWELL – I will postpone to a date certain which I believe is January 22, which is the next Planning Commission meeting.

PLANNING OFFICIAL SANDZIMIER – Then we will do everything in our power to be here on the 22nd. If we're simply working with the conditions that the applicant has asked to be modified, I believe we can do that in that timeframe.

CHAIR SIMS – Okay do we have a second for that?

COMMISSIONER RAMIREZ – I'll second.

CHAIR SIMS – Okay we have a first and a second.

COMMISSIONER BAKER – I abstain

COMMISSIONER VAN NATTA – No

COMMISSIONER RAMIREZ – Yes

CHAIR SIMS – No

VICE CHAIR LOWELL – Yes

CITY ATTORNEY EARLY – There is a provision in the rules regarding abstention, so I need a minute to… it goes with the majority and there is no majority.

CHAIR SIMS – Where is Barnes?

CITY ATTORNEY EARLY – So the motion does not pass

CHAIR SIMS – Okay I would propose a motion that we approve… Okay I make a motion that we **APPROVE** Resolution No. 2015-01 and thereby:

1. **ADOPT** a Negative Declaration for PA14-0033 Conditional Use Permit for a Planned Unit Development in that this project will not result in significant environmental impacts; and,
2. **APPROVE** PA14-0033 Conditional Use Permit PUD based on the findings contained in this resolution and subject to the attached conditions of approval, with no modifications included in and I may be overstating myself there… the attached conditions of approval with no modifications included as Exhibit A.

And then going forward, do we vote on that separately?

CITY ATTORNEY EARLY – Yes we need to address the two resolutions separately with two seconds and two votes.

CHAIR SIMS – Then that would be my motion.

COMMISSIONER RAMIREZ – I'll second

COMMISSIONER RAMIREZ – Yes

COMMISSIONER BAKER – Yes

COMMISSIONER VAN NATTA – No

VICE CHAIR LOWELL – No

CHAIR SIMS – Yes

PLANNING OFFICIAL SANDZIMIER – Now you have to have a second second and then vote again. That one took place… that vote took consideration of the first resolution you read. So the second second will allow you to vote on the second resolution which is the map.

CITY ATTORNEY EARLY – I would make that motion one more time for the map and then second.

CHAIR SIMS – Okay, so…

VICE CHAIR LOWELL – You only read the first recommendation

CHAIR SIMS – I only read the first recommendation, so I'll read the second one now. I make a recommendation or a motion to **APPROVE** Resolution 2015-02 and thereby:

1. **ADOPT** Negative Declaration for PA14-0032 Tentative Tract Map No. 34544 in that this project will not result in significant environmental impacts, and,

2. **APPROVE** PA14-0032 Tentative Tract Map No. 34544 based on the findings contained in this resolution and subject to the attached conditions of approval with the modification to condition P28 and to modify that the last sentence be changed to read 'for purposes of calculation of TUMF and DIF fees that the rate shall be in accordance with applicable laws and regulations.

COMMISSIONER RAMIREZ – I'll second

COMMISSIONER BAKER – Yes

COMMISSIONER RAMIREZ – Yes

COMMISSIONER VAN NATTA – No

VICE CHAIR LOWELL – No

CHAIR SIMS – Yes

PLANNING OFFICIAL SANDZIMIER – Do you have that vote Grace?

GRACE ESPINO-SALCEDO – Just need a moment.

CITY ATTORNEY EARLY – The question pending and I'm afraid I wasn't able to hear it because of the logistical conversation here, was with respect to those motions, whether they were adopting the originally submitted Staff conditions of approval or as modified in the packet that was presented to you this evening.

CHAIR SIMS – I was making mine based on the salmon colored conditions that were presented today at the dais.

CITY ATTORNEY EARLY – So we may want to get that clarification from the vote as well in case there was any misunderstanding there from others as well, just to clarify the record.

CHAIR SIMS – So what do we need to do… redo it?

CITY ATTORNEY EARLY – I'm afraid I didn't hear, so if you did state that then when you read the recommendation, if you stated as modified then that's what was voted on. If that is not what was stated then I would recommend…

COMMISSIONER VAN NATTA – It was not… it was not stated that way.

VICE CHAIR LOWELL – He read it exactly as written on here with the two modifications that were presented tonight, however the motion here reads is how we voted.

PLANNING OFFICIAL SANDZIMIER – It's how you voted, however it was a reference to the attached conditions and the only modification you made was to the language that was only presented in the salmon colored attachment.

CHAIR SIMS – Plus the one modification that we were going back and forth on the TUMF that we added…

PLANNING OFFICIAL SANDZIMIER – Right, which is what I'm saying was only identified in the salmon colored. It was never identified in the original packet, so by reference it applies to the salmon colored one is what we believe, but I think for clarification purposes just for the record, if the folks that voted would say that you understood it to be as presented on the salmon colored, that's all I think we need to know or if you thought it was what was …

CITY ATTORNEY EARLY – This is actually addressed in the rules and procedures that exists and has come up as a question on how this works and this is a perfect example. This is a motion for reconsideration and may be made by a member of the majority voting block, so any member of the majority voting block can ask for a move for reconsideration, sub-pursuant to this change and you'd have one more quick vote, which would correct that procedural error.

CHAIR SIMS – Okay

COMMISSIONER VAN NATTA – I move to reconsider both motions.

CITY ATTORNEY EARLY – I believe you were in the negative on those votes ad reconsideration can only be made by a member of the affirmative voting block.

COMMISSIONER VAN NATTA – I can't do it, okay.

CHAIR SIMS – Well since I tried; since I apparently botched up the original motion, I'll try re-doing it. I make a motion that our vote was based on the salmon; the conditions that were presented on the salmon colored paper except for the minor modification to the Tentative Parcel Map condition P28.

CITY ATTORNEY EARLY – And I believe a vote… you can call for a second and a vote on that and that should clarify the issue with respect to both resolutions.

CHAIR SIMS – Can we have a second?

PLANNING OFFICIAL SANDZIMIER – That would only apply to the map and then you would have to do it again with regard to P35 which is the one in the CUP.

CHAIR SIMS – Of course

PLANNING OFFICIAL SANDZIMIER – Just to make sure, because the numbers are a little…

CITY ATTORNEY EARLY - But you don't have to read the whole thing again. What you just did. Just a simple motion. Just get a second and a new vote and we should be able to do that again real quick.

CHAIR SIMS – Okay so do we have a second for the Tentative Tract Map?

COMMISIONER RAMIREZ – I'll second

COMMISSIONER VAN NATTA – And when we're voting on this, we're voting on just the clarification and not on the original vote that we made; just on the clarification? So when I say yes to this it means yes I voted no on the salmon.

CITY ATTORNEY EARLY – No you would still presumably vote the same way, unless you've changed your mind based on the new change.

COMMISSIONER VAN NATTA – Okay

GRACE ESPINO-SALCEDO – Okay so we have a motion by Chair Sims and a second by Commissioner Ramirez. Can I get a vote?

COMMISSIONER BAKER – Yes

COMMISSIONER VAN NATTA – No

VICE CHAIR LOWELL – No

CHAIR SIMS – Yes

COMMISSIONER RAMIREZ – Yes

CHAIR SIMS – Okay, so the next motion is that to clarify that our vote was for the Conditional Use Permit was based on the conditions…

PLANNING OFFICIAL SANDZIMIER – May I do one thing first just with respect to the action that was just taken for a wrap up, since you did take an action on a Tentative Tract Map. Any affected person may appeal the decision of the Planning Commission on a Tentative Tract Map. An appellant must state the specific reasons for their appeal. That appeal should be submitted to the Community Development Director within 10 days following this hearing. Otherwise if no appeal is filed, the Planning Commission's decision is considered final. If it is appealed it will go to the City Council on the Tract Map.

CHAIR SIMS – Okay, moving on to the motion on the CUP. I make the motion that we clarify that the motion was based on the conditions of approval on the salmon colored paper that was presented to Staff today.

COMMISSIONER RAMIREZ – I second

COMMISSIONER BAKER – Yes

COMMISSIONER VAN NATTA – No

VICE CHAIR LOWELL – No

CHAIR SIMS – Yes

COMMISSIONER RAMIREZ – Yes

PLANNING OFFICIAL SANDZIMIER – Okay so the wrap up on this is also an action taken by the Planning Commission which is appealable, so any affected person may appeal the decision of the Planning Commission to the City Council. Such an appeal shall be directed to the Director of Community & Economic Development. The appellant shall state the specific reasons for the appeal and the appeal shall be filed within 15 days following the action of the Planning Commission. If no appeal is filed the action of the Planning Commission is considered final. If an appeal is filed it will be heard by the City Council.

OTHER COMMISSION BUSINESS

Discussion of PC Rules and Procedures (continued from 9/26/14)

CHAIR SIMS – Okay, moving on to the Agenda here is Other Commission Business. We have discussion Planning Commission Rules and Planning Commission Rules and Procedures. Do we want to go through that tonight or is there… Okay let's move forward on that then.

PLANNING OFFICIAL SANDZIMIER – The item before you is a discussion item that does give you an opportunity to comment on the Rules and Procedures and organization of the Planning Commission. We worked at the direction of the Planning Commission with our City Attorney to make some revisions which are before you this evening. I'd like to turn it over to our City Attorney to walk you through some of the changes and we can discuss the process of incorporating those changes if it is the desire of the Planning Commission.

CITY ATTORNEY EARLY – Thank you. So this has been on the Agenda for quite some time and was actually started by the City Attorney Suzanne Bryant back before I actually went back and watched the Planning Commission meeting back in September or October where this was discussed and there were a number of suggestions from the Commission and from Ms. Bryant, so I took those suggestions and incorporated them into a draft, worked with the Planning Official on some other changes and found a few minor typo type things and incorporated them into this draft for discussion with the Commission. Most of the changes here are clarification more than they are major substantive changes. On the first change from Roberts Rules to the Standard Code is just to be consistent with the City Council and the other Boards and Commissions of the

City. The second one in the Officer Section, was to clear up some confusion with respect to how many terms a Commissioner may serve especially if they have a staggered term as a Chair or a Vice Chair, so we tried to make that clearer. There are a number of typographical changes; grammatical changes, but I don't think there is anything significantly substantive that changes in here, so we wanted to get your comments or questions and address those. So if you do have any now is a good time to discuss those. We actually did address and worked on them mostly for reconsideration which I remember being a question of what that was for and why it was there and you just saw it in action. Its purpose is just that a technical or clerical type of error to be corrected which is why it is limited to only a member of the voting majority is allowed to bring that. It is not meant to continuously circle and cycle an issue. So if the Commission has any questions or concerns, we'd like to address them now.

VICE CHAIR LOWELL - I have one. On the first page its Rules and Orders then Section C, Officers, then Section 1, Selection, then Section C… 1, C, 1, C. In the absence of the Chairperson or Vice Chairperson any other member may call the Commission to order. It used to be shall and then was changed to may, or is it an option that both of them are missing and we just have the option of not having a meeting. I think it was more definitive the other way.

CITY ATTORNEY EARLY – I'm trying to remember where this came from. One thing I can think of is the quorum possibility. If you don't have a quorum you can't force the…

PLANNING OFFICIAL SANDZIMIER – I may have made that and just thought it sounded better. It may have been me.

CITY ATTORNEY EARLY – I can think of a technical case where you don't have a quorum so you can't; you wouldn't force somebody to call to order. Yes it's just meant to say you don't have to call the meeting to order. It doesn't force it to happen if you don't have them there, but again I don't see any other. I don't think shall is harmful there.

VICE CHAIR LOWELL – I don't know. It was just a thought and then on that same paragraph where it says 1A; it's talking about the Chairperson and Vice Chair shall be elected annually from among the Commissioners. Then is says however, no person shall serve more than two consecutive terms as either Chair or Vice Chair, however a Commissioner may serve for two consecutive terms as Vice Chair followed by two consecutive terms as Chairperson or vice versa. So in the situation that we just had where Meli was our Chair for two years and then say she was appointed to Vice Chair, Giba was appointed to City Council so he left the Planning Commission. If Meli were a Vice Chair while Giba was Chair, she then would become Chair, wouldn't that be a conflict of interest.

CITY ATTORNEY EARLY – Well it wouldn't be a conflict of interest but it would…

VICE CHAIR LOWELL – break the rules

CITY ATTORNEY EARLY – It would violate the rules. That is correct.

VICE CHAIR LOWELL – I don't know how that would work?

CITY ATTORNEY EARLY – Well actually it wouldn't because it wouldn't be consecutive. She would have served as Vice Chair in-between.

VICE CHAIR LOWELL – But the term itself would have been a year long term and it's just a portion of that

CITY ATTORNEY EARLY – He served a term as Chair and another consecutive term as Chair and then as a term as Vice Chair.

VICE CHAIR LOWELL – No, I'm using it as a hypothetical

CITY ATTORNEY EARLY – Hypothetical your next term is as Vice Chair, so there is no violation. It doesn't say she can't act as the Chair in the Chair's absence, it just says you can't serve a term as the Chairperson. He's still the Vice Chair.

VICE CHAIR LOWELL – He just remains the Vice Chair and we just appoint a new Chair.

CITY ATTORNEY EARLY – Right. When the Chair is absent the Vice Chair doesn't become the Chair, they still are the Vice Chair with the responsibilities of the Chair.

COMMISSIONER VAN NATTA – But serving a portion of a year as Chair would not make up the consecutive. Like say for example, Jeff is serving out the remainder of the year as Chair since Giba left, but he could still serve two years as Chair.

CITY ATTORNEY EARLY – As it's written, that would be true because it defines a term as a year. We're just seeking your input of any changes. For instance we'll address that shall may issue and assuming there any other questions or concerns or additions or deletions, we would bring it back to you at the next meeting just for a vote for your approval.

COMMISSIONER VAN NATTA – You're going to run it through spellcheck and stuff like that?

PLANNING OFFICIAL SANDZIMIER – Right

CITY ATTORNEY EARLY – Assuming it's not, if you found something, let me know.

PLANNING OFFICIAL SANDZIMIER – On page 4, one change that was not made but it has been a question that has been asked of me a couple of times with regard to regular meetings and the start time is 7 pm. If and I don't know the history of why we start at 7 pm, but I would just ask does that work for the Commissioners or is that something you'd like us to investigate changing. Is there some history of why it was set up at 7? I know our City Council starts at 5:30 for the special session and then 6 o'clock for the regular meeting.

COMMISSIONER VAN NATTA – I think Planning Commissioners are more likely to have real jobs during the day.

PLANNING OFFICIA SANDZIMIER – Okay so we can leave it at 7, but I just wanted to find out if there was any…

CHAIR SIMS – Well the one thing to argue is … (Inaudible – no sound)

COMMISSIONER VAN NATTA - 7 o'clock is good, yes. Page 3, paragraph b, where it says Vice Chairperson, on the third line performal. Performal the duties?

CITY ATTORNEY EARLY – Page 3, subsection b…

COMMISSIONER VAN NATTA – Actually its part of Section C… page 3,

PLANNING OFFICIAL SANDZIMIER – There are two page 3's

COMMISSIONER VAN NATTA – Oh there is… well okay. Page 2 then, that is numbered page 3; it says a Chairperson be Vice Chairperson and the third line it's talking about performal… performal the duties, where it should be perform all the duties.

CITY ATTORNEY EARLY – Mine says perform all the duties

COMMISSIONER VAN NATTA – Mine says performal

CITY ATTORNEY EARLY – Oh are you looking at the clean version. I'm looking at the red line.

COMMISSIONER VAN NATTA – I'm looking at the one that was included.

CITY ATTORNEY EARLY – They were both there; the clean and the red line were. So I'll check that. I'm looking at the red line.

COMMISSIONER VAN NATTA – Oh okay. I'm on the clean version.

PLANNING OFFICIAL SANDZIMIER – You're right, the clean version does say performal.

CITY ATTORNEY EARLY – Yes it's probably when it accepted the tract changes because the red line shows it's perform all, but we'll make that correction.

COMMISSIONER VAN NATTA – Okay, I'm looking at… yes

PLANNING OFFICIAL SANDZIMIER – We make up words as we go.

COMMISSIONER VAN NATTA – I make up words too, all the time. And I've already re-read this several times for every time we were going to look at it before, so there isn't really anything else to say.

CITY ATTORNEY EARLY – We'll bring back a clean copy for you with those changes and it should be simple motion and vote for that one.

PLANNING OFFICIAL SANDZIMIER – Is the preference to change the may to shall though? Is that what he said?

COMMISSIONER VAN NATTA – No. May is fine because it means you can but you don't have to if there is a reason not to. On page 4; I'm assuming there is only one page 4?

CITY ATTORNEY EARLY – One marked as page 4

COMMISSIONER VAN NATTA – Yes, under the clean one and I asked about this before on the regular meetings. It says regular meetings shall… there is that word again… shall be held on the second and fourth Thursdays of each month at 7 pm. We talked about the 7 pm, but this says it shall be held on the second and fourth.

PLANNING OFFICIAL SANDZIMIER – Okay that one I will have to get back to you on it because I think I mentioned it at an earlier meeting that there was some budget considerations in terms of why the number of meetings was actually reduced. The current budget that we're operating under does generally assume only one Planning Commission meeting per month throughout the rest of the year, so I just wanted to make sure …

COMMISSIONER VAN NATTA – Well it says otherwise determined by the Commission, but I can't ever recall it any time as a Commissioner being asked if

we wanted to meet on the second and fourth or only on the 4th. So maybe the word should be something other than shall or…

VICE CHAIR LOWELL – And/or

PLANNING OFFICIAL SANDZIMIER – On that one I'd like to work with City Attorney and the City Manager and make sure from a budget standpoint I'm not…

COMMISSIONER VAN NATTA – I think from a budget standpoint it's really good… second and/or fourth Thursdays of each month. That would solve that problem.

COMMISSIONER BAKER – We don't meet on the fourth.

PLANNING OFFICIAL SANDZIMIER – I like that. I think we can do the and/or; it will be fine and then I don't have to go ask.

CITY ATTORNEY EARLY – This is exactly why we wanted to bring it to you this way first.

COMMISSIONER VAN NATTA – Which brings the next paragraph… it's talking about if the meeting falls on a public holiday, you know like on Thanksgiving. This says that the meeting will occur the next business day, but it isn't. Maybe it should be on the next scheduled meeting day.

CITY ATTORNEY EARLY - Well it wouldn't be recently because you're not doing it … well you are doing it on the fourth, which is the one that was cancelled.

COMMISSIONER VAN NATTA – Such regular meeting shall occur on the next scheduled meeting or …

PLANNING OFFICIAL SANDZIMIER – Maybe we should have had it on the day after Christmas I think. That's what would have happened, right?

CITY ATTORNEY EARLY – That's what would have happened according to these. According to the old rules; yes.

COMMISSIONER VAN NATTA – The day after Thanksgiving and the day after Christmas.

CITY ATTORNEY EARLY – So what would you like it to be… the following Thursday?

COMMISSIONER VAN NATTA – On the next scheduled…

CITY ATTORNEY EARLY – Or just have it be cancelled if it falls on a holiday?

COMMISSIONER VAN NATTA – Yes. A regular meeting shall be held on that day… You know you could just leave out the second sentence on that. Whenever a regular meeting falls on a public holiday, no regular meeting shall be held on that day.

CITY ATTORNEY EARLY – Alright, that would work.

CHAIR SIMS - Okay, comments? Thank you very much for getting us through that.

CITY ATTORNEY EARLY – No problem.

CHAIR SIMS – We'll look forward to a clean version; receive and file.

CITY ATTORNEY EARLY – You'll need to adopt it and actually vote on it.

CHAIR SIMS – Very exciting.

STAFF COMMENTS

CHAIR SIMS – Okay, do we have any Staff comments?

PLANNING OFFICIAL SANDZIMIER – The only thing I wanted to do is just wish you guys a very Happy New Year and good success this coming year. It's been a pleasure for me to be here for the first four months and I look forward to working with you for the rest of this year.

COMMISSIONER VAN NATTA – It's been a pleasure working with us?

PLANNING OFFICIAL SANDZIMIER – Absolutely

PLANNING COMMISSIONER COMMENTS

CHAIR SIMS – Okay would any of the Commissioners like to make a comment?

ADJOURNMENT

CHAIR SIMS – Okay, I'm looking for a motion to…

COMMISSIONER VAN NATTA – I motion we adjourn

COMMISSIONER BAKER – I'll second.

VICE CHAIR LOWELL – I second

CHAIR SIMS – All those in favor?

NEXT MEETING

Planning Commission Regular Meeting, January 22nd, 2015 at 7:00 pm, City of Moreno Valley, City Hall Council Chamber, 14177 Frederick Street, Moreno Valley, CA, 92533.

_____ _____

Richard Sandzimier Date
Planning Official
Approved

_____ _____

Jeffrey Sims Date
Chair

PLANNING COMMISSION STAFF REPORT

Cases:	PA13-0063 (Plot Plan) P13-130 (Environmental Impact Report (EIR))
Date:	March 12, 2015
Applicant:	Kearny Real Estate Company
Representative:	Jason Rosin, Kearny Real Estate Company
Location:	17300 Perris Blvd (NEC of Perris Boulevard and Modular Way)
Proposal:	A Plot Plan for the construction of a 1,109,378 square foot warehouse building on 50.68 net acres with the demolition of the existing warehouse facility. The project site is in the Moreno Valley Industrial Area Specific Plan 208. Approval of this project includes the review and certification of an EIR.
Parcel Numbers:	312-250-030, 031, 032, 036, 037, & 038
Council District:	4
Recommendation:	Approval

SUMMARY

The project consists of a Plot Plan for a 1,109,378 square foot warehouse building on 50.68 net acres. Prior to construction of the project, the existing warehouse facility will be demolished. An Environmental Impact Report was prepared for the project. The site is located within the Moreno Valley Industrial Area Specific Plan 208. There are no outstanding issues.

PROJECT DESCRIPTION

Project

PA13-0063 Plot Plan

The applicant, Kearny Real Estate Company, is requesting the review and approval of a Plot Plan (PA13-0063) to construct a 1,109,378 square foot warehouse distribution facility. The proposed project site includes 50.68 net acres located at 17300 Perris Boulevard, which is at the northeast corner of Perris Boulevard and Modular Way.

The proposed 1,109,378 square foot building includes approximately 20,000 square feet of office space and 1,089,378 square feet of warehouse space. The office spaces are proposed in all four corners of the building. Shipping and receiving areas will be on both the north and south sides of the building. A total of 256 loading bays are planned for loading, unloading, and short term parking for truck trailers; the split includes 128 dock doors on the north side and 128 on the south side of the building. The loading and truck areas will be screened from view by 14-foot tall walls that screen loading and docking bays from public views along Perris Boulevard, Modular Way, and Kitching Street.

The proposed warehouse facility is a permitted use within the Industrial (I) zone of the Moreno Valley Industrial Area Specific Plan 208. The Specific Plan is intended to provide locations for medium to heavy industrial and warehouse land uses. The proposed warehouse building is being built as a shell building for single or multiple tenant occupancy with no tenant identified.

Site

The project is located in the southern portion of the City between Perris Boulevard and Kitching Street on the north side of Modular Way. The site is rectangular in shape and relatively flat. The site is predominantly vacant with several older structures and a paved parking area that will all be removed prior to construction of the project. The proposed grading would not create any manufactured slopes except around the proposed water quality detention basins.

Surrounding Area

All surrounding land uses to the north, south, and east are industrial and within the Moreno Valley Industrial Area Specific Plan 208. Properties to the north include a recently constructed 555,670 square foot industrial distribution facility (PA06-0017/P12-146) and several other constructed warehouse facilities further west. To the south is the Walgreens distribution facility and to the east is the Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD).

Access/Parking

The project will take access from eight (8) driveways: two (2) driveways would take access from Perris Boulevard, three (3) driveways from Modular Way, one (1) driveway from Kitching Street, and two (2) driveways from Edwin Road. All Project driveways would be stop sign controlled. At Perris Boulevard, the southernmost driveway would have the option to be restricted to use by passenger vehicles only (Option A) or be fully accessible for use by passenger vehicles and trucks (Option B). All other driveways may be used by both passenger cars and trucks. Access to the loading bays and truck parking areas are proposed to be gated. Proposed truck check-in points and driveways are positioned interior to the Project site to create interior queuing to minimize the potential for trucks to stack onto public streets when entering the Project site.

The Plot Plan depicts the number and location of proposed passenger car and trailer parking spaces. The Plot Plan identifies 373 passenger car parking spaces distributed along the western and eastern sides of the building. A total of 306 trailer parking spaces would be distributed along the northern and southern sides of the building. The Project also includes an alternate site plan that would accommodate less trailer parking spaces and more passenger vehicle parking spaces, if required by the tenants that would eventually occupy the structure. The alternative site plan would not involve any changes to the size, location, configuration, or design of the proposed building. The proposed Project also would provide bicycle parking in compliance with the City of Moreno Valley Municipal Code Section 9.11.060, which requires bicycle parking to be provided in an amount equal to 5% of required vehicle parking. Per this Code requirement 19 bicycle parking spaces are required for the project.

Design/Landscaping

The proposed building would be constructed to a height of approximately 42 feet above finished grade, with architectural projections reaching up to 47 feet above finished grade. The building would be constructed with concrete tilt-up panels and blue-glazed, low-reflective glass. Articulated building elements, including white anodized mullions and white metal canopies, are proposed as decorative elements. The proposed exterior architectural color palette is comprised of various shades of gray, white, and blue. The interior of the proposed warehouse building is designed to provide a main floor and office spaces. The building has the potential to be partitioned for multiple tenant use.

Solid concrete walls would be installed on the southern and northern portions of the proposed warehouse building to screen loading docks and trailer parking areas from public view. The screen walls on the north side of the building would be located at the northwestern and northeastern corners of the building and would face Perris Boulevard and Kitching Street, respectively. On the south side of the building, screen walls would be constructed at the southwestern and southeastern corners of the building (facing Perris Boulevard and Kitching Street, respectively) and along the site's frontage with Modular Way. The concrete screen walls would be 14-feet tall and

constructed with a finish and color that complements the color palette for the proposed warehouse building. A chain-link metal fence is proposed along a portion of the northern property boundary (in the trailer parking area) and would not be visible from public viewing areas. Where access points into the loading dock and truck parking areas would be gated, eight (8)-foot tall, manually operated tubular steel gates, equipped with Knox® padlocks to allow emergency vehicle access, would be provided.

Landscaping will be designed per the Municipal Code Landscape Requirements in Section 9.17 with enhanced planting schemes at each of the driveways. The landscaping design requires a drought tolerant palette to reduce water usage satisfying the City's requirements and Eastern Municipal Water District's water usage/budget requirements.

REVIEW PROCESS

The applicant submitted the project on November 5, 2013. The project was reviewed by the Project Review Staff Committee on January 14, 2014. Based on comments from staff, minor revisions were requested on the site plan, grading plan, drainage study and Preliminary Water Quality Management Plan. The comments have been addressed. The Preliminary Water Quality Management Plan has been accepted by the City.

ENVIRONMENTAL

Initial Study/Notice of Preparation

An Initial Study was prepared for the project by an outside environmental consultant, T&B Planning, Inc., and submitted to the City for review. Based on the Initial Study, an Environmental Impact Report (EIR) was determined to be required. A Notice of Preparation for the EIR was prepared with the public comment period beginning on March 25, 2014 and ending on April 24, 2014. A Scoping Meeting held on April 21, 2014 with four members of the public in attendance.

Draft Environmental Impact Report

The draft environmental documents were prepared by an outside environmental consultant, T&B Planning, Inc., and submitted to the City for review.

A peer consultant, PMC, was hired under contract to the City to review the Environmental Impact Report and related environmental documents for compliance with the California Environmental Quality Act (CEQA) Guidelines. PMC suggested several revisions to further clarify the content. In addition, staff completed an independent review of all environmental documents to ensure that the documents reflect the independent judgment and analysis of the City as the CEQA Lead Agency. Upon completion of the Draft EIR, the document was circulated for a 45-day public review period, starting on October 24, 2014 and ending on December 8, 2014. The Draft EIR was sent to all required State and local agencies and interested parties. Six comment letters were received during the 45-day review period.

Final Environmental Impact Report

Responses to the six comment letters received during the 45 day review period are included in the Response to Comments document and Final EIR. The Response to Comments and related documents were mailed to all interested parties and responsible agencies on February 26, 2015, to allow for review prior to the Planning Commission hearing. As was the case with the Draft EIR, the Final EIR was provided for public review at City Hall, the City Library and posted on the City's website.

Significant and Unavoidable Impacts

The analysis presented in the EIR indicates that the proposed project will have potentially significant impacts, either as direct result of the proposed project or cumulatively with other proposed projects in the areas of aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, and transportation/traffic. The EIR includes proposed mitigation measures to reduce or eliminate potentially significant impacts. Even with proposed mitigation, a number of potential impacts cannot be reduced to a less than significant level. As specifically identified in section 4.0 of the EIR document, impacts that are concluded to be significant and unavoidable include air quality (long-term), greenhouse gas emissions (near-term and long-term), noise (near-term) and transportation/traffic (near-term and long-term).

Although all impacts cannot be reduced to less than significant levels, CEQA allows a decision making body to consider a statement of overriding considerations and findings. CEQA requires the decision making agency to balance the economic, legal, social, technological or other benefits of a proposed project against its unavoidable environmental impacts when determining whether to approve the proposed project. This would include project benefits such as the creation of jobs or other desired beneficial project features versus the project impacts that cannot be feasibly mitigated to less than significant levels. Therefore, if the Planning Commission determines that the benefits of the proposed project outweigh the unavoidable adverse environmental effects, the Commission may approve a statement of overriding considerations and approve the project.

Mitigation Measures and Monitoring

The Final EIR recommends 58 mitigation measures to reduce project specific and cumulative impacts related to aesthetics (lighting), air quality, biological resources, cultural resources, construction noise, and transportation/traffic. CEQA requires that public agencies "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." (Public Resources Code Section 21081.6) A Mitigation Monitoring Program has been developed to ensure compliance with all proposed mitigation measures. The Program provides for reporting procedures with verification and certification by City staff.

Approval and Certification

The Planning Commission will take public testimony on the proposed project and Final EIR. Before action on the proposed project, the Planning Commission must review the final environmental document and either certify or reject the Final EIR and Mitigation Monitoring Program.

NOTIFICATION

Public notice was sent to all property owners of record within 300' of the project on March 2, 2015. The public hearing notice for this project was also posted on the project site on March 2, 2015 and published in the Press Enterprise newspaper on March 1, 2015. As of the date of report preparation, staff had received no public inquiries in response to the noticing for this project.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2015-03 and Resolution No. 2015-04, and thereby:

1. **CERTIFY** that Final Environmental Impact Report (EIR), P13-130, for the Modular Logistics Center on file with the Community & Economic Development Department, has been completed in compliance with the California Environmental Quality Act, the Planning Commission reviewed and considered the information contained in the Final EIR, and the Final EIR reflects the City's independent judgment and analysis as provided for in Planning Commission Resolution No. 2015-03 (Attachment 2); and

2. **ADOPT** the Findings and Statement of Overriding Considerations regarding the Final EIR for the Modular Logistics Center, attached hereto as Exhibit A to Attachment 2; and

3. **APPROVE** the Mitigation Monitoring Program for the Final EIR for the proposed Modular Logistics Center, attached hereto as Exhibit B to Attachment 2; and

4. **APPROVE** PA13-0063 Plot Plan, subject to the attached Conditions of Approval included as Exhibit A to Attachment 3.

Prepared by:	Approved by:
Claudia Manrique Associate Planner	Richard J. Sandzimier Planning Official

ATTACHMENTS:

1. Public Hearing Notice
2. Planning Commission Resolution No. 2015-03
   Exhibit A - Statement of Overriding Considerations
   Exhibit B - Mitigation Monitoring Program
3. Planning Commission Resolution No. 2015-04
   Exhibit A - Conditions of Approval
4. Aerial Photograph
5. Zoning Map
6. Project Plans
7. Final EIR
8. Draft EIR

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Notice of PUBLIC HEARING

This may affect your property. Please read.

Notice is hereby given that a Public Hearing will be held by the Planning Commission of the City of Moreno Valley on the following item(s):

CASE: **PA13-0063 (Plot Plan)**
P13-130 (Environmental Impact Report)

APPLICANT: **Kearny Modular Way LLC**

OWNER: **Kearny Modular Way LLC**

REPRESENTATIVE: **Albert A Webb Associates**

LOCATION: **17300 Perris Blvd (NEC of Perris Boulevard and Modular Way)**

PROPOSAL: The proposed Modular Logistics Center involves the construction and operation of one logistics warehouse building having 1,109,378 square feet of building space, with 256 loading bays. The site is partially developed with industrial land uses under existing conditions. Existing site improvements would be demolished. The project is located within the Moreno Valley Industrial Area Plan (Specific Plan 208). Approval of this project will require the certification of an EIR.

ENVIRONMENTAL DETERMINATION: An Environmental Impact Report (P13-130), Statement of Overriding Considerations and Mitigation Monitoring Program have been prepared for this project (SCH#2014031068). A draft document was circulated to the public (including interested parties/responsible agencies) for review from October 24, 2014 to December 8, 2014.

COUNCIL DISTRICT: 4

STAFF RECOMMENDATION: Approval

Any person interested in any listed proposal can contact the Community & Economic Development Department, Planning Division, at 14177 Frederick St., Moreno Valley, California, during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday and 7:30 a.m. to 4:30 p.m., Friday), or may telephone (951) 413-3206 for further information. The associated documents will be available for public inspection at the above address.

In the case of Public Hearing items, any person may also appear and be heard in support of or opposition to the project or recommendation of adoption of the Environmental Determination at the time of the Hearing.

The Planning Commission, at the Hearing or during deliberations, could approve changes or alternatives to the proposal.

If you challenge any of these items in court, you may be limited to raising only those items you or someone else raised at the Public Hearing described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing.

LOCATION N ∅

PLANNING COMMISSION HEARING

City Council Chamber, City Hall
14177 Frederick Street
Moreno Valley, Calif. 92553

DATE AND TIME: March 12, 2015 at 7 PM

CONTACT PLANNER: Claudia Manrique

PHONE: (951) 413-3225

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PLANNING COMMISSION RESOLUTION NO. 2015-03

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY CERTIFYING FINAL ENVIRONMENTAL IMPACT REPORT (P13-130) AND ADOPTING THE FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATION AND APPROVING THE MITIGATION MONITORING PROGRAM FOR THE MODULAR LOGISTICS CENTER PROJECT

WHEREAS, the applicant, Kearny Modular Way LLC, submitted applications for the Modular Logistics Center, which include an Environmental Impact Report (P13-130) and Plot Plan (PA13-0063). The development includes one logistics warehouse building containing a total of 1,109,378 square feet on approximately 50.68 net acres. The above applications shall not be approved unless the Final Environmental Impact Report (Final EIR) is certified and approved; and

WHEREAS, the applicant, Kearny Modular Way LLC, and the environmental consultant, T & B Planning, Inc., worked with the City in the preparation of an Initial Study checklist and a Notice of Preparation (NOP). A Notice of Completion and Environmental Document Transmittal was filed with the State Clearinghouse on March 25, 2014 for the Notice of Preparation (NOP) of a Draft EIR for the project. The public review period of the NOP was March 25, 2014 through April 24, 2014. A public scoping meeting was held in connection with the NOP on April 21, 2014 in the Council Chamber at City Hall; and

WHEREAS, the applicant, Kearny Modular Way LLC, and the environmental consultant, T & B Planning, Inc., worked with the City in the review and consideration of NOP response comments in the preparation of a Draft Environmental Impact Report (Draft EIR) for this project. The Draft EIR was circulated to the public and to responsible agencies for comments for a 45 day period beginning on October 24, 2014 and ending on December 8, 2014; and

WHEREAS, the City has prepared responses to comments on the Draft EIR received during the 45 day comment period, which have been included in the Final EIR; and

WHEREAS, on February 26, 2015, the City distributed copies of the draft Final EIR to the State Clearinghouse, local agencies and other interested parties; and

WHEREAS, on March 1, 2015, the City published a notice in the local newspaper (Press Enterprise); and

WHEREAS, the Draft and Final EIR for the proposed Modular Logistics Center Project were prepared in sufficient detail and duly circulated in compliance with the California Environmental Quality Act (CEQA), the State of California Guidelines for

Implementation of CEQA, and the City of Moreno Valley's Rules and Procedures to Implement CEQA; and

WHEREAS, since February 26, 2015, copies of the draft EIR have been made available to the public at the City's offices, on the City's website and at the City's public library; and

WHEREAS, the Final EIR includes a review of potential impacts associated with the implementation of the Modular Logistics Center, including, but not limited to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Noise, and Transportation/Traffic; and

WHEREAS, a Mitigation Monitoring Program has been completed to ensure that all of the mitigation measures outlined in the Final EIR are implemented; and

WHEREAS, a Final EIR, (including the Draft EIR, and responses to comments), has been completed and is being recommended for certification, prior to the approval of discretionary permits related to the project; and

WHEREAS, on March 12, 2015**,** the Planning Commission conducted a public hearing to consider the Final EIR for the proposed project; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on March 12, 2015, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Independent Judgment and Analysis –** The Final Environmental Impact Report represents the City's independent judgment and analysis.

   FACT: The City reviewed all environmental documentation included in the Final EIR, and the environmental consultant incorporated staff's review and analysis into the Final EIR. Further, a public hearing was conducted by the Planning Commission on March 12, 2015, during which opportunity was given to address the adequacy of the Final EIR. All comments on the Final EIR raised during the public and agency comment period and at the Public Hearing(s) on the project were considered by the Planning Commission.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2015-03, and thereby:

1. **CERTIFY** that the Final Environmental Impact Report for the Modular Logistics Center Project on file with the Community & Economic Development Department, incorporated herein by this reference, has been completed in compliance with the California Environmental Quality Act, that the Planning Commission reviewed and considered the information contained in the Final EIR and that the Final EIR reflects the City's independent judgment and analysis; and

2. **ADOPT** the Findings and Statement of Overriding Considerations regarding the Final EIR for the Modular Logistics Center Project, attached hereto as Exhibit A; and

3. **APPROVE** the Mitigation Monitoring Program for the Final EIR for the proposed Modular Logistics Center Project, attached hereto as Exhibit B.

APPROVED this 12th day of March, 2015.

_____
Jeffrey D. Sims
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

Attachments

Facts, Findings and Statement of Overriding Considerations Regarding the Environmental Effects of the Approval of the Modular Logistics Center Project State Clearinghouse No. 2014031068

Plot Plan (PA13-0063)
EIR Case P13-130

I. INTRODUCTION

The Planning Commission of the City of Moreno Valley (the "Commission") in approving the Modular Logistics Center project (the "Project"), makes the Findings described below and adopts the Statement of Overriding Considerations presented at the end of the Findings. The Findings are based upon the entire record before the Commission, as described in Section III below, including the Environmental Impact Report ("EIR") prepared for the Project by the City, acting as lead agency under the California Environmental Quality Act ("CEQA").

II. PROJECT SUMMARY

A. PROJECT DESCRIPTION

One discretionary action (Plot Plan (PA13-0063)) is requested of the City of Moreno Valley to implement the Project. The Project site is 50.84 gross acres in size and is located in the southern portion of the City of Moreno Valley, within the boundary of the Moreno Valley Industrial Area Plan (MVIAP). The subject property is generally rectangular-shaped and located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard.

The Plot Plan (PA13-0063) proposes to redevelop the property with one logistics warehouse building containing 1,109,378 square feet (s.f.) of building space with 256 loading bays. Associated improvements to the property would include, but are not limited to, surface parking areas, drive aisles, utility infrastructure, landscaping, exterior lighting, signage, and water quality/detention basins. Construction of the proposed Project involves the demolition of existing buildings on-site, grading and preparation of the property for redevelopment, and construction and operation of one logistics warehouse.

The proposed building is designed to contain 1,089,378 s.f. of warehouse space and 20,000 s.f. of office space. The office spaces would be located at the northwest, northeast, southwest, and southeast corners of the building. Right-of-way dedications for roadway purposes to the City of Moreno Valley included as part of the Project total approximately 0.16 acres; therefore, the Project site measures approximately 50.68 net acres in size. The proposed building would calculate to a floor area ratio (FAR) of 0.50.

B. PROJECT OBJECTIVES

The primary objective of the proposed Project is to redevelop an underutilized property in the City of Moreno Valley's Industrial Area Plan (MVIAP, Specific Plan 208) with a large logistics warehouse building in conformance with the land use designations applied to the property by City of Moreno Valley General Plan and the MVIAP. The Project would achieve this primary objective through the following basic objectives.

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

III. ENIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The City has conducted an extensive environmental review of the Project to ensure that both the City's decision makers and the public are fully informed about potential significant environmental effects of the Project; to identify ways that environmental damage can be avoided or significantly reduced; to prevent significant, avoidable damage to the environment by requiring changes in the Project through the use of mitigation

measures which have been found to be feasible; and to disclose to the public the reasons why the City has approved the Project in the manner chosen in light of the significant environmental effects which have been identified in the EIR. In order to do this, the City, as the lead agency under CEQA, has done all of the following:

1. Prepared and distributed an Initial Study/Notice of Preparation dated March 25, 2014, a copy of which was circulated on March 25, 2014, through the State Clearinghouse to various state agencies for their comments;

2. Sent the Initial Study/Notice of Preparation dated March 25, 2014, to each of the governmental agencies, organizations and individuals shown on the distribution list for the Notice of Preparation/Initial Study (see Appendix A to the Draft EIR), on March 25, 2014;

3. Sent a Notice of Completion and a copy of the Draft EIR to the State Clearinghouse on October 24, 2014;

4. Mailed the Notice of Availability to all organizations and individuals who had previously requested the Notice on October 24, 2014;

5. Mailed the Notice of Availability to all residents and property owners within 300 feet of the Project Site on October 24, 2014;

6. Provided copies of the Draft EIR to 44 public agencies, organizations and individuals on October 24, 2014;

7. Placed copies of the Draft EIR on the City's website, at the City's Planning Division's public counter and at the public library located at 14177 Frederick Street on October 24, 2014;

8. Proposed responses to comments on the Draft EIR received during and after the 45-day comment period on the Draft EIR, which have been included in the Final EIR;

9. Sent copies of the Final EIR on February 26, 2015, to all public agencies, organizations, and individuals who had submitted comments;

10. Published a Notice on March 1, 2015, in the Press Enterprise, a newspaper of general circulation which has the largest circulation in the areas affected by the Project, that the City's Planning Commission would hold a public hearing on March 12, 2015, to consider certification of the Final EIR as having been prepared in compliance with CEQA and the approval of the Project;

11. Mailed notice of the Planning Commission's hearing to all residents and property owners within 300 feet of the Project Site on March 2, 2015;

12. Sent notice of the Planning Commission's hearing to all organizations and individuals who had submitted a written comment on the Draft EIR and/or

previously requested notification of public meetings/hearings related to the Project on February 26, 2015; and

13. Held a public hearing of the City's Planning Commission to consider adequacy of the Final EIR on March 12, 2015, and, after full consideration of all comments, written and oral, certified that the Final EIR had been completed in compliance with CEQA and approved the Project.

All of the documents identified above and all of the documents which are required to be part of the record pursuant to Public Resources Code § 21167.6(e) are on file with the City's Community & Economic Development Department, Planning Division, located at 14177 Frederick Street, Moreno Valley, CA 92552-0805. Questions should be directed to Claudia Manrique, Associate Planner, in the Division.

A. INDEPENDENT JUDGMENT FINDING

Finding: The Final EIR for the Project reflects the City's and the Planning Commission's independent judgment and analysis.

Factual Basis for the Finding: The Final EIR was prepared by T&B Planning, Inc., a professional consulting firm hired and funded by the Project Applicant, but working under the supervision and direction of the City's Community & Economic Development Department, Planning Division staff. The EIR was also thoroughly reviewed by the consulting firm Pacific Municipal Consultants (PMC), an expert consultant firm hired and paid by the City with funding provided by the Project Applicant to provide independent peer review and assure the exercise of thorough and independent review and judgment by the City. The Planning Commission, as the City's final decision making body for the Project, received and reviewed the Final EIR and the comments, both written and oral, provided by public agencies and members of the public prior to certifying that the Final EIR complied with CEQA. The participation of City Staff in selection and approval both of T&B Planning, Inc. and PMC included review of the professional qualifications and reputation of the EIR Consultants, the supervision and direction of the EIR Consultants by the City Staff, the thorough and independent review of the Draft and Final EIRs, including comments and responses to comments, and their supporting technical studies by City Staff and PMC and the review and careful consideration by the Planning Commission of the Final EIR, comments and responses to comments, which all conclusively show that the Final EIR is the

product of and reflects the independent judgment and analysis of the City as the Lead Agency, and of the Planning Commission as its governing body.

B. FINDING OF THE ABSENCE OF ANY NEED TO RECIRCULATE THE FINAL EIR

Finding: The Planning Commission finds that the Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR.

Factual Basis for the Finding: The Planning Commission recognizes that the Final EIR incorporates information obtained and produced after the Draft EIR was completed and that the Final EIR contains additions, clarifications, and minor modifications to the Draft EIR. The Planning Commission has reviewed and considered the Final EIR, and all of the information contained in it, and has determined that the new information added to the Final EIR does not involve a new significant environmental impact or a substantial increase in the severity of an environmental impact, nor does the information added to the Final EIR include a feasible mitigation measure or an alternative considerably different from others previously analyzed and that would clearly lessen the significant environmental impacts of the Project that the Project Applicant declined to adopt. No information provided to the Planning Commission indicates that the Draft EIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the Draft EIR.

C. GENERAL TREATMENT OF MITIGATION MEASURES

It is the Planning Commission's intention to adopt all mitigation measures recommended by the Final EIR. If a measure has been omitted from the Conditions of Approval, from the Findings or from the Mitigation Monitoring Program (the "MMP"), a copy of which is attached as Exhibit A and which is hereby adopted, that mitigation measure shall be deemed to be adopted pursuant to this paragraph.

In addition, all Conditions of Approval and the MMP repeating or rewording mitigation measures recommended in the Final EIR are intended to be substantially similar to the mitigation measures as stated in the Final EIR and are found to be equally effective in avoiding or lessening the identified environmental impact.

IV. ENVIRONMENTAL IMPACTS AND FINDINGS

Based on the Initial Study, Appendix A to the Final EIR, and the responses to the Notice of Preparation, the EIR analyzed eight potential areas where significant environmental impacts could result from the development of the Project. The eight potential areas where significant environmental impacts could result from the development of the Project are aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, and transportation/traffic. Four (4) of those, air quality (long-term), greenhouse gas emissions (near-term and long-term), noise (near-term) and transportation/traffic (near-term and long-term), were found to have significant and unavoidable environmental impacts after the imposition of all feasible mitigation measures. Project-related effects to aesthetics, air quality (near-term), biological resources, cultural resources, geology and soils, and noise (long-term) were found to have either no significant and unavoidable environmental impacts or environmental impacts that could be mitigated to a level of insignificance. The description of each environmental area, the potential impacts, and the feasible mitigation measures are set forth in Section 4.0 of the Final EIR together with the changes and additions set forth in Section F.2.3 of the Final EIR.

A. IMPACTS IDENTIFIED IN THE EIR AS POTENTIALLY SIGNIFICANT THAT HAVE BEEN MITIGATED TO LESS THAN SIGNIFICANT

1. AIR QUALITY

a. Potential Direct and Cumulative Significant Impact (Near-term): Violation of an air quality standard, contribution to an air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (Thresholds 2 and 3).

Finding: Emissions during Project construction (near-term) would violate the South Coast Air Quality Management District (SCAQMD) regional thresholds for nitrogen oxides (NO_x). Near-term emissions of NO_x also would contribute to an existing air quality violation in the South Coast Air Basin (SCAB) (i.e., non-attainment status for NO_x and ozone (O_3)) because NO_x are precursors for O_3. As such, near-term construction activities would violate the air quality standard for NO_x and would contribute to an existing regional air quality violation and would cumulatively contribute to the net increase of two criteria pollutants (O_3 and NO_x) for which the region is non-attainment. Accordingly, near term, construction-related emissions of NO_x are a significant direct and cumulative impact of the Project.

The Project will be required to implement Mitigation Measure MM 4.2-5 to address the Project's significant near-term impact associated with NO_x emissions and NO_x contributions to the SCAB's non-attainment status for NO_x and O_3. Accordingly, Mitigation Measure MM 4.2-5, as set forth in the

MMP attached as Exhibit A, has been imposed as a condition of approval for this Project.

Factual Basis for the Finding: Construction activities will result in the maximum daily emissions (before mitigation) of 247.40 pounds per day of NO_x which exceeds SCAQMD's regional threshold of 100 pounds per day. As discussed on Final EIR Page 4.2-19 through Page 4.2-20 and in the Project's Air Quality Impact Analysis (Final EIR Technical Appendix B1), the sources of NO_X are primarily associated with exhaust from construction vehicles. As stated on Final EIR Page 3-16, the Project would be constructed over the course of approximately 11 months.

To address NO_x emissions, Mitigation Measure MM 4.2-5 requires that the Project comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling." Ten items are listed under Mitigation Measure MM 4.2-5, including requirements that 1) the contractor use California Air Resources Board (CARB) Tier 3 certified equipment for all off-road diesel-powered equipment; 2) that temporary signs be placed on the construction site specifying that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes; 3) that the construction contractor limit the use of diesel-powered construction equipment to no more than 26,992 horsepower-hours per day during days when soil import activities are occurring and 32,768 horsepower-hours per day on days when there is no soil import; 4) that high pressure injectors be used on all diesel powered construction equipment over 100 horsepower; 5) that all construction-related on-road diesel-powered haul trucks have 2007 or newer model year or be 2010 engine compliant vehicles; 6) that all particulate traps on construction-related equipment be Level 3

CARB certified; 7) that electric-powered construction equipment and tools be used when technically feasible; 8) that biodiesel fuel or other alternatives to diesel fuel be used to power construction equipment when technically feasible; 9) that all construction vehicles use the City's designated truck route; and 10) that construction parking areas be located and configured to minimize traffic interference on public streets. As shown on Final EIR Table 4.2-12, with the application of these measures, NOx emissions would be reduced to 96.54 pounds per day, which is below the SCAQMD threshold of 100 pounds per day.

2. BIOLOGICAL RESOURCES

a. Potential Direct and Cumulative Significant Impact: Substantial adverse effect on special-status species (Threshold 1) and conflict with the provisions of an adopted Habitat Conservation Plan (Threshold 6).

Finding: The 50.84-gross acre Project site is classified as Disturbed/Developed and does not contain any sensitive vegetation communities; nonetheless, there is suitable habitat for the western burrowing owl and migratory birds on the undeveloped (eastern) portion of the site. The burrowing owl was not observed on the site during biological field surveys conducted on the property as documented in EIR Appendices C1 and C2, but because the burrowing owl is migratory and because suitable habitat is present on the property, owls could migrate onto the undeveloped portion of the property prior to ground-disturbing construction activities and be subject to impact. If present when construction activities commence, the Project could have a substantial adverse effect on the species. The Project will be required to implement Mitigation Measure MM 4.3-2, including compliance with Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Species-Specific Conservation Objective 5 to address the Project's potential impact to the burrowing owl and reduce the potential impact to below a level of significance. The California horned lark was observed on the property as documented in EIR Appendix C1. Although impacts to this species are less than significant because the species is covered by the Western Riverside County MSHCP, the Project will be required to implement Mitigation Measure MM 4.3-1 to ensure that the Project pays the City's required Western Riverside County MSHCP development impact and mitigation fees to assist the City in the implementation of the Western Riverside County MSHCP. Furthermore, the Project would not conflict with the Stephens' Kangaroo Rat Habitat Conservation Plan. Regardless, Mitigation Measure MM 4.3-4 has been applied to the Project to ensure that the Project pays the appropriate Stephens' Kangaroo Rat development impact and mitigation fee. Potentially

significant cumulative impacts would be addressed and mitigated through compliance with the Western Riverside County MSHCP and associated ongoing establishment of the MSHCP Reserve System and mandatory compliance with the federal Migratory Bird Treaty Act.

Factual Basis for the Finding: As discussed on Pages 4.3-3, 4.3-4, 4.3-6, 4.3-9, and 4.3-13 through 4.3-17 of the Final EIR, in the Project's Biological Technical Report (Final EIR Technical Appendix C1) and in the Project's Focused Burrowing Owl Survey (Final EIR Technical Appendix C2), the Project site contains suitable habitat for the burrowing owl. Although the western burrowing owl was not observed as being present on the Project site during the pedestrian-based field surveys conducted during 2013, if present on the Project site just prior to the start of construction, the species has the potential to be impacted by Project construction activities. Pre-construction species surveys of the Project Site, avoidance of clearing and grading activities during the nesting season (if the site is occupied), and requirements to follow Western Riverside County MSCHP requirements and California Department of Fish and Wildlife protocol for occupied habitat will ensure that the potential direct and cumulative impacts will be mitigated to less-than-significant levels. Accordingly, Mitigation Measure MM 4.3-2 as set forth in the MMP attached as Exhibit A, has been imposed as a condition of approval.

As discussed on Pages 4.3-3, 4.3-8- 4.8-9, 4.3-15, and 4.3-17 of the Final EIR, and in the Project's Biological Technical Report (Final EIR Technical Appendix C1), the California horned lark was observed on the property but impacts to this species are not significant because it is a Covered Species under the Western Riverside County MSHCP. Nonetheless, Mitigation Measure MM 4.3-1, as set forth in the MMP attached as Exhibit A, has been imposed as a condition of approval to mitigate potential direct and cumulative impacts to special-status species.

b. Potential Direct and Cumulative Significant Impact: Potential for the Project to interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory

wildlife corridors, or impede the use of native wildlife nursery sites (Threshold 4).

Finding: The Project is not located within an area that has the potential to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting migratory birds protected by the Migratory Bird Treaty Act ("MBTA") and California Fish and Game Code, if construction activities were to occur during the nesting season. The Project would be required to implement Mitigation Measure MM 4.3-3, which prohibits vegetation clearing and ground disturbance during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with City requirements. Potentially significant cumulative impacts would be addressed and mitigated through compliance with Mitigation Measure MM 4.3-3 and reduced to below a level of significance.

Facts in Support of the Finding: As discussed on Page 4.3-10 of the Final EIR and in the Project's Biological Technical report (Final EIR Technical Appendix C1), the 50.84-gross acre Project site is classified as Disturbed/Developed. There are no water bodies on or adjacent to the site that could support fish; therefore, there is no potential for the Project to interfere with the movement of fish. There are also no native wildlife nurseries on or adjacent to the site; therefore, there is no potential for the Project to impede the use of a native wildlife nursery site. The proposed Project would, however, result in the removal of vegetation (i.e., trees and shrubs) from the Project site that has the potential to support nesting migratory birds. Impacts to such species are prohibited under the MBTA and California Fish and Game Code. Accordingly Mitigation Measure MM 4.3-3 as set forth in the MMP attached as Exhibit A, has been imposed as a condition of approval to reduce the potential impact to a level of insignificance.

3. CULTURAL RESOURCES

a. Potential Direct and Cumulative Significant Impact: Substantial adverse change in the significance of an archaeological resource (Threshold 2).

Finding: The Project site does not contain any known archaeological resources. However, the ground disturbing activities involved with the construction phase of the Project would have the potential, however unlikely, to unearth and adversely impact archaeological resources that may be buried underneath the ground surface. Mitigations Measures MM 4.4-1 through MM 4.4-3

require the Project to implement monitoring procedures by qualified archaeologists and provide notification to Native American representatives. Mitigation Measure MM 4.4-4 outlines the procedure to address the inadvertent unearthing of archaeological resources in order to ensure proper preservation and treatment of such resources. Potentially significant direct and cumulative impacts would be addressed and mitigated through compliance with Mitigations Measures MM 4.4-1 through MM 4.4-4 and reduced to below a level of significance.

Facts in Support of the Finding: As discussed on Pages 4.4-9 and 4.4-11 of the Final EIR, and in the Project's Cultural Resources Report (Final EIR Technical Appendix D1), the Project site does not contain any documented archaeological resources. Furthermore, according to the archival records search, no prehistoric archaeological resources were previously recorded on the Project site and no prehistoric archaeological resources were observed on the Project site during the pedestrian survey of the site. Although no resources are expected to be observed on the Project site, the construction activities proposed by the Project have the potential to uncover previously unknown resources. For this reason, Mitigation Measures MM 4.4-1 through MM 4.4-4 as set forth in the MMP attached as Exhibit A, have been imposed as conditions of approval.

b. Potential Direct and Cumulative Significant Impact: Potential impact to a unique paleontological resource or site or unique geological feature (Threshold 3).

Finding: The Project site does not contain any unique geological features. However, the older Pleistocene alluvial fan deposits on-site have a high potential to contain significant nonrenewable paleontological resources. Mitigations Measures MM 4.4-5 through MM 4.4-8 require the Project to implement monitoring procedures overseen by a qualified paleontologist and provide curation of specimens into a professional, accredited public museum repository. Potentially significant direct and cumulative impacts would be addressed and mitigated through compliance with Mitigations Measures MM 4.4-5 through MM 4.4-8 and reduced to below a level of significance.

Facts in Support of the Finding: As discussed on pages 4.4-7 – 4.4-8 and 4.4-9 – 4.4-10 of the Final EIR, and in the Project's Paleontological Resources Report (Final EIR Technical Appendix D2), the Project site does not contain any unique geological features or known paleontological resources. However, the older Pleistocene alluvial fan deposits on-site have a high potential to contain significant

nonrenewable paleontological resources and are assigned a "high paleontological resource sensitivity." Furthermore, the Riverside County Multipurpose Open Space Element, categorizes the Project area as having a High Potential/Sensitivity for paleontological resources. Although no resources are expected to be observed on the Project site, the construction activities proposed by the Project have the potential to uncover previously unknown resources. For this reason, Mitigation Measures MM 4.4-5 through MM 4.4-8 as set forth in the MMP attached as Exhibit A, have been imposed as conditions of approval.

B. IMPACTS IDENTIFIED IN THE EIR AS BEING SIGNIFICANT AND UNAVOIDABLE EVEN AFTER THE IMPOSITION OF ALL FEASIBLE MITIGATION MEASURES

1. AIR QUALITY

a. Significant and Unavoidable Direct and Cumulative Impact (Long-term): Violation of air quality standard, contribution to air quality violation, or cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (Thresholds 2 and 3).

Finding: The Project's long-term operational emissions would exceed the SCAQMD threshold of significance for NO_X, primarily associated with mobile source emissions. The SCAB does not attain state criteria for NO_X concentrations. Furthermore, NO_X is a precursor for O_3, and the SCAB is identified as a federal and state non-attainment area for O_3. As such, the Project's long-term operational activities, primarily associated with mobile source emissions, would violate the air quality standard for NO_X, which would contribute to existing regional air quality violations and would cumulatively contribute to the net increase of criteria pollutants for which the region is non-attainment (NO_X and O_3). The Project's impact is thus significant on a direct and cumulative basis.

The Project will be required to implement Mitigation Measures MM 4.2-6 through MM 4.2-17 to reduce the Project's significant long-term operational-related impact associated with the emission of NO_X contributions to the SCAB's non-attainment status for NO_X and O_3. Mitigation Measure MM 4.2-6 requires that legible, weather-proof signs be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. Mitigation Measure MM 4.2-7 requires, prior to the issuance of building permits, that the City verify that the parking lot striping and security plan allows for adequate truck

stacking at gates to prevent queuing of trucks outside the property. MM 4.2-8 requires, prior to the issuance of a building permit, that documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the California Title 24 Energy Efficiency Standards (2013). Mitigation Measure MM 4.2-9 requires, prior to the issuance of occupancy permits, documentation shall be provided to the City of Moreno Valley demonstrating that Energy Star rated appliances and fixtures are installed in restrooms and employee break areas. Mitigation Measure MM 4.2-10 requires, prior to the issuance of permits that would allow the installation of landscaping, that the City of Moreno Valley review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques. Mitigation Measure MM 4.2-11 requires, prior to the issuance of occupancy permits, that the Project's property owner provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nanina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program. Mitigation Measure MM 4.2-12 requires that, prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees. Mitigation Measure MM 4.2-13 requires that, in the event that the building attracts trucks that need continual power, all loading docks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel. Mitigation Measure MM 4.2-14 requires that building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers. Mitigation Measure MM 4.2-15 requires that prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow. Mitigation Measure MM 4.2-16 requires that prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive isles and truck courts shall be composed of concrete. Mitigation Measure MM 4.2-17 requires that the Project's building shall be capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at

loading bays, as determined by the City of Moreno Valley at building permit issuance.

In addition to Mitigation Measures MM 4.2-6 through MM 4.2-17, on-road vehicles accessing the Project are required to comply with many state and federal regulatory requirements that address fuel usage and mobile emissions control, including but not limited to the California Code of Regulations Title 13, Title 17, and the CARB "Pavley" fuel standards. Furthermore, all new developments in the State of California are required to comply with the California Building Standards Code (also known as CalGreen), which addresses operational energy use efficiency. For example, CalGreen Section 5.106, Site Development, requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. CalGreen standards became more stringent in 2014 to require a higher level of energy efficiency than all previous versions of the California Building Code. Cycle updates to CalGreen Title 24 have undergone substantial changes in the last 10 years to require energy-efficient development. The California Energy Commission (CEC) has increased the overall stringency of the Title 24 standards by 45 to 50 percent since 2000.

The Project's long-term emissions of NO_X would directly and cumulatively contribute to an existing air quality violation in the SCAB (NO_X), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., NO_X and O_3). The City of Moreno Valley finds this impact to be a significant unavoidable direct and cumulative impact (long-term). There are no additional feasible mitigation measures that would avoid or substantially lessen emissions of NO_X during long-term operation to a level below significant while still attaining most of the basic objectives of the Project. Mitigation Measures MM 4.2-6 through MM 4.2-17 have been adopted and will reduce this impact, but not to a less-than-significant level. This impact is overridden by Project benefits as set forth in the statement of overriding considerations.

Factual Basis for the Finding: As discussed on Page 4.2-20 through Page 4.2-26 and Page 4.2-33 through Page 4.2-34 of the Final EIR and in the Project's Air Quality Impact Analysis (Final EIR Technical Appendix B1), air pollutant emissions during Project operation (long term) are projected to exceed the SCAQMD regional threshold for NO_X. Long-term emissions of NO_X also would contribute to an existing air quality violation in the SCAB (i.e., non-attainment status for NO_X and O_3) because NO_X is precursors for O_3. As such, Project-related air emissions would violate SCAQMD air quality standards and contribute to the non-attainment status of criteria pollutants (NO_X and O_3). These Project-related air pollutant emissions

are concluded to be a significant impact on a direct and cumulatively considerable basis.

Project-related operational emissions (before mitigation) in the summer months will result in maximum daily emissions of 326.86 pounds per day of NO_X, which exceeds the SCAQMD's regional threshold of 55 pounds per day. Project-related operational emissions (before mitigation) in the winter months will result in maximum daily emissions of 339.97 pounds per day of NO_X, which exceeds the SCAQMD's regional threshold of 55 pounds per day. Operational emissions for all other criteria pollutants (VOC, CO, SO_X, PM_{10}, $PM_{2.5)}$ will not exceed the SCAQMD thresholds.

The Project will be required to implement Mitigation Measures MM 4.2-6 through MM 4.2-17 to reduce the Project's significant long-term operational-related impact associated with the emission of NO_X and its contributions to the SCAB's non-attainment status for NO_X and O_3. In addition, on-road vehicles accessing the Project are required to comply with many state and federal regulatory requirements that address fuel usage and emissions control, including but not limited to the California Code of Regulations Title 13, Title 17, Title 24, and the California Air Resources Board (CARB) "Pavley" fuel standards. A listing of these regulatory requirements is contained in Final EIR Appendices B1 and F. Complying with all applicable regulatory requirements and Mitigation Measures MM 4.2-6 through MM 4.2-17 by requiring that legible, weather-proof signs be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations (Mitigation Measure 4.2-6), by requiring that the City verify that the parking lot striping and security plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property (Mitigation Measure MM 4.2-7), by requiring that documentation be provided to the City of Moreno Valley demonstrating that the building design meets the California Title 24 Energy Efficiency Standards (2013) requires, (Mitigation Measure MM 4.2-8), by requiring that documentation is provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are

Energy Star rated (Mitigation Measure MM 4.2-9), by requiring that the City of Moreno Valley review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques (Mitigation Measure MM 4.2-10), by requiring that the Project's property owner include provisions in the building's lease agreement that inform tenants about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nanina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program (Mitigation Measure MM 4.2-11), by requiring that the Project's property owner to include provisions in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees (Mitigation Measure MM 4.2-12), by requiring that, in the event that the building attracts trucks that need continual power, all loading docks be equipped with an electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel (Mitigation Measure MM 4.2-13), by requiring that the building design include conduit and plug-in locations for operating equipment such as electric yard tractors, fork lifts, reach stackers, and sweepers (Mitigation Measure MM 4.2-14), by requiring that a sign is installed at each exit driveway, providing directional information to the City's truck route (Mitigation measure MM 4.2-15), by requiring that. documentation be provided to the City of Moreno Valley demonstrating that truck drive isles and truck courts shall be composed of concrete (Mitigation Measure MM 4.2-16), and by requiring that the Project's building shall be capable of accommodating the future installation of electrical infrastructure to

service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance (Mitigation Measure MM4.2-17). These requirements, included in the Final EIR as mitigation measures, would reduce NO_X emissions, but not to a level below the SCAQMD thresholds of significance, which the EIR relies upon to form a significance conclusion.

The majority of the Project's NO_X emissions would be from tailpipe emissions of vehicles traveling to and from the Project site. There are no other feasible ways to reduce the Project's impact and meet the Project's objectives. It is not feasible to impose nor would there be any environmental benefit to the SCAB from requiring trucks accessing this Project to meet stricter engine requirements than state and federal laws require. Imposing engine restrictions on this one Project or even on all new warehouse projects in the City of Moreno Valley is not feasible given the realities of the southern California economy and the nature of local control. High cube logistics and warehousing is one of the largest sectors of the California economy and is subject to fierce competition. As explained on Page 2-5 of the Final EIR, the Project is consistent with the Southern California Association of Governments' Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), and particularly its Goods Movement Chapter. As stated on Final EIR Page 2-5 and quoting from the RTP/SCS Goods Movement Chapter, "Goods movement and freight transportation are essential to supporting the SCAG regional economy and quality of life. The goods movement system in the SCAG region is a multimodal, coordinated network that includes deep water marine ports, international border crossings, Class I rail lines, interstate highways, state routes and local roads, air cargo facilities, intermodal facilities, and regional distribution and warehousing clusters. In 2010, over 1.15 billion tons of cargo valued at almost $2 trillion moved across the region's transportation system. Whether carrying imported goods from the San Pedro Bay Ports to regional distribution centers, supplying materials for local manufacturers, or delivering consumer goods to SCAG residents, the movement of freight provides the goods and services needed to sustain regional industries and consumers on a daily basis." The imposition of additional mitigation measures on the Project as

suggested in comment letters received by the City on the Draft EIR, such as imposing engine requirements on the vehicle fleet accessing the Project site, would have no realized environmental benefit because companies seeking to rent or buy such warehousing space have a wide range of location options throughout Southern California (particularly in the Inland Empire) and if the City of Moreno Valley were to unilaterally impose fleet restrictions on warehouse buildings within its borders, its share of the developable market for warehouse uses would evaporate as users and tenants not meeting the restriction would simply relocate to other cities within the SCAB (such as Ontario, Perris, Riverside, Corona, Beaumont, etc.) where fleet controls are not in place. Thus, the NO_X emissions would simply be shifted to another portion of the Air Basin and the Air Basin's overall air quality would not be benefited. Additionally, the overall air quality in the Air Basin could arguably be worsened if the alternative locations resulted in increased vehicle miles traveled and hence more emissions. The Project location is in geographic area of the Moreno Valley Industrial Area Plan, which is an area of the City that has been planned for industrial development for over 25 years and that is consistent with the SCAG's Goods Movement Strategy. The same rationale holds true for emissions from on-site operating equipment such as yard trucks. As state and federal emission regulations and restrictions at the San Pedro Bay Ports become more stringent, it is expected that older trucks and operating equipment will diminish from warehousing truck fleets and operational equipment fleets without additional restrictions imposed by local governments. CARB reports indicate that NO_X and other air pollutant emissions are trending downward, showing an overall improvement in air quality over the past several decades even as population and new development is increasing (refer to Final EIR Pages 4.2-5 through 4.2-11, including Tables 4.2-3 and 4.2-4). As shown by this data and in Technical Appendices B1, B2, and B3, overall air quality within the Air Basin is dramatically improving as the result of regulatory programs and is expected to continue to improve in the future as regulations become more stringent.

In conclusion, although implementation of mandatory and applicable state and federal regulatory requirements

and Mitigation Measures MM 4.2-6 through MM 4.2-17, as set forth in the MMP attached as Exhibit A, will reduce long-term operational emissions of NOx and contributions to the SCAB's nonattainment status for NO_X and O_3, Project-related operational emissions of NOx, primarily from mobile source emissions, would remain above the SCAQMD significance threshold and there are no other ways to measurably reduce this impact with mitigation measures that are fully enforceable, have an essential nexus to a legitimate governmental interest, and are roughly proportional to the impacts of the Project.

2. GREENHOUSE GAS EMISSIONS

a. Significant and Unavoidable Cumulative Impact: The generation of greenhouse gas emissions that have significant effect on the environment (Threshold 1) and conflict with an applicable plan, policy, or regulation (Threshold 2).

Finding: Greenhouse gasses (GHGs) would be emitted by the Project, approximately 90% of which would come from mobile sources (vehicles traveling to and from the Project site). Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed in the technical analysis contained in Technical Appendix F, the Project is not able to reduce its GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the mandates of AB 32. In addition, the Project is calculated to emit a total of 18,322.72 metric tons of CO2 equivalent ($MTCO_2e$) per year without mitigation and 14,453 $MTCO_2e$ with mitigation, which exceeds the SCAQMD's significance threshold of 10,000 $MTCO_2e$ per year for stationary source emissions from industrial projects. Although the Project's emissions would primarily come from mobile sources and not stationary sources, the SCAQMD criterion was nonetheless taken into consideration in the evaluation of the Project's GHG impacts. Because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley for the analysis of GHG impacts, and further because the Project would emit more than 10,000 $MTCO_2e$ on an annual basis, the Project is determined to result in GHG emissions (including long-term operational emissions and short-term construction-related emissions amortized over the life of the Project) that would have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32). The application of Mitigation Measures MM 4.2-6 through MM 4.2-17 in Final EIR Section 4.2, Air Quality, and Mitigation Measures MM 4.6-1 through MM 4.6-6 in Final EIR Section 4.6, Greenhouse Gas Emissions, would reduce Project-related GHG emissions; however, these measures would not substantially reduce

Project-related mobile source GHG emissions (which comprise approximately 90% of the Project's total GHG emissions). Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley. No additional mitigation measures are available to substantially reduce the Project's mobile source GHG emissions that are 1) feasible for the Project Applicant to implement, 2) enforceable by the City of Moreno Valley, and 3) that have a proportional nexus to the Project's impact. This impact is overridden by Project benefits as set forth in the statement of overriding considerations.

Factual Basis for Finding: As discussed in Subsection 4.6 of the Final EIR and the Project's Greenhouse Gas Analysis (Final EIR Technical Appendix F), the Project would result in the emission of greenhouse gasses, 90% of which would come from mobile sources (vehicles traveling to and from the site). Because the environmental impact affected by greenhouse gas emissions (GHGs) is the issue of Global Climate Change (GCC), the Project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]). Therefore all impacts resulting from the Project's greenhouse gas emissions were evaluated as cumulative.

Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed in Technical Appendix F, the Project would not be feasibly able to reduce GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the mandates of AB 32. Also, although approximately 90% of the Project's emissions would be from mobile sources and not stationary sources, the Project would exceed the SCAQMD's annual threshold of 10,000 metric tons per year of carbon monoxide equivalent ($MTCO_2e$) related to stationary source emissions from industrial projects. As shown in Final EIR Table 4.6-6, the Project would emit 18,322.72 $MTCO_2e$ under the BAU scenario and 14,453.47 $MTCO_2e$ with the application of mitigation measures presented in the Final EIR and regulatory requirements enforced since AB 32 was adopted. The Project improvement over BAU is 21.12%, whereas the

goal of AB 32 is 28.5%. Because the Project's energy source air emissions account for only 6% of the Project's total GHG emissions (830.59 $MTCO_2e$) and on-site operating equipment account for only 1.0% of the Project's GHG emissions (153.70 $MTCO_2e$), many of the measures suggested by comments to the Draft EIR (which address small components of the overall energy-sources) would result in very low overall GHG emission reduction percentages compared to the Project as a whole. Many of the suggested measures would in a reduction of less than three-tenths of one percent. Further, many of the measures suggested in comments to the Draft EIR are associated with tenant operations that are beyond the City's authority and capacity to impose and enforce.

In conclusion, because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley for GHG impacts, the Project is determined to result in GHG emissions that would have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32). Mitigation Measures MM 4.6-1 through MM 4.6-6 have been applied as conditions of approval for the project to reduce energy use emissions and emissions from on-site equipment. However, these Mitigation Measures do not reduce the Project's mobile source GHG emissions, which account for approximately 90% of the Project's total GHG emissions. There are no other ways to measurably reduce the Project's mobile source emissions of greenhouse gasses that are feasible and practical to monitor and enforce.

3. NOISE

a. Significant and Unavoidable Direct and Cumulative Impact (Near-term): Short-term generation of construction-related noise levels in excess of the City Noise Ordinance standard for non-transportation and stationary noise sources and short-term substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project (Thresholds 1, 3, and 4).

Finding: The City of Moreno Valley Noise Ordinance (Municipal Code Section 11.80.030.D.7) states that construction noise cannot occur between the hours

of 8PM and 7AM. The Project's construction activities are required to comply with the Ordinance. Because the Noise Ordinance does not specify a maximum decibel limit on noise levels during permitted construction hours (and as such, any noise level is permitted to occur), the City conservatively applied the Noise Ordinance's decibel limit for non-transportation and stationary noise sources as the significance threshold for construction activities (65 dBA at 200 feet from the property line of industrial properties during daytime hours). During Project construction, in the event that Project construction activities occur simultaneously with other construction activities that affect the same sensitive receptors, cumulatively considerable construction-related noise impacts could potentially occur.

The Project will be required to implement Mitigation Measure MM 4.7-1 which requires construction practices that would minimize noise impacts. Mitigation Measure MM 4.7-1 requires the Project to provide written records of notes (as well as comply with the requirements of the notes) on future grading plans that 1) limit the hours of construction activities to hours permitted by the Noise Ordinance, 2) require construction equipment, fixed or mobile, to be equipped with properly operating and maintained mufflers, 3) require that all construction activity and equipment staging areas be placed on the site so that all emitted noise is directed towards the center of the property and away from the property boundaries and noise sensitive receptors nearest the Project site, and 4) require that all haul truck deliveries use City-approved haul routes and limit haul hours. Additional feasible mitigation measures are not available to further reduce Project-related construction noise levels, resulting in a significant and unavoidable near-term direct and cumulative impact. Mitigation Measure MM 4.7-1 has been adopted and will reduce this impact, but not to a less-than-significant level. This impact is overridden by Project benefits as set forth in the statement of overriding considerations.

Factual Basis for the Finding: As discussed on Pages 4.7-17 and 4.7-19, and in the Project's Noise Impact Analysis (Final EIR Technical Appendix G), in the event that Project construction activities occur simultaneously with other construction activities that affect the same sensitive receptors, cumulative construction-related noise impacts would also be significant. As disclosed on EIR Page 4.7-10, the nearest noise sensitive receptor is a non-conforming residential home located approximately 240 feet northwest of the Project site, within the Moreno Valley Industrial Area Plan. To reduce the Project's construction-related noise impact on sensitive noise receptors, the Project will be required to implement Mitigation Measure MM 4.7-1, as set forth in the MMP attached as Exhibit A, which requires construction practices that would minimize noise levels to sensitive receptors, but not to below a level of significance on a

cumulative basis. Additional feasible noise-reduction measures are not available to further reduce the off-site noise level during construction, with the loudest noise occurring during the mass grading phase of the construction process. Construction is required to occur in compliance with the City's Noise Ordinance, which does not specify a maximum decibel level for construction activities.

4. TRANSPORTATION/TRAFFIC

a. Significant and Unavoidable Cumulative Impact (Near-term): Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system (Threshold 1).

Finding: The Project's contribution of traffic to the Indian Street/Grove View Road intersection and roadway segment Nos. 17, 18, and 19 (Indian Street, North of Grove View Road; Indian Street, South of Grove View Road; and Indian Street, North of Harley Knox Boulevard) is determined to be cumulatively considerable and unavoidable in the near-term. However, such impacts would be eliminated once Heacock Street is extended to Harley Knox Boulevard. Also, the Project's cumulative impacts at four (4) intersections (Indian Street/Harley Knox Boulevard, Western Way/Harley Knox Boulevard, Patterson Avenue/Harley Knox Boulevard, and Webster Avenue/Harley Knox Boulevard) and seven (7) roadway segments (Harley Knox Boulevard, I-215 Northbound Ramps to Western Way; Harley Knox Boulevard, East of Western Way; Harley Knox Boulevard, West of Patterson Avenue; Harley Knox Boulevard, East of Patterson Avenue; Harley Knox Boulevard, West of Webster Avenue; Harley Knox Boulevard, East of Webster Avenue; and Harley Knox Boulevard, West of Indian Street) in the City of Perris would be significant and unavoidable because these intersections fall outside of the City of Moreno Valley's jurisdiction and there is no fee program in place to which the Project can contribute mitigation funds. Also, the City of Moreno Valley has no authority to assure that the needed improvements will be in place prior to the Project's Opening Year Cumulative (2018) condition. Although needed improvements to Harley Knox Boulevard are programmed as part of the North Perris Road and Bridge Benefit District (NPRBBD), the proposed Project is not in the NPRBBD fee area. As such, there is no feasible and legal means for the Project to monetarily contribute to the improvements. Because such a funding program is not currently in place, the City of Moreno Valley finds this impact to be a significant and unavoidable near-term cumulative impact. This impact is overridden by Project benefits as set forth in the statement of overriding considerations.

Factual Basis for the Finding: As discussed on Pages 4.8-22 through 4.8-24 of the Final EIR, and in the Project's Traffic Impact Analysis

(Final EIR Technical Appendix H1), the addition of Project traffic to the circulation network would impact four (4) intersections and seven (7) roadway segments in the City of Perris that are programmed for improvement, but for which there is no mechanism for the Project to contribute fees to mitigate its impact. These intersections are Western Way/Harley Knox Boulevard, Patterson Avenue/ Harley Knox Boulevard, Webster Avenue/ Harley Knox Boulevard, and Indian Street/Harley Knox Boulevard. These roadway segments are Harley Knox Boulevard, I-215 Northbound Ramps to Western Way; Harley Knox Boulevard, East of Western Way; Harley Knox Boulevard, West of Patterson Avenue; Harley Knox Boulevard, East of Patterson Avenue; Harley Knox Boulevard, West of Webster Avenue; Harley Knox Boulevard, East of Webster Avenue; and Harley Knox Boulevard, West of Indian Street. At Opening Year Cumulative (2018) Conditions the intersections of Western Way/Harley Knox Boulevard, Patterson Avenue/Harley Knox Boulevard, Webster Avenue/Harley Knox Boulevard, and Indian Street/Harley Knox Boulevard are projected to operate at a LOS F under AM and PM peak hour conditions. At Opening Year Cumulative (2018) Conditions the roadway segments of Harley Knox Boulevard, between I-215 Northbound Ramps and Western Way, East of Western Way, and West of Patterson Avenue are projected to operate at a LOS E. Harley Knox Boulevard, East of Patterson Avenue, West of Webster Avenue, East of Webster Avenue, and West of Indian Street are projected to operate at a LOS F. Although programmed improvements (funded by the NPRBBD) are anticipated to relieve these deficiencies in the long-term along Harley Knox Boulevard, there is no assurance that the improvements will be in place at the time of the proposed Project's Opening Year Cumulative (2018) Conditions, and the Project cannot pay NPRBBD fees because the property is not located in the NPRBBD fee area. Mitigation measures beyond contribution to a fee program, such as full improvement of the intersections by the Project, are not feasible because there lacks proportionality to the Project's impacts. Additionally, City of Moreno Valley is not authorized to require physical improvements to intersections in the City of Perris. There are no feasible

mitigation measures that will reduce the Project's cumulative near term impacts to these four (4) intersections and seven (7) roadway segments below a level of significance. Additionally, two (2) of the cumulatively impacted intersections are at I-215 ramps in Caltrans' jurisdiction. Caltrans does not have a fee or other mitigation program in place for the mitigation of direct or cumulative impacts caused by private development projects on the State Highway System.

b. Significant Unavoidable Cumulatively Considerable Impact: Conflict with an applicable congestion management program, including, but not limited to level of service standards (Threshold 2)

Finding: The Project would contribute more than 50 peak hour trips to four (4) mainline segments of I-215 and one (1) mainline segment of SR-91 within the Project study area that operate at an unacceptable LOS. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. In addition, the Project's cumulative impact to the I-215 Northbound ramp at Harley Knox Boulevard is determined to be significant and unavoidable near-term impact.

Factual Basis for Finding: As discussed on Pages 4.8-28 through 4.8-30, 4.8-33 through 4.8-34, 4.8-38 and 4.8-39 of the Final EIR, and in the Project's Traffic Impact Analysis (Final EIR Technical Appendix H1), the addition of Project traffic to the existing highway network would result in multiple significant cumulatively considerable impacts including four (4) I-215 freeway mainline segments: I-215 Southbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the AM and PM peak hours); I-215 Northbound, between Box Springs Road and SR-60/I-215 Freeway (LOS "E" during the AM and PM peak hours); I-215 Northbound, between SR-60 Freeway and Eucalyptus Avenue (LOS "F" during the PM peak hour); and I-215 Northbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the PM peak hour), one (1) freeway ramp: I-215 Northbound Ramp at Harley Knox Boulevard, which is projected to experience long queues during the AM peak hour, and three (3) freeway ramp junction merge/diverge areas: I-215 Southbound Off-Ramp at Harley Knox Boulevard in the AM and PM peak hours; I-215 Southbound On-Ramp at Harley Knox Boulevard in the AM and PM peak hours; and I-215 Northbound On-Ramp at Harley Knox Boulevard

in the PM peak hour. In addition, the SR-91 eastbound segment between Central Avenue and 14th Street operates at unacceptable LOS under Existing (2013) conditions without Project-related traffic. As such, the Project's contribution of traffic to the SR-91 eastbound segment between Central Avenue and 14th Street would be cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

Improvements are planned for each of the affected freeways impacted by the Project's significant cumulative impacts; however they are not completed under existing conditions. Freeway expansion projects are planned or are in-progress for I-215 and SR-91 mainline segments within the Project study area. A schedule for constructing planned improvements to I-215 has not yet been identified due to funding shortfalls while several construction projects are underway to improve traffic mobility along SR-91 and are assumed to be in place for the Opening Year (2018) analysis scenario. Until the improvements are in place to relieve congested conditions, the Project's impact would be cumulatively considerable. All freeway ramps at the I-215/Harley Knox Boulevard interchange are projected to operate with acceptable stacking distances in the Opening Year (2018) with planned improvements. However, there is no timeline for the beginning or completion of the construction of planned improvements to I-215. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance planned improvements will be in place prior to occupancy of the Project (Year 2015). As such, the Project's cumulative impact to the I-215 Northbound ramp at Harley Knox Boulevard and the merge/diverge areas at the southbound on/off-ramps and northbound off-ramp at the I-215/Harley Knox Boulevard is determined to be significant and unavoidable near-term impact.

V. PROJECT ALTERNATIVES

A. ALTERNATIVE SITES

Finding: There exists no feasible and available alternative site for the Project which would avoid or substantially lessen the significant impacts of the Project while allowing for the feasible attainment of most of the Project's basic objectives.

Factual Basis for the Finding: As discussed on Pages 6-4 through 6-5 of the Final EIR, the Project is consistent with the Light Industrial land use designation applied to the property by the City of Moreno Valley General Plan and as further detailed by the Industrial designation applied to the property by the Moreno Valley Industrial Area Plan (MVIAP) (Specific Plan 208). Thus, it can be reasonably assumed that development would ultimately occur in conformance with the property's applicable land use designation, whether by the Project Applicant or by others in the future. An examination of alternative sites is typically not necessary when a proposed development project is consistent with the applicable land use plan, because it can reasonably be assumed that development would ultimately occur in conformance with the applicable land use designation, whether by the Project Applicant or by others in the future. In cases where a proposed project is consistent with the applicable General Plan, the alternatives analysis should typically focus on options for developing the site consistent with adopted plan policies and the discussion of alternatives should search for an environmentally superior version of the project on the site instead of an alternative site.

The Project site is flat and is mostly developed with existing uses with the exception of approximately 13 acres in the eastern portion of the subject property which contain heavily disturbed vegetation communities that are routinely maintained (i.e., disced) for fire management. Locating the proposed Project on an alternative site, therefore, would not avoid physical disturbance of the property. The only potential advantage, then, to selecting an alternative site for the proposed Project would be to displace the Project's operational effects to a different location.

The Project site is surrounded to the north, south, and east by properties developed with or planned for the

future construction of industrial land uses. Non-conforming residential land uses and March ARB are located to the west. Few other properties in the City of Moreno Valley and western Riverside County would offer less developmental and environmental constraints, or fewer physical environmental impacts than the proposed Project site. Development of the Project in an alternate location would have similar impacts as would occur with implementation of the Project at its proposed location. For these reasons, an alternative sites analysis is not required for the proposed Project.

B. NO PROJECT ALTERNATIVE

Finding: The No Project Alternative would fail to meet all of the Project's specific objectives as listed in Subsection II.B above. This Alternative would not allow for the construction and operation of a logistics center warehouse. This Alternative also would not attract new businesses or jobs to the City of Moreno Valley because the property would remain as a partially developed site with 13 acres of vacant land on the eastern portion of the site. Moreover, selection of the No Project Alternative, while preventing redevelopment of the property with a logistics center warehouse building, would not result in a reduction in demand for high-cube warehouse logistics development in western Riverside County; thus, it is likely for the Project's environmental impacts to occur elsewhere in the City or Inland Empire region rather than be avoided. The No Project Alternative would avoid physical impacts to the property. Operational impacts associated with transportation/traffic, air quality, and greenhouse gas emissions, and noise impacts during the Project's construction phase would be avoided but likely displaced to another property.

Factual Basis for the Finding: The No Project Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project to the environmental effects of the No Project Alternative which would leave the property in its existing condition. Under existing conditions a portion of the property is vacant and a portion is developed with light industrial uses, outdoor storage areas, paved parking areas, and a water quality/detention basin. The proposed Project implements the City of Moreno Valley General Plan and the MVIAP. If the Project were not approved, it is reasonable to expect that the property would remain mostly developed with the exception of approximately 13 acres located on the eastern portion of the subject property.

As discussed on Pages 6-3, 6-8 through 6-10, and in Table 6-1 on Page 6-24 of the Final EIR, aesthetic impacts would be increased under this Alternative while other environmental effects would be avoided by the selection of this Alternative. However, this Alternative would not absorb demand for logistics center space in western Riverside County; thus, it is likely that any reduced level of environmental impact achieved through this Alternative would be displaced to another property rather than avoided. This conclusion is supported by the discussion in the Southern California Association of Governments' Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and particularly it's Goods Movement Chapter, on Page 2-5 of the Final EIR. As stated on Final EIR Page 2-5, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, the SCAG region is forecasted to have a demand for over one billion square feet of warehousing space by the year 2035. However, SCAG projects that the region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028. Unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of approximately 227 million square feet of industrial warehouse space will occur between the years 2028 and 2035. The Project site is located in the Moreno Valley Industrial Area Plan area and has been planned for industrial use for the past 25 years. Leaving the property as it stands under existing conditions would reduce the tax revenue and employment generation potential of the property and shift the demand for warehouse space to a different property, resulting in no environmental benefits. Additionally, the existing development that occurs on the property today does not meet the Project's basic objectives and would not fully implement the Light Industrial land use designation applied to the property by the City's General Plan. Existing development on the site fails to make efficient use of the property as compared to the objective to make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards. The existing development represents an inefficient use of land that is not justified by the environmental benefit of avoiding, but more

likely displacing, the significant and unavoidable impacts associated with constructing and operating a logistics center warehouse on the property.

C. VACANT LOT DEVELOPMENT ALTERNATIVE

Finding This Alternative is the environmentally superior alternative. The Vacant Lot Development Alternative would fail to meet most of the project's objectives. While the Project that would be met by the Vacant Lot Development Alternative would meet two objectives – to attract new business/job opportunities to the City of Moreno Valley and to develop a vacant/underutilized property in a manner that complements surrounding development – these objectives would be achieved less effectively by this Alternative than by the proposed Project. Implementation of the Vacant Lot Alternative would retain the existing light industrial land uses on the western portion of the property and developing the eastern, undeveloped portion of the property (approximately 13 acres) with one (1) 200,000 s.f. light industrial building. This Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions and would lessen the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils.

Factual Basis For Finding

This Alternative was selected by the Lead Agency to evaluate the comparative environmental benefits of retaining the existing light industrial land uses on the western portion of the property and developing the eastern, undeveloped portion of the property (approximately 13 acres) with one (1) 200,000 s.f. light industrial building.

As discussed on Pages 6-3, and 6-10 through 6-15 and in Table 6-1 on Page 6-24 of the Final EIR, implementation of the Vacant Lot Development Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions and reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils. Impacts to aesthetics and cultural resources would remain similar under the Vacant Lot Development Alternative as they would under the proposed Project. This Alternative would generate approximately 1,394 actual daily vehicle trips (utilizing

the ITE trip rate for general light industrial) which is approximately 25 percent less than traffic that would be generated by the Project. As such, air quality, noise and traffic/transportation impacts associated with long-term operation of the Vacant Lot Development Alternative would be reduced as compared to the Project; however, this alternative would not avoid the Project's significant air quality, noise, and transportation/traffic impacts. However, due to the reduction in the amount of average daily vehicle trips associated with this Alternative, mobile-source related GHG emissions would be substantially decreased as compared to the proposed Project (mobile source emissions account for approximately 90 percent of the Project's GHG emissions). Although this Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions and reduce but not avoid the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, this Alternative would not absorb demand for large warehouse spaces in western Riverside County. As stated on Final EIR Page 2-5, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, the SCAG region is forecasted to have a demand for over one billion square feet of warehousing space by the year 2035. However, SCAG projects that the region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028. Unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of approximately 227 million square feet of industrial warehouse space will occur between the years 2028 and 2035. As the availability of vacant locations for industrial/warehousing facilities near the ports reach capacity, the demand will shift inland to regions that have the vacant land and infrastructure to accommodate such land uses, primarily the Inland Empire. In addition, developing only the vacant lot on the Project site fails to make efficient use of the property as compared to the objective to maximize the site's buildout potential based on City of Moreno Valley Municipal Code standards. The Vacant Lot Development Alternative represents an inefficient use of land that is not justified by the environmental benefit of reducing or avoiding, but more likely displacing, the

significant and unavoidable impacts associated with constructing and operating a logistics center warehouse on the property.

D. SMALL BUILDINGS ALTERNATIVE

Finding: The Small Buildings Alternative would meet seven of the eight of the Project's objectives, but to a lesser degree, and would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative also would not reach the property's full potential to reduce demand for high-cube logistics warehouse development in western Riverside County; thus, it is likely that some of the environmental effects associated with logistics center operations would occur elsewhere in the City or Inland Empire region rather than be avoided. Implementation of the Small Buildings Alternative would result in the construction of two (2) 400,000 s.f. high cube industrial warehouse buildings on-site in lieu of the single, large building proposed by the Project. There would be a 28% reduction in building area. Implementation of this Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic. Potential impacts to aesthetics, biological resources, cultural resources, and geology/soils would be similar under the Small Buildings Alternative and the proposed Project.

Factual Basis for the Finding: This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project (one larger building that is likely to attract one tenant) against the environmental effects of constructing two smaller buildings that would generate fewer daily truck trips. Under this Alternative, two buildings would be constructed, and combined would include 800,000 s.f. of building area, 309,378 s.f. less than the proposed Project. There would be a 28% reduction in building area.

As discussed on Pages 6-3, and 6-15 through 6-29 and in Table 6-1 on Page 6-24 of the Final EIR, implementation of the Small Buildings Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic. Although this Alternative would result in a reduction in building area, this Alternative would require the construction of more walls for the individual buildings and would require more area requiring paint, thereby increasing the emission of VOCs under near-term conditions. In addition, construction of this Alternative would reduce, but not avoid, the Project's near term significant and unavoidable construction noise impact. The buildings

would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project), in comparison to the proposed Project which would generate approximately 2,619 PCE vehicle trips on a daily basis. This reduction in daily vehicle trips would reduce the operational impacts associated with traffic and air quality as compared to the proposed Project; however, these impacts would not be avoided entirely. Additionally, because the Small Buildings Alternative would involve less building area and fewer daily vehicle trips, non-mobile and mobile source operational GHG emissions would be reduced. However, GHG impacts would remain significant and unavoidable. In addition, the reduced building square footage and the impacts associated with building operations would likely be displaced to another property achieving no real environmental benefit. This conclusion is supported by the discussion in the Southern California Association of Governments' Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and particularly its Goods Movement Chapter, on Page 2-5 of the Final EIR. As stated on Final EIR, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, the SCAG region is forecasted to have a demand for over one billion square feet of warehousing space by the year 2035. However, SCAG projects that the region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028. Unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of approximately 227 million square feet of industrial warehouse space will occur between the years 2028 and 2035. As the availability of vacant locations for industrial/warehousing facilities near the ports reach capacity, the demand will shift inland to regions that have the vacant land and infrastructure to accommodate such land uses, primarily the Inland Empire. Therefore, there would be no environmental benefit to the selection of this Alternative.

E. REDUCED PROJECT ALTERNATIVE

Finding: The Reduced Project Alternative would construct one (1) 800,000 s.f. high-cube warehouse building while keeping the remaining approximately 13 acres

of the property as vacant, undeveloped land. The Reduced Project Alternative would meet seven of the eight of the Project's objectives, but to a lesser degree, and would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative also would not reach the property's full potential to reduce demand for high-cube logistics warehouse development in western Riverside County; thus, it is likely that some of the environmental effects of logistics center operations would occur elsewhere in the City or Inland Empire region rather than be avoided. Selection of this Alternative would reduce the amount of industrial warehouse building square footage on-site by 309,378 s.f., which is a 28% reduction in building area but would not necessarily prevent the additional square footage from being located in another location in the City or Inland Empire region in response to the demand for industrial building space in western Riverside County. The Reduced Project Alternative would not avoid physical impacts to the property. Impacts associated with transportation/traffic, air quality, greenhouse gas, noise, and transportation/traffic would be reduced, but not avoided under this Alternative.

Factual Basis for the Finding: The Reduced Project Alternative was chosen by the Lead Agency to determine if a smaller building size would reduce the Project significant unavoidable impacts. As discussed on Pages 6-3 and 6-19 though Page 6-23 and in Table 6-1 on Page 6-24 of the Final EIR, selection of this Alternative would generate approximately 28% less daily vehicle traffic than the proposed Project, which would decrease – but not fully avoid – the Project's significant and unavoidable cumulatively considerable effects to Transportation/Traffic. In addition, construction of this Alternative would reduce, but not avoid, the Project's near term significant and unavoidable construction noise impact. Furthermore, because the Reduced Project Alternative would involve less building area and fewer daily vehicle trips, non-mobile and mobile source operational GHG emissions would be reduced. However, GHG impacts would remain significant and unavoidable. In addition, the reduced building square footage and the impacts associated with building operations would likely be displaced to another property achieving no real environmental benefit. This alternative would generally reduce many of the other Project-related impacts that are related to building intensity. The Reduced Project Alternative would reduce the impacts to biological resources, potentially avoid impacts to cultural resources, and would have similar impacts to the proposed Project on aesthetics

and geology and soils. However, the reduced building square footage and the impacts associated with building operations would likely be displaced to another property achieving no real environmental benefit. This conclusion is supported by the discussion in the Southern California Association of Governments' Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and particularly its Goods Movement Chapter, on Page 2-5 of the Final EIR. As stated, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, In addition, construction of this Alternative would reduce, but not avoid, the Project's near term significant and unavoidable construction noise impact. The buildings would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project), in comparison to the proposed Project which would generate approximately 2,619 PCE vehicle trips on a daily basis. This reduction in daily vehicle trips would reduce the operational impacts associated with traffic and air quality as compared to the proposed Project; however, these impacts would not be avoided entirely. Additionally, because the Reduced Project Alternative would involve less building area and fewer daily vehicle trips, non-mobile and mobile source operational GHG emissions would be reduced. However, GHG impacts would remain significant and unavoidable. In addition, the reduced building square footage and the impacts associated with building operations would likely be displaced to another property achieving no real environmental benefit. As the availability of vacant locations for industrial/warehousing facilities near the ports reaches capacity, the demand will shift inland to regions that have the vacant land and infrastructure to accommodate such land uses, primarily the Inland Empire. Although this Alternative would meet most of the Project's basic objectives, it would meet some of them to a lesser degree than the proposed Project due to the reduction in building area. Specifically, this Alternative would attract a fewer number of jobs to the City of Moreno Valley, would not fully implement the Light Industrial land use designation applied to the property by the City's General Plan, and would fail to make efficient use of the property by maximizing the site's buildout

potential. Furthermore, the reduction in building space that would result from implementation of this Alternative represents an inefficient use of land that is not justified by the environmental benefit of reducing, but more likely displacing, operational impacts.

VI. STATEMENT OF OVERRIDING CONSIDERATIONS

This Section specifically addresses §15093 of the CEQA Guidelines, which requires the City, acting as the Lead Agency, to balance the benefits of the Project against its significant and unavoidable adverse environmental impacts and determine whether the benefits which will accrue from the development of the Project outweigh its significant and unavoidable impacts. If the City finds that the major benefits of the Project outweigh its significant and unavoidable adverse environmental impacts, the City may approve the Project. Each of the separate benefits listed below are hereby determined to be, in itself, and independent of the Project's other benefits, the basis for overriding all significant and unavoidable environmental impacts identified in the EIR.

As set forth in Section IV above, most of the Project's impacts on the environment will either be less than significant or, through the imposition of mitigation measures as conditions of approval of the Project, can be reduced to less than significant. However, as set forth in subsection IV.B, above, impacts to air quality, greenhouse gas emissions, noise, and transportation/traffic will remain significant and unavoidable even after the imposition of all feasible mitigation measures. Further, as set forth in Section V, above, there are no feasible alternatives to the Project which would mitigate or avoid those environmental impacts while still attaining all of the Project's basic objectives. Nevertheless, as set forth below, the Planning Commission has determined that the benefits which will accrue from the development of the Project outweigh the significant and unavoidable impacts which the Project will produce.

A. AIR QUALITY

Finding: Notwithstanding the significant unavoidable impacts to air quality discussed in subsection IV.B.1, above, implementation of the City of Moreno Valley's General Plan and Specific Plan No. 208, the redevelopment of otherwise underutilized land, the creation of jobs and a multiplier effect that will create secondary jobs to support the Project and those who work in it, the demonstration that the City is eager to attract new business opportunities, and the fact that the Project will include energy efficiency features, constitutes benefits which outweigh the unavoidable adverse environmental impacts to air quality. Each of the benefits, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impact on air quality that will result.

Factual Basis for the Finding: As set forth in the Project Objectives on Page 3-3 of the Final EIR and in the description of the Project provided

on Pages 3-1 through 3-22 of the Final EIR, approval of the Project will allow the conversion of an underutilized site into a job and revenue producing facility. Applying average employment density factors reported by the Southern California Association of Governments in their publication *"Employment Density Study Report,"* (SCAG 2001), implementation of the Project is anticipated to result in the creation of up to 594 new, recurring jobs, which also will improve the regional jobs-housing balance, thereby reducing the need for Western Riverside County residents to commute longer distances to work. The existing use that operates on the property only employs approximately 15 persons. The Project will allow for the implementation of Light Industrial land uses in conformance with the City of Moreno Valley General Plan and Moreno Valley Industrial Area Plan, and will assist the City in achieving numerous General Plan Goals, including, but not limited to, Ultimate Goal No. IV. (to achieve a community which "Enjoys a healthy economic climate that benefits both residents and businesses"), and Community Development Objective 2.5 ("Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses"). The Project would implement energy conservation measures, including the installation of solar panels to provide power to the office portion(s) of the structure (or purchase electricity from a utility provider that utilizes renewable energy sources), the installation of two level 2 electric vehicle charging stations, in addition to the mandatory energy conservation measures required by the Title 24 Energy Efficiency Standards. Approving the Project also will result in the Project's monetary contributions to established fee programs such as the City's Development Impact Fee and the western Riverside County Transportation Uniform Mitigation Fee that will be directed to needed local and regional road improvements. A monetary contribution also will be provided in accordance with the western Riverside County MSHCP to assist in establishing a regional

conservation and open space system, whereas the Project site itself has very little biological value.

B. GREENHOUSE GAS EMISSIONS

Finding: Notwithstanding the significant unavoidable impacts to greenhouse gas emissions discussed in subsection IV.B.1, above, implementation of the City of Moreno Valley's General Plan and Specific Plan No. 208, the redevelopment of otherwise underutilized land, the creation of jobs and a multiplier effect that will create secondary jobs to support the Project and those who work in it, the demonstration that the City is eager to attract new business opportunities, and the fact that the Project will include energy efficiency features, constitutes benefits which outweigh the unavoidable adverse environmental impacts to greenhouse gas emissions. Each of the benefits, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impact on air quality that will result.

Factual Basis for the Finding: As set forth in the Project Objectives on Page 3-3 of the Final EIR and in the description of the Project provided on Pages 3-1 through 3-22 of the Final EIR, approval of the Project will allow the conversion of an underutilized site into a job and revenue producing facility. Applying average employment density factors reported by the Southern California Association of Governments in their publication *"Employment Density Study Report,"* (SCAG 2001), implementation of the Project is anticipated to result in the creation of up to 594 new, recurring jobs, which also will improve the regional jobs-housing balance, thereby reducing the need for Western Riverside County residents to commute longer distances to work. The existing use that operates on the property only employs approximately 15 persons. The Project will allow for the implementation of Light Industrial land uses in conformance with the City of Moreno Valley General Plan and Moreno Valley Industrial Area Plan, and will assist the City in achieving numerous General Plan Goals, including, but not limited to, Ultimate Goal No. IV. (to achieve a community which "Enjoys a healthy economic climate that benefits both residents and businesses"), and Community Development Objective 2.5 ("Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities

that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses"). The Project would implement energy conservation measures, including the installation of solar panels to provide power to the office portion(s) of the structure (or purchase electricity from a utility provider that utilizes renewable energy sources), the installation of two level 2 electric vehicle charging stations, in addition to the mandatory energy conservation measures required by the Title 24 Energy Efficiency Standards. Approving the Project also will result in the Project's monetary contributions to established fee programs such as the City's Development Impact Fee and the western Riverside County Transportation Uniform Mitigation Fee that will be directed to needed local and regional road improvements. A monetary contribution also will be provided in accordance with the western Riverside County MSHCP to assist in establishing a regional conservation and open space system, whereas the Project site itself has very little biological value.

C. NOISE

Finding: Notwithstanding the significant unavoidable impacts to noise discussed in subsection IV.B.1, above, implementation of the City of Moreno Valley's General Plan and Specific Plan No. 208, the redevelopment of otherwise underutilized land, the creation of jobs and a multiplier effect that will create secondary jobs to support the Project and those who work in it, the demonstration that the City is eager to attract new business opportunities, and the fact that the Project will include energy efficiency features, constitutes benefits which outweigh the unavoidable adverse environmental impacts to air quality. Each of the benefits, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impact on air quality that will result.

Factual Basis for the Finding: As set forth in the Project Objectives on Page 3-3 of the Final EIR and in the description of the Project provided on Pages 3-1 through 3-22 of the Final EIR, approval of the Project will allow the conversion of an underutilized site into a job and revenue producing facility. Applying average employment density factors reported by the Southern California Association of Governments in their publication *"Employment Density Study Report,"* (SCAG 2001), implementation of the Project is anticipated to result in the creation of up to 594 new,

recurring jobs, which also will improve the regional jobs-housing balance, thereby reducing the need for Western Riverside County residents to commute longer distances to work. The existing use that operates on the property only employs approximately 15 persons. The Project will allow for the implementation of Light Industrial land uses in conformance with the City of Moreno Valley General Plan and Moreno Valley Industrial Area Plan, and will assist the City in achieving numerous General Plan Goals, including, but not limited to, Ultimate Goal No. IV. (to achieve a community which "Enjoys a healthy economic climate that benefits both residents and businesses"), and Community Development Objective 2.5 ("Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses"). Approving the Project also will result in the Project's monetary contributions to established fee programs such as the City's Development Impact Fee and the western Riverside County Transportation Uniform Mitigation Fee that will be directed to needed local and regional road improvements. A monetary contribution also will be provided in accordance with the western Riverside County MSHCP to assist in establishing a regional conservation and open space system, whereas the Project site itself has very little biological value.

D. TRANSPORTATION/TRAFFIC

Finding: Notwithstanding the significant unavoidable impacts to transportation/ traffic discussed in subsection IV.B.1, above, implementation of the City of Moreno Valley's General Plan and Specific Plan No. 208, the redevelopment of otherwise underutilized land, the creation of jobs and a multiplier effect that will create secondary jobs to support the Project and those who work in it, the demonstration that the City is eager to attract new business opportunities, and the fact that the Project will include energy efficiency features, constitutes benefits which outweigh the unavoidable adverse environmental impacts to air quality. Each of the benefits, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impact on air quality that will result.

Factual Basis for the Finding: As set forth in the Project Objectives on Page 3-3 of the Final EIR and in the description of the Project provided on Pages 3-1 through 3-22 of the Final EIR, approval of the Project will allow the conversion of an underutilized site into a job and revenue producing facility. Applying average employment density factors reported by the Southern California Association of Governments in their publication *"Employment Density Study Report,"* (SCAG 2001), implementation of the Project is anticipated to result in the creation of up to 594 new, recurring jobs, which also will improve the regional jobs-housing balance, thereby reducing the need for Western Riverside County residents to commute longer distances to work. The existing use that operates on the property only employs approximately 15 persons. The Project will allow for the implementation of Light Industrial land uses in conformance with the City of Moreno Valley General Plan and Moreno Valley Industrial Area Plan, and will assist the City in achieving numerous General Plan Goals, including, but not limited to, Ultimate Goal No. IV. (to achieve a community which "Enjoys a healthy economic climate that benefits both residents and businesses"), and Community Development Objective 2.5 ("Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses"). Approving the Project also will result in the Project's monetary contributions to established fee programs such as the City's Development Impact Fee and the western Riverside County Transportation Uniform Mitigation Fee that will be directed to needed local and regional road improvements. A monetary contribution also will be provided in accordance with the western Riverside County MSHCP to assist in establishing a regional conservation and open space system, whereas the Project site itself has very little biological value.

VII. CERTIFICATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT

The Moreno Valley Planning Commission finds that it has reviewed and considered the Final EIR in evaluating the Project, that the Final EIR is an accurate and objective statement that fully complies with CEQA and the CEQA Guidelines, and that the Final EIR reflects the independent judgment of the Planning Commission.

The Planning Commission declares that no new significant information as defined by CEQA Guidelines Section 15088.5 has been received by the Commission after the circulation of the Draft EIR that would require recirculation. All of the information added to the Final EIR merely clarifies, amplifies or makes insignificant modifications to an already adequate Draft EIR pursuant to CEQA Guidelines Section 15088.5(b).

The Planning Commission hereby certifies the EIR based on the following findings and conclusions:

A. FINDINGS

1. WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN COMPLIANCE

The Project is in conformance with the conservation requirements of the Western Riverside County Multiple Species Conservation Plan (MSHCP) in that:

1. The Project site is located within the MSHCP Plan Area, but is not located within a Criteria Area; therefore, a Habitat Acquisition and Negotiation Strategy (HANS) application is not required to be submitted to the Western Riverside County Regional Conservation Authority (RCA).

2. Pursuant to Section 6.1.2 of the MSHCP, an assessment of potentially significant effects on Riparian/Riverine Areas and Vernal Pools is required if such resources are identified on the Project site or will impacted by the Project. The Project site does not contain any Riparian/Riverine Areas or vernal pools and will not impact these resources. As such, the Project will not impact the biological function or value of any riparian habitat and a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not required.

3. Pursuant to Section 6.1.3 of the MSHCP, habitat assessments and/or focused surveys for certain Narrow Endemic plant species are required for properties within mapped survey areas. The majority of the Project site is within the MSHCP Criteria Area Species Survey Area (CASSA), as well as the Narrow Endemic Plant Species Survey Area (NEPSSA). The entire Project site is developed and/or highly disturbed and does not support suitable habitat for any CASSA or NEPSSA sensitive species. As such

the Project would not conflict with Volume I, Section 6.1.3 of the Western Riverside County MSHCP and no impact would occur.

4. Pursuant to Section 6.1.4 of the MSHCP, projects in close proximity to the MSHCP Conservation Area are required to incorporate mechanisms to address indirect effects to the MSHCP Conservation Area. The Project site is not located within or adjacent to a MSHCP Criteria Area or existing Conservation Area. Therefore, the proposed Project is consistent with Section 6.1.4 of the Western Riverside County MSHCP.

5. Pursuant to Section 6.3.2 of the MSHCP, habitat assessments and/or focused surveys for certain additional plant and animal species are required for properties within mapped survey areas. The Project site is located in a survey area for western burrowing owl and required surveys were conducted. Pre-construction surveys of the Project site and avoidance of clearing and grading activities during the nesting season are required. If the site is occupied, Mitigation Measure MM 4.3-2 b) and c), as set forth in the MMP attached as Exhibit A, have been imposed as a condition of approval of the Project in accordance with the MSHCP.

2. CEQA COMPLIANCE

As the decision-making body for the Project, the Planning Commission has reviewed and considered the information contained in the Findings and supporting documentation. The Planning Commission determines that the Findings contain a complete and accurate reporting of the environmental impacts and mitigation measures associated with the Project, as well as complete and accurate reporting of the unavoidable impacts and benefits of the proposed Project as detailed in the Statement of Overriding Considerations. The Commission finds that the EIR was prepared in compliance with CEQA and that the Commission complied with CEQA's procedural and substantive requirements.

3. SIGNIFICANT UNAVOIDABLE IMPACTS/STATEMENT OF OVERRIDING CONSIDERATIONS

The Project will have significant adverse impacts even following adoption of all feasible mitigation measures which are required by the Planning Commission. The following significant environmental impacts have been identified in the Final EIR and will require mitigation but cannot be mitigated to a level of insignificance as set forth in subsection IV.B of these Findings: Air Quality - Violation of air quality standard, contribution to air quality violation, or cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (Thresholds 2 and 3); Greenhouse Gas Emissions - generation of greenhouse gas emissions that have significant effect on the environment (Threshold 1), conflict with an applicable plan, policy, or regulation (Threshold 2); Noise - Short-term generation of construction-related noise levels in excess of

the City Noise Ordinance Standard for non-transportation and substantial permanent increase in ambient noise and short-term substantial temporary or periodic increase in ambient noise levels in the Project vicinity (Thresholds 1, 3, and 4); Transportation/Traffic - Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system and conflict with an applicable congestion management program (Thresholds 1 and 2).

The Planning Commission has eliminated or substantially reduced environmental impacts where feasible and the Commission determines that the remaining unavoidable significant adverse impacts are acceptable due to the reasons set forth in the preceding Statement of Overriding Considerations.

4. CONCLUSION

The following conclusion is found to be an accurate summation of the foregoing review and findings set forth in this resolution and all the documents, studies reports, and testimony considered and independently decided upon by this Planning Commission.

1. All potentially significant environmental impacts from implementation of the proposed Project have been identified in the EIR and, with the implementation of the mitigation measures defined herein and set forth in the MMP, will be mitigated to a less-than-significant level, except for the impacts identified in subsection IV.B herein.

2. Other reasonable alternatives to the proposed Project that could feasibly achieve the basic objectives of the proposed Project have been considered and rejected in favor of the proposed Project.

3. Environmental, economic, social and other considerations and benefits derived from the development of the proposed Project override and make infeasible any alternatives to the proposed Project or further mitigation measures beyond those incorporated into the proposed Project.

Mitigation Monitoring Program
Modular Logistics Center

State Clearinghouse No. 2014031068

Prepared for:

City of Moreno Valley
Community & Economic Development Department
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Moreno Valley, CA 92552

Prepared by:

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February 24, 2015

Exhibit B

INTRODUCTION

CEQA Requirements

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document that includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a Mitigation Monitoring Program (MMP) for the changes to the project that it has adopted or made a condition of project approval in order to mitigate or avoid significant environmental impacts. The appropriate reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code §21081.6).

The City of Moreno Valley & Economic Community Development Department, Planning Division, would coordinate the monitoring of the mitigation measures with each applicable City department or division, while various City departments/divisions would be responsible for monitoring and verifying compliance of specific mitigation measures (see the Mitigation Monitoring and Reporting Summary Table beginning on page 6). The City's Public Works Department would coordinate monitoring of the implementation of all mitigation measures for the project. Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation measure; and 3) retention of records in the project file.

Program Objectives

The objectives of the MMP for the proposed Modular Logistics Center Project (the "Project") include the following:

- To provide assurance and documentation that mitigation measures are implemented as planned;
- To collect analytical data to assist City administration in its determination of the effectiveness of the adopted mitigation measures;
- To report periodically regarding project compliance with mitigation measures, performance standards and/or other conditions; and
- To make available to the public, upon request, the City record of compliance with project mitigation measures.

Overview of the Project

The Project site consists of 50.84-gross acres (50.68-net acres) in the southern portion of the City of Moreno Valley, Riverside County, California. From a regional perspective, the Project site is located north and northeast of the City of Perris, southeast of the City of Riverside, and south, east, and west of unincorporated areas in Riverside County. Interstate 215 (I-215) is located approximately two (2) miles to the west of the site and State Route 60 (SR-60) is located approximately 4.7 miles to the north of the site. At the local scale, the Project site is located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard.

The Project consists of redeveloping of a 50.84-gross acre property with one (1) industrial warehouse building containing 1,109,378 square feet (s.f.) of building space and 256 loading bays. The Project

involves the demolition of existing buildings on-site, grading and preparation of the property for development, and the construction and operation of one industrial warehouse building. Associated improvements to the property will include, but are not limited to, surface parking areas, drive aisles, utility infrastructure, landscaping, exterior lighting, signage, and water quality/detention basins.

A Plot Plan (PA13-0063) is requested of the City of Moreno Valley to implement the Project. Other discretionary and administrative actions that would or could be necessary to implement the Project are listed below.

Matrix of Project Approvals/Permits

PUBLIC AGENCY	APPROVALS AND DECISIONS
City of Moreno Valley	
Proposed Project – City of Moreno Valley Discretionary Approvals	
City of Moreno Valley Planning Commission	• Approve, conditionally approve, or deny PA13-0063 (appealable to City Council). • Reject or certify this EIR along with appropriate CEQA Findings (P13-130) (appealable to City Council).
Subsequent City of Moreno Valley Discretionary and Ministerial Approvals	
City of Moreno Valley Subsequent Implementing Approvals	• Approve Final Maps, parcel mergers, lot line adjustments, or parcel consolidations, as may be appropriate. • Approve Conditional or Temporary Use Permits, if required. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way dedications. • Approve street vacations.
Other Agencies – Subsequent Approvals and Permits	
Riverside County Flood Control and Water Conservation District	• Approvals for construction of drainage infrastructure.
Eastern Municipal Water District	• Approvals for construction of water and sewer infrastructure.
Santa Ana Regional Water Quality Control Board	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.

The proposed building is designed to contain 1,089,378 s.f. of warehouse space and 20,000 s.f. of office space. The office spaces would be located at the northwest, northeast, southwest and southeast corners of the building. The floor area ratio (FAR) for the Project site would be approximately 0.50.

Organization of the Mitigation Monitoring Program

The following describes the sections of this MMP:

- **Introduction** - Provides an overview of CEQA's monitoring and reporting requirements, program objectives, the project for which the program has been prepared, and the manner in which this MMP is organized.

- **MMP** - Describes the City entities responsible for implementation of the mitigation monitoring plan, the plan scope, procedures for monitoring and reporting, public availability of documents, the process for making changes to the program, types of mitigation measures, and the manner in which monitoring will be coordinated to ensure implementation of mitigation measures.
- **Mitigation Monitoring and Reporting Summary** - Outlines the Project's environmental effects and mitigation measures, responsible entities, and the timing for monitoring and reporting for each mitigation measure included in this MMP.

DESCRIPTION OF PLAN

Mitigation Monitoring Plan

This MMP delegates responsibilities for monitoring the project, and allows responsible City entities flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. The timing for monitoring and reporting is described in the monitoring and reporting summary table, below. Adequate monitoring requires demonstration of monitoring procedures and implementation of mitigation measures.

In order to enhance the effectiveness of the monitoring program, the City will utilize existing systems where appropriate. For instance, with any major construction project, the administration generally has at least one inspector assigned to monitor project construction. These inspectors are familiar with a broad range of regulatory issues and will provide first line oversight for much of the monitoring program.

Responsibilities of the City include identification of typical mitigation measure-related issues such as noisy equipment, dust, safety problems, etc. Any problems are generally corrected through directions to the contractors or through other appropriate, established mechanisms. Internal reporting procedures are already in place to document any problems and to address broader implementation issues.

Reporting Procedures

The City will be responsible for monitoring and implementing the mitigation measures included in this monitoring plan. Reporting establishes a record that a mitigation measure is being implemented and generally involves the following steps:

- The City distributes reporting forms to the appropriate City Departments (as indicated on the Mitigation Monitoring and Reporting forms) or employs the office's existing reporting process for verification of compliance.
- Responsible entities verify compliance by signing the monitoring and reporting form and/or documenting compliance using their own internal procedures when monitoring is triggered.
- Responsible entities provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented.

The reporting forms prepared by the City will document the implementation status of mitigation measures of the Project. Progress reports describe the monitoring status of all mitigation measures. The City will keep records of Project reporting forms and periodic status reports.

The City also is responsible for assisting the Project's contractor(s) with reporting responsibilities to ensure that they understand their charge and complete their reporting procedures accurately and on schedule.

Public Availability

All monitoring reporting forms, summaries, data sheets, and correction instructions related to this MMP for Modular Logistics Center will be available for public review upon request at the Community & Economic Development Department of the City of Moreno Valley (14177 Frederick St., Moreno Valley, CA 92553) during normal business hours.

Program Changes

If minor changes are required to this MMP, they will be made in accordance with CEQA and would be permitted after further review by the City. Such changes could include reassignment of monitoring and reporting responsibilities and/or minor modifications to mitigation measures that achieve the same or better end results. No change will be permitted unless the Mitigation Monitoring Program continues to satisfy the requirements of Public Resources Code §21081.6.

Types of Mitigation Measures Being Monitored

The Final Environmental Impact Report for the Modular Logistics Center Project is a "project specific" and "cumulative" evaluation as defined in the CEQA Guidelines.

The Final Environmental Impact Report recommends 45 project specific and cumulative mitigation measures to reduce impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, and transportation/circulation. Compliance with these mitigation measures will be accomplished through administrative controls over project planning and implementation. Monitoring would be accomplished as described previously under "Reporting Procedures" through verification and certification by personnel.

In general, implementation of the MMP will require the following actions:

- Appropriate mitigation measures would be included in construction documents.
- Departments with reporting responsibilities would review the Final Environmental Impact Report, which provides general background information on the reasons for including specified mitigation measures.
- Problems with or exceptions to compliance would be addressed by the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance with mitigation measures.

Mitigation Monitoring and Reporting Summary

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
Aesthetics							
MM 4.1-1 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City Ordinance No. 359.	Project Proponent; City of Moreno Valley	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit				
MM 4.1-2 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.	Project Proponent; City of Moreno Valley	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit				
Air Quality							
MM 4.2-1 Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective	Project Proponent; Project construction contractors	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
construction contractors. a) All surface coatings shall consist of Zero-Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113.							
MM 4.2-2 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors. a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour. b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily	Project Proponent; Project construction Contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit and building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day. c) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads. d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered.							
MM 4.2-3 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the	Project Proponent; Project contractors	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors. a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning. b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM10-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.							
MM 4.2-4 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SOX) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of	Project Proponent; Project contractors	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors. a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.							
MM 4.2-5 The Project shall comply with California Code of Regulations Title 13,Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its	Project Proponent; Project contractors	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better. b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas. c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are							

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import. d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower. e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles. f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified. g) Electric-powered construction equipment and tools shall be used when technically feasible. h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible. i) Construction vehicles shall use the City's designated truck route. j) Construction parking shall be located and configured to minimize traffic interference on public streets.							
MM 4.2-6 Legible, durable, weather proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
restrict idling to no more than three (3) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.							
MM 4.2-7 Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit				
MM 4.2-8 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit				
MM 4.2-9 Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit				
MM 4.2-10 Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of permits that would allow the installation of landscaping				
MM 4.2-11 Prior to the issuance of occupancy permits, the Project's property	Project	City of Moreno Valley Planning	Prior to the issuance of an				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.	Proponent	Division	occupancy permit				
MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of an occupancy permit				
MM 4.2-13 In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.							
MM 4.2-14 The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit				
MM 4.2-15 Prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of occupancy permits				
MM 4.2-16 Prior to the issuance of building permits, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive isles and truck courts shall be composed of concrete.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of building permits				
MM 4.2-17 The Project's building shall capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of building permits				
MM 4.2-18 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of	Project Proponent; Project contractors	City of Moreno Valley Land Development Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit				

MITIGATION MEASURE	RESPONSIBLE PARTY	VERIFICATION OF COMPLIANCE	TIMING	START DATE	FINISH DATE	MONITORING	
						DATE	MONITOR
Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement. a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.							

Biological Resources							
MM 4.3-1 The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, *Western Riverside County Multiple Species Habitat Conservation Plan Fee Program*, which requires a per-acre local development impact and mitigation fee. The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of a building permit				
MM 4.3-2 Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area*. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions: a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-	Project Biologist	City of Moreno Valley Planning Division	Within 30 days prior to grading and prior to the issuance of a grading permit.				

disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either: • Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation							

(DBESP) report for the western burrowing owl by the CDFW; or • A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.							
MM 4.3-3 As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements: a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified	Project Biologist; City of Moreno Valley Planning Division	City of Moreno Valley Planning Division	Prior to issuance of a clearing or grading permit				

biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree. b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.							
MM 4.3-4 The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, *Threatened and Endangered Species*, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of grading and improvement permits.				

Riverside County, California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.							
Cultural Resources							
MM 4.4-1 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.	Project Proponent; Project archaeological monitor	City of Moreno Valley Planning Division and Land Development Division	Prior to the issuance of a grading permit.				
MM 4.4-2 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.	Project Proponent; appropriate Native American Tribe(s) representative	City of Moreno Valley Planning Division and Land Development Division	Prior to the issuance of a grading permit.				
MM 4.4-3 During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural	Professional archaeological monitor, appropriate Native American	City of Moreno Valley Planning Division; City of Moreno Valley Land Development	During grading operations in previously undisturbed soils.				

deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply.	Tribe(s) representative	Division					
MM 4.4-4 If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report	Project archaeological monitor; appropriate Native American Tribe(s) representative; City Planning Division; Project's land owner	City of Moreno Valley Planning Division; appropriate Native American Tribe(s); Eastern Information Center (EIC)	During ground disturbing activities.				

containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.							
MM 4.4-5 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.	Project Proponent; Project paleontological monitor	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit				
MM 4.4-6 During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.	Project paleontological monitor	City of Moreno Valley Planning Division; City of Moreno Valley Land Development Division	During ground disturbing activities				

MM 4.4-7 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.	Project paleontological monitor	City of Moreno Valley Planning Division	During ground disturbing activities				
MM 4.4-8 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit.	Project paleontological monitor; Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of first occupancy permit				
MM 4.4-9 Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors. a) If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in	Project contractors; Riverside County Coroner; California Native American Heritage Commission	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit				

place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.							
Geology and Soils							
MM 4.5-1 Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors. a) Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to grading permit issuance.				
MM 4.5-2 Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit and grading				

detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.			permit				
MM 4.5-3 Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.	Project Proponent	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit				
MM 4.5-4 Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.	Project Proponent; Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit				
MM 4.5-5 Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and	Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit				

permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.							
Greenhouse Gas Emissions							
MM 4.6-1 Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project construction				
MM 4.6-2 Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of the first building permit				
MM 4.6-3 Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to issuance of the first building permit				
MM 4.6-4 Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen,	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit				

2013, Table 5.106.5.2).							
MM 4.6-5 Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.	Project Proponent	City of Moreno Valley Building and Safety Division and Planning Division	Prior to the approval of permits that would permit the installation of landscaping				
MM 4.6-6 Prior to the approval of permits and approvals that would permit cold storage in the building, the Project Applicant shall provide information to the City of Moreno Valley demonstrating that the cooling system design is energy efficient.	Project Proponent	City of Moreno Valley Building and Safety Division and Planning Division	Prior to the approval of permits that would permit cold storage in the building.				
Noise							
MM 4.7-1 Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code).	Project Proponent; Project construction contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit and grading permit				

b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries. d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site. e) Construction contractors limit all haul truck deliveries to the same hours specified for construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul trucks using City streets shall use the City's designated truck routes.							
Traffic/Circulation							
MM 4.8-1 Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to	Project Proponent	City of Moreno Valley Building and Safety Division and Transportation Engineering	Prior to the issuance of a grading permit and building permit				

prospective construction contractors. The temporary traffic control plan shall require the following: • Delivery trucks shall utilize the most direct route between the site and the 1-215 Freeway via Harley Knox Boulevard to Perris Boulevard; • The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials, earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25 outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.							
MM 4.8-2 The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project Construction				
MM 4.8-3 Prior to the issuance of building or occupancy permits, the Project shall	Project Proponent	City of Moreno Valley Planning	Prior to the issuance of a				

comply with the City of Moreno Valley Development Impact Fee (DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is applied to reduce traffic congestion by funding the installation of intersection improvements.		Division; City of Moreno Valley Building and Safety Division	building permit or occupancy permit				
MM 4.8-4 Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.	Project Proponent	City of Moreno Valley Planning Division; City of Moreno Valley Building and Safety Division	Prior to the issuance of the first occupancy permit				

PLANNING COMMISSION RESOLUTION NO. 2015-04

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY APPROVING PA13-0063, A PLOT PLAN FOR THE CONSTRUCTION OF A 1,109,378 SQUARE FOOT LOGISTICS WAREHOUSE BUILDING TO BE LOCATED ON THE NORTHEAST CORNER OF PERRIS BOULEVARD AND MODULAR WAY (ASSESSORS PARCEL NUMBERS 312-250-030, 031, 032, 036, 037, AND 038)

WHEREAS, Kearny Modular Way LLC, has filed an application for the approval of a Plot Plan (PA13-0063) for a warehouse building as described in the title of this Resolution; and

WHEREAS, on March 12, 2015, the Planning Commission of the City of Moreno Valley held a meeting to consider the subject applications and all of the environmental documentation prepared for the project; and

WHEREAS, the Planning Commission considered the Final Environmental Impact Report (Final EIR) prepared for the project for the purpose of compliance with the California Environmental Quality Act (CEQA) and the above application shall not be approved unless the Final Environmental Impact Report (P13-130) is certified and approved; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, there is hereby imposed on the subject development project certain fees, dedications, reservations and other exactions pursuant to state law and City ordinances; and

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND RESOLVED by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the meeting on March 12, 2015 including written and oral staff

reports and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed use is consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: The General Plan encourages a mix of industrial uses to provide a diversified economic base and ample employment opportunities. Stated policies require the avoidance of adverse impacts on surrounding properties and the screening of industrial uses to reduce glare, noise, dust, vibrations and unsightly views. The project as designed and conditioned would achieve the objectives of the City of Moreno Valley's General Plan. The proposed project is consistent with the General Plan and does not conflict with the goals, objectives, policies, and programs established within the Plan. The project will facilitate the orderly and future expansion of the Industrial area providing employment and other benefits to the community.

2. **Conformance with Zoning Regulations –** The proposed use complies with all applicable zoning and other regulations.

   FACT: The project site is within the Moreno Valley Industrial Area Specific Plan 208 (SP208I). The plot plan as designed and conditioned will comply with all applicable specific plan regulations and applicable Municipal Code standards. The project is designed in accordance with the provisions of Moreno Valley Industrial Area Specific Plan 208.

3. **Health, Safety and Welfare –** The proposed use will not be detrimental to public health, safety or welfare or materially injurious to properties or improvements in the vicinity.

   FACT: The proposed warehouse building as designed and conditioned will not adversely affect public health, safety or general welfare. The project has been designed consistent with the City's Municipal Code. A Final EIR has been prepared to address the potential environmental impacts of the project in accordance with the provisions of the California Environmental Quality Act (CEQA).

4. **Location, Design and Operation –** The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

FACT: The project is located on the northeast corner of Perris Boulevard and Modular Way, All surrounding land uses to the north, south, and east are industrial and within the Moreno Valley Industrial Area Specific Plan 208. Properties to the north include a newly constructed 555,670 square foot industrial distribution facility (PA06-0017/P12-146) and several other constructed warehouse facilities further west. The existing Walgreens distribution facility is located to the south. The Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD) is located to the east of the site.

The project as designed and conditioned is compatible with existing and proposed land uses in the vicinity. The industrial use is a permitted use in the Industrial Use zone of the Moreno Valley Industrial Area Specific Plan 208. The proposed building will be compatible in use, architectural design, and scale with other developments in the general vicinity.

C. FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Rat Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan Fee, Bridge and Thoroughfare Mitigation Fee (Future) and Traffic Signal Mitigation Fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for PA13-0063 incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d)(1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any impact fee, dedication, reservation, or other exaction described in this resolution begins on the effective date of this resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the Statute of Limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2015-04, and thereby:

1. **APPROVE** PA13-0063 (Plot Plan), subject to the attached conditions of approval included as Exhibit A.

APPROVED this 12th day of March, 2015.

_____
Jeffrey D. Sims
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

Attachments

CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
PA13-0063 (PLOT PLAN)
FOR A WAREHOUSE DISTRIBUTION FACILITY
AT 17300 PERRIS BOULEVARD
APN(s): 312-250-030, 031, 032, 036, 037, & 038

APPROVAL DATE: **March 12, 2015**
EXPIRATION DATE: **March 12, 2018**

_X_ Planning (P), including School District (S), Post Office (PO), Building (B)
_X_ Fire Prevention Bureau (F)
_X_ Public Works – Land Development (LD)
_X_ Public Works – Transportation Engineering (TE)
_X_ Public Works – Moreno Valley Utility (MVU)
_X_ Financial and Management Services - Special Districts (SD)
_X_ Police (PD)

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Division

P1. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever. Use means the beginning of substantial construction contemplated by this approval within the three-year period, which is thereafter pursued to completion, or the beginning of substantial utilization contemplated by this approval. (MC 9.02.230)

P2. A Plot Plan approval for an approximately 1,109,378 square foot industrial warehouse building, including approximately 20,000 square feet of office space and 1,089,378 square feet of warehouse space, to be located on approximately 50.68 acres in the Moreno Valley Industrial Area Specific Plan 208 to include 256 loading bays and required parking for autos and truck trailers per the approved plans. A change or modification shall require separate approval.

P3. This project is located within the Moreno Valley Industrial Area Specific Plan 208. The provisions of the specific plan, the design manual, their subsequent amendments, and the Conditions of Approval shall prevail unless modified herein. (MC 9.13)

P4. The site shall be developed in accordance with the approved plans on file in the Community & Economic Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

P5. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

P6. All landscaped areas shall be maintained by the property owner/developer in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

P7. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), proposed for this development shall be designed in conformance with the sign provisions of the Development Code or approved sign program, if applicable, and shall require separate application and approval through the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

P8. (GP) All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

P9. Prior to issuance of precise grading permits, the developer shall submit wall/fence/security gate system plans to the Community and Economic Development Department – Planning Division for review and approval.

P10. This project is subject to Water Supply Assessment issued by Eastern Municipal Water District (EMWD) which was approved on January 21, 2014. Contact EMWD for any current requirements.

P11. Mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30-days of the project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

Prior to Issuance of Grading Permits

P12. (GP) If potential historic, archaeological, or paleontological resources are uncovered during excavation or construction activities at the project site, work in the affected area will cease immediately and a qualified person (meeting the Secretary of the Interior's standards (36CFR61)) shall be consulted by the applicant to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, prehistoric, or paleontological resource. Determinations and recommendations by the consultant shall be implemented as deemed appropriate by the Community & Economic Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all affected Native American Tribes before any further work commences in the affected area.

If human remains are discovered, no further disturbance shall occur until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be contacted within a reasonable timeframe to identify the "most likely descendant." The "most likely descendant" shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98). (GP Objective 23.3, CEQA)

P13. (GP) Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

P14. (GP) Prior to the issuance of grading permits, the final erosion control landscape and irrigation plans for all cut or fill slopes over 3 feet in height shall be submitted to the Planning Division for review and approval for the phase in process. The plans shall be designed in accordance with the slope erosion plan as required by the City Engineer for that phase. Man-made slopes greater than 10 feet in height shall be "land formed" to conform to the natural terrain and shall be landscaped and stabilized to minimize visual scarring. (GP Objective 1.5, MC 9.08.080, DG)

P15. (GP) Prior to issuance of any grading permits, final median enhancement/landscape/irrigation plans shall be submitted to and approved by the Planning Division, and Financial and Management Services – Special Districts. Timing of installation shall be determined by Special Districts.

P16. (GP) Prior to the issuance of any grading permits, plans for any proposed security gate system shall be submitted and approved by the Planning Division.

P17. (GP) Within thirty (30) days prior to any grading or other land disturbance, a focused pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. If a Burrowing Owl is found present on the project site, the protocol of the Multi-Species Habitat Conservation Program shall be followed.

P18. (GP) Decorative pedestrian pathways across circulation aisles/paths shall be provided for the industrial building and parking and/or the public right-of-way. The pathways shall be shown on the precise grading plan. The decorative treatment shall provide a contrast in color and texture from the adjoining pavement surface. (No painted hatched lines will be permitted) (GP Objective 46.8, DG)

P19. (GP) Eight (8) percent of required parking shall be designated for any combination of low-emitting fuel efficient and carpool/vanpool vehicles for all new nonresidential development. (MC 9.11.040) The spaces shall also be in compliance with the California Green Building Standards Code.

P20. (GP) Bicycle parking shall be provided (i.e. racks) at a minimum of five (5) percent of the required vehicular parking, to be located near the designated office area, and shall comply with the California Green Building Standards Code.

P21. (GP) Prior to the issuance of building permits, the site plan shall show decorative concrete pavers for all driveway ingress/egress locations of the project. The decorative pavers/treatment shall extend the full width of the driveway, project at least 20 feet into the site and shall provide a contrast in color and texture from the adjoining pavement surface.

P22. (GP) Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

A. A 3 foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.
B. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.
C. Proposed screening walls for truck loading areas and required loading docks shall also include decorative walls with pilasters with a height up to fourteen (14) feet to fully screen trucks. Design, colors and materials shall be consistent with those indicated for the building as approved by the Planning Official.
D. Any open fencing around water quality features shall take into consideration safety and aesthetics.
E. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.

F. Drought tolerant landscape shall be used. Sod shall not be included in the design.
G. Street trees shall be provided every 40 feet on center in the right of way.
H. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.
I. Enhanced landscaping shall be provided at all driveway entries.
J. The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

PRIOR TO BUILDING PERMITS

P23. (BP) Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria: transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building(s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30, DG)

P24. Building plans shall reflect the following features:

A. Colors shall be per the approved color and materials sheet.
B. Downspouts shall be integrated into the building design along the east and west elevations.
C. Ventilation louvers, if necessary, shall be on the north and south elevations only.
D. Integrated treatment for the man doors on the east and west elevations.

P25. Electrical outlets to be provided in the truck loading area for use by refrigerated trucks to eliminate the need for truck idling.

P26. (BP) Prior to issuance of building permits, screening details for roof top equipment and trash enclosures shall be submitted for Planning Division review and approval. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building. For trash enclosures, landscaping shall be included on at least three sides. The trash enclosure, including any roofing, shall be compatible with the architecture for the building(s). (GP Objective 43.6, DG)

P27. (BP) Prior to issuance of building permits, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used and shall include style, illumination, location, height and method of shielding meeting the City standards. The lighting shall be designed in such a manner so that it does not exceed 0.25 foot candle illumination within five feet of the property line. The lighting level for all parking lots or structures shall be a minimum coverage of one foot-candle of light with a maximum of eight foot-candles. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, DG)

P28. (BP) Prior to issuance of building permits, the developer or developer's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), Multi-species Habitat Conservation Plan (MSHCP) mitigation fees, and the City's adopted Development Impact Fees. (Ord)

P29. (BP) Prior to issuance of building permits, the applicant shall obtain a Land Use Clearance stamp from the Community & Economic Development Department – Planning Division on the final check set.

P30. (BP) Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Standards and shall include:

A. A 3 foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening of vehicle lights.
B. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.
C. Drought tolerant landscape shall be used. Sod shall not be included in the design.
D. Street trees shall be provided every 40 feet on center in the right of way.
E. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.
F. Enhanced landscaping shall be provided at all driveway entries.
G. The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.
H. All site perimeter and parking lot landscape and irrigation shall be installed

prior to the release of certificate of any occupancy permits for the site or pad in question.

PRIOR TO CERTIFICATE OF OCCUPANCY

P31. (BP) Prior to issuance of Certificate of Occupancy or building final, the developer or developer's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

P32. (CO) Prior to issuance of Certificate of Occupancy or building final, all required landscaping and irrigation shall be installed and operational in accordance with the City's Landscape Standards and inspected by the Planning Division.

P33. Prior to the issuance of Certificate of Occupancy or building final, signs shall be installed in the truck loading areas limiting idling per the Mitigation Measures.

P34. (CO) Prior to the issuance of Certificates of Occupancy or building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

P35. (CO) Prior to issuance of Certificate of Occupancy or building final, all site clean-up shall be completed.

MITIGATION MEASURES

P36. MM 4.1-1: Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City Ordinance No. 359.

P37. MM 4.1-2: Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.

P38. MM 4.2-1: Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All surface coatings shall consist of Zero-Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113.

P39. MM 4.2-2: The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors.

a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour.
b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day.
c) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads.
d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered.

P40. MM 4.2-3: The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors.

a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning.

b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM10-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.

P41. MM 4.2-4: The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SOX) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.

P42. MM 4.2-5: The Project shall comply with California Code of Regulations Title 13,Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better.

b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment

staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas.

c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import.

d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower.

e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles.

f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified.

g) Electric-powered construction equipment and tools shall be used when technically feasible

h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible.

i) Construction vehicles shall use the City's designated truck route.

j) Construction parking shall be located and configured to minimize traffic interference on public streets.

P43. MM 4.2-6: Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than three (3) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.

P44. MM 4.2-7: Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.

P45. MM 4.2-8: Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.

P46. MM 4.2-9: Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.

P47. MM 4.2-10: Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.

P48. MM 4.2-11: Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.

P49. MM 4.2-12: Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees.

P50. MM 4.2-13: In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.

P51. MM 4.2-14: The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.

P52. MM 4.2-15: Prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow.

P53. MM 4.2-16: Prior to the issuance of building permits, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive aisles and truck courts shall be composed of concrete.

P54. MM 4.2-17: The Project's building shall be capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance.

P55. MM 4.2-18: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement.

a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.

P56. MM 4.3-1: The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, Western Riverside County Multiple Species Habitat Conservation Plan Fee Program, which requires a per-acre local development impact and mitigation fee. The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.

P57. MM 4.3-2: Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions:

a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction.

b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either:

• Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or

• A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

P58. MM 4.3-3: As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:

a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree.

b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.

P59. MM 4.3-4: The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, Threatened and Endangered Species, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.

P60. MM 4.4-1: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.

P61. MM 4.4-2: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.

P62. MM 4.4-3: During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply.

P63. MM 4.4-4: If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.

P64. MM 4.4-5: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

P65. MM 4.4-6: During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by

qualified paleontological personnel to have a low potential to contain or yield fossil resources.

P66. MM 4.4-7: Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.

P67. MM 4.4-8: A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit.

P68. MM 4.4-9: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors.

A. If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.

P69. MM 4.5-1: Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.

A. Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.

P70. MM 4.5-2: Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the

detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.

P71. MM 4.5-3: Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.

P72. MM 4.5-4: Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

P73. MM 4.5-5: Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

P74. MM 4.6-1: Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.

P75. MM 4.6-2: Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.

P76. MM 4.6-3: Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.

P77. MM 4.6-4: Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and

carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen, 2013, Table 5.106.5.2).

P78. MM 4.6-5: Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.

P79. MM 4.7-1: Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request.

a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code).
b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.
c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries.
d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site.
e) Construction contractors limit all haul truck deliveries to the same hours specified for construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul trucks using City streets shall use the City's designated truck routes.

P80. MM 4.8-1: Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors. The temporary traffic control plan shall require the following:

- Delivery trucks shall utilize the most direct route between the site and the 1-215 Freeway via Harley Knox Boulevard to Perris Boulevard;
- The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials,

earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25 outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.

P81. MM 4.8-2: The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.

P82. MM 4.8-3: Prior to the issuance of building or occupancy permits, the Project shall comply with the City of Moreno Valley Development Impact Fee (DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is applied to reduce traffic congestion by funding the installation of intersection improvements.

P83. MM 4.8-4: Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.

Building and Safety Division

B1. New buildings/structures shall comply with the current California Building Standards Code (CBC, CEC, CMC, CPC and Green Building Standards) as well as City ordinances. Plans shall be submitted to the Building and Safety Division as a separate submittal and shall include a soils report at time of first submittal. Beginning on January 1, 2014, the 2013 CBC will become effective for all new building permit applications.

B2. Prior to the issuance of a building permit, the applicant shall submit a properly completed "Waste Management Plan" (WMP), as required, as a portion of the building or demolition permit process.

B3. Building plans and instruments of service submitted with a building permit application shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

B4. The proposed new development may be subject to the payment of development fees as required by the City's Fee Ordinance at the time an application is submitted or prior to the issuance of permits as determined by the City.

VAL VERDE UNIFIED SCHOOL DISTRICT

S1. (BP) Prior to issuance of building permits, the developer shall provide to the Community & Economic Development Director a written certification by the affected school district that either: (1) the project has complied with the fee or other exaction levied on the project by the governing board of the district, pursuant to Government Code Section 65996; or (2) the fee or other requirement does not apply to the project.

UNITED STATES POSTAL SERVICE

PO1. (BP) Prior to the issuance of building permits, the developer shall contact the U.S. Postal Service to determine the appropriate type and location of mailboxes.

FIRE PREVENTION BUREAU

1. Hydrants shall be required along all public streets.

With respect to the conditions of approval, the following fire protection measures shall be provided in accordance with Moreno Valley City Ordinances and/or recognized fire protection standards:

F1. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in force at the time of building plan submittal.

F2. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering 4000 GPM for 4 hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for the project will be determined at time of submittal. (CFC 507.3, Appendix B).

F3. Industrial, Commercial, Multi-family, Apartment, Condominium, Townhouse or Mobile Home Parks. A combination of on-site and off-site super fire hydrants (6" x 4" x 2 ½" x 2 ½") and super enhanced fire hydrants (6" x 4" x 4" x 2 ½") shall not be closer than 40 feet and more than 150 feet from any portion of the building as measured along approved emergency vehicular travel ways. The required fire flow shall be available from any adjacent fire hydrant(s) in the system. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, super or enhanced fire hydrants as determined by the fire code official shall be provided at spacing not to exceed 500 feet of frontage for transportation hazards. (CFC 507.5.7 & MVMC 8.36.060 Section K, L)

F4. Prior to issuance of Certificate of Occupancy or Building Final, "Blue Reflective Markers" shall be installed to identify fire hydrant locations in accordance with City specifications. (CFC 509.1 and MV City Standard Engineering Plan 422 a, b, c)

F5. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)

F6. Prior to construction and issuance of building permits, all locations where structures are to be built shall have an approved Fire Department emergency vehicular access road (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4 and MV City Standard Engineering Plan 108d)

F7. Prior to construction and issuance of Building Permits, fire lanes and fire apparatus access roads shall have an unobstructed width of not less than thirty (30) feet as approved by the

Fire Prevention Bureau and an unobstructed vertical clearance of not less the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

F8. Prior to construction, all roads, driveways and private roads shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])

F9. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)

F10. Prior to building construction, dead end roadways and streets which have not been completed shall have a turnaround capable of accommodating fire apparatus. (CFC 503.2.5)

F11. The angle of approach and departure for any means of Fire Department access shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m), and the design limitations of the fire apparatus of the Fire Department shall be subject to approval by the AHJ. (CFC 503 and MVMC 8.36.060)

F12. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of six (6) inches in height for buildings and six (6) inches in height for suite identification on a contrasting background. Unobstructed lighting of the address(s) shall be by means approved by the Fire Prevention Bureau and Police Department. In multiple suite centers (strip malls), businesses shall post the name of the business on the rear door(s). (CFC 505.1, MVMC 8.36.060[I])

F13. Prior to issuance of a Certificate of Occupancy or Building Final, a “Knox Box Rapid Entry System” shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Chief. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)

F14. Prior to issuance of Building Permits, the applicant/developer shall participate in the Fire Impact Mitigation Program. (Fee Resolution as adopted by City Council)

F15. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire sprinkler system based on square footage and type of construction, occupancy or use. Fire sprinkler plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9, MVMC 8.36.100[D])

F16. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)

F17. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall:

a) Be signed by a registered civil engineer or a certified fire protection engineer;
b) Contain a Fire Prevention Bureau approval signature block; and
c) Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau.

After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

Existing fire hydrants on public streets are allowed to be considered available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3)

F18. Complete plans and specifications for fire alarm systems, fire-extinguishing systems (including automatic sprinklers or standpipe systems), clean agent systems (or other special types of automatic fire-extinguishing systems), as well as other fire-protection systems and appurtenances thereto shall be submitted to the Moreno Valley Fire Prevention Bureau for review and approval prior to system installation. Submittals shall be in accordance with CFC Chapter 9 and associated accepted national standards.

F19. Emergency and Fire Protection Plans shall be provided when required by the Fire Prevention Bureau. (CFC Section 105, MVMC 8.36.100[A])

F20. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer must submit a simple plot plan, a simple floor plan, and other plans as requested, each as an electronic file in .dwg format, to the Fire Prevention Bureau. Alternate file formats may be acceptable with approval by the Fire Chief.

F21. Approval of the safety precautions required for buildings being constructed, altered or demolished shall be required by the Fire Chief in addition to other approvals required for specific operations or processes associated with such construction, alteration or demolition. (CFC Chapter 33 & CBC Chapter 33)

F22. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall be responsible for obtaining underground and/or above ground tank permits for the storage of combustible liquids, flammable liquids, or any other hazardous materials from both the County of Riverside Community Health Agency Department of Environmental Health and the Fire Prevention Bureau. (CFC 105)

F23. Prior to issuance of Certificate of Occupancy, approval shall be required from the County of Riverside Community Health Agency (Department of Environmental Health) and Moreno Valley Fire Prevention Bureau to maintain, store, use, handle materials, or conduct processes which produce conditions hazardous to life or property, and to install equipment used in connection with such activities. (CFC 105)

F24. A permit is required to maintain, store, use or handle materials, or to conduct processes which produce conditions hazardous to life or property, or to install equipment used in connection with such activities. Such permits shall not be construed as authority to violate, cancel or set aside any of the provisions of this code. Such permit shall not take the place of any license required by law. Applications for permits shall be made to the Fire Prevention Bureau in such form and detail as prescribed by the Bureau. Applications for permits shall be accompanied by such plans as required by the Bureau. Permits shall be kept on the premises designated therein at all times and shall be posted in a conspicuous location on the premises or shall be kept on the premises in a location designated by the Fire Chief. Permits shall be subject to inspection at all times by an officer of the fire department or other persons authorized by the Fire Chief in accordance with CFC 105.

F25. Prior to issuance of Certificate of Occupancy, permits are required to store, dispense, use or handle hazardous material. Each application for a permit shall include a hazardous materials management plan (HMMP). The location of the HMMP shall be posted adjacent to (other) permits when an HMMP is provided. The HMMP shall include a facility site plan designating the following:

a) Storage and use areas;
b) Maximum amount of each material stored or used in each area;
c) Range of container sizes;
d) Locations of emergency isolation and mitigation valves and devises;
e) Product conveying piping containing liquids or gases, other than utility-owned fuel gas lines and low-pressure fuel gas lines;
f) On and off positions of valves for valves which are of the self-indicating type;
g) Storage plan showing the intended storage arrangement, including the location and dimensions of aisles. The plans shall be legible and approximately to scale. Separate distribution systems are allowed to be shown on separate pages; and
h) Site plan showing all adjacent/neighboring structures and use.

NOTE: Each application for a permit shall include a hazardous materials inventory statement (HMIS).

F26. Before a Hazardous Materials permit is issued, the Fire Chief shall inspect and approve the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used. In instances where laws or regulations are enforceable by departments other than the Fire Prevention Bureau, joint approval shall be obtained from all departments concerned. (CFC 105 Chapter 50)

F27. Construction or work for which the Fire Prevention Bureau's approval is required shall be subject to inspection by the Fire Chief and such construction or work shall remain accessible and exposed for inspection purposes until approved. (CFC Section 105)

F28. The Fire Prevention Bureau shall maintain the authority to inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the Fire Chief for the purpose of ascertaining and causing to be corrected any conditions which would reasonably tend to cause fire or contribute to its spread, or any violation of the

purpose or provisions of this code and of any other law or standard affecting fire safety. (CFC Section 105)

F29. Permit requirements issued, which designate specific occupancy requirements for a particular dwelling, occupancy, or use, shall remain in effect until such time as amended by the Fire Chief. (CFC Section 105)

F30. In accordance with the California Fire Code Appendix Chapter 1, where no applicable standards or requirements are set forth in this code, or contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards as are approved shall be deemed as prima facie evidence of compliance with the intent of this code as approved by the Fire Chief. (CFC Section 102.8)

F31. Any alterations, demolitions, or change in design, occupancy and use of buildings or site will require plan submittal to the Fire Prevention Bureau with review and approval prior to installation. (CFC 102.3)

F32. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.

CITY OF MORENO VALLEY
PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION
CONDITIONS OF APPROVAL
PA13-0063 – 1.1M Warehouse on 51 acres

Note: All Special Conditions are in **Bold** lettering and follow the standard conditions.

PUBLIC WORKS DEPARTMENT – LAND DEVELOPMENT DIVISION

The following are the Public Works Department – Land Development Division Conditions of Approval for this project and shall be completed at no cost to any government agency. All questions regarding the intent of the following conditions shall be referred to the Public Works Department – Land Development Division.

General Conditions

LD1. (G) The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). (MC 9.14.010)

LD2. (G) It is understood that the plot plan correctly shows all existing easements, traveled ways, and drainage courses, and that their omission may require the plans associated with this application to be resubmitted for further consideration. (MC 9.14.040)

LD3. (G) In the event right-of-way or offsite easements are required to construct offsite improvements necessary for the orderly development of the surrounding area to meet the public health and safety needs, the developer shall make a good faith effort to acquire the needed right-of-way in accordance with the Land Development Division's administrative policy. In the event that the developer is unsuccessful, he shall enter into an agreement with the City to acquire the necessary right-of-way or offsite easements and complete the improvements at such time the City acquires the right-of-way or offsite easements which will permit the improvements to be made. The developer shall be responsible for all costs associated with the right-of-way or easement acquisition. (GC 66462.5)

LD4. (G) If improvements associated with this project are not initiated within two years of the date of approval of the Public Improvement Agreement, the City Engineer may require that the improvement cost estimate associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the Public Improvement Agreement or issuance of a permit.

LD5. (G) The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:

(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.

(b) Observance of working hours as stipulated on permits issued by the Public Works Department.

(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.

(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements shall be adhered to during the grading operations.

Violation of any condition or restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor(s) to remedies as noted in the City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

LD6. (G) The developer shall protect downstream properties from damage caused by alteration of drainage patterns, i.e., concentration or diversion of flow. Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. (MC 9.14.110)

LD7. (G) A detailed drainage study shall be submitted to the City Engineer for review and approval at the time of any improvement or grading plan submittal. The study shall be prepared by a registered civil engineer and shall include existing and proposed hydrologic conditions. Hydraulic calculations are required for all drainage control devices and storm drain lines. (MC 9.14.110). Prior to approval of the related improvement or grading plans, the developer shall submit the approved drainage study, on compact disk, in (.pdf) digital format to the Land Development Division of the Public Works Department.

LD8. (G) The final conditions of approval issued by the Planning Division subsequent to Planning Commission approval shall be photographically or electronically included as part of the Grading and Street Improvement plan sets on twenty-four (24) inch by thirty-six (36) inch sheets and submitted with the plans for plan check. The approved plans shall be available in the field during grading and construction.

<u>Prior to Grading Plan Approval or Grading Permit</u>

LD9. (GPA) Prior to approval of the grading plans, plans shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil engineer and other registered/licensed professional as required.

LD10. (GPA) Prior to approval of grading plans, the developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. A grading permit shall be obtained from the Public Works Department Land Development Division prior to commencement of any grading outside of the City maintained road right-of-way.

d. All improvement plans are substantially complete and appropriate clearance and at-risk letters are provided to the City. (MC 9.14.030)

e. The developer shall submit a soils and geologic report to the Public Works Department – Land Development Division. The report shall address the soil's stability and geological conditions of the site.

LD11. (GPA) Prior to approval of the grading plans for projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB). The WDID# shall be noted on the grading plans prior to issuance of the first grading permit.

LD12. (GPA) Prior to the issuance of a building permit, the Developer shall record a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," to provide public notice of the requirement to implement the approved final project-specific WQMP and the maintenance requirements associated with the WQMP.

A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," can be obtained by contacting the Land Development Division of the Public Works Department.

LD13. (GPA) Prior to the grading plan approval, or issuance of a building permit, if a grading permit is not required, the Developer shall secure approval of the final project-specific WQMP from the City Engineer. The final project-specific WQMP shall be submitted at the same time of grading plan submittal. The approved final WQMP shall be submitted to the Stormwater Program Manager on compact disk(s) in Microsoft Word format prior to grading plan approval.

LD14. (GPA) Prior to the grading plan approval, or issuance of a building permit as determined by the City Engineer, the approved final project-specific WQMP shall be incorporated by reference or attached to the project's Storm Water Pollution Prevention Plan as the Post-Construction Management Plan.

LD15. (GPA) Prior to the approval of the grading plans, the developer shall pay applicable remaining grading plan check fees.

LD16. (GP) Prior to issuance of a grading permit, or building permit when a grading permit is not required, for projects that require a project-specific Water Quality Management Plan (WQMP), a project-specific final WQMP (F-WQMP) shall be approved. Upon approval, a WQMP Identification Number is issued by the Storm Water Management Section and shall be noted on the rough grading plans as confirmation that a project-specific F-WQMP approval has been obtained.

LD17. (GP) Prior to issuance of a grading permit, if the fee has not already been paid prior to map approval or prior to issuance of a building permit if a grading permit is not required, the developer shall pay Area Drainage Plan (ADP) fees. The developer shall provide a receipt to the City showing that ADP fees have been paid to Riverside County Flood Control and Water Conservation District. (MC 9.14.100)

LD18. (GP) Prior to issuance of a grading permit, security, in the form of a cash deposit (preferable), letter of credit, or performance bond shall be required to be submitted as a guarantee of the completion of the grading required as a condition of approval of the project. (MC 8.21.070)

LD19. (GP) Prior to issuance of a grading permit, security, in the form of a cash deposit (preferable), letter of credit, or performance bond shall be required to be submitted as a guarantee of the implementation and maintenance of erosion control measures required as a condition of approval of the project. At least twenty-five (25) percent of the required security shall be in cash and shall be deposited with the City. (MC 8.21.160)

LD20. (GP) Prior to issuance of a grading permit, the developer shall pay the applicable grading inspection fees.

Prior to Improvement Plan Approval or Construction Permit

LD21. (IPA) Prior to approval of the improvement plans, the improvement plans shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil engineer and other registered/licensed professional as required.

LD22. (IPA) Prior to approval of the improvement plans, the developer shall submit clearances from all applicable agencies, and pay all outstanding plan check fees. (MC 9.14.210)

LD23. (IPA) All public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer in order for the Public Improvement Agreement and accompanying security to be executed.

LD24. (IPA) Prior to approval of the improvement plans, securities and a public improvement agreement shall be required to be submitted and executed as a guarantee of the completion of the improvements required as a condition of approval of the project.

LD25. (IPA) The street improvement plans shall comply with all applicable City standards and the following design standards throughout this project:

a. Corner cutbacks in conformance with City Standard MVSI-165-0 shall be shown on the final map or, if no map is to be recorded, offered for dedication by separate instrument.

b. Lot access to major thoroughfares shall be restricted except at intersections and approved entrances and shall be so noted on the final map. (MC 9.14.100)

c. The minimum centerline and flow line grades shall be one percent unless otherwise approved by the City Engineer. (MC 9.14.020)

d. All street intersections shall be at ninety (90) degrees plus or minus five (5) degrees per City Standard No. MVSI-160A-0, or as approved by the City Engineer. (MC 9.14.020)

e. All reverse curves shall include a minimum tangent of one hundred (100) feet in length.

LD26. (IPA) Prior to approval of the improvement plans, the plans shall be based upon a centerline profile, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer. Design plan and profile information shall include the minimum 300 feet beyond the project boundaries.

LD27. (IPA) Prior to approval of the improvement plans, the plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three years old and recently slurry sealed streets less than one year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved in writing by the City Engineer.

LD28. (IPA) Prior to approval of the improvement plans, the developer shall pothole to determine the exact location of existing underground utilities. The improvement plans shall be designed based on the pothole field investigation results. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

LD29. (IPA) Prior to approval of the improvement plans, all dry and wet utility crossings shall be potholed to determine actual elevations. Any conflicting utilities shall be identified and addressed on the plans. The pothole survey data shall be submitted with the street improvement plans for reference purposes.

LD30. (IPA) Prior to approval of the improvement plans, the developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, those access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless approved otherwise by the City Engineer.

LD31. (IPA) Prior to approval of the improvement plans, drainage facilities with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided. (MC 9.14.110)

LD32. (IPA) Prior to the approval of the improvement plans, the hydrology study shall show that the 10-year storm flow will be contained within the curb and the 100-year storm flow shall be contained within the street right-of-way. In addition, one lane in each direction shall not be used to carry surface flows during any storm event for street sections equal to or larger than a minor arterial. When any of these criteria is exceeded, additional drainage facilities shall be installed. (MC 9.14.110 A.2)

LD33. (IPA) The project shall be designed to accept and properly convey all off-site drainage flowing onto or through the site. All storm drain design and improvements shall be subject to review and approval of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of the Development Code will apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the Public Works Department – Land Development Division. (MC 9.14.110)

LD34. (CP) All work performed within the City right-of-way requires a construction permit. As determined by the City Engineer, security may be required for work within the right-of-way. Security shall be in the form of a cash deposit or other approved means. The City Engineer may require the execution of a public improvement agreement as a condition of the issuance of the construction permit. All inspection fees shall be paid prior to issuance of construction permit. (MC 9.14.100)

LD35. (CP) Prior to issuance of a construction permit, all public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer.

LD36. (CP) Prior to issuance of construction permits, the developer shall submit all improvement plans on compact disks, in (.dxf) digital format to the Land Development Division of the Public Works Department.

LD37. (CP) Prior to issuance of construction permits, the developer shall pay all applicable inspection fees.

Prior to Building Permit

LD38. (BP) Prior to issuance of building permits for non-subdivision projects, all street dedications shall be irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer. All dedications shall be free of all encumbrances as approved by the City Engineer.

LD39. (BP) Prior to issuance of building permits for non-subdivisions, security shall be required to be submitted as a guarantee of the completion of the improvements required as a condition of approval of the project. A public improvement agreement will be required to be executed.

LD40. (BP) Prior to issuance of building permit for a non-subdivision project, the developer shall comply with the requirements of the City Engineer based on recommendations of the Riverside County Flood Control District regarding the construction of County Master Plan Facilities. (MC 9.14.110)

LD41. (BP) Prior to issuance of a building permit for non-subdivision projects, the developer shall enter into an agreement with the City and Riverside County Flood Control and Water Conservation District establishing the terms and conditions covering the inspection, operation and maintenance of Master Drainage Plan facilities. (MC 9.14.110)

LD42. (BP) Prior to issuance of a building permit, all pads shall meet pad elevations per approved plans as noted by the setting of "Blue-top" markers installed by a registered land surveyor or licensed engineer.

Prior to Certificate of Occupancy

LD43. (CO) Prior to issuance of the last certificate of occupancy or building final, the developer shall pay all outstanding fees.

LD44. (CO) Prior to issuance of a certificate of occupancy, this project is subject to requirements under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System **(NPDES)** as mandated by the Federal Clean Water Act. In compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Following are the requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.
    i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or
    ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. (California Government Code & Municipal Code)

LD45. (CO) The City of Moreno Valley has an adopted Development Impact Fee (DIF) nexus study. All projects unless otherwise exempted shall be subject to the payment of the DIF prior to issuance of occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy.

LD46. (CO) The City of Moreno Valley has an adopted area wide Transportation Uniform Mitigation Fee (TUMF). All projects unless otherwise exempted shall be subject to the payment of the TUMF prior to issuance of occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy.

LD47. (CO) Prior to issuance of a certificate of occupancy or building final, the developer shall construct all public improvements in conformance with applicable City standards, except as noted in the Special Conditions, including but not limited to the following applicable improvements:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of existing and proposed utility lines less than 115,000 volts.

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

LD48. (CO) Prior to issuance of a certificate of occupancy or building final, all existing and new utilities adjacent to and on-site shall be placed underground in accordance with City of Moreno Valley ordinances. (MC 9.14.130)

LD49. (CO) Prior to issuance of a certificate of occupancy or building final for any Commercial/Industrial facility, whichever occurs first, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

LD50. (CO) Prior to issuance of a certificate of occupancy or building final, the applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP)
b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted to the City for review and approval.

Prior to Acceptance of Streets into the City Maintained Road System

LD51. (AOS) Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, the developer/contractor must provide a slurry mix design submittal for City Engineer approval. The latex additive shall be Ultra Pave 70 (for anionic – per project geotechnical report) or Ultra Pave 65 K (for cationic – per project geotechnical report) or an approved equal. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

SPECIAL CONDITIONS

LD52. The following project engineering design plans (24"x36" sheet size) shall be submitted for review and approval as well as additional plans deemed necessary by the City during the plan review process: Rough Grading Plan, Precise Grading Plan, Street Improvement Plan, Final Drainage Study, and As-Builts of above referenced plans.

LD53. Prior to rough grading plan approval, this project shall submit for review and approval a lot line adjustment to combine the existing parcels into one parcel.

LD54. The Applicant shall prepare and submit for approval a final, project-specific water quality management plan (F-WQMP) for PA13-0063 Modular Logistics Center. The F-WQMP shall be consistent with the approved P-WQMP and the Special Project Conditions listed above, as well as in full conformance with the document; "*Water Quality Management Plan - A Guidance Document for the Santa Ana Region of Riverside County" dated October 22, 2012*. The F-WQMP shall be submitted and approved prior to application for and issuance of grading permits or building permits. At a minimum, the F-WQMP shall include the following: stormwater BMPs; LID principles; Source control BMPs; Operation and Maintenance requirements for BMPs; and sources of funding for BMP implementation.

LD55. The Applicant has proposed to incorporate the use of bio-retention. Final design and sizing details of all BMPs must be provided in the first submittal of the F-WQMP, per the Special Project Conditions listed above. The Applicant acknowledges that more area than currently shown on the plans may be required to treat site runoff as required by the WQMP guidance document.

LD56. The Applicant shall substantiate all applicable Hydrologic Condition of Concern (HCOC) issues in the first submittal of the F-WQMP, if applicable.

LD57. The Applicant shall, prior to building or grading permit closeout or the issuance of a certificate of occupancy, demonstrate:

a. **That all structural BMPs have been constructed and installed in conformance with the approved plans and specifications;**
b. **That all structural BMPs described in the F-WQMP have been implemented in accordance with approved plans and specifications;**
c. **That the applicant is prepared to implement all non-structural BMPs included in the F-WQMP, conditions of approval, and building/grading permit conditions; and**
d. **That an adequate number of copies of the approved F-WQMP are available for the future owners/occupants of the project**.

LD58. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

LD59. Prior to precise grading plan approval, the grading plans shall show any proposed trash enclosure as dual bin; one bin for trash and one bin for recyclables. The trash enclosure shall be per City Standard Plans MVSI-660A-0 thru 660F-0.

LD60. Prior to occupancy, the following improvements shall be completed:

a. **Modular Way, Industrial Collector, City Standard MVSI-106A-0 (78-foot RW / 56-foot CC) shall construct the remaining public improvements along the project's south frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.**

b. **Kitching Street, Arterial, City Standard MVSI-104A-0 (100-foot RW / 38-foot CC) shall be constructed to half-width plus 18' along the entire project's east frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements. Dedicate additional right-of-way on the west side of the street, along the project's east frontage.**

c. **Edwin Street, Industrial Collector, City Standard MVSI-106A-0 (78-foot RW / 56-foot CC) shall construct the remaining public improvements along the project's north frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements. Dedicate additional right-of-way on the south side of the street, along the project's north frontage. Vacate a portion of the right-of-way on the south side of the street, as applicable.**

d. Perris Blvd., 6-lane Divided Arterial, City Standard MVSI-103C-0 shall replace or install any damaged, substandard or missing improvements.

e. Driveway approaches shall be constructed per City Std. MVSI-112C-0.

f. Pavement core samples of existing pavement on Perris Blvd, Modular Way, Kitching Street and Edwin Street may be taken and findings submitted to the City for review and consideration of pavement improvements. The City will determine the adequacy of the existing pavement structural section. If the existing pavement structural section is found to be adequate, the developer may still be required to perform a one-tenth inch grind and overlay or slurry seal depending on the severity of existing pavement cracking, as required by the City Engineer. If the existing pavement section is found to be inadequate, the Developer shall replace the pavement to meet or exceed the City's pavement structural section standard.

Transportation Engineering Division – Conditions of Approval

Based on the information contained in our standard review process we recommend the following conditions of approval be placed on this project:

GENERAL CONDITIONS

TE1. Perris Boulevard is classified as a Six-Lane Divided Arterial (110' RW/86' CC) per City Standard Plan No. MVSI-103C-0. Any improvements to the roadway shall be per City standards. Citywide Communication Conduits shall be installed along project frontage per City Standard Plan No. MVSI-186-0.

TE2. Kitching Street is classified as an Arterial (100' RW/76' CC) per City Standard Plan No. MVSI-104A-0. Any improvements to the roadway shall be per City standards. Citywide Communication Conduits shall be installed along project frontage per City Standard Plan No. MVSI-186-0.

TE4. Modular Way is classified as an Industrial Collector Street (78' RW/56' CC) per City Standard Plan No. MVSI-106A-0. Any improvements to the roadway shall be per City standards.

TE5. Edwin Road is classified as an Industrial Collector Street (78' RW/56' CC) per City Standard Plan No. MVSI-106A-0. Any improvements to the roadway shall be per City standards.

TE6. Driveways shall conform to Section 9.11.080, and Table 9.11.080-14 of the City's Development Code – Design Guidelines and City of Moreno Valley Standard No. MVSI-112C-0 for commercial driveway approach. Driveways serving trucks shall have a radius of 50', or as approved by the City Traffic Engineer.

TE7. Each gated entrance (with the exception of the Edwin Road gate) shall be provided with the following, or as approved by the City Traffic Engineer:

a) A storage lane with a minimum of 75 feet queuing length for entering traffic.
b) Signing and striping.

All of these features must be kept in working order.

TE8. Conditions of approval may be modified or added if a modified or phasing plan is submitted for this development.

PRIOR TO IMPROVEMENT PLAN APPROVAL OR CONSTRUCTION PERMIT

TE9. Prior to the final approval of the street improvement plans, traffic signal modification plans may be required for the traffic signal located at Perris Boulevard and San Michele Road. Modifications may include but not be limited to new signal poles, new pull boxes, new traffic detector loops, etc.

TE10. Prior to the final approval of the street improvement plans, a bus bay per City Standard Plan No. MVSI-161-0 shall be designed for northbound Perris Boulevard, just north of San Michele Road.

TE11. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for all streets.

TE12. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

TE13. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

PRIOR TO BUILDING PERMIT

TE14. (BP) Prior to the issuance of Building Permit, the project applicant shall make any fair-share payments for improvements identified in the project Traffic Study.

PRIOR TO CERTIFICATE OF OCCUPANCY OR BUILDING FINAL

TE15. (CO) Prior to issuance of Certificate of Occupancy, traffic signal modifications identified in TE9 and the bus bay identified in TE10 shall be constructed per the approved plans with the street improvements to the satisfaction of the City Traffic Engineer.

TE16. (CO) Prior to issuance of Certificate of Occupancy, all approved signing and striping shall be installed per current City Standards and the approved plans.

PRIOR TO ACCEPTANCE OF STREETS INTO THE CITY-MAINTAINED ROAD SYSTEM

TE17. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

PUBLIC WORKS DEPARTMENT

Moreno Valley Utility

Acknowledgement of Conditions

The following items are Moreno Valley Utility's Conditions of Approval for project(s) PA13-0063; this project shall be completed at no cost to any Government Agency. All questions regarding Moreno Valley Utility's Conditions including but not limited to, intent, requests for change/modification, variance and/or request for extension of time shall be sought from Moreno Valley Utility (the Electric Utility Division) of the Public Works Department 951.413.3500. The applicant is fully responsible for communicating with Moreno Valley Utility staff regarding their conditions.

PRIOR TO ENERGIZING MVU ELECTRIC UTILITY SYSTEM AND CERTIFICATE OF OCCUPANCY

MVU-1 (R) If the project is a commercial or industrial project, and it requires the installation of electric distribution facilities within common areas, a non-exclusive easement shall be provided to Moreno Valley Utility to include all such common areas. All easements shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

MVU-2 (BP) **City of Moreno Valley Municipal Utility Service – Electrical Distribution**: Prior to constructing the MVU Electric Utility System, the developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and concurrent with trenching operations and other subdivision improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City, or the City's designee, all utility infrastructure (including but not limited to conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and "bring-up" facilities including electrical capacity to serve the identified development and other adjoining/abutting/ or benefiting projects as determined by Moreno Valley Utility) – collectively referred to as "utility system" (to and through the development), along with any appurtenant real property easements, as determined by the City Engineer to be necessary for the distribution and /or delivery of any and all "utility services" to each lot and unit within the Tentative Map. For purposes of this

condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

The City, or the City’s designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Developer shall, at developer's sole expense, install or cause the installation of such interconnection facilities as may be necessary to connect the electrical distribution infrastructure within the project to the Moreno Valley Utility owned and controlled electric distribution system.

MVU-3 This project may be subject to a Reimbursement Agreement. The project may be responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Special Districts Division

Acknowledgement of Conditions

The following items are the Special Districts Division's Conditions of Approval for project **PA13-0063**; this project shall be completed at no cost to any Government Agency. All questions regarding the following Conditions including but not limited to intent, requests for change/modification, variance and/or request for extension of time shall be sought from the Special Districts Division of the Financial & Management Services Department 951.413.3480 or by emailing specialdistricts@moval.org.

General Conditions

SD-1 The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

SD-2 Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

SD-3 The removal of existing trees with four-inch or greater trunk diameters (calipers), shall be replaced, at a three to one ratio, with minimum twenty-four (24) inch box size trees of the same species, or a minimum thirty-six (36) inch box for a one to one replacement, where approved. (MC 9.17.030)

SD-4 Modification of the existing irrigation system for parkway improvements may be required per the direction of, approval by and coordination with the Special Districts Division. Please contact Special Districts Division staff at 951.413.3480 or specialdistricts@moval.org to coordinate the modifications.

SD-5 Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, Moreno Valley Utility. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

Prior to Building Permit Issuance

SD-6 (BP) This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. This condition will not apply if the first building permit for the project is obtained prior to formation of the district. If the condition applies, conducting a special election may take up to 90 days to complete the process in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

SD-7 (BP) This project is conditioned to provide a funding source for the capital improvements, energy charges, and maintenance for street lighting. The Developer shall satisfy the condition with one of the options below.

a. Participate in a special election (mail ballot proceeding) for street lighting and pay all associated costs of the ballot process and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover future operation and maintenance costs for the street lights.

c. Projects with privately maintained streets, establish a property Owner Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs associated with the street lights installed on private roadways. This does not apply to publicly accepted roadways.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires 90 days to complete the special election process to

allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first building permit.

SD-8 (BP) This project is conditioned to provide a funding source for the capital improvements and/or maintenance for the Perris Boulevard median landscape. The Developer shall satisfy the condition with one of the options outlined below.

a. Participate in a special election (mail ballot proceeding) for improved median maintenance and pay all associated costs of the ballot process and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the city; or

b. Fund an endowment to cover the future maintenance costs of the landscaped area.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financing option when submitting the application for building permit issuance. The option for participating in a special election requires 90 days to complete the special election process to allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of certificate of occupancy.

SD-9 (BP) This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for **maintenance/services** and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process to allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the certificate of occupancy.

SD-10 *Commercial* (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the monitoring of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). If participating in a special election the process requires a 90 days to allow adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

SD-11 (BP) Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division *(specialdistricts@moval.org).* Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

POLICE DEPARTMENT

PD1. Prior to the start of any construction, temporary security fencing shall be erected. The fencing shall be a minimum of six (6) feet high with locking, gated access and shall remain through the duration of construction. Security fencing is required if there is: construction, unsecured structures, unenclosed storage of materials and/or equipment, and/or the condition of the site constitutes a public hazard as determined by the Public Works Department. If security fencing is required, it shall remain in place until the project is completed or the above conditions no longer exist. (DC 9.08.080)

PD2. (GP) Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

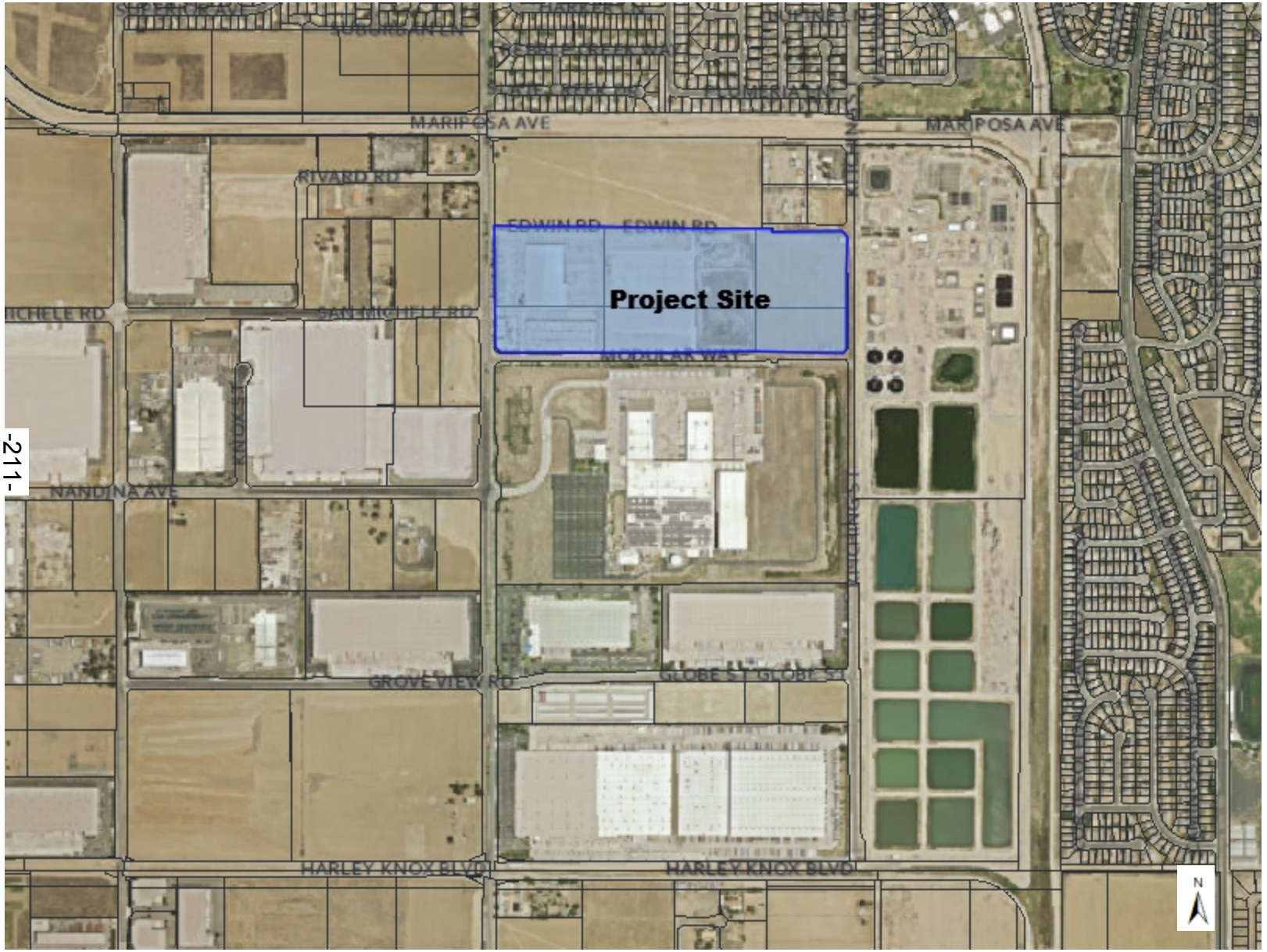
a. The name (if applicable) and address of the development.

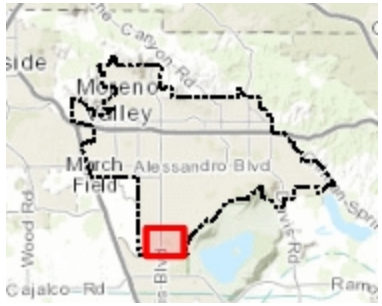
b. The developer's name, address, and a 24-hour emergency telephone number. (DC 9.08.080)

PD3. (CO) Prior to the issuance of a Certificate of Occupancy, an Emergency Contact Information Form for the project shall be completed at the permit counter of the Community Development Department - Building Division for routing to the Police Department. (DC 9.08.080)

PD4. Addresses shall be in plain view, visible from the street and visible at night.

PA13-0063 - Aerial Photograph





Legend

- ☐ Parcels

Notes

Attachment 4

2,173.0 0 1,086.48 2,173.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 3/18/2014

DISCLAIMER: The information shown on this map was compiled from the City of Moreno Valley GIS and Riverside County GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

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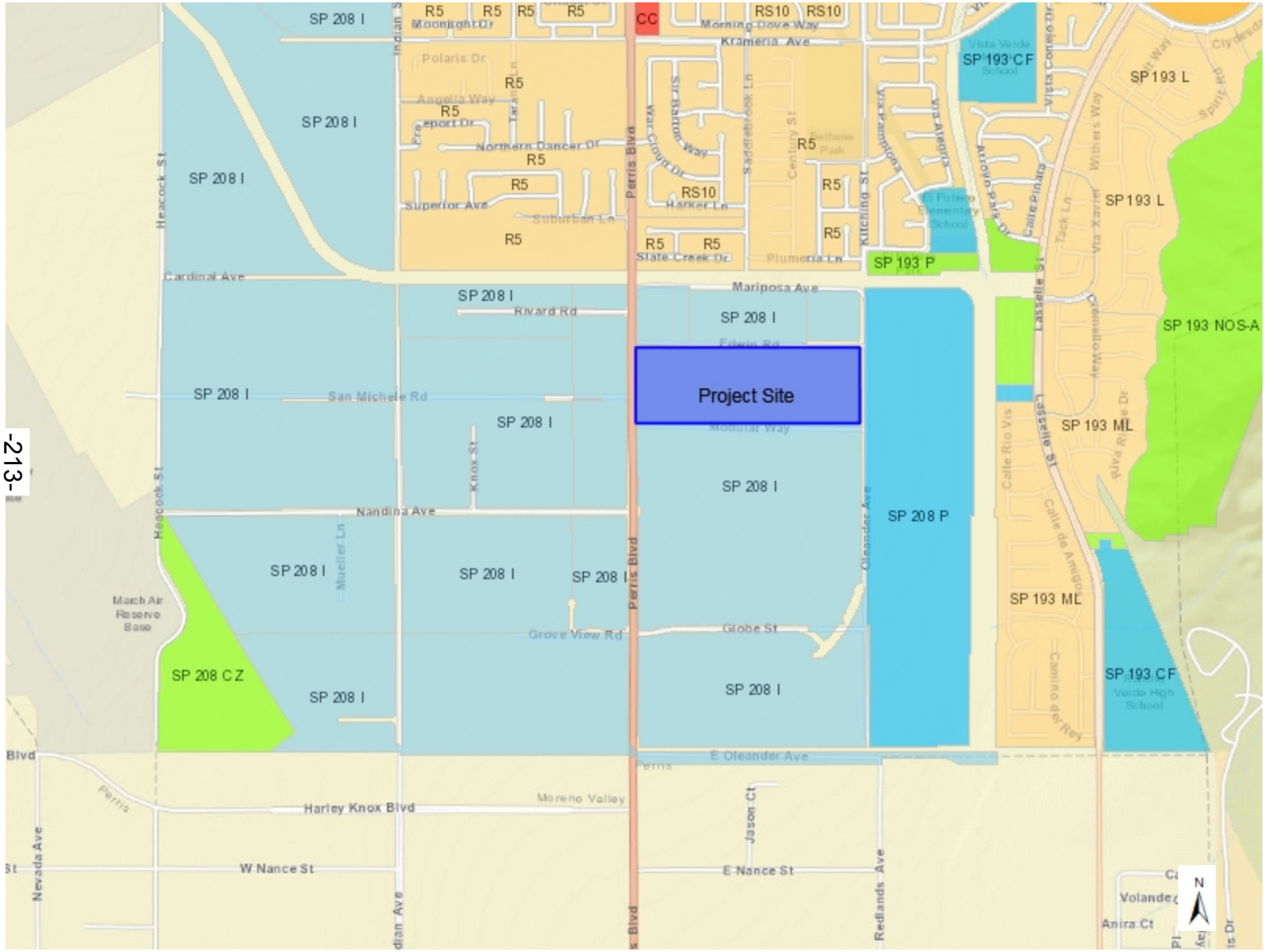
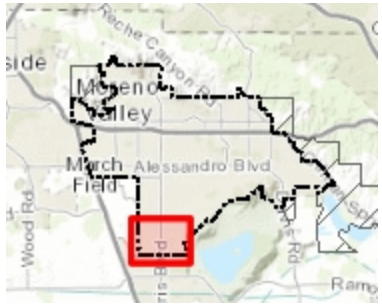
PA13-0063 - Zoning





Legend

Zoning

- Commercial
- Industrial/Business Park
- Public Facilities
- Office
- Planned Development
- Large Lot Residential
- Residential Agriculture 2 DU/AC
- Residential 2 DU/AC
- Suburban Residential
- Multi-family
- Open Space/Park

Notes

Attachment 5

3,419.2 0 1,709.62 3,419.2 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 3/2/2015

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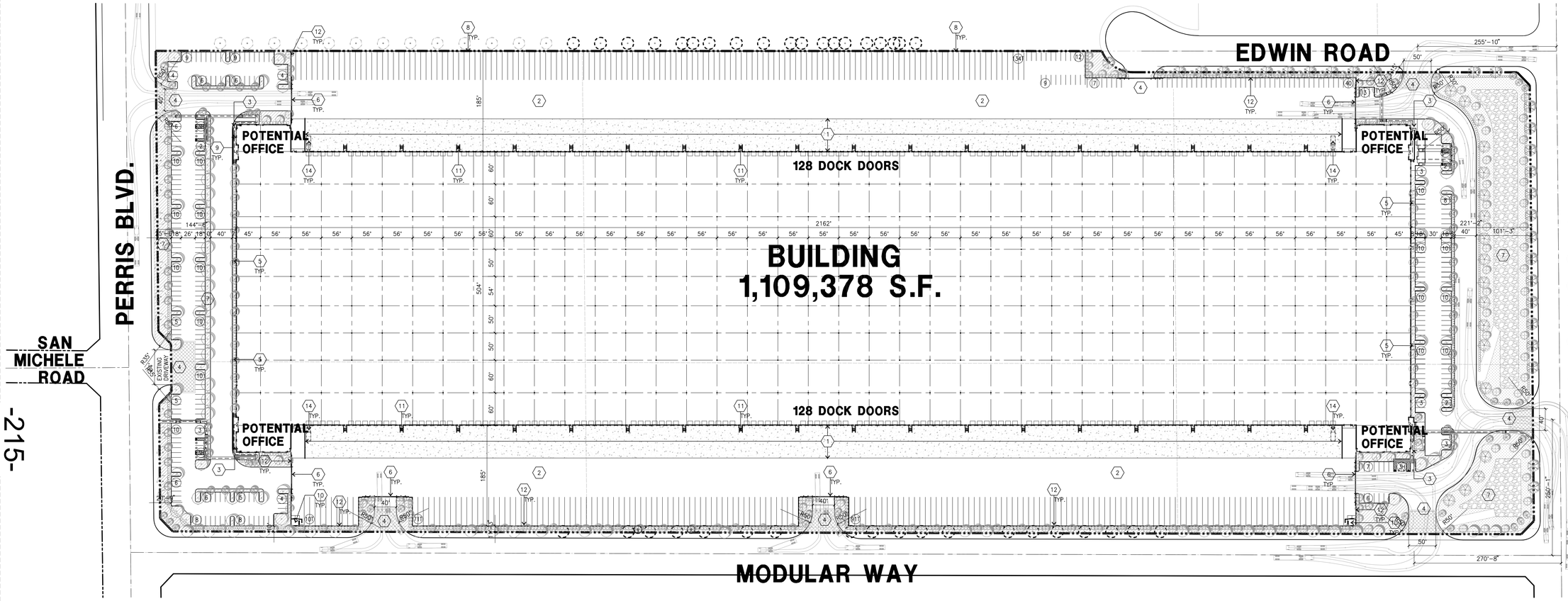


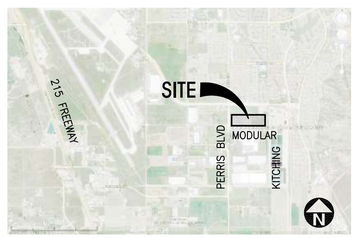
OVERALL SITE PLAN

scale: 1"=80'-0"

TABULATION

SITE AREA		
in s.f.	2,207,410	s.f.
in acres	50.68	ac
BUILDING AREA		
office	20,000	s.f.
warehouse	1,089,378	s.f.
TOTAL	1,109,378	s.f.
COVERAGE	50.3%	
PARKING REQUIRED		
office @ 1/250 s.f.	80	stalls
1st. 20k @ 1/1,000 s.f.	20	stalls
2nd. 20k @ 1/2,000 s.f.	10	stalls
above 40k @ 1/4,000 s.f.	263	stalls
TOTAL	373	stalls
TRAILER PARKING REQURED		
1/1 Door Ratio	256	stalls
PARKING PROVIDED		
standard (9'x18')	361	stalls
handicap (9'x18')	12	stalls
trailers (12'x53')	306	stalls
TOTAL	679	stalls

AERIAL MAP



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONC. PAVEMENT.
2. ASPHALT CONCRETE (AC) PAVING
3. CONCRETE WALKWAY
4. DRIVEWAY APRONS TO BE CONSTRUCTED PER "L" DRAWINGS.
5. 5'-6"X5'-6"X4" MIN. THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" : 12" MAX. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY W/ 1:20 MAX. AS REQ. BY CITY INSPECTOR.
6. PROVIDE 8' H METAL TUBULAR MANUALLY OPERATED GATES W/ KNOX-PAD LOCK PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
7. LANDSCAPE. SEE "L" DWG.
8. CHAINLINK FENCE
9. CONCRETE RAMP TO THE BUILDING.
10. TRASH ENCLOSURE
11. EXTERIOR CONC. STAIR.
12. 14'H CONCRETE TILT-UP SCREEN WALL.
13. APPROXIMATE LOCATION OF ELECTRICAL TRANSFORMER.
14. TRASH COMPACTOR N.I.C.
15. PUMP HOUSE
16. MONUMENT SIGN

SITE PLAN GENERAL NOTES

1. THE SOILS REPORT PREPARED BY _____.
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES. DETAILS ON SHEET AD.1 ARE MINIMUM STANDARDS.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM, PRIOR TO INSTALLATION & AT LEAST 60 DAYS BEFORE BLDG. COMPLETION.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C" DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY W/ 1:20 MAX. SLOPE. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". SEE "L" DRAWINGS FOR FINISH.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
16. APPROVED CONCEPTUAL LANDSCAPE PLAN PRIOR TO GRADING PERMIT
17. FRONT OFFICE MAY BE USED USED BY A TENANT DIFFERENCT THAN THE PROPOSED REAR BUILDING.
18. 2 FOOT CANDLE AVERAGE AT OFFICE PARKING AND 1 FOOT CANDLE AVERAGE AT TRUCK YARD.

SITE LEGEND

- LANDSCAPED AREA
- AC. PAVING - SEE "C" DRWGS. FOR THICKNESS
- CONCRETE PAVING SEE "C" DRWGS. FOR THICKNESS
- BIO TREATMENT AREA
- STANDARD PARKING STALL (9' X 18')
- HANDICAP PARKING STALL (9' X 18')
- PATH OF TRAVEL

PROJECT INFORMATION

Owner / Applicant
KEARNY MODULAR WAY LLC
1900 AVENUE OF THE STARS-STE.#320
LOS ANGELES, CA 90067
TEL: (310) 203-1847
CONTACT: JASON ROSIN

Architect
HPA, INC.
18831 BARDEEN AVE. SUITE #100
IRVINE, CA 92612
TEL: (949) 862-2116
CONTACT: HOON KEUN PARK

A.P.N.
312-250-030
312-250-031
312-250-032
312-250-036
312-250-037
312-250-038

Zoning:

EXISTING LAND USE:	WAREHOUSE
PROPOSED LAND USE:	INDUSTRIAL
EXISTING ZONING:	INDUSTRIAL SP
PROPOSED ZONING:	INDUSTRIAL SP

Civil Engineer
ALBERT A. WEBB ASSOCIATES
3788 McCRAY STREET
RIVERSIDE, CA 92506
TEL: (951) 686-1070
FAX: (951) 788-1256
CONTACT: ROBERT BERNDT

Landscape Architect
SPLA INC.
P.O. BOX 2157
LAKE ARROWHEAD, CA 92352
TEL: (909) 337-9895
CONTACT: SCOTT PETERSON

Attachment 6

-215-

HPA architecture
hpa, inc.
18831 bardeen avenue, - ste. #100
irvine, ca
92612
tel: 949-863-1770
fax: 949-863-0851
email: hpa@hparchs.com

KEARNY Real Estate Company
KEARNY MODULAR WAY LLC
1900 Avenue of the Stars - Ste.#320
Los Angeles, CA 90067
tel: (310) 203-1847

Project:
Modular Logistics Center
MORENO VALLEY, CA

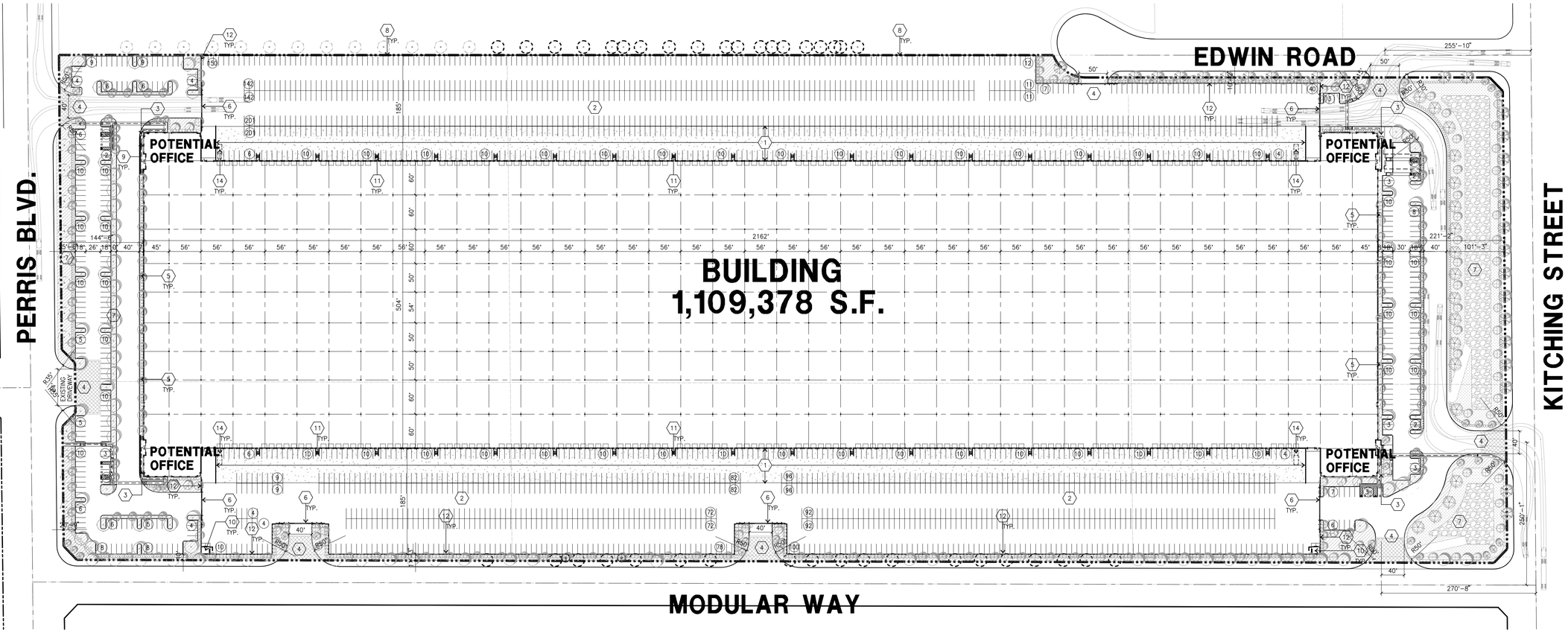
Consultants:

CIVIL	WEBB & ASSOC.
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: OVERALL SITE PLAN

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet: A1.1



OVERALL SITE PLAN

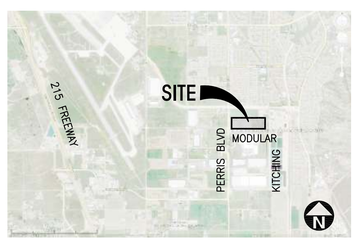
scale: 1"=80'-0"

-216-

TABULATION

SITE AREA		
in s.f.	2,207,410	s.f.
in acres	50.68	ac
BUILDING AREA		
office	20,000	s.f.
warehouse	1,089,378	s.f.
TOTAL	1,109,378	s.f.
COVERAGE	50.3%	
PARKING REQUIRED		
office @ 1/250 s.f.	80	stalls
1st. 20k @ 1/1,000 s.f.	20	stalls
2nd. 20k @ 1/2,000 s.f.	10	stalls
above 40k @ 1/4,000 s.f.	263	stalls
TOTAL	373	stalls
PARKING PROVIDED		
standard (9'x18')	2,466	stalls
handicap (9'x18')	12	stalls
TOTAL	2,478	stalls

AERIAL MAP



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SITE LEGEND

- LANDSCAPED AREA
- AC. PAVING – SEE "C" DRWGS. FOR THICKNESS
- CONCRETE PAVING SEE "C" DRWGS. FOR THICKNESS
- BIO TREATMENT AREA
- STANDARD PARKING STALL (9' X 18')
- HANDICAP PARKING STALL (9' X 18')
- PATH OF TRAVEL

PROJECT INFORMATION

Owner / Applicant
KEARNY MODULAR WAY LLC
1900 AVENUE OF THE STARS-STE.#320
LOS ANGELES, CA 90067
TEL: (310) 203-1847
CONTACT: JASON ROSIN

Architect
HPA, INC.
18831 BARDEEN AVE. SUITE #100
IRVINE, CA 92612
TEL: (949) 862-2116
CONTACT: HOON KEUN PARK

A.P.N.
312-250-030
312-250-031
312-250-032
312-250-036
312-250-037
312-250-038

Zoning:

EXISTING LAND USE:	WAREHOUSE
PROPOSED LAND USE:	INDUSTRIAL
EXISTING ZONING:	INDUSTRIAL SP
PROPOSED ZONING:	INDUSTRIAL SP

Civil Engineer
ALBERT A. WEBB ASSOCIATES
3788 McCRAY STREET
RIVERSIDE, CA 92506
TEL: (951) 686-1070
FAX: (951) 788-1256
CONTACT: ROBERT BERNDT

Landscape Architect
SPLA INC.
P.O. BOX 2157
LAKE ARROWHEAD, CA 92352
TEL: (909) 337-9895
CONTACT: SCOTT PETERSON

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fax: 949-863-0851
email: hpa@hparchs.com

KEARNY Real Estate Company
KEARNY MODULAR WAY LLC
1900 Avenue of the Stars - Ste.#320
Los Angeles, CA 90067
tel: (310) 203-1847

Project:

Modular Logistics Center

MORENO VALLEY, CA

Consultants:

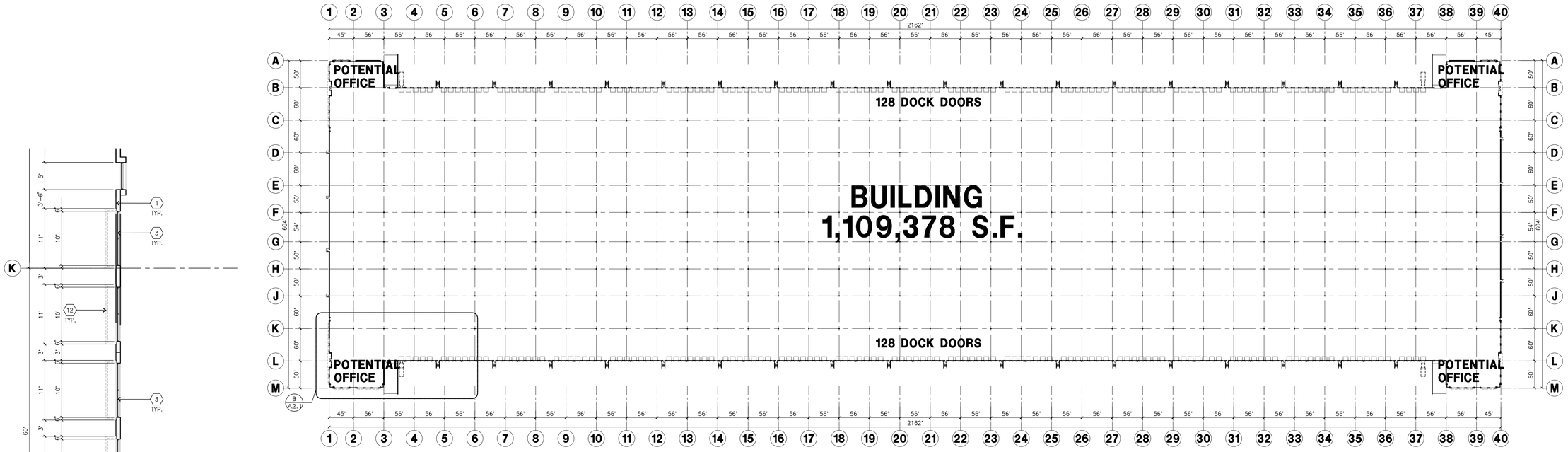
CIVIL	WEBB & ASSOC.
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: OVERALL SITE PLAN ALTERNATE PARKING

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet:

A1.1A



OVERALL FLOOR PLAN A
scale: 1"=80'-0"

ENLARGED FLOOR PLAN B
scale: 1/8"=1'-0"

GENERAL NOTES - FLOOR PLAN

A. THIS BUILDING IS DESIGNED FOR HIGH PILE STORAGE WITH FIRE ACCESS MAN DOORS AT 100' MAXIMUM O.C. A SEPARATE PERMIT WILL BE REQUIRED FOR ANY RACKING/CONVEYER SYSTEMS.
B. FIRE HOSE LOCATIONS SHALL BE APPROVED PER FIRE DEPARTMENT.
C. THE BUILDING FLOOR SLAB IS SLOPED, SEE "C" DRAWINGS FOR FINISH SURFACE ELEVATIONS.
D. NOT USED
E. WAREHOUSE INTERIOR CONCRETE WALLS ARE PAINTED WHITE. COLUMNS ARE TO RECEIVE PRIMER ONLY. ALL GYP. BD. WALLS IN WAREHOUSE TO RECEIVE 1 COAT OF WHITE TO COVER.
F. SLOPE POUR STRIP 1/2" TO EXTERIOR AT ALL MANDOOR EXITS. SEE "S" DRAWINGS FOR POUR STRIP LOCATION.
G. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE PANEL WALL, GRIDLINE, OR FACE OF STUD U.N.O.
H. SEE CIVIL DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR TO VERIFY ACTUAL UTILITY LOCATIONS. PLUMBING/ELECTRICAL COORDINATION.
I. FOR DOOR TYPES AND SIZES, SEE DETAIL SHEET AD.4. NOTE: ALL DOORS PER DOOR SCHEDULE ARE FINISH OPENINGS.
J. CONTRACTOR TO PROTECT AND KEEP THE FLOOR SLAB CLEAN. ALL EQUIPMENT TO BE DIAPERED INCLUDING CARS AND TRUCKS.
K. ALL EXIT MAN DOORS IN WAREHOUSE TO HAVE ILLUMINATED EXIT SIGN. HARDWARE.
L. HIGHLY FLAMMABLE AND COMBUSTIBLE MATERIAL SHALL NOT BE USED OR STORED IN THIS BUILDING.
M. EACH EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS "EXIT". THE MOUNTING HEIGHT FOR SUCH SIGNAGE SHALL BE 60" FROM FINISH FLOOR LEVEL TO THE CENTER OF THE SIGN.
N. NON-ACCESSIBLE DOOR. PROVIDE WARNING SIGN LOCATED IN THE INTERIOR SIDE PER CBC 1133B.1.1.1
O. ALL ROOF MOUNTED MATERIALS SHALL BE FULLY SCREENED FROM PUBLIC VIEW, SEE A/A4.1 OFFICE SECTION.

KETNOTES - FLOOR PLAN

1. CONCRETE TILT-UP PANEL.
2. STRUCTURAL STEEL COLUMN.
3. TYPICAL STOREFRONT SYSTEM WITH GLAZING.
4. CONCRETE RAMP.
5. 9'-0" X 10' TRUCK DOOR, SECTIONAL O'H., STANDARD GRADE.
6. EXTERIOR CONCRETE STAIR
7. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD.
8. NOT USED
9. DOCK DOOR BUMPER
10. 12' X 14' DRIVE THRU, SECTIONAL OH., STANDARD GRADE.
11. 3'X7' HOLLOW METAL EXTERIOR MAN DOOR.
12. METAL CANOPY
13. SOFFIT LINE ABOVE
14. CONC. FILLED GUARD POST. 6" DIA. U.N.O. 42"H
15. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPER
16. Z GUARD
17. LOUVERED OPENING FOR VENTILATION

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tel: (310) 203-1847

Project:
Modular Logistics Center
MORENO VALLEY, CA

Consultants:

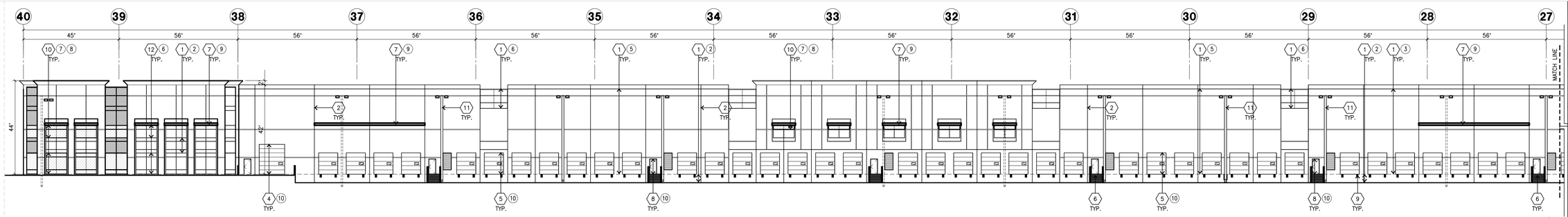
CIVIL	WEBB & ASSOC.
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: FLOOR PLAN

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet: A2.1

-217-



NORTH ELEVATION A
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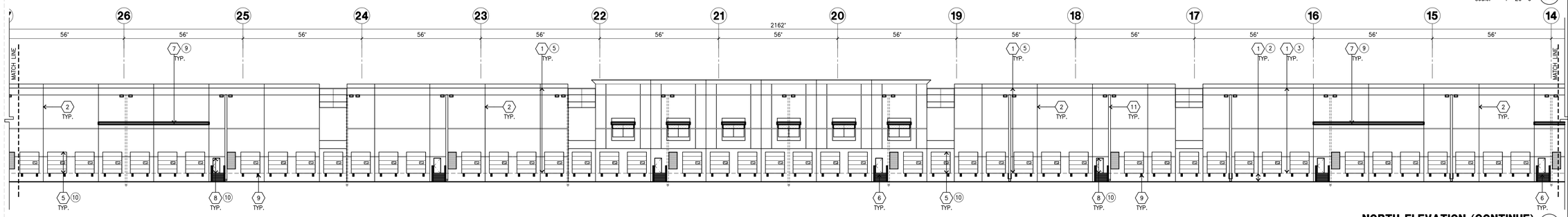

NORTH ELEVATION (CONTINUE) B
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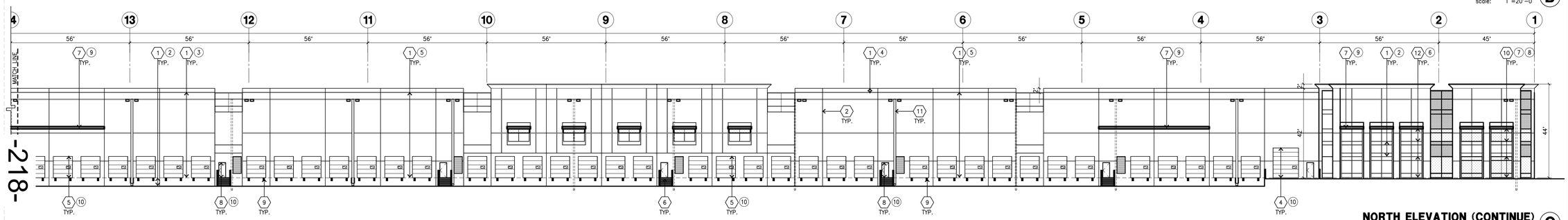

NORTH ELEVATION (CONTINUE) C
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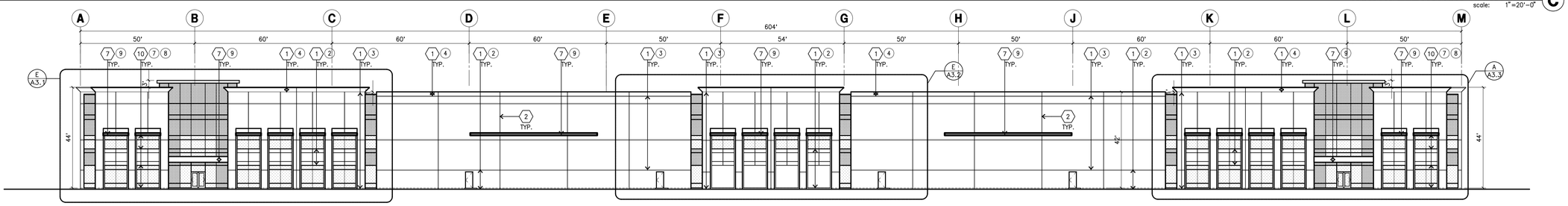

WEST ELEVATION D
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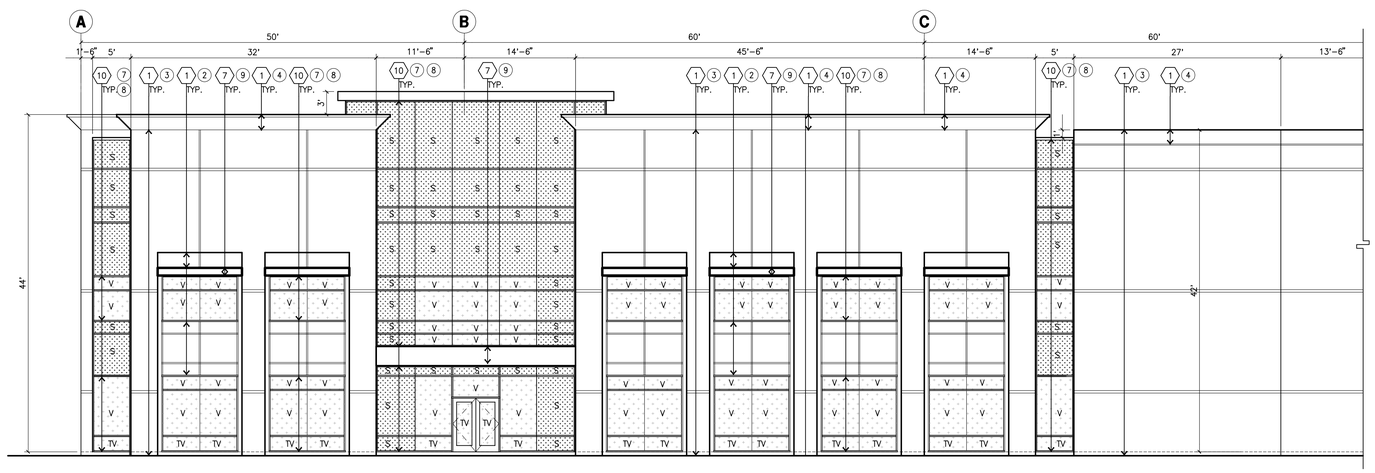

ENLARGED WEST ELEVATION E
scale: 1/8"=1'-0"

GENERAL NOTES - ELEVATIONS

A. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS UNLESS NOTED OTHERWISE.
B. ALL PAINT FINISHES ARE TO BE FLAT UNLESS NOTED OTHERWISE.
C. T.O.P. EL.= TOP OF PARAPET ELEVATION.
D. F.F. = FINISH FLOOR ELEVATION.
E. STOREFRONT CONSTRUCTION: GLASS, METAL ATTACHMENTS AND LINTELS SHALL BE DESIGNED TO RESIST 90 MPH. EXPOSURE "C" WINDS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.
F. CONTRACTOR SHALL FULLY PAINT ONE CONCRETE PANEL W/ SELECTED COLORS, ARCHITECT AND OWNER SHALL APPROVE PRIOR TO PAINTING REMAINDER OF BUILDING.
G. BACK SIDE OF PARAPETS TO HAVE SMOOTH FINISH AND BE PAINTED WITH ELASTOMERIC PAINT.
H. FOR SPANDREL GLAZING, ALLOW SPACE BEHIND SPANDREL TO BREATH.
J. USE ADHESIVE BACK WOOD STRIPS FOR ALL REVEAL FORMS.
K. THE FIRST COAT OF PAINT TO BE ROLLED-ON AND THE SECOND COAT TO BE SPRAYED-ON

KEYNOTES - ELEVATIONS

1. CONCRETE TILT-UP PANEL(PAINTED).
2. PANEL JOINT.
3. PANEL REVEAL. ALL REVEALS TO HAVE A MAX. OF 3/8" CHAMFER. REVEAL COLOR TO MATCH ADJACENT BUILDING FIELD COLOR. U.N.O.
4. OVERHEAD DOOR @ DRIVE THRU.
5. OVERHEAD DOOR @ DOCK HIGH.
6. CONCRETE STAIR, LANDING AND GUARDRAIL W/ METAL PIPE HANDRAIL.
7. METAL CANOPY
8. HOLLOW METAL DOORS.
9. DOCK BUMPER
10. ALUMINUM STOREFRONT FRAMING WITH TEMPERED GLAZING AT ALL DOORS, SIDELITES ADJACENT TO DOORS AND GLAZING WITH BOTTOMS LESS THAN 18" ABOVE FINISH FLOOR ELEVATION. DESIGN
11. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPER.
12. KNOCK OUT PANEL

COLOR SCHED. - ELEVATIONS

1	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW7006 EXTRA WHITE
2	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW7070 SITE WHITE
3	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6254 LAZY GRAY
4	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6256 SERIOUS GREY
5	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6257 GIBRALTAR
6	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6523 DENIM
7	MULLIONS	COLOR	WHITE
8	GLAZING	COLOR	BLUE REFLECTIVE
9	METAL CANOPY	COLOR	SHERWIN-WILLIAMS SW7006 EXTRA WHITE
10	DOORS	COLOR	MATCH TO ADJ. BUILDING COLOR

GLAZING LEGEND

- S — SPANDREL GLASS
- TV — TEMPERED VISION GLASS
- V — VISION GLASS

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KEARNY Real Estate Company

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tel: (310) 203-1847

Project:

Modular Logistics Center

MORENO VALLEY, CA

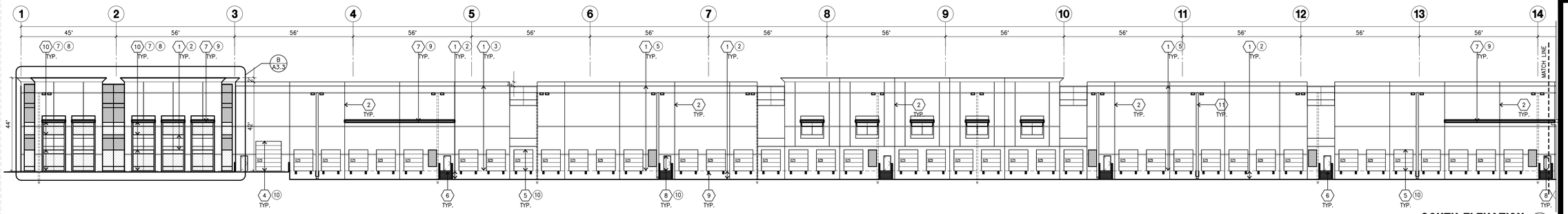
Consultants:

CIVIL	WEBB & ASSOC.
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: ELEVATION

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet: A3.1



SOUTH ELEVATION (A)

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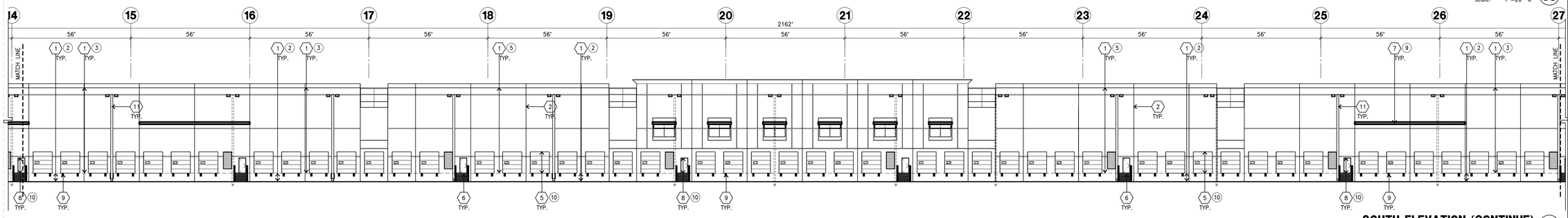

SOUTH ELEVATION (CONTINUE) (B)

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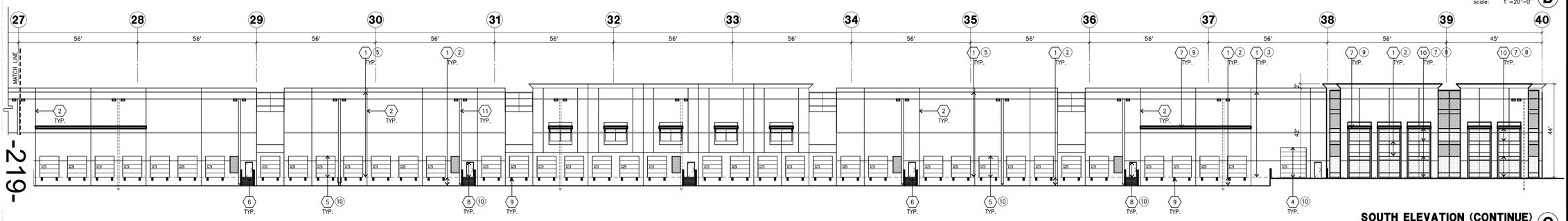

SOUTH ELEVATION (CONTINUE) (C)

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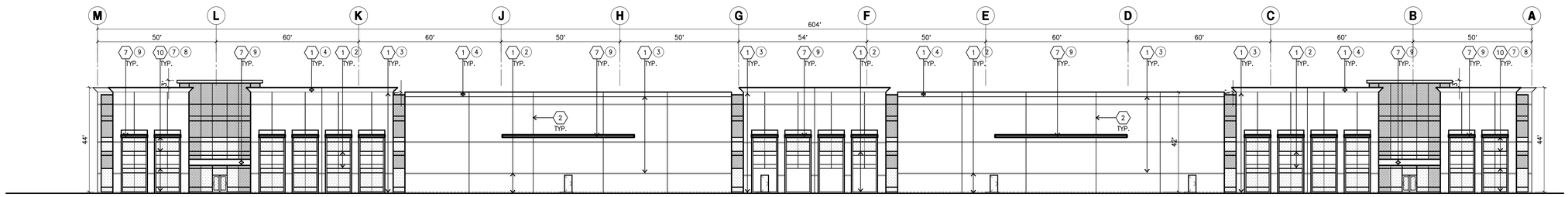

EAST ELEVATION (D)

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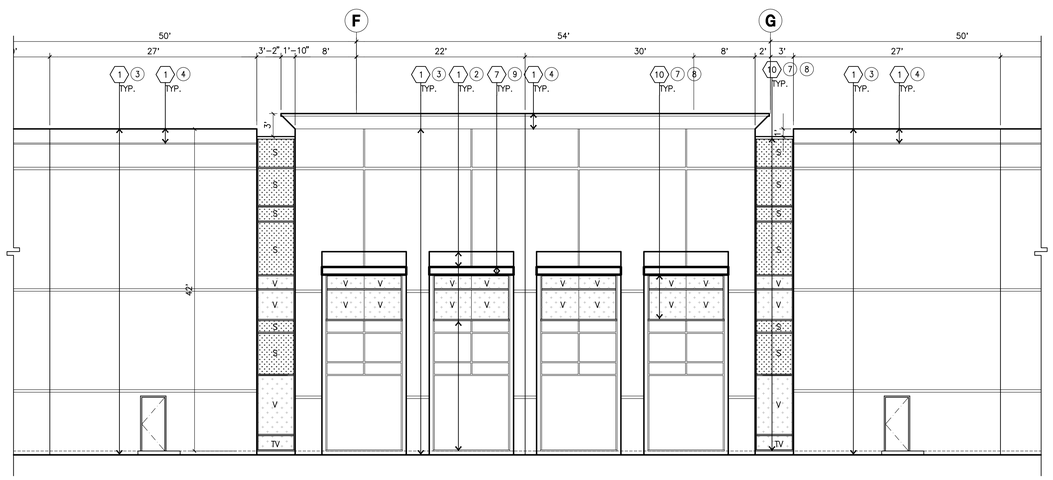

ENLARGED WEST ELEVATION (E)

scale: 1/8"=1'-0"

GENERAL NOTES - ELEVATIONS

A. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS UNLESS NOTED OTHERWISE.
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C. T.O.P. EL.= TOP OF PARAPET ELEVATION.
D. F.F. = FINISH FLOOR ELEVATION.
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G. BACK SIDE OF PARAPETS TO HAVE SMOOTH FINISH AND BE PAINTED WITH ELASTOMERIC PAINT.
H. FOR SPANDREL GLAZING, ALLOW SPACE BEHIND SPANDREL TO BREATH.
J. USE ADHESIVE BACK WOOD STRIPS FOR ALL REVEAL FORMS.
K. THE FIRST COAT OF PAINT TO BE ROLLED-ON AND THE SECOND COAT TO BE SPRAYED-ON

KEYNOTES - ELEVATIONS

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2. PANEL JOINT.
3. PANEL REVEAL. ALL REVEALS TO HAVE A MAX. OF 3/8" CHAMFER. REVEAL COLOR TO MATCH ADJACENT BUILDING FIELD COLOR. U.N.O.
4. OVERHEAD DOOR @ DRIVE THRU.
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6. CONCRETE STAIR, LANDING AND GUARDRAIL W/ METAL PIPE HANDRAIL.
7. METAL CANOPY
8. HOLLOW METAL DOORS.
9. DOCK BUMPER
10. ALUMINUM STOREFRONT FRAMING WITH TEMPERED GLAZING AT ALL DOORS, SIDELITES ADJACENT TO DOORS AND GLAZING WITH BOTTOMS LESS THAN 18" ABOVE FINISH FLOOR ELEVATION. DESIGN
11. EXTERIOR DOWNSPOUT WITH OVERFLOW SCUPPER.
12. KNOCK OUT PANEL

COLOR SCHED. - ELEVATIONS

1	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW7006 EXTRA WHITE
2	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW7070 SITE WHITE
3	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6254 LAZY GRAY
4	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6256 SERIOUS GREY
5	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6257 GIBRALTAR
6	CONCRETE TILT-UP PANEL	PAINT BRAND	SHERWIN-WILLIAMS SW6523 DENIM
7	MULLIONS	COLOR	WHITE
8	GLAZING	COLOR	BLUE REFLECTIVE
9	METAL CANOPY	COLOR	SHERWIN-WILLIAMS SW7006 EXTRA WHITE
10	DOORS	COLOR	MATCH TO ADJ. BUILDING COLOR

GLAZING LEGEND

- S — SPANDREL GLASS
- TV — TEMPERED VISION GLASS
- V — VISION GLASS

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Project:

Modular Logistics Center

MORENO VALLEY, CA

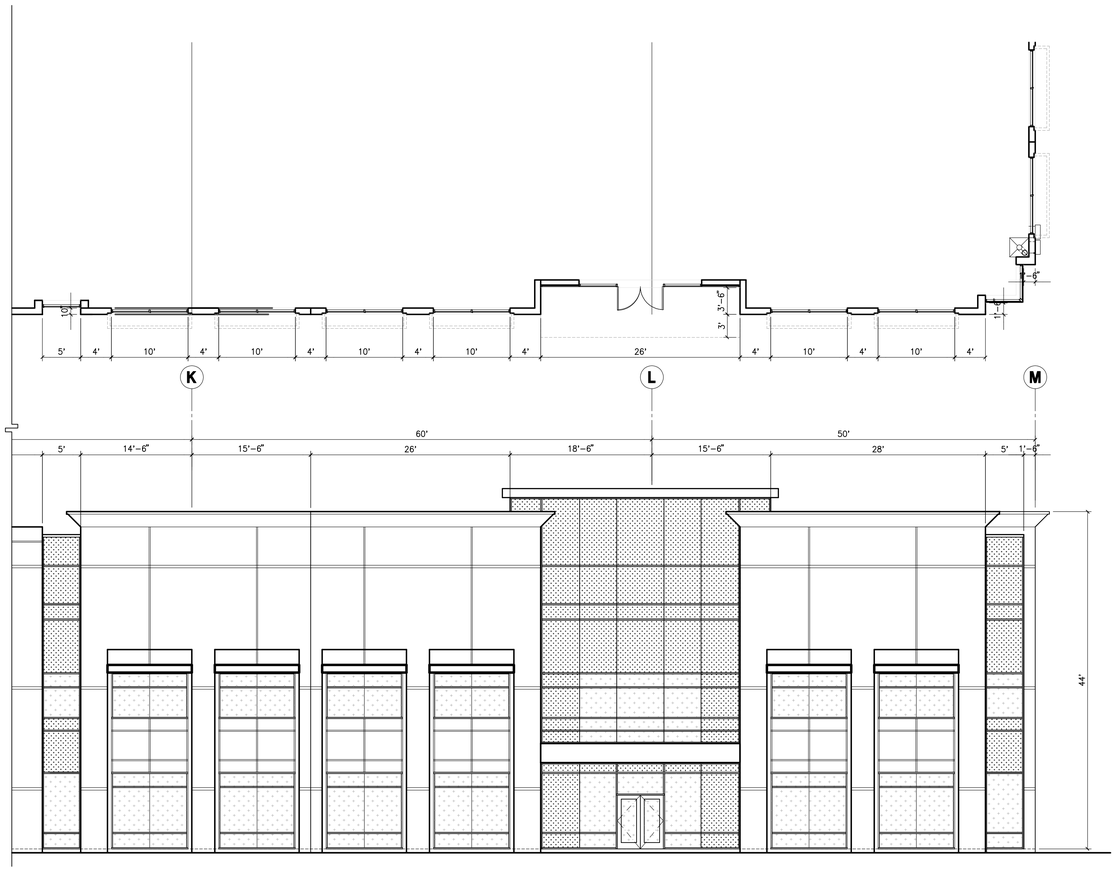
Consultants:

CIVIL	WEBB & ASSOC.
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: ELEVATION

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet: A3.2



ENLARGED WEST ELEVATION (A)
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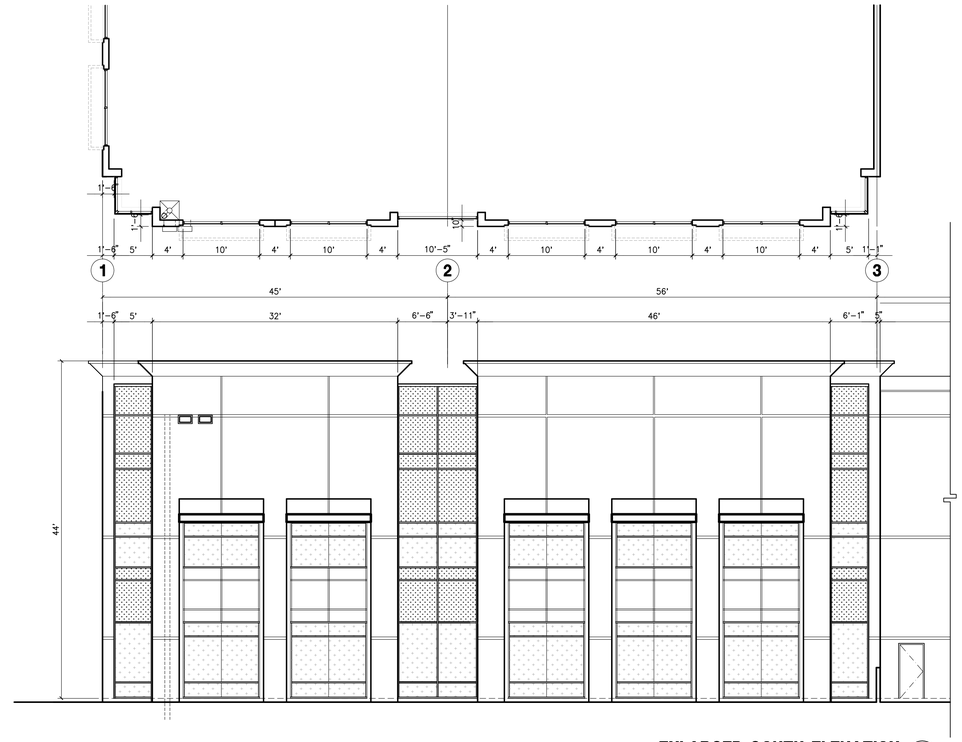

ENLARGED SOUTH ELEVATION (B)
scale: 1/8" = 1'-0"

-220-

HPA architecture

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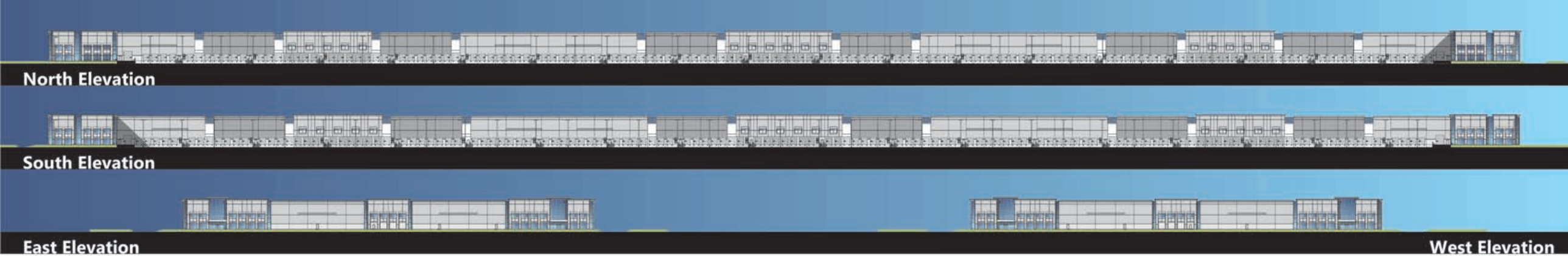
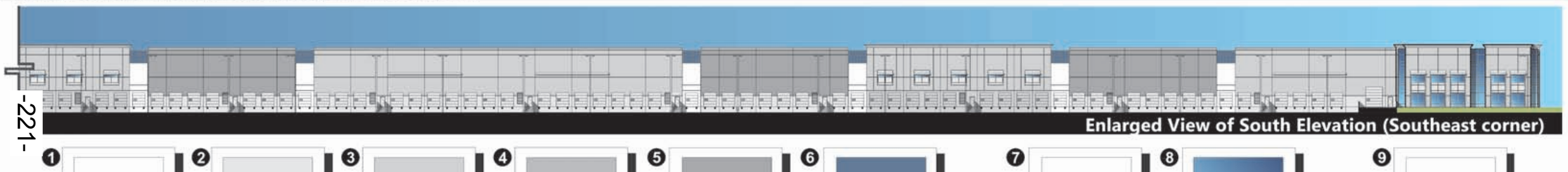
ELECTRICAL	-
LANDSCAPE	SPLA INC.
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: ENLARGED ELEVATION

Project Number: 13214
Drawn by: JW
Date: 10/31/2013
Revision:

Sheet: A3.3





-221

1 Sherwin-Williams SW 7006 Extra White

2 Sherwin-Williams SW 7070 Site White

3 Sherwin-Williams SW 6254 Lazy Gray

4 Sherwin-Williams SW 6256 Serious Grey

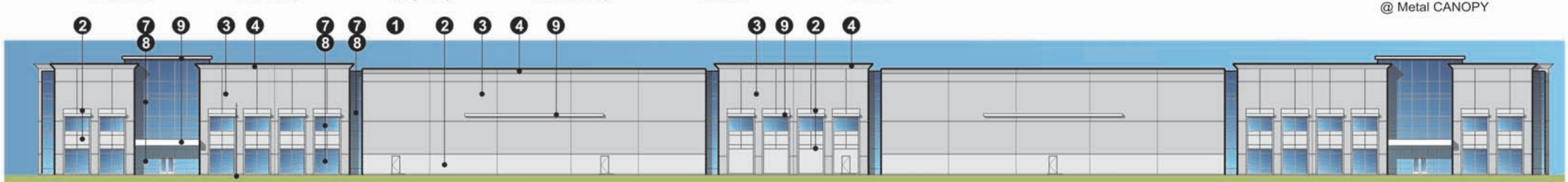
5 Sherwin-Williams SW 6257 Gibraltar

6 Sherwin-Williams SW 6523 Denim

7 White Anodized MULLIONS

8 Blue Reflective GLAZING

9 Sherwin-Williams Metallics to match SW7006 Extra White (with clear coat) @ Metal CANOPY



HPA architecture

Modular Logistics Center

MORENO VALLEY, CA

KEARNY Real Estate Company

Job No 13214.00

COLORED ELEVATIONS & MATERIAL BOARD

10.29.2013

MODULAR LOGISTICS CENTER
PLOT PLAN & CONCEPTUAL GRADING PLAN
PA13-0063

-222-

OWNER:
COMPANY: KEARNY MODULAR WAY LLC
CONTACT: JASON ROSIN
ADDRESS: C/O KEARNY REAL ESTATE CO.
1900 AVENUE OF THE STARS, SUITE 320
LOS ANGELES CA 90067
PHONE: (310) 203-1840

APPLICANT:
COMPANY: KEARNY MODULAR WAY LLC
CONTACT: JASON ROSIN
ADDRESS: C/O KEARNY REAL ESTATE CO.
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ENGINEER:
COMPANY: ALBERT A. WEBB ASSOCIATES
CONTACT: ROBERT BERNDT
ADDRESS: 3788 MCCRAY ST
RIVERSIDE, CA 92506
PHONE: (951) 686-1070
FAX: (951) 788-1256

ARCHITECT
COMPANY: HPA ARCHITECTURE
CONTACT: HOON PARK
ADDRESS: 18831 BARDEEN, SUITE #100
IRVINE, CA 92612
PHONE: (949) 863-1770
FAX: (949) 863-0851

TOPOGRAPHY:
INLAND AERIAL SURVEY
DATED 8-20-12

SETBACKS
MINIMUM SITE AREA: 5 AC.
MINIMUM SITE WIDTH: 300'
MINIMUM SITE DEPTH 150'

MINIMUM SETBACKS
PERRIS BLVD 20'
MODULAR WAY 10'
EDWIN STREET 10'
KITCHING STREET 15'

A.P.N.
312-250-030, 312-250-031, 312-250-032,
312-250-036, 312-250-037, 312-250-038,

LAND USE / ZONING:

ISTING LAND USE:	WAREHOUSE
OPOSED LAND USE	INDUSTRIAL
ISTING ZONING:	INDUSTRIAL SP
OPOSED ZONING	INDUSTRIAL SP

EAGE

SS SITE AREA:	50.84 AC.
OSS AREA:	50.68 AC.

SCAPE AREA
8.5% PROPOSED
181,000 S.F. PROPOSED COVERAGE

EARTHWORK ESTIMATE:

CUT:	108,400	CY
FILL:	98,200	CY
SHRINKAGE:	16,200	CY
NET:	26,000	CY IMPORT

UTILITY COMPANIES:

WATER:	EASTERN MUNICIPAL WATER DISTRICT PHONE: (951) 928-6107
SEWER:	EASTERN MUNICIPAL WATER DISTRICT PHONE: (951) 928-6107
ELECTRIC:	MORENO VALLEY UTILITIES PHONE: (951) 413-3500
TELEPHONE:	VERIZON PHONE: (909) 658-1305
GAS:	SOUTHERN CALIFORNIA GAS COMPANY PHONE: (909) 335-3428

PROJECT DESCRIPTION:
THIS PROJECT PROPOSES A 1,109,378 SF WAREHOUSE BUILDING ON 50.7 ACRES, CONSISTING OF 1,089,378 SF WAREHOUSE, 20,000 OFFICE. THE PROJECT PROPOSES 256 LOADING DOCKS, SURFACE PARKING AREAS, DRIVE ISLE ROADWAY IMPROVEMENTS, UTILITY INFRASTRUCTURE, LANDSCAPING, WATER QUALITY/FILTRATION BASINS AND OTHER SITE IMPROVEMENTS INCLUDING DEMOLITION OF EXISTING WAREHOUSE FACILITY.

NOTES:
1. 2008 THOMAS BROS. MAP-PAGE 147, GRID H6
2. THIS AREA IS NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGIC HAZARDS WITHIN A SPECIAL STUDIES ZONE.
3. FEMA COMMUNITY PANEL NO. 06065C1430G DATED: JUNE X.
4. CONTOUR INTERVAL, ONE FOOT.
5. THIS AREA IS WITHIN THE MORENO VALLEY INDUSTRIAL SPECIFIC PLAN #208.
6. THIS PROJECT IS WITHIN CITY OF MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE A & C.
7. DRIVEWAYS ARE PER CITY STANDARD PLAN NO. 118C.
8. ALL TRAILER PARKING STALLS ARE 12' X 53'
9. FUTURE PARCEL MERGER WILL BE CONDITIONED

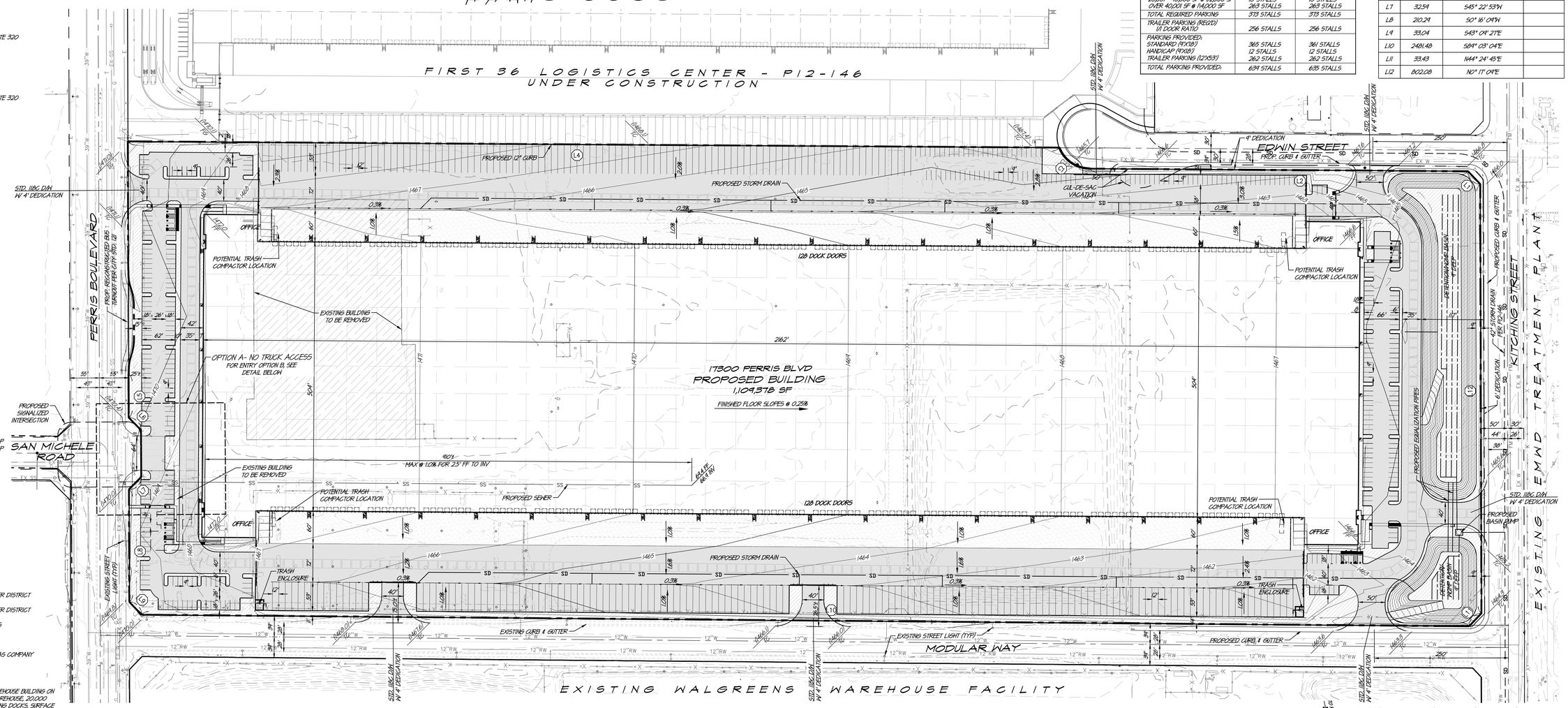
LEGAL DESCRIPTION
PORTIONS OF PARCELS 1 THROUGH 4, INCLUSIVE OF PARCEL MAP NO. 1894, ON FILE IN BOOK 59 OF PARCEL MAP 58 AT PAGE 27, RECORDS OF RIVERSIDE COUNTY, LYING WITHIN SECTION 32, TOWNSHIP 3 SOUTH, RANGE 3 WEST, S.B.M.

FOR A MORE DETAILED DESCRIPTION, REFER TO TITLE REPORT

STREET ADDRESS
17250 AND 17300 PERRIS BLVD., MORENO VALLEY

SITE TABULATION:	OPTION A	OPTION B
PROPOSED PARCEL NET AREA	2,207,140 SF (50.68 AC)	2,207,140 SF (50.68 AC)
BUILDING AREA		
OFFICE	20,000 SF	20,000 SF
WAREHOUSE	1,089,378 SF	1,089,378 SF
TOTAL BUILDING AREA	1,109,378 SF	1,109,378 SF
LOT COVERAGE	50.3%	50.3%
LANDSCAPING PROVIDED	181,000 SF	181,000 SF
LANDSCAPE COVERAGE	8.5%	8.5%
OFFICE PARKING (REQ'D) 0 - 40,000 SF @ 1/250 SF	80 STALLS	80 STALLS
WAREHOUSE PARKING (REQ'D) 0 - 20,000 SF @ 1/2,000 SF 20,001 - 40,000 SF @ 1/2,000 SF OVER 40,001 SF @ 1/4,000 SF	20 STALLS 10 STALLS 263 STALLS	20 STALLS 10 STALLS 263 STALLS
TOTAL REQUIRED PARKING	373 STALLS	373 STALLS
TRAILER PARKING (REQ'D)/ 1/1 DOOR RATIO	256 STALLS	256 STALLS
PARKING PROVIDED: STANDARD (9'X18') HANDICAP (9'X18') TRAILER PARKING (12'X53')	365 STALLS 12 STALLS 262 STALLS	361 STALLS 12 STALLS 262 STALLS
TOTAL PARKING PROVIDED:	639 STALLS	635 STALLS

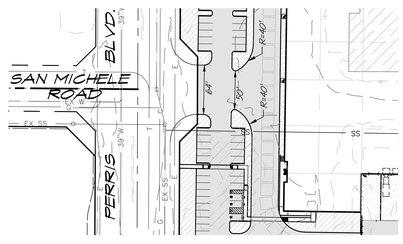
LINE AND CURVE TABLE			
(#)	LENGTH	BEARING/DELTA	RADIUS
C777	73.31	68.86	61.00
C1	73.31	68.86	61.00
L1	33.08	N43° 12' 33"W	
L2	107.35	N89° 04' 55"W	
L4	1741.03	N89° 04' 55"W	
L5	81.52	50° 16' 04"W	
L6	32.69	S44° 12' 58"E	
L7	32.54	S45° 22' 53"W	
L8	210.24	50° 16' 04"W	
L9	33.04	S43° 04' 21"E	
L10	2481.48	S84° 03' 04"E	
L11	33.43	N44° 24' 45"E	
L12	802.08	N0° 11' 04"E	



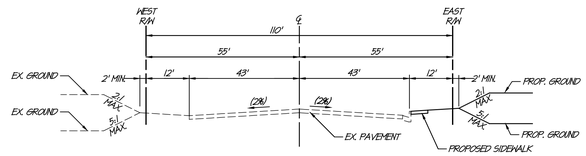
LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED LANDSCAPE AREA
- EXISTING BUILDING TO BE REMOVED
- PROPOSED FIRE LANE
- PROPOSED SCREEN WALL
- PROPOSED CHAINLINK FENCE
- GRADEBREAK/RIDGELINE
- FLOWLINE
- (1475) EXISTING CONTOURS
- 1475 PROPOSED CONTOURS
- EX W EXISTING WATER LINE
- EX SS EXISTING SEWER LINE
- 50 EXISTING STORM DRAIN
- G EXISTING GAS LINE
- E EXISTING ELECTRICAL LINE

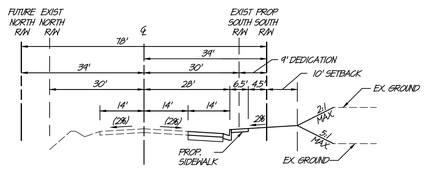
FL	FLOW LINE
GB	GRADE BREAK
GRND	GROUND
INV	INVERT
LS	LANDSCAPE AREA
LP	LOW POINT
MAX	MAXIMUM
PL	PROPERTY LINE
RG	ROUGH GRADE
ROW	RIGHT OF WAY
TYP	TYPICAL



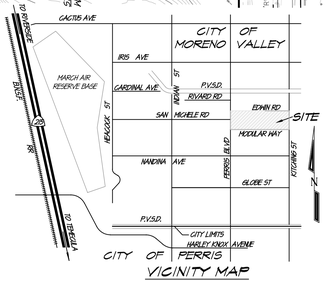
ENTRY OPTION B
FOR TRUCK ACCESS
1"=80'



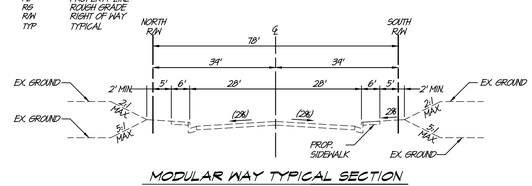
PERRIS BLVD TYPICAL SECTION
ARTERIAL STREET
STD. NO. 103C, NOT TO SCALE
MIN TI=10.0 MIN 6" AC / 12" AB



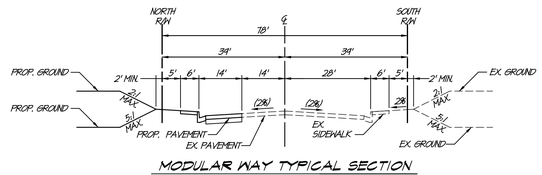
EDWIN STREET TYPICAL SECTION
INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
MIN TI=10.0 MIN 6" AC / 12" AB



VICINITY MAP
NOT TO SCALE



MODULAR WAY TYPICAL SECTION
INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
MIN TI=10.0 MIN 6" AC / 12" AB



MODULAR WAY TYPICAL SECTION
INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
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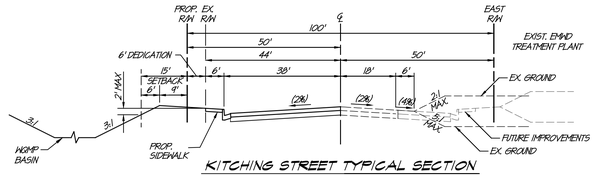


KITCHING STREET TYPICAL SECTION
ARTERIAL STREET
STD. NO. 104A, NOT TO SCALE
MIN TI=10.0 MIN 6" AC / 12" AB

REVISIONS	DATE	BY

CITY OF MORENO VALLEY

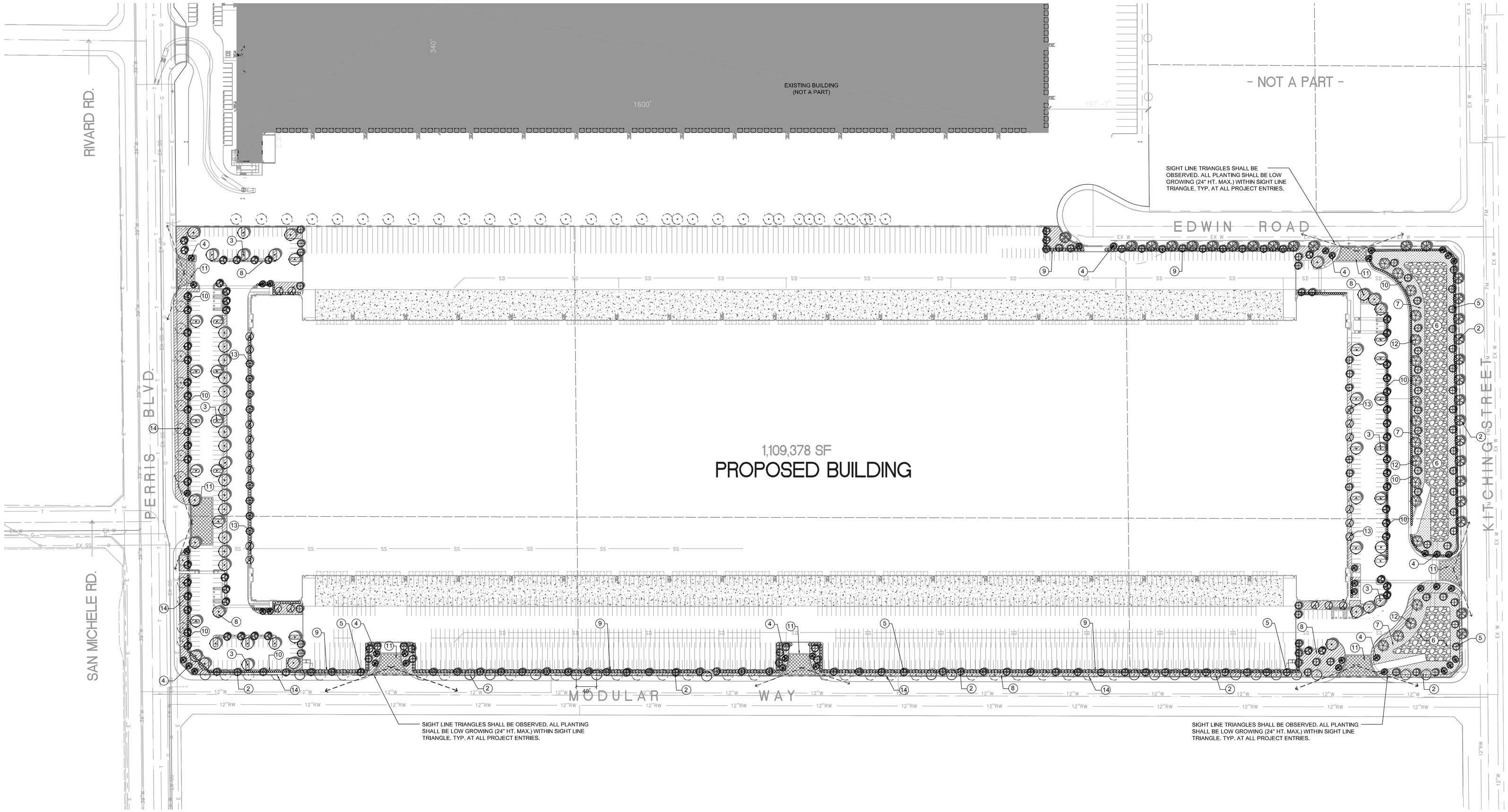
MODULAR LOGISTICS CENTER
PLOT PLAN & CONCEPTUAL GRADING PLAN
PA13-0063

SCALE:	1"=80'
DATE:	11/01/13
DESIGNED:	DJ
CHECKED:	RB
PLN CK REF:	
F.B.	

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

W.O.
SHEET /
OF / SHEETS
DWG. NO.

G:\2013\13-0268\DRAWINGS\ENTITLEMENTS\13-0268PP.DWG
5/20/2013 7:58 AM



SIGHT LINE TRIANGLES SHALL BE OBSERVED. ALL PLANTING SHALL BE LOW GROWING (24" HT. MAX.) WITHIN SIGHT LINE TRIANGLE. TYP. AT ALL PROJECT ENTRIES.

SIGHT LINE TRIANGLES SHALL BE OBSERVED. ALL PLANTING SHALL BE LOW GROWING (24" HT. MAX.) WITHIN SIGHT LINE TRIANGLE. TYP. AT ALL PROJECT ENTRIES.

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PLANTING LEGEND

PROPOSED TREES	QTY.	PLANT FACTOR
NEW STREET TREE ALONG KITCHING STREET PLATANUS ACERIFOLIA 'BLOODGOOD', LONDON PLANE TREE 24" BOX SIZE	28	M
PARKING LOT SHADE TREE PROSOPIS CHILENSIS, CHILEAN MESQUITE (THORNLESS) 24" BOX SIZE	63	L
NEW FLOWERING ACCENT TREE SUCH AS CERCIDIUM 'DESERT MUSEUM', BLUE PALO VERDE VAR. 36" BOX SIZE	43	L
SUPPLEMENTAL STREET TREE ALONG MODULAR WAY KOELREUTERIA BIPINNATA, CHINESE FLAME TREE 24" BOX SIZE	22	L
VERTICAL PARKING LOT SHADE TREE GEIJERA PARVIFLORA, AUSTRALIAN WILLOW 15 GAL. SIZE	55	L

	QTY.	P.F.
VERTICAL GROWING EVERGREEN TREE BRACHYCHITON POPULNEUS, BOTTLE TREE 24" BOX SIZE	21	L
DEEP ROOTING TREE AT BIOSWALE AND BASIN SLOPES PLATANUS RACEMOSA, CA. SYCAMORE 15 GAL. SIZE	15	L
EVERGREEN SCREEN TREE SUCH AS PINUS ELDARICA, AFGHAN PINE 24" BOX SIZE	139	M
DETENTION BASIN AND BIOSWALE BOTTOM SHALL RECEIVE A COBBLESTONE/ RIVER ROCK TREATMENT. 4-8" DIA. SIZE.		
DETENTION BASIN AND BIOSWALE SLOPES SHALL RECEIVE A HYDROSEED MIX CONSISTING OF NATIVE GRASSES, REEDS AND OTHER PLANTS TOLERANT SEASONAL WATER INUNDATION		M

PROPOSED SHRUBS
THE FOLLOWING IS A SHORT LIST OF PROPOSED DROUGHT TOLERANT SHRUBS:

	P.F.
ELAEAGNUS PUNGENS, SILVERBERRY 5 GAL. SIZE	L
LEUCOPHYLLUM TEXANUM, TEXAS RANGER 5 GAL. SIZE	L
DODONEA VISCOSA 'PURPUREA', HOPSEED BUSH 5 GAL. SIZE .	L
RHAPHIOLEPIS 'PINK LADY', INDIAN HAWTHORNE 5 GAL. SIZE	M
ROSMARINUS 'TUSCAN BLUE', ROSEMARY SHRUB 5 GAL. SIZE .	L
RHAPHIOLEPIS 'CLARA', INDIAN HAWTHORNE 5 GAL. SIZE	M
CASSIA AUSTRALIS, SENNA 5 GAL. SIZE	L

GROUND COVER AND SHRUB MASSES

▨ THE FOLLOWING IS A SHORT LIST OF PROPOSED DROUGHT TOLERANT GROUND COVERS AND GRASSES THAT WILL BE PROPOSED THROUGHOUT THE PROJECT:

	P.F.
• LANTANA MONTEVIDENSIS 'GOLD RUSH', YELLOW LANTANA 1 GAL. SIZE @ 30" O.C.	L
• MUHLENBERGIA RIGENS, DEER GRASS 1 GAL. SIZE @ 36" O.C.	L
• BACCHARIS 'PILULARIS', DWARF COYOTE BUSH 1 GAL. SIZE @ 36" O.C.	L
• ROSMARINUS 'PROSTRATUS', CREEPING ROSEMARY FROM FLATS @ 12" O.C.	L
• SALVIA GREGGII, AUTUMN SAGE 1 GAL. @ 36" O.C.	L
• SALVIA LEUCOPHYLLUM, MEX. BUSH SAGE 5 GAL. SIZE @ 42" O.C.	L

DESIGN KEY NOTES:

1. NEW CONC. SIDEWALK
2. NEW STREET TREE PER PLANTING LEGEND.
3. NEW PARKING LOT SHADE TREE.
4. FLOWERING ACCENT TREES PER LEGEND.
5. EVERGREEN SCREEN TREE PER LEGEND.
6. RIVER ROCK COBBLESTONE AT BOTTOM OF DETENTION BASINS FOR EROSION CONTROL.
7. HYDROSEED GRASSES AND NATIVE VEGETATION AT DETENTION BASIN. PLANT TYPES SHALL BE TOLERANT OF SEASONAL WATER INUNDATION.
8. GROUND COVERS PER LEGEND.
9. FOUNDATION SCREEN SHRUBS ALONG ARCHITECTURAL SCREEN WALL. APPROX. (6'-0" O.C.)
10. TYP. SCREEN / BARRIER SHRUB HEDGE (48" O.C. SPACING)
11. ENHANCED VEHICULAR PAVING AT ENTRY DRIVE. COLORED CONC. WITH SCORE-LINE GRID PATTERN WITH 24" WD. CONC. PERIMETER BAND.
12. DEEP ROOTING TREE ALONG PERIMETER OF DETENTION BASIN AREA.
13. VERTICAL GROWING TREE ADJACENT TO BUILDING.
14. EXISTING STREET TREES SHALL REMAIN UNLESS OTHERWISE NOTED ON PLAN.

WUCOLS PLANT FACTOR

THIS PROJECT IS LOCATED IN 'WUCOLS' REGION '4-SOUTH INLAND VALLEY'.

H = HIGH WATER NEEDS
M = MODERATE WATER NEEDS
L = LOW WATER NEEDS
VL= VERY LOW WATER NEEDS

IRRIGATION NOTES:

- THE PROJECT WILL BE EQUIPPED WITH A LOW FLOW IRRIGATION SYSTEM CONSISTING OF ET WEATHER BASED CONTROLLERS, LOW FLOW RP ROTOR, BUBBLER AND/ OR DRIP SYSTEMS USED THROUGHOUT. THE IRRIGATION WATER EFFICIENCY WILL MEET OR SURPASS THE CURRENT STATED MANDATED AB-1881 WATER ORDINANCE.

L-1

north

1" = 80'
0 40' 80' 160' 240'

SPLA
SCOTT PETERSON LANDSCAPE ARCHITECTURE, INC.
P.O. BOX 2157
LAKE ARROWHEAD, CA 92352
PH: 909-337-9695
FX: 909-337-8984

KEARNY
Real Estate Company

CONCEPTUAL LANDSCAPE PLAN

Modular Logistics Center

Moreno Valley, CA

OCTOBER 31, 2013 / Job #1009

Note: This is a conceptual plan. It is base on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

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Final Environmental Impact Report

SCH No. 2014031068

Modular Logistics Center

Moreno Valley, California

EIR Case P13-130

Lead Agency
City of Moreno Valley
14177 Frederick Street
PO Box 88005
Moreno Valley, CA 92552

Date: February 24, 2015

Attachment 7

Final Environmental Impact Report
SCH No. 2014031068

Modular Logistics Center
Moreno Valley, California
EIR Case P13-130

Lead Agency
City of Moreno Valley
14177 Frederick Street
PO Box 88005
Moreno Valley, CA 92552

CEQA Consultant
T&B Planning, Inc.
17542 East 17th Street, Suite 100
Tustin, CA 92780

Project Applicant
Kearny Modular Way, LLC
c/o Kearny Real Estate Company
1900 Avenue of the Stars, Suite 320
Los Angeles, CA 90067

Lead Agency Discretionary Permits
Plot Plan (PA13-0063)

Date: February 24, 2015

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EIR Technical Appendices (bound separately)

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LIST OF TABLES

Table Number and Title **Page**

Table Number and Title **Page**

Table Number and Title **Page**

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
>	greater than
≥	greater than or equal to
a.m.	Ante Meridiem (between the hours of midnight and noon)
AB	Assembly Bill
AC	Acres
A.D.	Anno Domini
ADP	Area Drainage Plan
ADT	Average Daily Traffic
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
AMSL	Above Mean Sea Level
APS	Alternative Planning Strategy
APN	Assessor Parcel Number
AQMP	Air Quality Management Plan
ARB	Air Reserve Base
ARB/IRP	March Air Reserve Base/Inland Port Airport
ASTM	American Society of Testing and Materials
ASTs	Above ground storage tanks
Av.	Avenue
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
BFSA	Brian F. Smith & Associates
Blvd.	Boulevard
BLM	Bureau of Land Management
BMPs	Best Management Practices
BP	Business Park/Light Industrial (and use designation)
BSA	Biological Study Area
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod™	California Emissions Estimator Model™
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association

Acronym	Definition
CASSA	Criteria Area Species Survey Area
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CETAP	Community & Environmental Transportation Acceptability Process
CFC	California Fire Code
CFCs	Chlorofluorocarbons
C_2F_6	Hexaflouroethane
C_2H_6	Ethane
CF_4	Tetraflouromethane
CF_3CH_2F	HFC-134a
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geologic Survey
CH_4	Methane
CH_3CHF_2	HFC-152a
CHF_3	HFC-23
CHL	California Historical Landmark
CHRIS	California Historic Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
COG	Council of Governments
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COHb	carboxyhemoglobin
CPUC	California Public Utilities Commission
CSRG	Conservation Summary Report Generator
CWA	Clean Water Act
CWC	California Water Code
CWHR	California Wildlife Habitat Relationships
Db	Decibel
dBA	A-weighted Decibels
DBESP	Determination of Biologically Superior Preservation
DEH	Department of Environmental Health
DIF	Development Impact Fee

Acronym	Definition
DP	Development Permit
DP-P13-09	Development Permit/Site Plan
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
DU	Dwelling Unit
e/o	East of
E+P	Existing plus Project Conditions
EDR	Environmental Data Review
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	Emissions Factor Model
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
ESA	Environmental Site Assessment
et seq.	*et sequentia*, meaning "and the following"
F	Fahrenheit
FAR	floor area ratio
FAR	Federal Aviation Regulations
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FHA	Federal Housing Administration
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GCC	Global Climate Change
GHGs	Greenhouse Gases
GIS	Geographic Information System
GISD	Geographic Information Services Database
GgCO2e	Gigagrams of carbon dioxide equivalent
GLO	General Land Office
GPS	Global Positioning System
GVWR	Gross Vehicle Weight Rating
GWP	Global Warming Potential
H_2O	Water Vapor
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCS+	Highway Capacity Software Plus
HFCs	Hydrofluorocarbons

Acronym	Definition
HET	High-Efficiency Toilet
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMMD	Hazardous Materials Management Division
HMMP	Hazardous Materials Management Plan
HPLV	High Pressure Low Volume
HRI	Historical Resource Inventory
HSC	Health and Safety Code
HUC	Hydrologic Unit Code
HVAC	Heating, Ventilation, and Air Conditioning
HVWAP	Harvest Valley/Winchester Area Plan
I-215	Interstate 215
i.e.	that is
IA	Implementing Agreement
IBC	International Building Code
ID	Identification
INCE	Institute of Noise Control Engineering
IPA	Inland Port Airport
IPCC	Intergovernmental Panel on Climate Change
IRP	Installation Restoration Program
IRWMP	Integrated Regional Water Management Plan
ITE	Institute of Transportation Engineers
JD	Jurisdictional Delineation
JPA	Joint Powers Authority
JPR	Joint Project Review
kWh	kilowatt-hour
lbs	pounds
LCA	Life-cycle analysis
Leq	equivalent continuous sound level
Lmax	Maximum level measured over the time interval
Lmin	Maximum level measures over the time interval
LNAP	Lakeview/Nuevo Area Plan
LOS	Level of Service
LSAA	Lake and Streambed Alteration Agreement
LSTs	Localized Significance Thresholds
M^3	Cubic Meter
March ARB	March Air Reserve Base
MATES III	Multiple Air Toxics Exposure Study in the South Coast Air Basin
MBTA	Migratory Bird Treaty Act
MDP	Master Drainage Plan
MEISC	maximally exposed individual school child

Acronym	Definition
MEIR	maximally exposed individual receptor
MEIW	maximally exposed individual worker
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMTs	million metric tons
MMTCO2e	million metric tons of carbon dioxide equivalent
Mph	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric ton
MUTCD	Manual on Uniform Traffic Control Devices
MVAP	Mead Valley Area Plan
MVFD	Moreno Valley Fire Department
MVIAP	Moreno Valley Industrial Area Plan
n/o	North of
N_2	Nitrogen
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAIOP	Commercial Real Estate Association
NATA	National Air Toxic Assessment
NB	Northbound
ND	Negative Declaration
NEPSSA	Narrow Endemic Plant Species Survey Area
NHP	National Register of Historic Places
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
N_2	Nitrogen
N_2O	Nitrous Oxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
n.p.	No page
NPL	National Priorities List
NPRBBD	North Perris Road and Bridge Benefit District
NRCS	Natural Resources Conservation Service
O_2	Oxygen
O_3	Ozone
OD	Officially Designated
OHWM	Ordinary High Water Mark
OIP	Office Industrial Park land use designation
OPR	Office of Planning and Research

Acronym	Definition
Ord.	Ordinance
Pb	Lead
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PFCs	Perfluorocarbons
PHF	peak hour factor
PHI	Points of Interest
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
pp.	pages
ppt	parts per trillion
PQP	Publi/Quasi-Public
Rapanos Decision	John A. Rapanos v. United States: and June Carabell v. United States Army Corps of Engineers
RCALUP	Riverside County Airport Land Use Plan
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCIP	Riverside County Integrated Project
RCTC	Riverside County Transportation Commission
RCNM	Roadway Construction Noise Model
Rd.	Road
REC	Recognized environmental Concerns
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
REMEL	Reference Mean Emission Level
RHA	Rivers and Harbor Act of 1899
RIX	Rapid Infiltration Extraction
ROGs	Reactive Organic Gasses
RPS	Renewable Portfolio Standards
RPW	Relative Permanent Water
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
s/o	south of
s.f.	square feet
SF_6	Sulfur Hexaflouride
SANBAG	San Bernardino Associated Governments

Acronym	Definition
SAWPA	Santa Ana Watershed Project Authority
SB	Southbound
SB	Senate Bill
SBTAM	San Bernardino Transportation Analysis Model
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SDFR	Single Family Detached Residential
SF_6	Sulfur Hexafluoride
SFL	Sacred Lands File
SIPs	State Implementation Plans
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SP	Specific Plan
SP 208	Specific Plan 208
SR-60	State Route 60
SR-74	State Route 74
SRA	Source Receptor Area
St.	Street
STC	Sound Transmission Class
SUB13-07	Tentative Parcel Map No. 19487
SURRGO	Soil Survey Geographic
SWANCC	Solid Waste Agency of Northern Cook County vs. USACE
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminants
TIA	Traffic Impact Analysis
TNW	Traditional Navigable Water
TPM	Tentative Parcel Map
TSF	Thousand Square Feet
TUMF	Transportation Uniform Mitigation Fee
µg	microgram
UBC	Uniform Building Code
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	URBan EMISsions
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United Stated Geological Society

Acronym	Definition
USTs	Underground storage tanks
VFP	Vehicle Fueling Positions
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
w/o	West of
WoUS	Waters of the United States
WoS	Waters of the State
WPLT	Western Pluvial Lakes Tradition
WQC	Water Quality Certification Program
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRF	Water Reclamation Facility
WRP	Water Reclamation Plant
WSA	Water Supply Assessment
Wy.	Way
YBP	Years before Present

F.0 FINAL ENVIRONMENTAL IMPACT REPORT

F.1 INTRODUCTION TO THE FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)

This Final Environmental Impact Report (FEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.).

According to CEQA Guidelines Section 15132, the Final EIR shall consist of:

a. The draft EIR or a revision of the draft;

b. Comments and recommendations received on the draft EIR either verbatim or in summary;

c. A list of persons, organizations, and public agencies commenting on the draft EIR;

d. The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

e. Any other information added by the Lead Agency.

In accordance with the above listed requirements, this FEIR for Plot Plan 13-0063 and associated discretionary and administrative actions consists of the following:

1. Comment letters and responses to public comment; and
2. The circulated Modular Logistics Center Draft EIR and Technical Appendices, SCH No. 2014031068 with additions shown as underline text and deletions shown as ~~stricken~~ text in Subsection F.2.3, below.

This FEIR document has been prepared in accordance with CEQA and the CEQA Guidelines and represents the independent judgment of the Lead Agency (City of Moreno Valley).

F.2 RESPONSES TO COMMENTS

Section 15088 of the CEQA Guidelines requires the Lead Agency (City of Moreno Valley) to evaluate comments on environmental issues received from public agencies and interested parties who reviewed the Draft EIR and to provide written responses to any substantive comments received. This Section F.0, "Final Environmental Impact Report," provides all comments received on the Draft, the City's response to each comment, and a summary of revisions made to the Draft EIR as part of the FEIR in response to the various comment letters.

A total of six (6) comment letters were received, with five (5) letters received during the public review period and one (1) letter received after the public review period closed. The public comment period closed on December 8, 2014. A copy of each comment letter and a response to each substantive environmental point raised in those letters is included in Subsection F.4. No comments submitted to the City of Moreno Valley on the Draft EIR have produced substantial new information requiring recirculation or additional environmental review under State CEQA Guidelines Section 15088.5.

On the following pages, each comment letter is assigned a letter reference and each substantive comment is numbered. Responses to the numbered comments are provided. A list of agencies, organizations, and persons that submitted comments on the Draft EIR during the public review period is presented in Table F-1, *List of Persons, Organizations, and Public Agencies that Commented on the Draft EIR*, in the order that these letters were received by the City

Table F-1 List of Persons, Organizations, and Public Agencies that Commented on the Draft EIR

Comment Letter Reference	Commenting Person, Organization, or Public Agency	Date of Comment Letter
A.	State Clearinghouse	December 9, 2014
B.	Natalie Mann	October 31, 2014
C.	South Coast Air Quality Management District	December 2, 2014
D.	City of Riverside Planning Division	December 8, 2014
E.	Johnson & Sedlack	December 8, 2014
F.	Department of Transportation	December 31, 2014*

*Received after the public review period closed.

F.2.1 CEQA REQUIREMENTS REGARDING COMMENTS AND RESPONSES

CEQA Guidelines Section 15204(a) outlines parameters for submitting comments, and notes that the focus of review and comment of Draft EIRs should be:

> *…on the sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible…CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or suggested by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.*

CEQA Guidelines Section 15204(c) further advises that, "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence." Section 15204(d) also notes that, "Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility." Section 15204(e) states that, "This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by [CEQA Guidelines Section 15204]."

In accordance with CEQA Guidelines Section 15088(b), copies of the written responses will be provided to commenting public agencies at least ten (10) days prior to certifying the FEIR. The responses will be provided along with an electronic copy of this FEIR, as permitted by CEQA, and will conform to the legal standards established for response to comments on Draft EIRs.

F.2.2 REVISIONS TO THE PROPOSED PROJECT IN RESPONSE TO PUBLIC COMMENTS

Since the time that the Draft EIR was circulated for public review, no substantive revisions to Plot Plan 13-0063 were made by the Project Applicant and no changes to the proposed Project were warranted in response to any public comments received on the Draft EIR by the City of Moreno Valley. The Health Risk Assessment (HRA) model was updated and the updated report is included as Appendix B3 to the Final EIR.

F.2.3 CORRECTIONS AND ADDITIONS TO THE DRAFT EIR IN RESPONSE TO PUBLIC COMMENTS

Substantive changes made to the text, tables and/or exhibits of the Draft EIR in response to public comments on the Draft EIR are itemized in Table F-2, *Errata Table of Corrections and Additions*. Refer to the referenced sections and page numbers for additional detail, as not every revision is noted in the Errata Table. Additions are shown in Table F-2 as underline text and deletions shown as ~~stricken~~ text. No corrections or additions made to the Draft EIR are considered substantial new information requiring recirculation or additional environmental review under State CEQA Guidelines Section 15088.5.

Table F-2 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
Table S-1; S-9	Executive Summary	The following addition has been made to the Monitoring Party column of the MMRP for Mitigation Measures 4.1-1, 4.1-2, 4.2-1, 4.4-1, 4.4-2, 4.6-5: City of Moreno Valley Planning Division The following addition has been made to the Monitoring Party column of the MMRP for Mitigation Measures 4.2-3, 4.2-4, 4.2-18, 4.4-1, 4.4-2, 4.4-3, 4.4-6, 4.5-3, 4.7-1: City of Moreno Valley Land Development Division The following addition has been made to the Monitoring Party column of the MMRP for Mitigation Measure 4.8-1: Transportation Engineering
1-12	Introduction	In response to comments from South Coast Air Quality Management District (SCAQMD) (refer to Comments C-7 and C-8), the health risk assessment model was re-run by Urban Crossroads and is included in the Final EIR as Appendix B3. The Supplemental Health Risk Assessment is added to the list of technical appendices in the Section 1.0, *Introduction*, of the Final EIR. B3: Supplemental Health Risk Assessment
3-8	Project Description	In response to comments by the SCAQMD, the Project Description was revised to disclose that the Project proposes to install at least two charging stations for electric passenger cars. The Plot Plan identifies 373 passenger car parking spaces (including the number of spaces required by the California Building Standards

Page(s)	Section	Corrections and Additions
		Code for alternatively fueled vehicles and for accessibility to disabled persons), distributed along the western and eastern sides of the building. At least two of the passenger car parking spaces would be equipped with a level 2 electrical vehicle charging station.
4.2-20; S-15	Air Quality; Executive Summary	In response to comments from Johnson & Sedlack (refer to Comment E 22.9), Mitigation Measure MM 4.2-6 is revised as follows: MM 4.2-6 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than ~~five~~ three (3~~5~~) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.
4.2-40; S-17	Air Quality, Executive Summary	In response to comments from Johnson & Sedlack (refer to Comment E 33.16), Mitigation Measure MM 4.2-12 is revised as follows: MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about ~~1)~~ locations of the nearest existing and planned Metrolink stations~~;~~ and ~~2)~~ the benefits of implementing a voluntary carpool or rideshare program for employees.
4.2-40; S-17	Air Quality, Executive Summary	In response to comments from SCAQMD (refer to Comment C-13) and Johnson & Sedlack (refer to Comments E-5, E-26, and E-27, E-39, E-40, E-46, E-47, E-48) the following mitigation measure is added to the Final EIR. MM 4.2-15 Prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow.
4.2-40; S-18	Air Quality, Executive Summary	In response to comments from SCAQMD (refer to Comment C-13, last bullet point), the following mitigation measure is added to the Final EIR. MM 4.2-16 Prior to the issuance of building permits, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive isles and truck courts shall be composed of concrete.
4.2-40; S-18	Air Quality, Executive Summary	In response to comments from Johnson & Sedlack (refer to Comments E-22.13 and E 45.3), the following mitigation measure is added to the Final EIR. MM 4.2-17 The Project's building shall be capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance.

Page(s)	Section	Corrections and Additions
4.6-36; S-32	Greenhouse Gas, Executive Summary	In response to comments from SCAQMD (refer to comment C-12) and Johnson & Sedlack (refer to comment E-33.18), the following mitigation measure is added to the Final EIR. MM 4.6-6 Prior to the approval of permits and approvals that would permit cold storage in the building, the Project Applicant shall provide information to the City of Moreno Valley demonstrating that the cooling system design is energy efficient.
5-5	Other CEQA Considerations	In response to comments from Johnson & Sedlack (refer to Comment E-52), the following statement is revised. The proposed Project would attract new businesses to the Project site that would provide jobs to the Project area; therefore, the proposed Project ~~would~~ is likely to assist the City in improving the jobs-housing ratio, depending on the number of persons that the proposed Project's tenant would employ. ~~which under existing conditions is lower than the statewide and regional average (indicating the City of Moreno Valley and surrounding areas experience a relatively low jobs to housing ratio).~~
Table 6-1; 6-15	Alternatives	In response to comments from Johnson & Sedlack (refer to Comment E-54), Table 6-1 and the text on page 6-15 have been amended to indicate that Objective A would be partially met by the Vacant Lot Alternative. Table 6-1: ~~No~~ Yes, but to a lesser extent Pg. 6-15: The Vacant Lot Development Alternative would fail to meet most of the Project's objectives. The ~~only two~~ three objectives of the Project that would be met by the Vacant Lot Development Alternative – to redevelop a vacant or underutilized industrially-zoned property, to attract new business/job opportunities to the City of Moreno Valley, and to develop a vacant/underutilized property in a manner that complements surrounding development – would be achieved less effectively by this Alternative than by the proposed Project.~~.~~
7-3	References	A citation for the memorandum entitled "Vehicle Mix Assumptions for High-Cube Warehouse" has been added to section 7.0 of the EIR. Moreno Valley, City of. 2013. *Vehicle Mix Assumption for High-Cube Warehouse*. September 27, 2013. Available at the City of Moreno Valley Public Works Department, 14177 Frederick Street, Moreno Valley, CA 92552.
Technical Appendix, 7-1	Technical Appendix B3, References	Technical Appendix B3 has been added to the EIR. This Appendix contains health risk model runs requested by the South Coast Air Quality Management District.
Technical Appendix, 7-1	Technical Appendix B4, References	Technical Appendix B4 has been added to the EIR. This Appendix contains a Supplemental Analysis for Refrigerated Uses performed by Urban Crossroads.

F.2.4 RESPONSES TO COMMENTS

Provided in this section are the comment letters received in response to the Draft EIR, along with a response to all comments on environmental issues. Comment letters and specific comments are given letters and numbers for reference purposes.

F.3 NO RECIRCULATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT REQUIRED

CEQA Guidelines Section 15088.5 describes the conditions under which a Draft EIR that was circulated for public review is required to be re-circulated for additional public review and comment. CEQA Guidelines Section 15088.5 states that new information added to a Draft EIR is not significant unless the Draft EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

a. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

b. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

c. A feasible project alternative or mitigation measure considerably different from the others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

d. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

As summarized in SectionF.2.2, *Revisions to the Proposed Project in Response to Public Comments*, and based on the comment letters and responses thereto presented in Section F.2.4, Responses to Comments, there were no public comments or changes to the text or analysis contained in the Draft EIR that resulted in the identification of any new significant environmental effect or a substantial increase in the severity of an environmental effects that were disclosed in the Draft EIR. Based on comments received on the Draft EIR, minor revisions to the Project's mitigation requirements were incorporated (as described above in Table F-2, *Errata Table of Corrections and Additions*), and all suggested mitigation measures that would clearly lessen the significant environmental impacts of the Project were incorporated into the Final EIR. Additionally, the Draft EIR was fundamentally and basically adequate, and all conclusions within the Draft EIR were supported by evidence provided within the Draft EIR or the administrative record for the proposed Project. Furthermore, public comment letters on the Draft EIR did not identify any alternatives to the proposed Project considerably different from those analyzed in the Draft EIR that would substantially lessen the significant environmental impacts of the proposed Project while still attaining the Project's basic objectives.

Based on the foregoing, additional recirculation of the Draft EIR is not warranted according to the guidance set forth in Section 15088.5 of the State CEQA Guidelines.

F.4 RESPONSES TO COMMENT

Refer to the following pages.

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

RECEIVED
DEC 15 2014
CITY OF MORENO VALLEY
Planning Division

December 9, 2014

Claudia Manrique
City of Moreno Valley
14177 Frederick Street
PO Box 88055
Moreno Valley, CA 92552-0805

Subject: Modular Logistics Center (Plot Plan PA13-0063)
SCH#: 2014031068

Dear Claudia Manrique:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 8, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

A-1

A-1 The City of Moreno Valley acknowledges this letter indicating that the close of public review for the Draft EIR was December 8, 2014. The City further acknowledges that the Project has complied with the State Clearinghouse review requirements for draft environmental documents.

Document Details Report
State Clearinghouse Data Base

SCH#	**2014031068**
Project Title	Modular Logistics Center (Plot Plan PA13-0063)
Lead Agency	Moreno Valley, City of
Type	**EIR** Draft EIR
Description	The proposed Modular Logistics Center (Plot Plan PA13-0063) involves the construction and operation of one logistics warehouse building having 1,109,378 sf of building space, with 256 loading bays. Other features of the site plan include truck and passenger car parking areas, screen walls, water quality/detention basins, and landscaping. The site is partially developed with industrial land uses under existing conditions. Existing site improvements would be demolished.

Lead Agency Contact

Name	Claudia Manrique		
Agency	City of Moreno Valley		
Phone	951 413 3225	***Fax***	
email			
Address	14177 Frederick Street PO Box 88055		
City	Moreno Valley	***State*** CA	***Zip*** 92552-0805

Project Location

County	Riverside				
City	Moreno Valley				
Region					
Lat / Long	33° 51' 56" N / 117° 13' 18" W				
Cross Streets	Perris Boulevard and Modular Way				
Parcel No.					
Township	3S	***Range*** 3W	***Section*** 32	***Base***	SBB&M

Proximity to:

Highways	I-215
Airports	March ARB
Railways	BNSF
Waterways	Lake Perris, Perris Valley Channel
Schools	El Portero ES
Land Use	Industrial and Vacant / Industrial

Project Issues	Air Quality; Archaeologic-Historic; Biological Resources; Geologic/Seismic; Noise; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Growth Inducing; Cumulative Effects; Other Issues
Reviewing Agencies	Resources Agency; Department of Boating and Waterways; Department of Fish and Wildlife, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 8; Air Resources Board; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission

Date Received 10/23/2014 ***Start of Review*** 10/23/2014 ***End of Review*** 12/08/2014

A-1

-253-

From: Natalie Mann
To: Claudia Manrique
Subject: RE: Draft Environmental Impact Report
Date: Friday, October 31, 2014 8:18:33 PM

I have reviewed the draft environmental impact report regarding the Modular Logistics Center Project. Thank you for providing the documentation via the web for easier review.

I would like to comment on the project as a resident of Moreno Valley. I also ask that you would be kind enough to notify me when there is an upcoming council meeting to discuss the project so that I might attend. I thank you in advance for your consideration. B-1

I oppose the project for the following reasons:

Air quality - the extreme measures that the building company must take, as laid out in the EIR, do not seem easy to follow, and even harder to enforce when they are broken. The air quality in Moreno Valley is already one of the worst areas in Southern California. Why expose the area to more risk? B-2

Traffic - again, the constraints that would be required by the EIR to be in compliance are almost impossible, begging for the rules to be broken, and leaving the community to bear the weight of the impact. B-3

Considering the supporting documents state that the builders do not have tenants lined up, it does not seem worth the risk. B-4

I thank you for passing on the comments of the community.

Best wishes,
Dr. Natalie Mann
Sunnymead Ranch Resident
Adjunct Professor, Moreno Valley College

B-1 The City has added Ms. Mann to the notification list for future public hearings regarding the proposed Project. She also will receive these written responses to her comments, prior to the Planning Commission hearing at which the Final EIR will be considered for certification and the proposed Project will be considered for approval.

B-2 Ms. Mann's opposition to the Project is noted. The mitigation measures listed in the Final EIR to address the Project's air quality impacts represent all feasible mitigation measures with a proportional nexus to the Project's air quality impacts that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce. The City will adopt a Mitigation Monitoring Program (MMP), which it will use to track the implementation of each mitigation measure. Enforcement will be assured through the Project's Conditions of Approval.

EIR Section 4.2 acknowledges the primary air pollutants found in the South Coast Air Basin (SCAB). Although the Air Basin is polluted, as described on Pages 4.2-8 through Pages 4.2-12 of the EIR, air quality in the SCAB has dramatically improved as a result of regulatory programs and is expected to continue improving as regulations become more and more stringent. In 2013, the most recent year for which data is available, no federal or state air quality standards were exceeded in the local area, with the exception of the federal 8-hour ozone standard that was exceeded on 34 days (9.5% of the year, refer to EIR Table 4.2-5).

B-3 The proposed Project's traffic impacts are disclosed in EIR Subsection 4.8. The four (4) mitigation measures listed on Pages 4.8-35 and 36 of the Final EIR to address the Project's traffic impacts are feasible to implement and enforce. No rules would be broken as the comment suggests.

B-4 Ms. Mann correctly notes that no tenant is identified for the Project at this time. As described in the Colliers International letter included in Appendix K to the EIR, there is a large demand for industrial warehouse space in the Inland Empire region and there is a shortage in supply of larger (over 200,000 square-foot) industrial warehouse buildings in Moreno Valley.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA USPS AND E-MAIL:
ClaudiaM@Moval.org

December 2, 2014

Ms. Claudia Manrique, Associate Planner
Community & Economic Development Department
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

Draft Environmental Impact Report (Draft EIR) for the Proposed Modular Logistics Center (EIR Case P13-130 - SCH. No. 2014031068))

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Environmental Impact Report (FEIR).

The Lead Agency proposes construction of an approximate 1.1 million square foot warehouse distribution center building on a 50.84 gross acre site. Construction activities would begin after the existing industrial buildings are demolished involving approximately 38, 240 tons of debris, of which 97 percent (37,712 tons) would be processed and reused on-site or recycled. Approximately 108,400 cubic yards of cut, 88,200 cubic yards of fill, and 26,000 cubic yards of soil import will be needed during soil disturbance activities. Construction is expected to take approximately 11 months to complete with opening year starting in 2015. The proposed warehouse building's tenants are unknown at this point but operations are estimated to include approximatey1,864 total daily trips including up to 710 daily truck trips. [1]

The SCAQMD staff has concerns about the modeling assumptions used to estimate the Project health risk assessment (HRA) and localized significance threshold (LST) impacts. Based on these concerns, Project impacts from cancer risk and localized air quality impacts could be substantially underestimated, so therefore, the SCAQMD staff recommends that both analyses be revised in the FEIR. In addition, although the Lead Agency used the recommended 9th Edition of the Institute of Traffic Engineers (ITE) 1.68 overall daily vehicle trip rate for the High-Cube Warehouse/Distribution Center land use, a non-standard 0.40 daily truck trip rate was used in the Draft EIR analyses instead of the ITE and SCAQMD recommended 0.64 daily truck trip rate. The SCAQMD staff therefore recommends revising all applicable analyses in the FEIR, i.e., HRA, LST,

[1] Recommended weighted average daily truck trip generation rate of 0.64 truck trips per 1,000 square feet of gross floor area, Institute of Transportation Engineers (ITE), 9th Edition, Page 267, Land Use 152 – High Cube Warehouse Distribution Center (0.64 times 1,109.378 equals 710 daily trips).

C-1

C-2

-256-

C-1 The description of the proposed Project given in this comment is accurate, with the exception of the total number daily truck trips. As specified on EIR Page 4.8-17, the mix of vehicles that the EIR assumes will access the Project site is based on field observations conducted by Counts Unlimited on behalf of Urban Crossroads, Inc. in September 2013 at six (6) high-cube distribution warehouse facilities located in the City of Moreno Valley. The vehicle mix used by the Institute of Transportation Engineers (ITE) and presented in their Trip Generation Manual (9th Edition, 2012), as noted in the comment's footnote, was not used as the basis for analysis in the EIR, because actual vehicle mix counts collected in Moreno Valley in 2013 are more reflective of actual operating conditions at warehouse buildings in Moreno Valley than ITE rates. The Project is estimated to generate 447 daily truck trips and not the 710 daily truck trips noted in this comment.

C-2 Refer to Response C-1. The daily truck trip rate of 0.40 used in the analyses is based on field observation data from six (6) high-cube distribution warehouse facilities operating in Moreno Valley. This rate is more reflective of actual operating conditions in Moreno Valley than the ITE rate of 0.64. The analyses presented in the EIR are accurate and do not warrant revision.

COMMENT LETTERS

RESPONSES

Ms. Claudia Manrique, 1 December 2, 2014
Associate Planner

operational air quality analysis, etc., using the more conservative ITE 0.64 truck trip rate since the prospective occupants and related truck activities are unknown.

Finally, the SCAQMD staff recommends that additional feasible mitigation be incorporated to minimize or reduce operational emissions to less than significant levels if further analyses indicate that significant impacts occur. Additional details are included in the attachment.

Pursuant to Public Resources Code Section 21092.5, the SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

C-2

C-3

C-4

Sincerely,

Jillian Baker

Jillian Baker, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

Attachment

JB:GM

SBC141024-02
Control Number

C-3 Refer to Responses C-13 and C-14. The EIR includes feasible mitigation measures to reduce the Project's air pollutant emissions to the maximum feasible extent. There are no additional measures that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce that have a proportional nexus to the Project's impacts.

C-4 The City acknowledges that Gordon Mize, Air Quality Specialist CEQA Section, is the SCAQMD contact person for additional questions. The Final EIR, including these written responses to SCAQMD's comments, will be sent to the SCAQMD prior to the Planning Commission hearing at which the Final EIR will be considered for certification and the proposed Project will be considered for approval.

HRA and LST Analyses

1. The American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) was formed to introduce state-of-the-art modeling concepts into the Environmental Protection Agency's (EPA) air quality models. Through AERMIC, a modeling system, Atmospheric Dispersion Modeling System (AERMOD), was introduced that incorporated air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. As of December 9, 2006, AERMOD is fully promulgated as a replacement to the Industrial Source Complex (ISC3) model, in accordance with EPA guidance.[1] AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. AERMOD-ready meteorological data for various meteorological stations within the South Coast Air Basin (SCAB) are available for download free of charge at the SCAQMD website.[2] The Lead Agency used AERMOD (version 13350) to prepare the dispersion modeling for the Health Risk Assessment (HRA) but used SCREEN3, which is the screening level version of ISC to perform the LST dispersion modeling analysis. Given that AERMOD is the US EPA's recommended model for dispersion modeling, SCAQMD staff recommends that the Lead Agency revise the LST analysis using the latest version of AERMOD (Version 14134, released on May 14, 2014), which was available at the time that the Lead Agency performed its dispersion modeling analysis (dated June, 19 2014).

2. The HRA analysis for the resident, worker, and school receptor involved the use of separate discrete receptors placed randomly. The SCAQMD staff is therefore concerned that the Draft EIR has under-estimated the cancer risk impacts to residents, workers, and the school (students, faculty and administrative staff) from the proposed Project's generated diesel particulate matter emissions. Based on a review of the input files, the Lead Agency placed one receptor at each school location, while ignoring the portion of school property which is much closer to the sources of emissions from the proposed Project. SCAQMD staff recommends that the Lead Agency revise the HRA to include a receptor grid of no more than 100-meter spacing placed over the entire school property (includes classrooms, stadium, baseball fields, etc), the existing residences and areas zoned or planned for residential development, in order to properly analyze and characterize the cancer risk impacts to the school.

3. In the HRA report, the Lead Agency says that meteorological data from the Perris station was used. However, a review of the modeling input and output files shows that the Riverside meteorological station, which is located 14.5 miles northwest of the proposed Project site, was used in the analysis. SCAQMD staff recommends the

[1] EPA Website: Appendix W (http://www.epa.gov/ttn/scram/dispersion_prefrec.htm)
[2] SCAQMD website: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod

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C-5 As noted by the SCAQMD and acknowledged by the EIR (Pages 4.2-26 and 4.2-28) and Appendix B1 to the EIR, the SCREEN3 model was used to prepare the localized emissions analysis and the AERMOD model was used to prepare the health risk assessment analysis. Because the localized emissions analysis and the health risk assessment analysis evaluate different pollutants and impacts (short-term – 1-hour, 8-hour, and 24-hour – impacts associated with CO, NOX, PM10, and PM2.5 versus average yearly concentration over a given exposure analysis to diesel particulate matter), the air quality models were selected on a conservative basis which overstate the air pollutants in question. That is, the SCREEN3 model was used to prepare the localized emissions analysis because it would present the Project's "worst-case" localized CO, NOX, PM10, and PM2.5 emissions given the known information about the Project as compared to the AERMOD model. Further, the SCREEN3 model is the most appropriate to evaluate the Project's localized emissions because emissions could occur across the Project site, particularly during construction. Use of SCREEN3 as a screening tool to represent worst-case conditions is supported by the U.S. EPA's Screening Procedures for Estimating the Air Quality Impact of Stationary Sources. Although the City acknowledges the SCAQMD's request to perform the localized emissions analysis using the AERMOD program, no revisions are needed to the EIR or its Air Quality Analysis because the methodology used in these documents is sound, is consistent with the City's practice for evaluating similar development projects in the immediate area, and overstate the Project's impact – resulting in a conservative analysis.

C-6 The SCAQMD's characterization of receptor placement as random is misleading. The Project's Health Risk Assessment (Appendix B2 to the EIR) includes individual discreet receptors placed geospatially at nearby existing residences, businesses, and schools. In regards to school receptors, placing a receptor at a baseball field or playground is not appropriate when determining long-term exposure concentrations because receptors would only be at

these locations for temporary and intermittent durations whereas receptors would be located in classrooms and administrative offices for regular, extended periods of time. As such, the health risk levels for school receptors reported in the EIR and EIR Appendix D2 represent the maximally impacted school receptors in the Project vicinity and there is, therefore, no need to prepare and analyze a receptor grid to characterize cancer risk exposure over the entire school site. The maximum cancer risk reported in the EIR and EIR Appendix B2 is accurate.these locations for temporary and intermittent durations whereas receptors would be located in classrooms and administrative offices for regular, extended periods of time. As such, the health risk levels for school receptors reported in the EIR and EIR Appendix D2 represent the maximally impacted school receptors in the Project vicinity and there is, therefore, no need to prepare and analyze a receptor grid to characterize cancer risk exposure over the entire school site. The maximum cancer risk reported in the EIR and EIR Appendix B2 is accurate.

C-7 The health risk assessment model was re-run by Urban Crossroads in December 2014 using meteorological data from the Perris monitoring station. Under the updated analysis, which has been added as Appendix B3 to the Final EIR, the Project's maximum cancer risk would be 5.34 in one million at the maximally exposed individual residential receptor (MEIR), 1.92 in one million at the maximally exposed individual worker (MEIW), and 0.11 in one million at the maximally exposed individual school child receptor (MEISC). The Project's cancer risk impacts at the MEIR, MEIW, and MEISC would be less under the updated analysis (i.e., using meteorological data from the Perris monitoring station) than the impacts disclosed in the EIR. As such, the impact analysis presented in the EIR and its Appendix B2 overstates the Project's cancer risk impact. No revisions have been made in the Final EIR, because it already overstates the level of impact.

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Lead Agency revise the dispersion modeling performed for the HRA and LST analyses using the Perris meteorological station.

4. In the HRA report, the Lead Agency mentions that only one year of meteorological data would be used for the analysis (Table 2-5 of Appendix B2). If the Lead Agency chooses to only use one year of meteorological data, the Lead Agency must first do an analysis to see which one year will result in the highest impacts. Alternatively, for HRAs, the Lead Agency can run all 5-years of available meteorological data using the Period option in AERMOD to get the appropriate concentration to use in the estimation of health risks. The SCAQMD staff recommends that the Lead Agency either perform an analysis to identify the one year, which will result in the highest annual concentration or revise the HRA using the entire 5-years of meteorological data.

5. In the HRA modeling analysis, the Lead Agency identified the various schools as "school receptors" using a nine-year exposure duration. However, worker receptors (teachers and administrative staff, etc.) were not identified in the modeling analysis. Worker receptors placed on school property should therefore be identified and evaluated for a 40-year exposure period in the FEIR.

6. In the HRA analysis for the school, the Lead Agency used an hour of day adjustment factor for the emissions. The Lead Agency used this adjustment factor without explaining why those adjustments were used only for the school receptor analysis. By taking an additional hour of day adjustment for the emission sources, the HRA would likely have under-estimated the health risks to school receptors. The FEIR should either provide an explanation as to why the hour of day adjustment is appropriate or include a revised HRA analysis without the use of the hour of day adjustment.

Operations Air Quality Analysis

7. In the Draft EIR, the Lead Agency used the Institute of Transportation Engineers (ITE)[2] recommended 1.68 overall daily vehicle trip generation rate for high cube warehouse land use but did not use the ITE recommended 0.64 daily truck trip rate to estimate daily truck trips. Rather, a 0.40 daily truck trip rate was used based on vehicle classification surveys conducted by the Lead Agency at different high-cube warehouse locations in the City of Moreno Valley. Consistent with ITE Manual and SCAQMD Governing Board direction, the SCAQMD staff recommends using the truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in the South Coast Air Basin, i.e., 0.64 daily truck trips per thousand square feet of warehouse space. Further, since prospective tenants and specific traffic information are unknown at this time, the SCAQMD staff recommends revising the FEIR using the 0.64 rate instead of the 0.40 truck trip rate to

[2] Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012) per thousand square feet of floor area for high cube warehouse (Land Use 152), Pages 267 and 273.

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C-8 The health risk assessment model was re-run by Urban Crossroads in December 2014 using all five years of meteorological data from the Perris monitoring station. The results of the updated analysis are presented in Response C-7 and have been added as Appendix B3 to the Final EIR.

C-9 The MEIW is located north of and immediately adjacent to the Project site. The nearest school site (El Potrero Elementary School) is located approximately 0.33-mile northeast of the Project site. Because the El Potrero Elementary School site is located farther from the Project site than the MEIW disclosed in the EIR, there is no potential for workers at the school to be exposed to higher concentrations of diesel particulate matter (DPM) from Project-related activities than disclosed for the MEIW. As disclosed in EIR Subsection 4.2, concentrations of DPM diminish rapidly as distance from its source increases. As indicated in Response C-7, the maximum cancer risk at the MEIW would be 1.92 in one million, which is less than the SCAQMD significance threshold of 10 in one million.

C-10 The hour of day adjustment factor was enabled for the school child exposure analysis scenario because school-aged children would not be present at the school for 24 hours of the day (the default analysis scenario). It would be inappropriate and unreasonable to assume that school children remain at school for 24 hours per day for the nine year exposure duration assumed in the assessment. The model was adjusted to account for the hours of the day when school-age children are like to be present at the school site. As such, the Project's Health Risk Assessment does not under-estimate the health risk to school child receptors.

C-11 For substantiation of the vehicle fleet mix rate, refer to EIR Subsection 4.8.4, Threshold 1, Part A (EIR pp.4.8-17). Assumptions on the mix of vehicles that would access the Project site are based

on field observations conducted by Counts Unlimited on behalf of Urban Crossroads, Inc. in September 2013 at six (6) high-cube distribution warehouse facilities located in the City of Moreno Valley. The count data is on file at the City of Moreno Valley, Department of Public Works, Transportation Engineering Division and referenced in EIR Appendix H1 (Traffic Impact Analysis). The surveyed warehouse facilities were determined by City staff to be highly representative of operating conditions for warehouses in the City of Moreno Valley. The use of actual vehicle mix data collected from operating warehouses in Moreno Valley in 2013 is the most locally accurate data available for estimating vehicle trips by vehicle classification.

be consistent and as a more conservative estimate of project truck trips and air quality impacts.

Use of Un-Refrigerated Warehouse Land Use Model Input

8. Based on a review of the project's emissions calculations in Appendix 3.1: CalEEMod Emissions Model Outputs (CalEEMod Output Sheets), the Lead Agency determined the proposed Project's air quality impacts using emission factors for unrefrigerated warehouses/truck activity. However, in mitigation measure MM 4.2-13 to reduce Operational Emissions starting on Page 4.2-40, the Lead Agency refers to the use of "future building tenant trucks that that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the buildings electrical system" … to reduce idling and air emissions associated with the burning of fuel. If future tenants will use Transport Refrigeration Units (TRUs), the SCAQMD staff therefore recommends that the Lead Agency include a mitigation measure that precludes the use of refrigerated warehousing at the Project site or revise the air quality analysis to account for emissions from refrigerated warehouse uses. Further, if the Lead Agency chooses to include refrigerated warehouses in the air quality analysis then MM 4.2-13 should be incorporated into the project and remain in the FEIR.

Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

9. The Lead Agency has determined that operational air quality impacts exceed the SCAQMD recommended daily significance threshold for NOx, primarily from mobile source truck emissions related to on-road vehicle trips associated with the proposed project. The SCAQMD staff therefore recommends the following on-road mobile-source truck related mitigation measures that should be incorporated in the FEIR in addition to the measures proposed starting on page 4.2-39 the DRAFT EIR in order to reduce potential significant project air quality impacts:

- Require the use of 2010 compliant diesel trucks, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) at commercial/retail sites upon project build-out. If this isn't feasible, consider other measures such as incentives, phase-in schedules for clean trucks, etc.
- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.
- Limit activities to the amounts analyzed in the Draft CEQA document.
- Promote clean truck incentive programs (see the discussion above regarding Cleaner Operating Truck Incentive Programs), and
- Provide electric vehicle (EV) Charging Stations (see the discussion below regarding EV charging stations).
- Should the proposed project generate significant regional emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-

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C-12 Refrigerated warehousing would not be precluded from occupying the proposed building. The California Air Resources Board, in Title 13, Chapter 10, Section 2485, Division 3 of the of the California Code of Regulations, imposes a requirement that heavy duty trucks shall not idle for greater than five minutes at any location. Mitigation Measure 4.2-13 reinforces the CARB 5-minute idling restriction. However, to present a worst-case analysis in the EIR, the Air Quality analysis assumed 15 minutes of idling, thereby overstating air emissions associated with on-site idling by 200%, which would more than account for any emissions associated with refrigerated warehouse uses.

Typically, tenants requiring cold storage space only require a small portion of a building's warehouse area to serve as a refrigerator and/or freezer (less than 15% of the building space). However, the City recognizes that there are some warehouse tenants that require much larger spaces for chilled, cold, or freezer goods. To account for the possibility of a large refrigerated warehouse space occupying the proposed Project's building, Appendix B4 has been added to the Final EIR to quantify air pollutant, diesel particulate matter, and greenhouse gas emissions associated with cooling 400,000 s.f. of the proposed structure (approximately 36% of the building). Refer to Appendix B4 for the detailed analysis.

The analysis presented in Appendix B4 assumes compliance with CARB's 5-minute idling restriction and utilizes the CARB 2011 EMFAC computer model, which is the same computer model used to evaluate emissions in the Draft EIR. Although an updated EMFAC computer model was released by the CARB on December 30, 2014, which takes into account current Environmental Protection Agency (EPA) and CARB regulations and standards such as the 2014 Truck and Bus Rule and Advanced Clean Car regulations (which require the use of cleaner fuel and more efficient and less polluting engines in motor vehicles), the updated 2014 EMFAC was not used in the analysis presented in Appendix B4 in order to maintain consistency and provide a comparative analysis with the 2011 EMFAC modeling results disclosed in the Draft EIR. The 2011 EMFAC does not take new, mandatory government

regulations and standards into consideration; thus, the Draft EIR and Appendix B4 both overstate expected air emissions from the Project. As reported in Final EIR Appendix B4, diesel exhaust emissions based on EMFAC 2014 would be over 40% less than those derived using the EMFAC 2011 model.

By comparing the air pollutant, diesel particulate matter, and greenhouse gas emission quantifications disclosed in the Draft EIR (no refrigerated warehousing and 15 minutes of on-site truck idling (200% inflation over CARB standards) to the quantifications disclosed in Appendix B4 (400,000 s.f. of refrigerated warehousing and 5 minutes of on-site truck idling (5 minutes is required by CARB and encouraged to be even less (3 minutes) by Mitigation Measure MM 4.2-6), there would be no change in the EIR's significance conclusions. Also, both quantification scenarios use the 2011 EMFAC model, which overstates diesel exhaust emissions by approximately 40% as compared to CARB's updated 2014 EMFAC model. For these reasons, should a portion of the proposed Project's building be occupied by chilled, cold, or freezer space, the significance conclusions drawn by the Final EIR remain accurate; there would be no substantively increased air quality, health risk, or greenhouse gas emissions associated with using a portion of the proposed building for cold storage.

C-13 In accordance with CEQA Guidelines §15126.4, an EIR shall describe feasible mitigation measures that minimize significant impacts. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the project. With this basis, each of the commenter's proposed measures are discussed below:

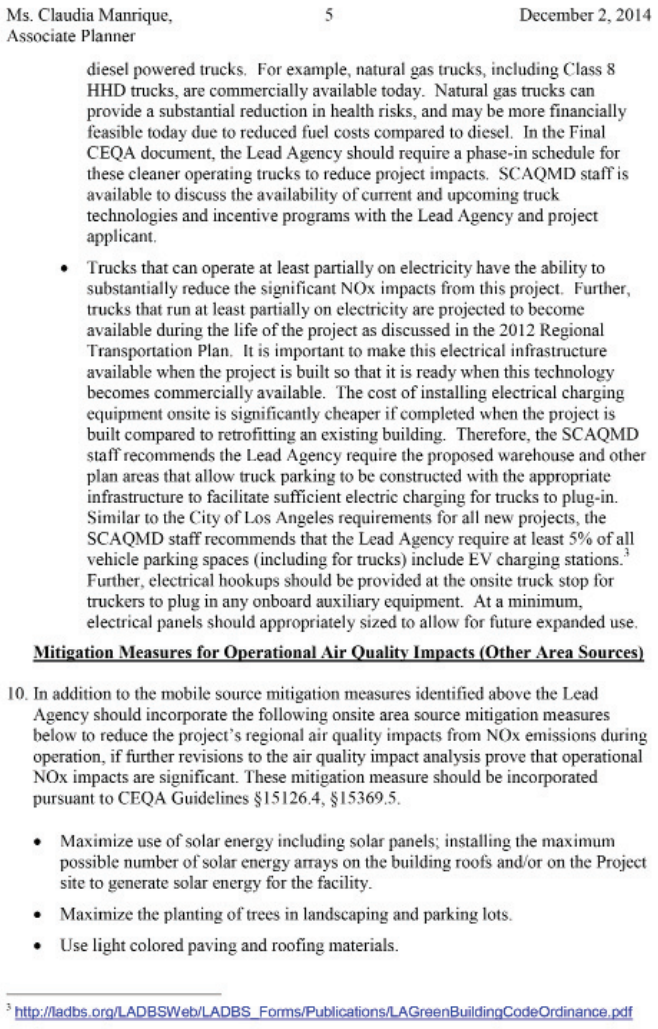
- Suggesting that the City of Moreno Valley require more stringent truck engine controls than the federal government or State of California require is neither practical nor feasible for the City to effectively apply and enforce. CEQA Guidelines §15091 provides that mitigation measures

must be within the responsibility and jurisdiction of the Lead Agency in order to be implemented. The City of Moreno Valley has no ability to enforce a provision that would restrict the type of truck engines that are installed in trucks used by the Project site's tenant or by independent contractors that service the Project site's building. The EIR already includes mitigation requiring the Project's property owner to inform tenants of incentives and programs related to alternatively fueled cargo handling equipment, grants available for vehicle engine retrofit/ replacement, nearby alternative fueling stations, public transit, and carpools and rideshares (refer to Mitigation Measures 4.2-11 and 4.2-12). Furthermore, it should be noted that as federal and State engine and fuel standards become more stringent, truck manufacturers and operators will be required by law to comply. This mostly applies to cleaner diesel technologies. The trucking business is a complex operation and retrofitting engines and using alternatively fueled vehicles is not as simplistic a process as this comment implies. Truck retrofits are expensive and federal grants to offset costs are not always available. The only alternatively fueled vehicles commercially available to the trucking industry in southern California are electric and natural gas. Electric vehicles can only be used for short-haul trips with a flat route. Electric vehicles cannot efficiently pull a heavy load or pull a loaded trailer up a grade, and do not offer the battery capacity for long trips without the need for lengthy battery recharge cycles (i.e. 4+ hours). Natural gas vehicles comprise only a small portion of trucking fleets at the current time, and even the largest warehouse distribution users in the country are using natural gas vehicles only on a voluntary, self-directed basis (SCAG webinar "Successes in Alternative Fuel Fleet Development," February 12, 2015). There are no federal or State laws in effect that require the use of natural gas vehicles. Also, there are complexities associated with natural gas vehicle use that the AQMD does not

acknowledge in this comment. For example, driver and mechanic re-training is needed, repair shops along the driving route need to be equipped to handle the maintenance requirements of these vehicles, and the origin and destination points for the vehicle trip need to be accommodating. These issues go well beyond considering the use of alternatively fueled vehicles at the Project site in isolation. Therefore, not only is the suggestion in this comment infeasible for the City of Moreno Valley to enforce, it is also highly improbable that a building user could comply.

- Truck routes in the City of Moreno Valley are identified by signs. Mitigation Measure 4.2-15 has been added to the Final EIR to require the installation of signs at Project exit driveways that direct truck traffic to turn south on Perris Boulevard to Harley Knox Boulevard, a designated truck route.
- The EIR evaluates operation of the Project site in accordance with its underlying zoning designation. Use of the Project site for activities inconsistent with those evaluated in the EIR would represent a zoning violation that would be subject to a corrective action, and possibly fines, through the City's Code and Neighborhood Services Division. Because the Project would be required to comply with its underlying zoning standards by existing City law – a law that applies to all properties within the City – no additional mitigation is needed.
- As discussed above under the first bullet point, the EIR already requires the Project property owner to notify future tenants of clean truck incentive programs. No additional mitigation is required.
- EIR Subsection 3.3.1 has been revised to disclose that the Project proposes to install at least two level 2 charging stations for electric passenger cars.

- Suggesting that the City of Moreno Valley require the tenant of the proposed Project's building to use non-diesel fueled trucks is not feasible for the Project Applicant to implement or the City of Moreno Valley to enforce. The use of alternatively fueled trucks is also not required by either the federal government or the State of California. CEQA Guidelines §15091 provides that mitigation measures must be within the responsibility and jurisdiction of the Lead Agency in order to be implemented. The City of Moreno Valley has no ability to enforce the use of non-diesel powered trucks utilized at the Project's logistic center building or by independent contractors that service the Project site's building. Also refer to the response under the first bullet point, above.
- Mitigation Measure 4.2-17 has been added to the Final EIR to require the building to be capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays.



Ms. Claudia Manrique, Associate Planner 5 December 2, 2014

diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in health risks, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce project impacts. SCAQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency and project applicant.

- Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. Further, trucks that run at least partially on electricity are projected to become available during the life of the project as discussed in the 2012 Regional Transportation Plan. It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, the SCAQMD staff recommends the Lead Agency require the proposed warehouse and other plan areas that allow truck parking to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces (including for trucks) include EV charging stations.[3] Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. At a minimum, electrical panels should appropriately sized to allow for future expanded use.

Mitigation Measures for Operational Air Quality Impacts (Other Area Sources)

10. In addition to the mobile source mitigation measures identified above the Lead Agency should incorporate the following onsite area source mitigation measures below to reduce the project's regional air quality impacts from NOx emissions during operation, if further revisions to the air quality impact analysis prove that operational NOx impacts are significant. These mitigation measure should be incorporated pursuant to CEQA Guidelines §15126.4, §15369.5.

- Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
- Maximize the planting of trees in landscaping and parking lots.
- Use light colored paving and roofing materials.

[3] http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf

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C-14 In accordance with CEQA Guidelines §15126.4, an EIR shall describe feasible mitigation measures that minimize significant impacts. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the project. With this basis, each of the commenter's proposed measures are discussed below:

- As shown in EIR Table 4.2-8, energy source air emissions associated with the Project are calculated to be very low and constitute a very low percentage of the Project's total air emissions. As a percentage of the Project's NOx emissions, energy sources account for less than two-tenths of one percent (0.19%) of the Project's total NOx impact. NOx is the only operational-source air pollutant that would be emitted by the Project's operational activities and exceed the SCAQMD's daily significance threshold. Emissions of NOx have little association to electrical energy production and consumption. Nonetheless, as a condition of the Project's approval, the City of Moreno Valley will require that the office areas of the proposed building are supplied with energy from roof-mounted photovoltaic panels or from an energy purveyor that secures its power from alternative sources. In addition, CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws.
- The Project's conceptual landscaping plan is included as EIR Figure 3-6. The location and number of trees are shown on this exhibit. The landscaping plan meets City requirements and is a Project design feature.

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- As indicated in EIR Subsection 3.3.1(B), the color palette for the building's exterior architecture is proposed to include varying shades of white and gray. The pavement is proposed as light colored concrete. The color palette is a project design feature.
- As shown in EIR Table 4.2-8, energy source air emissions associated with the Project are calculated to be very low and constitute a very low percentage of the Project's total air emissions. As a percentage of the Project's NOx emissions, energy sources account for less than two-tenths of one percent (0.19%) of the Project's total NOx impact. NOx is the only operational-source air pollutant that would be emitted by the Project's operational activities and exceed the SCAQMD's daily significance threshold. Emissions of NOx have little association to electrical energy production and consumption. Although this recommendation to use Energy Star heating, cooling, and lighting devices and appliances does not establish any nexus or rough proportionality with the Project's air impacts, about 90% of which are caused by on-road mobile sources and not from the building's energy use, the Project is required to comply with the California Green Building Standards Code (CALGreen), Title 24, which requires energy efficiency in building operations. Cycle updates to the Title 24 have undergone substantial changes in the last 10 years. The California Energy Commission (CEC) has increased the overall stringency of the standards by 45 to 50 percent since 2000. CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws.

- The use of cool roofs is a prescriptive requirement of the California's Green Building Standards Code, Title 24, Building Energy Efficiency Standards. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws. Most cool roof materials for low-sloped roofs are white or another light color. The Project's pavement areas are proposed as light colored concrete. The color palette is a project design feature.
- As shown in EIR Table 4.2-8, energy source air emissions associated with the Project are calculated to be very low and constitute a very low percentage of the Project's total air emissions. As a percentage of the Project's NOx emissions, energy sources account for less than two-tenths of one percent (0.19%) of the Project's total NOx impact. NOx is the only operational-source air pollutant that would be emitted by the Project's operational activities and exceed the SCAQMD's daily significance threshold. Emissions of NOx have little association to electrical energy production and consumption. Regardless, all new development in the City of Moreno Valley is required to comply with City Municipal Code Section 9.08.100, "Lighting." In addition, the Project is required to comply with the California Green Building Standards Code (CALGreen), including its Section 5.106.8 "Light Pollution Reduction." Cycle updates to the Title 24 have undergone substantial changes in the last 10 years. The California Energy Commission (CEC) has increased the overall stringency of the standards by 45 to 50 percent since 2000. CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation. Compliance with California State law is mandatory and CEQA does not require mitigation measures

to be duplicative of State laws.

- As shown in EIR Table 4.2-8, energy source air emissions associated with the Project are calculated to be very low and constitute a very low percentage of the Project's total air emissions. Regarding on-site maintenance equipment, such as sweepers, that would be used by a building tenant or maintenance company on the Project site, the City does not have an enforcement mechanism or the staffing resources to monitor and enforce the mechanical composition of maintenance equipment, especially given the cyclical nature of equipment used by maintenance companies and building tenants. CEQA Guidelines §15091 provides that mitigation measures must be within the responsibility and jurisdiction of the Lead Agency. Additionally, this comment does not establish any nexus or rough proportionality between this recommendation and the Project's air emission impacts, 90% of which are caused by on-road mobile sources and not the periodic operation of maintenance equipment. The recommendation to use electric or alternatively fueled sweepers with HEPA filters would not substantially lessen the Project's air quality impacts. Therefore, the City has determined that this recommendation is not feasible to require as a mitigation measure. However, the EIR does require the installation conduit and plug-in locations for the charging of electrical maintenance equipment should a building tenant or maintenance company use such equipment (refer to EIR Mitigation Measure MM 4.2-14).
- Air emissions associated with the use of Project-related cleaning products would be a very low proportion of the Project's total operating emission levels. As shown in EIR Table 4.2-8, the percentage of energy source air emissions is less than one half of one percent (0.5%) of the Project's total air emissions in every pollutant category. The percentage of air emissions associated with cleaning products would be a small fraction of that

already small percentage. As such, this comment does not establish any nexus or rough proportionality between this recommendation and the Project's air quality impacts, which are primarily caused by on-road mobile sources and not the use of cleaning products. Further, regarding cleaning products that might be used by a building tenant or operator on the Project site, the City does not have an enforcement mechanism or the staffing resources to monitor and enforce the chemical composition of cleaning products used during the normal course of private business operations. CEQA Guidelines §15091 provides that mitigation measures must be within the responsibility and jurisdiction of the lead agency and have a proportional nexus to the Project's impact on the environment. Therefore, the City has determined that this recommendation is not feasible to require as a mitigation measure.

- Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- Install light colored "cool" roofs and cool pavements.
- Limit the use of outdoor lighting to only that needed for safety and security purposes.
- Require use of electric or alternatively fueled sweepers with HEPA filters.
- Use of water-based or low VOC cleaning products.

C-14

Community Development
Department
Planning Division

City of Arts & Innovation

December 8, 2014

Claudia Manrique, Associate Planner
City of Moreno Valley
Community & Economic Development Department
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P.O. Box 88005
Moreno Valley, CA 92552

Subject: Notice of Availability of a Draft Environmental Impact Report for the Modular Logistics Center (Plot Plan PA13-0063)

Dear Ms. Manrique:

Thank you for the opportunity to comment on the Notice of Availability (NOA) of the Draft Environmental Impact Report (DEIR) for the proposed Modular Logistics Center project. The project proposes the construction of an approximately 1,109,378 square-foot warehouse building on a 50.84 gross acre site situated north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. D-1

The project is anticipated to generate 1,202 net daily truck trips in passenger car equivalents, with 2,619 anticipated total daily trips (PCE). The DEIR does not identify regional distribution of truck or passenger car trips, assigning 20% of passenger car trips to Interstate-215 along with 95% of inbound truck trips & 90% of outbound truck trips. It is likely that the significant anticipated truck traffic along I-215 will make use of Alessandro Boulevard or Van Buren Boulevard as a cut-through to State Route 91. D-2

The DEIR and accompanying appendices do not evaluate the potential of this cut-through traffic, and as such do not evaluate potential impacts on the City of Riverside. The City of Riverside Public Works Department, Traffic Engineering Division, respectfully requests that the City of Moreno Valley consider and address the following comments in the preparation of the Final Environmental Impact Report. D-3

The project has a potential to generate truck traffic cutting through the City of Riverside on Van Buren Blvd, between the I-215 and SR-91 within the City of Riverside and within a 5-mile radius of the project. Due to the potential impact to the City of Riverside, the City's Public Works Department, Traffic Engineering Division, requests that the Traffic Impact Analysis and EIR address the following: D-4

3900 Main Street, Riverside, CA 92522 | Phone: (951) 826-5371 | **RiversideCA.gov**

D-1 The City acknowledges this comment. This comment correctly summarizes the Project location and scope.

D-2 This comment correctly summarizes the average daily traffic associated with the Project and the distribution of Project traffic to Interstate 215 (I-215). Regarding the claim that Project traffic is likely to use Alessandro Boulevard or Van Buren Boulevard as a cut-through to State Route 91 (SR-91), the study area used in the Project's traffic study was defined based on the City of Moreno Valley's Traffic Impact Analysis Preparation Guide (August 2007), which states that the area to be studied "…shall include any intersection of 'Collector' or higher classification street, with 'Collector' or higher classification streets, at which the proposed project will add 50 or more peak hour trips" (City of Moreno Valley Traffic Impact Analysis Preparation Guide, 2007, p. 4). The "50 peak hour trip" criteria utilized by the City of Moreno Valley is consistent with the methodology employed by other jurisdictions throughout Riverside County, and generally represents a threshold of trips at which a typical intersection would have the potential to be impacted. In fact, the 50 peak hour trip criteria also is relied upon by the City of Riverside's Traffic Impact Analysis Preparation Guide (August 2012), which indicates that "…the area to be studied shall generally include any intersection of 'Collector' or higher classification streets on which the proposed project will add 50 or more peak hour trips up to a 5 mile radius of the project location" (City of Riverside, 2012, p. 3).

The study area identified by the Project's traffic impact analysis is summarized in EIR Tables 4.8-1 through 4.8-4. The study area accounts for all intersections that would be potentially impacted by receiving 50 or more peak hour trips from the Project. The Project would not contribute 50 or more peak hour trips to any intersection located within the City of Riverside. Therefore, in conformance with the City's Traffic Impact Analysis Preparation Guide (August 2007), and consistent with the study area requirements specified in the City of Riverside's Traffic Impact Analysis

Preparation Guide (August 2012), the Project's traffic impact analysis properly defines the study area, which does not include any transportation facilities located within the City of Riverside. Because no facilities in the City of Riverside would receive 50 or more peak hour trips from the Project, any impact to City of Riverside facilities would be less than significant and less than cumulatively considerable; thus, a detailed analysis of City of Riverside transportation facilities is not warranted.

Further, as shown on EIR Figure 4.8-13, 90% of the Project's outgoing truck traffic is expected to circulate south to Harley Knox Boulevard to access I-215 (with 70% of truck traffic traveling north on I-215 and 20% traveling south on I-215). Also as shown on EIR Figure 4.8-13, 95 percent of the Project's incoming truck traffic is expected to travel on southbound I-215 to access the Project site, exiting at Harley Knox Boulevard. Based on the trip distribution and trip generation factors presented in the Project's traffic report (EIR Technical Appendix H1), the Project would contribute a maximum of 69 Passenger Car Equivalent (PCE) truck trips to I-215 segments north of Harley Knox Boulevard during the AM or PM peak hour. As such, 72% of Project truck traffic would need to "spill over" onto City of Riverside arterials adjacent to I-215 during congested peak hour conditions to meet the City of Riverside's stated traffic impact threshold of 50 or more peak hour trips. The probability of 72% of the Project's I-215 truck traffic oriented north of Harley Knox Boulevard choosing to use the exact same alternative route to bypass I-215 at the exact same time during typical peak hour conditions is extremely low and highly speculative. The commenter does not provide any substantial evidence to conclude that a scenario where 72% of the Project's peak hour truck traffic is likely to spill over onto streets in the City of Riverside would have any reasonable probability to occur.

D-3 Refer to Response D-2.

1. Evaluation and mitigation of the impacts associated with trucks shortcutting through the City of Riverside on Van Buren Boulevard, from I-215 to SR-91; D-5
2. Evaluation and mitigation of the impacts associated with any increase in truck and employee traffic on both the Alessandro Boulevard and Van Buren Boulevard corridors; D-6
3. The EIR needs to identify appropriate mitigation to reduce any impact to and maintain the levels of service (LOS) within the City of Riverside; D-7

The City of Riverside appreciates your consideration of the comments provided in this letter. Please forward any updated environmental documents related to the Modular Logistics Center project to the Planning Division for further review. Should you have any questions regarding this letter, please feel free to contact David Murray, Senior Planner at (951) 826-5773 or by email at dmurray@riversideca.gov. D-8

Sincerely,

Jay Eastman, AICP
Principal Planner

JE:dm

c: Scott Barber, City Manager
Deanna Lorson, Assistant City Manager
Kristi Smith, Supervising Deputy City Attorney
Al Zelinka, FAICP, Community Development Director
Tom Boyd, Public Works Director
Gilbert Hernandez, Interim City Traffic Engineer
Nathan Mustafa, Associate Traffic Engineer

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D-4 Refer to Response D-2.

D-5 Refer to Response D-2.

D-6 Refer to Response D-2. The Project would not contribute 50 or more peak hour trips to any roadways within the City of Riverside, including Alessandro Boulevard or Van Buren Boulevard.

D-7 Refer to Response D-2. The Project would not result in any significant traffic impacts in the City of Riverside and no mitigation is required.

D-8 The City acknowledges that David Murray, Senior Planner, is the City of Riverside contact person for additional questions. The Final EIR, including these written responses to the City of Riverside's comments, will be sent to the City of Riverside prior to the Planning Commission hearing at which the Final EIR will be considered for certification and the proposed Project will be considered for approval.

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VIA U.S. MAIL AND EMAIL

December 8, 2014

Claudia Manrique
Associate Planner
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City of Moreno Valley
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RE: Modular Logistics Center (EIR Case P13-130, SCH No. 2014031068)

Greetings:

On behalf of Sierra Club and local residents, we hereby submit these comments on the Draft Environmental Impact Report (EIR) for the Modular Logistics Center, Environmental Impact Report Case P13-130 (SCH No. 2014031068).[1]

Project Summary

The Project would develop one, 1,109,378 sf logistics warehouse building on 50.84-acres within the boundaries of the Moreno Valley Industrial Area Plan at the northeast corner of Modular Way and Perris Boulevard in the City of Moreno Valley. The building would consist of 1,089,378 sf of warehouse space and 20,000 sf of office space. The Project would have 256 loading bays/ dock doors; 373 auto parking spaces; and 306 trailer parking spaces. The Project site is located 2 miles east of I-215 and 4.7 miles south of SR-60.

The site is designated "Industrial". The "Industrial" designation in the MVIAP permits a wide range of industrial and industrial/ business related support uses, including wholesale, storage and distribution facilities. The site currently contains a 38-acre industrial development for stone and manufactured stone products. The remaining 13 acres is undeveloped. The Project

[1] In order to conserve paper, the citations herein are only provided electronically, unless otherwise noted. Please include the documents cited in your review of these comments as if they were attached. If any hyperlink and/or webpage does not function properly, please contact Johnson & Sedlack and we will be happy to provide you with a hard copy of the document.

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E-1 Comment is acknowledged.

E-2 The description of the proposed Project and its location as provided in this comment is accurate.

E-3 The description of the Project site's Industrial land use designation, current uses of the property, and the Project's proposal to demolish the existing industrial uses on the property and develop the entirety of the Project site as provided in this comment is accurate.

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would include demolition and removal of the existing buildings and development across the whole site.

General Comments

The California Environmental Quality Act (CEQA) was adopted as a disclosure and transparency document. The theory is that by providing a document that adequately describes the environmental consequences of a project to decision makers and the public, the decision makers will make a rational decision based upon the true environmental consequences of the project and if they do not, the electorate can hold them accountable for their decisions. The core of this statutory structure is the EIR's adequacy as an informational document.

On review of the EIR here, a major flaw is readily apparent- only 5-10% of truck trips are assumed to travel north from the site on Perris Boulevard, a City- approved truck route. Perris Boulevard north of the Project site contains various residences, schools, etc. so that health risks, traffic, air quality, and other impacts would likely be worsened if additional trucks traveled northbound. Since most Project trucks are destined for northern end destinations, the EIR should be revised and recirculated to account for a greater portion of trucks using Perris Boulevard to head north.

The EIR also utilizes an unreasonably low truck trip percentage as a portion of all trips based on some undisclosed counts in lieu of the ITE rate recommended by SCAQMD. Truck trips are likely much greater in number than the EIR discloses.

Several potentially significant impacts are omitted from full evaluation in the EIR including, but not limited to, impacts to/from hydrology/water quality and land use/ planning. The City of Moreno Valley has been plagued with issues relative to its storm drains/ channels, yet the EIR does not consider the potentially significant effects of this Project and cumulative projects on or from the Perris Valley Storm Drainage Channel and the flood zone. While this Project may not be directly impacted by flooding, by altering where flood waters may escape residential users across the Channel and others may suffer the effects of this Project. The EIR should be revised to evaluate these impacts.

The EIR fails to adequately evaluate and disclose project impacts to/ from (but not limited to) air quality, health risks, GHGs, hydrology/water quality, land use/planning, noise, and traffic. (Public Res. C. § 21002.1(a), (e); State CEQA Guidelines § 15128, 15126, 15123) The EIR also fails to adopt all feasible mitigation to reduce the Project's significant impacts to air quality, GHGs, noise, and traffic.

For these reasons and as set forth below, the EIR should be revised and recirculated, and additional mitigation incorporated into any proposed Project set out for City approval. As written, the EIR fails as an informational document and the conclusions in the EIR are unsupported by substantial evidence.

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E-4 The basic purposes of CEQA are stated in the CEQA Guidelines §15002 and listed on EIR Page 1-1. Note that in addition to its basic purposes, CEQA also provides for balancing environmental concerns with other social goals. For example, if a significant adverse environmental impact cannot be mitigated, a public agency may still approve a project if the agency adopts a statement of overriding considerations, supported by substantial evidence in the record, in which it finds that the benefits of the project outweigh the potential environmental damage. See CEQA Guidelines §15093. Based on evidence in the Project's administrative record and by the independent judgment of the City of Moreno Valley, serving as the CEQA Lead Agency concerning the proposed Project, the EIR contains an accurate description of the proposed Project's expected environmental impacts. The City will consider adoption of a statement of overriding considerations regarding the Project's significant and unavoidable effects.

E-5 As shown on EIR Figure 4.8-13, 95% of the Project's incoming truck traffic is expected to arrive from I-215 via Harley Knox Boulevard and 90% of the Project's outgoing truck traffic is expected to circulate south to Harley Knox Boulevard to access I-215. This is the most direct route to and from the Project site to the regional freeway system (approximately 2.0 miles). Trucks would be deterred from using Perris Boulevard north of the Project site due to the multiple traffic lights and 4.7-mile distance encountered to access the regional freeway system from that direction. Also, Mitigation Measure 4.2-15 has been added to the Final EIR to require the installation of signs at Project exit driveways that direct truck traffic to turn south on Perris Boulevard to Harley Knox Boulevard, a designated truck route. The vehicle distribution pattern analyzed in the EIR is based on reasonable assumptions does not warrant revision.

E-6 As specified on EIR Page 4.8-17, the mix of vehicles that the EIR assumes will access the Project site is based on field observations

conducted by Counts Unlimited on behalf of Urban Crossroads, Inc. in September 2013 at six (6) high-cube distribution warehouse facilities located in the City of Moreno Valley. The vehicle mix used by the Institute of Transportation Engineers (ITE) and presented in their Trip Generation Manual (9th Edition, 2012) was not used as the basis for analysis in the EIR, because actual vehicle mix counts collected in Moreno Valley in 2013 are more reflective of actual operating conditions at warehouse buildings in Moreno Valley than ITE rates. The vehicle mix analyzed is therefore appropriate and does not warrant revision.

E-7 The issue areas of hydrology/water quality and land use and planning are evaluated in EIR Subsection 5.4, "Effects Found Not to be Significant as Part of the Initial Study Process." As presented in this subsection, there is substantial evidence provided in the Initial Study (see EIR Appendix A) and the project's Water Quality Management Plan (EIR Appendix E2) to conclude that the Project's impacts in these subject areas would be clearly less than significant, and that mitigation measures are not required.

The Project would not substantially alter the existing drainage patterns of the property. Upon implementation of the proposed Project, water runoff would flow into a proposed on-site detention basin, which would attenuate the rate and volume of storm water discharge to be similar to the rate and volume that are discharged from the site under existing conditions. As a result, implementation of the proposed Project would not increase the potential for flooding on-site or off-site and would not contribute additional water rates or volumes to off-site storm water drainage facilities including the Perris Valley Channel. In addition, the Project's storm water drainage plan is subject to review and approval by the Riverside County Flood Control and Water Conservation District (RCFCWCD) to ensure that the proposed improvements are consistent with the RCFCWCD's master drainage plan.

E-8 This comment provides no substantial evidence to support its claim that the EIR does not adequately evaluate the Project's environmental impacts.

E-9 This comment provides no substantial evidence to support its claim that the EIR does not include feasible mitigation measures to reduce the Project's environmental impacts.

E-10 The EIR does not need to be recirculated based on §15073.5 of the State CEQA Guidelines. As summarized in the responses below, there were no public comments or changes to the text or analysis of the EIR that resulted in the identification of any new significant environmental effect requiring mitigation. In addition, based on comments received on the Draft EIR, only minor, non-substantive revisions that merely clarify or amplify information presented in the EIR were required (as described in the Errata Table of Corrections and Additions, included as Final EIR Table F-1). The Draft EIR circulated for public review was fundamentally and basically adequate, and all conclusions presented in the EIR are supported by evidence provided within the EIR and/or the administrative record for the proposed Project. Based on the foregoing, recirculation of the EIR is not warranted according to the guidance set forth in §15073.5 of the State CEQA Guidelines.

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Air Quality

Appendix B1, the Air Quality Analysis states, "The Project will reduce vehicle miles traveled by: designing a Project that promotes a suburban center setting; providing design elements that enhance walkability and connectivity; as well as incorporation of bicycle lanes and paths; improving the on-site pedestrian network, and implement a voluntary trip reduction program. Thus the appropriate CalEEMod parameters have been enabled to ensure appropriate credit is taken for these design features." Adjusting the CalEEMod defaults for these alleged reductions in vehicle miles traveled is completely improper and unsupported by any evidence or reasoning. How does the Project, a logistics warehouse built for a speculative tenant, promote a suburban center setting? What reductions in VMT are anticipated by walkability, bike connectivity, and a *voluntary* trip reduction program? Particularly for a project centered on trucking? Absent a mandatory trip reduction program, no credits should be given for these actions.

In modeling construction *and* operational LSTs, while the Air Quality Analysis uses a 25 meter distance for CO and NO2, a 73 meter distance is used for PM 10 and PM2.5 because that 73 meters is the location of the nearest 24-hour sensitive receptor land use. There is no explanation for such an adjustment or detail that modeling should be modified in this manner pursuant to the procedures set forth by SCAQMD or the US EPA.

Substantial modifications were made to the CalEEMod defaults during construction including reducing the horsepower of offroad equipment, increasing the load factor, reducing the CO2 Intensity factor, reducing the solid waste generation rate, reducing vehicle trips and VMT, etc. Absent a clear and documented reason for making these modifications, the defaults should be reinstated.

Regarding Project operational impacts, the Air Quality Analysis assumes 2,619 passenger car equivalent trips per day will occur, of which 76% will be cars and just 24% will be trucks (1,416 car trips, 446 truck trips). This rate is untenable and is not based on evidence disclosed in the EIR or subject to public scrutiny. Instead, the EIR states that the "vehicle mix information has been determined based on recent vehicle classification surveys collected by Counts Unlimited on behalf of Urban Crossroads in September 2013 at six (6) various high-cube distribution warehouse facilities located in the City of Moreno Valley." In fact, no information is divulged regarding which six warehouses were considered or the manner in which these vehicle surveys were conducted. There is nothing to say that the six facilities used were in full operation or were otherwise representative of the facility here to justify this extremely low truck percentage.

On the other hand, various other sources recommend a much higher truck trip rate as a percentage of overall trips. SCAQMD recently completed its own study of 34 high cube warehouses in the area, "Warehouse Truck Trip Study Data Results and Usage", Mobile Source Committee, July 25, 2014. (Available at <http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2>.) Looking at some 34 high cube warehouses in the area, this study found truck rates from 0.40 trips/ tsf to 1.32 trips/ tsf, with an

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E-11 The CalEEMod model default for trip length relies on data provided by the Southern California Association of Governments (SCAG). As stated on EIR Page 4.2-22, the analysis of the Project's passenger car trips relies on the CalEEMod model default of a 9.5-mile one-way trip length, which is appropriate for the proposed Project and its location in a mostly developed sector of Moreno Valley. The CAlEEMod model default trip length of 12.6 miles for trucks was overridden for the analysis of this Project, and a 61-mile one-way trip length for trucks was used in the EIR and EIR Appendix B1 instead. As disclosed on EIR Pages 4.2-33 and 34, the average truck trip length of 61 miles is based on reasonably foreseeable travel distances, including to the Port of Los Angeles/ Long Beach, the outer edges of the South Coast Air Basin (SCAB), and destination points in the SCAB. Distances between the Project site and the following locations are given below:

80 miles to the Port of Los Angeles/Long Beach

30 miles east on State Route 60

60 miles to San Diego County line

50 miles to Inland Empire destinations

10 miles to Perris destinations

10 miles to Moreno Valley destinations

The Project site is located adjacent to public streets that have an established sidewalk system. Also, the proposed Project would provide bicycle parking in compliance with the City of Moreno Valley Municipal Code Section 9.11, which requires bicycle parking to be provided for 5% of required vehicle parking. Mitigation Measure MM 4.2-12 requires the Project's property owner to include information in the building's lease agreement about the locations of nearby Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program. Implementing a voluntary trip reduction program and improving the pedestrian network would not result in substantial emissions reductions that would alter any of the conclusions in the EIR. The EIR concludes that the Project would result in a significant

operational air quality impact before and after implementation of these measures.

E-12 In order to utilize the mitigation measure in CalEEMod for improving the pedestrian network at the Project site, a model option of either Low Density Suburban, Suburban Center, Urban, or Urban Center must be checked in CalEEMod. The model, however, is not sensitive to this selection for purposes of the Project because the only mitigation measure selected on this screen is to improve pedestrian network, which pursuant to the California Air Pollution Control Officers Association's (CAPCOA's) definition is that the Project would provide pedestrian access on-site that connects to all existing or planned external streets and pedestrian facilities contiguous to the Project site.

E-13 As discussed in EIR Appendix B1, two different distances were used to analyze CO /NO2 (25 meters) and PM 10/PM 2.5 (73 meters) because CO/NO2 have shorter averaging times than PM 10 and PM 2.5. CO has averaging times of 1-Hour and 8-Hour. NO2 has an averaging time of 1-Hour. Therefore, LST receptors for CO and NO2 were placed where an individual can stay for a shorter averaged time. The nearest receptor (where an individual can stay for a shorter averaged time) is located immediately adjacent to the Project site's northern boundary (zoned industrial). Notwithstanding, the Methodology given in EIR Appendix B1 explicitly states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Based on SCAQMD's Final LST Methodology, a 25 meter receptor distance is utilized in order to determine the LSTs for emissions of CO and NO2. Additionally, PM 10 and PM 2.5 have an averaging time of 24-Hours. Therefore, the nearest sensitive receptor land use (where an individual could remain for 24 hours) is located approximately 240 feet/73 meters northeast of the Project site. Therefore, for purposes of this

analysis, a 73 meter sensitive receptor distance is appropriately utilized in order to determine the LSTs for emissions of PM 10 and PM2.5.

E-14 Modifications to off-road construction equipment's horsepower and load factor were made only to off-Highway trucks in order to characterize these pieces of equipment more closely to that of a water truck. Adjustments to the CO2 Intensity Factor were made to the Project operational runs in the EIR Appendix B1 (Air Quality Analysis) as well as the 2020 project run in EIR Appendix F (Greenhouse Gas Analysis) in order to more accurately model the CO2 intensity, consistent with the California Public Utility Commission's data within Southern California Edison's coverage area. Additionally, the Project's operational runs utilize model defaults for the solid waste generation rate. The Project Passenger Car Operational run utilizes a trip rate consistent with the Project's Traffic Impact Analysis (EIR Appendix H1) and incorporates the highest identified trip length for passenger cars as identified in Appendix D "Default Data Tables" of the CalEEMod User's Guide (February 2011). However, the Project Truck Operational run utilizes a trip length 61 miles which is over four times greater than the 12.6-mile CalEEMod model default and is a more conservative estimate of air pollutant emissions.

E-15 The vehicle mix data documented by Counts Unlimited on behalf of Urban Crossroads is part of the Project's administrative record and was available to the public at the City of Moreno Valley Department of Public Works during the Draft EIR public review period. The memorandum containing this information is dated September 27, 2013 and titled "Vehicle Mix Assumptions for High-Cube Warehouse." A citation to this memorandum has been added to the Final EIR Section 7.0, References. As stated in the memorandum, "Urban Crossroads with guidance from staff collected data at six High-cube Warehouse locations within the City in order to establish a realistic vehicle mix based on typical

operations in the City spanning various sized warehouses and operations. All study locations were fully occupied, operating at capacity, and have truck deliveries (no train access)." The six locations included Sketcher's Warehouse (29800 Eucalyptus), Walgreens Warehouse (17500 Perris), O'Reilly Warehouse (24520 San Michelle), Ross Warehouse (17800 Perris), Lowe's Warehouse (16850 Heacock), and Centerpointe Buildings 4, 5, 6, 8, and 9. Data was collected on weekdays during August and September of 2013 and represent typical operating conditions.

E-16 Refer to Response E-15. The daily truck trip rate of 0.40 used in the analyses is based on field observation data from six (6) high-cube distribution warehouse facilities operating in Moreno Valley. This rate is more reflective of actual operating conditions in Moreno Valley than the ITE rate of 0.64. The analyses presented in the EIR are accurate and do not warrant revision.

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average composite rate of 0.50 trips/ tsf. Upon reviewing the results of the study, SCAQMD recommended usage of the ITE trip rates for area projects, which rates are 1.68 trips/tsf overall, and a truck rate of 0.64 trips/ tsf. (*Ibid.*)

Another source, the CalEEMod User's Guide, recommends an assumption of 40% trucks as a percentage of overall trip rates. (CalEEMod User's Guide, Appendix E, Large Warehouse and Distribution Center Trip Rates < http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixe.pdf?sfvrsn=2>)

The EIR for this Project uses the overall ITE rate of 1.68 noting that, "[t]he ITE Trip Generation manual is a nationally recognized source for estimating site specific trip generation," but fails to use the ITE truck rate of 0.64 trips/ tsf. (EIR Appendix H1 p. 51) Applying the ITE truck rate to this Project, daily truck trips would total 710 truck trips per day, far in excess of the EIR's disclosed 446 trips. Even applying the lower composite rate found by SCAQMD in its study of the area of 0.50, truck trips would be far in excess of the number disclosed in the EIR: 554 truck trips/day. The EIR should be revised and recirculated using one of these truck trip rates recognized by the regulatory agencies to determine the Project's impacts to air quality, traffic, noise, etc.

Regardless, the EIR finds that the Project would result in significant operational impacts to NOx. Additional mitigation measures requiring cleaner trucks for the Project should be implemented in light of these emissions. As stated by SCAG:

> "The two air pollutants of greatest concern in Southern California are nitrogen oxides (NOx) and fine particulate matter ($PM_{2.5}$). The South Coast Air Basin is classified as an extreme non-attainment area per the federal ambient ozone standard, with a required attainment date of 2023. By approximately 2031, a second, more stringent federal ozone standard must be attained. The federal Clean Air Act requires the region to demonstrate timely attainment of these standards or federal sanctions may result, such as interruption or curtailment of funding for transportation projects. To attain the federal ozone standards, the region will need broad deployment of zero- and near-zero-emission transportation technologies in the 2023 to 2035 timeframe." [emphasis added] (Southern California Association of Governments' (SCAG's) 2012- 2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS))

Moreover, in the Inland Empire, increased distribution warehousing and truck travel to and from the ports of Los Angeles and Long Beach are anticipated to cause "substantial congestion problems due to the increased truck volumes on regional highways." (*Id.*) In light of the fact that this Project and cumulative Projects are anticipated to exacerbate the substantial NOX and PM2.5 problems in the Southern California region, a mitigation measure requiring that all trucks accessing the site meet or exceed 2010 model year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, should be adopted for this Project.

The EIR claims that requiring mobile source emissions to exceed federal, state, and SCAQMD requirements in a single locale such as the City of Moreno Valley are infeasible

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E-17 Refer to Responses E-15 and E-16. The daily truck trip rate of 0.40 (approximately 24.4%) used in the analyses is based on field observation data from six (6) high-cube distribution warehouse facilities operating in Moreno Valley. This rate is more reflective of actual operating conditions in Moreno Valley than the CalEEMod default value.

E-18 Refer to Responses E-15, E-16, and E-17. The analyses presented in the EIR utilize vehicle mix percentages that were substantiated by the collection of vehicle data from six operating warehouses in Moreno Valley in 2013. The vehicle mix analyzed is therefore appropriate and does not warrant revision.

E-19 The first statement is correct. The EIR concludes that the Project's operation will result in a significant and unavoidable impact associated with NOx emissions. All mitigation measures to reduce NOx emissions that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce and that have a proportional nexus to the Project's impact are listed in the Final EIR. The quotation from SCAG's RTP/SCS is noted.

E-20 The Commentator requests that the City of Moreno Valley prohibit trucks from accessing the Project site unless they have engines that meet 2010 model year emissions equivalents. Mandatory compliance with the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 4.5, will ensure that all truck fleet owners in California phase in newer engines over time. The suggestion to expedite the phase-in for trucks that would access the proposed Project's one building is not feasible for the Project Applicant to implement or for the City of Moreno Valley to enforce. These vehicles are otherwise permitted to operate in California and access other properties in the city, region, and state. As such, there is no way for the City of Moreno Valley to feasibly or practically enforce a prohibition on such vehicles from accessing

the Modular Logistics Center property. CEQA Guidelines §15091 provides that mitigation measures must be within the responsibility and jurisdiction of the Lead Agency in order to be implemented. The City of Moreno Valley has no ability to enforce the use of trucks with 2010 emissions equivalent engines by the proposed Project's building tenant or by independent contractors that service the Project site's building. The responsibility to regulate vehicle engines and fuel standards is within the authority of the State and federal government, not local governments. The City of Moreno Valley has no jurisdiction over the regulation of truck engines.

In addition, there is no evidence presented in this comment to show that the imposition of such a prohibition would improve air quality in the South Coast Air Basin (SCAB) faster than is already occurring by mandatory compliance with State and federal engine and fuel requirements. Continued improvement in air quality will occur throughout the SCAB through the ongoing implementation of State, federal, state, and SCAQMD regulations. By January 1, 2012, heavy trucks must have been retrofitted with particulate matter (PM) filters and by January 1, 2023, nearly all trucks and buses must have 2010 model year engines or equivalent. Vehicles that would access the Project site are required by law to comply with the myriad of engine requirements and tailpipe emission regulations enforced at the federal and state levels. As documented in EIR Subsection 4.2-1(D), "Existing Air Quality," air quality is rapidly improving across California due to regulations adopted at the federal, state, and air district levels. As noted in the EIR, continued improvement in air quality is expected to occur through the continued implementation of federal, state, and SCAQMD regulations (EIR pp. 4.2-5 to 4.2-11). A detailed account of regional air quality improvement is contained in EIR Technical Appendix B1.

E-21 Refer to Response E-20. As stated on EIR Page 4.2-20,

> "The application of mobile source emission requirements that exceed federal, state, and SCAQMD mandates in a single locale such as the City of Moreno Valley would not result in the improvement of regional air quality and would not ensure uniform CEQA review throughout the SCAB. For example, if the City applied emission control requirements to one or more development projects more stringently than state and federal laws already mandate, the realities of the southern California economy would render that development project less competitive in attracting tenants. Perspective tenants that will not or cannot meet the heightened requirement would simply occupy another site in the Inland Empire area, resulting in no improvement to the air quality in the SCAB. Thus, the criteria pollutant emissions would simply be shifted to another portion of the SCAB and the SCAB's overall air quality would not be benefited."

The above description is accurate and has no correlation to the information given in EIR Subsection 2.4.1 about SCAG's Goods Movement Strategy. EIR Section 2.4.1 supports the EIR's assertion that there are, and will continue to be, plenty of other existing and planned warehouses in the local area and the SCAG region that would be available to accommodate tenants that will not or cannot meet truck engine requirements that are more strict than State and federal laws require.

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because such action would drive tenants to occupy another site in the SCAB outside the City without these restrictions, thus resulting in the same emissions still originating in the region. Yet the EIR also claims that, based on SCAG projections of land zoned for logistics uses, there is nowhere else for logistics warehousing to develop. There is thus no evidence to support that the EIR's claim that the City's application of higher mobile emission standards would fail to reduce emissions. A mitigation measure restricting the model year of trucks accessing the site should therefore be adopted as it is both feasible and would significantly reduce Project mobile source air quality impacts.

The following additional mitigation is also feasible and should be adopted to reduce the Project's air quality effects:

1. Diesel yard trucks (hostlers, yard goats, etc.) shall be prohibited from use onsite.*
2. The operator/user of any industrial uses shall become SmartWay Partner.*
3. The operator/user of any industrial uses shall meet SmartWay 1.25 ratings.*
4. The operator/user of any industrial uses shall use only freight companies that meet SmartWay 1.25 ratings.*
5. All heavy trucks accessing the site shall conform to 2010 air quality standards or better. Results, including backup data shall be reported to the Planning Department semi-annually.*
6. The developer shall establish a diesel minimization plan (DMP) to implement the regulations of the California Air Resources Board pursuant to a faster schedule than required by law. The DMP shall require the phase in of new or retrofitted trucks so that by 2020 all trucks with GVWR greater than 16,000 lbs that visit the Project site and/or are owned or operated by a Project tenant shall meet or exceed 2010 model year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. The DMP shall also require that all 53-foot or longer box-type trailers are equipped with low-rolling resistance tires by 2015. From the date of Project approval and for six years thereafter, Developer (and/or purchaser/tenant/owner/operator, as required by contract provision) shall maintain evidence of compliance with the DMP. Developer, tenant, or purchaser shall maintain a log including license plates, engine model year, retrofit technology if applicable, and engine family name of all trucks accessing the Project site. 10% of the truck fleets for any industrial uses shall be 2010 model compliant upon Project opening, and increase that percentage at least 20% per year until 100% of trucks operating onsite are 2010 compliant.
7. Install catalytic converters on gasoline-powered equipment.*
8. Utilize electrical equipment for landscape maintenance. Prohibit gas powered equipment for landscape maintenance.*
9. Prohibit idling of trucks for periods exceeding three minutes.*
10. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
11. Plant at least 50 percent low-ozone forming potential (Low-OFP) trees and shrubs, preferably native, drought-resistant species, to meet city/county landscaping requirements.*
12. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that

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E-22.1 At this time, the commercial availability of non-diesel fueled yard trucks is limited; therefore, the City finds the imposition of a requirement to use non-diesel fueled yard trucks infeasible. The City acknowledges, however, that new, innovative technologies are continually under development in the marketplace and at some point in the future, non-diesel fueled equipment may be commercially available and cost-competitive for use by building tenants. With this foresight, Mitigation Measure MM 4.2-14 is included in the EIR to require the building to include conduit and plug-in locations for the charging of electric yard tractors, fork lifts, reach stackers, and sweepers. Also, Mitigation Measure MM 4.2-11 requires the Project's property owner to provide information in the building's lease agreement that informs tenants about the availability of alternatively fueled cargo handling equipment and their benefits to air quality.

E-22.2 SmartWay is a U.S. Environmental Protection Agency (EPA) program that individuals and companies in the transportation industry can voluntarily join and which encourages voluntary achievement of fuel efficiency practices. The Commenter's recommendation to require the future tenant of the proposed building to join a voluntary program in which participation is voluntary would not assure the reduction of mobile source emissions. Regardless, EIR Mitigation Measure 4.2-11 requires the Project's property owner to provide information in the building's lease agreement that informs tenants about the U.S. EPA's Smartway Program and its benefits to air quality.

E-22.3 Refer to Response E-22.2.

E-22.4 Refer to Response E-22.2.

E-22.5 Refer to Responses E-20 and E-21.

E-22.6 Refer to Responses E-20 and E-21.

E-22.7 Regarding on-road vehicles powered by gasoline that access the Project site, the recommendation to use catalytic convertors is not necessary because the same result is achieved by mandatory compliance with State and federal vehicle emission laws. Regarding off-road gasoline powered equipment that might be used by a building tenant or operator on the Project site, there are various exhaust emission technologies available and various State and federal emission regulations that must be complied with to reduce NOx emissions. The City does not have an enforcement mechanism or the staffing resources to monitor and enforce the mechanical composition of every piece of gasoline powered equipment used by a private business, especially given the cyclical nature of equipment used by building tenants.

E-22.8 The Commenter does not establish any nexus or rough proportionality between this recommendation and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the use of landscape maintenance equipment. As of January 1, 2014, the California Building Standards Code (CalGreen) Title 24, Section 5.409, Building Maintenance and Operation, requires new non-residential buildings over 10,000 s.f. to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CalGreen achieves the Commenter's recommendation to reduce energy use conservation associated with building maintenance activities. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws.

E-22.9 Mitigation Measure MM 4.2-6 has been revised in the EIR to change five (5) minutes to three (3) minutes.

already required by city or county ordinance. Consider roadside, sidewalk, and driveway shading.*

13. Concrete, instead of asphalt, shall be used for parking areas. Concrete shall have an initial solar reflectance value of at least .30 as determined in accordance with American Society for Testing and Materials (ASTM) Standards E 1980 or E1918.
14. Orient 75 percent or more of buildings to face either north or south (within 30 degrees of N/S) and plant trees and shrubs that shed their leaves in winter nearer to these structures to maximize shade to the building during the summer and allow sunlight to strike the building during the winter months.*
15. Provide grass paving, tree shading, or reflective surface for unshaded parking lot areas, driveways, or fire lanes that reduce standard black asphalt paving by 10% or more.*
16. Project driveways and parking areas shall be concrete instead of asphalt. Concrete shall have an initial solar reflectance value of at least .30 as determined in accordance with American Society for Testing and Materials (ASTM) Standards E 1980 or E1918.*
17. Provide shuttle service to food service establishments/commercial areas.*
18. Roof area shall be constructed with materials with an initial installation Solar Reflective Index Value of at least 39 or greater than the values specified and set forth in CalGreen 2013 Table A5.106.11.2.2.
19. All hot water heaters installed by Developer shall be powered either through solar cells mounted on the roof of the building, solar water heating, or through other on-site renewable power.*
20. No diesel-powered generator of any type shall be used at any time on the Project site.*
21. The site shall be developed to meet, but not exceed, the number of parking stalls required by local zoning requirements.

(*Would also reduce GHG emissions)

Regarding health risks, the nearest sensitive receptor is a residence located 240 feet northwest of the Project, south of Rivard Road, west of Perris Boulevard. El Potrero Elementary School is also located approximately 0.33-miles northeast of the Project site, and various residences and schools are located to the north of the site.

The EIR professes to disclose *cumulative* health risk impacts of the Project, however there is no basis for the assumption made and impacts may be far greater than disclosed. The public and decision makers would be better served by the absence of this "analysis" than through this misleading material at page 4.2-34 through 4.2-35. For instance, the EIR states the cumulative health risks of the Project and surrounding development at "greater than or equal to 15.67 in one million" at the MEIR. This cumulative figure, however, is simply the Project's 5.67 cancers in one million added to an assumption that cumulative projects would have a cancer risk of ">10". (Table 4.2-11). There is no *evaluation* or analysis of the actual cumulative health risk of cumulative projects. Cumulative health risks should be evaluated based on evaluation or a reasonable assumption based on fact, not this bare statement of ">10."

The assumptions regarding truck travel relied on in the health risk assessment minimize the potentially significant health risk impacts of this Project. The health risk assessment assumes 95 percent of the truck traffic associated with the Project travels to the Project site from the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 5 percent of truck traffic is

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E-22.10 A landscaping plan is a requirement of the Project's proposed Building Plot Plan and is shown on EIR Figure 3-6. Trees are proposed to be planted to shade passenger car parking lots. The planting of trees in the truck court is not required by the City or proposed by the Project to avoid maneuverability issues for trucks. Also, the Commenter does not establish any nexus or rough proportionality between this recommendation and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from parked vehicles in unshaded parking lots.

E-22.11 A landscaping plan is a requirement of the Project's proposed Building Plot Plan and is shown on EIR Figure 3-6. Tree species noted on the plan include Afghan pine, which is a low OFP species.

E-22.12 A landscaping plan is a requirement of the Project's proposed Building Plot Plan and is shown on EIR Figure 3-6. The City of Moreno Valley has verified that the proposed landscaping plan meets the water-use efficiency requirements stated in the City of Moreno Valley Municipal Code Chapter 9.17.

E-22.13 The Project proposes the use of concrete for truck drive isle and truck courts. Although the Commenter does not establish any nexus or rough proportionality between this recommendation and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the composition of hard surfaces, Mitigation Measure MM 4.2-16 has been added to the Final EIR to require truck drive isles and truck courts to be composed of concrete. The use of concrete will not be required for passenger car parking lots.

E-22.14 One building is proposed, with the longest building faces oriented to the north and to the south. Landscaping is proposed to occur along public street frontages, in the proposed detention basin, in the passenger car parking areas, and at the pedestrian entrances to the building's office areas. Trees would be planted at the west and east façades of the building, which is the most effective placement locations for shading a building based on sun angle.

E-22.15 The Commenter does not establish any nexus or rough proportionality between these recommendations and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the composition or shading of parking lot surfaces. Nonetheless, as shown on EIR Figure 3-6, landscaping would occur along public street frontages, in the detention basins, in the passenger car parking areas, and at the pedestrian entrances to the building's office areas. The passenger car parking lots would be shaded by landscaping. The planting of trees in the truck courts is not feasible because planting pockets would create maneuverability issues and hazards for trucks. Additionally, adding landscape pockets in truck courts is not water-use efficient and would increase the Project's demand for irrigation water, which is reliant on fossil fuels to produce and convey. The use of grass paving in the truck courts is not feasible because the wear and tear on grass surfaces by trucks would render them ineffective in providing air quality benefits. Also, as suggested in Comment E.22-13, the Commenter suggested that the parking areas be surfaced with concrete, not grass. Refer to Response E.22.13 regarding concrete surfaces.

E-22.16 Refer to Response E.22.13.

E-22.17 The Commenter's recommendation to require that private building tenants shuttle their employees to lunch and commercial establishments (presumably to keep workers from traveling off-site in

private automobiles to eating and shopping establishments) is not practical, nor would such a requirement be feasible for the City to monitor or enforce. In addition, although interior tenant improvements are not proposed at this time, nearly all modern warehouses in the City of Moreno Valley include a lunch/break room with kitchen conveniences for use by employees.

E-22.18 The Commenter does not establish any nexus or rough proportionality between this recommendation and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the composition of building roof materials. The Project is required to comply with the California Green Building Standards Code (CALGreen), Title 24. Cycle updates to the Title 24 have undergone substantial changes in the last 10 years. The California Energy Commission (CEC) has increased the overall stringency of the standards by 45 to 50 percent since 2000. Mandatory compliance with CALGreen will achieve energy use conservation and assist in lowering the heat island effect. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws. Also refer to Response E-33.6.

E-22.19 The Commenter does not establish any nexus or rough proportionality between these recommendations and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the use of hot water in the building. Mitigation Measure MM 4.2-9 requires all appliances and fixtures to be Energy Star rated. In addition, the Project is required to comply with the California Green Building Standards Code (CALGreen), Title 24. Cycle updates to the Title 24 have undergone substantial changes in the last 10 years. The California Energy Commission (CEC) has increased the overall stringency of the standards by 45 to 50 percent since 2000. CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to

comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation. Compliance with California State law is mandatory and CEQA does not require mitigation measures to be duplicative of State laws.

E-22.20 Emergency generators are typically needed as part of the infrastructure system for large warehouse buildings such as the proposed Project. These generators service the building with power when there is a loss of electricity. Electric powered generators would thus defeat the purpose of having a generator, because it would not operate if there was an electrical power disruption. Diesel power generators are by far the most reliable in an emergency situation, especially to service large buildings. According to information available from generator manufacturers that service large commercial and industrial standby applications, power density as well as capital cost advantages favor diesel for standby power, and diesel is by far the norm in the generator market. However, the City recognizes that clean burning gaseous fueled (natural gas fueled) generators and generators bi-fueled by diesel and natural gas are evolving in their technology and becoming more powerful and reliable. Regardless of fuel type, both types of generators emit carbon monoxide (CO2). Also, although diesel generators producing 200 kilowatts of power emit about 14.9% more CO2 than gas generators, diesel engines burn fuel 23% more efficiently than a similar-sized gaseous-fueled generator. For these reasons, and that fact that emissions from generators would only occur during short periods during loss of electrical power, the City finds that there would not be a substantial air quality benefit to prohibiting diesel fueled generators as the emergency back-up system for the proposed building.

E-22.21 As discussed in EIR Subsection 3.3.1, the Project would supply the number of parking spaces required by the City of Moreno Valley Municipal Code. The Commenter does not establish any nexus or rough proportionality between the number of available parking spaces and the Project's NOx air quality impact, which is primarily caused by on-road mobile sources and not from the existence of parking spaces.

E-23 Comment noted. For analysis purposes a receptor was placed at the residence 240 feet northwest of the Project site south of Rivard Road and west of Perris Boulevard. Receptors have also been placed at El Potrero Elementary school and the various residences and schools located north of the site. The results of the air quality analysis indicate that there are less than significant impacts at these locations.

E-24 CEQA requires that two questions be answered in the context of a cumulative impact analysis. First – considering past, present, and reasonably foreseeable projects, is there a significant cumulative impact? Second – if yes, would the proposed Project's contribution to the cumulative impact be cumulatively considerable? If the answer to the second question is yes, then the CEQA lead agency is required to consider mitigation for the Project's considerable contribution to the cumulative impact. If the Project's contribution is less than considerable, then the Project's impact is less than significant and mitigation is not required.

The EIR accurately discloses the cumulative health risk of the Project combined with other existing, planned, and reasonably foreseeable projects. EIR Table 4.2-11, "Cumulative Carcinogenic Heath Risk," discloses that the cumulative carcinogenic risk that a person experiences from breathing the air is 587 persons in one million under existing conditions. Table 4.2-11 discloses that the risk to nearby sensitive receptors will be increased by a maximum of 5.67 as a result of the Project and by greater than 10 persons per million with the addition of cumulative development,

for a total increase of greater than 15.67. This comment faults the EIR for not precisely quantifying the increase (how much greater than 15.67). However, a precise quantification is not required by CEQA because enough data is presented to make a definitive conclusion that although the overall cumulative impact is significant (greater than 597 persons per million compared against a significance threshold of 10), the Project's contribution to the health risk is less than cumulatively considerable (less than 10 persons per million). The EIR correctly concludes that based on the significance criterion of 10 in one million incremental cancer risk cases (for a single project's impacts to be considered cumulatively considerable as established by the SCAQMD) the proposed Project would have a less than significant cumulatively considerable impact. As such, mitigation is not required.

To reiterate the trend of air quality improvement and, specifically, cancer risk decline in the South Coast Air Basin, based on information available from CARB, overall cancer risk throughout the Air Basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, the State of California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant. Subsequent to this determination, the SCAQMD initiated a comprehensive urban toxic air pollution study, called MATES-II (for Multiple Air Toxics Exposure Study). MATES-II showed that average cancer risk in the SCAB ranged from 1,100 in a million to 1,750 in a million, with an average regional risk of about 1,400 in one million. Moreover, diesel particulate matter (DPM) accounted for more than 70 percent of the cancer risk. In 2008 the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimated that the average excess cancer risk level from exposure to toxic air contaminates dropped from 1,400 to approximately 1,200 in one million basin-wide. Since that time, annual DPM concentrations have been steadily declining (refer to EIR Technical Appendix B2, Section 2.8 "Regional Air Quality Improvement"). Additional reductions in diesel risk exposure are anticipated to result from ARB's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and

Vehicles." The key elements of the Plan are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, and to lower the sulfur content of diesel fuel to protect new, and very effective, advanced technology emission control devices on diesel engines. When fully implemented, the Diesel Risk Reduction Plan is projected by the ARB to substantially reduce emissions from both old and new diesel-fueled motor vehicles and from stationary sources that burn diesel fuel. The goal of the Diesel Risk Reduction Plan is to reduce concentrations by 75 percent by 2010 and 85 percent by 2020.

E-25 Refer to Response E-26. The direction of truck travel analyzed in the EIR is accurately described in this comment.

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from the local vicinity of Moreno Valley (5 percent south from Perris Boulevard). 90 percent of the truck traffic associated with the Project travels from the Project site to the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 10 percent of truck traffic serves the local vicinity of Moreno Valley. (EIR p. 4.2-29)

In fact, the Project is located on Perris Boulevard, a designated truck route. (*See,* < http://www.moreno-valley.ca.us/city_hall/departments/pub-works/transportation/pdfs/truck-routes.pdf>, and Moreno Valley Ordinance No. 836.) Trucks may travel north on Perris Boulevard to access I-215 via Cactus Ave. or Alessandro Blvd; or to access SR-60. As the majority of trucks are expected to travel north and then west to the ports, it is absurd to assume that 90-95% of truck travel will be to and from Harley Knox Boulevard to the south.

If traffic heads north on Perris Boulevard it will be passing by countless residential sensitive receptors. The impacts of these trips should be disclosed in the EIR, particularly in light of the health risks impacts to children. (*See, e.g.* Attachments 3-5, below.) Mitigation should be incorporated which informs drivers that access shall be from Harley Knox Boulevard. In addition, mitigation should be adopted which physically prevents outbound trucks from turning north on Perris Boulevard from the site; and inbound trucks from turning left from Perris Boulevard into the site; through the use of curbs or other physical impediments.

GHGs

The EIR uses an improper baseline for determining Project GHG emissions and reductions for purposes of evaluating compliance with AB 32. The EIR states, "A summary of the proposed Project's estimated annual operational GHG emissions, including the amortized construction emissions, is provided in Table 4.6-5, Total Annual Greenhouse Gas Emissions (BAU)." (EIR p. 4.6-24) The EIR evaluates BAU emissions at 18,322.72 MTCO2e per year, and whether or not the Project would comply with AB32 by reducing annual GHG emissions by 28.5% or greater as compared to the BAU scenario. The EIR concludes a significant impact would occur.

The use of this BAU estimate is improper where a portion of the site is currently developed and in operation. The Court in *Friends of Oroville v. City of Oroville* (2013) 219 Cal. App. 4th 832, 842-843 struck down the same methodology, finding the City of Oroville misapplied the Assembly Bill 32 threshold-of-significance standard by failing to calculate the GHG emissions for the existing use. This is because, "The relevant question to be addressed in the EIR is not the relative amount of GHG emitted by the Project when compared with California's GHG emissions, but whether the Project's GHG emissions should be considered significant in light of the threshold-of-significance standard of Assembly Bill 32, which seeks to cut about 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from 2010 levels." (*Id.*) Where there is an existing use onsite, the BAU emissions are calculations of existing emissions of the existing use onsite, not the proposed project with and without mitigation. (*Id.*)

Applying the same reasoning here, the GHG emissions of the Project should be compared to the emissions of the existing uses onsite to determine whether the Project would in fact

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E-26 As shown on EIR Figure 4.8-13, 95% of the Project's incoming truck traffic is expected to arrive from I-215 via Harley Knox Boulevard and 90% of the Project's outgoing truck traffic is expected to circulate south to Harley Knox Boulevard to access I-215. This is the most direct route to and from the Project site to the regional freeway system (approximately 2.0 miles). Trucks would be deterred from using Perris Boulevard north of the Project site due to the multiple traffic lights and 4.7-mile distance encountered to access the regional freeway system from that direction. Also, Mitigation Measure 4.2-15 has been added to the Final EIR to require the installation of signs at Project exit driveways that direct truck traffic to turn south on Perris Boulevard to Harley Knox Boulevard, a designated truck route. The vehicle distribution pattern analyzed in the EIR is based on reasonable assumptions and the health risk assessment from truck travel routes, therefore, does not warrant revision.

E-27 Refer to Response E-26.

E-28 In addition to the business as usual (BAU) analysis, EIR Subsection 4.6 includes a detailed, quantified analysis of the Project's GHG emissions and compares that numeric value to the SCAQMD's draft screening threshold of 10,000 MTCO2, which is not adopted but was proposed by SCAQMD staff as a numerical screening threshold for stationary source where the SCAQMD serves as lead agency. The application of SCAQMD's draft screening threshold for GHG emissions to a development proposal like the proposed Project, where GHG emissions would result primarily from mobile sources rather than stationary sources, presents a highly conservative comparison of Project emission levels to a numerical value that the SCAQMD has suggested for screening projects to determine if a more detailed analysis should be completed to evaluate impacts. Also, EIR Subsection 4.6 includes a numeric calculation of the Project's GHG emissions and compares that numeric value to the SCAQMD GHG CEQA Significance Threshold Working

Group's project-level efficiency target of 4.8 MTCO2e per service population (for the Year 2020). Regardless of whether the BAU significance threshold is used or the SCAQMD screening threshold to determine significance, the proposed Project would result in a significant GHG emissions impact. The conclusion of significance and the magnitude of the impact are appropriately disclosed in the EIR.

E-29 Refer to Response E-28.

E-30 Refer to Response E-28.

achieve the reductions sought by AB 32. The GHG evaluation should be modified to evaluate and disclose the correct baseline of existing GHG emissions from current onsite uses.

Nevertheless, the EIR properly concludes the Project would cause a significant and unmitigated impact to GHGs.

The EIR fails to recommend adoption of all feasible mitigation for the Project. MM 4.6-1 provides: "Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources." It is feasible to require electricity for a greater portion of the building in the range of an approximately 100kW AC photovoltaic system. Furthermore, it is feasible to require both the installation of solar panels and purchase of green energy from the utility company.

The following additional mitigation should be incorporated to reduce impact to GHG emissions:

1. Provide preferential parking locations at 10% of parking spaces for clean fueled vehicles (EV, CNG, etc.)
2. All operators on the Project site shall provide electrical vehicle ("EV") and compressed natural gas ("CNG") vehicles in vehicle fleets.
3. Implement parking fee for single-occupancy vehicle commuters.
4. Charge reduced or no parking fee for EVs and CNG vehicles.
5. Install a minimum of five EV charging stations onsite, at least three of which are DC Fastcharge/ Quickcharge, with the remainder meeting at least EVSE Level 2 standards.
6. All buildings shall be constructed to LEED Platinum standards.
7. Require the installation of additional solar PV cells as follows: if a high energy user occupies the building and its energy consumption is shown or predicted to be 20% or more above energy demand described in the EIR (3,574,906 kilowatts hours of electricity per year (kWh/yr)), require a respective increase in PV installation up to a 100% increase (i.e. doubling of the initial PV system.)
8. Require operators/users to implement a parking cash-out program for non-driving employees.
9. Require each user to establish a carpool/vanpool program.
10. Provide subsidies or incentives to employees who use public transit or carpooling, including preferential parking.
11. Provide direct, safe, attractive pedestrian access from project to transit stops and adjacent development.
12. Provide direct safe, direct bicycle access to adjacent bicycle routes.
13. Provide showers and lockers for employees bicycling or walking to work.
14. Design and locate buildings to facilitate transit access, e.g., locate building entrances near transit stops, eliminate building setbacks, etc.
15. Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc. if they do not already exist at the bus stop on the site's western boundary with Perris Boulevard.
16. Provide a display case or kiosk displaying transportation information in a prominent area accessible to employees or residents.
17. Provide shuttle service to transit stations/multimodal centers.

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E-31 Refer to Response E-28. As stated by the Commenter, the EIR's conclusion is proper.

E-32 As shown in EIR Table 4.2-8, energy source air emissions associated with the Project are calculated to be very low and constitute a very low percentage of the Project's total air emissions. As a percentage of the Project's NOx emissions, energy sources account for less than two-tenths of one percent (0.19%) of the Project's total NOx impact. NOx is the only operational-source air pollutant that would be emitted by the Project's operational activities and exceed the SCAQMD's daily significance threshold. Emissions of NOx have little association to electrical energy production and consumption. Nonetheless, as a condition of the Project's approval, the City of Moreno Valley will require that the office areas of the proposed building are supplied with energy from roof-mounted photovoltaic panels or from an energy purveyor that secures its power from alternative sources. In addition, CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation.

E-33.1 This Project like all new developments in the State of California are required to comply with the California Green Building Standard Code (also known as CALGreen, 2013). CALGreen Section 5.106, Site Development, requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles.

E-33.2 There is no way for the City of Moreno Valley to feasibly or practically enforce a requirement that electric and natural gas powered vehicles be part of the Project operator's vehicle fleet

or by independent contractors that service the Project site's building. Also refer to Response C-13, first bullet.

E-33.3 There is no enforceable mechanism available to the City to require the imposition of a punitive parking fee on workers and visitors to the Project site that arrive in a single occupant vehicle. Additionally, the commenter does not provide any information to demonstrate that such a punitive measure would result in an improvement to the global climate. The likely result would be a fee payment to park, which would not result in reduced GHG emissions or have any benefit on regional air quality. Additionally, pursuant to Health and Safety Code Section 40717.9, no public agency shall require an employer to implement an employee trip reduction program unless the program is required by federal law. Accordingly, pursuant to Health and Safety Code Section 40717.9, the City is not authorized to effectively mandate that the tenant/owner implement mandatory employee carpooling. EIR Mitigation Measure MM 4.2-11 requires the Project's building lease agreement to inform tenants about the benefits of implementing a voluntary carpool or rideshare program for employees.

E-33.4 Refer to Response E-33.3. The Project does not propose to impose a parking fee for vehicles to park in its parking lot.

E-33.5 EIR Subsection 3.3.1 has been revised to disclose that the Project proposes to install at least two quick-charge stations for electric passenger cars.

E-33.6 Leadership in Energy & Environmental Design (LEED) is a national program of the United States Green Building Council (USGBC), wherein the USGBC can supply a third-party verification of "green" buildings at various levels based on their own rating system. In January 2011, California adopted the first statewide mandatory

green building code in the country, known as CALGreen. The California Code of Regulations (CCR), Title 24, also known as the California Green Building Standards Code, or CALGreen Code, sets forth building standards for all construction in the State of California. The 2014 update provides more stringent building standards to conserve energy in every community across the State. All buildings constructed in California inherently incorporate some of the features that qualify for LEED points in the USGBC's rating system. Nonetheless, the Project's building is required by the City's Conditions of Approval to be designed to achieve LEED Silver Certification under the current Core & Shell Standards set forth by the U.S. Green Building Council.

E-33.7 As a condition of the Project's approval, the City of Moreno Valley will require that the office areas of the proposed building are supplied with energy from roof-mounted photovoltaic panels or from an energy purveyor that secures its power from alternative sources. Further, the City's Conditions of Approval require the building's roof to be capable of accommodating a larger photovoltaic (PV) array should a larger array be desirable in the future, taking into consideration physical limitations imposed by shadows, setbacks, rooftop equipment, skylights, and other obstructions and physical limitations, as well as fire access paths, building and fire code requirements, legal limitations, and limitations imposed by Moreno Valley Electric Utility (MVU). In addition, CALGreen Title 24, Section 5.409, "Building Maintenance and Operation," requires new non-residential buildings over 10,000 square feet in size to comply with commissioning and reporting requirements and conduct functional performance testing for energy efficiency. Mandatory compliance with CALGreen will achieve energy use conservation associated with building operation.

E-33.8 This recommendation is not feasible. There is no enforceable mechanism available to the City to require that private building tenants pay or otherwise incentivize their employees for abstaining from arriving to work by motorized vehicle.

E-33.9 Pursuant to the California Health and Safety Code Section 40717.9, no public agency shall require an employer to implement an employee trip reduction program unless the program is required by federal law. Accordingly, pursuant to Health and Safety Code Section 40717.9, the City is not authorized to effectively mandate that the tenant/owner implement mandatory employee carpooling. EIR Mitigation Measure MM 4.2-12 requires the Project's building lease agreement to inform tenants about the benefits of implementing a voluntary carpool or rideshare program for employees.

E-33.10 Refer to Response E.33-9.

E-33.11 The Project site is located adjacent to public streets that have an established sidewalk system and there is a direct pedestrian connection to an existing transit stop. As indicated in EIR Subsection 2.5.9, the Riverside Transit Agency (RTA) operates bus services along Perris Boulevard, abutting the Project site, via Route 19. An existing bus stop is located at the approximate mid-point of the Project site's western boundary with Perris Boulevard.

E-33.12 The Project site is located adjacent to public streets and the City's bicycle lane network. Also, the proposed Project would provide bicycle parking in compliance with the City of Moreno Valley Municipal Code Section 9.11, which requires bicycle parking to be provided for 5% of required vehicle parking.

E-33.13 Interior tenant improvements are not under consideration by the City at this time as part of the Project's proposed Building Plot Plan. However, nearly all modern warehouses in the City of Moreno Valley include a locker room with showers for use by employees. The Commenter supplies no evidence, and the City has uncovered no evidence in professional literature, to indicate

that the provision of on-site showers and lockers in an industrial warehouse in a contextual setting similar to the proposed Project's would incentivize employees to bike or walk to work and reduce GHG emissions associated with worker commuting by motorized vehicle. The City finds no proportional nexus to the Project's GHG impact to require the imposition of this recommendation as a requirement.

E-33.14 Refer to Response E.33-9 and E.33-11.

E-33.15 Street furniture does not currently exist at the bus stop located adjacent to the Project site at Perris Boulevard, not does street furniture exist at many other RTA bus stops. The Commenter supplies no evidence, and the City has uncovered no evidence in professional literature, to indicate that the provision of street furniture at a transit stop in a contextual setting similar to the proposed Project's would incentivize employees to take public transit to work and reduce GHG emissions associated with worker commuting by personal motorized vehicle. The City finds no proportional nexus to the Project's GHG impact to require the imposition of this recommendation as a requirement.

E-33.16 Mitigation Measure MM 4.2-12 requires the Project's property owner to include information in the building's lease agreement about the locations of nearby Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program. MM 4.2-12 has been revised in the Final EIR to encourage building tenants to display such transportation information to workers. However, the Commenter supplies no evidence, and the City has uncovered no evidence in professional literature, to indicate that the provision of displayed information about transportation services would incentivize employees to take public transit to work and reduce GHG emissions associated with worker commuting by personal motorized vehicle. The City finds no proportional nexus to the Project's GHG impact and this recommendation.

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18. Install an ozone destruction catalyst on all air conditioning systems.
19. Purchase only green/ renewable power from the electric company.
20. Install solar water heating systems to generate all hot water requirements.
21. The Project is required to participate in any existing Transportation Management Association (TMA). The TMA will coordinate with other TMAs within the City to encourage and coordinate carpooling among building occupants. If no TMA exists, the Project shall establish a TMA.

Hydrology/Water Quality

The EIR does not evaluate impacts to Hydrology/ Water Quality as a potentially significant Project impact. This decision to not evaluate such potential effects in detail is not supported.

The Perris Valley Storm Drainage Channel is located approximately 0.3-mile north of the Project site. The intervening property between the Project and Channel is currently under construction for a large logistics warehouse building. Furthermore, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1430G, dated August 28, 2008, the entire Project site is prone to some degree of flooding from the Perris Valley Storm Drain Channel during rare storm events. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one (1) foot or drainage areas less than one (1) square mile.

The EIR finds no significant impacts from flooding or drainage from the Project because, the Project is required to be constructed in accordance with all applicable building code requirements. This finding and supporting facts fail to take into account potential cumulative impacts of both this site and the intervening property being developed so that this flood zone will be unavailable to the Channel in case of flood events, and the potential impacts (both individual and cumulative) off-site in terms of flooding, flows, and flow rates. For example, with the loss of this flood area homes on the east side of the channel may experience higher rates or quantities of flooding. The EIR should evaluate these potentially significant impacts.

Land Use/Planning

The EIR likewise states that Land Use and Planning impacts will be less than significant, and does not evaluate such effects in detail in the EIR. While accurate that the Project is consistent with its General Plan and MVIAP land use designations, the EIR does not analyze the Project's consistency with the General Plan or with its policies as a whole.

For example, the Project does not comply with the following:

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E-33.17 There is no enforceable mechanism available to the City to require private building tenants to shuttle their employees to transit stops. Further, the nearest transit stop is located adjacent to the Project site and within walking distance.

E-33.18 As concluded by the EIR, the Project's GHG impact is approximately 90% associated with emissions from mobile vehicles and not from other building operations such as electrical use including but not limited to HVAC units. In a typical logistics warehouse building, the office areas of the building are climate controlled, but the warehouse is not climate controlled. The Project's office area is proposed to include only 20,000 square feet of floor space (only 1.8% of the building). Therefore, operation of HVAC equipment would account for less than one percent of the Project's total GHG emissions. The installation of an ozone destruction catalyst on the building's air conditioning system would reduce a portion of the one percent which is not a substantial reduction. As such, the Commenter does not establish any nexus or rough proportionality between this recommendation and the Project's GHG impact.

As shown in Appendix B4 to the Final EIR, should a large portion of the proposed building accommodate cold storage, the percentage of the building's GHG emissions associated with energy use would increase. Based on 400,000 s.f. of refrigerated space, approximately 27% of the Project's GHG emissions would result from energy use (as opposed to 5.7% for dry storage). However, there are many ways to reduce energy use and associated GHG emissions from cooling system equipment other than through the installation of an ozone destruction catalyst. The mechanical specifications of evaporators and condensers, motors, temperature control systems, cold space door design, and other features have a measurable effect on energy efficiency. As such, Mitigation Measure MM 4.6-6 has been added to the Final EIR to require that, prior to the approval of permits and approvals that would permit cold storage in the building, the Project Applicant shall provide information on the cooling system design to demonstrate that it is energy efficient.

E-33.19 Refer to Response E.33-7.

E-33.20 Refer to Response E.22-19.

E-33.21 Refer to Response E.33-3.

E-34 The issue area of hydrology/water quality is evaluated in EIR Subsection 5.4, "Effects Found Not to be Significant as Part of the Initial Study Process." As presented in this subsection, there is substantial evidence provided in the Initial Study (see EIR Appendix A) and the project's Water Quality Management Plan (EIR Appendix E2) to conclude that the Project's potential impacts in this subject area would be clearly less than significant, and that mitigation measures are not required.

The Project would not substantially alter the existing drainage patterns of the property. Upon implementation of the proposed Project, water runoff would flow into a proposed on-site detention basin, which would attenuate the rate and volume of storm water discharge to be similar to the rate and volume that are discharged from the site under existing conditions. As a result, implementation of the proposed Project would not increase the potential for flooding on-site or off-site and would not contribute additional water rates or volumes to off-site storm water drainage facilities including the Perris Valley Channel. In addition, the Project's storm water drainage plan is subject to review and approval by the Riverside County Flood Control and Water Conservation District (RCFCWCD) to ensure that the proposed improvements are consistent with the RCFCWCD's master drainage plan.

E-35 The Project site would not place structures within a 100 year floodplain. Any potential impacts associated with flooding would be clearly less than significant because the significance criterion used by CEQA Guidelines Appendix G and the City of Moreno

Valley's Initial Study Checklist cite the 100-year floodplain as the benchmark for significant impacts associated with flooding. The other statements in this comment are correct. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods and the Project is required to be constructed in accordance with all applicable building code requirements, which would preclude any significant injuries or the loss of life or property due to the rare chance of flooding. Accordingly, impacts are less than significant.

E-36 This comment is far reaching and is unsupported by any scientific evidence or sound engineering practice. In the event that the Perris Valley Channel were to crest, there would be no greater chance for water to inundate residential areas than could occur under existing conditions. A majority of the Project site is already developed with industrial uses and does not serve as a capture area for potential flood waters from the Perris Valley Channel. Redevelopment of the property as proposed by the Project would have no potential to change the flooding potential of residential areas.

E-37 Under CEQA, a land use policy inconsistency is only germane if the inconsistency manifests into a physical effect on the environment. In this case, the Project is consistent with the City of Moreno Valley General Plan and all potential environmental effects of the Project are fully analyzed in the EIR. Refer to Responses E-38 and E-39.

E-38 This policy relates to the Moreno Valley area as a whole and not specifically the Project site. In addition, EIR Subsection 2.4.1 provides a discussion about SCAG's Goods Movement Strategy and the demand for distribution warehouse space to support the regional economy. As such the Project complies with Objective 2.5.

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- **Objective 2.5** Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors; and which meets the service needs of local businesses.

  The Project would develop additional distribution in lieu of existing, more diverse industrial uses.

- **Policy 2.5.4** Design industrial developments to discourage access through residential areas.

  Nothing presently discourages or prohibits access through industrial areas north of the site.

  Impacts to land use/ planning should be evaluated in depth in the EIR.

Noise

If no mitigation is put in place preventing truck traffic from traveling north from the site, traffic noise predictions should be remodeled to account for reasonable truck traffic travelling northbound on Perris Blvd.

The EIR adopts a quantitative threshold for significant noise increases above ambient noise as follows:

"For the purpose of this analysis, a "readily perceptible" 5 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are below 60 dBA and the with-Project noise levels exceeds the City's noise standard for the adjacent land use. A 3 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are between 60 and 65 dBA and the with- Project noise levels exceeds the City's noise standard for the adjacent land use. When the without- Project noise levels already exceed 65 dBA at a sensitive noise receptor location, any increase of 1.5 dBA or greater as a result of Project operations is considered a cumulatively considerable contribution to the community noise environment." (EIR p. 4.7-8)

Traffic noise would increase several roadways segments above these parameters (up to 10.9dBA CNEL above existing conditions), yet when it comes to applying these thresholds the EIR finds impacts to be less-than-significant. (*See,* EIR 4.7-12 through 4.7-13) This conclusion is unsupported in light of the significance criteria adopted. Traffic noise impacts should be found significant and all feasible mitigation adopted to reduce such effects.

While the EIR purports to evaluate cumulative traffic noise impacts, it does not in fact quantify the effects of cumulative projects in the area plus existing/future traffic plus the project. (EIR 4.7-17 through 4.7-18) The expected cumulative traffic noise should be analyzed in the EIR

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E-39 The Project complies with Policy 2.5.4. As shown on EIR Figure 4.8-13, 95% of the Project's incoming truck traffic is expected to arrive from I-215 via Harley Knox Boulevard and 90% of the Project's outgoing truck traffic is expected to circulate south to Harley Knox Boulevard to access I-215. This is the most direct route to and from the Project site to the regional freeway system (approximately 2.0 miles). Trucks would be deterred from using Perris Boulevard north of the Project site due to the multiple traffic lights and 4.7-mile distance encountered to access the regional freeway system from that direction. Also, Mitigation Measure 4.2-15 has been added to the Final EIR to require the installation of signs at Project exit driveways that direct truck traffic to turn south on Perris Boulevard to Harley Knox Boulevard, a designated truck route. Further, trucks are required to use designated truck routes and would thus not travel through residential areas.

E-40 Refer to Response E-39. Mitigation Measure 4.2-15 has been added to the Final EIR to require the installation of signs at Project exit driveways that direct truck traffic to turn south on Perris Boulevard to Harley Knox Boulevard, a designated truck route.

E-41 Comment noted.

E-42 The EIR's significance conclusions are accurate. As shown in EIR Table 4.7-11, under Existing (Year 2013) conditions, Project-related traffic would contribute over 5.0 dBA CNEL along three (3) study-area roadway segments where the without-Project noise levels are below 60.0 dBA CNEL. However, none of these roadway segments are adjacent to noise-sensitive land uses. Therefore, the Project would result in a less-than-significant impact to sensitive receptors and noise levels would not exceed applicable standards.

E-43 CEQA Guidelines §15130(a) states that when the lead agency determines that a project's incremental effect is not cumulatively considerable, the lead agency need not consider the effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. As explained in EIR Subsection 4.7.3 (EIR Pages 4.7-10 through 4.7-13) and EIR Subsection 4.7.4 (EIR Page 4.7-17), the Project's contribution to cumulative transportation-related noise levels would be less than cumulatively considerable based on the significance thresholds cited in the EIR. No sensitive noise receptors are located adjacent to or close enough to the roadway segments that would be impacted by Project-related transportation noise levels above a "barely perceptible" noise levels. These include: Kitching Street north and south of Modular Way, Modular Way east of Perris Boulevard, Modular Way east of Kitching Street, and Globe Street, west of Kitching Street. Because no noise-sensitive receptors would be affected, impacts would be less than significant. The EIR makes an accurate conclusion that the Project's contribution to the cumulative noise environment is less than significant and less than cumulatively considerable and mitigation is not required, regardless of the noise level posed by other cumulative development projects, because no sensitive receptors would be significantly and adversely impacted.

E-44 As shown on EIR Table 4.7-10, Project-related traffic would increase existing noise levels on the roadway segment of Kitching Street south of Modular Way by 10.9 dBA in the existing plus Project condition and the Year 2018 condition. There are no noise-sensitive land uses adjacent to this roadway segment, but even if there were, the with-Project noise level would be 63.0 dBA CNEL, which is an acceptable exterior noise level for noise-sensitive uses. The Project's impact is clearly less than significant.

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before making any determination that the Project's 10.9 dBA increase to that noise level would be less-than- significant.

Mitigation must be adopted for the Project's significant traffic noise impacts. Such mitigation may include:

1. Where technically feasible, utilize only electrical construction equipment.
2. Require signs be posted at Project exits directing trucks to truck routes to avoid passing sensitive receptors.
3. Require the use of rubberized asphalt for construction of all roadways and parking areas, and on Heacock near the Project site.
4. Maintain quality pavement conditions that are free of bumps, pot holes, pavement cracks, differential settlement in bridge approaches or individual pavement slabs, etc.
5. Require resurfacing of roads on- and off-site as needed.

Traffic

Appendix H1- Traffic Impact Analysis states that trip distribution is determined by "probable destinations, directions, or traffic routes that will be utilized by Project traffic." (DEIR Appendix H1, p. 52) Project truck trip distribution is completely unsupported by the probable destination of trucks, directions, and truck routes. The EIR assumes that 50% of all delivery trips will travel to and from the Project and the Port of Los Angeles/Long Beach, 10% go East on the State Route 60, 20% go to San Diego, 10% go to the Inland Empire, 5% go to Perris destinations and the remaining 5% to Moreno Valley destinations.

Hence most truck traffic would be traveling north from the site; yet the trip distribution has 90-95% of truck traffic traveling to and from the *south* to access I-215 at Harley Knox Blvd. There is no reason for finding almost all trucks would prefer to travel to/ from the south in lieu of taking Perris Blvd., a designated truck route, northbound to access I-215 (at Cactus Ave. or Alessandro Blvd.) or SR-60. Intersection and roadway impacts should be re-evaluated accounting for a more reasonable number of northbound trips on Perris Blvd and evaluating Project impacts on intersections/ roadways to the north of the site.

In addition, freeway traffic counts are far lower than those provided by Caltrans. (*See,* http://traffic-counts.dot.ca.gov/2013all/>.) For instance, SR-91 at McKinley St. is stated to have an existing peak volume of 5,974 (pm) EB and 4,542 (pm) WB, and LOS C. Caltrans has the same location at existing two-way volume of up to 15,200, so one way peak volume of approximately 7,600. (http://traffic-counts.dot.ca.gov/2013all/Route87-91.html [SR-91]; *See also,* http://traffic-counts.dot.ca.gov/2013all/Route60-70.html [SR-60]; http://traffic-counts.dot.ca.gov/2013all/Route198-220.html [I-215]) These discrepancies should be resolved through re-evaluating freeway impacts using the counts provided by Caltrans.

Mitigation should be adopted requiring that the Project pay into a transportation mitigation fee program for impacts to the state highway system should a fee program be adopted in the future between the City and Caltrans.

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E-45 Mitigation is not required for the Project-related transportation noise, because the impact is less than significant as substantiated in EIR Subsection 4.7. Nonetheless, the City has considered the Commenter's suggestions in Responses E-44.1 through E.44-5.

E-45.1 This recommendation is already included in the EIR as Mitigation Measure MM 4.2-5(g).

E-45.2 Refer to Response E-40 and Mitigation Measure MM 4.2-15 that has been added to the Final EIR.

E-45.3 Refer to Comment E-22.13, wherein the Commenter requests that parking areas be constructed of concrete, not rubberized asphalt this comment suggests. The City has accepted the recommendation made in Comment E-22.13 and Mitigation Measure MM 4.2-16 has been added to the Final EIR to require truck drive isles and truck courts to be composed of concrete. In addition, and as documented in EIR Subsection 4.7, Heacock Street is not located near the Project site. Heacock Street is located approximately one mile to the west. Based on the distribution pattern expected for Project-related traffic, a nominal number of Project-related vehicle trips would use Heacock Street. There is no proportional nexus between the Project's vehicular-related noise and the commendation to use a rubberized surface coating on Heacock Street.

E-45.4 The City of Moreno Valley's Maintenance and Operations Division of the Department of Public Works maintains the City's public street system, including pothole repair, crack sealing, shoulder repair, and reconstruction as needed when repairs are warranted. Maintenance of public streets is beyond the scope of the proposed Project. Maintenance of vehicle use areas on the Project site are the responsibility of the private property owner. The City does

not have an enforcement mechanism or the staffing resources to monitor and enforce the maintenance of pavement conditions on private properties used for private business operations. CEQA Guidelines §15091 provides that mitigation measures must be within the responsibility and jurisdiction of the lead agency and have a proportional nexus to the Project's impact on the environment. The Commenter has not established a nexus between the maintenance of on-site pavement and Project-related traffic noise on public streets. Therefore, the City has determined that this recommendation is not feasible to require as a mitigation measure.

E-45.5 Refer to Response E-45.4.

E-46 Refer to Response E-5.

E-47 Refer to Response E-5.

E-48 Refer to Response E-5.

E-49 The freeway traffic counts utilized in the traffic study are based on the PEMS database maintained by Caltrans which provides real-time information for a given period. The freeway traffic counts the Commenter is referencing are peak hour segment volumes that are "estimated" from the annual average daily traffic volumes (AADT) and thus are not as specific as what was used in the Project's traffic study.

E-50 There is no existing or pending fee program in place between the City of Moreno Valley and Caltrans, and the establishment of such a program is highly speculative. As such, the City has

Growth Inducing Impacts

The EIR states, "The proposed Project would attract new businesses to the Project site that would provide jobs to the Project area; therefore, the proposed Project would assist the City in improving the jobs-housing ratio, which under existing conditions is lower than the statewide and regional average (indicating the City of Moreno Valley and surrounding areas experience a relatively low jobs-to-housing ratio)." This statement is unsupported given that the site is currently occupied by active industrial uses, and the EIR does not show that this Project will increase jobs above those existing at the site. Moreover, distribution warehousing/ logistics is increasingly automated and employs fewer workers compared to other uses so that despite developing additional acreage, the Project may employ lesser people than existing uses. (*See, e.g.,* "MORENO VALLEY: Jobs analysis doesn't mesh with warehouse realities," June 16, 2012, http://www.pe.com/articles/warehouses-657599-husing-jobs.html?page=1.) This statement should thus be deleted.

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Alternatives

The EIR finds that the Vacant Lot Development Alternative, an alternative that would retain the existing light industrial land uses on the site and develop one, 200,000s.f. light industrial warehouse on the eastern portion of the property, is the "environmentally superior alternative." Where there is an environmentally superior alternative that significantly decreases the significant impacts of the Project then that alternative must be approved rather than the Project if that alternative is feasible. [(PRC§ 21002; *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 597, State CEQA Guidelines § 15126.6(b)] The Vacant Lot Development Alternative would avoid the Project's GHG impacts and significantly lessen impacts to air quality, noise, traffic, biological resources, and geology/soils. This Alternative should therefore be developed in lieu of the Project.

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The EIR states the Vacant Lot Development Alternative would fail to meet most of the Project's objectives. This is incorrect as the Alternative would meet at least four (4) of the basic objectives of the Project, and would meet the others to some extent:

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A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.
Alternative would redevelop a substantial portion of the underutilized property.

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B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.
Alternative would generate new employment

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C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.
There is no reason the Alternative could not accomplish this goal.

E-51 The existing business that operates on the Project site, El Dorado Stone, employs 15 persons. The City received this information from El Dorado Stone's operations manager on January 11, 2015. Because a tenant is not yet identified to occupy the proposed Project's building, the exact number of employees that would be accommodated on the Project site after the property is redeveloped as proposed is not known at this time, but is expected to be much greater than 15 persons. Also refer to Response E-52.

E-52 As stated in EIR Subsection 3.3.2.B (EIR Page 3-16), based on the Southern California Association of Governments (SCAG's) "Employment Density Report," the average employment rate of a warehouse land use in Riverside County is 11.69 jobs for every one acre of warehouse use. Thus, on average, the Project is estimated to generate approximately 594 new, recurring jobs. Recognizing that this calculation is an average, EIR Page 5-5 under the topic of Growth Inducing Effects has been revised in the Final EIR as follows: "the proposed Project would is likely to assist the City in improving the jobs-housing ratio, depending on the number of persons that the proposed Project's tenant would employ."

E-53 The Vacant Lot Development Alternative would not redevelop the Project site. Instead, this alternative considers a scenario in which the existing on-site industrial uses would remain and the eastern portion of the Project site that is currently vacant would be developed with a 200,000 s.f. building. The City of Moreno Valley Planning Commission will consider the adoption of Alternatives during public hearings for the proposed Project, and will make specific findings at that time as to whether or not any of the Alternatives presented in the EIR are feasible, and whether or not there is substantial evidence to justify the determined that this recommendation is not necessary to require as a mitigation measure.

rejection of the Alternative in accordance with CEQA Guidelines Section 15126.6.

E-54 Contrary to the opinion of the Commenter, only four of the proposed Project's objectives would be partially met by the Vacant Lot Development Alternative. Regarding Objective A, the City agrees with the Commenter and Table 6-1 has been revised in the Final EIR to indicate "yes, but to a lesser extent." Objective A would be partially met by the Vacant Lot Development Alternative because it assumes that the vacant portion of the Project site would be redeveloped. This portion of the property is 13 acres (25% of the Project site), and not a substantial portion of the site.

E-55 This comment is consistent with EIR Table 6-1, which indicates that the Vacant Lot Development Alternative would meet Project Objective B, but to a lesser extent than the proposed Project. This is because Project and its larger building would attract more employment to the site than would a smaller building. Also refer to Response E-52.

E-56 This comment is consistent with EIR Table 6-1, which indicates that the Vacant Lot Development Alternative would meet Project Objective C, but to a lesser extent than the proposed Project.

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D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.
The Alternative would better maximize buildout potential by developing a variety of industrial land uses in lieu of more high-cube/ logistics uses.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).
While the Alternative would not construct a logistics warehouse, it would conform to the General Plan and Area Plan.

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.
While the Alternative would not construct a logistics warehouse, it would accommodate light industrial tenants in close proximity to a designated truck route.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.
While the alternative would not construct a logistics warehouse, it would accommodate light industrial tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.
While the alternative would not construct a logistics warehouse, it would accommodate light industrial tenants that could be feasible and economically competitive.

As this Alternative would satisfy most Project objectives and *substantially* reduce or avoid the significant impacts of the Project, it should be adopted in lieu of the Project.

Conclusion

We appreciate the opportunity to offer comments on this Project, and thank you for your consideration of these comments.

Sincerely,

Raymond W. Johnson
JOHNSON & SEDLACK

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E-57 Contrary to the opinion of the Commenter, the Vacant Lot Development Alternative would not meet Project Objective D. The existing use that operates on the Project site does not maximize build-out potential of the property. Existing uses consist of a small office building, warehouse distribution structure, detention basin, paved parking lot, and outdoor storage areas that physically underutilize the property. The retention of these uses as contemplated by the Vacant Lot Development Alternative would not make efficient use of the property or maximize its buildout potential based on City of Moreno Valley Municipal Code, which allows for a greater development intensity on the property than would result from the Vacant Lot Development Alternative.

E-58 The Commenter acknowledges that the Vacant Lot Development Alternative would not meet Project Objective E because it does not contemplate redevelopment of the property by the construction of a logistics warehouse building. The City acknowledges that the existing industrial uses on the property comply with the City's General Plan and Specific Plan 208.

E-59 The Commenter acknowledges that the Vacant Lot Development Alternative would not meet Project Objective F because it does not contemplate redevelopment of the property by the construction of a logistics warehouse building. The City acknowledges that the existing industrial uses on the property are located in close proximity to a designated truck route.

E-60 The Commenter acknowledges that the Vacant Lot Development Alternative would not meet Project Objective G because it does not contemplate redevelopment of the property by the construction of a logistics warehouse building. The City acknowledges that the existing buildings on the property appeal to tenants, as they are currently occupied.

E-61 The Commenter acknowledges that the Vacant Lot Development Alternative would not meet Project Objective G because it does not contemplate redevelopment of the property by the construction of a logistics warehouse building. The City acknowledges that the existing buildings on the property appeal to tenants, as they are currently occupied.

E-62 The City of Moreno Valley Planning Commission will consider the adoption of Alternatives during public hearings for the proposed Project, and will make specific findings at that time as to whether or not any of the Alternatives presented in the EIR are feasible, and whether or not there is substantial evidence to justify the rejection of the Alternative in accordance with CEQA Guidelines Section 15126.6.

Attachments and Electronic Citations

(1) *CalEEMod User's Guide*, Appendix E, Large Warehouse and Distribution Center Trip Rates, available at www.caleemod.com

(2) *Warehouse Truck Trip Study Data Results and Usage*, SCAQMD Mobile Source Committee, July 25, 2014 <http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-qualityanalysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2. >

(3) *The Health Effects of Air Pollution on Children*, Michael T. Kleinman, Ph.D, Fall 2000, < http://www.aqmd.gov/docs/default-source/students/health-effects.pdf?sfvrsn=0 >

(4) *Diesel and Health in America: the Lingering Threat*, Clean Air Task Force, February 2005, <http://www.catf.us/resources/publications/files/Diesel_Health_in_America.pdf>

(5) *Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures*, California EPA OEHHA Air Toxicology and Epidemiology Branch, April 2009, p. 3. <http://www.oehha.ca.gov/air/hot_spots/pdf/TSDCPFApril_09.pdf.>

(6) U.S. Department of Housing and Urban Development. (March 2009) *The Noise Guidebook*. < https://www.onecpd.info/resource/313/hud-noise-guidebook/>

(7) Suter, Dr. Alice H., Administrative Conference of the United States. (November 1991) *Noise and Its Effects*. <http://www.nonoise.org/library/suter/suter.htm>

(8) 2013 Traffic Volumes on California State Highways, Caltrans (2013), <, http://traffic-counts.dot.ca.gov/2013all/>

(9) City of Moreno Valley Truck Routes <http://www.moreno-valley.ca.us/city_hall/departments/pub-works/transportation/pdfs/truck-routes.pdf>

(10) "MORENO VALLEY: Jobs analysis doesn't mesh with warehouse realities," June 16, 2012,< http://www.pe.com/articles/warehouses-657599-husing-jobs.html?page=1>

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E-63 The attachments are noted.

December 8, 2014
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RAYMOND W. JOHNSON, Esq. AICP
26785 Camino Seco
Temecula, CA 92590
(951) 506-9925
(951) 506-9725 Fax
(951) 775-1912 Cellular

Johnson & Sedlack, an Environmental Law firm representing plaintiff environmental groups in environmental law litigation, primarily CEQA.

City Planning:

Current Planning

- Two years principal planner, Lenexa, Kansas (consulting)
- Two and one half years principal planner, Lee's Summit, Missouri
- One year North Desert Regional Team, San Bernardino County
- Twenty-five years subdivision design: residential, commercial and industrial
- Twenty-five years as applicants representative in various jurisdictions in: Missouri, Texas, Florida, Georgia, Illinois, Wisconsin, Kansas and California
- Twelve years as applicants representative in the telecommunications field

General Plan

- Developed a policy oriented Comprehensive Plan for the City of Lenexa, Kansas.
- Updated Comprehensive Plan for the City of Lee's Summit, Missouri.
- Created innovative zoning ordinance for Lenexa, Kansas.
- Developed Draft Hillside Development Standards, San Bernardino County, CA.
- Developed Draft Grading Standards, San Bernardino County.
- Developed Draft Fiscal Impact Analysis, San Bernardino County

Environmental Analysis

- Two years, Environmental Team, San Bernardino County
  - Review and supervision of preparation of EIR's and joint EIR/EIS's
  - Preparation of Negative Declarations
  - Environmental review of proposed projects
- Eighteen years as an environmental consultant reviewing environmental documentation for plaintiffs in CEQA and NEPA litigation

Representation:

E-64

E-64 The credentials of Raymond W. Johnson, Esq. AICP are noted.

- Represented various clients in litigation primarily in the fields of Environmental and Election law. Clients include:
  - Sierra Club
  - San Bernardino Valley Audubon Society
  - Sea & Sage Audubon Society
  - San Bernardino County Audubon Society
  - Center for Community Action and Environmental Justice
  - Endangered Habitats League
  - Rural Canyons Conservation Fund
  - California Native Plant Society
  - California Oak Foundation
  - Citizens for Responsible Growth in San Marcos
  - Union for a River Greenbelt Environment
  - Citizens to Enforce CEQA
  - Friends of Riverside's Hills
  - De Luz 2000
  - Save Walker Basin
  - Elsinore Murrieta Anza Resource Conservation District

Education:

- B. A. Economics and Political Science, Kansas State University 1970
- Masters of Community and Regional Planning, Kansas State University, 1974
- Additional graduate studies in Economics at the University of Missouri at Kansas City
- J.D. University of La Verne. 1997 Member, Law Review, Deans List, Class Valedictorian, Member Law Review, Published, Journal of Juvenile Law

Professional Associations:

- Member, American Planning Association
- Member, American Institute of Certified Planners
- Member, Association of Environmental Professionals

Johnson & Sedlack, Attorneys at Law
26785 Camino Seco 12/97- Present
Temecula, CA 92590
(951) 506-9925

Principal in the environmental law firm of Johnson & Sedlack. Primary areas of practice are environmental and election law. Have provided representation to the Sierra Club, Audubon Society, AT&T Wireless, Endangered Habitats League, Center for Community Action and Environmental Justice, California Native Plant Society and numerous local environmental groups. Primary practice is writ of mandate under the California Environmental Quality Act.

Planning-Environmental Solutions
26785 Camino Seco 8/94- Present
Temecula, CA 92590

E-64

(909) 506-9825

Served as applicant's representative for planning issues to the telecommunications industry. Secured government entitlements for cell sites. Provided applicant's representative services to private developers of residential projects. Provided design services for private residential development projects. Provided project management of all technical consultants on private developments including traffic, geotechnical, survey, engineering, environmental, hydrogeological, hydrologic, landscape architectural, golf course design and fire consultants.

San Bernardino County Planning Department
Environmental Team 6/91-8/94
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

Responsible for coordination of production of EIR's and joint EIR/EIS's for numerous projects in the county. Prepared environmental documents for numerous projects within the county. Prepared environmental determinations and environmental review for projects within the county.

San Bernardino County Planning Department
General Plan Team 6/91-6/92
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

Created draft grading ordinance, hillside development standards, water efficient landscaping ordinance, multi-family development standards, revised planned development section and fiscal impact analysis. Completed land use plans and general plan amendment for approximately 250 square miles. Prepared proposal for specific plan for the Oak Hills community.

San Bernardino County Planning Department
North Desert Regional Planning Team
15505 Civic 6/90-6/91
Victorville, CA
(619) 243-8245

Worked on regional team. Reviewed general plan amendments, tentative tracts, parcel maps and conditional use permits. Prepared CEQA documents for projects.

Broadmoor Associates/Johnson Consulting
229 NW Blue Parkway
Lee's Summit, MO 64063
(816) 525-6640 2/86-6/90

Sold and leased commercial and industrial properties. Designed and developed an executive office park and an industrial park in Lee's Summit, Mo. Designed two

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additional industrial parks and residential subdivisions. Prepared study to determine target industries for the industrial parks. Prepared applications for tax increment financing district and grants under Economic Development Action Grant program. Prepared input/output analysis of proposed race track Provided conceptual design of 800 acre mixed use development.

Shepherd Realty Co.
Lee's Summit, MO 6/84-2-86

Sold and leased commercial and industrial properties. Performed investment analysis on properties. Provided planning consulting in subdivision design and rezoning.

Contemporary Concepts Inc.
Lee's Summit, MO 9/78-5/84
Owner

Designed and developed residential subdivision in Lee's Summit, Mo. Supervised all construction trades involved in the development process and the building of homes.

Environmental Design Association
Lee's Summit, Mo.
Project Coordinator 6/77-9/78

Was responsible for site design and preliminary building design for retirement villages in Missouri, Texas and Florida. Was responsible for preparing feasibility studies of possible conversion projects. Was in charge of working with local governments on zoning issues and any problems that might arise with projects. Coordinated work of local architects on projects. Worked with marketing staff regarding design changes needed or contemplated.

City of Lee's Summit, MO
220 SW Main
Lee's Summit, MO 64063
Community Development Director 4/75-6/77

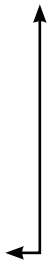
Supervised Community Development Dept. staff. Responsible for preparation of departmental budget and C.D.B.G. budget. Administered Community Development Block Grant program. Developed initial Downtown redevelopment plan with funding from block grant funds. Served as a member of the Lee's Summit Economic Development Committee and provided staff support to them. Prepared study of available industrial sites within the City of Lee's Summit. In charge of all planning and zoning matters for the city including comprehensive plan.

Howard Needles Tammen & Bergendoff
9200 Ward Parkway
Kansas City, MO 64114
(816) 333-4800 5/73-4/75
Economist/Planner

E-64

Responsible for conducting economic and planning studies for Public and private sector clients. Consulting City Planner for Lenexa, KS.

Conducted environmental impact study on maintaining varying channel depth of the Columbia River including an input/output analysis. Environmental impact studies of dredging the Mississippi River. Worked on the Johnson County Industrial Airport industrial park master plan including a study on the demand for industrial land and the development of target industries based upon location analysis. Worked on various airport master plans. Developed policy oriented comprehensive plan for the City of Lenexa, KS. Developed innovative zoning ordinance heavily dependent upon performance standards for the City of Lenexa, KS.



E-64

COMMENT LETTERS

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr. Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 722)
464 WEST 4th STREET, 6th Floor
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4557
FAX (909) 383-5936
TTY (909) 383-6300
www.dot.ca.gov/dist8

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CITY OF MORENO VALLEY
Planning Division

December 31, 2014

Claudia Manrique
City of Moreno Valley
Planning Department
14177 Frederick Street
Moreno Valley, CA 92552-0805

Modular Logistics Center (Plot Plan PA13-0063) SCH#2014031068 (Riv 215 PM R31.83)

Ms. Manrique,

We have completed our initial review for the above mentioned proposal to construct and operation of one logistics warehouse building having 1,109,378 square feet of building space, with 256 loading bays. The site includes truck and passenger car parking areas, screen walls, water quality/detention basins, and landscaping. F-1

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. Under the California Environmental Quality Act (CEQA), we are required to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Moreno Valley due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS. F-2

We recommend the following:

- The study proposes mitigation measures at Interstate-215/Harley Knox Boulevard at both southbound and northbound ramps. The City of Moreno Valley and the County of Riverside must ensure the collection of project fair share of Transportation Uniform Mitigation Fees (TUMF) and County Development Impact Fees (DIF) and completion of proposed mitigation. F-3

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 806-3957 or myself at (909) 383-4557 for assistance. F-4

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

RESPONSES

F-1 The general description of the proposed Project given in this comment is accurate.

F-2 Comment is noted.

F-3 The recommendations given in this comment are included in the EIR. Mitigation Measure MM 4.8-3 requires the Project to pay City of Moreno Valley DIF fees (less fee credits). Mitigation Measure MM 4.8-4 requires the Project to pay TUMF fees.

F-4 The City acknowledges that Mark Roberts and Talvin Dennis are the contact persons at Caltrans for additional questions. The Final EIR, including these written responses to comments, will be sent to Caltrans prior to the Planning Commission hearing at which the Final EIR will be considered for certification and the proposed Project will be considered for approval.

Ms. Manrique
December 31, 2014
Page 2

Sincerely,

MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code §21000, et seq. requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

This Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2014031068 was prepared in accordance with CEQA Guidelines Article 9, §15120 to §15132, to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Modular Logistics Center (hereafter, the "Project" or "proposed Project"). This EIR does not recommend approval, approval with modification, or denial of the proposed Project; rather, this EIR is a source of impartial information regarding potential impacts that the Project may cause to the physical environment. The Draft EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the City of Moreno Valley will consider certifying the Final EIR and adopting required findings in conjunction with Project approval. In the case that there are any adverse environmental impacts that cannot be fully mitigated, the City of Moreno Valley must adopt a Statement of Overriding Considerations, stating why the City is taking action to approve the Project with or without modification despite its unavoidable impacts.

This *Executive Summary* complies with CEQA Guidelines §15123, "Summary." This EIR document includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The City of Moreno Valley determined that the scope of this EIR should cover eight (8) subject areas. The scope was determined through the completion of an Initial Study accepted by the City of Moreno Valley's independent judgment pursuant to CEQA Guidelines §15063, and in consideration of public comment received by the City in response to this EIR's Notice of Preparation (NOP). The Initial Study, NOP, and written comments received by the City in response to the NOP, are attached to this EIR as *Technical Appendix A*. As determined by the Initial Study and in consideration of public comment on the NOP, the eight (8) environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources
5. Geology/Soils
6. Greenhouse Gas Emissions
7. Noise
8. Transportation/Traffic

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. As mentioned, the scope of this EIR includes these eight (8) subject areas as determined through the completion of an Initial Study pursuant to CEQA Guidelines §15063, and in

consideration of public comment to this EIR's NOP. Subject areas for which the Initial Study concluded that impacts would be clearly less than significant and that do not warrant further analysis in this EIR are addressed in EIR Section 5.0, *Other CEQA Considerations*. For each of the eight (8) subject areas analyzed in detail in Section 4.0, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (March 2014); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that have a proportional nexus to the Project's impacts and that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the City of Moreno Valley on the Project to lessen or avoid those impacts is included in this *Executive Summary* as Table S-1, *Mitigation, Monitoring, and Reporting Program*.

This EIR also discusses alternatives to the proposed Project. Alternatives are described that would attain most of the Project's objectives while avoiding or substantially lessening the proposed Project's significant adverse environmental effects. A full discussion of Project alternatives is found in EIR Section 6.0, *Alternatives.*

S.2 PROJECT OVERVIEW

S.2.1 LOCATION AND REGIONAL SETTING

The approximately 50.84-gross acre Project site is located in the City of Moreno Valley, in western Riverside County, California. Western Riverside County abuts San Bernardino County to the northeast, Orange County to the west, and San Diego County to the south. The site's location in a regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

From a regional perspective, the Project site is generally located to the north and northeast of the City of Perris and to the southeast of the City of Riverside. Unincorporated areas of Riverside County in the vicinity of the Project site include the unincorporated communities of Woodcrest and Mead Valley to the west and southwest, the unincorporated communities of Reche Canyon and Pigeon Pass to the north, and the unincorporated community of Lakeview and rugged terrain known as the "Badlands" to the east. Refer to EIR Subsection 2.1 for more information about the Project's regional setting.

At a local scale, the Project site is located within the southern portion of the City of Moreno Valley. The subject property is generally rectangular-shaped and located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Figure 3-2, *Vicinity Map*, in EIR Section 3.0, *Project Description*, shows the specific location of the Project site. The Project site is located approximately 2.0-miles east of Interstate 215 (I-215) and 4.7 miles south of State Route 60 (SR-60). The property encompasses Assessor Parcel Numbers (APNs) 312-250-030, 312-250-031, 312-250-032, 312-250-036, 312-250-037, 312-250-038, and lies within Section 32 of Township 3 South, Range 3 West of the San Bernardino Baseline and Meridian. Refer to EIR Subsection 2.2 for more information about the Project's local setting.

S.2.2 PROJECT OBJECTIVES

The objective of the proposed Project is to redevelop an underutilized property in the City of Moreno Valley's Industrial Area Plan (MVIAP, Specific Plan 208) with a large logistics warehouse building in conformance with the land use designations applied to the property by City of Moreno Valley General Plan and the MVIAP. The following is a list of the basic objectives sought by the proposed Project.

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, , thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

S.2.3 PROJECT DESCRIPTION SUMMARY

The proposed Project involves demolition and removal of existing buildings, grading and preparation of the property for redevelopment, and construction and operation of one (1) industrial warehouse building containing 1,109,378 square feet (s.f.) of building space with 256 loading bays. The principal discretionary actions required of the City of Moreno Valley to implement the proposed Project include the approval of a Plot Plan (PA13-0063) and certification of this EIR. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-1, *Matrix of Project Approvals/Permits*, in EIR Section 3.0.

The proposed Plot Plan (PA13-0063) details the Project's proposed site layout, architectural features, and landscape design. The Project Applicant proposes to construct and operate one (1) new industrial warehouse building on the property. The proposed 1,109,378 s.f. building is designed to include 1,089,378 s.f. of warehouse space and 20,000 s.f. of office space. The office spaces would be located at the northwest, northeast, southwest, and southeast corners of the building. A total of 256 loading bays are planned for loading, unloading, and short-term parking of truck trailers, with 128 dock doors provided along the north side of the building and 128 dock doors along the southern portion of the building. The Project Applicant is pursuing the Project on a speculative basis, meaning that the future building tenant(s) is not yet identified. Refer to EIR Section 3.0, *Project Description*, for a detailed description of the proposed Project.

S.3 EIR PROCESS

As a first step in complying with the procedural requirements of CEQA for an EIR, an Initial Study was prepared by the City of Moreno Valley to determine whether any aspect of the proposed Project, either individually or cumulatively, may cause a significant adverse effect on the physical environment (refer to EIR *Technical Appendix A* for a copy of the Initial Study). For this Project, the Initial Study indicated that this EIR should focus on eight (8) environmental subject areas listed above in Subsection S.1. After completion of the Initial Study, the City filed a NOP with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared. In turn, the Initial Study and NOP were distributed for a 30-day public review period, which began on March 25, 2014.

The City of Moreno Valley received written comments on the scope of the EIR during those 30 days, which were considered by the City during the preparation of this EIR. In addition, and pursuant to CEQA Guidelines §15082(c)(1), an advertised public meeting (called a scoping session) was held on April 21, 2014, at the City of Moreno Valley City Council Chambers.

This EIR is being circulated for review and comment by the public and other interested parties, agencies, and organizations for 45-day review period. During the 45-day public review period, public notices announcing availability of the Draft EIR will be mailed to interested parties, an advertisement will be published in the Press Enterprise (newspaper of general circulation in the Project area), and copies of the Draft EIR and its Technical Appendices will be available for review at the locations indicated in the public notices.

After the close of the 45-day Draft EIR public comment period, the City will prepare and publish responses to written comments it received on the environmental effects of the proposed Project. The Final EIR will then be considered by the City of Moreno Valley Planning Commission, prior to deciding to approve, approve with modification, or reject the proposed Project. Approval of the proposed Project would be accompanied by the adoption of written findings and a statement of overriding considerations for any significant unavoidable environmental impacts identified in the Final EIR. In addition, the City must adopt a Mitigation, Monitoring, and Reporting Program (MMRP), which describes the process to ensure implementation of the mitigation measures identified

in the Final EIR. The MMRP will ensure CEQA compliance during Project construction and operation.

S.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines §15123(b)(2) requires that areas of controversy known to the Lead Agency (City of Moreno Valley) be identified in the Executive Summary. Parties that frequently comment on CEQA documents prepared by the City of Moreno Valley for industrial warehouse projects have suggested that the City apply mitigation measures for mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements. The City of Moreno Valley applies mitigation measures which it determines a) are feasible and practical for project applicants to implement, b) are feasible and practical for the City of Moreno Valley to monitor and enforce, c) are legal for the City to impose, d) have an essential nexus to the Project's impacts, and e) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to analyze an exhaustive list of every imaginable mitigation measure, and measures that are duplicative of mandatory regulatory requirements. This is identified as an area of controversy.

Regarding issues to be resolved, this EIR addresses the environmental issues that are known by the City, that are identified in the Initial Study prepared for the Project, and that were identified in the comment letters that the City of Moreno Valley received on this EIR's NOP (refer to *Technical Appendix A* of this EIR). Environmental topics raised in written comment to the NOP are summarized in Table 1-2, *Summary of NOP Comments*, in Section 1.0 of this EIR and include but are not limited to the topics of mitigation measures related to mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements.

S.5 ALTERNATIVES TO THE PROPOSED PROJECT

In compliance with CEQA Guidelines §15126.6, an EIR must describe a range of reasonable alternatives to the Project or to the location of the Project. Each alternative must be able to feasibly attain most of the Project's objectives and avoid or substantially lessen the Project's significant effects on the environment. A detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives to the Proposed Project*. Also described in Section 6.0 is a list of alternatives that were considered but rejected from further analysis. An examination of alternative sites is not required in this EIR because the Project is consistent with the Moreno Valley General Plan and the MVIAP land use designations.

In reviewing the alternatives, the Southern California Association of Governments' (SCAG's) *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* chapter titled "Goods Movement" is relevant. It explains that goods movement is essential to supporting the SCAG regional economy and quality of life. The *RTP/SCS* states that the SCAG region hosts one of

the largest clusters of logistics activity in North America and that logistics activities, and the jobs that go with them, depend on a goods movement network, including warehousing and distribution facilities. According to SCAG, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). Thus, it is likely that the selection of any alternative that reduces building square footage on the Project site, which is designated and zoned for industrial development, is likely to displace the additional square footage to another property, which would result in the same or greater environmental effects, given the strong regional demand for logistics and warehousing space in the SCAG region.

The alternatives considered by this EIR include those listed below.

S.5.1 NO PROJECT ALTERNATIVE

The No Project Alternative allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the property were to remain in its existing condition for the foreseeable future. Selection of the No Project Alternative would prevent the Project site from new development but would not necessarily prevent the Project or another project of its nature from being developed in another location in response to the demand for logistics warehousing land use space in western Riverside County.

Implementation of the No Project Alternative would result in no physical environmental impacts beyond those that have historically occurred on the property. All significant effects of the proposed Project associated with its construction and operation at the Project site would be avoided or lessened by the selection of the No Project Alternative.

The No Project Alternative would fail to meet all of the Project's objectives. Furthermore, retention of the site in its existing condition would be inconsistent with the City of Moreno Valley General Plan and the MVIAP, which call for development of the entire subject property with industrial land uses.

S.5.2 VACANT LOT DEVELOPMENT ALTERNATIVE

The Vacant Lot Development Alternative would retain the existing light industrial land uses on the western portion of the property and would develop one (1) 200,000 s.f. building on the vacant, eastern portion of the property. For purposes of this analysis, the new 200,000 s.f. building was assumed to support as light-industrial land uses in accordance with the City of Moreno Valley General Plan and the MVIAP, and not high-cube warehouse as proposed by the Project. The Vacant Lot Alternative was selected for consideration by the Lead Agency to compare the environmental effects of the Project (which would redevelop the entire subject property) against the environmental effects of retaining the existing light-industrial land uses on the western portion of the subject property and developing the eastern, vacant portion of the property.

Selection of the Vacant Lot Development Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions. The Vacant Lot Development

Alternative also would lessen the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics and cultural resources would be similar under the Vacant Lot Development Alternative and the Project.

The Vacant Lot Development Alternative would fail to meet most of the Project's objectives. The only two objectives of the Project that would be met by the Vacant Lot Development Alternative – to attract new business/job opportunities to the City of Moreno Valley and to develop a vacant/underutilized property in a manner that complements surrounding development – would be achieved less effectively by this Alternative than by the proposed Project. Moreover, selection of the Vacant Lot Development Alternative would not result in a reduction in demand for large (high-cube) light industrial development in western Riverside County; thus, it is likely for a portion of the Project's environmental impacts to occur elsewhere rather than be avoided.

S.5.3 SMALL BUILDINGS ALTERNATIVE

The Small Buildings Alternative considers constructing two (2) 400,000 s.f. light industrial buildings on the Project site. This alternative would result in an approximately 28 percent reduction in building area as compared to the proposed Project, but would require additional surface parking area pursuant to the City of Moreno Valley's requirements for this building type. The land uses on the Project site under the Small Buildings Alternative would be similar to the proposed Project. This alternative was selected for consideration by the Lead Agency to compare the environmental effects of the proposed Project (one large building that is likely to attract one tenant) against the environmental effects of constructing multiple, smaller buildings that are likely to attract different tenants.

Selection of the Small Buildings Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. Potential impacts to aesthetics, biological resources, cultural resources, and geology/soils would be similar under the Small Buildings Alternative and the proposed Project.

The Small Buildings Alternative would fail to meet the Project's objective to maximize buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative would meet all other Project objectives (but less effectively than the Project), and it may be difficult to attract high-quality tenants seeking to locate in the Moreno Valley area due to the smaller-sized buildings as compared to the large building proposed by the Project.

S.5.4 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately

309,378 s.f. (or 28 percent) as compared to the proposed Project. The Reduced Project Alternative was selected by the Lead Agency to evaluate the comparative environmental benefits of replacing the existing light-industrial structures on-site with a high-cube warehouse building while leaving the eastern portion of the subject property in its existing condition.

Selection of the Reduced Project Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. The Reduced Project Alternative also would avoid the Project's less-than-significant effect to cultural resources and would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics would be similar under the Reduced Project Alternative and the proposed Project.

The Reduced Project Alternative would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. The Reduced Project Alternative, while providing a high-cube warehouse building space in close proximity to major regional transportation corridors, would attract fewer jobs to the City of Moreno Valley as compared to the proposed Project. The Reduced Project Alternative would meet all other Project objectives, but less effectively than the Project.

S.6 SUMMARY OF IMPACTS, MITIGATION MEASURES, AND CONCLUSIONS

S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of this EIR includes eight (8) subject areas determined through the completion of an Initial Study prepared by the City of Moreno Valley pursuant to CEQA Guidelines §15063 and CEQA Statute §21002(e), as well as consideration of public comments received by the City on this EIR's NOP and during the April 21, 2014, public scoping session. The Initial Study, NOP, and public comments received in response to the NOP, are attached to this EIR as *Technical Appendix A*. Subject areas for which City concluded that impacts clearly would be less than significant and that do not warrant further analysis in this EIR include: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. This EIR addresses these topics in EIR Subsection 5.0, *Other CEQA Considerations.*

S.6.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Mitigation, Monitoring, and Reporting Program*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines §15123(a). Also presented are the mitigation measures imposed on the Project by the City of Moreno Valley to further avoid adverse environmental impacts or to reduce their level of significance.

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Aesthetics					
Summary of Impacts					
Threshold 1: The Project site does not comprise all or part of a scenic vista and no unique or scenic vistas are visible from the property. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 2: The Project has no potential to damage scenic resources within a scenic highway corridor. The Project site is not located within the viewshed of a scenic highway and the Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings. Accordingly, a significant impact to scenic resources within a state scenic highway has no potential to occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold 3: The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas during Project construction or operation. Although the proposed Project would result in a change to the existing visual character of the site, the Project proposes a number of site design, architectural, and landscaping elements consistent with the requirements of the MVIAP that would ensure the provision of a high quality development. Impacts would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 4: The Project would not create substantial light or glare. Compliance with the MVIAP requirements for lighting and mandatory compliance with City of Moreno Valley Ordinance No. 359 would ensure less than significant impacts associated with light and glare affecting day or nighttime views in the area.	**MM 4.1-1** Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City Ordinance No. 359.	Project Proponent; City of Moreno Valley	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit	Less-than-Significant Impact
	MM 4.1-2 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.	Project Proponent; City of Moreno Valley	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit	
4.2 Air Quality					
Summary of Impacts					
Threshold 1: The Project would not conflict with or obstruct implementation of the SCAQMD AQMP.	No Mitigation is Required	N/A	N/A	N/A	No Impact
Thresholds 2 and 3: The Project's emissions of NO_X during short-term construction and long-term operational activities would violate the SCAQMD regional threshold for these pollutants. Short- and long-term emissions of NO_X also would contribute to an existing air quality violation in the SCAB (i.e., non-attainment status for NO_X and ozone – both NO_X is a precursor for ozone). As such, Project-related emissions would violate SCAQMD air quality	**MM 4.2-1** Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective construction contractors. a) All surface coatings shall consist of Zero-	Project Proponent; Project construction contractors	City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of a building permit	Significant Direct and Cumulatively Considerable Unavoidable Impact (Long-Term)

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
standards and contribute to the non-attainment of a criteria pollutant (i.e., NO_X and ozone), which is significant on a direct and cumulatively considerable basis.	Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113. **MM 4.2-2** The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors. a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour. b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day. c) Temporary signs shall be installed on the	Project Proponent; Project construction Contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads. d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered. **MM 4.2-3** The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors. a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning. b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and	Project Proponent; Project contractors	City of Moreno Valley Land Development Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	requirements for PM10-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.				
	MM 4.2-4 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SO_X) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors. a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.	Project Proponent; Project contractors	City of Moreno Valley Land Development Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit	
	MM 4.2-5 The Project shall comply with California Code of Regulations Title 13,Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following	Project Proponent; Project contractors	City of Moreno Valley Land Development Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better. b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas. c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered				

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import. d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower. e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles. f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified. g) Electric-powered construction equipment and tools shall be used when technically feasible h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible. i) Construction vehicles shall use the City's designated truck route. j) Construction parking shall be located and configured to minimize traffic interference on public streets.				
	MM 4.2-6 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	trucks to restrict idling to no more than three (3) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.				
	MM 4.2-7 Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
	MM 4.2-8 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
	MM 4.2-9 Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.2-10 Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of permits that would allow the installation of landscaping	
	MM 4.2-11 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2)	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.				
	MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourage tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of an occupancy permit	
	MM 4.2-13 In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.2-14 The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
	MM 4.2-15 Prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of occupancy permits	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	route. Text on the sign shall read "To Truck Route" with a directional arrow. **MM 4.2-16** Prior to the issuance of building permits, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive aisles and truck courts shall be composed of concrete.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of building permits	
	MM 4.2-17 The Project's building shall capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of building permits	
Threshold 4: The average carcinogenic risk to sensitive receptors in the vicinity of the Project site due to toxic air contaminates is approximately 587 cases per one million people. Risk attributable to the proposed Project would be 5.67 in one million for the maximally exposed individual receptor, 5.60 in one million for the maximally exposed individual worker, and 0.165 in one million for the maximally exposed school child. The cumulative health risk to sensitive receptors is significant, but the Project's contribution to the cumulative risk would be less than cumulatively considerable based on a significance threshold of 10 in one million. The maximum non-cancer health risk index attributable to the proposed Project would be 0.0036, which would also be less than significant and less than cumulatively considerable compared to the SCAQMD non-cancer health risk index of 1.0.	Mitigation Measures MM 4.2-3 through MM 4.2-14 shall apply				Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 5: Although short-term construction activities could produce odors associated with construction equipment exhaust, the application of asphalt, and the application of architectural coatings, standard construction requirements would minimize odor impacts to less than significant levels. Odors associated with long-term operation of the proposed Project would not significantly impact nearby sensitive receptors.	**MM 4.2-18** The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement. a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.	Project Proponent; Project contractors	City of Moreno Valley Land Development Division and Building and Safety Division	Prior to the issuance of a grading permit and building permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.3 Biological Resources					
Summary of Impacts					
Threshold 1: No sensitive vegetation communities or special-status plant species are located on the Project site. The loss of potential habitat for sensitive species is less than significant with mandatory Western Riverside County MSHCP compliance because these species are MSHCP Covered Species. Although the western burrowing owl is not present on the Project site, the species could be impacted if it migrates onto the property prior to the commencement of ground-disturbing construction activities, which is a potentially significant direct and cumulative impact.	**MM 4.3-1** The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, *Western Riverside County Multiple Species Habitat Conservation Plan Fee Program*, which requires a per-acre local development impact and mitigation fee. The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of a building permit	Less-than-Significant Impact
	MM 4.3-2 Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area*. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions: a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl,	Project Biologist	City of Moreno Valley Planning Division	Within 30 days prior to grading and prior to issuance of a grading permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either: • Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or				

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	• A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.				
Threshold 2: The Project site does not contain any riparian habitat or other sensitive natural community; therefore, the Project would have no impact on riparian or other sensitive habitats as defined by the CDFW or USFWS.	No mitigation is required	N/A	N/A	N/A	No Impact
Threshold 3: There are no federally protected wetlands on the Project site or within the Project's off-site impact area; therefore, no impact to wetlands would occur.	No mitigation is required	N/A	N/A	N/A	No Impact
Threshold 4: There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the	**MM 4.3-3** As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird	Project Biologist; City of Moreno Valley Planning Division	City of Moreno Valley Planning Division	Prior to the issuance of a clearing or grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
potential to impact nesting, migratory birds protected by the MBTA and California Fish and Wildlife Code, if construction activities were to occur during the nesting season.	nesting survey is completed in accordance with the following requirements: a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree. b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.				

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 5: The Project would not conflict with any local policies or ordinances governing biological resources.	**MM 4.3-4** The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, *Threatened and Endangered Species*, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit and improvement permits	Less-than-Significant Impact
Threshold 6: The Project site is subject to the Western Riverside County MSHCP and its survey requirements for the western burrowing owl. Although compliant with all MSHCP provisions, and although the western burrowing owl is absent on the property, the property contains potential habitat for the species. If the species is present on the property at the time a grading permit is issued, impacts would be significant, requiring mitigation.	MM 4.3-1 and MM 4.3-2 shall apply.	N/A	N/A	N/A	Less-than-Significant Impact
4.4 Cultural Resources					
Summary of Impacts					
Threshold 1: The Project would not impact a historic resource. No historic sites are present on the Project site or in its off-site improvement area; therefore, no historic sites could be altered or destroyed by construction or operation of the proposed Project.	No Mitigation is Required.	N/A	N/A	N/A	No Impact.

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 2: Implementation of the Project has the potential, however unlikely, to unearth and adversely impact archaeological resources that may be buried beneath the ground surface during Project construction activities.	**MM 4.4-1** Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.	Project Proponent; Project archaeological monitor	City of Moreno Valley Planning Division and Land Development Division	Prior to the issuance of a grading permit	Less-than-Significant Impact
	MM 4.4-2 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.	Project Proponent; appropriate Native American Tribe(s) representative(s)	City of Moreno Valley Planning Division and Land Development Division	Prior to the issuance of a grading permit	
	MM 4.4-3 During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the	Project archaeological monitor, appropriate Native American Tribe(s) representative	City of Moreno Valley Planning Division and Land Development Division	During grading operations in previously undisturbed soils	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply.				
	MM 4.4-4 If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.	Project archaeological monitor; appropriate Native American Tribe(s) representative; Project Applicant; City Planning Division; Project's land owner	City of Moreno Valley Planning Division; appropriate Native American Tribe(s); Eastern Information Center (EIC)	During ground disturbing activities	
Threshold 3: The Project would not impact any known paleontological resource. There is a very low likelihood for Project construction activities to unearth unique paleontological resources, sites, and geologic features during Project construction.	**MM 4.4-5** Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.	Project Proponent; Project paleontological monitor	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit	Less-than-Significant Impact
	MM 4.4-6 During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet	Project paleontological monitor	City of Moreno Valley Planning Division and Land Development	During ground disturbing activities	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.		Division		
	MM 4.4-7 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.	Project paleontological monitor	City of Moreno Valley Planning Division	During ground disturbing activities	
	MM 4.4-8 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit.	Project paleontological monitor; Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of first occupancy permit	
Threshold 4: In the unlikely event that human remains are discovered during Project grading or other ground disturbing	**MM 4.4-9** Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to	Project contractors; Riverside County Coroner; California	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 and California Public Resources Code §5097 et. seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.	ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors. a) If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.	Native American Heritage Commission			
4.5 Geology and Soils					
Summary of Impacts					
Threshold 1: The Project would not expose people or structures to substantial adverse seismic risks. The risk of liquefaction is low. There are no known active or potentially active faults on the Project site or trending toward the Project site. As with all properties within the Southern California region, the Project site is subject to seismic ground shaking associated with earthquakes. However, mandatory	**MM 4.5-1** Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors. a) Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
compliance with local and state ordinances and building codes would ensure that the proposed structure is developed as required to attenuate the risk to life or property to less than significant levels.	(CBSC)) in effect at the time of construction. **MM 4.5-2** Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit and grading permit	
Threshold 2: The Project would prepare and implement a SWPPP and WQMP, and also would be required to comply with the provisions of the City's MS4 NPDES Municipal Stormwater Permit, to minimize the potential for substantial waterborne erosion at the Project site during temporary short-term construction activities and long-term operational activities. Additionally, the Project would be required to comply with City Ordinance No. 568 and SCAQMD Rule 403 to preclude substantial wind erosion.	**MM 4.5-3** Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.	Project Proponent	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.5-4 Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.	Project Proponent; Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit	
	MM 4.5-5 Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.	Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit	
Threshold 3: There is no potential for the Project to cause rockfalls, landslides, or lateral spreading. Soils on the site have the potential for collapse and subsidence; however, potential adverse effects associated with such conditions would be reduced to less-than-significant levels with mandatory compliance to the recommendations provided within the Project's geotechnical study, including requirements to remove and recompact areas where unstable soil conditions exist.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 4: The soils on the Project site have a low to medium expansion potential under existing conditions. Potential adverse effects associated with expansive soils would be reduced to less-than-significant levels with mandatory compliance with the recommendations provided within the Project geotechnical study, including requirements to remove and recompact	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
areas where such unsuitable soil conditions exist.					
Threshold 5: The Project would not install septic tanks or alternative wastewater disposal systems. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.6 Greenhouse Gas Emissions					
Summary of Impacts					
Thresholds 1 and 2: Greenhouse gasses would be emitted by the Project, primarily from mobile sources (vehicles traveling to and from the Project site). Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed, the proposed Project would not reduce GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the mandates of AB 32. Therefore, because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley, the Project is determined to result in GHG emissions that may have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32).	**MM 4.6-1** Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project construction	Significant Unavoidable Cumulatively Considerable Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.6-2 Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of the first building permit	
	MM 4.6-3 Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to issuance of the first building permit	
	MM 4.6-4 Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen, 2013, Table 5.106.5.2).	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.6-5 Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.	Project Proponent	City of Moreno Valley Building and Safety Division and Planning Division	Prior to the approval of permits that would permit the installation of landscaping	
	MM 4.6-6 Prior to the approval of permits and approvals that would permit cold storage in the building, the Project Applicant shall provide information to the City of Moreno Valley	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the approval of permits that would permit cold storage in the building.	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	demonstrating that the cooling system design is energy efficient.				
4.7 Noise					
Summary of Impacts					
Thresholds 1, 3, and 4: Noise generated by Project construction activities would temporarily impact non-conforming residential properties located in the industrial zone. In the event that Project construction activities occur simultaneously with other construction activities that affect the same nearby noise-sensitive receptors as the Project, there is potential for a significant cumulative short-term impact to occur, with the Project's contribution to the impact being cumulatively considerable. Under long-term operation, the Project would not expose persons to or generate noise levels in excess of local standards and would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	**MM 4.7-1** Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries. d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site. e) Construction contractors limit all haul truck deliveries to the same hours specified for	Project Proponent; Project construction contractors	City of Moreno Valley Building and Safety Division and Land Development Division	Prior to the issuance of a building permit and grading permit	Significant Direct and Cumulatively Considerable Impact (Short-Term)

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul trucks using City streets shall use the City's designated truck routes.				
Threshold 2: The Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 5: The Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. As such, the Project would not expose people to excessive noise levels associated with the operation of an airport.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 6: The Project would not expose people to excessive noise levels associated with the operation of a private airstrip.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.8 Transportation/Circulation					
Summary of Impacts					
Threshold 1: Significant Cumulatively Considerable Impact. The addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to	**MM 4.8-1** Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable	Project Proponent	City of Moreno Valley Building and Safety Division and Transportation Engineering Division	Prior to the issuance of a grading permit and building permit	Significant Unavoidable Cumulatively Considerable Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
the cumulative impact of seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions.	requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors. The temporary traffic control plan shall require the following: • Delivery trucks shall utilize the most direct route between the site and the 1-215 Freeway via Harley Knox Boulevard to Perris Boulevard; • The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials, earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25 outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.				
	MM 4.8-2 The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project construction	
	MM 4.8-3 Prior to the issuance of building or occupancy permits, the Project shall comply with the City of Moreno Valley Development Impact Fee	Project Proponent	City of Moreno Valley Planning Division and Building and Safety	Prior to the issuance of a building permit or occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	(DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is applied to reduce traffic congestion by funding the installation of intersection improvements. **MM 4.8-4** Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.	Project Proponent	Division City of Moreno Valley Planning Division and Building and Safety Division	Prior to the issuance of the first occupancy permit	
Threshold 2: The Project would not degrade the LOS of any Congestion Management Plan (CMP) or state highway system facility from an acceptable to an unacceptable level of service (LOS); thus, direct impacts to CMP facilities would be less than significant. The Project's traffic would use CMP and state highway system facilities throughout Southern California, including I-215, I-5, I-15, I-110, I-405, I-710, SR-91 and SR-60, among others, segments of which operate at deficient LOS and are thus significantly and cumulatively impacted by area-wide development. The Project's contribution to the cumulative impact would be cumulatively considerable in locations where the Project would contribute 50 or more peak hour trips. CMP and state highway facilities that would receive 50 or more Project-related peak hour trips include four (4) segments of I-215 and one (1) segment of SR-91, as well as the I-215/Harley Knox Boulevard freeway ramps and the merge/diverge pattern at this interchange.	Freeway mainline segments are under the jurisdiction of Caltrans. Caltrans has no fee programs or other mitigation programs in place for the mitigation of cumulative impacts caused by development projects on freeway segments. Impacts to freeway ramps are satisfied by Mitigation Measures MM 4.8-4	N/A	N/A	N/A	Significant Unavoidable Cumulatively Considerable Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 3: The proposed Project does not include an air travel component and would not affect local air traffic levels. In addition, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 4: Implementation of the proposed Project would not substantially increase transportation safety hazards due to incompatible uses or design features.	Mitigation Measure MM 4.8-1 shall apply.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 5: Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 6: The proposed Project is consistent with adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, and is designed to minimize potential conflicts with non-vehicular means of transportation. Potential impacts to the performance or safety of transit, bicycle, and pedestrian systems would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

1.0 INTRODUCTION

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by CEQA Guidelines §15002, the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed [government actions (including the discretionary approval of development projects)];
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

If a project will be approved involving significant environmental effects,

- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose.

This Environmental Impact Report (EIR, P13-130) is an informational document that represents the independent judgment of the City of Moreno Valley and that evaluates the physical environmental effects that could result from constructing and operating the proposed Modular Logistics Center project (hereafter, the "Project"). The Project proposes governmental approval of a Plot Plan (PA 13-0063) and other related discretionary and administrative actions that are required to construct and operate the Project described in this EIR.

The Project is proposed on an approximately 50.84-gross acre (50.68-net acre) property located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard in the City of Moreno Valley, Riverside County, California. The City of Moreno Valley General Plan designates the Project site for "Business Park/Light Industrial (BP)" land uses. The BP designation allows for light industrial land uses that can meet high performance standards; uses typical to the BP designation generally include, but are not limited to, research and development, light manufacturing, warehousing and distribution, and multi-tenant industrial uses. The land use designation applied to the subject property by the General Plan is intended to reflect the land use designations applied to the site by the City of Moreno Valley's Specific Plan 208, titled "Moreno Valley Industrial Area Plan" (MVIAP, discussed below).

Development on the Project site is governed by the MVIAP. The MVIAP includes specific zoning designations and standards for development within its geographical boundaries, and applies an "Industrial" designation to the Project site. The Industrial designation permits a wide range of industrial and industrial/business related support uses, including light manufacturing and storage and distribution facilities. The land use designation applied to the Project site by the MVIAP represents the zoning designation for the subject property.

The proposed Project is consistent with the property's land use and zoning designations as applied by the City of Moreno Valley General Plan and the MVIAP. CEQA Guidelines §15183(a) mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. In this case, the subject property was evaluated as part of an EIR certified in 1989 for the MVIAP (State Clearinghouse Number 1988080813) and as part of the City's General Plan Program EIR certified in 2006 (State Clearinghouse Number 2000091075). Therefore, as mandated by CEQA Guidelines §15183(a), this EIR focuses on project-specific effects that are peculiar to the proposed Modular Logistics Center project and its 50.84-gross acre property.

As a first step in the CEQA compliance process, an Initial Study was prepared by the City of Moreno Valley pursuant to CEQA Guidelines §15063 to determine if the Project could have a significant effect on the environment. The Initial Study determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines §15161, is required. Pursuant to CEQA Guidelines §15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation."

Accordingly, and in conformance with CEQA Guidelines §15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

For purposes of this EIR, the term "Project" refers to the discretionary actions required to implement the Modular Logistics Center as proposed and all of the activities associated with its implementation including planning, construction, and ongoing operation. In summary, the Project proposes to redevelop an underutilized 50.84-gross acre property through the construction and operation of one (1) logistics warehouse building with 1,109,378 square feet (s.f.) of building space and 256 loading bays, as well as surface parking areas and drive aisles, utility infrastructure, landscaping, water quality/detention basins, and other site improvements.

The Project proposes the following discretionary action, which is under consideration by the City of Moreno Valley:

- **Plot Plan (PA 13-0063)** provides a detailed site plan for the proposed warehouse building, and includes a land use plan, architectural plans, and landscape design. One (1) building would be constructed with a maximum of 1,109,378 s.f. of building area.

Refer to Section 3.0, *Project Description*, for a detailed description of the proposed Project, including a list of the permits and actions that would be required of the City of Moreno Valley and other agencies and authorities to construct and operate the Project.

1.3 PRIOR CEQA REVIEW

The Project site is located within the geographic limits of the Moreno Valley Industrial Area Plan (formerly known as the "Oleander Specific Plan," SP 208) and was the subject of previous environmental review under CEQA as part of an EIR certified in 1989 for the Specific Plan (SCH No. 1988080813). The Oleander Specific Plan called for the development of "Business Park," "Mixed Use," "Light Industry," and "Heavy Industry" land uses across approximately 1,500 acres in southwestern Moreno Valley, adjacent to the March Air Reserve Base. SP 208 was adopted on June 27, 1989.

The Oleander Specific Plan was amended, and subsequently renamed the "Moreno Valley Industrial Area Plan," or MVIAP in 2001. As part of the 2001 Amendment, the Specific Plan boundaries were expanded to include an additional 40 acres of land. The MVIAP was amended again in 2002 to consolidate the "Business Park," "Mixed Use," "Light Industry," and "Heavy Industrial" land use designations of the original Specific Plan within a single "Industrial" land use classification.

In 2000, an application for a Plot Plan (PA00-0025) was submitted to the City of Moreno Valley to develop a portion of the Project site with an industrial office building and a manufacturing / warehouse building. PA00-0025 was consistent with the subject property's General Plan and Specific Plan land use designations. The City prepared a Negative Declaration (ND) for PA00-0025 in compliance with CEQA. The ND concluded that implementation of PA00-0025 would not result in a significant effect on the environment. PA00-0025 was approved by administrative decision and constructed. The western portion of the Project site is now developed with an approximately 12,000 s.f. office building, an approximately 130,000 s.f. manufacturing/warehouse building, and a water detention basin.

In 2008, a Plot Plan application (PA08-0096) was submitted to the City of Moreno Valley to allow the installation of concrete stone manufacturing equipment in the existing manufacturing/warehouse building on the Project site. PA08-0096 was approved by the City via an administrative process and was exempt from CEQA review.

In summary, the Project site was subject of the previous environmental reviews conducted under CEQA as part of the EIR certified in 1989 for the Oleander Specific Plan (SCH No. 1988080813) and the ND prepared in support of PA00-0025. The Project site also was evaluated as part of the City of Moreno Valley's General Plan Program EIR (SCH No. 2000091075), certified July 11, 2006. These documents are herein incorporated by reference and are available at the City of Moreno Valley, Planning Division, 14177 Frederick St, Moreno Valley, CA 92553. The General Plan EIR assumes full buildout of the City of Moreno Valley, including the MVIAP area in accordance with

the land use designations applied by SP 208, inclusive of the development of vacant lands as well as the redevelopment of existing uses where appropriate.

1.4 LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 *et seq.*).

Pursuant to CEQA §21067 and CEQA Guidelines Article 4 and §15367, the City of Moreno Valley is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City of Moreno Valley has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City of Moreno Valley's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§15090 through 15093).

Pursuant to CEQA Guidelines §§15040 through 15043, and upon completion of the CEQA review process, the City of Moreno Valley will have the legal authority to do any of the following:

- Approve the proposed Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Disapprove the Project, if necessary, in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even through the Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed Plot Plan (PA13-0063) and all other governmental discretionary and administrative actions related to the Project.

This EIR is an informational document intended for use by the City of Moreno Valley decision makers, Trustee and Responsible agencies, and members of the general public in evaluating the physical environmental effects of the proposed Project. As mandated by CEQA Guidelines §15183(a), this EIR focuses on the specific environmental effects that are peculiar to the proposed Project and its property, because designation of the property for industrial/business park development

was previously and adequately evaluated in accordance with CEQA by two prior EIRs (an EIR certified in 1989 for Specific Plan 208 (State Clearinghouse Number 1988080813) and the City's General Plan Program EIR certified in 2006 (State Clearinghouse Number 2000091075)). As such, the analysis of use of the property for industrial/business park development does not need to be repeated.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

Section 21104 of the California Public Resource Code requires that all EIRs be reviewed by state responsible and trustee agencies (see also CEQA Guidelines §15082 and §15086(a)). As defined by CEQA Guidelines §15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in CEQA Guidelines §15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For the proposed Project, the Santa Ana Regional Water Quality Control Board (RWQCB) is identified as a Trustee Agency that is responsible for the protection of water resources and water quality. The Santa Ana RWQCB is responsible for issuance of a National Pollutant Discharge Elimination System (NPDES) Permit to ensure that during and after Project construction, on-site water flows do not result in siltation, other erosional actions, or degradation of surface or subsurface water quality. There are no other agencies that are identified as Responsible or Trustee Agencies for the proposed Project.

1.6 EIR SCOPE, FORMAT, AND CONTENT

1.6.1 EIR SCOPE

As a first step in complying with the procedural requirements of CEQA, the City of Moreno Valley prepared an Initial Study to preliminarily identify the environmental issue areas that may be adversely impacted by the Project. Following completion of the Initial Study, the City filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to property owners located within 300 feet of the Project site, Responsible Agencies, Trustee Agencies, and other interested parties on March 25, 2014, for a 30-day public review period. The City of Moreno Valley also advertised the NOP in the Press Enterprise, a newspaper of general circulation in the Project area, and posted the Initial Study and NOP to its website (http://www.moval.org/index.shtml) for review by the general public. The City distributed the NOP for public review to solicit responses that may assist the City in identifying the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly noticed EIR Scoping Meeting was held at the City of Moreno Valley City Hall on April 21, 2014, which provided members of the general public an additional opportunity to comment on the scope and range of potential environmental concerns to be addressed in this EIR.

As a result of the Initial Study and in consideration of all comments received by the City on the NOP and during the Scoping Meeting, this EIR evaluates the Project's potential to cause adverse effects to the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Noise
- Transportation/Traffic

The Initial Study, NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive issues raised in response to the NOP are summarized below in Table 1-1, *Summary of NOP Comments*. The purpose of this table is to present the primary environmental issues of concern raised during the NOP review period. The table is not intended to list every comment received by the City during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP and at the EIR Scoping Meeting are addressed in this EIR.

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
State Clearinghouse	March 25, 2014	– Acknowledging receipt of NOP and distribution to State Agencies for review and comment.	Informational comment. No response necessary.
Department of the Air Force	March 21, 2014 [sic]	– Development is consisted with compatible land use and MARB mission operations at this location – Requests that the Project not contain features that interfere with aircraft communication or navigation	Informational comment. No response necessary. – Subsection 4.1, *Aesthetics;* Subsection 4.2, *Air Quality;*
California Department of Transportation (Caltrans)	April 2, 2014	– Prepare traffic study based on Caltrans Guide for the Preparation of Traffic Impact Studies. – Evaluate impacts to nearby regionally significant arterial segments and intersections. – Clearly label the traffic analysis scenarios. – Indicate and exhibit LOS with and without improvements. – Eliminate or reduce impacts to the State highway system.	– Subsection 4.9, *Transportation/Traffic* – Technical Appendices H1 and H2

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
Johnson & Sedlack	April 7, 2014 & Identical Letter Dated April 14, 2014	– Consider potential indirect blighting effects associated with the supply of logistics warehouse buildings in City of Moreno Valley	– Subsection 2.4, *Planning Context* – Section 5.0, *Other CEQA Considerations*
		– Consider cumulative impacts to traffic, air quality, health risk, biological resources, water quality and other effects	– Section 4.0, *Environmental Analysis (Table 4.0-1)* – Subsection 4.2, *Air Quality*; – Subsection 4.9, *Transportation/Traffic*; – Subsection 4.3, *Biological Resources*; – Section 5.0, *Other CEQA Considerations*
		– Consider impacts and mitigation related to health risks associated with the Project's anticipated truck traffic	– Subsection 4.2, *Air Quality*
		– Consider hydrology and water quality issues associated with proximity to Perris Valley Storm Drain Channel, Lake Perris, and the Moreno Valley Regional Water Reclamation Facility	– Section 5.0, *Other CEQA Considerations*
		– Consider traffic impacts to the state highway network related to Port traffic	– Subsection 4.9, *Transportation/Traffic*
		– Consider specific project design features, alternatives and/or mitigation measures to reduce diesel health risks and aesthetic impacts	– Subsection 4.2, *Air Quality*; – Subsection 4.1, *Aesthetics* – Section 6.0, Alternatives
		– Consider traffic and truck emissions associated with soil import	– Subsection 4.9, *Transportation/Traffic* – Subsection 4.2, *Air Quality* – Subsection 4.6, *Greenhouse Gas Emissions*
		– Consider and evaluate agricultural impacts	– Section 5.0, *Other CEQA Considerations*
		– Consider and mitigate impacts to raptors and burrowing owls	– Subsection 4.3, *Biological Resources*
		– Consider impacts and mitigation related to geology/soils	– Subsection 4.5, *Geology and Soils*
		– Quantify and disclose construction noise impacts	– Subsection 4.7, *Noise*
		– Disclose electricity supply and water supply needs of the building	– Section 5.0, *Other CEQA Considerations*
		– Recycle construction debris	– Section 3.0, *Project Description*

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
Native American Heritage Commission	April 16, 2014	– Include mitigation for identification and evaluation of archaeological resources – Coordinate and consult with the NAHC and local Native American contacts	– Subsection 4.4, *Cultural Resources*
California Department of Fish and Wildlife	April 25, 2014	– Consider and disclose impacts and information about habitat and species at the Project Site, measures to minimize impacts; include recent survey data conducted using CDFW methods – Ensure compliance with the MSHCP and demonstrate that proposed actions are consistent with MSHCP Section 6.1.2, 6.1.3 and 6.3.2 – Include cumulative analysis related to biological resources – Alternatives analysis should include alternatives that avoid or minimize impacts to sensitive biological resources	– Section 4.3, *Biological Resources* – Technical Appendices C1 and C2 – Section 4.3, *Biological Resources* – Technical Appendices C1 and C2 – Section 4.3, *Biological Resources* – Section 6.0, *Alternatives*
Southern California Association of Governments	April 23,2014	– Encourage side-by-side comparison of SCAG's RTP/SCS goals with discussion of consistency with supported analysis – Consider applicable RTP/SCS strategies as guidance for considering the Project within the context of regional goals and policies – Utilize the most recently adopted SCAG Regional Growth forecast. – Consider SCAG's RTP/SCS example mitigation to be applied as appropriate	– Section 5.0, *Other CEQA Considerations* – Subsection 2.4, *Planning Context* – Section 5.0, *Other CEQA Considerations* – Section 5.0, *Other CEQA Considerations* – Section 5.0, *Other CEQA Considerations*
South Coast Air Quality Management District	April 24, 2014	– Use CalEEMod land use emissions software for analysis – Identify and quantify air quality impacts that could occur from all phases of the Project and compare to SCAQMD's regional and localized significant thresholds	– Subsection 4.2, *Air Quality* – Subsection 4.6, *Greenhouse Gas Emissions* – Technical Appendices C1, C2 and F – Subsection 4.2, *Air Quality*

The Lead Agency has identified one issue of controversy associated with the proposed Project, which is a common issue of concern associated with warehouse distribution projects in the City and surrounding area. Parties that frequently comment on CEQA documents prepared by the City of Moreno Valley for industrial warehouse projects have suggested that the City apply mitigation measures for mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements. The City of Moreno Valley applies mitigation measures which it determines a) are feasible and practical for project applicants to implement, b) are feasible and practical for the City of Moreno Valley to monitor and enforce, c) are legal for the City to impose, d) have an essential nexus to the Project's impacts, and e) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to analyze an exhaustive list of every imaginable mitigation measure, and measures that are duplicative of mandatory regulatory requirements. This is identified as an area of controversy.

1.6.2 EIR FORMAT AND CONTENT

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, Section 21000 *et. seq.* and California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference guide in locating the CEQA-required sections within this document.

In summary, the content and format of this EIR are as follows:

- **Section 1.0, Introduction,** provides introductory information about the CEQA process and the responsibilities of the City of Moreno Valley, serving as the Lead Agency for this EIR.
- **Section 2.0, Environmental Setting,** describes the environmental setting, including descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was released for public review (March 25, 2014).
- **Section 3.0, Project Description,** serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines §15123.
- **Section 4.0, Environmental Analysis**, provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the proposed Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The CEQA Guidelines also identify the terms "effects" and "impacts" as being synonymous (CEQA

Table 1-2 Location of CEQA-Required Topics

CEQA REQUIRED TOPIC	CEQA GUIDELINES REFERENCE	LOCATION IN THIS EIR
Table of Contents	§15122	Table of Contents
Summary	§15123	Section S.0
Project Description	§15124	Section 3.0
Environmental Setting	§15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented	§15126.2(c)	Subsection 5.2
Growth-Inducing Impact of the Proposed Project	§15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§15126.6	Section 6.0
Effects Not Found to be Significant	§15128	Subsection 5.4
Organizations and Persons Consulted	§15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§15130	Section 4.0

Guidelines §15358). In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementation of the proposed Project. The analyses are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. In most cases, implementation of the mitigation measures would reduce the adverse environmental impact to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental

effect is identified as a significant and unavoidable adverse impact, for which a statement of overriding considerations would need to be adopted by the City of Moreno Valley pursuant to CEQA §15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the proposed Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not to be significant during this EIR's Initial Study and NOP process and that, therefore, do not require a detailed evaluation in this EIR.

- **Section 6.0, Project Alternatives,** describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of four (4) alternatives is presented in Section 6.0.

- **Section 7.0, References,** cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

- **Technical Appendices.** CEQA Guidelines §15147 states that the "information contained in an EIR shall include summarized…information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Moreno Valley Community and Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, California, 92552, during the City's regular business hours or can be requested in electronic form by contacting the City Planning Division. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

  A: Initial Study, Notice of Preparation, and Written Comments on the NOP
  B1: Air Quality Impact Analysis
  B2: Mobile Source Health Risk Assessment
  B3: Supplemental Health Risk Assessment
  B4: Supplemental Analysis for Refrigerated Uses
  C1: Biological Resources Assessment
  C2: Burrowing Owl Survey
  D1: Cultural Resources Assessment
  D2: Paleontological Resources Assessment

E1: Geotechnical Investigation
E2: Water Quality Management Plan
F: Greenhouse Gas Analysis
G: Noise Impact Analysis
H1: Traffic Impact Analysis
H2: Supplemental Basic Freeway Segment Analysis
H3: Site Access Evaluation
I: Water Supply Assessment
J: Phase I Environmental Site Assessment
K: Written Correspondence

- **Documents Incorporated by Reference.** CEQA Guidelines §15150 allows for the incorporation "by reference all or portions of another document…[and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." Documents, analyses, and reports that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of an EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

2.0 ENVIRONMENTAL SETTING

2.1 PHYSICAL SETTING AND LOCATION

The approximately 50.84-gross acre (50.68-net acre) Project site is located in the City of Moreno Valley, in western Riverside County, California. Western Riverside County abuts San Bernardino County to the northeast, Orange County to the west, and San Diego County to the south. Los Angeles County is located further to the northwest. The site's location in a regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square mile region comprising San Bernardino County, Riverside County, and the eastern tip of Los Angeles County. The Southern California Association of Governments (SCAG) estimates that the majority of growth in the entire southern California region will take place in Riverside and San Bernardino Counties (SCAG 2012a 2). According to U.S Census data, the 2010 population of Riverside County was 2,189,641 (U.S. Census Bureau 2012). SCAG forecast models predict that the population of Riverside County will grow to approximately 3.324 million persons (an approximate 1.1 million person increase) by the Year 2035 (SCAG 2012b).

From a regional perspective, the Project site is generally located to the north and northeast of the City of Perris and to the southeast of the City of Riverside. Unincorporated areas of Riverside County in the vicinity of the Project site include the unincorporated communities of Woodcrest and Mead Valley to the west and southwest, the unincorporated communities of Reche Canyon and Pigeon Pass to the north, and the unincorporated community of Lakeview and rugged terrain known as the "Badlands" to the east.

The subject property is rectangular-shaped and located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Figure 3-2, *Vicinity Map*, in EIR Section 3.0, *Project Description*, shows the specific location of the Project site. The Project site is located approximately 2.0 miles east of Interstate 215 (I-215) and 4.7 miles south of State Route 60 (SR-60). The property encompasses Assessor Parcel Numbers (APNs) 312-250-030, 312-250-031, 312-250-032, 312-250-036, 312-250-038, and 312-250-050, and lies within Section 32 of Township 3 South, Range 3 West of the San Bernardino Baseline and Meridian.

The Project site is located within the geographical limits of the MVIAP. Property in the MVIAP boundaries was once rural in nature, but over the past decade has been transitioning into an important industrial and economic center for the City, as called for by the MVIAP. The MVIAP was originally approved by the City in 1989 (previously known as the "Oleander Specific Plan"). The pace of industrial development in the MVIAP area was very slow until about 2007 when the warehouse distribution industry began to locate distribution warehouse facilities in this location. Several large-scale industrial and warehouse buildings have developed within the MVIAP area and there are

several approved industrial and warehouse development projects in this area that are pending construction.

Approximately 1.0 mile west of the Project site is the March Air Reserve Base (MARB), which was established as a military airport in 1918 and operated as March Air Force Base until 1996 when it was transitioned to a reserve base. Today, the property contains an airfield, military uses, aviation-related uses, and areas designated for civilian development called the March Inland Port Airport (IPA). Additionally, Lake Perris is located approximately 1.3 miles to the southeast of the Project site. Subsection 2.2, below, describes the conditions surrounding the Project site in more detail.

2.2 SURROUNDING LAND USES AND DEVELOPMENT

Figure 2-1, *Surrounding Land Uses and Development*, depicts the existing land uses and land use designations in the vicinity of the Project site. The Project site is located in a portion of the City of Moreno Valley that is developing as a center for distribution warehousing and light industrial land uses.

North: North of the Project site is Edwin Road and a property that is currently under construction to accommodate a large distribution warehouse building. As part of that construction process, Edwin Road is being extended to the west and will terminate in a cul-de-sac. To the north of the parcel under construction is the Perris Valley Storm Drain Channel, beyond which is single-family residential housing intermixed with residential-serving uses such as parks and schools. Four (4) school facilities are located within one (1) mile of the Project site. The nearest school facility is the El Portero Elementary School, located approximately 0.4-mile northeast of the Project site. Vista Verde Middle School is located approximately 0.8-mile northeast of the Project site on Krameria Avenue. In addition, Morning Dove Christian Academy is located approximately 0.7-mile north of the Project site and Mary McLeod Bethune Elementary School is located approximately 0.6-mile northeast of the Project site at the southwest corner of the intersection of Krameria Avenue and Kitching Street.

South: Immediately to the south of the Project site is Modular Way, south of which is a distribution warehouse building occupied by Walgreens. Further south are additional distribution warehouse buildings, including but not limited to buildings occupied by Ross and Home Depot.

West: Perris Boulevard abuts the Project site to the west. West of Perris Boulevard are a collection of warehouse distribution buildings (including but not limited to buildings occupied by Harbor Freight Tools and O'Reilly Auto Parts), truck trailer parking yards, and small parcels that are either undeveloped or contain small commercial, industrial, or manufacturing structures intermixed with several non-conforming residential land uses.

East: To the east of the Project site lie Kitching Street and the Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD). Lake Perris is located approximately 1.3 miles to the east of the Project site.

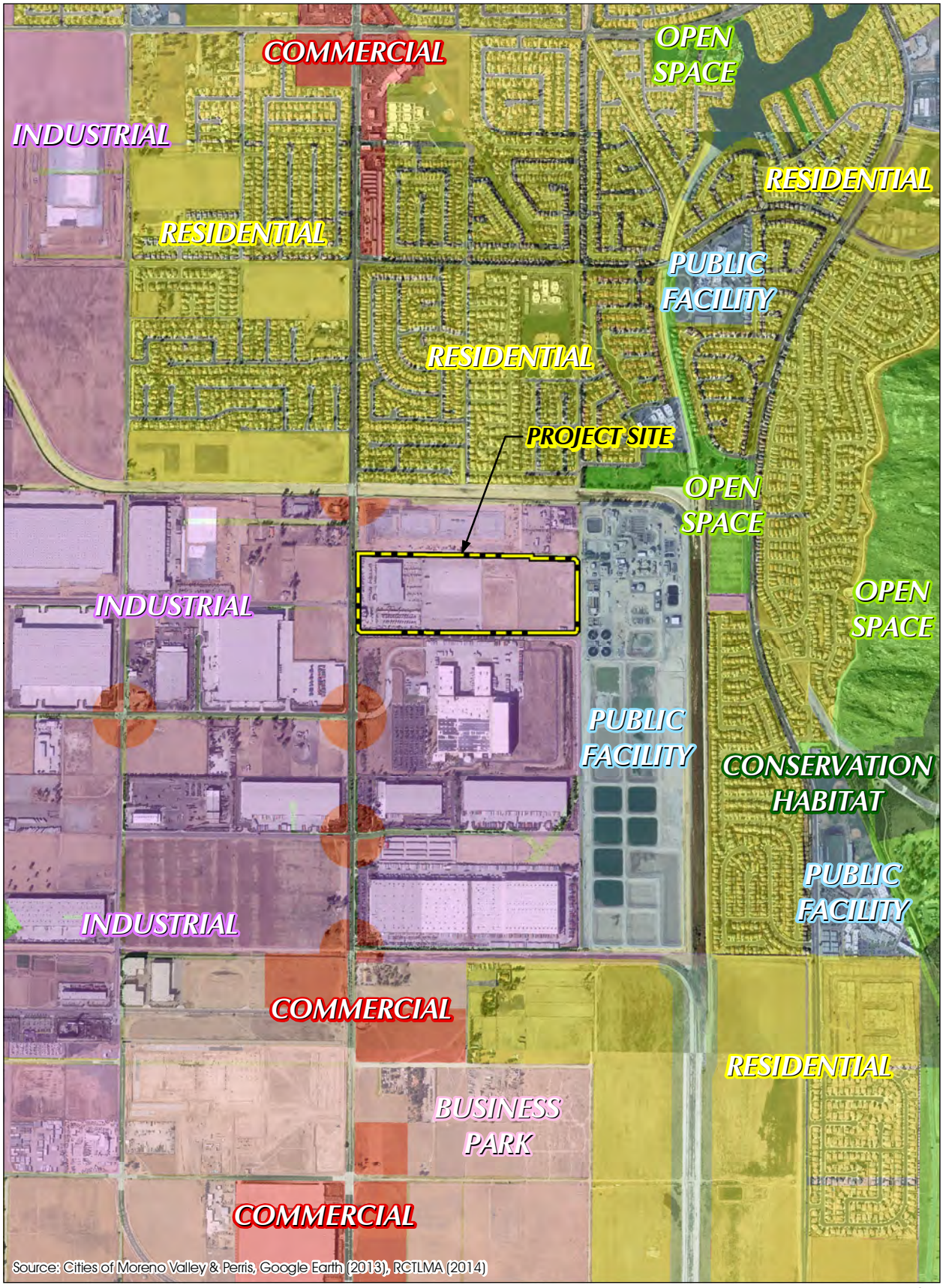


Figure 2-1

Surrounding Land Uses and Development

All undeveloped properties immediately surrounding the proposed Project site are designated for industrial development pursuant to the City's General Plan and the MVIAP.

2.3 FUNCTIONAL SETTING OF INDUSTRIAL/LOGISTICS WAREHOUSE LAND USES

Just northwest of the Inland Empire is the greater Los Angeles area, which is the second largest metropolitan region in the country. The ports of LA/Long Beach are by far the largest water ports in the country and handle approximately 40% of port container traffic throughout the United States. The ports substantially contribute to Southern California's economy and offer a cost efficient method for Asian goods to enter North American markets. Future growth in port activity is anticipated, as there are plans to spend $5 billion on port infrastructure by 2017. A key component of distributing goods to consumers once they enter the United States via the ports is goods storage and distribution centers. Industrial logistics/warehouse vacancy rates in Southern California are at historic lows, and tenants have growing needs for state of the art warehouse buildings to receive, sort, and ship goods. The business of logistics has grown more sophisticated over the years mandating early suppression fast response (ESFR) fire sprinkler systems, 32 to 36 foot minimum ceiling clearances, truck courts that accommodate large trailers, and large trailer parking areas. (Colliers International, 2014)

Since the economic downturn in 2008, companies throughout the United States have learned to become more efficient and productivity has been on the rise. Companies are operating more efficiently within their facilities, leading them to demand state-of-the-art features found in new buildings. Retailers are demanding more and more out of distributors, forcing them to combine product lines, provide pick-and-pack services employing larger numbers of people, which all require larger facilities. E-commerce is an emerging trend that is growing at an accelerating pace. As United States consumers buy more and more goods online, stores are getting smaller and warehouses are getting larger. Large industrial facilities are typically owned by institutions, not individuals. Unlike manufacturing facilities that are built for a specific purpose, logistic warehouse facilities are built with the flexibility to accommodate a variety of occupants.

2.4 PLANNING CONTEXT

Provided in this Subsection is a description of the Project site's context to SCAG's Regional Transportation Plan Goods Movement Strategy and the Project site's land use designations, as applied by planning documents adopted by the City of Moreno Valley.

2.4.1 SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS REGIONAL TRANSPORTATION PLAN

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans

including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region (SCAG n.d.).

As a MPO and public agency, SCAG develops transportation and housing plans that transcend jurisdictional boundaries that affect the quality of life for Southern Californian as a whole. SCAG's *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*) includes a chapter titled "Goods Movement" that is applicable to the proposed Project. It states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. To that end, the Goods Movement Appendix of the RTP/SCS sets forth regional strategies to achieve an efficient movement of goods. It states:

> "Goods movement and freight transportation are essential to supporting the SCAG regional economy and quality of life. The goods movement system in the SCAG region is a multimodal, coordinated network that includes deep water marine ports, international border crossings, Class I rail lines, interstate highways, state routes and local roads, air cargo facilities, intermodal facilities, and regional distribution and warehousing clusters. In 2010, over 1.15 billion tons of cargo valued at almost $2 trillion moved across the region's transportation system. Whether carrying imported goods from the San Pedro Bay Ports to regional distribution centers, supplying materials for local manufacturers, or delivering consumer goods to SCAG residents, the movement of freight provides the goods and services needed to sustain regional industries and consumers on a daily basis." (SCAG 2012 1)

According to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. Unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035 a shortfall of 227 million square feet of industrial warehouse space will occur (SCAG 2013 4-39).

Assuming no other land, such as agricultural lands, is converted to industrial use, and based on available land that is zoned for industrial uses, the SCAG region could hold another 186.2 million square feet of warehousing and distribution buildings. Within the SCAG region, Riverside County contains the largest share of undeveloped space suitable for industrial warehouse development (60.0 million square feet, 32.2%), of which the vast majority (67.5%) is located in outlying desert areas (SCAG 2013 3-34). A significant amount of available industrial land is located in the vicinity of the SR-60 corridor, particularly in Moreno Valley, Perris, and near March Reserve Base. Approximately 50% of the SCAG region's projected industrial warehouse space is located within a five (5) mile radius of SR-60 (SCAG 2013 6-16).

2.4.2 CITY OF MORENO VALLEY GENERAL PLAN

The City of Moreno Valley's prevailing planning document is its General Plan, dated July 11, 2006. As depicted on Figure 2-2, *Existing General Plan Land Use Designations*, the City's General Plan designates the Project site for "Business Park/Light Industrial" land uses. The "Business Park/Light Industrial" designation provides for employee intensive uses, including manufacturing, research and development, warehousing and distribution, as well as office and support commercial activities, with a building intensity up to 1.0 floor area ratio (FAR).

2.4.3 MORENO VALLEY INDUSTRIAL AREA PLAN (SPECIFIC PLAN 208)

The Project site is located within the geographic boundaries of the MVIAP (Specific Plan 208). The MVIAP "establishes development regulations and design standards that will ensure quality development which will positively contribute to the City's industrial employment base…" (City of Moreno Valley 2002 I-4). The MVIAP includes specific zoning designations and standards for development within its geographical boundaries.

As shown on Figure 2-3, *MVIAP Land Use Map*, the MVIAP applies an "Industrial" land use designation to the Project site. The "Industrial" designation permits a wide range of industrial and industrial/business related support uses, including wholesale, storage and distribution facilities.

2.4.4 ZONING

The development regulations and design standards contained within the MVIAP (Specific Plan 208) supersede the zoning standards contained in the City's Municipal Code. The MVIAP applies the "Industrial" zoning designation to the proposed Project site. Refer to MVIAP Section III, *Development Standards and Guidelines*, and Section IV, *Development Framework*, for more information on the specific development regulations and design standards that apply to the Project site. The MVIAP is herein incorporated by reference pursuant to CEQA Guidelines §15150 and is available for review at the physical location indicated in EIR Subsection 7.2, *Documents Incorporated by Reference*.

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to CEQA Guidelines §15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on March 25, 2014, and the following subsections provide a description of the Project site's physical environmental condition as of that approximate date. More information regarding the Project's site's environmental setting is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 LAND USE

The area surrounding the Project site, as described previously in Subsection 2.2, is characterized by industrial and warehouse development, the Moreno Valley Regional Water Reclamation Facility, and

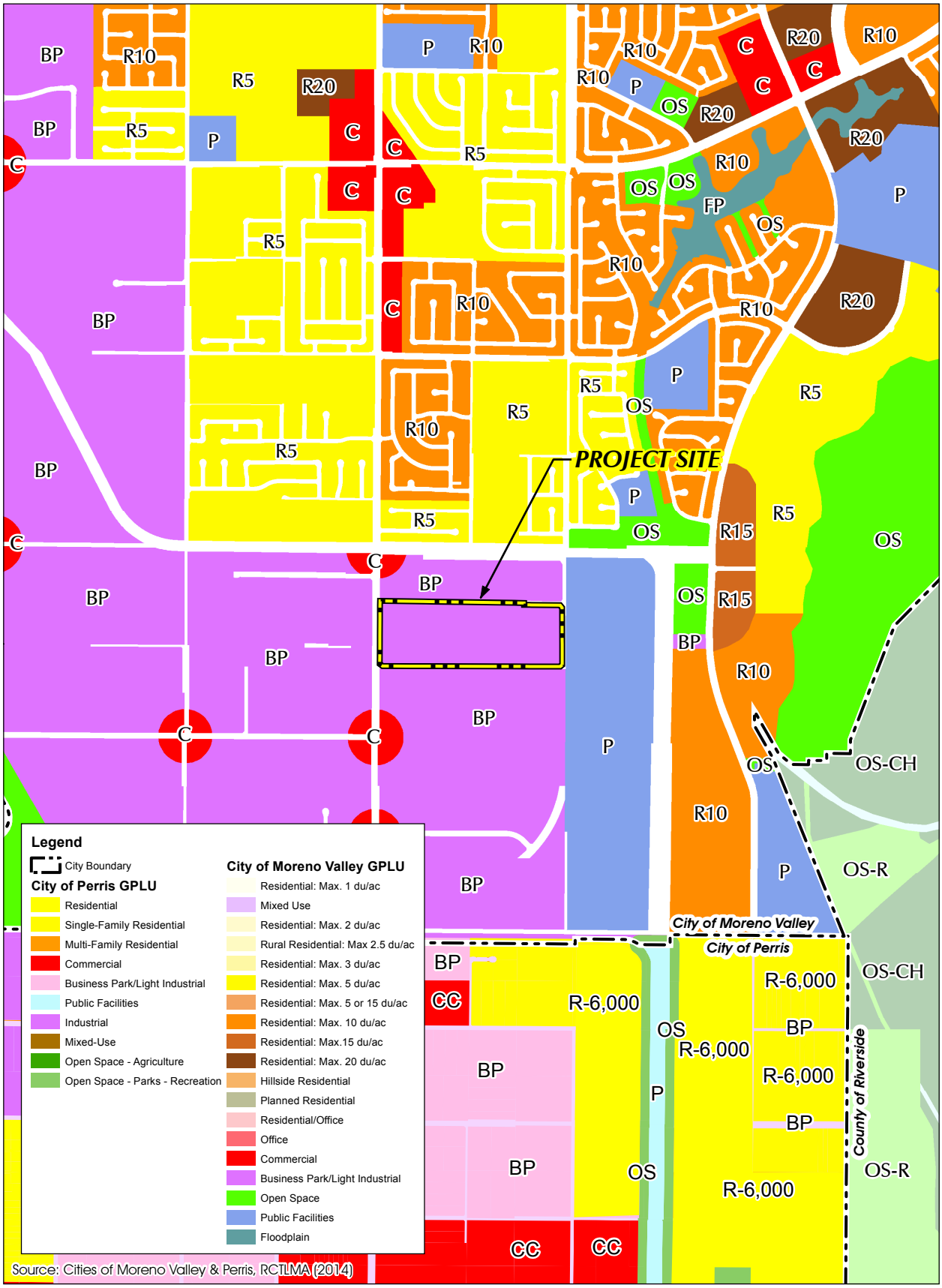


Figure 2-2

Existing General Plan Land Use Designations

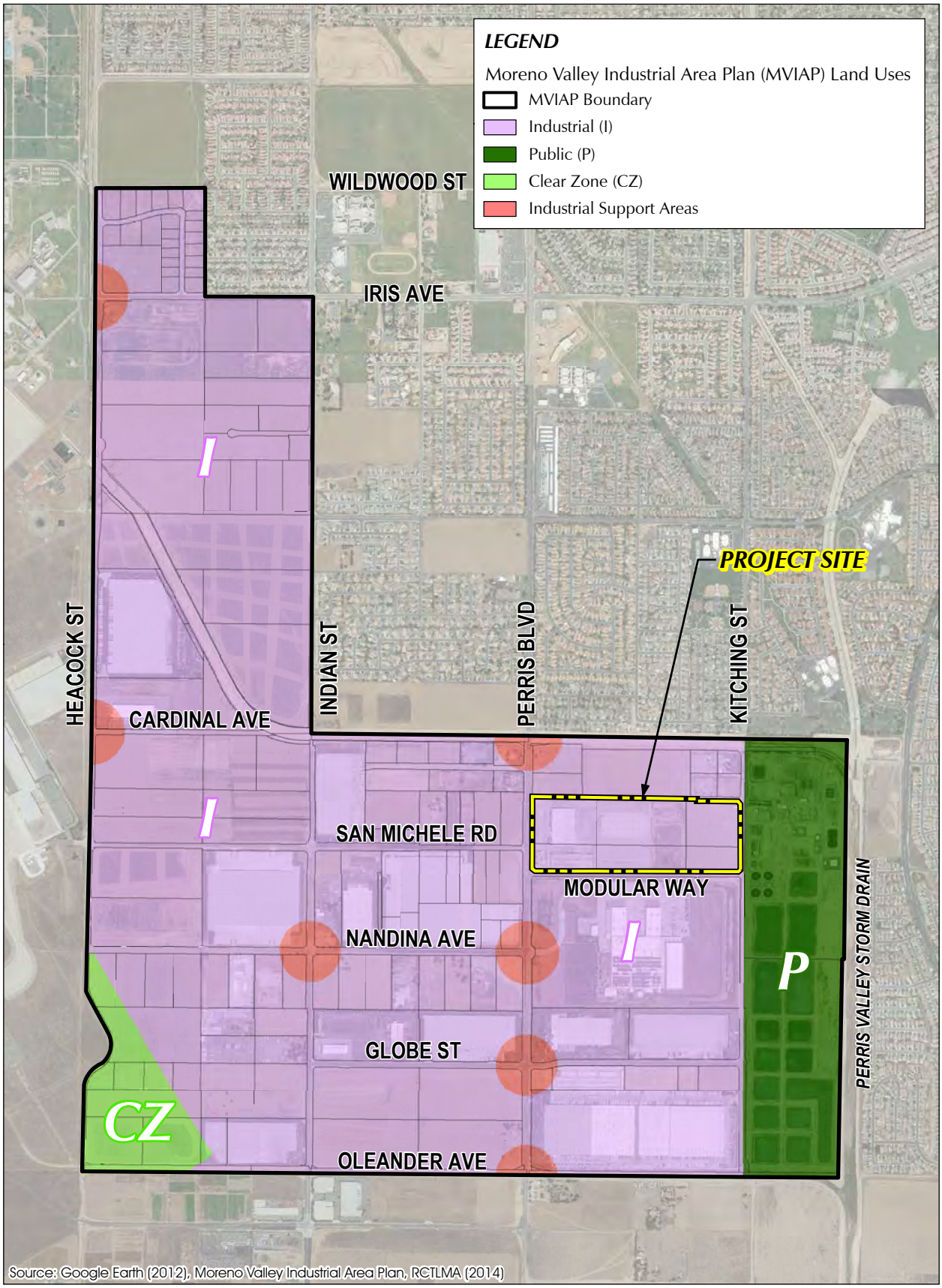


Figure 2-3

MVIAP Land Use Map

vacant, undeveloped land. Historically, a majority of the Project site was used for agricultural production; however, all agricultural activities on the Project site ceased in approximately 2002 when the property was partly developed with industrial uses. The Project site is not located in an agricultural area and there are no Williamson Act Contract lands or Agricultural Preserves located on the site or in the surrounding area.

As depicted in Figure 2-4, *Aerial Photograph*, the eastern portion of the Project site is vacant and routinely maintained (*i.e.*, disced) to remove vegetation from the site to reduce the risk of fire as required by the Riverside County Fire Department. The eastern portion of the Project site was previously utilized as a storage area for modular units. The central portion of the site contains a large detention basin associated with the Eldorado Stone facility operating on the western portion of the site. The industrial operation on the western portion of the Project site, which is occupied by Eldorado Stone, consists of one (1) large warehouse/distribution structure with approximately 130,000 s.f. of building area and an approximate height of 37 feet, one (1) office building with approximately 12,000 s.f. of building area and an approximate height of 37 feet, a paved parking lot in the southwest corner, and additional paved land utilized as outdoor storage.

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

The Project site is relatively flat, with a topographic high point of 1,471.6 feet above mean sea level (AMSL) in the northwest portion of the site and a topographic low point of approximately 1,457.4 feet AMSL in the south central portion of the site (within the existing detention basin associated with the Eldorado Stone facility). The topographic relief of the Project site is approximately fourteen (14) feet. Ornamental landscaping, including trees, is provided along the western, northern, and southern perimeters of the Eldorado Stone facility and interior to the site at building entrances and within parking/storage areas. The central and eastern portions of the site do not contain any formal landscaping, and are characterized by ruderal plants and weeds. No trees are present on the central and eastern portions of the subject property. There are no rock outcroppings or unique topographic features on the Project site. Aesthetically, the Project site is characterized as a flat, partially developed site (refer to Subsection 2.5.1 for a description of the existing structures on the Project site). Figure 3-3, *USGS Topographic Map*, in EIR Section 3.0, *Project Description*, depicts the Project site's existing topographic conditions.

The areas immediately surrounding the Project site to the north, south and west are characterized as flat and/or developed. The Russell Mountains are located approximately 0.7-mile to the east of the Project site.

Refer to EIR Subsections 4.1, *Aesthetics*, and 4.5, *Geology and Soils*, for a more thorough discussion of the Project site's existing topographic and aesthetic setting.

Figure 2-4

Aerial Photograph

2.5.3 AIR QUALITY AND CLIMATE

The Project site is located in the 6,745-square-mile South Coast Air Basin (SCAB), which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and state air quality standards. As documented in the Project's air quality report (*Technical Appendix B1* to this EIR), although the climate of the SCAB is characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. More than 90% of the SCAB's rainfall occurs from November through April. Temperatures during the year range from an average minimum of 36°F in January to over 100°F maximum in the summer. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Ana[s]" each year.

Although air quality in the SCAB has improved over the past several decades, the SCAB is currently not in attainment of state and/or federal standards established for Ozone (O_3) one-hour and eight-hour, particulate matter (PM_{10} and $PM_{2.5}$), and Nitrogen Oxides (NO_X), and also not in attainment for Lead (Pb) in Los Angeles County (Urban Crossroads 2014a 12). The SCAQMD conducts in-depth analysis of toxic air contaminants and their resulting health risks for all of Southern California. This study, entitled, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III*), predicted an excess cancer risk of 566 in one million for the vicinity of the Project site (Urban Crossroads 2014a 25).

Refer to EIR Subsections 4.2, *Air Quality*, and 4.6, *Greenhouse Gas Emissions*, for a more thorough discussion of the Project's site existing air quality and climate setting.

2.5.4 BIOLOGICAL RESOURCES

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the conservation of sensitive plant and animal species and their associated habitats in western Riverside County. The City of Moreno Valley approved the MSHCP on January 13, 2004. The MSHCP identifies a Criteria Area, in which habitat conservation efforts are targeted. As shown on Figure 2-5, *MSHCP Criteria Areas*, the Project site is not located within a MSHCP Criteria Area. As such, the site is not targeted for open space conservation as part of the regional plan for habitat conservation (Riverside County, 2003, Vol. 1 Ch. 3).

The entire Project site has been disturbed, either by past development and/or agricultural activities or by ongoing fire fuel management (*i.e.*, discing). According to a biological field survey conducted on the Project site in November 2013 by Alden Environmental, Inc. (refer to *Technical Appendix C1*),

Figure 2-5

MSHCP Criteria Areas

the subject property does not support any native vegetation communities. No special-status plant species were observed on the Project site; however, one (1) special-status animal species (California horned lark) was detected on the Project site. The western burrowing owl, a California Species of Special Concern, was not observed on the Project site; however, the species is common throughout the western Riverside County area and there is potential for the species to occur on-site.

Refer to EIR Subsection 4.3, *Biological Resources*, for a more thorough discussion of the Project site's existing biological setting.

2.5.5 CULTURAL RESOURCES

The Project site is characterized by the City's General Plan Final EIR as having a "low" potential for containing paleontological resource deposits (City of Moreno Valley 2006b 5.10-11) but is characterized by the Riverside County General Plan as having a "high" potential for containing paleontological resources (Riverside County Land Information System). There are no known paleontological resources located on or beneath the surface of the Project site.

From an archaeological perspective, regional prehistory within the Project area is defined by the Late Pleistocene/Paleo-Indian Period (11,500 to 9,000 years ago), the Archaic period (9,000 to 1,300 years ago), and the Late Prehistoric period (approximately 1,300 years ago). Each of these historical periods in time is discussed in EIR Subsection 4.4, *Cultural Resources*. In summary, human habitation of southern California dates back to approximately 11,500 years ago. Over a series of cultural periods, the area transitioned from a hunting and gathering society, to settlements of small groups of people, to large occupations near natural water sources, to formations of distinct ethnographic groups. Moreno Valley is located in the traditional tribal use areas of several Native American Tribes, particularly the Luiseno, with influences from the Gabrielino, Cahuilla, and Serrano Indians (BFSA 2013a pp. 2.0-5 – 2.0-28).

The Project site is not known to have historical significance to the region. The structures present on the property are of modern construction, possess no distinctive features, are not identified as being eligible for listing on the California Register of Historic Places.

Refer to EIR Subsection 4.4, *Cultural Resources*, for a more thorough discussion of the Project's site existing cultural setting.

2.5.6 GEOLOGY

The Project site is located within the Peninsular Range Geomorphic Province, a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded on the east by the Colorado Desert. The Peninsular Range is characterized by steep, elongated ranges and valleys that generally trend northwesterly (California Department of Conservation 2002). More specifically, the Project site is situated within the Perris Block unit, which is mass of granitic rock. The Perris Block is bounded by

the San Jacinto fault zone to the northeast, the Elsinore fault zone to the southwest, and the Santa Ana River (City of Moreno Valley 2006b 5.6).

Southern California Geotechnical, Inc. performed visual site reconnaissance, subsurface exploration, field and laboratory testing, and a geotechnical engineering analysis on the Project site. The developed, western portion of the site generally is underlain with artificial fill materials extending to depths of approximately nine (9) feet, with the native alluvial soils located underneath. The undeveloped, eastern portion of the Project site generally is underlain by native alluvial soil (Southern California Geotechnical, Inc. 2012 pp. 7-8).

The Project site is not located within an active Alquist-Priolo earthquake zone or a City-designated fault hazard zone, meaning that no active faults are mapped or known to exist on the Project site or in the immediate surrounding area (Southern California Geotechnical 2012 12). The nearest known active fault to the Project site, the San Jacinto Valley section of the San Jacinto Fault Zone (Casa Loma Fault), is located approximately 6.2 miles to the west of the subject property.

Refer to EIR Subsection 4.5, *Geology and Soils*, for a more thorough discussion of the Project site's existing geologic setting.

2.5.7 HYDROLOGY

The Project site is located in the Santa Ana River watershed, which drains a 2,650 square-mile area and is the principal surface flow water body within the region. The Santa Ana River starts in the San Bernardino Mountains, approximately 29 miles northeast of the Project site, and flows southwesterly for approximately 96 miles across San Bernardino, Riverside, Los Angeles, and Orange counties before spilling into the Pacific Ocean.

Under existing conditions, runoff from the developed portion of the subject property sheet flows into an on-site detention basin, while runoff from the undeveloped portion of the subject property sheet flows to surrounding roadways (mostly Kitching Street and Modular Way). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1430G, dated August 28, 2008, the entire Project site is prone to some degree of flooding from the Perris Valley Storm Drain Channel during rare storm events. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one (1) foot or drainage areas less than one (1) square mile. The Perris Valley Storm Drainage Channel is located approximately 0.3-mile north of the Project site; intervening property is currently under construction for a large logistics warehouse building.

The Project site does not contain any surface water; however, free water was encountered in one (1) subsurface boring on the Project site at a depth of approximately 25 feet below the ground surface.

Based on the observed water level reading and the moisture content of recovered soil samples, Southern California Geotechnical, Inc. determined the static groundwater table existed at a depth of approximately 25 feet across the Project site at the time of subsurface exploration in 2012 (Southern California Geotechnical, Inc. 2012 8).

2.5.8 NOISE

Primary sources of noise in the Project vicinity include vehicle noise and aircraft noise. To determine the existing acoustical setting, 24-hour noise measurements were taken in the Project study area by Urban Crossroads, Inc. at four (4) locations on November 7, 2013, and December 18, 2013. Measured hourly noise levels in the Project area ranged from 51.8 to 62.7 equivalent-level decibels (dBA Leq), which correlates to a Community Noise Equivalent Level (CNEL) ranging from 57.8 dBA CNEL to 69.2 dBA CNEL (refer to *Technical Appendix G*).

Refer to EIR Subsection 4.8, *Noise*, for a more thorough discussion of the Project's site existing noise setting.

2.5.9 TRANSPORTATION

Major vehicular travel routes in the Project region include I-215, SR-60, and Interstate 15 (I-15). The Project site is located approximately 2.0 miles east of I-215. The nearest interchange is located at Harley Knox Boulevard/I-215 in the City of Perris. From the Harley Knox interchange, I-215 connects with I-15 approximately 24 roadway miles to the south and connects with SR-60 approximately 6.0 roadway miles to the north.

The Project site is located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Existing traffic on nearby roadways consists of both passenger vehicles and trucks accessing the existing industrial / warehouse developments and other land uses in the area. The most direct travel routes from the Project site to I-215 are: Perris Boulevard south to Harley Knox Boulevard west in the City of Perris; and San Michelle Road west to Indian Street south to Harley Knox Boulevard west in the City of Perris.

The City of Moreno Valley Ordinance No. 836 established and designated the following streets or portions thereof as truck routes:

- Alessandro Boulevard (I-215 to the easterly city limits)
- Cactus Avenue (I-215 to Perris Boulevard)
- Elsworth Avenue (Alessandro Boulevard to Cactus Avenue)
- Frederick Street (Cactus Avenue to Sunnymead Boulevard)
- Gilman Springs Road (SR-60 to the easterly City limits)
- Graham Street (Alessandro Boulevard to Cactus Avenue)
- Heacock Street (San Michele Road to Reche Vista Drive)
- Indian Street (San Michelle Road to the southerly City limits)

- Ironwood Avenue (Pigeon Pass to Perris Bouelvard)
- Moreno Beach Drive (Alessandro Boulevard to the SR-60 Westbound (WB) On-Off Ramp
- Nandina Avenue (Perris Boulevard to Indian Street)
- Perris Boulevard (Ironwood Avenue to the southerly City limits)
- Pigeon Pass Road (Sunnymead Boulevard to Ironwood Avenue)
- Reche Vista Road (Heacock Street to the northerly City limits)
- Redlands Boulevard (SR-60 Eastbound (EB) On-Off Ramps to the northerly City limits
- San Michelle Road (Perris Boulevard to Heacock Street)
- Sunnymead Boulevard (Frederick Street to Perris Boulevard)
- Theodore Street (Alessandro Boulevard to Ironwood Avenue)

The City of Perris General Plan Circulation Element establishes Harley Knox Boulevard and Indian Street in the northern portion of the City of Perris as truck routes. Regarding other forms of transportation, field observations indicate that there is nominal pedestrian and bicycle activity in the Project area (Urban Crossroads 2014e 29). The Riverside Transit Agency (RTA) operates bus services along Perris Boulevard, abutting the Project site, via Route 19. An existing bus stop is located at the approximate mid-point of the Project site's western boundary with Perris Boulevard. There is no commuter rail service in the City of Moreno Valley under existing conditions; however, in February 2014, construction broke ground on the "Perris Valley Line," a 24-mile extension of the Metrolink commuter rail service. The Perris Valley Line, which is scheduled to be operational in late-2015, will provide service from Downtown Riverside to Perris along the west side of I-215 (Downey). A station for the Perris Valley Line is planned at Alessandro Boulevard, approximately 6.3 roadway miles from the Project site. Approximately 1.0 mile east of the Project site is the March ARB, at which the airport is used by military and government aircraft with limited use by civilian aircraft. Although air cargo service was discontinued in 2008, the March ARB/IPA Joint Land Use Study (March JPA 2010 Ch. 2), discloses the potential for increased general aviation use.

Refer to EIR Subsection 4.8, *Transportation/Traffic*, for a more thorough discussion of the Project's site existing transportation setting, including local roadways in the City of Moreno Valley and City of Perris that would be used by Project-related traffic.

2.5.10 UTILITIES AND SERVICE SYSTEMS

The Project site is located in the service area of Eastern Municipal Water District (EMWD) for domestic water and sewer service. EMWD manages the domestic water supply and delivery service within its 555 square mile service area, including the City of Moreno Valley, all or portions of six other cities, and a portion of unincorporated Riverside County. As documented in EMWD's *2010 Urban Water Management Plan*, EMWD has four sources of water supply: imported water from the Metropolitan Water District (MWD), recycled water, local groundwater production, and desalted groundwater (EMWD 2011 Ch. 3). EMWD has an adopted Water Shortage Contingency Plan (EMWD Ordinance 117.2) that applies regulations and restrictions on the delivery of and consumption of water during water shortages. Regarding sewer collection and treatment, EMWD

collects and treats all of the wastewater collected in its service area to tertiary standards. The Moreno Valley Regional Water Reclamation Facility operated by EMWD is located immediately east of the Project site. Regarding sewer collection and treatment, EMWD collects and treats all of the wastewater collected in its service area to tertiary standards. Treated wastewater is disposed of by means of customer sales, discharge to Temescal Creek, and through percolation and evaporation while stored in EMWD ponds (EMWD 2011 Ch. 3). Solid waste collection and disposal in the Project area is conducted by Waste Management of the Inland Empire, a division of Waste Management, Inc. Landfills that have the potential of receiving solid waste from the Project site include the El Sobrante Landfill, the Badlands Sanitary Landfill, and the Lamb Canyon Sanitary Landfill.

3.0 PROJECT DESCRIPTION

This section provides all of the information required of a Project Description by CEQA Guidelines §15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR, including a list of the government agencies that are expected to use this EIR in their decision-making processes; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

Under existing conditions, the 50.84-gross acre (50.68-net acre) Project site contains an approximately 38-acre industrial development (stone and manufactured stone products). The remaining approximately 13 acres of the Project site consist of undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The proposed Project involves the demolition and removal of existing buildings and improvements, grading and preparation of the site for redevelopment, and construction and operation of a logistics warehouse structure containing 1,109,378 square feet of building space and 256 loading bays. Associated improvements to the property would include, but are not limited to, surface parking areas, drive aisles, utility infrastructure, landscaping, exterior lighting, signage, and water quality/detention basins. The Project also includes frontage improvements along site-adjacent roadways and utility connections within abutting roadways.

This EIR (P13-130) analyzes the physical environmental effects associated with all components of the Project, including planning, construction, and on-going operation. Approval of a Plot Plan (PA13-0063) is requested of the City of Moreno Valley to implement the proposed Project. This application, as submitted to the City of Moreno Valley by the Project Applicant, is herein incorporated by reference pursuant to CEQA Guidelines §15150 and is available for review at the City of Moreno Valley Community & Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, CA 92552. No other discretionary actions are required on the part of the City to approve the Project; nonetheless, this EIR covers any and all other discretionary and administrative approvals that may be required of the City of Moreno Valley or other governmental agencies to fully implement the proposed Project. A complete description of the proposed Project is provided in the following subsections of this Section 3.0.

3.1 PROJECT LOCATION

The Project site consists of 50.84-gross acres (50.68-net acres) in the southern portion of the City of Moreno Valley, Riverside County, California (see Figure 3-1, *Regional Map*). From a regional perspective, the Project site is located north of the City of Perris, southeast of the City of Riverside, and south, east, and west of unincorporated areas in Riverside County. Interstate 215 (I-215) is located approximately two (2) miles to the west of the site and State Route 60 (SR-60) is located approximately 4.7 miles to the north of the site. At the local scale, the Project site is located north of

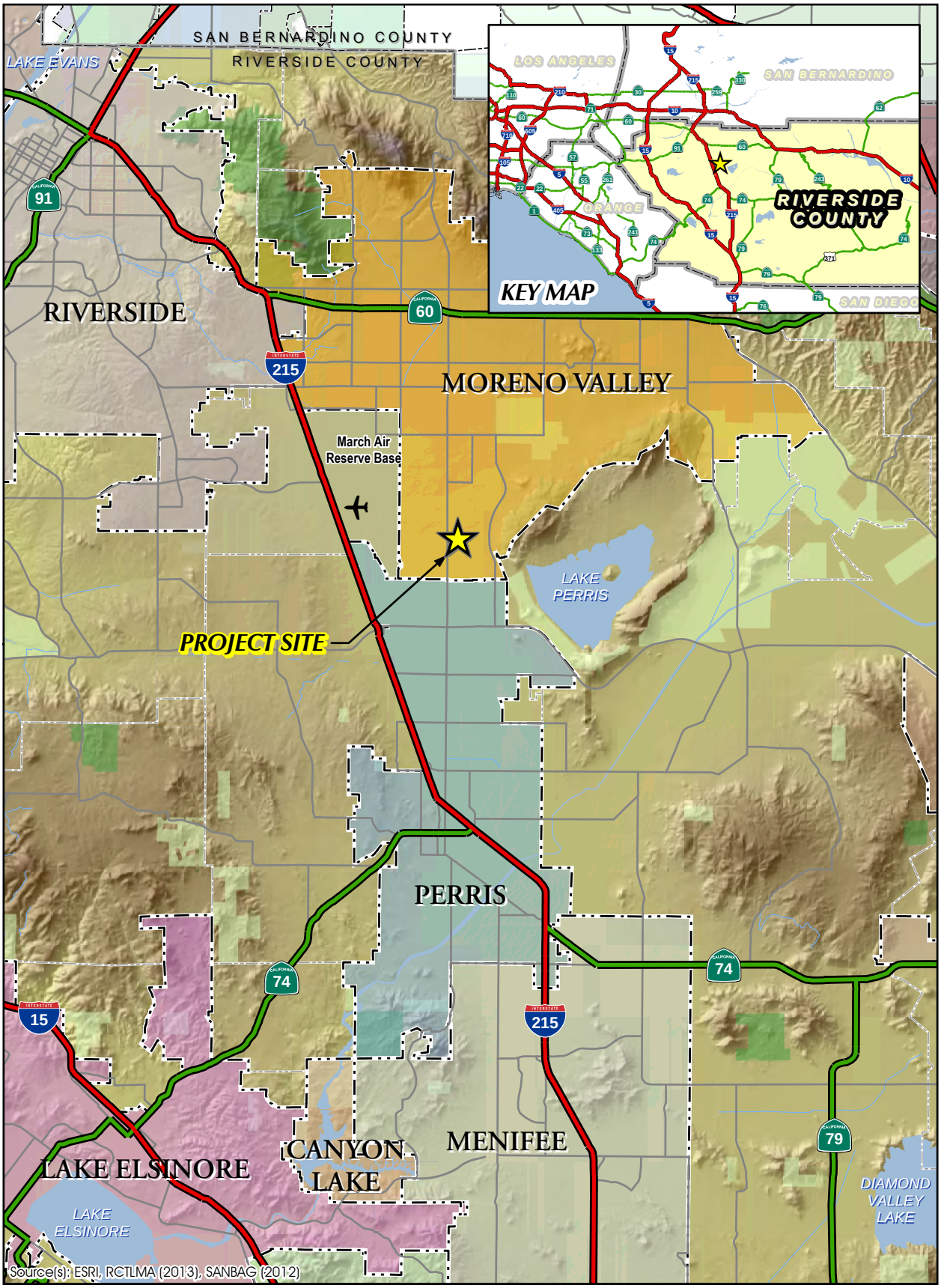


Figure 3-1

Regional Map

Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard, as illustrated on Figure 3-2, *Vicinity Map*, and Figure 3-3, *USGS Topographic Map*.

Refer to EIR Section 2.0, *Environmental Setting*, for more information related to the regional and local setting of the Project site.

3.2 STATEMENT OF OBJECTIVES

The intent of the proposed Project is to redevelop an underutilized property in the City of Moreno Valley's Industrial Area Plan (MVIAP, Specific Plan 208) with a large logistics warehouse building in conformance with the land use designations applied to the property by City of Moreno Valley General Plan and the MVIAP. The Project would achieve this primary objective through the following basic objectives.

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

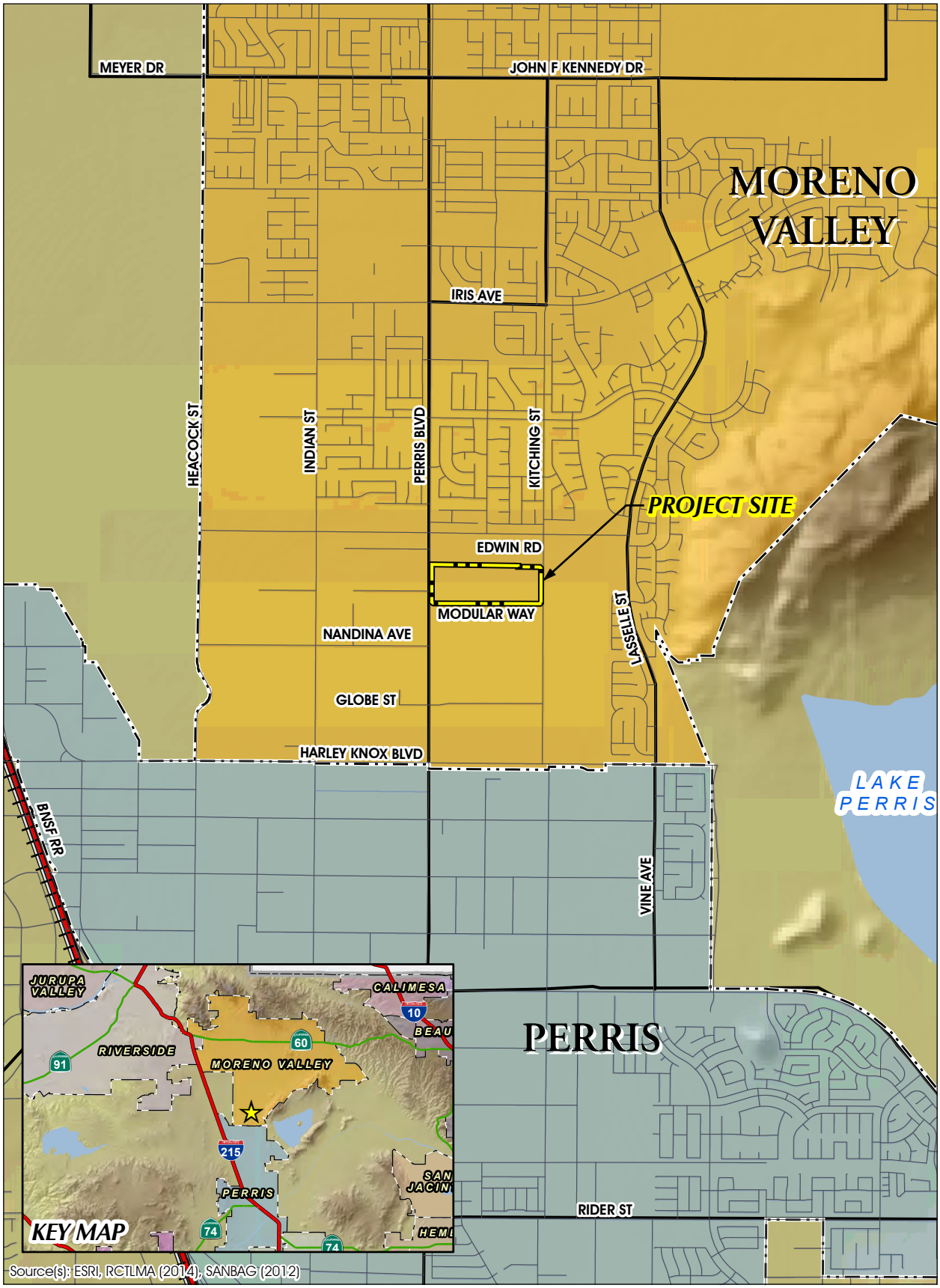
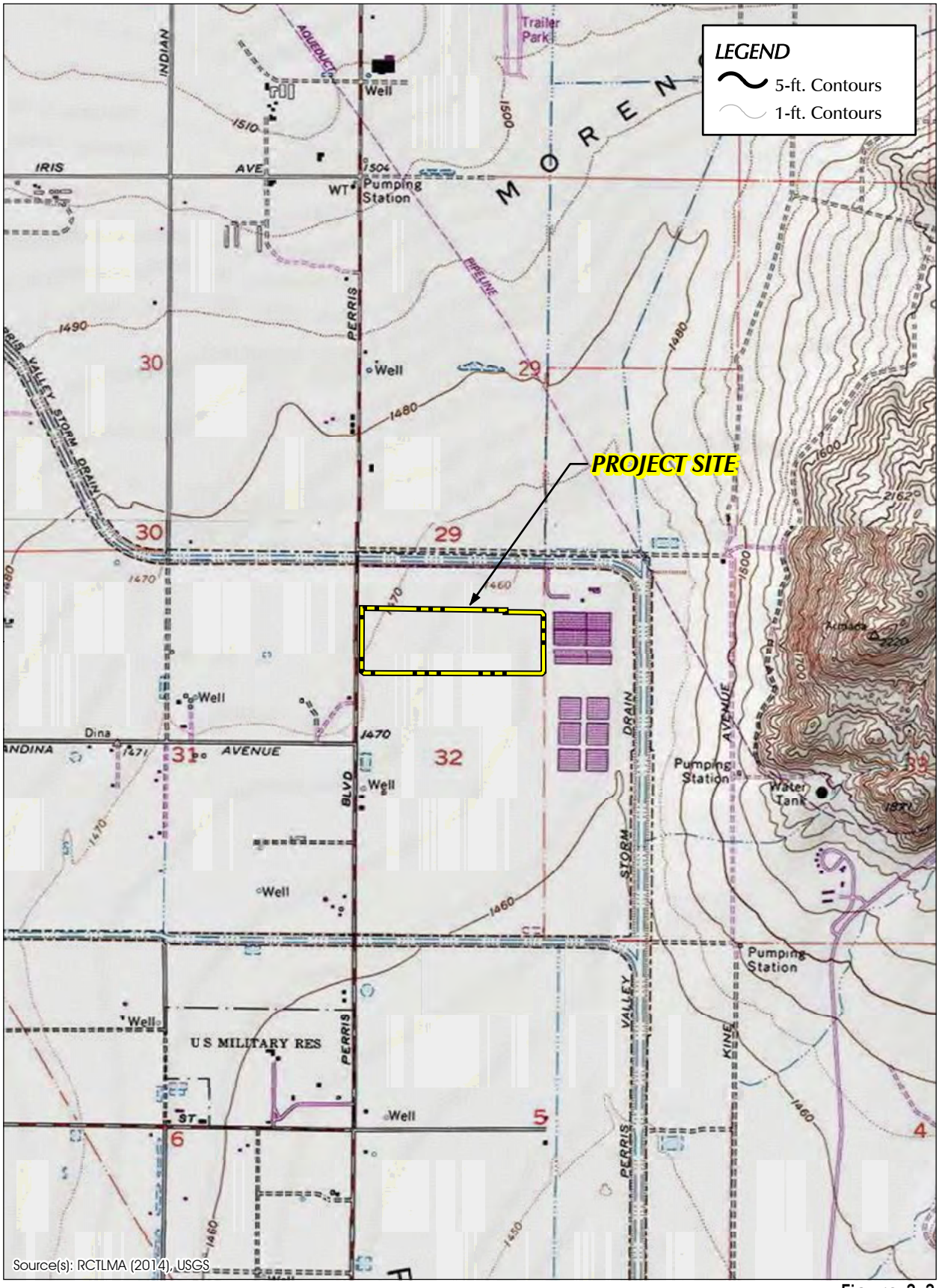


Figure 3-2

Vicinity Map



Source(s): RCTLMA (2014), USGS

Figure 3-3

0 1,000 2,000 Feet

USGS Topographic Map

3.3 PROJECT'S COMPONENT PARTS

The Project consists of a proposal to redevelop a 50.84-gross acre (50.68-net acre) property to accommodate one logistics warehouse building. The principal discretionary actions required of the City of Moreno Valley to implement the proposed Project include the approval of a Plot Plan (PA13-0063) and certification of this EIR (P13-130). Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-2, *Matrix of Project Approvals/Permits*, at the end of this EIR Section.

A detailed description of the proposed Project is provided in the following subsections.

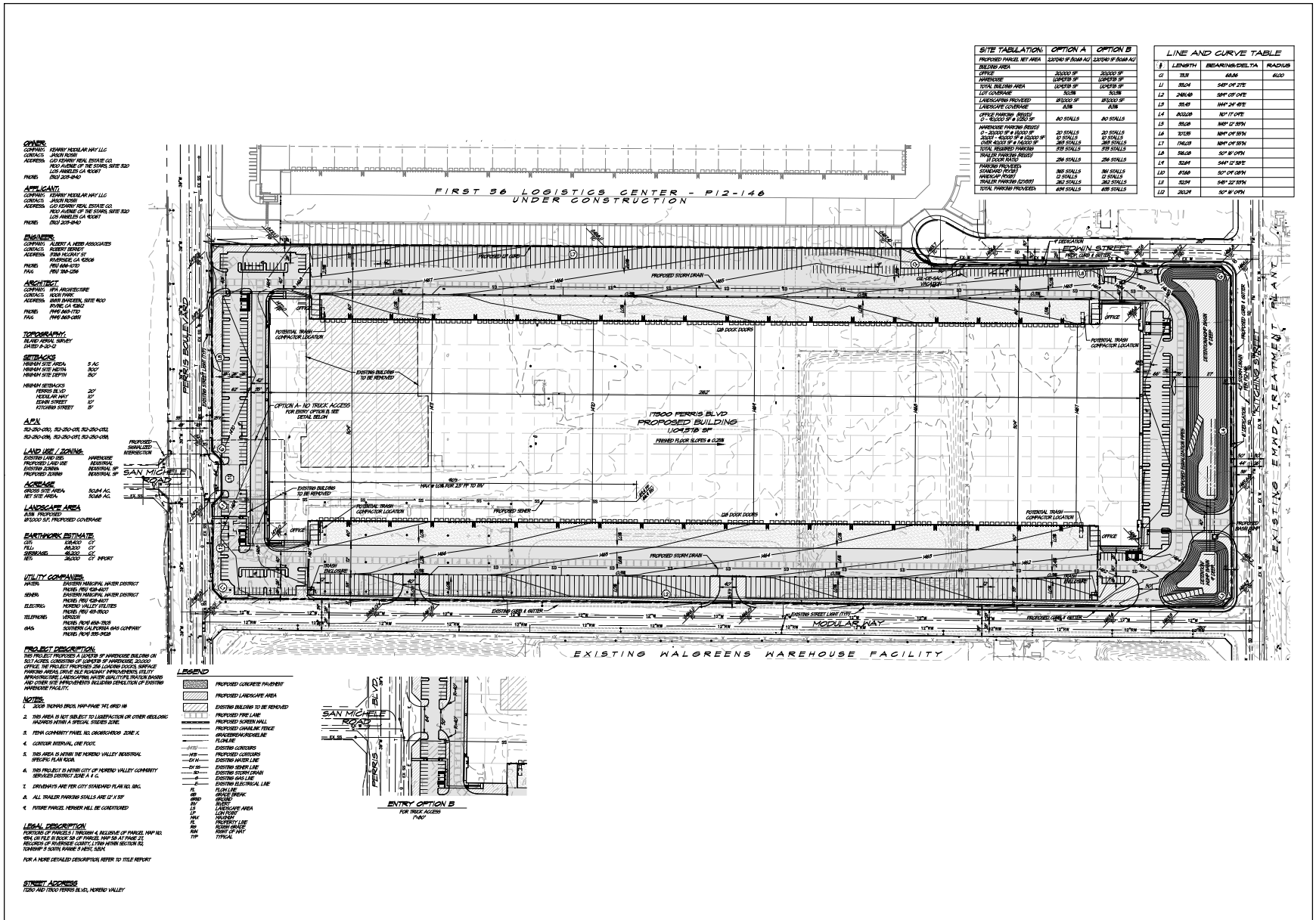
3.3.1 PLOT PLAN PA13-0063

A. General Description

As shown on Figure 3-4, *Plot Plan and Conceptual Grading Plan PA 13-0063*, the Project Applicant proposes to construct one logistics warehouse building on the approximately 50.84-acre property in accordance with the "Industrial" land use designation applied to the subject property by the MVIAP. The proposed building would contain 1,109,378 square feet of building area consisting of 1,089,378 square feet of warehouse space and 20,000 square feet of office space. The office spaces would be located at the northwest, northeast, southwest and southeast corners of the building. The floor area ratio (FAR) for the Project site would be approximately 0.50. At the time this EIR was prepared, the future tenant(s) of the proposed Project's building is unknown. The building is designed to accommodate a warehouse distribution, e-logistics, fulfillment center, or light-industrial operator(s).

A total of 256 loading bays are planned as part of the building for loading, unloading, and short-term parking of truck trailers, with 128 bays proposed on the north and south sides of the building, respectively. At a logistics warehouse building, loading bays (also called "docks") are used for the receiving of goods and the shipment of goods. Quite often, these docks are on different sides of the building. The proposed Project's building has been designed in this manner, with one side of the building for the receiving of goods and the other side for the shipment of goods. Although all of the loading bays are rarely used simultaneously, most logistic warehouse tenants like to have as many bays as possible to facilitate operations inside the structure, where goods are sorted and stored. When trucks have the option to dock close to the area where their cargo is sorted and stored inside the structure, workers inside the building have a shorter distance to cover when moving goods from the truck to the storage area and vice versa (Stertil 2002 1-5).

Eight (8) driveways would provide access to the site. Two (2) driveways would take access from Perris Boulevard, three (3) driveways would take access from Modular Way, one (1) driveway would take access from Kitching Street, and two (2) driveways would take access from Edwin Road. All Project driveways would be stop-sign controlled. At Perris Boulevard, the southernmost driveway would have the option to be restricted to use by passenger vehicles only or be fully accessible for use by passenger vehicles and trucks. All other driveways may be used by both passenger cars and



SITE TABULATION:	OPTION A	OPTION B
PROPOSED PARCEL NET AREA	2,207,040 SF (50.66 AC)	2,207,040 SF (50.66 AC)
BUILDING AREA		
OFFICE	20,000 SF	20,000 SF
WAREHOUSE	1,041,878 SF	1,041,878 SF
TOTAL BUILDING AREA	1,061,878 SF	1,061,878 SF
LOT COVERAGE	50.3%	50.3%
LANDSCAPING PROVIDED	812,032 SF	812,032 SF
LANDSCAPE COVERAGE	8.3%	8.3%
OFFICE PARKING (RESID'L) 0 - 10,000 SF @ 1/250 SF	80 STALLS	80 STALLS
WAREHOUSE PARKING (RESID'L) 0 - 20,000 SF @ 1/500 SF	20 STALLS	20 STALLS
20,001 - 40,000 SF @ 1/1,000 SF	20 STALLS	20 STALLS
OVER 40,001 SF @ 1/4,000 SF	265 STALLS	265 STALLS
TOTAL REQUIRED PARKING	373 STALLS	373 STALLS
TRAILER PARKING (RESID'L) 17 DOOR RATIO	256 STALLS	256 STALLS
PARKING PROVIDED		
STANDARD PARKING	365 STALLS	361 STALLS
HANDICAP (PVMT)	12 STALLS	12 STALLS
TRAILER PARKING (12'x55')	262 STALLS	262 STALLS
TOTAL PARKING PROVIDED	639 STALLS	635 STALLS

LINE AND CURVE TABLE			
#	LENGTH	BEARING/DELTA	RADIUS
C1	113.31	68.86	60.00
L1	33.04	S45° 04' 27"E	
L2	248.49	S89° 07' 04"E	
L3	35.49	N44° 24' 49"E	
L4	602.08	N0° 17' 04"E	
L5	28.28	N49° 17' 55"W	
L6	107.05	N89° 04' 55"W	
L7	1146.03	N89° 04' 55"W	
L8	58.06	S0° 16' 04"W	
L9	32.64	S44° 12' 58"E	
L10	87.60	S0° 04' 08"W	
L11	32.54	S45° 22' 55"W	
L12	263.24	S0° 16' 04"W	

OWNER:
COMPANY: KENNEDY MODULAR WAY, LLC
CONTACT: JASON ROSSI
ADDRESS: C/O KENNEDY REAL ESTATE CO.
1900 AVENUE OF THE STARS, SUITE 1520
LOS ANGELES, CA 90067
PHONE: (562) 203-8940

APPLICANT:
COMPANY: KENNEDY MODULAR WAY, LLC
CONTACT: JASON ROSSI
ADDRESS: C/O KENNEDY REAL ESTATE CO.
1900 AVENUE OF THE STARS, SUITE 1520
LOS ANGELES, CA 90067
PHONE: (562) 203-8940

ENGINEER:
COMPANY: ALBERT A. WEBB ASSOCIATES
CONTACT: ROBERT BERNEY
ADDRESS: 3788 MCCRAY ST.
RIVERSIDE, CA 92506
PHONE: (951) 686-1070
FAX: (951) 788-1256

ARCHITECT:
COMPANY: KPA ARCHITECTURE
CONTACT: NOOR PARIS
ADDRESS: 2603 DAIRYGLEN, SUITE 100
IRVINE, CA 92612
PHONE: (949) 863-1720
FAX: (949) 863-0851

TOPOGRAPHY:
RLAND AERIAL SURVEY
DATED 9-27-12

SETBACKS:
MINIMUM SITE AREA: 5 AC.
MINIMUM SITE WIDTH: 300'
MINIMUM SITE DEPTH: 150'

MINIMUM SETBACKS
FERRIS BLVD: 20'
NEWLAR WAY: 10'
EDWIN STREET: 10'
KITCHING STREET: 5'

A.P.N.:
312-250-030, 312-250-031, 312-250-032,
312-250-036, 312-250-037, 312-250-038,

LAND USE / ZONING:
EXISTING LAND USE: WAREHOUSE
PROPOSED LAND USE: INDUSTRIAL
EXISTING ZONING: INDUSTRIAL SP
PROPOSED ZONING: INDUSTRIAL SP

ACREAGE:
GROSS SITE AREA: 50.84 AC.
NET SITE AREA: 50.66 AC.

LANDSCAPE AREA:
A.5% PROPOSED:
812,032 S.F. PROPOSED COVERAGE

EARTHWORK ESTIMATE:
CUT: 1,061,400 CY
FILL: 848,200 CY
SHRINKAGE: 46,200 CY
NET: 212,000 CY IMPORT

UTILITY COMPANIES:
WATER: EASTERN MUNICIPAL WATER DISTRICT
PHONE: (951) 928-4037
SEWER: EASTERN MUNICIPAL WATER DISTRICT
PHONE: (951) 928-4037
ELECTRIC: MORENO VALLEY UTILITIES
PHONE: (951) 413-3500
TELEPHONE: VERIZON
PHONE: (909) 658-7305
GAS: SOUTHERN CALIFORNIA GAS COMPANY
PHONE: (909) 335-3928

PROJECT DESCRIPTION:
THIS PROJECT PROPOSES A 1,061,878 SF WAREHOUSE BUILDING ON 50.7 ACRES, CONSISTING OF 1,041,878 SF WAREHOUSE, 20,000 OFFICE. THE PROJECT PROPOSES 256 LOADING DOCKS, SURFACE PARKING AREAS, DRIVE AISLE ROADWAY IMPROVEMENTS, UTILITY INFRASTRUCTURE, LANDSCAPING, WATER QUALITY/DETENTION BASINS AND OTHER SITE IMPROVEMENTS INCLUDING DEMOLITION OF EXISTING WAREHOUSE FACILITY.

NOTES:
1. 2008 THOMAS BROS. MAP PAGE 747, GRID H6
2. THIS AREA IS NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGIC HAZARDS WITHIN A SPECIAL STUDIES ZONE.
3. FEMA COMMUNITY PANEL NO. 06065C0809 ZONE X.
4. CONTOUR INTERVAL, ONE FOOT.
5. THIS AREA IS WITHIN THE MORENO VALLEY INDUSTRIAL SPECIFIC PLAN 208A.
6. THIS PROJECT IS WITHIN CITY OF MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE A # C.
7. DRIVEWAYS ARE PER CITY STANDARD PLAN NO. 18C.
8. ALL TRAILER PARKING STALLS ARE 12' X 55'
9. FUTURE PARCEL PERMER MLL BE CONDITIONED

LEGAL DESCRIPTION:
PORTIONS OF PARCELS 1 THROUGH 4, INCLUSIVE OF PARCEL MAP NO. 18114, ON FILE IN BOOK 136 OF PARCEL MAP 58 AT PAGE 21, RECORDS OF RIVERSIDE COUNTY, LYING WITHIN SECTION 32, TOWNSHIP 3 SOUTH, RANGE 3 WEST, SBM.

FOR A MORE DETAILED DESCRIPTION, REFER TO TITLE REPORT.

STREET ADDRESS:
17250 AND 17300 FERRIS BLVD, MORENO VALLEY

Source: Webb Associates (11-01-2013)

NOT TO SCALE

Figure 3-4
Plot Plan and Conceptual Grading Plan PA 13-0063

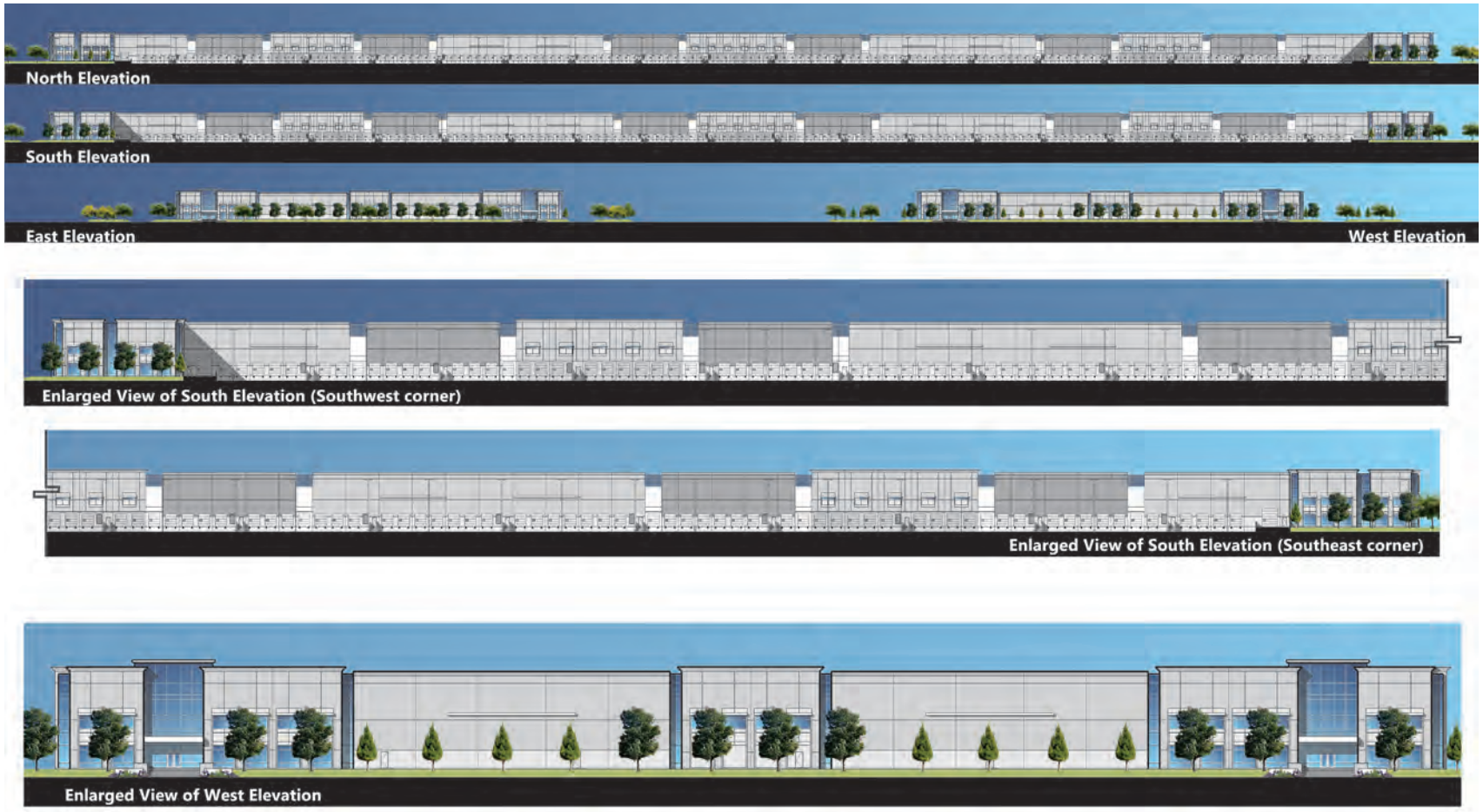
trucks. Access to the loading bays and truck parking areas may be gated. Proposed truck check-in points and driveways are positioned interior to the Project site to create interior queuing to minimize the potential for trucks to stack onto public streets when entering the Project site.

The Plot Plan depicts the number and location of proposed passenger car and trailer parking spaces. The Plot Plan identifies 373 passenger car parking spaces (including the number of spaces required by the California Building Standards Code for alternatively fueled vehicles and for accessibility to disabled persons), distributed along the western and eastern sides of the building. At least two of the passenger car parking spaces would be equipped with a level 2 electrical vehicle charging station. A total of 306 trailer parking spaces would be distributed along the northern and southern sides of the building. The Project also includes an alternate site plan that would accommodate less trailer parking spaces and more passenger vehicle parking spaces, if required by the tenants that would eventually occupy the structure. The alternative site plan would not involve any changes to the size, location, configuration, or design of the proposed building. The proposed Project also would provide bicycle parking in compliance with the City of Moreno Valley Municipal Code Section 9.11, which requires bicycle parking to be provided for 5% of required vehicle parking.

B. Architecture

Figure 3-5, *Architectural Elevations* depicts conceptual architectural elevations for the proposed logistics warehouse structure. The proposed building would be constructed to a height of approximately 42 feet above finished grade, with architectural projections reaching up to 47 feet above finished grade. The building would be constructed with concrete tilt-up panels and blue-glazed, low-reflective glass. Articulated building elements, including white anodized mullions and white metal canopies, are proposed as decorative elements. The proposed exterior architectural color palette is comprised of various shades of gray, white, and blue. The interior of the proposed warehouse building is designed to provide a main floor and office spaces. The building has the potential to be partitioned for multiple tenant use.

Solid concrete walls would be installed on the southern and northern portions of the proposed warehouse building to screen loading docks and trailer parking areas from public view. The screen walls on the north side of the building would be located at the northwestern and northeastern corners of the building and would face Perris Boulevard and Kitching Street, respectively. On the south side of the building, screen walls would be constructed at the southwestern and southeastern corners of the building (facing Perris Boulevard and Kitching Street, respectively) and along the site's frontage with Modular Way. The concrete screen walls would be 14-feet tall and constructed with a finish and color that complements the color palette for the proposed warehouse building. A chain-link metal fence is proposed along a portion of the northern property boundary (in the trailer parking area) and would not be visible from public viewing areas. Where access points into the loading dock and truck parking areas would be gated, eight (8)-foot tall, manually operated tubular steel gates, equipped with Knox® padlocks to allow emergency vehicle access, would be provided.



Source: HPA Architecture (10-29-2013)

NOT TO SCALE

Figure 3-5
Architectural Elevations

C. Conceptual Landscape Plan

The Project's conceptual landscape plan is depicted on Figure 3-6, *Conceptual Landscape Plan*. The landscape plan indicates that trees, shrubs, and groundcovers are proposed to be planted along street frontages of Perris Boulevard, Modular Way, Kitching Street, and Edwin Road (including landscaping within public rights-of-way). Landscaping also would occur at building entries, in and around automobile parking areas, in and around the site's water quality/detention basins, and along proposed screen walls. Landscaping is estimated to cover 8.5% of the property (approximately 4.3 acres). Proposed landscaping would be ornamental in nature, except within water quality/detention basins where plant materials would be selected to serve water quality functions. Prior to the issuance of a building permit to implement the Project, the Project Applicant would be required to submit specific planting and irrigation plans to the City of Moreno Valley for review and approval. The plans are required to comply with Chapter 9.17 of the City of Moreno Valley Municipal Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency.

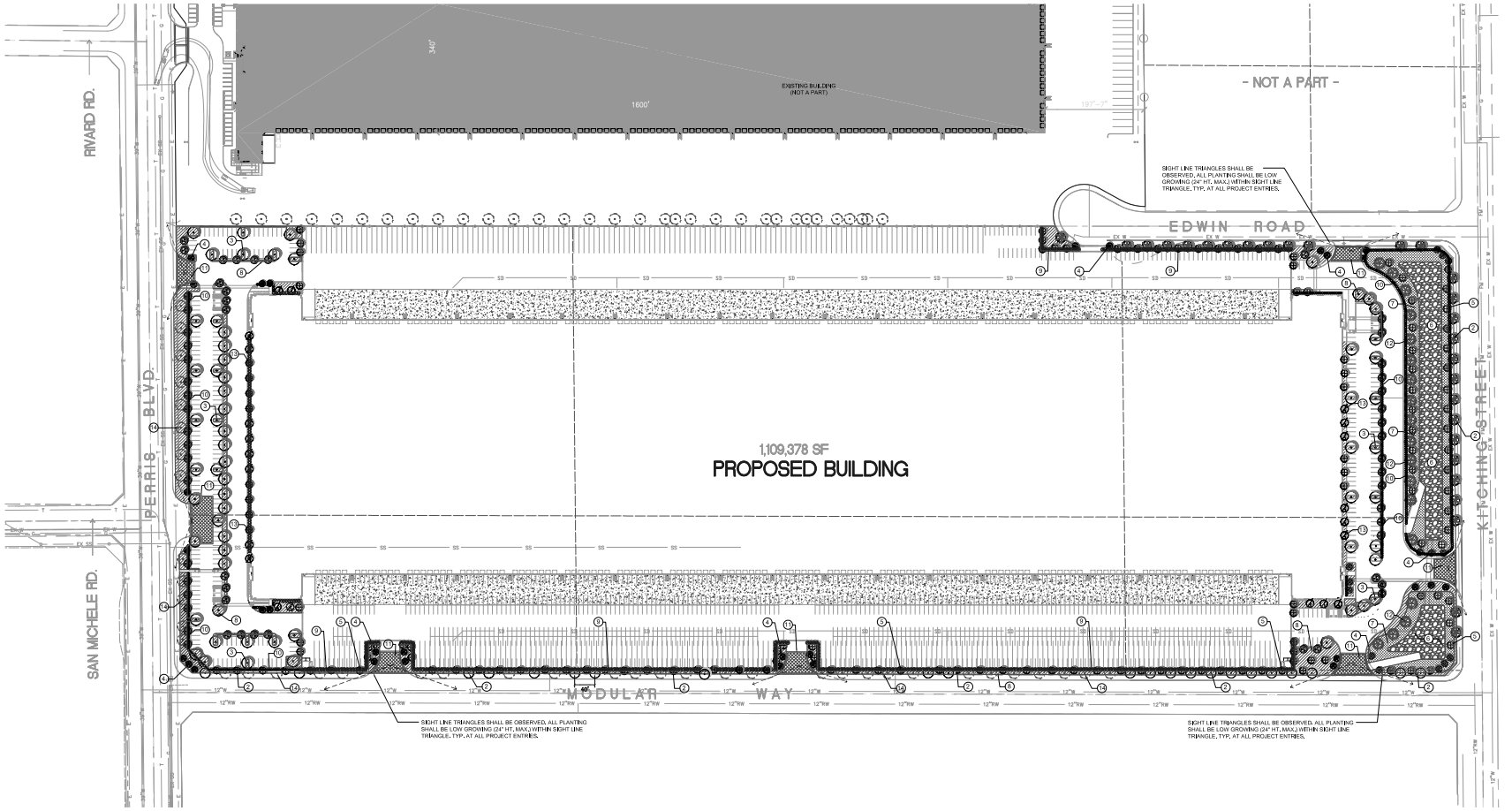
D. Public Roadway Dedications, Improvements, and Vacations

The existing public street network servicing and abutting the Project site consists of Perris Boulevard on the west, Kitching Street on the east, Edwin Road on the north, and Modular Way on the south. The Project would dedicate approximately 0.2-acre of land to the City of Moreno Valley as public right-of-way for Kitching Street (approximately 0.1-acre) and Edwin Road (approximately 0.1-acre). Proposed street dedications would occur as part of a subsequent administrative-level approval of street improvement plans.

Planned public rights-of-way (or portions thereof) that were previously offered to a city, county, or other government agency but that are no longer needed for public purposes can be "vacated" by the government body. As part of the Project, one (1) roadway right-of-way that was previously offered to the City of Moreno Valley but that was never accepted by the City for public use is proposed to be vacated. The right-of-way to be vacated is also known by the term "paper street" because the alignment exists only on maps, with no physical attributes constructed on the landscape. The "paper street" to be vacated comprises an approximately 127-foot long cul-de-sac along the northern Property boundary, located west of the Kitching Street/Edwin Road intersection. This cul-de-sac "paper street" is no longer needed because the Edwin Road cul-de-sac has already been approved for construction slightly west of the "paper street" alignment. The proposed street vacation would occur as part of a subsequent administrative-level street vacation action.

Public roadway improvements that are proposed as part of the Project are described below and depicted on Figure 3-7, *Roadway Cross-Sections*.

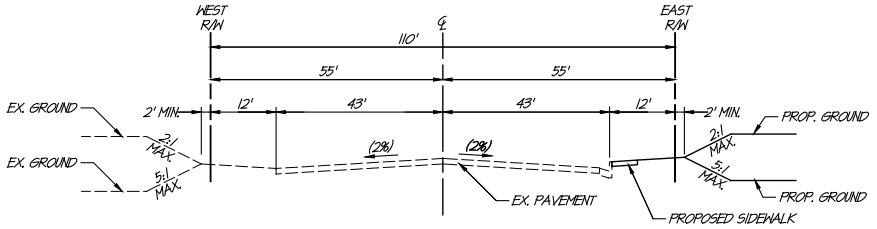
- **Perris Boulevard.** Perris Boulevard is a north-south oriented roadway located along the Project site's western boundary. Under existing conditions, this segment of Perris Boulevard is constructed as a six-lane street within a 110-foot wide public right-of-way. The existing 12-foot wide parkway on the east side of the road, including existing sidewalk and landscape improvements, would be retained as feasible. The bus bay



Source: SPLA (10-31-2013)

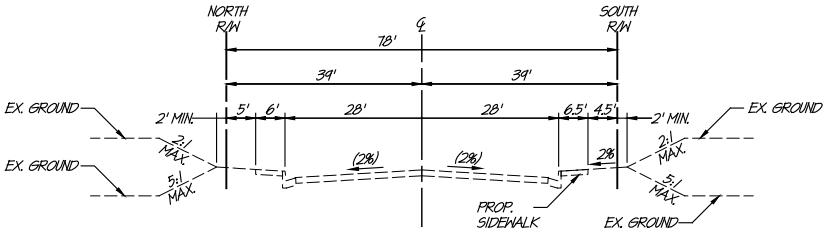
NOT TO SCALE

Figure 3-6
Conceptual Landscape Plan



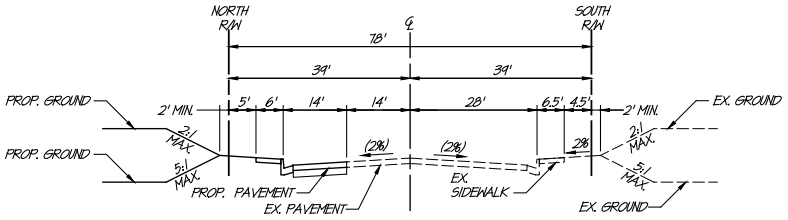
PERRIS BLVD TYPICAL SECTION

ARTERIAL STREET
STD. NO. 104, NOT TO SCALE



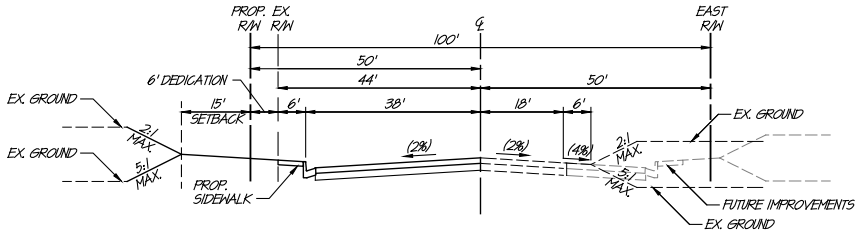
MODULAR WAY - SEGMENT A

INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
TI=10.0



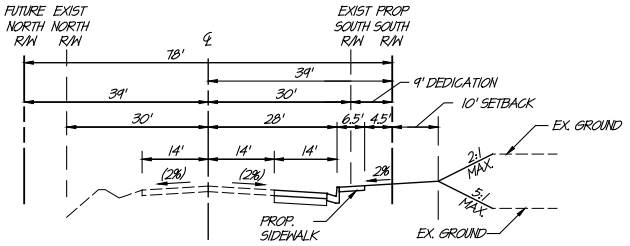
MODULAR WAY - SEGMENT B

INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
TI=10.0



KITCHING STREET TYPICAL SECTION

ARTERIAL STREET
STD. NO. 104, NOT TO SCALE



EDWIN STREET TYPICAL SECTION

INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
TI=10.0

Source: Webb Associates (11-01-2013)

NOT TO SCALE

Figure 3-7
Roadway Cross-Sections

located along the Project's frontage with Perris Boulevard would be reconstructed to current City standards and would accommodate RTA bus transit operations. Any modifications to the existing parkway to accommodate proposed site grading/construction activities would occur in accordance with City of Moreno Valley engineering standards and as will required by the final conditions of approval for the proposed Project.

- **Modular Way.** Modular Way is an east-west oriented roadway located along the southern boundary of the Project site. Under existing conditions, Modular Way is constructed to its full width as a two-lane road within a 78-foot wide public right-of-way from Perris Boulevard extending approximately 1,850 feet east (hereafter "Segment 'A'"). The remaining segment of Modular Way abutting the Project site (from Kitching Street extending approximately 165 feet west) is partially developed as a one-lane road within a 78-foot wide public right-of-way under existing conditions (hereafter "Segment 'B'").

  Within Segment "A" of Modular Way, the proposed Project would retain the existing sidewalk and landscape improvements within the 11-foot wide parkway on the north side of the road as feasible. Any modifications to the existing parkway to accommodate proposed site grading/construction activities would occur in accordance with City of Moreno Valley engineering standards and as will required by the final conditions of approval for the proposed Project.

  Within Segment "B" of Modular Way, the proposed Project would widen the existing roadway by 25 feet, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, along the southern Project frontage to provide the ultimate full-width section of the roadway. Proposed improvements to Segment "B" of Modular Way would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

- **Kitching Street.** Kitching Street is a north-south oriented roadway located along the Project site's eastern boundary. Under existing conditions, this segment of Kitching Street is developed as a one-lane road within a 94-foot wide public right-of-way. As previously described, the Project would dedicate additional public right-of-way to the City of Moreno Valley along the site's eastern frontage, increasing the total right-of-way width along this segment of Kitching Street to 100 feet. In addition, the Project would widen Kitching Street along the site's eastern frontage, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, to provide the ultimate half-width section of the roadway. Proposed improvements to Kitching Street would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

- **Edwin Road.** Edwin Road is an east-west oriented roadway located along a portion of the Project site's northern boundary. Edwin Road terminates at a cul-de-sac approximately 800 feet west of Kitching Street. Under existing conditions, Edwin Road is developed as a one-lane road within a 69-foot wide public right-of-way. As previously described, the Project would dedicate additional public right-of-way to the City of Moreno Valley along the site's northern frontage, increasing the total right-of-way width along this segment of Edwin Road to 78 feet. In addition, the Project would widen Edwin Road along the site's northern frontage, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, to provide the ultimate half-width section of the roadway. Proposed improvements to Edwin Road would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

E. Infrastructure Improvements

❑ Water Service

Water service would be provided to the Project by the Eastern Municipal Water District (EMWD). Under existing conditions, domestic water service is available to the Project site via a 39-inch water line installed beneath Perris Boulevard, a 12-inch water line installed beneath Modular Way, and a 12-inch water line installed beneath Kitching Street. Additionally, recycled water is available to the Project site under existing conditions via a 12-inch recycled water line installed beneath Modular Way. The Project proposes two (2) connection points to the existing 12-inch domestic water line beneath Modular Way via 12-inch water lines. The Project also proposes to connect to the existing 12-inch recycled water line beneath Modular Way via two (2) 2-inch water lines to provide landscape irrigation water to the site. All proposed water facilities would be designed in accordance with EMWD standards and would require review and approval by EMWD prior to their installation.

❑ Wastewater Service

Wastewater conveyance and treatment service would be provided to the Project by EMWD. Under existing conditions, wastewater service is available to the Project site via a 12-inch sewer line located beneath Perris Boulevard. As part of the Project, an 8-inch sewer line would be constructed on-site under the southern portion of the building and would connect to the existing 12-inch sewer line located in Perris Boulevard. All proposed sewer facilities would be designed in accordance with EMWD standards and would require review and approval by EMWD prior to their installation.

❑ Stormwater Drainage

The Project's drainage system would consist of underground storm drain pipes and detention basins installed on the property. The system is designed to collect and treat stormwater runoff and detain treated flows into detention basins provided on the Project site. Two east-west oriented storm drain lines would be constructed on-site; one storm drain line would be constructed beneath the loading dock and trailer parking area on the north side of the building and one storm drain line would be constructed beneath the loading dock and trailer parking area on the south side of the building.

These storm drain lines would convey the site's stormwater runoff to the proposed water quality/detention basins along the eastern boundary of the subject property. Two (2) water quality/detention basins are proposed by the Project. In addition to stormwater drainage functions, these basins also would provide water quality functions. The detention basins would be designed to treat and temporarily detain stormwater runoff to ensure that post-development discharge from the site is less than, or equal to, pre-development conditions. Drainage flows would be conveyed from the on-site water quality/detention basins to an existing 36-inch storm drain line within Kitching Street and, ultimately, discharged to the Perris Valley Channel. The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for approving all proposed storm drain improvements to ensure property facility sizing and construction, as well as consistency with the applicable local drainage plan.

F. Earthwork and Grading

As shown on Figure 3-4, *Plot Plan and Conceptual Grading Plan PA 13-0063*, earthwork and grading would occur over the entire 50.84-acre Project site. No area of the site would be left undisturbed. Proposed earthwork and grading activities would occur in one phase and would result in approximately 108,400 cubic yards of cut and 88,200 cubic yards of fill. Based on expected shrinkage of on-site soils, it is anticipated that up to 26,000 cubic yards of imported soil would be required during proposed earthwork and grading activities. The borrow site has not yet been identified, but is expected to be within a 20-mile radius of the Project site and a property that is approved for earth disturbance and export. When grading is complete, the Project site would have a slight, west-to-east slope; the highest point of the site would be approximately 1,471 feet above mean sea level (AMSL) at the northwest corner of the site and would slope downward to an elevation of approximately 1,464 AMSL in the southwest corner of the site.

The Project site is relatively flat and proposed grading would not create manufactured slopes except around the proposed water/quality detention basins in the eastern portion of the site, where proposed slopes would measure up to nine (9) feet in height with a maximum incline of 3:1.

3.3.2 PROJECT CONSTRUCTION AND OPERATIONAL CHARACTERISTICS

A. Construction Details

The proposed Project would be constructed over the course of approximately 11 months (Fullmer Construction 2013). Construction activities would commence with site preparation and the demolition of the existing structures. It is expected that approximately 38,240 tons of demolition debris would be generated on-site, of which approximately 97% (approximately 37,712 tons) would either be processed and re-used on-site during construction or recycled (Fullmer Construction 2013). After demolition, the property would be mass-graded and the underground utility system would be installed. Next, surface materials would be poured and the building would be erected, connected to the underground utility system, and painted. Lastly, landscaping, fencing/walls and other site improvements would be installed and fine grading would occur. Construction activities include:

- Demolition
- Grading
- Plumbing
- Electrical
- Structural Concrete
- Fire Protection
- Reinforcing Steel
- Site Utilities
- Structural Steel
- Roof Structure
- Painting (Architectural Coatings)
- Construction Workers Commuting

Construction equipment is expected to operate on the Project site eight (8) hours per day, five (5) days per week during the construction phase. The types and numbers of heavy equipment expected to be used during construction activities are listed in Table 3-1, *Construction Equipment Assumptions*. For purposes of evaluation in this EIR, it is assumed that the building would be operational in the Year 2015.

B. Operational Details

At the time this EIR was prepared, the future tenant(s) of the Project site were unknown. The Project Applicant estimates that the building would be primarily occupied by a warehouse distribution, e-logistics, fulfillment center, or light-industrial operator(s). Although the proposed building is not necessarily expected to accommodate a tenant(s) that requires cold storage (refrigeration), the analysis in this EIR assumes that the building could house a tenant that uses cold storage. For the purpose of analysis in this document, the future tenant types are assumed to be any of those uses permitted by the MVIAP's "Industrial" designation (pursuant to MVIAP Section III). Furthermore, this EIR assumes the Project would be operational 24 hours per day, seven (7) days per week, with exterior areas lit at night. The proposed building is designed such that business operations would be conducted primarily within the enclosed building, with the exception of traffic movement, parking, and the loading and unloading of tractor trailers at the loading bays. As discussed in EIR Subsection 4.8, *Transportation/Traffic*, the proposed Project is calculated to generate 1,416 passenger car trips and 447 truck trips on a daily basis.

Because the building tenant is not yet known, the number of jobs that the Project would generate cannot be precisely determined; therefore, for purposes of analysis within this EIR, employment estimates are calculated using average employment density factors reported by the Southern California Association of Governments in their publication "Employment Density Study Report," (SCAG 2001). This publication reports that for every one (1) acre of warehouse land use in Riverside County, the median number of jobs supported is 11.69 (SCAG 2001 Table 9A). Using this data, the proposed Project is expected to create approximately 594 new, recurring jobs.

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Demolition *(Phase 1)*			2							2	2	2											
Demolition *(Phase 1.1)*		1																					
Grading *(Phase 1)*			2			9		1			1												
Grading *(Phase 1.1)*	1		1			1																	
Grading *(Phase 2)*			1			1		1			2												
Grading *(Phase 3)*			1			1		1			2												
Plumbing - Underslab *(Phase 1)*												1											
Plumbing - Underslab *(Phase 1.1)*											1												
Plumbing -Building														1									
Electrical - Underground									1														

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Electrical – Building (Phase 1)														2									
Electrical – Building (Phase 1.1)																							1
Structural Concrete *(Phase 1)*						1																	
Structural Concrete *(Phase 2)*				2	3																		
Structural Concrete *(Phase 3)*																	2						
Structural Concrete *(Phase 4)*			1																				
Structural Concrete *(Phase 5)*							1																
Structural Concrete *(Phase 6)*													1										
Structural Concrete *(Phase 7)*																1							
Structural Steel														3						1	1	4	

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Fire Protection - Site			1						1		1						1						
Fire Protection - Overhead														3	3		2						
Reinforcing Steel																	2						
Site Utilities - Storm											2	2											
Site Utilities - Sewer									1		1												
Site Utilities - Water									1		1												
Roof Structure														2	4		2	2					

Source: Urban Crossroads 2014a, Table 3-2

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According to a Water Supply Assessment prepared for the Project by EMWD (*Technical Appendix I* to this EIR), land uses proposed by the Project are estimated to result in a demand for approximately 38.03 acre-feet of water per year (or about 33,951 gallons per day). The Project also is estimated to result in an average daily demand of 43,295 gallons per day of wastewater treatment capacity (based on EMWD's wastewater generation factor of 1,700 gallons per day per acre for light industrial building area (Raines 2014)). Based on calculations utilized in the Project's greenhouse has analysis report (*Technical Appendix F* to this EIR), the proposed Project would demand 3,574,906 kilowatts hours of electricity per year (kWh/yr) and 2,374,070 kilo-British Thermal Units of natural gas per year (kBTU/yr).

3.4 STANDARD REQUIREMENTS AND CONDITIONS OF APPROVAL

The proposed Plot Plan PA13-0063 and its technical aspects were reviewed in detail by various City of Moreno Valley departments and divisions. These departments and divisions are responsible for reviewing land use applications for compliance with City codes and regulations. They also were responsible for reviewing this EIR (P13-130) for technical accuracy and compliance with CEQA. The City of Moreno Valley departments and divisions responsible for technical review include:

- Community & Economic Development Department, Building and Safety Division
- Community & Economic Development Department, Planning Division
- Public Works Department, Land Development Division
- Public Works Department, Transportation Engineering Division
- Public Works Department, Special Districts Division
- Fire Prevention Bureau
- Moreno Valley Utility

Review of proposed Plot Plan PA13-0063 by the City departments and divisions listed above will result in the production of a comprehensive set of draft Conditions of Approval that will be available for public review prior to consideration of the proposed Project by the Moreno Valley Planning Commission. These conditions will be considered by the Planning Commission in conjunction with their consideration of Plot Plan PA13-0063. If approved, the Project will be required to comply with all imposed Conditions of Approval.

Conditions of Approval and other applicable regulations, codes, and requirements to which the Project is required to comply and that result in the reduction or avoidance of an environmental impact are specified in each subsection of EIR Section 4.0, *Environmental Analysis*. These are referred to as "Project Requirements" throughout this EIR.

3.5 SUMMARY OF REQUESTED ACTIONS

The City of Moreno Valley has primary approval responsibility for the proposed Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines §15050. The role of the Lead Agency was previously described in detail in Subsection 1.4 of this EIR). The City's

Planning Commission will consider the Project's requested discretionary permit applications and approvals and will determine whether to approve, approve with changes, or deny the requested actions that are within the City's jurisdiction. In the event that the decision of the Planning Commission is appealed to the City Council within ten (10) days, or in the event that the City Council assumes jurisdiction over the proposed Project, then an additional public hearing would be held before the City Council, where the decision of the Planning Commission would be sustained, modified, rejected, or overruled. The City will consider the information contained in this EIR and this EIR's Administrative Record in its decision-making processes. Upon approval of the Project and certification of this EIR, the City would conduct administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval. A list of the primary actions under City jurisdiction is provided in Table 3-2, *Matrix of Project Approvals/Permits*.

3.6 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Subsequent to approval of Plot Plan PA13-0063 by the City of Moreno Valley, additional discretionary and/or administrative actions would be necessary to implement the proposed Project. Table 3-2, *Matrix of Project Approvals/Permits*, lists the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, state, local government and quasi-government approvals which may be needed to construct or implement the Project, whether or not they are explicitly listed in Table 3-2, or elsewhere in this EIR (CEQA Guidelines §15124(d)).

Table 3-2 Matrix of Project Approvals/Permits

PUBLIC AGENCY	APPROVALS AND DECISIONS
City of Moreno Valley	
Proposed Project – City of Moreno Valley Discretionary Approvals	
City of Moreno Valley Planning Commission	• Approve, conditionally approve, or deny PA13-0063 (appealable to City Council). • Reject or certify this EIR along with appropriate CEQA Findings (P13-130) (appealable to City Council).
Subsequent City of Moreno Valley Discretionary and Ministerial Approvals	
City of Moreno Valley Subsequent Implementing Approvals	• Approve Final Maps, parcel mergers, lot line adjustments, or parcel consolidations, as may be appropriate. • Approve Conditional or Temporary Use Permits, if required. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way dedications. • Approve street vacations.
Other Agencies – Subsequent Approvals and Permits	
Riverside County Flood Control and Water Conservation District	• Approvals for construction of drainage infrastructure.
Eastern Municipal Water District	• Approvals for construction of water and sewer infrastructure.
Santa Ana Regional Water Quality Control Board	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines §§15126 - 15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, an Initial Study was prepared to determine the scope of environmental analysis for this EIR. Public comment on the scope consisted of written comments received by the City of Moreno Valley in response to the NOP issued for this EIR and oral comments provided by members of the public at the EIR scoping meeting held on April 21, 2014 at Moreno Valley City Hall. Taking all known information and public comments into consideration, eight (8) primary environmental subject areas are evaluated in this Section 4.0, as listed below. Each subsection evaluates several specific subject matters related to the general topic of the subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology/Soils
4.6 Greenhouse Gas Emissions
4.7 Noise
4.8 Transportation/Traffic

Nine (9) environmental subjects were determined by the City to have no potential to be significantly impacted by the Project, as concluded by the Project's Initial Study (included in *Technical Appendix A* to this EIR) and after consideration of all comments received by the City on the scope of this EIR and documented in the City's administrative record. These nine (9) subjects are discussed briefly in Section 5.0, *Other CEQA Considerations*, and include: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines §15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines §15130(a)(1)). As defined in CEQA Guidelines §15355:

'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

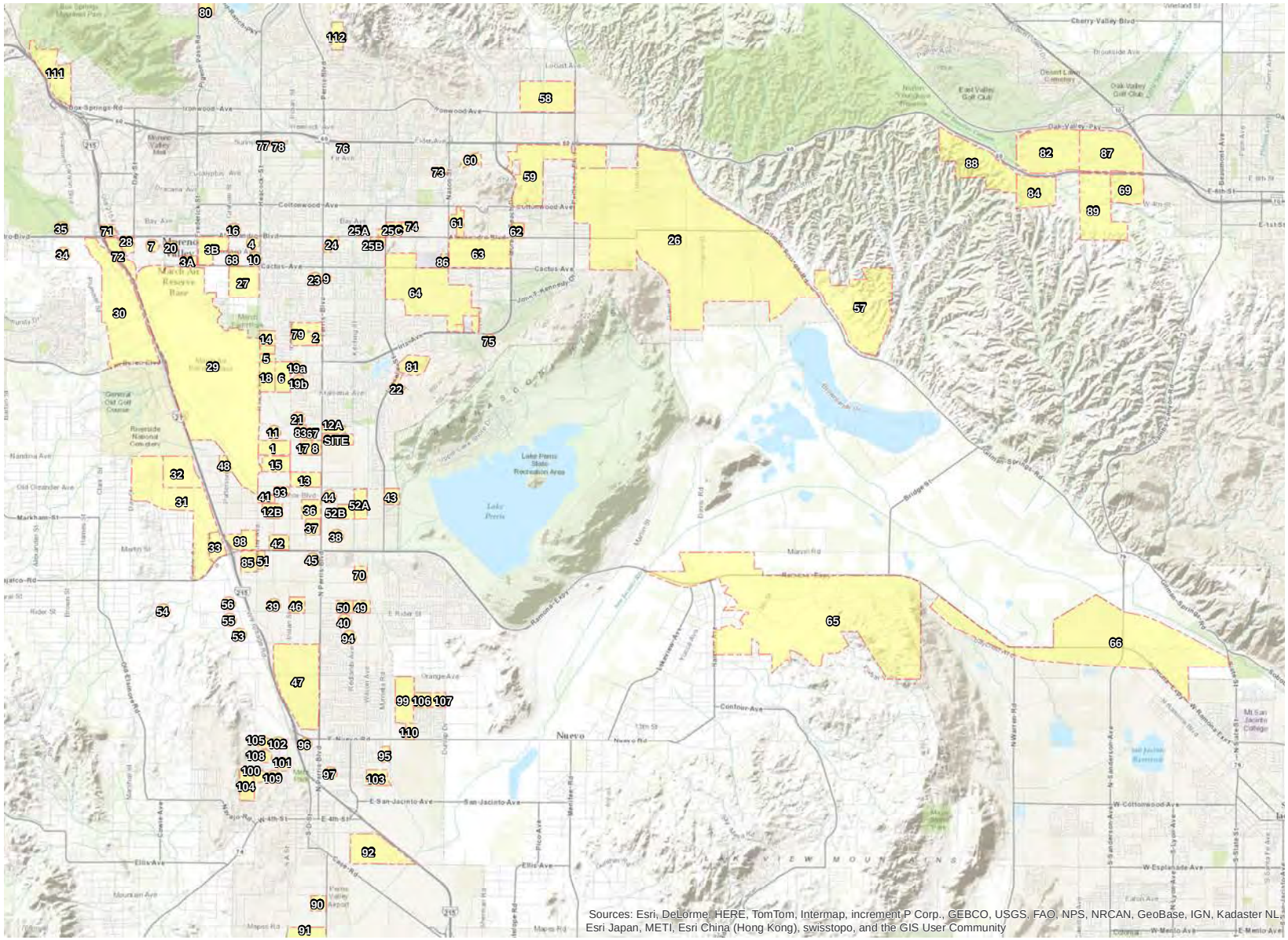
CEQA Guidelines §15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: "1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ['the list of projects approach'], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact ['the summary of projections approach']."

The summary of projections approach is used in this EIR, except for the evaluation of cumulative traffic and vehicular-related air quality, greenhouse gas, and noise impacts. The analysis of cumulative traffic impacts uses the list of projects approach, as is required to be used by the City of Moreno Valley Transportation Engineering Division's Traffic Impact Analysis Preparation Guide (August 2007). Therefore, the cumulative analyses of vehicular-related air quality, greenhouse gas, and noise impacts, which rely on the traffic study, inherently also use the list of projects approach.

Using the summary of projections approach, the cumulative study area includes the City of Moreno Valley, the City of Perris, the City of Riverside, and the Harvest Valley/Winchester Area Plan (HVWAP), Lakeview/Nuevo Area Plan (LNAP), and the Mead Valley Area Plan (MVAP), all of which are part of the Riverside County General Plan. These three cities and the three Riverside County Area Plans encompass portions of western Riverside County that have similar environmental characteristics as the Project area. The selected study area encompasses the Perris Valley, which is largely bounded by prominent topographic landforms, such as Reche Canyon to the north, the Badlands to the east, and the Lakeview Mountains to the southeast. This study area exhibits similar characteristics in terms of climate, geology, and hydrology, and therefore is also likely to have similar biological characteristics and cultural resources. This study area also encompasses the service areas of the Project's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, or other environmental circumstances that are different from those of the Project area, or are simply too far from the proposed Project site to produce environmental effects that could be cumulatively considerable.

Environmental impacts associated with buildout of the Riverside County General Plan were evaluated in a Program EIR certified by Riverside County in 2003 (SCH No. 2002051143). The Riverside County General Plan EIR is herein incorporated by reference, and is available for review at the County of Riverside Transportation and Land Management Agency Planning Department, 4080 Lemon Street, 12th Floor, Riverside CA 92502. Likewise, the environmental impacts associated with the buildout of the City of Perris General Plan were evaluated in a Program EIR that was certified by the Perris City Council on April 26, 2005 (SCH No. 2004031135). The City of Perris General Plan EIR is also incorporated by reference, and is available for review at the City of Perris Department of Community Development, 135 North "D" Street, Perris CA 92570. Finally, the environmental impacts associated with the buildout of the City of Riverside General Plan was evaluated in a Program-level EIR that was certified by the Riverside City Council in November 2007 (SCH No. 2004021108). The City of Riverside General Plan EIR is also incorporated by reference, and is available for review at the City of Riverside Community Development Department, Planning Division, 3900 Main Street, Riverside, CA 92522.

A specific cumulative study area was established using the "list of projects approach" to assess the cumulative effect of the Project's impacts to traffic and transportation, as required by the City of Moreno Valley Transportation Engineering Division's Traffic Impact Analysis Preparation Guide. The cumulative study area for traffic generally includes approved and pending development projects within a five (5)-mile radius of the Project site, as well as several large, traffic-intensive projects falling just beyond a five (5)-mile radius of the Project site. As such, the cumulative impact analysis of traffic impacts in EIR Subsection 4.8 analyzes 112 other past, present, and reasonably foreseeable projects within this study area. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or state highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. Specific development projects included in the cumulative analysis are shown in Figure 4.0-1, *Cumulative Development Location Map*, and are listed in Table 4.0-1, *Cumulative Project List.*



Source: Urban Crossroads (03-17-2014)

NOT TO SCALE

Figure 4.0-1
Cumulative Development Location Map

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
1	PA 06-0152 & PA 06-0153 (First Park Nandina I & II)	High-Cube Warehouse	1,182.918	TSF
2	Moreno Valley Walmart	Free-Standing Discount Store	189.520	TSF
		Gas Station	16	VFP
3A	PA 08-0072 (Overton Moore Properties)	High-Cube Warehouse	520.000	TSF
3B	Harbor Freight Expansion	High-Cube Warehouse	1,279.910	TSF
4	PA 04-0063 (Centerpointe Buildings 8 and 9)	General Light Industrial	361.384	TSF
5	PA 07-0035; PA 07-0039 (Moreno Valley Industrial Park)	General Light Industrial	204.657	TSF
		High-Cube Warehouse	409.920	TSF
6	PA 07-0079 (Indian Business Park)	High-Cube Warehouse	1,560.046	TSF
7	PA 08-0047-0052 (Komar Cactus Plaza)[3]	Hotel	110	RMS
		Fast Food w/Drive Thru	8.000	TSF
		Commercial	42.400	TSF
8	First Inland Logistics Center	High-Cube Warehouse	400.130	TSF
9	TM 33607	Condo/Townhomes	54	DU
10	PA 08-0093 (Centerpointe Business Park II)	General Light Industrial	99.988	TSF
11	PA 06-0021; PA 06-0022; PA 06-0048; PA 06-0049 (Komar Investments)	Warehousing	2,057.400	TSF
12A	PA 06-0017 (Ivan Devries)	Industrial Park	569.200	TSF
12B	Integra Pacific Industrial Facility	High-Cube Warehouse	880.000	TSF
13	PA 09-0004 (Vogel)	High-Cube Warehouse	1,616.133	TSF
14	TM 34748	SFDR	135	DU
15	Modular Logistics Center	High-Cube Warehouse	1,109.378	TSF
16	PA 09-0031	Gas Station	12	VFP
17	First Park Nandina III	High-Cube Warehouse	691.960	TSF
	Moreno Valley Commerce Park	High-Cube Warehouse	354.321	TSF
18	March Business Center	General Light Industrial	16.732	TSF
		Warehousing	87.429	TSF
		High-Cube Warehouse	1,380.246	TSF
19A	TM 33810	SFDR	16	DU
19B	TM 34151	SFDR	37	DU
20	373K Industrial Facility	High-Cube Warehouse	373.030	TSF
21	TM 32716	SFDR	57	DU
22	TM 32917	Condo/Townhomes	227	DU
23	TM 33417	Condo/Townhomes	10	DU
24	TM 34988	Condo/Townhomes	251	DU
25A	TM 34216	Condo/Townhomes	40	DU
25B	TM 34681	Condo/Townhomes	49	DU
25C	PA 08-0079-0081 (Winco Foods)	Discount Supermarket	95.440	TSF
		Specialty Retail	14.800	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
26	Moreno Beach Marketplace (Lowe's)	Commercial Retail	175.000	TSF
	Auto Mall Specific Plan (Planning Area C)	Commercial Retail	304.500	TSF
	Westridge	High-Cube Warehouse	937.260	TSF
	ProLogis	High-Cube Warehouse	1,916.190	TSF
		Warehousing	328.448	TSF
	World Logistics Center	High-Cube Warehouse	41,400.000	TSF
		Warehousing	200.000	TSF
		Gas Station w/ Market	12	VFP
		Existing SFDR	7	DU
27	March Lifecare Campus Specific Plan[4]	Medical Offices	190.000	TSF
		Commercial Retail	210.000	TSF
		Research & Education	200.000	TSF
		Hospital	50	Beds
		Institutional Residential	660	Beds
28	Alessandro Metrolink Station	Light Rail Transit Station	300	SP
29	Airport Master Plan	Airport Use	559.000	TSF
30	Meridian Business Park North	Industrial Park	5,985.000	TSF
31	SP 341; PP 21552 (Majestic Freeway Business Center)	High-Cube Warehouse	6,200.000	TSF
32	PP 20699 (Oleander Business Park)	Warehousing	1,206.710	TSF
33	Ramona Metrolink Station	Light Rail Transit Station	300	SP
34	PP 22925 (Amstar/Kaliber Development)	Office (258.102 TSF)	258.102	TSF
		Warehousing	409.312	TSF
		General Light Industrial	42.222	TSF
		Retail	10.000	TSF
35	P07-1028 (Alessandro Business Park)	General Light Industrial	652.018	TSF
36	P 05-0113 (IDI)	High-Cube Warehouse	1,750.000	TSF
37	P 05-0192 (Oakmont I)	High-Cube Warehouse	697.600	TSF
38	P 05-0477	High-Cube Warehouse	462.692	TSF
39	Rados Distribution Center	High-Cube Warehouse	1,200.000	TSF
40	Investment Development Services (IDS) II	High-Cube Warehouse	350.000	TSF
41	P 07-09-0018	Warehousing	170.000	TSF
42	P 07-07-0029 (Oakmont II)	High-Cube Warehouse	1,600.000	TSF
43	TR 32707	SFDR	137	DU
44	TR 34716	SFDR	318	DU
45	P 05-0493 (Ridge I)	High-Cube Warehouse	700.000	TSF
46	Ridge II	High-Cube Warehouse	2,000.000	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
47	Harvest Landing Specific Plan	SFDR	717	DU
		Condo/Townhomes	1,139	DU
		Sports Park	16.700	AC
		Business Park	1,233.401	TSF
		Shopping Center	73.181	TSF
	Perris Marketplace	Shopping Center	450.000	TSF
48	P 06-0411 (Concrete Batch Plant)	Manufacturing	2.000	TSF
49	Jordan Distribution	High-Cube Warehouse	378.000	TSF
50	Aiere	High-Cube Warehouse	642.000	TSF
51	P 08-11-0005; P 08-11-0006 (Starcrest)	High-Cube Warehouse	454.088	TSF
52A	Stratford Ranch Specific Plan	High-Cube Warehouse	1,725.411	TSF
52B	Stratford Ranch Specific Plan	High-Cube Warehouse	480.000	TSF
		General Light Industrial	120.000	TSF
53	PP 18908	General Light Industrial	133.000	TSF
54	Tract 33869	SFDR	39.000	DU
55	PP 16976	General Light Industrial	85.000	TSF
56	PP 21144	Industrial Park	190.802	TSF
57	Quail Ranch Specific Plan	Private School (K-12)	300	STU
		Golf Course	18	Holes
		Hotel	500	ROOMS
		Specialty Retail	66.667	TSF
		General office	66.667	TSF
		Assisted Living	500	Beds
		Senior Living (Detached)	200	DU
		SFDR	600	DU
58	a TR 32460 (Sussex Capital)	SFDR	58	DU
	b TR 32459 (Sussex Capital)	SFDR	11	DU
	c TR 30411 (Pacific Communities)	SFDR	24	DU
	d TR 33962 (Pacific Scene Homes)	SFDR	31	DU
	e TR 30998 (Pacific Communities)	SFDR	47	DU
59	a Westridge Commerce Center	High-Cube Warehouse	937.260	TSF
	b P06-158 (Gascon)	Commercial Retail	116.360	TSF
	c Auto Mall Specific Plan (PAC)	Commercial Retail	304.500	TSF
	d ProLogis	Warehousing	367.000	TSF
		High-Cube Warehouse	1,901.000	TSF
	e TR 35823 (Stowe Passco)	SFDR	262	DU
		Apartments	216	DU
60	TR 36340	SFDR	275	DU

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
61	a TR 31771 (Sanchez)	SFDR	25	DU
	b TR 34397 (Winchester Associates)	SFDR	52	DU
	c TR 32645 (Winchester Associates)	SFDR	54	DU
62	Lowe's (Moreno Beach Marketplace)	Home Improvement Store	175.000	TSF
63	a Convenience Store/ Fueling Station	Gas Station w/ Market	30.750	TSF
	b Senior Assisted Living	Assisted Living Units	139	DU
	c TR 31590 (Winchester Associates)	SFDR	96	DU
	d TR 32548 (Gabel, Cook & Associates)	SFDR	107	DU
	e 26th Corp. & Granite Capitol	SFDR	32	DU
	f TR 32218 (Whitney)	SFDR	63	DU
	g Moreno Marketplace	Commercial Retail	93.788	TSF
	h Medical Plaza	Medical Offices	311.633	TSF
64	a Moreno Medical Campus	Medical Offices	80.000	TSF
	b Aqua Bella Specific Plan	SFDR	2,922	DU
	c TR 34329 (Granite Capitol)	SFDR	90	DU
	d Cresta Bella	General Office	30.000	TSF
65	a Villages of Lakeview	SFDR	860	DU
		Condo/Townhomes	1,920	DU
		Elementary School	1,200	STU
		Commercial Retail	100.000	TSF
		Soccer Complex	12	Fields
		City Park	8.900	AC
		County Park	8.100	AC
		Regional Park	107.100	AC
	b Motte Lakeview Ranch	SFDR	847	DU
		Condo/Townhomes	686	DU
		Apartments	467	DU
		Elementary School	650	STU
		Middle School	300	STU
		Commercial Retail	120.000	TSF
		Regional Park	177.000	AC
66	Gateway Area Specific Plan	Commercial Retail	255.000	AC
		General Office	510.000	AC
		Business Park	595.000	AC
		Residential	340.000	AC
67	Moreno Valley Industrial Center (Industrial Area SP)	General Light Industrial	354.810	TSF
68	Centerpointe Business Park	General Light Industrial	356.000	TSF
69	ProLogis/Rolling Hills Ranch Industrial	Heavy Industrial	2,565.684	TSF
70	P05-0493	Logistics	597.370	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
71	P07-1028, -0102; and P09-0416, -0418, -0419	General Light Industrial	652.018	TSF
72	Amstar/Kaliber Development, PP22925	General Light Industrial	42.222	TSF
		Heavy Industrial	409.312	TSF
		Commercial Retail	10.000	TSF
		General Office	258.102	TSF
73	TR 31305 / Richmond American	Residential	87	DU
74	TR 32505 / DR Horton	Residential	71	DU
75	TR 34329 / Granite Capitol	Residential	90	DU
76	TR 31814 / Moreno Valley Investors	Residential	60	DU
77	TR 33771 / Creative Design Associates	Residential	12	DU
78	TR 35663 / Kha	Residential	12	DU
79	TR 22180 / Young Homes	Residential	87	DU
80	TR 32515	Residential	161	DU
81	TR 32142	Residential	81	DU
82	Heartland	Residential	922	DU
83	San Michele Industrial Center (Industrial Area SP)	General Light Industrial	865.960	TSF
84	Hidden Canyon	General Light Industrial	2,890.000	TSF
85	Starcrest, P011-0005; 08-11-0006	General Light Industrial	454.088	TSF
86	Commercial Medical Plaza	Medical Offices	311.633	TSF
87	Mountain Bridge Regional Commercial Community	Commercial	1,853.251	TSF
88	Jack Rabbit Trail	Residential	2,000	DU
89	The Preserve / Legacy Highlands SP	Commercial	595.901	TSF
		Residential	3,412	DU
90	South Perris Industrial Phase 1	Logistics	787.700	TSF
91	South Perris Industrial Phase 2	Logistics	3,448.734	TSF
92	South Perris Industrial Phase 3	Logistics	3,166.857	TSF
93	P 04-0343	Warehousing	41.650	TSF
94	P 06-0228	General Light Industrial	149.738	TSF
95	P 06-0378	Senior Housing	429	DU
96	P 11-09-0011	Retail	80.000	TSF
97	P 12-05-0013	Apartments	75	DU
98	P 12-10-0005	High-Cube Warehouse	1,463.887	TSF
99	TR 30850	Residential	496	DU
100	TR 30973	Residential	35	DU
101	TR 31225	Residential	57	DU
102	TR 31226	Residential	82	DU
103	TR 31240	Residential	114	DU
104	TR 31407	Residential	243	DU
105	TR 31650	SFDR	61	DU
106	TR 31659	SFDR	161	DU
107	TR 32041	Residential	122	DU

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
108	TR 32406	SFDR	15	DU
109	TR 33193	Townhomes	94	DU
110	TR 33338	Residential	75	DU
111	The Gateway Center	SFDR	1,342	DU
		Condo/Townhomes	402	DU
		Apartments	307	DU
		Shopping Center	5.7	AC
		Mixed-Use/Metrolink Station	15.2	AC
		Parks	15.9	AC
112	TTM 31592 (P 13-078) Covey Ranch	SFDR	115	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; SP = Spaces; VFP = Vehicle Fueling Positions; AC = Acres

[3] Source: Cactus Avenue and Commerce Center Drive Commercial Center TIA, Urban Crossroads, Inc., December 9, 2008 (Revised).

[4] Source: March Lifecare Campus Specific Plan Traffic Impact Analysis, Mountain Pacific, Inc., May 2009 (Revised).

Source: Urban Crossroads, Inc. 2014 H1, Table 4-3

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.8 of this EIR evaluate the eight (8) environmental subjects warranting detailed analysis, as determined by this EIR's Initial Study and in consideration of public comment on this EIR's NOP. The format of discussion is standardized as much as possible in each section for ease of review. The environmental setting is discussed first, followed by a discussion of the Project's potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant. The thresholds of significance used in this EIR are based on the thresholds presented in CEQA Guidelines Appendix G and as applied by the City of Moreno Valley to create the Project's Initial Study Checklist (included in *Technical Appendix A* to this EIR). The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of Moreno Valley is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the judgment of the City of Moreno Valley, taking into consideration CEQA Guidelines Appendix G, the City of Moreno Valley's Municipal Code and adopted City policies, the judgment of the technical experts that prepared this EIR's Technical Appendices, performance standards adopted, implemented, and monitored by regulatory agencies, significance standards recommended by regulatory agencies, and the standards in CEQA that trigger the preparation of an EIR.

As required by CEQA Guidelines §15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized "impact statement" is provided in each subsection following the analysis. The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.
- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.
- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact With Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measures.
- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measures that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, the City of Moreno Valley would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines §15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This subsection describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity. This subsection also analyzes the potential effects that the Project could have on these resources. In particular, descriptions of existing visual characteristics, both on site and in the vicinity of the Project site, are provided. Potential aesthetic impacts that could result from implementing the proposed Project are based in part upon on field observations and site photographs collected by T&B Planning, Inc. in December 2013 and January 2014 (LaMar 2013-2014), analysis of aerial photography (Google Earth, imagery dated November 2012), Project application materials submitted to the City of Moreno Valley and described in Section 3.0 of this EIR, and information provided in reports appended to this EIR. This subsection also is based in part on information contained in the Conservation Element of the City of Moreno Valley General Plan (Moreno Valley 2006a Ch. 7, pp. 7-12 – 14), and the Aesthetics section of the certified Final Program EIR prepared for the General Plan (SCH No. 2000091075) (Moreno Valley 2006b Sec. 5.11, pp. 5.11-1 – 5.11-6).

4.1.1 EXISTING CONDITIONS

The Project site encompasses 50.84 gross acres (50.68 net acres) in the southern portion of the City of Moreno Valley. The site is located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Topographically, the site ranges in elevation from approximately 1,457 feet above mean sea level (AMSL) at the bottom of a detention basin in the central portion of the site, to a topographic high point of approximately 1,471 feet AMSL in the northwest portion of the site. The overall topographic relief is approximately 14 feet. The central portion of the Project site contains an earthen storm water detention basin that ranges in depth from approximately seven (7) to eight (8) feet. The site is perceived as flat or gently sloping to the east or southeast under existing conditions.

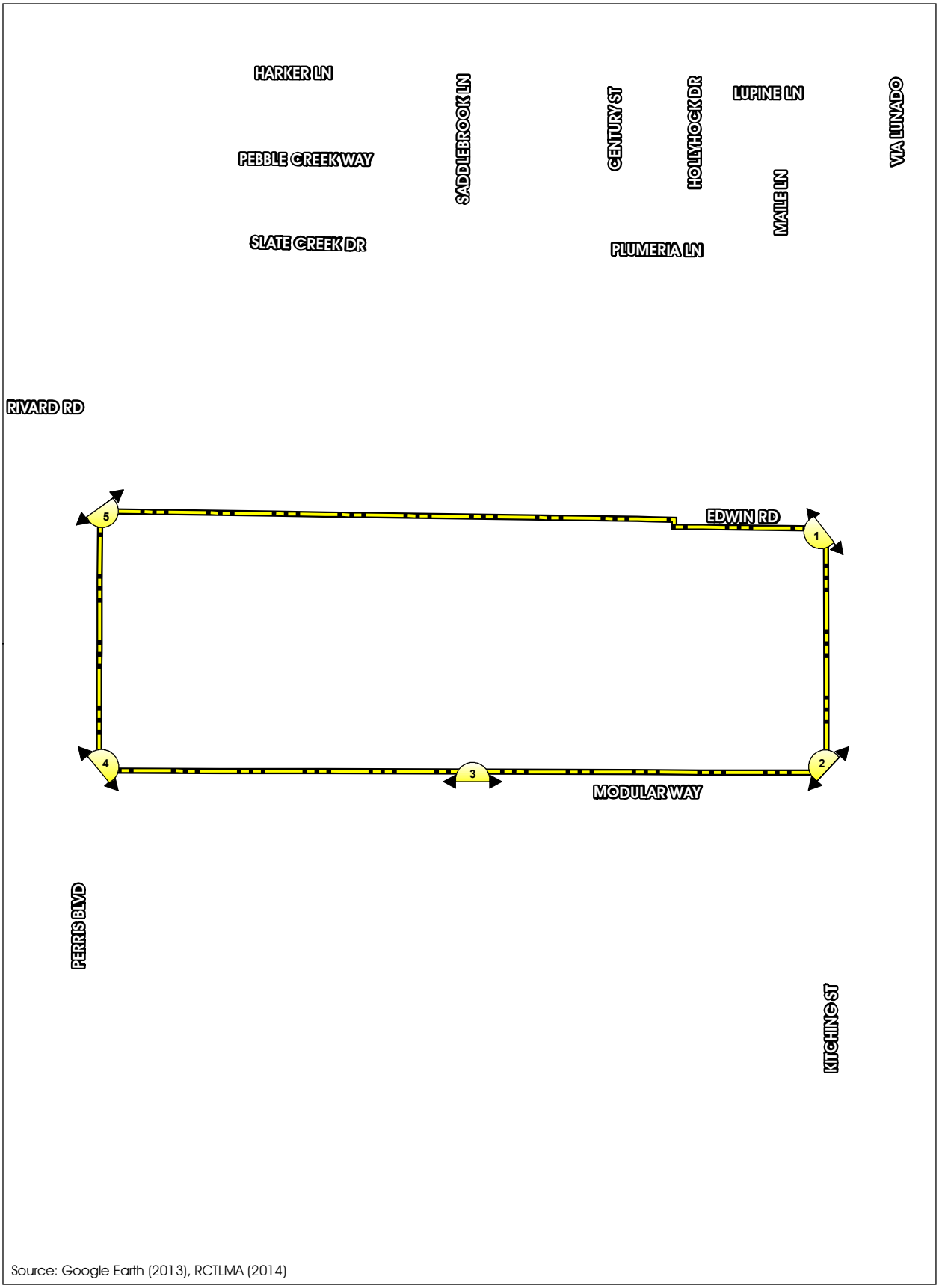
Pursuant to CEQA Guidelines §15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released on March 25, 2014. As of that date, the Project site consisted of an industrial development and vacant land. Historically, the Project site was used for agricultural production; however, agricultural activities ceased on the Project site in 2001/2002. The western portion of the site contains an industrial complex occupied by Eldorado Stone, which includes one (1) large warehouse/distribution structure with approximately 130,000 s.f. of building area and an approximate height of 37 feet, one (1) office building with approximately 12,000 s.f. of building area and an approximate height of 37 feet, a parking lot, and paved areas utilized as outdoor storage. The central portion of the site contains a large storm water detention basin associated with the Eldorado Stone facility. The eastern portion of the site is vacant under existing conditions and is routinely maintained (*i.e.,* disced) to remove vegetation from the site to reduce the risk of fire. Ornamental landscaping, including trees, is present along the western, northern, and southern perimeters of the Eldorado Stone facility and interior to the site at building entrances and within parking/storage areas. The central and eastern portions of the site do not contain any formal landscaping, and are characterized by ruderal plants and weeds. No trees are present on the central and eastern portions of the subject property. There are no rock outcroppings or

unique topographic features on the Project site. The existing conditions of the Project site were previously shown on Figure 2-4, *Aerial Photograph*.

To illustrate the existing visual conditions of the Project site in more detail, a photographic inventory was prepared. Figure 4.1-1, *Site Photograph Key Map*, depicts the locations of five (5) vantage point photographs, each of which are described below. These photographs, shown on Figure 4.1-2 through Figure 4.1-4, provide a representative visual inventory of the site's visual characteristics as seen from surrounding public viewing areas.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken from the Project site's northeast corner looking southwest. The left-hand side of the photograph provides a view along the site's eastern boundary, adjacent to Kitching Street. The center of the photograph looks southwest, across the Project site. The right-hand side of the photo looks along the site's northern boundary, adjacent to Edwin Road. In the foreground of the photograph, evidence of on-going weed abatement activities (*i.e.*, discing) on the property is clearly visible. An abandoned modular unit defaced with graffiti also is in the foreground, on the left-hand side of the photograph. In the mid-ground, on the left-hand side of the photograph (looking off-site), the Moreno Valley Regional Water Reclamation Facility is visible. In the mid-ground, on the right-hand side of the photo, the Eldorado Stone industrial development on the western portion of the Project site is visible. In the far right-hand side of the photograph, an off-site under-construction industrial warehouse facility is visible north of Edwin Road. Along the horizon in the central portion of the photograph, the Walgreens distribution warehouse facility is visible (located off-site and immediately south of the Project site). As illustrated by this photograph, there are no scenic resources on-site, nor are views of scenic vistas or prominent topographic features afforded from this location.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken from the Project site's southeast corner, looking northwest. The left-hand side of the photograph looks along the site's southern boundary, adjacent to Modular Way. The right-hand side of the photograph looks along the site's eastern boundary, adjacent to Kitching Street. The foreground of the photograph shows the eastern portion of the property vegetated with weeds and ruderal, non-native shrubbery. As shown in the mid-ground of the photograph, on the left-hand side, the Project site contains several abandoned modular units (several of which are defaced with graffiti). Behind the modular units, the existing on-site Eldorado Stone industrial facility is visible. In the foreground, in the central and right-hand portions of the photograph, evidence of on-going weed abatement activities (*i.e.*, discing) on the site is clearly visible. The off-site Moreno Valley Regional Water Reclamation Facility also is visible in the mid-ground, in the extreme right-hand portion of the photograph (looking off-site). Along the horizon, in the central and right-hand portions of the photograph, the Box Springs Mountains and Reche Canyon area are visible, albeit substantially obscured by a large warehouse building (which is currently under construction north of the Project site) and atmospheric haze, which is common in western Riverside County.



Source: Google Earth (2013), RCTLMA (2014)

Figure 4.1-1

Site Photographs Key Map

Southeast

Northwest

Site Photo 1: At Northeast Intersection of Edwin Rd. and Kitching St., looking Southeast to Northwest

Southwest

Northeast

Site Photo 2: At Southeast Intersection of Modular Way and Kitching St., looking Southwest to Northeast

NOT TO SCALE

Figure 4.1-2
Site Photographs 1 & 2

- Site Photograph 3 (Figure 4.1-3): Site Photograph 3 was taken at the approximate midpoint of the site's southern boundary along Modular Way, looking north. The photograph depicts a 180-degree view of the Project site, with the site's eastern boundary on the right-hand side of the photograph and the site's western boundary on the left-hand side of the photograph. The foreground of the photograph depicts the sidewalk, ornamental landscaping, and black, tubular steel fence located along the Project site's southern border. In the mid-ground, in the left-hand side of the photograph, the Eldorado Stone warehouse structure is visible, although mostly obscured by the fencing. In the center of the photograph, in the mid-ground, the industrial warehouse building under construction to the north of the Project site is partially visible (although mostly obscured by the tubular steel fence). On the right-hand side of the photograph, in the mid-ground, an abandoned modular unit is visible. Along the horizon, on the right-hand side of the photograph (looking off-site) the Russell Mountains are visible.

- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the Project site's southwest corner, looking northeast. The left-hand side of the photograph looks north along the site's western boundary, adjacent to Perris Boulevard. The center of the photograph looks across the Project site. The right-hand side of the photograph looks east along the site's southern boundary, adjacent to Modular Way. The immediate foreground of the photograph is dominated by urban development features associated with Perris Boulevard and Modular Way, including street signs, street lights, and cement sidewalks. Existing ornamental landscaping (trees, turf and scattered shrubs) and the black, tubular steel fence that runs along the perimeter of the Eldorado Stone facility are visible in the mid-ground of the photograph. The Eldorado Stone office building is partially visible from this vantage point on the left-hand side of the photograph, but is mostly obscured by landscaping and fencing. The Russell Mountains are partially visible on the right-hand side of the photograph (along the horizon) from this location.

- Site Photograph 5 (Figure 4.1-4): Site Photograph 5 was taken from the Project site's northwest corner, looking southeast. The left-hand side of the photograph looks east along the site's northern boundary. The center of the photograph looks across the Project site. The right-hand side of the photograph looks south along the Project site's western boundary with Perris Boulevard. In the foreground, in the left-hand and center portions of the photograph, is a paved driveway offering access to the northwestern corner of the Project site. In the foreground on the right-hand side of the photograph, urban development features are visible, including a street light and cement sidewalk. The mid-ground of the photograph depicts the black, tubular steel fence along the perimeter of the Eldorado Stone facility as well as ornamental landscaping adjacent to Perris Boulevard. Along the horizon on the left-hand side of the photograph and above the fence line, a large off-site industrial warehouse building and the Russell Mountains are partially visible. The Eldorado Stone warehouse structure is partially visible along the horizon line and above the fence line in the central and right-hand portions of the photograph.

West

East

Site Photo 3: At Southern Edge of Modular Way, looking West to East

Northwest

Southeast

Site Photo 4: At Southwest Intersection of Modular Way and Perris Blvd., looking Northwest to Southeast

NOT TO SCALE

Figure 4.1-3
Site Photographs 3 & 4

Northeast

Southwest

Site Photo 5: At Northwestern Edge of Perris Blvd., looking Northeast to Southwest

NOT TO SCALE

Figure 4.1-4
Site Photograph 5

Under existing conditions, the Eldorado Stone facility operating on the western portion of the Project site contains several sources of artificial light. There are approximately 50 artificial light sources (*e.g.*, building mounted lights/floodlights, pole mounted lights) installed at the existing warehouse structure, office building, and parking and storage areas within the Eldorado Stone facility. Furthermore, there are streetlights installed immediately west of the Project site along Perris Boulevard and immediately south of the Project site along Modular Way; all existing street lights are installed off-site within the public rights-of-ways. In addition to the lighting on-site and immediately adjacent to the Project site, the surrounding area is developed with numerous industrial facilities, each of which contain additional sources of artificial light: a large, under-construction warehouse facility to the north, the Walgreens distribution warehouse facility to the south, the Harbor Freight Tools distribution warehouse facility to the southwest, and the Moreno Valley Regional Water Reclamation Facility to the east.

Mt. Palomar Observatory, located in the northern portion of San Diego County, has noted that the continued urbanization of southwestern Riverside County reduces the usefulness of the observatory due to emission of artificial lighting from streetlights, automobiles, residences, and businesses (CalTech n.d.). This type of lighting condition is known as "sky glow." Properties located within a 45-mile radius of the Mt. Palomar Observatory are considered to have the potential to contribute to lighting impacts at the observatory. Although the City of Moreno Valley General Plan does not address the Mt. Palomar Observatory, the Project site is identified by the Riverside County General Plan as being located within a 45-mile distance of the facility, which is referred to as "Zone B" of the "Mt. Palomar Nighttime Lighting Policy Area" (Riverside County 2003, Mead Valley Area Plan Figure 6).

The City of Moreno Valley General Plan includes policies related to development along "Scenic Routes," in addition to policies related to "View Corridors" (Moreno Valley 2006b 7-13). However, as shown on Figure 4.1-5, *City of Moreno Valley Major Scenic Resources*, the Project site is not located within close proximity to, or within the view of, any designated scenic route or view corridor.

4.1.2 BASIS FOR DETERMINING SIGNIFICANCE

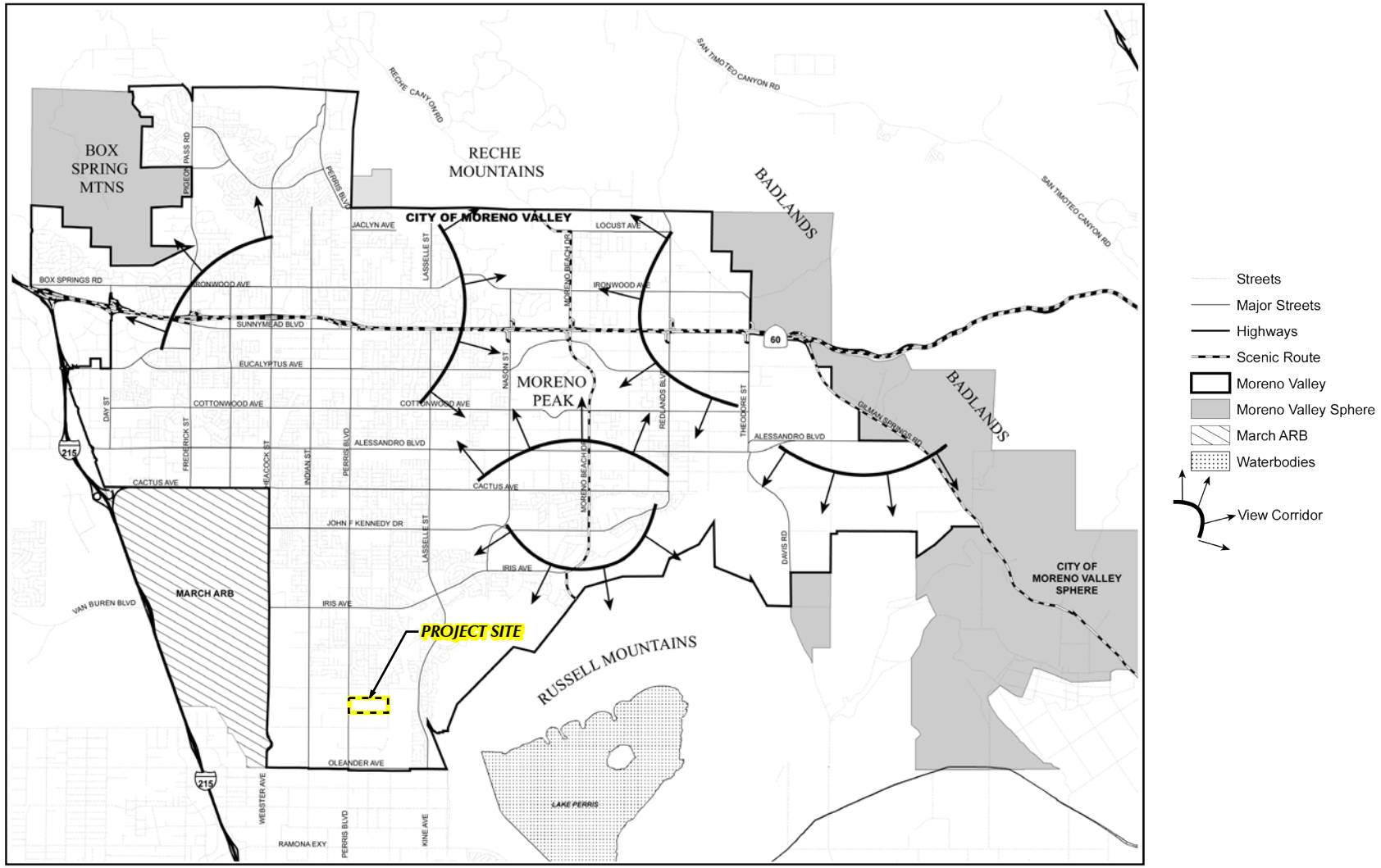
The proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

1. *Have a substantial adverse effect on a scenic vista;*

2. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*

3. *Substantially degrade the existing visual character or quality of the site and its surroundings; or*

4. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*



Source: City of Moreno Valley General Plan (07-11-2006)

NOT TO SCALE

Figure 4.1-5
City of Moreno Valley Major Scenic Resources

4.1.3 IMPACT ANALYSIS

Threshold 1: Would the Project have a substantial adverse effect on a scenic vista?

The photographs provided on Figure 4.1-2 through Figure 4.1-4 depict the subject property under existing conditions. As shown, the western portion of the Project site is occupied by an industrial facility (Eldorado Stone), the central portion of the site contains a water detention basin, and the eastern portion of the site is vacant. The Project site does not contribute to a scenic vista under existing conditions, and the City of Moreno Valley General Plan Final Program EIR does not identify any scenic vistas or scenic corridors within the vicinity of the Project site (City of Moreno Valley 2006b 7-13).

Scenic vistas within Moreno Valley are defined by the Box Springs Mountains and Reche Canyon area to the north, the "Badlands" to the northeast, and the Russell Mountains to the east. The Project site is located within a relatively flat valley floor approximately 0.7-mile to the west of the Russell Mountains, which are identified as a scenic resource by the City of Moreno Valley General Plan (City of Moreno Valley 2006a, Figure 7-2). The General Plan distinguishes the scenic viewshed for the Russell Mountains as occurring from the north (*i.e.*, lands to the north of the Russell Mountains looking south toward the Mountains), whereas the Project site is located to the west of the Mountains.

Under existing conditions, views of the Russell Mountains are partially obstructed along the western Project boundary by the Eldorado Stone industrial structures measuring 37 feet in height, fencing, and landscaping. Implementation of the proposed Project would result in the construction of a logistics warehouse building with an approximate height of 42 feet above finished grade and architectural projections reaching up to 47 feet above finished grade. The proposed building would be five (5) feet taller than the existing on-site buildings and 10 feet taller on the proposed building's corners where architectural projections would accent the building's office areas. The proposed logistics warehouse building would be set back from the Perris Boulevard public right-of-way by approximately 150 feet. The proposed 150-foot setback is approximately 30 feet farther away from the Perris Boulevard public right-of-way than the existing Eldorado Stone office building and 225 closer to the Perris Boulevard public right-of-way than the existing Eldorado Stone warehouse building. Because the proposed logistics warehouse building would be taller than the existing on-site buildings, views of the Russell Mountains experienced from Perris Boulevard would be impeded to a greater degree than occurs under existing conditions. However, the proposed Project would not block views to the Russell Mountains from public viewing areas along Perris Boulevard because views of the Mountains would still be visible beyond the building and along the horizon. The change in view obstruction would not be perceived as substantial. Implementation of the proposed Project also would not block views of the Russell Mountains from public viewing areas along the northern and southern boundaries of the subject property as the Mountains would still be visible beyond the proposed warehouse building. Views of the Russell Mountains from the Project site's eastern boundary would not be affected by the proposed Project due to the location of the Mountains in relation to the Project site.

The proposed Project also would have a less-than-significant impact on public views of the Box Spring Mountains to the northwest of the subject property and the Reche Canyon area to the north. The distance and location of the Box Spring Mountains and Reche Canyon area in relation to the Project site do not provide prominent, distinct views of these scenic resources from the Project site under existing conditions. The views that are available under existing conditions, primarily from the Project's southern and eastern boundaries, would not be obstructed by the redevelopment of the Project site. The proposed Project would not block views of these landforms from public viewing areas (*i.e.*, public roads); these features would still be visible beyond the building and along the horizon. The Project site does not afford any views of the Badlands; therefore, implementation of the proposed Project would not adversely impact any public view of the Badlands.

Based on the foregoing analysis, the proposed Project would not have a substantial adverse effect on scenic vistas, and a less-than-significant impact would occur.

Threshold 2: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project site is not located within or adjacent to a scenic highway corridor and does not contain scenic resources, such as trees of scenic value, rock outcroppings, or historic buildings. Furthermore, there are no State-designated or eligible scenic highways within the City of Moreno Valley (Caltrans "Eligible (E) and Officially Designated (OD) Routes"). The nearest State-eligible scenic highway to the Project site is I-215 (between SR-74 near Perris to SR-74 near Romoland), which is located approximately 6.0 miles south of the Project site. Additionally, the Project site is located approximately 4.7 miles south of State Route 60, which the City of Moreno Valley General Plan identifies as a "Scenic Route," (Moreno Valley 2006b 7-13). The Project's proposed development features (one warehouse building with associated features) would not be visible from either I-215 (between SR-74 near Perris to SR-74 near Romoland) or State Route 60 due to intervening development and distance. Because the Project site is not visible from a state scenic highway and contains no scenic resources, the proposed Project would not adversely impact the viewshed within a scenic highway corridor and would not damage important scenic resources within a scenic highway corridor, including trees, rock outcroppings, and historic buildings. No impact would occur.

Threshold 3: Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

❑ Construction-Related Activities

As described in Subsection 3.3.4.A of this EIR, the proposed Project would be constructed in one phase over a period of approximately 11 months. Heavy equipment would be used, which would be visible to the immediately surrounding areas during the temporary construction period. Construction activities are a common occurrence in the developing Inland Empire region of southern California, particularly in the rapidly developing MVIAP area, and are not considered to substantially degrade

the area's visual quality. Furthermore, except for the short-term use of cranes during building construction and lifts during the architectural coating phase, the construction equipment is expected to be low in height and not substantially visible to the surrounding area. All Project-related construction activities would be temporary in nature and all construction equipment would be removed from the Project site following completion of the Project's construction activities. Project-related changes to local visual character and quality would be less than significant during temporary, near-term construction activities.

❑ Project Buildout

At buildout of the proposed Project, views of the site from the surrounding area would change from that of a partially developed property featuring an existing covered warehouse/manufacturing structure, office building, outdoor parking/storage areas, and vacant land to a redeveloped site containing one (1) large logistics warehouse building. As more fully described in EIR Section 3.0, the proposed Project would result in the construction and operation of an approximately 1,109,378 s.f. logistics warehouse building with 256 loading docks erected by conventional concrete tilt-up construction. Example building elevations were previously depicted on Figure 3-5, *Architectural Elevations*. In addition to the logistics warehouse structure, the site also would contain surface parking areas and drive aisles, loading docks, screen walls (measuring up to 14 feet in height), fencing, landscaping elements, water quality detention/basins, utility infrastructure, and other site improvements.

In order to determine if the proposed Project would substantially degrade the existing visual character or quality of the site and its surroundings, an analysis of Site Photographs 1 through 5 (refer to Figure 4.1-2 through Figure 4.1-4) is provided on the following pages. Refer also to the Project's proposed Plot Plan (Figure 3-4), conceptual architectural elevations (Figure 3-5), and conceptual landscape plan (Figure 3-6) for illustrations of the proposed site layout and architectural and landscape design.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken from the Project site's northeast corner looking southwest. This vantage point would be visible at the corner of Kitching Street and Edwin Road. The northeast corner of the proposed logistics warehouse building would be visible from this location, as well as partial views of the northern and eastern edges of the warehouse building. Upon buildout of the Project, the immediate foreground of this photograph (from the left-hand side of the photograph to the center) would contain ornamental landscaping surrounding a water quality detention basin. A driveway and drive aisle would also be visible in the foreground from this vantage point (from the center of the photograph extending to the right-hand side). In the left-hand side of the photograph, in the mid-ground, a drive-aisle and landscaping would be visible, as well as the eastern edge of the warehouse facility. Also in the mid-ground (center of the photograph), the corner of the proposed warehouse building would be visible. The corner of the warehouse building would house an office area featuring enhanced architectural treatments. In the right-hand side of the photograph (in the mid-ground), a 14-foot tall masonry screen wall painted to match the

building's color palette would be visible. The screen wall and landscaping visible from this vantage point would obscure views of the building's loading bays; a portion of the proposed warehouse building would be visible above the masonry wall line. The visual prominence of the screen wall would be reduced by densely planted flowering, deciduous accent trees, and large canopied deciduous trees and evergreen coniferous trees along Edwin Road. The tree understory would be planted with a combination of shrubs and groundcover.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken from the Project site's southeast corner looking northwest. From this location, the southwest corner of the warehouse building would be visible in the center of the photograph, with the building's eastern edge extending north in the right-hand side of the photograph and the building's southern edge extending west in the left-hand side of the photograph. From the left-hand side of the photograph and extending to the right-hand side of the photograph, the foreground would be dominated by landscaping (trees and groundcover) planted along the perimeter of the water quality/detention basin proposed in the southeast corner of the site. In the left-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen and landscaping would be visible. The proposed warehouse building would be partially visible beyond the masonry wall, while the loading docks would be screened by the aforementioned masonry wall. In the center of the photograph (in the mid-ground), the corner of the warehouse facility would be visible, as would a drive aisle. This corner of the building would contain an office area featuring enhanced architectural treatments. In the right-hand side of the photograph (in the mid-ground) a drive aisle, landscaping, and a water-quality/detention basin would be visible. Views of the horizon on the right- and left-hand sides of the photograph would not be obscured with buildout of the Project. However, distant views of the Box Springs Mountains along the horizon line in the central portion of the photograph may be partially obstructed due to the close proximity of the proposed warehouse building and landscaping, but the view would not be completely obstructed.

- Site Photograph 3 (Figure 4.1-3): Site Photograph 3 was taken at the approximate midpoint of the site's southern boundary with Modular Way. The photograph depicts a 180-degree view of the Project site, facing north, with the site's eastern boundary on the right-hand side of the photograph, and the site's western boundary on the left-hand side of the photograph. At Project buildout, this vantage point would provide a view of the southern edge of the proposed warehouse building. Views of the foreground from this vantage point would include a cement sidewalk and ornamental landscaping, as occurs under existing conditions. A 14-foot tall masonry wall painted to match the building's color palette would be visible in the mid-ground from this vantage point (from left to right). The visual prominence of the screen wall would be reduced by densely planted trees, shrubs, and groundcover. The southern edge of the proposed warehouse building would be partially visible beyond the masonry wall. Architectural enhancements as proposed along the southern edge of the warehouse building to break-up the wall plane and provide visual interest.

- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the corner of Modular Way and Perris Boulevard, looking northeast. The southwest corner of the proposed logistics warehouse building would be visible from this location, as well as partial views of the southern and western edges of the warehouse building. The immediate foreground of this photograph (from the left-hand side to the right-hand side) would include a cement sidewalk and ornamental landscaping adjacent to Perris Boulevard and Modular Way, as occurs under existing conditions. In the left-hand side of the photograph, the mid-ground would contain an employee/visitor parking area and a drive-aisle. Both of these features would be partially obscured by proposed landscaping; the western edge of the proposed warehouse building also would be partially obscured by landscaping. In the mid-ground (center of the photograph), the corner of the warehouse facility would feature enhanced architectural treatments. In the right-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen wall painted to match the building's color palette would be visible. The screen wall would obscure views of the loading bays and partially obscure the proposed warehouse building. The visual prominence of the screen wall would be reduced by densely planted flowering, deciduous accent trees, and large canopied deciduous trees and evergreen coniferous trees along Modular Way. Views of the Russell Mountains would be partially obstructed along the horizon line at this vantage point (at the central and right-hand portions of the photograph); however, views of the Mountains are already partially obstructed under existing conditions by the Eldorado Stone facility. Furthermore, the proposed Project would not detract from the visual prominence of the Russell Mountains from this vantage point; the Mountains would continue to be seen by a viewer from this location.

- Site Photograph 5 (Figure 4.1-4): Site Photograph 5 was taken from the Project site's northwest corner, looking southeast. From this viewpoint, the left-hand side of the photograph would offer views along the logistics warehouse building's northern edge, with the building's northwest corner visible in the center of the photograph, and the building's western edge visible along the right-hand side of the photograph. The immediate foreground of the photograph would contain an employee/visitor parking area, drive aisle, and associated landscaping (left-hand and center portions of the photograph). On the right-hand side of the photograph (in the foreground) a driveway and ornamental landscaping adjacent to Perris Boulevard would be visible, similar to existing conditions. In the left-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen wall painted to match the building's color palette would be visible. The screen wall would obscure views of the loading bays and partially obscure views of the proposed warehouse building, although the building would be visible beyond the screen wall. The northwest corner of the proposed warehouse building would be visible in the central foreground from this viewing area. This corner of the building would feature enhanced architectural treatments. To the right of the office area, the western edge of the warehouse building, employee/visitor parking areas, a drive aisle and landscaping would be visible. Views of the Russell Mountains would be partially obstructed along the horizon line at this vantage point; however, views of the Mountains are already partially obstructed under existing conditions by the Eldorado Stone facility. Furthermore,

the Project would not detract from the visual prominence of the Russell Mountains from this vantage point; the Mountains would continue to be seen by a viewer from this location.

As indicated in the above descriptions, buildout of the proposed Project would change the existing visual character of the Project site from a property partially developed with industrial uses occupied by Eldorado Stone to that of a redeveloped property containing one (1) logistics warehouse building and associated site improvements. Although the aesthetic changes to the Project site would be noticeable, the Project would not change the visual character of the Project as the site contains industrial buildings under existing conditions and would contain an industrial building under proposed conditions. With respect to changes to visual quality, the Project incorporates a number of features intended to soften the visual prominence of the building and its loading docks from public viewing areas, including enhanced architectural treatments and landscaping. The Project also incorporates 14-foot tall walls to screen loading and docking bays from public views along Modular Way, Perris Boulevard, Kitching Street and Edwin Road. The visual prominence of these screening walls would be reduced through the installation of landscaping (trees, shrubs, and groundcover) in front of the walls. These visual features of the proposed development would help ensure a high-quality aesthetic for the site, consistent with the design standards called for by the MVIAP. Therefore, based on the foregoing analysis, implementation of the proposed Project would not result in any significant adverse impacts to the visual character or quality of the Project site.

With respect to the visual character of the surrounding area, the proposed Project would be visually compatible with the existing industrial land uses to the north, south, southwest, and east of the Project site. Large warehouse buildings having similar architectural characteristics as proposed by the Project are located to the immediate north and south and are approved to be constructed to the immediate west. Accordingly, implementation of the Project would not substantially degrade the existing visual character of the Project site's surroundings, and impacts would be less than significant.

Based on the foregoing analysis, development of the site with a 1,109,378 s.f. logistics warehouse complete with a parking area, drive aisles, loading docks, walls and fencing, landscaping elements, water quality detention/basins, utility infrastructure, and other site improvements would not substantially degrade the visual quality or character of the Project site or surrounding area. As such, the Project would result in a less-than-significant impact.

Threshold 4: Create a new source of substantial light or glare, which would adversely affect daytime or nighttime view of the area?

Under existing conditions, the western portion of the Project site is developed and includes sources of artificial light associated with operation of the existing Eldorado Stone facility. Existing light sources include exterior building and pole-mounted light fixtures. These existing light sources would be eliminated by the Project and replaced with new lighting sources for operation of the proposed Project.

The MVIAP includes standards for lighting within the Area Plan as follows:

> *Exterior light fixtures shall be designed and placed so as not to provide light spillage on adjacent properties or public rights-or-way. The use of "full cut off' fixtures should be used adjacent to the MARB/MIP to reduce nighttime glare towards the flight line* (City of Moreno Valley, 2002).

In addition, §9.08.100 of the City of Moreno Valley Municipal Code addresses light and glare, and requires the following:

> *All outdoor lighting associated with nonresidential uses shall be fully shielded and directed away from surrounding residential uses. Such lighting shall not exceed one-quarter foot-candle minimum maintained lighting measured from within five feet of any property line, and shall not blink, flash, oscillate, or be of unusually high intensity or brightness* (City of Moreno Valley n.d.).

The proposed Project is designed to adhere to the requirements of both the City Municipal Code §9.08.100 and the MVIAP, and future implementing permits and approvals (*i.e.*, building permits) would be required to demonstrate compliance with these standards. Compliance would ensure that the proposed Project does not produce substantial amounts of light or glare from artificial lighting sources that would adversely affect the day or nighttime views of adjacent properties.

With respect to daytime glare impacts that could result from reflective building materials, the proposed Project would involve the construction and operation of one logistics warehouse building. The majority of the exterior building surfaces would consist of tilt-up concrete construction that does not include any physical properties that would produce substantial amounts of glare. Although the north, south, west, and east elevations of the proposed warehouse building would provide enhanced architecture, including the use of blue-glazed, low-reflective glass, the use of this material would not adversely affect daytime views of any surrounding properties because the glass would not be mirrored. Accordingly, a less-than-significant daytime glare impact would occur.

As noted previously, the Project site is located within a 45-mile radius of the Mt. Palomar Observatory. Light pollution is not addressed by the City of Moreno Valley's General Plan or Municipal Code; however, the 45-mile radius surrounding the Mt. Palomar Observatory is defined by Riverside County Ordinance No. 655 as an area in which light pollution may impact the functionality of the observatory. Any development project within a 45-mile radius of the observatory that would add artificial light sources has the potential to contribute to sky glow effects, which could adversely affect operations at the observatory. Although the Project is located in the City of Moreno Valley and is not subject to Riverside County Ordinance No. 655, the light pollution effects of the Project on the Mt. Palomar Observatory should still be considered The proposed Project would be required to comply with City of Moreno Valley Municipal Code §9.08.100, which requires shielded fixtures and prohibits unusually high intensity or brightness to minimize light pollution (and thereby minimizing

potential impacts associated with artificial lighting, including but not limited to effects on nighttime observations at the Mt. Palomar Observatory).

Although implementation of the Project would not introduce substantial sources of artificial lighting and glare and would result in a less-than-significant impact to daytime and nighttime views in the area, this EIR recommends mitigation to ensure that the Project complies with the MVIAP and City of Moreno Valley Municipal Code §9.08.100 (refer to Subsection 4.1.6, below).

4.1.4 CUMULATIVE IMPACT ANALYSIS

The City of Moreno Valley's General Plan EIR (City of Moreno Valley 2006b 5.11-5), concluded that buildout of the City in accordance with its General Plan would not have any significant direct or cumulative impacts to local or regional aesthetics with enforcement of the City's General Plan and Specific Plans. As previously stated, the proposed Project is consistent with the City's General Plan and MVIAP and would therefore not result in any cumulative aesthetics impacts. Furthermore, and as noted under the discussion of Threshold 1, the Project site contains an industrial facility and disturbed, vacant land under existing condition and does not offer a scenic vista. Views of the Box Springs Mountains, Reche Canyon area, and the Russell Mountains are available from public viewing areas adjacent to the Project site; however, such views are available throughout the City of Moreno Valley and are not unique to the Project site's vicinity. Additionally, and as shown on Figure 4.1-5, the City of Moreno Valley General Plan does not identify any scenic routes or view corridors within close proximity of the Project site. With buildout of the proposed Project and other developments within the Project's viewshed, which would include buildout of the MVIAP and surrounding areas, there would be a less than significant cumulative effect to any existing scenic vistas. Accordingly, no cumulatively considerable impact to scenic vistas would occur with buildout of the proposed Project.

As noted under the analysis of Threshold 2, the Project site is not located within close proximity to any designated Scenic Routes and does not contain any scenic resources under existing conditions, including, but not limited to, trees, rock outcroppings, and historic buildings. Therefore, the proposed Project has no potential to directly impact a scenic resource or to contribute to a cumulatively significant scenic resource impact. As such, no impact would occur.

With respect to visual quality and character of the site and surrounding area, under cumulative conditions the geographic area of the MVIAP would be industrial in character as the MVIAP area would be fully built-out with business park/light industrial land uses. As with the proposed Project, uses within the MVIAP would be subject to the development regulations and design standards contained in the MVIAP. Mandatory compliance to these development regulations and design standards would ensure that the business park/light industrial development within the remaining undeveloped portions of the MVIAP would incorporate high quality building materials, site design, and landscaping so as to minimize the potential for adverse effects associated with visual quality. The building that would be constructed on the Project site and other buildings within the MVIAP would be similar in character and would display the aesthetic qualities required by the MVIAP.

These qualities have been incorporated into the proposed Project's design as described in EIR Section 3.0, *Project Description*. As such, the cumulative impact would be less than significant and the proposed Project would not considerably contribute to an adverse cumulative impact to the existing visual character or quality of the Project site or its surroundings.

With respect to potential cumulative light and glare impacts, City of Moreno Valley Municipal Code §9.08.100 sets a maximum limit of 0.25 foot candles of "spill over" lighting that can directly or indirectly affect adjacent properties and requires light fixtures to incorporate shielding to prevent potential glare impacts. Similarly, the County of Riverside and cities in the surrounding area enforce similar light pollution regulations (Riverside County Ord. 655, City of Perris Zoning Ord. Sec. 19.01 *et. seq.*, City of Riverside Municipal Code Sec. 19.590.070). As noted previously, the Project site is located within a 45-mile radius of the Mt. Palomar Observatory. Areas within 45 miles of the Mt. Palomar Observatory have been identified by the County of Riverside as having the potential to adversely affect nighttime operations at the Observatory. However, as noted above, all development with artificial light sources located within the City of Moreno Valley and surrounding areas are required to comply with the applicable lighting restrictions of the City Municipal Code §9.08.100 (or the applicable lighting restrictions applied by their respective City/County). The restriction on "spill over" lighting enforced by these lighting regulations has the effect of minimizing light and glare that would create sky glow. Additionally, development projects with artificial light sources in surrounding jurisdictions would be required to comply with the light reduction requirements applicable in their respective jurisdiction. Therefore, because City of Moreno Valley Municipal Code §9.08.100 and the light control regulations of other jurisdictions within the 45-mile radius of the Observatory would minimize the amount of sky glow that could affect nighttime operations at the observatory the cumulative effect would be less than significant. Because the proposed Project is mandated to comply with the City's Municipal Code, the Project's contribution to sky glow impacts to the Mt. Palomar Observatory is determined to be less than cumulatively considerable.

4.1.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Less-than-Significant Impact. The Project site does not comprise all or part of a scenic vista and no unique or scenic vistas are visible from the property. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas resulting from the Project would be less than significant.

Threshold 2: No Impact. The Project has no potential to damage scenic resources within a scenic highway corridor. The Project site is not located within the viewshed of a scenic highway and the Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings. Accordingly, a significant impact to scenic resources within a state scenic highway has no potential to occur.

Threshold 3: Less-than-Significant Impact. The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas during Project construction or operation. Although the Project would result in a change to the existing visual character of the site,

the Project proposes a number of site design, architectural, and landscaping elements consistent with the requirements of the MVIAP that would ensure the provision of a high quality development. Furthermore, buildout of the Project would be consistent with the industrial character of the site and surrounding area which is made up of warehouse and industrial facilities. Impacts would be less than significant.

Threshold 4: Less-than-Significant Impact. The Project would not create substantial light or glare. Compliance with the MVIAP requirements for lighting and mandatory compliance with City of Moreno Valley Municipal Code §9.08.100 would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

4.1.6 MITIGATION

Although the proposed Project would not introduce substantial sources of artificial lighting and glare and would result in a less-than-significant impact to daytime and nighttime views in the area, the following mitigation measures are recommended to ensure compliance with the MVIAP and City of Moreno Valley Municipal Code §9.08.100.

MM 4.1-1 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City of Moreno Valley Municipal Code §9.08.100.

MM 4.1-2 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.

4.2 AIR QUALITY

This Subsection is based on two technical studies that were prepared by Urban Crossroads, Inc. to evaluate the Project's potential to adversely affect local and regional air quality. These studies include the following: 1) "Modular Logistics Center Air Quality Impact Analysis," dated September 26, 2014, which is included as *Technical Appendix B1* to this EIR (Urban Crossroads 2014a); and 2) "Modular Logistics Center Mobile Source Health Risk Assessment," dated June 18, 2014, which is included as *Technical Appendix B2* to this EIR (Urban Crossroads 2014b).

4.2.1 EXISTING CONDITIONS

A. Atmospheric Setting

The Project site is located in the South Coast Air Basin (SCAB, or "Basin") which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB encompasses approximately 6,745 square miles and includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and the Jacinto Mountains to the north and east, respectively; and the San Diego County line to the south (Urban Crossroads 2014a 10).

B. Regional Climate and Meteorology

The regional climate – temperature, wind, humidity, precipitation, and the amount of sunshine – has a substantial influence on air quality. The distinctive climate of the SCAB is determined by its terrain and geographical location, which comprises a coastal plain connected to broad valleys and low hills surrounded by the Pacific Ocean and high mountains. The annual average temperatures throughout the SCAB vary from the low to middle 60s, measured in degrees Fahrenheit (F). Inland areas in the SCAB, like where the Project site is located, show more variability in annual minimum and maximum temperatures than coastal areas within the SCAB due to a decreased marine influence (Urban Crossroads 2014a 10-11).

The climate of the SCAB is characterized as semi-arid; however, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB and the relative high humidity heightens the conversion of sulfur dioxide to sulfates. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland (Urban Crossroads 2014a 10).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution, as the direction and speed of wind patterns determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind

flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. During the nighttime, heavy, cool air descends mountain slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counter-clockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections (Urban Crossroads 2014a 11).

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level (Urban Crossroads 2014a 11).

A second inversion-type forms in conjunction with the drainage of cool air off of the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides and carbon monoxide, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline (Urban Crossroads 2014a 11).

C. Air Quality Pollutants and Associated Health Effects

The federal government and State of California have established maximum permissible concentrations for common air pollutants that may pose a risk to human health or would otherwise degrade air quality and adversely affect the environment. These regulated air pollutants are referred to as "criteria pollutants." An overview of the common criteria air pollutants in the SCAB, their sources, and associated effects to human health are summarized on the following pages.

- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest in the winter during the morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. CO is emitted directly from internal combustion engines; therefore, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections (Urban Crossroads 2014a 14).

CO combines with hemoglobin to produce carboxyhemoglobin (COHb), which interferes with the transport of oxygen throughout the body. The most common symptoms associated with CO poisoning include headache, nausea, vomiting, dizziness, fatigue, and weakness. Exposure to CO can also result in chest pain. Individuals most at risk to the effects of CO include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic oxygen deficiency (Urban Crossroads 2014a 18).

- Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X) (Urban Crossroads 2014a 14).

  SO_2 is a respiratory irritant to people afflicted with asthma. After a few minutes exposure to low levels of SO_2, asthma sufferers can experience breathing difficulties, including airway constriction, resistance to air flow, and reduction in breathing capacity. Although healthy individuals do not exhibit similar acute breathing difficulties in response to SO_2 exposure at low levels, animal studies suggest that very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract (Urban Crossroads 2014a 19).

- Nitrogen Oxides (NO_X) consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO_2 absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than measured by regional monitoring stations (Urban Crossroads 2014a 14-15).

  Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_X. Short-term exposure to NO_X can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO_X can result in larger decreases in lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema), as these individual are more susceptible to the effects of NO_X than healthy individuals (Urban Crossroads 2014a 19).

- Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X) (both byproducts of internal combustion engine exhaust), undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are

generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant (Urban Crossroads 2014a 15).

Short-term exposure (lasting for a few hours) to ozone at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for ozone effects. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high ozone levels (Urban Crossroads 2014a 18).

- Particulate Matter (PM) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particles 10 microns or smaller (PM_{10}) easily become airborne and can reduce visibility. Particles 2.5 microns or smaller ($PM_{2.5}$), often referred to as fine particles, are formed in the atmosphere from sulfates or nitrates, a byproduct of primary gaseous emissions of SO_2 and NO_X (Urban Crossroads 2014a 15).

  Elevated ambient concentrations of particulate matter (PM_{10} and $PM_{2.5}$) have been linked to respiratory infections, number and severity of asthma attacks, and increased hospital admissions. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to a decrease in respiratory lung volumes in children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children, appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$ (Urban Crossroads 2014a 18-19).

- Volatile Organic Compounds (VOCs) are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed and do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor. Examples of VOC include gasoline, alcohol, and the paints used for solvents (Urban Crossroads 2014a 15). Odors generated by VOCs can irritate the eye, nose, and throat, which can reduce respiratory volume. Studies have shown that odor-associated VOCs can stimulate sensory nerves leading to neurochemical changes that may compromise the immune system (Urban Crossroads 2014a 20).

- Reactive Organic Gases (ROGs) Similar to VOCs, ROGs are also precursors in forming ozone. ROGs consist of compounds containing methane ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. The SCAQMD uses the terms ROG and VOC interchangeably. (Urban Crossroads 2014a 15).

- Lead (Pb) is a heavy metal that is highly persistent in the environment. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters (Urban Crossroads 2014a 15).

  Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure (Urban Crossroads 2014a 19-20).

D. Existing Air Quality

The quality of the air is measured based upon ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect, as well health effects of each pollutant regulated under these standards are detailed in Table 4.2-1, *Ambient Air Quality Standards.*

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), inhalable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99% of the daily concentrations, averaged over three years, are equal to or less than the standard (Urban Crossroads 2014a 12).

Table 4.2-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.075 ppm (147 µg/m³)		
Respirable Particulate Matter (PM10)[8]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[8]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[11,12]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes for Table 4.2-1:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3.Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4.Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

9.To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm

10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm

11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

12.National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: Urban Crossroads 2014a, Table 2-1

❑ Regional Air Quality

Criteria Air Pollutants

The SCAQMD monitors levels of various criteria air pollutants at 40 monitoring stations throughout its jurisdiction. In 2012, the most recent year for which detailed data is available, the federal and state ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$ were exceeded on at least one day at most monitoring locations within the SCAB (Urban Crossroads 2014a 14). Measured levels of NO_2, SO_2, CO, sulfates, and lead within the SCAB did not exceed Federal or State standards in 2012 (Urban Crossroads 2014a 14).

The attainment status for criteria pollutants within the SCAB is summarized in Table 4.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)*.

Table 4.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Nonattainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead[1]	Attainment	Attainment

Source: Urban Crossroads 2014a, Table 2-2

SCAQMD's *Fiscal Year 2012-2103 Budget & Work Program* (herein incorporated by reference and available for review at the location cited in Section 7.0, *References*, (SCAQMD 2013 2) states that although the SCAB has suffered unhealthful air since World War II and is one of the most unhealthful air basins in the United States, the 65-year history of the region's air pollution control efforts is, in many ways, one of the world's key success stories. Peak ozone levels have been cut by almost three-fourths since air monitoring began in the 1950 and population exposure was cut in half during the 1980s alone (SCAQMD 2013 2). Thus, overall air quality within the SCAB is dramatically improving as the result of regulatory programs and is expected to continue to improve in the future as regulations become more stringent. As stated in SCAQMD's *Fiscal Year 2012-2013 Budget and Work Program*:

> "Ozone levels have fallen by about three-quarters since peaks in the mid-1950s. Lead, nitrogen dioxide, sulfur dioxide, and carbon monoxide levels have gone down from nonattainment to full attainment of federal health standards. In November 2008, US EPA revised the lead standard from a 1.5 µg/m3 quarterly average to a 0.15 µg/m3 rolling 3-month average. The current Basin lead network remains below the new

> standard…. In 2011, the Basin exceeded the current federal 8-hour ozone standard on 107 days. 2010 was the cleanest year on record for ozone in the Basin, exceeding the federal standard on 102 days. The standard was exceeded on 113 days in 2009.
>
> In 2007 US EPA formally redesignated the Basin from nonattainment to full attainment of the federal health standard for carbon monoxide. Basin-wide maximum levels of carbon monoxide have been consistently measured at more than 30% below the federal standard since 2004. In 2010, US EPA established a new NO_2 1-hour standard at a level of 100 ppb (0.100ppm) and SO_2 1-hour standard at a level of 75 ppb (0.075 ppm). In 2011, a few sites in Los Angeles County exceeded the new 1-hour NO_2 standard on one day. Based on the 3-year design values, the region continues to remain in attainment of the NO_2 and SO_2 standards.
>
> In 2006, US EPA rescinded the annual federal standard for PM10 but retained the 24-hour standard. Ambient levels of PM_{10} in the Basin meet the federal 24-hour PM_{10} standard and the SCAQMD has requested US EPA to redesignate the Basin as in attainment of the health based standard for PM_{10}. $PM_{2.5}$ levels have decreased dramatically in the Basin since the beginning of the decade; however, regional concentrations continue to exceed the federal annual and 24-hour standards." (SCAQMD 2013 pp. 3-4).

Continued improvement in air quality is expected to occur through the continued implementation of federal, state, and SCAQMD regulations such as California's low sulfur diesel fuel programs, and renewable electricity standards. California AB 1493, enacted on July 22, 2002, required the California Air Resources Board (CARB) to develop and adopt regulations that reduce passenger vehicle and light duty truck emissions. Although the regulation was stalled by automaker lawsuits and by the U.S. EPA denial of an implementation waiver to the state of California, in June 2009, the U.S. EPA granted the waiver request. The standards phase in during the 2009 through 2016 vehicle model years. When fully phased in, the near term (2009-2012) standards are projected to result in about a 22-percent reduction of greenhouse gas emissions compared with the 2002 fleet, and the mid-term (2013-2016) standards will result in about a 30-percent reduction. Executive Order S-01-07 (2007) directed the establishment of a Low Carbon Fuel Standard, and CARB adopted the Low Carbon Fuel Standard on April 23, 2009. The standard reduces the carbon intensity of California's transportation fuels by at least 10 percent by 2020. Although there have been legal challenges to this standard, it has been upheld to-date, allowing the CARB to continue to implement and enforce the regulation. Regarding renewable electricity standards, Executive Order S-21-09 (2009) requires the state's load serving entities to meet a 33 percent renewable energy target by 2020. The CARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. The CARB Truck and Bus Regulation requires diesel trucks and buses to be upgraded to reduce emissions. The regulation applies to nearly all privately and federally-owned diesel fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. By January 1, 2012, heavier trucks must have been retrofitted with PM filters. By January 1, 2015, older trucks will need

to be replaced and by January 1, 2023, nearly all trucks and buses must have 2010 model year engines or equivalent.

A more detailed account of regional air quality improvement is contained in *Technical Appendix B1*, Section 2.8, Regional Air Quality Improvement.

Toxic Air Contaminants

In 1998, following a 10-year scientific assessment process, the CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. Subsequently, the SCAQMD initiated a comprehensive urban toxic air pollution study, called *MATES-II* (*Multiple Air Toxics Exposure Study in the South Coast Air Basin*). *MATES-II* showed the average cancer risk within the SCAB ranging from 1,100 in a million to 1,750 in a million, with an average regional risk of about 1,400 in a million. SCAQMD concluded that diesel particulate matter (DPM) accounted for more than 70 percent of the identified cancer risk (Urban Crossroads 2014a 27).

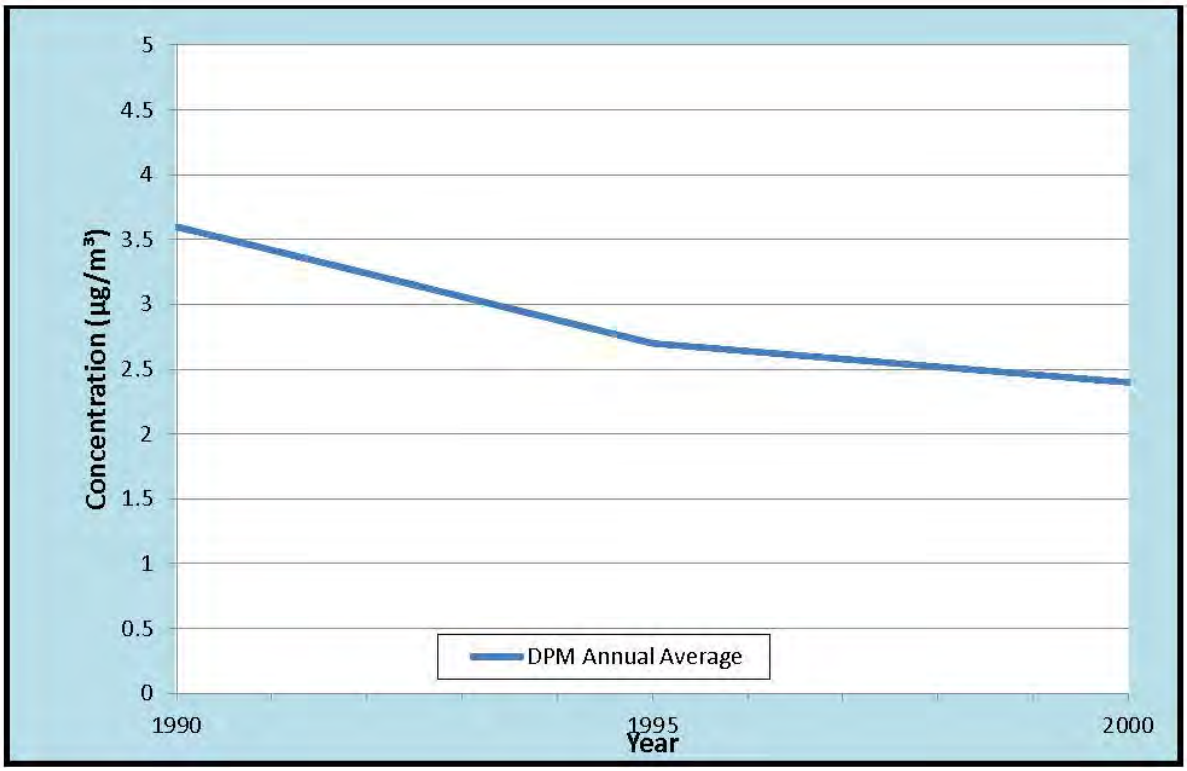
In 2008, SCAQMD updated the *MATES-II* report. The updated report, *MATES-III*, is the most comprehensive dataset of ambient air toxic levels and health risks within the SCAB. The *MATES-III* report estimates the average basin-wide excess cancer risk level within the SCAB to be approximately 1,200 in one million. The average basin-wide excess cancer risk estimates were based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are within the local area of the Project site. However, *MATES-III* extrapolated the excess cancer risk levels throughout the SCAB by modeling specific geographic grids. *MATES-III* modeling predicted an excess cancer risk of 587 in one million for the Project area. DPM accounts for 83.6% of the total risk shown in MATES III (MATES III Carcinogenic Interactive Map; Urban Crossroads 2014b 27).

As shown on Table 4.2-3, *Diesel Particulate Matter Annual Average Concentration*, annual DPM concentrations have been steadily declining since 1990, which has resulted in a concomitant reduction in the annual average basin-wide cancer risk (refer to Table 4.2-4, *Annual Average SCAB Cancer Risk*). Further reductions in diesel risk exposure are anticipated to result from the CA EPA Air Resource Board's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (Urban Crossroads 2014a 28).

❑ Local Air Quality

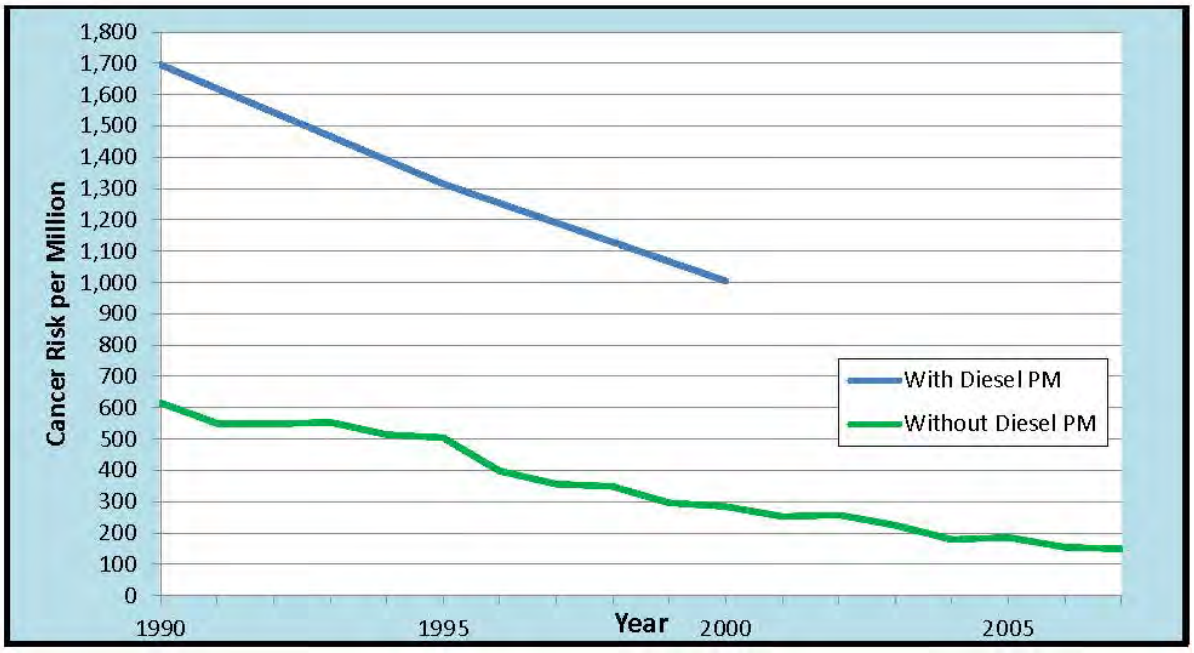
The nearest long-term monitoring air quality monitoring site for O_3 and PM_{10} is the SCAQMD Perris monitoring station (SRA 24), located approximately 5.7 miles south of the Project site. Data for CO, NO_2, $PM_{2.5}$ was obtained from the Metropolitan Riverside County 2 monitoring station (SRA 23), located approximately 11.25 miles northwest of the Project site. It should be noted that the Metropolitan Riverside County 2 monitoring station was utilized in lieu of the Perris monitoring station only in instances where data was not available from the Perris site (Urban Crossroads 2014a 14). Table 4.2-5, *Project Area Air Quality Monitoring Summary 2011-2013*, provides a summary of ambient air quality conditions in the general vicinity of the Project site over the most recent three-year period for which air quality data is available, that being the years 2011-2013.

Table 4.2-3 Diesel Particulate Matter Annual Average Concentration



Source: Urban Crossroads 2014a Table 2-10

Table 4.2-4 Annual Average SCAB Cancer Risk



Source: Urban Crossroads 2014a Table 2-11

Table 4.2-5 Project Area Air Quality Monitoring Summary 2011-2013

POLLUTANT	STANDARD	YEAR		
		2011	2012	2013
Ozone (O_3)[a]				
Maximum 1-Hour Concentration (ppm)		0.125	0.111	0.108
Maximum 8-Hour Concentration (ppm)		0.112	0.093	0.090
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	44	28	--
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	77	64	--
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	2	0	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	54	46	34
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)[b]				
Maximum 1-Hour Concentration (ppm)		--	--	4.5
Maximum 8-Hour Concentration (ppm)		1.5	1.5	1.4
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO_2)[b]				
Maximum 1-Hour Concentration (ppm)		0.057	0.060	0.053
Annual Arithmetic Mean Concentration (ppm)		0.017	0.017	--
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})[a]				
Maximum 24-Hour Concentration ($\mu g/m^3$)		65	62	70
Number of Samples		60	60	57
Number of Samples Exceeding State Standard	> 50 $\mu g/m^3$	3	1	--
Number of Samples Exceeding Federal Standard	> 150 $\mu g/m^3$	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)[b]				
Maximum 24-Hour Concentration ($\mu g/m^3$)		51.6	30.2	33.4
Annual Arithmetic Mean ($\mu g/m^3$)		11.8	11.4	11.6
Number of Samples Exceeding Federal 24-Hour Standard	> 35 $\mu g/m^3$	2	0	--

-- = data not available from either SCAQMD or EPA
[a] Data for ozone and PM10 was obtained from the Perris monitoring station (SRA 24)
[b] Data for CO, NO2, and PM2.5 was obtained from the Metropolitan Riverside County 2 monitoring station (SRA 23)

Source: Urban Crossroads 2014a Table 2-3

❑ Air Quality Conditions at Project Site

The Project site contains industrial land uses (*i.e.*, Eldorado Stone office building and warehouse) and vacant land. While the portion of the site developed with industrial land uses generates air emissions under existing conditions, such emissions are primarily associated with intermittent vehicle traffic to and from the property and are assumed to be below applicable SCAQMD regional and localized significance thresholds.

The remaining portions of the property, approximately 21.5 acres, are vacant under existing conditions and do not generate quantifiable air emissions. Maintenance activities at the Project site

(*i.e.*, discing of the land for fire fuel management) may generate temporary fugitive dust emissions (PM_{10} and $PM_{2.5}$); however, because detailed information is not available and given the infrequent and intermittent nature of site maintenance activities, temporary fugitive dust emissions that may be generated during site maintenance activities cannot be accurately calculated and would be speculative in nature.

Existing air quality conditions at the Project site are, therefore, similar to local ambient conditions presented in Table 4.2-5.

E. Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations governing air quality emissions.

❑ Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years. The CAA establishes the federal air quality standards, the National Ambient Air Quality Standards (NAAQS), and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA, which identify specific emission reduction goals for areas not meeting the NAAQS, require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.2-1 provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) which are emitted as byproducts of the combustion process.

❑ California Regulations

The California Air Resources Board (CARB), which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the California Ambient Air Quality Standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

All air pollution control districts have been formally designated as being in attainment or non-attainment for each CAAQS. Refer to Table 4.2-2 for attainment status of the SCAB. Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals.

❑ Air Quality Management Planning

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, and in conformance with California Health & Safety Code §40702 et seq. and the California Clean Air Act, the SCAQMD has adopted an Air Quality Management Plan (AQMP) to plan for the regional improvement of air quality. AQMPs are updated regularly in order to more effectively reduce emissions and accommodate growth. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. The most recent AQMP was adopted by the SCAQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) prepared by the Southern California Association of Governments (SCAG) and updated emission inventory methodologies for various source categories. The 2012 AQMP is based on assumptions provided by both CARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012-2035 RTP/SCS. The 2012 AQMP also assumes that such development projects will implement strategies to reduce air emissions generated during the construction and operational phases of development.

4.2.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to air quality if the Project or any Project-related component would:

1. *Conflict with or obstruct implementation of the applicable air quality plan;*

2. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*

3. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);*

4. *Expose sensitive receptors to substantial pollutant concentrations; or*

5. *Create objectionable odors affecting a substantial number of people.*

Within the context of the above threshold considerations, emissions generated by a development project would be significant under Thresholds 2 and 3 if emissions are projected to exceed the regional thresholds established by the SCAQMD for criteria pollutants and would be significant under Threshold 4 if emissions are projected to exceeded the localized thresholds established by the State of California and the SCAQMD for criteria pollutants. The criteria applicable to the proposed Project are summarized in Table 4.2-6, *Regional and Localized Thresholds for Criteria Pollutants*. Pursuant to SCAQMD guidance, any development project in the SCAB with daily emissions that would exceed any of the thresholds summarized in Table 4.2-6 would be considered to have a significant impact to air quality on both a direct (individual) and cumulatively considerable basis (Urban Crossroads 2014a 32).

In addition, pursuant to the significance thresholds established by the SCAQMD, any project that would emit toxic air contaminants, like diesel particulate matter (DPM), and expose sensitive receptor populations to an incremental cancer risk of greater than 10 in one million is considered to have a significant impact to air quality under Threshold 4 (Urban Crossroads 2014b 1) on both direct and cumulatively considerable levels.

The SCAQMD published a report giving direction on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD 2003). In this report the SCAQMD states on page D-3:

> "…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold

Table 4.2-6 Regional and Localized Thresholds for Criteria Pollutants

Pollutant	Construction	Operations
Regional Thresholds		
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
Sox	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Localized Thresholds		
NOx (1-Hour)	0.18 ppm	0.18 ppm
PM10 (24-Hour)	10.40 µg/m3	2.50 µg/m3
PM2.5 (24-Hour)	10.40 µg/m3	2.50 µg/m3
CO (1-Hour)	20 ppm	20 ppm
CO (8-Hour)	9 ppm	9 ppm

NOTE: ppm = parts per million; µg/m3 = micrograms per cubic meter.
Source: Urban Crossroads 2014a, Table 3-1.

for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Given this direction from the SCAQMD, the proposed Project evaluated in this EIR would result in a significant direct and cumulatively considerable impact associated with carcinogenic risk if it would increase risk by more than 10 persons per one million people.

The SCAQMD has also established non-carcinogenic risk parameters. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or

below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Thus, non-carcinogenic exposures of less than 1.0 are considered less-than-significant on a direct and cumulatively considerable basis under Threshold 4.

4.2.3 IMPACT ANALYSIS

Threshold 1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The 2012 SCAQMD AQMP is the applicable air quality plan for the Project area, which estimates long-term air quality conditions for the SCAB. The air quality conditions presented in the 2012 AQMP are based in part on the growth forecasts that were used as inputs for the regional transportation model. The growth forecasts utilized in the 2012 AQMP are based on the growth projections identified by SCAG in its *2012-2035 RTP/SCS*. The *RTP/SCS* assumes that development in the various incorporated and unincorporated areas within the SCAB will occur in accordance with the adopted general plans for these areas. In addition, the air quality conditions presented in the 2012 AQMP are based on the assumption that future development projects will implement strategies to reduce emissions generated during the construction and operational phases of development (Urban Crossroads 2014a 54). Accordingly, if a proposed project is consistent with these growth forecasts, and if available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is considered to be consistent with the 2012 AQMP.

The SCAQMD has established criteria for determining consistency with the 2012 AQMP. These criteria are defined in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD *CEQA Air Quality Handbook* and are discussed below.

- ***Consistency Criterion No. 1:*** *The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

  Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. Violations of the CAAQS and NAAQS would occur if localized significance thresholds (LSTs) were exceeded. As evaluated under Threshold 4 (below), the Project would not exceed localized significance thresholds for any criteria pollutant during its construction or during long-term operation. Accordingly, localized emissions resulting from the Project would not contribute substantially to an existing or potential future violation or a delay in the attainment of air quality standards.

  As discussed under Thresholds 2 and 3 (below), the Project is anticipated to exceed regional threshold criteria for NO_X during short-term construction activities and long-term operational activities. Although short-term construction and long-term operational emissions generated by the Project would exceed the SCAQMD's regional threshold criteria, the Project's emissions are already accounted for in the AQMP and the AQMP's air quality attainment goals. That is, the land uses proposed by the Project are consistent with land uses and development intensities

reflected in the currently adopted City of Moreno Valley General Plan and are, therefore, within the scope of air quality considerations reflected in the AQMP. As such, implementation of the Project would neither increase the frequency or severity of existing air quality violations disclosed in the AQMP nor cause or contribute to new violations that are not already disclosed or anticipated by the AQMP. Moreover, the Project's urban location and proximity to local and regional transportation facilities act to reduce vehicle miles traveled and associated mobile-source (vehicular) emissions. Additionally, the Project's incorporation of mandatory energy-efficient technologies as required by the California Green Building Standards Code (CALGreen) and mandatory compliance with SCAQMD rules and control requirements act to reduce stationary-source air emissions. These Project attributes and features are consistent with and support the AQMP's air pollution reduction strategies and promote timely attainment of the AQMP's air quality standards.

On the basis of the preceding discussion, the Project is determined to be consistent with Consistency Criterion No. 1.

- ***Consistency Criterion No. 2:*** *The proposed project will not exceed the assumptions in the AQMP based on the years of project buildout phase.*

  The growth forecasts used in the AQMP to project future emissions levels are based in part on land use data provided by lead agency general plan documentation. Projects that propose to increase the intensity of use on a subject property may result in higher traffic volumes than accounted for in the applicable local general plan, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. If however, a project does not exceed the growth projections in the applicable local general plan, then the project is considered to be consistent with the growth assumptions in the AQMP.

  Development of the Project site is governed by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (MVIAP). The City of Moreno Valley General Plan designates the Project site for "Business Park/Light Industrial" land uses. Similarly, the MVIAP calls for the site to be developed with "Industrial" land uses. The proposed Project is consistent with the land use designations of the General Plan and the MVIAP. The Project also does not plan to increase the development intensity on the subject property beyond that currently anticipated for the subject site as reflected on the General Plan Land Use Map and in the MVIAP. Because the land use proposed by the Project is consistent with the adopted General Plan, the Project is in compliance with Consistency Criterion No. 2.

In summary, because the proposed Project satisfies both of the two aforementioned criteria for determining consistency, the Project is deemed consistent with the 2012 AQMP. As such, the Project would not conflict with or result in the obstruction of the applicable AQMP and no impact would occur.

Threshold 2:	***Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***
Threshold 3:	***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

A. Construction Emissions

❑ Methodology for Calculating Project Construction Emissions

On October 2, 2013, the SCAQMD released the latest version of the California Emissions Estimator Model (CalEEMod™ v 2013.2.2). This model was used to estimate Project-related emissions of criteria pollutants NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO, associated with construction proposed by the Project. Construction-related emissions would be expected from the following construction activities:

- Demolition;
- Site Preparation;
- Grading;
- Building Construction;
- Paving;
- Painting (Architectural Coatings); and
- Construction Workers Commuting.

The assumptions for each phase of Project construction were input into the CalEEMod™ model using anticipated construction characteristics (*e.g.*, construction activities, construction equipment list) and a schedule provided by the Project Applicant. In all instances where construction information was not provided and/or not available, the analysis utilizes the default CalEEMod™ model assumptions (Urban Crossroads 2014a 34). A list of the construction equipment assumed in the analysis of Project-related construction emissions is provided in Section 3.0, *Project Description,* of this EIR. Refer to Pages 33 through 37 of the Air Quality Impact Analysis (*Technical Appendix B1*) for more details on the methodology utilized to estimate Project-related construction emissions.

❑ Project Construction Emissions Impact Analysis

For purposes of analysis, it is assumed that construction of the Project would commence in December 2014 and last through September 2015. If construction activities occur at a later date than assumed in this EIR, emissions quantities associated with construction equipment exhaust would be less than disclosed in this Subsection due to the application of more restrictive regulatory requirements for construction equipment and on-going replacement of older construction fleet equipment with newer, less-polluting equipment by construction contractors. The estimated maximum daily construction emissions associated with Project construction are presented in Table 4.2-7, *Construction Emissions Summary (Pounds per Day)*. Detailed construction-related emissions model outputs are presented in Appendix 3.1 of *Technical Appendix B1* to this EIR).

Table 4.2-7 Construction Emissions Summary (Pounds per Day)

Year	VOC	NOx	CO	SOx	PM10	PM2.5
2015	18.78	247.40	147.05	0.27	22.21	10.34
Maximum Daily Emissions	**18.78**	**247.40**	**147.05**	**0.27**	**22.21**	**10.34**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-3

Project-related construction emissions of VOCs, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed SCAQMD's regional criteria thresholds (refer to Table 4.2-7). Accordingly, the Project would not emit substantial concentrations of these pollutants during construction and would not cause or contribute to an existing or projected air quality violation, on either a direct or cumulatively considerable basis. The Project would result in less-than-significant impacts associated with emissions of VOCs, CO, SO_X, PM_{10} and $PM_{2.5}$ during Project construction and mitigation is not required.

Although the Project would generate less-than-significant levels of VOC emissions during the construction phase, this EIR recommends the application of Mitigation Measure MM 4.2-1 to assure compliance with SCAQMD Rule 1113 and further reduce VOC emissions below the levels listed above in Table 4.2-7. This EIR also recommends the application of Mitigation Measures MM 4.2-2 and MM 4.2-3 to assure compliance with SCAQMD Rules 403, 1186, and 1186.1 and further reduce the Project's less-than-significant construction emissions of particulate matter below the levels indicated in Table 4.2-7. Additionally, although the Project's construction emissions of SO_X are below the SCAQMD's thresholds of significance, this EIR recommends Mitigation Measure MM 4.2-4 to assist in ensuring compliance with SCAQMD Rule 431.2 requirements to use liquid fuels with low sulfur content. Refer to Subsection 4.2.6, below, for recommended mitigation.

As shown on Table 4.2-7, the Project is projected to exceed SCAQMD regional criteria pollutant thresholds for emissions of NO_X during construction-related activities. The SCAB does not attain state criteria for NO_X emissions, as previously presented in Table 4.2-2. Furthermore, NO_X is a precursor for ozone, a pollutant for which the SCAB does not attain Federal or State standards. Accordingly, the Project's emissions of NO_X during construction-related activities would violate the SCAQMD regional threshold and would result in a considerable net increase of a criteria pollutant for which the Project region is in non-attainment. The Project's NO_X emissions from construction-related activities would result in a significant impact to the environment on both a direct and cumulatively considerable short-term basis. Refer to Subsection 4.2.6, below, for recommended mitigation.

B. Operational Emissions

CalEEMod™ v 2013.2.2 was used to estimate emissions of criteria pollutants NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO, associated with long-term operation of the proposed Project. During long-term

operation of the Project, emissions would be expected from vehicles, combustion emissions associated with use of natural gas and electricity, fugitive dust related to vehicular travel, use of landscape maintenance equipment, and architectural coatings (painting). The methodologies used to assess air pollutant emissions associated with each of these activities is summarized below and discussed in detail in Section 3.5 of the Air Quality Impact Analysis (*Technical Appendix B1* to this EIR).

Vehicles

Air pollutant emissions would result from the operation of motor vehicles by Project visitors, employees, and customers. Project-related vehicular air pollutant emissions are dependent on the Project's daily vehicle trip generation and the characteristics of those trips. Information related to the Project's daily vehicle trip generation and trip characteristics was obtained from the Project's traffic report contained as *Technical Appendix H1* to this EIR. As summarized in *Technical Appendix H1*, the Project would generate 2,619 Passenger Car Equivalent (PCE) trips per day. It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of PCEs in an effort to recognize and acknowledge the effects of heavy vehicles at intersections in the Project's study area and in accordance with traffic engineering best practices. The PCE trips were not used for the purposes of quantifying air pollutant emissions; rather, to be more representative of actual emissions, the actual number of passenger cars (including light trucks) and heavy trucks were used in the air quality analysis. The vehicle fleet mix, in terms of actual vehicles, as derived from *Technical Appendix H1* to this EIR, is comprised of approximately 76% passenger cars and 24% trucks (i.e., 1,416 passenger car trips and 447 truck trips per day). For analysis purposes, 12.5% of all trucks were assumed to be Light-Heavy-Duty, 12.5% of all trucks were assumed to be Medium-Heavy-Duty, and 75% of all trucks were assumed to be Heavy-Heavy Duty (Urban Crossroads 2014a 39).

The Project-generated daily passenger car and truck trips utilized in this analysis were obtained from the Project's traffic impact analysis report and are derived from trip generation rates specified in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012. Use of the ITE rates are standard industry practice for the calculation of projected traffic volumes in traffic studies supporting CEQA documents throughout the State of California (Urban Crossroads 2014a 40).

A technical deficiency inherent in calculating the projected air pollutant emissions associated with the Project's traffic is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips a project would generate multiplied by average trip length. This method of estimating VMT for use in calculating vehicle emissions can result in the over-estimation and double-counting of emissions because for a distribution warehouse business center such as the proposed Project, the land use is likely to attract (divert) existing vehicle trips that are already in the circulation system as opposed to generating new trips. As such, the proposed Project would merely redistribute existing mobile source emissions. Accordingly, the use of models that measure overall emissions can overstate emission levels without acknowledging that some level of emissions associated with a project under study would still occur

in the region regardless of whether the Project is built. As such, the estimation of air pollutant emissions associated with the proposed Project and disclosed herein assumes a VMT value that very likely overestimates the actual impact of the Project (Urban Crossroads 2014a 41).

In the last several years, the SCAQMD has provided numerous comments on the trip length for warehouse/distribution and industrial land use projects. The SCAQMD asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse/distribution center and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles and/or to destinations outside of California. The SCAQMD states that for this reason, the model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length (Urban Crossroads 2014a 41).

SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region (which includes the proposed Project site) is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks (Urban Crossroads 2014a 42).

Trip lengths and VMT estimates employed in *Technical Appendix B1* and this EIR Subsection generate vehicular-source emissions that would represent a maximum impact scenario. Other EIRs for land use development projects with similar land uses as the proposed Project for which the City of Moreno Valley served as the CEQA Lead Agency have utilized these same or similar VMT estimates. To maintain analytic consistency and establish the maximum impact scenario, the following approach has been utilized in calculating emissions associated with vehicles accessing the Project (Urban Crossroads 2014a 42).

For analysis of the Project's passenger car trips, the Riverside County CalEEMod™ default of a 9.5-mile one-way trip length was assumed. The CalEEMod™ model defaults relies on data provided by SCAG for trip length. For heavy duty trucks, an average trip length was derived from distances from the Project site to the far edges of the South Coast Air Basin (SCAB) based on the Project's traffic pattern shown in *Technical Appendix H1*. It is appropriate to stop the VMT calculation at the boundary of the SCAB because any activity beyond that boundary would be speculative (the SCAB encompasses 6,745 square miles) and because the selected approach is consistent with professional industry practice (Urban Crossroads 2014a 42).

- Project site to the Port of Los Angeles/Long Beach: 80 miles;
- Project site to East on State Route 60: 30 miles;
- Project site to San Diego County line: 60 miles;
- Project site to Inland Empire: 50 miles;
- Project site to Perris destinations: 10 miles; and
- Project site to Moreno Valley destinations: 10 miles.

The air pollutant emissions analysis presented in *Technical Appendix B1* and this EIR Subsection assumes that 50% of all delivery trips would travel to and from the Project and the Port of Los Angeles/Long Beach, 10% would travel east on the State Route 60, 20% would travel to San Diego County, 10% would travel to the Inland Empire, 5% would travel to City of Perris destinations, and the remainder would travel to City of Moreno Valley destinations, resulting in an average Project-related truck trip length of 61 miles (Urban Crossroads 2014a 42).

Two separate model runs were utilized in order to more accurately model air pollutant emissions resulting from Project-related vehicle operations. The first model run analyzed Project-related passenger car emissions, which assumed a trip length of 9.5 miles and a vehicle fleet mix of 100% Light-Duty-Auto vehicles. The second model run analyzed Project-related truck emissions, which assumed an average truck trip length of 61 miles and a vehicle fleet mix of 12.5% Light-Heavy-Duty trucks, 12.5% Medium-Heavy-Duty trucks, and 75% Heavy-Heavy-Duty trucks (Urban Crossroads 2014a 42).

Fugitive Dust from Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every operational development project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (Regional Air Incentives Market RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod™ model (Urban Crossroads 2014a 43).

Consumer Products

Consumer projects include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive

pollutants. The emissions associated with use of consumer products were calculated based on assumptions provided in the CalEEMod™ model. In the case of the industrial warehouse uses proposed by the Project, no substantive on-site use of consumer products is anticipated (Urban Crossroads 2014a 43).

Architectural Coatings

Over a period of time the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

On-Site Equipment

It is common for an industrial warehouse project to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD; high-cube warehouse projects typically have 3.1 yard trucks per one million square feet of building space. For the proposed Project, on-site modeled operational equipment includes four (4) 200 hp yard tractors operating at four (4) hours a day for 260 days of the year. The emissions associated with on-site equipment were calculated using the CalEEMod model. (Urban Crossroads 2014a pp. 43-44)

❑ Project Operational Emissions Impact Analysis

Long-term emissions associated with Project operation are presented in Table 4.2-8, *Operational Emissions Summary (Pounds per Day)*. Detailed emissions model outputs are presented in Appendix 3.1 of the Air Quality Impact Analysis (*Technical Appendix B1* to this EIR).

Both the emissions from the Project and the SCAQMD thresholds are quantified in terms of emissions for one (1) day of operation. As summarized in Table 4.2-8, the Project's emissions of VOCs, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed SCAQMD regional thresholds during long-term operational activities on a daily basis. Accordingly, the Project would not emit substantial concentrations of these pollutants during long-term operation and would not contribute to an existing or projected air quality violation on either a direct or cumulatively considerable basis. The Project would result in less-than-significant impacts associated with long-term emissions of VOCs, CO, SO_X, PM_{10} and $PM_{2.5}$ t and mitigation is not required.

The Project would, however, exceed the regional threshold of significance established by the SCAQMD for emission of NO_X (refer to Table 4.2-8). Furthermore, the SCAB is a designated non-

Table 4.2-8 Operational Emissions Summary (Pounds per Day)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source	0.07	0.64	0.54	3.83e-3	0.05	0.05
Mobile (Trucks)	13.57	310.20	118.43	0.77	28.38	11.96
Mobile (Passenger Cars)	3.40	2.86	39.30	0.10	9.61	2.58
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**52.07**	**326.86**	**162.21**	**0.88**	**38.47**	**14.98**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source	0.07	0.64	0.54	3.83e-3	0.05	0.05
Mobile (Trucks)	13.82	323.14	124.00	0.77	28.39	11.97
Mobile (Passenger Cars)	3.20	3.03	34.42	0.09	9.61	2.57
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**52.12**	**339.97**	**162.90**	**0.87**	**38.48**	**14.98**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-5

attainment area for NO_X concentrations and for ozone concentrations (NO_X is a precursor for ozone),as previously described. Accordingly, the Project's long-term emissions of NO_X would result in a considerable net increase of a criteria pollutant for which the Project region is in non-attainment (*i.e.* NO_X and ozone). The Project's NO_X emissions during long-term operation would result significant direct and cumulatively considerable impacts on the environment and mitigation measures would be required to reduce these impacts (refer to MM 4.2-6 through MM 4.2-17 in Section 4.2.6, below).

Emissions of NO_X are the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards. Sources of on-site air pollution that are within the direct control of the Project Applicant and future tenants of the Project and that are addressed by building design and operation are below the significance thresholds (as disclosed in the paragraph above). Furthermore, all new development in California must comply with the California Green Building Standards Code (CALGreen Code (2013)). Therefore, the proposed Project like all other development projects in California would be obligated to implement the applicable provisions of CALGreen. Compliance with the applicable provisions of CALGreen would result in some reduction of the Project's NO_X emissions; however, impacts would not be substantially reduced because the Project's impacts are primarily caused by mobile source

emissions, which are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley. Mobile emissions are regulated by federal, state, and SCAQMD mandates.

The application of mobile source emission requirements that exceed federal, state, and SCAQMD mandates in a single locale such as the City of Moreno Valley would not result in the improvement of regional air quality and would not ensure uniform CEQA review throughout the SCAB. For example, if the City applied emission control requirements to one or more development projects more stringently than state and federal laws already mandate, the realities of the southern California economy would render that development project less competitive in attracting tenants. Perspective tenants that will not or cannot meet the heightened requirement would simply occupy another site in the Inland Empire area, resulting in no improvement to the air quality in the SCAB. Thus, the criteria pollutant emissions would simply be shifted to another portion of the SCAB and the SCAB's overall air quality would not be benefited. As previously mentioned, although the SCAB experiences some of the worst air quality levels in the United States, air quality in the SCAB has dramatically improved over the past 30 years and is expected to continue improving through the enforcement of state and federal laws.

Threshold 4: Would the Project expose sensitive receptors to substantial pollutant concentrations?

A. Construction Localized Emissions

❑ Methodology for Calculating Project Construction Localized Emissions

Localized emissions associated with Project-related construction activities were estimated and evaluated in accordance with SCAQMD's *Final Localized Significance Threshold Methodology*. SCAQMD's *Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis only emissions included in the CalEEMod™ on-site emissions outputs were considered (Urban Crossroads 2014a 47).

The Perris Valley Source Receptor Area (SRA) was utilized as the baseline for ambient air quality because the Perris Valley station is the closest monitoring station to the Project site for which air quality data is available. SCREEN3, a U.S. EPA approved air quality model containing algorithms associated with the U.S. EPA's *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources* was used to calculate localized pollutant concentrations for construction activities. Based on the construction fleet information provided by the Project Applicant and CalEEMod™ model defaults, the analysis performed in *Technical Appendix B2* and presented in this Subsection assumes a maximum of 9.5 acres would be disturbed on the Project site on any given day during peak construction activities (Urban Crossroads 2014a 47).

The nearest receptor for purposes of determining impacts related to CO and NO_2 emissions (defined as a place where an individual could remain for a one (1) or eight (8) hour time period) is a logistics

warehouse building located immediately adjacent to and north of the Project site (under construction as of the writing of this EIR). Notwithstanding, the SCAQMD's Final LST Methodology requires that receptors be plotted at a distance of 25 meters from a project site, even if a project may have receptors closer than 25 meters. Accordingly, based on SCAQMD's Final LST Methodology, a 25 meter receptor distance is utilized in order to determine the LSTs for emissions of CO and NO_2. (Urban Crossroads 2014a pp. 47-48)

The nearest sensitive receptor land use for purposes of determining impacts related to PM_{10} and $PM_{2.5}$ (defined as a place where an individual could remain for 24-hours) would be the existing non-conforming residence located approximately 240 feet (73 meters) northwest of the Project boundary, south of Rivard Road and west of Perris Boulevard (Urban Crossroads 2014a 48).

Refer to Section 3.6 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) for a detailed explanation of the model inputs and equations used in the analysis of construction-related localized emissions.

❑ Project Construction Localized Emissions Impact Analysis

Table 4.2-9, *Construction Localized Emissions Summary*, summarizes the Project's construction-related localized emissions. Detailed construction-related localized emissions model outputs are presented in Appendix 3.2 of *Technical Appendix B1* to this EIR. As shown, Project-related construction emissions would not exceed the SCAQMD Localized Threshold for CO, NO_2, PM_{10}, or $PM_{2.5}$. Localized emission levels would be further reduced with the incorporation of the construction-related mitigation measures presented below in Subsection 4.2.6. Accordingly, construction of the proposed Project would not result in the exposure of any sensitive receptors to substantial pollutant concentrations on a direct or cumulatively considerable basis. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

Table 4.2-9 Construction Localized Emissions Summary

Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.46	0.33	0.02	1.86	0.89
Background Concentration [A]	3.10	1.70	0.06		
Total Concentration	**3.56**	**2.03**	**0.08**	1.86	0.89
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm

Source: Urban Crossroads 2014a Table 3-9

B. Operational Localized Emissions

❑ Methodology of Estimating Operational Localized Emissions

Criteria Pollutant Emissions

The LST analysis includes on-site sources only; however, the CalEEMod™ outputs do not separate on-site and off-site emissions from mobile sources. Emissions from on-site activity including area, energy, and on-site equipment were obtained from CalEEMod, emissions from on-site passenger car and truck travel and idling were calculated using EMFAC 2011. (Urban Crossroads 2014a 51)

The nearest receptor for purposes of determining impacts related to CO and NO_2 emissions (defined as a place where an individual could remain for a one (1) or eight (8) hour time period) is a logistics warehouse building located immediately adjacent to and north of the Project site (under construction as of the writing of this EIR). Notwithstanding, the SCAQMD's Final LST Methodology requires that receptors be plotted at a distance of 25 meters from a project site, even if a project may have receptors closer than 25 meters. Accordingly, based on SCAQMD's Final LST Methodology, a 25 meter receptor distance is utilized in order to determine the LSTs for emissions of CO and NO_2. (Urban Crossroads 2014a pp. 47-48)

The nearest sensitive receptor land use for purposes of determining impacts related to PM_{10} and $PM_{2.5}$ (defined as a place where an individual could remain for 24-hours) would be the existing non-conforming residence located approximately 240 feet (73 meters) northwest of the Project boundary, south of Rivard Road and west of Perris Boulevard (Urban Crossroads 2014a 48).

Section 3.7 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) for a detailed explanation of the model inputs and equations used in the analysis of operational-related localized emissions.

Diesel Particulate Emissions

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM_{10}) generated with the 2011 version of the Emission FACtor model (EMFAC) developed by the CARB. EMFAC 2011 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2011, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day (Urban Crossroads 2014b pp. 9-10). Refer to Section 2.2 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the model inputs and equations used in the estimation of Project-related DPM emissions.

The effect of Project-related DPM emissions was quantified in accordance with the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling*

Emissions for CEQA Air Quality Analysis. Pursuant to SCAQMD's recommendations, emissions were quantified using the U.S. EPA's AERMOD model (Urban Crossroads 2014b 14). Refer to Section 2.3 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the model inputs and equations used in the estimation of average particulate concentrations associated with operations at the Project site.

Health risks associated with exposure to DPM emissions are defined in terms of the probability of developing cancer or adverse, chronic non-cancer health effects as a result of exposure to a chemical at a given concentration. The cancer and non-cancer risk probabilities are determined through a series of equations to calculate unit risk factor, cancer potency factor, and chronic daily intake. The equations and input factors utilized in the Project analysis were obtained from the California EPA, Office of Environmental Health Hazard (Urban Crossroads 2014b pp.19-20). Refer to Section 2.4 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the variable inputs and equations used in the estimation of receptor population health risks associated with Project operations.

Potential receptor population health risks were calculated for the maximally exposed residential receptor (MEIR), the maximally exposed individual worker (MEIW), and the maximally exposed school child (MEISC) located within a 1,320 foot radius of the Project site and its primary truck route. Proximity to sources of DPM is critical to determining the potential health hazard impacts. Industry research, including studies by the CARB and SCAQMD, show a 70% drop in DPM pollution levels from mobile sources (*i.e.*, vehicles) at a distance of 500 feet from roadways/freeways, and an 80% drop in DPM pollution levels from mobile sources at a distance of 1,000 feet from logistics center sites (Urban Crossroads 2014b 34). Accordingly, the 1,320 foot buffer area surrounding the Project site and its primary truck route utilized in *Technical Appendix B2* to this EIR and this EIR Subsection provides an appropriate geographic study area.

As identified in the Project's traffic study (refer to *Technical Appendix H1*), 95 percent of the truck traffic associated with the Project travels to the Project site from the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 5 percent of truck traffic is from the local vicinity of Moreno Valley (5 percent south from Perris Boulevard). Additionally, 90 percent of the truck traffic associated with the Project travels from the Project site to the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 10 percent of truck traffic serves the local vicinity of Moreno Valley (10 percent travels north to Perris Boulevard). The analysis presented in *Technical Appendix B2* and this EIR Subsection provides an evaluation of potential health risks within the 1,320-foot buffer area along the route from the Project site to I-215 via Harley Knox Boulevard and Indian Street (Urban Crossroads 2014b 35). Because the ultimate destination(s) of the Project's truck traffic trips within the cities of Moreno Valley and Perris are unknown, it would be speculative to estimate a travel route for these local truck trips (Urban Crossroads 2014b 35). The evaluation of speculative impacts is prohibited pursuant to §15145 of the CEQA Guidelines; therefore, technical quantification of potential health risk impacts associated with the 10 percent of Project truck traffic that travels north to Perris Boulevard is not required. Qualitatively, the Project-related health risk associated with 10 percent of the Project's traffic that travels north would be proportionately less than the health

risk associated with the other 90 percent of the Project's truck traffic that travels south and that is quantitatively evaluated herein.

The MEIR is an existing non-conforming residence located approximately 0.05 miles northwest of the Project site, specifically located south of Rivard Road and west of Perris Boulevard. The MEIW would be located immediately adjacent to the Project site (to the north); this site is an under construction warehouse building that is anticipated to be occupied by the Project's opening year. The MEISC would be located at the El Potrero Elementary School, located approximately 0.33-mile northeast of the Project site (Urban Crossroads 2014b 25).

For purposes of evaluating the Project's potential to contribute to cumulative health risk impacts associated with DPM emissions, the Project's expected DPM emissions are considered with the expected emissions of all past, present, and probable future projects located within a 1,320 foot radius of the Project site and the Project's primary truck route (to/from I-215 via Harley Knox Boulevard and Indian Street), in addition to expected traffic along the truck route as described in *Technical Appendix H1*. As described above, a study area that includes a 1,320 foot buffer area surrounding the Project site and its primary truck route is a conservative and appropriate geographic study area for evaluating potential health risks from DPM emissions. A total of 15 development projects are located within the 1,320 foot buffer area surrounding the Project site and its primary truck route, and the expected DPM emissions of these projects and traffic using the truck route are included in the Project's cumulative DPM health risk impact analysis (Urban Crossroads 2014b pp. 35-41). Refer to Section 2.8 of *Technical Appendix B2* and EIR Section 4.0.3 for a detailed description of the development projects included in the cumulative impact analysis.

CO "Hot Spots"

A CO "Hot Spot" Analysis was not performed to evaluate the effect of Project-related vehicular emissions on localized concentrations of CO at intersections in the vicinity of the Project site. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 2003 AQMP, CO "Hot Spots" are typically associated with idling vehicles at extremely busy intersections (*i.e.*, intersections with an excess of 100,000 vehicle trips per day) in areas with unusual meteorological and topographical conditions (Urban Crossroads 2014a 53). Based on an analysis of the busiest intersections within the Project's vicinity, Urban Crossroads was determined that none of the intersections in the vicinity of the Project would have peak traffic volumes exceeding those at the intersections modeled in the 1992 CO Plan/2003 AQMP analysis. In addition, there are no unique topographical or meteorological conditions in the Project vicinity that could contribute to the formation of a CO "Hot Spot." Furthermore, a study prepared by the Bay Area Air Quality Management District (BAAQMD) determined that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO "Hot Spot" impact. The proposed Project would only generate 2,619 vehicle trips over an entire day (Passenger Car Equivalent) and would not remotely approach

the volume of hourly traffic required to generate a CO "Hot Spot" (Urban Crossroads 2014a 53). Therefore, Project-related vehicular emissions would not result in a substantial contribution of CO concentrations at intersections in the vicinity of the Project site and a CO "Hot Spot" analysis is not warranted (Urban Crossroads 2014a 53).

❑ Project Operational Localized Emissions Impact Analysis

Criteria Pollutant Emissions

Table 4.2-10, *Operational Localized Emissions Summary*, presents the results of the long-term localized significance threshold analysis. Detailed operational localized emissions model outputs are presented in Appendix 3.2 of *Technical Appendix B1* to this EIR. As shown, estimated Project-related long-term operational emissions would not exceed localized thresholds established by the SCAQMD. Accordingly, long-term operation of the proposed Project would not result in the exposure of any sensitive receptors to substantial pollutant concentrations on a direct or cumulatively considerable basis. Therefore, the Project would result in less- than- significant impacts and no mitigation is required.

Table 4.2-10 Operational Localized Emissions Summary

Operation	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Operation)	
Peak Day Localized Emissions	0.03	0.02	0.002	3.14e-2	2.90e-2
Background Concentration [A]	3.10	1.70	0.06		
Total Concentration	**3.13**	**1.72**	**0.062**	**3.14e-3**	**2.90e-3**
SCAQMD Localized Significance Threshold	20	9	0.18	2.50	2.50
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm

Source: Urban Crossroads 2014a, Table 3-11

Although the proposed Project would not generate substantial localized pollutant concentrations during long-term operational activities, this EIR recommends mitigation to further reduce the Project's less-than-significant operational localized emissions below the levels disclosed in Table 4.2-10 (refer to Mitigation Measures MM 4.2-6 through MM 4.2-17 under Subsection 4.2.6, below).

Diesel Particulate Emissions

The Project's operational activities would generate/attract diesel-fueled trucks. Diesel trucks produce diesel particulate matter (DPM), which is known to be associated with health hazards, including cancer. To evaluate the Project's potential to expose nearby sensitive receptors to substantial amounts of DPM during long-term operation, a Mobile Source Health Risk Assessment was prepared for the proposed Project and is included as *Technical Appendix B2* to this EIR.

Project-related DPM health risks were evaluated under three (3) receptor scenarios which are described below. Detailed air dispersion model outputs and risk calculations are presented in Appendices 5.1 and 5.2, respectively, of *Technical Appendix B2*.

At the MEIR, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 5.67 in one million (assuming that the resident(s) at this property would stay at their home 24 hours per day, seven (7) days per week, 365 days per year, for 70 years). A cancer risk of 5.67 in one million would not exceed the SCAQMD cancer risk threshold of 10 in one million (Urban Crossroads 2014b 25). At this same location, the non-cancer health risk index attributable to the proposed Project would be 0.0036, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads 2014b 26). Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of residential receptors to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

At the MEIW, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 5.60 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million (Urban Crossroads 2014b 25). The MEIW analysis assumes the employees would work in the Project area for 40 years. At this same location, the non-cancer health risk index attributable to the proposed Project would be 0.0178, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads 2014b 26). Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of nearby workers to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

At the MEISC, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 0.165 in one million and the non-cancer health risk index attributable to the proposed Project's DPM emissions would be 0.00082 (Urban Crossroads 2014b pp. 25-26). Both the estimated cancer risk and non-cancer health risk index would not exceed SCAQMD thresholds of significance. Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of nearby school child receptors to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

Although the proposed Project would expose nearby residential receptors, workers, and school children to less-than-significant direct and less-than-significant cumulatively considerable DPM concentrations, mitigation is recommended by this EIR to further reduce diesel-particulate matter emissions associated with long-term Project operations (refer to Mitigation Measures MM 4.2-6 through MM 4.2-12 under Subsection 4.2.6, below).

Threshold 5: Would the Project create objectionable odors affecting a substantial number of people?

The Project could produce odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Accordingly, the proposed Project would not create objectionable odors affecting a substantial number of people during construction. Therefore, the Project would result in less-than-significant impacts during short-term construction activities and no mitigation is required.

During long-term operation, the proposed Project would include warehouse distribution land uses, which are not typically associated with objectionable odors. The temporary storage of refuse associated with the proposed Project's long-term operational use could be a potential source of odor; however, Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations, thereby precluding any significant odor impact. Furthermore, the proposed Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation. As such, long-term operation of the proposed Project would not create objectionable odors affecting a substantial number of people and the Project would have a less-than-significant impact.

Although Project-related odor impacts would be less than significant, this EIR recommends mitigation to ensure compliance with SCAQMD Rule 402 (refer to Mitigation Measure MM 4.2-18 under Subsection 4.2.6, below).

4.2.4 CUMULATIVE IMPACT ANALYSIS

The Project proposes to construct and operate one (1) industrial warehouse building in accordance with the Industrial land use designation applied to the property by the City of Moreno Valley General Plan and the MVIAP. As such, the Project would be consistent with the growth forecasts used in the SCAQMD's AQMP to predict future air quality conditions in the SCAB. Accordingly, emissions that would be generated by the Project are accounted for in the AQMP, and the Project would not conflict with or obstruct the implementation of the SCAQMD on a cumulatively considerable basis.

As indicated in the analysis of Thresholds 2 and 3 in Subsection 4.2.3 above, the Project would exceed SCAQMD criteria pollutant standards for emissions of NO_X during short-term construction and long-term operational activities. Because NO_X is a precursor for ozone, a pollutant for which the SCAB is in non-attainment under both federal and state criteria, the Project's short- and long-term emissions would also cumulatively contribute a criteria pollutant for which the Project region in in

non-attainment (*i.e.*, NO_X and ozone). These impacts are concluded to be cumulatively significant, the Project's contribution would be cumulatively considerable, and mitigation would be required.

As demonstrated in the analysis of Threshold 4, above, air emissions generated by the Project during construction and operation would not violate the SCAQMD localized thresholds for NO_x, CO, PM_{10}, or $PM_{2.5}$. Surrounding the Project site, the parcel to the immediate north is under construction and development is scheduled to be completed prior to the commencement of construction on the Project site. Land to the east is developed as a water treatment facility and land to the south is developed with a warehouse use; thus, no construction activities are expected on those lands. The only potential for construction activity to occur in the immediate vicinity of the Project site simultaneously with Project-related construction activities is an approved but not yet built warehouse project on the west side of Perris Boulevard. Should construction activities occur on that parcel concurrently with Project-related construction activities, localized significance thresholds would still not be exceeded and thus the cumulative effect would be less than significant. As shown in Table 4.2-9, Project-related construction emission levels fall far below the significance thresholds and even the doubling of localized emission quantities would not result in exceeding the thresholds. Under long-term operating conditions, emissions associated with Project operations would be far below the SCAQMD's thresholds of significance for localized emissions. Therefore, it is reasonable to conclude that even when the Project's operational emissions combined with localized emissions from other development projects within close proximity to the Project site, such emissions would not exceed SCAQMD thresholds. Accordingly, long-term operation of the Project would not expose nearby sensitive receptors to substantial localized pollutant concentrations, and a cumulatively considerable impact would not occur.

As further discussed under the analysis of Threshold 4, DPM emissions generated by the Project during long-term operation would not exceed the SCAQMD's incremental carcinogenic or non-carcinogenic health hazard risk thresholds for the maximally exposed residential, worker, or school child scenarios. The cumulative carcinogenic health risk from DPM emissions in the Project's cumulative study area is presented in Table 4.2-11, *Cumulative Carcinogenic Health Risk*.

Table 4.2-11 quantifies estimated DPM carcinogenic health risks for existing, ambient air conditions in the surrounding area, as well as expected DPM carcinogenic risks from the Project and cumulative development projects. As shown in Table 4.2-11, with implementation of the Project and nearby cumulative development projects, the carcinogenic health risk would increase by greater than or equal to 15.67 in one million at the Project's MEIR, by greater than or equal to 15.60 in one million at the Project's MEIW, and by greater than or equal to 10.165 at the Project's MEISC. Under each of the MEIR, MEIW, and MEISC scenarios, the Project's contribution to the carcinogenic health risk would be less than 10 in one million, which is less than the SCAQMD's threshold for cumulatively considerable impacts (Urban Crossroads 2014b pp. 35-36). Accordingly, this EIR acknowledges a significant cumulative impact, but the proposed Project would not contribute to a cumulatively considerable increase in carcinogenic health risks from DPM emissions in the vicinity of the Project site or its primary truck route.

Table 4.2-11 Cumulative Carcinogenic Health Risk

	Cancer Risk as Maximum Sensitive Receptor (risk in one million)			
	Existing	Project Site	Cumulative Projects	Total Cumulative Risk
Maximum Impact to All Receptors Without Project	587		>10	>597
Maximum Impact to Nearest Residential With Project	587	5.67	>10	>592.67
Maximum Impact to Nearest Worker With Project	587	5.60	>10	>592.60
Maximum Impact to Nearest School With Project	587	0.165	>10	>587.17
	Source: **MATES III Carcinogenic Risk Interactive Map** (http://www2.aqmd.gov/webappl/matesiii/) (SCAQMD 2008).			

Source: Urban Crossroads 2014b, Table 2-9

Due to the very low nature of non-cancer risk levels in the Project area, the cumulative non-cancer risk in the vicinity of the Project site is less than significant and the Project's contribution to non-cancer risk would be less than cumulatively considerable.

As indicated in the analysis of Threshold 5, above, there are no components of the proposed Project's construction or long-term operation that would result in the exposure of a substantial number of sensitive receptors to objectionable odors. There also are no odor emitters in the Project's cumulative study area which, when combined with Project-related odors, could affect a substantial number of people. Accordingly, a cumulatively significant impact would not occur.

4.2.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: No Impact. The proposed Project would not conflict with or obstruct implementation of the SCAQMD AQMP.

Thresholds 2 and 3: Significant Direct and Cumulatively Considerable Impact (Short-Term and Long-Term). The Project's emissions of NO_X during short-term construction and long-term operational activities would violate the SCAQMD regional threshold. Short- and long-term emissions of NO_X also would contribute to an existing air quality violation in the SCAB (*i.e.*, non-attainment status for NO_X and ozone – NO_X is a precursors for ozone). As such, Project-related emissions would violate SCAQMD air quality standards and contribute to the non-attainment of a criteria pollutant (*i.e.*, NO_X and ozone), which is significant on a direct and cumulatively considerable basis.

Threshold 4: Less-than-Significant Impact. The average carcinogenic risk to sensitive receptors in the vicinity of the Project site due to toxic air contaminates is approximately 587 cases per one million people. Risk attributable to the proposed Project would be 5.67 in one for the maximally

exposed individual receptor, 5.60 in one million for the maximally exposed individual worker, and 0.165 in one million for the maximally exposed school child. The cumulative health risk to sensitive receptors is significant, but the Project's contribution to the cumulative risk would be less than cumulatively considerable based on a significance threshold of 10 in one million. The maximum non-cancer health risk index attributable to the proposed Project would be 0.0036, which would also be less than significant and less than cumulatively considerable compared to the SCAQMD non-cancer health risk index of 1.0.

Threshold 5: Less-than-Significant Impact. Although short-term construction activities could produce odors associated with construction equipment exhaust, the application of asphalt, and the application of architectural coatings, standard construction requirements would minimize odor impacts to less than significant levels. Odors associated with long-term operation of the proposed Project would not significantly impact nearby sensitive receptors.

4.2.6 MITIGATION

Although the Project's construction related emissions of VOC would be less than significant, the following mitigation measure is recommended to further reduce the Project's less-than-significant impact.

MM 4.2-1 Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All surface coatings shall consist of Zero-Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113.

Although the Project's construction emissions of particulate matter (PM_{10} and $PM_{2.5}$) would be less than significant, the following mitigation measures are recommended to further reduce the Project's less-than-significant impact.

MM 4.2-2 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors.

a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour.

b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day.

c) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads.

d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered.

MM 4.2-3 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors.

a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning.

b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM_{10}-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.

Although the Project's construction emissions of SO_X would be less than significant, the following mitigation measure is recommended to further reduce the Project's less-than-significant impact.

MM 4.2-4 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SO_X) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.

The following mitigation measures is recommended to reduce the Project's significant, short-term construction-related impact associated with the emissions of NO_X and NO_X contributions to the SCAB's non-attainment status for ozone. These measures also would further reduce the Project's less-than-significant impact associated with short-term diesel particulate matter emissions.

MM 4.2-5 The Project shall comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better.

b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in

place during the duration of construction activities at all loading, unloading, and equipment staging areas.

c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import.

d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower.

e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles.

f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified.

g) Electric-powered construction equipment and tools shall be used when technically feasible.

h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible.

i) Construction vehicles shall use the City's designated truck route.

j) Construction parking shall be located and configured to minimize traffic interference on public streets.

The following measures are recommended to reduce the Project's significant long-term operational-related impact associated with the emissions of NO_X and the contributions of this pollutant to the SCAB's non-attainment status for ozone. These measures also would further reduce the Project's less than significant impact associated with long-term emissions of localized criteria pollutants and diesel particulate matter.

MM 4.2-6 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than three (3) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.

MM 4.2-7 Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.

MM 4.2-8 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.

MM 4.2-9 Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.

MM 4.2-10 Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.

MM 4.2-11 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.

MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that 1) encourages tenants to display information about alternative transportation options in a common area of the building and 2) informs tenants about locations of the nearest existing and planned Metrolink stations and the benefits of implementing a voluntary carpool or rideshare program for employees.

MM 4.2-13 In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.

MM 4.2-14 The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.

MM 4.2-15 Prior to the issuance of occupancy permits, the City of Moreno Valley shall verify that a sign has been installed at each exit driveway, providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow.

MM 4.2-16 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that truck drive isles and truck courts shall be composed of concrete.

MM 4.2-17 The Project's building shall be capable of accommodating the future installation of electrical infrastructure to service truck plug-ins at loading bays, as determined by the City of Moreno Valley at building permit issuance.

Although the Project's short-term construction and long-term operational odor impacts would be less than significant, the following mitigation measure is recommended to ensure compliance with SCAQMD Rule 402 and minimize the potential for odors on the Project site.

MM 4.2-18 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement.

a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.

4.2.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 2 and 3: Less-than-Significant Impact with Mitigation (Short-term), Significant and Unavoidable Impact, Direct and Cumulatively Considerable (Long-term). As shown in Table 4.2-12, *Construction Emissions Summary (Pounds per Day) – With Mitigation*, with incorporation of Mitigation Measures MM 4.2-5, the Project's short-term construction-related emission of NO_X would be reduced to below the SCAQMD regional thresholds of significance. Accordingly, construction-related emissions would not violate any applicable air quality standard, would not substantially contribute to an existing regional air quality violation, and would not result in a cumulatively considerable contribution to the net increase of any criteria pollutants for which the region is non-

attainment. Therefore, short-term construction-related air quality impacts would be less than significant with mitigation.

Table 4.2-12 Construction Emissions Summary (Pounds per Day) – With Mitigation

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2015	5.97	96.54	75.46	0.19	7.57	3.76
Maximum Daily Emissions	**5.97**	**96.54**	**75.46**	**0.19**	**7.57**	**3.76**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-4.

Although implementation of Mitigation Measures MM 4.2-6 through MM 4.2-17 would reduce long-term operational emissions of NO_X, Project-related operational emissions of NO_X would remain above regional significance thresholds (refer to Table 4.2-13, *Operational Emissions Summary (Pounds per Day) – With Mitigation*). Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards, and beyond the direct control of the Project Applicant and/or future tenants of the Project site. No other mitigation measures are available that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce that have a proportional nexus to the Project's level of impact. As such, it is concluded that the Project's long-term emissions of NO_x would violate SCAQMD air quality standards. In addition, the Project's long-term emissions of and NO_x would cumulatively contribute to an existing air quality violation in the SCAB (*i.e.*, NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (*i.e.*, federal and state ozone concentrations). Accordingly, the Project's long-term emissions of NO_X are concluded to result in a significant and unavoidable impact on both a direct and cumulatively considerable basis.

Table 4.2-13 Operational Emissions Summary (Pounds per Day) – With Mitigation

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source Emissions	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source Emissions	0.05	0.48	0.40	2.88e-3	0.04	0.04
Mobile Emissions (Trucks)	13.46	307.18	117.64	0.76	28.10	11.84
Mobile Emissions (Passenger Cars)	3.3644	2.76	37.89	0.10	9.21	2.47
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**51.90**	**323.58**	**159.89**	**0.87**	**37.78**	**14.74**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source Emissions	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source Emissions	0.05	0.48	0.40	2.88e-3	0.04	0.04
Mobile Emissions (Trucks)	13.72	319.98	123.22	0.76	28.11	11.85
Mobile Emissions (Passenger Cars)	3.17	2.93	33.27	0.09	9.21	2.47
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**51.97**	**336.55**	**160.83**	**0.86**	**37.79**	**14.75**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-6.

4.3 BIOLOGICAL RESOURCES

This subsection assesses the proposed Project's potential to impact sensitive biological resources that may be present on-site or within off-site improvement areas. As previously described in EIR Section 3.0, *Project Description*, off-site improvement areas associated with the Project include the construction of frontage improvements to and utility service connections within abutting roadways, including Perris Boulevard, Modular Way, Kitching Street, and Edwin Road. The analysis in this subsection is based in part on information contained in a site-specific general biological resources assessment prepared by Alden Environmental, Inc. titled, "General Biological Resources Assessment for the Modular Logistics Project," dated October 1, 2014. The technical report is provided as *Technical Appendix C1 t*o this EIR. The analysis in this subsection is also based on the site-specific burrowing owl survey report prepared by Alden Environmental, Inc. titled, "Burrowing Owl Survey Results Report for the Dorado Property," dated September 10, 2013. The technical report is provided in *Technical Appendix C2* to this EIR.

4.3.1 EXISTING CONDITIONS

A. Scope and Methodology for the Biological Resources Assessment

Biologists from Alden Environmental, Inc. conducted a site-specific evaluation of biological resources present or potentially present on the Project site. Methods of study included a review of relevant literature and databases, pedestrian-based field surveys, and wildlife observations. Background research included a review of current, local, state, and federal regulations, historical and current aerial photographs, United States Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps, the California Natural Diversity Data Base (CNDDB), and the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Alden Environmental, Inc. assessed resources on the Project site using methodologies and accepted scientific and technical standards and survey requirements issued by the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), and Western Riverside County MSHCP (Alden 2014 1).

The field studies focused on a number of primary objectives that would satisfy the special provisions of the Western Riverside County MSHCP and also comply with CEQA requirements, including: (1) general reconnaissance surveys and vegetation mapping; (2) general wildlife surveys; (3) habitat assessments and surveys for special-status plants (including species with applicable Western Riverside County MSHCP survey requirements); and (4) habitat assessments and focused surveys for special-status animals (including species with applicable Western Riverside County MSHCP survey requirements); and (5) assessments for areas subject to the jurisdiction of the USACE pursuant to Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and Section 13050(e) (et seq.) of the California Water Code (CWC), and CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code. Observations of plant and wildlife species were recorded during each of the above mentioned survey efforts and are contained within *Technical Appendices C1 and C2*.

The focused burrowing owl survey was conducted according to the burrowing owl survey instructions for the Western Riverside MSHCP (Alden 2014 2). Refer to *Technical Appendices C1 and C2* for detailed descriptions of the scopes and methodologies used for the general biological resource assessment and the burrowing owl survey reports.

B. Special Status Native Plant Populations and Natural Communities

The Project site is located within the MSHCP Criteria Area Species Survey (CASSA), as well as the Narrow Endemic Plant Species Survey Area (NEPSSA). Alden Environmental, Inc. evaluated the Project site for the presence of special status native plant populations and natural communities. Plant species were considered based on a number of factors, including: 1) species identified by the California Natural Diversity Database (CNDDB) as occurring (either currently or historically) on or in the vicinity of the Project site; 2) Western Riverside County MSHCP survey areas; and 3) any other special-status plants that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on the Project site. Plant species detected on site and recorded during field surveys were also assessed for potential riparian/riverine and jurisdictional (*i.e.*, wetland features) areas (Alden 2014 3).

❑ Vegetation Communities Observed On-Site

Alden Environmental, Inc. conducted a general biological survey and vegetation mapping of the Project site on November 26, 2013. Under existing conditions, the eastern portion of the Project site (approximately 13 acres) is undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. The western portion of the property does not support native vegetation communities and is classified as "developed" (Alden 2014 4, Figure 4). The eastern portion of the Project site is a highly disturbed fallow field that consists of tilled non-native grasses and exotic forb species that provides no native habitat for plant species. The eastern portion of the Project site is classified as "disturbed habitat" (Alden 2014 4, Figure 4).

❑ Narrow Endemic and Criteria Area Plants

The CASSA identified Coulter's goldfields (*Lasthenia glabrata*), Davidson's saltscale (*Atriplex serenana*), little mousetail (*Mysurus minumus*), mud nama (*Nama stenocarpum*), Parish's brittlescale (*Atriplex parishii*), round-leaved filaree (*California macrophylla*), San Jacinto Valley crownscale (*Atriplex coronata*), smooth tarplant (*Centromadia pungens*), and thread-leaved brodiaea (*Brodiaea filifolia*) as having the potential to occur on or near the Project site. Additionally, the NEPSSA identified *San Diego ambrosia (Ambrosia* pumila), many-stemmed dudleya (*Dudleya multicaulis)*, spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii*) as having the potential to occur on or near the Project site (Alden 2014 3).

❑ Special Status Native Plant Populations Observed On-Site

No sensitive plant species were observed by Alden Environmental during the November 2013 field survey. Given the developed and highly disturbed nature of the Project site, the site was found to be unsuitable for the plant species identified as potentially occurring within the area by the CASSA, NEPSSA, or MSHCP (Alden 2014 pp. 3, 5).

C. Special Status Wildlife Species

Alden Environmental, Inc. evaluated the Project site for the presence of special status wildlife species. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the property, 2) Western Riverside County MSHCP species survey areas applicable to the property, and 3) any other special-status wildlife that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on the site.

❑ Special Status Wildlife Observed On-Site

In addition to the general biological survey and vegetation mapping conducted in November 2013, Alden Environmental also conducted a focused burrowing owl surveys on August 8, 15, 19, and 21, 2013. Animal species that were observed or detected on the site or foraging over the site during field surveys are identified by their scientific name in Appendix C to *Technical Appendix C1* as: red-tailed hawk, house finch, killdeer, rock dove, common raven, California horned lark, American kestrel, Say's phoebe, European starling, Cassin's kingbird, barn owl, mourning dove, coyote, desert cottontail, Botta's pocket gopher, and Common side-blotched lizard. Of the 16 wildlife species observed on the Project site only one (1) species, the California horned lark, is classified as a "special status" species (Alden 2014 5).

- **California Horned Lark.** The California horned lark is not a state- or-federally listed species; however, this species is on the State Watch List. The California horned lark is a Covered Species under the Western Riverside County MSHCP. It is a common-to-abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. The California horned lark breeds and resides in the coastal region of California from Sonoma County southeast to the United States/Mexican border, including most of the San Joaquin Valley, and eastward to the foothills of the Sierra Nevada. Range-wide, California horned larks breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. In non-agricultural lands, the California horned lark typically inhabits areas of short vegetation or bare ground, including shortgrass prairie, deserts, brushy flats, and alpine habitat. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands.

No burrowing owls or signs of their use of the property (*i.e.*, scat, tracks, pellets, or feathers) were observed on the Project site during focused surveys for the species conducted by Alden

Environmental, Inc. However, the potential for the burrowing owl to migrate onto the undeveloped eastern portion of the site is high because it provides suitable habitat for the species (Alden Environmental 2014 5).

- **Western burrowing owl.** The burrowing owl is designated as a CDFW California Species of Special Concern. In California, burrowing owls are restricted to the central valley extending from Redding south to the Grapevine, east through the Mojave Desert and west to San Jose, the San Francisco Bay area, the outer coastal foothills area which extend from Monterey south to San Diego, and the Sonoran desert. The burrowing owl is a resident in the open areas of the lowlands over much of the Southern California region. The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident. The species also may use areas such as, but not limited to, golf courses, cemeteries, road allowances within developed areas, airports, vacant lots, fairgrounds, abandoned buildings, and irrigation ditches. Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. They may also dig their own burrow in soft, friable soil and may also use pipes, culverts, and nest boxes where burrows are scarce.

D. Nesting Birds

Numerous non-native trees occur within the existing site landscaping along the site's frontages on Perris Boulevard and Modular Way. The trees are small in size and are considered to have low potential to support nesting raptor species, although they may provide habitat for smaller, migratory birds (Alden 2014 5). Although biologists from Alden Environmental, Inc. did not observe nesting birds on the Project site, there is potential that migratory birds could nest on the property. The Migratory Bird Treaty Act (MBTA) and CDFW Code prohibit impacts to nesting birds.

E. MSHCP Riparian/Riverine Areas and Vernal Pools

No areas meeting the MSHCP definition of riparian or riverine habitats or vernal pools were observed on the Project site (Alden 2014 pp. 5-6).

F. Jurisdictional Waters

The Project site is flat and does not support any drainages, water courses, vernal pools, or wetland habitats that would be under the jurisdiction of the USACE, CFDW, or the RWQCB (Alden 2014 5).

G. Regulatory Setting

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state and federally listed plants and animals; aquatic resources, including rivers and

creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities. Provided below is an overview of applicable federal, state, and regional laws, regulations, and requirements.

❑ State and/or Federally Listed Plants and Animals

State of California Endangered Species Act

California's Endangered Species Act (CESA) provides definitions for endangered species, threatened species, and candidate species of California. Listed endangered and threatened species are protected by the CESA and candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Article 3, Sections 2080 through 2085, of the CESA address the taking of threatened, endangered or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) provides definitions for endangered species and threatened species of the U.S. Under provisions of Section 9(a) (1) (B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a) (2) (b) of the FESA addresses the protections afforded to listed plants.

State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the

action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a) (2).

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCPs) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

Take Authorizations Pursuant to the Western Riverside County MSHCP

The Western Riverside County MSHCP, a regional HCP, was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the USFWS, CDFW, and participating entities. The intent of the Western Riverside County MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the Western Riverside County MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the Western Riverside County MSHCP and to provide for an overall Conservation Area that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The Western Riverside County MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species.

Through agreements with the USFWS and the CDFW, the Western Riverside County MSHCP designates 146 special-status animal and plant species that receive some level of coverage under the plan. Of the 146 "Covered Species" designated under the Western Riverside County MSHCP, the majority of these species have no additional survey/conservation requirements. In addition, through compliance with the Western Riverside County MSHCP, the MSHCP provides mitigation for project-specific impacts to Covered Species so that the impacts would be reduced to below a level of significance pursuant to CEQA. The Project site is located within the Western Riverside County MSHCP burrowing owl survey area, which requires project-specific survey requirements for the species because it is designated as a "Covered Species not yet adequately conserved" (Volume I, Section 6.1.2 of the Western Riverside County MSHCP document).

4.3.2 BASIS FOR DETERMINING SIGNIFICANCE

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, §21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California to:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in §15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. CEQA Guidelines §15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species"*

Therefore, for the purpose of analysis in this EIR, the proposed Project would result in a significant impact to biological resources if the Project or any Project-related component would:

1. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service;*

2. *Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U. S. Fish Wildlife Service;*

3. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

4. *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan.

4.3.3 IMPACT ANALYSIS

Threshold 1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?

A. Impacts to Vegetation Communities

As discussed in Subsection 4.3.1, the western portion of the Project site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. As such, the developed western portion of the property does not support native vegetation communities (Alden 2014 4). The eastern portion of the Project site is a highly disturbed fallow field that consists of tilled non-native grasses and exotic forb species that is classified as "disturbed habitat" and does not support sensitive plant species (Alden 2014 4). As such, the proposed Project would have no potential to impact any natural or sensitive vegetation community. Therefore, the Project would result in less-than-significant impacts and no mitigation would be required.

B. Impacts to Special Status Native Plant Populations

As documented by Alden Environmental, Inc. no special status plant species were observed during site visits and none are expected on the site given the disturbed and developed nature of the property (Alden 2014 5). Because natural plant communities are absent on the Project site, there is no potential for the Project to directly or indirectly impact special-status plants species. Therefore, the Project would result in less-than-significant impacts and no mitigation would be required.

C. Impacts to Special Status Wildlife Species

One (1) special-status wildlife species was observed on the Project site during biological field surveys in November 2013: the California horned lark. Because the California horned lark is a species that is "covered" by the Western Riverside County MSHCP, impacts to this special status species would be less than significant. An Implementation Agreement (IA) between the USFWS, the CDFW, and participating government bodies, including the City of Moreno Valley, was executed and associated 10(a)(1)(B) Permit No. TE-088609 was issued on June 22, 2004. For properties such as the Project site that are located outside of a Western Riverside County MSCHP Criteria Area, impacts to plant and animal species identified in the Western Riverside County MSHCP as "Covered Species Adequately Conserved" are authorized by Permit No. TE-088609. The Project Applicant will be required to pay the City of Moreno Valley's Western Riverside County MSHCP Mitigation Fee, which supplements the financing and acquisition of lands supporting species covered by the MSHCP

and to pay for new development's share of this cost. Although impacts to the California horned lark would be less than significant with mandatory compliance to the Western Riverside County MSHCP, this EIR recommends mitigation to ensure that the Project Applicant pays the appropriate Western Riverside County MSHCP Mitigation Fee.

Although no burrowing owl or signs of burrowing owl were observed on the site, the eastern undeveloped portion of the site contains habitat suitable to burrowing owl (Alden 2013 3). As such, it is possible the species could migrate onto the property prior to construction, resulting in a potentially significant impact. A pre-construction survey for the western burrowing owl is required prior to Project-related ground-disturbing activities and mitigation will be necessary if the species is found to be present.

D. Indirect Impacts to Special Status Biological Resources

The proposed Project would not result in significant indirect impacts to special-status biological resources. The Project site is not located in or adjacent to the Western Riverside County MSHCP Conservation Area; therefore, the Project is not required to implement measures pursuant to the *MSHCP Urban Wildland Interface Guidelines* specified in Volume I, Section 6.1.4 of the MSHCP. There are no other components of the proposed Project that could indirectly impact special-status biological resources. Accordingly, no indirect impacts to candidate, sensitive, or special-status species would occur.

Threshold 2:	***Would the Project have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Wildlife Service?***

None of the existing habitat types within the Project's impact area are considered riparian habitats, nor are these habitats identified as sensitive natural communities in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. Accordingly, the proposed Project has no potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. As such, no impact would occur.

Threshold 3:	***Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

There are no riparian/riverine communities or potential jurisdictional areas located on the Project site. The property is flat and does not support any aquatic features necessary for the development of these habitats (Alden 2014 4). The Project site does not support any drainages, water courses, vernal pools, or wetland habitat that would be considered jurisdictional by the USACE, CDFW, or the RWQCB (Alden 2014 5). Therefore, the proposed Project has no potential to result in a substantial

adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marshes, vernal pools, or coastal wetlands, through direct removal, filling, hydrological interruption, or other means. No impact would occur.

Threshold 4: Would the Project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

There are no water bodies on or adjacent to the site that could support fish; therefore, there is no potential for the Project to interfere with the movement of fish. There are also no native wildlife nurseries on or adjacent to the site; therefore, there is no potential for the Project to impede the use of a native wildlife nursery site. As such, no impact would occur.

Although wildlife could move through or within the Project site, the existing urban land uses that surround the site impede substantial wildlife movement throughout the Project site's vicinity. In addition, implementation of the Project would not have the ability to interfere with an established migratory wildlife corridor, because the site does not serve as a corridor nor is it connected to an established corridor. Additionally, the Project site is not located adjacent to the Western Riverside County MSHCP Criteria Area or any MSHCP Preserve; thus, the Project has no potential to result in wildlife movement impacts within a MSHCP Preserve. As such, the Project would result in a less-than-significant impact on wildlife movement.

The proposed Project would, result in minimal removal of vegetation (*i.e.*, trees and shrubs) from the Project site that has the potential to support nesting migratory birds. Impacts to such species are prohibited under the MBTA and California Fish and Game Code. The Project's potential to impact nesting migratory birds is a significant impact for which mitigation is required.

Threshold 5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Moreno Valley Municipal Code contains provisions for the protection of the Stephens' Kangaroo Rat pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County" (refer to Title 8, Chapter 8.60 of the Municipal Code). The Project site is not located within an identified reserve area for the Stephens' Kangaroo Rat. In addition, the Project site does not contain suitable habitat for the Stephens' Kangaroo Rat and the species was not observed on the subject property during site-specific biological surveys conducted in 2013. Accordingly, the Project is exempt from the focused survey requirements for the Stephens' Kangaroo Rat established by the Municipal Code. The Project Applicant is required to contribute a local development impact and mitigation fee, which requires a fee payment to assist the City in implementing the habitat conservation plan for the Stephens' Kangaroo Rat. With mandatory compliance with standard regulatory requirements (*i.e.*, development impact and mitigation fee payment), the proposed Project would not conflict with any City policies or ordinances related to the protection of the Stephens' Kangaroo Rat. Although a less-than-significant impact would occur with

implementation of the proposed Project, this EIR recommends mitigation to ensure compliance with the City's Stephens' Kangaroo Rat development impact and mitigation fee.

The City of Moreno Valley Municipal Code requires development projects that remove existing, mature trees (defined as a 4-inch or greater trunk diameter) to replace each removed tree at a 3:1 ratio with a minimum 24-inch box size tree (refer to Title 9, Chapter 9.17 of the Municipal Code). Although the majority of the Project site consists of developed and disturbed land, numerous trees are present along the Project site's frontages on Perris Boulevard and Modular Way and within internal parking lots. As previously described in EIR Section 3.0, *Project Description*, the Project would retain all existing trees along the site's frontage with Perris Boulevard and Modular Way to the extent feasible. The number of trees to be removed on-site cannot be quantified at this time because the decision to retain or remove individual trees will be made in the field during construction by the Project construction contractor; however, it is estimated that up to approximately 100 trees could be removed during construction. Based on the proposed Project's conceptual landscaping plan, approximately 316 trees would be installed on-site with a minimum 24-inch box size at initial planting (plus an additional 55 trees with a minimum 15-gallon size at planting), which would more than exceed the ratio of 3:1 required by the City's Municipal Code. As such, a less-than-significant impact would occur.

The City of Moreno Valley does not have any additional policies or ordinances in place to protect biological resources.

Threshold 6: ***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?***

The following is an analysis of the proposed Project's compliance with the Western Riverside County MSHCP's Reserve Assembly Requirements as well as other applicable MSHCP requirements pursuant to the following sections of the MSHCP: Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*; Section 6.1.3, *Protection of Narrow Endemic Plant Species*; Section 6.1.4, *Guidelines Pertaining to the Urban/Wildland Interface*; and Section 6.3.2, *Additional Survey Needs and Procedures.*

❑ Project Relation to Reserve Assembly

The Project site occurs within the overall Plan Area of the Western Riverside County MSHCP. As indicated in the discussion below, all surveys required by the Western Riverside County MSHCP have been conducted on the Project site and off-site improvement areas. The Project site does not occur within a Western Riverside County MSHCP Criteria Area. As such, the proposed Project is not required to set aside conservation lands pursuant to the Western Riverside County MSHCP, and the proposed Project is not subject to the MSHCP's Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process, or Joint Project Review (JPR). Accordingly, the proposed Project would not conflict with the Western Riverside County MSHCP Reserve Assembly requirements and no impact would occur.

❑ Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

As previously discussed in Subsection 4.3.1F, the Project site does not contain any drainages that meet the definition of riparian/riverine areas as defined by the Western Riverside County MSHCP. In addition, vernal pools, vernal swales, alkali scalds, or other seasonal wet habitats were not identified on the Project site or within the Project's off-site impact areas during field surveys conducted in late 2013 (Alden 2014 5). Therefore, the proposed Project would have no impact on riparian/riverine areas or vernal pools, or the species associated with these habitat types. Accordingly, the proposed Project has no potential to conflict with Volume I, Section 6.1.2 of the Western Riverside County MSHCP. No impact would occur.

❑ Protection of Narrow Endemic Plants

Section 6.1.3 of the Western Riverside County MSHCP requires that within the Narrow Endemic Plant Species Survey Area (NEPSSA), site-specific focused surveys for Narrow Endemic Plant Species are required for all public and private projects where appropriate soils and habitat are present. The majority of the site is within the MSHCP Criteria Area Species Survey Area (CASSA), as well as the Narrow Endemic Plant Species Survey Area (NEPSSA). The CASSA identifies Coulter's goldfields (*Lasthenia glabrata*), Davidson's saltscale (*Atriplex serenana*), little mousetail (*Myosurus minimus*), mud nama (*Nama stenocarpum*), Parish's brittlescale (*Atriplex parishii*), round-leaved filaree (*California macrophylla*), San Jacinto Valley crownscale (*Atriplex coronata*), smooth tarplant (*Centromadia pungens*), and thread-leaved brodiaea (*Brodiaea filifolia*) as potentially occurring sensitive species on the site. Additionally, the NEPSSA identified San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis)*, California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii*) as potentially occurring sensitive species on site. Special attention was paid to the potential for these species to occur on site during the on-site focused surveys conducted by Alden Environmental. As previously discussed in Subsection 4.3.1B, no sensitive plant species were observed on the Project site and due to the developed and disturbed nature of the property, the habitat on site is not considered suitable for sensitive plant species with the potential to occur in the Project area (Alden 2014 pp. 4-5).

The entire site is developed and/or highly disturbed and does not support suitable habitat for any CASSA or NEPSSA sensitive species. Additionally, The CNDDB database search did not identify any sensitive plant species that have been known to occur on site or within the Project vicinity. The site does not support alkaline marshes, wet meadows, vernal pools, wetlands, or chaparral/coastal sage scrub habitats; therefore, no suitable habitat is present for all but one of the species identified as potentially occurring by the MSHCP, the smooth tarplant.

Suitable habitat for the smooth tarplant includes alkali scrub, alkali playas, and grasslands with alkaline affinities. The soil on site is mapped as Domino silt loam with saline-alkaline characteristics. The soil on-site has been heavily disturbed and disked regularly, thereby altering its characteristics and reducing the potential for this species to occur. Additionally, this species typically leaves behind dried stems, leaves, and flowers that persist throughout the year and allow for species identification

outside of the flowering season. No signs of this species were observed during the field visits conducted by Alden Environmental. Based on these conditions, the smooth tarplant is not present and is not expected to occur or establish on the site.

Based on the heavily disturbed nature of the site and the lack of suitable habitat, focused rare plant surveys are not required, and neither are surveys for other Narrow Endemic Plants. Accordingly, the proposed Project would not conflict with Volume I, Section 6.1.3 of the Western Riverside County MSHCP. No impact would occur.

❑ Guidelines Pertaining to Urban/Wildland Interface

The Western Riverside County MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the Western Riverside County MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area and edge effects with the potential to adversely affect biological resources within the Conservation Area are required to be evaluated. Edge effects are identified in the MSCHP as: Drainage; Toxics; Lighting; Noise; Invasive Species; Barriers; and Grading/Land Development. The Project site does not occur within or adjacent to a MSCHP Criteria Area or existing Conservation Area, or any Public/Quasi-Public lands. As such, the proposed Project would not have the potential to create indirect effects on the MSHCP Conservation Area and is not be subject to the Urban/Wildland Interface Guidelines. The proposed Project, therefore, is consistent with Section 6.1.4 of the Western Riverside County MSHCP. No impact would occur.

❑ Additional Needs Survey and Procedures

Western Riverside County MSHCP Section 6.3.2 identifies that in addition to the Narrow Endemic Plant Species addressed in Section 6.1.3, additional surveys may be needed for other certain plant and animal species in conjunction with MSHCP implementation in order to achieve full coverage for these species. Within areas of suitable habitat, focused surveys are required for additional plant species if a project site occurs within a designated CAPSSA, or special animal species survey area (*i.e.*, burrowing owl, amphibians, and mammals).

As discussed above under the analysis of Threshold 1, a focused survey for the western burrowing owl was completed in 2013 in accordance with the Western Riverside County MSHCP Burrowing Owl Survey Area requirements. The survey determined that no burrowing owls or signs of burrowing owl were present on the Project site (Alden 2013 3); therefore, no impact to an observed special-status species would occur. However, the species is migratory and could migrate onto the property prior to ground-disturbing construction activities. Therefore, a pre-construction survey for the species will be required and mitigation would be necessary if the species is found to be present.

4.3.4 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan

buildout in the City of Moreno Valley and other jurisdictions in the region within the boundaries of the Western Riverside County MSHCP.

Implementation of the proposed Project would result in permanent ground disturbance to the entire Project site. Additionally, the Project would require some off-site improvements, including frontage improvements to and utility service connections within abutting roadways, including Perris Boulevard, Modular Way, Kitching Street, and Edwin Road.

The primary effects of the proposed Project, when considered with the build out of long range plans in the region, would be the cumulative loss of vacant land that can support habitat for sensitive species. With respect to special-status species, although habitat offered on approximately 13 acres in the eastern portion of the Project site is of substantially lesser quality than habitat that is found in undisturbed natural areas within the geographic area covered by the Western Riverside County MSHCP, it still provides open spaces for foraging, refuge, nesting, and areas that can be used for species reproduction.

Anticipated cumulative impacts are addressed within the region by the Western Riverside County MSHCP and the adopted "The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California." The Western Riverside County MSHCP, as currently adopted, addresses 146 "Covered Species" that represent a broad range of habitats and geographical areas within Western Riverside County, including threatened and endangered species and regionally- or locally-sensitive species that have specific habitat requirements and conservation and management needs. The Western Riverside County MSHCP addresses biological impacts for take of Covered Species within the MSHCP area. Impacts to Covered Species and establishment and implementation of a regional conservation strategy and other measures included in the Western Riverside County MSHCP address the federal, state, and local mitigation requirements for these species and their habitats. Specifically, Section 4.4 of the Western Riverside County MSHCP states that:

> *The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.*

It goes on to state that:

> *The LDMF [Local Development Mitigation Fee] is to be charged throughout the Plan Area to all future development within the western part of the County and the Cities in order to provide a coordinated conservation area and implementation program that will facilitate the preservation of biological diversity, as well as maintain the region's quality of life.*

The reason for the imposition of the Mitigation Fee over the entire region is that the loss of habitat for endangered species is a regional problem resulting from the cumulative effect of continuing development throughout all of the jurisdictions in Western Riverside County. Finally, Section 5.1 of the Western Riverside County MSHCP states that:

> *It is anticipated that new development in the Plan Area will fund not only the mitigation of the impacts associated with its proportionate share of regional development, but also the impacts associated with the future development of more than 332,000 residential units and commercial and industrial development projected to be built in the Plan Area over the next 25 years.*

As the construction of buildings, infrastructure, and all alterations of the land within areas that are outside of the Criteria Area are permitted under the Western Riverside County MSHCP (see MSHCP Section 2.3.7.1), cumulative impacts to biological resources with the exception of MSHCP non-covered species would be less than significant provided that the terms of the MSHCP are fully implemented (MSHCP Final EIR/EIS, Section 4.4.1.6). The Western Riverside County MSHCP database was consulted for the proposed Project and the recommended focused surveys for the western burrowing owl have been conducted. The Project Applicant is required to pay the required MSHCP mitigation fees per the City of Moreno Valley Municipal Code Title 3, Chapter 3.48 (and pursuant to mitigation measures recommended by this EIR, (refer to Subsection 4.3.6 below). The proposed Project would comply with the requirements of the Western Riverside County MSHCP and, thus, would not conflict with its adopted policies. Accordingly, because the proposed Project is required to comply with the Western Riverside County MSHCP and pay the required MSHCP mitigation fee, the proposed Project would have less-than-significant cumulatively considerable impacts to MSHCP covered species.

Although the Project site occurs within the Western Riverside MSHCP, NEPSSA, and CASSA, the entire Project site is either developed or disturbed and does not contain sensitive species or suitable habitat for any CASSA or NEPSSA sensitive species (Alden 2014 3). Because the proposed Project and all other developments within the Western Riverside County MSHCP Study Area would be required to comply with the MSHCP, Project impacts to MSHCP, CASSA, or NEPPSA sensitive species would be less than significant and less than cumulatively considerable.

Regarding special-status wildlife, the proposed Project would eliminate actual or potential live-in habitat for the California horned lark and the western burrowing owl. Because the proposed Project and other cumulative developments would be required to comply with the Western Riverside County MSHCP, potential Project-related impacts to the California horned lark is concluded to be less than significant on a cumulative basis because adequate habitat for these species would be accommodated through the Western Riverside County MSHCP Reserve System. Cumulative effects to raptor foraging habitat are addressed through the MSHCP. The Project is required to comply with the City of Moreno Valley Municipal Code Title 3, Chapter 3.48, MSHCP Fee Program, which requires a per-acre local development mitigation fee that provides revenue to acquire and preserve vegetation communities and natural areas that are known to support threatened, endangered or key sensitive

populations of plant and wildlife species. Mandatory payment of the MSHCP Fee would reduce any Project-related impact to raptor foraging habitat to below a level of significance. MSHCP Section 5.3.5, "Identifying Wildlife Habitat Types" describes the general California Wildlife Habitat Relationships (CWHR) methodology used to identify the planned MSHCP Conservation Area. The CWHR "makes predictions about a habitat's value to wildlife in terms of its capacity to fulfill reproduction, foraging, and cover needs of wildlife" (MSHCP Volume 1, Section 5.3.5). Thus, the MSHCP accounts for foraging.

The burrowing owl is fairly ubiquitous within the Project vicinity; as such, it is reasonable to conclude that impacts to habitat for this species are occurring throughout the cumulative study area. As such, cumulative impacts are significant and the proposed Project's potential impacts to burrowing owls that may be located on the site prior to Project construction would be cumulatively considerable. Mitigation would be required.

The Project site does not contain habitat of wetlands or riparian areas, including areas that may be subject under the jurisdiction of the USACOE, RWQCB, and/or CDFW. Therefore, the proposed Project would not impact any wetlands or riparian/riverine areas and would therefore not result in any cumulatively considerable impacts to wetlands and riparian/riverine areas.

As indicated under the discussion and analysis of Threshold 4, the proposed Project would not significantly impact wildlife movement corridors because such corridors already are accommodated by the Western Riverside County MSHCP and the Project site is not targeted for conservation as part of any proposed or existing linkages by the MSHCP. In addition, there are no native wildlife nursery sites within the Project vicinity. While Western Riverside County is becoming increasingly urbanized, which could restrict wildlife movement, the MSHCP, and the Conservation Areas established therein, was developed with several goals that specifically support wildlife movement. Accordingly, cumulative impacts to wildlife movement are less than significant. As concluded by the MSHCP's Final EIR/EIS, "The MSHCP provides for the movement of native resident and migratory species and for genetic flow identified for Covered Species. Therefore, impacts related to cores and linkages resulting from the Plan are considered less than significant" (MSHCP Volume 4: Final EIR/EIS, Section 4.1.5). As such, the proposed Project would not result in cumulatively considerable impacts to wildlife movement corridors or native wildlife nursery sites.

The proposed Project would remove vegetation from the site (*i.e.*, trees and shrubs) that has the potential to support nesting migratory birds protected by the MBTA and California Fish and Game Code. Other projects within the Western Riverside County area would similarly have the potential to impact protected nesting migratory birds and also be subject to compliance with the MBTA. The Project's potential impact to nesting birds would be cumulatively considerable absent compliance to the MBTA.

The proposed Project would not conflict with any local policies or ordinances protecting biological resources. Other development projects in the City of Moreno Valley also would be required to comply with the City's Municipal Code. Accordingly, cumulative effects associated with compliance

to local policies or ordinances protecting biological resources would be less than significant and the proposed Project's contribution would be less than cumulatively considerable.

4.3.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Significant Direct and Cumulative Impact. No sensitive vegetation communities or candidate, sensitive, or special-status plant species are located on the Project site. The loss of habitat for the California horned lark is less than significant with mandatory Western Riverside County MSHCP compliance because the species is a MSHCP Covered Species. Although the western burrowing owl is not present on the Project site, the species could be impacted if it migrates onto the property prior to the commencement of ground-disturbing construction activities, which is a potentially significant direct and cumulatively considerable impact.

Threshold 2: No Impact. The Project site does not contain any riparian habitat or other sensitive natural community; therefore, the Project would have no impact on riparian or other sensitive habitats as defined by the CDFW or USFWS.

Threshold 3: No Impact. There are no federally protected wetlands on the Project site or within the Project's off-site impact area; therefore, no impact to wetlands would occur.

Threshold 4: Significant Direct and Cumulative Impact. There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting, migratory birds protected by the MBTA and California Fish and Game Code if construction activities were to occur during the migratory bird nesting season.

Threshold 5: Less-Than-Significant Impact. The Project would not conflict with any local policies or ordinances governing biological resources.

Threshold 6: Significant Direct and Cumulative Impact. The Project site is subject to the Western Riverside County MSHCP and its survey requirements for the western burrowing owl. Although compliant with all MSHCP provisions and although the western burrowing owl is absent on the property, the eastern portion of the property contains suitable habitat for the species. If the species is present on the property at the time a grading permit is issued, impacts would be significant, requiring mitigation.

4.3.6 MITIGATION

MM 4.3-1 The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, *Western Riverside County Multiple Species Habitat Conservation Plan Fee Program*, which requires a per-acre local development impact and mitigation fee. The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.

MM 4.3-2 Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area*. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions:

a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction.

b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either:

- Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or
- A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that

the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

MM 4.3-3 As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:

a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree.

b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.

MM 4.3-4 The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, *Threatened and Endangered Species*, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.

4.3.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1 and 6. Less-than-Significant Impact with Mitigation. Implementation of MM 4.3-1 would ensure that the Project Applicant pays the City's required Western Riverside County MSHCP development impact and mitigation fees to assist the City in the implementation of the Western Riverside County MSHCP. Implementation of MM 4.3-2 would ensure that pre-construction surveys are conducted for the western burrowing owl to determine the presence or absence of the species on the Project site prior to Project-related grading activities. If the species is present, the mitigation requires avoidance and/or relocation of burrowing owls in conformance with accepted protocols for the species. As such, impacts would be less-than-significant with mitigation.

Threshold 4: Less-than-Significant Impact with Mitigation. Implementation of MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting migratory birds to determine presence or absence prior to Project-related tree removals. If the species is present, the mitigation requires avoidance of migratory bird nests during the breeding season in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to nesting migratory birds would be reduced to below a level of significance. As such, impacts would be less-than-significant with mitigation.

Threshold 5: Less-than-Significant Impact. As previously discussed under the impact evaluation for Threshold 5 (refer to Subsection 4.3.3), the Project would not conflict with any local policies or ordinances related to the protection of biological resources upon mandatory compliance with provisions of the City of Moreno Valley Municipal Code. However, MM 4.3-4 has been applied to the Project to ensure that the Project complies with the City's Municipal Code and pays the appropriate Stephens' Kangaroo Rat development impact and mitigation fee. As such, impacts would be less-than-significant with mitigation.

4.4 CULTURAL RESOURCES

4.4.1 EXISTING CONDITIONS

This analysis in this subsection is based on the site-specific cultural resources assessment prepared by Brian F. Smith & Associates (BFSA) titled, "A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, California," and dated December 16, 2013. The technical report is provided as *Technical Appendix D1* to this EIR. The analysis in this subsection is also based on the site-specific paleontological resource and monitoring assessment titled, "Paleontological Resource and Monitoring Assessment, Modular Logistics Center Project, City of Moreno Valley, Riverside County, California," and dated December 13, 2013. The technical report is provided as *Technical Appendix D2* to this EIR. Information used to support the analysis in this subsection also was obtained from the Cultural Resources section (Section 5.10, pp. 5.10-1 – 16) of the certified Final Program EIR prepared for the City of Moreno Valley General Plan (SCH No. 2000091075), dated July 2006 (Moreno Valley 2006b), and the Riverside County General Plan Multipurpose Open Space Element (Riverside County 2003).

A. Scope and Methodology for the Cultural Resources Assessment

❑ Literature Review

Prior to conducting the site-specific cultural resources assessment, a BFSA archaeologist conducted a California Historic Resources Information System (CHRIS) records search, at the Eastern Information Center (EIC), at the University of California, Riverside in Riverside, CA. The purpose of the records search was to enable BFSA archeologists to determine whether any cultural resources investigations had previously been conducted or whether any cultural resources had been recorded within or adjacent to the Project area. The EIC also provided the standard review of the National Register of Historic Places (NHP) and the Office of Historic Preservation Historic Property Directory. Land patent records held by the Bureau of Land Management (BLM) and accessible through the BLM Government Land Office (GLO) website were also reviewed by BFSA. In addition, the BFSA research library was consulted for any relevant historical information (BFSA 2013a 3.02).

❑ Field Methods

As previously discussed in Subsection 3.0 *Project Description*, under existing conditions, the eastern portion of the Project site (approximately 13.0 acres) is undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building and a maintained detention basin surrounded by fencing. BFSA conducted an intensive pedestrian survey on the eastern disturbed but undeveloped portion of the Project site on December 2, 2013. In addition, all areas in the developed western portion of the property that were not covered with parking lots and buildings were visually inspected by BFSA investigators. Digital photographs were taken of the Project area and are included within *Technical Appendix D1* to this EIR.

B. General Regional Prehistory Description

The Paleo Indian, Archaic Period Milling Stone Horizon, and Late Prehistoric Shoshonean groups are the three generational groups represented in Western Riverside County. Because these culture sequences have been used to describe archeological manifestations in the region, the following discussion of the cultural history of Western Riverside County references the Western Pluvial Lakes Tradition, San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, Sayles Complex, and the San Luis Rey Complex. The Late Prehistoric component of Western Riverside County was represented by the Luiseño, with influences from the Gabrielino, Cahuilla and Serrano Indians. Each of these pre-historical periods in time is briefly described below and documented in more detail in *Technical Appendix D1* to this EIR. The geologic framework divides the culture chronology of the area into the following segments:

- Late Pleistocene/Paleo Indian Period (11,500 to circa 9,000 (Years Before Present (YBP)). The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000YBP). In North America, the Paleo Indian Period began at approximately 11,000 YBP with the Clovis Culture. Large fluted points particularly characterize the Clovis culture in addition to knives, scrapers, choppers, perforators, and casual flake tools that dominate later Pleistocene sites (BFSA 2013a 2.0-7). Clovis sites have not been identified in the Project area, although Clovis-like fluted points have been found in a variety of settings in southern California, including passes in the Cuyamaca and Tehachapi mountains, valleys in the Mojave Desert and Owens Valley, and the shorelines of Little Lake, Searles Lake, Panamint Lake, and ancient Lake Mojave (BFSA 2013a 2.0-7). The recovery of isolated fluted points would suggest that at the end of the Pleistocene, small groups of people sharing Clovis-like traits were present in southern California. The variety of fluted points in a variety of settings would suggest that the Paleo Indians were likely attracted to multiple habitat types including mountains, marshlands, estuaries, and lakeshores (BFSA 2013a 2.1-7).

- Early and Middle Holocene/Archaic Period (circa 9,000 to 1,300 YBP). The Archaic Period of prehistory begins with the onset of the Holocene around 9,000 YBP. The Paleo-environmental record for the inland valleys, where the Project site is located, is poorly understood as most of the paleoenvironmental reconstructions have been located along the coast and further east into the desert (BFSA 2013a 2.1-7). At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established. The sedimentation of the lagoons resulted in the decline in larger shellfish, loss of drinking water, and a reduction in the availability of Torrey Pine nuts. This resulted in a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploration of terrestrial small game and plants, including acorns (BFSA 2013a 2.0-8-9). The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, or horizons, including Western Pluvial Lakes, San Dieguito, La Jolla, Encinitas, Milling Stone, Pauma, and Sayles. These cultures are further documented within *Technical*

Appendix D1 to this EIR. Overlapping radiocarbon dates and different artifact types between sites identified as Western Pluvial Lakes, San Dieguito, La Jolla, Encinitas, Milling Stone, Sayles, and/or Pauma suggest a generalized hunting and gathering pattern that was employed for over 8,000 years. The large amount of marine shell and fish, along with some mammal bone as found in early Holocene sites next to lagoons, changes as one moves inland (BFSA 2013a 2.0-16). At these sites, an increase in sites and artifact assemblages likely reflects the same people moving along drainages between the coast and mountains, exploiting both marine (fish and mollusks) and terrestrial (small and large game, plants, and lithic materials) resources (BFSA 2013a 2.0-17).

- Late Holocene/Late Prehistoric/San Luis Rey Period (1,300 YBP to 1769). Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Technological developments during this period include the introduction of the bow and arrow between A.D. 400 and A.D. 600. This period is divided into the San Luis Rey I phase and San Luis Rey II phase. San Luis Rey I is characterized by the use of portable shaped or unshaped slab mutates, manos and pestles, and non-portable bedrock milling features. Cremations, bone awls, and stone and shell ornaments are also prominent in the material culture. Ceramic cooking and storage vessels, cremation urns, and polychrome pictographs augment the later San Luis Rey II assemblage (BFSA 2013a 2.0-17). The fluorescence of rock art likely appeared as the result of increased populations and sedentism. Flaked stone dart points are dominated by the Cottonwood Triangular series, but Desert Side-Notched and Dos Cabazas Serrated styles also occur (BFSA 2013a 2.0-17). Subsidence is thought to have focused on the utilization of acorns, a storable species that allowed for relative sedentism and increased population densities (BFSA 2013a 2.0-17).

C. General Ethnography Description

Ethnohistoric and ethnographic evidence indicates that three (3) Shoshonean-speaking groups occupied portions of Riverside County, including the Cahuilla, the Gabielino, and the Luiseño (BFSA 2013a 2.0-17). The geographic boundaries between these groups in prehistoric and proto-historic times is difficult to place, but the Project site is located well within the borders of ethnographic Luiseño territory (BFSA 2013a 2.0-17).

- Luiseño. The Luiseño were a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Range Mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present day San Juan Capistrano (BFSA 2013a 2.0-19). The Luiseño occupied sedentary villages, most often

located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching, as well as in areas that offered thermal and defensive protection. Inland groups occupied fishing and gathering sites along the coast that were used intensively from January to March when inland food resources were scarce. Most of the village would relocate to mountain oak groves to harvest acorns in October and November. The Luiseño remained at village sites for the remainder of the year, where food resources were within a days travel (BFSA 2013a 2.0-19-20). House structures were conical, partially subterranean, and thatched with reeds, brush, or bark (BFSA 2013a 2.0-21). Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wooden tip or a lithic point usually fashioned from locally available metavolcanic material or quartz. Throwing sticks were made out of wood. The Luiseño had a well-developed basket industry. Ceramic containers were shaped by paddle and anvil and fired in shallow open pits. Other utensils included wooden implements, steatite bowls, and ground stone manos, metates, mortars, and pestles. Personal adornment items were made from bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell.

- Cahuilla. At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the west, and the Santa Ana River to the north (BFSA 2013a 2.0-21). Cahuilla villages were typically permanent and located on low terraces within canyons and in proximity to water sources. Villages were occupied throughout the year; however during a several-week period in the Autumn, most of the village members relocated to mountain oak groves to take part in acorn harvesting (BFSA 2013a 2.0-22). Cahuilla houses were dome-shaped or rectangular thatched structures. Other structures within the village included sweathouses and graneries. The use of plant resources by the Cahuilla is well documented. Hunting implements included the bow and arrow, throwing sticks and clubs. Grinding tools used in food processing included manos, mutates, and wooden mortars. Baskets were made from rush, deer grass, and skunkbrush. Coiled-ware baskets were either flat bowl-shaped, deep, inverted cone-shaped, or rounded and flat-bottomed. Cahuilla pottery was made from thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes (BFSA 2013a 2.0-23).

- Gabrielino. The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange Counties, The southern extent of this culture is bounded by Aliso Creek, the eastern extent is located east of current day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several of the Channel Islands. Because of their access to a steatite source from Santa Catalina Island, the Gabrielino were among the wealthiest and most populous aboriginal groups in southern California. The Gabrielino traded their materials and

resources as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (BFSA 2013a 2.0-24). The Gabrielino lived in permanent villages and smaller resource-gathering camps at various times of the year depending on the seasonality of each resource. Permanent villages were located along rivers and streams, as well as sheltered areas along the coast (BFSA 2013a 2.0-24). Gabrielino houses were domed, circular structures made of thatched vegetation. Hunting implements included wooden clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. Other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, mutates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush, deer grass, and skunkbrush. Soapstone, or steatite, procured from the Santa Catalina quarries was used for making pipes, animal carvings, ritual objects, ornaments, and cooking objects (BFSA 2013a 2.0-25-26).

D. General Regional History Description

The historic background of the Project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations as well as expanding the knowledge of and access to new resources in the region. In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California and gradually expanded their use of the interior valley (Western Riverside County) for raising grain and cattle to support the missions. The San Gabriel Mission claimed lands in what are now Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey claimed land in what is now Lake Elsinore, Temecula, and Murrieta (BFSA 2013a 2.0-26). In the mid-to-late 1770's, Juan Batista de Anza described fertile valleys, lakes, and sub-desert areas as he passed through much of Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles. Before constructing Mission San Luis Rey in northern San Diego County, in 1797, Father Presidente Lausen, Father Norberto de Santiago, and Corporal Pedro Lisalde led an expedition form Mission San Juan Capistrano through southwestern Riverside County in search of a new mission site. While no missions were ever built in what would become Riverside County, many mission outposts were established in the early years of the nineteenth century which extended the missions' influence to the backcountry. Two of the mission outposts were located in San Jacinto and Temecula in Riverside County (BFSA 2013a 2.0-26-27).

Mexico gained independence in 1822 and desecularized the missions in 1832 signifying the end of the Mission Period. By this time, the missions owned some of the best and most fertile land in southern California and the new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. These land grants (ranchos) included Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potero, and San Jacinto Viejo, which were located in present-day Riverside County. Rancho Jurupa, which was given to Juan Bandini in 1838, was the first land grant located in present-

day Riverside County. These ranchos were all located in the valley environments typical of Western Riverside County (BFSA 2013a 2.0-27).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, leading to California becoming a state in 1880. These events generated a steady flow of settlers into the area. With completion of the transcontinental railroad in 1869, land speculators, developers, and colonists began to invest in southern California. The first colony to exist in Riverside County was known as the Riverside colony. Judge John Wesley North, an abolitionist from Tennessee, brought a group of associates and co-investors to southern California and founded Riverside on part of the Jurupa Rancho. A few years later, the navel orange was planted and found to be such a success that it quickly became the agricultural staple of the region (BFSA 2013a 2.0-28). In May of 1893, voters living within portions of San Bernardino County and San Diego County approved the formation of Riverside County. By the time of Riverside County's formation, due to the successful cultivation of the navel orange, Riverside had grown to become the wealthiest city per capita in the country (BFSA 2013a 2.0-28-29).

E. Prehistory and Historic Archeological Resources

As documented in *Technical Appendix D1*, the EIC archeological records search for a 1.0-mile radius around the Project area did not report any previously recorded sites within the Project site boundaries. However, nine (9) cultural resource locations have been recorded within a 1.0-mile radius of the Project area, including four (4) prehistoric sites and five (5) historic sites. Two of the prehistoric sites are large complexes of rock shelters, rock art, cupule features, and milling features. The cultural resource locations previously recorded within a 1.0-mile radius of the Project site are listed in Table 4.4-1, *Archaeological Sites Located within One-Mile of the Project Site*.

Table 4.4-1 Archaeological Sites Located within One-Mile of the Project Site

Site(s)	Description
RIV-530 and RIV-4206	Bedrock milling sites
P-33-11604 and P-33-15854	Historic irrigation elements
RIV-11,291	Historic grain mill foundations
RIV-8222	Historic agricultural structure ruins
RIV- 7649	Historic structure (formerly barracks)
RIV-12/4417/8235 and RIV-331	Prehistoric rock shelters, rock art, and bedrock milling features

Source: BFSA 2013a Table 4.1-1

In total, twenty-four (24) cultural resource studies have been conducted within a 1.0-mile radius of the Project area. The records search indicated that there was one previous cultural resource study

conducted within the Project site. The previous study did not identify the presence of cultural resources on the Project site (BFSA 2013a 4.0-1).

The Project site was used for agricultural production from approximately the 1950s to 2000. The eastern portion of the property (approximately 13.0 acres) is undeveloped land that was formerly used for the storage of modular units and storage containers. The developed, western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. Due to the Project site's prior and current development, the majority of the Project site is characterized by BFSA archeologists as disturbed (BFSA 2013a 4.0-2). No historic or prehistoric cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and it was concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the frequent and ongoing clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site (BFSA 2013a 5.0-1).

F. Paleontological Resources

According to the City of Moreno Valley General Plan Final EIR, the City of Moreno Valley contains sedimentary rock units with potential to contain significant nonrenewable paleontological (fossil) resources. These sedimentary units are referred to as the Mt. Eden Formation and the San Timoteo Formation (City of Moreno Valley 2006b 5.10-10). The Mt. Eden Formation is described as being primarily reddish sandstone and dark green and brown clay with local reddish fanglomerate and conglomerate. The age of the fossils contained in the Formation and the dark reddish brown coloration distinguish the Mt. Eden formation from the younger, green to gray, tan and red weathering of the San Temoteo Formation. Fossilized fauna include cricetine rodent, horse and proboscidean (extinct animals related to elephants) (City of Moreno Valley 2006b 5.10-10). The San Timoteo Formation is a widespread deposit of sands, gravels, and clays that extends northward from the foothills of the San Jacinto Mountains for a distance of nearly 20 miles. The San Timoteo Formation contains fossils of land animals and plant species, and represents sediments deposited from about 3.5 to 0.7 million years ago during Late Pliocene to middle Pleistocene time. The presence of non-marine fossils within a sequence of rocks spanning such a long time has led to several studies of the depositional environments and paleontology of the formation (California Department of Conservation 2002a).

According to Figure 5.10-3 of the Moreno Valley General Plan Final EIR (City of Moreno Valley 2006b 5.10-11), the Project area is characterized as having a "Low" potential for containing paleontological resource deposits. The General Plan Final EIR explains that this is because the Project site, as with most of the City of Moreno Valley, is covered with recent alluvium. These sediments overlie fossiliferous sedimentary units of the Mt. Eden Formation and the San Timoteo Formation. Excavation to depths normal for development generally would not penetrate recent

alluvial sediments to encounter fossiliferous deposits. Areas within the City that are thought to have the greatest potential for encountering paleontological resources occur in the hills in the east end of the City, in an area known as the "Badlands." The Project site is not located in this portion of the City.

Contrary to the Moreno Valley General Plan Final EIR, according to Figure OS-8 of the Riverside County Multipurpose Open Space Element, the Project area is categorized as having a High Potential/Sensitivity (High B) for paleontological resources (Riverside County 2003) which is based on the presence of geologic formations or mappable rock units that contain fossilized body elements, and trace fossils such as tracks, nests, and eggs. The category "High B" indicates that fossils are likely to be encountered at or below four (4) feet of depth, and may be impacted during excavation by construction activities. BFSA's records search on a nearby property concluded that the Holocene alluvium is considered to be too recently deposited to have the potential to contain fossil resources and is assigned a "low paleontological sensitivity." However, the older Pleistocene alluvial fan deposits have a high potential to contain significant nonrenewable paleontological resources and are assigned a "high paleontological resource sensitivity." Similar older Pleistocene sediments throughout the lowland (valley) areas of Riverside County and the Inland Empire have been reported to yield significant fossils of plants and extinct terrestrial mammals from the last Ice Age. The collections and records search report did not identify any known fossil localities from within 1.0-mile radius of the Project site, which includes the area for this Project site analyzed in this EIR (BFSA 2013b 1-2).

4.4.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to cultural resources if the Project OR any Project-related component would:

1. *Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5;*

2. *Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations, Section 15064.5;*

3. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or*

4. *Disturb any human remains, including those interred outside of formal cemeteries.*

4.4.3 IMPACT ANALYSIS

Threshold 1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?

No historic sites or historic resources are present on the Project site. The Project site was used for agricultural production from approximately the 1950s to 2000. The eastern portion of the Project site (approximately 13.0 acres) is undeveloped land that receives routine maintenance for fire fuel

management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building and a maintained detention basin surrounded by fencing. All existing structures on-site are of modern construction, do not contain any distinctive architectural features of historical importance, and are not associated with events or people that made significant contributions to the broad patterns of California's history and cultural heritage and, therefore, do not meet the definition of historical resources as defined by California Code of Regulations §15064.5. Therefore, implementation of the proposed Project has no potential to result in a substantial adverse change to any significant historic resource, because no such resources exist in the Project's ground disturbance area. No impact would occur.

Threshold 2: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations, Section 15064.5?

BFSA archaeologist conducted a California Historic Resources Information System (CHRIS) records search at the Eastern Information Center (EIC), at the University of California, Riverside in Riverside, CA and an intensive pedestrian survey on the undeveloped, eastern portion of the Project site on December 2, 2013. In addition, all areas in the developed western portion of the property that were not covered in parking lots and existing buildings were visually inspected by BFSA investigators. No archaeological cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and BFSA concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the ongoing clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site (BFSA 2013a 5.0-1). Regardless, if significant resources as defined in California Code of Regulations §15064.5 are unearthed during Project-related construction activities, they could be significantly impacted if not appropriately treated. The Project's potential to impact previously undiscovered prehistoric archaeological resources during its construction process, which could result in an adverse change in the significance of the resources pursuant to California Code of Regulations §15064.5, is a potentially significant impact for which mitigation would be required.

Threshold 3: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

No unique geologic features are present on the Project site. According to Figure 5.10-3 of the Moreno Valley General Plan Final EIR (City of Moreno Valley 2006b 5.10-11), the Project area is characterized as having a "Low" potential for containing paleontological resource deposits. Contrary to the Moreno Valley General Plan Final EIR, according to Figure OS-8 of the Riverside County Multipurpose Open Space Element, the Project area is categorized as having a High Potential/Sensitivity (High B) for paleontological resources (Riverside County 2003). The category "High B" indicates that fossils are likely to be encountered at or below four (4) feet of depth. BFSA's

records search on a nearby project (contained in *Technical Appendix D2*) concluded that the Holocene alluvium, present on the Project site is considered to be too recently deposited to have the potential to contain fossil resources and is assigned a "low paleontological sensitivity." However, the older Pleistocene alluvial fan deposits have a high potential to contain significant nonrenewable paleontological resources and are assigned a "high paleontological resource sensitivity." Similar older Pleistocene sediments throughout the lowland (valley) areas of Riverside County and the Inland Empire have been reported to yield significant fossils of plants and extinct terrestrial mammals from the last Ice Age. The collections and records search report, however, did not identify any known fossil localities from within 1.0-mile radius of the Project site, which includes the area for this Project site analyzed in this EIR (BFSA 2013b 1-2).

As previously summarized in EIR Section 4.5, *Geology and Soils*, the Project site is generally underlain by pavements, aggregate base, artificial fill, and alluvium. No paleontological resources have been identified on the Project site and the likelihood of resources to be encountered above four (4) feet is low. The proposed Project would result in ground disturbing activities to depths of no more than four (4) feet, with a deeper excavation of approximately nine (9) feet for the two detention basins.

Because of the high paleontological sensitivity of the older alluvial deposits across the Project site and beneath the thin veneer of younger alluvium, the potential exists to uncover paleontological resources during ground disturbing activities to construct the detention basins. If such resources were discovered on-site and destroyed during construction activities, a significant impact would occur. Therefore, mitigation would be required to reduce the Project's potential impact to paleontological resources below a level of significance.

Threshold 4: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site by BFSA in 2013 did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code, §7050.5 "Disturbance of Human Remains." According to §7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code §5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native

American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code §5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. With mandatory compliance to California Health and Safety Code §7050.5 and Public Resources Code §5097.98, the Project would result in less-than-significant impacts to human remains.

Although impacts to human remains would be less than significant, this EIR recommends mitigation to ensure compliance with California Health and Safety Code §7050.5 and California Public Resources Code §5097.98 (refer to Subsection 4.4.6, below).

4.4.4 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers redevelopment of the Project site in conjunction with other development projects in the vicinity of the Project site resulting from full General Plan buildout in the City of Moreno Valley and other jurisdictions in the region identified in Subsection 4.0.2.

Record searches and field surveys of the Project area indicate the absence of significant historical sites and resources on the Project site; therefore, the Project has no potential to contribute towards a significant cumulative impact to historical sites and resources.

No prehistoric archaeological resources were identified on the site during field investigations conducted in 2013. A records search by BFSA indicated that no prehistoric resources were previously recorded on the Project site. No historic or prehistoric cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and it was concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the recent clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site. As discussed above under the analysis for Threshold 2, the Project site does not contain any important, known archeological resources and is located within an area that has a low potential for such resources to be discovered. In the unlikely event that such resources are buried beneath the surface of the Project site and/or off-site improvement area which are unearthed and not properly treated, the Project has the potential to significantly impact archeological resources. Other projects within the traditional Tribal Use Area of the Luiseño and Cahuilla tribes would similarly have the potential to impact unknown, subsurface prehistoric archaeological resources during ground-

disturbing activities. Therefore, the Project's potential to contribute a cumulatively considerable impact to subsurface archaeological deposits is a potentially significant impact for which mitigation would be required.

As indicated above under the discussion of Threshold 3, no paleontological resources have been identified on the Project site and the likelihood of resources to be encountered above four (4) feet is low. The proposed Project would result in ground disturbing activities to depths of no more than four (4) feet, with a deeper excavation of approximately nine (9) feet for the two detention basins. Because of the high paleontological sensitivity of the older alluvial deposits across the Project site and beneath the thin veneer of younger alluvium, the potential exists to uncover paleontological resources during ground disturbing activities associated with excavating the detention basins. Other development projects in the cumulative study area with similar geologic characteristics as the Project would have a similar potential to uncover unique paleontological resources. Therefore, the Project's potential to result in a cumulatively considerable impact to a unique paleontological resource is a potentially significant impact for which mitigation would be required.

Finally, due to mandatory compliance required of all ground-disturbing construction activities with the provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq., human remains would be assured proper treatment if encountered. Because other development projects within the City of Moreno Valley and elsewhere in the region similarly would be required to comply with state law, any cumulative impact associated with human remains discovery would be reduced to below a level of significance.

4.4.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: No Impact. The Project would not impact a historic resource. No historic sites are present on the Project site or in its off-site improvement area; therefore, no historic sites could be altered or destroyed by construction or operation of the proposed Project.

Threshold 2: Significant Direct and Cumulative Impact. Implementation of the Project has the potential, however unlikely, to unearth and adversely impact archaeological resources that may be buried beneath the ground surface during Project construction activities.

Threshold 3: Significant Direct and Cumulative Impact. Implementation of the Project has the potential, however unlikely, to unearth and adversely impact paleontological resources that may be buried beneath the ground surface during excavation of the detention basins.

Threshold 4: Less-than-Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 and California Public Resources Code §5097 et. seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.

4.4.6 MITIGATION

The following mitigation measures are recommended to reduce the Project's potential to result in significant to archeological and paleontological resources during construction-related activities.

Archaeological Resources

MM 4.4-1 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.

MM 4.4-2 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.

MM 4.4-3 During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply.

MM 4.4-4 If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.

Paleontological Resources

MM 4.4-5 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

MM 4.4-6 During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.

MM 4.4-7 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.

MM 4.4-8 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit..

Although impacts to human remains would be less than significant, the following mitigation measure is recommended to ensure compliance with California Health and Safety Code §7050.5 and California Public Resources Code §5097.98.

MM 4.4-9 Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors.

a) If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County

Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.

4.4.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold 2: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.4-1 through MM 4.4-4 would ensure that any significant archaeological resource uncovered on the Project site would be properly treated and mitigated to a level of less than significant. As such, impacts would be less-than-significant with mitigation.

Threshold 3: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.4-5 through MM 4.4-9 would ensure that any significant paleontological resource uncovered on the Project site during excavation activities in older Pleistocene alluvial fan deposits would be properly treated and mitigated to a level of less than significant. As such, impacts would be less-than-significant with mitigation.

4.5 GEOLOGY AND SOILS

This subsection assesses the existing surface and subsurface geologic conditions and features of the Project site and determines the potential for impacts associated with these features. The analysis is based in part on information contained in the report titled "Geotechnical Investigation and Liquefaction Evaluation Proposed Dorado Logistics Center NEC of Perris Boulevard and Modular Way Moreno Valley, California," prepared by Southern California Geotechnical, Inc. and dated October 3, 2012. The geotechnical investigation is provided as *Technical Appendix E1* to this EIR. In addition, information used to support the analysis in this subsection was obtained from the Geology and Soils section (Section 5.6, pp. 5.6-1 – 5.6-12) of the certified Final Program EIR prepared for the City of Moreno Valley General Plan (SCH No. 2000091075), dated July 2006 (Moreno Valley 2006b).

4.5.1 EXISTING CONDITIONS

A. Regional Geology

The Project site is located within the Peninsular Range Geomorphic Province, a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded on the east by the Colorado Desert. The Peninsular Range is characterized by steep, elongated ranges and valleys that generally trend northwesterly (California Department of Conservation 2002). More specifically, the Project site is situated within the Perris Block unit, which is mass of granitic rock. Thin sedimentary, metamorphic, and volcanic units locally mantle the bedrock with alluvial deposits filling in the lower valley and drainage areas. The Perris Block is bounded by the San Jacinto fault zone to the northeast, the Elsinore fault zone to the southwest, and the Santa Ana River (City of Moreno Valley 2006b 5.6).

B. Geotechnical Conditions

Southern California Geotechnical, Inc. performed visual site reconnaissance, subsurface exploration, field and laboratory testing, and a geotechnical engineering analysis on the Project site. The developed, western portion of the site generally is underlain with artificial fill materials extending to depths of approximately nine (9) feet, with native alluvial soils located underneath. The undeveloped, eastern portion of the Project site generally is underlain by native alluvial soil. The geotechnical conditions at the time of subsurface exploration are documented below.

❑ Pavements

Pavements were encountered at the ground surface in three (3) of the borings obtained by Southern California Geotechnical, Inc. The pavements consisted of approximately five (5) to seven (7) inches of Portland cement concrete with no discernable underlying aggregate base (Southern California Geotechnical, Inc. 2012 7).

- **Aggregate Base**

A layer of aggregate base approximately two (2) to three (3) inches thick was encountered in the center of the Project site, within the parking/storage portion of the Eldorado Stone facility (Southern California Geotechnical, Inc. 2012 7).

- **Artificial Fill**

Artificial fill soils were encountered beneath existing pavements and aggregate base areas within the developed, western portion of the site. Southern California Geotechnical Inc., observed the fill soils extending to depths of approximately 2.5 to nine (9) feet, and consisting of medium stiff to very stiff, mottled, sandy clays and medium dense sandy silts (Southern California Geotechnical, Inc. 2012 7).

- **Alluvium**

Southern California Geotechnical Inc., encountered native alluvial soils extending to the maximum explored depth of 50 feet below existing site grades beneath the entirety of the Project site. Native alluvial soils were encountered beneath the artificial fills, aggregate base, and existing pavement in the developed portion of the Project site, and at the surface in the vacant, eastern portion of the site. The alluvial soils consist of interbeded layers of stiff to hard clayey silts, sandy clays, and loose to medium dense sandy silts, silty sands, and clayey sands (Southern California Geotechnical, Inc. 2012 8).

C. Surface Water and Groundwater

Southern California Geotechnical Inc. did not observe any surface water on the Project site; however, free water was encountered in one (1) subsurface boring on the Project site at a depth of 25 feet. Based on the observed water level reading and the moisture content of recovered soil samples, Southern California Geotechnical, Inc. determined the static groundwater table existed at a depth of approximately 25 feet across the Project site at the time of subsurface exploration (Southern California Geotechnical, Inc. 2012 8).

D. Site Topography

The majority of the Project site slopes gently towards the center of the property where there is a constructed storm water detention basin. The eastern portion of the Project site slopes gently to the southeast at a gradient of less than one percent. The topographic low point on the property is at the bottom of the detention basin located in the center of the property at approximately 1,468 feet AMSL. There are no unique topographic features or steep natural slopes present on the property. The earthen storm water detention basin in the center of the Project site contains the only manufactured slopes on the Project site. Figure 3-3, *Topographic Map*, illustrates the Project site's existing topographic conditions.

E. Seismic Hazards

The geologic structure of the Southern California area is dominated by northwest-trending faults associated with the San Andreas Fault system. The San Andreas Fault system includes several major branches, including the San Jacinto and Elsinore faults, as well as numerous minor branches. The San Andreas, Elsinore, and San Jacinto faults are known to have ruptured the ground surface during historic seismic events. The Project site is located in an area that is subject to strong ground motions due to earthquakes (Southern California Geotechnical, Inc. 2012 12). Figure 4.5-1, *Earthquake Fault Zones*, depicts the known active earthquake faults within the vicinity of the Project site. An active fault is defined by the California Geological Survey as one which has experienced surface displacement within the Holocene Epoch (roughly the last 11,000 years). As depicted on Figure 4.5-1, the nearest known active fault is the San Jacinto Valley section of the San Jacinto Fault Zone (Casa Loma Fault), which is located 6.2 miles east of the Project site (City of Moreno Valley Final Program EIR Figure 5.6-2). No active or potentially active faults occur on the Project site, and the site does not lie within an identified Alquist-Priolo Earthquake Fault Zone or within a City-designated fault zone (City of Moreno Valley 2006b 5.6-4; Southern California Geotechnical, Inc. 2012 12).

Secondary hazards associated with ground shaking associated with earthquakes include surface rupture, ground failure, unstable soils and slopes (liquefaction). Each of these hazards is briefly described below.

❑ Fault Rupture

Fault rupture can occur along pre-existing, known active fault traces; however, fault rupture also can splay from known active faults or rupture along unidentified fault traces. As shown on Figure 4.5-1, no known faults are mapped trending through or toward the site. Therefore, the potential for significant fault rupture on the Project site is low (Southern California Geotechnical Inc. 2012 12).

❑ Liquefaction

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions, which causes the soil to behave as a viscous liquid. Liquefaction is generally limited to the upper 50 feet of subsurface soils. Research and historical data indicate that loose granular soils below a near-surface groundwater table are most susceptible to liquefaction, while the stability of most clayey material is not adversely affected by vibratory motion. Therefore, in order for the potential effects of liquefaction to be manifested at the ground surface, soils generally must be granular, loose to medium dense, relatively saturated near the ground surface and subjected to a sufficient magnitude and duration of ground shaking. According to the Moreno Valley General Plan FEIR Figure 5.6-2, *Seismic Hazards*, the Project site is not located within a potential liquefaction zone (City of Moreno Valley 2006b Figure 5.6-2). In addition, Southern California Geotechnical Inc. determined that the subsurface conditions (very stiff sandy clays) encountered at boring locations are not susceptible to liquefaction (Southern California Geotechnical, Inc. 2012 14).

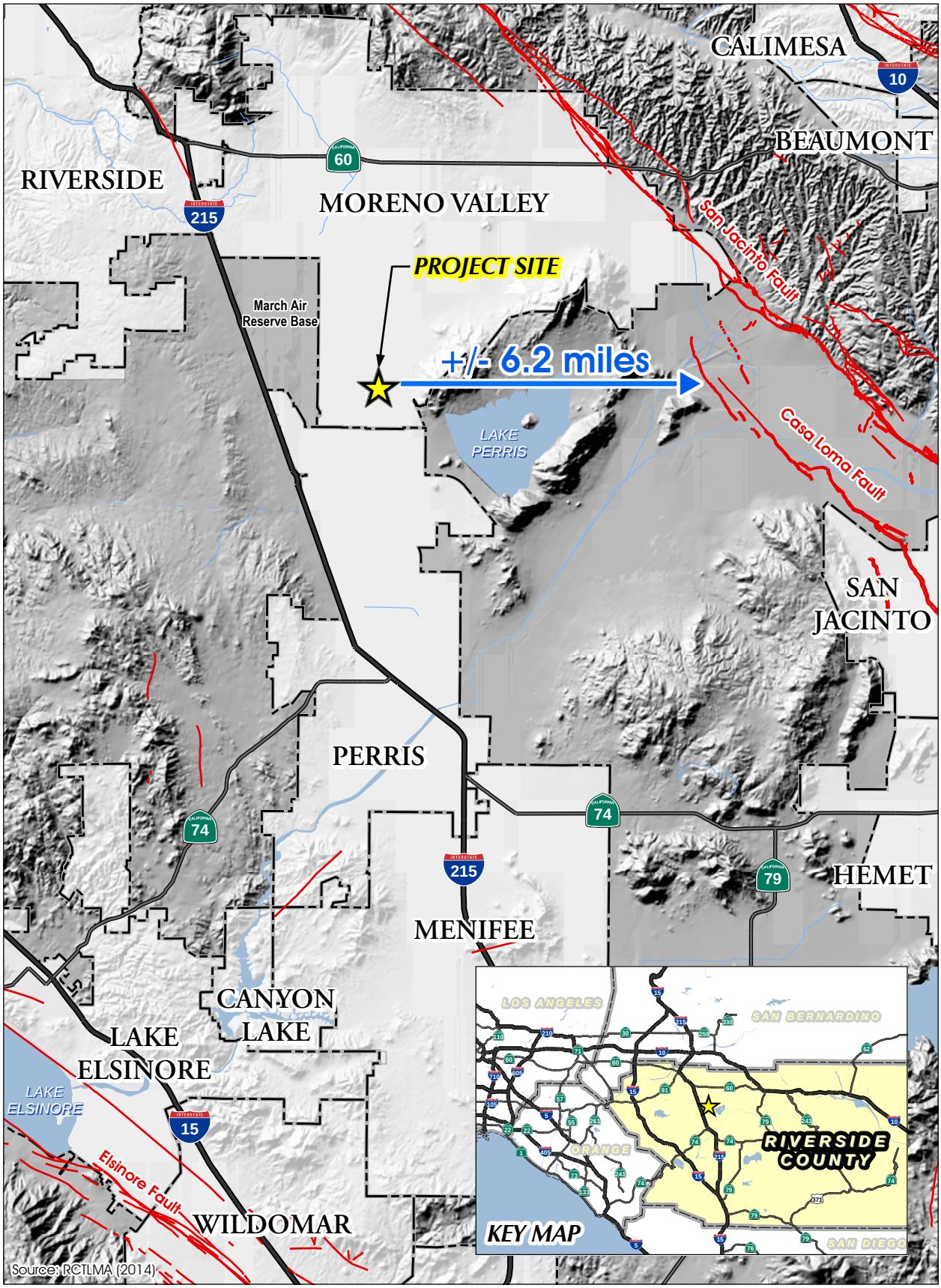


Figure 4.5-1

Earthquake Fault Zones

❑ Unstable Soils and Slopes

The Project site is generally flat and does not contain any steep natural slopes or rock outcroppings. The Project site does contain one storm water detention basin with earthen, manufactured slopes; however, these slopes are not substantial (*i.e.*, less than eight (8) feet in height) and are engineered to maximize stability during seismic events. As such, the site is not susceptible to seismically induced landslides and rockfalls.

F. Slope and Soil Instability Hazards

❑ Soil Erosion

Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Additionally, the slope gradient on which a given soil is located also contributes to the soil's resistance to erosive forces. Because water is able to flow faster down steeper gradients, the steeper the slope on which a given soil is located, the more readily it will erode. The soils series on the Project site range from fair to good and poor to fair stability, which corresponds to a minimal to significant potential for water erosion (USDA 2014, City of Moreno Valley 2006b 5.6-3).

Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. It mostly affects dry, sandy soils in flat, bare areas, but wind erosion may occur wherever soil is loose, dry, and finely granulated. Under existing conditions, the developed western portion of the Project site has no potential to contribute windblown soil and sand because this portion of the site does not contain exposed topsoil. Under existing conditions, the eastern, undeveloped portion of the Project site has the potential to contribute windblown soil and sand because this portion of the Project site does not contain vegetative cover; this eastern portion of the site is routinely disced and contains areas of loose and dry topsoil.

❑ Settlement Potential

Laboratory testing conducted by Southern Geotechnical, Inc. indicates that the near surface artificial fill soils within the developed, western portion of the Project site possess a low potential for settlement, as these soils were placed as engineered, compacted fill (Southern California Geotechnical Inc. 2012 pp. 14-15). The native alluvial soils encountered in the eastern portion of the Project site possess physical properties that make these soils susceptible to settlement (Southern California Geotechnical Inc. 2012 15).

❑ Shrinkage/Subsidence Potential

Subsidence is a gradual settling or sudden sinking of the ground surface. The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Laboratory testing on soil samples taken from the site by Southern California Geotechnical, Inc. indicate that removal and re-compaction of the near surface soils is estimated to

result in an average shrinkage of 12 to 16 percent (Southern California Geotechnical, Inc. 2012 16). Therefore, the subject property has the potential for shrinkage and subsidence.

❑ Soil Expansion Potential

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. Based on expansion index testing on soil samples taken from the Project site, Southern California Geotechnical, Inc. determined that the site's soils consisting of silty clays, clayey silts, and sandy clays have a low to medium expansion potential (Southern California Geotechnical, Inc. 2012 15).

❑ Landslide Potential

The Project site and immediately surrounding properties are flat to gently sloping and contain no large and/or steep natural or manufactured slopes; thus, there is no potential for landslides to occur on or immediately adjacent to the site.

G. Applicable Environmental Regulations

❑ Alquist-Priolo Earthquake Fault Zoning Act (CA Pub. Res. Code §2621 et Seq.)

The Alquist-Priolo Special Studies Zone Act was signed into law in 1972 and renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994. The primary purpose of the Alquist-Priolo Act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault.

❑ Seismic Hazards Mapping Act (CA Pub. Res. Code §2690 et Seq.)

The Seismic Hazards Mapping Act of 1990 is a statewide seismic hazard mapping and technical advisory program in California to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes. The California Geologic Survey (CGS) is the principal State implementing agency which has mapped out seismic zones requiring the completion of site-specific geotechnical investigations prior to construction of a project.

❑ California Building Standards Code, Title 24

The California Building Standards Code (CBSC) (California Code of Regulations, Title 24) is the standard from which California buildings derive appropriate building design standards related to building foundation support, protection from seismic ground motion, and soil and slope instability. The International Building Code (IBC) used by the International Code Council establishes design and construction standards for buildings and facilities. The California Building Code (CBC, California Code of Regulations, Title 24, Part 2) component of the CBSC incorporates the IBC as well as other uniform codes into its code standards.

❑ South Coast Air Quality Management District, Rule 403

The South Coast Air Quality Management District (SCAQMD) is responsible for enforcing air pollution control measures in the South Coast Air Basin, within which the Project site is located. Rule 403 addresses blowing dust from construction sites and is applicable to the Project due to its potential to result in wind erosion during grading and construction activities.

❑ Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)) is the principal federal statute that addresses water resources. The provision of the CWA applicable to geology and soils is CWA Section 402, which applies to all construction sites of over one acre in size and, in part, serves to control the potential impacts of erosion. CWA Section 402 authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit. In addition, the NPDES program requires Municipal Separate Storm Sewer System (MS4) permits to regulate storm water discharges from municipal sewer systems.

H. Applicable Local Ordinances

❑ Moreno Valley Municipal Code §9.08.160

In cases where a proposed project falls within an earthquake fault zone as shown on the maps prepared by the State Geologist, Municipal Code §9.08.160 requires compliance with all of the provisions of the Alquist-Priolo Act and the adopted policies and criteria of this ordinance.

❑ Moreno Valley Municipal Code §8.21.150

Municipal Code §8.21.150 establishes standards and requirements for grading permits. This ordinance requires a soils engineering and engineering geology report (geotechnical report) be prepared for all grading projects. Recommendations contained in the approved geotechnical report are required to be incorporated into the grading plans and specifications and shall become conditions of the grading permit for the Project.

❑ Moreno Valley Municipal Code §8.21.160

Municipal Code §8.21.160 requires that all earth moving or grading operations requiring a grading permit also have an approved erosion control plan. The erosion control plan is required to be submitted to the City Engineer for approval concurrent with the grading permit and/or grading plan submittal. The erosion control plan shall include details of protective measures necessary to protect adjoining public or private property from damage by erosion, flooding, or mud and/or debris deposits which may originate from the site or result from proposed grading operations.

❑ Moreno Valley Municipal Code §8.23

Municipal Code §8.23 requires that all projects comply with California Building Codes and the International Building Codes. The City's Building and Safety Division is responsible for providing technical expertise in reviewing and enforcing the Building Code. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public. The Building Code contains minimum baseline standards to guard against unsafe development.

4.5.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to geology and soils if the Project or any Project-related component would:

1. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:*
    i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;*
    ii. *Strong seismic ground shaking;*
    iii. *Seismic-related ground failure, including liquefaction; or*
    iv. *Landslides.*
2. *Result in substantial soil erosion or the loss of topsoil;*
3. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*
4. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or*
5. *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.*

4.5.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:***
	i. ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;***
	ii. ***Strong seismic ground shaking;***
	iii. ***Seismic-related ground failure, including liquefaction; or***
	iv. ***Landslides?***

❑ Rupture of Known Earthquake Fault

There are no known active or potentially active faults on the Project site or trending toward the Project site. In addition, the Project site is not located within a mapped Alquist-Priolo Earthquake Fault Zone (Southern California Geotechnical, Inc. 2012 12). The closest mapped active fault to the Project site is located approximately 6.2 miles east of the Project site (Casa Loma Fault, City of Moreno Valley Final Program EIR Figure 5.6-2). There are no other conditions on-site or in the surrounding area that provide evidence of any other faults that could impact the Project site. Accordingly, the proposed Project would not expose people or structures to potential adverse effects, including the risk of loss, injury or death, involving the rupture of a known earthquake fault. No impact would occur and mitigation is not required.

❑ Strong Seismic Ground Shaking

The Project site is located in a seismically active area of Southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the Southern California area. As a mandatory condition of Project approval, the Project would be required to construct proposed structures in accordance with the California Building Code (CBC), also known as California Code of Regulations (CCR), Title 24 and the City Building Code. The CBC and City Building Code are designed to preclude significant adverse effects associated with strong seismic ground shaking. In addition, in accordance with Mitigation Measure 4.5-2 and required by code, the Project will be conditioned to comply with the site-specific ground preparation and construction recommendations contained in the geotechnical report prepared for the Project. Refer to *Technical Appendix E1*. Mandatory compliance with these standard and site-specific design and construction measures would ensure than the Project has a less-than-significant impact associated with seismically induced ground shaking. As such, the Project would not expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking.

Although impacts associated with seismic shaking would be less than significant, this EIR recommends mitigation to ensure compliance with the California Code of Regulations, Title 24 and

the site-specific design recommendations contained within the Project's geotechnical report (refer to Subsection 4.5.6, below).

❑ Seismic-Related Ground Failure

Southern Geotechnical Inc. determined that the subsurface soil conditions at the Project site are not susceptible to liquefaction (Southern California Geotechnical, Inc. 2012 14). Furthermore, the proposed Project is required to be designed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBC and City Building Code. Also, the Project would be required to comply with the site-specific grading and construction recommendations contained within the Project's geotechnical report (pursuant to the City's conditions of approval), which are anticipated to further reduce the risk of seismic-related ground failure. As such, the Project would result in less-than-significant impacts associated with seismic-related ground failure and/or liquefaction hazards.

Although impacts associated with seismic-related ground failure would be less than significant, this EIR recommends mitigation to ensure that the Project would be implemented in accordance with the recommendations included in the Project's geotechnical report (refer to Subsection 4.5.6, below).

❑ Landslides

The Project site is relatively flat, as is the surrounding area. There are no hillsides or steep slopes on the Project site or in the immediate vicinity of the site. Accordingly, the Project site is located within an area having low potential for landslides and development on the subject property would not be exposed landslide risks. The Project would not result in the creation of any new on-site slopes, with the exception of the approximate 9-foot manufactured slopes around the perimeter of the proposed water quality/detention basins with a maximum incline of 3:1; therefore, these slopes would not contain a significant slope and would be engineered to maximize stability so as to not pose a threat to future site workers or the proposed building on-site. As such, the Project would result in less-than-significant impacts associated with landslides and mitigation is not required.

Threshold 2: Would the Project result in substantial soil erosion or the loss of topsoil?

Development of the Project site would disturb the subject property during grading and construction and expose underlying soils, which would increase erosion susceptibility. In the long-term, development of the Project site would introduce additional impervious surfaces and landscaping on the Project site, thereby reducing the potential for erosion and loss of topsoil.

❑ Temporary Construction-Related Activities

Under existing conditions, the western portion of the Project site is developed with industrial land uses and does not contain exposed soils subject to erosion; however, the undeveloped, eastern portion of Project site is subject to some wind and water erosion under existing conditions, due to routine weed abatement activities which regularly remove vegetative cover and disturb on-site soils.

Proposed demolition, grading, and construction activities on the western portion of the Project site would expose underlying soils beneath the existing Eldorado Stone facility; proposed grading and construction activities on the eastern portion of the site would continue to temporarily expose underlying soils on this portion of the property. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing surface cover and vegetation and exposure of these erodible materials to wind and water. Based on the foregoing, the Project site would be susceptible to erosion during the construction phase of the Project.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. The City's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measures (*i.e.*, Best Management Practices) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges during construction. In addition, the Project would be required to comply with §8.21.160 of the City's Municipal Code during all grading and construction activities involving the movement or exposure of earth materials. Municipal Code §8.21.160 establishes requirements for the control of erosion during construction (including wind erosion). Further, as described previously in EIR Subsection 4.2, *Air Quality*, the Project would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. With mandatory compliance to the erosion control measures noted in the Project's SWPPP, as well as applicable regulatory requirements, the potential for substantial water and/or wind erosion during Project construction would be less than significant.

Although the Project would result in less-than-significant impacts to soil erosion during construction, this EIR recommends mitigation to ensure compliance with regulatory permitting requirements and minimize the potential for erosion at the Project site during temporary construction activities (refer to Subsection 4.5.6, below).

❑ Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Implementation of the Project would result in less long-term erosion and loss of topsoil than occurs under the site's existing conditions.

The City's MS4 NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Project-specific Water Quality Management Plan (WQMP). The WQMP (refer to *Technical Appendix E2*) identifies an effective combination of erosion control and sediment control measures (*i.e.*, Best Management Practices) to reduce or eliminate discharge to surface water from

storm water and non-storm water discharges. The WQMP for the Project requires post-construction measures to ensure on-going erosion protection. Compliance with the WQMP would be required as a condition of Project approval and long-term maintenance of on-site water quality features is required. Therefore, implementation of the proposed Project would not result in substantial soil erosion during long-term operational activities; impacts would be less than significant.

Although long-term operation of the Project would result in less-than-significant soil erosion impacts, this EIR recommends mitigation to ensure compliance with regulatory permitting requirements and minimize the potential for erosion at the Project site during long-term operational activities (refer to Subsection 4.5.6, below).

Threshold 3: ***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

The Project site is flat and gently sloping and contains no substantial natural or man-made slopes. There is no evidence of on-site landslides on or near the Project site, nor are there any exposed boulders that could result in rock fall hazards. Slopes constructed as part of the Project are limited to the approximate 9-foot manufactured slopes along the perimeter of the proposed water quality/detention basins, which would be engineered for long term stability and would be required to comply with the site-specific recommendations contained within the Project's geotechnical reports. Accordingly, the Project would result in less-than-significant impacts associated with landslides and rock fall hazards..

Laboratory testing conducted by Southern Geotechnical, Inc. indicates that the near surface alluvial soils on the Project site have the potential for subsidence and collapse (Southern California Geotechnical Inc. 2012 15). However, the Project's geotechnical report indicates that the property's subsidence and collapse potential would be reduced to less-than-significant levels through removal of undocumented fill soils and compressible native alluvium down to competent materials and replacement with properly compacted fill, which is included as a recommendation in the Project's geotechnical report. Refer to *Technical Appendix E1*. The proposed Project would be required to incorporate the recommendations contained within *Technical Appendix E1* into the grading plan for the Project through standard conditions of approval. As such, implementation of the Project would result in less-than-significant impacts associated with soil subsidence and collapse. Although potential impacts associated with soil subsidence and collapse would be less than significant, Mitigation Measure 4.5-2 has nonetheless been identified out an abundance of caution to ensure compliance with the recommendations of the site-specific geotechnical report.

Lateral spreading is primarily associated with liquefaction hazards, and occurs when the ground slides on a buried liquefied layer, potentially resulting in damage to structures placed above such layers. As noted above under the discussion of Threshold 1, the potential for liquefaction at the site is considered low based on a site-specific analysis conducted by Southern California Geotechnical,

Inc. Similarly, and based on the findings of the site-specific geotechnical report, the potential for lateral spreading on the Project site would be low and thus result in less-than-significant impacts.

Threshold 4: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Note: Appendix G of the CEQA Guidelines references Table 18-1-B of the 1994 Uniform Building Code (UBC). This Table no longer exists. The adopted 2001 California Building Code included a "Classification of Expansive Soil" that correlated an expansion index with the potential for soil expansion. The subsequent updates to the California Building Code (2007 and 2010), contained information on expansive soils, but no longer included a reference to Table 18-1-B. The Building Code currently in effect, the 2013 CBC, references ASTM D-4829, a standard procedure for testing and evaluating the expansion index (or expansion potential) of soils established by ASTM International, which was formerly known as the American Society for Testing and Materials (ASTM).

As documented in the Project's geotechnical report contained as *Technical Appendix E1*, the Project site contains soils with "low" to "medium" expansion potential. With mandatory implementation of standard building requirements, including the requirements of the CBC and City Building Code, and the site-specific grading and construction recommendations contained within the Project's geotechnical report, on-site soils would be adequately stabilized to accommodate the proposed development. Accordingly, implementation of the proposed Project would result in less-than-significant impacts associated with expansive soils.

Although impacts associated with expansive soils would be less than significant, this EIR recommends mitigation to ensure compliance with the Project's geotechnical report and applicable regulatory requirements (refer to Subsection 4.5.7, below).

Threshold 5: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project does not propose the use of septic tanks or alternative waste water disposal systems. The Project would install domestic sewer infrastructure and connect to the EMWD's existing sewer conveyance and treatment system. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur and mitigation is not required.

4.5.4 CUMULATIVE IMPACT ANALYSIS

As noted in the foregoing analysis of the Project's direct impacts, all potential Project-specific impacts related to geology and soils would be below the thresholds of significance identified in Subsection 4.5.3 through conformance as part of the Project's design and conformance with the

geotechnical recommendations contained within the Project geotechnical report (*Technical Appendix E1*) and compliance with standard regulatory requirements.

With exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, issues including fault rupture, seismic ground shaking, liquefaction, landslides, and expansive soils would involve effects to (and not from) the proposed development, and are specific to on-site conditions. Accordingly, addressing these potential hazards for the development proposed on the Project site have no relationship to, or impact on, off-site areas. Due to the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties.

As discussed under Threshold 2, during both near-term construction and long-term operation, measures would be incorporated into the Project's design to ensure that substantial erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with SWPPPs and WQMPs. All projects in the cumulative study area also would be required to comply with SCAQMD Rule 403 and grading requirements of the local governing body (i.e. City Municipal Code §8.21.160), which would preclude wind-related erosion hazards during construction. Project-level mitigation is intended to ensure compliance with these codes and regulations; other development projects within the cumulative study area also would be required to comply with these applicable building codes. Therefore, because the Project would result in less than significant erosion impacts, and because other projects within the cumulative study area would be subject to similar requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant and the Project's contribution would be less than cumulatively considerable.

4.5.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Less-than-Significant Impact. The Project would not expose people or structures to substantial adverse seismic risks. There are no known active or potentially active faults on the Project site or trending toward the Project site. As with all properties within the Southern California region, the Project site is subject to seismic ground shaking associated with earthquakes. However, mandatory compliance with local and state ordinances and building codes would ensure that development is built as required to attenuate the risk to life or property to less than significant levels. The risk of liquefaction is low. The site would be designed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBC and City Building Code, as well as the site-specific recommendations contained within the Project's geotechnical report, which are anticipated to further reduce the risk of seismic-related ground failure. As such, impacts associated with seismic-related ground failure and/or liquefaction hazards would be less than significant. There is no risk of landslide.

Threshold 2: Less-than-Significant Impact. The Project would prepare and implement a SWPPP and WQMP, and also would be required to comply with the provisions of the City's MS4 NPDES Municipal Stormwater Permit, to minimize the potential for substantial waterborne erosion at the Project site during temporary near-term construction activities and long-term operational activities. Additionally, the Project would be required to comply with City Municipal Code §8.21.160 and SCAQMD Rule 403 to preclude substantial wind erosion.

Threshold 3: Less-than-Significant Impact. There is no potential for the Project to cause rockfalls, landslides, or lateral spreading. Soils on the site have the potential for collapse and subsidence; however, potential adverse effects associated with such conditions would be reduced to less-than-significant levels with mandatory compliance to the recommendations provided within the Project's geotechnical study, including requirements to remove and recompact areas where unstable soil conditions exist.

Threshold 4: Less than Significant Impact. The soils on the Project site have a low to medium expansion potential under existing conditions. Potential adverse effects associated with expansive soils would be reduced to less-than-significant levels with mandatory compliance with the recommendations provided within the Project geotechnical study, including requirements to remove and recompact areas where such unsuitable soil conditions exist.

Threshold 5: No Impact. The Project would not install septic tanks or alternative wastewater disposal systems. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

4.5.6 MITIGATION

Although impacts associated with seismic ground shaking would be less than significant, mitigation measures below are recommended to ensure that the Project complies with standard regulatory requirements and site-specific design recommendations to minimize potential hazards associated with seismic events.

4.5-1 Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.

a. Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.

4.5-2 Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building

specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.

Although the Project would not result in substantial soil erosion, the mitigation measures below are recommended to ensure that the Project complies with standards regulatory permitting requirements to minimize the potential for soil erosion:

4.5-3 Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.

4.5-4 Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

4.5-5 Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

4.6 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a report prepared by Urban Crossroads, Inc. titled "Modular Logistics Center Greenhouse Gas Analysis," dated September 26, 2014, and included as *Technical Appendix F* to this EIR. The technical report and analysis in this subsection assess the proposed Project's potential to generate greenhouse gas emissions that could contribute to global climate change and its associated environmental effects.

4.6.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

Global climate change (GCC) refers to the change in average meteorological conditions on the Earth with respect to temperature, wind patterns, precipitation, and storms. Debate exists within the scientific community regarding the extent to which GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred naturally over the course of thousands or millions of years and that these historical changes to the Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, other scientists believe that the climate shift taking place since approximately year 1900 is occurring at a quicker rate and magnitude than in the past as a result of human activity and industrialization (Urban Crossroads 2014c 10).

Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases (GHGs) in the Earth's atmosphere. These gases include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), and fluorinated gases. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. These gases that trap heat in the atmosphere are referred to collectively in this EIR as GHGs, which are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural GHG effect, the Earth's average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently (Urban Crossroads 2014c pp. 10-11).

It is not possible for an individual project like the proposed Project to generate enough GHG emissions to make a discernible change in global climate (Urban Crossroads 2014c 8). However, the proposed Project may participate in the potential for GCC through its incremental contribution of GHG emissions when considered in combination with other worldwide sources of GHGs.

B. Greenhouse Gases

Emissions of CO_2, N_2O, and CH_4 are the focus of evaluation in this Subsection because these gases are the primary contributors to GCC from land development projects. Although other substances such as fluorinated gases also contribute to GCC, sources of fluorinated gases are not well defined and no accepted emissions factors or methodology exist to accurately calculate these gases (Urban Crossroads 2014c 12).

GHGs have varying global warming potential (GWP) values. GWP values represent the potential of a gas to trap heat in the atmosphere. CO_2 is used as the reference gas for GWP, and thus has a GWP of 1. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.6-1, *GWP and Atmospheric Life of Select GHGs*. As shown in Table 4.6-1, GWP ranges from 1 for CO_2 to 23,900 for sulfur hexaflouroethene (SF_6).

Table 4.6-1 GWP and Atmospheric Life of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100 year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12 ± 3	21
Nitrous Oxide (N_2O)	120	310
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CH_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: Urban Crossroads 2014c, Table 2-2.

Provided below is a description of the various gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Sections 2.4, 2.5, and 2.6 of *Technical Appendix F* and the reference sources cited therein.

- Water Vapor (H_2O) is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation, thereby allowing less energy to reach the Earth's surface and heat it up. There are no human health effects from water vapor itself;

however, when some pollutants come in contact with water vapor, they can dissolve and the water vapor can then act as a pollutant-carrying agent.

- Carbon Dioxide (CO_2) is an odorless and colorless GHG that is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Manmade sources include: the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases CO_2 emissions has increased dramatically. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Exposure to CO_2 in high concentrations can cause human health effects, but outdoor levels are not high enough to adversely affect human health.

- Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning. No human health effects are known to occur from atmospheric exposure to methane.

- Nitrous Oxide (N_2O) concentrations began to rise in the atmosphere at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is used as an aerosol spray propellant, (*e.g.*, in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. Also known as laughing gas, N_2O is a colorless GHG that can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage.

- Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 and have no natural source. CFCs were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was

undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, due to their long atmospheric lifetime, some of the CFCs will remain in the atmosphere for over 100 years.

- Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order largest to smallest), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23 emissions. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No human health effects are known to result from exposure to HFCs, which are manmade and used for applications such as automobile air conditioners and refrigerants.

- Perfluorocarbons (PFCs) are primarily produced for aluminum production and semiconductor manufacture. PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. No human health effects are known to result from exposure to PFCs.

- Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The U.S. Environmental Protection Agency (EPA) indicates that concentrations in the 1990's were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

C. Greenhouse Gas Emissions Inventories

❑ Global

Worldwide anthropogenic (man-made) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Man-made GHG emissions data for Annex I nations are available through Year 2011. For the Year 2011, the sum of these emissions totaled approximately 25,285,543 gigagrams of carbon dioxide equivalent (GgCO2e), as shown in Table 4.6-2, *Top GHG Producer Countries and the European Union*, which equates to approximately 25,285.54 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). The GHG emissions in more recent years may differ from the inventories presented in Table 4.6-2; however, the data is representative of the currently available inventory date (Urban Crossroads 2014c pp. 10-11).

Table 4.6-2 Top GHG Producer Countries and the European Union

EMITTING COUNTRIES	GHG EMISSIONS ($GgCO_2e$) IN 2011
China	8,715,307
United States	6,665,700
European Union	4,550,212
Russian Federation	2,320,834
India	1,725,762
Japan	1,307,728
Total	**25,285,543**

Gg = gigagram
Source: Urban Crossroads 2014c, Table 2-1.

❑ United States

As noted in Table 4.6-2, the United States, as a single country, was the second highest producer of GHG emissions in 2011. The primary GHG emitted by human activities in the United States was CO_2, representing approximately 83% of the United States' total GHGs. CO_2 from fossil fuel combustion, the largest source of United States' GHG emissions, accounted for approximately 78% of the United States' 2011 GHG emissions (Urban Crossroads 2014c 11).

❑ State of California

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based upon the 2012 GHG inventory data (*i.e.*, the latest year for which data is available, 2000 – 2012 GHG inventory), California emitted 459 MMTCO2e including emissions resulting from imported electrical power in 2012. Based on the CARB inventory data and GHG inventories compiled by the World Resources Institute, California's total statewide GHG emissions rank second in the United States (Texas is number one) with emissions of 415 MMTCO2e, excluding emissions related to imported power (Urban Crossroads 2014c 11).

Although California's rate of growth of GHG emissions is slowing, the state is still a substantial contributor to the United States' GHG emissions inventory total. Despite a population increase of 16% between 1990 and 2004, and based on a review of GHG inventories for those years, California had significantly slowed the rate of growth of GHG emissions. This is in part due to the implementation of energy efficiency programs as well as adoption of strict emission controls by federal and state agencies (Urban Crossroads 2014c 12).

D. Potential Effects of Climate Change in California

The California Environmental Protection Agency (CalEPA) published a report titled "Scenarios of Climate Change in California: An Overview" (herein called the "Climate Scenarios report") in February 2006, that is generally instructive about effects of climate change in California. The Climate Scenarios report used a range of emissions scenarios developed by the Intergovernmental

Panel on Climate Change (IPCC) to project a series of potential warming ranges (*i.e.*, temperature increases) that may occur in California during the 21st century: lower warming range (3.0-5.5°F); medium warming range (5.5-8.0°F); and higher warming range (8.0-10.5°F). The Climate Scenarios report then presents an analysis of future climate in California under each warming range, that while uncertain, present a picture of the GCC induced trends in California (California Environmental Protection Agency 2006).

In addition, the California Natural Resources Agency adopted a "California Climate Adaptation Strategy" in 2009. This report details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes, and responds to the Governor's Executive Order S-13-2008 that called on state agencies to develop California's strategy to identify and prepare for expected climate impacts (California Natural Resources Agency 2009).

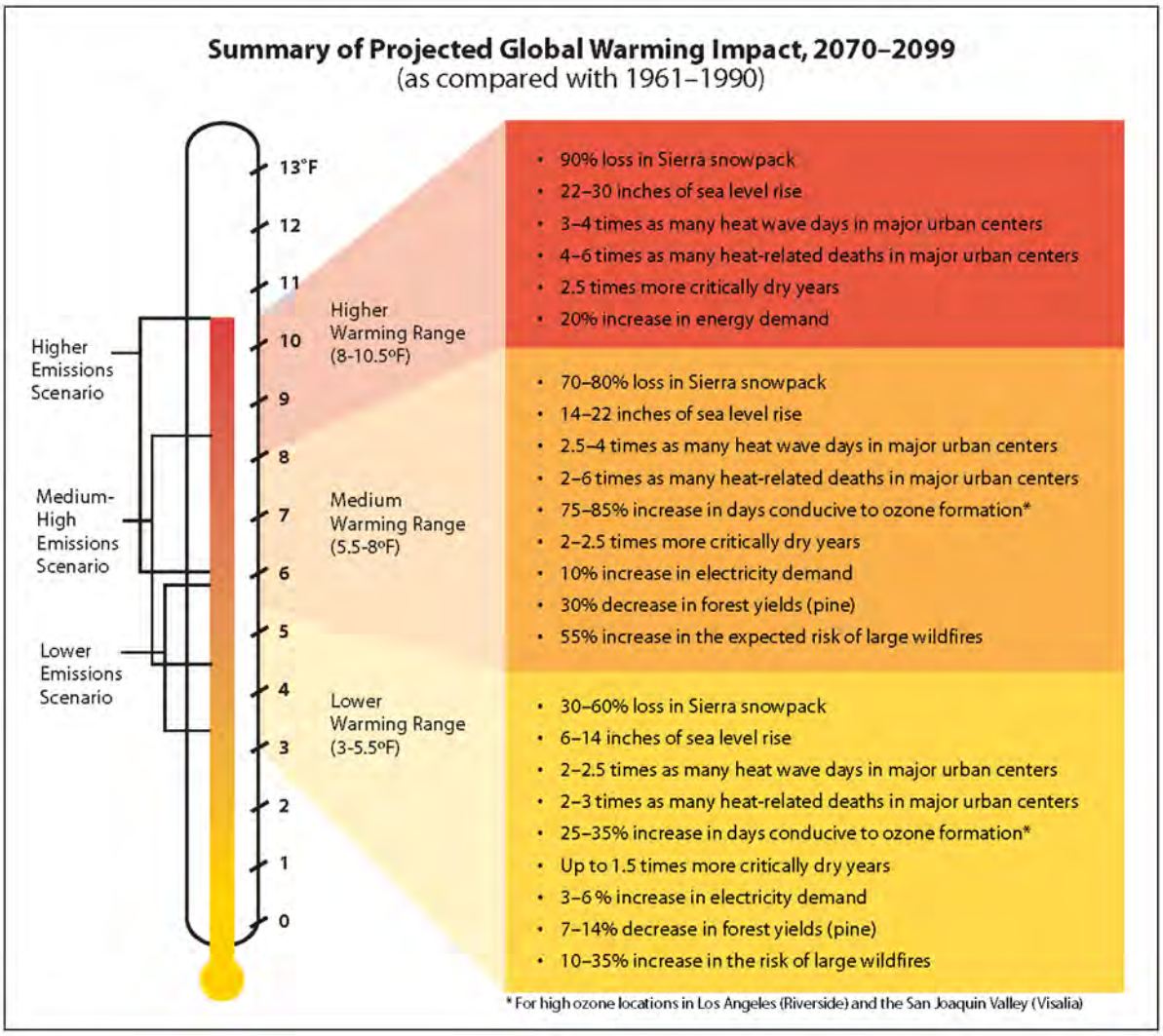
According to these reports, substantial temperature increases arising from increased GHG emissions worldwide could result in a variety of effects to the people, economy, and environment of California, with the severity of the effects depending upon actual future emissions of GHGs and associated degree of warming. Table 4.6-3, *Summary of Projected Global Warming Impact, 2070-2099 (as compared with 1961-1990)*, presents the potential impacts of global warming.

Under the emissions scenarios of the Climate Scenarios and California Climate Adaption Strategy reports, the impacts of climate change in California have the potential to include, but are not limited to, the following areas. For more information, refer to Section 2.5 of *Technical Appendix F* and the reference sources cited therein.

- Human Health Effects. The potential human health effects related directly to GHG emissions (including CO_2, N_2O, and CH_4) from development projects are still being debated in the scientific community. The contribution that these GHGs make to GCC have the potential to cause adverse effects to human health in various ways. Increases in the Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change also could cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

- Water Resource Effects. A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. Additionally, if temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70% to 90%. The loss of snowpack could pose

Table 4.6-3 Summary of Projected Global Warming Impact, 2070-2099 (as compared with 1961-1990)



challenges to water managers, hamper hydropower generation, and adversely affect winter tourism. The State's water supplies are also at risk from rising sea levels. An influx of salt water could degrade California's estuaries, wetlands, and groundwater aquifers and be a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

- Agriculture Effects. Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. California farmers could face water shortages. Crops may grow faster and be more susceptible to pests and disease outbreaks due to higher atmospheric temperatures. Faster plant growth could worsen the quantity and quality of yield for some crops such as wine

grapes, fruit, and nuts. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, there may still be a water shortage for the agricultural industry. In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants.

- Forest and Landscape Effects. GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. Continued GCC also has the potential to alter natural ecosystems and biological diversity, including a decrease in forest productivity, as a result of increasing temperatures.

- Sea Level Effects. Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

E. Regulatory Setting

Below is an account of the regulatory programs, policies, laws, and regulations that are applicable to GHG emissions and GCC in California. For more information, refer to Section 2.7 of *Technical Appendix F* and the reference sources cited therein.

❑ International Regulations and the Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail GCC. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Kyoto protocol are met, global GHG emissions could be reduced an estimated 5% from 1990 levels during the first commitment period of 2008-2012. Notably, while the United States is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the United States is not bound by the

Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto.

❑ Federal Regulations and the Clean Air Act

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the U.S. Environmental Protection Agency (EPA) issued an Endangerment Finding under §202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them.

Previously the EPA had not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 [2007]), however, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress.

Although GCC did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the state's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975.

❑ Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

California Code of Regulations, Title 24, Part 11 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3)

Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The currently applicable version of this code is CALGreen 2013, which achieves a 25% greater energy efficiency than its 2009 predecessor.

❑ California Assembly Bill No. 1493 (AB 1493)

AB 1493 required CARB to develop and adopt the nation's first GHG emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in California. Further, the legislature stated that technological solutions to reduce GHGs would stimulate the California economy and provide jobs.

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of §1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1 (Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in her official capacity as Executive Director of the California Air Resources Board, et al.). The suit, heard in the U.S. District Court for the Eastern District of California, contended that California's implementation of regulations, that in effect regulate vehicle fuel economy, violates various federal laws, regulations, and policies. In January 2007, the judge hearing the case accepted a request from the State Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court Case, Massachusetts vs. EPA, the primary issue in question was whether the federal CAA provides authority for U.S. EPA to regulate CO2 emissions. In April 2007, the U.S. Supreme Court ruled in Massachusetts' favor, holding that GHGs are air pollutants under the CAA. On December 11, 2007, the judge in the Central Valley Chrysler-Jeep case rejected each plaintiff's arguments and ruled in California's favor. On December 19, 2007, the U.S. EPA denied California's waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging U.S. EPA's denial on January 2, 2008.

The Obama administration subsequently directed the U.S. EPA to re-examine their decision. On May 19, 2009, challenging parties, automakers, the State of California, and the federal government reached an agreement on a series of actions that would resolve these current and potential future disputes over the standards through model year 2016. In summary, the U.S. EPA and the U.S. Department of Transportation agreed to adopt a federal program to reduce GHGs and improve fuel economy, respectively, from passenger vehicles in order to achieve equivalent or greater GHG benefits as the AB 1493 regulations for the 2012–2016 model years. Manufacturers agreed to

ultimately drop current and forego similar future legal challenges, including challenging a waiver grant, which occurred on June 30, 2009. The State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by "pooling" California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with U.S. EPA-adopted GHG standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the AB 1493 regulations. Both of these programs are aimed at light-duty auto and light-duty trucks.

CARB's on-road heavy-duty diesel vehicles regulations require diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavy trucks were required to be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. CARB reports that by January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The heavy-duty vehicles regulation applies to nearly all privately- and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds.

❑ Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snow pack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020, and to 80% below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

❑ California Assembly Bill 32 (AB 32)

In September 2006, Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to Year 1990 levels by the year 2020. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions that started to be phased in, in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG

emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required that CARB adopt a quantified cap on GHG emissions representing Year 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also included guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission Year 1990 levels were estimated at 427 million metric tons (MMTs) (emission sources by sector were: transportation – 35%; electricity generation – 26%; industrial – 24%; residential – 7%; agriculture – 5%; and commercial – 3%). Accordingly, 427 MMTs of CO_2 equivalent was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 MMT for 2000 and 532 MMT for 2010. "Business as usual" conditions (without the reductions to be implemented by CARB regulations) for Year 2020 were projected to be 596 MMTs.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plans, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94% of the point source CO_2 emissions in the State.

On December 11, 2008, CARB adopted a scoping plan to reduce GHG emissions to 1990 levels. Table 4.6-4, *Scoping Plan GHG Reduction Measures*, shows the proposed reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the Year 2020 emissions reduction, local land use changes are estimated to result in a reduction of 5 MMTCO2e, which is approximately 3% of the Year 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15% of 2006 levels by 2020 to ensure that municipal and community-wide emissions match the state's reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2% through land use planning, resulting in a potential GHG reduction of 2 MMTCO2e (or approximately 1.2% of the GHG reduction target).

On May 22, 2014, CARB approved the first update to the Scoping Plan. The update recalculates 1990 GHG emissions using new global warming potentials (GWPs) identified in the Intergovernmental Panel on Climate Change Fourth Assessment Report released in 2007. Using the new GWPs, the 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan was adjusted to 431 MTCO2e. Based on the revised 2020 emissions, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO2e.

Table 4.6-4 Scoping Plan GHG Reduction Measures

Recommended Reduction Measures	*Reductions Counted toward 2020 Target of 169 MMT CO2e*	*Percentage of Statewide 2020 Target*
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB. 2008, MMTons CO2e: million metric tons of CO2e
[1]Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.
[2]According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 Target

Source: Urban Crossroads 2014c, Table 2-3.

❑ California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill 1368 (SB 1368), which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368.

❑ Senate Bill 97 (SB 97)

Pursuant to the direction of SB 97, OPR released preliminary draft CEQA Guideline amendments for GHG emissions on January 8, 2009, and the Natural Resources Agency adopted the Guideline amendments and they became effective on March 18, 2010. Of note, the CEQA Guidelines state that a CEQA lead agency shall have discretion to determine whether to use a quantitative model or methodology, or in the alternative, rely on a qualitative analysis or performance based standards. CEQA Guideline § 15064.4(a) state that "[a] lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use… ; or (2) Rely on a qualitative analysis or performance based standards."

CEQA emphasizes that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]). Section 15064.4(b) of the CEQA Guidelines provides direction for lead agencies for assessing the significance of impacts of GHG emissions. The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence.

❑ Executive Order S-01-07

On January 18, 2007, California Governor Schwarzenegger, through Executive Order S-01-07, mandated a statewide goal to reduce the carbon intensity of California's transportation fuel by at least

10% by the Year 2020. The order also requires that a California-specific low carbon fuel standard be established for transportation fuels.

❑ Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to the Year 2010. In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by the Year 2020.

❑ Senate Bill 375 (SB 375)

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs did not meet the GHG reduction targets, transportation projects are not eligible for funding programmed after January 1, 2012. Applicable to the proposed Project is the Southern California Association of Governments' (SCAG's) *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*).

❑ CARB's Preliminary Draft Staff Proposal for Interim Significance Thresholds

Separate from its Scoping Plan approved in December of 2008, CARB issued a Staff Proposal in October 2008, as its first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. CARB staff's objective in this proposal is to develop a threshold of significance that will result in the vast majority (approximately 90% statewide) of GHG emissions from new industrial projects being subject to CEQA's requirement to impose feasible mitigation. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. These draft thresholds are under revision in response to public comments. There is no timetable for finalized thresholds at this time.

As currently proposed by CARB staff, the threshold consists of a quantitative threshold of 7,000 metric tons of CO2e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions (which have not yet been developed). CARB's proposal was not final at the time that the NOP for this EIR was released for public review (March 2014). Further, CARB's proposal sets forth draft thresholds for industrial projects that have high operational stationary GHG emissions, such as manufacturing plants, or uses that utilize

combustion engines. Mobile source emissions are not addressed. The GHG emissions that would be emitted by the Project evaluated in this EIR would be mostly from mobile sources, and as such, the CARB proposal would not be applicable to the proposed Project because it excludes transportation (mobile) sources.

- **South Coast Air Quality Management District Recommendations for Significance Thresholds**

In April 2008, the South Coast Air Quality Management District (SCAQMD), convened a "GHG CEQA Significance Threshold Working Group," in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents. The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential, non-residential, industrial, etc. However, final thresholds were never discussed or adopted for land development projects. Notwithstanding, in December 2008, staff presented the SCAQMD Governing Board with a significance threshold for development projects that are stationary sources of air pollutants where the SCAQMD is the lead agency. This threshold utilizes a tiered approach to determine a project's significance, with 10,000 MTCO2e as a numerical screening threshold for "industrial project" stationary sources of air pollution. However, when setting the 10,000 MTCO2e threshold, the SCAQMD did not consider mobile sources (vehicular travel); rather, the threshold was intended for "heavy industrial" stationary source emitters such as boilers, refineries, etc. As such, the 10,000 MTCO2e threshold would misrepresent the significance of emissions associated with land uses (like those of the proposed Project) where the majority of GHG emissions are related to mobile sources regulated by state and federal agencies. Thus, the SCAQMD's draft screening threshold is not applicable to the Project.

In 2010, the SCAQMD Working Group authored an alternative, tiered approach for evaluating the significance of GHG emissions from development projects. Under the Working Group's alternative approach, development projects that are not exempt from CEQA and that would exceed a numerical screening threshold (either 3,000 MTCO2e for all project types or 3,500 MTCO2e for residential land uses, 1,400 MTCO2e for commercial land uses, or 3,000 MTCO2e for mixed-use projects) would result in a cumulatively considerable impact associated with GHG emissions, unless the project can demonstrate that it meets a project-level efficiency target or reduces emissions by an undefined percentage. The Working Group set the project-level efficiency target for the Year 2020 at 4.8 MTCO2e per service population. The Working Group made no formal recommendations to the SCAQMD regarding significance thresholds for GHG emissions, and the SCAQMD did not take action on the Working Group's alternative approach. The Working Group last convened in 2010 and it is unclear if the SCAQMD will re-initiate the working group or if the process has been abandoned altogether.

The SCAQMD has adopted rules that address GHG reductions (i.e., Rules 2700, 2701, and 2702). However, these rules address boilers and process heaters, forestry, and manure management projects, none of which are proposed or required by the proposed Project.

❑ City of Moreno Valley

On October 9, 2012, the Moreno Valley City Council approved an *Energy Efficiency and Climate Action Strategy* and related GHG analysis. The *Energy Efficiency and Climate Action Strategy* document identifies potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The majority of the policies are directed at municipal operations of the City, but the document also contains recommended policies for the community at large (including private development projects). These recommended policies include but are not limited to: energy efficiency, water use reduction, trip reduction, solid waste diversion, and educational policies. The overall goal of the *Energy Efficiency and Climate Action Strategy* is to ensure that the City is consistent with and would not otherwise conflict with the provisions of AB 32.

4.6.2 BASIS FOR DETERMINING SIGNIFICANCE

In order to assess the significance of the proposed Project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. As discussed in Subsection 4.6.1 above, while Project-related GHG emissions can be estimated, the direct impacts of such emissions on GCC is *de minimis* considering the worldwide scope of climate change. There is no evidence at this time that would indicate that the small quantity of emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project has no potential to result in a direct impact to GCC; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively considerable way.

The CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to:

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

2. *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

Because AB 32 is the primary plan, policy or regulation adopted in the State of California to reduce GHG emissions, the proposed Project would have a cumulative considerable significant impact on GCC if the Project would impede compliance with the GHG emissions reduction mandate established by AB 32, which requires that California's GHG emissions limit be reduced to Year 1990 levels by the Year 2020. The CARB Scoping Plan and CAT Report (2006) were prepared in response to the California Governor's Executive Order S-3-05 and summarize measures than can be implemented to achieve the GHG emissions reductions goals of AB 32. Additionally, analysis prepared by CARB supporting AB 32, indicates that a reduction of 28.5% below the "business as usual" scenario is required to meet the goals of AB 32. To comply with AB 32 on a city-wide level, on October 9, 2012, the Moreno Valley City Council approved an *Energy Efficiency and Climate Action Strategy* and the related Greenhouse Gas Analysis. The *Strategy* and *Analysis* document identify potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The *Strategy* also prioritizes implementation of programs, policies, and projects based upon energy efficiency, cost efficiency and potential resources. The accompanying *Greenhouse Gas Analysis* provides a more scientific approach and recommends a target to reducing community-wide GHG emissions consistent with the State reduction goals in AB 32. Therefore, should the proposed Project be consistent with AB-32 and the City's *Energy Efficiency and Climate Action Strategy*, impacts would be less than cumulatively considerable.

For information purposes, and because the City of Moreno Valley does not have an adopted, quantified significance threshold for GHG emissions, the analysis below also includes a numeric calculation of the Project's GHG emissions and compares that numeric value to the SCAQMD's draft screening threshold of 10,000 MTCO2, which is not adopted but was proposed by SCAQMD staff as a numerical screening threshold for stationary source where the SCAQMD serves as lead agency. As previously described, the application of SCAQMD's draft screening threshold for GHG emissions to a development proposal like the proposed Project, where GHG emissions would result primarily from mobile sources rather than stationary sources, presents a highly conservative comparison of Project emission levels to a numerical value that the SCAQMD has suggested for screening projects to determine if a more detailed analysis should be completed to evaluate impacts.

Also for information purposes, the analysis below includes a numeric calculation of the Project's GHG emissions and compares that numeric value to the SCAQMD GHG CEQA Significance Threshold Working Group's project-level efficiency target of 4.8 MTCO2e per service population (for the Year 2020). As previously described, the Working Group did not formally recommend the project-level efficiency target to the SCAQMD for approval and the SCAQMD did not take formal action to adopt or reject the project-level efficiency target.

4.6.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***
Threshold 2:	***Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

The Project would be consistent with the subject property's underlying land use designations and would not increase the development intensity on the subject property beyond what is currently anticipated by the General Plan Land Use Map. Because the Project would be consistent with the adopted General Plan, the Project also would be consistent with SCAG's *2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, which is based on the land use pattern and transportation network contained in local general plans. The Project's consistency with the land use and transportation assumptions within the *RTP/SCS* ensures the Project would not conflict with the *RTP/SCS*'s goal to reduce regional GHG emissions by reducing regional per capita vehicle miles traveled.

Furthermore, activities associated with the proposed Project would be required to comply with all mandatory regulatory requirements imposed by the State to directly or indirectly reduce GHG emissions, including, but not limited to:

- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles;
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction;
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances;
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by Year 2020;
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent to ensure efficient landscapes in new development and reduced water waste in existing landscapes; Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions; and
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by Year 2010 and 33 percent by Year 2020.

Although the Project would be required to comply with the above-listed regulations and policies for reducing GHG emissions in the State of California, provided below is an analysis of the proposed Project's ability to achieve the GHG reduction goal of AB 32 on a project-specific basis, which is the primary policy/regulation adopted in the State to reduce GHG emissions. Analysis also is provided

regarding the proposed Project's consistency with the City of Moreno Valley's *Energy Efficiency and Climate Action Strategy*.

A. Methodology for Estimating Project-Related Greenhouse Gas Emissions

CEQA Guidelines §15064.4(b)(1) states that a CEQA lead agency may use a model or methodology to quantify GHG emissions associated with a project. On October 2, 2013, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) released the latest version (v2013.2.2.) of the California Emissions Estimator Model (CalEEMod™) (Urban Crossroads 2014c 43). The purpose of this model is to estimate air quality and GHG emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. As such, the October 2013 (v2013.2.2.) CalEEMod™ was used to estimate Project-related emissions to determine construction and operational air quality impacts (Urban Crossroads 2014c pp. 43-44). Output from the model runs for both Project-related construction and operational activity are provided in Appendix 3.1 of *Technical Appendix F*.

Due to the lack of consensus guidance on life-cycle analysis (LCA) methodology, a full LCA is not included in the Project's Greenhouse Gas Analysis (*Technical Appendix F*). LCA (*i.e.*, assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development and infrastructure) depends on emission factors or econometric factors that are not well established for all processes. At this time a LCA would be extremely speculative and thus has not been prepared (Urban Crossroads 2014c 44).

❑ Methodology for Estimating Project-Related Construction Emissions

Construction activities associated with the proposed Project would result in emissions of GHGs from the following construction activities:

- Demolition;
- Site Preparation;
- Grading;
- Building Construction;
- Paving;
- Architectural Coatings (Painting); and
- Construction Workers Commuting.

Information about the Project's anticipated construction schedule and equipment as supplied by the Project Applicant was input into the CalEEMod™ model and defaults for all other assumptions were utilized. Refer to Appendix 3.1 of *Technical Appendix F* to this EIR for more details on the construction emissions estimate methodology. Refer also to the specific detailed modeling inputs/outputs contained in Appendix 3.1 of *Technical Appendix F*. A summary of construction equipment assumptions by phase that were used as model inputs is provided in Section 3.0, *Project Description* (Table 3-2).

In accordance with SCAQMD recommendations, the Project's construction phase GHG emissions were quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project per the recommended SCAQMD methodology, the total GHG emissions associated with the Project's proposed construction activities was calculated, divided by the project life span default (*i.e.*, 30 years), and then added to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30 year period and added to the annual operational phase GHG emissions (Urban Crossroads 2014c 44).

❑ Methodology for Estimating Project-Related Operational Emissions

Operational activities associated with the proposed Project would result in emissions of GHGs from the following primary sources, each of which is discussed below: 1) Building Energy Use; 2) Water Supply, Treatment and Distribution; 3) Solid Waste 4) Mobile Source Emissions.

Building Energy Use

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Using defaults built into the California Emissions Estimator Model™ (CalEEMod™), the proposed Project would demand 3,574,906 kilowatts hours of electricity per year (kWh/yr) (Urban Crossroads 2014c 45).

Water Supply, Treatment and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. The Project's water demand is based on the Water Supply Assessment (*Technical Appendix I*) prepared for the Project by EMWD (Urban Crossroads 2014c 45), which states that the proposed Project is estimated to result in a demand for approximately 38.03 acre-feet of water per year (or about 33,951 gallons per day) . The Project also is estimated to result in an average daily demand of 86,428 gallons per day of wastewater treatment capacity (based on EMWD's wastewater generation factor of 1,700 gallons per day per acre for light industrial land uses).

Solid Waste

The Project would result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, through adherence to mandatory requirements for reducing the amount of waste generated, recycling, and/or composting. Waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste estimated to be generated by the proposed Project were calculated by the CalEEMod™ model using default parameters (Urban Crossroads 2014c 45).

On-Site Equipment

It is common for an industrial warehouse project to utilize cargo handling equipment. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 horse power to 200 horse power. Based on the latest available information from SCAQMD, high-cube warehouse projects typically have 3.1 yard tractors per million square feet of building space. For the Project, four (4) 200 horsepower yard tractors were assumed to operate fourt (4) hours per day for 260 days of the year. The emissions associated with on-site equipment were calculated using the CalEEMod model. (Urban Crossroads 2014c 45)

Mobile Source Emissions

A majority of the proposed Project's GHG emissions would result from mobile sources, including daily operation of motor vehicles by visitors, employees, and customers. The Project's GHG emissions are dependent on the Project's daily vehicle trip generation and the characteristics of those trips. Information related to the Project's daily vehicle trip generation and trip characteristics was obtained from the Project's traffic report contained as *Technical Appendix H1* to this EIR. It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of heavy vehicles at intersections in the Project's study areas and in accordance with traffic engineering best practices. The PCE trips were not used for the purposes of quantifying GHG emissions; rather, to be more representative of actual emissions, the actual number of passenger cars (including light trucks) and heavy trucks were used in the analysis. The vehicle fleet mix, in terms of actual vehicles, as derived from the traffic impact analysis for the Project, is comprised of approximately 76% passenger cars and 24% trucks. For analysis purposes, 12.5% of all trucks were assumed to be Light-Heavy-Duty, 12.5% of all trucks were assumed to be Medium-Heavy-Duty, and 75% of all trucks were assumed to be Heavy-Heavy Duty (Urban Crossroads 2014c 46).

A technical deficiency inherent in calculating the projected mobile source vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips a project would generate multiplied by average trip length. This method of estimating VMT for use in calculating vehicle emissions can result in the over-estimation and double-counting of emissions because for a logistics warehouse building such as the proposed Project, the land use is likely to attract (divert) existing vehicle trips that are already in the circulation system as opposed to generating new trips. As such, the proposed Project would merely redistribute existing mobile source emissions. Accordingly, the use of models that measure overall emissions can overstate emission levels without acknowledging that some level of emissions associated with a project under study would still occur in the region regardless of whether the project is built. As such, the estimation of GHG emissions associated with the proposed Project and disclosed herein assumes a VMT value that very likely overestimates the actual impact of the Project (Urban Crossroads 2014c pp.47-48).

In the last several years, the SCAQMD has provided numerous comments on the trip rate and trip length for warehouse/distribution and industrial land use projects. SCAQMD staff suggests the use of a greatly exaggerated trip generation rate, but there is no evidentiary basis to support a speculative hypothesis that the proposed Project would generate traffic greater than the trip generation rates specified in the Institute of Transportation Engineers (ITE) Trip Generation manual (8th Edition, 2008). Use of the ITE rates standard industry practice for the calculation of projected traffic volumes in traffic studies supporting CEQA documents throughout the State of California.

The SCAQMD staff also asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse/distribution center and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles and/or to destinations outside of California. The SCAQMD states that for this reason, the model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length (Urban Crossroads 2014c 48). SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region (which includes the proposed Project site) is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks (Urban Crossroads 2014c 48).

Trip lengths and VMT estimates employed in *Technical Appendix F* and this EIR Subsection generate vehicular-source emissions that would represent a maximum impact scenario. Other EIRs for land use development projects with similar land uses as the proposed Project for which the City of Moreno Valley served as the CEQA Lead Agency have utilized these same or similar VMT estimates. To maintain analytic consistency and establish the maximum impact scenario, the following approach is used to calculate emissions associated with vehicles accessing the Project (Urban Crossroads 2014c pp. 48-49).

For analysis of the Project's passenger car trips, the Riverside County CalEEMod™ default of a 9.5-mile one-way trip length was assumed. The CalEEMod™ model defaults relies on data provided by SCAG for trip length. For heavy duty trucks, an average trip length was derived from distances from the Project site to the far edges of the South Coast Air Basin (SCAB) based on the Project's traffic pattern shown in *Technical Appendix H1*. It is appropriate to stop the VMT calculation at the boundary of the SCAB because any activity beyond that boundary would be speculative (the SCAB encompasses 6,745 square miles) and because the selected approach is consistent with professional industry practice (Urban Crossroads 2014c 49).

- Project site to the Port of Los Angeles/Long Beach: 80 miles;
- Project site to East on State Route 60: 30 miles;
- Project site to San Diego County line: 60 miles;
- Project site to Inland Empire: 50 miles;
- Project site to Perris destinations: 10 miles; and

- Project site to Moreno Valley destinations: 10 miles.

The GHG analysis presented in *Technical Appendix F* and this EIR Subsection assumes that 50% of all delivery trips would travel to and from the Project and the Port of Los Angeles/Long Beach, 10% would travel East on the State Route 60, 20% would travel to San Diego County, 10% would travel to the Inland Empire, 5% would travel to City of Perris destinations, and the remainder would travel to City of Moreno Valley destinations, resulting in an average Project-related truck trip length of 61 miles (Urban Crossroads 2014c 49).

Two separate model runs were utilized in order to more accurately model GHG emissions resulting from Project-related vehicle operations. The first model run analyzed Project-related passenger car emissions, which assumed a trip length of 9.5 miles and a vehicle fleet mix of 100% Light-Duty-Auto vehicles. The second model run analyzed Project-related truck emissions, which assumed an average truck trip length of 61 miles and a vehicle fleet mix of 12.5% Light-Heavy-Duty trucks, 12.5% Medium-Heavy-Duty trucks, and 75% Heavy-Heavy-Duty trucks (Urban Crossroads 2014c 49).

B. Project-Related GHG Emissions Impact Analysis

❑ Quantification of Project-Related GHG Emissions

A summary of the proposed Project's estimated annual operational GHG emissions, including the amortized construction emissions, is provided in Table 4.6-5, *Total Annual Greenhouse Gas Emissions (BAU)*. This represents the "business as usual" (BAU) scenario, which does not take into account applicable regulatory developments since the publication of the CARB Scoping Plan in 2006 (discussed above) and mitigation measures or design features of the Project that would reduce GHG emissions from direct and indirect sources. The operational GHG emissions for the Project's BAU scenario, including the amortized construction emissions, are estimated to be 18,322.72 MTCO2e per year. The primary source of Project-related GHG emissions would occur from mobile sources (trucks and passenger cars traveling to and from the Project site).

As shown in Table 4.6-6, *Total GHG Emissions (Proposed Project)*, the total GHG emissions generated by the Project, when accounting for applicable regulatory requirements that have gone into effect since the Year 2006, Project design features, and the mitigation measures set forth in Subsection 4.6.6 of this EIR would reduce the Project's operational GHG emissions, including the amortized construction emissions, to 14,453.47 MTCO2e per year (Urban Crossroads 2014c 49). By comparing the "BAU" and "Proposed Project" scenarios, the data shows that the proposed Project's GHG emissions would be approximately 21% less than the BAU scenario (refer to Table 4.6-7, *Summary of GHG Emissions: BAU vs. Project*).

As indicated in §15064(b) of the State CEQA Guidelines, the determination of significance of greenhouse gases is not "ironclad;" rather, the "determination of whether a project may have a significant effect on the environment calls for a "careful judgment" by the City "based to the extent

Table 4.6-5 Total Annual Greenhouse Gas Emissions (BAU)

Emission Source	Emissions (metric tons per year)			
	CO2	CH4	N2O	Total CO2E
Annual construction-related emissions amortized over 30 years	99.75	0.64	--	100.15
Area	0.03	1.60e-4	--	0.04
Energy	1,222.11	0.05	0.01	1,227.22
Mobile Sources (Trucks)	14,458.98	0.58	--	14,471.06
Mobile Sources (Passenger Cars)	1,811.08	0.16	--	1,814.39
On-Site Equipment	184.40	0.02	--	184.80
Waste	211.68	12.51	--	474.40
Water Usage	44.76	0.20	5.20e-3	50.67
Total CO_2E (All Sources)	**18,322.72**			

Source: CalEEMod™ model output, See Appendix 3.1of *Technical Appendix F* for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.
Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent
Source: Urban Crossroads 2014c, Table 3-1

Table 4.6-6 Total GHG Emissions (Proposed Project)

Emission Source	Emissions (metric tons per year)			
	CO2	CH4	N2O	Total CO2E
Annual construction-related emissions amortized over 30 years	99.75	0.64	--	100.15
Area	0.03	9.00e-5	--	0.04
Energy	825.15	0.05	0.01	830.59
Mobile Sources (Trucks)	11,800.93	0.08	--	11,802.51
Mobile Sources (Passenger Cars)	1,057.62	0.04	--	1,058.42
On-Site Equipment	152.67	0.05	--	153.70
Waste	211.68	12.51	--	474.40
Water Usage	28.92	0.16	4.18e-3	33.66
Total CO2E (All Sources)	**14,453.47**			
SCAQMD Service Population (SP) Threshold	**4.8MTC02e/SP**			
Service Population	**594 Employees**			
Metric Tons CO2e per Service Population	**24.33**			

Source: CalEEMod™ model output, See Appendix 3.1of *Technical Appendix F* for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.
Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent
Source: Urban Crossroads 2014c, Table 3-2.

Table 4.6-7 Summary of GHG Emissions: BAU vs. Project

Category	CO2e Emissions	
	BAU	Project (With regulatory requirements and applicable mitigation measures)
	Metric Tons per Year	
Construction	100.15	100.15
Area	0.04	0.04
Energy Use	1,227.22	830.59
Mobile Sources (Trucks)	14,471.04	11,802.51
Mobile Sources (Passenger Cars)	1,814.39	1,058.42
On-Site Equipment	184.80	153.70
Waste Disposed	474.40	474.40
Water Use	50.67	33.66
Total	**18,322.72**	**14,453.47**
Project Improvement over BAU	**21.12%**	

Source: Urban Crossroads 2014c. Table 1-1

possible on scientific and factual data." The City of Moreno Valley has not adopted a numeric threshold of significance for GHG emissions.

The SCAQMD's draft screening threshold of 10,000 MTCO2e for "industrial projects" applies to stationary sources (such as manufacturing plants or uses that utilize combustion engines) and not mobile sources, and is not used as a significance threshold by the City of Moreno Valley. Nevertheless, comparison of the GHG emissions from the Project's stationary, area sources (construction, area, energy use, waste disposal, and water usage) indicates that the Project's emissions from such sources would be well below the draft SCAQMD screening threshold for stationary sources. With regard to GHG emissions from mobile sources, as discussed above under Subsection 4.6.3A0, the estimation of the Project's mobile source GHG emissions is highly speculative because the methodology to quantify mobile source GHG emissions assumes that all of the vehicle trips to and from the Project site would be new, rather than redistributed vehicle trips from other areas. No methods or models exist to estimate the Project's net contribution to regional or global vehicle miles traveled. Because the estimation of the Project's contribution to mobile source GHG emissions is speculative, and based on the absence of applicable numerical thresholds for mobile source GHG emissions, use of a quantitative threshold of significance is not meaningful. Regardless, for information disclosure purposes it is acknowledged that the Project's total annual emissions (stationary and mobile source emissions combined) of 18,322.72 MTCO2e (BAU

scenario) or 14,453.47 MTCO2e (when accounting for applicable regulatory requirements, Project design features and mitigation measures) would be higher than the SCAQMD's draft numerical screening threshold of 10,000 MTCO2e per year for "industrial project" stationary sources.

Table 4.6-6 summarizes the Project's emissions against the project-level efficiency target formulated by the SCAQMD GHG CEQA Significance Threshold Working Group. As shown, the Project is estimated to generate approximately 24.59 MTCO2e per service population on an annual basis, which would exceed the Working Group's annual efficiency target of 4.8 MTCO2e per service population.

As previously noted, the SCAQMD's screening threshold and the project-level efficiency target are not adopted by the SCAQMD and are not used as a significance threshold by the City of Moreno Valley. Accordingly, a qualitative analysis set forth below is used by the City of Moreno Valley to determine significance of the Project's GHG emissions, based on consistency with regional and state GHG plans. Specifically, compliance with the CARB Scoping Plan, the State of California's Climate Action Team Report (2006), and the City of Moreno Valley's *Energy Efficiency and Climate Action Strategy* are used. The analysis below sets out the factual basis for the City's determination regarding the effect of Project-related GHG emissions.

❑ Consistency with CARB Scoping Plan

As previously discussed in Subsection 4.6.1E, CARB identified measures to reduce state-wide GHG emissions and achieve the emissions reductions goals of AB 32 in its Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with AB 32's mandate to reduce GHG emissions. Many of the strategies identified in the Scoping Plan are not applicable at the project-level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the proposed Project, such as energy efficiency features required by CALGreen. Table 4.6-8, *CARB Scoping Plan Consistency*, presents the 39 recommended actions identified by CARB in its Scoping Plan. Of the 39 measures identified, those that would be applicable to the Project consist primarily of actions related to transportation, electricity and natural gas use, green building design, and industrial land uses. The Project's consistency with applicable measures of the CARB Scoping Plan is also summarized in Table 4.6-8. A detailed description of the Project's consistency with the CARB Scoping Plan recommended actions is presented in Section 2.10 of *Technical Appendix F* to this EIR. As shown in Table 4.6-8, the Project is consistent with the applicable, recommended measures of the CARB Scoping Plan.

❑ Consistency with GHG Emission Reduction Strategies of the 2006 CAT Report

The 2006 CAT Report was prepared in response to Executive Order S-3-05 and includes recommended strategies for reducing California's GHG emissions and achieving the goals of Executive Order S-3-05 and AB 32. Project's that are consistent with the CAT strategies also would be consistent with the mandates of Executive Order S-3-05 and AB 32 to reduce GHG emissions.

Table 4.6-8 CARB Scoping Plan Consistency

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	NO	NO
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	NO	NO
T-3	Transportation	Regional Transportation-Related GHG Targets	NO	NO
T-4	Transportation	Vehicle Efficiency Measures	NO	NO
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	NO	NO
T-6	Transportation	Goods-movement Efficiency Measures	NO	NO
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	NO	NO
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	NO	NO
T-9	Transportation	High Speed Rail	NO	NO
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards	YES	NO
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	NO	NO
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	NO	NO
E-4	Electricity and Natural Gas	Million Solar Roofs	YES	NO
CR-1	Electricity and Natural Gas	Energy Efficiency	YES	NO
CR-2	Electricity and Natural Gas	Solar Water Heating	NO	NO
GB-1	Green Buildings	Green Buildings	YES	NO
W-1	Water	Water Use Efficiency	YES	NO
W-2	Water	Water Recycling	NO	NO
W-3	Water	Water System Energy Efficiency	YES	NO
W-4	Water	Reuse Urban Runoff	NO	NO
W-5	Water	Increase Renewable Energy Production	NO	NO
W-6	Water	Public Goods Charge (Water)	NO	NO
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	YES	NO
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	NO	NO
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	NO	NO
I-4	Industry	Refinery Flare Recovery Process Improvements	NO	NO
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	NO	NO
RW-1	Recycling & Waste Management	Landfill Methane Control (Discrete Early Action)	NO	NO
RW-2	Recycling & Waste Management	Additional Reductions in Landfill Methane – Capture Improvements	NO	NO
RW-3	Recycling & Waste Management	High Recycling/Zero Waste	NO	NO
F-1	Forestry	Sustainable Forest Target	NO	NO
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	NO	NO
H-2	High Global Warming Potential Gases	SF_6 Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	NO	NO
H-3	High Global Warming Potential Gases	Reduction in Perflourocarbons in Semiconductor Manufacturing (Discrete Early Action)	NO	NO
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	NO	NO
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	NO	NO
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	NO	NO
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	NO	NO
A-1	Agriculture	Methane Capture at Large Dairies	NO	NO

Source: Urban Crossroads 2014c, Table 2-5

Table 4.6-9, *Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report*, lists the recommended GHG emission reduction strategies from the 2006 CAT report and also summarizes the Project's consistency with each applicable emission reduction strategy. As indicated in Table 4.6-9, the proposed Project would be consistent with all applicable GHG reduction strategies contained within the 2006 report.

❑ Consistency with City of Moreno Valley Energy Efficiency and Climate Action Strategy

The City of Moreno Valley *Energy Efficiency and Climate Action Strategy* is a policy document that identifies ways in which the City government can reduce its GHG emissions and energy and water consumption. The *Energy Efficiency and Climate Action Strategy* also outlines actions the community may take to reduce GHG emissions and water and energy consumption. The *Strategy* defines a baseline for the City's GHG emissions, projects how these emissions will grow, and includes strategies to reduce emissions to a level consistent with California's emissions reduction target. The actions listed in the Strategy complement the City's General Plan polices. The purpose and intent of these policies is to achieve compliance with AB32 and reduce GHG emissions by 15% by 2020. In 2020, the City is projected to emit a total of 1,298,543 MTCO2e without the incorporation of GHG reduction policies (City of Moreno Valley 2012 6).

While the statewide reduction measures would reduce the bulk of Moreno Valley's emissions and make a substantial contribution toward reaching the 2020 reduction target, the City would still need to supplement the statewide measures with the implementation of local reduction policies, in order to achieve a 15% reduction in GHG by 2020 (City of Moreno Valley 2012 6). The proposed Project's consistent with the City's *Energy Efficiency and Climate Action Strategy*, as it applies to redevelopment of an industrial property, is summarized in Table 4.6-10, *Project Compliance with Applicable City of Moreno Valley Energy Efficiency and Climate Action Strategy.*

❑ Conclusion

As previously indicated in Subsection 4.6.2, neither the City of Moreno Valley nor the SCAQMD have adopted a threshold of significance for determining the cumulative significance of a Project's GHG emissions on GCC. In the absence of an adopted quantitative threshold of significance, and for purposes of analysis within this Subsection, the applicable threshold of significance is whether or not the Project would comply with AB32 by reducing annual GHG emissions by 28.5% or greater on a Project-specific basis as compared to the BAU scenario, and compliance with the City's *Energy Efficiency and Climate Action Strategy* as it applies to redevelopment of an industrial property.

The Project would generate GHG emissions amounting to approximately 14,453.47 MTCO2e per year, which represents a GHG emissions reduction of approximately 21.12% as compared to the BAU scenario. As shown in Table 4.6-6, a majority of the Project's emissions – 12,860.93 MTCO2e (or 89%) – would be generated by mobile sources (*i.e.*, trucks and passenger vehicles) which are regulated by federal and state emissions and fuel use standards and outside of the control of the

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
California Air Resource Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Other Light Duty Vehicle Technology New standards would be adopted to phase in beginning in the 2017 model.	
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	
Diesel Anti-Idling In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Compliant. Heavy-duty diesel trucks that access the project site will be required to limit idling to no more than five minutes.
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak-tightness to the pass criteria for vehicular Inspection and Maintenance programs; 5) Enforce federal ban on releasing HFCs.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Transportation Refrigeration Units (TRUs), Off-Road Electrification, Port Electrification Strategies to reduce emissions from TRUs, increase off-road electrification, and increase use of shore-side/port electrification.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions. Further, no refrigerated truck units will access the Project site, nor does the Project proposed refrigerated warehousing.
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Reduced Venting and Leaks in Oil and Gas Systems Rule considered for adoption by the Air Pollution Control Districts for improved management practices.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Hydrogen Highway The California Hydrogen Highway Network (CA H_2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Integrated Waste Management Board	
Achieve 50 percent Statewide Recycling Goal Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a statewide basis. Therefore, a 2 percent additional reduction is needed.	Compliant. The project is required to comply with the City's Source Reduction and Recycling Element (SRRE). To this end, the Project design includes provisions for tenants to recycle. In accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued.
Zero Waste - High Recycling Additional recycling beyond the State's 50 percent recycling goal.	
Department of Forestry	
Forest Management Strategies for storing more carbon through forest management activities can involve a range of management activities such as increasing either the growth of individual trees, the overall age of trees prior to harvest, or dedicating land to older age trees.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
Forest Conservation Conservation projects are designed to minimize/prevent the climate change emissions that are associated with the conversion of forestland to non-forest uses by adding incentives to maintain an undeveloped forest landscape.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Fuels Management/Biomass Large, episodic, unnaturally hot fires are an increasing trend on California's wild lands because of decades of fire suppression activities, sustained drought, and increasing insect, disease, and invasive plans infestations. Actions taken to reduce wildfire severity through fuel reduction and biomass development would reduce climate change emissions from wildfire, increase carbon sequestration, replace fossil fuels, and provide significant economic development opportunities.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	The Project does not involve or propose a formal urban forestry program. Nor has the City adopted or implemented an urban forestry program. Notwithstanding, the Project will construct landscaping improvements, including tree plantings, consistent with the City's landscape design guidelines.
Afforestation/Reforestation Projects Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Department of Water Resources	
Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	Compliant. The Project shall implement U.S. EPA Certified WaterSense labeled or equivalent faucets and high-efficiency toilets (HETs), and implement water-conserving shower heads where applicable.
California Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Compliant. Project will be compliant with incumbent California Code of Regulations, Title 24 (Energy Efficiency Standards for Residential and Nonresidential Buildings).
Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Compliant. Appliances purchased for use in the Project will be consistent with all applicable energy efficiency standards.
Fuel-Efficient Replacement Tires & Inflation Programs State legislation (Chapter 912, Statues of 2001) directed the Energy Commission to investigate and to recommend ways to improve fuel efficiency of vehicle tires. The bill established a statewide program to encourage the production and use of more fuel efficient tires.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Cement Manufacturing Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Municipal Utility Strategies Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Alternative Fuels: non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
Business Transportation and Housing	
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. Governor Schwarzenegger is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity, and a quality environment.	Compliant. The Project is proximate to serving transportation corridors, thereby promoting operational efficiencies.
Measures to Improve Transportation Energy Efficiency Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	Compliant. The Project promotes transportation efficiencies through its location proximate to serving transportation corridors. Moreover, distribution warehouse uses such as those proposed by the Project act to consolidate regional transport and delivery of goods, thereby reducing VMT within the region, further improving transportation efficiencies. trips
Department of Food and Agriculture	
Conservation tillage/cover crops Conservation tillage and cover crops practices are increasingly being used by California farmers for a variety of reasons, including improved soil tilth, improved water use efficiency, reduced tillage requirements, saving labor and fuel, and reduced fertilizer inputs.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Enteric Fermentation Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
State and Consumer Services Agency	Not Applicable.
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.	Compliant. The Project will meet or surpass Title 24 Energy Efficiency standards, acting to reduce area source GHG emissions. Further, State mandated programs (Pavely et al.) will act to substantively reduce mobile-source GHG emissions. Additionally, the Project is required to comply with the mandatory provisions of the California Green Building Standards Code (CALGreen) pursuant to the California Code of Regulations, Title 24, which became effective on January 1, 2011.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33 percent renewables in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
California Solar Initiative Installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses; increased use of solar thermal systems to offset the increasing demand for natural gas; use of advanced metering in solar applications; and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Compliant. Project buildings will be designed to accommodate renewable energy sources, such as photovoltaic solar energy systems as is economically and physically feasible.
Investor-Owned Utility This strategy includes energy efficiency programs, combined heat and power initiative, and electricity sector carbon policy for investor owned utility.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Source: Urban Crossroads 2014c, Table 2-6

Table 4.6-10 Project Compliance with Applicable City of Moreno Valley Energy Efficiency and Climate Action Strategy

ID#	Strategy	Remarks
R2-T1:	Land Use Based Trips and VMT Reduction Policies. Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.	Project consistency: Not applicable.
R2-T3:	Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.	Project consistency: Consistent with implementation of recommended Mitigation Measures MM4.2-12, MM4.6-3, and MM 4.6-4.
R2-E1:	New Construction Residential Energy Efficiency Requirements. Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards. (Reach Code)	Project consistency: Not applicable; this measure applies to residential projects.
R2-E2:	New Construction Residential Renewable Energy. Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.	Project consistency: Not applicable; this measure applies to residential projects.
R2-E5:	New Construction Commercial Energy Efficiency Requirements. Require energy efficient design for all new commercial buildings to be 10% beyond the current Title 24 standards. (Reach Code)	Project consistency: Consistent. The City's Climate Action Strategy was established under an older version of Title 24. The current, applicable Title 24 standards are more stringent than previous versions of the code and would achieve greater than the 10% energy reduction envisioned by R2-E5. Furthermore, Mitigation Measures MM 4.2-8, MM 4.2-9, MM 4.6-1, MM 4.6-2, and MM 4.6-5 are recommended to encourage even greater energy efficient building design than required by Title 24.
R3-E1:	Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining. Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.	Project consistency: Not applicable.
R3-L2:	Heat Island Plan. Develop measures that address "heat islands." Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.	Project consistency: Consistent; the Project will comply with the City of Moreno Valley's landscaping requirements.
R2-W1:	Water Use Reduction Initiative. Consider adopting a per capita water use reduction goal, which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.	Project consistency: Consistent. California Green Building Standards Code, Chapter 5, Division 5.3, Section 5.303.2 requires that indoor water use be reduced by 20 percent. Section 5.304.3 requires irrigation controllers and sensors. Mitigation Measures MM 4.2-9 and MM 4.2-10 require water conservation.
R3-W1:	Water Efficiency Training and Education. Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.	Project consistency: Not applicable.
R2-S1:	City Diversion Program. For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.	Project consistency: Consistent. the Project will comply with the City of Moreno Valley's citywide goal of solid waste reduction. Additionally the Project will be compliant with the City of Moreno Valley's Municipal Code 8.80.030 by implementing a Waste Management Plan.

Source: Urban Crossroads 2014c pp. 29-30

Project Applicant and future tenants of the Project. Furthermore, as indicated in the above discussion and analysis, the proposed Project would be consistent with applicable recommended measures and actions of the CARB Scoping Plan and the applicable GHG emission reduction strategies set forth in the 2006 CAT Report. Regardless, the Project would not achieve AB 32's GHG emissions reduction goal of 28.5% compared to BAU; therefore, the Project is determined to generate GHG emissions that may have a cumulatively considerable contribution to GCC.

4.6.4 CUMULATIVE IMPACT ANALYSIS

GCC occurs as the result of global emissions of GHGs. An individual project such as the proposed Project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]).

Accordingly, the Project-specific impact analysis provided in Subsection 4.6.3 reflects a cumulative impact analysis of the Project's GHG emissions, and concludes that because the proposed Project would not achieve AB 32's goal to reduce GHG emissions by 28.5% or greater on a project-specific basis as compared to the BAU scenario, the Project would result in a cumulatively considerable emissions of GHGs as well as a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

4.6.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds 1 and 2: Significant Cumulatively Considerable Impact. Greenhouse gases would be emitted by the Project, primarily from mobile sources (vehicles traveling to and from the Project site). Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed in the analysis, the proposed Project would not reduce GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the mandates of AB 32. Therefore, because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley, the Project is determined to result in GHG emissions that may have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32). The Project would, however, comply with applicable provisions of the City's *Energy Efficiency and Climate Action Strategy* as it applies to redevelopment of an industrial property.

4.6.6 MITIGATION MEASURES

The following measures are recommended to ensure that Project-related stationary source emissions of GHGs are reduced to the maximum practical extent. In addition, Mitigation Measures MM 4.2-6 through MM 4.2-12 in Subsection 4.2, *Air Quality*, also would reduce GHG emissions.

MM 4.6-1 Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.

MM 4.6-2 Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.

MM 4.6-3 Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.

MM 4.6-4 Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen, 2013, Table 5.106.5.2).

MM 4.6-5 Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.

MM 4.6-6 Prior to the approval of permits and approvals that would permit cold storage in the building, the Project Applicant shall provide information to the City of Moreno Valley demonstrating that the cooling system design is energy efficient.

4.6.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (*i.e.*, trucks and cars). The application of Mitigation Measures MM 4.2-6 through 4.2-12 in EIR Subsection 4.2, *Air Quality*, and Mitigation Measures MM 4.6-1 through MM 4.6-4 listed above would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions (which comprise approximately 89% of the Project's total GHG emissions). Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley. No additional mitigation measures that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce and that have a proportional nexus to the Project's impact are available to substantially reduce the Project's mobile source GHG emissions. Imposing emissions controls on vehicles that would travel to and from the Project site, beyond the controls that are mandated by state and federal law and controls in place at the Ports of Los Angeles and Long Beach, would not be feasible given the realities of the southern California economy and the nature of local control in the

City of Moreno Valley. Accordingly, implementation of the Project would result in a cumulatively considerable significant and unavoidable impact.

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing emissions and particularly diesel particulate matter. More specifically, the CARB Drayage Truck Regulation, the CARB statewide On-road Truck and Bus Regulation, and the Ports of Los Angeles and Long Beach "Clean Truck Program" (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet. In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these and other regulatory requirements. More restrictive programs are infeasible to impose on a single-development project basis in the City of Moreno Valley.

4.7 NOISE

This following analysis is based on a technical noise study prepared by Urban Crossroads, Inc. entitled "Modular Logistics Center Noise Impact Analysis City of Moreno Valley," dated April 23, 2014d, and included as *Technical Appendix G* to this EIR. The report considers potential noise impacts associated with the construction and operation of the proposed Project.

4.7.1 EXISTING CONDITIONS

A. Study Area Description

The Project site is located in the southern portion of the City of Moreno Valley, north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Surrounding land uses are described in EIR Section 2.0, *Environmental Setting.* The nearest noise sensitive receptor is a non-conforming residential home located approximately 240 feet northwest of the Project site (Urban Crossroads 2014d 19).

B. Noise Fundamentals

❑ Noise Definitions

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Because the range of sound that the human ear can detect is so large, the scale used to measure sound intensity is based on multiples of 10, the logarithmic scale. The unit of measure in which a sound intensity is described is the decibel (dB). Each interval of 10 dB indicates a sound energy 10 times greater than before, which is perceived by the human ear as being roughly twice as loud. A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum; dBA is adjusted to reflect only those frequencies which are audible to the human ear (Urban Crossroads 2014d 4). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet (Urban Crossroads 2014d 7).

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most commonly used figure is the equivalent level (Leq). Leq are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). Leq represents a steady sound level containing the same total energy as a time-varying level over a given sample period (Urban Crossroads 2014d 8). Consequently, Leq can vary depending on the time of day.

Peak hour noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour levels may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24 hour noise level, is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 dB to sound levels in the evening from 7 p.m. to 10 a.m., and the addition of 10 dB to sound levels at night between 10 p.m. and 7 a.m. These additions are made to account for the noise sensitive time periods during the evening and nighttime

hours when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure (Urban Crossroads 2014d 8).

❑ Effects of Noise

Harmful effects of noise can include speech interference, sleep disruption, loss of hearing, and disruptions to performance and learning processes. Approximately 10% of the population has a very low tolerance for noise and will object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Another 25% of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA is considered "barely perceptible," and changes of 5 dBA are considered "readily perceptible" (Urban Crossroads 2014d 11).

❑ Sound Propagation

When sound propagates over a distance, it changes in level and frequency content (Urban Crossroads 2014d 6). The manner in which noise reduces with distance depends on geometric spreading, atmospheric effects, and shielding.

Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (Urban Crossroads 2014d 8).

Ground Absorption of Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in traffic noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water) no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. For the purposes of analysis, soft site conditions were used to analyze the traffic noise impacts for the Project study area because there is landscaping between the Project site's perimeter roads and on-site development areas, and along other roadways in the study area. Soft site conditions account for the sound propagation loss over natural surfaces such as soft earth and ground vegetation (Urban Crossroads 2014d 23).

Atmospheric Effects

Receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (500 feet or greater) due to atmospheric temperature inversions. Other factors that may affect noise levels include air temperature, humidity, and turbulence (Urban Crossroads 2014d 9).

Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Solid objects or barriers are most effective at attenuating noise levels. For vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The noise analysis conducted in *Technical Appendix G* and evaluated in this EIR does not consider the planting of vegetation to be a noise abatement measure (Urban Crossroads 2014d 9).

❑ Traffic Noise Prediction

According to the *Highway Traffic Noise Analysis and Abatement Policy and Guidance* provided by the Federal Highway Administration (FHWA), the level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the vehicle mix within the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, assuming that the speed and vehicle mix do not change, results in a noise level increase of 3 dBA. The vehicle mix on a given roadway may also have an effect on community noise levels. As the number of medium and heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels will increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires on the roadway (Urban Crossroads 2014d 9).

❑ Noise Control and Noise Barrier Attenuation

Noise control is the process of obtaining an acceptable noise environment for a particular observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to any and all of these three elements (Urban Crossroads 2014d 10).

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of the noise source (Urban Crossroads 2014d 10).

❑ Land Use Compatibility

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than are commercial or

industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development. For these reasons, land use compatibility with the noise environment is an important consideration in the planning and design process (Urban Crossroads 2014d 10).

❑ Vibration

Vibration is the periodic oscillation of a medium or object. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB. (Urban Crossroads 2014d 11)

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. (Urban Crossroads 2014d 11)

C. Existing Noise Conditions

On November 7, 2013 and December 18, 2013, Urban Crossroads, Inc. recorded 24-hour noise readings using Piccolo Type 2 integrating sound level meter and data loggers at four (4) noise level measurement locations in the Project area. More information about the sound level meters is provided in *Technical Appendix G* to this EIR. One (1) sound level meter was positioned at the nearest noise-sensitive receptor located approximately 240 feet northwest of the Project site, west of Perris Boulevard and north of San Michelle Road. In addition, three (3) sound level meters were placed at representative noise-sensitive receptors in the general vicinity of the Project site. Figure 4.7-1, *Noise Measurement Locations,* shows the noise measurement locations in relation to the Project site (locations L1 through L4).

The results of the noise level measurements are presented in Table 4.7-1, *Existing Ambient Noise Level Measurements*, and are summarized below. Table 4.7-1 identifies the average daytime (7 a.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) ambient noise levels at each noise level measurement location. (Refer to Appendix 5.2 within *Technical Appendix G* for the noise measurement worksheets utilized to produce the results of the noise levels described in Table 4.7-1, including a summary of the hourly noise levels and the minimum and maximum observed noise levels at each of the measurement locations.) A summary of the existing noise levels at the four (4) noise measurement locations is presented below. (Urban Crossroads 2014d 22)

- Location L1 is located approximately 717 feet west of the Project site, west of Perris Boulevard and north of San Michelle Road. Location L1 represents the off-site noise levels at the nearest noise sensitive residential receptor location. The existing daytime hourly ambient noise levels ranged from 60.3 to 64.1 dBA Leq resulting in an energy (logarithmic) average

daytime noise level of 62.2 dBA Leq. During the nighttime hours, the measured ambient noise levels ranged from 57.4 to 66.2 dBA Leq producing an energy (logarithmic) average nighttime noise level of 62.7 dBA Leq. Based on the collection of 24 hourly noise levels, the Community Noise Equivalent Level (CNEL) for overall exterior noise level is 69.2 dBA CNEL.

- Location L2 represents the residential community located approximately 911 feet north of the Project site, on the north side of the Perris Valley Storm Drain Channel at the end of Kitching Street. Based on the collection of24 hourly noise levels, the overall exterior noise at Location L2 is calculated to be of 57.8 dBA CNEL. The hourly noise levels measured at Location L2 ranged from 48.8 to 54.9 dBA Leq during the daytime hours and from 48.8 to 53.4 dBA Leq during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 51.8 dBA Leq with an average nighttime noise level of 50.9 dBA Leq.
- Location L3 represents the existing noise sensitive receptors located approximately 1,705 feet east of the Project site in the residential neighborhood of Callerio Vista. Based on the collection of 24 hourly noise levels, the overall exterior noise level at Location L3 is calculated to be 58.6 CNEL. The hourly noise levels measured at Location L3 ranged from 50.2 to 62.7 dBA Leq resulting in an energy (logarithmic) average daytime noise level of 56.4 dBA Leq. During the nighttime hours, the measured ambient noise levels ranged from 41.4 to 55.8 dBA Leq producing an energy (logarithmic) average nighttime noise level of 50.3 dBA Leq.
- Location L4 represents the existing ambient noise levels approximately 1,688 feet southwest of the Project site at an existing residential home located south of Nandina Avenue. Based on the collection of 24 hourly noise levels, the overall exterior noise level is calculated to be of 67.8 dBA CNEL. The existing daytime hourly noise levels were measured at 60.1 to 64.6 dBA Leq with the nighttime hours ranging from 56.8 to 63.9 dBA Leq. The energy (logarithmic) average daytime noise level was calculated at 62.3 dBA Leq with an average nighttime noise level of 61.0 dBA Leq.

D. Existing Ground-Borne Vibration

Ground-borne vibration is usually localized to areas within about 100 feet from the vibration source (California Department of Transportation 2004 Appendix A). There are no existing sources of measured ground-borne vibration on or within 100 feet of the Project site.

E. Existing Noise Standards (Policies and Regulations)

Local noise guidelines are often based on the broader guidelines established by state and federal agencies. Following is a description of the existing noise regulatory setting for the proposed Project. Because the Project's local road traffic distribution (and associated vehicular noise) is projected to route through the City of Moreno Valley and the City of Perris, the noise criteria for the City of Moreno Valley and the City of Perris are presented below.

❑ California Office of Planning and Research General Plan Guidelines

The City of Moreno Valley General Plan does not include a noise element or specific transportation related noise standards; rather, noise is considered in the Environmental Safety section of the General

Plan Safety Element. While the General Plan provides background and noise fundamentals, it does not identify criteria to assess the impacts associated with off-site transportation related noise impacts. Therefore, for purposes of evaluating traffic-related noise impacts within the City of Moreno Valley, the analysis in this EIR instead relies on the noise criteria derived from the standards provided in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. These standards are used by many California cities and counties and specify the maximum noise levels allowable for new developments. A copy of the *General Plan Guidelines* is provided as Appendix 3.1 to the Project's Noise Impact Analysis (see *Technical Appendix G*) (Urban Crossroads 2014d pp. 13-14).

❑ City of Moreno Valley Noise Ordinance

The Noise Ordinance included in Chapter 11.80 of the City of Moreno Valley's Municipal Code provides performance standards and noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts.

Section 11.80.030.C, *Nonimpulsive Sound Decibel Limits*, provides the following restriction:

> *No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2 when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance. (Moreno Valley n.d. Section 11.80.030.C)*

Table 11.80.030-2 of the City's Noise Ordinance is replicated at the end of this EIR section as Table 4.7-2, *Maximum Sound Levels (in dBA) For Source Land Uses.* Table 4.7-2 shows that the daytime and nighttime standards for commercial uses (including the warehouse use proposed by the Project) are 65 dBA and 60 dBA, respectively (City of Moreno Valley Municipal Code Table 11.80.030-2).

The City of Moreno Valley also has established restrictions on the time of day that construction activities can occur. Noise Ordinance Section 11.80.030.D.7, *Construction and Demolitions*, states: "No person shall operate or cause operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 8:00 p.m. and 7:00 a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee" (City of Moreno Valley Municipal Code Section 11.80.030.D.7). The City's Noise Ordinance does not address construction-related noise volumes during permitted construction hours.

❑ City of Perris General Plan Noise Element

The City of Perris General Plan standards also are derived from standards contained in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. The Noise Element includes standards for land use compatibility for community noise exposure. Goal 1 of the City's Noise Element requires that the State of California Noise/Land Use Compatibility Criteria be used in determining land use compatibility for new development. At different exterior noise levels,

individual land uses are identified as "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." The City of Perris General Plan's *Land Use/Noise Compatibility Guidelines*, which are presented as General Plan Exhibit N-1, are designed to ensure noise compatibility of proposed land uses with the predicted future noise environment and illustrate the ranges of allowable exterior noise levels for various land uses based on the 2003 State of California General Plan Guidelines (City of Perris 2005).

The City of Perris utilizes the CNEL scale as the criterion for assessing the compatibility of residential land uses with transportation related noise sources. For noise sensitive uses such as residential uses, the exterior noise level standard is 65 dBA CNEL and the interior noise standard is 45 dBA CNEL. Commercial uses are not considered noise sensitive uses and are evaluated with respect to the Noise/Land Use Compatibility Criteria that defines an ambient noise level ranging from 65 dBA CNEL to 75 dBA CNEL as conditionally acceptable (City of Perris 2005).

4.7.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to noise if the Project or any Project-related component would:

1. *Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
2. *Expose persons to or generate excessive groundborne vibration or groundborne noise levels;*
3. *Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
4. *Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
5. *For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or*
6. *For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.*

While the CEQA Guidelines and the City of Moreno Valley noise standards provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts under Threshold 1, they do not define the levels at which increases are considered substantial for use under Thresholds 2, 3, or 4. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receptors in order to determine if a noise increase represents a significant adverse environmental impact.

Noise impacts would be considered significant if any of the following occur as a direct result of the proposed Project:

- If Project-related construction activities occur on any weekday during noise sensitive hours (8:00 p.m.to 7:00 a.m.) or would exceed a maximum sound level of 65 dBA Leq at a distance of 200 feet from the Project site and effect a sensitive noise receptor;
- If Project-related operational (stationary source) noise levels exceed the daytime and nighttime maximum sound levels of 65 dBA CNEL and 60 dBA CNEL, respectively (City of Moreno Valley Noise Ordinance Table 11.80.030-02) beyond 200 feet from the Project's property boundary;
- If short-term Project-related construction activities exceed 80 vibration decibels (VdB) at noise sensitive receiver locations; or
- If Project-related operational activities exceed 70 vibration decibels (VdB) at noise sensitive receiver locations.

The level of significance attributed to the Project's cumulative contribution to noise impacts is based on the noise levels that occur with and without the Project. The significance of cumulative noise impacts varies depending on the condition of the environment and the Project-related noise level increases. For example, if the ambient noise environment is quiet and the new noise source greatly increases the noise levels, an impact may occur even though the noise criteria might not be exceeded. In areas where the without Project noise levels range from 60 to 65 dBA, noise levels increases of 1 dBA cannot be perceived (except in carefully controlled laboratory experiments), an increase of 3 dBA is considered "barely perceptible" and an increase of 5 dBA is considered "readily perceptible." For the purpose of this analysis, a "readily perceptible" 5 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are below 60 dBA and the with-Project noise levels exceeds the City's noise standard for the adjacent land use. A 3 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are between 60 and 65 dBA and the with-Project noise levels exceeds the City's noise standard for the adjacent land use. When the without-Project noise levels already exceed 65 dBA at a sensitive noise receptor location, any increase of 1.5 dBA or greater as a result of Project operations is considered a cumulatively considerable contribution to the community noise environment.

4.7.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***
Threshold 3:	***Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project?***
Threshold 4:	***Would the Project result in a substantially temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?***

A. Short-Term Construction Noise Impacts

- **Methodology for Estimating Project Construction Equipment Reference Noise Levels**

In January 2006, the Federal Highway Administration (FHWA) published a national database of construction equipment reference noise emission levels. The database provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation (Urban Crossroads 2014d pp. 45-46). Noise levels generated by heavy construction equipment can range from approximately 70 dBA in excess of 100 dBA when measured at 50 feet. These noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 78 dBA measured at 50 feet from the noise source to the receptor would be reduced to 72 dBA at 100 feet from the source to the receptor, and would be further reduced to 66 dBA at 200 feet from the source to the receptor (Urban Crossroads 2014d 46). Construction-related noise levels were predicted based on the types and numbers of heavy equipment expected to be used during Project construction activities as previously described in EIR Section 3.0, *Project Description*.

- **Project Construction Noise Impact Analysis**

Construction activities associated with the proposed Project, especially activities involving heavy equipment, would create intermittent periods of noise when construction equipment is in operation and would cause a short-term increase in ambient noise levels. Examples of construction equipment that generate noise includes but is not limited to graders, bulldozers, trucks, power tools, concrete mixers, jackhammers, and portable generators. Construction of the proposed Project is expected to occur in four (4) stages: 1) site preparation and demolition, 2) grading and subsurface improvements, 3) building construction, 4) landscaping, fencing/wall, and other site improvements installation. The highest construction noise levels would occur during the grading phase (Urban Crossroads 2014d 47).

To assess the construction-related noise levels expected from the proposed Project, analysis of the Project's construction noise level impacts were completed for the ten (10) noise receiver locations identified on Figure 4.7-2, *Noise Receiver Locations.* Receiver locations R3, R4, R7, R8, and R9 represent residential communities in the Project site's vicinity and are considered "noise-sensitive" receptors. Receiver locations R1, R2, R5, R6, and R10 represent areas that are zoned for industrial

land use. There are seven (7) non-conforming residential homes currently located in the industrial zone, south of the Perris Valley Storm Drain Channel and north of Grove View Road.

The projected noise levels used for analysis assume the worst-case noise environment, with all construction equipment operating simultaneously, at full power, at the same location on the Project site. In reality, noise levels would vary day-to-day and would vary throughout the days, as it is highly unlikely that all pieces of construction equipment would simultaneously operate at the same time and location. As shown in Table 4.7-3, *Construction Equipment Noise Levels*, Project-related construction activities are estimated to reach a maximum noise level of 78.4 dBA Leq when measured 200 feet from the Project site. Noise levels experienced by receivers located closer than 200 feet from the Project site would be louder than noise levels at and beyond 200 feet. The nearest noise sensitive receptor is a non-conforming residential property, located approximately 240 feet west of the Project site, west of Perris Boulevard. Receiver locations R3, R4, R7, R8, and R9, located within residential communities, would experience construction-related noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours, assuming a clear line of site from the construction equipment to the receiver. The construction-related noise level impacts experienced by noise receiver locations R3, R4, R7, R8, and R9 would not exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with the existing backyard perimeter walls and the intervening development that blocks or partially blocks the line of sight (Urban Crossroads 2014d 46). Receiver locations R2, R4, R9, and R10 would not exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours. Noise sensitive receivers R1, R5, and R6, located within areas zoned for industrial use, are expected to experience noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours. Therefore, Project construction-related activities would represent a short-term significant impact to non-conforming residential uses near the Project site in the industrial zone.

B. Long-Term Operational Impacts

❑ Transportation-Related Noise

Methodology for Estimating Project Operational Traffic Noise

Future roadway noise impacts from vehicular traffic were projected using a computer program that replicates the FHWA and Model Inputs Traffic Noise Prediction Model- FHWA-RD-77-108 (the "FHWA Model"). Future noise impacts to properties along local roads from vehicular traffic were calculated along the Project's predicted local traffic route where fifty (50) or more peak hour trips would be contributed. A total of 17 roadway segments were evaluated based on the traffic impact study area utilized in the Project's Traffic Impact Analysis (refer to *Technical Appendix H1)*.

The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the REMEL to account for the roadway classification (e.g., collector, secondary, major, or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the

ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period (Urban Crossroads 2014d 23).

Table 4.7-4, *Off-Site Roadway Parameters*, presents the FHWA Model roadway parameters used by Urban Crossroads in the Project's traffic impact analysis (Refer to *Technical Appendix H1*) for each of the 17 study area roadway segments. For the purpose of the noise analysis (Refer to *Technical Appendix G*), soft site conditions were used to analyze the traffic noise conditions in the Project study area (Urban Crossroads 2014d 23). Table 4.7-5, *Average Daily Traffic Volumes*, and Table 4.7-6, *Time of Day Vehicle Splits*, present the hourly traffic flow distributions (vehicle mix) used for the noise analysis (Refer to *Technical Appendix G*). To quantify the off-site traffic noise levels, the FHWA noise prediction model inputs were modified to account for the increased heavy truck activities within the Project study area. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model (Urban Crossroads 2014d 23).

Transportation-Related Noise Impact Analysis

Generally, traffic noise impacts are analyzed both to ensure that a project would not adversely impact the acoustic environment of the surrounding community and also to ensure that a project site is not exposed to an unacceptable level of noise resulting from the ambient noise environment acting upon the property. The proposed Project consists of the construction and operation of one (1) logistics warehouse building and is not considered to be sensitive to noise exposure. Thus, the analysis herein focuses on the Project's potential to increase traffic noise as a result of vehicles traveling to and from the property.

Noise contours (representing the 55, 60, 65, and 70 dBA noise levels) along the 17 local roadway segments to which the Project would contribute 50 or more peak hour trips were calculated for the without-Project and with-Project scenarios to assess the Project's incremental traffic-related noise impact on local roads. Traffic noise contours were modeled for each scenario studied in the Project's Traffic Impact Analysis (*Technical Appendix H1*) and include the Existing (2013) and Year 2018 noise scenarios. The noise contours assume a normal "soft" condition and do not take into account the effect of any existing noise barriers or topography (walls, fences, berms, etc.) that may attenuate ambient noise levels. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Traffic noise contour boundaries are typically calculated at distances of 100 feet from a roadway centerline. In addition, because the noise contours reflect modeling of vehicular noise along area roadways, they appropriately do not reflect noise contribution from surrounding operational activities that occur as part of commercial and industrial uses, aircraft operations, or other uses within the study area. Noise contour boundaries for Existing (2013) conditions are summarized in Table 4.7-7 and Table 4.7-8. Noise contour boundaries for Year 2018 conditions are summarized in Table 4.7-9 and Table 4.7-10. Traffic noise contour worksheets are contained in Appendix 7.1 of *Technical Appendix H1*.

Pursuant to the *Thresholds of Significance* (refer to Subsection 4.7.2, above), the Project would have the potential to contribute to a cumulatively considerable noise impact if the Project (in this case, the Project's traffic) would generate substantial noise. Substantial noise is defined as 5 dBA or more when the without project noise environment is less than 60 dBA CNEL, 3 dBA or more when the

without project noise environment is between 60 and 65 dBA CNEL, or 1.5 dBA or more when the without project noise environment exceeds 65 dBA CNEL.

Table 4.7-11, *Existing (2013) Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the existing (2013) noise conditions to the noise conditions that would result with implementation of the proposed Project in the absence of cumulative development and ambient growth. Under existing (2013) conditions, operation of the proposed Project would cause an increased noise level of 0.0 to 10.9 dBA CNEL along local roads (as measured 100 feet from the roadway centerline). With the addition of Project-related traffic to the Existing (Year 2013) noise environment, the noise levels along study area roadway segments would range between 57.7 to 70.4 dBA CNEL (as measured from the roadway centerline).

As shown in Table 4.7-11, under Existing (Year 2013) conditions, Project-related traffic would contribute over 5.0 dBA CNEL along three (3) study-area roadway segments where the without-Project noise levels are below 60.0 dBA CNEL and the Project has the potential to contribute to a cumulatively considerable effect at each of the listed roadway segments.

- Kitching Street, south of Modular Way;
- Modular Way, west of Kitching Street; and
- Globe Street, west of Kitching Street

None of the three (3) roadway segments listed above are adjacent to noise-sensitive land uses, and none of the three (3) above-listed roadway segments would exceed the City's noise standard for adjacent land uses with the addition of Project traffic. Therefore, the Project would result in a less-than-significant impact to sensitive receptors and noise levels would not exceed applicable standards.

Additionally, Project-related traffic would contribute less than 3 dBA along all study area roadway segments where the without-Project noise levels are between 60 and 65 dBA CNEL under Existing (Year 2013) conditions.

The Project would cause noise levels to exceed 65.0 dBA CNEL along one (1) roadway segment under Existing (Year 2013) conditions; the Harley Knox Boulevard segment west of Perris Boulevard (an increase from 63.8 to 65.2 dBA CNEL, refer to Table 4.7-11). However, there are no noise-sensitive land uses adjacent to this roadway segment and this area is planned for long-term industrial use. Because there are no noise-sensitive land uses adjacent to this roadway segment and because the long-term use of this area (i.e., industrial) is compatible with noise levels below 70.0 dBA CNEL, the Project would not directly result in the exposure of sensitive receptors to noise levels in excess of applicable standards. As such, the Project would result in less-than-significant impacts related to noise.

Furthermore, Project-related traffic would increase noise levels by at least 1.5 dBA CNEL along one (1) roadway segment (Indian Street, south of Grove View Road) where the without-Project noise levels exceed 65 dBA CNEL under existing (year 2013) conditions, and the Project has the potential to contribute to a cumulatively significant effect at this roadway segment. However, because there are no noise-sensitive land uses adjacent to the segment of Indian Street south of Grove View Road, the Project would not contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards. Therefore, the Project would result in less-than-significant impacts associated

with off-site transportation-related noise and impacts would be less than cumulatively considerable under Existing (Year 2013) plus Project conditions.

Table 4.7-12, *Year 2018 Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the projected noise conditions in the Year 2018 (including cumulative development and ambient growth) to the noise conditions that would result with addition of the proposed Project. Under Year 2018 conditions, off-site roadway noise levels along the 17 studied roadway segments would increase from 0.0 to 10.9 dBA CNEL (as measured 100 feet from the roadway centerline) with addition of the proposed Project. With the addition of Project-related traffic to the projected Year 2018 noise environment, the noise levels along study area roadway segments would range between 59.0 dBA CNEL and 72.2 dBA CNEL.

As shown in Table 4.7-12, *Year 2018 Off-Site Project-Related Traffic Noise Impacts*, the addition of Project-related traffic to projected 2018 traffic is calculated to increase noise levels by a maximum of 10.9 dBA CNEL. Five (5) roadway segments where without-Project noise levels are below 60 dBA CNEL, would be subject to noise level increases of at least 5.0 dBA CNEL, thereby having the potential to contribute to a cumulatively considerable effect:

- Kitching Street, north of Modular Way
- Kitching Street, south of Modular Way
- Modular Way, east of Perris Boulevard
- Modular Way, west of Kitching Street
- Globe Street, west of Kitching Street.

However, none of the five (5) roadway segments listed above are adjacent to any noise-sensitive land uses and the Project's effects would be less-than-significant. In addition, these roadways exist adjacent to industrially zoned lands where such roadway noise is typical. Furthermore, the remaining 12 study area roadway segments would not be subjected to Project-traffic related noise level increases in excess of 0.6 dBA CNEL for Year 2018 projected conditions and the Project's incremental noise contributions along these roadways would be considered "barely perceptible" (i.e., less than 1.5 dBA CNEL). Accordingly, the addition of Project-related traffic would not represent a substantial, permanent increase in noise levels above ambient conditions and would not result in the exposure of sensitive receptors to noise levels in excess of applicable standards. Therefore, the Project would result in less-than-significant impacts associated with off-site transportation-related noise and impacts would be less than cumulatively considerable under Existing (Year 2018) plus Project conditions.

❑ Stationary Noise

Methodology for Estimating Project Operational Stationary Noise

Operational noise levels at the Project site would be very similar to operational noise levels generated at other distribution warehouse facilities in southern California. Reference noise level measurements were collected by Urban Crossroads on Tuesday, January 22, 2013, at two operating warehouse facilities in Anaheim, California (Veg Fresh Farms and the FedEx distribution facility, both located at East Orangethorpe Avenue). From a noise standpoint, a warehouse facility's operational characteristics are the primary factors that affect operational noise levels; the geographic location of the facility does not substantially influence operational noise levels. The noise level measurements

collected from the Veg Fresh Farms and FedEx warehouse facilities in Anaheim, California are representative of stationary noise levels expected at the Project site because these facilities have 24-hour operational activities that are comparable to those proposed at the Project site. The reference noise level measurements include the daytime and nighttime noise levels associated with idling trucks, delivery truck activities, parking, backup alarms and the use of refrigerated containers or reefers. Although a tenant requiring refrigeration is not expected to occupy the Project site, the inclusion of refrigeration activities as part of the reference noise level allows analysis of a higher intensity operation than a non-refrigeration operation that would likely occupy the Project site.

Based on the noise level measurements collected by Urban Crossroads from the reference Veg Fresh Farms and the FedEx distribution facilities, a noise level of 69.1 dBA Leq is used as the reference noise level for the Project's operational activities. The reference noise level was measured at a distance of 25 feet from the noise source (loading dock) and with an estimated noise source height of eight (8) feet. The reference noise levels describe the worst-case noise condition with full 24-hour daytime and nighttime distribution activities. It is likely overstates the noise level impacts that will actually occur at the Project site. The specific noise levels at the Project site will depend on the actual tenant (which is not yet known), the intensity and the daytime/nighttime hours of operation.

Stationary Noise Impact Analysis

The proposed Project consists of the construction and operation of one (1) logistics warehouse building. Stationary noise sources associated with operation of the Project would include but not be limited to idling trucks, delivery truck activities, parking, backup alarms, and HVAC equipment. The reference noise levels describe the worst-case noise condition with full 24-hour daytime and nighttime distribution activities. In reality, operational noise levels would vary throughout the day and would not be constant.

Based upon the reference noise levels, as described above, Table 4.7-13, *Operational Noise Level Projections*, presents the exterior operational noise levels expected from Project operation at each receiver location shown in Figure 4.7-2. The operational noise level calculations shown on Table 4.7-13 identify the distance from the reference noise source (i.e., truck loading and parking areas) to the noise receivers, the distance attenuation, and the estimated Project-related hourly noise levels. As indicated in Table 4.7-13, the hourly operational noise levels that are expected from Project operations are calculated to range from 30.6 dBA Leq to 41.2 dBA Leq, which is below both the daytime (65 dBA Leq) and nighttime (60 dBA Leq) City of Moreno Valley exterior noise standards (City of Moreno Valley Municipal Code Section 11.80).

Table 4.7-14 and Table 4.7-15 summarize the local daytime and nighttime noise environments when Project operational noise is added to ambient noise conditions. As indicated in Table 4.7-14 and Table 4.7-15, noise levels would range from 50.3 to 62.7 dBA Leq when combined with the existing ambient noise level measurements. The analysis in Table 4.7-14 indicates that the proposed Project would contribute an operational noise level impact of up to 0.2 dBA Leq at noise receiver location R7 during daytime hours (7:00 a.m. to 10:00 p.m.). The analysis in Table 4.7-15 indicates that the Project would contribute an operational noise level impact of up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 during nighttime hours (10:00 p.m. to 7:00 a.m.). The Project's contribution of noise at noise receiver locations R3, R7, and R8 is determined to be a less-than-significant impact because noise levels at these locations would remain below acceptable standards

(i.e., 65 dBA Leq during daytime hours and 60 dBA Leq during nighttime hours) and the Project's noise contribution at these locations would not be perceptible. At receiver locations R1, R2, R4, R5, R6, and R10, the Project would contribute 0.0 dBA Leq to the noise environment during daytime and nighttime hours. Applying the *Thresholds of Significance* (refer to Subsection 4.7.2 above), the expected operational noise level increase of up to 0.2 dBA Leq would not represent a substantial, permanent increase above ambient conditions.

The Project's northernmost driveway along Perris Boulevard would be used by trucks and passenger cars entering and exiting the proposed warehouse facility, receiving approximately 300 passenger car equivalent (PCE) trips per day (see Figure 4.8-12 of this EIR). Vehicle traffic at the Project's northernmost driveway along Perris Boulevard would not be a source of substantial Project-related operational noise because the Project's use of this driveway would be intermittent throughout any given day and vehicle noise at this driveway likely would not be discernable above background traffic noise along Perris Boulevard (as summarized in Tables 4.7-11 and 4.7-12) or background noise on the Project site (as summarized in Tables 4.7-13 through 4.7-15). Accordingly, long-term use of the Project's northernmost driveway along Perris Boulevard is not expected to create a substantial, permanent increase above ambient conditions or expose sensitive receptors to noise levels in excess of applicable standards.

In summary, the Project's operational activities would not create a substantial, permanent increase in noise levels above the ambient conditions, and would not cause or contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards.

Threshold 2: Would the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

A. Short-Term Construction Vibration Impacts

The Project's construction-related vibration levels were predicted using reference construction equipment vibration levels and logarithmic equations contained in the Federal Transit Administration's (FTA) 2006 publication: "Transit Noise and Vibration Impact Assessment" (Urban Crossroads 2014d 49).

Construction activities that would occur within the Project site are expected to include grading and excavation, which have the potential to generate low levels of intermittent, localized ground-borne vibration. Vibration levels anticipated to result from Project-related construction activities were calculated at each of the ten (10) receiver locations identified on Figure 4.7-2. In addition, Project construction-related vibration levels were calculated at a non-specific receiver location 200 feet from the Project site. The results of the vibration analysis for Project-related construction activities are summarized in Table 4.7-16, *Construction Equipment Vibration Levels*. As shown in Table 4.7-16, Project-related construction activities are expected to create a peak vibration level of 59.9 VdB when measured at 200 feet from the Project site, and would not expose any nearby receptor (i.e., R1-R10) to peak vibration levels in excess of 57.5 VdB. Because the amount of vibration generated by the Project would be well below a level of significance threshold (80 VdB, refer to Subsection 4.7.2), the Project's short-term construction activities would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Therefore, the Project would result in less-than-significant impacts associated with construction vibration.

B. Long-Term Operational Vibration Impacts

Under long-term conditions, operational activities of the proposed Project would not include nor require equipment, facilities, or activities that would result in perceptible groundborne vibration. Trucks would travel to-and-from the Project site during long-term operation; however, vibration levels for heavy trucks operating at low-to-normal speeds on smooth, paved surfaces – as is expected on the Project site and along surrounding roadways – are typically below the human threshold of perception (65 VdB, Urban Crossroads 2014d 43). Accordingly, long-term operation of the Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels, and a less-than-significant impact would occur.

Threshold 5: ***For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?***

According to the City of Moreno Valley General Plan FEIR Figure 5.4-1, *March Reserve Air Base Noise Impact Area*, the Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. Accordingly, the Project would have a less-than-significant impact associated with airport-related noise.

The proposed Project does not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with the proposed Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise.

Threshold 6: ***For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?***

Although the Project site is located 1.0 mile west of the March ARB, this airfield is not a private airfield and there are no other private airfields or airstrips in the vicinity of the Project site. Therefore, the proposed Project would not expose people to excessive noise levels associated with operations at a private airstrip and no impact would occur.

4.7.4 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan buildout in the City of Moreno Valley and surrounding areas. The analysis of potential cumulative impacts is divided into four general topics of discussion by combining the *Thresholds of Significance* (listed above in Subsection 4.7.2) into groupings of like topics.

A. Substantial Noise Increase or Violations (Thresholds 1, 3, and 4)

❑ Short-Term Cumulative Construction-Noise Impacts

Construction activities associated with the Project, especially activities involving heavy equipment, would create intermittent periods of noise when construction equipment is in operation and cause a short-term increase in ambient noise levels. The peak noise level anticipated during construction activities would occur during mass grading of the site, which would result in Project-related noise levels of 78.4 dBA Leq at a distance of 200 feet from the noise source. Noise levels within 200 feet would be louder than noise levels at and beyond 200 feet. The nearest noise sensitive receptor is located approximately 240 feet west of the Project site, west of Perris Boulevard. As previously indicated in Subsection 4.7.3, receiver locations R3, R4, R7, R8, and R9, located within residential communities would experience noise levels that would exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with a clear line of sight from the noise source to the receiver. The construction-related noise level impacts at noise receiver locations R3, R4, R7, R8, and R9 are not expected to exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with the existing backyard perimeter walls (Urban Crossroads 2014d 46) from construction of the proposed Project alone. Noise receiver locations R2, R4, R9, and R10 would not experience noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours from construction of the proposed Project alone. Noise sensitive receivers R1, R5, and R6, located within areas zoned for industrial use, are expected to exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours from construction of the proposed Project alone.

Construction-related Project noise combined with ambient noise, construction noise, and vehicular noise from potential cumulative development projects would have a cumulative effect on noise sensitive receiver locations R2, R4, R9, and R10. As indicated previously in EIR Subsection 2.3, some of the properties located in the immediate vicinity of the Project site are vacant or contain non-conforming uses and are anticipated to develop with industrial and warehouse uses consistent with their General Plan land use and zoning designations. In the event that construction activities occur on any properties surrounding the site simultaneous with Project-related construction activities, and that also contribute construction noise to receiver locations R2, R4, R9 and R10, a cumulative impact may occur and the Project's construction-related noise contribution to the overall noise level would be cumulatively considerable. Such noise level increases would represent a cumulatively considerable substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. Because construction noise would be temporary in nature, Project construction activities would result in a less than cumulatively considerable substantial permanent (long-term) increase in ambient noise levels in the Project vicinity above levels existing without the Project.

❑ Long-Term Cumulative Transportation-Related Noise Impacts

Under existing with Project conditions, the proposed Project is expected to generate transportation-related noise level increases up to 10.9 dBA CNEL. However, none of the roadway segments that are subjected to potentially significant levels of Project-related traffic noise contain sensitive receptors. Therefore, pursuant to the Thresholds of Significance (refer to Subsection 4.7.2), the Project's traffic-related noise impacts along other study area roadway segments (17 total) would be less than cumulatively considerable under Existing (Year 2013) conditions.

By the Year 2018, the concentration of Project traffic on study area roadways (as a percentage of total traffic) would decrease as the overall volume of background traffic increases, and the Project's contribution of traffic-related noise to study area roadways would decrease concomitantly. Under Year 2018 with Project conditions, the Project is expected to generate transportation-related noise level increases of up to 10.9 dBA CNEL (refer to Table 4.7-12). However, none of the five (5) roadway segments subject to noise increases in excess of 5.0 dBA CNEL, which constitutes a "readily perceptible" noise increase, are adjacent to any noise-sensitive land uses and the Project's effects would be less-than-significant (Urban Crossroads 2014d 35). Furthermore, the remaining 12 study area roadway segments would not be subjected to Project-traffic related noise level increases in excess of 0.6 dBA CNEL for Year 2018 projected conditions and the Project's incremental noise contributions along these roadways would be considered "barely perceptible" (i.e., less than 1.5 dBA CNEL). Therefore noise impacts under the Year 2018 scenario would be less than cumulatively considerable.

❑ **Long-Term Cumulative Stationary Noise Impacts**

The proposed Project would contribute operational noise levels of up to 0.2 dBA Leq at noise receiver location R7 during daytime hours (7:00 a.m. to 10:00 p.m.) and up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 during nighttime hours (10:00 p.m. to 7:00 a.m.). The Project's contribution of noise at a level of up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 is considered less than cumulatively considerable because noise levels at these locations would remain below acceptable standards (i.e., 65 dBA Leq during daytime hours and 60 dBA Leq during nighttime hours) and the Project's noise contribution to noise at these locations would not be perceptible. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments and a change of 3 dBA is considered "barely perceptible" (Urban Crossroads 2014d 11). A level of 0.2 dBA is well below the level that can be perceived. At receiver locations R1, R2, R4, R5, R6, and R10, the proposed Project would contribute 0.0 dBA Leq to the noise environment during daytime and nighttime hours. Applying the *Thresholds of Significance* (refer to Subsection 4.7.2 above), the expected operational noise level increase of up to 0.2 dBA Leq would not represent a substantial, permanent increase above ambient conditions. Thus, the Project's operational activities would not cumulatively contribute to the creation of a significant and substantial, permanent increase in noise levels above the ambient conditions, and would not cause or contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards. Accordingly, the Project would have a less-than-significant operational noise impact and impacts would be less than cumulatively considerable.

B. Groundborne Vibration and Groundborne Noise (Threshold 2)

The types of construction equipment that would be used to implement the proposed Project would not create vibration amplitudes that could cause structural damage to nearby structures. The nearest existing off-site structures are located more than 100 feet from the nearest point of construction activities and would not be exposed to substantial ground-borne vibration due to the temporary operation of heavy construction equipment on the Project site. In addition, there would be no other construction activities occurring simultaneously within 100 feet of the Project site. Under long-term operating conditions, the Project would not involve the use of equipment, facilities, or activities that would result in perceptible groundborne vibration. Accordingly, the Project has no potential to cumulatively contribute to excessive groundborne vibration and noise and impacts would be less than cumulatively considerable.

C. Public and Private Airport-Related Noise Levels (Thresholds 5 and 6)

The proposed Project does not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with the proposed Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively contribute to impacts associated with noise from a public airport, public use airport, or private airstrip. Additionally, the Project is not a noise-sensitive land use and operation of the Project would not contribute towards the exposure of people to excessive airport-related noise.

4.7.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds 1, 3, and 4: Significant Direct and Cumulatively Considerable Impact (Short-Term): Noise generated by Project construction activities would temporarily impact non-conforming residential properties located in the industrial zone. In the event that Project construction activities occur simultaneously with other construction activities that affect the same nearby noise-sensitive receptors as the Project, there is potential for a significant cumulative short-term impact to occur, with the Project's contribution to the impact being cumulatively considerable. Under long-term operation, the Project would not expose persons to or generate noise levels in excess of local standards and would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Threshold 2: Less-than-Significant Impact. The Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Threshold 5: Less-than-Significant Impact. The Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. As such, the Project would not expose people to excessive noise levels associated with the operation of an airport.

Threshold 6: No Impact. The Project would not expose people to excessive noise levels associated with the operation of a private airstrip.

4.7.6 MITIGATION

MM 4.7-1 Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request.

a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code).

b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries.

d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site.

e) Construction contractors limit all haul truck deliveries to the same hours specified for construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul trucks using City streets shall use the City's designated truck routes.

4.7.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1, 3, and 4: Significant Unavoidable Direct and Cumulatively Considerable Impact (Short-Term). Although implementation of Mitigation Measure MM 4.7-1 would reduce construction-related noise levels, this measure would not reduce construction-related noise impacts to non-conforming sensitive receptors located near the Project site in the industrial zone. These properties would experience noise levels above 65 dBA Leq. during construction of the Project and other simultaneous construction projects and operational activities in the area. Additional feasible mitigation measures with a proportional nexus to the Project's level of impact are not available to further reduce Project-related construction noise levels.

Table 4.7-1 Existing Ambient Noise Level Measurements

Location[1]	Date	Description	Hourly Noise Level (Leq dBA)[2]		CNEL
			Daytime (7am to 10pm)	Nighttime (10pm to 7am)	
L1	12/18/2013	Southwest of the Project site across Perris boulevard and north of San Michele Road	62.2	62.7	69.2
L2	12/18/2013	North of the Project site across the wash basin at the end of Kitching Street	51.8	50.9	57.8
L3	12/18/2013	East of the Project site in an existing residential neighborhood located on Callerio Vista	56.4	50.3	58.6
L4	11/7/2013	Southwest of the Project site in an existing residential neighborhood south of Nandina Avenue.	62.2	61.0	67.8

[1] See Figure 4.7-1 for the location of the noise level measurement locations.
[2] Energy (logarithmic) average hourly levels. The long-term measurements printouts are included in Appendix 5.1.
Source: Urban Crossroads 2014d, Table 5-1

Table 4.7-2 Maximum Sound Levels (in dBA) For Source Land Uses

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
60	55	65	60

Source: City of Moreno Valley Municipal Code Table 11.80.030-2

Table 4.7-3 Construction Equipment Noise Levels

Noise Receiver[1]	Construction Phase Hourly Noise Level (dBA Leq)[2]																											
	Demolition (Phase 1)	Demolition (Phase 1.1)	Grading (Phase 1)	Grading (Phase 1.1)	Grading (Phase 2)	Grading (Phase 3)	Plumbing Underslab (Phase 1)	Plumbing Underslab (Phase 1.1)	Plumbing-Building	Electrical-Underground	Electrical-Building (Phase 1)	Electrical-Building (Phase 1.1)	Structural Concrete (Phase 1)	Structural Concrete (Phase 2)	Structural Concrete (Phase 3)	Structural Concrete (Phase 4)	Structural Concrete (Phase 5)	Structural Concrete (Phase 6)	Structural Concrete (Phase 7)	Structural Steel	Fire Protection-Site	Fire Protection-Overhead	Reinforcing Steel	Site Utilities- Storm	Site Utilities-Sewer	Site-Utilities-Water	Roof Structure	Peak[3]
@200'	71.9	62.7	78.4	70.5	72.8	72.8	65.0	63.0	**56.0**	62.0	59.0	62.0	68.0	68.3	59.0	60.0	60.0	62.0	56.0	67.3	66.9	66.9	59.0	70.1	65.5	65.5	72.8	**78.4**
R1	60.8	51.6	67.3	59.4	61.7	61.7	53.9	51.9	44.9	50.9	47.9	50.9	56.9	57.2	47.9	48.9	48.9	50.9	44.9	56.2	55.9	55.9	47.9	59.0	54.4	54.4	61.7	**67.3**
R2	57.7	48.6	64.2	56.4	58.7	58.7	50.8	48.8	41.8	47.8	44.8	47.8	53.8	54.1	44.8	45.8	45.8	47.8	41.8	53.1	52.8	52.8	44.8	56.0	51.4	51.4	58.6	64.2
R3	58.7	49.5	65.2	57.3	59.7	59.7	51.8	49.8	42.8	48.8	45.8	48.8	54.8	55.1	45.8	46.8	46.8	48.8	42.8	54.1	53.8	53.8	45.8	56.9	52.3	52.3	59.6	**65.2**
R4	53.3	44.1	59.7	51.9	54.2	54.2	46.4	44.4	37.4	43.4	40.4	43.4	49.4	49.7	40.4	41.4	41.3	43.4	37.4	48.7	48.3	48.3	40.4	51.5	46.9	46.9	54.2	**59.7**
R5	70.3	61.1	76.8	68.9	71.2	71.2	63.4	61.4	54.4	60.4	57.4	60.4	66.4	66.7	57.4	58.4	58.4	60.4	54.4	65.7	65.4	65.4	57.4	68.5	63.9	63.9	71.2	**76.8**
R6	62.1	52.9	68.6	60.7	63.0	63.0	55.2	53.2	46.2	52.2	49.2	52.2	58.2	58.5	49.2	50.2	50.2	52.2	46.2	57.5	57.2	57.2	49.2	60.3	55.7	55.7	63.0	**68.6**
R7	59.1	49.9	65.5	57.7	60.0	60.0	52.2	50.2	43.1	49.2	46.2	49.2	55.2	55.5	46.2	47.2	47.1	49.1	43.1	54.5	54.1	54.1	46.2	57.3	52.7	52.7	60.0	**65.5**
R8	58.6	49.5	65.1	57.3	59.6	59.6	51.7	49.7	42.7	48.7	45.7	48.7	54.7	55.0	45.7	46.7	46.7	48.7	42.7	54.0	53.7	53.7	45.7	56.9	52.3	52.3	59.5	**65.1**
R9	53.8	44.6	60.2	52.4	54.7	54.7	46.9	44.9	37.9	43.9	40.9	43.9	49.9	50.2	40.9	41.9	41.9	43.9	37.9	49.2	48.8	48.8	40.9	52.0	47.4	47.4	54.7	60.2
R10	55.2	46.0	61.6	53.8	56.1	56.1	48.3	46.3	39.3	45.3	42.3	45.3	51.3	51.6	42.3	43.3	43.2	45.3	39.3	50.6	50.2	50.2	42.3	53.4	48.8	48.8	56.1	61.6

[1] Noise receiver locations are shown on Figure 4.7-2.
[2] Construction noise calculations by phase are included in Appendix 9-2.
[3] Estimated construction noise levels during peak operating conditions assuming clear line of sight from noise sensitive receiver.

Table 4.7-4 Off-Site Roadway Parameters

ID	Roadway	Segment	Jurisdiction	Roadway Classification[1]	Lanes	Vehicle Speed (MPH)
1	Patterson Av.	s/o Harley Knox Bl.	Perris	Collector	2	45
2	Indian St.	n/o Grove View Rd.	Moreno Valley	Minor Arterial	4	45
3	Indian St.	s/o Grove View Rd.	Moreno Valley	Minor Arterial	4	45
4	Perris Blvd.	n/o San Michele Rd.	Moreno Valley	Divided Arterial	6	50
5	Perris Blvd.	s/o San Michele Rd.	Moreno Valley	Divided Arterial	6	50
6	Perris Blvd.	n/o Grove View Rd.	Moreno Valley	Divided Arterial	6	50
7	Perris Blvd.	s/o Grove View Rd.	Moreno Valley	Divided Arterial	6	50
8	Perris Blvd.	s/o Harley Knox Bl.	Perris	Divided Arterial	6	50
9	Kitching St.	n/o Modular Wy.	Moreno Valley	Arterial	4	50
10	Kitching St.	s/o Modular Wy.	Moreno Valley	Arterial	4	50
11	Modular Way	e/o Perris Blvd.	Moreno Valley	Collector	2	45
12	Modular Way	w/o Kitching St.	Moreno Valley	Collector	2	45
13	Globe St.	w/o Kitching St.	Moreno Valley	Collector	2	45
14	Harley Knox Blvd.	e/o I-15 Fwy.	Perris	Arterial	4	45
15	Harley Knox Blvd.	w/o Patterson Av.	Perris	Arterial	4	45
16	Harley Knox Blvd.	e/o Patterson Av.	Perris	Arterial	4	45
17	Harley Knox Blvd.	w/o Perris Blvd.	Perris	Arterial	4	45

[1] Road Classifications based upon the General Plan Circulation Element.
Source: Urban Crossroads 2014d, Table 6-1

Table 4.7-5 Average Daily Traffic Volumes

ID	Roadway	Segment	Average Daily Traffic (1,000's)[1]			
			Existing		Year 2018	
			No Project	With Project	No Project	With Project
1	Patterson Av.	s/o Harley Knox Bl.	1.4	1.5	1.9	2.0
2	Indian St.	n/o Grove View Rd.	6.6	6.7	23.1	23.2
3	Indian St.	s/o Grove View Rd.	8.1	9.0	22.1	23.0
4	Perris Blvd.	n/o San Michele Rd.	18.8	19.4	25.9	26.5
5	Perris Blvd.	s/o San Michele Rd.	17.9	18.4	24.7	25.1
6	Perris Blvd.	n/o Grove View Rd.	16.9	17.5	28.1	28.8
7	Perris Blvd.	s/o Grove View Rd.	17.3	18.2	28.6	29.5
8	Perris Blvd.	s/o Harley Knox Bl.	16.2	16.6	26.7	27.0
9	Kitching St.	n/o Modular Wy.	0.8	1.7	0.6	1.3
10	Kitching St.	s/o Modular Wy.	0.3	0.9	0.3	1.5
11	Modular Way	e/o Perris Blvd.	0.6	0.8	0.3	0.8
12	Modular Way	w/o Kitching St.	0.6	0.7	0.3	0.8
13	Globe St.	w/o Kitching St.	1.4	2.6	1.6	2.7
14	Harley Knox Blvd.	e/o I-15 Fwy.	13.3	14.7	31.1	32.5
15	Harley Knox Blvd.	w/o Patterson Av.	12.2	13.6	33.1	34.4
16	Harley Knox Blvd.	e/o Patterson Av.	10.8	12.2	31.7	33.1
17	Harley Knox Blvd.	w/o Perris Blvd.	5.4	5.6	13.1	13.7

Source: Urban Crossroads 2014d, Table 6-2

Table 4.7-6 Time of Day Vehicle Splits

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7am-7pm)	77.5%	84.8%	86.5%
Evening (7pm-10pm)	12.9%	4.9%	2.7%
Nighttime (10pm-7am)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Urban Crossroads 2014d, Table-6-3.

Table 4.7-7 Existing (2013) Without Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	57.7	RW	RW	70	151
2	Indian St.	n/o Grove View Rd.	64.6	44	94	203	436
3	Indian St.	s/o Grove View Rd.	65.5	50	108	232	500
4	Perris Blvd.	n/o San Michele Rd.	70.2	104	224	482	1,039
5	Perris Blvd.	s/o San Michele Rd.	70.0	101	217	467	1,005
6	Perris Blvd.	n/o Grove View Rd.	69.8	97	208	449	968
7	Perris Blvd.	s/o Grove View Rd.	69.9	98	212	456	983
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	94	203	437	941
9	Kitching St.	n/o Modular Wy.	56.4	RW	RW	57	123
10	Kitching St.	s/o Modular Wy.	52.1	RW	RW	RW	64
11	Modular Way	e/o Perris Blvd.	54.0	RW	RW	40	86
12	Modular Way	w/o Kitching St.	54.0	RW	RW	40	86
13	Globe St.	w/o Kitching St.	57.7	RW	RW	70	151
14	Harley Knox Blvd.	e/o I-15 Fwy.	67.8	71	153	329	709
15	Harley Knox Blvd.	w/o Patterson Av.	67.4	67	144	311	670
16	Harley Knox Blvd.	e/o Patterson Av.	66.9	62	133	287	617
17	Harley Knox Blvd.	w/o Perris Blvd.	63.8	39	84	180	389

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-1

Table 4.7-8 Existing (2013) With Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	57.7	RW	RW	71	152
2	Indian St.	n/o Grove View Rd.	64.6	44	94	203	437
3	Indian St.	s/o Grove View Rd.	67.0	63	136	294	633
4	Perris Blvd.	n/o San Michele Rd.	70.4	106	228	491	1,058
5	Perris Blvd.	s/o San Michele Rd.	70.4	106	228	490	1,057
6	Perris Blvd.	n/o Grove View Rd.	70.1	102	220	474	1,021
7	Perris Blvd.	s/o Grove View Rd.	70.4	106	228	491	1,058
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	94	204	438	945
9	Kitching St.	n/o Modular Wy.	61.0	RW	54	116	250
10	Kitching St.	s/o Modular Wy.	63.0	RW	73	158	341
11	Modular Way	e/o Perris Blvd.	58.4	RW	37	79	170
12	Modular Way	w/o Kitching St.	60.2	RW	48	103	223
13	Globe St.	w/o Kitching St.	63.1	RW	75	162	349
14	Harley Knox Blvd.	e/o I-15 Fwy.	68.8	83	178	385	829
15	Harley Knox Blvd.	w/o Patterson Av.	68.5	79	171	368	792
16	Harley Knox Blvd.	e/o Patterson Av.	68.1	75	162	349	751
17	Harley Knox Blvd.	w/o Perris Blvd.	65.2	48	103	222	479

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-2

Table 4.7-9 Year 2018 Without Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	59.0	RW	40	86	185
2	Indian St.	n/o Grove View Rd.	70.0	101	217	467	1,006
3	Indian St.	s/o Grove View Rd.	69.8	98	210	453	977
4	Perris Blvd.	n/o San Michele Rd.	71.6	129	277	597	1,286
5	Perris Blvd.	s/o San Michele Rd.	71.4	125	268	578	1,246
6	Perris Blvd.	n/o Grove View Rd.	72.0	136	293	630	1,358
7	Perris Blvd.	s/o Grove View Rd.	72.1	137	296	638	1,374
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	131	283	609	1,313
9	Kitching St.	n/o Modular Wy.	55.1	RW	RW	47	102
10	Kitching St.	s/o Modular Wy.	52.1	RW	RW	RW	64
11	Modular Way	e/o Perris Blvd.	51.0	RW	RW	RW	54
12	Modular Way	w/o Kitching St.	51.0	RW	RW	RW	54
13	Globe St.	w/o Kitching St.	58.3	RW	RW	77	166
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.5	125	269	580	1,249
15	Harley Knox Blvd.	w/o Patterson Av.	71.7	130	281	605	1,302
16	Harley Knox Blvd.	e/o Patterson Av.	71.5	127	273	587	1,265
17	Harley Knox Blvd.	w/o Perris Blvd.	67.7	70	151	326	702

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d Table 7-3

Table 4.7-10 Year 2018 With Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	59.0	RW	40	86	186
2	Indian St.	n/o Grove View Rd.	70.0	101	217	467	1,007
3	Indian St.	s/o Grove View Rd.	70.5	108	232	499	1,076
4	Perris Blvd.	n/o San Michele Rd.	71.7	130	281	605	1,304
5	Perris Blvd.	s/o San Michele Rd.	71.7	129	278	600	1,292
6	Perris Blvd.	n/o Grove View Rd.	72.2	140	302	651	1,404
7	Perris Blvd.	s/o Grove View Rd.	72.4	144	310	667	1,438
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	132	284	611	1,316
9	Kitching St.	n/o Modular Wy.	60.6	RW	51	109	235
10	Kitching St.	s/o Modular Wy.	63.0	RW	73	158	341
11	Modular Way	e/o Perris Blvd.	57.6	RW	RW	69	149
12	Modular Way	w/o Kitching St.	59.7	RW	44	95	205
13	Globe St.	w/o Kitching St.	63.3	RW	77	166	358
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.9	134	289	623	1,341
15	Harley Knox Blvd.	w/o Patterson Av.	72.2	139	300	646	1,392
16	Harley Knox Blvd.	e/o Patterson Av.	72.0	136	293	632	1,362
17	Harley Knox Blvd.	w/o Perris Blvd.	68.3	77	166	358	771

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-4

Table 4.7-11 Existing (2013) Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact?
			No Project	With Project	Project Addition	
1	Patterson Av.	s/o Harley Knox Bl.	57.7	57.7	0.1	No
2	Indian St.	n/o Grove View Rd.	64.6	64.6	0.0	No
3	Indian St.	s/o Grove View Rd.	65.5	67.0	1.5	Yes
4	Perris Blvd.	n/o San Michele Rd.	70.2	70.4	0.1	No
5	Perris Blvd.	s/o San Michele Rd.	70.0	70.4	0.3	No
6	Perris Blvd.	n/o Grove View Rd.	69.8	70.1	0.4	No
7	Perris Blvd.	s/o Grove View Rd.	69.9	70.4	0.5	No
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	69.6	0.0	No
9	Kitching St.	n/o Modular Wy.	56.4	61.0	4.6	No
10	Kitching St.	s/o Modular Wy.	52.1	63.0	10.9	Yes
11	Modular Way	e/o Perris Blvd.	54.0	58.4	4.4	No
12	Modular Way	w/o Kitching St.	54.0	60.2	6.2	Yes
13	Globe St.	w/o Kitching St.	57.7	63.1	5.4	Yes
14	Harley Knox Blvd.	e/o I-15 Fwy.	67.8	68.8	1.0	No
15	Harley Knox Blvd.	w/o Patterson Av.	67.4	68.5	1.1	No
16	Harley Knox Blvd.	e/o Patterson Av.	66.9	68.1	1.3	No
17	Harley Knox Blvd.	w/o Perris Blvd.	63.8	65.2	1.4	No

Source: Urban Crossroads 2014d Table 7-5

Table 4.7-12 Year 2018 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact?
			No Project	With Project	Project Addition	
1	Patterson Av.	s/o Harley Knox Bl.	59.0	59.0	0.0	No
2	Indian St.	n/o Grove View Rd.	70.0	70.0	0.0	No
3	Indian St.	s/o Grove View Rd.	69.8	70.5	0.6	No
4	Perris Blvd.	n/o San Michele Rd.	71.6	71.7	0.1	No
5	Perris Blvd.	s/o San Michele Rd.	71.4	71.7	0.2	No
6	Perris Blvd.	n/o Grove View Rd.	72.0	72.2	0.2	No
7	Perris Blvd.	s/o Grove View Rd.	72.1	72.4	0.3	No
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	71.8	0.0	No
9	Kitching St.	n/o Modular Wy.	55.1	60.6	5.5	Yes
10	Kitching St.	s/o Modular Wy.	52.1	63.0	10.9	Yes
11	Modular Way	e/o Perris Blvd.	51.0	57.6	6.6	Yes
12	Modular Way	w/o Kitching St.	51.0	59.7	8.7	Yes
13	Globe St.	w/o Kitching St.	58.3	63.3	5.0	Yes
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.5	71.9	0.5	No
15	Harley Knox Blvd.	w/o Patterson Av.	71.7	72.2	0.4	No
16	Harley Knox Blvd.	e/o Patterson Av.	71.5	72.0	0.5	No
17	Harley Knox Blvd.	w/o Perris Blvd.	67.7	68.3	0.6	No

Source: Urban Crossroads 2014d, Table 7-6

Table 4.7-13 Operational Noise Level Projections

Receiver Location[1]	Project Noise[2]	Distance From Source To Receiver (Feet)[3]	Distance Attenuation[4]	Hourly Noise Levels[5]
@200	69.1	200'	-18.1	51.0
R1	69.1	1,080'	-32.7	36.4
R2	69.1	1,034'	-32.3	36.8
R3	69.1	1,077'	-32.7	36.4
R4	69.1	2,100'	-38.5	30.6
R5	69.1	623'	-27.9	41.2
R6	69.1	832'	-30.4	38.7
R7	69.1	922'	-31.3	37.8
R8	69.1	979'	-31.9	37.2
R9	69.1	1,988'	-38.0	31.1
R10	69.1	1,597'	-36.1	33.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] The reference noise level measurements include the daytime and nighttime noise levels associated with idling trucks, delivery truck activities, parking, backup alarms , refrigerated containers or reefers, as well as loading and unloading of dry goods. Reference noise level measurements were collected from the existing 24-hour operations of Veg Fresh Farms and FedEx distribution facility located at 500 East Orangethorpe Avenue in the City of Anaheim. The reference noise level measurements were collected on Tuesday, January 22, 2013.
[3] Estimated distances to nearest loading dock activities.
[4] Noise levels diminish at a rate 6 dBA per doubing of distance and a reference distance of 25 feet.
[5] Estimated project stationary source noise levels.
Source: Urban Crossroads 2014d Table 8-1

Table 4.7-14 Daytime (7:00 A.M. to 10:00 P.M.) Operational Noise Levels

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]
R1	36.4	L1	62.2	62.2	0.0
R2	36.8	L1	62.2	62.2	0.0
R3	36.4	L2	51.8	51.9	0.1
R4	30.6	L3	56.4	56.4	0.0
R5	41.2	L1	62.2	62.2	0.0
R6	38.7	L1	62.2	62.2	0.0
R7	37.8	L2	51.8	52.0	0.2
R8	37.2	L2	51.8	51.9	0.1
R9	31.1	L3	56.4	56.4	0.0
R10	33.0	L4	62.2	62.2	0.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] Total project operational noise levels with mitigation as shown on Urban Crossroads 2014d, Table 8-1.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown on Urban Crossroads 2014d, Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
Source: Urban Crossroads 2014d, Table 8-2

Table 4.7-15 Nighttime (10:00 P.M. to 7:00 A.M) Operational Noise Level Impacts

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]
R1	36.4	L1	62.2	62.2	0.0
R2	36.8	L1	62.2	62.2	0.0
R3	36.4	L2	51.8	51.9	0.1
R4	30.6	L3	56.4	56.4	0.0
R5	41.2	L1	62.2	62.2	0.0
R6	38.7	L1	62.2	62.2	0.0
R7	37.8	L2	51.8	52.0	0.2
R8	37.2	L2	51.8	51.9	0.1
R9	31.1	L3	56.4	56.4	0.0
R10	33.0	L4	62.2	62.2	0.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] Total project operational noise levels with mitigation as shown on Table 8-1.
[3] Reference noise level measurement locations as shown in Urban Crossroads 2014d, Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown on Urban Crossroads 2014d, Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
Source: Urban Crossroads 2014d, Table 8-3

Table 4.7-16 Construction Equipment Vibration Levels

Noise Receiver[1]	Distance To Property Line (In Feet)	Receiver Vibration Levels (VdB)[2]					Significant Impact[3]
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Peak Vibration	
@200'	200	30.9	51.9	58.9	59.9	59.9	No
R1	717	14.3	35.3	42.3	43.3	43.3	No
R2	1,020	9.7	30.7	37.7	38.7	38.7	No
R3	911	11.2	32.2	39.2	40.2	40.2	No
R4	1,705	3.0	24.0	31.0	32.0	32.0	No
R5	240	28.5	49.5	56.5	57.5	57.5	No
R6	618	16.2	37.2	44.2	45.2	45.2	No
R7	875	11.7	32.7	39.7	40.7	40.7	No
R8	920	11.0	32.0	39.0	40.0	40.0	No
R9	1,608	3.7	24.7	31.7	32.7	32.7	No
R10	1,370	5.8	26.8	33.8	34.8	34.8	No

[1] Noise receiver locations are shown on Figure 4.7-2.
[2] Based on the Vibration Source Levels of Construction Equipment included in *Technical Appendix G*.
[3] Does the Peak Vibration exceed the FTA maximum acceptable vibration standard of 80 (VdB).
Source: Urban Crossroads 2014d, Table 9-2

Source: Urban Crossroads (Technical Appendix G)

NOT TO SCALE

Figure 4.7-1
Noise Measurement Locations

LEGEND

- Noise Measurement Locations
- Noise Receiver Locations

Source: Urban Crossroads (Technical Appendix G)

NOT TO SCALE

Figure 4.7-2
Noise Receiver Locations

4.8 TRANSPORTATION/TRAFFIC

The following analysis is based on three technical studies prepared by Urban Crossroads, Inc. to evaluate the Project's potential to adversely affect local and regional circulation. These studies include the following: 1) "Modular Logistics Center, Traffic Impact Analysis, City of Moreno Valley, California" and dated June 9, 2014, which is included as *Technical Appendix H1* to this EIR (Urban Crossroads 2014e); 2) "Modular Logistics Center Traffic Impact Analysis – Supplemental Basic Freeway Segment Analysis" and dated March 17, 2014, which is included as *Technical Appendix H2* to this EIR (Urban Crossroads 2014f); and 3) "Modular Logistics Center Site Access Evaluation" and dated March 13, 2014, which is included as *Technical Appendix H3* to this EIR (Urban Crossroads 2014g). These reports consider potential traffic impacts associated with construction and operation of the proposed Project and recommend improvements to mitigate impacts considered significant in comparison to stated thresholds. *Technical Appendices H1* through *H3* were prepared in accordance with the City of Moreno Valley, Transportation Engineering Division's *Traffic Impact Analysis Preparation Guide* (August 2007). The Project's Traffic Study Scoping Agreement, which was approved by the City of Moreno Valley prior to the commencement of the traffic impact analyses, is included as Appendix 1.1 of *Technical Appendix H1*. Also, where appropriate, *Technical Appendices H1* through *H3* address requirements as identified by the County of Riverside Congestion Management Program (CMP), California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies* (December 2002).

4.8.1 STUDY AREA DESCRIPTION

The study area for purposes of evaluating Project-related effects to the local transportation and circulation network was defined in conformance with the requirements of the City of Moreno Valley, Transportation Engineering Division's *Traffic Impact Analysis Preparation Guide*. Based on the City's guidelines, the area to be studied by a project's TIA shall include any roadway segment or any intersection of "Collector" or higher classification street with "Collector" or higher classification streets, at which a proposed project would add 50 or more AM peak hour (7:00 AM – 9:00 AM) or PM peak hour (4:00 PM – 6:00 PM) trips (Urban Crossroads 2014e 3). The "50 peak hour trip" criteria utilized by the City of Moreno Valley is consistent with the methodology utilized by many other jurisdictions, including the County of Riverside, and generally represents a threshold of trips at which a typical intersection would have the potential to be impacted. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a valid and proven way to establish a study area (Urban Crossroads 2014 pp. 3, 5). Following the City's guidelines, intersections and connecting roadway segments that would receive 50 or more peak hour trips from the Project are included in the study area. Intersections and connecting roadway segments that would receive less than 50 peak hour trips from the Project are not included, and are not required to be included in the study area because a contribution of less than 50 peak hour trips is regarded to be a less than significant direct impact and a less than cumulatively considerable impact based on the significance criteria applied by the City of Moreno Valley in this EIR.

The study area for purposes of evaluating Project-related effects to the state highway system was defined in conformance with Caltrans' *Guide for the Preparation of Traffic Impact Studies*

(December 2002) and a letter dated February 10, 2014, from Caltrans to the City of Moreno Valley clarifying the application of their *Guide for the Preparation of Traffic Impact Studies* to the analysis of state highway facilities in CEQA documents (Kopulsky 2014).

A. Intersections

Twenty-two (22) study area intersections were identified for analysis based on the City's *Traffic Impact Analysis Preparation Guide* analysis methodology and recommendations from the City of Moreno Valley, Traffic Engineering Division, and are listed in Table 4.8-1, *Study Area Intersection Analysis Locations*. The study area intersection's jurisdictional location and the ID number assigned to each intersection also are identified in Table 4.8-1. As noted in Table 4.8-1, six (6) of the intersections in the Project's study area would be developed as part of the Project and do not currently exist.

The proposed Project would contribute fewer than 50 peak hour trips to intersections located within the City of Riverside and unincorporated Riverside County; thus, intersections in those jurisdictions do not warrant analysis. Intersections in the study area that would receive 50 or more peak hour trips from the proposed Project are located within, and under the jurisdiction of, the City of Moreno Valley (15 intersections), City of Perris (five (5) intersections), and Caltrans (two (2) intersections).

B. Roadway Segments

Forty-five (45) study area roadway segments were identified for analysis based on the City's *Traffic Impact Analysis Preparation Guide* analysis methodology and recommendations from the City of Moreno Valley, Traffic Engineering Division. Table 4.8-2, *Study Area Roadway Segment Analysis Locations*, provides a list of the study area roadway segments, each with an ID number noted.

The proposed Project would contribute fewer than 50 peak hour trips to roadway segments located within the City of Riverside; thus, roadway segments in those jurisdictions do not warrant analysis. Roadway segments in the study area and that would receive 50 or more peak hour trips from the proposed Project are located within, and under the jurisdiction of, the City of Moreno Valley (25 roadway segments), the City of Perris (18 roadway segments), and the County of Riverside (two (2) roadway segments).

C. Freeway Mainline Segments

Based on communication with Caltrans District 8, Caltrans requests quantitative analysis of Project-related traffic on freeway mainline segments where the project would add 50 or more peak hour trips and/or the most heavily impacted segment in each direction. Because impacts to freeway segments dissipate with distance from the point of state highway system entry (at ramps receiving project traffic), Caltrans indicates that when a project's traffic volumes dissipate to fewer than 50 peak hour trips on a freeway mainline segment, they become unrecognizable from other traffic on the state highway system (Kopulsky 2014). Thus, Caltrans does not require a project's entire vehicular travel path on State facilities to be studied. The freeway mainline segments included in the Project's study area are listed in Table 4.8-3, *Study Area Freeway Mainline Segments*. Pursuant to Caltrans

direction, there are 50 freeway mainline analysis locations, including northbound and southbound segments of I-215, eastbound and westbound segments of SR-60 (west of I-215 and east of SR-91), and eastbound and westbound segments of SR-91, that receive 50 or more Project peak-hour trips. The Project would not contribute 50 or more peak hour trips to any eastbound or westbound segment of SR-60 east of I-215 or west of SR-91 (Urban Crossroads 2014f pp. 2-3). I-215 and SR-60 overlap between I-215 and SR-91. As such, the overlapping freeway mainline segments can be referred to as either "I-215" or "SR-60." For purposes of analysis in this Subsection and *Technical Appendix H2*, all eastbound/westbound mainline segments of SR-60 located west of I-215 and east of SR-91 are evaluated as northbound/southbound segments of I-215 (refer to Table 4.8-3). All freeway mainline segments are under the jurisdiction of Caltrans.

D. Freeway Merge/Diverge Ramp Junctions

The Project study area includes four (4) freeway merge/diverge ramp junction locations for I-215, in both the northbound and southbound locations. These locations are where the highest volumes of Project traffic would merge and diverge across freeway lanes and potentially disrupt traffic flow. The freeway mainline merge/diverge ramp junctions in the Project study area are listed in Table 4.8-4, *Study Area Freeway Merge/Diverge Ramp Junctions*. All freeway ramp junctions are under the jurisdiction of Caltrans.

E. Freeway Ramps

The proposed Project's traffic would access I-215 primarily at Harley Knox Boulevard. Consistent with Caltrans traffic study guidelines, the I-215 ramp intersections at Harley Knox Boulevard are included in the Project study area.

4.8.2 EXISTING CONDITIONS

The Project site is located in the southern portion of the City of Moreno Valley, east of Perris Boulevard, north of Modular Way, west of Kitching Street, and south of Edwin Road. . Figure 4.8-1, *City of Moreno Valley General Plan Circulation Plan*, and Figure 4.8-2, *City of Moreno Valley General Plan Roadway Cross-Sections*, show the City's roadway designations and cross-sections for the major roads located adjacent to and surrounding the Project site. I-215 is located approximately two (2) miles west of the Project site, SR-60 is located approximately 4.7 miles north of the Project site, and SR-91 is located approximately 11.1 miles north of the Project site, respectively.

A. Existing Intersection Traffic Counts

Manual AM and PM peak hour turning movement counts at study area intersections were collected in January, May, October, and November 2013 (Urban Crossroads 2014e 35). The traffic count dates were representative of typical weekday peak hour traffic conditions in the study area, as no observations were made in the field by Urban Crossroads that would indicate atypical traffic conditions on these dates. The counts include the vehicle classifications as shown below, per City of Moreno Valley requirements:

- Passenger Cars

- 2-Axle Trucks
- 3-Axle Trucks
- 4 or More Axle Trucks

To represent the effect that large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into Passenger Car Equivalents (PCEs) for the purpose of conducting the Project's traffic analysis. By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for large vehicles to accelerate and decelerate is longer than for passenger cars, and varies depending on the type of vehicle and number of axles. For the purpose of the Project's TIA contained in *Technical Appendix H1* and the analysis presented in this EIR Subsection, a PCE factor of 1.5 was applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement.

Existing (2013) weekday average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Figure 4.8-3, *Existing (2013) Average Daily Traffic (ADT)*. Existing (2013) ADT volumes are based upon factored intersection peak hour counts collected by Urban Crossroads using the following formula for each intersection leg (Urban Crossroads 2014 38):

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

Based on a comparison of PM peak hour traffic count data to 24-hour traffic counts collected along roadway segments in close proximity to the study area, Urban Crossroads determined that the PM peak hour volumes are approximately eight (8) to nine (9) percent of the total 24-hour daily volume on select segments. As such, the above equation is appropriately utilized to approximate the ADT volume on the study area roadway segments based on the same relationship (*i.e.*, eight (8) percent PM peak-to-daily relationship) (Urban Crossroads 2014e 38). Existing weekday AM and PM peak hour traffic volumes for the study area intersections are shown on Figure 4.8-4, *Existing (2013) AM Peak Hour Intersection Volumes (PCE)*, and Figure 4.8-5, *Existing (2013) PM Peak Hour Intersection Volumes (PCE)*. All of the traffic volumes illustrated on these exhibits and used in the analysis presented in this EIR Subsection and in the TIA contained in *Technical Appendix H1* are shown in terms of PCE.

B. Existing Freeway Mainline Segment & Interchange Traffic Volumes

Freeway mainline segment and interchange traffic volume data for I-215 and SR-91 was obtained from Caltrans' Performance System Website (PeMS). The data obtained from Caltrans was dated September 24th to September 26th, and these the most recent dates for which reliable data was available at the time this EIR was prepared. In an effort to conduct a conservative analysis, the maximum value observed within the three (3) day period was utilized for the morning (AM) and evening (PM) peak hours (Urban Crossroads 2014e 23, Urban Crossroads 2014f 6).

Consistent with industry-standard methodology (*i.e.*, Highway Capacity Manual 2000) actual vehicles, as opposed to PCE volumes, were utilized to calculate density and the associated level of service (LOS) letter grade for each of the analyzed freeway segments. Truck traffic, expressed as a

percentage of total traffic, is included as part of the data used to perform the density calculation. Because the peak hour directional volumes are based on actual vehicles (and not PCE volumes), the peak hour freeway mainline segment traffic volume data differs slightly from the peak hour volume data presented in the *Technical Appendix H1*, which is presented in PCE. This difference is expected, and does not indicate an error in volume development (Urban Crossroads 2014e 23).

C. Existing Intersection Conditions

The operating characteristics (*e.g.*, travel lanes, stop controls) of the sixteen (16) existing intersections within the study area are illustrated on Figure 4.8-6, *Study Area Intersections: Existing (2013) Through Lanes and Intersection Controls*. The additional six (6) intersections in the study area not shown in Figure 4.8-6 are planned, future intersections that do not currently exist.

Existing (2013) traffic operations were evaluated for the sixteen (16) existing study area intersections based on the analysis methodologies presented in Subsection 4.8.4A, *Methodology for Estimating Project-Related Traffic Impacts*. Included in Subsection 4.8.4A is a discussion of level of service (LOS), which is used to describe the performance of an intersection, roadway segment, or other transportation facility. The LOS for existing study area roadway segments are summarized in Table 4.8-5, *Intersection Analysis for Existing (2013) Conditions*. As shown in Table 4.8-5, all 16 existing intersections in the Project's study area operate at an acceptable LOS under Existing (2013) conditions.

D. Existing Roadway Conditions

Existing (2013) traffic operations were evaluated for the study area roadway segments based on the analysis methodologies presented in Subsection 4.8.4A. The LOS for study area roadway segments are summarized in Table 4.8-6, *Roadway Segment Analysis for Existing (2013) Conditions*. As shown in Table 4.8-6, the only roadways segment within the Project's study area that operates at deficient LOS under Existing (2013) conditions is Perris Boulevard north of Harley Knox Boulevard (which operates at LOS "E"). Although the roadway segment of Perris Boulevard north of Harley Knox Boulevard operates at LOS "E" under existing conditions, traffic movement along this roadway segment is considered to be acceptable because the intersections on northern and southern extents of this segment operate at acceptable LOS, which demonstrates that traffic flow through the roadway segment is relatively smooth (Urban Crossroads 2014e 44).

E. Existing Freeway Mainline Segment Conditions

The operating characteristics (*i.e.*, travel lanes) of Project study area freeway mainline segments were recorded by Urban Crossroads during field observations in October 2013. Existing (2013) freeway mainline segment traffic operations were evaluated based on the methodologies presented in Subsection 4.8.4A. The LOS for study area freeway mainline segments is summarized in Table 4.8-7, *Freeway Mainline Segment Analysis for Existing (2013) Conditions*. As shown in Table 4.8-7, all of the freeway mainline segments in the Project study area operate at an acceptable LOS under Existing (2013) conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street (which operates at LOS "E" during the PM peak hour).

F. Existing Freeway Ramp Merge/Diverge Conditions

The operating characteristics (*i.e.*, travel lanes) of Project study area freeways were recorded by Urban Crossroads during field observations in October 2013. Existing (2013) traffic operations were evaluated for study area freeway ramp merge/diverge areas based on the methodologies presented in Subsection 4.8.4A. The LOS for study area freeway ramp merge/diverge areas are summarized in Table 4.8-8, *Freeway Ramp Merge/Diverge Analysis for Existing (2013) Conditions*. As shown in Table 4.8-8, all freeway ramp merge/diverge areas in the Project study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard, which operates at LOS "E" during the PM peak hour.

G. Existing Freeway Ramp Conditions

Existing (2013) freeway ramp queuing in the Project study area was evaluated using the methodologies presented in Subsection 4.8.4A. As summarized in Table 4.8-9, *Freeway Ramp Stacking Summary for Existing (2013) Conditions*, all freeway ramps in the Project study area feature acceptable stacking lengths under Existing (2013) conditions.

H. Existing Mass Transit

The study area is currently served by the Riverside Transit Agency (RTA) with bus services along Perris Boulevard via Route 19. An existing bus stop is located at the approximate mid-point of the Project site's western boundary with Perris Boulevard. There is no commuter rail service in the City of Moreno Valley under existing conditions; however, in February 2014, construction broke ground on the "Perris Valley Line," a 24-mile extension of the Metrolink commuter rail service. The Perris Valley Line, which is scheduled to be operational in late-2015, will provide service from Downtown Riverside to Perris along the west side of I-215 (Downey). A station for the Perris Valley Line is planned at Alessandro Boulevard, approximately 6.3 roadway miles from the Project site.

I. Existing Pedestrian and Bicycle Facilities

Field observations conducted by Urban Crossroads indicate nominal pedestrian and bicycle activity within the study area, which is likely attributable to the limited residential and commercial development within and immediately surrounding the Project site (Urban Crossroads 2014e 29). Figure 4.8-7, *City of Moreno Valley Master Plan of Trails*, shows that there are no trails or planned trails in the vicinity of the Project site. Figure 4.8-8, *City of Moreno Valley Bike Plan*, shows planned bike routes in the area. A Class III bikeway facility is planned along San Michele Road and Indian Street, approximately 0.5-mile west of the Project site.

J. Existing Truck Routes

Figure 4.8-9, *City of Moreno Valley Truck Routes*, shows the designated truck route map for the City of Moreno Valley; this map also was used to predict the route of truck traffic under future conditions (Urban Crossroads 2014e 35). As shown on Figure 4.8-9, designated truck routes in the vicinity of the Project site include Perris Boulevard (adjacent to the Project site), San Michele Road, Nandina Avenue, and Indian Street. Moreno Valley sets forth regulations for the City's designated truck

routes in *Title 12 Vehicles and Traffic* of the City's Municipal Code. Moreno Valley Municipal Code Chapter 12.36.050 states the following:

> *"Whenever any truck route has been duly established pursuant to this chapter and so designated by appropriate signs, the operation of any vehicle exceeding a maximum gross weight limit of three tons shall drive on such route or routes and none other.*
>
> *When the truck route established pursuant to this chapter for Heacock Street and Reche Vista Road northerly of Ironwood Avenue to the northerly city limits has been so designated by appropriate signs, the operation thereon of any vehicle which exceeds a maximum gross weight limit of twelve (12) tons or which has more than three axles shall be unlawful.*
>
> *Nothing in this section shall prohibit the operator of any vehicle exceeding the various maximum gross weights established by this section coming from a truck route established hereunder from having ingress and egress by direct route to and from restricted streets when necessary for the purpose of making pickups or deliveries of goods, wares, or merchandise from or to any building or structure located on such restricted streets or for the purpose of delivering materials to be used in the actual and bona fide repair, alteration, remodeling or construction of any building or structure upon such restricted streets for which a building permit has previously been obtained therefor, nor shall this section prohibit an operator from proceeding by direct route to or from a legal parking place pursuant to a valid permit obtained under Chapter 12.38 of this code (Ord. 283 § 1.1, 1990; Ord. 128 § 1.2, 1987; Ord. 105 § 1.5, 1986).*

The City of Perris also has an established truck route. Designated City of Perris truck routes in the vicinity of the Project site include Harley Knox Boulevard and Indian Street (City of Perris 2005 Exhibit CE-9).

K. Existing Regional and Local Transportation Programs and Plans

Following is a discussion of planning efforts, programs, and policies regarding transportation that have applicability to the proposed Project.

❑ SCAG Regional Transportation Plan (RTP)

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code §6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On April 4, 2012, SCAG adopted a Regional Transportation Plan (RTP) with goals to: 1) maximize mobility and accessibility for all people and goods in the region; 2) ensure travel safety and reliability for all people and goods in the region; 3) preserve and ensure a

sustainable transportation system; 4) maximize productivity of the transportation system; 5) protect the environment, improve air quality, and promote energy efficiency; 6) encourage land use and growth patterns that complement the transportation investments and improve the cost-effectiveness of expenditures; and 7) maximize the security of the transportation system (Southern California Association of Governments 2012). Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation.

As a MPO and public agency, SCAG develops transportation that transcends jurisdictional boundaries that affect the quality of life for Southern Californian as a whole. SCAG's *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*) includes a chapter titled "Goods Movement" that is applicable to the proposed Project. It states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. Also, existing infrastructure, equipment, and trade flows in the SCAG region provide a substantial competitive advantage and serve as a major economic incentive for importers to move freight requiring train loading through Southern California (SCAG 2011 11). To that end, the Goods Movement section of the RTP/SCS sets forth regional strategies to achieve an efficient movement of goods. It recognizes that the SCAG region will experience dramatic increases in truck traffic on east-west corridors that will cause increased congestion and longer delays to both trucks and general traffic on existing routes (SCAG 2011 20). The Goods Movement section of the RTP/SCS suggests the construction of a regional freight corridor that would increase capacity to accommodate the projected growth in truck activity, but such a corridor is not yet in the planning stages. Other strategies also are presented, such as highway strategies, bottleneck strategies, rail strategies, and capacity enhancements on the existing infrastructure system.

❑ County of Riverside Congestion Management Program (CMP)

The Riverside County CMP was prepared by the Riverside County Transportation Commission (RCTC) in accordance with Proposition 111, passed in June 1990. The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality. Deficiencies along the CMP system are identified by RCTC when they occur so that improvement measures can be identified. Understanding the reason for these deficiencies and identifying ways to reduce the impact along a critical CMP corridor is intended to conserve scarce funding resources and help target those resources appropriately. In the vicinity of the Project site, I-215 is the only CMP Roadway (Riverside County Transportation Commission 2011 pp. 2-5).

❑ Riverside County Integrated Project (RCIP)

The RCIP is Riverside County's comprehensive, three-part, integrated program to determine future habitat conservation, transportation, and housing and economic needs in Riverside County. The RCIP addresses traffic congestion by addressing future traffic and multi-model circulation issues through the Community & Environmental Transportation Acceptability Process (CETAP). This

element of RCIP identifies the locations for new transportation facilities that will help benefit commuters and serve Riverside County's growing economy. Selection of new transportation corridors are intended to be integrated with decisions on land use and environmentally sensitive areas (Riverside County 2003a). CETAP does not identify any new, planned transportation corridors in close proximity to the Project site.

❑ City of Moreno Valley General Plan Circulation Element

The purpose of the City of Moreno Valley's General Plan Circulation Element is to ensure a complete, balanced, and well-maintained circulation system that relies on vehicular travel and transit, and incorporates alternative modes including bikeways and pedestrian facilities (Moreno Valley 2006a). A primary objective of the Circulation Element is to ensure that the effects of future new development on the City's transportation system are understood and that the improvements needed to support new growth are planned and properly funded. Refer to Figure 4.8-1 and Figure 4.8-2 for illustrations of the City's General Plan Circulation Element exhibits.

❑ City of Perris General Plan Circulation Element

The City of Perris' General Plan Circulation Element is designed to accommodate anticipated transportation needs based on various land uses within the region (City of Perris 2005). Refer to Figure 4.8-10, *City of Perris* , and Figure 4.8-11, *City of Perris General Plan Roadway* Cross-Sections, for illustrations of the City of Perris' General Plan Circulation Element exhibits.

4.8.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to the transportation/traffic system if the Project or any Project-related component would:

1. *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

2. *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*

3. *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*

4. *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*

5. *Result in inadequate emergency access; or*

6. *Conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

A. Determining the Significance of Impacts

❑ Roadway Segments and Intersections

For purposes of determining the significance of traffic impacts under this Subsection and in accordance with the City of Moreno Valley's *Traffic Impact Analysis Preparation Guide*, and applicable City of Perris and County of Riverside traffic impact evaluation guidelines, a significant direct traffic impact would occur when the addition of Project traffic (as measured by 50 or more peak hour trips) to Existing (2013) traffic conditions (E+P) causes an intersection or roadway segment that operates at an acceptable LOS under Existing (2013) traffic conditions (*i.e.*, LOS "D" or better) to fall to LOS "E" or "F"(if a roadway segment operates at LOS "E" or LOS "F" but the intersections on both extents of the roadway segment operates at LOS "D" or better, then traffic flow through the roadway segment is considered acceptable). Therefore, E+P traffic conditions are compared to Existing (2013) traffic conditions to identify significant Project-related impacts to local roadway segments and intersections.

A cumulatively considerable impact would occur when a roadway segment or intersection is projected to operate at an unacceptable LOS with the addition of future traffic. The addition of Project-related traffic is considered cumulatively considerable if the Project would contribute 50 or more peak hour trips to a roadway section or intersection projected to operate at an unacceptable LOS. Cumulative traffic impacts are created as a result of a combination of the proposed Project together with other future developments that contribute to the overall traffic impacts requiring additional improvements to maintain acceptable LOS operations with or without the Project. The Project's contribution to a cumulatively significant impact can be reduced to less-than-significant if the Project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

❑ Freeway Mainline Segments and Ramp Junctions

Regarding Caltrans' ramp to arterial intersections and other Caltrans maintained facilities (*e.g.*, freeways), the published Caltrans *Guide for the Preparation of Traffic Impact Studies* (2002) states the following:

> *"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."*

The City of Moreno Valley consulted with Caltrans regarding the proposed Project. A letter dated February 10, 2014, from Caltrans District 8 to the City of Moreno Valley clarifies the significance

thresholds for impacts to the state highway system. Caltrans District 8 recommended that the City consider impacts to be significant if the Project would degrade the LOS of a state highway facility from "D" or better to "E" or "F" (direct impact) or if the Project would exacerbate an already deficient condition (LOS "E" or "F") on a state highway facility (cumulatively considerable impact). Caltrans specified that for industrial, warehouse, and logistics center development projects in the MVIAP, quantitative analysis of Project-related traffic on freeway mainline segments should occur where the project would add 50 or more peak hour trips, and that when a project's traffic volumes dissipate to fewer than 50 peak hour trips, they become unrecognizable from other traffic on the highway system (Kopulsky 2014). For this reason, the addition of 50 or more peak hour trips to a state highway facility that operates at LOS "E" or "F" is considered a cumulatively considerable impact in this EIR.

Although Caltrans utilizes LOS "D" as their stated threshold or acceptable operating conditions, the RCTC has adopted LOS "E" as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. For purposes of the analysis in this Subsection, LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans.

4.8.4 IMPACT ANALYSIS

A. Methodology for Estimating Project-Related Traffic Impacts

❑ Level of Service (LOS)

Traffic operations of roadway facilities are described using the term Level of Service (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS "A," representing completely free-flow conditions, to LOS "F," representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, which is an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow. Table 4.8-10 and Table 4.8-11 summarize typical operational conditions at signalized and unsignalized intersections for each LOS classification, respectively, and Table 4.8-12 summarizes the typical operational conditions for roadway segments for each LOS classification.

The definition of an intersection deficiency in the City of Moreno Valley is based on the City of Moreno Valley General Plan Circulation Element. The City of Moreno Valley General Plan states that target LOS "C" or LOS "D" be maintained along City roads (including intersections) wherever possible. LOS "D" is the limit of acceptable traffic operations at intersections of roads with the classification of Collector or higher with other roads having a classification of Collector or higher. LOS "D" also is the limit of acceptable traffic operations in the City of Perris and the County of Riverside (Urban Crossroads 2014e pp. 26-27).

LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans (Urban Crossroads 2014e 26). Table 4.8-13 and Table 4.8-14

summarize typical operational conditions and freeway mainline segments and freeway merge/diverge areas, respectively.

❑ Intersection Capacity Analysis

The intersection LOS analysis is based on the traffic volumes observed during peak hour conditions. The following peak hours were selected for analysis because these hours are typically experience the most traffic during a 24-hour period:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

For signalized intersections, the City of Moreno Valley requires operations analysis based on the methodology described in Chapter 16 of the Highway Capacity Manual (HCM). Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay (Urban Crossroads 2014e 17). For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4.8-10.

Per the Caltrans *Guide for the Preparation of Traffic Impact Studies*, the traffic modeling and signal timing optimization software package Synchro (Version 8 Build 804) was used to analyze signalized intersections under Caltrans' jurisdiction, which include the I-215 Freeway ramps at Harley Knox Boulevard. All other study area intersections outside of Caltrans' jurisdiction were analyzed using the software package Traffix (Version 8.0 R1, 2008) (Urban Crossroads 2014e 18).

For unsignalized intersections, the City of Moreno Valley requires that operations be evaluated using the methodology described in Chapter 17 of the HCM. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (Urban Crossroads 2014e 19). The LOS rating is based on the weighted average control delay expressed in seconds per vehicle, as shown in Table 4.8-11.

For a more detailed discussion on intersection capacity analysis methodology, refer to *Technical Appendix H1*.

❑ Traffic Signal Warrant Analysis

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. The signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD), as amended by the *MUTCD 2012 California Supplement*, is used for all study area intersections

(Urban Crossroads 2013 25). For more information on signal warrant methodology, refer to Section 2.7 of *Technical Appendix H1*.

Traffic signal warrant analyses were performed for all of the study area intersections that are not signalized under Existing (2013) conditions. A signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this signal warrant condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Ultimately the need for a traffic signal at any intersection should be evaluated by the City Engineer. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above LOS "D" or operate below LOS "D" and not meet a signal warrant (Urban Crossroads 2014e pp. 25-26).

❑ Roadway Segment Capacity Analysis

Roadway segment operations were evaluated using the City of Moreno Valley Daily Roadway Capacity Values provided in the City's *Traffic Impact Analysis Preparation Guide*, summarized in Table 4.8-12. These roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration, and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic), and pedestrian and bicycle traffic. As such, where the ADT-based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes (Urban Crossroads 2013 pp. 19, 21).

❑ Freeway Segment Analysis

Freeway mainline segments within the Project study area were broken into segments defined by freeway-to-arterial interchange locations and evaluated based on peak hour directional volumes. The freeway mainline segment analysis utilized the methodology described in Chapter 23 of the HCM and was performed using Highway Capacity Software Plus (HCS+). The performance measure used by Caltrans to determine the performance of a freeway mainline segment is density; density is expressed in terms of passenger cars per mile per lane (Urban Crossroads 2014e 23, Urban Crossroads 2014f 6). Table 4.8-13 summarizes the freeway mainline segment LOS thresholds for each density range utilized in the analysis. For more information on the freeway mainline segment analysis methodology, refer to Section 2.5 of *Technical Appendix H1* and *Technical Appendix H2*.

The number of lanes along freeway mainline segments under existing, baseline conditions was obtained by Urban Crossroads during field observations in October 2013. Improvements to numerous freeway facilities in the Project's study area are in various stages of planning, design, and construction. The planned enhancements to the regional freeway system in the Project vicinity are summarized below:

- I-215 Widening: RCTC has plans in place for the widening of the I-215 Freeway through the Project study area; however, a schedule for the widening of I-215 between Nuevo Road in the City of Perris and Box Springs Road in the City of Riverside has not be set due to the state's on-going budget challenges. The I-215 expansion project will add a carpool lane (high-occupancy vehicle lane) in each direction to a 10.75-mile section of the freeway. Once the I-215 expansion costs and funding are determined, the planning, design and construction process is estimated to last approximately 8.5 years. The future expansion of I-215 was not assumed to be in place for either the Existing (2013) or Opening Year (2018) analysis scenarios (Urban Crossroads 2014g 7-8).
- I-215 Interchange Improvements: The I-215/Cactus Avenue interchange will be improved to extend the northbound auxiliary lane between Alessandro Boulevard and Cactus Avenue (expected to be completed by 2018), and the I-215/Van Buren Boulevard interchange will be improved to include northbound and southbound auxiliary lanes between Cactus Avenue and Van Buren Boulevard (expected to be completed by 2014). These I-215 interchange improvements are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).
- I-215/SR-60 Carpool Lanes: As of the writing of this EIR, the extension of carpool lanes along the I-215/SR-60 is under construction. When finished, the project will connect the existing carpool lanes on both sides of the I-215. Construction of the carpool lanes is expected to be completed by Summer 2014. The I-215/SR-60 carpool lanes are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).
- SR-91 Carpool and Express Lanes: Several construction projects are underway to improve traffic mobility along SR-91, including the construction of one carpool lane in each direction between Adams Street and the SR-60/SR-91/I-215 freeway interchange (expected to be complete by Summer 2014), the addition of express and mixed flow lanes in each direction between SR-71 and I-15, and the addition of an eastbound mixed flow lane between I-15 and Pierce Street (expected to be complete by 2017). These SR-91 improvements are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).

❑ Freeway Merge/Diverge Ramp Junction Analysis

The merge/diverge analysis is based on the HCM Ramps and Ramp Junctions analysis method and performed using HCS+ software. Although the HCM indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis presented in *Technical Appendix H1* and this subsection was performed at all ramp locations with respect to the nearest on- or off-ramp at each interchange in an effort to be consistent with Caltrans guidance/comments on other projects along the I-215 corridor. The results (reported in passenger car per mile per lane) are calculated based on the existing number of travel lanes, number of lanes at the on- and off-ramps both at the analysis junction and at upstream and downstream locations (if applicable), and acceleration/deceleration lengths at each merge/diverge point (Urban Crossroads 2014e 24). Table 4.8-14 summarizes the freeway merge/diverge ramp junction LOS thresholds utilized in the analysis. For more information on the

freeway merge/diverge ramp junction analysis methodology, refer to Section 2.6 of *Technical Appendix H1*.

❑ Freeway Ramp Queuing Analysis

The traffic progression analysis tool and HCM intersection analysis program, Synchro, was used to assess the potential impacts/needs of the freeway ramps with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps are based upon the 95th percentile queue resulting from the Synchro queuing analysis. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group (Urban Crossroads 2014e pp. 21-22). For more information on the freeway ramp queuing analysis methodology, refer to section 2.4 of *Technical Appendix H1*.

❑ Future Year Background Traffic

Future year background traffic forecasts are based upon a background (ambient) growth rate of 2% per year, compounded annually. As directed by City of Moreno Valley staff, future year background traffic forecasts are defined as Existing (2013) traffic conditions plus five (5) years of ambient growth. The total ambient growth rate assumed for the Project is 10.4% (Urban Crossroads 2014e 61). This ambient growth factor is intended to approximate area-wide growth not accounted by known cumulative development projects analyzed in *Technical Appendix H1*. According to regional population projections included in SCAG's 2012 RTP, the population of western Riverside County is projected to increase by 41% between the Years 2010 and 2035, which corresponds to a compounded annual growth rate of 1.38%. During the same time period, the 2012 RTP estimates employment in western Riverside County to increase by 112%, which corresponds to a compounded annual growth rate of 3.06%. Accordingly, the 2% annual growth rate utilized in *Technical Appendix H1* and this Subsection accurately approximates the anticipated growth in regional traffic volumes, especially when considered in addition to Project-related traffic and traffic generated by other known development projects. This methodology would tend to overstate, as opposed to understate, potential impacts to traffic and circulation (Urban Crossroads 2014e pp. 61-62).

❑ Opening Year (2018) Analysis

The analysis contained in *Technical Appendix H1* and this Subsection assumes lane configurations and traffic controls to be in place for Opening Year (2018) conditions are consistent with those previously discussed under Subsection 4.8.2, with the exception of the following improvements which have been recently completed (2014) or will be completed prior to opening of the Project (Urban Crossroads 2014 2014e 87):

- Widening of Perris Boulevard to its ultimate full-width from the City of Moreno Valley city limit to Ramona Expressway; and
- Construction of Project driveways and those facilities assumed to be constructed to provide access to the site.

The analysis does not assume the planned future roadway extension of Heacock Street to Harley Knox Boulevard under Opening Year (2018) conditions. With the future Heacock Street extension in

place, traffic along Heacock Street would no longer be diverted to Indian Street to connect to Harley Knox Boulevard, thereby reducing potential impacts to intersections and roadway segments along Indian Street between Nandina Avenue and Harley Knox Boulevard (Urban Crossroads 2014e pp. 87, 95). As such, the analysis presented in this EIR provides a conservative, "worst case" analysis of potential effects to Indian Street.

❑ Cumulative Impact Analysis

CEQA Guidelines §15130 requires that an EIR disclose the impact from the Project along with the incremental impacts from closely related past, present, and reasonably foreseeable future projects (*i.e.*, cumulative impact analysis). A list of 112 cumulative projects was developed using data collected from other recent traffic studies conducted in close proximity to the proposed Project and consultation between Urban Crossroads, Inc. and City of Moreno Valley staff. This comprehensive list of projects was assumed for purposes of the analysis in *Technical Appendix H1* and this Subsection (Urban Crossroads 2014e pp. 62-70). Descriptive and locational information about each development project considered in the cumulative impact analysis can be found in Section 4.7 of *Technical Appendix H1* and Section 4.0.3 of this EIR.

❑ Fair Share Calculation

In cases where *Technical Appendix H1* and this Subsection identify that the proposed Project would have a significant cumulative impact to a roadway facility, and the recommended mitigation measures is a "fair share" monetary contribution toward the construction of planned roadway improvements, the Project's fair share contribution is determined by the following equation (Urban Crossroads 2014e pp. 27-28):

Project Fair Share % = Project Traffic / (Total Traffic - Existing Baseline Traffic)

Refer to Section 2.10 of *Technical Appendix H1* for more information on the methodology used to calculate the Project's fair share contribution toward planned roadway improvements.

Threshold 1:	***Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

The Project proposes to provide two (2) driveways onto Perris Boulevard, three (3) driveways onto Modular Way, one (1) driveway onto Kitching Street, and two (2) driveways onto Edwin Road, and improve the site-adjacent segments of Edwin Road, Kitching Street, and Modular way (a portion thereof). The Project's southernmost driveway at Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would have the option to be restricted for use by passenger vehicles only or be fully accessible for use by passenger vehicles and trucks. The proposed roadway improvements were previously described in EIR Section 3.0, *Project Description*, and would be ensured as part of the Project's Conditions of Approval, which will be issued by the City of Moreno

Valley prior to consideration of the proposed Project for approval. The construction of these roadway improvements is assumed throughout the analyses under this Threshold.

The analysis of Threshold 1 focuses on potential impacts to local roadways, based on applicable LOS standards established by the City of Moreno Valley General Plan and the City of Perris General Plan. Refer to Threshold 2 for an analysis of potential impacts to the Riverside County CMP roadway network, including I-215 and SR-91, based on the acceptable LOS "D" standard recommended by Caltrans (Kopulsky 2014).

A. Project Vehicle Trip Generation

Vehicle trip generation represents the amount of traffic that is both attracted to and produced by a development project. Determining traffic generation for a specific project is, therefore, based upon forecasting the amount of traffic and mix of vehicles (*e.g.*, passenger cars, light trucks, heavy trucks) that is expected to be both attracted to and produced by the specific land uses being proposed for a given project. The vehicle trip generation rates utilized to estimate the amount of traffic that would be generated by the proposed Project are based on data collected by the Institute of Transportation Engineers (ITE) and presented in their most recent edition of the *Trip Generation* manual (9th Edition, 2012). Assumptions on the mix of vehicles that would access the Project site are based on field observations conducted by Counts Unlimited on behalf of Urban Crossroads, Inc. in September 2013 at six (6) high-cube distribution warehouse facilities located in the City of Moreno Valley. The surveyed warehouse facilities were selected in consultation with City of Moreno Valley staff and were each determined by City staff to be suitable for use by the Project for estimating vehicle trips by vehicle classification (Urban Crossroads 2014e 51). Although the use of public transit, walking, and/or bicycling have the potential to reduce Project-related vehicular traffic, such reductions were purposely not taken in this analysis in order to provide a worst-case analysis of the Project's potential to result in significant traffic impacts. The proposed Project is estimated to generate 1,863 daily vehicle trips, including 1,416 passenger car trips and 447 truck trips.

Table 4.8-15, *Project Trip Generation*, summarizes the ITE-recommended trip generation rates of 1.68 vehicle trips per thousand square feet and vehicle mix for the high-cube warehouse land use proposed by the Project, with PCE factors applied. Consistent with standard traffic engineering practice in Southern California, PCE factors have been applied to Project-related traffic due to the expected heavy truck component of the Project's traffic. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and LOS analyses. As previously described in Subsection 4.8.2A, a PCE factor of 1.5 was applied to 2-axle trucks, a factor of 2.0 for 3-axle trucks and a factor of 3.0 for 4+-axle trucks. After converting to PCE, the Project is estimated to generate 2,619 PCE daily trips, including 171 trips during the AM peak hour and 187 trips during the PM peak hour (refer to Table 4.8-16, *Project Trip Generation Summary* (Urban Crossroads 2014e 52). The adjusted trip rates and vehicle mix presented in Table 4.8-16 are utilized throughout the analysis in *Technical Appendix H1* and this Subsection to determine the Project's effect to the transportation and circulation network.

As mentioned above, the trip generation rates used in this analysis are rates recommended by the ITE, which are based on national data collection and scientific study. Additionally, the Commercial Real Estate Development Association (formerly known by the acronym NAIOP), commissioned a study of high-cube warehouses of over 500,000 square feet in size in the Inland Empire in 2011 using data collected in 2008. The NAIOP study, prepared by Kunzman Associates, Inc. and herein incorporated by reference and available for public review at the City of Moreno Valley Community and Economic Development Department, Planning Division, covered 31 warehouse sites and was overseen by a Technical Advisory Group with representatives of the City of Moreno Valley, WRCOG, RCTC, San Bernardino Associated Governments (SANBAG) and the University of California, Riverside. That study revealed that no single trip generation rate is uniformly applicable to all warehouse projects, but that on average, trips generated by large warehouses in the Inland Empire are 0.9904 trips per thousand square feet, which is less than the 1.68 trips per thousand square feet recommended by the ITE and used in this analysis.

B. Project Vehicle Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that would be utilized by Project traffic. The distribution pattern for truck and passenger vehicle trips that would be generated by the Project were developed based on existing travel patterns in the area, the geographical location of the Project site, the location of the local designated truck route, and the site's proximity to the regional arterial and state highway system, as well as recommendations provided by the City of Moreno Valley Public Works Department, Transportation Engineering Division. The total volume on each roadway was divided by the Project's total traffic generation to indicate the percentage of Project traffic that would use each component of the local and regional roadway system in each relevant direction. The traffic distribution pattern for Project-related passenger car trips is graphically depicted on Figure 4.8-12, *Project Passenger Car Trip Distribution*, while the traffic distribution pattern for Project-related truck trips is graphically depicted on Figure 4.8-13, *Project Truck Trip Distribution*.

The assignment of Project traffic to the adjoining roadway system is based upon the Project's trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of Project occupancy. Based on the identified Project traffic generation and trip distribution patterns, Project ADT volumes for the weekday are shown on Figure 4.8-14, *Project Average Daily Traffic (PCE)*. The Project's contribution of traffic to study area intersections during the AM and PM peak hours are shown on Figure 4.8-15 and Figure 4.8-16, respectively.

C. Analysis Scenarios

Potential impacts to the transportation and circulation network are assessed for each of the conditions listed below.

- Short-Term Construction Conditions
- Existing (2013) Conditions

- Existing (2013) plus Project Conditions
- Opening Year (2018) plus Ambient Growth plus Cumulative Development Projects
- Opening Year (2018) plus Ambient Growth plus Project Conditions plus Cumulative Development Projects

The Short-Term Construction Conditions analysis determines the potential for Project construction-related traffic or construction-related activities (*i.e.*, construction activities within the public right-of-way) to result in an adverse effect to the local roadway system. Types of traffic anticipated during construction include employees traveling to/from the Project site as well as deliveries of construction materials to the Project site.

Information for Existing (2013) conditions is disclosed in Subsection 4.8.2, above, and represents the baseline traffic conditions as they existed at the approximate time the NOP for this EIR was released for public review.

The Existing (2013) plus Project Conditions determines direct Project-related traffic impacts that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon Existing (2013) conditions. The Existing (2013) plus Project scenario is presented to disclose direct impacts as required by CEQA.

The Opening Year (2018) analysis includes an evaluation of traffic conditions at the "opening" of the Project. Pursuant to the methodology established by the City of Moreno Valley in their *Traffic Impact Analysis Preparation Guide*, "opening year" is defined as Existing (2013) conditions plus five (5) years. In the case of the Project, Opening Year is defined as 2018. The Opening Year (2018) analysis compares Existing plus Ambient Growth plus Cumulative Development traffic conditions to Existing plus Ambient Growth plus Project plus Cumulative Development traffic conditions in order to determine if improvements funded through local and regional transportation mitigation fee programs such as the Transportation Uniform Mitigation Fee (TUMF) program, City of Moreno Valley Development Impact Fee (DIF) program, or other approved funding mechanisms can accommodate future anticipated traffic at the applicable target LOS. If the funded improvements can provide the target LOS with the addition of Project traffic, then the Project's participation in mandatory funding mechanisms (TUMF, DIF, and/or others) is considered to be adequate mitigation for the Project's contribution to cumulative traffic impacts as imposed through Conditions of Approval applied to the Project by the City of Moreno Valley. If other improvements are needed beyond the funded improvements (such as localized improvements to non-TUMF or non-DIF facilities), they are identified as such.

D. Short-Term Construction Traffic Impact Analysis

During the construction phase of the Project, traffic to and from the Project site would be generated by activities such as construction employee trips, delivery of construction materials, and use of heavy equipment. Approximately 75 construction workers would work on the Project site on a daily basis. Based on the anticipated construction schedule, most construction workers would arrive to and depart

from the Project site outside of the peak hours. As such, vehicular traffic associated with construction employees would be less than daily and peak hour traffic volumes generated during Project operational activities, and would not result in a substantial adverse effect to the local roadway system (Urban Crossroads 2014e 57). Deliveries of construction materials to the Project site would also have a nominal effect to the local roadway network; construction materials would be delivered to the site throughout the construction phase based on need and would not occur on an everyday basis. Heavy equipment would be utilized on the Project site during the construction phase. As most heavy equipment is not authorized to be driven on a public roadway, most equipment would be delivered and removed from the site via flatbed trucks. As with the delivery of construction materials, the delivery of heavy equipment to the Project site would not occur on a daily basis, but would occur periodically throughout the construction phase based on need. As shown in Table 4.8-5, all 16 existing intersections in the Project's study area operate at an acceptable LOS under Existing (2013) conditions. As described above under Subsection 4.8.2D, *Existing Roadway Conditions*, all 45 roadway segments in the Project's study area operate at acceptable levels under Existing (2013) conditions. The addition of temporary, Project-related construction traffic to these transportation facilities would not degrade LOS to a deficient level. Accordingly, traffic generated by the Project's construction phase would not result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. As such, a less-than-significant impact would occur during the Project's construction phase.

Although the Project would result in a less-than-significant effect to the local circulation system during short-term construction activities, Mitigation Measure MM 4.8-1 has nonetheless been identified out an abundance of caution to ensure that the Project's construction-related traffic does not result in substantial adverse effects to the local circulation network (refer to Subsection 4.8.7, below).

E. Existing (2013) plus Project Traffic Analysis (E+P)

This subsection presents an analysis of existing (2013) traffic volumes plus traffic generated by the proposed Project (Existing plus Project, or E+P). The reason this particular analysis scenario is provided is to disclose the potential for direct impacts to the existing environment as required by CEQA. The E+P scenario rarely materializes as an actual scenario in the real world. The time period between the environmental baseline date and the date project buildout occurs often can be a period of several years or more. In the case of the proposed Project, the estimated time period between the distribution of the NOP for the Project's EIR (2013) and estimated Project buildout (2015) is two (2) years. During this time period, traffic conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Therefore the E+P scenario is very unlikely to materialize in real world conditions and thus does not accurately describe the environment will exist when the proposed Project is constructed and becomes operational. Regardless, the E+P scenario is evaluated to satisfy CEQA requirements to identify the Project's impacts to the existing environment.

The lane configurations and traffic controls assumed to be in place for E+P conditions are identical to those that are in place under Existing (2013) conditions, with the exception of all site-adjacent roadway and site access improvements (*i.e.*, Project driveways) that would be installed by the Project and described in EIR Section 3.0.

Projected ADT volumes for E+P conditions are shown on Figure 4.8-17, *Existing plus Project (E+P) Average Daily Traffic*. Peak hour study area intersection turning movement volumes for E+P traffic conditions are shown on Figure 4.8-18, *Existing plus Project (E+P) Intersection Volumes – AM Peak Hour*, and Figure 4.8-19, *Existing plus Project (E+P) Intersection Volumes – PM Peak Hour*, respectively.

❑ Intersection Operations Analysis

Table 4.8-17, *Existing plus Project (E+P) Intersection Analysis*, summarizes the peak hour LOS at Project study area intersections under E+P conditions. The analysis presented in Table 4.8-17 assumes that vehicle traffic at the Project's southernmost driveway along Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would be restricted to passenger vehicle traffic only. As shown in Table 4.8-17, all 22 intersections in the Project study area are projected to operate at acceptable LOS during the AM and PM peak hours with the addition of Project traffic to the Existing (2013) condition. Therefore, implementation of the proposed Project would result in less-than-significant impacts to study area intersections under E+P conditions.

Table 4.8-18, *Existing plus Project (E+P) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)*, summarizes the peak hour LOS at the Perris Boulevard/San Michele Road intersection in the event that trucks are allowed to directly access the Project site from this intersection. If trucks were to use the Perris Boulevard/San Michele Road intersection to access the site, the intersection would be able to provide acceptable LOS under E+P traffic conditions, as shown in Table 4.8-18. Therefore, the Project would have a less-than-significant impact on the Perris Boulevard/San Michele Road intersection.

❑ Traffic Signal Warrant Analysis

Based on projected E+P traffic volumes, no unsignalized intersections in the Project study area warrant consideration for a traffic signal under E+P conditions (Urban Crossroads 2014e 80). As such, the Project would result in a less-than-significant impact on unsignalized traffic intersections.

❑ Roadway Segment Operations Analysis

Table 4.8-19, *Existing plus Project (E+P) Roadway Segment Volume/Capacity Analysis*, summarizes the projected daily traffic volumes and volume-to-capacity ratio along all roadway segments in the Project study area under E+P conditions. As shown in Table 4.8-19, all roadways segments in the Project study area would operate at LOS with the addition of Project traffic to the Existing (2013) condition, with the exception of the Perris Boulevard segment north of Harley Knox Boulevard (which is projected to operate at LOS "F" under E+P conditions). Although the roadway segment of Perris Boulevard north of Harley Knox Boulevard is projected to operate at LOS "F" under E+P

traffic conditions, traffic movement along this roadway segment is considered to be acceptable because the intersections on northern and southern extents of this segment operate at acceptable LOS, which demonstrates that traffic flow through the roadway segment is relatively smooth (Urban Crossroads 2014e 80). As such, the proposed Project would result in a less-than-significant impact to study area roadway segments under E+P conditions.

F. Opening Year (2018) Traffic Analysis

As described above under the E+P traffic analysis, implementation of the Project would result in less-than-significant, direct effects to intersections and roadway segments within the Project study area. However, the incremental addition of Project traffic when combined with traffic from ambient growth and other nearby projects has the potential to cause or compound cumulatively adverse effects to the local circulation network. The Opening Year (2018) traffic conditions analysis identifies the Project's potential to have a cumulatively considerable contribution to cumulative traffic impacts on the local circulation system based on a comparison of the traffic volumes expected in Year 2018, including background traffic from ambient growth and local cumulative development projects, without the proposed Project (Existing plus Ambient Growth plus Cumulative Developments, or E+A+C) and with the proposed Project (Existing plus Ambient Growth plus Project Conditions plus Cumulative Developments, or E+A+P+C). A total of 112 other known cumulative development projects in local area were included in the Opening Year (2018) analysis, in addition to an ambient growth rate factor of 10.4%. As specified in Subsection 4.8.4A, a significant cumulative impact would occur when a roadway segment or intersection is projected to operate at an unacceptable LOS with the addition of future traffic. The addition of Project-related traffic is considered cumulatively considerable if the Project would contribute 50 or more peak hour trips to a roadway section or intersection projected to operate at an unacceptable LOS.

The lane configurations and traffic controls assumed to be in place for the Opening Year (2018) traffic impact analysis are identical to those assumed for the E+P analysis. This is a worst-case scenario assumption used to reveal impacts to the local roadway network assuming that no roadway or intersection improvements would occur between 2013 and 2018. If improvements do occur, LOS conditions would improve.

Projected ADT volumes for Opening Year (2018) without Project traffic conditions are shown on Figure 4.8-20, *Opening Year (2018) without Project Average Daily Traffic*. Peak hour study area intersection turning movement volumes for Opening Year (2018) without Project traffic conditions are shown on Figure 4.8-21, *Opening Year (2018) without Project Intersections Volumes – AM Peak Hour,* and Figure 4.8-22, *Opening Year (2018) without Project Intersection Volumes – PM Peak Hour*, respectively.

Projected ADT volumes for Opening Year (2018) with Project traffic conditions are shown on Figure 4.8-23, *Opening Year (2018) with Project Average Daily Traffic*. Peak hour study area intersection turning movement volumes for Opening Year (2018) with Project traffic conditions are shown on

Figure 4.8-24, *Opening Year (2018) with Project Intersection Volumes – AM Peak Hour*, and Figure 4.8-25, *Opening Year (2018) with Project Intersection Volumes – PM Peak Hour*, respectively.

❑ Intersection Operations Analysis

Table 4.8-20, *Opening Year (2018) Intersection Analysis*, summarizes the LOS of study area intersections during the AM and PM peak hours under Opening Year (2018) conditions both with and without Project traffic. As shown in Table 4.8-20, under Opening Year (2018) without Project conditions (E+A+C), the following six (6) study area intersections are projected to operate at unacceptable LOS during peak hours:

- Intersection No. 1: I-215 Southbound Ramps/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 3: Western Way/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 4: Patterson Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 5: Webster Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 6: Indian Street/Grove View Road in the AM and PM peak hours; and
- Intersection No. 7: Indian Street/Harley Knox Boulevard in the AM and PM peak hours.

When Project traffic is added to Opening Year (2018) conditions (E+A+P+C), all of the intersections listed above would continue to operate at unacceptable LOS (refer to Table 4.8-20). Because the Project would contribute 50 or more peak hour trips to the above-listed intersections under Opening Year (2018) with Project traffic conditions, the Project's impact to these intersections would be cumulatively considerable. The addition of Project traffic to Opening Year (2018) traffic conditions also would contribute to the degradation of traffic operations from acceptable to unacceptable LOS at one additional intersection (I-215 Northbound Ramps/Harley Knox Boulevard during the PM peak hour, refer to Table 4.8-20), resulting in a cumulatively considerable impact.

The analysis presented in Table 4.8-20 assumes that vehicle traffic at the Project's southernmost driveway along Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would be restricted to passenger vehicle traffic only. If trucks were to directly access the Project site from the Perris Boulevard/San Michele Road intersection under Opening Year (2018) conditions (E+A+P+C), this intersection would continue to operate at acceptable LOS (refer to Table 4.8-21, *Opening Year (2018) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)*). Based on the information presented in Table 4.8-20 and Table 4.8-21, the Project would have a less-than-significant impact on the Perris Boulevard/San Michele Road intersection under Opening Year (2018) conditions.

❑ Traffic Signal Warrant Analysis

For Opening Year (2018) without and with Project conditions, the Indian Street/Grove View Road intersection meets the minimum conditions for which a traffic signal may be warranted. No other

unsignalized intersections in the Project study area warrant consideration for a traffic signal under Opening Year (2018) conditions without or with the Project (Urban Crossroads 2014e 100). As noted previously, meeting a traffic signal warrant does not require that a traffic signal be installed at a particular location. Rather, a traffic signal warrant means that other traffic factors and conditions should be evaluated in order to determine whether a signal is actually justified. As shown in Table 4.8-20, the Indian Street/Grove View Road intersection is projected to experience extreme traffic delays (LOS "F") under Opening Year (2018) conditions without and with Project traffic, and as such *Technical Appendix H1* recommends a traffic signal at this intersection under Opening Year (2018) conditions. The Project's contribution of traffic to the Indian Street/Grove View Road intersection is a cumulatively considerable impact because the Project would contribute substantial traffic (*i.e.*, 50 or more peak hour trips) to an intersection that operates at deficient LOS and warrants a traffic signal under Opening Year (2018) traffic conditions.

❑ Roadway Segment Operations Analysis

Table 4.8-22, *Opening Year (2018) Roadway Segment Volume/Capacity Analysis*, summarizes the LOS of study area roadway segments under Opening Year (2018) conditions both with and without Project traffic. As shown in Table 4.8-22, under Opening Year (2018) without Project conditions (E+A+C), the following 10 study area intersections are projected to operate at unacceptable LOS:

- Segment No. 3: Harley Knox Boulevard, I-215 Northbound Ramps to Western Way;
- Segment No. 4: Harley Knox Boulevard, East of Western Way;
- Segment No. 5: Harley Knox Boulevard, West of Patterson Avenue;
- Segment No. 6: Harley Knox Boulevard, East of Patterson Avenue;
- Segment No. 7: Harley Knox Boulevard, West of Webster Avenue;
- Segment No. 8: Harley Knox Boulevard, East of Webster Avenue;
- Segment No. 9: Harley Knox Boulevard, West of Indian Street;
- Segment No. 17: Indian Street, North of Grove View Road;
- Segment No. 18: Indian Street, South of Grove View Road; and
- Segment No. 19: Indian Street, North of Harley Knox Boulevard.

As shown in Table 4.8-22, all of the 10 above-listed roadway segments would continue to operate an unacceptable LOS under Opening Year (2018) conditions with the addition of Project traffic (E+A+P+C). Because the Project would contribute 50 or more peak hour trips to the roadway segments listed above under Opening Year (2018) with Project traffic conditions, the Project's impact to these roadway segments would be cumulatively considerable. Project-related traffic would not contribute to LOS deficiencies at any additional study area roadway segments, beyond those listed above, under Opening Year (2018) conditions.

Threshold 2: ***Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

The Riverside County Congestion Management Plan (CMP) prepared by the RCTC is applicable to the Project because of the subject property's proximity to freeways that are designated as part of the Riverside County CMP roadway system. The RCTC has adopted LOS "E" as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. For purposes of the analysis in this Subsection, however, LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans (Kopulsky 2014).

For purposes of analysis, the segments of I-215 (northbound and southbound directions) and SR-91 (eastbound and westbound directions) located near the Project site have been broken into smaller segments defined by the freeway-to-arterial interchange locations. The Project would contribute peak hour vehicle trips to the state highway system, including segments of I-215 and SR-91. Potential impacts to I-215 and SR-91 were evaluated using the same analysis scenarios presented above under Threshold 1 (*i.e.*, E+P, E+A+C, and E+A+P+C).

The analysis provided in the Traffic Impact Analysis (*Technical Appendix H1*) and summarized on the following pages evaluates the Project's addition of actual vehicles (passenger cars and trucks) to study area freeway mainline segments and does not adjust traffic volumes to PCE-equivalent traffic volumes (Urban Crossroads 2014e 23).

A. Short-Term Construction CMP Impact Analysis

As previously described under the analysis for Threshold 1, above, an average of 75 construction workers would be on the Project site on a daily basis. Because construction activities on the Project site are estimated to commence at 7:00 am and last until 6:00 pm on a daily basis (weekdays only), most construction workers would travel to/from the Project site outside of the peak hour. Therefore, the Project would not generate substantial peak-hour traffic during the construction phase. As shown in Table 4.8-9 all four (4) freeway ramps in the Project's study area provide adequate stacking lengths under Existing (2013) conditions. Because the Project would not generate substantial peak-hour traffic during the construction phase, the temporary addition of Project-related traffic to freeway ramps has no potential to degrade traffic movement (*i.e.*, stacking) to a deficient level.

As shown in Table 4.8-7, all freeway mainline segments in the Project's study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street, which operates at LOS "E" during the PM peak hour. Pursuant to Caltrans standards, Project-related construction traffic would result cumulatively considerable impact to this freeway mainline segment if the amount of Project construction traffic totals more than 50 peak hour trips at this segment during the PM peak hour (4:00 PM to 6:00 PM). The Project would generate very few construction-related inbound trips to the Project site in the PM peak hour – well fewer than 50 trips. Thus, the Project's construction-related impact to the SR-91

eastbound segment between Central Avenue and 14th Street in the PM peak hour would be less than cumulatively considerable.

As shown in Table 4.8-8, all freeway ramp merge/diverge areas in the Project's study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard, which operates at LOS "E" during the PM peak hour. Thus, Project-related construction traffic has the potential to have a cumulatively considerable impact to the I-215 Southbound Off-Ramp at Harley Knox Boulevard if the amount of Project construction traffic totals more than 50 peak hour trips at this ramp during the PM peak hour (4:00 PM to 6:00 PM). The addition of 50 or more peak hour trips is considered by Caltrans to be cumulatively considerable. The Project would generate very few construction-related inbound trips to the Project site in the PM peak hour – well fewer than 50 trips. Thus, the Project's construction-related impact to the I-215 Southbound Off-Ramp at Harley Knox Boulevard in the PM peak hour would be less than cumulatively considerable.

Based on the foregoing information, traffic generated by the Project's construction phase would not result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The proposed Project would result in less-than-significant impacts during the Project's construction phase. Although the Project would result in a less-than-significant effect to the local circulation system during short-term construction activities, this EIR recommends mitigation to ensure that the Project's construction-related traffic does not result in substantial adverse effects to the local circulation network (refer to Subsection 4.8.7, below).

B. Existing (2013) plus Project CMP Impact Analysis

As previously stated, for purposes of full disclosure and in an effort to satisfy CEQA Guidelines §15125(a), this subsection presents an analysis of existing traffic volumes plus traffic generated by the proposed Project (Existing plus Project, or E+P). The E+P scenario rarely materializes as an actual scenario in the real world because it takes time to construct a development Project and environmental conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Regardless, the E+P scenario is analyzed to satisfy CEQA requirements to identify the Project's direct impacts to the existing environment.

❑ Freeway Mainline Segment Operations Analysis

Table 4.8-7 summarizes the LOS of freeway mainline segments within the Project study area with the addition of Project traffic to Existing (2013) conditions. The freeway mainline segments selected for evaluation in Table 4.8-7 include all freeway mainline segments where the Project would contribute 50 or more peak hour trips, in conformance with Caltrans direction (Kopulsky 2014). As shown in Table 4.8-7, all freeway mainline segments in the Project study area operate at acceptable LOS during the AM and PM peak hours under E+P traffic conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street, which operates at LOS "E" during the PM peak hour. The SR-91 eastbound segment between Central Avenue and 14th Street operates

at unacceptable LOS under Existing (2013) conditions without Project-related traffic (refer to Subsection 4.8.2E); therefore, the Project would not cause the LOS deficiency at this freeway mainline segment. As such, the Project's contribution of traffic to the SR-91 eastbound segment between Central Avenue and 14th Street would be less than significant on a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

The freeway mainline segments listed in Table 4.8-7 include the segments that would receive the highest concentration of traffic from the Project. However, Project-related traffic does not stop at the limits of the freeway mainline segments listed in Table 4.8-7. Rather, Project-related traffic continues to travel throughout the Southern California region along the state highway system, dissipating as distance from the Project site increases. As such, Project-related traffic has the potential to travel along other freeway mainline segments that experience unacceptable levels of congestion, including but not limited to segments of I-5, I-15, I-110, I-405, I-710, and SR-60, among others. All state highway system facilities that operate at an unacceptable LOS are considered to be cumulatively impacted. The Project's contribution of traffic to congested freeway mainline segments, including freeway segments included in the Riverside County CMP roadway system, is a cumulatively considerable impact on segments where the Project would contribute 50 or more peak hour trips.

❑ Freeway Ramp Operations Analysis

Pursuant to Caltrans direction, the Project's effect on freeway ramps that would receive 50 or more peak hour trips from the Project was studied. The only freeway ramps that would receive 50 or more peak hour trips from the Project are the northbound and southbound I-215 ramps at Harley Knox Boulevard. Table 4.8-23, *Existing (2013) plus Project Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange*, summarizes freeway ramp queuing at the I-215/Harley Knox Boulevard during the AM and PM peak hours under E+P traffic conditions. As shown on Table 4.8-23, all freeway ramps at the I-215/Harley Knox Boulevard interchange experience acceptable stacking lengths during the AM and PM peak hours under E+P traffic conditions, which would preclude "spill back" of traffic from this interchange onto mainline segments of I-215. Accordingly, implementation of the Project would result in less-than-significant impacts to freeway ramp operations under E+P traffic conditions.

❑ Freeway Merge/Diverge Operations Analysis

Table 4.8-24, *Existing (2013) plus Project Freeway Ramp Merge/Diverge Analysis*, summarizes traffic operations at freeway ramp junction merge/diverge areas within the Project study area under E+P traffic conditions. Per the direction of Caltrans, locations where a Project's traffic would result in 50 or more peak hour trips merging and diverging across lanes of freeway interchanges require study. As shown in Table 4.8-24, freeway ramp junction merge/diverge areas at the I-215/Harley Knox Boulevard interchange are projected to operate at acceptable LOS during AM and PM peak hours under E+P traffic conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard (which would operate at LOS "E" during the PM peak hour). As previously

described in Subsection 4.8.2F, the I-215 Southbound off-ramp at Harley Knox Boulevard operates at LOS "E" during the PM peak hour under Existing (2013) conditions without Project-related traffic; therefore, the Project would not directly cause or worsen the LOS deficiency at this freeway ramp junction merge/diverge area. As such, the Project's contribution of traffic to freeway ramp junction merge/diverge areas would be less than significant on a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

C. Opening Year (2018) CMP Impact Analysis

The Opening Year (2018) conditions analysis determines the Project-related effects to I-215 and SR-91 based on a comparison of the traffic volumes expected in Year 2018 without and with development of the Project, including background traffic from ambient growth and cumulative development projects.

❑ Freeway Mainline Segment Operations Analysis

Table 4.8-25, *Opening Year (2018) Freeway Segment Analysis*, summarizes the LOS of freeway mainline segments within the Project study area under Opening Year (2018) conditions both without and with Project traffic. As shown in Table 4.8-25, under Opening Year (2018) without Project conditions (E+A+C), the following four (4) study area freeway mainline segments are project to operate at unacceptable LOS during peak hours:

- I-215 Southbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the AM and PM peak hours);
- I-215 Northbound, between Box Springs Road and SR-60/I-215 Freeway (LOS "E" during the AM and PM peak hours);
- I-215 Northbound, between SR-60 Freeway and Eucalyptus Avenue (LOS "F" during the PM peak hour); and
- I-215 Northbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the PM peak hour).

As shown in Table 4.8-25, the four (4) above-listed freeway mainline segments would continue to operate an unacceptable LOS under Opening Year (2018) conditions with the addition of Project traffic (E+A+P+C), and the LOS at the I-215 Northbound mainline segment between Box Springs Road and SR-60/I-215 Freeway would degrade from LOS "E" to LOS "F" during the PM peak hour. Because the Project would contribute 50 or more peak hour trips to the freeway mainline segments listed above under Opening Year (2018) with Project traffic conditions, the Project's impact to these freeway mainline segments would be cumulatively considerable.

The freeway mainline segments selected for evaluation in Table 4.8-25 include all freeway mainline segments where the Project would contribute 50 or more peak hour trips, in conformance with Caltrans direction. The freeway mainline segments listed in Table 4.8-25 include the segments that would receive the highest concentration of traffic from the Project. However, Project-related traffic

does not stop at the limits of the freeway mainline segments listed in Table 4.8-25. Rather, Project-related traffic continues to travel throughout the Southern California region along the state highway system, dissipating as distance from the Project site increases. As such, Project-related traffic has the potential to travel along freeway mainline segments that may experience unacceptable levels of congestion under Opening Year (2018) conditions, including but not limited to segments of I-5, I-15, I-110, I-405, I-710, and SR-60, among others. All state highway system facilities that operate at an unacceptable LOS are considered to be cumulatively impacted. The Project's contribution of traffic to congested freeway mainline segments, including freeway segments included in the Riverside County CMP roadway system, is a cumulatively considerable impact on segments where the Project would contribute 50 or more peak hour trips.

❑ Freeway Ramp Operations Analysis

Pursuant to Caltrans direction, the Project's effect on freeway ramps that would receive 50 or more peak hour trips from the Project was studied. The only freeway ramps that would receive 50 or more peak hour trips from the Project are the northbound and southbound I-215 ramps at Harley Knox Boulevard. Table 4.8-26, *Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange*, summarizes freeway ramp queuing at the I-215/Harley Knox Boulevard during the AM and PM peak hours under Year (2018) conditions without and with Project traffic. As shown on Table 4.8-26, all freeway ramps in the Project study area would experience acceptable stacking lengths during the AM and PM peak hours under Opening Year (2018) conditions with the exception of the I-215 Northbound Ramp at Harley Knox Boulevard, which is projected to experience long queues during the AM peak hour (both without and with Project-related traffic). Thus, no new deficiencies would be created by the Project. Regardless, the Project would contribute more than 50 peak hour trips to the freeway mainline segments adjacent to this freeway ramp and the addition of Project-related traffic to this freeway ramp would further contribute to unacceptable vehicle queues under Opening Year (2018) conditions. The Project's impact is determined to be cumulatively considerable.

❑ Freeway Merge/Diverge Operations Analysis

Table 4.8-27, *Opening Year (2018) Freeway Ramp Merge/Diverge Analysis*, summarizes traffic operations at freeway ramp junction merge/diverge areas within the Project study area under Opening Year (2018) traffic conditions without and with Project-related traffic. Per the direction of Caltrans, locations where a project's traffic would result in 50 or more peak hour trips merging and diverging across lanes of freeway interchanges require study. As shown in Table 4.8-27, the following three (3) freeway ramp junction merge/diverge areas within the Project study area are projected to operate at unacceptable LOS during peak hours:

- I-215 Southbound Off-Ramp at Harley Knox Boulevard in the AM and PM peak hours;
- I-215 Southbound On-Ramp at Harley Knox Boulevard in the AM and PM peak hours; and
- I-215 Northbound On-Ramp at Harley Knox Boulevard in the PM peak hour.

Each of the three (3) above-listed freeway ramp junction merge/diverge areas would operate at unacceptable conditions in the Opening Year (2018) without Project traffic; therefore, the addition of Project traffic would not cause or worsen the LOS deficiency at any of the freeway ramp junction merge/diverge areas listed above (refer to Table 4.8-27). As such, the Project's contribution of traffic to freeway ramp junction merge/diverge areas would be less than significant a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

Threshold 3: ***Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

The proposed Project does not include an air travel component (*e.g.*, runway, helipad, drones); therefore, there is no potential for the Project to alter air traffic patterns by increasing air traffic levels.

The Project does not include any component that would obstruct the flight path and change air traffic patterns. As previously described in EIR Section 3.0, the Project-site would be developed with a large logistics warehouse building, parking areas, detention basins and landscaping, which are all uses deemed compatible for the subject property by the MVIAP, the March ARB Air Installation Compatible Use Zone Study (AICUZ) (Department of the Air Force 2005), the March ARB/Inland Port Airport Joint Land Use Study (March Joint Powers Authority 2010), the 1984 Airport Land Use Compatibility Plan for March ARB (Riverside County Airport Land Use Commission 1986), and the draft update to the 1984 Airport Land Use Compatibility Plan (Riverside County Airport Land Use Commission 2013). The approximately 42-foot height of the proposed warehouse building would be compatible with aircraft operations at March ARB and would not obstruct flight operations (March Joint Powers Authority 2010 Exhibit 3-4, Riverside County Airport Land Use Commission 2013 Table MA-2). In addition, the Project does not propose any features that may attract birds that can pose a safety risk to air traffic patterns. Landscaping on the Project site would be spaced to avoid large contiguous tree canopies and on-site detention basins would drain within 72 hours. As such, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns and result in substantial safety risks. Therefore, the Project would result in less-than-significant impacts to air traffic patterns and associated safety risks.

Threshold 4: ***Would the Project substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?***

The large warehouse proposed by the Project would be compatible with existing development in the surrounding area and the long-term planning vision for the area as called for by the City of Moreno Valley General Plan and the MVIAP. The Project also would be located adjacent to the City's designated truck route. As such, there would be no transportation hazards created as a result of an incompatible land use. Refer to Threshold 3 for a discussion of compatibility with the nearby March ARB.

All proposed improvements within the public right-of-ways of Perris Boulevard, Modular Way, Kitching Street, and Edwin Road would be installed in conformance with City design standards. The City of Moreno Valley Transportation Engineering Division has reviewed the Project's application materials (refer to EIR Section 3.0, *Project Description*) and determined that no hazardous transportation design features would be introduced by the Project. Additionally, the Project would be required to implement a temporary traffic control plan during construction activities to safely route traffic through the area during temporary construction activities and maintain adequate emergency access (refer to Mitigation Measure MM 4.8-1 in Subsection 4.8.7, below).

Accordingly, the proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use. Therefore, the Project would result in less-than-significant impacts.

Threshold 5: Would the Project result in inadequate emergency access?

The proposed Project would result in the construction and long-term operation of one warehouse building on the Project site, which would require the need for emergency access to-and-from the site. During the course of the City of Moreno Valley's review of the proposed Project, the Project's design was reviewed to ensure that adequate access to-and-from the site would be provided for emergency vehicles. Furthermore, as described above under the response to Threshold 4, adequate emergency access would be maintained along adjacent public roadways during temporary construction activities. Therefore, the Project would result in less-than-significant impacts. Regardless, the City of Moreno Valley also will require that the Project provide adequate paved access to-and-from the site as a condition of Project approval, in addition to a traffic control plan as required by Mitigation Measure MM 4.8-1.

Threshold 6: Would the Project conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed Project consists of one new distribution warehouse building, which is a land use that is not likely to attract large volumes of pedestrian, bicycle, or transit traffic. Regardless, the Project is designed to comply with all applicable transportation policies.

The Project is designed to accommodate pedestrians via sidewalks provided along adjacent public roadways. Landscaping is designed to be installed along the Project's perimeter, which would separate the adjacent public roadway rights-of-way (and their associated streetscapes and sidewalks) from the proposed Project's interior, eliminating any conflict between Project operations and the sidewalks along of perimeter roadways. Furthermore, all Project driveways would be stop-sign controlled and sight distance at each Project driveway is required to be reviewed by the City of Moreno Valley at the time improvement plans are submitted to ensure that sight distance meets City standards.

The City of Moreno Valley General Plan does not designate any public roadway segments adjacent to the Project site (*i.e.*, Perris Boulevard, Modular Way, Kitching Street, and Edwin Road) as a bikeway (refer to Figure 4.8-8). The nearest City-designated bikeways to the Project site are located approximately 0.5-mile west of the subject property, along Indian Street and San Michele Road. As required by the City, bike racks would be provided at the proposed building.

Bus service in the local area is available along Perris Boulevard via RTA Bus Route 19. There is one (1) bus stop located along the Project's frontage with Perris Boulevard. The Project would retain the existing bus stop and would not conflict with RTA bus transit operations. Accordingly, the Project could not conflict with local public transit service.

Off site, trucks accessing the Project are required to use approved truck routes within the Cities of Moreno Valley and Perris, which would minimize conflicts with passenger vehicles, bicyclists, and pedestrians and would maximize the safety of the multi-model circulation system.

As demonstrated by the foregoing analysis, the Project would not conflict with adopted policies, plans or programs related to alternative transportation, or otherwise substantially decrease the performance or safety of such facilities, and a less-than-significant impact would occur.

4.8.5 CUMULATIVE IMPACT ANALYSIS

The analysis under Threshold 1 determined the Project's potential to affect the local transportation network on a cumulative basis. As concluded under Threshold 1, the addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions.

Cumulatively Impacted Intersections

- Intersection No. 1: I-215 Southbound Ramps/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 2: I-215 Northbound Ramps/Harley Knox Boulevard in the PM peak hour;
- Intersection No. 3: Western Way/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 4: Patterson Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 5: Webster Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 6: Indian Street/Grove View Road in the AM and PM peak hours; and
- Intersection No. 7: Indian Street/Harley Knox Boulevard in the AM and PM peak hours.

Cumulatively Impacted Roadway Segments

- Segment No. 3: Harley Knox Boulevard, I-215 Northbound Ramps to Western Way;
- Segment No. 4: Harley Knox Boulevard, East of Western Way;

- Segment No. 5: Harley Knox Boulevard, West of Patterson Avenue;
- Segment No. 6: Harley Knox Boulevard, East of Patterson Avenue;
- Segment No. 7: Harley Knox Boulevard, West of Webster Avenue;
- Segment No. 8: Harley Knox Boulevard, East of Webster Avenue;
- Segment No. 9: Harley Knox Boulevard, West of Indian Street;
- Segment No. 17:Indian Street, North of Grove View Road;
- Segment No. 18: Indian Street, South of Grove View Road; and
- Segment No. 19: Indian Street, North of Harley Knox Boulevard.

Four (4) of the cumulatively impacted intersections and seven (7) of the cumulatively impacted roadway segments are at Harley Knox Boulevard in the City of Perris' jurisdiction. Future improvements to Harley Knox Boulevard are planned to be funded by the City of Perris though the North Perris Road and Bridge Benefit District (NPRBBD). Because the proposed Project is located in the City of Moreno Valley, it is not subject to NPRBBD fee payments. Additionally, two (2) of the cumulatively impacted intersections are at I-215 ramps in Caltrans' jurisdiction. Caltrans does not have a fee or other mitigation program in place for the mitigation of direct or cumulative impacts caused by private development projects on the State Highway System (Kopulsky 2014). The remaining one (1) cumulatively impacted intersection and three (3) cumulatively impacted roadway segments occur along Indian Street in the City of Moreno Valley. As previously described under Subsection 4.8.4A, the analysis of Opening Year (2018) traffic impacts presented in this Subsection does not assume the planned future extension of Heacock Street to Harley Knox Boulevard, which would substantially reduce traffic volumes on Indian Street and would improve the LOS of Indian Street roadway segments and intersections to acceptable LOS. The Project's contribution of traffic to the significant cumulative impact at the Indian Street/Grove View Road and Indian Street/Harley Knox Boulevard intersections and the Indian Street Roadway segments from north of Grove View Road to north of Harley Knox Boulevard are determined to be cumulatively considerable and unavoidable in the short-term. These impacts would be alleviated in the future once Heacock Street is extended to Harley Knox Boulevard.

The analysis under Threshold 2 determined the Project's potential to affect the state highway system on cumulative basis. As concluded under Threshold 2, the addition of Project traffic to the state highway system would result in a cumulatively considerable contribution of traffic to congested state facilities that that receive 50 or more peak hour trips from the Project, including I-215 and SR-91 freeway mainline segments and the interchange and merge/diverge pattern at the I-215/Harley Knox Boulevard interchange. As indicated by Caltrans, it has no fee programs or other mitigation programs in place for the mitigation of direct or cumulative impacts caused by development projects in the MVIAP on freeway segments. Caltrans also indicates that mitigation of direct and cumulative impacts to freeway ramps are satisfied by mandatory participation in the TUMF program (Kopulsky 2014). Improvements to the I-215/Harley Knox Boulevard on- and off-ramps are fully accounted for by the TUMF Nexus fee program, and specifically the NPRBBD. The NPRBBD is a consolidation of TUMF, DIF and other facilities within a specific boundary. The program enables the City of Perris to retain a predetermined portion of the TUMF generated within the NPRBBD boundaries to

improve facilities within the boundaries rather than forward the full TUMF to Western Riverside Council of Governments (WRCOG) for future distribution. Based on information obtained from the WRCOG, the I-215/Harley Knox Interchange is included in TUMF for improvement with a $10.9 million construction budget, and the WRCOG believes that this budget amount is sufficient to fully improve the ramps and approaches (WRCOG 2013). TUMF funds are collected for improvements necessitated by growth with a 2035 time horizon and improvements are expected to be in place in the intervening years. However, no schedule is prescribed by the TUMF program. At the present time, there is no current planning effort underway by either the City of Perris or Caltrans to improve the interchange; however, the City of Perris expects planning to get underway in the next five years. The WRCOG's TUMF program was established to provide funding for infrastructure improvements warranted by development projects in the region that contribute vehicular traffic to the circulation network. As stated in the TUMF Nexus Study, "the idea behind a uniform mitigation fee is to have new development throughout the region contribute equally to paying the cost of improving the transportation facilities that serve longer distance trips between communities. Thus, the fee should be used to improve transportation facilities that serve trips between communities within the region (primarily arterial roadways) as well as the infrastructure for public transportation" (WRCOG 2009 vi). The TUMF Nexus Study (2009), which is herein incorporated by reference and available for public review at the location indicated in EIR Section 7.0, *References*, establishes a nexus or reasonable relationship between the TUMF fee's use and the type of project for which the fee is required. CEQA allows for the assessment of a fee as an appropriate form of mitigation when it is linked to a specific mitigation program. In this case, the TUMF is an established mitigation program.

The proposed Project has no potential to contribute to significant cumulatively considerable impacts under the topics discussed under Thresholds 3, 4, and 5 because the Project has no potential to result in changes to air traffic patterns, to result in transportation design safety concerns, or to adversely affect emergency access on a direct or cumulative basis. As such, no impact would occur.

Regarding Threshold 6, the Project would not conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities and thus has no potential to contribute to a cumulative impact. The Project consists of one distribution warehouse building, which is likely to attract passenger cars and trucks and only small volumes of pedestrian, bicycle, or transit traffic. The Project would have a less-than-significant cumulatively considerable impact to adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, as well as a less-than-significant cumulatively considerable impact to the performance of such facilities.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Significant Cumulatively Considerable Impact. The addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to the cumulative impact of seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions.

Threshold 2: Significant Cumulatively Considerable Impact. The Project would not degrade the LOS of any CMP or state highway system facility from an acceptable to an unacceptable LOS; thus, direct impacts to CMP facilities would be less than significant. The Project's traffic would use CMP and state highway system facilities throughout Southern California, including I-215, I-5, I-15, I-110, I-405, I-710, SR-91 and SR-60, among others, segments of which operate at deficient LOS and are thus significantly and cumulatively impacted by area-wide development. The Project's contribution to the cumulative impact would be cumulatively considerable in locations where the Project would contribute 50 or more peak hour trips. CMP and state highway facilities that would receive 50 or more Project-related peak hour trips include four (4) segments of I-215 and one (1) segment of SR-91, as well as the I-215/Harley Knox Boulevard freeway ramps and the merge/diverge pattern at this interchange.

Threshold 3: Less-than-Significant Impact. The proposed Project does not include an air travel component and would not affect local air traffic levels. In addition, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns.

Threshold 4: Less-than-Significant Impact. Implementation of the proposed Project would not substantially increase transportation safety hazards due to incompatible uses or design features.

Threshold 5: Less-than-Significant Impact. Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.

Threshold 6: Less than Significant Impact. The proposed Project is consistent with adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, and is designed to minimize potential conflicts with non-vehicular means of transportation. Potential impacts to the performance or safety of transit, bicycle, and pedestrian systems would be less than significant.

4.8.7 MITIGATION

MM 4.8-1 Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the *California Manual on Uniform Traffic Control Devices*. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors. The temporary traffic control plan shall require the following:

- Delivery trucks shall utilize the most direct route between the site and the I-215 Freeway via Harley Knox Boulevard to Perris Boulevard;
- The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials, earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25

outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.

MM 4.8-2 The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.

MM 4.8-3 Prior to the issuance of building or occupancy permits, the Project shall comply with the City of Moreno Valley Development Impact Fee (DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is applied to reduce traffic congestion by funding the installation of intersection improvements.

MM 4.8-4 Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.

4.8.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold 1: Significant Unavoidable Cumulatively Considerable Impact. Implementation of Mitigation Measures MM 4.8-3 and MM 4.8-4 would require the Project to participate in funding programs, including TUMF and City of Moreno Valley DIF, to address the Project's fair share payment toward cumulative impacts to study area intersections and roadway segments that are projected to operate at deficient LOS.

The alleviation of deficient operating conditions along Indian Street will occur when Heacock Avenue is extended to Harley Knox Boulevard. The City of Moreno Valley is committed to undertaking the Heacock Avenue extension, but a schedule for the extension is not yet in place.

Similarly, alleviation of deficient operating conditions along Harley Knox Boulevard (except for the intersections of Harley Knox Boulevard/Western Way, Harley Knox Boulevard/Indian Street, and Harley Knox Boulevard/Perris Boulevard, which require improvements beyond those currently identified in the NPRBBD) will occur when the roadway and its intersections are improved as funded by the NPRBBD. The City of Perris is committed to undertaking the Harley Knox Boulevard improvements, but a schedule for the improvements is not yet in place. Improvement schedules for both of these roads are partially dependent on the pace of new development and associated pace of fee collection that occurs under the Moreno Valley DIF, the TUMF, and the NPRBBD.

Under CEQA, a fair share monetary contribution to a mitigation fund is adequate mitigation if the funds are part of a reasonable plan that the relevant agency (in this case City of Moreno Valley and City of Perris) is committed to implementing. As such, the proposed Project can mitigate its

cumulatively considerable contribution to impacts along Indian Street through payment of the Moreno Valley DIF and impacts at the I-215 Southbound Ramps/Harley Knox Boulevard and I-215 Northbound/Harley Knox Boulevard intersections through payment of the TUMF. Regardless, because the improvements may not be in place at their time of need, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations.

Additionally, because the Project site is not located in the fee area of the NPRBBD, there is no mechanism available for the Project to participate in an established fee program for improvements to Harley Knox Boulevard. Therefore, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at four (4) Harley Knox Boulevard intersections and seven (8) Harley Knox Boulevard roadway segments and a long-term impact at the intersections of Harley Knox Boulevard/Western Way and Harley Knox Boulevard/Indian Street (which require improvements beyond those currently identified in the NPRBBD). No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities. More detail is below.

Intersection Operations

As shown in Table 4.8-28, *Opening Year (2018) Intersection Analysis with Recommended Mitigation*, all study area intersections would operate at acceptable LOS under Opening Year (2018) traffic conditions with the construction of intersection improvements programmed to be funded by the Moreno Valley DIF, TUMF, and NPRBBD; except, the following study area intersections are projected to require improvements above and beyond those currently programmed:

- Western Way/Harley Knox Boulevard;
- Indian Street/Grove View Road; and
- Indian Street/Harley Knox Boulevard.

All of the above-listed intersections, with the exception of the Indian Street/Grove View Road intersection, are under the jurisdiction of the City of Perris; therefore, the City of Moreno Valley cannot assure improvements to these intersections. Because there is no assurance the City of Perris will improve the Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard intersections to an acceptable LOS operating condition, the Project would result in significant and unavoidable long-term cumulatively considerable impacts to this intersection.

As shown in Table 4.8-28, the Indian Street/Grove View Road intersection would operate at acceptable LOS under the Opening Year (2018) scenario with the installation of traffic signals. Although this intersection is located within the City of Moreno Valley and the City has the authority to implement improvements to these intersections, the City Department of Public Works has determined that traffic signals are not desirable at this intersection because of anticipated future traffic volume reductions along Indian Street upon completion of the planned Heacock Street extension to Harley Knox Boulevard. As previously described under Subsection 4.8.4A, the analysis of potential Opening Year (2018) traffic impacts presented in this Subsection does not assume the

planned future extension of Heacock Street to Harley Knox Boulevard. Once the future Heacock Street extension is in place, traffic volumes along Indian Street would be reduced because traffic would no longer be diverted from Heacock Street onto Indian Street in order to connect to Harley Knox Boulevard. The anticipated future reductions in traffic volumes along Indian Street would result in a concomitant improvement to the performance of intersections along Indian Street, including the Indian Street/Grove View Road intersection. As shown in Table 4.8-20, the Indian Street/Grove View Road intersection would operate at acceptable LOS upon completion of the planned Heacock Street extension and without a traffic signal. Accordingly, the Project's contribution of traffic to the significant cumulative impact at the Indian Street/Grove View Road intersection is determined to be cumulatively considerable and unavoidable in the short-term and would be eliminated once Heacock Street is extended to Harley Knox Boulevard.

Roadway Segment Operations

As shown in Table 4.8-29, *Opening Year (2018) Roadway Segment Volume/Capacity Analysis with Recommended Mitigation*, all roadway segments in the Project study area would operate at acceptable LOS under Opening Year (2018) with recommended improvements, with the exception of the segment of Harley Knox Boulevard west of Patterson Avenue (which is projected to operate at LOS "E"). The intersection adjacent to this roadway segment (*i.e.*, the Patterson Avenue/Harley Knox Boulevard intersection) is projected to operate at an acceptable LOS during peak hours under Opening Year (2018) with recommended improvements (refer to Table 4.8-28). Because the intersection adjacent to the Harley Knox Boulevard segment west of Patterson Avenue experiences acceptable traffic flow, traffic operations along the roadway segment are not considered to be deficient (Urban Crossroads 2014e 112). Accordingly, with implementation of Mitigation Measures MM 4.8-3 and MM 4.8-4, the Project's contribution to cumulative impacts to study area roadway segments would be less than cumulatively considerable in the long-term.

Threshold 2: Significant Unavoidable Cumulatively Considerable Impact. Implementation of the proposed Project would contribute traffic trips to congested freeway mainline segments in the Southern California region, including the contribution of more than 50 peak hour trips to four (4) mainline segments of I-215 and one (1) mainline segment of SR-91 within the Project study area that operate at an unacceptable LOS. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern.

Freeway Mainline Segment Operations

Under short-term (2013) traffic conditions, the Project would contribute cumulatively considerable traffic volumes to a congested segment of SR-91 (SR-91 eastbound segment between Central Avenue and 14th Street). As shown in Table 4.8-25, this segment of SR-91 would operate at acceptable LOS under Opening Year (2018) traffic conditions – both with and without Project-related traffic – upon the completion of several in-progress freeway improvement projects (previously described under Subsection 4.8.4A). Accordingly, the Project's contribution of traffic to the significant cumulative impact along the SR-91 eastbound segment between Central Avenue and 14th Street is determined to

be cumulatively considerable and unavoidable in the short-term and would be eliminated upon the completion of in-progress improvements to SR-91.

As previously described under Subsection 4.8.4A, freeway expansion projects are planned or in-progress for I-215 mainline segments within the Project study area, including one major proposal to widen a 10.75-mile segment of I-215. There is no timeline for the beginning or completion of the project to widen I-215 due to funding shortfalls. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance that planned improvements will be in place prior to occupancy of the Project (Year 2015). Accordingly, the Project's contribution of traffic to congested I-215 freeway segments would represent a cumulatively considerable and unavoidable impact.

Freeway Ramp Operations

Table 4.8-30, *Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange with Planned Improvements*, summarizes projected vehicle queues at the I-215/Harley Knox Boulevard interchange under Opening Year (2018) traffic conditions upon the completion of planned improvements to I-215. As shown in Table 4.8-30, all freeway ramps at the I-215/Harley Knox Boulevard interchange are projected to operate with acceptable stacking distances in the Opening Year (2018) with planned improvements. However, there is no timeline for the beginning or completion of the construction of planned improvements to I-215. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance planned improvements will be in place prior to occupancy of the Project (Year 2015). As such, the Project's cumulative impact to the I-215 Northbound ramp at Harley Knox Boulevard is determined to be significant and unavoidable short-term impact. The Project's impact will be eliminated upon the completion of planned improvements to I-215.

Freeway Ramp Operations

Table 4.8-31, *Opening Year (2018) Freeway Ramp Merge/Diverge Analysis with Planned Improvements*, summarizes LOS at merge/diverge areas at the I-215/Harley Knox Boulevard interchange under Opening Year (2018) traffic conditions upon the completion of planned improvements to I-215. As shown in Table 4.8-32, the LOS at the merge/diverge areas at the I-215/Harley Knox Boulevard interchange would improve with the completion of planned improvements but would still experience unacceptable LOS in all movement directions, with the exception of the northbound off-ramp. There is no timeline for the beginning or completion of the construction of planned improvements to I-215. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance planned improvements will be in place prior to occupancy of the Project (Year 2015). As such, the Project's cumulative impact to merge/diverge areas at the southbound on/off-ramps and northbound off-ramp at the I-215/Harley Knox Boulevard are determined to be a significant and unavoidable short- and long-term impact.

Table 4.8-1 Study Area Intersection Analysis Locations

ID	Intersection Location	Jurisdiction
1	I-215 Southbound Ramps / Harley Knox Boulevard	Caltrans
2	I-215 Northbound Ramps / Harley Knox Boulevard	Caltrans
3	Western Way / Harley Knox Boulevard	Perris
4	Patterson Avenue / Harley Knox Boulevard	Perris
5	Webster Avenue / Harley Knox Boulevard	Perris
6	Indian Street / Grove View Road	Moreno Valley
7	Indian Street / Harley Knox Boulevard	Perris
8	Perris Boulevard / Driveway 1	Moreno Valley
9	Perris Boulevard / San Michele Road (Driveway 2)	Moreno Valley
10	Perris Boulevard / Modular Way	Moreno Valley
11	Perris Boulevard / Nandina Avenue (Walgreens)	Moreno Valley
12	Perris Boulevard / Grove View Road (Globe Street)	Moreno Valley
13	Perris Boulevard / Harley Knox Boulevard	Perris
14	Driveway 3 / Modular Way – Future Intersection	Moreno Valley
15	Driveway 4 / Modular Way – Future Intersection	Moreno Valley
16	Driveway 5 / Edwin Road – Future Intersection	Moreno Valley
17	Driveway 6 / Edwin Road – Future Intersection	Moreno Valley
18	Driveway 7 / Modular Way – Future Intersection	Moreno Valley
19	Kitching Street / Edwin Road	Moreno Valley
20	Kitching Street / Driveway 8 – Future Intersection	Moreno Valley
21	Kitching Street / Modular Way	Moreno Valley
22	Kitching Street / Globe Street	Moreno Valley

Source: Urban Crossroads, Inc. 2014e, Table 1-1.

Table 4.8-2 Study Area Roadway Segment Analysis Locations

ID	Roadway Segments	Jurisdiction
1	Harley Knox Boulevard, West of I-215 Freeway	County of Riverside
2	Harley Knox Boulevard, I-215 SB Ramps to I-215 NB Ramps	County of Riverside
3	Harley Knox Boulevard, I-215 NB Ramps to Western Way	Perris
4	Harley Knox Boulevard, East of Western Way	Perris
5	Harley Knox Boulevard, West of Patterson Avenue	Perris
6	Harley Knox Boulevard, East of Patterson Avenue	Perris
7	Harley Knox Boulevard, West of Webster Avenue	Perris
8	Harley Knox Boulevard, East of Webster Avenue	Perris
9	Harley Knox Boulevard, West of Indian Street	Perris
10	Harley Knox Boulevard, East of Indian Street	Perris
11	Harley Knox Boulevard, West of Perris Boulevard	Perris
12	Western Way, North of Harley Knox Boulevard	Perris
13	Patterson Avenue, North of Harley Knox Boulevard	Perris
14	Patterson Avenue, South of Harley Knox Boulevard	Perris
15	Webster Avenue, North of Harley Knox Boulevard	Perris
16	Webster Avenue, South of Harley Knox Boulevard	Perris
17	Indian Street, North of Grove View Road	Moreno Valley
18	Indian Street, South of Grove View Road	Moreno Valley
19	Indian Street, North of Harley Knox Boulevard	Perris
20	Indian Street, South of Harley Knox Boulevard	Perris
21	Perris Boulevard, North of Driveway 1	Moreno Valley
22	Perris Boulevard, Driveway 1 to San Michele Road	Moreno Valley
23	Perris Boulevard, San Michele Road to Modular Way	Moreno Valley
24	Perris Boulevard, South of Modular Way	Moreno Valley
25	Perris Boulevard, North of Nandina Avenue	Moreno Valley

Table 4.8-2 Study Area Roadway Segment Analysis Locations (cont.)

ID	Roadway Segments	Jurisdiction
26	Perris Boulevard, South of Nandina Avenue	Moreno Valley
27	Perris Boulevard, North of Grove View Road	Moreno Valley
28	Perris Boulevard, South of Grove View Road	Moreno Valley
29	Perris Boulevard, North of Harley Knox Boulevard	Perris
30	Perris Boulevard, South of Harley Knox Boulevard	Perris
31	San Michele Road, West of Perris Boulevard	Moreno Valley
32	Modular Way, Perris Boulevard to Driveway 3	Moreno Valley
33	Modular Way, Driveway 3 to Driveway 4	Moreno Valley
34	Modular Way, Driveway 4 to Driveway 7	Moreno Valley
35	Modular Way, Driveway 7 to Kitching Street	Moreno Valley
36	Grove View Road / Globe Street, East of Indian Street	Moreno Valley
37	Grove View Road / Globe Street, West of Perris Boulevard	Moreno Valley
38	Grove View Road / Globe Street, East of Perris Boulevard	Moreno Valley
39	Grove View Road / Globe Street, West of Kitching Street	Moreno Valley
40	Kitching Street, North of Edwin Road	Moreno Valley
41	Kitching Street, Edwin Road to Driveway 8	Moreno Valley
42	Kitching Street, Driveway 8 to Modular Way	Moreno Valley
43	Kitching Street, South of Modular Way	Moreno Valley
44	Kitching Street, North of Globe Street	Moreno Valley
45	Kitching Street, South of Globe Street	Moreno Valley

Source: Urban Crossroads, Inc. 2014e, Table 1-2.

Table 4.8-3 Study Area Freeway Mainline Segments

ID	Freeway	Direction	Segment
1	SR-91	Eastbound	I-15 Freeway to McKinley St.
2	SR-91	Eastbound	McKinley St. to Riverwalk Pkwy.
3	SR-91	Eastbound	Riverwalk Pkwy. To Magnolia Av.
4	SR-91	Eastbound	Magnolia Av. to La Sierra Av.
5	SR-91	Eastbound	La Sierra Av. to Tyler Av.
6	SR-91	Eastbound	Tyler Av. to Van Buren Bl.
7	SR-91	Eastbound	Van Buren Bl. to Adams St.
8	SR-91	Eastbound	Adams St. to Madison St.
9	SR-91	Eastbound	Madison St. to Arlington Av.
10	SR-91	Eastbound	Arlington Av. to Central Av.
11	SR-91	Eastbound	Central Av. to 14th St.
12	SR-91	Eastbound	14th St. to University Av.
13	SR-91	Eastbound	University Av. to Spruce St.
14	SR-91	Eastbound	Spruce St. to I-215 Freeway
15	I-215	Southbound	SR-60/SR-91 Freeway to Blaine St.
16	I-215	Southbound	Blaine St. to University Av.
17	I-215	Southbound	University Av. to Martin Luther King Bl.

Table 4.8-3 Study Area Freeway Mainline Segments (cont.)

ID	Freeway	Direction	Segment
18	I-215	Southbound	Martin Luther King Bl. to Central Av.
19	I-215	Southbound	Central Av. to Box Springs Rd.
20	I-215	Southbound	Box Springs Rd. to SR-60/I-215 Freeway
21	I-215	Southbound	SR-60 Freeway to Eucalyptus Av.
22	I-215	Southbound	Eucalyptus Av. to Alessandro Bl.
23	I-215	Southbound	Alessandro Bl. to Cactus Av.
24	I-215	Southbound	Cactus Av. to Van Buren Bl.
25	I-215	Southbound	Van Buren Bl. to Harley Knox Bl.
26	SR-91	Westbound	I-15 Freeway to McKinley St.
27	SR-91	Westbound	McKinley St. to Riverwalk Pkwy.
28	SR-91	Westbound	Riverwalk Pkwy. To Magnolia Av.
29	SR-91	Westbound	Magnolia Av. to La Sierra Av.
30	SR-91	Westbound	La Sierra Av. to Tyler Av.
31	SR-91	Westbound	Tyler Av. to Van Buren Bl.
32	SR-91	Westbound	Van Buren Bl. to Adams St.
33	SR-91	Westbound	Adams St. to Madison St.
34	SR-91	Westbound	Madison St. to Arlington Av.
35	SR-91	Westbound	Arlington Av. to Central Av.
36	SR-91	Westbound	Central Av. to 14th St.
37	SR-91	Westbound	14th St. to University Av.
38	SR-91	Westbound	University Av. to Spruce St.
39	SR-91	Westbound	Spruce St. to I-215 Freeway
40	I-215	Northbound	SR-60/SR-91 Freeway to Blaine St.
41	I-215	Northbound	Blaine St. to University Av.
42	I-215	Northbound	University Av. to Martin Luther King Bl.
43	I-215	Northbound	Martin Luther King Bl. to Central Av.
44	I-215	Northbound	Central Av. to Box Springs Rd.
45	I-215	Northbound	Box Springs Rd. to SR-60/I-215 Freeway
46	I-215	Northbound	SR-60 Freeway to Eucalyptus Av.
47	I-215	Northbound	Eucalyptus Av. to Alessandro Bl.
48	I-215	Northbound	Alessandro Bl. to Cactus Av.
49	I-215	Northbound	Cactus Av. to Van Buren Bl.
50	I-215	Northbound	Van Buren Bl. to Harley Knox Bl.

Source: Urban Crossroads, Inc. 2014f, Table 1.

Table 4.8-4 Study Area Freeway Merge/Diverge Ramp Junctions

ID	Freeway Merge/Diverge Ramp Junctions
1	I-215 Freeway – Southbound, Off Ramp at Harley Knox Boulevard (Diverge)
2	I-215 Freeway – Southbound , On Ramp at Harley Knox Boulevard (Merge)
3	I-215 Freeway – Northbound, On-Ramp at Harley Knox Boulevard (Merge)
4	I-215 Freeway – Northbound, Off-Ramp at Harley Knox Boulevard (Diverge)

Source: Urban Crossroads, Inc. 2014e, Table 1-4.

Table 4.8-5 Intersection Analysis for Existing (2013) Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	28.1	29.8	C	C
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	17.6	18.3	B	B
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	16.2	11.9	C	B
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	20.6	13.2	C	B
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	0	1	0	1	1	0	16.4	17.1	C	C
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	13.3	16.4	B	C
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	32.2	31.7	C	C
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	29.9	15.7	C	B
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	3.9	3.6	A	A
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	31.8	30.8	C	C
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	20.3	20.4	C	C
13	Perris Bl. / Harley Knox Bl.	TS	1	1	0	0	1	1	1	0	1	0	0	0	15.4	16.4	B	B
14	Driveway 3 / Modular Wy.		Future Intersection															
15	Driveway 4 / Modular Wy.		Future Intersection															
16	Driveway 5 / Edwin Rd.		Future Intersection															
17	Driveway 6 / Edwin Rd.		Future Intersection															
18	Driveway 7 / Modular Wy.		Future Intersection															
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A
20	Kitching St. / Driveway 8		Future Intersection															
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	7.4	7.6	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.4	9.8	A	A

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

Source: Urban Crossroads, Inc. 2014e, Table 3-1.

Table 4.8-6 Roadway Segment Analysis for Existing (2013) Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing (2013)	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	6,564	0.18	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	10,020	0.28	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	13,260	0.37	A	D
4		East of Western Way	4U	35,900	12,696	0.35	A	D
5		West of Patterson Avenue	4U	35,900	12,168	0.34	A	D
6		East of Patterson Avenue	2D	18,000	10,800	0.60	A	D
7		West of Webster Avenue	2D	18,000	9,300	0.52	A	D
8		East of Webster Avenue	2D	18,000	9,300	0.52	A	D
9		West of Indian Street	3D	26,900	10,560	0.39	A	D
10		East of Indian Street	3D	26,900	5,688	0.21	A	D
11		West of Perris Boulevard	2D	18,000	5,400	0.30	A	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	924	0.07	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	252	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,404	0.11	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	24	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	72	0.01	A	D
17	Indian Street	North of Grove View Road	2D	18,750	6,600	0.35	A	D
18		South of Grove View Road	2D	18,750	8,088	0.43	A	D
19		North of Harley Knox Boulevard	2D	18,000	7,260	0.40	A	D
20		South of Harley Knox Boulevard	4D	25,900	4,404	0.17	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	18,816	0.33	A	D
22		Driveway 1 to San Michele Road	6D	56,300	18,828	0.33	A	D
23		San Michele Road to Modular Way	6D	56,300	17,952	0.32	A	D
24		South of Modular Way	6D	56,300	17,772	0.32	A	D
25		North of Nandina Avenue	6D	56,300	17,448	0.31	A	D
26		South of Nandina Avenue	6D	56,300	17,316	0.31	A	D
27		North of Grove View Road	6D	56,300	16,860	0.30	A	D
28		South of Grove View Road	6D	56,300	17,256	0.31	A	D
29		North of Harley Knox Boulevard	2D	18,000	18,048	**1.00**	**E**	D
30		South of Harley Knox Boulevard	2D	18,000	16,224	0.90	D	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	1,764	0.09	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	252	0.01	A	D
33		Driveway 3 to Driveway 4	2D	18,750	252	0.01	A	D
34		Driveway 4 to Driveway 7	2D	18,750	252	0.01	A	D
35		Driveway 7 to Kitching Street	2D	18,750	252	0.01	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	1,752	0.09	A	D
37		West of Perris Boulevard	2D	18,750	1,140	0.06	A	D
38		East of Perris Boulevard	2D	18,750	1,848	0.10	A	D
39		West of Kitching Street	2D	18,750	1,416	0.08	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	468	0.04	A	D
42		Driveway 8 to Modular Way	2U	12,500	516	0.04	A	D
43		South of Modular Way	2U	12,500	288	0.02	A	D
44		North of Globe Street	2U	12,500	588	0.05	A	D
45		South of Globe Street	2U	12,500	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 3-2.

Table 4.8-7 Freeway Mainline Segment Analysis for Existing (2013) Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	Existing (2013)			Existing Plus Project		
					Volume	Density[2]	LOS	Volume	Density[2]	LOS
SR-91 Freeway	Eastbound	I-15 Freeway to McKinley St.	4	AM	5,825	23.8	C	5,883	24.2	C
				PM	5,974	24.5	C	6,003	24.7	C
		McKinley St. to Riverwalk Pkwy.	3	AM	5,430	31.7	D	5,488	32.6	D
				PM	5,473	32.2	D	5,502	32.5	D
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,937	27.5	D	4,995	28.2	D
				PM	4,955	27.7	D	4,984	27.9	D
		Magnolia Av. to La Sierra Av.	4	AM	4,835	19.4	C	4,893	19.8	C
				PM	4,743	19.1	C	4,772	19.2	C
		La Sierra Av. to Tyler Av.	4	AM	4,610	18.7	C	4,668	19.0	C
				PM	4,926	20.0	C	4,955	20.1	C
		Tyler Av. to Van Buren Bl.	4	AM	5,148	20.5	C	5,206	20.8	C
				PM	4,924	19.6	C	4,953	19.8	C
		Van Buren Bl. to Adams St.	4	AM	2,811	11.2	B	2,869	11.5	B
				PM	3,765	15.0	B	3,794	15.2	B
		Adams St. to Madison St.	3	AM	4,287	22.9	C	4,345	23.4	C
				PM	5,336	30.4	D	5,365	30.6	D
		Madison St. to Arlington Av.	4	AM	4,728	18.8	C	4,786	19.1	C
				PM	5,541	22.1	C	5,570	22.3	C
		Arlington Av. to Central Av.	4	AM	4,429	17.6	B	4,487	17.9	B
				PM	4,666	18.6	C	4,695	18.8	C
		Central Av. to 14th St.	3	AM	5,563	32.5	D	5,621	33.4	D
				PM	5,982	**37.4**	E	6,011	**37.7**	E
		14th St. to University Av.	4	AM	4,924	19.6	C	4,982	19.9	C
				PM	5,764	23.1	C	5,793	23.3	C
		University Av. to Spruce St.	5	AM	5,253	16.7	B	5,311	17.0	B
				PM	4,551	14.5	B	4,580	14.7	B
		Spruce St. to I-215 Freeway	4	AM	4,161	16.6	B	4,219	16.9	B
				PM	3,609	14.4	B	3,638	14.5	B
I-215 Freeway	Southbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,066	16.6	B	5,127	16.9	B
				PM	4,665	15.3	B	4,696	15.4	B
		Blaine St. to University Av.	4	AM	4,853	19.9	C	4,914	20.2	C
				PM	5,208	21.4	C	5,239	21.5	C
		University Av. to Martin Luther King Bl.	4	AM	5,122	21.0	C	5,183	21.4	C
				PM	6,202	26.1	D	6,233	26.3	D
		Martin Luther King Bl. to Central Av.	5	AM	4,794	15.7	B	4,855	16.0	B
				PM	6,987	23.1	C	7,018	23.2	C
		Central Av. to Box Springs Rd.	5	AM	3,603	11.8	B	3,663	12.1	B
				PM	5,719	18.7	C	5,750	18.8	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	4,773	19.5	C	4,833	19.9	C
				PM	7,260	32.9	D	7,291	33.2	D
		SR-60 Freeway to Eucalyptus Av.	5	AM	6,064	20.3	C	6,125	20.5	C
				PM	6,011	20.1	C	6,042	20.2	C
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,348	18.1	C	3,408	18.5	C
				PM	4,782	26.7	D	4,813	27.1	D
		Alessandro Bl. to Cactus Av.	4	AM	3,321	13.5	B	3,382	13.8	B
				PM	4,949	20.1	C	4,980	20.2	C
		Cactus Av. to Van Buren Bl.	3	AM	2,793	15.2	B	2,854	15.7	B
				PM	3,897	21.2	C	3,928	21.5	C
		Van Buren Bl. to Harley Knox Bl.	3	AM	4,728	25.4	C	4,789	26.0	C
				PM	5,541	32.1	D	5,572	32.3	D

Table 4.8-7 Freeway Mainline Segment Analysis for Existing (2013) Conditions (cont.)

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	Existing (2013)			Existing Plus Project		
					Volume	Density[2]	LOS	Volume	Density[2]	LOS
SR-91 Freeway	Westbound	I-15 Freeway to McKinley St.	4	AM	4,326	17.5	B	4,336	17.5	B
				PM	4,542	18.3	C	4,568	18.4	C
		McKinley St. to Riverwalk Pkwy.	3	AM	4,452	24.2	C	4,462	24.2	C
				PM	4,651	25.5	C	4,677	25.7	C
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,217	22.7	C	4,227	22.8	C
				PM	4,380	23.7	C	4,406	23.9	C
		Magnolia Av. to La Sierra Av.	3	AM	3,958	21.2	C	3,968	21.3	C
				PM	4,330	23.4	C	4,356	23.6	C
		La Sierra Av. to Tyler Av.	3	AM	4,412	24.2	C	4,422	24.3	C
				PM	4,748	26.5	D	4,774	26.7	D
		Tyler Av. to Van Buren Bl.	4	AM	3,458	13.8	B	3,468	13.8	B
				PM	3,785	15.1	B	3,811	15.2	B
		Van Buren Bl. to Adams St.	4	AM	4,668	18.6	C	4,678	18.6	C
				PM	5,491	21.9	C	5,517	22.1	C
		Adams St. to Madison St.	4	AM	4,429	17.6	B	4,439	17.7	B
				PM	4,627	21.9	C	4,653	18.5	C
		Madison St. to Arlington Av.	3	AM	4,728	25.7	C	4,738	25.8	C
				PM	5,336	30.4	D	5,362	30.6	D
		Arlington Av. to Central Av.	4	AM	3,782	15.0	B	3,792	15.1	B
				PM	3,776	15.0	B	3,802	15.2	B
		Central Av. to 14th St.	3	AM	3,995	21.2	C	4,005	21.3	C
				PM	4,627	25.0	C	4,653	25.2	C
		14th St. to University Av.	4	AM	5,563	22.2	C	5,573	22.3	C
				PM	5,982	24.1	C	6,008	24.2	C
		University Av. to Spruce St.	6	AM	4,027	10.7	A	4,037	10.7	A
				PM	3,885	10.3	A	3,911	10.4	A
		Spruce St. to I-215 Freeway	4	AM	4,300	17.1	B	4,310	17.1	B
				PM	3,739	14.9	B	3,765	15.1	B
I-215 Freeway	Northbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	549	18.0	B	5,506	18.0	C
				PM	4,753	15.6	B	4,800	15.8	B
		Blaine St. to University Av.	5	AM	6,760	22.3	C	6,777	22.3	C
				PM	5,620	18.4	C	5,667	18.7	C
		University Av. to Martin Luther King Bl.	4	AM	5,735	23.8	C	5,753	23.8	C
				PM	5,399	22.2	C	5,445	22.5	C
		Martin Luther King Bl. to Central Av.	4	AM	5,924	24.7	C	5,941	24.8	C
				PM	5,647	23.4	C	5,693	23.7	C
		Central Av. to Box Springs Rd.	5	AM	5,607	18.4	C	5,624	18.4	C
				PM	4,577	15.0	B	4,623	15.2	B
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	6,155	25.9	C	6,172	25.9	C
				PM	5,868	24.4	C	5,915	24.6	C
		SR-60 Freeway to Eucalyptus Av.	3	AM	3,615	20.1	C	3,632	20.2	C
				PM	3,929	21.9	C	3,976	22.2	C
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,283	17.8	B	3,301	17.9	B
				PM	3,329	18.0	B	3,376	18.3	C
		Alessandro Bl. to Cactus Av.	4	AM	3,934	16.0	B	3,951	16.0	B
				PM	4,021	16.3	B	4,067	16.6	B
		Cactus Av. to Van Buren Bl.	3	AM	3,960	21.6	C	3,977	21.8	C
				PM	2,810	15.3	B	2,857	15.6	B
		Van Buren Bl. to Harley Knox Bl.	3	AM	3,217	17.0	B	3,234	17.1	B
				PM	4,169	22.0	C	4,216	22.5	C

[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
* BOLD = Unacceptable Level of Service

Source: Urban Crossroads, Inc. 2014f, Table 3.

Table 4.8-8 Freeway Ramp Merge/Diverge Analysis for Existing (2013) Conditions

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	31.3	D	**35.2**	**E**
		On-Ramp at Harley Knox Bl.	3	26.8	C	30.5	D
	Northbound	On-Ramp at Harley Knox Bl.	3	21.5	C	26.3	C
		Off-Ramp at Harley Knox Bl.	3	20.1	C	25.3	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 3-5.

Table 4.8-9 Freeway Ramp Stacking Summary for Existing (2013) Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	352 [2]	331 [2]	Yes	Yes
	SBR	270	36	48	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	27	21	Yes	Yes
	NBR	265	41	43	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 3-3.

Table 4.8-10 Signalized Intersection LOS Thresholds

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Applicable to all study area intersections (including those in the City of Perris and Caltrans intersections)
Source: Urban Crossroads, Inc. 2014e, Table 2-1.

Table 4.8-11 Unsignalized Intersection LOS Thresholds

Level of Service	Description	Average Control Per Vehicle (Seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

Applicable to all study area intersections (including those in the City of Perris and Caltrans intersections)
Source: Urban Crossroads, Inc. 2014e, Table 2-2.

Table 4.8-12 Roadway Segment Capacity LOS Thresholds

City of Moreno Valley:

Facility Type	Level of Service Capacity[1]				
	A	B	C	D	E
Six Lane Divided Arterial	33,900	39,400	45,000	50,600	56,300
Four Lane Divided Arterial	22,500	26,300	30,000	33,800	37,500
Four Lane Undivided Arterial	15,000	17,500	20,000	22,500	25,000
Two Lane Industrial Collector	7,500	8,800	10,000	11,300	12,500
Two Lane Undivided Residential	N/A	N/A	N/A	N/A	2,000

[1] *These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's TIA Preparation Guidelines (August 2007). These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective roadway classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.*

City of Perris and County of Riverside:

Facility Type	Level of Service Capacity[1]				
	A	B	C	D	E
Six Lane Urban Arterial	32,340	37,730	43,100	48,500	53,900
Four Lane Urban Arterial	21,540	25,130	28,700	32,300	35,900
Two Lane Arterial	10,800	12,600	14,400	16,200	18,000
Four Lane Secondary Arterial	15,540	18,130	20,700	23,300	25,900
Two Lane Collector	7,800	9,100	10,400	11,700	13,000

[1] *Source: Table CE-9 of the City of Perris General Plan Circulation Element and Figure C-2 of the County of Riverside General Plan Circulation Element. All capacity exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.*

Source: Urban Crossroads, Inc. 2014e, Table 2-3.

Table 4.8-13 Freeway Mainline Segment LOS Thresholds

Level of Service	Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow.	>45.0

[1] *pc/mi/ln = passenger cars per mile per lane. Source: HCM 2000, Chapter 23*

Source: Urban Crossroads, Inc. 2014e, Table 2-4.

Table 4.8-14 Freeway Merge and Diverge LOS Thresholds

Level of Service	Density Range (pc/mi/ln)[1]
A	0.0 – 11.0
B	11.1 – 18.0
C	18.1 – 26.0
D	26.1 – 35.0
E	35.1 – 45.0
F	>45.0

[1] *pc/mi/ln = passenger cars per mile per lane. Source: HCM 2000, Chapter 25*

Source: Urban Crossroads, Inc. 2014e, Table 2-5.

Table 4.8-15 Project Trip Generation Rates

Land Use	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
High-Cube Warehouse[3]	TSF	152	0.08	0.03	0.11	0.04	0.08	0.12	1.68
76.0% Passenger Cars			0.061	0.023	0.084	0.030	0.061	0.091	1.277
3% 2-Axle Trucks (PCE = 1.5)			0.004	0.001	0.005	0.002	0.004	0.005	0.076
3% 3-Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.005	0.007	0.101
18% 4-Axle+ Trucks (PCE = 3.0)			0.043	0.016	0.059	0.022	0.043	0.065	0.907

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation, Ninth Edition (2012).

[2] Vehicle Mix Source: Based on actual vehicle classification surveys conducted at various high-cube distribution warehouse locations in the City of Moreno Valley

[3] TSF = thousand square feet

Source: Urban Crossroads, Inc. 2014e, Table 4-1.

Table 4.8-16 Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1	**1,109.378**	TSF							
Passenger Cars:			67	25	93	34	67	101	1,416
Truck Trips:									
2-axle:			*4*	*1*	*5*	*2*	*4*	*6*	*84*
3-axle:			*5*	*2*	*7*	*3*	*5*	*8*	*112*
4+-axle:			*48*	*18*	*66*	*24*	*48*	*72*	*1,006*
- Net Truck Trips (PCE)			*57*	*21*	*79*	*29*	*57*	*86*	*1,202*
Modular Logistics Total Trips (PCE)[2]			***125***	***47***	***171***	***62***	***125***	***187***	***2,619***

[1] TSF = Thousand Square Feet.

[2] Based on the following Passenger Car Equivalent Factors: 2-axle = 1.5 PCE, 3-axle = 2.0 PCE, 4+-axle = 3.0 PCE. See Table 1.

[3] TOTAL TRIPS (PCE) = Passenger Cars + Net Truck Trips (PCE).

Source: Urban Crossroads, Inc. 2013, Table 4-2.

Table 4.8-17 Existing plus Project (E+P) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Existing (2013)				Existing Plus Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	28.1	29.8	C	C	39.9	34.0	D	C
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	17.6	18.3	B	B	17.4	18.2	B	B
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	16.2	11.9	C	B	17.0	12.5	C	B
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	20.6	13.2	C	B	21.0	18.6	C	B
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	1	1	0	1	1	0	16.4	17.1	C	C	18.5	19.1	C	C
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	13.3	16.4	B	C	14.0	19.5	B	C
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	32.2	31.7	C	C	33.2	31.7	C	C
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A	10.8	10.2	B	B
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	29.9	15.7	C	B	30.2	28.1	C	C
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	3.9	3.6	A	A	4.1	3.7	A	A
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	31.8	30.8	C	C	32.1	30.9	C	C
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	20.3	20.4	C	C	20.7	21.1	C	C
13	Perris Bl. / Harley Knox Bl.	TS	1	1	0	0	1	1	1	0	1	0	0	0	15.4	16.4	B	B	16.8	17.4	B	B
14	Driveway 3 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.9	8.8	A	A
15	Driveway 4 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.8	8.8	A	A
16	Driveway 5 / Edwin Rd.	**CSS**	0	0	**1**	0	0	0	0	0	0	1	0	0	Future Intersection				8.3	8.4	A	A
17	Driveway 6 / Edwin Rd.	**CSS**	0	**1**	0	0	0	0	0	1	0	0	1	0	Future Intersection				8.3	8.4	A	A
18	Driveway 7 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.7	8.7	A	A
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A	8.4	9.5	A	A
20	Kitching St. / Driveway 8	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	Future Intersection				8.4	8.6	A	A
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	7.4	7.6	A	A	7.6	8.1	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.4	9.8	A	A	9.7	10.5	A	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

Source: Urban Crossroads, Inc. 2014e, Table 5-1.

Table 4.8-18 Existing plus Project (E+P) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)

#	Intersection	Traffic Control[2]	2014 Traffic Study				With Truck Traffic			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Perris Bl. / St. Michele Rd.-Driveway	TS	30.2	28.1	C	C	30.2	28.1	C	C

[1] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014g, Table 1

Table 4.8-19 Existing plus Project (E+P) Roadway Segment Volume/Capacity Analysis

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing Plus Project	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	6,564	0.18	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	10,853	0.30	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	14,655	0.41	A	D
4		East of Western Way	4U	35,900	12,696	0.35	A	D
5		West of Patterson Avenue	4U	35,900	13,563	0.38	A	D
6		East of Patterson Avenue	2D	18,000	12,265	0.68	B	D
7		West of Webster Avenue	2D	18,000	10,766	0.60	A	D
8		East of Webster Avenue	2D	18,000	10,766	0.60	A	D
9		West of Indian Street	3D	26,900	12,026	0.45	A	D
10		East of Indian Street	3D	26,900	6,272	0.23	A	D
11		West of Perris Boulevard	2D	18,000	5,984	0.33	A	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	924	0.07	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	252	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,474	0.11	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	24	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	72	0.01	A	D
17	Indian Street	North of Grove View Road	2D	18,750	6,670	0.36	A	D
18		South of Grove View Road	2D	18,750	8,969	0.48	A	D
19		North of Harley Knox Boulevard	2D	18,000	8,142	0.45	A	D
20		South of Harley Knox Boulevard	4D	25,900	4,404	0.17	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	19,472	0.35	A	D
22		Driveway 1 to San Michele Road	6D	56,300	19,413	0.34	A	D
23		San Michele Road to Modular Way	6D	56,300	18,396	0.33	A	D
24		South of Modular Way	6D	56,300	18,438	0.33	A	D
25		North of Nandina Avenue	6D	56,300	18,113	0.32	A	D
26		South of Nandina Avenue	6D	56,300	17,981	0.32	A	D
27		North of Grove View Road	6D	56,300	17,525	0.31	A	D
28		South of Grove View Road	6D	56,300	18,194	0.32	A	D
29		North of Harley Knox Boulevard	2D	18,000	18,986	**1.05**	**F**	D
30		South of Harley Knox Boulevard	2D	18,000	16,578	**0.92**	**E**	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	1,976	0.11	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	757	0.04	A	D
33		Driveway 3 to Driveway 4	2D	18,750	757	0.04	A	D
34		Driveway 4 to Driveway 7	2D	18,750	757	0.04	A	D
35		Driveway 7 to Kitching Street	2D	18,750	737	0.04	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	2,563	0.14	A	D
37		West of Perris Boulevard	2D	18,750	1,951	0.10	A	D
38		East of Perris Boulevard	2D	18,750	2,992	0.16	A	D
39		West of Kitching Street	2D	18,750	2,559	0.14	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	720	0.06	A	D
42		Driveway 8 to Modular Way	2U	12,500	1,244	0.10	A	D
43		South of Modular Way	2U	12,500	1,431	0.11	A	D
44		North of Globe Street	2U	12,500	1,731	0.14	A	D
45		South of Globe Street	2U	12,500	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Impact Analysis Preparation Guidelines Division's Traffic Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 5-2.

Table 4.8-20 Opening Year (2018) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												2018 Without Project				2018 With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	34.9	48.8	C	D	36.7	**59.5**	D	**E**
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	**53.9**	**95.3**	**F**	**F**	**61.1**	**>100.0**	**F**	**F**
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	**171.2**	**182.9**	**F**	**F**	**191.1**	**>200.0**	**F**	**F**
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	0	1	0	1	1	0	**62.2**	**>100.0**	**F**	**F**	**80.6**	**>100.0**	**F**	**F**
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
	-With Heacock Extension	CSS	0	1	0	1	1	0	0	0	0	1	0	1	15.2	23.9	C	C	16.1	32.1	C	D
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	**>200.0**	**78.0**	**F**	**E**	**>200.0**	**87.8**	**F**	**F**
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A	12.1	11.1	B	B
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	21.6	24.6	C	C	39.7	37.5	D	D
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	11.7	10.8	B	B	12.0	11.1	B	B
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	39.3	38.0	D	D	39.6	38.2	D	D
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	21.4	23.8	C	C	21.8	24.2	C	C
13	Perris Bl. / Harley Knox Bl.[4]	TS	1	1	0	0	1	1	1	0	1	0	0	0	27.8	29.6	C	C	30.4	30.0	C	C
14	Driveway 3 / Modular Wy.	CSS	0	0	0	0	1	0	1	1	0	0	1	d	Future Intersection				8.9	8.8	A	A
15	Driveway 4 / Modular Wy.	CSS	0	0	0	0	1	0	1	1	0	0	1	d	Future Intersection				8.8	8.9	A	A
16	Driveway 5 / Edwin Rd.	CSS	0	0	1	0	0	0	0	0	0	1	0	0	Future Intersection				8.3	8.4	A	A
17	Driveway 6 / Edwin Rd.	CSS	0	1	0	0	0	0	0	1	0	0	1	0	Future Intersection				8.4	8.4	A	A
18	Driveway 7 / Modular Wy.	CSS	0	0	0	0	1	0	1	1	0	0	1	d	Future Intersection				8.7	8.7	A	A
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A	8.4	9.6	A	A
20	Kitching St. / Driveway 8	CSS	0	1	0	0	1	0	0	1	0	0	0	0	Future Intersection				8.4	8.6	A	A
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	1.3	1.9	A	A	1.3	1.9	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.5	9.9	A	A	9.8	10.7	A	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

[4] Assumes the lanes recently constructed by the City of Perris as part of their widening project of Perris Boulevard.

Source: Urban Crossroads, Inc. 2014e, Table 6-1.

Table 4.8-21 Opening Year (2018) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)

#	Intersection	Traffic Control[2]	2014 Traffic Study				With Truck Traffic			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Perris Bl. / San Michele Rd.-Driveway	TS	39.7	37.5	D	D	39.8	37.6	D	D

[1] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014g, Table 2.

Table 4.8-22 Opening Year (2018) Roadway Segment Volume/Capacity Analysis

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2018 Without Project	V/C	LOS	Acceptable LOS	2018 With Project	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	12,221	0.34	A	D	12,221	0.34	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	21,791	0.61	A	D	22,624	0.63	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	31,127	0.87	D	D	32,522	**0.91**	**E**	D
4		East of Western Way	4U	35,900	32,440	0.90	D	D	33,835	**0.94**	**E**	D
5		West of Patterson Avenue	4U	35,900	33,046	**0.92**	**E**	D	34,441	**0.96**	**E**	D
6		East of Patterson Avenue	2D	18,000	31,663	**1.76**	**F**	D	33,128	**1.84**	**F**	D
7		West of Webster Avenue	2D	18,000	31,734	**1.76**	**F**	D	33,200	**1.84**	**F**	D
8		East of Webster Avenue	2D	18,000	32,034	**1.78**	**F**	D	33,500	**1.86**	**F**	D
9		West of Indian Street	3D	26,900	30,234	**1.12**	**F**	D	31,700	**1.18**	**F**	D
10		East of Indian Street	3D	26,900	12,716	0.47	A	D	13,300	0.49	A	D
11		West of Perris Boulevard	2D	18,000	13,140	0.73	C	D	13,724	0.76	C	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	1,414	0.11	A	D	1,414	0.11	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	303	0.02	A	D	303	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,849	0.14	A	D	1,919	0.15	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	26	0.00	A	D	26	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	400	0.03	A	D	400	0.03	A	D
17	Indian Street	North of Grove View Road	2D	18,750	23,129	**1.23**	**F**	D	23,199	**1.24**	**F**	D
18		South of Grove View Road	2D	18,750	22,132	**1.18**	**F**	D	23,013	**1.23**	**F**	D
19		North of Harley Knox Boulevard	2D	18,000	17,818	**0.99**	**E**	D	18,700	**1.04**	**F**	D
20		South of Harley Knox Boulevard	4D	25,900	7,800	0.30	A	D	7,800	0.30	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	25,644	0.46	A	D	26,300	0.47	A	D
22		Driveway 1 to San Michele Road	6D	56,300	25,920	0.46	A	D	26,505	0.47	A	D
23		San Michele Road to Modular Way	6D	56,300	24,708	0.44	A	D	25,153	0.45	A	D
24		South of Modular Way	6D	56,300	24,588	0.44	A	D	25,254	0.45	A	D
25		North of Nandina Avenue	6D	56,300	26,340	0.47	A	D	27,005	0.48	A	D
26		South of Nandina Avenue	6D	56,300	26,616	0.47	A	D	27,281	0.48	A	D
27		North of Grove View Road	6D	56,300	28,128	0.50	A	D	28,793	0.51	A	D
28		South of Grove View Road	6D	56,300	28,608	0.51	A	D	29,546	0.52	A	D
29		North of Harley Knox Boulevard[2]	6D	53,900	31,572	0.59	A	D	32,510	0.60	A	D
30		South of Harley Knox Boulevard[2]	6D	53,900	26,676	0.49	A	D	27,030	0.50	A	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	7,464	0.40	A	D	7,676	0.41	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	288	0.02	A	D	793	0.04	A	D
33		Driveway 3 to Driveway 4	2D	18,750	288	0.02	A	D	793	0.04	A	D
34		Driveway 4 to Driveway 7	2D	18,750	288	0.02	A	D	793	0.04	A	D
35		Driveway 7 to Kitching Street	2D	18,750	288	0.02	A	D	773	0.04	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	1,932	0.10	A	D	2,742	0.15	A	D
37		West of Perris Boulevard	2D	18,750	1,380	0.07	A	D	2,191	0.12	A	D
38		East of Perris Boulevard	2D	18,750	2,460	0.13	A	D	3,604	0.19	A	D
39		West of Kitching Street	2D	18,750	1,572	0.08	A	D	2,715	0.14	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	516	0.04	A	D	768	0.06	A	D
42		Driveway 8 to Modular Way	2U	12,500	564	0.05	A	D	1,292	0.10	A	D
43		South of Modular Way	2U	12,500	312	0.02	A	D	1,455	0.12	A	D
44		North of Globe Street	2U	12,500	648	0.05	A	D	1,791	0.14	A	D
45		South of Globe Street	2U	12,500	996	0.08	A	D	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] Assumes the lanes recently constructed by the City of Perris as part of their widening project of Perris Boulevard.

Source: Urban Crossroads, Inc. 2014e, Table 6-2.

Table 4.8-23 Existing (2013) plus Project Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange

Intersection	Movement	Stacking Distance (Feet)	Existing (2013)				Existing Plus Project			
			95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]		95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	352 [2]	331 [2]	Yes	Yes	432 [2]	372 [2]	Yes	Yes
	SBR	270	36	48	Yes	Yes	36	48	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	27	21	Yes	Yes	27	21	Yes	Yes
	NBR	265	41	43	Yes	Yes	42	43	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 5-3.

Table 4.8-24 Existing (2013) plus Project Freeway Ramp Merge/Diverge Analysis

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	Existing (2013)				Existing Plus Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	31.3	D	**35.2**	**E**	31.9	D	**35.5**	**E**
		On-Ramp at Harley Knox Bl.	3	26.8	C	30.5	D	26.8	C	30.7	D
	Northbound	On-Ramp at Harley Knox Bl.	3	21.5	C	26.3	C	21.7	C	26.8	C
		Off-Ramp at Harley Knox Bl.	3	20.1	C	25.3	C	20.2	C	25.4	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 5-5.

Table 4.8-25 Opening Year (2018) Freeway Segment Analysis

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	2018 Without Project			2018 With Project		
					Volume[2]	Density[3]	LOS	Volume[2]	Density[3]	LOS
SR-91 Freeway	Eastbound	I-15 Freeway to McKinley St.	5	AM	6,374	20.6	C	6,432	20.9	C
				PM	6,458	20.9	C	6,487	21.0	C
		McKinley St. to Riverwalk Pkwy.	4	AM	5,934	24.2	C	5,992	24.6	C
				PM	6,019	24.6	C	6,048	24.7	C
		Riverwalk Pkwy. to Magnolia Av.	3	AM	5,470	32.1	D	5,528	33.0	D
				PM	5,460	32.0	D	5,489	32.3	D
		Magnolia Av. to La Sierra Av.	4	AM	5,316	21.4	C	5,374	21.8	C
				PM	5,228	21.0	C	5,257	21.2	C
		La Sierra Av. to Tyler Av.	4	AM	5,050	20.5	C	5,108	20.8	C
				PM	5,311	21.6	C	5,340	21.7	C
		Tyler Av. to Van Buren Bl.	4	AM	5,493	21.9	C	5,551	22.3	C
				PM	5,312	21.2	C	5,341	21.4	C
		Van Buren Bl. to Adams St.	4	AM	3,391	13.5	B	3,449	13.8	B
				PM	4,305	17.1	B	4,334	17.2	B
		Adams St. to Madison St.	3	AM	4,675	25.3	C	4,733	25.9	C
				PM	5,553	32.4	D	5,582	33.0	D
		Madison St. to Arlington Av.	4	AM	4,199	16.8	B	4,248	17.1	B
				PM	5,013	20.1	C	5,038	20.3	C
		Arlington Av. to Central Av.	4	AM	4,064	16.2	B	4,114	16.5	B
				PM	4,413	17.6	B	4,438	17.7	B
		Central Av. to 14th St.	3	AM	4,813	26.5	D	4,863	27.0	D
				PM	5,420	31.4	D	5,445	31.9	D
		14th St. to University Av.	4	AM	4,405	17.6	B	4,454	17.9	B
				PM	5,302	21.2	C	5,327	21.5	C
		University Av. to Spruce St.	5	AM	4,616	14.8	B	4,666	15.0	B
				PM	4,286	13.7	B	4,311	13.8	B
		Spruce St. to I-215 Freeway	4	AM	3,732	14.9	B	3,781	15.3	B
				PM	3,591	14.4	B	3,616	14.5	B
I-215 Freeway	Southbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,644	18.5	C	5,705	18.8	C
				PM	5,297	17.4	B	5,328	17.5	B
		Blaine St. to University Av.	4	AM	5,395	22.2	C	5,456	22.6	C
				PM	5,750	23.8	C	5,781	24.0	C
		University Av. to Martin Luther King Bl.	4	AM	5,659	23.4	C	5,720	23.8	C
				PM	6,702	29.0	D	6,733	29.4	D
		Martin Luther King Bl. to Central Av.	5	AM	5,546	18.1	C	5,607	18.4	C
				PM	7,725	26.0	D	7,756	26.1	D
		Central Av. to Box Springs Rd.	5	AM	4,557	14.9	B	4,618	15.1	B
				PM	6,759	22.1	C	6,790	22.4	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	4,701	19.4	C	4,762	19.8	C
				PM	6,962	30.7	D	6,993	31.2	D
		SR-60 Freeway to Eucalyptus Av.	5	AM	8,582	31.9	D	8,643	32.3	D
				PM	8,157	28.9	D	8,188	29.0	D
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,817	20.7	C	3,878	21.1	C
				PM	5,235	30.4	D	5,266	30.9	D
		Alessandro Bl. to Cactus Av.	4	AM	3,818	15.5	B	3,879	15.8	B
				PM	5,436	22.2	C	5,467	22.4	C
		Cactus Av. to Van Buren Bl.	4	AM	3,274	13.3	B	3,335	13.7	B
				PM	4,602	18.8	C	4,633	18.9	C
		Van Buren Bl. to Harley Knox Bl.	3	AM	6,826	--	F	6,887	--	F
				PM	6,947	--	F	6,978	--	F

Table 4.8-25 Opening Year (2018) Freeway Segment Analysis (cont.)

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	2018 Without Project			2018 With Project		
					Volume[2]	Density[3]	LOS	Volume[2]	Density[3]	LOS
SR-91 Freeway	Westbound	I-15 Freeway to McKinley St.	4	AM	4,829	19.5	C	4,839	19.5	C
				PM	5,444	22.0	C	5,470	22.2	C
		McKinley St. to Riverwalk Pkwy.	3	AM	5,041	28.3	D	5,051	28.4	D
				PM	5,483	32.0	D	5,509	32.5	D
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,656	25.5	C	4,666	25.6	C
				PM	5,011	28.1	D	5,037	28.3	D
		Magnolia Av. to La Sierra Av.	3	AM	4,387	23.8	C	4,397	23.8	C
				PM	4,898	27.2	D	4,924	27.4	D
		La Sierra Av. to Tyler Av.	3	AM	4,719	26.3	D	4,729	26.4	D
				PM	5,242	30.5	D	5,268	30.7	D
		Tyler Av. to Van Buren Bl.	4	AM	3,943	15.7	B	3,953	15.7	B
				PM	4,390	17.5	B	4,416	17.6	B
		Van Buren Bl. to Adams St.	4	AM	4,949	19.7	C	4,959	19.7	C
				PM	5,862	23.6	C	5,888	23.8	C
		Adams St. to Madison St.	4	AM	4,746	18.9	C	4,756	18.9	C
				PM	5,077	20.2	C	5,103	20.3	C
		Madison St. to Arlington Av.	3	AM	4,283	23.0	C	4,291	23.1	C
				PM	4,838	26.6	D	4,860	27.0	D
		Arlington Av. to Central Av.	4	AM	3,584	14.3	B	3,592	14.4	B
				PM	3,694	14.8	B	3,716	14.9	B
		Central Av. to 14th St.	3	AM	3,772	20.1	C	3,780	20.2	C
				PM	4,332	23.3	C	4,354	23.4	C
		14th St. to University Av.	4	AM	4,908	19.6	C	4,916	19.7	C
				PM	5,293	21.2	C	5,316	21.4	C
		University Av. to Spruce St.	6	AM	3,744	10.0	A	3,752	10.0	A
				PM	3,726	9.9	A	3,749	10.0	A
		Spruce St. to I-215 Freeway	4	AM	3,848	15.4	B	3,856	15.4	B
				PM	3,455	13.8	B	3,477	14.0	B
I-215 Freeway	Northbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,854	19.2	C	5,871	19.3	C
				PM	5,445	17.8	B	5,492	18.0	C
		Blaine St. to University Av.	5	AM	6,933	23.0	C	6,950	23.1	C
				PM	6,174	20.2	C	6,221	20.5	C
		University Av. to Martin Luther King Bl.	4	AM	6,175	26.0	C	6,192	26.1	D
				PM	6,031	25.2	C	6,078	25.5	C
		Martin Luther King Bl. to Central Av.	4	AM	6,319	26.8	D	6,336	27.0	D
				PM	6,376	27.1	D	6,423	27.3	D
		Central Av. to Box Springs Rd.	5	AM	6,233	20.4	C	6,250	20.5	C
				PM	5,441	17.7	B	5,488	18.0	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	7,685	**37.1**	E	7,702	**37.6**	E
				PM	8,163	**44.2**	E	8,210	--	F
		SR-60 Freeway to Eucalyptus Av.	3	AM	4,722	27.6	D	4,739	28.0	D
				PM	5,995	--	F	6,042	--	F
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,777	20.4	C	3,794	20.5	C
				PM	3,909	21.1	C	3,956	21.5	C
		Alessandro Bl. to Cactus Av.	5	AM	4,414	14.3	B	4,431	14.4	B
				PM	4,564	14.8	B	4,611	15.0	B
		Cactus Av. to Van Buren Bl.	4	AM	4,538	18.5	C	4,555	18.6	C
				PM	3,520	14.3	B	3,567	14.5	B
		Van Buren Bl. to Harley Knox Bl.	3	AM	4,191	23.2	C	4,208	23.3	C
				PM	6,162	--	F	6,209	--	F

[1] Number of lanes are in the specified direction and reflect new auxiliary lanes and assume the HOV lane in each direction.
[2] Volumes shown on this table have been reduced to account for the proposed HOV lane in each direction.
[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).
* **BOLD** = Unacceptable Level of Service

Source: Urban Crossroads, Inc. 2014g, Table 4.

Table 4.8-26 Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange

Intersection	Movement	Stacking Distance (Feet)	2018 Without Project				2018 With Project			
			95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]		95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	1,102 [2]	739 [2]	Yes	Yes	1,175 [2]	778 [2]	Yes	Yes
	SBR	270	107	70	Yes	Yes	114	80	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	117	55	Yes	Yes	117	55	Yes	Yes
	NBR	265	**530** [2]	87	**No**	Yes	**549** [2]	100	**No**	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 6-3.

Table 4.8-27 Opening Year (2018) Freeway Ramp Merge/Diverge Analysis

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	2018 Without Project				2018 With Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	**48.5**	**F**	**47.5**	**F**	**49.5**	**F**	**48.1**	**F**
		On-Ramp at Harley Knox Bl.	3	**36.0**	**E**	**43.0**	**F**	**36.1**	**E**	**43.2**	**F**
	Northbound	On-Ramp at Harley Knox Bl.	3	28.6	D	**41.5**	**F**	28.8	D	**41.9**	**F**
		Off-Ramp at Harley Knox Bl.	3	28.2	D	33.4	D	28.3	D	33.4	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 6-5.

Table 4.8-28 Opening Year (2018) Intersection Analysis with Recommended Mitigation

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.																	
	- Without Improvements	TS	0	0	0	0	1	1	0	2	d	1	2	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	TS	0	0	0	**2**	1	**0**	0	2	d	**2**	2	0	28.8	22.7	C	C
2	I-215 NB Ramps / Harley Knox Bl.																	
	- Without Improvements	TS	0	1	1	0	0	0	1	2	0	0	2	d	36.7	**59.5**	D	**E**
	- With Improvements	TS	0	1	1	0	0	0	1	2	0	0	2	**1>>**	19.6	13.1	B	B
3	Western Wy. / Harley Knox Bl.																	
	- Without Improvements	CSS	0	0	0	0	1	0	0	2	0	0	2	d	**61.1**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	0	0	0	1	0	**1**	2	0	0	2	d	28.2	14.4	C	B
4	Patterson Av. / Harley Knox Bl.																	
	- Without Improvements	TS	0	1	0	0	1	d	1	1	1	1	1	0	**191.1**	**>200.0**	**F**	**F**
	- With Improvements	TS	0	1	0	0	1	d	1	**2**	1	1	**2**	0	23.1	22.7	C	C
5	Webster Av. / Harley Knox Bl.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	0	**80.6**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	**2**	0	1	**2**	0	10.4	15.6	B	B
6	Indian St. / Grove View Rd.																	
	- Without Improvements	CSS	0	1	0	1	1	0	0	0	0	1	0	1	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	**2**	0	1	**2**	0	0	0	0	1	0	1	13.7	17.5	B	B
7	Indian St. / Harley Knox Bl.																	
	- Without Improvements	**TS**	2	2	1	1	2	0	1	1	1	2	2	0	**>200.0**	**87.8**	**F**	**F**
	- With Improvements	**TS**	2	2	1	1	2	**1>**	**2**	**2**	1	2	2	0	38.5	50.8	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop c
For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are show

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014e, Table 6-6.

Table 4.8-29 Opening Year (2018) Roadway Segment Volume/Capacity Analysis with Recommended Mitigation

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2018 With Project	V/C	LOS	Acceptable LOS
3	Harley Knox Boulevard	I-215 NB Ramps to Western Way	**4D**	**35,900**	**32,522**	**0.91**	**E**	D
4		East of Western Way	**4D**	**35,900**	**33,835**	**0.94**	**E**	D
5		West of Patterson Avenue	**4D**	**35,900**	**34,441**	**0.96**	**E**	D
6		East of Patterson Avenue	**4D**	**35,900**	**33,128**	**0.92**	**E**	D
7		West of Webster Avenue	**4D**	**35,900**	**33,200**	**0.92**	**E**	D
8		East of Webster Avenue	**4D**	**35,900**	**33,500**	**0.93**	**E**	D
9		West of Indian Street	**4D**	**35,900**	31,700	0.88	D	D
17	Indian Street	North of Grove View Road	**4D**	**37,500**	23,198	0.62	B	D
18		South of Grove View Road	**4D**	**37,500**	23,013	0.61	B	D
19		North of Harley Knox Boulevard	**4D**	**37,500**	18,700	0.50	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 6-8.

Table 4.8-30 Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange with Planned Improvements

Intersection	Movement	Stacking Distance (Feet)	2018 With Project				2018 With Project, With Improvements			
			95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]		95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	1,175[2]	778[2]	Yes	Yes	350	244	Yes	Yes
	SBR	270	114	80	Yes	Yes	44	67	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	117	55	Yes	Yes	285	94	Yes	Yes
	NBR	265	**549**[2]	100	**No**	Yes	266	54	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

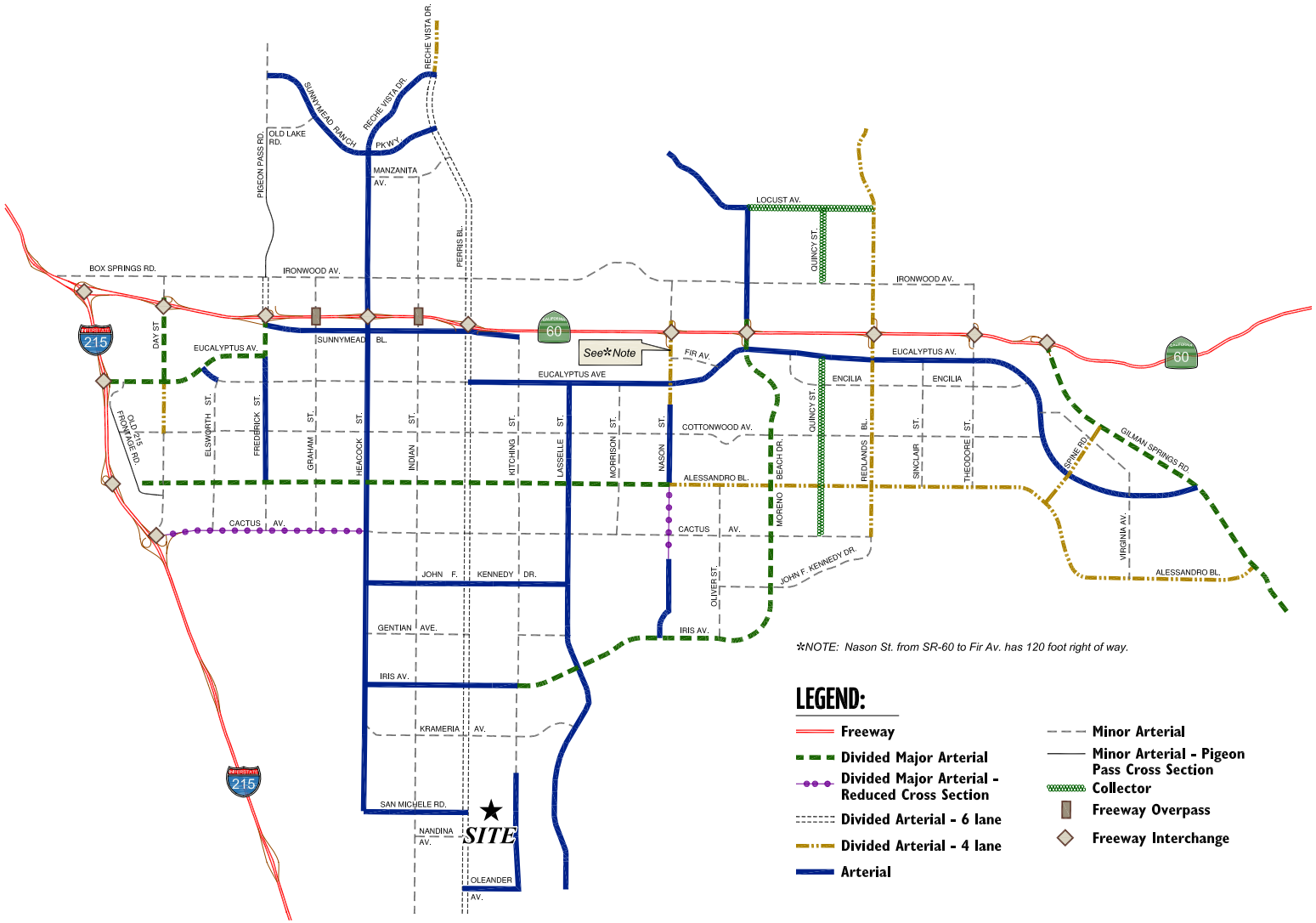
Source: Urban Crossroads, Inc. 2014e, Table 6-7.

Table 4.8-31 Opening Year (2018) Freeway Ramp Merge/Diverge Analysis with Planned Improvements

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	2018 With Project				2018 With Project, With Improvements			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	**49.5**	**F**	**48.1**	**F**	**40.7**	**E**	**38.9**	**E**
		On-Ramp at Harley Knox Bl.	3	**36.1**	**E**	**43.2**	**F**	31.6	D	**37.0**	**E**
	Northbound	On-Ramp at Harley Knox Bl.	3	28.8	D	**41.9**	**F**	25.9	C	**38.1**	**E**
		Off-Ramp at Harley Knox Bl.	3	28.3	D	33.4	D	25.3	C	29.6	D

[1] Number of lanes are in the specified direction and is based on existing conditions plus the construction of an HOV lane in each direction.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 6-10.

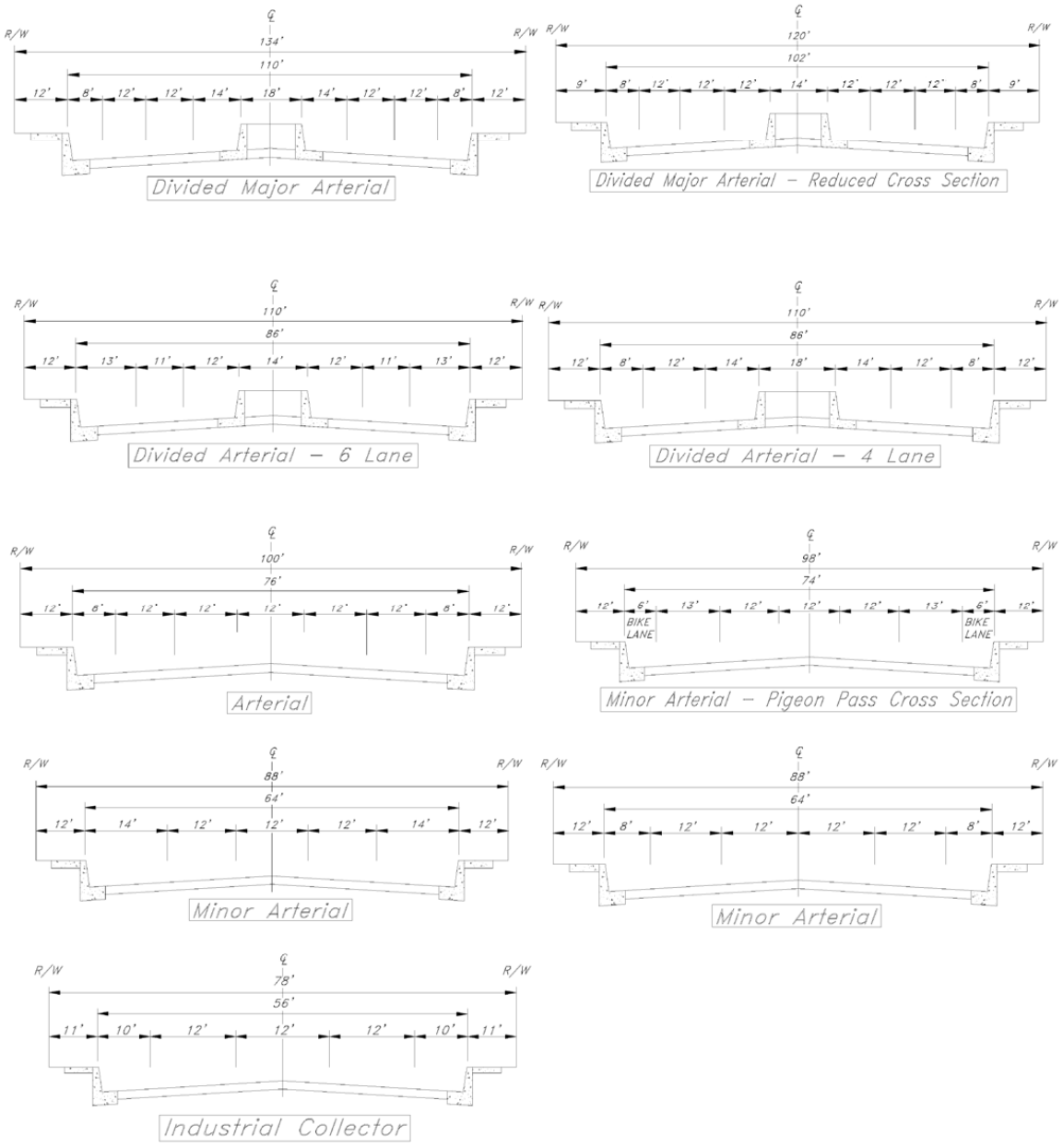


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-1

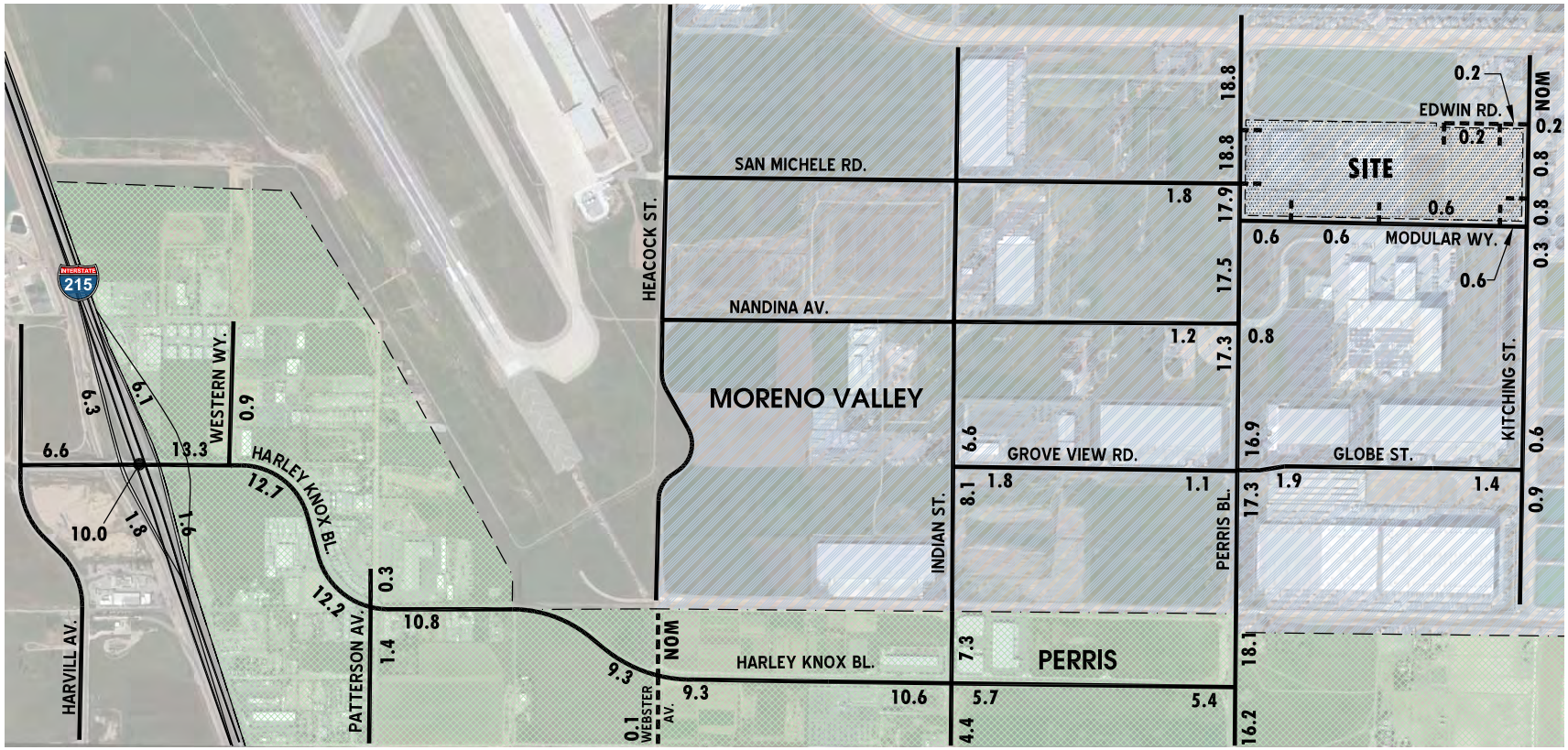
City of Moreno Valley General Plan Circulation Plan



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-2
City of Moreno Valley General Plan Roadway Cross-Sections



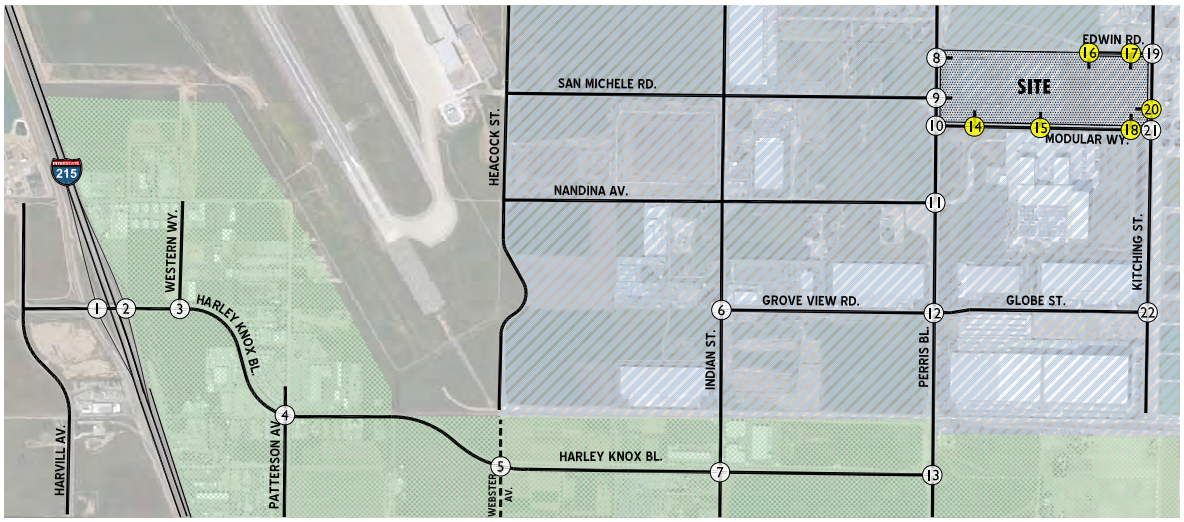
LEGEND:

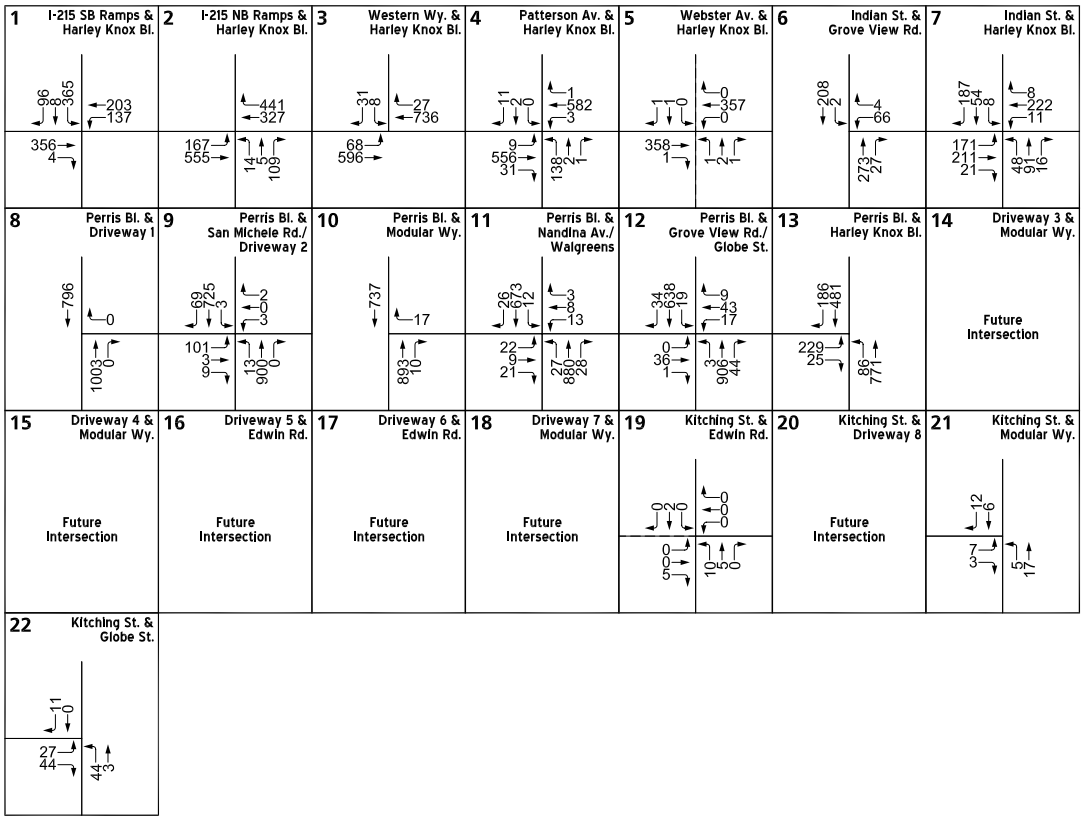
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-3
Existing (2013) Average Daily Traffic (ADT)

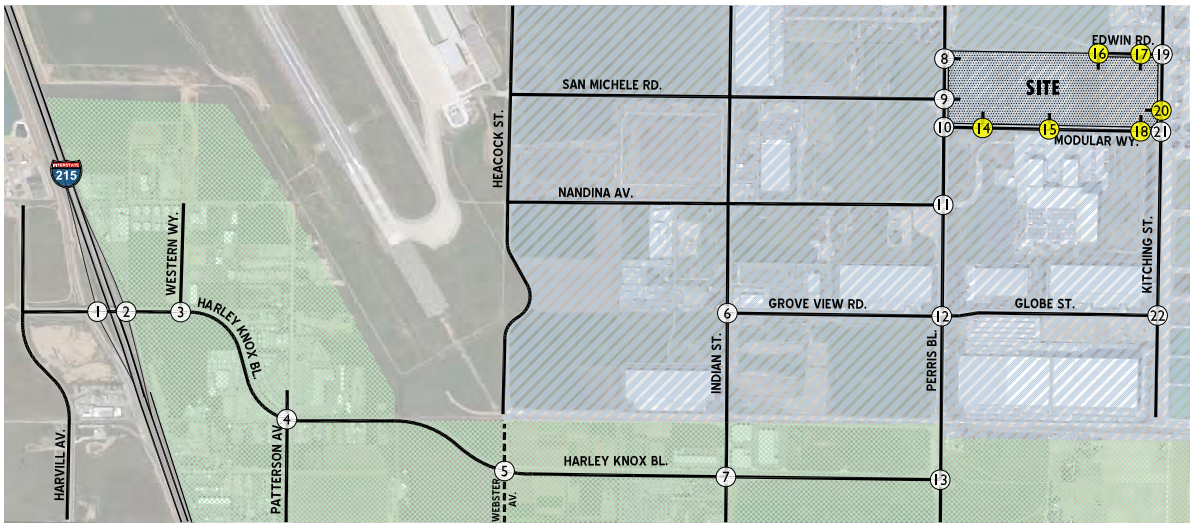


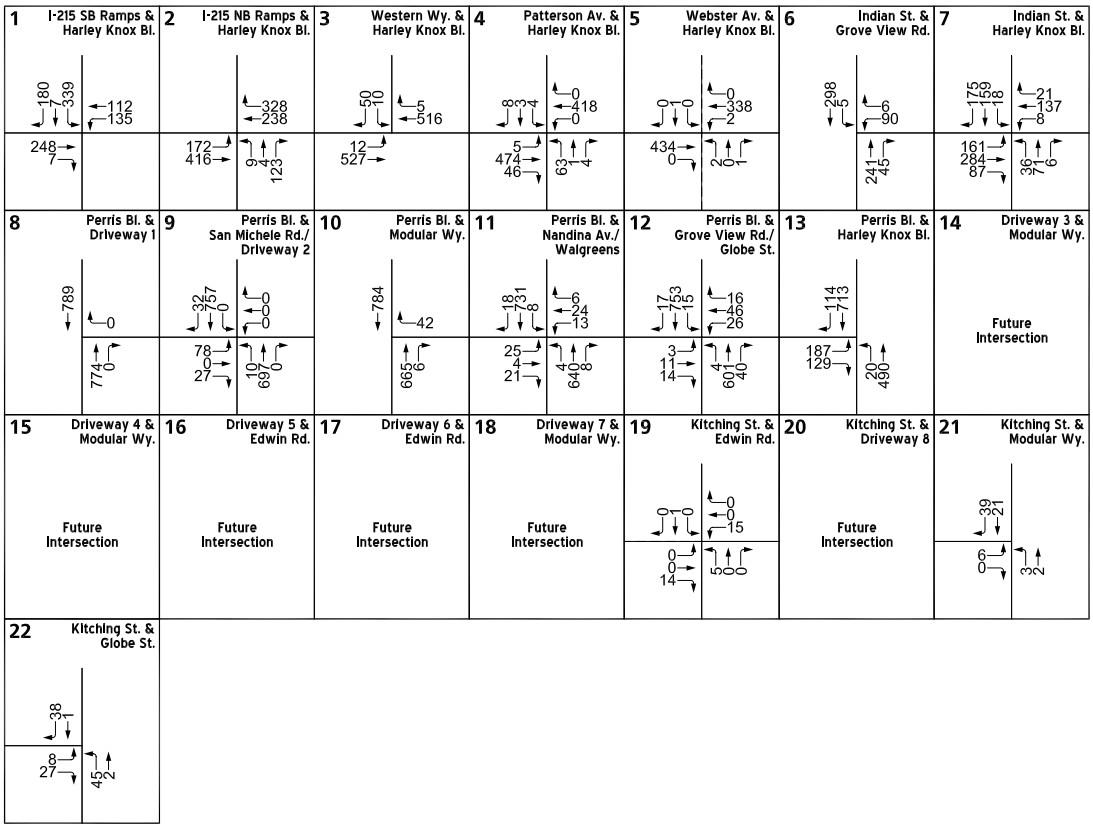


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-4
Existing (2013) AM Peak Hour Intersection Volumes

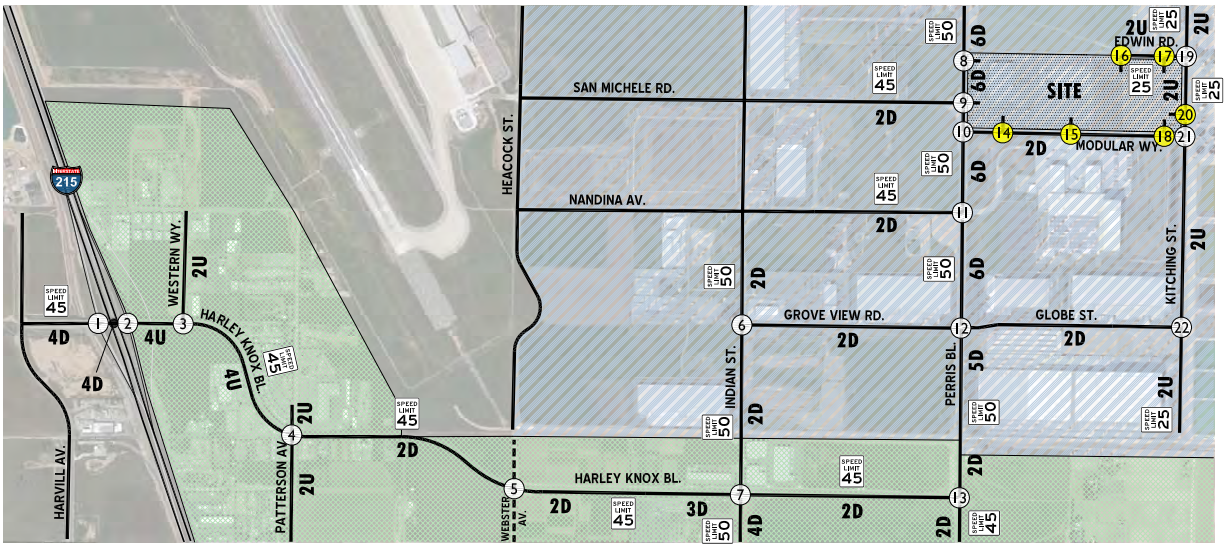


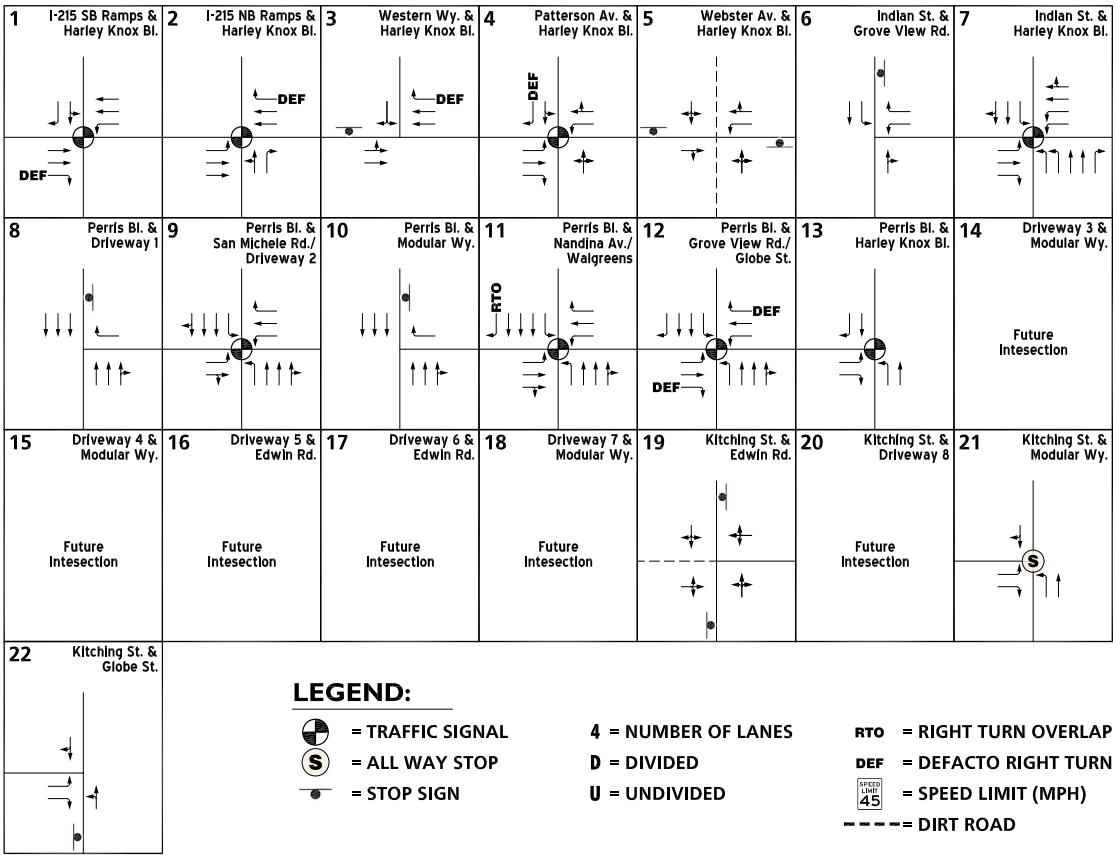


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-5
Existing (2013) PM Peak Hour Intersection Volumes



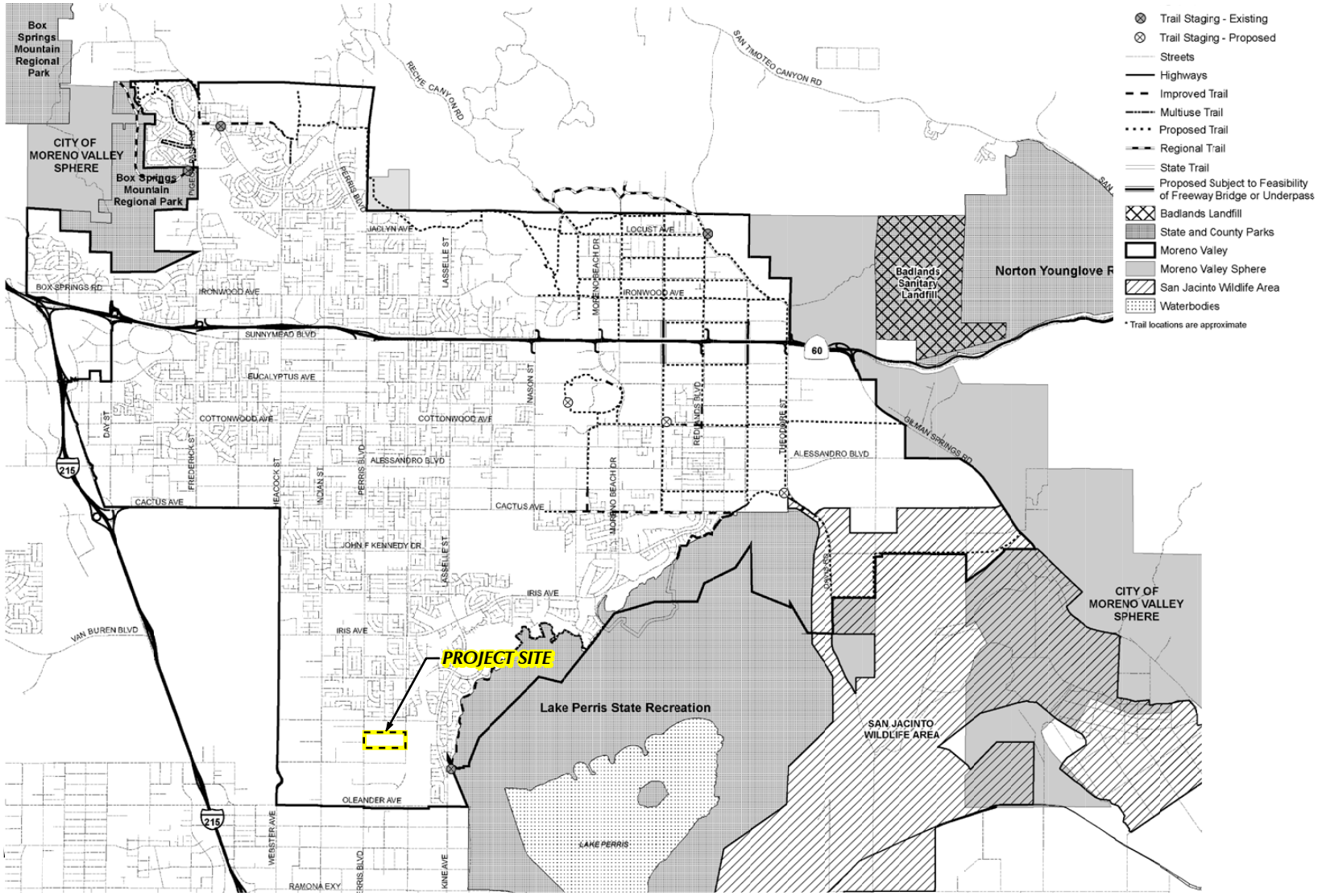


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-6

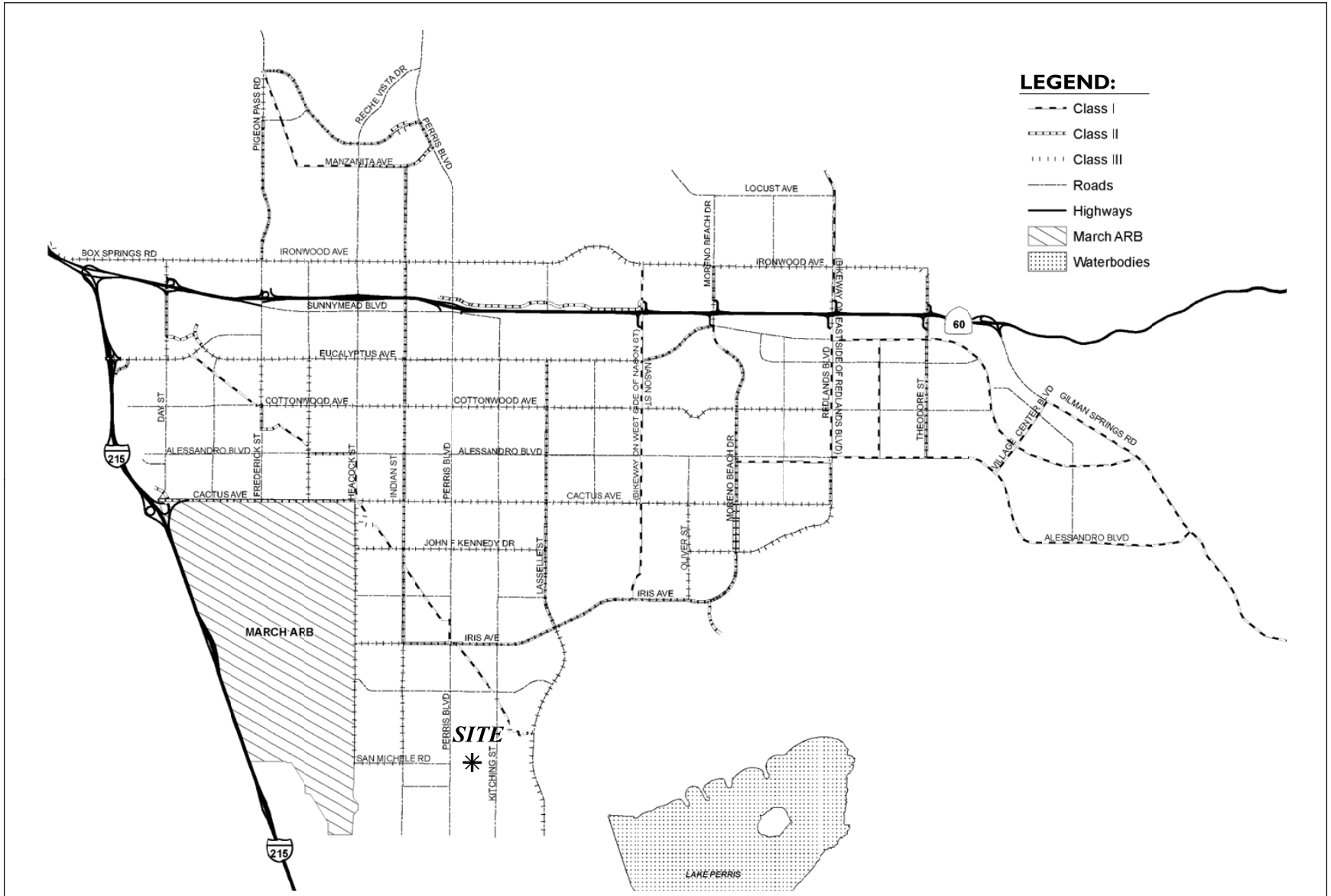
Study Area Intersections: Existing (2013) Through Lanes and Intersection Controls



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

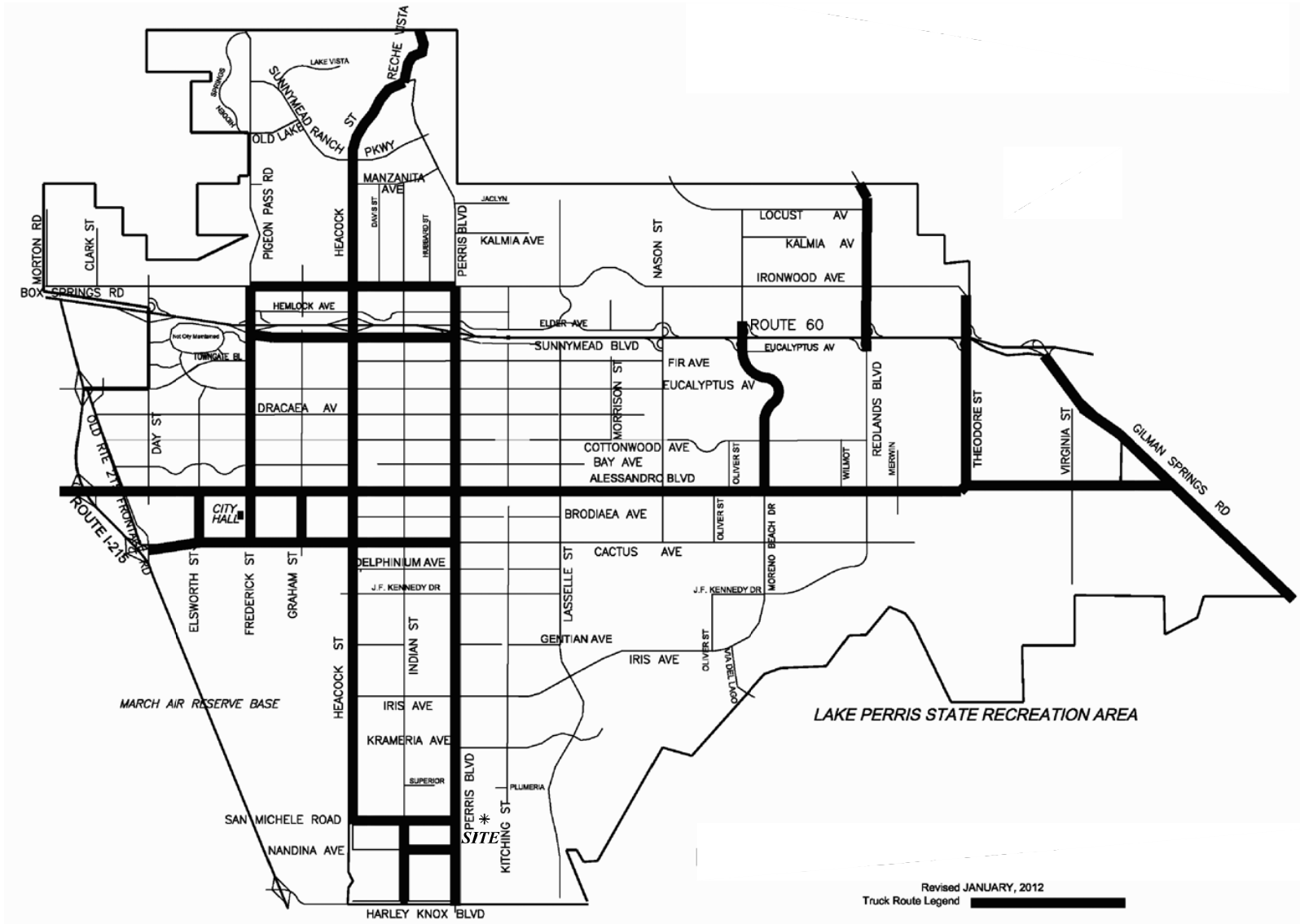
Figure 4.8-7
City of Moreno Valley Master Plan of Trails



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

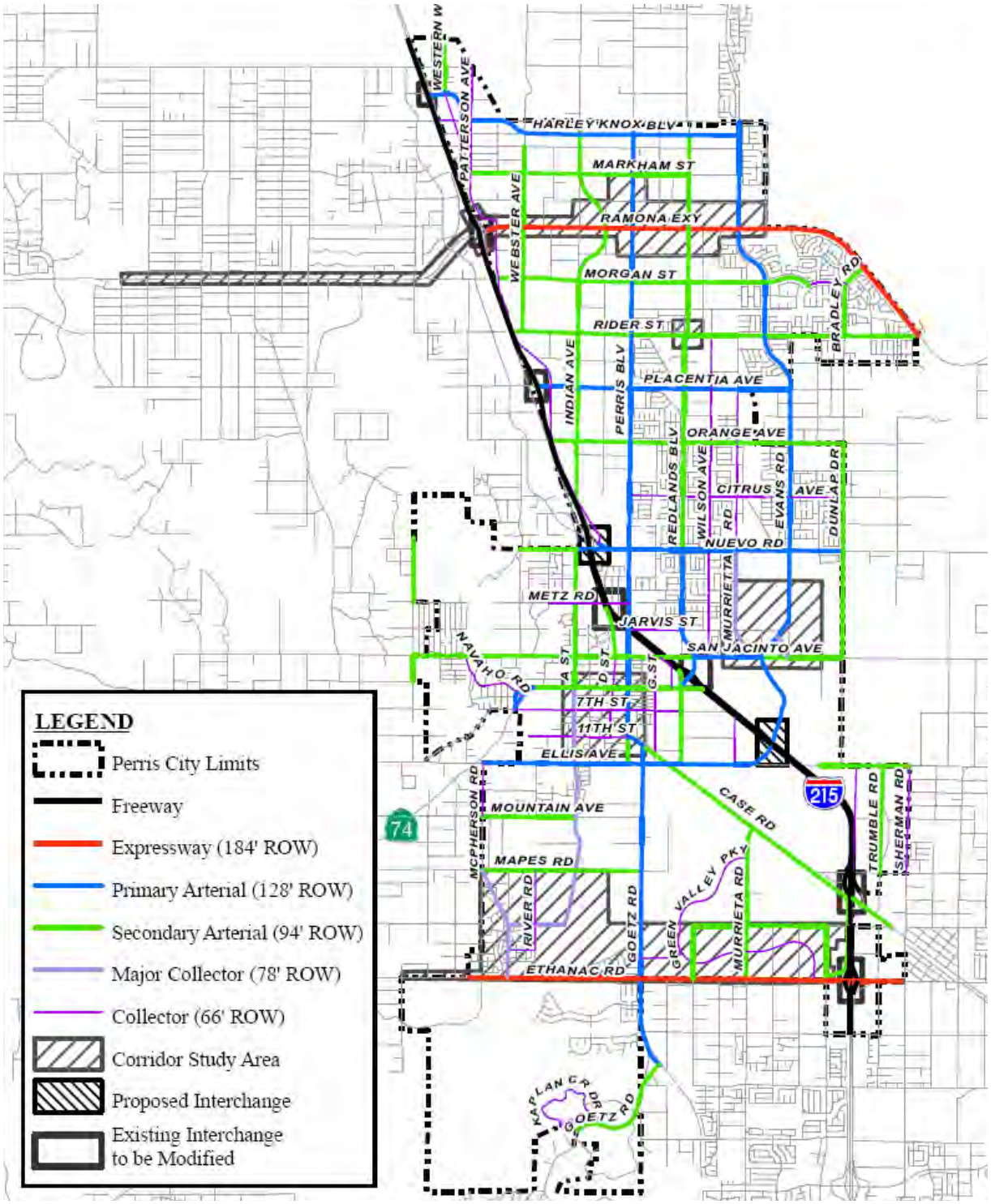
Figure 4.8-8
City of Moreno Valley Bike Plan



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-9
City of Moreno Valley Truck Routes

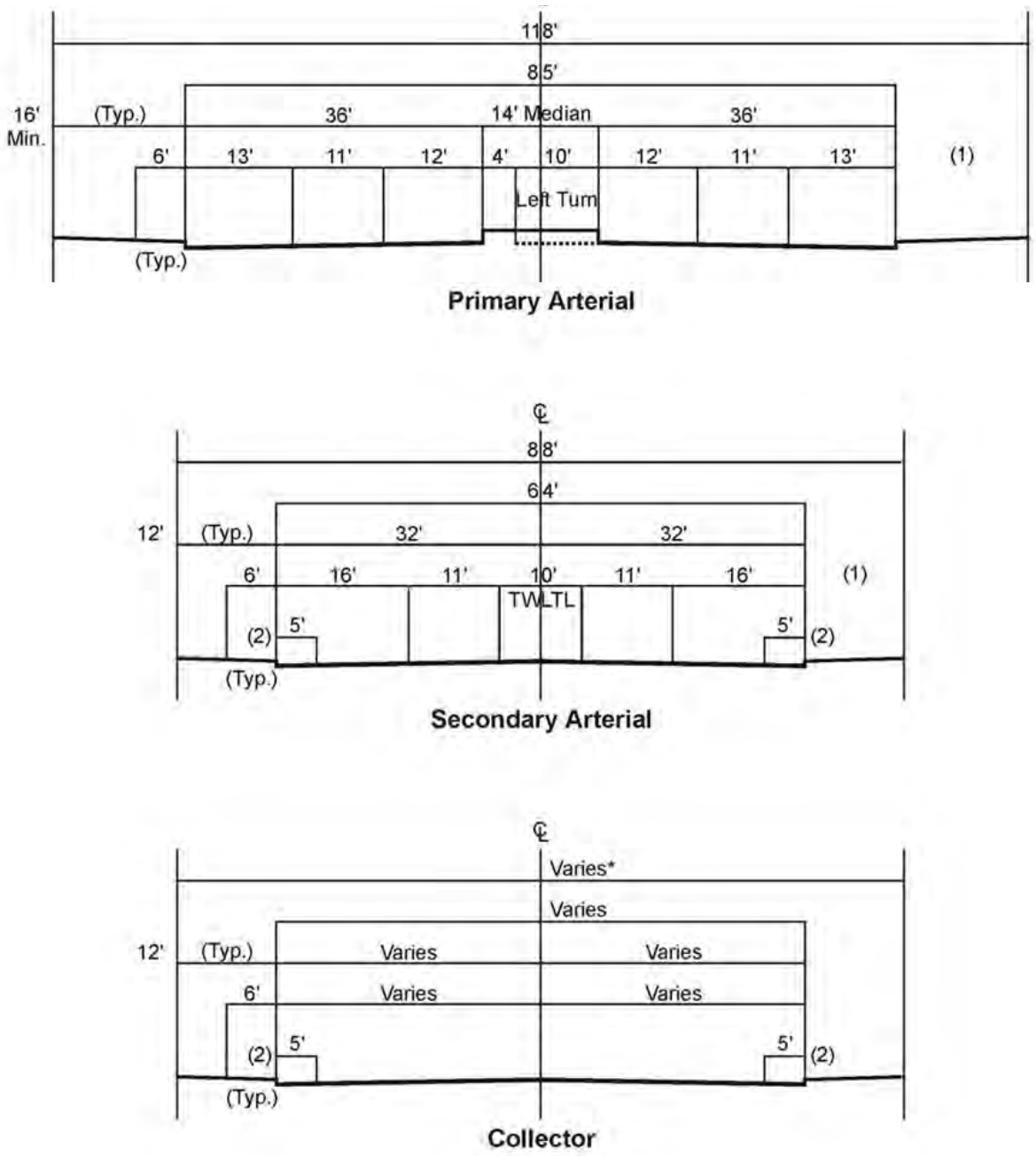


Source: City of Perris General Plan, Circulation Element (8/2008)

Figure 4.8-10

NOT TO SCALE

CITY OF PERRIS GENERAL PLAN CIRCULATION PLAN



Legend

(1) No stopping any time both sides.

(2) Bike lane where designated.

* The width of the collector street can range from 40 feet to 64 feet curb-to-curb.

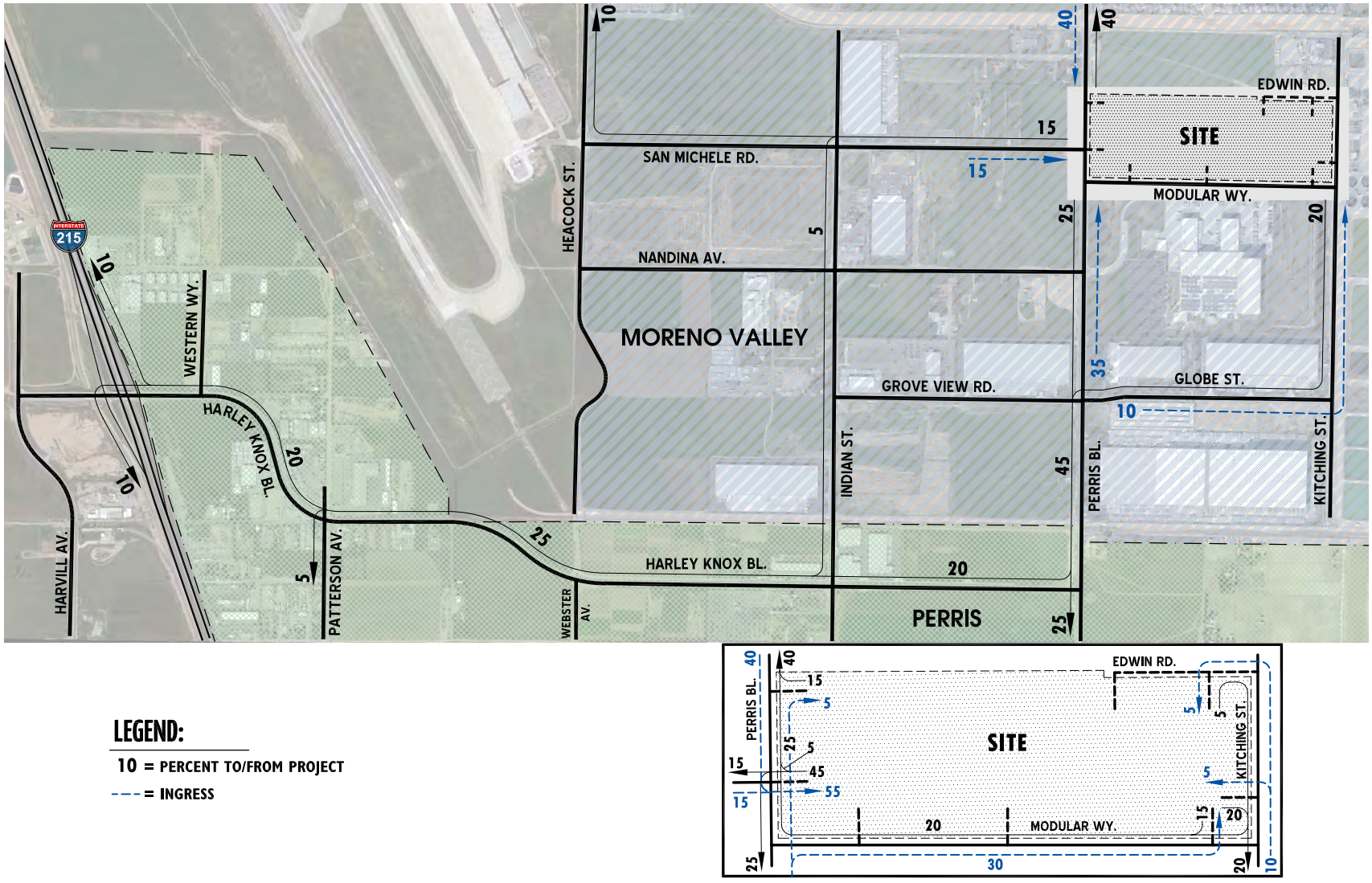
TWLTL = Two Way Left Turn Lane

Source: City of Perris General Plan - Circulation Element (08/2008)

Figure 4.8-11

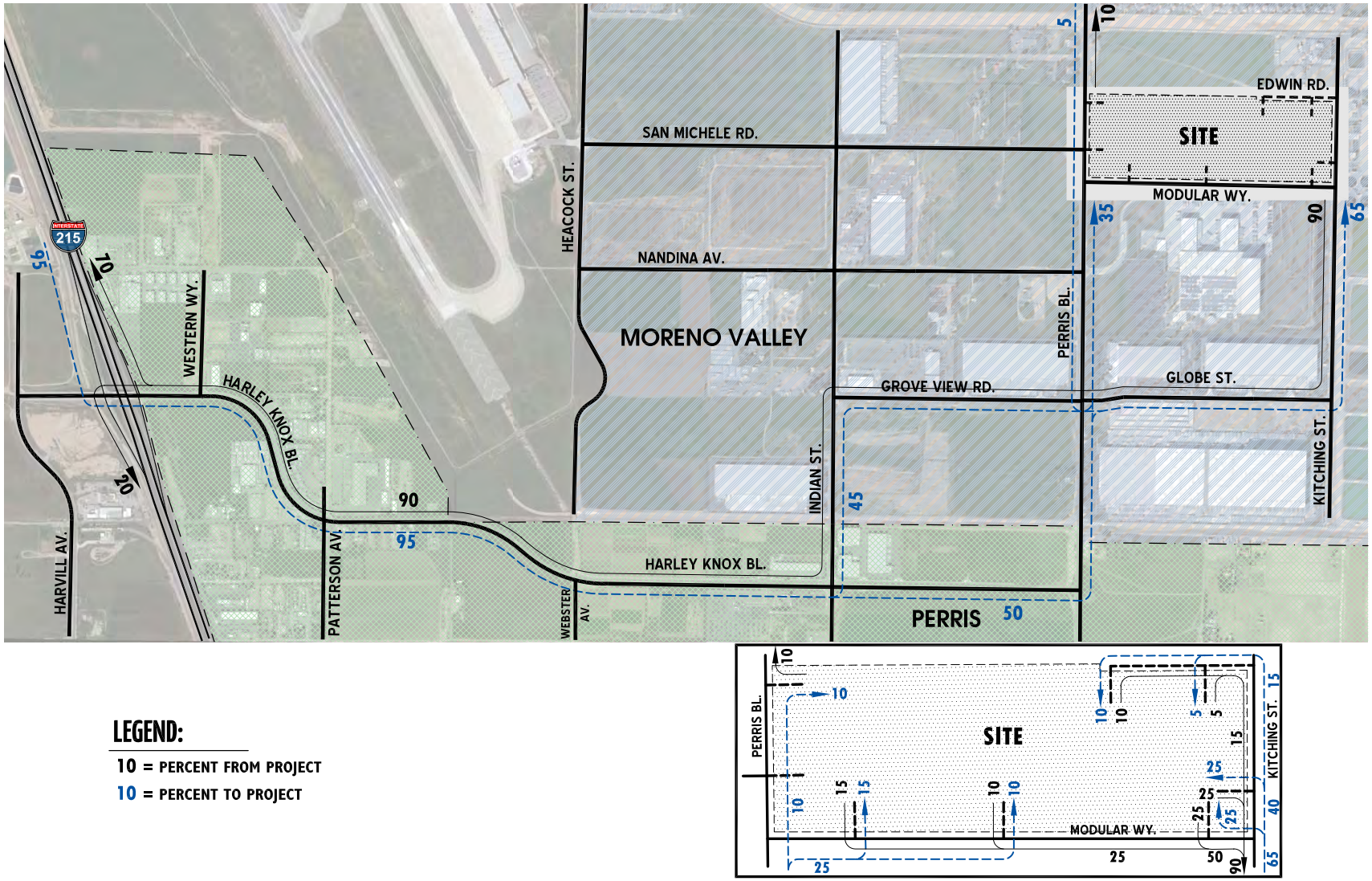
NOT TO SCALE

City of Perris General Plan Roadway Cross-Sections



Source: Urban Crossroads (Technical Appendix H1)

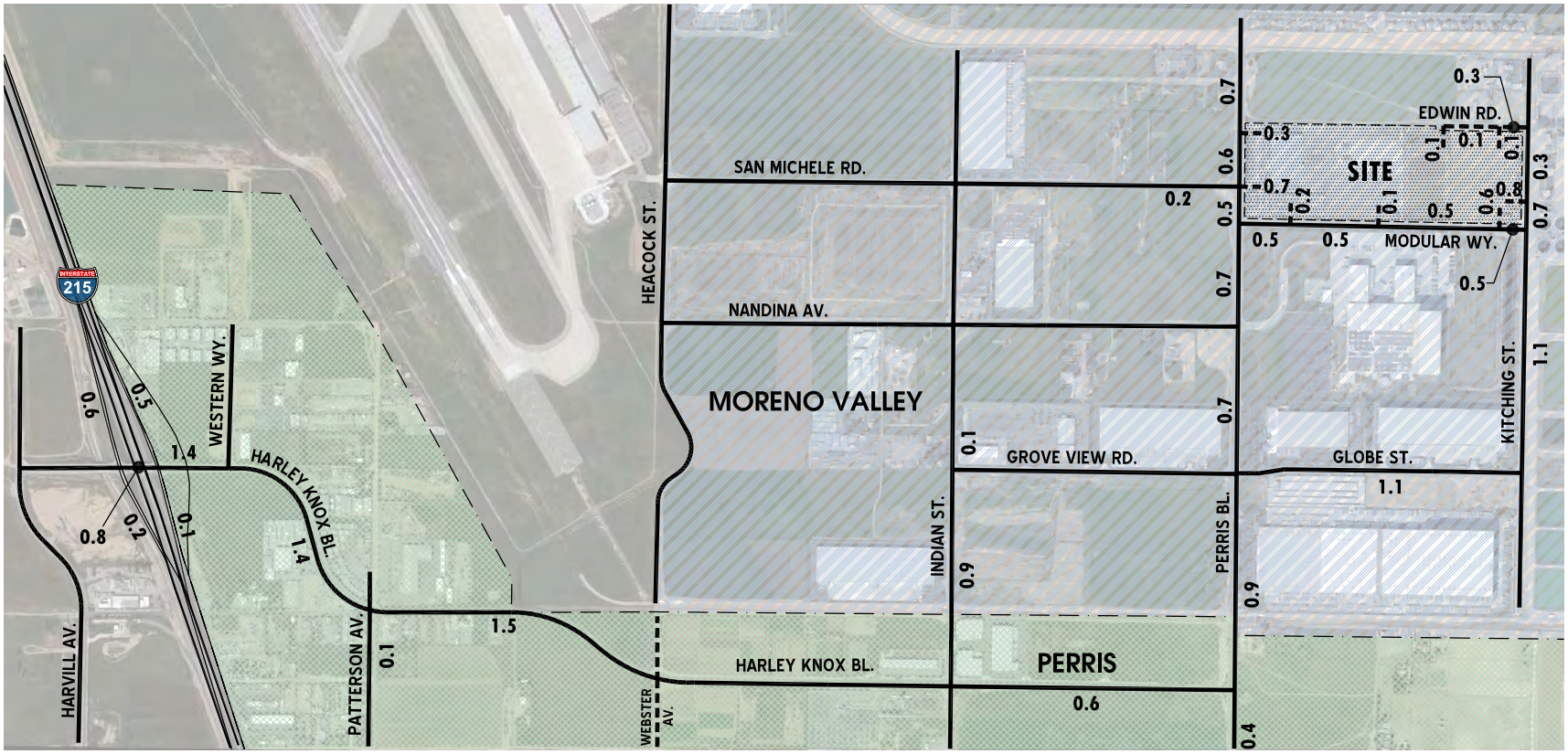
Figure 4.8-12
Project Passenger Car Trip Distribution



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-13
Project Truck Trip Distribution



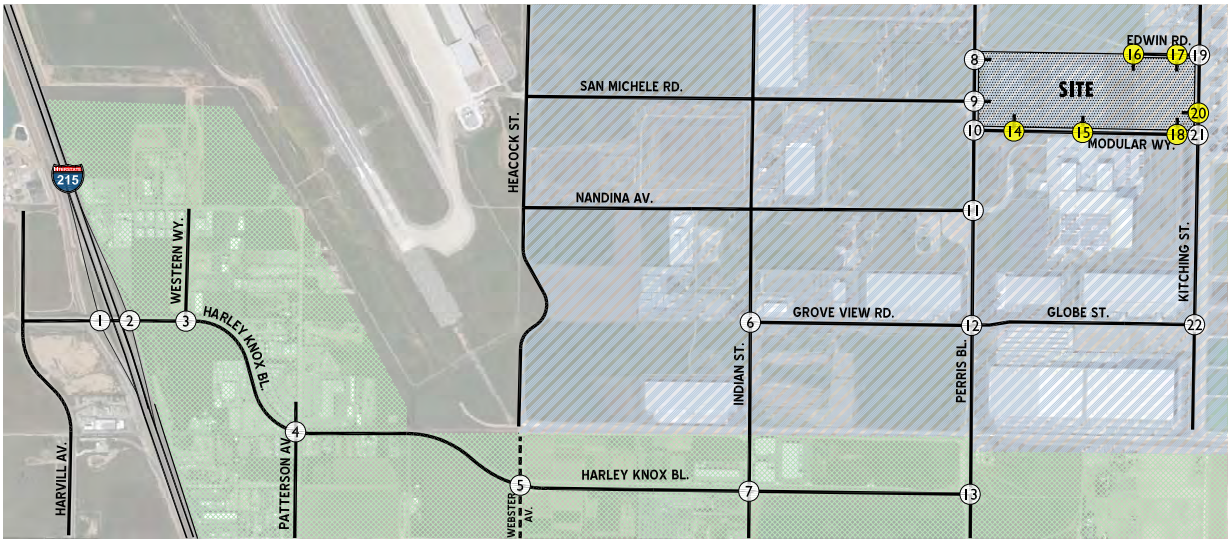
LEGEND:

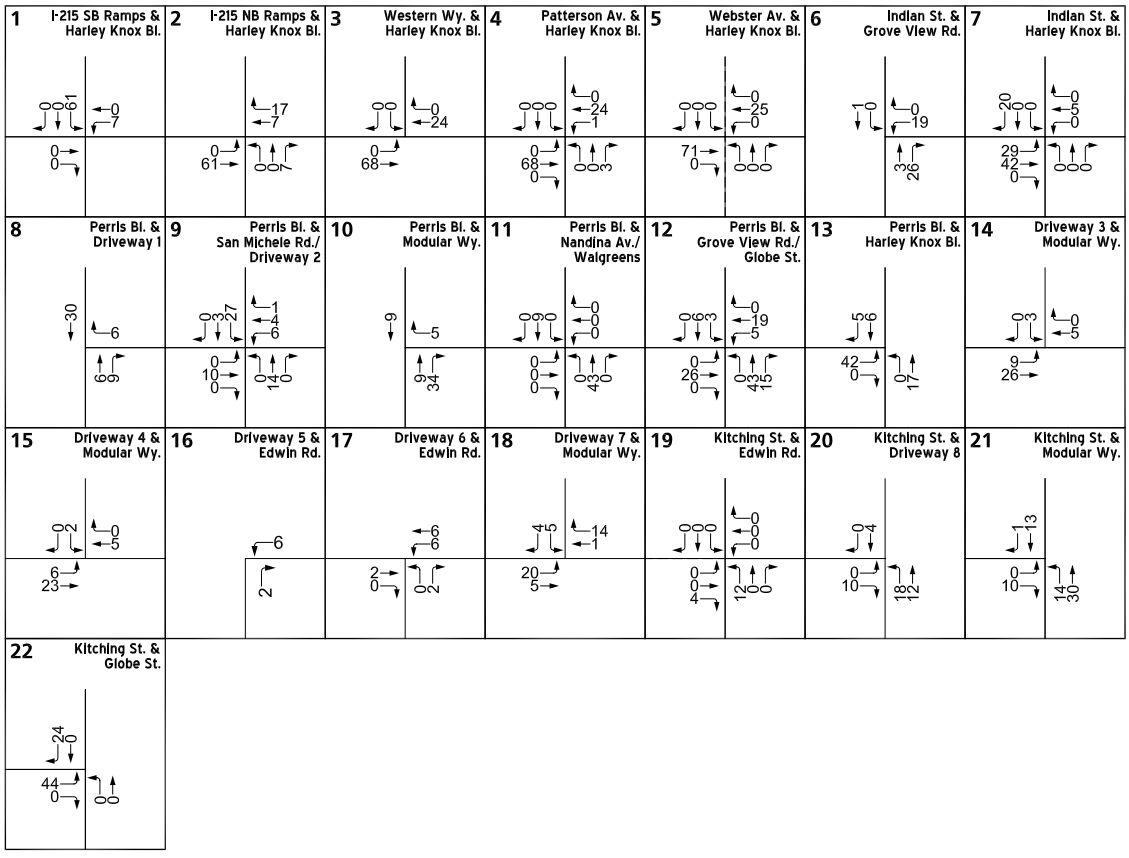
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-14
Project Average Daily Traffic (PCE)

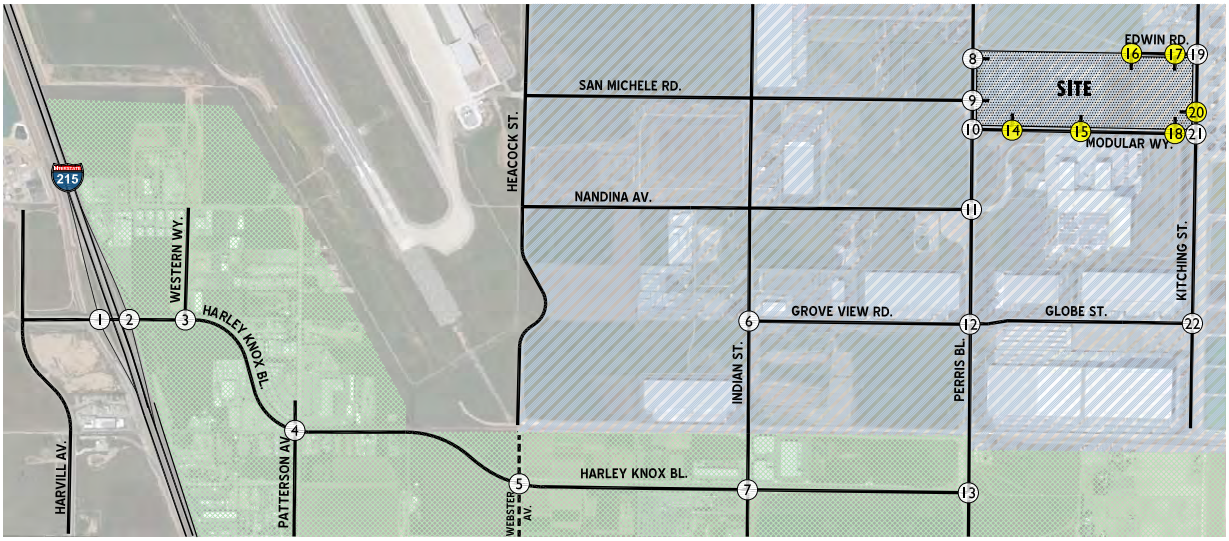


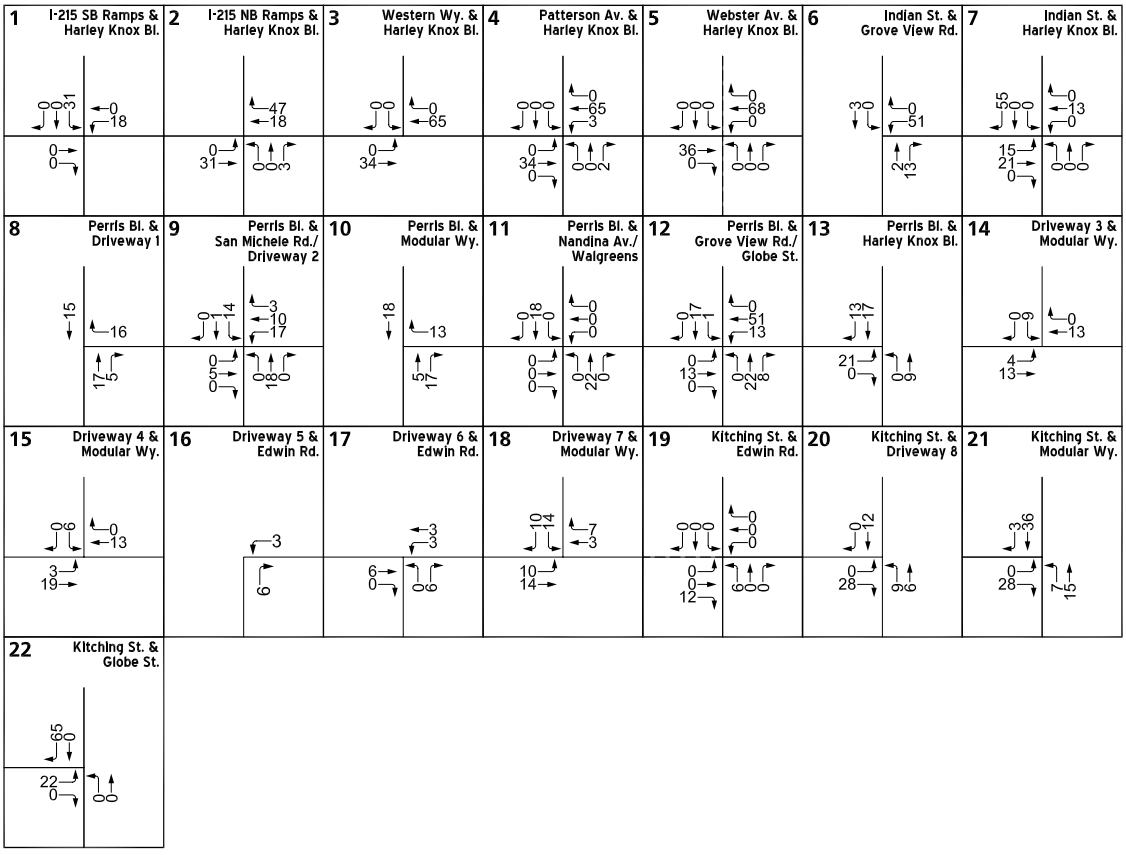


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-15
Project AM Peak Hour Intersection Volumes (PCE)

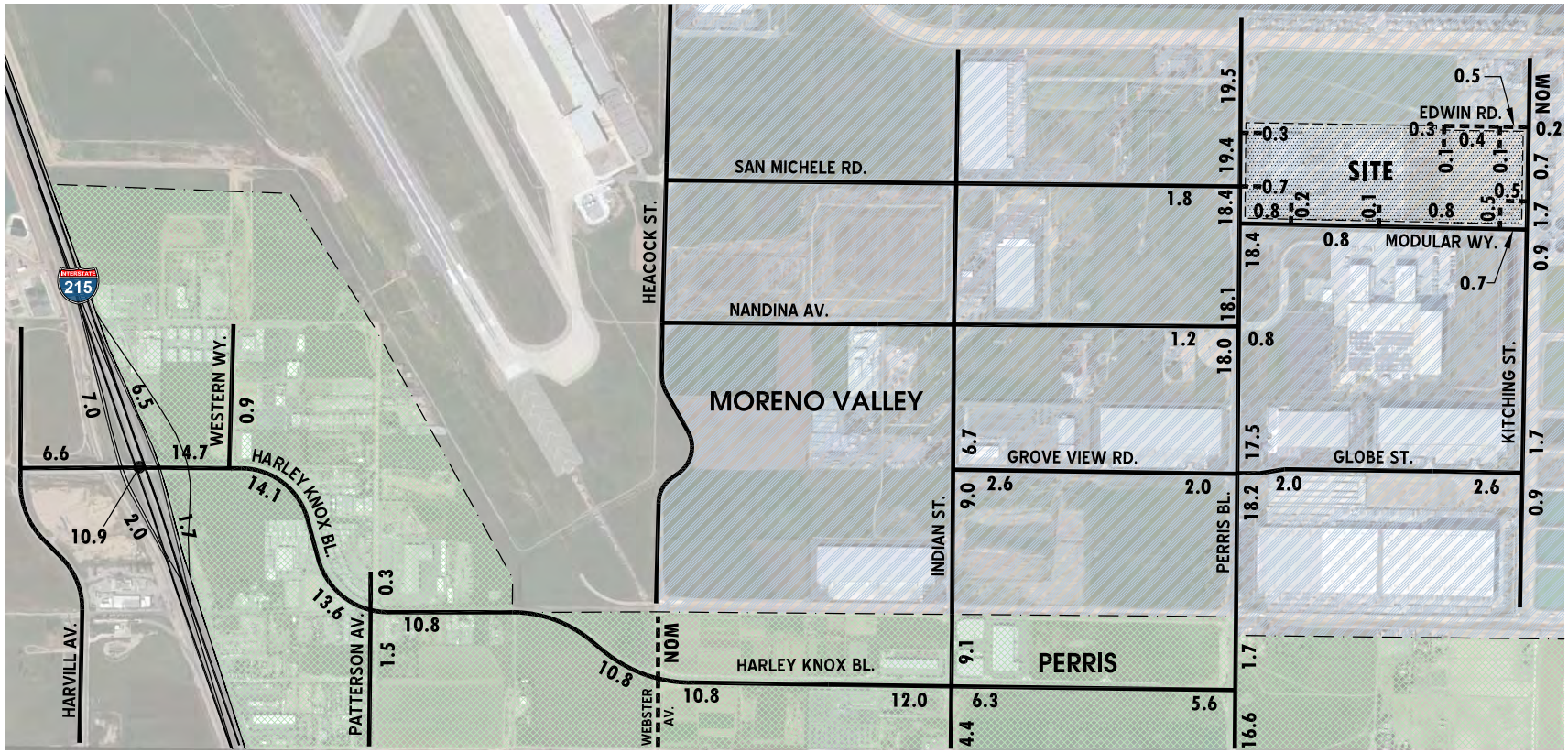




Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-16
Project PM Peak Hour Intersection Volumes (PCE)



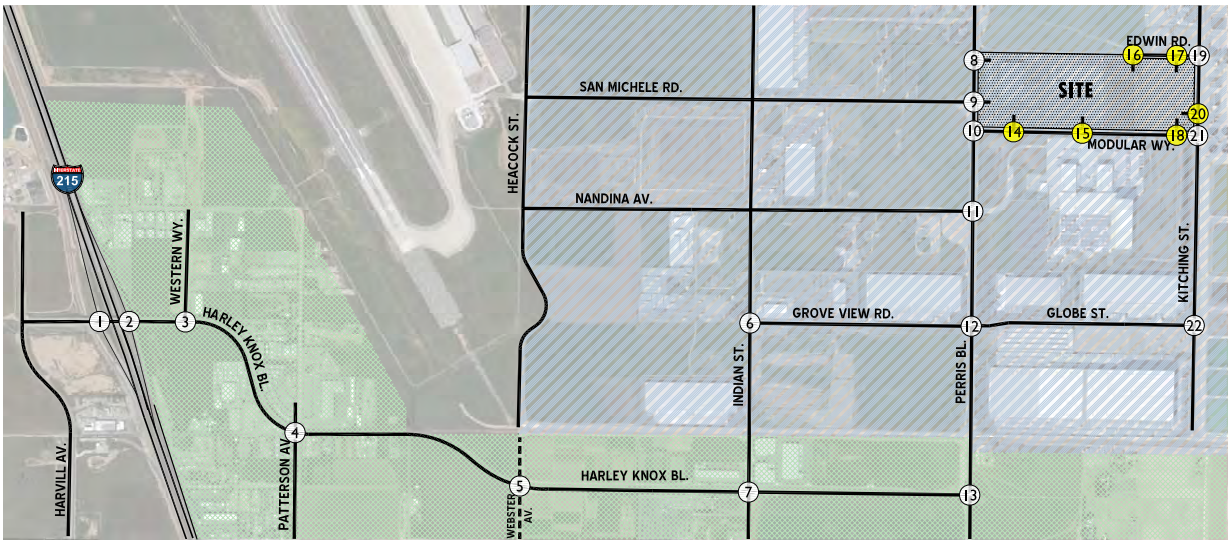
LEGEND:

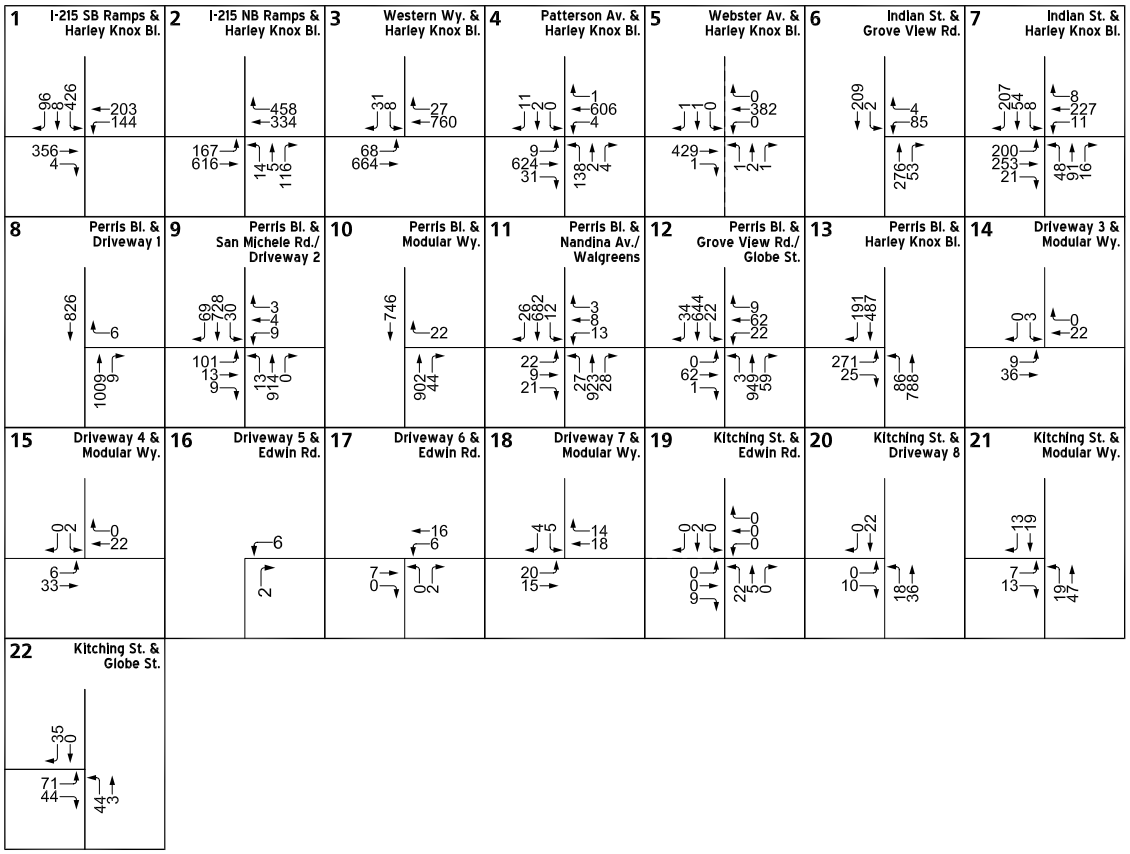
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-17
Existing plus Project (E+P) Average Daily Traffic



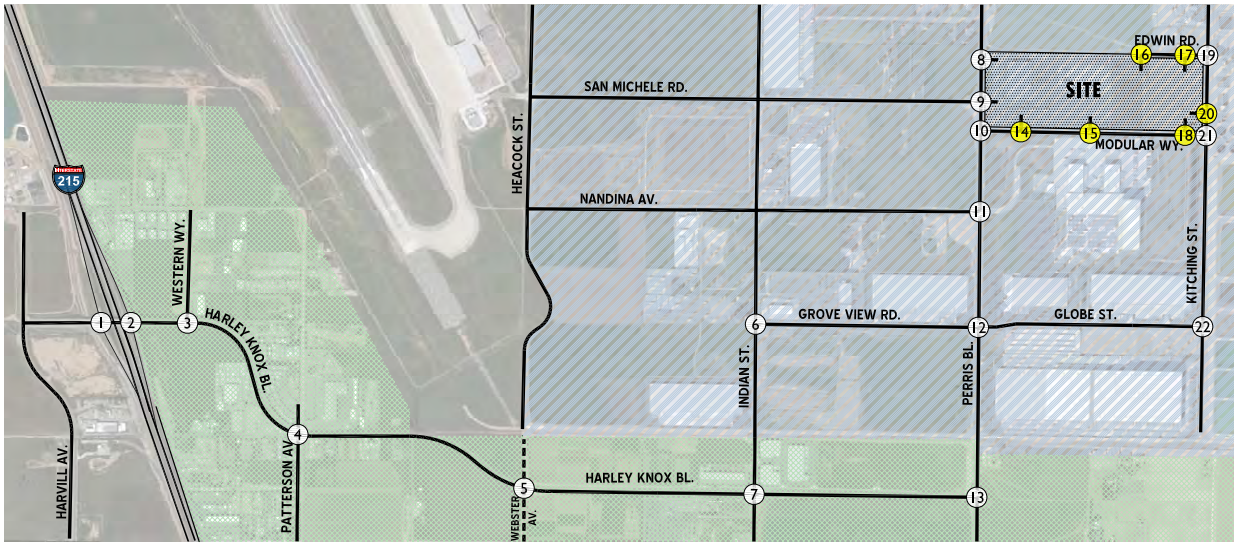


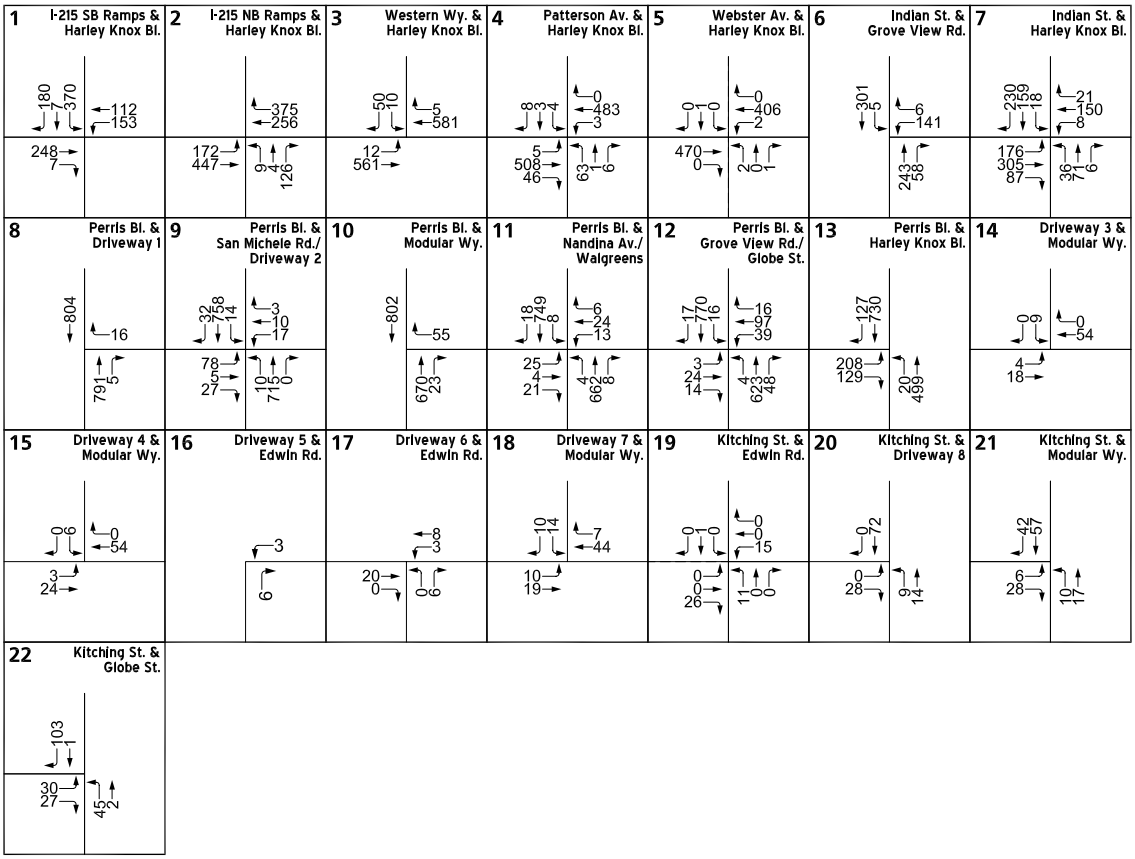
Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-18

Existing plus Project (E+P) Intersection Volumes - AM Peak Hour



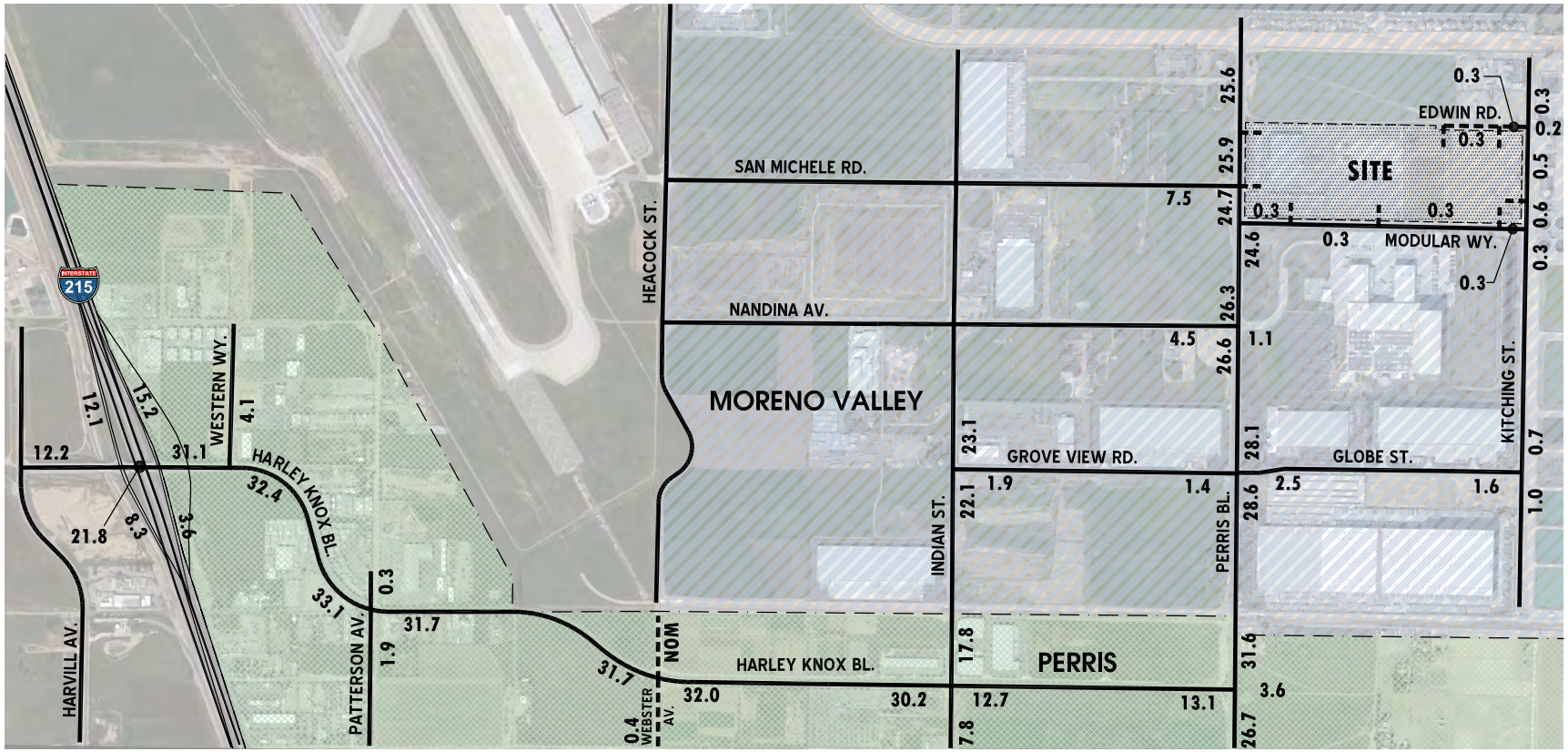


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-19

Existing plus Project (E+P) Intersection Volumes - PM Peak Hour



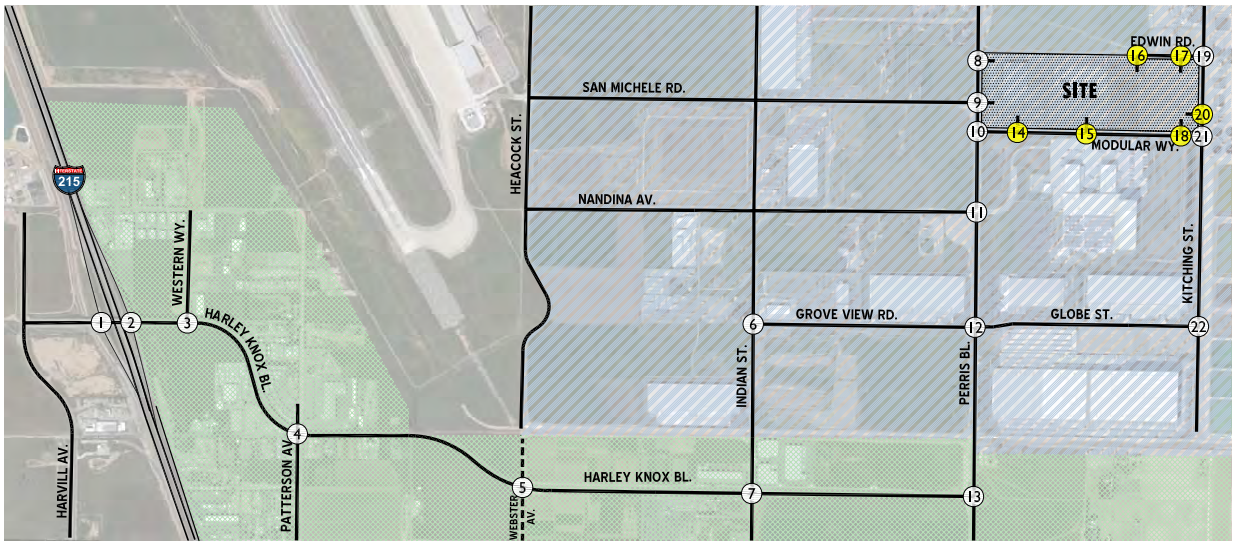
LEGEND:

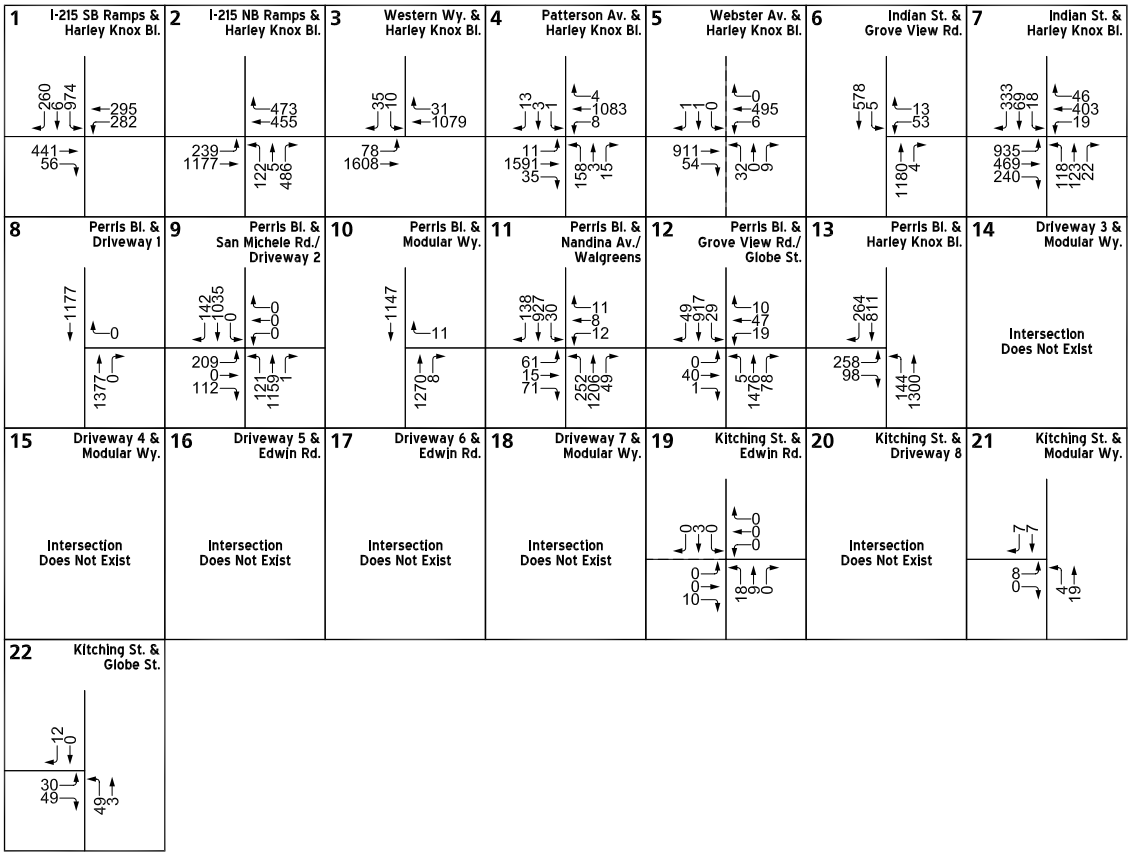
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-20
Opening Year (2018) without Project Average Daily Traffic



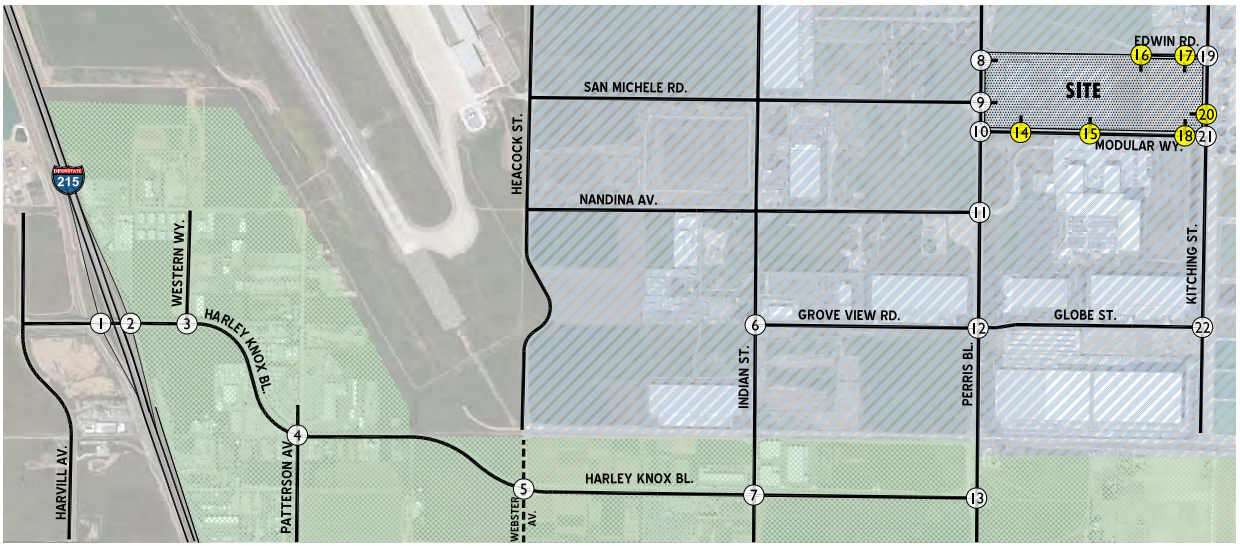


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-21

Opening Year (2018) without Project Intersection Volumes -AM Peak Hour



1 I-215 SB Ramps & Harley Knox Bl.
335 7 665 — 155 578
423 109

2 I-215 NB Ramps & Harley Knox Bl.
961 686
350 738 — 47 4 247

3 Western Wy. & Harley Knox Bl.
58 12 — 7 1638
39 1083

4 Patterson Av. & Harley Knox Bl.
7 4 5 — 1 1609 10
6 1077 56 — 72 2 8

5 Webster Av. & Harley Knox Bl.
0 1 0 — 0 980 17
572 32 — 65 0 14

6 Indian St. & Grove View Rd.
1377 14 — 11 48
695 37

7 Indian St. & Harley Knox Bl.
763 321 75 — 20 516 18
414 459 140 — 269 106 11

8 Perris Bl. & Driveway 1
1032 — 0
1105 0

9 Perris Bl. & San Michele Rd./ Driveway 2
147 898 14 — 0 0 0
211 0 141 — 123 890 1

10 Perris Bl. & Modular Wy.
1039 — 17
1003 7

11 Perris Bl. & Nandina Av./ Walgreens
25 1107 53 — 0 0 14
135 2 204 — 4 872 17

12 Perris Bl. & Grove View Rd./ Globe St.
29 1292 27 — 18 51 29
3 1 5 — 5 975 68

13 Perris Bl. & Harley Knox Bl.
361 1130
246 252 — 51 783

14 Driveway 3 & Modular Wy.
Intersection Does Not Exist

15 Driveway 4 & Modular Wy.
Intersection Does Not Exist

16 Driveway 5 & Edwin Rd.
Intersection Does Not Exist

17 Driveway 6 & Edwin Rd.
Intersection Does Not Exist

18 Driveway 7 & Modular Wy.
Intersection Does Not Exist

19 Kitching St. & Edwin Rd.
0 2 0 — 0 0 17
0 15 — 9 0 0

20 Kitching St. & Driveway 8
Intersection Does Not Exist

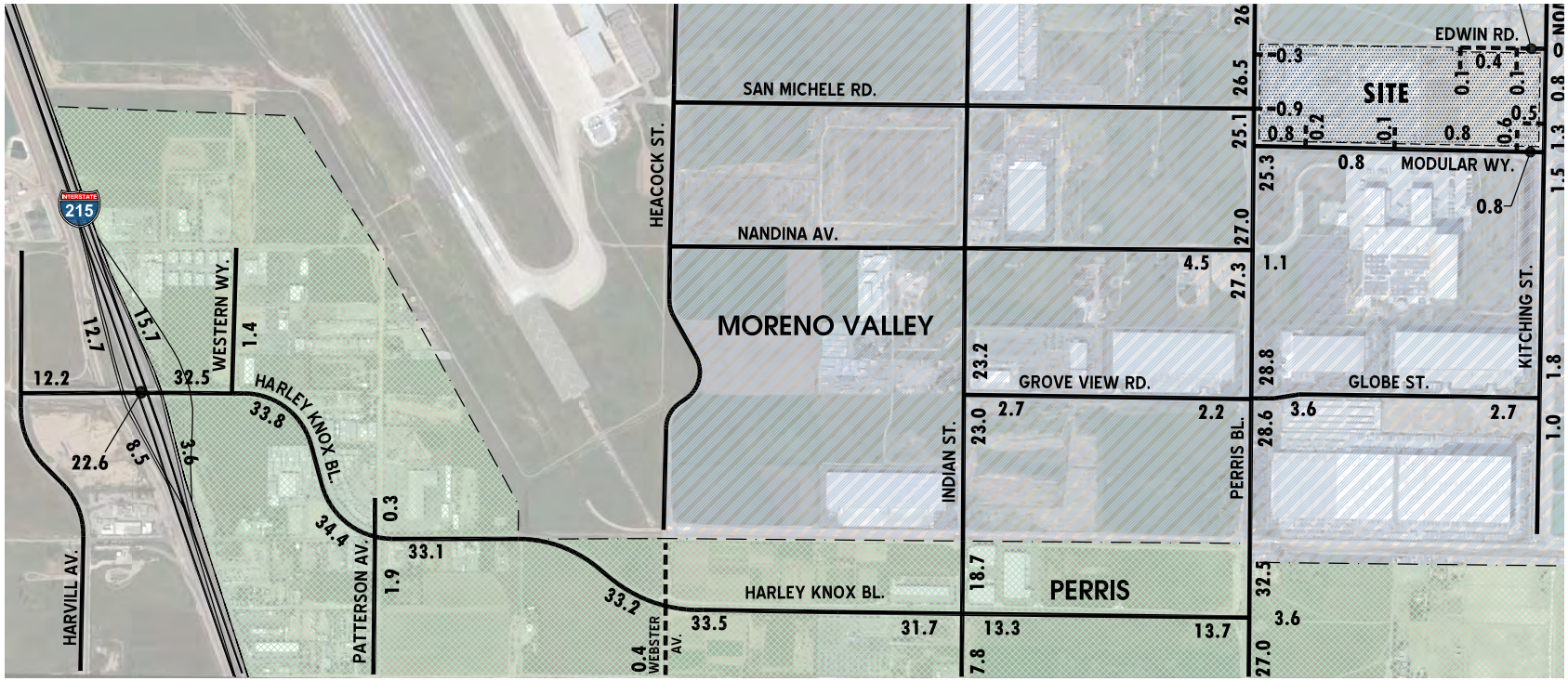
21 Kitching St. & Modular Wy.
15 23 — 1 2
7 0

22 Kitching St. & Globe St.
42 1 — 50 2
9 30

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-22
Opening Year (2018) without Project Intersection Volumes - PM Peak Hour



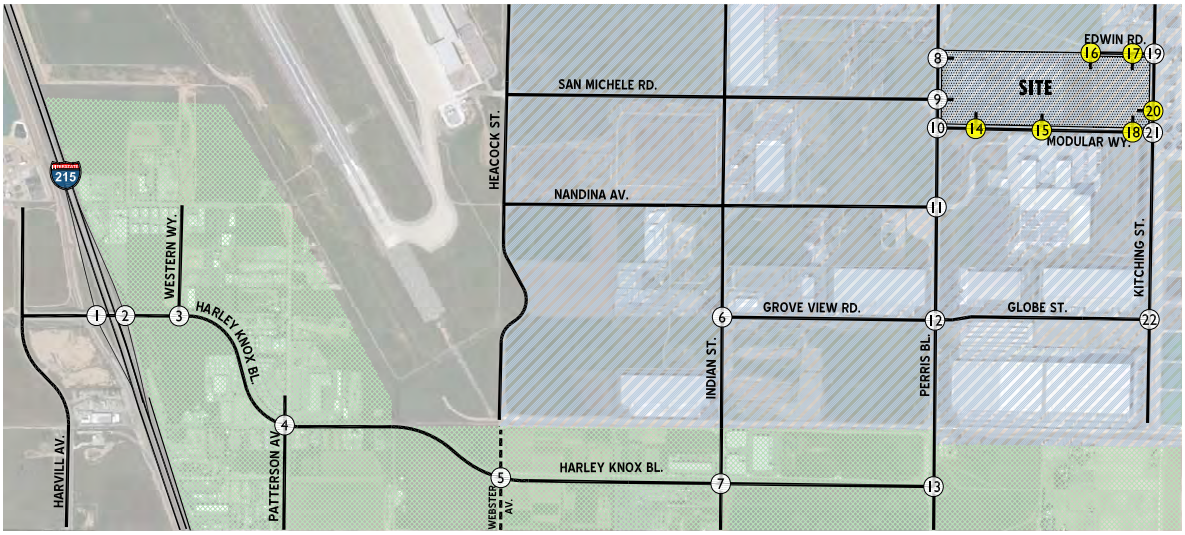
LEGEND:

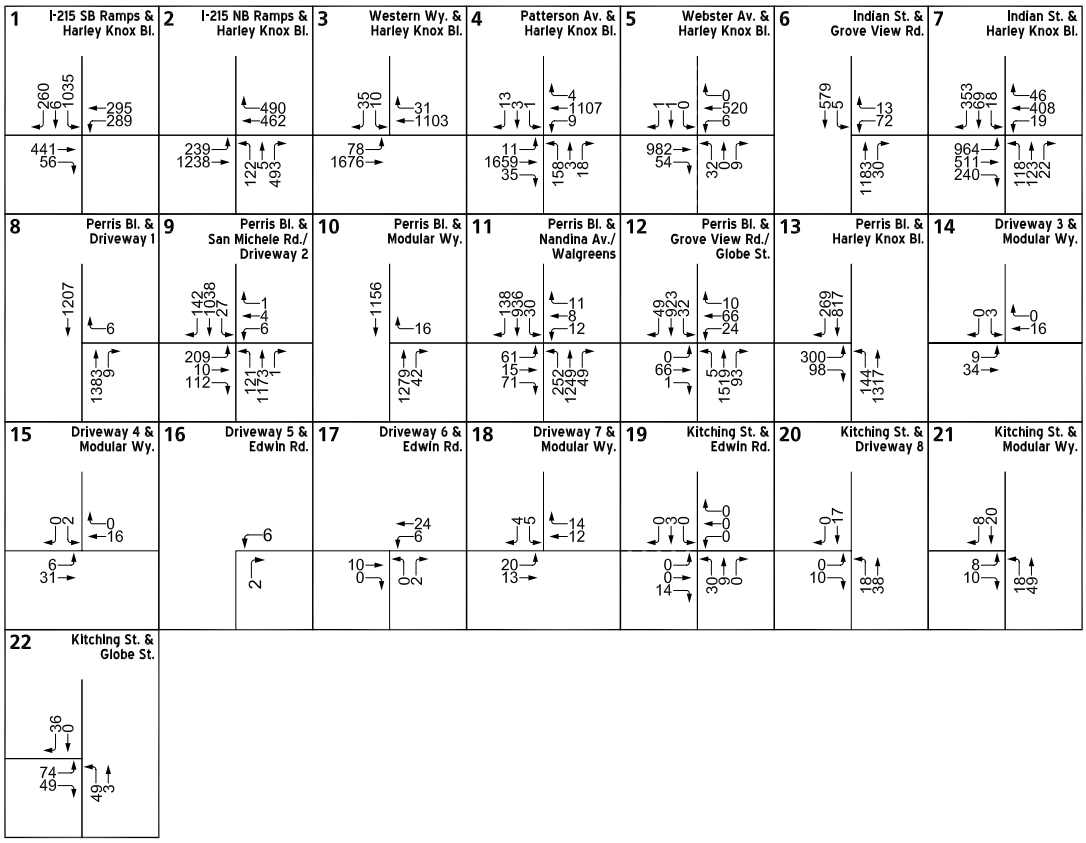
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-23
Opening Year (2018) with Project Average Daily Traffic



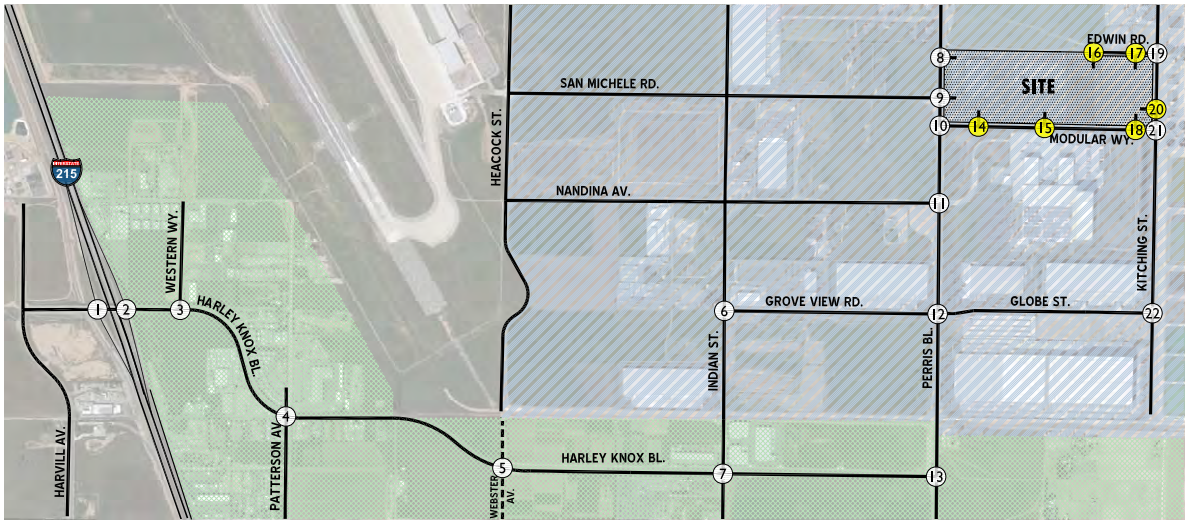


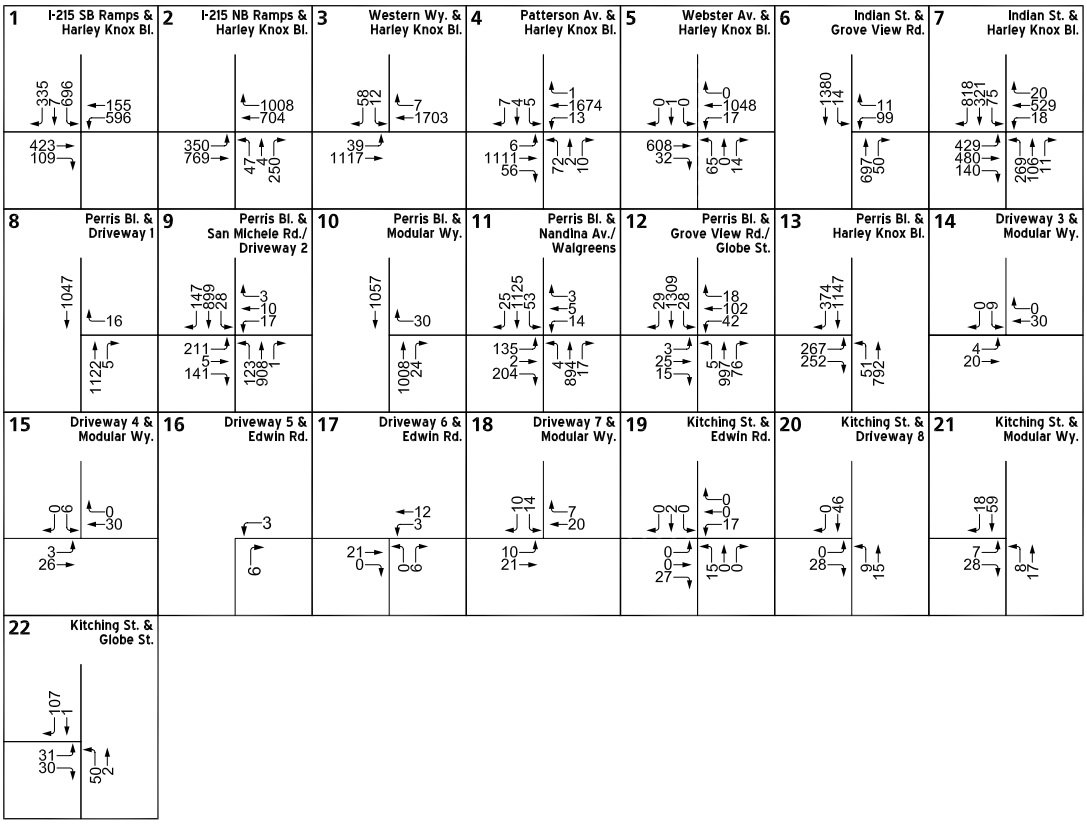
Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-24

Opening Year (2018) with Project Intersection Volumes - AM Peak Hour





Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-25

Opening Year (2018) with Project Intersection Volumes - PM Peak Hour

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines §15126[b]). As described in detail in Section 4.0 of this EIR, the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after implementation of relevant standard conditions of approval, compliance with applicable regulations, and application of feasible mitigation measures. The significant impacts that cannot be mitigated to a level below significant consist of the following:

- Air Quality Thresholds 2 and 3: Significant and Unavoidable Direct and Cumulatively Considerable Impact. After the application of feasible mitigation measures, Project-related operational emissions of NO_X would remain above regional significance thresholds. Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards and beyond the direct control of the Project Applicant and/or future tenants of the Project site. In addition, the Project's long-term emissions of NO_X would cumulatively contribute to an existing air quality violation in the SCAB (i.e., NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and state ozone concentrations).

- Greenhouse Gas Emissions Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (i.e., trucks and cars). The application of mitigation measures would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions, which comprise more than 90 percent of the Project's total GHG emissions. Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley.

- Noise Thresholds 1, 3, and 4: Significant and Unavoidable Cumulatively Considerable Impact. Although mitigation measures would reduce construction-related noise levels, there are no feasible measures to ensure that sensitive receptors in the Project's vicinity would not be significantly impacted by cumulative construction noise if other construction projects occur simultaneously with the Project and cause noise levels at sensitive receptors to exceed 65 dBA Leq. The nearest sensitive receptor (a non-conforming residential structure) is located approximately 240 feet to the northwest of the Project site.

- Transportation/Traffic Threshold 1: Significant and Unavoidable Cumulatively Considerable Impact. The addition of Project-related traffic to the existing and planned circulation

network would make a cumulatively considerable contribution to deficient operating conditions at seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions. The Project would mitigate its cumulatively considerable contribution to these impacts through payment of fees pursuant to the Moreno Valley DIF and TUMF; however, because improvements to the affected facilities may not be in place before the Project becomes operational, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, until planned improvements are implemented. Additionally, the Project would have a cumulatively considerable long-term impact at the intersections of Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard, which require improvements beyond those currently identified in the NPRBBD.

- Transportation/Traffic Threshold 2: Significant and Unavoidable Cumulatively Considerable Impact. The proposed Project would contribute traffic trips to congested freeway mainline segments in the Southern California region, including four (4) mainline segments of I-215 and one (1) mainline segment of SR-91, where the Project's contribution of traffic would be cumulatively considerable. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. There is no mitigation program offered by Caltrans for state highway freeway segments significantly impacted by the Project. The Harley Knox/I-215 interchange is scheduled for improvements funded by the TUMF program, but the interchange is not scheduled to be improved before the proposed Project is expected to become operational.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines §15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources are not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of the proposed Project, but development of the Project site as proposed is not expected to negatively affect the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), compliance with which reduces a building operation's energy volume that is produced by fossil fuels.

Implementation of the proposed Project would result in the commitment of future generations to one logistics warehouse building on the proposed Project site. Surrounding the Project site, several large-scale industrial and warehouse buildings have been developed and there are several approved development projects in this area that are pending construction. As demonstrated in the analysis presented throughout EIR Section 4.0, long-term operation of the proposed Project would not result in significant physical environmental effects to nearby properties. Although the Project would cause or contribute to significant unavoidable impacts associated with air quality (direct and cumulatively considerable), greenhouse gas emissions (cumulatively considerable), noise (cumulatively considerable), and transportation/traffic (cumulatively considerable), as previously summarized in Subsection 5.1, these effects would not commit surrounding properties to land uses other than the uses currently planned by the City of Moreno Valley General Plan and the MVIAP.

As concluded in EIR Subsection 5.4.2, below, the Project would be required to comply with federal, state, and local regulations related to hazardous materials, which would ensure that construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

As previously disclosed in Section 3.0, *Project Description*, the proposed Project's electricity demand would be 3,754,906 kWh/yr and the Project's natural gas demand would be 2,374,070 kBTU/year. To reduce the Project's energy needs and fossil fuel consumption, and thereby reduce air emissions, the Project is required to ensure mandatory compliance with applicable regulatory requirements imposed by the State of California and the SCAQMD (as summarized in EIR Subsections 4.2 and 4.6), which would reduce the Project's level of demand for energy resources. Therefore, the proposed Project would not result in the wasteful use of energy or the consumption of resources that are not justified based on the scale of the proposed Project.

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which the proposed Project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines §15126.2(d)). New employees and new residential populations represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environs where population growth results in increased demand for service and commodity markets responding to the new population. Economic growth would likely take place as a result of the proposed Project's operation as a logistics warehouse building, but the intensity of economic growth would occur consistent with planned growth identified in the City of Moreno Valley General Plan and in the General Plans of adjacent jurisdictions. The Project is consistent with land use designations assigned to the property by the City of Moreno Valley General Plan and the MVIAP.

Further, the Project is consistent with SCAG's *2012-2035 Regional Transportation Plan/ Sustainable Communities Strategy* (*RTP/SCS*), and particularly the chapter titled "Goods Movement" that is applicable to the proposed Project. The *RTP/SCS* states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. The "Goods Movement" chapter of the *RTP/SCS* states that goods movement and freight transportation are essential to supporting the SCAG regional economy and quality of life. According to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. The report goes on to state that unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of space of approximately 227 million square feet will occur (SCAG 2013 4-39). Thus, the proposed Project helps to fill a regional need for warehouse space and accommodates projected growth and the Southern California economy, rather than inducing growth.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Southern California Association of Governments (SCAG). Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

Development of the Project site with a logistics warehouse building may entice the development of surrounding parcels designated for industrial development and that are currently undeveloped. However, these surrounding properties already are planned for long-term development with business park/industrial land uses by the City of Moreno Valley General Plan and the MVIAP and implementation of the proposed Project would not directly promote growth on these adjacent and surrounding properties. Because development on nearby parcels would be consistent with the City's General Plan and the MVIAP, growth-inducing impacts of the Project would be less than significant. The Project is not expected to induce growth or land use changes on other parcels in the vicinity, as other lands surrounding the site are either already developed or planned to be developed consistent with their General Plan and MVIAP land use designations.

Projected growth quantifications for the Project are most meaningful for the geographic area covered by the Western Riverside Council of Governments (WRCOG). This area includes the cities of Banning, Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, Temecula, Wildomar, as well as portions of unincorporated Riverside County. The most recent growth forecasts for the WRCOG area is reflected below in Table 5-1, *Western Riverside County Growth Forecasts, 2010-2035*. Because the Project is consistent with the City of Moreno Valley General Plan it is also consistent with the growth forecasts summarized in Table 5-1, as the forecasts considered buildout of the City General Plan.

Table 5-1 Western Riverside County Growth Forecasts, 2010-2035

CATEGORY	YEAR 2010	YEAR 2020	YEAR 2035
Population	1,741,597	2,140,500	2,749,200
Households	525,018	667,500	881,300
Employment	434,126	750,000	1,002,000

Source: Western Riverside County Council of Governments "Western Riverside County Growth Forecasts 2010-2035" (adopted Fall 2011).

"Jobs-to-housing ratio" measures the extent to which job opportunities in a given geographic area are sufficient to meet the employment needs of area residents. However, as noted in the City's General Plan, "The land use plan allows for an adequate number of jobs to meet the needs of local residents" (Moreno Valley 2006a 2-6). The proposed Project would attract new businesses to the Project site that would provide jobs to the Project area; therefore, the proposed Project is likely to assist the City in improving the jobs-housing ratio, depending on the number of persons that the proposed Project's tenant would employ.

Indirect growth-inducing impacts at the local level result from a demand for additional goods and services associated with the increase in people in the area, including employees. This occurs in suburban or rural environments where population growth results in increased demand for service and commodity markets responding to the new population. This type of growth is, however, a regional phenomenon resulting from introduction of a major employment center or regionally significant housing project. The implementation of the proposed Project would result in indirect growth-inducing impacts of the region, but not beyond that which is already envisioned by the City of Moreno Valley General Plan.

5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT AS PART OF THE INITIAL STUDY PROCESS

CEQA Guidelines §15128 requires that an EIR:

> *"…contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."*

An Initial Study was prepared for the proposed Project, which is included as *Technical Appendix A* to this EIR. Through the Initial Study process, the City of Moreno Valley determined that the proposed Project could potentially cause adverse effects, and an EIR is required. Nine (9) environmental issues were found not to have the potential to cause significant adverse effects: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. Therefore, these issue areas are not required to be discussed in Section 4.0, *Environmental Analysis*, of this EIR. A brief summary of issues found not to be significant is presented below, with a more detailed analysis provided in *Technical Appendix A*.

5.4.1 AGRICULTURAL RESOURCES

The Project site is not used for agriculture. The Project site contains lands classified as "Farmland of Local Importance," "Other Land," and "Urban and Built-Up Land" by the Farmland Mapping and Monitoring Program (FMMP) and does not contain any soils mapped by the California Department of Conservation as "Prime Farmland," Unique Farmland," or "Farmland of Statewide Importance." As such, a significant impact due to the conversion of important farmland types would not occur with implementation of the Project.

The Project site is not within an agricultural preserve, nor is it subject to a Williamson Act contract. Under existing conditions, the Project site contains an approximately 38-acre industrial development (stone and manufactured stone products) and approximately 13 acres of undeveloped land that receives routine maintenance for fire fuel management and weed abatement. Lands surrounding the proposed Project site are not used for agricultural production and include undeveloped lands, warehouse distribution land uses, commercial land uses, and the Moreno Valley Regional Water Reclamation Facility. The Project site is zoned for industrial land uses and the immediate surrounding area is similarly zoned. Because the Project site is not located in or adjacent to an agricultural preserve and because neither the Project site nor any immediately surrounding property is zoned for agricultural use, the proposed Project would not conflict with an existing agricultural use, zoning, or a Williamson Act contract.

The Project site does not contain forest land, and no forest land is located adjacent to or within the vicinity of the Project site. Furthermore, no portion of the proposed Project site or surrounding area is zoned for forest land or timberland. Accordingly, the Project has no potential to result in the loss of forest land or convert forest land or a non-forest use.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Agricultural Resources.

5.4.2 HAZARDS AND HAZARDOUS MATERIALS

A Phase 1 Environmental Assessment was prepared for the Project site by Kennedy/Jenks Consultants (refer to *Technical Appendix J* to this EIR). No evidence of past or current usage, storage, or disposal of large quantities of hazardous materials was observed on the property during a survey of the site. The current tenant of the site (Eldorado Stone) stores and uses small quantities of chemicals in their warehouse operations, which would be removed with implementation of the proposed Project. Kennedy/Jenks did not report any environmental concerns and stated that no further hazardous materials testing of the property is required.

During construction of the proposed Project, a limited amount of hazardous materials would be transported to, stored, and used on the property (fuel, paint, etc.), that are typical in a construction operation and do not create a significant hazard to the public or environment. The specific business or tenant that will occupy the Project's proposed building is not known at this time. The Project site is located within the MVIAP, and is designated for "Industrial" land uses. Based on the list of land uses permitted in the MVIAP's Industrial zone, it is possible that hazardous materials could be used during the course of daily operations. Future tenant(s) are required to comply with all federal, state, county, and local hazardous materials regulations, as overseen and enforced by the California Department of Toxic Substances Control, the Riverside County Department of Environmental Health

and the Moreno Valley Fire Department. Furthermore, the City of Moreno Valley Fire Prevention Bureau requires the issuance of a permit to store, dispense, use or handle hazardous material; to conduct processes which produce conditions hazardous to life or property; or to install equipment used in connection with such activities. Each application for a permit is required to include a hazardous materials management plan (HMMP). With mandatory adherence to federal, state, county, and local requirements associated with hazardous material transport, storage, and use, the proposed Project would not create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials.

The nearest school facility is the El Potrero Elementary School, located approximately 0.35-mile to the northeast of the Project site. There are no existing or planned school sites within one-quarter mile of the Project site. Accordingly, the proposed Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

According to the California Department of Toxic Substances Control's "EnviroStor" database, the proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, the proposed Project would not result in a significant hazard to the public or environment.

The Project site is located approximately one mile east of the March Air Reserve Base. Pursuant to the March Air Reserve Base Compatible Use Zone Study commissioned by the United States Air Force and as depicted on Figure 6-5, *Air Crash Hazards*, of the Moreno Valley General Plan, the Project site is not located within a zone subject to hazards related to air crashes. According to the March ARB/Inland Port Airport Joint Land Use Study (March Joint Powers Authority 2010), the Project site is located within arrival and departure flight tracts at altitudes between 4,000 and 10,000 feet and is located outside of areas mapped as subject to airport-related noise impacts. The property is located in Compatibility Zones D and E. Zone D indicates that property is subject to noise and risks associated with aircraft operations, but the impacts are sufficiently minimal that land use restrictions are generally unnecessary. Zone E indicates occasional overflights, with low noise and safety impacts. Accordingly, implementation of the proposed Project would not result in a safety hazard for people residing or working in the Project area.

There are no private airfields or airstrips in the vicinity of the Project site. Because no private airports are located nearby, the potential for the proposed Project to result in a safety hazard would not occur.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the proposed Project would be required to maintain adequate emergency access for emergency vehicles as required by the City. Because the proposed Project would not interfere with an adopted emergency response or evacuation plan, the potential for the proposed Project to impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan would not occur.

Pursuant to Figure 5.5-2, *Floodplains and High Fire Hazard Areas*, of the City of Moreno Valley General Plan EIR, the Project site is not located within a high wildfire hazard area. The Project site is located in an area that has been largely developed and is surrounded on all sites by either

developed properties or paved roads. No wildlands are located on or adjacent to the Project site. Accordingly, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Hazards and Hazardous Materials.

5.4.3 HYDROLOGY AND WATER QUALITY

Redevelopment of the Project site as proposed by the Project would involve demolition, clearing, grading, paving, utility installation, building construction, and landscaping activities, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures. Pursuant to the requirements of the Santa Ana Regional Water Quality Control Board and the City Moreno Valley, the Project would be required to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a Storm Water Pollution Prevention Program (SWPPP) for construction-related activities, including grading. The SWPPP would specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. With mandatory compliance with the SWPPP, the proposed Project would not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant.

The Project also would be required to implement a Water Quality Management Plan (WQMP), pursuant to the City of Moreno Valley requirements (Municipal Code §8.10), which would be incorporated as part of the conditions of approval for the Project. The WQMP is a post-construction management program that ensures the on-going protection of the watershed basin by requiring structural and programmatic controls. A preliminary WQMP has been prepared for the proposed Project by Albert A. Webb Associates and is on file with the City of Moreno Valley (and also included as *Technical Appendix E2* to this EIR). The WQMP identifies structural controls (including two water quality/detention basins) and programmatic controls (including maintenance requirements, educational materials for tenants/occupants, common area litter control, etc.) to minimize, prevent, and/or otherwise appropriately treat storm water runoff flows before they are discharged from the site. Mandatory compliance with the WQMP would ensure that the Project does not violate any water quality standards or waste discharge requirements during long-term operation. Therefore, water quality impacts associated with post-development activities would be less than significant.

As depicted on Figure 5.7-2, Groundwater Basins, of the City of Moreno Valley General Plan EIR, the Project site is located within the Perris North Groundwater Basin. There are few domestic uses

for groundwater within the City, due to salinity/water quality issues, and the City primarily relies on imported water from EMWD for its domestic water supply. The Project does not propose the installation of any water wells that would directly extract groundwater; however, the increase in impervious surface cover that would occur with redevelopment of the site could reduce the amount of water percolating down into the underground aquifer that underlies the Project site and a majority of the City (although the Project's proposed water quality/detention basin would allow for some infiltration/groundwater recharge). However, and as noted in the City's General Plan EIR (Page 5.7-12), "the impact of an incremental reduction in groundwater would not be significant as domestic water supplies are not reliant on groundwater as a primary source." With buildout of the Project, the local groundwater levels would not be adversely affected. Therefore, impacts to groundwater supplies and recharge would be less than significant.

The Project would involve mass grading of the site, which would nominally alter the existing drainage pattern. Under existing conditions, runoff from the developed portions of the property sheet flow into an on-site detention basin. After implementation of the proposed Project, runoff from developed portions of the property would also flow into an on-site detention basin which would allow settling/infiltration. As such, there would not be any significant increases in erosion or siltation on- or off-site. In addition, the proposed Project is required to implement BMPs via a SWPPP and WQMP to minimize the discharge of pollutants in stormwater, including silt and soil from erosion. Therefore, impacts would be less than significant.

The proposed Project would not substantially alter the existing drainage patterns of the site. Under existing conditions, runoff from the developed portions of the Project site flow into an on-site detention basin. Upon implementation of the proposed Project, runoff would also flow into an on-site detention basin. Flooding on- or off-site would not occur due to the proposed construction of on-site detention basins and storm drain facilities because these proposed facilities would attenuate the rate and volume of storm water discharge to be similar to the rate and volume that occurs under existing conditions. As a result, implementation of the proposed Project would not increase the potential for flooding on- or off-site; therefore, impacts would be less than significant.

The proposed Project is required to be designed to ensure that post-development runoff rates and volumes closely resemble those that occur under existing conditions. Because the Project would attenuate the discharge of storm water from the Project site to match existing conditions, existing off-site storm water drainage facilities that receive storm water runoff from the Project site have adequate capacity to convey storm water runoff discharged from the Project. Further, the Project's storm water drainage plan is subject to review by Riverside County Flood Control and Water Conservation District (RCFCWCD) to ensure that proposed development/improvements are consistent with the local drainage master plan. The former property owner paid fees to the Riverside County Flood Control and Water Conservation District for the Perris Valley Storm Drain when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Because existing and planned storm drain facilities have sufficient capacity to convey runoff from the Project site, the Project would not create or contribute runoff which would exceed the capacity of any existing or planned storm water drainage system. With compliance with the Project's WQMP, which identifies BMPs to be incorporated into the Project to ensure that long-term operation of the proposed Project does not result in substantial amounts of polluted runoff, impacts would be less than significant. In addition, the Project would be required to comply with the requirements of the City of Moreno Valley's NPDES permit, which would reduce the amount of

sediment in runoff discharged from the site during grading and construction activities. Accordingly, the proposed Project would not create or contribute substantial additional sources of polluted runoff. Impacts would be less than significant.

There are no conditions associated with the proposed Project beyond that which is described above that could result in the substantial degradation of water quality. Accordingly, impacts are less than significant.

The proposed Project does not include housing. Therefore, there is no potential for housing to be located within a 100-year flood hazard zone and no significant impacts would occur from implementing the proposed Project.

According to Figure 5.5-2, *Floodplains and High Fire Hazards*, of the Moreno Valley General Plan EIR, and City of Moreno Valley General Plan Figure 6-4, *Flood Hazards*, the proposed Project site is not located within or adjacent to a 100-year floodplain. As such, the proposed Project has no potential to place structures within a 100-year flood hazard area that could impede or redirect flood flows. Accordingly, a significant flood hazard would not occur with implementation of the proposed Project.

The nearest dam to the Project site, Lake Perris, is located approximately 1.2 miles east of the subject property. According to Figure 5.5-2, *Floodplains and High Fire Hazards*, of the Moreno Valley General Plan EIR, and City of Moreno Valley General Plan Figure 6-4, *Flood Hazards*, the Project site and surrounding areas are not subject to dam inundation hazards. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1430G, dated August 28, 2008, the entire Project site is prone to some degree of flooding during rare storm events from the Perris Valley Storm Drain Channel, which is located approximately 0.12-mile north and approximately 0.25-mile east of the Project site. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one (1) foot or drainage areas less than one (1) square mile. However, the Project is required to be constructed in accordance with all applicable building code requirement, which would preclude any significant injuries or the loss of life or property due to flooding. Accordingly, impacts are less than significant.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Hydrology and Water Quality.

5.4.4 LAND USE AND PLANNING

The Project site consists of approximately 50.84-acres of land, the majority of which is developed. Redevelopment of the Project site by the proposed construction and operation of a logistics warehouse building would not physically disrupt or divide the arrangement of an established community. The Project site is located in a developing area of the City of Moreno Valley that is designated for industrial development. The property is proposed to be redeveloped in accordance with its assigned General Plan and MVIAP land use designations. Properties adjacent to the Project

site have either been developed or are planned for long-term development with industrial land uses. Development of the proposed warehouse building on the subject property would not conflict with applicable land use plans, policies, or regulations, including the applicable goals of SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (refer to Table 5-2, below).

Table 5-2 Analysis of Consistency with SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts.
G2	Maximize mobility and accessibility for all people and goods in the region.	No inconsistency identified. EIR Subsection 4.8 evaluates Project-related traffic impacts and specifies the mitigation measures that would be imposed to ensure that roadway and intersection and intersection improvements needed to accommodate Project traffic volumes are implemented concurrent with proposed development.
G3	Ensure travel safety and reliability for all people and goods in the region.	No inconsistency identified. As disclosed in EIR Subsection 4.8, the Project would be compatible with existing and planned land uses, and there is no component of the Project that would result in a substantial safety hazard to motorists (refer to analysis under Threshold 4). Furthermore, EIR Subsection 4.8 specifies the mitigation measures that would be implemented by the Project to ensure that roadway and intersection improvements meet safety standards and operate as efficiently as is feasible.
G4	Preserve and ensure a sustainable regional transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would have no adverse effect on such planning or maintenance efforts.
G5	Maximize the productivity of our transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would be consistent with the City of Moreno Valley General Plan, which meets this goal to maximize productivity.
G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	No inconsistency identified. An analysis of the Project's environmental impacts is provided throughout this EIR, and mitigation measures are specified where warranted. Air quality is addressed in EIR Subsection 4.2, and mitigation measures have been incorporated to reduce, to the extent feasible, the Project's air quality impacts. Additionally, and as discussed in EIR Subsection 4.6, the Project would incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy. Additionally, sidewalks are already provided along the Project's frontage with Modular Way and Perris Boulevard.

Table 5-2 Analysis of Consistency with SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G7	Actively encourage and create incentives for energy efficiency, where possible.	No inconsistency identified. This policy provides guidance to City staff to establish local incentive programs to encourage and promote energy efficient development.
G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	No inconsistency identified. This policy provides guidance to City staff to establish a local land use plan that facilitates the use of transit and non-motorized forms of transportation. The Project is consistent with the existing City of Moreno Valley General Plan.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	No inconsistency identified. This policy provides guidance to City staff to monitor the transportation network and to coordinate with other agencies as appropriate.

Source: *SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy.* (Refer to the following web site for more information: http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf.)

The Project site does not provide access to established communities and would not isolate any established communities or residences from neighboring communities. Therefore, Project implementation would not physically divide an established community and no impact would occur.

The Project proposes to redevelop the subject property to accommodate a logistics warehouse building, which would be consistent with the "Business Park/Light Industrial" land use designation applied to the site by the General Plan and the "Industrial" zoning designation applied to the site by the MVIAP. As part of its review of the proposed Plot Plan application, the City of Moreno Valley will ensure consistency with applicable policies of the General Plan and MVIAP, and will ensure mandatory conformance with the City's Municipal Code requirements. As such, the Project would not conflict with applicable local land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effects and impacts would be less than significant.

As discussed in EIR Subsection 4.3, *Biological Resources*, the proposed Project is subject to the Western Riverside County MSHCP, which is the habitat conservation plan applicable to the City of Moreno Valley and the proposed Project site. The proposed Project is not located within any MSHCP-designated Criteria Cells or Cell Groups, and the proposed Project's impact area does not contain any riparian/riverine areas or vernal pools. The Project is subject to pre-construction surveys for the burrowing owl and mitigation measures are applied in Subsection 4.3 to ensure that the Project would comply with the MSHCP, including species-specific survey and conservation requirements for the burrowing owl. From a land use and planning perspective, the Project would not conflict with the Western Riverside County MSHCP because the property is not designated for conservation and would comply with all required species survey requirements.

For the reasons stated above, the proposed Project would result in less-than-significant impacts to Land Use and Planning.

5.4.5 MINERAL RESOURCES

The Project site is not located within an area known to be underlain by regionally- or locally-important mineral resources, or within an area that has the potential to be underlain by regionally- or locally-important mineral resources, as disclosed by the City of Moreno Valley General Plan and its associated EIR. Accordingly, implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. In addition, the City's General Plan does not identify any locally-important mineral resource recovery sites on site or within close proximity to the Project site. Accordingly, impacts to Mineral Resources would not occur.

5.4.6 POPULATION AND HOUSING

The proposed Project would develop the subject property with a logistics warehouse building in accordance with the "Business Park/Light Industrial" land use designations applied to the site by the City of Moreno Valley General Plan and the MVIAP. Accordingly, the Project would not result in growth that was not already anticipated by the City of Moreno Valley General Plan and evaluated in the City of Moreno Valley General Plan EIR. The Project site is served by existing public roadways and utility infrastructure is already installed beneath public rights of way that abut the property. As such, implementation of the Project would not result in substantial, unanticipated direct or indirect growth in the area that would increase the population beyond projections, and impacts are evaluated as less than significant.

The Project site does not contain any residential structures under existing conditions. Accordingly, implementation of the Project would not displace housing or people, and would not necessitate the construction of replacement housing elsewhere. Significant impacts would not occur.

Therefore, for the reasons stated above, the proposed Project would not result in a significant impact to Population and Housing.

5.4.7 PUBLIC SERVICES

Fire Protection

The Moreno Valley Fire Department (MVFD) provides primary fire protection services to the Project area from Station No. 91 (College Park) and Station No. 65 (Kennedy Park). Station 91 is located at 16110 Lasselle Street. Station 65 is located at 15111 Indian Street. A majority of the Project site is already developed and receives fire protection services, so redevelopment of the Project site as proposed would add minimal extra demand on the provision of service.

The MVFD's response time goal is to arrive at the scene of a fire in five (5) minutes, 90% of the time. Allowing one (1) minute for suit-up, the on-road travel time goal is four (4) minutes. To supplement their existing fire stations, the MVFD plans to construct a fire station within the MVIAP to provide primary service to all properties within the MVIAP and immediately adjacent areas. The MVFD has already acquired a property for the future fire station within the MVIAP area, on San Michele Road, between Perris Boulevard and Indian Avenue. Construction of the new fire station is dependent on funding collected by the City through the City of Moreno Valley's Development Impact Fee (DIF) Ordinance (Ordinance No. 695). This ordinance requires a fee payment prior to

the issuance of building permits that the City applies to the funding of public facilities, including fire protection facilities, vehicles and equipment.

The proposed Project is required to comply with Ordinance No. 695 and pay fees that would be allocated by the City toward the construction of the new fire station on San Michelle Road. Implementation of the Project would not directly trigger the need to construct the new fire station, but would cumulatively contribute toward both the need for the new station and the City's ability to move forward with its construction as DIF fees are collected from building permit applicants throughout the City. The City and MVFD have a constitutional obligation to provide adequate fire protection services within its service area. The construction and operation of a new fire station on a property owned for such purpose by the MVFD is not the responsibility of the proposed Project and the City has already analyzed the programmatic impacts of the proposed fire station in its General Plan EIR (certified July 11, 2006) and in the environmental assessments prepared in connection with the City's Capital Improvement Program on which the City's DIF Ordinance is based. Further, should the new fire station not be operational before the proposed Project is constructed, there is no basis to conclude that potential dangers associated with response times that may exceed MVFD's five (5) minute response time goal would cause a substantial adverse effect to the environment or on human beings. The Project site is already developed and receives fire protection services. No physical impact beyond that already planned to serve existing and future development would occur. For these reasons, impacts associated with the provision of fire protection services are less than significant.

The proposed Project would be required to provide a minimum of fire safety and support fire suppression activities, including type of building construction, fire sprinklers, a fire hydrant system and paved access of the property, which would minimize the risk of fire on the subject property and maximize the MVFD's ability to provide fire protection services to the Project.

Police Protection

Because a majority of the property is developed under existing conditions, it already receives police protection services. No additional police protection service demand would occur as a result of the property's redevelopment as proposed by the Project. Accordingly, the proposed Project would not cause or contribute to the need for the construction of new or physically altered police facilities. Prior to the issuance of building permits, the Project Applicant would be required to comply with the provisions of the City of Moreno Valley's Development Impact Fee Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including police facilities. The former property owner paid DIF fees when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Based on the foregoing, the proposed Project would receive adequate police protection service, and would not result in the need for new or physically altered police protection facilities. Impacts to police protection facilities are therefore evaluated as less than significant.

Public Schools

The Project would not create a direct demand for public school services, as the subject property would be developed solely with a logistics warehouse building and would not generate any school-aged children requiring public education. The addition of intensification of employment-generating

uses on the Project site would assist in the achievement of the City's goal to provide a better jobs/housing balance within the City and the larger western Riverside County region. Thus, the Project is not expected to draw new residents to the region and would therefore not indirectly generate additional school-aged students requiring public education. Because the Project would not directly generate students and is not expected to indirectly draw students to the area, the proposed Project would not result in the need to construct new or physically altered public school facilities. Regardless, the Project Applicant would be required to contribute development impact fees to the Val Verde Unified School District, in compliance with California Senate Bill 50 (Greene). Mandatory payment of school fees would be required prior to the issuance of building permits. The former property owner paid school fees to the Val Verde Unified School District when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Project-related impacts to public schools are evaluated as less than significant.

Parks and Recreation Facilities

As discussed in Subsection 5.4.8, below, the proposed Project would not create a demand for public park facilities and would not result in the need to modify existing or construct new park facilities. Accordingly, implementation of the Project would not adversely affect any park facility and impacts are regarded as less than significant.

Other Public Facilities

The proposed Project would not result in a demand for other public facilities/services, including libraries, community recreation centers, or animal shelters. As such, implementation of the Project would not adversely affect other public facilities or require the construction of new or modified facilities.

For the reasons stated above, the proposed Project would result in less-than-significant impacts to Public Services.

5.4.8 RECREATION

The Project proposes to redevelop the site with one logistics warehouse building. The Project does not propose any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Accordingly, implementation of the Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park.

The Project does not propose to construct any new on- or off-site recreational facilities and would not expand any existing off-site recreational facilities. Therefore, adverse environmental impacts related to the construction or expansion of recreational facilities would not occur with implementation of the Project.

As such, implementation of the proposed Project would not result in any significant impacts associated with Recreation.

5.4.9 UTILITIES AND SERVICE SYSTEMS

Wastewater service is provided to the Project site by Eastern Municipal Water District (EMWD). EMWD is required to operate all of its treatment facilities in accordance with the waste treatment and discharge standards and requirements set forth by the Regional Water Quality Control Board (RWQCB). The proposed Project would not install or utilize septic systems or alternative wastewater treatment systems; therefore, the Project would have no potential to violate the applicable wastewater treatment requirements established by the RWQCB.

The proposed Project would require the installation of water and wastewater conveyance lines to serve the proposed logistics warehouse building and connect to existing, off-site facilities in the abutting public roadways. With the exception of new on-site water and sewer service lines, the Project would not create the need for any new or expanded water or wastewater facility (such as treatment facilities, storage tanks, pump stations or trunk sewers). The construction of on-site water and sewer lines would result in physical impacts to the surface and subsurface of the Project site (with small encroachments into adjacent public rights-of-way of developed/paved streets); however, these impacts are considered to be inherent to the Project's construction phase and are evaluated throughout this EIR accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this EIR, as feasible. There would be no significant environmental effects created particular to water or sewer line installation.

The proposed Project would require the construction of a stormwater drainage conveyance system on the Project site to serve the proposed logistics warehouse building, parking areas, and other site features, but would not require any improvements to regional storm drain facilities. The construction of on-site stormwater drainage facilities would result in physical impacts to the surface and subsurface of the Project site (with small encroachments into adjacent public right-of-way of developed/paved streets); however, these impacts are considered to be inherent to the Project's construction phase and are evaluated throughout this EIR accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this EIR, as feasible. There would be no significant environmental effects created particular to the construction of stormwater drainage facilities.

EMWD is responsible for supplying potable water to the Project site and the region. As discussed in EMWD's *2010 Urban Water Management Plan*, adequate water supplies are projected to be available to meet EMWD's estimated water demand in all types of climate conditions in all types of climate conditions for at least the next 22 years (Eastern Municipal Water District 2011 pp. 30-31). EMWD projections for future water demand are based on population projections of the Southern California Association of Governments (SCAG), which rely on the adopted land use designations contained within the general plans that cover the geographic area of EMWD's service area. The proposed Project is consistent with the "Business Park/Light Industrial" land use designation applied to the subject property by the City of Moreno Valley General Plan. As such, development of the Project site with industrial uses such as those proposed by the Project has already been assumed by the EMWD in its projections of future water supply and demand. Furthermore, EMWD has prepared a water supply assessment for the proposed Project (included as *Technical Appendix I* to this EIR) to assess the ultimate effect of the Project's water demands and service needs. The water supply assessment was prepared in accordance with Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221).

As documented in *Technical Appendix I*, EMWD estimates the Project would generate an annual water volume of 38.03 acre-feet. Based on a review of existing and anticipated future water supplies and demands, EMWD has determined that adequate water supplies are available to service proposed development (see *Technical Appendix I)*. Accordingly, sufficient water supplies are available to serve the Project and implementation of the Project would not require any new or expanded water entitlements. The Project's effect to EMWD's water network would be less than significant.

Wastewater flows generated by the Project would be conveyed to the Perris Valley Regional Water Reclamation Facility, which is owned and operated by EMWD. In April 2014, an expansion project was completed on the Perris Valley Regional Water Reclamation Facility to expand its daily treatment capacity from 14 million gallons per day to 22 million gallons per day to provide sufficient treatment for anticipated regional growth. The facility receives approximately 14 million gallons of wastewater flows per day and, therefore, has an excess treatment capacity of approximately 8 million gallons per day (Schulte 2014). The Project is anticipated to generate 43,295 gallons of wastewater per day (Raines 2014). This generally corresponds to approximately five-tenths of one percent (0.5%) of the existing treatment capacity at the Perris Valley Regional Water Reclamation Facility. Due to the relatively small amount of wastewater that would be generated by proposed Project and the amount of existing and planned available capacity at this facility, it is determined that the Perris Valley Regional Water Reclamation Facility would have sufficient capacity to treat wastewater generated by the Project. Impacts would be less than significant.

Implementation of the proposed Project would generate solid waste requiring off-site disposal during short-term construction and long-term operational activities. Waste generated by the construction process would primarily consisting of demolition debris, discarded materials and packaging. Based on a proposed building area of 1,109,378 square feet and a construction waste generation factor of 4.34 pounds per square foot, approximately 38,240 tons of waste would be generated over the course of the construction phase. The Project would be required to comply with City of Moreno Valley Ordinance No. 706, which requires a minimum of 50 percent of all construction waste and debris to be recycled. According to the Project Applicant's construction contractor, approximately 97 percent of the waste generated during the Project's construction phase (approximately 37,712 tons) would either be processed and re-used on-site or recycled (Molle 2013). During long-term operation of the Project, it is estimated that approximately 1.42 pounds of waste would be generated for every 100 square feet of building area (utilizing waste generation rates from CalRecycle), which would correlate to approximately 7.9 tons of waste per day. Solid waste generated by the proposed Project would be disposed at the El Sobrante Landfill (which received approximately 42,336 tons of waste per week during the first quarter of 2014 and has a permitted disposal capacity of 70,000 tons per week), the Badlands Sanitary Landfill (which received approximately 1,994 tons of waste per day during the first quarter of 2014 and has a permitted disposal capacity of 4,000 tons per day), and/or the Lamb Canyon Sanitary Landfill (which received approximately 1,634 tons of waste per day during the first quarter of 2014 and has a permitted disposal capacity of 5,000 tons per day) (Riverside County Waste Management Department 2014). As described above, each of these landfills receive well below their maximum permitted daily disposal volume. Furthermore, each of these landfills have the potential for future expansion and none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction or operational periods – the El Sobrante Landfill has sufficient available capacity until at least 2045, the Badlands Sanitary Landfill has sufficient available capacity until at least 2024, and the Lamb Canyon Sanitary Landfill has sufficient available capacity until at least 2021. (CalRecycle 2014)

Accordingly, the Project would be served by landfills with sufficient available capacity to accept waste generated by the Project. Impacts would be less than significant.

The Project would be required to comply with the City of Moreno Valley's waste reduction programs, including recycling and other diversion programs to divert the amount of solid waste deposited in landfills. As such, the Project applicant or master developer would be required to implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would provide adequate areas for collecting and loading recyclable materials where solid waste is collected. Additionally, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future tenant(s) of the proposed Project would be required to arrange for recycling services, if the tenant generates four (4) or more cubic yards of solid waste per week. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

Regarding energy, the Project would not result in a wasteful or inefficient use of energy either during Project construction or operation. During Project operation, the Project would demand approximately 3,574,906 kilowatt hours of electricity per year. There is no aspect of the Project that would result in an energy demand higher than is typical of for similar industrial warehousing buildings in southern California. In addition to mandatory compliance with the California Building Standards Code, several energy efficiency features have been incorporated into the Project's design as described in EIR Section 3.0, Project Description, EIR Section 4.2, Air Quality, and EIR Section 4.6, Greenhouse Gas Emissions.

For the reasons stated above, the proposed Project would result in less than significant impacts to Utilities and Service Systems.

6.0 ALTERNATIVES TO THE PROPOSED PROJECT

State CEQA Guidelines §15126.6(a) indicates the scope of alternatives to a proposed project that must be evaluated:

> "*An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*"

As discussed in Section 4.0 of this EIR, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are:

- Air Quality Thresholds 2 and 3: Significant and Unavoidable Direct and Cumulatively Considerable Impact. After the application of feasible mitigation measures, Project-related operational emissions of NO_X would remain above regional significance thresholds. Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards and beyond the direct control of the Project Applicant and/or future tenants of the Project site. In addition, the Project's long-term emissions of NO_X would cumulatively contribute to an existing air quality violation in the SCAB (i.e., NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and state ozone concentrations).

- Greenhouse Gas Emissions Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (i.e., trucks and cars). The application of mitigation measures would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions, which comprise more than 90 percent of the Project's total GHG emissions. Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley.

- Noise Thresholds 1, 3, and 4: Significant and Unavoidable Cumulatively Considerable Impact. Although mitigation measures would reduce construction-related noise levels, there are no feasible measures to ensure that sensitive receptors in the Project's vicinity would not be significantly impacted by cumulative construction noise if other construction projects occur simultaneously with the Project and cause noise levels at sensitive receptors to exceed 65 dBA Leq. The nearest sensitive receptor (a non-conforming residential structure) is located approximately 240 feet to the northwest of the Project site.

- Transportation/Traffic Threshold 1: Significant and Unavoidable Cumulatively Considerable Impact. The addition of Project-related traffic to the existing and planned circulation network would make a cumulatively considerable contribution to deficient operating conditions at seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions. The Project would mitigate its cumulatively considerable contribution to these impacts through payment of fees pursuant to the Moreno Valley DIF and TUMF; however, because improvements to the affected facilities may not be in place before the Project becomes operational, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, until planned improvements are implemented. Additionally, the Project would have a cumulatively considerable long-term impact at the intersections of Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard, which require improvements beyond those currently identified in the NPRBBD.

- Transportation/Traffic Threshold 2: Significant and Unavoidable Cumulatively Considerable Impact. The proposed Project would contribute traffic trips to congested freeway mainline segments in the southern California region, including four (4) mainline segments of I-215 and one (1) mainline segment of SR-91, where the Project's contribution of traffic would be cumulatively considerable. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. There is no mitigation program offered by Caltrans for state highway freeway segments significantly impacted by the Project. The Harley Knox/I-215 interchange is scheduled for improvements funded by the TUMF program, but the interchange is not scheduled to be improved before the proposed Project is expected to become operational.

CEQA Guidelines §15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services. This is considered to be the No Project Alternative. The No Project Alternative, described in detail below, is identified as the most environmentally superior alternative. CEQA requires that if the environmentally superior alternative is determined to be a No Project Alternative, then another environmentally superior alternative should be identified among the other alternatives, if the analysis indicates that significant impacts can be avoided by one or more of the other alternatives. Therefore, the Vacant Lot Development Alternative is identified as the environmentally superior alternative.

6.1 ALTERNATIVES UNDER CONSIDERATION

The following scenarios have been identified as potential alternatives to implementation of the proposed Project.

❑ No Project Alternative

The No Project Alternative considers no additional development on the Project site beyond that which occurs under existing conditions. This alternative was selected by the Lead Agency for the purpose of conducting a comparative analysis of the environmental effects of the proposed Project to the environmental effects of the No Project alternative which would leave the property in its existing condition. Under existing conditions a portion of the property is vacant and a portion of the property is developed with light industrial uses, outdoor storage areas, a large paved parking area, and a water quality/detention basin. If the proposed Project were not approved, it is reasonable to expect that the undeveloped portions of the property would remain vacant; however, the use of the e existing industrial warehouse building, industrial office building, outdoor storage areas, and large paved parking area would continue.

❑ Vacant Lot Development Alternative

The Vacant Lot Development Alternative would retain the existing light industrial land uses on the western portion of the property and would develop one (1) 200,000 s.f. building on the vacant, eastern portion of the property. For purposes of this analysis, the new 200,000 s.f. building was assumed to support as light-industrial land uses in accordance with the City of Moreno Valley General Plan and the MVIAP, and not high-cube warehouse as proposed by the Project. The Vacant Lot Alternative was selected for consideration by the Lead Agency to evaluate whether or not a less-intensive development proposal would reduce the Project's significant and unavoidable impacts to air quality, greenhouse gases, transportation/traffic, and noise.

❑ Small Buildings Alternative

The Small Buildings Alternative would develop two (2) 400,000 s.f. light industrial buildings on the Project site. This alternative would result in an approximately 28 percent reduction in building area as compared to the proposed Project, but would require additional surface parking area pursuant to the City of Moreno Valley's requirements for this building type. The land uses on the Project site under the Small Buildings Alternative would be similar to the proposed Project. This alternative was selected for consideration by the Lead Agency to compare the environmental effects of the proposed Project (one large building that is likely to attract one tenant) against the environmental effects of constructing multiple, smaller buildings that would generate fewer daily truck trips to determine if this alternative development scenario would reduce the Project's significant and unavoidable impacts to air quality, greenhouse gases, transportation/traffic, and noise.

❑ Reduced Project Alternative

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while

keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately 309,378 s.f. (or 28 percent) as compared to the proposed Project. The Reduced Project Alternative was selected by the Lead Agency to determine if a smaller building size would substantially reduce the Project's significant and unavoidable impacts associated to air quality, greenhouse gases, transportation/traffic, and noise.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines §15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines §15126.6(f) (1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. Alternative land uses for the property (residential, retail, mixed-use, etc.) were considered and rejected because these land uses are not consistent with the property's General Plan and MVIAP land use designations. An evaluation of alternative sites was rejected for the reasons described below.

❑ Alternative Sites

CEQA does not require that an analysis of alternative sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the *"key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR"* [CEQA Guidelines §15126.6(f) (2)].

The Project site is designated "Light Industrial" by the City of Moreno Valley General Plan. In addition to the General Plan, the site is also subject to the MVIAP. The MVIAP applies an

"Industrial" designation to the Project site and provides specific zoning designations and standards for development within its geographical boundaries and. The proposed Project is consistent with the land use designation applied to the property by the City of Moreno Valley General Plan and further detailed by the MVIAP. An examination of alternative sites is typically not necessary when a proposed development project is consistent with the applicable land use plan, because it can be reasonably assumed that development would ultimately occur in conformance with the applicable land use designation, whether by the Project Applicant or by others in the future. In cases where a proposed project is consistent with the applicable General Plan, the alternatives analysis should typically focus on options for developing the site consistent with adopted plan policies and the discussion of alternatives should search for an environmentally superior version of the project on the site instead of an alternative site.

The 50.84-acre Project site in its existing condition is mostly developed with industrial land uses, outdoor storage areas, paved parking areas, and a water quality/detention basin, with the exception of approximately 13 acres in the eastern portion of the subject property. The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. The site contains no sensitive vegetation communities or special-status plant species and is not located within an MSHCP Criteria Area. The property is generally flat with a topographic relief of approximately 14 feet with no unique topographic or geologic features.

The property is located in a portion of the City of Moreno Valley that is developing as a center for distribution warehousing and light industrial land uses. All undeveloped properties surrounding the proposed Project site are designated for industrial development pursuant to the City's General Plan and the MVIAP. Surrounding land use includes the following:

North: North of the Project site is Edwin Road and a property that is currently under construction to accommodate a large distribution warehouse building. As part of that construction process, Edwin Road is being extended to the west and will terminate in a cul-de-sac. To the north of the parcel under construction is the Perris Valley Storm Drain Channel.

South: Immediately to the south of the Project site is Modular Way, south of which is a distribution warehouse building occupied by Walgreens. Further south are additional distribution warehouse buildings, including but not limited to buildings occupied by Ross and Home Depot.

West: Perris Boulevard abuts the Project site to the west. West of Perris Boulevard are a collection of warehouse distribution buildings (including but not limited to buildings occupied by Harbor Freight Tools and O'Reilly Auto Parts), truck trailer parking yards, and small parcels that are either undeveloped or contain small commercial, industrial, or manufacturing structures intermixed with several non-conforming residential land uses.

East: To the east of the Project site lie Kitching Street and the Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD).

Based on a review of aerial photography, the City of Moreno Valley General Plan Land Use Plan Map, and a list of approved/pending development proposals within the City of Moreno Valley (refer to Figure 4.0-1, *Cumulative Development Location Map*, and Table 4-1, *Cumulative Project List*), there are no other available, undeveloped properties of similar size (i.e., approximately 50 acres) and similar zoning designation (i.e., "Business Park" or "Light Industrial") in the City of Moreno Valley.

If alternative sites located within the City of Moreno Valley not zoned for "Business Park" or "Light Industrial" land uses are considered, there would not be any site that would offer less developmental and environmental constraints, or fewer environmental impacts than the proposed Project site. Development of the Project in an alternate location would have similar impacts as would occur with implementation of the Project at its proposed location, with the potential for greater impacts. Alternative sites available for development likely would be vacant under existing conditions; any environmental effect resulting from development of a vacant, undeveloped property would be considered to be a "new" impact. The proposed Project site supports approximately 142,000 s.f. of light industrial land uses; therefore, the long-term operational environmental effects from redevelopment of the Project site are only considered to be a "new" impact once they exceed those impacts that occur on the Project site under existing conditions. Furthermore, all undeveloped land within the City of Moreno Valley similar in size to the Project site (i.e., approximately 50 acres) and not part of an approved/pending development proposal is located farther from major regional transportation routes (I-215 and local truck routes) than the Project site Therefore, operational impacts associated with traffic and vehicular noise and air emissions would be greater as the vehicles would need to travel farther distances on local roads to reach the state highway system. Therefore, redevelopment of the Project site as proposed by the Project would result in a smaller net increase of total development (and, potentially, environmental effects) in the local area than would result from the development of a vacant property.

In addition, according to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. The report goes on to state that unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of space of approximately 227 million square feet will occur (SCAG 2013 4-39). Thus, it is likely that selection of an alternative site would merely displace the development activity proposed by the Project to another location resulting in the same or greater environmental effects, given the regional demand for logistics and warehousing space in the SCAG region.

For these reasons, an alternative site analysis is not required for the proposed Project.

❑ Loading Bay Reposition Alternative

During public comment on this EIR's NOP, a member of the public suggested studying an alternative that does not include loading docks on the north side of the building. The City of Moreno Valley determined that such an alternative is not feasible and would not result in reduced environmental effects compared to the effects of the proposed Project.

Eliminating loading docks on the north side of the structure and placing them on other façades would result in no measureable improvement to the environment. To the immediate north of the Project site is a distribution warehouse structure under construction. The loading docks proposed by the Project are designed to face another warehouse and would be approximately 960 feet from the nearest residential home located north of the Perris Valley Storm Drain Channel. Industry research, including studies by the CARB and SCAQMD, show a 70% drop in DPM pollution levels from mobile sources (*i.e.*, vehicles) at a distance of 500 feet from roadways/freeways, and an 80% drop in DPM pollution levels from mobile sources at a distance of 1,000 feet from logistics center sites (Urban Crossroads 2014b 34). Furthermore, at a logistics warehouse building, loading bays (also called "docks") are used for the receiving of goods and the shipment of goods. It is standard industry practice to locate receiving docks and shipping docks on opposite sides of the building. Given the rectangular shape of the property and the building proposed by the Project, there is not enough linear space available on the east and west sides of the building to provide a sufficient number of dock doors to allow for the elimination of docks on the northern side of the structure. Therefore, the elimination of dock doors on the north side of the proposed structure is not feasible.

6.3 ALTERNATIVE ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. A conclusion is provided for each impact as to whether the alternative results in one of the following: (1) reduction or elimination of the proposed Project's impact, (2) a greater impact than would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-1 at the end of this section compares the environmental hazard and resource impacts of the alternatives with those of the proposed Project and identifies the ability of the Alternative to meet the basic objectives of the Project. As described in EIR Subsection 3.2, the proposed Project's basic objectives are:

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

6.3.1 NO PROJECT ALTERNATIVE

The No Project Alternative allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the property were to be unchanged from existing conditions for the foreseeable future. The 50.84-acre Project site in its existing condition is developed with industrial land uses, outdoor storage areas, paved parking areas, and a water quality/detention basin, with the exception of approximately 13 acres in the eastern portion of the subject property. The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. The site contains no sensitive vegetation communities or special-status plant species and is not located within an MSHCP Criteria Area. The property is generally flat with a topographic relief of approximately 14 feet with no unique topographic or geologic features. Refer to the description of the Project site's existing physical conditions in Section 2.0 of this EIR.

❑ **Aesthetics**

The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. Under existing conditions, the site is developed with two buildings, an outdoor storage area, a parking area, and sparse landscaping. The eastern portion of the Project site is largely developed and contains storage containers that have been vandalized. Under the No Project Alternative, the visual character and quality of the site would be maintained in its existing condition. No additional structures, landscaping, or sources of artificial light would be introduced on the property beyond that which occurs under existing conditions. Buildout of the site with proposed

Project would create a single, cohesive development that would utilize the entire site. The Project would be fully landscaped and would complete street improvements on surrounding roadways. Therefore, the proposed Project would have a higher aesthetic quality than this Alternative. Selection of this Alternative would result in greater aesthetic impacts than the proposed Project.

❑ Air Quality

As identified in EIR Subsection 4.2, the proposed Project would result in air quality emissions during Project construction and significant and unavoidable direct and cumulatively considerable unavoidable impacts to air quality due to NO_X emissions during long-term operational activities, primarily from mobile source emissions. Under the No Project Alternative, no new development would occur on the Project site; therefore, there would be no potential sources of increased short-term or long-term air pollutant emissions. Selection of this Alternative would avoid all of the proposed Project's short- and long-term air quality impacts.

❑ Biological Resources

The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. Under the No Project Alternative, the Project site would remain in its existing condition and the Project's potential impacts to the burrowing owl and nesting birds would not occur.

❑ Cultural Resources

The No Project Alternative would leave the property in its existing condition; no grading would occur under this Alternative and there would be no potential impacts to subsurface archeological or paleontological resources that may exist beneath the ground surface. Selection of this Alternative would avoid all site disturbances on the vacant portions of the property other than the routine weed abatement activities that occur under existing conditions.

❑ Geology and Soils

The No Project Alternative would result in no grading of the property; therefore, no impacts to geology or soils would occur. Because no new structures would be constructed, there would be no increased risks associated with seismic ground shaking or geologic hazards. Selection of this Alternative would avoid the Project's impacts to geology and soils. Neither the proposed Project nor the No Project Alternative would result in significant or cumulatively considerable impacts to geology and soils.

❑ Greenhouse Gas Emissions

As identified in EIR Subsection 4.6, the proposed Project would result in GHG emissions during Project construction and significant and unavoidable cumulatively considerable unavoidable GHG impacts during long-term operational activities, primarily from mobile source emissions. Under the No Project Alternative, no new development would occur on the Project site; therefore, there would be no potential sources of increased short-term or long-term GHG emissions. Selection of this

Alternative would avoid all of the proposed Project's short- and long-term effects associated with GHG emissions.

- **Noise**

Because no new development would occur on the site, there would be no new sources of stationary noise and no new traffic trips would be generated; thus, the No Project Alternative would not contribute to an incremental increase in area-wide noise levels. Selection of this Alternative would avoid all Project-related construction noise impacts, including the cumulatively considerable contribution to construction noise effecting sensitive receptors should Project construction occur simultaneously with other noise-generating construction projects that affect the same sensitive receptors.

- **Transportation/Traffic**

Under the No Project Alternative, no new development would occur on the property and no additional traffic would be generated. Because there would be no new development on the Project site under this Alternative, no monetary contributions would be made by the Project Applicant to the Moreno Valley DIF or the TUMF. The proposed Project's significant traffic impacts would be avoided through selection of the No Project Alternative.

- **Conclusion**

Implementation of the No Project Alternative would result in no physical environmental impacts beyond those that have historically occurred on the property. All significant effects of the proposed Project would be avoided or lessened by the selection of this alternative.

The No Project Alternative would fail to meet all of the Project's objectives. This alternative would fail to make efficient use of an underutilized property and fail to redevelop the property with a large warehouse building that would attract new businesses and jobs to the City of Moreno Valley. Furthermore, retention of the site in its existing, partially-developed condition would be inconsistent with the General Plan and the MVIAP, which calls for development of the entire Project site with light industrial land uses. Moreover, selection of the No Project Alternative, while preventing further development of the property, would not result in a reduction in demand for distribution warehousing building space in western Riverside County and the Southern California region.

6.3.2 VACANT LOT DEVELOPMENT ALTERNATIVE

The Vacant Lot Development Alternative was selected to evaluate the comparative environmental benefits of foregoing the single, large high-cube warehouse building on the subject property as proposed by the Project and instead retaining the existing light industrial land uses on the western portion of the property and developing the eastern, undeveloped portion of the property (approximately 13 acres) with one (1) 200,000 s.f. light industrial building. Roadway improvements would be identical to the proposed Project under this Alternative. This Alternative would be consistent with the subject property's General Plan and MVIAP land use designations. This

Alternative was selected to determine if developing only the eastern portion of the property would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and transportation/traffic impacts.

❑ Aesthetics

The Vacant Lot Development Alternative would not alter the existing visual character of the western 38 acres of the Project site; no additional structures, landscaping, or sources of artificial light would be introduced on this portion of the property beyond what occurs under existing conditions. The eastern 13 acres of the Project site would be transformed from a vacant, undeveloped lot with ruderal vegetation and several abandoned modular structures to a light industrial complex with a similar size, scale, and aesthetic character as the existing light industrial structures on the western portion of the site.

As previously described in EIR Subsection 4.1, the Project site is not visible from any state- or locally-designated scenic highway. Accordingly, neither the proposed Project nor this Alternative would negatively impact views from any scenic highway. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the property after development of this Alternative would be similar to that of the proposed Project, as both the Project and this Alternative would be subject to the development standards (i.e., architecture and landscaping) imposed on new development by the MVIAP. Neither the proposed Project nor this Alternative would result in significant direct or cumulatively considerable impact to aesthetics.

❑ Air Quality

The Vacant Lot Development Alternative would have a shorter construction phase than the proposed Project because this Alternative would not require the demolition of the existing structures on the western portion of the subject property, would reduce the overall grading footprint by approximately 75 percent, and would reduce the construction of new building area on the subject property by approximately 82 percent. As such, the total amount of air pollutant emissions generated during the construction phase would be reduced under this Alternative as compared to the Project. However, the daily intensity of construction activities on the subject property would be similar under this Alternative or the proposed Project; therefore, the total daily emissions during the construction phase would be the same as the proposed Project. As with the proposed Project, this alternative would also require mitigation measures to reduce short-term emissions of NO_x to a level below significant. With required mitigation, neither this Alternative nor the proposed Project would result in a violation of an air quality standard or contribution to a projected air quality violation during the construction phase.

This Alternative would generate approximately 1,394 actual daily vehicle trips (utilizing the ITE trip rate for general light industrial, not adjusted for PCE). The Project would generate approximately 1,863 actual daily vehicle trips (not adjusted for PCE). Accordingly, average daily vehicle trips associated with long-term operation of the Vacant Lot Development Alternative would be approximately 25 percent less than traffic that would be generated by the Project. As such, air

pollutant emissions associated with long-term operation of the Vacant Lot Development Alternative would be reduced as compared to the Project; however, this alternative would not avoid the Project's significant air quality effects. This Alternative would require implementation of mitigation measures similar to those imposed on the proposed Project and even with incorporation of these measures, long-term operation of this Alternative would exceed the SCAQMD's daily criteria pollutant threshold for NO_X and would contribute to an existing air quality violation (i.e., violation of ozone standards). Accordingly, this alternative would reduce but not avoid the proposed Project's significant and unavoidable impact due to operational NO_X emissions.

As with the proposed Project, impacts to nearby sensitive receptors would be less than significant under this Alternative. Like the Project, construction (short-term) and operational (long-term) criteria pollutant emissions under this Alternative would be below the SCAQMD localized thresholds of significance, and diesel particulate emissions would not expose sensitive receptors to significant cancer and non-cancer health risks. However, these less-than-significant impacts to sensitive receptors would be reduced under this alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,394 average daily trips, as compared to 1,863 average daily trips under the proposed Project, not adjusted for PCE).

The Vacant Lot Development Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

Under existing conditions, the majority of the Project site is developed with light industrial land uses (approximately 38 acres) with the remaining, vacant portion of the site (approximately 13 acres) routinely disturbed for weed abatement. Both the Project and the Vacant Lot Development Alternative would develop the vacant 13-acre portion of the Project site and would have similar potential to adversely impact the western burrowing owl. The Vacant Lot Development Alternative would be required to implement the same mitigation measures as the Project to reduce potential impacts to the western burrowing owl to less-than-significant levels. The Vacant Lot Development Alternative would not remove any landscaping (i.e., shrubs or trees) from the western portion of the Project site and, therefore, would avoid the Project's potential less-than-significant effect (after mitigation) to migratory bird species.

❑ Cultural Resources

There are no known historic resources on the property and no known or recorded archeological or paleontological resources are present on the property. In addition, the likelihood of unearthing archeological or paleontological resources is low. Although Vacant Lot Development Alternative would have a smaller development footprint than the Project, this Alternative and the Project would

have similar impacts to cultural resources because both proposals would impact the only remaining land within the Project site with the potential, albeit low, to contain significant cultural resources (i.e., the undeveloped 13 acres in the eastern portion of the Project site with a relatively intact subsurface). Accordingly, this Alternative would be subject to the same regulatory requirements and mitigation measures as the proposed Project to reduce potential cultural resource impacts to less-than-significant levels.

❑ Geology and Soils

This Alternative would physically disturb approximately 13 acres, an approximately 75 percent smaller disturbance footprint than the Project. Because the Vacant Lot Development Alternative would have a smaller impact footprint than the Project, the potential for soil erosion during the construction phase would be lessened – although soil erosion impacts would be less significant under both the Project and this Alternative due to mandatory compliance with federal, state and local water quality standards. This Alternative would be required to comply with the same mandatory regulatory requirements and mitigation measures as the proposed Project to reduce potential impacts associated with seismic ground shaking and ground failure to less-than-significant levels.

❑ Greenhouse Gas Emissions

The Vacant Lot Development Alternative would involve the construction and operation of 200,000 s.f. of light industrial land uses, which would generate approximately 1,394 average daily vehicle trips. Due to the reduction in the amount of average daily vehicle trips associated with this Alternative (469 fewer average daily vehicle trips than the Project), mobile-source related GHG emissions would be substantially decreased as compared to the proposed Project (mobile source emissions account for more than 90 percent of the Project's GHG emissions). Additionally, because this alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative.

Mitigation measures to reduce GHG emissions, similar to those applied to the proposed Project, would be required of this Alternative, including those imposed to address air quality impacts. With compliance to these mitigation measures to reduce near and long-term GHG emissions, combined with the substantial reduction in building intensity that would occur under this Alternative, this Alternative would reduce the cumulatively considerable impact associated with the Project's GHG emissions to less-than-significant levels. Compliance with required mitigation measures also would ensure this Alternative would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the site would be similar under the Vacant Lot Development Alternative and the proposed Project; however, because construction activities would occur over a smaller physical area and less building area would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during

the construction phase would decrease under this Alternative as compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar under this Alternative and the Project, and the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Vacant Lot Development Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 469 fewer average daily vehicle trips than the Project and, therefore, would contribute less traffic-related noise to local roadways. The Vacant Lot Development Alternative and the Project would both result in less-than-significant off-site, traffic-related noise impacts during long-term operation, but impacts would be lessened under this Alternative. Long-term noise impacts from operations on the Project site would be similar under the Vacant Lot Development Alternative and the proposed Project. Like the proposed Project, the Vacant Lot Development Alternative would install perimeter walls, which would act as noise barriers to minimize the amount of noise emitted from the subject property. Due to the construction of perimeter walls on the Project site and the distance from the site to the nearest noise-sensitive receptor, long-term operation of both the Vacant Lot Development Alternative and the Project would not expose noise sensitive land uses to noise levels in excess of the City of Moreno Valley's allowable standard; impacts would be less than significant.

- **Transportation/Traffic**

The Vacant Lot Development Alternative would result in the construction and operation of a 200,000 s.f. light industrial building on the eastern portion of the Project site, which would result in the generation of approximately 1,394 actual vehicle trips on a daily basis (utilizing the ITE trip generation rates for light industrial land uses, not adjusted for PCE). For comparison purposes, the proposed Project would generate approximately 1,863 actual vehicle trips on a daily basis (not adjusted for PCE). Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Vacant Lot Development Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Vacant Lot Development Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the Project, because this Alternative would generate approximately 469 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way, Kitching Street, and Edwin Road would occur under both the Vacant Lot Development Alternative and the proposed Project, and would be required to comply with City requirements to preclude the potential for introducing hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ **Conclusion**

Selection of the Vacant Lot Development Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions. The Vacant Lot Development Alternative also would lessen the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics and cultural resources would be similar under the Vacant Lot Development Alternative and the Project.

The Vacant Lot Development Alternative would fail to meet most of the Project's objectives. The three objectives of the Project that would be met by the Vacant Lot Development Alternative – to redevelop a vacant or underutilized industrially-zoned property, to attract new business/job opportunities to the City of Moreno Valley, and to develop a vacant/underutilized property in a manner that complements surrounding development – would be achieved less effectively by this Alternative than by the proposed Project.

6.3.3 SMALL BUILDINGS ALTERNATIVE

The Small Buildings Alternative was selected to evaluate the comparative environmental benefits of constructing two (2) 400,000 s.f. high-cube light industrial warehouse buildings on-site in lieu of the single, large building proposed by the Project. The two buildings, combined, would include a maximum building area of 800,000 s.f., or 309,378 s.f. less building area than proposed by the Project (a reduction in building area of approximately 28 percent). The Small Buildings Alternative would have an identical development footprint as the proposed Project. Roadway improvements would be identical to the proposed Project under this Alternative. This Alternative would be consistent with the subject property's General Plan and MVIAP land use designations. The Small Buildings Alternative was selected for evaluation to determine if developing the site with two smaller warehouse buildings would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and transportation/traffic impacts.

❑ **Aesthetics**

Neither the proposed Project nor the Small Buildings Alternative would negatively impact views from any state- or locally-designated scenic highway segment due to distance and intervening development. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the property after development of the Small Buildings Alternative would be similar to that of the Project, although there would be more buildings with each building individually having a

lesser bulk and scale than the proposed Project. Furthermore, under this Alternative, there would be more tenants located on-site than would occur with the Project, some of which may have outdoor storage. Neither the proposed Project nor the Small Buildings Alternative would result in significant direct or cumulatively considerable aesthetic impacts.

❑ Air Quality

The construction activities required to implement the Small Buildings Alternative would be similar to the Project. Although the Small Buildings Alternative would result in a reduction in building area, this Alternative would require the construction of more walls for the individual buildings and would require more area requiring paint, thereby increasing the emission of VOCs under short-term construction conditions (construction-related VOC impacts would remain less-than-significant, however). Both the Small Buildings Alternative and the proposed Project would generate significant NO_X emissions during the construction phase; however, with the implementation of required mitigation, neither this Alternative nor the proposed Project would violate an air quality standard or contribute to a projected air quality violation during construction activities.

The two (2) buildings developed under this Alternative would generate approximately 1,885 PCE vehicle trips per day (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project), which corresponds to an approximately 28 percent decrease in average daily traffic as compared to the Project. As with the Project, long-term operation of the Small Buildings Alternative would exceed SCAQMD regional air quality thresholds for NO_X and would contribute to an existing regional air quality violation (i.e., unacceptable ozone concentrations). No mitigation is available to fully mitigate long-term mobile source emissions of NO_X to less-than-significant levels. Implementation of the Project also would result in a significant and unavoidable air quality impact associated with long-term emissions of NO_X; however, due to the decrease in daily vehicle trips, air quality impacts would be reduced by the selection of the Small Buildings Alternative.

Neither the Small Buildings Alternative nor the Project would expose nearby sensitive receptors to substantial pollutant concentrations, including localized criteria pollutants and diesel particulate matter, during short-term construction or long-term operational activities. However, these less-than-significant impacts to sensitive receptors would be reduced under this alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,885 daily PCE vehicle trips, as compared to 2,619 daily PCE vehicle trips under the proposed Project).

The Small Buildings Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

This Alternative would have an identical development footprint as the Project. As such, impacts to biological resources that would occur under this Alternative are the same as those impacts described in EIR Subsection 4.3 for the proposed Project. No biological resource impacts would be reduced or avoided.

❑ Cultural Resources

The Small Buildings Alternative would physically disturb the same physical area as the proposed Project, to similar depths below the existing ground surface. Accordingly, potential impacts to cultural resources would be identical under either the Small Buildings Alternative or the proposed Project, and both development scenarios would be subject to the same regulatory requirements and mitigation measures to reduce potential impacts to less-than-significant levels.

❑ Geology and Soils

This Alternative would require a similar amount of earthwork and grading as the proposed Project. As such, impacts to geology and soils under the Small Buildings Alternative would be similar to those identified for the Project. Like the proposed Project, the Small Buildings Alternative would be required to comply with the requirements of the CBC and City Building Code. While construction in accordance with the CBC and City Building Code would not make structures totally resistant to seismic shaking, they would be designed not to collapse. Furthermore, the Small Buildings Alternative would be required to comply with the recommendations contained in the Project's geotechnical report, including requirements to remove and recompact areas where unstable soil conditions exist, to preclude potential adverse soil conditions. Impacts to geology and soils would be similar to those of the proposed Project.

❑ Greenhouse Gas Emissions

The Small Buildings Alternative would involve the construction and operation of a total of 800,000 s.f. of high cube warehouse building area. Due to the reduction in the amount of traffic associated with this Alternative (734 fewer average daily PCE trips), mobile-source GHG emissions would decrease as compared to the proposed Project. Additionally, because the Small Buildings Alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative. Mitigation measures similar to those applied to the proposed Project associated GHG emissions would apply to this Alternative, including those imposed to address air quality emissions. Incorporation of these measures is anticipated to reduce short- and long-term emissions of GHGs. Regardless, as with Project, GHG emissions produced by Small Buildings Alternative would be cumulatively considerable and no mitigation is available to reduce emissions to less-than-significant levels.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the subject property

would be similar under the Small Buildings Alternative and the proposed Project; however, because two buildings would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during the construction phase would slightly increase under this Alternative as compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar both the Small Buildings Alternative and the Project; therefore, the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Small Buildings Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 734 fewer average daily trips than the Project and, therefore, would contribute less traffic-related noise to local roadways than the Project. The Small Buildings Alternative would result in less-than-significant off-site, traffic-related noise impacts during long-term operation, which is similar to the conclusion reached for the Project. Like the proposed Project, the Small Buildings Alternative would install walls along the perimeter of the subject property, which would act as noise barriers to minimize the amount of noise emitted from the subject property. With construction of these walls, nearby sensitive receptors (i.e., non-conforming residential uses) would experience noise levels below the City's exterior noise standard. As such, impacts would be less than significant and would be similar to the proposed Project.

- **Transportation/Traffic**

The Small Buildings Alternative would result in the construction and operation of a total of 800,000 s.f. of high-cube light industrial warehouse uses on the subject property, which would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project). In comparison, the proposed Project would generate approximately 2,619 PCE vehicle trips on a daily basis. Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Small Buildings Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Small Buildings Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the Project, because this Alternative would generate approximately 734 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way, Kitching Street, and Edwin Road would occur under both the Small Buildings Alternative and the proposed Project, and would be required to comply with City requirements to preclude the potential for introducing safety hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ Conclusion

Selection of the Small Buildings Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. Potential impacts to aesthetics, biological resources, cultural resources, and geology/soils would be similar under the Small Buildings Alternative and the proposed Project.

The Small Buildings Alternative would fail to meet the Project's objective to maximize buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative would meet all other Project objectives (but less effectively than the Project), and it may be difficult to attract high-quality tenants seeking to locate in the Moreno Valley area due to the smaller-sized buildings as compared to the large building proposed by the Project.

6.3.4 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately 309,378 s.f. (or 28 percent) as compared to the proposed Project. This Alternative would not install frontage improvements to Kitching Street or Modular Way. The Reduced Project Alternative was selected by the Lead Agency to evaluate whether replacing the existing light-industrial structures on-site with a high-cube warehouse building and leaving the eastern portion of the subject property in its existing condition would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and/or transportation/traffic impacts.

❑ Aesthetics

Neither the proposed Project nor the Reduced Project Alternative would negatively impact views from any state- or locally-designated scenic highway segment due to distance and intervening development. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the western portion property (approximately 38 acres) after development of the Reduced Project Alternative would be similar to that of the Project, although the building provided by the Reduced Project Alternative would have a slightly lesser bulk and scale than the proposed Project. Under this Alternative, the aesthetic quality and character of the eastern 13 acres of the subject property would not change from existing conditions. Neither the proposed Project nor this Alternative would result in significant direct or cumulatively considerable impact to aesthetics.

❑ Air Quality

Under the Reduced Project Alternative, the extent of construction activities would be reduced as compared to the Project; as such, construction-related air quality emissions would be lessened. As with the proposed Project, this Alternative would require mitigation measures to reduce short-term emissions of NO_X to a level below significant, but to a lesser degree. With required mitigation, neither this Alternative nor the proposed Project would result in a violation of an air quality standard or contribution to a projected air quality violation, although short-term construction emissions would be reduced under this alternative as compared to the proposed Project.

This Alternative would generate approximately 1,885 PCE vehicle trips per day (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project) due to the reduction in total building area on-site. Average daily vehicle traffic associated with long-term operation of the Reduced Project Alternative would be approximately 28 percent less than traffic that would be generated by the Project. Accordingly, air pollutant emissions associated with long-term operation of the Reduced Project Alternative would be reduced as compared to the Project; however, this alternative would require the implementation of mitigation measures similar to those imposed on the proposed Project. Even with the incorporation of mitigation measures, long-term operation of this alternative would result in significant and unavoidable impacts due to emissions of NO_X, which would violate the SCAQMD regional air quality standard and would contribute to an existing air quality violation (i.e., ozone). Because the proposed Project would generate more average daily vehicle trips than would occur under this Alternative, impacts due to a conflict with the SCAQMD regional air quality standard and the level of contribution to an existing air quality violation (i.e., ozone) would be reduced under this Alternative. Accordingly, the Reduced Project Alternative would reduce, but not avoid, the proposed Project's significant and unavoidable impact due to operational NO_X emissions.

As with the proposed Project, impacts to nearby sensitive receptors would be less than significant under this Alternative. Similar to the Project, emissions under this Alternative would be below the SCAQMD localized thresholds of significance, and diesel particulate emissions would not expose sensitive receptors to significant cancer and non-cancer risks. However, these less-than-significant impacts to sensitive receptors would be reduced under this Alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,885 average daily PCE trips, as compared to 2,619 average daily PCE trips under the proposed Project).

The Small Buildings Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

The Reduced Project Alternative would not impact the vacant, undeveloped 13 acres in the eastern portion of the subject property beyond those impacts that have historically occurred on the site (as previously described, the site is routinely disced for weed abatement and fire fuel management). As such, this Alternative would avoid the Project's less-than-significant impact (after mitigation) to the western burrowing owl. All other impacts to biological resources would be similar to the Project.

❑ Cultural Resources

The only ground disturbance that would occur on the subject property with the Reduced Project Alternative would occur on the western portion of the property which is developed under existing conditions. The Reduced Project Alternative would not impact the eastern portion of the Project site (approximately 13 acres) which is undeveloped under existing conditions. Because the western portion of the site was previously graded/developed, the likelihood of uncovering prehistoric artifacts or paleontological resources on this portion of the property is considered nil. As such, the Reduced Project Alternative would avoid the Project's less-than-significant impact to cultural resources.

❑ Geology and Soils

This Alternative would conduct earthwork and grading activities on approximately 13 less acres than the Project. Regardless, impacts to geology and soils under the Reduced Project Alternative would be similar to those identified for the Project. Like the proposed Project, the Reduced Project Alternative would be required to comply with the requirements of the CBC and City Building Code. While construction in accordance with the CBC and City Building Code would not make structures totally resistant to seismic shaking, they would be designed not to collapse. Furthermore, the Reduced Project Alternative would be required to comply with the recommendations contained in the Project's geotechnical report, including requirements to remove and recompact areas where unstable soil conditions exist, to preclude potential adverse soil conditions. Impacts to geology and soils would be similar to those of the proposed Project.

❑ Greenhouse Gas Emissions

The Reduced Project Alternative would involve the construction and operation of an 800,000 s.f. high cube warehouse building. Due to the reduction in the amount of traffic associated with this Alternative (734 fewer average daily PCE trips), mobile-source GHG emissions would decrease as compared to the proposed Project. Additionally, because the Reduced Project Alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative. Mitigation measures similar to those applied to the proposed Project associated GHG emissions would apply to this Alternative, including those imposed to address air quality emissions. Incorporation of these measures is anticipated to reduce short- and long-term emissions of GHGs. Regardless, as with Project, GHG emissions produced by Reduced Project Alternative would be cumulatively considerable and no mitigation is available to reduce emissions to less-than-significant levels.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the site would be similar under the Reduced Project Alternative and the proposed Project; however, because construction activities would occur over a smaller physical area and less building area would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during the construction phase would decrease under this Alternative as compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar under this Alternative and the Project, and the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Reduced Project Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 734 fewer average daily trips than the Project and, therefore, would contribute less traffic-related noise to local roadways than the Project. The Reduced Project Alternative would result in less-than-significant off-site, traffic-related noise impacts during long-term operation, which is similar to the conclusion reached for the Project. Like the proposed Project, the Reduced Project Alternative would install walls along the perimeter of the subject property, which would act as noise barriers to minimize the amount of noise emitted from the subject property. With construction of these walls, nearby sensitive receptors (i.e., non-conforming residential uses) would experience noise levels below the City's exterior noise standard. As such, impacts would be less than significant and would be similar to the proposed Project.

❑ Transportation/Traffic

The Reduced Project Alternative would result in the construction and operation of an 800,000 s.f. of high-cube light industrial warehouse building on the subject property, which would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project). In comparison, the proposed Project would generate approximately 2,619 PCE vehicle trips on a daily basis. Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Small Buildings Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Reduced Project Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the

Project, because this Alternative would generate approximately 734 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way and Kitching Street would not occur under the Reduced Project Alternative (as they would under the proposed Project), which could adversely affect future traffic operations along one or both of these roadways. Like the proposed Project, the Reduced Project Alternative would be required to comply with City requirements to preclude the potential for introducing safety hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ Conclusion

Selection of the Reduced Project Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. The Reduced Project Alternative also would avoid the Project's less-than-significant effect to cultural resources and would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics would be similar under the Reduced Project Alternative and the proposed Project.

The Reduced Project Alternative would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. The Reduced Project Alternative, while providing a high-cube warehouse building space in close proximity to major regional transportation corridors, would attract fewer jobs to the City of Moreno Valley as compared to the proposed Project. The Reduced Project Alternative would meet all other Project objectives, but less effectively than the Project.

Table 6-1 Alternatives - Comparison of Environmental Impacts

ENVIRONMENTAL TOPIC	PROPOSED PROJECT SIGNIFICANCE OF IMPACTS AFTER MITIGATION	LEVEL OF IMPACT COMPARED TO THE PROPOSED PROJECT			
		NO PROJECT ALTERNATIVE	VACANT LOT DEVELOPMENT ALTERNATIVE	SMALL BUILDINGS ALTERNATIVE	REDUCED PROJECT ALTERNATIVE
Aesthetics	Less-than-Significant	Increased	Similar	Similar	Similar
Air Quality	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
Biological Resources	Less-than-Significant	Avoided	Reduced	Similar	Reduced
Cultural Resources	Less-than-Significant	Avoided	Similar	Similar	Avoided
Geology and Soils	Less-than-Significant	Avoided	Reduced	Similar	Similar
Greenhouse Gas Emissions	Significant and Unavoidable	Avoided	Avoided	Reduced but not avoided	Reduced but not avoided
Noise	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
Transportation/Traffic	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
ABILITY TO MEET THE BASIC OBJECTIVES OF THE PROJECT[1]					
Objective A:		No	Yes, but to a lesser extent	Yes	Yes
Objective B:		No	Yes, but to a lesser extent	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective C:		No	Yes, but to a lesser extent	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective D:		No	No	No	No
Objective E:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective F:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective G:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective H:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent

1. Refer to EIR Subsection 6.3 for a list of the proposed Project's basic objectives.
2. Impacts avoided or reduced would likely be displaced to another location in Western Riverside County, because the alternatives would not reduce the market demand for the high cube industrial warehouse space to the extent of the proposed Project.

7.0 REFERENCES

7.1 PERSONS INVOLVED IN PREPARATION OF THIS EIR

CITY OF MORENO VALLEY COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT, PLANNING DIVISION

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7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Modular Logistics Center EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of Moreno Valley Community and Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, California, 92552.

Appendix A Initial Study for Modular Logistics Center, Notice of Preparation, and Written Comments.

Appendix B1 Urban Crossroads. 2014a. *Modular Logistics Center Air Quality Impact Analysis City of Moreno Valley*. September 26, 2014.

Appendix B2 Urban Crossroads. 2014b. *Modular Logistics Center Mobile Source Health Risk Assessment City of Moreno Valley*. June 18, 2014.

Appendix B3 Urban Crossroads, 2015a. *Supplemental Health Risk Assessment.* December 3, 2014

Appendix B4 Urban Crossroads, 2015b. *Supplemental Analysis for Refrigerated Uses.* January 23, 2015.

Appendix C1 Alden Environmental, Inc. 2014. *General Biological Resources Assessment for the Modular Logistics Project.* October 1, 2014.

Appendix C2 Alden Environmental Inc. 2013. *Burrowing Owl Survey Results Report for the Dorado Property*. September 10, 2013.

Appendix D1 Brian Smith & Associates. BFSA 2013a. *A Phase I Cultural Resources Assessment for the Modular Logistics Center*. December 13, 2013.

Appendix D2 Brian Smith & Associates. BFSA 2013b. *Paleontological Resource and Monitoring Assessment Modular Logistics Project City of Moreno Valley Riverside County, California*. December 13, 2013.

Appendix E1 Southern California Geotechnical. 2012. *Geotechnical Investigation and Liquefaction Proposed Dorado Logistics Center.* October 3, 2012.

Appendix E2 Albert A. Webb Associates. 2013. *Project Specific Preliminary Water Quality Management Plan (WQMP) for Modular Logistics Center*. October 13, 2013.

Appendix F Urban Crossroads, 2014c. *Modular Logistics Center Greenhouse Gas Analysis.* September 26, 2014.

Appendix G Urban Crossroads. 2014d. *Modular Logistics Center Noise Impact Analysis City of Moreno Valley*. April 23, 2014.

Appendix H1 Urban Crossroads. 2014e. *Modular Logistics Center Traffic Impact Analysis City of Moreno Valley, California.* June 9, 2014.

Appendix H2 Urban Crossroads. 2014f. *Modular Logistics Center Traffic Impact Analysis – Supplemental Basic Freeway Segment Analysis.* March 17, 2014.

Appendix H3 Urban Crossroads. 2014g. *Modular Logistics Center Site Access Evaluation.* March 13, 2014.

Appendix I Eastern Municipal Water District. EMWD 2014. *Water Supply Assessment for the Modular Logistics Center*. January 22, 2014.

Appendix J Kennedy/Jenks Consultants. 2012. *Phase I Environmental Site Assessment 17300 Perris Boulevard Moreno Valley, California*. October 3, 2012.

Appendix K Written Correspondence

7.3 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

Kunzman Associates, Inc. 2011. Trip Generation Analysis for High-Cube Warehouse Distribution Center Land Use for NAIOP, the Commercial Real Estate Association, Inland Empire Chapter. Available at the City of Moreno Valley Community & Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, CA 92552. Web. http://mvgordie.files.wordpress.com/2013/02/l-21-appendix-s-omitted-from-appendix-l.pdf

Moreno Valley, City of. 2007. City of Moreno Valley Transportation Engineering Division Traffic Impact Analysis Preparation Guide. Available at the City of Moreno Valley Public Works Department, 14177 Frederick Street, Moreno Valley, CA 92552. Web. http://www.moreno-valley.ca.us/city_hall/departments/pub-works/transportation/pdfs/traffic-studyguide.pdf

Moreno Valley, City of. 2006a. *Moreno Valley General Plan*. Approved July 11, 2006. Available at the City of Moreno Valley Community & Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, CA 92552. Web. http://www.moreno-valley.ca.us/city_hall/general_plan.shtml

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DRAFT Environmental Impact Report

SCH No. 2014031068

Modular Logistics Center

Moreno Valley, California

EIR Case P13-130

Lead Agency
City of Moreno Valley
14177 Frederick Street
PO Box 88005
Moreno Valley, CA 92552

Date: October 24, 2014

DRAFT Environmental Impact Report
SCH No. 2014031068

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Lead Agency Discretionary Permits
Plot Plan (PA13-0063)

Date: October 24, 2014

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
>	greater than
≥	greater than or equal to
a.m.	Ante Meridiem (between the hours of midnight and noon)
AB	Assembly Bill
AC	Acres
A.D.	Anno Domini
ADP	Area Drainage Plan
ADT	Average Daily Traffic
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
AMSL	Above Mean Sea Level
APS	Alternative Planning Strategy
APN	Assessor Parcel Number
AQMP	Air Quality Management Plan
ARB	Air Reserve Base
ARB/IRP	March Air Reserve Base/Inland Port Airport
ASTM	American Society of Testing and Materials
ASTs	Above ground storage tanks
Av.	Avenue
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
BFSA	Brian F. Smith & Associates
Blvd.	Boulevard
BLM	Bureau of Land Management
BMPs	Best Management Practices
BP	Business Park/Light Industrial (and use designation)
BSA	Biological Study Area
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod™	California Emissions Estimator Model™
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association

Acronym	Definition
CASSA	Criteria Area Species Survey Area
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CETAP	Community & Environmental Transportation Acceptability Process
CFC	California Fire Code
CFCs	Chlorofluorocarbons
C_2F_6	Hexaflouroethane
C_2H_6	Ethane
CF_4	Tetraflouromethane
CF_3CH_2F	HFC-134a
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geologic Survey
CH_4	Methane
CH_3CHF_2	HFC-152a
CHF_3	HFC-23
CHL	California Historical Landmark
CHRIS	California Historic Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
COG	Council of Governments
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COHb	carboxyhemoglobin
CPUC	California Public Utilities Commission
CSRG	Conservation Summary Report Generator
CWA	Clean Water Act
CWC	California Water Code
CWHR	California Wildlife Habitat Relationships
Db	Decibel
dBA	A-weighted Decibels
DBESP	Determination of Biologically Superior Preservation
DEH	Department of Environmental Health
DIF	Development Impact Fee

Acronym	Definition
DP	Development Permit
DP-P13-09	Development Permit/Site Plan
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
DU	Dwelling Unit
e/o	East of
E+P	Existing plus Project Conditions
EDR	Environmental Data Review
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	Emissions Factor Model
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
ESA	Environmental Site Assessment
et seq.	*et sequentia*, meaning "and the following"
F	Fahrenheit
FAR	floor area ratio
FAR	Federal Aviation Regulations
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FHA	Federal Housing Administration
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GCC	Global Climate Change
GHGs	Greenhouse Gases
GIS	Geographic Information System
GISD	Geographic Information Services Database
GgCO2e	Gigagrams of carbon dioxide equivalent
GLO	General Land Office
GPS	Global Positioning System
GVWR	Gross Vehicle Weight Rating
GWP	Global Warming Potential
H_2O	Water Vapor
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCS+	Highway Capacity Software Plus
HFCs	Hydrofluorocarbons

Acronym	Definition
HET	High-Efficiency Toilet
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMMD	Hazardous Materials Management Division
HMMP	Hazardous Materials Management Plan
HPLV	High Pressure Low Volume
HRI	Historical Resource Inventory
HSC	Health and Safety Code
HUC	Hydrologic Unit Code
HVAC	Heating, Ventilation, and Air Conditioning
HVWAP	Harvest Valley/Winchester Area Plan
I-215	Interstate 215
i.e.	that is
IA	Implementing Agreement
IBC	International Building Code
ID	Identification
INCE	Institute of Noise Control Engineering
IPA	Inland Port Airport
IPCC	Intergovernmental Panel on Climate Change
IRP	Installation Restoration Program
IRWMP	Integrated Regional Water Management Plan
ITE	Institute of Transportation Engineers
JD	Jurisdictional Delineation
JPA	Joint Powers Authority
JPR	Joint Project Review
kWh	kilowatt-hour
lbs	pounds
LCA	Life-cycle analysis
Leq	equivalent continuous sound level
Lmax	Maximum level measured over the time interval
Lmin	Maximum level measures over the time interval
LNAP	Lakeview/Nuevo Area Plan
LOS	Level of Service
LSAA	Lake and Streambed Alteration Agreement
LSTs	Localized Significance Thresholds
M^3	Cubic Meter
March ARB	March Air Reserve Base
MATES III	Multiple Air Toxics Exposure Study in the South Coast Air Basin
MBTA	Migratory Bird Treaty Act
MDP	Master Drainage Plan
MEISC	maximally exposed individual school child

Acronym	Definition
MEIR	maximally exposed individual receptor
MEIW	maximally exposed individual worker
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMTs	million metric tons
MMTCO2e	million metric tons of carbon dioxide equivalent
Mph	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric ton
MUTCD	Manual on Uniform Traffic Control Devices
MVAP	Mead Valley Area Plan
MVFD	Moreno Valley Fire Department
MVIAP	Moreno Valley Industrial Area Plan
n/o	North of
N_2	Nitrogen
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAIOP	Commercial Real Estate Association
NATA	National Air Toxic Assessment
NB	Northbound
ND	Negative Declaration
NEPSSA	Narrow Endemic Plant Species Survey Area
NHP	National Register of Historic Places
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
N_2	Nitrogen
N_2O	Nitrous Oxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
n.p.	No page
NPL	National Priorities List
NPRBBD	North Perris Road and Bridge Benefit District
NRCS	Natural Resources Conservation Service
O_2	Oxygen
O_3	Ozone
OD	Officially Designated
OHWM	Ordinary High Water Mark
OIP	Office Industrial Park land use designation
OPR	Office of Planning and Research

Acronym	Definition
Ord.	Ordinance
Pb	Lead
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PFCs	Perfluorocarbons
PHF	peak hour factor
PHI	Points of Interest
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
pp.	pages
ppt	parts per trillion
PQP	Publi/Quasi-Public
Rapanos Decision	John A. Rapanos v. United States: and June Carabell v. United States Army Corps of Engineers
RCALUP	Riverside County Airport Land Use Plan
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCIP	Riverside County Integrated Project
RCTC	Riverside County Transportation Commission
RCNM	Roadway Construction Noise Model
Rd.	Road
REC	Recognized environmental Concerns
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
REMEL	Reference Mean Emission Level
RHA	Rivers and Harbor Act of 1899
RIX	Rapid Infiltration Extraction
ROGs	Reactive Organic Gasses
RPS	Renewable Portfolio Standards
RPW	Relative Permanent Water
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
s/o	south of
s.f.	square feet
SF_6	Sulfur Hexaflouride
SANBAG	San Bernardino Associated Governments

Acronym	Definition
SAWPA	Santa Ana Watershed Project Authority
SB	Southbound
SB	Senate Bill
SBTAM	San Bernardino Transportation Analysis Model
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SDFR	Single Family Detached Residential
SF_6	Sulfur Hexafluoride
SFL	Sacred Lands File
SIPs	State Implementation Plans
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SP	Specific Plan
SP 208	Specific Plan 208
SR-60	State Route 60
SR-74	State Route 74
SRA	Source Receptor Area
St.	Street
STC	Sound Transmission Class
SUB13-07	Tentative Parcel Map No. 19487
SURRGO	Soil Survey Geographic
SWANCC	Solid Waste Agency of Northern Cook County vs. USACE
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminants
TIA	Traffic Impact Analysis
TNW	Traditional Navigable Water
TPM	Tentative Parcel Map
TSF	Thousand Square Feet
TUMF	Transportation Uniform Mitigation Fee
µg	microgram
UBC	Uniform Building Code
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	URBan EMISsions
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United Stated Geological Society

Acronym	Definition
USTs	Underground storage tanks
VFP	Vehicle Fueling Positions
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
w/o	West of
WoUS	Waters of the United States
WoS	Waters of the State
WPLT	Western Pluvial Lakes Tradition
WQC	Water Quality Certification Program
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRF	Water Reclamation Facility
WRP	Water Reclamation Plant
WSA	Water Supply Assessment
Wy.	Way
YBP	Years before Present

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code §21000, et seq. requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

This Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2014031068 was prepared in accordance with CEQA Guidelines Article 9, §15120 to §15132, to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Modular Logistics Center (hereafter, the "Project" or "proposed Project"). This EIR does not recommend approval, approval with modification, or denial of the proposed Project; rather, this EIR is a source of impartial information regarding potential impacts that the Project may cause to the physical environment. The Draft EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the City of Moreno Valley will consider certifying the Final EIR and adopting required findings in conjunction with Project approval. In the case that there are any adverse environmental impacts that cannot be fully mitigated, the City of Moreno Valley must adopt a Statement of Overriding Considerations, stating why the City is taking action to approve the Project with or without modification despite its unavoidable impacts.

This *Executive Summary* complies with CEQA Guidelines §15123, "Summary." This EIR document includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The City of Moreno Valley determined that the scope of this EIR should cover eight (8) subject areas. The scope was determined through the completion of an Initial Study accepted by the City of Moreno Valley's independent judgment pursuant to CEQA Guidelines §15063, and in consideration of public comment received by the City in response to this EIR's Notice of Preparation (NOP). The Initial Study, NOP, and written comments received by the City in response to the NOP, are attached to this EIR as *Technical Appendix A*. As determined by the Initial Study and in consideration of public comment on the NOP, the eight (8) environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources
5. Geology/Soils
6. Greenhouse Gas Emissions
7. Noise
8. Transportation/Traffic

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. As mentioned, the scope of this EIR includes these eight (8) subject areas as determined through the completion of an Initial Study pursuant to CEQA Guidelines §15063, and in

consideration of public comment to this EIR's NOP. Subject areas for which the Initial Study concluded that impacts would be clearly less than significant and that do not warrant further analysis in this EIR are addressed in EIR Section 5.0, *Other CEQA Considerations*. For each of the eight (8) subject areas analyzed in detail in Section 4.0, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (March 2014); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that have a proportional nexus to the Project's impacts and that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the City of Moreno Valley on the Project to lessen or avoid those impacts is included in this *Executive Summary* as Table S-1, *Mitigation, Monitoring, and Reporting Program*.

This EIR also discusses alternatives to the proposed Project. Alternatives are described that would attain most of the Project's objectives while avoiding or substantially lessening the proposed Project's significant adverse environmental effects. A full discussion of Project alternatives is found in EIR Section 6.0, *Alternatives.*

S.2 PROJECT OVERVIEW

S.2.1 LOCATION AND REGIONAL SETTING

The approximately 50.84-gross acre Project site is located in the City of Moreno Valley, in western Riverside County, California. Western Riverside County abuts San Bernardino County to the northeast, Orange County to the west, and San Diego County to the south. The site's location in a regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

From a regional perspective, the Project site is generally located to the north and northeast of the City of Perris and to the southeast of the City of Riverside. Unincorporated areas of Riverside County in the vicinity of the Project site include the unincorporated communities of Woodcrest and Mead Valley to the west and southwest, the unincorporated communities of Reche Canyon and Pigeon Pass to the north, and the unincorporated community of Lakeview and rugged terrain known as the "Badlands" to the east. Refer to EIR Subsection 2.1 for more information about the Project's regional setting.

At a local scale, the Project site is located within the southern portion of the City of Moreno Valley. The subject property is generally rectangular-shaped and located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Figure 3-2, *Vicinity Map*, in EIR Section 3.0, *Project Description*, shows the specific location of the Project site. The Project site is located approximately 2.0-miles east of Interstate 215 (I-215) and 4.7 miles south of State Route 60 (SR-60). The property encompasses Assessor Parcel Numbers (APNs) 312-250-030, 312-250-031, 312-250-032, 312-250-036, 312-250-037, 312-250-038, and lies within Section 32 of Township 3 South, Range 3 West of the San Bernardino Baseline and Meridian. Refer to EIR Subsection 2.2 for more information about the Project's local setting.

S.2.2 PROJECT OBJECTIVES

The objective of the proposed Project is to redevelop an underutilized property in the City of Moreno Valley's Industrial Area Plan (MVIAP, Specific Plan 208) with a large logistics warehouse building in conformance with the land use designations applied to the property by City of Moreno Valley General Plan and the MVIAP. The following is a list of the basic objectives sought by the proposed Project.

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, , thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

S.2.3 PROJECT DESCRIPTION SUMMARY

The proposed Project involves demolition and removal of existing buildings, grading and preparation of the property for redevelopment, and construction and operation of one (1) industrial warehouse building containing 1,109,378 square feet (s.f.) of building space with 256 loading bays. The principal discretionary actions required of the City of Moreno Valley to implement the proposed Project include the approval of a Plot Plan (PA13-0063) and certification of this EIR. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-1, *Matrix of Project Approvals/Permits*, in EIR Section 3.0.

The proposed Plot Plan (PA13-0063) details the Project's proposed site layout, architectural features, and landscape design. The Project Applicant proposes to construct and operate one (1) new industrial warehouse building on the property. The proposed 1,109,378 s.f. building is designed to include 1,089,378 s.f. of warehouse space and 20,000 s.f. of office space. The office spaces would be located at the northwest, northeast, southwest, and southeast corners of the building. A total of 256 loading bays are planned for loading, unloading, and short-term parking of truck trailers, with 128 dock doors provided along the north side of the building and 128 dock doors along the southern portion of the building. The Project Applicant is pursuing the Project on a speculative basis, meaning that the future building tenant(s) is not yet identified. Refer to EIR Section 3.0, *Project Description*, for a detailed description of the proposed Project.

S.3 EIR PROCESS

As a first step in complying with the procedural requirements of CEQA for an EIR, an Initial Study was prepared by the City of Moreno Valley to determine whether any aspect of the proposed Project, either individually or cumulatively, may cause a significant adverse effect on the physical environment (refer to EIR *Technical Appendix A* for a copy of the Initial Study). For this Project, the Initial Study indicated that this EIR should focus on eight (8) environmental subject areas listed above in Subsection S.1. After completion of the Initial Study, the City filed a NOP with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared. In turn, the Initial Study and NOP were distributed for a 30-day public review period, which began on March 25, 2014.

The City of Moreno Valley received written comments on the scope of the EIR during those 30 days, which were considered by the City during the preparation of this EIR. In addition, and pursuant to CEQA Guidelines §15082(c)(1), an advertised public meeting (called a scoping session) was held on April 21, 2014, at the City of Moreno Valley City Council Chambers.

This EIR is being circulated for review and comment by the public and other interested parties, agencies, and organizations for 45-day review period. During the 45-day public review period, public notices announcing availability of the Draft EIR will be mailed to interested parties, an advertisement will be published in the Press Enterprise (newspaper of general circulation in the Project area), and copies of the Draft EIR and its Technical Appendices will be available for review at the locations indicated in the public notices.

After the close of the 45-day Draft EIR public comment period, the City will prepare and publish responses to written comments it received on the environmental effects of the proposed Project. The Final EIR will then be considered by the City of Moreno Valley Planning Commission, prior to deciding to approve, approve with modification, or reject the proposed Project. Approval of the proposed Project would be accompanied by the adoption of written findings and a statement of overriding considerations for any significant unavoidable environmental impacts identified in the Final EIR. In addition, the City must adopt a Mitigation, Monitoring, and Reporting Program (MMRP), which describes the process to ensure implementation of the mitigation measures identified

in the Final EIR. The MMRP will ensure CEQA compliance during Project construction and operation.

S.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines §15123(b)(2) requires that areas of controversy known to the Lead Agency (City of Moreno Valley) be identified in the Executive Summary. Parties that frequently comment on CEQA documents prepared by the City of Moreno Valley for industrial warehouse projects have suggested that the City apply mitigation measures for mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements. The City of Moreno Valley applies mitigation measures which it determines a) are feasible and practical for project applicants to implement, b) are feasible and practical for the City of Moreno Valley to monitor and enforce, c) are legal for the City to impose, d) have an essential nexus to the Project's impacts, and e) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to analyze an exhaustive list of every imaginable mitigation measure, and measures that are duplicative of mandatory regulatory requirements. This is identified as an area of controversy.

Regarding issues to be resolved, this EIR addresses the environmental issues that are known by the City, that are identified in the Initial Study prepared for the Project, and that were identified in the comment letters that the City of Moreno Valley received on this EIR's NOP (refer to *Technical Appendix A* of this EIR). Environmental topics raised in written comment to the NOP are summarized in Table 1-2, *Summary of NOP Comments*, in Section 1.0 of this EIR and include but are not limited to the topics of mitigation measures related to mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements.

S.5 ALTERNATIVES TO THE PROPOSED PROJECT

In compliance with CEQA Guidelines §15126.6, an EIR must describe a range of reasonable alternatives to the Project or to the location of the Project. Each alternative must be able to feasibly attain most of the Project's objectives and avoid or substantially lessen the Project's significant effects on the environment. A detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives to the Proposed Project*. Also described in Section 6.0 is a list of alternatives that were considered but rejected from further analysis. An examination of alternative sites is not required in this EIR because the Project is consistent with the Moreno Valley General Plan and the MVIAP land use designations.

In reviewing the alternatives, the Southern California Association of Governments' (SCAG's) *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* chapter titled "Goods Movement" is relevant. It explains that goods movement is essential to supporting the SCAG regional economy and quality of life. The *RTP/SCS* states that the SCAG region hosts one of

the largest clusters of logistics activity in North America and that logistics activities, and the jobs that go with them, depend on a goods movement network, including warehousing and distribution facilities. According to SCAG, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). Thus, it is likely that the selection of any alternative that reduces building square footage on the Project site, which is designated and zoned for industrial development, is likely to displace the additional square footage to another property, which would result in the same or greater environmental effects, given the strong regional demand for logistics and warehousing space in the SCAG region.

The alternatives considered by this EIR include those listed below.

S.5.1 NO PROJECT ALTERNATIVE

The No Project Alternative allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the property were to remain in its existing condition for the foreseeable future. Selection of the No Project Alternative would prevent the Project site from new development but would not necessarily prevent the Project or another project of its nature from being developed in another location in response to the demand for logistics warehousing land use space in western Riverside County.

Implementation of the No Project Alternative would result in no physical environmental impacts beyond those that have historically occurred on the property. All significant effects of the proposed Project associated with its construction and operation at the Project site would be avoided or lessened by the selection of the No Project Alternative.

The No Project Alternative would fail to meet all of the Project's objectives. Furthermore, retention of the site in its existing condition would be inconsistent with the City of Moreno Valley General Plan and the MVIAP, which call for development of the entire subject property with industrial land uses.

S.5.2 VACANT LOT DEVELOPMENT ALTERNATIVE

The Vacant Lot Development Alternative would retain the existing light industrial land uses on the western portion of the property and would develop one (1) 200,000 s.f. building on the vacant, eastern portion of the property. For purposes of this analysis, the new 200,000 s.f. building was assumed to support as light-industrial land uses in accordance with the City of Moreno Valley General Plan and the MVIAP, and not high-cube warehouse as proposed by the Project. The Vacant Lot Alternative was selected for consideration by the Lead Agency to compare the environmental effects of the Project (which would redevelop the entire subject property) against the environmental effects of retaining the existing light-industrial land uses on the western portion of the subject property and developing the eastern, vacant portion of the property.

Selection of the Vacant Lot Development Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions. The Vacant Lot Development

Alternative also would lessen the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics and cultural resources would be similar under the Vacant Lot Development Alternative and the Project.

The Vacant Lot Development Alternative would fail to meet most of the Project's objectives. The only two objectives of the Project that would be met by the Vacant Lot Development Alternative – to attract new business/job opportunities to the City of Moreno Valley and to develop a vacant/underutilized property in a manner that complements surrounding development – would be achieved less effectively by this Alternative than by the proposed Project. Moreover, selection of the Vacant Lot Development Alternative would not result in a reduction in demand for large (high-cube) light industrial development in western Riverside County; thus, it is likely for a portion of the Project's environmental impacts to occur elsewhere rather than be avoided.

S.5.3 SMALL BUILDINGS ALTERNATIVE

The Small Buildings Alternative considers constructing two (2) 400,000 s.f. light industrial buildings on the Project site. This alternative would result in an approximately 28 percent reduction in building area as compared to the proposed Project, but would require additional surface parking area pursuant to the City of Moreno Valley's requirements for this building type. The land uses on the Project site under the Small Buildings Alternative would be similar to the proposed Project. This alternative was selected for consideration by the Lead Agency to compare the environmental effects of the proposed Project (one large building that is likely to attract one tenant) against the environmental effects of constructing multiple, smaller buildings that are likely to attract different tenants.

Selection of the Small Buildings Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. Potential impacts to aesthetics, biological resources, cultural resources, and geology/soils would be similar under the Small Buildings Alternative and the proposed Project.

The Small Buildings Alternative would fail to meet the Project's objective to maximize buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative would meet all other Project objectives (but less effectively than the Project), and it may be difficult to attract high-quality tenants seeking to locate in the Moreno Valley area due to the smaller-sized buildings as compared to the large building proposed by the Project.

S.5.4 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately

309,378 s.f. (or 28 percent) as compared to the proposed Project. The Reduced Project Alternative was selected by the Lead Agency to evaluate the comparative environmental benefits of replacing the existing light-industrial structures on-site with a high-cube warehouse building while leaving the eastern portion of the subject property in its existing condition.

Selection of the Reduced Project Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. The Reduced Project Alternative also would avoid the Project's less-than-significant effect to cultural resources and would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics would be similar under the Reduced Project Alternative and the proposed Project.

The Reduced Project Alternative would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. The Reduced Project Alternative, while providing a high-cube warehouse building space in close proximity to major regional transportation corridors, would attract fewer jobs to the City of Moreno Valley as compared to the proposed Project. The Reduced Project Alternative would meet all other Project objectives, but less effectively than the Project.

S.6 SUMMARY OF IMPACTS, MITIGATION MEASURES, AND CONCLUSIONS

S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of this EIR includes eight (8) subject areas determined through the completion of an Initial Study prepared by the City of Moreno Valley pursuant to CEQA Guidelines §15063 and CEQA Statute §21002(e), as well as consideration of public comments received by the City on this EIR's NOP and during the April 21, 2014, public scoping session. The Initial Study, NOP, and public comments received in response to the NOP, are attached to this EIR as *Technical Appendix A.* Subject areas for which City concluded that impacts clearly would be less than significant and that do not warrant further analysis in this EIR include: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. This EIR addresses these topics in EIR Subsection 5.0, *Other CEQA Considerations.*

S.6.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Mitigation, Monitoring, and Reporting Program*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines §15123(a). Also presented are the mitigation measures imposed on the Project by the City of Moreno Valley to further avoid adverse environmental impacts or to reduce their level of significance.

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Aesthetics					
Summary of Impacts					
Threshold 1: The Project site does not comprise all or part of a scenic vista and no unique or scenic vistas are visible from the property. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 2: The Project has no potential to damage scenic resources within a scenic highway corridor. The Project site is not located within the viewshed of a scenic highway and the Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings. Accordingly, a significant impact to scenic resources within a state scenic highway has no potential to occur.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
Threshold 3: The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas during Project construction or operation. Although the proposed Project would result in a change to the existing visual character of the site, the Project proposes a number of site design, architectural, and landscaping elements consistent with the requirements of the MVIAP that would ensure the provision of a high quality development. Impacts would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold 4: The Project would not create substantial light or glare. Compliance with the MVIAP requirements for lighting and mandatory compliance with City of Moreno Valley Ordinance No. 359 would ensure less than significant impacts associated with light and glare affecting day or nighttime views in the area.	**MM 4.1-1** Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City Ordinance No. 359.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	Less-than-Significant Impact
	MM 4.1-2 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.	Project Proponent; City of Moreno Valley	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
4.2 Air Quality					
Summary of Impacts					
Threshold 1: The Project would not conflict with or obstruct implementation of the SCAQMD AQMP.	No Mitigation is Required	N/A	N/A	N/A	No Impact
Thresholds 2 and 3: The Project's emissions of NO_X during short-term construction and long-term operational activities would violate the SCAQMD regional threshold for these pollutants. Short- and long-term emissions of NO_X also would contribute to an existing air quality violation in the SCAB (i.e., non-attainment status for NO_X and ozone – both NO_X is a precursor for ozone). As such, Project-related emissions would violate SCAQMD air quality	**MM 4.2-1** Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective construction contractors. a) All surface coatings shall consist of Zero-	Project Proponent; Project construction contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	Significant Direct and Cumulatively Considerable Unavoidable Impact (Long-Term)

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
standards and contribute to the non-attainment of a criteria pollutant (i.e., NO_X and ozone), which is significant on a direct and cumulatively considerable basis.	Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113. **MM 4.2-2** The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors. a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour. b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day. c) Temporary signs shall be installed on the	Project Proponent; Project construction Contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads. d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered. **MM 4.2-3** The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors. a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning. b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and	Project Proponent; Project contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	requirements for PM10-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.				
	MM 4.2-4 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SO_X) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors. a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.	Project Proponent; Project contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit and building permit	
	MM 4.2-5 The Project shall comply with California Code of Regulations Title 13,Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following	Project Proponent; Project contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit and building permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better. b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas. c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered				

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import. d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower. e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles. f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified. g) Electric-powered construction equipment and tools shall be used when technically feasible h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible. i) Construction vehicles shall use the City's designated truck route. j) Construction parking shall be located and configured to minimize traffic interference on public streets.				
	MM 4.2-6 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	trucks to restrict idling to no more than five (5) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.				
	MM 4.2-7 Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
	MM 4.2-8 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
	MM 4.2-9 Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.2-10 Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of permits that would allow the installation of landscaping	
	MM 4.2-11 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2)	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.				
	MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about 1) locations of the nearest existing and planned Metrolink stations; and 2) the benefits of implementing a voluntary carpool or rideshare program for employees.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of an occupancy permit	
	MM 4.2-13 In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.2-14 The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	
Threshold 4: The average carcinogenic risk to sensitive receptors in the vicinity of the Project site due to toxic air contaminates is approximately 587 cases per one million people. Risk attributable to the proposed Project would be 5.67 in one million for the maximally exposed individual receptor,	Mitigation Measures MM 4.2-3 through MM 4.2-14 shall apply				Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
5.60 in one million for the maximally exposed individual worker, and 0.165 in one million for the maximally exposed school child. The cumulative health risk to sensitive receptors is significant, but the Project's contribution to the cumulative risk would be less than cumulatively considerable based on a significance threshold of 10 in one million. The maximum non-cancer health risk index attributable to the proposed Project would be 0.0036, which would also be less than significant and less than cumulatively considerable compared to the SCAQMD non-cancer health risk index of 1.0.					
Threshold 5: Although short-term construction activities could produce odors associated with construction equipment exhaust, the application of asphalt, and the application of architectural coatings, standard construction requirements would minimize odor impacts to less than significant levels. Odors associated with long-term operation of the proposed Project would not significantly impact nearby sensitive receptors.	**MM 4.2-15** The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement. a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be	Project Proponent; Project contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit and building permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.				
4.3 Biological Resources					
Summary of Impacts					
Threshold 1: No sensitive vegetation communities or special-status plant species are located on the Project site. The loss of potential habitat for sensitive species is less than significant with mandatory Western Riverside County MSHCP compliance because these species are MSHCP Covered Species. Although the western burrowing owl is not present on the Project site, the species could be impacted if it migrates onto the property prior to the commencement of ground-disturbing construction activities, which is a potentially significant direct and cumulative impact.	**MM 4.3-1** The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, *Western Riverside County Multiple Species Habitat Conservation Plan Fee Program*, which requires a per-acre local development impact and mitigation fee. The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of a building permit	Less-than-Significant Impact
	MM 4.3-2 Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the *Burrowing*	Project Biologist	City of Moreno Valley Planning Division	Within 30 days prior to grading and prior to issuance of a grading permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Owl Survey Instructions for the Western Riverside MSHCP Area. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions: a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit. c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states				

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either: • Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or • A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.				
Threshold 2: The Project site does not contain any riparian habitat or other sensitive natural community; therefore, the	No mitigation is required	N/A	N/A	N/A	No Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Project would have no impact on riparian or other sensitive habitats as defined by the CDFW or USFWS.					
Threshold 3: There are no federally protected wetlands on the Project site or within the Project's off-site impact area; therefore, no impact to wetlands would occur.	No mitigation is required	N/A	N/A	N/A	No Impact
Threshold 4: There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting, migratory birds protected by the MBTA and California Fish and Wildlife Code, if construction activities were to occur during the nesting season.	**MM 4.3-3** As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements: a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree. b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius	Project Biologist; City of Moreno Valley Planning Division	City of Moreno Valley Planning Division	Prior to the issuance of a clearing or grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.				
Threshold 5: The Project would not conflict with any local policies or ordinances governing biological resources.	**MM 4.3-4** The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, *Threatened and Endangered Species*, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.	Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit and improvement permits	Less-than-Significant Impact
Threshold 6: The Project site is subject to the Western Riverside County MSHCP and its survey requirements for the western burrowing owl. Although compliant with all MSHCP provisions, and although the western burrowing owl is absent on the property, the property contains potential habitat for the species. If the species is present on the property at the time a grading permit is issued, impacts would be significant, requiring mitigation.	MM 4.3-1 and MM 4.3-2 shall apply.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.4 Cultural Resources					
Summary of Impacts					
Threshold 1: The Project would not impact a historic resource. No historic sites are present on the Project site or in its off-site improvement area; therefore, no historic sites could be altered or destroyed by construction or operation of the proposed Project.	No Mitigation is Required.	N/A	N/A	N/A	No Impact.
Threshold 2: Implementation of the Project has the potential, however unlikely, to unearth and adversely impact archaeological resources that may be buried beneath the ground surface during Project construction activities.	**MM 4.4-1** Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.	Project Proponent; Project archaeological monitor	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit	Less-than-Significant Impact
	MM 4.4-2 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.	Project Proponent; appropriate Native American representative(s)	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit	
	MM 4.4-3 During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect	Project archaeological monitor, appropriate Native American Tribe(s) representative	City of Moreno Valley Planning Division; City of Moreno Valley Building and Safety Division	During grading operations in previously undisturbed soils	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply. **MM 4.4-4** If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.	Project archaeological monitor; representative of the appropriate Native American Tribe(s); Project Applicant; City Planning Division; Project's land owner	City of Moreno Valley Planning Division; appropriate Native American Tribe(s); Eastern Information Center (EIC)	During ground disturbing activities	
Threshold 3: The Project would not impact any known paleontological resource. There is a very low likelihood for Project construction activities to unearth unique	**MM 4.4-5** Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct	Project Proponent; Project paleontological monitor	City of Moreno Valley Planning Division	Prior to the issuance of a grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
paleontological resources, sites, and geologic features during Project construction.	monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.				
	MM 4.4-6 During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.	Project paleontological monitor	City of Moreno Valley Planning Division; City of Moreno Valley Building and Safety Division	During ground disturbing activities	
	MM 4.4-7 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.	Project paleontological monitor	City of Moreno Valley Planning Division	During ground disturbing activities	
	MM 4.4-8 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and	Project paleontological monitor; Project Proponent	City of Moreno Valley Planning Division	Prior to the issuance of first occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit.				
Threshold 4: In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 and California Public Resources Code §5097 et. seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.	**MM 4.4-9** Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors. a) If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.	Project contractors; Riverside County Coroner; California Native American Heritage Commission	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit	Less-than-Significant Impact
4.5 Geology and Soils					
Summary of Impacts					
Threshold 1: The Project would not expose people or structures to substantial adverse seismic risks. The risk of liquefaction is	**MM 4.5-1** Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
low. There are no known active or potentially active faults on the Project site or trending toward the Project site. As with all properties within the Southern California region, the Project site is subject to seismic ground shaking associated with earthquakes. However, mandatory compliance with local and state ordinances and building codes would ensure that the proposed structure is developed as required to attenuate the risk to life or property to less than significant levels.	required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors. a) Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction. **MM 4.5-2** Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit and grading permit	
Threshold 2: The Project would prepare and implement a SWPPP and WQMP, and also would be required to comply with the provisions of the City's MS4 NPDES Municipal Stormwater Permit, to minimize the potential for substantial waterborne erosion at the Project site during temporary	**MM 4.5-3** Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
short-term construction activities and long-term operational activities. Additionally, the Project would be required to comply with City Ordinance No. 568 and SCAQMD Rule 403 to preclude substantial wind erosion.	**MM 4.5-4** Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.	Project Proponent; Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit	
	MM 4.5-5 Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.	Project contractors	City of Moreno Valley Land Development Division	Prior to the issuance of a grading permit	
Threshold 3: There is no potential for the Project to cause rockfalls, landslides, or lateral spreading. Soils on the site have the potential for collapse and subsidence; however, potential adverse effects associated with such conditions would be reduced to less-than-significant levels with mandatory compliance to the recommendations provided within the Project's geotechnical study, including requirements to remove and recompact areas where unstable soil conditions exist.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 4: The soils on the Project site have a low to medium expansion potential under existing conditions. Potential adverse	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
effects associated with expansive soils would be reduced to less-than-significant levels with mandatory compliance with the recommendations provided within the Project geotechnical study, including requirements to remove and recompact areas where such unsuitable soil conditions exist.					
Threshold 5: The Project would not install septic tanks or alternative wastewater disposal systems. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.6 Greenhouse Gas Emissions					
Summary of Impacts					
Thresholds 1 and 2: Greenhouse gasses would be emitted by the Project, primarily from mobile sources (vehicles traveling to and from the Project site). Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed, the proposed Project would not reduce GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the mandates of AB 32. Therefore, because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley, the Project is determined to result in GHG emissions that may have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively	**MM 4.6-1** Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project construction	Significant Unavoidable Cumulatively Considerable Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32).	**MM 4.6-2** Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of the first building permit	
	MM 4.6-3 Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to issuance of the first building permit	
	MM 4.6-4 Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen, 2013, Table 5.106.5.2).	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of an occupancy permit	
	MM 4.6-5 Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the approval of permits that would permit the installation of landscaping	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.7 Noise					
Summary of Impacts					
Thresholds 1, 3, and 4: Noise generated by Project construction activities would temporarily impact non-conforming residential properties located in the industrial zone. In the event that Project construction activities occur simultaneously with other construction activities that affect the same nearby noise-sensitive receptors as the Project, there is potential for a significant cumulative short-term impact to occur, with the Project's contribution to the impact being cumulatively considerable. Under long-term operation, the Project would not expose persons to or generate noise levels in excess of local standards and would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	**MM 4.7-1** Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries. d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site. e) Construction contractors limit all haul truck deliveries to the same hours specified for construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul	Project Proponent; Project construction contractors	City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit and grading permit	Significant Direct and Cumulatively Considerable Impact (Short-Term)

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	trucks using City streets shall use the City's designated truck routes.				
Threshold 2: The Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 5: The Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. As such, the Project would not expose people to excessive noise levels associated with the operation of an airport.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 6: The Project would not expose people to excessive noise levels associated with the operation of a private airstrip.	No Mitigation is Required.	N/A	N/A	N/A	No Impact
4.8 Transportation/Circulation					
Summary of Impacts					
Threshold 1: Significant Cumulatively Considerable Impact. The addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to the cumulative impact of seven (7) intersections and 10 roadway segments	**MM 4.8-1** Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices. A requirement to comply	Project Proponent	City of Moreno Valley Building and Safety Division	Prior to the issuance of a grading permit and building permit	Significant Unavoidable Cumulatively Considerable Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
under Opening Year (2018) traffic conditions.	with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors. The temporary traffic control plan shall require the following: • Delivery trucks shall utilize the most direct route between the site and the 1-215 Freeway via Harley Knox Boulevard to Perris Boulevard; • The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials, earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25 outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.				
	MM 4.8-2 The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.	Project Proponent	City of Moreno Valley Building and Safety Division	During Project construction	
	MM 4.8-3 Prior to the issuance of building or occupancy permits, the Project shall comply with the City of Moreno Valley Development Impact Fee (DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is	Project Proponent	City of Moreno Valley Planning Division; City of Moreno Valley Building and Safety Division	Prior to the issuance of a building permit or occupancy permit	

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	applied to reduce traffic congestion by funding the installation of intersection improvements. **MM 4.8-4** Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.	Project Proponent	City of Moreno Valley Planning Division; City of Moreno Valley Building and Safety Division	Prior to the issuance of the first occupancy permit	
Threshold 2: The Project would not degrade the LOS of any Congestion Management Plan (CMP) or state highway system facility from an acceptable to an unacceptable level of service (LOS); thus, direct impacts to CMP facilities would be less than significant. The Project's traffic would use CMP and state highway system facilities throughout Southern California, including I-215, I-5, I-15, I-110, I-405, I-710, SR-91 and SR-60, among others, segments of which operate at deficient LOS and are thus significantly and cumulatively impacted by area-wide development. The Project's contribution to the cumulative impact would be cumulatively considerable in locations where the Project would contribute 50 or more peak hour trips. CMP and state highway facilities that would receive 50 or more Project-related peak hour trips include four (4) segments of I-215 and one (1) segment of SR-91, as well as the I-215/Harley Knox Boulevard freeway ramps and the merge/diverge pattern at this interchange.	Freeway mainline segments are under the jurisdiction of Caltrans. Caltrans has no fee programs or other mitigation programs in place for the mitigation of cumulative impacts caused by development projects on freeway segments. Impacts to freeway ramps are satisfied by Mitigation Measures MM 4.8-4	N/A	N/A	N/A	Significant Unavoidable Cumulatively Considerable Impact
Threshold 3: The proposed Project does not include an air travel component and would	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation, Monitoring, and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
not affect local air traffic levels. In addition, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns.					
Threshold 4: Implementation of the proposed Project would not substantially increase transportation safety hazards due to incompatible uses or design features.	Mitigation Measure MM 4.8-1 shall apply.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 5: Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold 6: The proposed Project is consistent with adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, and is designed to minimize potential conflicts with non-vehicular means of transportation. Potential impacts to the performance or safety of transit, bicycle, and pedestrian systems would be less than significant.	No Mitigation is Required.	N/A	N/A	N/A	Less-than-Significant Impact

1.0 INTRODUCTION

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by CEQA Guidelines §15002, the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed [government actions (including the discretionary approval of development projects)];
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

If a project will be approved involving significant environmental effects,

- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose.

This Environmental Impact Report (EIR, P13-130) is an informational document that represents the independent judgment of the City of Moreno Valley and that evaluates the physical environmental effects that could result from constructing and operating the proposed Modular Logistics Center project (hereafter, the "Project"). The Project proposes governmental approval of a Plot Plan (PA 13-0063) and other related discretionary and administrative actions that are required to construct and operate the Project described in this EIR.

The Project is proposed on an approximately 50.84-gross acre (50.68-net acre) property located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard in the City of Moreno Valley, Riverside County, California. The City of Moreno Valley General Plan designates the Project site for "Business Park/Light Industrial (BP)" land uses. The BP designation allows for light industrial land uses that can meet high performance standards; uses typical to the BP designation generally include, but are not limited to, research and development, light manufacturing, warehousing and distribution, and multi-tenant industrial uses. The land use designation applied to the subject property by the General Plan is intended to reflect the land use designations applied to the site by the City of Moreno Valley's Specific Plan 208, titled "Moreno Valley Industrial Area Plan" (MVIAP, discussed below).

Development on the Project site is governed by the MVIAP. The MVIAP includes specific zoning designations and standards for development within its geographical boundaries, and applies an "Industrial" designation to the Project site. The Industrial designation permits a wide range of industrial and industrial/business related support uses, including light manufacturing and storage and distribution facilities. The land use designation applied to the Project site by the MVIAP represents the zoning designation for the subject property.

The proposed Project is consistent with the property's land use and zoning designations as applied by the City of Moreno Valley General Plan and the MVIAP. CEQA Guidelines §15183(a) mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. In this case, the subject property was evaluated as part of an EIR certified in 1989 for the MVIAP (State Clearinghouse Number 1988080813) and as part of the City's General Plan Program EIR certified in 2006 (State Clearinghouse Number 2000091075). Therefore, as mandated by CEQA Guidelines §15183(a), this EIR focuses on project-specific effects that are peculiar to the proposed Modular Logistics Center project and its 50.84-gross acre property.

As a first step in the CEQA compliance process, an Initial Study was prepared by the City of Moreno Valley pursuant to CEQA Guidelines §15063 to determine if the Project could have a significant effect on the environment. The Initial Study determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines §15161, is required. Pursuant to CEQA Guidelines §15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation."

Accordingly, and in conformance with CEQA Guidelines §15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

For purposes of this EIR, the term "Project" refers to the discretionary actions required to implement the Modular Logistics Center as proposed and all of the activities associated with its implementation including planning, construction, and ongoing operation. In summary, the Project proposes to redevelop an underutilized 50.84-gross acre property through the construction and operation of one (1) logistics warehouse building with 1,109,378 square feet (s.f.) of building space and 256 loading bays, as well as surface parking areas and drive aisles, utility infrastructure, landscaping, water quality/detention basins, and other site improvements.

The Project proposes the following discretionary action, which is under consideration by the City of Moreno Valley:

- **Plot Plan (PA 13-0063)** provides a detailed site plan for the proposed warehouse building, and includes a land use plan, architectural plans, and landscape design. One (1) building would be constructed with a maximum of 1,109,378 s.f. of building area.

Refer to Section 3.0, *Project Description*, for a detailed description of the proposed Project, including a list of the permits and actions that would be required of the City of Moreno Valley and other agencies and authorities to construct and operate the Project.

1.3 PRIOR CEQA REVIEW

The Project site is located within the geographic limits of the Moreno Valley Industrial Area Plan (formerly known as the "Oleander Specific Plan," SP 208) and was the subject of previous environmental review under CEQA as part of an EIR certified in 1989 for the Specific Plan (SCH No. 1988080813). The Oleander Specific Plan called for the development of "Business Park," "Mixed Use," "Light Industry," and "Heavy Industry" land uses across approximately 1,500 acres in southwestern Moreno Valley, adjacent to the March Air Reserve Base. SP 208 was adopted on June 27, 1989.

The Oleander Specific Plan was amended, and subsequently renamed the "Moreno Valley Industrial Area Plan," or MVIAP in 2001. As part of the 2001 Amendment, the Specific Plan boundaries were expanded to include an additional 40 acres of land. The MVIAP was amended again in 2002 to consolidate the "Business Park," "Mixed Use," "Light Industry," and "Heavy Industrial" land use designations of the original Specific Plan within a single "Industrial" land use classification.

In 2000, an application for a Plot Plan (PA00-0025) was submitted to the City of Moreno Valley to develop a portion of the Project site with an industrial office building and a manufacturing / warehouse building. PA00-0025 was consistent with the subject property's General Plan and Specific Plan land use designations. The City prepared a Negative Declaration (ND) for PA00-0025 in compliance with CEQA. The ND concluded that implementation of PA00-0025 would not result in a significant effect on the environment. PA00-0025 was approved by administrative decision and constructed. The western portion of the Project site is now developed with an approximately 12,000 s.f. office building, an approximately 130,000 s.f. manufacturing/warehouse building, and a water detention basin.

In 2008, a Plot Plan application (PA08-0096) was submitted to the City of Moreno Valley to allow the installation of concrete stone manufacturing equipment in the existing manufacturing/warehouse building on the Project site. PA08-0096 was approved by the City via an administrative process and was exempt from CEQA review.

In summary, the Project site was subject of the previous environmental reviews conducted under CEQA as part of the EIR certified in 1989 for the Oleander Specific Plan (SCH No. 1988080813) and the ND prepared in support of PA00-0025. The Project site also was evaluated as part of the City of Moreno Valley's General Plan Program EIR (SCH No. 2000091075), certified July 11, 2006. These documents are herein incorporated by reference and are available at the City of Moreno Valley, Planning Division, 14177 Frederick St, Moreno Valley, CA 92553. The General Plan EIR assumes full buildout of the City of Moreno Valley, including the MVIAP area in accordance with

the land use designations applied by SP 208, inclusive of the development of vacant lands as well as the redevelopment of existing uses where appropriate.

1.4 LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 *et seq.*).

Pursuant to CEQA §21067 and CEQA Guidelines Article 4 and §15367, the City of Moreno Valley is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City of Moreno Valley has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City of Moreno Valley's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§15090 through 15093).

Pursuant to CEQA Guidelines §§15040 through 15043, and upon completion of the CEQA review process, the City of Moreno Valley will have the legal authority to do any of the following:

- Approve the proposed Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Disapprove the Project, if necessary, in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even through the Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed Plot Plan (PA13-0063) and all other governmental discretionary and administrative actions related to the Project.

This EIR is an informational document intended for use by the City of Moreno Valley decision makers, Trustee and Responsible agencies, and members of the general public in evaluating the physical environmental effects of the proposed Project. As mandated by CEQA Guidelines §15183(a), this EIR focuses on the specific environmental effects that are peculiar to the proposed Project and its property, because designation of the property for industrial/business park development

was previously and adequately evaluated in accordance with CEQA by two prior EIRs (an EIR certified in 1989 for Specific Plan 208 (State Clearinghouse Number 1988080813) and the City's General Plan Program EIR certified in 2006 (State Clearinghouse Number 2000091075)). As such, the analysis of use of the property for industrial/business park development does not need to be repeated.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

Section 21104 of the California Public Resource Code requires that all EIRs be reviewed by state responsible and trustee agencies (see also CEQA Guidelines §15082 and §15086(a)). As defined by CEQA Guidelines §15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in CEQA Guidelines §15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For the proposed Project, the Santa Ana Regional Water Quality Control Board (RWQCB) is identified as a Trustee Agency that is responsible for the protection of water resources and water quality. The Santa Ana RWQCB is responsible for issuance of a National Pollutant Discharge Elimination System (NPDES) Permit to ensure that during and after Project construction, on-site water flows do not result in siltation, other erosional actions, or degradation of surface or subsurface water quality. There are no other agencies that are identified as Responsible or Trustee Agencies for the proposed Project.

1.6 EIR SCOPE, FORMAT, AND CONTENT

1.6.1 EIR SCOPE

As a first step in complying with the procedural requirements of CEQA, the City of Moreno Valley prepared an Initial Study to preliminarily identify the environmental issue areas that may be adversely impacted by the Project. Following completion of the Initial Study, the City filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to property owners located within 300 feet of the Project site, Responsible Agencies, Trustee Agencies, and other interested parties on March 25, 2014, for a 30-day public review period. The City of Moreno Valley also advertised the NOP in the Press Enterprise, a newspaper of general circulation in the Project area, and posted the Initial Study and NOP to its website (http://www.moval.org/index.shtml) for review by the general public. The City distributed the NOP for public review to solicit responses that may assist the City in identifying the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly noticed EIR Scoping Meeting was held at the City of Moreno Valley City Hall on April 21, 2014, which provided members of the general public an additional opportunity to comment on the scope and range of potential environmental concerns to be addressed in this EIR.

As a result of the Initial Study and in consideration of all comments received by the City on the NOP and during the Scoping Meeting, this EIR evaluates the Project's potential to cause adverse effects to the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Noise
- Transportation/Traffic

The Initial Study, NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive issues raised in response to the NOP are summarized below in Table 1-1, *Summary of NOP Comments*. The purpose of this table is to present the primary environmental issues of concern raised during the NOP review period. The table is not intended to list every comment received by the City during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP and at the EIR Scoping Meeting are addressed in this EIR.

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
State Clearinghouse	March 25, 2014	– Acknowledging receipt of NOP and distribution to State Agencies for review and comment.	Informational comment. No response necessary.
Department of the Air Force	March 21, 2014 [sic]	– Development is consisted with compatible land use and MARB mission operations at this location – Requests that the Project not contain features that interfere with aircraft communication or navigation	Informational comment. No response necessary. – Subsection 4.1, *Aesthetics;* Subsection 4.2, *Air Quality;*
California Department of Transportation (Caltrans)	April 2, 2014	– Prepare traffic study based on Caltrans Guide for the Preparation of Traffic Impact Studies. – Evaluate impacts to nearby regionally significant arterial segments and intersections. – Clearly label the traffic analysis scenarios. – Indicate and exhibit LOS with and without improvements. – Eliminate or reduce impacts to the State highway system.	– Subsection 4.9, *Transportation/Traffic* – Technical Appendices H1 and H2

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
Johnson & Sedlack	April 7, 2014 & Identical Letter Dated April 14, 2014	– Consider potential indirect blighting effects associated with the supply of logistics warehouse buildings in City of Moreno Valley	– Subsection 2.4, *Planning Context* – Section 5.0, *Other CEQA Considerations*
		– Consider cumulative impacts to traffic, air quality, health risk, biological resources, water quality and other effects	– Section 4.0, *Environmental Analysis (Table 4.0-1)* – Subsection 4.2, *Air Quality*; – Subsection 4.9, *Transportation/Traffic*; – Subsection 4.3, *Biological Resources*; – Section 5.0, *Other CEQA Considerations*
		– Consider impacts and mitigation related to health risks associated with the Project's anticipated truck traffic	– Subsection 4.2, *Air Quality*
		– Consider hydrology and water quality issues associated with proximity to Perris Valley Storm Drain Channel, Lake Perris, and the Moreno Valley Regional Water Reclamation Facility	– Section 5.0, *Other CEQA Considerations*
		– Consider traffic impacts to the state highway network related to Port traffic	– Subsection 4.9, *Transportation/Traffic*
		– Consider specific project design features, alternatives and/or mitigation measures to reduce diesel health risks and aesthetic impacts	– Subsection 4.2, *Air Quality*; – Subsection 4.1, *Aesthetics* – Section 6.0, Alternatives
		– Consider traffic and truck emissions associated with soil import	– Subsection 4.9, *Transportation/Traffic* – Subsection 4.2, *Air Quality* – Subsection 4.6, *Greenhouse Gas Emissions*
		– Consider and evaluate agricultural impacts	– Section 5.0, *Other CEQA Considerations*
		– Consider and mitigate impacts to raptors and burrowing owls	– Subsection 4.3, *Biological Resources*
		– Consider impacts and mitigation related to geology/soils	– Subsection 4.5, *Geology and Soils*
		– Quantify and disclose construction noise impacts	– Subsection 4.7, *Noise*
		– Disclose electricity supply and water supply needs of the building	– Section 5.0, *Other CEQA Considerations*
		– Recycle construction debris	– Section 3.0, *Project Description*

Table 1-1 Summary of NOP Comments

COMMENTER	DATE	COMMENTS	LOCATION IN EIR WHERE COMMENT(S) ADDRESSED
Native American Heritage Commission	April 16, 2014	– Include mitigation for identification and evaluation of archaeological resources – Coordinate and consult with the NAHC and local Native American contacts	– Subsection 4.4, *Cultural Resources*
California Department of Fish and Wildlife	April 25, 2014	– Consider and disclose impacts and information about habitat and species at the Project Site, measures to minimize impacts; include recent survey data conducted using CDFW methods – Ensure compliance with the MSHCP and demonstrate that proposed actions are consistent with MSHCP Section 6.1.2, 6.1.3 and 6.3.2 – Include cumulative analysis related to biological resources – Alternatives analysis should include alternatives that avoid or minimize impacts to sensitive biological resources	– Section 4.3, *Biological Resources* – Technical Appendices C1 and C2 – Section 4.3, *Biological Resources* – Technical Appendices C1 and C2 – Section 4.3, *Biological Resources* – Section 6.0, *Alternatives*
Southern California Association of Governments	April 23,2014	– Encourage side-by-side comparison of SCAG's RTP/SCS goals with discussion of consistency with supported analysis – Consider applicable RTP/SCS strategies as guidance for considering the Project within the context of regional goals and policies – Utilize the most recently adopted SCAG Regional Growth forecast. – Consider SCAG's RTP/SCS example mitigation to be applied as appropriate	– Section 5.0, *Other CEQA Considerations* – Subsection 2.4, *Planning Context* – Section 5.0, *Other CEQA Considerations* – Section 5.0, *Other CEQA Considerations* – Section 5.0, *Other CEQA Considerations*
South Coast Air Quality Management District	April 24, 2014	– Use CalEEMod land use emissions software for analysis – Identify and quantify air quality impacts that could occur from all phases of the Project and compare to SCAQMD's regional and localized significant thresholds	– Subsection 4.2, *Air Quality* – Subsection 4.6, *Greenhouse Gas Emissions* – Technical Appendices C1, C2 and F – Subsection 4.2, *Air Quality*

The Lead Agency has identified one issue of controversy associated with the proposed Project, which is a common issue of concern associated with warehouse distribution projects in the City and surrounding area. Parties that frequently comment on CEQA documents prepared by the City of Moreno Valley for industrial warehouse projects have suggested that the City apply mitigation measures for mobile source air quality emissions that go beyond emission requirements imposed by federal and state law and that are duplicative of mandatory regulatory requirements. The City of Moreno Valley applies mitigation measures which it determines a) are feasible and practical for project applicants to implement, b) are feasible and practical for the City of Moreno Valley to monitor and enforce, c) are legal for the City to impose, d) have an essential nexus to the Project's impacts, and e) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to analyze an exhaustive list of every imaginable mitigation measure, and measures that are duplicative of mandatory regulatory requirements. This is identified as an area of controversy.

1.6.2 EIR FORMAT AND CONTENT

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, Section 21000 *et. seq.* and California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference guide in locating the CEQA-required sections within this document.

In summary, the content and format of this EIR are as follows:

- **Section 1.0, Introduction,** provides introductory information about the CEQA process and the responsibilities of the City of Moreno Valley, serving as the Lead Agency for this EIR.
- **Section 2.0, Environmental Setting,** describes the environmental setting, including descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was released for public review (March 25, 2014).
- **Section 3.0, Project Description,** serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines §15123.
- **Section 4.0, Environmental Analysis**, provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the proposed Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The CEQA Guidelines also identify the terms "effects" and "impacts" as being synonymous (CEQA

Table 1-2 Location of CEQA-Required Topics

CEQA REQUIRED TOPIC	CEQA GUIDELINES REFERENCE	LOCATION IN THIS EIR
Table of Contents	§15122	Table of Contents
Summary	§15123	Section S.0
Project Description	§15124	Section 3.0
Environmental Setting	§15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented	§15126.2(c)	Subsection 5.2
Growth-Inducing Impact of the Proposed Project	§15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§15126.6	Section 6.0
Effects Not Found to be Significant	§15128	Subsection 5.4
Organizations and Persons Consulted	§15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§15130	Section 4.0

Guidelines §15358). In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementation of the proposed Project. The analyses are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. In most cases, implementation of the mitigation measures would reduce the adverse environmental impact to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental

effect is identified as a significant and unavoidable adverse impact, for which a statement of overriding considerations would need to be adopted by the City of Moreno Valley pursuant to CEQA §15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the proposed Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not to be significant during this EIR's Initial Study and NOP process and that, therefore, do not require a detailed evaluation in this EIR.

- **Section 6.0, Project Alternatives,** describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of four (4) alternatives is presented in Section 6.0.

- **Section 7.0, References,** cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

- **Technical Appendices.** CEQA Guidelines §15147 states that the "information contained in an EIR shall include summarized…information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Moreno Valley Community and Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, California, 92552, during the City's regular business hours or can be requested in electronic form by contacting the City Planning Division. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

  A: Initial Study, Notice of Preparation, and Written Comments on the NOP
  B1: Air Quality Impact Analysis
  B2: Mobile Source Health Risk Assessment
  C1: Biological Resources Assessment
  C2: Burrowing Owl Survey
  D1: Cultural Resources Assessment
  D2: Paleontological Resources Assessment
  E1: Geotechnical Investigation
  E2: Water Quality Management Plan

F: Greenhouse Gas Analysis
G: Noise Impact Analysis
H1: Traffic Impact Analysis
H2: Supplemental Basic Freeway Segment Analysis
H3: Site Access Evaluation
I: Water Supply Assessment
J: Phase I Environmental Site Assessment
K: Written Correspondence

- **Documents Incorporated by Reference.** CEQA Guidelines §15150 allows for the incorporation "by reference all or portions of another document…[and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." Documents, analyses, and reports that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of an EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

2.0 ENVIRONMENTAL SETTING

2.1 PHYSICAL SETTING AND LOCATION

The approximately 50.84-gross acre (50.68-net acre) Project site is located in the City of Moreno Valley, in western Riverside County, California. Western Riverside County abuts San Bernardino County to the northeast, Orange County to the west, and San Diego County to the south. Los Angeles County is located further to the northwest. The site's location in a regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square mile region comprising San Bernardino County, Riverside County, and the eastern tip of Los Angeles County. The Southern California Association of Governments (SCAG) estimates that the majority of growth in the entire southern California region will take place in Riverside and San Bernardino Counties (SCAG 2012a 2). According to U.S Census data, the 2010 population of Riverside County was 2,189,641 (U.S. Census Bureau 2012). SCAG forecast models predict that the population of Riverside County will grow to approximately 3.324 million persons (an approximate 1.1 million person increase) by the Year 2035 (SCAG 2012b).

From a regional perspective, the Project site is generally located to the north and northeast of the City of Perris and to the southeast of the City of Riverside. Unincorporated areas of Riverside County in the vicinity of the Project site include the unincorporated communities of Woodcrest and Mead Valley to the west and southwest, the unincorporated communities of Reche Canyon and Pigeon Pass to the north, and the unincorporated community of Lakeview and rugged terrain known as the "Badlands" to the east.

The subject property is rectangular-shaped and located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Figure 3-2, *Vicinity Map*, in EIR Section 3.0, *Project Description*, shows the specific location of the Project site. The Project site is located approximately 2.0 miles east of Interstate 215 (I-215) and 4.7 miles south of State Route 60 (SR-60). The property encompasses Assessor Parcel Numbers (APNs) 312-250-030, 312-250-031, 312-250-032, 312-250-036, 312-250-038, and 312-250-050, and lies within Section 32 of Township 3 South, Range 3 West of the San Bernardino Baseline and Meridian.

The Project site is located within the geographical limits of the MVIAP. Property in the MVIAP boundaries was once rural in nature, but over the past decade has been transitioning into an important industrial and economic center for the City, as called for by the MVIAP. The MVIAP was originally approved by the City in 1989 (previously known as the "Oleander Specific Plan"). The pace of industrial development in the MVIAP area was very slow until about 2007 when the warehouse distribution industry began to locate distribution warehouse facilities in this location. Several large-scale industrial and warehouse buildings have developed within the MVIAP area and there are

several approved industrial and warehouse development projects in this area that are pending construction.

Approximately 1.0 mile west of the Project site is the March Air Reserve Base (MARB), which was established as a military airport in 1918 and operated as March Air Force Base until 1996 when it was transitioned to a reserve base. Today, the property contains an airfield, military uses, aviation-related uses, and areas designated for civilian development called the March Inland Port Airport (IPA). Additionally, Lake Perris is located approximately 1.3 miles to the southeast of the Project site. Subsection 2.2, below, describes the conditions surrounding the Project site in more detail.

2.2 SURROUNDING LAND USES AND DEVELOPMENT

Figure 2-1, *Surrounding Land Uses and Development*, depicts the existing land uses and land use designations in the vicinity of the Project site. The Project site is located in a portion of the City of Moreno Valley that is developing as a center for distribution warehousing and light industrial land uses.

North: North of the Project site is Edwin Road and a property that is currently under construction to accommodate a large distribution warehouse building. As part of that construction process, Edwin Road is being extended to the west and will terminate in a cul-de-sac. To the north of the parcel under construction is the Perris Valley Storm Drain Channel, beyond which is single-family residential housing intermixed with residential-serving uses such as parks and schools. Four (4) school facilities are located within one (1) mile of the Project site. The nearest school facility is the El Portero Elementary School, located approximately 0.4-mile northeast of the Project site. Vista Verde Middle School is located approximately 0.8-mile northeast of the Project site on Krameria Avenue. In addition, Morning Dove Christian Academy is located approximately 0.7-mile north of the Project site and Mary McLeod Bethune Elementary School is located approximately 0.6-mile northeast of the Project site at the southwest corner of the intersection of Krameria Avenue and Kitching Street.

South: Immediately to the south of the Project site is Modular Way, south of which is a distribution warehouse building occupied by Walgreens. Further south are additional distribution warehouse buildings, including but not limited to buildings occupied by Ross and Home Depot.

West: Perris Boulevard abuts the Project site to the west. West of Perris Boulevard are a collection of warehouse distribution buildings (including but not limited to buildings occupied by Harbor Freight Tools and O'Reilly Auto Parts), truck trailer parking yards, and small parcels that are either undeveloped or contain small commercial, industrial, or manufacturing structures intermixed with several non-conforming residential land uses.

East: To the east of the Project site lie Kitching Street and the Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD). Lake Perris is located approximately 1.3 miles to the east of the Project site.

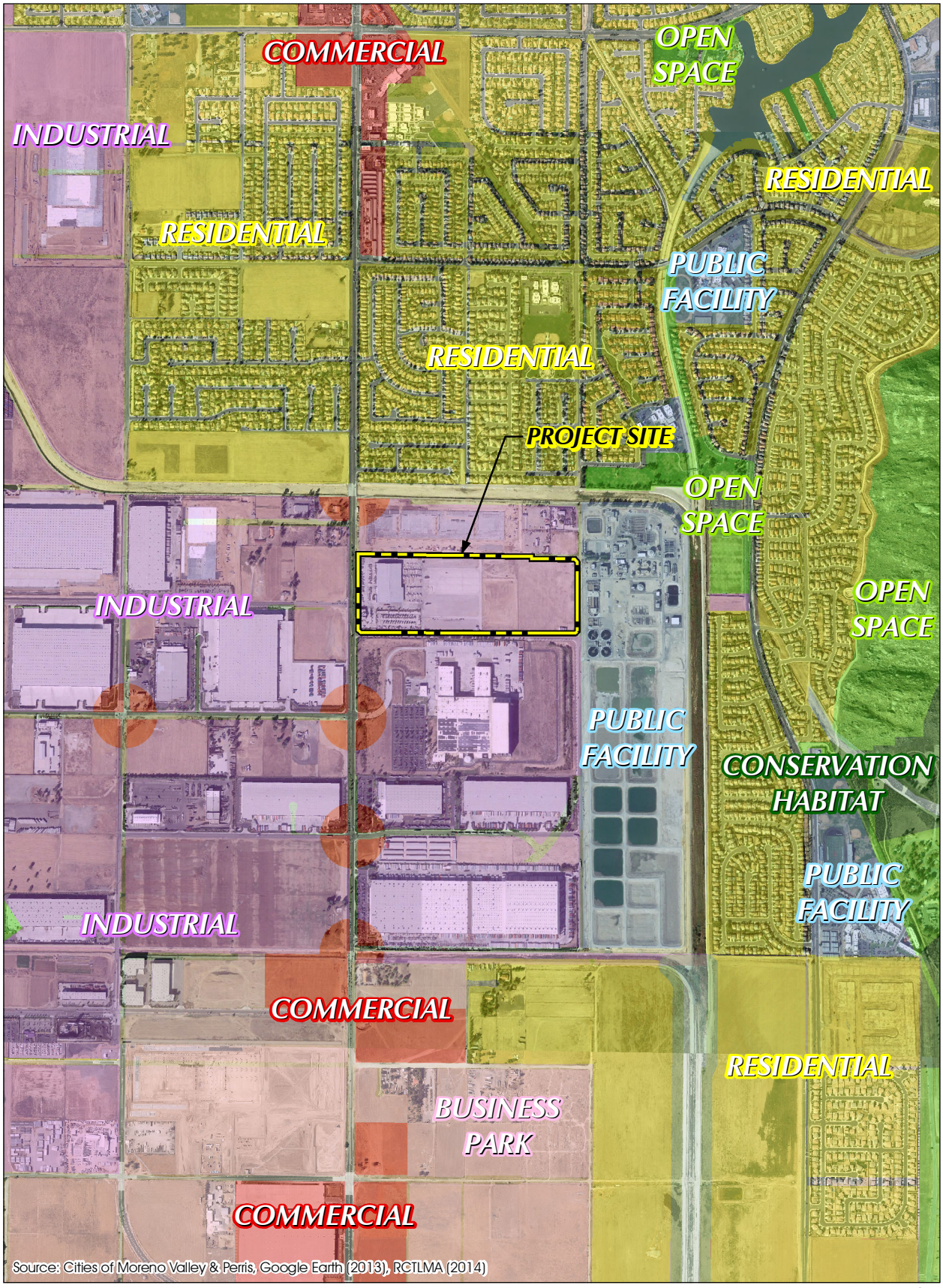


Figure 2-1

Surrounding Land Uses and Development

All undeveloped properties immediately surrounding the proposed Project site are designated for industrial development pursuant to the City's General Plan and the MVIAP.

2.3 FUNCTIONAL SETTING OF INDUSTRIAL/LOGISTICS WAREHOUSE LAND USES

Just northwest of the Inland Empire is the greater Los Angeles area, which is the second largest metropolitan region in the country. The ports of LA/Long Beach are by far the largest water ports in the country and handle approximately 40% of port container traffic throughout the United States. The ports substantially contribute to Southern California's economy and offer a cost efficient method for Asian goods to enter North American markets. Future growth in port activity is anticipated, as there are plans to spend $5 billion on port infrastructure by 2017. A key component of distributing goods to consumers once they enter the United States via the ports is goods storage and distribution centers. Industrial logistics/warehouse vacancy rates in Southern California are at historic lows, and tenants have growing needs for state of the art warehouse buildings to receive, sort, and ship goods. The business of logistics has grown more sophisticated over the years mandating early suppression fast response (ESFR) fire sprinkler systems, 32 to 36 foot minimum ceiling clearances, truck courts that accommodate large trailers, and large trailer parking areas. (Colliers International, 2014)

Since the economic downturn in 2008, companies throughout the United States have learned to become more efficient and productivity has been on the rise. Companies are operating more efficiently within their facilities, leading them to demand state-of-the-art features found in new buildings. Retailers are demanding more and more out of distributors, forcing them to combine product lines, provide pick-and-pack services employing larger numbers of people, which all require larger facilities. E-commerce is an emerging trend that is growing at an accelerating pace. As United States consumers buy more and more goods online, stores are getting smaller and warehouses are getting larger. Large industrial facilities are typically owned by institutions, not individuals. Unlike manufacturing facilities that are built for a specific purpose, logistic warehouse facilities are built with the flexibility to accommodate a variety of occupants.

2.4 PLANNING CONTEXT

Provided in this Subsection is a description of the Project site's context to SCAG's Regional Transportation Plan Goods Movement Strategy and the Project site's land use designations, as applied by planning documents adopted by the City of Moreno Valley.

2.4.1 SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS REGIONAL TRANSPORTATION PLAN

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans

including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region (SCAG n.d.).

As a MPO and public agency, SCAG develops transportation and housing plans that transcend jurisdictional boundaries that affect the quality of life for Southern Californian as a whole. SCAG's *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*) includes a chapter titled "Goods Movement" that is applicable to the proposed Project. It states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. To that end, the Goods Movement Appendix of the RTP/SCS sets forth regional strategies to achieve an efficient movement of goods. It states:

> "Goods movement and freight transportation are essential to supporting the SCAG regional economy and quality of life. The goods movement system in the SCAG region is a multimodal, coordinated network that includes deep water marine ports, international border crossings, Class I rail lines, interstate highways, state routes and local roads, air cargo facilities, intermodal facilities, and regional distribution and warehousing clusters. In 2010, over 1.15 billion tons of cargo valued at almost $2 trillion moved across the region's transportation system. Whether carrying imported goods from the San Pedro Bay Ports to regional distribution centers, supplying materials for local manufacturers, or delivering consumer goods to SCAG residents, the movement of freight provides the goods and services needed to sustain regional industries and consumers on a daily basis." (SCAG 2012 1)

According to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. Unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035 a shortfall of 227 million square feet of industrial warehouse space will occur (SCAG 2013 4-39).

Assuming no other land, such as agricultural lands, is converted to industrial use, and based on available land that is zoned for industrial uses, the SCAG region could hold another 186.2 million square feet of warehousing and distribution buildings. Within the SCAG region, Riverside County contains the largest share of undeveloped space suitable for industrial warehouse development (60.0 million square feet, 32.2%), of which the vast majority (67.5%) is located in outlying desert areas (SCAG 2013 3-34). A significant amount of available industrial land is located in the vicinity of the SR-60 corridor, particularly in Moreno Valley, Perris, and near March Reserve Base. Approximately 50% of the SCAG region's projected industrial warehouse space is located within a five (5) mile radius of SR-60 (SCAG 2013 6-16).

2.4.2 CITY OF MORENO VALLEY GENERAL PLAN

The City of Moreno Valley's prevailing planning document is its General Plan, dated July 11, 2006. As depicted on Figure 2-2, *Existing General Plan Land Use Designations*, the City's General Plan designates the Project site for "Business Park/Light Industrial" land uses. The "Business Park/Light Industrial" designation provides for employee intensive uses, including manufacturing, research and development, warehousing and distribution, as well as office and support commercial activities, with a building intensity up to 1.0 floor area ratio (FAR).

2.4.3 MORENO VALLEY INDUSTRIAL AREA PLAN (SPECIFIC PLAN 208)

The Project site is located within the geographic boundaries of the MVIAP (Specific Plan 208). The MVIAP "establishes development regulations and design standards that will ensure quality development which will positively contribute to the City's industrial employment base…" (City of Moreno Valley 2002 I-4). The MVIAP includes specific zoning designations and standards for development within its geographical boundaries.

As shown on Figure 2-3, *MVIAP Land Use Map*, the MVIAP applies an "Industrial" land use designation to the Project site. The "Industrial" designation permits a wide range of industrial and industrial/business related support uses, including wholesale, storage and distribution facilities.

2.4.4 ZONING

The development regulations and design standards contained within the MVIAP (Specific Plan 208) supersede the zoning standards contained in the City's Municipal Code. The MVIAP applies the "Industrial" zoning designation to the proposed Project site. Refer to MVIAP Section III, *Development Standards and Guidelines*, and Section IV, *Development Framework*, for more information on the specific development regulations and design standards that apply to the Project site. The MVIAP is herein incorporated by reference pursuant to CEQA Guidelines §15150 and is available for review at the physical location indicated in EIR Subsection 7.2, *Documents Incorporated by Reference*.

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to CEQA Guidelines §15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on March 25, 2014, and the following subsections provide a description of the Project site's physical environmental condition as of that approximate date. More information regarding the Project's site's environmental setting is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 LAND USE

The area surrounding the Project site, as described previously in Subsection 2.2, is characterized by industrial and warehouse development, the Moreno Valley Regional Water Reclamation Facility, and

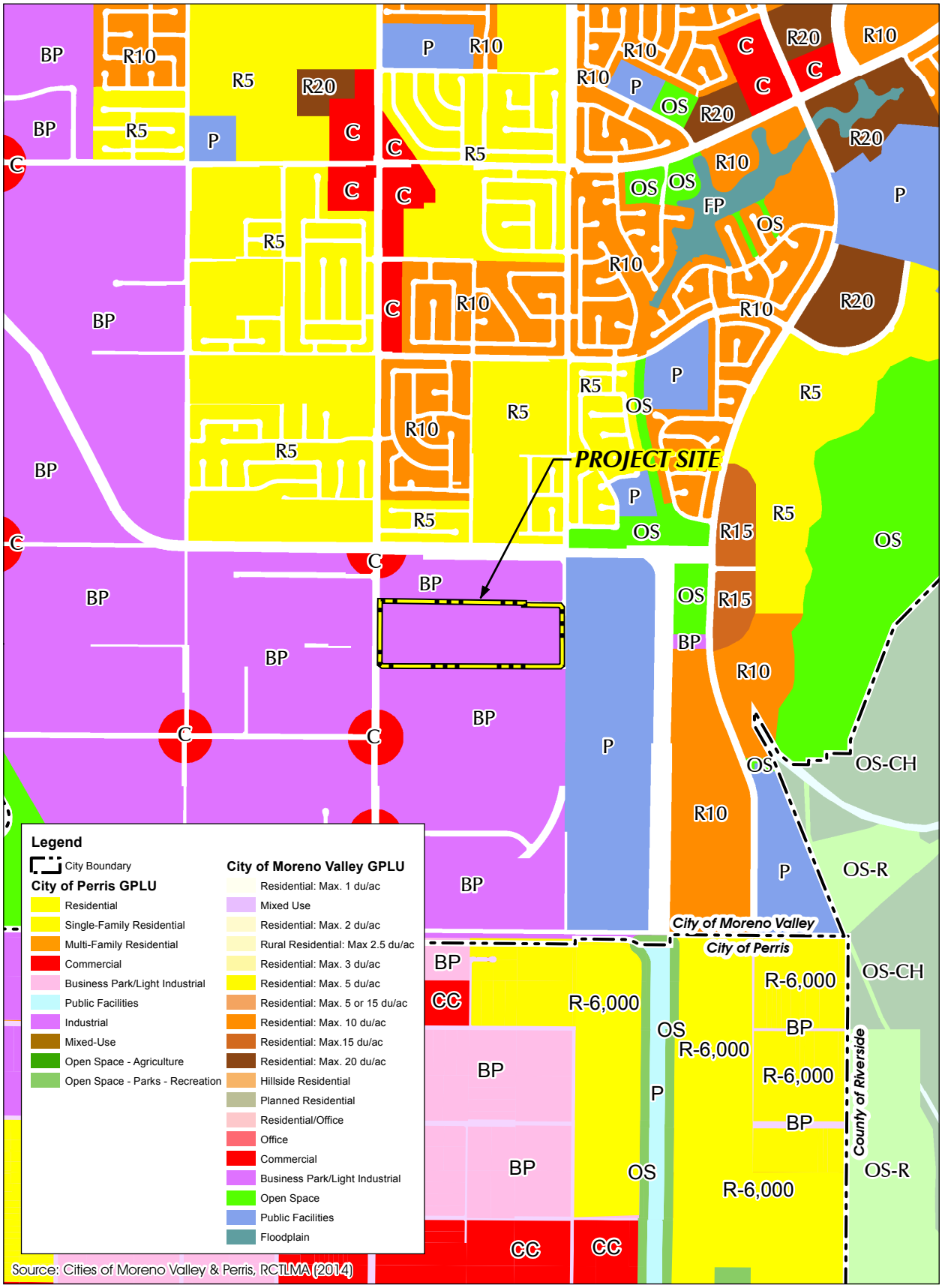


Figure 2-2

Existing General Plan Land Use Designations

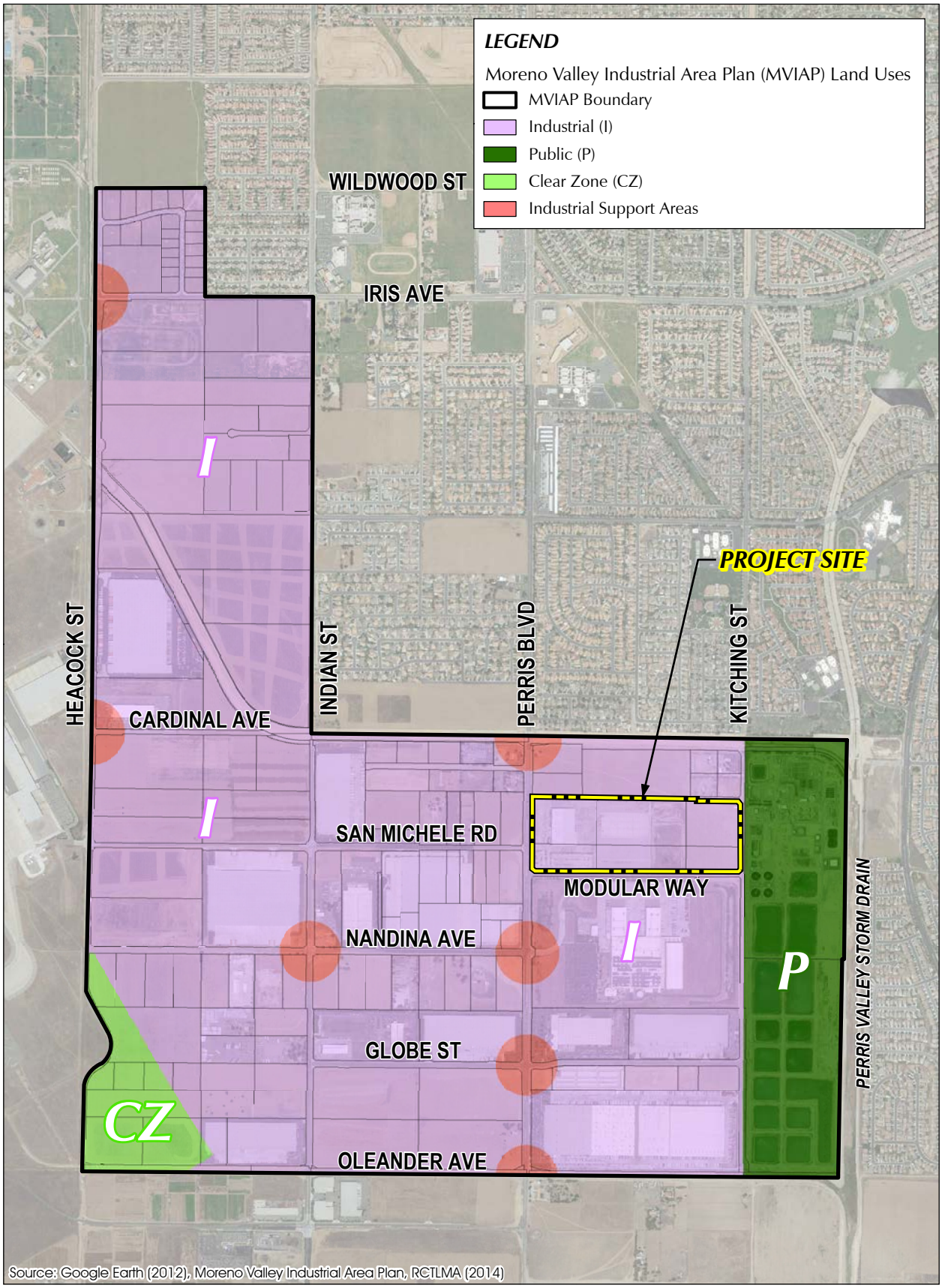


Figure 2-3

MVIAP Land Use Map

vacant, undeveloped land. Historically, a majority of the Project site was used for agricultural production; however, all agricultural activities on the Project site ceased in approximately 2002 when the property was partly developed with industrial uses. The Project site is not located in an agricultural area and there are no Williamson Act Contract lands or Agricultural Preserves located on the site or in the surrounding area.

As depicted in Figure 2-4, *Aerial Photograph*, the eastern portion of the Project site is vacant and routinely maintained (*i.e.*, disced) to remove vegetation from the site to reduce the risk of fire as required by the Riverside County Fire Department. The eastern portion of the Project site was previously utilized as a storage area for modular units. The central portion of the site contains a large detention basin associated with the Eldorado Stone facility operating on the western portion of the site. The industrial operation on the western portion of the Project site, which is occupied by Eldorado Stone, consists of one (1) large warehouse/distribution structure with approximately 130,000 s.f. of building area and an approximate height of 37 feet, one (1) office building with approximately 12,000 s.f. of building area and an approximate height of 37 feet, a paved parking lot in the southwest corner, and additional paved land utilized as outdoor storage.

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

The Project site is relatively flat, with a topographic high point of 1,471.6 feet above mean sea level (AMSL) in the northwest portion of the site and a topographic low point of approximately 1,457.4 feet AMSL in the south central portion of the site (within the existing detention basin associated with the Eldorado Stone facility). The topographic relief of the Project site is approximately fourteen (14) feet. Ornamental landscaping, including trees, is provided along the western, northern, and southern perimeters of the Eldorado Stone facility and interior to the site at building entrances and within parking/storage areas. The central and eastern portions of the site do not contain any formal landscaping, and are characterized by ruderal plants and weeds. No trees are present on the central and eastern portions of the subject property. There are no rock outcroppings or unique topographic features on the Project site. Aesthetically, the Project site is characterized as a flat, partially developed site (refer to Subsection 2.5.1 for a description of the existing structures on the Project site). Figure 3-3, *USGS Topographic Map*, in EIR Section 3.0, *Project Description*, depicts the Project site's existing topographic conditions.

The areas immediately surrounding the Project site to the north, south and west are characterized as flat and/or developed. The Russell Mountains are located approximately 0.7-mile to the east of the Project site.

Refer to EIR Subsections 4.1, *Aesthetics*, and 4.5, *Geology and Soils*, for a more thorough discussion of the Project site's existing topographic and aesthetic setting.

Figure 2-4

Aerial Photograph

2.5.3 AIR QUALITY AND CLIMATE

The Project site is located in the 6,745-square-mile South Coast Air Basin (SCAB), which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and state air quality standards. As documented in the Project's air quality report (*Technical Appendix B1* to this EIR), although the climate of the SCAB is characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. More than 90% of the SCAB's rainfall occurs from November through April. Temperatures during the year range from an average minimum of 36°F in January to over 100°F maximum in the summer. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Ana[s]" each year.

Although air quality in the SCAB has improved over the past several decades, the SCAB is currently not in attainment of state and/or federal standards established for Ozone (O_3) one-hour and eight-hour, particulate matter (PM_{10} and $PM_{2.5}$), and Nitrogen Oxides (NO_X), and also not in attainment for Lead (Pb) in Los Angeles County (Urban Crossroads 2014a 12). The SCAQMD conducts in-depth analysis of toxic air contaminants and their resulting health risks for all of Southern California. This study, entitled, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III*), predicted an excess cancer risk of 566 in one million for the vicinity of the Project site (Urban Crossroads 2014a 25).

Refer to EIR Subsections 4.2, *Air Quality*, and 4.6, *Greenhouse Gas Emissions*, for a more thorough discussion of the Project's site existing air quality and climate setting.

2.5.4 BIOLOGICAL RESOURCES

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the conservation of sensitive plant and animal species and their associated habitats in western Riverside County. The City of Moreno Valley approved the MSHCP on January 13, 2004. The MSHCP identifies a Criteria Area, in which habitat conservation efforts are targeted. As shown on Figure 2-5, *MSHCP Criteria Areas*, the Project site is not located within a MSHCP Criteria Area. As such, the site is not targeted for open space conservation as part of the regional plan for habitat conservation (Riverside County, 2003, Vol. 1 Ch. 3).

The entire Project site has been disturbed, either by past development and/or agricultural activities or by ongoing fire fuel management (*i.e.*, discing). According to a biological field survey conducted on the Project site in November 2013 by Alden Environmental, Inc. (refer to *Technical Appendix C1*),

Figure 2-5

MSHCP Criteria Areas

the subject property does not support any native vegetation communities. No special-status plant species were observed on the Project site; however, one (1) special-status animal species (California horned lark) was detected on the Project site. The western burrowing owl, a California Species of Special Concern, was not observed on the Project site; however, the species is common throughout the western Riverside County area and there is potential for the species to occur on-site.

Refer to EIR Subsection 4.3, *Biological Resources*, for a more thorough discussion of the Project site's existing biological setting.

2.5.5 CULTURAL RESOURCES

The Project site is characterized by the City's General Plan Final EIR as having a "low" potential for containing paleontological resource deposits (City of Moreno Valley 2006b 5.10-11) but is characterized by the Riverside County General Plan as having a "high" potential for containing paleontological resources (Riverside County Land Information System). There are no known paleontological resources located on or beneath the surface of the Project site.

From an archaeological perspective, regional prehistory within the Project area is defined by the Late Pleistocene/Paleo-Indian Period (11,500 to 9,000 years ago), the Archaic period (9,000 to 1,300 years ago), and the Late Prehistoric period (approximately 1,300 years ago). Each of these historical periods in time is discussed in EIR Subsection 4.4, *Cultural Resources*. In summary, human habitation of southern California dates back to approximately 11,500 years ago. Over a series of cultural periods, the area transitioned from a hunting and gathering society, to settlements of small groups of people, to large occupations near natural water sources, to formations of distinct ethnographic groups. Moreno Valley is located in the traditional tribal use areas of several Native American Tribes, particularly the Luiseno, with influences from the Gabrielino, Cahuilla, and Serrano Indians (BFSA 2013a pp. 2.0-5 – 2.0-28).

The Project site is not known to have historical significance to the region. The structures present on the property are of modern construction, possess no distinctive features, are not identified as being eligible for listing on the California Register of Historic Places.

Refer to EIR Subsection 4.4, *Cultural Resources*, for a more thorough discussion of the Project's site existing cultural setting.

2.5.6 GEOLOGY

The Project site is located within the Peninsular Range Geomorphic Province, a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded on the east by the Colorado Desert. The Peninsular Range is characterized by steep, elongated ranges and valleys that generally trend northwesterly (California Department of Conservation 2002). More specifically, the Project site is situated within the Perris Block unit, which is mass of granitic rock. The Perris Block is bounded by

the San Jacinto fault zone to the northeast, the Elsinore fault zone to the southwest, and the Santa Ana River (City of Moreno Valley 2006b 5.6).

Southern California Geotechnical, Inc. performed visual site reconnaissance, subsurface exploration, field and laboratory testing, and a geotechnical engineering analysis on the Project site. The developed, western portion of the site generally is underlain with artificial fill materials extending to depths of approximately nine (9) feet, with the native alluvial soils located underneath. The undeveloped, eastern portion of the Project site generally is underlain by native alluvial soil (Southern California Geotechnical, Inc. 2012 pp. 7-8).

The Project site is not located within an active Alquist-Priolo earthquake zone or a City-designated fault hazard zone, meaning that no active faults are mapped or known to exist on the Project site or in the immediate surrounding area (Southern California Geotechnical 2012 12). The nearest known active fault to the Project site, the San Jacinto Valley section of the San Jacinto Fault Zone (Casa Loma Fault), is located approximately 6.2 miles to the west of the subject property.

Refer to EIR Subsection 4.5, *Geology and Soils*, for a more thorough discussion of the Project site's existing geologic setting.

2.5.7 HYDROLOGY

The Project site is located in the Santa Ana River watershed, which drains a 2,650 square-mile area and is the principal surface flow water body within the region. The Santa Ana River starts in the San Bernardino Mountains, approximately 29 miles northeast of the Project site, and flows southwesterly for approximately 96 miles across San Bernardino, Riverside, Los Angeles, and Orange counties before spilling into the Pacific Ocean.

Under existing conditions, runoff from the developed portion of the subject property sheet flows into an on-site detention basin, while runoff from the undeveloped portion of the subject property sheet flows to surrounding roadways (mostly Kitching Street and Modular Way). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1430G, dated August 28, 2008, the entire Project site is prone to some degree of flooding from the Perris Valley Storm Drain Channel during rare storm events. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one (1) foot or drainage areas less than one (1) square mile. The Perris Valley Storm Drainage Channel is located approximately 0.3-mile north of the Project site; intervening property is currently under construction for a large logistics warehouse building.

The Project site does not contain any surface water; however, free water was encountered in one (1) subsurface boring on the Project site at a depth of approximately 25 feet below the ground surface.

Based on the observed water level reading and the moisture content of recovered soil samples, Southern California Geotechnical, Inc. determined the static groundwater table existed at a depth of approximately 25 feet across the Project site at the time of subsurface exploration in 2012 (Southern California Geotechnical, Inc. 2012 8).

2.5.8 NOISE

Primary sources of noise in the Project vicinity include vehicle noise and aircraft noise. To determine the existing acoustical setting, 24-hour noise measurements were taken in the Project study area by Urban Crossroads, Inc. at four (4) locations on November 7, 2013, and December 18, 2013. Measured hourly noise levels in the Project area ranged from 51.8 to 62.7 equivalent-level decibels (dBA Leq), which correlates to a Community Noise Equivalent Level (CNEL) ranging from 57.8 dBA CNEL to 69.2 dBA CNEL (refer to *Technical Appendix G*).

Refer to EIR Subsection 4.8, *Noise*, for a more thorough discussion of the Project's site existing noise setting.

2.5.9 TRANSPORTATION

Major vehicular travel routes in the Project region include I-215, SR-60, and Interstate 15 (I-15). The Project site is located approximately 2.0 miles east of I-215. The nearest interchange is located at Harley Knox Boulevard/I-215 in the City of Perris. From the Harley Knox interchange, I-215 connects with I-15 approximately 24 roadway miles to the south and connects with SR-60 approximately 6.0 roadway miles to the north.

The Project site is located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Existing traffic on nearby roadways consists of both passenger vehicles and trucks accessing the existing industrial / warehouse developments and other land uses in the area. The most direct travel routes from the Project site to I-215 are: Perris Boulevard south to Harley Knox Boulevard west in the City of Perris; and San Michelle Road west to Indian Street south to Harley Knox Boulevard west in the City of Perris.

The City of Moreno Valley Ordinance No. 836 established and designated the following streets or portions thereof as truck routes:

- Alessandro Boulevard (I-215 to the easterly city limits)
- Cactus Avenue (I-215 to Perris Boulevard)
- Elsworth Avenue (Alessandro Boulevard to Cactus Avenue)
- Frederick Street (Cactus Avenue to Sunnymead Boulevard)
- Gilman Springs Road (SR-60 to the easterly City limits)
- Graham Street (Alessandro Boulevard to Cactus Avenue)
- Heacock Street (San Michele Road to Reche Vista Drive)
- Indian Street (San Michelle Road to the southerly City limits)

- Ironwood Avenue (Pigeon Pass to Perris Bouelvard)
- Moreno Beach Drive (Alessandro Boulevard to the SR-60 Westbound (WB) On-Off Ramp
- Nandina Avenue (Perris Boulevard to Indian Street)
- Perris Boulevard (Ironwood Avenue to the southerly City limits)
- Pigeon Pass Road (Sunnymead Boulevard to Ironwood Avenue)
- Reche Vista Road (Heacock Street to the northerly City limits)
- Redlands Boulevard (SR-60 Eastbound (EB) On-Off Ramps to the northerly City limits
- San Michelle Road (Perris Boulevard to Heacock Street)
- Sunnymead Boulevard (Frederick Street to Perris Boulevard)
- Theodore Street (Alessandro Boulevard to Ironwood Avenue)

The City of Perris General Plan Circulation Element establishes Harley Knox Boulevard and Indian Street in the northern portion of the City of Perris as truck routes. Regarding other forms of transportation, field observations indicate that there is nominal pedestrian and bicycle activity in the Project area (Urban Crossroads 2014e 29). The Riverside Transit Agency (RTA) operates bus services along Perris Boulevard, abutting the Project site, via Route 19. An existing bus stop is located at the approximate mid-point of the Project site's western boundary with Perris Boulevard. There is no commuter rail service in the City of Moreno Valley under existing conditions; however, in February 2014, construction broke ground on the "Perris Valley Line," a 24-mile extension of the Metrolink commuter rail service. The Perris Valley Line, which is scheduled to be operational in late-2015, will provide service from Downtown Riverside to Perris along the west side of I-215 (Downey). A station for the Perris Valley Line is planned at Alessandro Boulevard, approximately 6.3 roadway miles from the Project site. Approximately 1.0 mile east of the Project site is the March ARB, at which the airport is used by military and government aircraft with limited use by civilian aircraft. Although air cargo service was discontinued in 2008, the March ARB/IPA Joint Land Use Study (March JPA 2010 Ch. 2), discloses the potential for increased general aviation use.

Refer to EIR Subsection 4.8, *Transportation/Traffic*, for a more thorough discussion of the Project's site existing transportation setting, including local roadways in the City of Moreno Valley and City of Perris that would be used by Project-related traffic.

2.5.10 UTILITIES AND SERVICE SYSTEMS

The Project site is located in the service area of Eastern Municipal Water District (EMWD) for domestic water and sewer service. EMWD manages the domestic water supply and delivery service within its 555 square mile service area, including the City of Moreno Valley, all or portions of six other cities, and a portion of unincorporated Riverside County. As documented in EMWD's *2010 Urban Water Management Plan*, EMWD has four sources of water supply: imported water from the Metropolitan Water District (MWD), recycled water, local groundwater production, and desalted groundwater (EMWD 2011 Ch. 3). EMWD has an adopted Water Shortage Contingency Plan (EMWD Ordinance 117.2) that applies regulations and restrictions on the delivery of and consumption of water during water shortages. Regarding sewer collection and treatment, EMWD

collects and treats all of the wastewater collected in its service area to tertiary standards. The Moreno Valley Regional Water Reclamation Facility operated by EMWD is located immediately east of the Project site. Regarding sewer collection and treatment, EMWD collects and treats all of the wastewater collected in its service area to tertiary standards. Treated wastewater is disposed of by means of customer sales, discharge to Temescal Creek, and through percolation and evaporation while stored in EMWD ponds (EMWD 2011 Ch. 3). Solid waste collection and disposal in the Project area is conducted by Waste Management of the Inland Empire, a division of Waste Management, Inc. Landfills that have the potential of receiving solid waste from the Project site include the El Sobrante Landfill, the Badlands Sanitary Landfill, and the Lamb Canyon Sanitary Landfill.

3.0 PROJECT DESCRIPTION

This section provides all of the information required of a Project Description by CEQA Guidelines §15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR, including a list of the government agencies that are expected to use this EIR in their decision-making processes; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

Under existing conditions, the 50.84-gross acre (50.68-net acre) Project site contains an approximately 38-acre industrial development (stone and manufactured stone products). The remaining approximately 13 acres of the Project site consist of undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The proposed Project involves the demolition and removal of existing buildings and improvements, grading and preparation of the site for redevelopment, and construction and operation of a logistics warehouse structure containing 1,109,378 square feet of building space and 256 loading bays. Associated improvements to the property would include, but are not limited to, surface parking areas, drive aisles, utility infrastructure, landscaping, exterior lighting, signage, and water quality/detention basins. The Project also includes frontage improvements along site-adjacent roadways and utility connections within abutting roadways.

This EIR (P13-130) analyzes the physical environmental effects associated with all components of the Project, including planning, construction, and on-going operation. Approval of a Plot Plan (PA13-0063) is requested of the City of Moreno Valley to implement the proposed Project. This application, as submitted to the City of Moreno Valley by the Project Applicant, is herein incorporated by reference pursuant to CEQA Guidelines §15150 and is available for review at the City of Moreno Valley Community & Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, CA 92552. No other discretionary actions are required on the part of the City to approve the Project; nonetheless, this EIR covers any and all other discretionary and administrative approvals that may be required of the City of Moreno Valley or other governmental agencies to fully implement the proposed Project. A complete description of the proposed Project is provided in the following subsections of this Section 3.0.

3.1 PROJECT LOCATION

The Project site consists of 50.84-gross acres (50.68-net acres) in the southern portion of the City of Moreno Valley, Riverside County, California (see Figure 3-1, *Regional Map*). From a regional perspective, the Project site is located north of the City of Perris, southeast of the City of Riverside, and south, east, and west of unincorporated areas in Riverside County. Interstate 215 (I-215) is located approximately two (2) miles to the west of the site and State Route 60 (SR-60) is located approximately 4.7 miles to the north of the site. At the local scale, the Project site is located north of

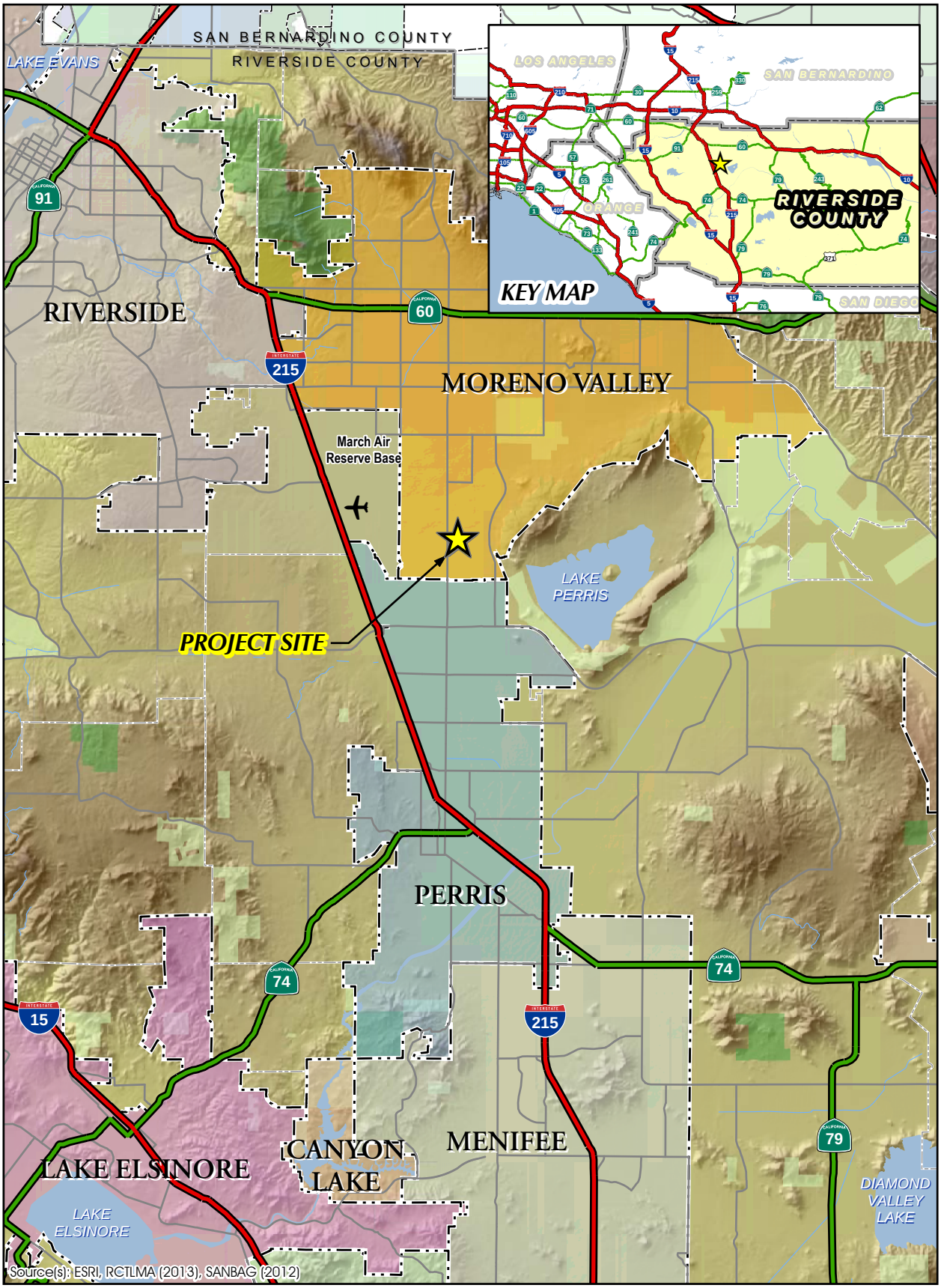


Figure 3-1

Regional Map

Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard, as illustrated on Figure 3-2, *Vicinity Map*, and Figure 3-3, *USGS Topographic Map*.

Refer to EIR Section 2.0, *Environmental Setting*, for more information related to the regional and local setting of the Project site.

3.2 STATEMENT OF OBJECTIVES

The intent of the proposed Project is to redevelop an underutilized property in the City of Moreno Valley's Industrial Area Plan (MVIAP, Specific Plan 208) with a large logistics warehouse building in conformance with the land use designations applied to the property by City of Moreno Valley General Plan and the MVIAP. The Project would achieve this primary objective through the following basic objectives.

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

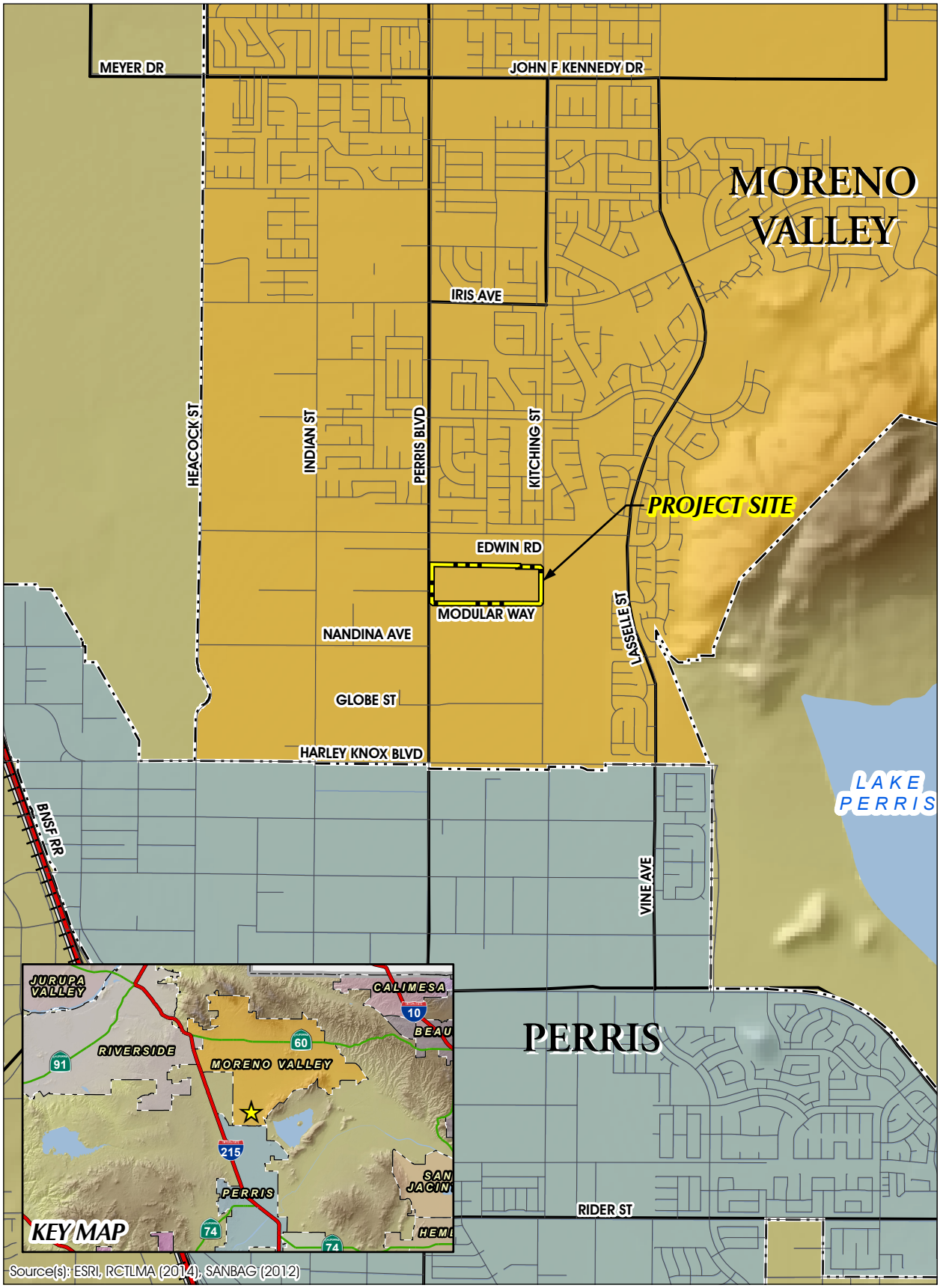
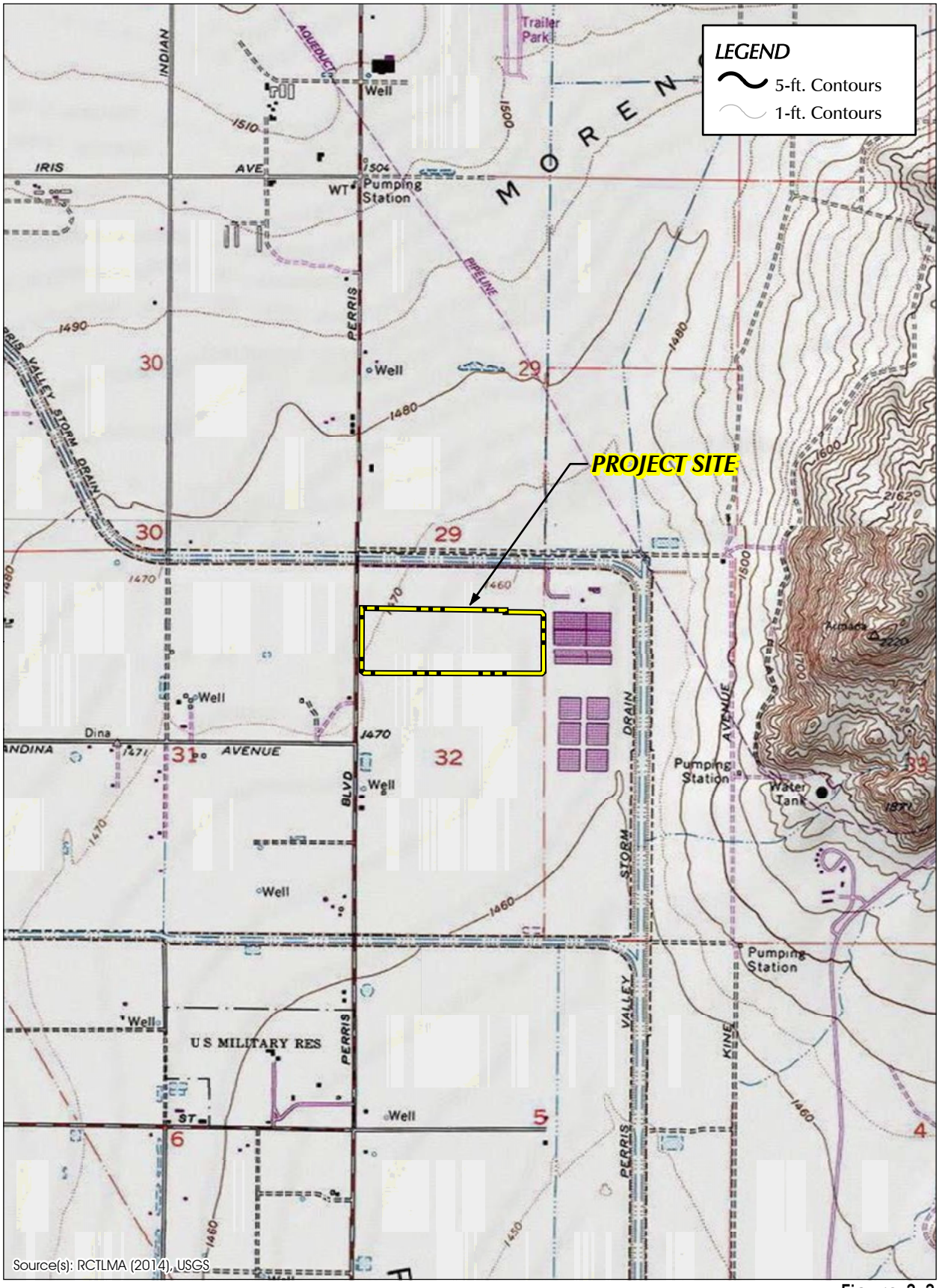


Figure 3-2

Vicinity Map



Source(s): RCTLMA (2014), USGS

Figure 3-3

0 1,000 2,000 Feet

USGS Topographic Map

3.3 PROJECT'S COMPONENT PARTS

The Project consists of a proposal to redevelop a 50.84-gross acre (50.68-net acre) property to accommodate one logistics warehouse building. The principal discretionary actions required of the City of Moreno Valley to implement the proposed Project include the approval of a Plot Plan (PA13-0063) and certification of this EIR (P13-130). Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-2, *Matrix of Project Approvals/Permits*, at the end of this EIR Section.

A detailed description of the proposed Project is provided in the following subsections.

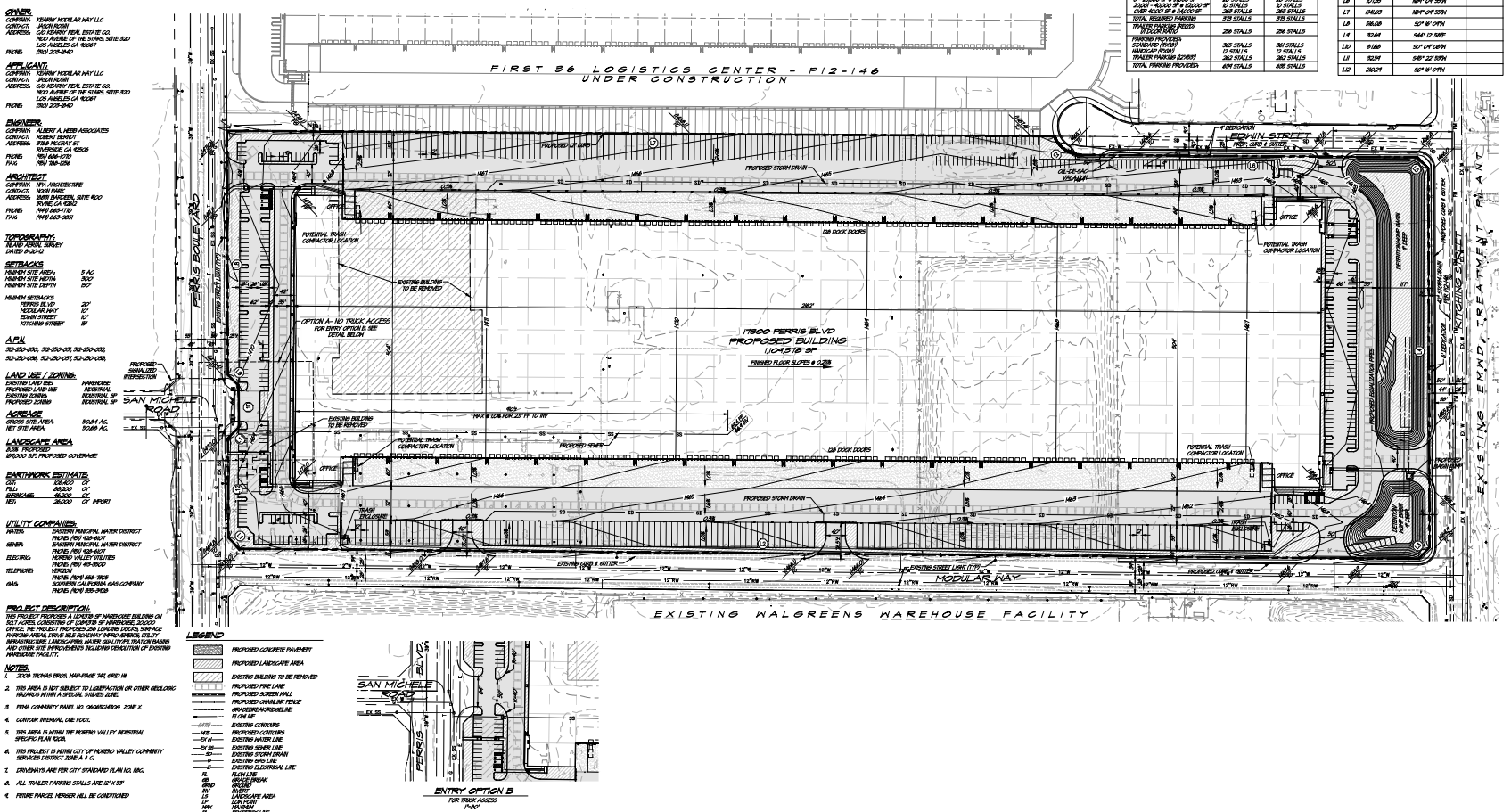
3.3.1 PLOT PLAN PA13-0063

A. General Description

As shown on Figure 3-4, *Plot Plan and Conceptual Grading Plan PA 13-0063*, the Project Applicant proposes to construct one logistics warehouse building on the approximately 50.84-acre property in accordance with the "Industrial" land use designation applied to the subject property by the MVIAP. The proposed building would contain 1,109,378 square feet of building area consisting of 1,089,378 square feet of warehouse space and 20,000 square feet of office space. The office spaces would be located at the northwest, northeast, southwest and southeast corners of the building. The floor area ratio (FAR) for the Project site would be approximately 0.50. At the time this EIR was prepared, the future tenant(s) of the proposed Project's building is unknown. The building is designed to accommodate a warehouse distribution, e-logistics, fulfillment center, or light-industrial operator(s).

A total of 256 loading bays are planned as part of the building for loading, unloading, and short-term parking of truck trailers, with 128 bays proposed on the north and south sides of the building, respectively. At a logistics warehouse building, loading bays (also called "docks") are used for the receiving of goods and the shipment of goods. Quite often, these docks are on different sides of the building. The proposed Project's building has been designed in this manner, with one side of the building for the receiving of goods and the other side for the shipment of goods. Although all of the loading bays are rarely used simultaneously, most logistic warehouse tenants like to have as many bays as possible to facilitate operations inside the structure, where goods are sorted and stored. When trucks have the option to dock close to the area where their cargo is sorted and stored inside the structure, workers inside the building have a shorter distance to cover when moving goods from the truck to the storage area and vice versa (Stertil 2002 1-5).

Eight (8) driveways would provide access to the site. Two (2) driveways would take access from Perris Boulevard, three (3) driveways would take access from Modular Way, one (1) driveway would take access from Kitching Street, and two (2) driveways would take access from Edwin Road. All Project driveways would be stop-sign controlled. At Perris Boulevard, the southernmost driveway would have the option to be restricted to use by passenger vehicles only or be fully accessible for use by passenger vehicles and trucks. All other driveways may be used by both passenger cars and



Source: Webb Associates (11-01-2013)

NOT TO SCALE

Figure 3-4

Plot Plan and Conceptual Grading Plan PA 13-0063

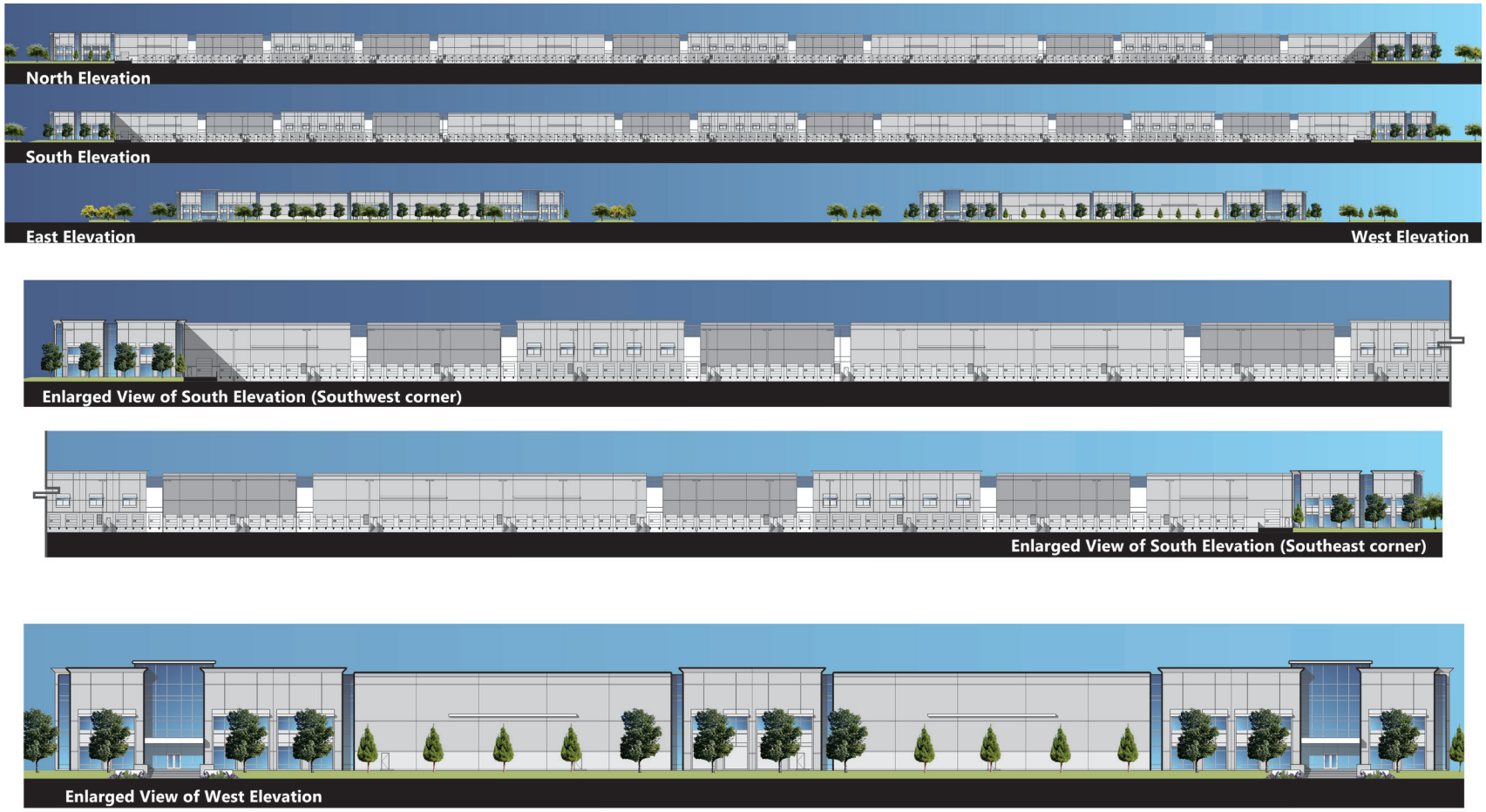
trucks. Access to the loading bays and truck parking areas may be gated. Proposed truck check-in points and driveways are positioned interior to the Project site to create interior queuing to minimize the potential for trucks to stack onto public streets when entering the Project site.

The Plot Plan depicts the number and location of proposed passenger car and trailer parking spaces. The Plot Plan identifies 373 passenger car parking spaces (including the number of spaces required by the California Building Standards Code for alternatively fueled vehicles and for accessibility to disabled persons), distributed along the western and eastern sides of the building. A total of 306 trailer parking spaces would be distributed along the northern and southern sides of the building. The Project also includes an alternate site plan that would accommodate less trailer parking spaces and more passenger vehicle parking spaces, if required by the tenants that would eventually occupy the structure. The alternative site plan would not involve any changes to the size, location, configuration, or design of the proposed building. The proposed Project also would provide bicycle parking in compliance with the City of Moreno Valley Municipal Code Section 9.11, which requires bicycle parking to be provided for 5% of required vehicle parking.

B. Architecture

Figure 3-5, *Architectural Elevations* depicts conceptual architectural elevations for the proposed logistics warehouse structure. The proposed building would be constructed to a height of approximately 42 feet above finished grade, with architectural projections reaching up to 47 feet above finished grade. The building would be constructed with concrete tilt-up panels and blue-glazed, low-reflective glass. Articulated building elements, including white anodized mullions and white metal canopies, are proposed as decorative elements. The proposed exterior architectural color palette is comprised of various shades of gray, white, and blue. The interior of the proposed warehouse building is designed to provide a main floor and office spaces. The building has the potential to be partitioned for multiple tenant use.

Solid concrete walls would be installed on the southern and northern portions of the proposed warehouse building to screen loading docks and trailer parking areas from public view. The screen walls on the north side of the building would be located at the northwestern and northeastern corners of the building and would face Perris Boulevard and Kitching Street, respectively. On the south side of the building, screen walls would be constructed at the southwestern and southeastern corners of the building (facing Perris Boulevard and Kitching Street, respectively) and along the site's frontage with Modular Way. The concrete screen walls would be 14-feet tall and constructed with a finish and color that complements the color palette for the proposed warehouse building. A chain-link metal fence is proposed along a portion of the northern property boundary (in the trailer parking area) and would not be visible from public viewing areas. Where access points into the loading dock and truck parking areas would be gated, eight (8)-foot tall, manually operated tubular steel gates, equipped with Knox® padlocks to allow emergency vehicle access, would be provided.



Source: HPA Architecture (10-29-2013)

NOT TO SCALE

Figure 3-5
Architectural Elevations

C. Conceptual Landscape Plan

The Project's conceptual landscape plan is depicted on Figure 3-6, *Conceptual Landscape Plan*. The landscape plan indicates that trees, shrubs, and groundcovers are proposed to be planted along street frontages of Perris Boulevard, Modular Way, Kitching Street, and Edwin Road (including landscaping within public rights-of-way). Landscaping also would occur at building entries, in and around automobile parking areas, in and around the site's water quality/detention basins, and along proposed screen walls. Landscaping is estimated to cover 8.5% of the property (approximately 4.3 acres). Proposed landscaping would be ornamental in nature, except within water quality/detention basins where plant materials would be selected to serve water quality functions. Prior to the issuance of a building permit to implement the Project, the Project Applicant would be required to submit specific planting and irrigation plans to the City of Moreno Valley for review and approval. The plans are required to comply with Chapter 9.17 of the City of Moreno Valley Municipal Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency.

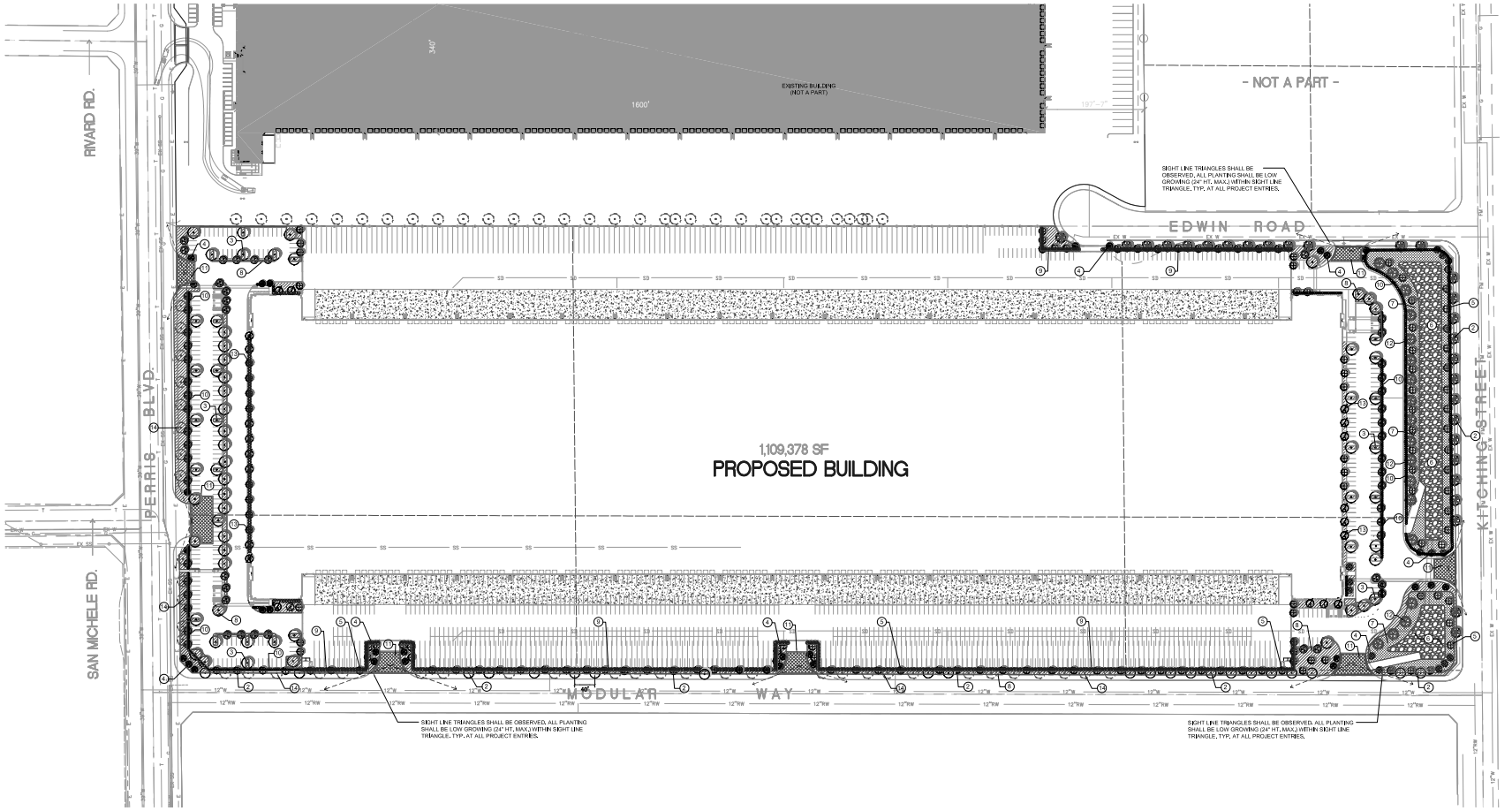
D. Public Roadway Dedications, Improvements, and Vacations

The existing public street network servicing and abutting the Project site consists of Perris Boulevard on the west, Kitching Street on the east, Edwin Road on the north, and Modular Way on the south. The Project would dedicate approximately 0.2-acre of land to the City of Moreno Valley as public right-of-way for Kitching Street (approximately 0.1-acre) and Edwin Road (approximately 0.1-acre). Proposed street dedications would occur as part of a subsequent administrative-level approval of street improvement plans.

Planned public rights-of-way (or portions thereof) that were previously offered to a city, county, or other government agency but that are no longer needed for public purposes can be "vacated" by the government body. As part of the Project, one (1) roadway right-of-way that was previously offered to the City of Moreno Valley but that was never accepted by the City for public use is proposed to be vacated. The right-of-way to be vacated is also known by the term "paper street" because the alignment exists only on maps, with no physical attributes constructed on the landscape. The "paper street" to be vacated comprises an approximately 127-foot long cul-de-sac along the northern Property boundary, located west of the Kitching Street/Edwin Road intersection. This cul-de-sac "paper street" is no longer needed because the Edwin Road cul-de-sac has already been approved for construction slightly west of the "paper street" alignment. The proposed street vacation would occur as part of a subsequent administrative-level street vacation action.

Public roadway improvements that are proposed as part of the Project are described below and depicted on Figure 3-7, *Roadway Cross-Sections*.

- **Perris Boulevard.** Perris Boulevard is a north-south oriented roadway located along the Project site's western boundary. Under existing conditions, this segment of Perris Boulevard is constructed as a six-lane street within a 110-foot wide public right-of-way. The existing 12-foot wide parkway on the east side of the road, including existing sidewalk and landscape improvements, would be retained as feasible. The bus bay



Source: SPLA (10-31-2013)

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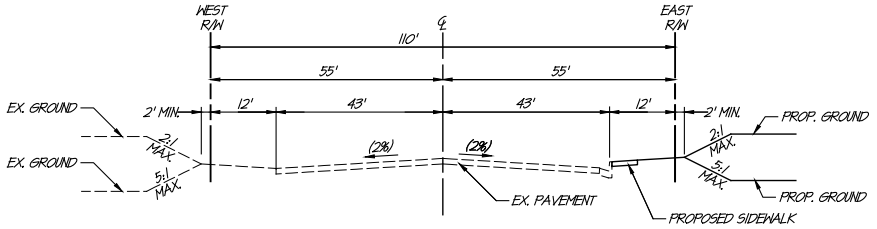
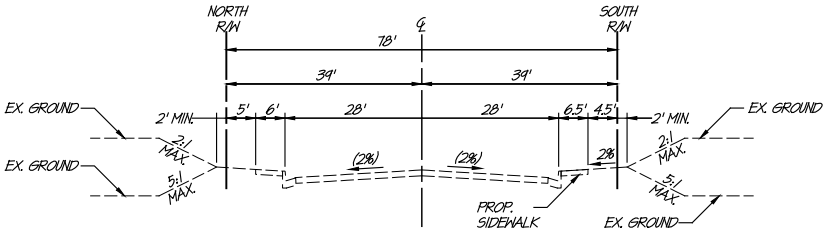
Figure 3-6
Conceptual Landscape Plan



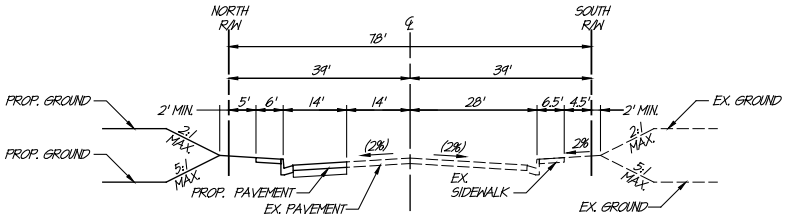
PERRIS BLVD TYPICAL SECTION

ARTERIAL STREET
STD. NO. 104, NOT TO SCALE



MODULAR WAY - SEGMENT A

INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
TI=10.0



MODULAR WAY - SEGMENT B

INDUSTRIAL COLLECTOR STREET
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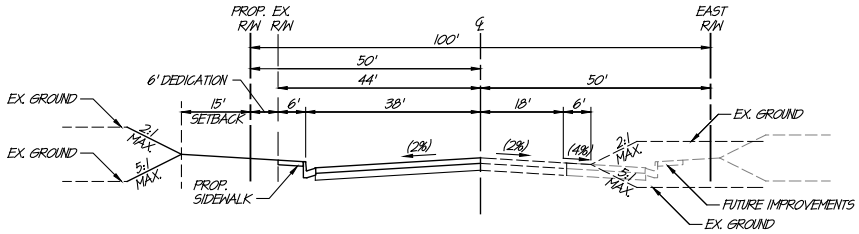
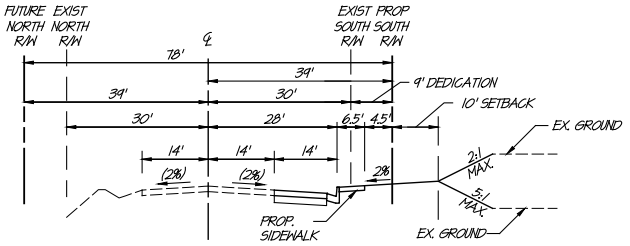


KITCHING STREET TYPICAL SECTION

ARTERIAL STREET
STD. NO. 104, NOT TO SCALE



EDWIN STREET TYPICAL SECTION

INDUSTRIAL COLLECTOR STREET
STD. NO. 106, NOT TO SCALE
TI=10.0

Source: Webb Associates (11-01-2013)

NOT TO SCALE

Figure 3-7
Roadway Cross-Sections

located along the Project's frontage with Perris Boulevard would be reconstructed to current City standards and would accommodate RTA bus transit operations. Any modifications to the existing parkway to accommodate proposed site grading/construction activities would occur in accordance with City of Moreno Valley engineering standards and as will required by the final conditions of approval for the proposed Project.

- **Modular Way.** Modular Way is an east-west oriented roadway located along the southern boundary of the Project site. Under existing conditions, Modular Way is constructed to its full width as a two-lane road within a 78-foot wide public right-of-way from Perris Boulevard extending approximately 1,850 feet east (hereafter "Segment 'A'"). The remaining segment of Modular Way abutting the Project site (from Kitching Street extending approximately 165 feet west) is partially developed as a one-lane road within a 78-foot wide public right-of-way under existing conditions (hereafter "Segment 'B'").

  Within Segment "A" of Modular Way, the proposed Project would retain the existing sidewalk and landscape improvements within the 11-foot wide parkway on the north side of the road as feasible. Any modifications to the existing parkway to accommodate proposed site grading/construction activities would occur in accordance with City of Moreno Valley engineering standards and as will required by the final conditions of approval for the proposed Project.

  Within Segment "B" of Modular Way, the proposed Project would widen the existing roadway by 25 feet, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, along the southern Project frontage to provide the ultimate full-width section of the roadway. Proposed improvements to Segment "B" of Modular Way would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

- **Kitching Street.** Kitching Street is a north-south oriented roadway located along the Project site's eastern boundary. Under existing conditions, this segment of Kitching Street is developed as a one-lane road within a 94-foot wide public right-of-way. As previously described, the Project would dedicate additional public right-of-way to the City of Moreno Valley along the site's eastern frontage, increasing the total right-of-way width along this segment of Kitching Street to 100 feet. In addition, the Project would widen Kitching Street along the site's eastern frontage, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, to provide the ultimate half-width section of the roadway. Proposed improvements to Kitching Street would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

- **Edwin Road.** Edwin Road is an east-west oriented roadway located along a portion of the Project site's northern boundary. Edwin Road terminates at a cul-de-sac approximately 800 feet west of Kitching Street. Under existing conditions, Edwin Road is developed as a one-lane road within a 69-foot wide public right-of-way. As previously described, the Project would dedicate additional public right-of-way to the City of Moreno Valley along the site's northern frontage, increasing the total right-of-way width along this segment of Edwin Road to 78 feet. In addition, the Project would widen Edwin Road along the site's northern frontage, including pavement, curb, gutter, sidewalk, and landscape parkway improvements, to provide the ultimate half-width section of the roadway. Proposed improvements to Edwin Road would conform to applicable City of Moreno Valley engineering standards and would be required by the final conditions of approval for the proposed Project.

E. Infrastructure Improvements

❑ Water Service

Water service would be provided to the Project by the Eastern Municipal Water District (EMWD). Under existing conditions, domestic water service is available to the Project site via a 39-inch water line installed beneath Perris Boulevard, a 12-inch water line installed beneath Modular Way, and a 12-inch water line installed beneath Kitching Street. Additionally, recycled water is available to the Project site under existing conditions via a 12-inch recycled water line installed beneath Modular Way. The Project proposes two (2) connection points to the existing 12-inch domestic water line beneath Modular Way via 12-inch water lines. The Project also proposes to connect to the existing 12-inch recycled water line beneath Modular Way via two (2) 2-inch water lines to provide landscape irrigation water to the site. All proposed water facilities would be designed in accordance with EMWD standards and would require review and approval by EMWD prior to their installation.

❑ Wastewater Service

Wastewater conveyance and treatment service would be provided to the Project by EMWD. Under existing conditions, wastewater service is available to the Project site via a 12-inch sewer line located beneath Perris Boulevard. As part of the Project, an 8-inch sewer line would be constructed on-site under the southern portion of the building and would connect to the existing 12-inch sewer line located in Perris Boulevard. All proposed sewer facilities would be designed in accordance with EMWD standards and would require review and approval by EMWD prior to their installation.

❑ Stormwater Drainage

The Project's drainage system would consist of underground storm drain pipes and detention basins installed on the property. The system is designed to collect and treat stormwater runoff and detain treated flows into detention basins provided on the Project site. Two east-west oriented storm drain lines would be constructed on-site; one storm drain line would be constructed beneath the loading dock and trailer parking area on the north side of the building and one storm drain line would be constructed beneath the loading dock and trailer parking area on the south side of the building.

These storm drain lines would convey the site's stormwater runoff to the proposed water quality/detention basins along the eastern boundary of the subject property. Two (2) water quality/detention basins are proposed by the Project. In addition to stormwater drainage functions, these basins also would provide water quality functions. The detention basins would be designed to treat and temporarily detain stormwater runoff to ensure that post-development discharge from the site is less than, or equal to, pre-development conditions. Drainage flows would be conveyed from the on-site water quality/detention basins to an existing 36-inch storm drain line within Kitching Street and, ultimately, discharged to the Perris Valley Channel. The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for approving all proposed storm drain improvements to ensure property facility sizing and construction, as well as consistency with the applicable local drainage plan.

F. Earthwork and Grading

As shown on Figure 3-4, *Plot Plan and Conceptual Grading Plan PA 13-0063*, earthwork and grading would occur over the entire 50.84-acre Project site. No area of the site would be left undisturbed. Proposed earthwork and grading activities would occur in one phase and would result in approximately 108,400 cubic yards of cut and 88,200 cubic yards of fill. Based on expected shrinkage of on-site soils, it is anticipated that up to 26,000 cubic yards of imported soil would be required during proposed earthwork and grading activities. The borrow site has not yet been identified, but is expected to be within a 20-mile radius of the Project site and a property that is approved for earth disturbance and export. When grading is complete, the Project site would have a slight, west-to-east slope; the highest point of the site would be approximately 1,471 feet above mean sea level (AMSL) at the northwest corner of the site and would slope downward to an elevation of approximately 1,464 AMSL in the southwest corner of the site.

The Project site is relatively flat and proposed grading would not create manufactured slopes except around the proposed water/quality detention basins in the eastern portion of the site, where proposed slopes would measure up to nine (9) feet in height with a maximum incline of 3:1.

3.3.2 PROJECT CONSTRUCTION AND OPERATIONAL CHARACTERISTICS

A. Construction Details

The proposed Project would be constructed over the course of approximately 11 months (Fullmer Construction 2013). Construction activities would commence with site preparation and the demolition of the existing structures. It is expected that approximately 38,240 tons of demolition debris would be generated on-site, of which approximately 97% (approximately 37,712 tons) would either be processed and re-used on-site during construction or recycled (Fullmer Construction 2013). After demolition, the property would be mass-graded and the underground utility system would be installed. Next, surface materials would be poured and the building would be erected, connected to the underground utility system, and painted. Lastly, landscaping, fencing/walls and other site improvements would be installed and fine grading would occur. Construction activities include:

- Demolition
- Grading
- Plumbing
- Electrical
- Structural Concrete
- Fire Protection
- Reinforcing Steel
- Site Utilities
- Structural Steel
- Roof Structure
- Painting (Architectural Coatings)
- Construction Workers Commuting

Construction equipment is expected to operate on the Project site eight (8) hours per day, five (5) days per week during the construction phase. The types and numbers of heavy equipment expected to be used during construction activities are listed in Table 3-1, *Construction Equipment Assumptions*. For purposes of evaluation in this EIR, it is assumed that the building would be operational in the Year 2015.

B. Operational Details

At the time this EIR was prepared, the future tenant(s) of the Project site were unknown. The Project Applicant estimates that the building would be primarily occupied by a warehouse distribution, e-logistics, fulfillment center, or light-industrial operator(s). Although the proposed building is not necessarily expected to accommodate a tenant(s) that requires cold storage (refrigeration), the analysis in this EIR assumes that the building could house a tenant that uses cold storage. For the purpose of analysis in this document, the future tenant types are assumed to be any of those uses permitted by the MVIAP's "Industrial" designation (pursuant to MVIAP Section III). Furthermore, this EIR assumes the Project would be operational 24 hours per day, seven (7) days per week, with exterior areas lit at night. The proposed building is designed such that business operations would be

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Demolition *(Phase 1)*			2							2	2	2											
Demolition *(Phase 1.1)*		1																					
Grading *(Phase 1)*			2			9		1			1												
Grading *(Phase 1.1)*	1		1			1																	
Grading *(Phase 2)*			1			1		1			2												
Grading *(Phase 3)*			1			1		1			2												
Plumbing - Underslab *(Phase 1)*												1											
Plumbing - Underslab *(Phase 1.1)*											1												
Plumbing -Building														1									
Electrical - Underground									1														

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Electrical – Building (Phase 1)														2									
Electrical – Building (Phase 1.1)																							1
Structural Concrete *(Phase 1)*						1																	
Structural Concrete *(Phase 2)*				2	3																		
Structural Concrete *(Phase 3)*																	2						
Structural Concrete *(Phase 4)*			1																				
Structural Concrete *(Phase 5)*							1																
Structural Concrete *(Phase 6)*													1										
Structural Concrete *(Phase 7)*																1							
Structural Steel														3						1	1	4	

Table 3-1 Construction Equipment Assumptions

Equipment	Blade	Crusher	Water Trucks	Dump Truck	Skip	Scraper	Sweeper	Motor Grader	Backhoe	Skid Steer Loader	Rubber Tire Loader	Excavator	Laser Screed	Scissor Lift	Boom Lift	Man Lift	Forklift	Gradall	Generator Sets	Reach Lift	Cranes	Welder	Air Compressor
Fire Protection - Site			1						1		1						1						
Fire Protection - Overhead														3	3		2						
Reinforcing Steel																	2						
Site Utilities - Storm											2	2											
Site Utilities - Sewer									1		1												
Site Utilities - Water									1		1												
Roof Structure														2	4		2	2					

Source: Urban Crossroads 2014a, Table 3-2

conducted primarily within the enclosed building, with the exception of traffic movement, parking, and the loading and unloading of tractor trailers at the loading bays. As discussed in EIR Subsection 4.8, *Transportation/Traffic*, the proposed Project is calculated to generate 1,416 passenger car trips and 447 truck trips on a daily basis.

Because the building tenant is not yet known, the number of jobs that the Project would generate cannot be precisely determined; therefore, for purposes of analysis within this EIR, employment estimates are calculated using average employment density factors reported by the Southern California Association of Governments in their publication "Employment Density Study Report," (SCAG 2001). This publication reports that for every one (1) acre of warehouse land use in Riverside County, the median number of jobs supported is 11.69 (SCAG 2001 Table 9A). Using this data, the proposed Project is expected to create approximately 594 new, recurring jobs.

According to a Water Supply Assessment prepared for the Project by EMWD (*Technical Appendix I* to this EIR), land uses proposed by the Project are estimated to result in a demand for approximately 38.03 acre-feet of water per year (or about 33,951 gallons per day). The Project also is estimated to result in an average daily demand of 43,295 gallons per day of wastewater treatment capacity (based on EMWD's wastewater generation factor of 1,700 gallons per day per acre for light industrial building area (Raines 2014)). Based on calculations utilized in the Project's greenhouse has analysis report (*Technical Appendix F* to this EIR), the proposed Project would demand 3,574,906 kilowatts hours of electricity per year (kWh/yr) and 2,374,070 kilo-British Thermal Units of natural gas per year (kBTU/yr).

3.4 STANDARD REQUIREMENTS AND CONDITIONS OF APPROVAL

The proposed Plot Plan PA13-0063 and its technical aspects were reviewed in detail by various City of Moreno Valley departments and divisions. These departments and divisions are responsible for reviewing land use applications for compliance with City codes and regulations. They also were responsible for reviewing this EIR (P13-130) for technical accuracy and compliance with CEQA. The City of Moreno Valley departments and divisions responsible for technical review include:

- Community & Economic Development Department, Building and Safety Division
- Community & Economic Development Department, Planning Division
- Public Works Department, Land Development Division
- Public Works Department, Transportation Engineering Division
- Public Works Department, Special Districts Division
- Fire Prevention Bureau
- Moreno Valley Utility

Review of proposed Plot Plan PA13-0063 by the City departments and divisions listed above will result in the production of a comprehensive set of draft Conditions of Approval that will be available for public review prior to consideration of the proposed Project by the Moreno Valley Planning Commission. These conditions will be considered by the Planning Commission in conjunction with

their consideration of Plot Plan PA13-0063. If approved, the Project will be required to comply with all imposed Conditions of Approval.

Conditions of Approval and other applicable regulations, codes, and requirements to which the Project is required to comply and that result in the reduction or avoidance of an environmental impact are specified in each subsection of EIR Section 4.0, *Environmental Analysis*. These are referred to as "Project Requirements" throughout this EIR.

3.5 SUMMARY OF REQUESTED ACTIONS

The City of Moreno Valley has primary approval responsibility for the proposed Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines §15050. The role of the Lead Agency was previously described in detail in Subsection 1.4 of this EIR). The City's Planning Commission will consider the Project's requested discretionary permit applications and approvals and will determine whether to approve, approve with changes, or deny the requested actions that are within the City's jurisdiction. In the event that the decision of the Planning Commission is appealed to the City Council within ten (10) days, or in the event that the City Council assumes jurisdiction over the proposed Project, then an additional public hearing would be held before the City Council, where the decision of the Planning Commission would be sustained, modified, rejected, or overruled. The City will consider the information contained in this EIR and this EIR's Administrative Record in its decision-making processes. Upon approval of the Project and certification of this EIR, the City would conduct administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval. A list of the primary actions under City jurisdiction is provided in Table 3-2, *Matrix of Project Approvals/Permits*.

3.6 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Subsequent to approval of Plot Plan PA13-0063 by the City of Moreno Valley, additional discretionary and/or administrative actions would be necessary to implement the proposed Project. Table 3-2, *Matrix of Project Approvals/Permits*, lists the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, state, local government and quasi-government approvals which may be needed to construct or implement the Project, whether or not they are explicitly listed in Table 3-2, or elsewhere in this EIR (CEQA Guidelines §15124(d)).

Table 3-2 Matrix of Project Approvals/Permits

PUBLIC AGENCY	APPROVALS AND DECISIONS
City of Moreno Valley	
Proposed Project – City of Moreno Valley Discretionary Approvals	
City of Moreno Valley Planning Commission	• Approve, conditionally approve, or deny PA13-0063 (appealable to City Council). • Reject or certify this EIR along with appropriate CEQA Findings (P13-130) (appealable to City Council).
Subsequent City of Moreno Valley Discretionary and Ministerial Approvals	
City of Moreno Valley Subsequent Implementing Approvals	• Approve Final Maps, parcel mergers, lot line adjustments, or parcel consolidations, as may be appropriate. • Approve Conditional or Temporary Use Permits, if required. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way dedications. • Approve street vacations.
Other Agencies – Subsequent Approvals and Permits	
Riverside County Flood Control and Water Conservation District	• Approvals for construction of drainage infrastructure.
Eastern Municipal Water District	• Approvals for construction of water and sewer infrastructure.
Santa Ana Regional Water Quality Control Board	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines §§15126 - 15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, an Initial Study was prepared to determine the scope of environmental analysis for this EIR. Public comment on the scope consisted of written comments received by the City of Moreno Valley in response to the NOP issued for this EIR and oral comments provided by members of the public at the EIR scoping meeting held on April 21, 2014 at Moreno Valley City Hall. Taking all known information and public comments into consideration, eight (8) primary environmental subject areas are evaluated in this Section 4.0, as listed below. Each subsection evaluates several specific subject matters related to the general topic of the subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology/Soils
4.6 Greenhouse Gas Emissions
4.7 Noise
4.8 Transportation/Traffic

Nine (9) environmental subjects were determined by the City to have no potential to be significantly impacted by the Project, as concluded by the Project's Initial Study (included in *Technical Appendix A* to this EIR) and after consideration of all comments received by the City on the scope of this EIR and documented in the City's administrative record. These nine (9) subjects are discussed briefly in Section 5.0, *Other CEQA Considerations*, and include: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines §15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines §15130(a)(1)). As defined in CEQA Guidelines §15355:

'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

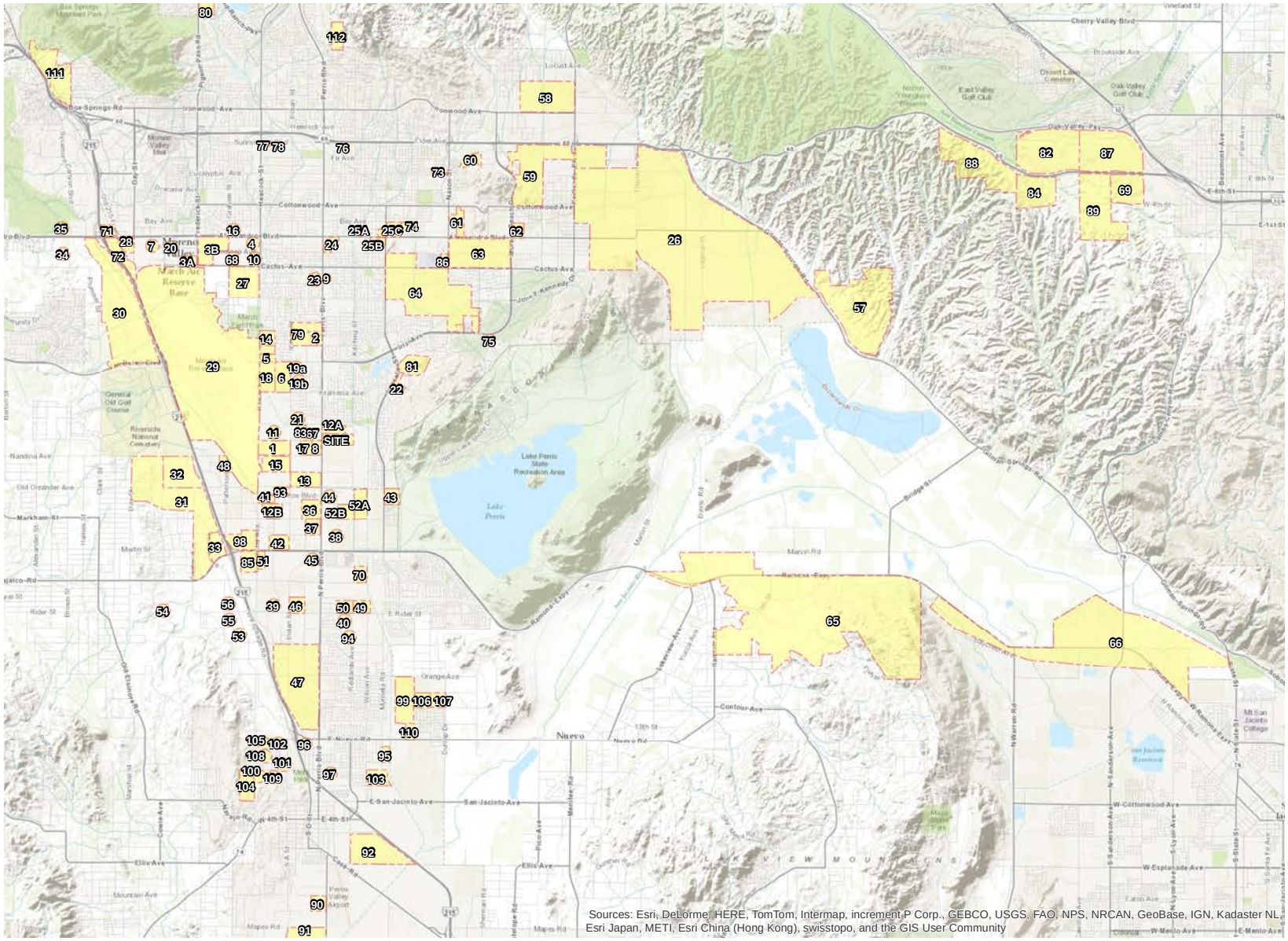
CEQA Guidelines §15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: "1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ['the list of projects approach'], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact ['the summary of projections approach']."

The summary of projections approach is used in this EIR, except for the evaluation of cumulative traffic and vehicular-related air quality, greenhouse gas, and noise impacts. The analysis of cumulative traffic impacts uses the list of projects approach, as is required to be used by the City of Moreno Valley Transportation Engineering Division's Traffic Impact Analysis Preparation Guide (August 2007). Therefore, the cumulative analyses of vehicular-related air quality, greenhouse gas, and noise impacts, which rely on the traffic study, inherently also use the list of projects approach.

Using the summary of projections approach, the cumulative study area includes the City of Moreno Valley, the City of Perris, the City of Riverside, and the Harvest Valley/Winchester Area Plan (HVWAP), Lakeview/Nuevo Area Plan (LNAP), and the Mead Valley Area Plan (MVAP), all of which are part of the Riverside County General Plan. These three cities and the three Riverside County Area Plans encompass portions of western Riverside County that have similar environmental characteristics as the Project area. The selected study area encompasses the Perris Valley, which is largely bounded by prominent topographic landforms, such as Reche Canyon to the north, the Badlands to the east, and the Lakeview Mountains to the southeast. This study area exhibits similar characteristics in terms of climate, geology, and hydrology, and therefore is also likely to have similar biological characteristics and cultural resources. This study area also encompasses the service areas of the Project's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, or other environmental circumstances that are different from those of the Project area, or are simply too far from the proposed Project site to produce environmental effects that could be cumulatively considerable.

Environmental impacts associated with buildout of the Riverside County General Plan were evaluated in a Program EIR certified by Riverside County in 2003 (SCH No. 2002051143). The Riverside County General Plan EIR is herein incorporated by reference, and is available for review at the County of Riverside Transportation and Land Management Agency Planning Department, 4080 Lemon Street, 12th Floor, Riverside CA 92502. Likewise, the environmental impacts associated with the buildout of the City of Perris General Plan were evaluated in a Program EIR that was certified by the Perris City Council on April 26, 2005 (SCH No. 2004031135). The City of Perris General Plan EIR is also incorporated by reference, and is available for review at the City of Perris Department of Community Development, 135 North "D" Street, Perris CA 92570. Finally, the environmental impacts associated with the buildout of the City of Riverside General Plan was evaluated in a Program-level EIR that was certified by the Riverside City Council in November 2007 (SCH No. 2004021108). The City of Riverside General Plan EIR is also incorporated by reference, and is available for review at the City of Riverside Community Development Department, Planning Division, 3900 Main Street, Riverside, CA 92522.

A specific cumulative study area was established using the "list of projects approach" to assess the cumulative effect of the Project's impacts to traffic and transportation, as required by the City of Moreno Valley Transportation Engineering Division's Traffic Impact Analysis Preparation Guide. The cumulative study area for traffic generally includes approved and pending development projects within a five (5)-mile radius of the Project site, as well as several large, traffic-intensive projects falling just beyond a five (5)-mile radius of the Project site. As such, the cumulative impact analysis of traffic impacts in EIR Subsection 4.8 analyzes 112 other past, present, and reasonably foreseeable projects within this study area. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or state highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. Specific development projects included in the cumulative analysis are shown in Figure 4.0-1, *Cumulative Development Location Map*, and are listed in Table 4.0-1, *Cumulative Project List.*



Source: Urban Crossroads (03-17-2014)

NOT TO SCALE

Figure 4.0-1
Cumulative Development Location Map

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
1	PA 06-0152 & PA 06-0153 (First Park Nandina I & II)	High-Cube Warehouse	1,182.918	TSF
2	Moreno Valley Walmart	Free-Standing Discount Store	189.520	TSF
		Gas Station	16	VFP
3A	PA 08-0072 (Overton Moore Properties)	High-Cube Warehouse	520.000	TSF
3B	Harbor Freight Expansion	High-Cube Warehouse	1,279.910	TSF
4	PA 04-0063 (Centerpointe Buildings 8 and 9)	General Light Industrial	361.384	TSF
5	PA 07-0035; PA 07-0039 (Moreno Valley Industrial Park)	General Light Industrial	204.657	TSF
		High-Cube Warehouse	409.920	TSF
6	PA 07-0079 (Indian Business Park)	High-Cube Warehouse	1,560.046	TSF
7	PA 08-0047-0052 (Komar Cactus Plaza)[3]	Hotel	110	RMS
		Fast Food w/Drive Thru	8.000	TSF
		Commercial	42.400	TSF
8	First Inland Logistics Center	High-Cube Warehouse	400.130	TSF
9	TM 33607	Condo/Townhomes	54	DU
10	PA 08-0093 (Centerpointe Business Park II)	General Light Industrial	99.988	TSF
11	PA 06-0021; PA 06-0022; PA 06-0048; PA 06-0049 (Komar Investments)	Warehousing	2,057.400	TSF
12A	PA 06-0017 (Ivan Devries)	Industrial Park	569.200	TSF
12B	Integra Pacific Industrial Facility	High-Cube Warehouse	880.000	TSF
13	PA 09-0004 (Vogel)	High-Cube Warehouse	1,616.133	TSF
14	TM 34748	SFDR	135	DU
15	Modular Logistics Center	High-Cube Warehouse	1,109.378	TSF
16	PA 09-0031	Gas Station	12	VFP
17	First Park Nandina III	High-Cube Warehouse	691.960	TSF
	Moreno Valley Commerce Park	High-Cube Warehouse	354.321	TSF
18	March Business Center	General Light Industrial	16.732	TSF
		Warehousing	87.429	TSF
		High-Cube Warehouse	1,380.246	TSF
19A	TM 33810	SFDR	16	DU
19B	TM 34151	SFDR	37	DU
20	373K Industrial Facility	High-Cube Warehouse	373.030	TSF
21	TM 32716	SFDR	57	DU
22	TM 32917	Condo/Townhomes	227	DU
23	TM 33417	Condo/Townhomes	10	DU
24	TM 34988	Condo/Townhomes	251	DU
25A	TM 34216	Condo/Townhomes	40	DU
25B	TM 34681	Condo/Townhomes	49	DU
25C	PA 08-0079-0081 (Winco Foods)	Discount Supermarket	95.440	TSF
		Specialty Retail	14.800	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
26	Moreno Beach Marketplace (Lowe's)	Commercial Retail	175.000	TSF
	Auto Mall Specific Plan (Planning Area C)	Commercial Retail	304.500	TSF
	Westridge	High-Cube Warehouse	937.260	TSF
	ProLogis	High-Cube Warehouse	1,916.190	TSF
		Warehousing	328.448	TSF
	World Logistics Center	High-Cube Warehouse	41,400.000	TSF
		Warehousing	200.000	TSF
		Gas Station w/ Market	12	VFP
		Existing SFDR	7	DU
27	March Lifecare Campus Specific Plan[4]	Medical Offices	190.000	TSF
		Commercial Retail	210.000	TSF
		Research & Education	200.000	TSF
		Hospital	50	Beds
		Institutional Residential	660	Beds
28	Alessandro Metrolink Station	Light Rail Transit Station	300	SP
29	Airport Master Plan	Airport Use	559.000	TSF
30	Meridian Business Park North	Industrial Park	5,985.000	TSF
31	SP 341; PP 21552 (Majestic Freeway Business Center)	High-Cube Warehouse	6,200.000	TSF
32	PP 20699 (Oleander Business Park)	Warehousing	1,206.710	TSF
33	Ramona Metrolink Station	Light Rail Transit Station	300	SP
34	PP 22925 (Amstar/Kaliber Development)	Office (258.102 TSF)	258.102	TSF
		Warehousing	409.312	TSF
		General Light Industrial	42.222	TSF
		Retail	10.000	TSF
35	P07-1028 (Alessandro Business Park)	General Light Industrial	652.018	TSF
36	P 05-0113 (IDI)	High-Cube Warehouse	1,750.000	TSF
37	P 05-0192 (Oakmont I)	High-Cube Warehouse	697.600	TSF
38	P 05-0477	High-Cube Warehouse	462.692	TSF
39	Rados Distribution Center	High-Cube Warehouse	1,200.000	TSF
40	Investment Development Services (IDS) II	High-Cube Warehouse	350.000	TSF
41	P 07-09-0018	Warehousing	170.000	TSF
42	P 07-07-0029 (Oakmont II)	High-Cube Warehouse	1,600.000	TSF
43	TR 32707	SFDR	137	DU
44	TR 34716	SFDR	318	DU
45	P 05-0493 (Ridge I)	High-Cube Warehouse	700.000	TSF
46	Ridge II	High-Cube Warehouse	2,000.000	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
47	Harvest Landing Specific Plan	SFDR	717	DU
		Condo/Townhomes	1,139	DU
		Sports Park	16.700	AC
		Business Park	1,233.401	TSF
		Shopping Center	73.181	TSF
	Perris Marketplace	Shopping Center	450.000	TSF
48	P 06-0411 (Concrete Batch Plant)	Manufacturing	2.000	TSF
49	Jordan Distribution	High-Cube Warehouse	378.000	TSF
50	Aiere	High-Cube Warehouse	642.000	TSF
51	P 08-11-0005; P 08-11-0006 (Starcrest)	High-Cube Warehouse	454.088	TSF
52A	Stratford Ranch Specific Plan	High-Cube Warehouse	1,725.411	TSF
52B	Stratford Ranch Specific Plan	High-Cube Warehouse	480.000	TSF
		General Light Industrial	120.000	TSF
53	PP 18908	General Light Industrial	133.000	TSF
54	Tract 33869	SFDR	39.000	DU
55	PP 16976	General Light Industrial	85.000	TSF
56	PP 21144	Industrial Park	190.802	TSF
57	Quail Ranch Specific Plan	Private School (K-12)	300	STU
		Golf Course	18	Holes
		Hotel	500	ROOMS
		Specialty Retail	66.667	TSF
		General office	66.667	TSF
		Assisted Living	500	Beds
		Senior Living (Detached)	200	DU
		SFDR	600	DU
58	a TR 32460 (Sussex Capital)	SFDR	58	DU
	b TR 32459 (Sussex Capital)	SFDR	11	DU
	c TR 30411 (Pacific Communities)	SFDR	24	DU
	d TR 33962 (Pacific Scene Homes)	SFDR	31	DU
	e TR 30998 (Pacific Communities)	SFDR	47	DU
59	a Westridge Commerce Center	High-Cube Warehouse	937.260	TSF
	b P06-158 (Gascon)	Commercial Retail	116.360	TSF
	c Auto Mall Specific Plan (PAC)	Commercial Retail	304.500	TSF
	d ProLogis	Warehousing	367.000	TSF
		High-Cube Warehouse	1,901.000	TSF
	e TR 35823 (Stowe Passco)	SFDR	262	DU
		Apartments	216	DU
60	TR 36340	SFDR	275	DU

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
61	a TR 31771 (Sanchez)	SFDR	25	DU
	b TR 34397 (Winchester Associates)	SFDR	52	DU
	c TR 32645 (Winchester Associates)	SFDR	54	DU
62	Lowe's (Moreno Beach Marketplace)	Home Improvement Store	175.000	TSF
63	a Convenience Store/ Fueling Station	Gas Station w/ Market	30.750	TSF
	b Senior Assisted Living	Assisted Living Units	139	DU
	c TR 31590 (Winchester Associates)	SFDR	96	DU
	d TR 32548 (Gabel, Cook & Associates)	SFDR	107	DU
	e 26th Corp. & Granite Capitol	SFDR	32	DU
	f TR 32218 (Whitney)	SFDR	63	DU
	g Moreno Marketplace	Commercial Retail	93.788	TSF
	h Medical Plaza	Medical Offices	311.633	TSF
64	a Moreno Medical Campus	Medical Offices	80.000	TSF
	b Aqua Bella Specific Plan	SFDR	2,922	DU
	c TR 34329 (Granite Capitol)	SFDR	90	DU
	d Cresta Bella	General Office	30.000	TSF
65	a Villages of Lakeview	SFDR	860	DU
		Condo/Townhomes	1,920	DU
		Elementary School	1,200	STU
		Commercial Retail	100.000	TSF
		Soccer Complex	12	Fields
		City Park	8.900	AC
		County Park	8.100	AC
		Regional Park	107.100	AC
	b Motte Lakeview Ranch	SFDR	847	DU
		Condo/Townhomes	686	DU
		Apartments	467	DU
		Elementary School	650	STU
		Middle School	300	STU
		Commercial Retail	120.000	TSF
		Regional Park	177.000	AC
66	Gateway Area Specific Plan	Commercial Retail	255.000	AC
		General Office	510.000	AC
		Business Park	595.000	AC
		Residential	340.000	AC
67	Moreno Valley Industrial Center (Industrial Area SP)	General Light Industrial	354.810	TSF
68	Centerpointe Business Park	General Light Industrial	356.000	TSF
69	ProLogis/Rolling Hills Ranch Industrial	Heavy Industrial	2,565.684	TSF
70	P05-0493	Logistics	597.370	TSF

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
71	P07-1028, -0102; and P09-0416, -0418, -0419	General Light Industrial	652.018	TSF
72	Amstar/Kaliber Development, PP22925	General Light Industrial	42.222	TSF
		Heavy Industrial	409.312	TSF
		Commercial Retail	10.000	TSF
		General Office	258.102	TSF
73	TR 31305 / Richmond American	Residential	87	DU
74	TR 32505 / DR Horton	Residential	71	DU
75	TR 34329 / Granite Capitol	Residential	90	DU
76	TR 31814 / Moreno Valley Investors	Residential	60	DU
77	TR 33771 / Creative Design Associates	Residential	12	DU
78	TR 35663 / Kha	Residential	12	DU
79	TR 22180 / Young Homes	Residential	87	DU
80	TR 32515	Residential	161	DU
81	TR 32142	Residential	81	DU
82	Heartland	Residential	922	DU
83	San Michele Industrial Center (Industrial Area SP)	General Light Industrial	865.960	TSF
84	Hidden Canyon	General Light Industrial	2,890.000	TSF
85	Starcrest, P011-0005; 08-11-0006	General Light Industrial	454.088	TSF
86	Commercial Medical Plaza	Medical Offices	311.633	TSF
87	Mountain Bridge Regional Commercial Community	Commercial	1,853.251	TSF
88	Jack Rabbit Trail	Residential	2,000	DU
89	The Preserve / Legacy Highlands SP	Commercial	595.901	TSF
		Residential	3,412	DU
90	South Perris Industrial Phase 1	Logistics	787.700	TSF
91	South Perris Industrial Phase 2	Logistics	3,448.734	TSF
92	South Perris Industrial Phase 3	Logistics	3,166.857	TSF
93	P 04-0343	Warehousing	41.650	TSF
94	P 06-0228	General Light Industrial	149.738	TSF
95	P 06-0378	Senior Housing	429	DU
96	P 11-09-0011	Retail	80.000	TSF
97	P 12-05-0013	Apartments	75	DU
98	P 12-10-0005	High-Cube Warehouse	1,463.887	TSF
99	TR 30850	Residential	496	DU
100	TR 30973	Residential	35	DU
101	TR 31225	Residential	57	DU
102	TR 31226	Residential	82	DU
103	TR 31240	Residential	114	DU
104	TR 31407	Residential	243	DU
105	TR 31650	SFDR	61	DU
106	TR 31659	SFDR	161	DU
107	TR 32041	Residential	122	DU

Table 4.0-1 Cumulative Project List

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
108	TR 32406	SFDR	15	DU
109	TR 33193	Townhomes	94	DU
110	TR 33338	Residential	75	DU
111	The Gateway Center	SFDR	1,342	DU
		Condo/Townhomes	402	DU
		Apartments	307	DU
		Shopping Center	5.7	AC
		Mixed-Use/Metrolink Station	15.2	AC
		Parks	15.9	AC
112	TTM 31592 (P 13-078) Covey Ranch	SFDR	115	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; SP = Spaces; VFP = Vehicle Fueling Positions; AC = Acres

[3] Source: Cactus Avenue and Commerce Center Drive Commercial Center TIA, Urban Crossroads, Inc., December 9, 2008 (Revised).

[4] Source: March Lifecare Campus Specific Plan Traffic Impact Analysis, Mountain Pacific, Inc., May 2009 (Revised).

Source: Urban Crossroads, Inc. 2014 H1, Table 4-3

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.8 of this EIR evaluate the eight (8) environmental subjects warranting detailed analysis, as determined by this EIR's Initial Study and in consideration of public comment on this EIR's NOP. The format of discussion is standardized as much as possible in each section for ease of review. The environmental setting is discussed first, followed by a discussion of the Project's potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant. The thresholds of significance used in this EIR are based on the thresholds presented in CEQA Guidelines Appendix G and as applied by the City of Moreno Valley to create the Project's Initial Study Checklist (included in *Technical Appendix A* to this EIR). The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of Moreno Valley is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the judgment of the City of Moreno Valley, taking into consideration CEQA Guidelines Appendix G, the City of Moreno Valley's Municipal Code and adopted City policies, the judgment of the technical experts that prepared this EIR's Technical Appendices, performance standards adopted, implemented, and monitored by regulatory agencies, significance standards recommended by regulatory agencies, and the standards in CEQA that trigger the preparation of an EIR.

As required by CEQA Guidelines §15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized "impact statement" is provided in each subsection following the analysis. The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.
- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.
- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact With Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measures.
- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measures that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, the City of Moreno Valley would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines §15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This subsection describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity. This subsection also analyzes the potential effects that the Project could have on these resources. In particular, descriptions of existing visual characteristics, both on site and in the vicinity of the Project site, are provided. Potential aesthetic impacts that could result from implementing the proposed Project are based in part upon on field observations and site photographs collected by T&B Planning, Inc. in December 2013 and January 2014 (LaMar 2013-2014), analysis of aerial photography (Google Earth, imagery dated November 2012), Project application materials submitted to the City of Moreno Valley and described in Section 3.0 of this EIR, and information provided in reports appended to this EIR. This subsection also is based in part on information contained in the Conservation Element of the City of Moreno Valley General Plan (Moreno Valley 2006a Ch. 7, pp. 7-12 – 14), and the Aesthetics section of the certified Final Program EIR prepared for the General Plan (SCH No. 2000091075) (Moreno Valley 2006b Sec. 5.11, pp. 5.11-1 – 5.11-6).

4.1.1 EXISTING CONDITIONS

The Project site encompasses 50.84 gross acres (50.68 net acres) in the southern portion of the City of Moreno Valley. The site is located north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Topographically, the site ranges in elevation from approximately 1,457 feet above mean sea level (AMSL) at the bottom of a detention basin in the central portion of the site, to a topographic high point of approximately 1,471 feet AMSL in the northwest portion of the site. The overall topographic relief is approximately 14 feet. The central portion of the Project site contains an earthen storm water detention basin that ranges in depth from approximately seven (7) to eight (8) feet. The site is perceived as flat or gently sloping to the east or southeast under existing conditions.

Pursuant to CEQA Guidelines §15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released on March 25, 2014. As of that date, the Project site consisted of an industrial development and vacant land. Historically, the Project site was used for agricultural production; however, agricultural activities ceased on the Project site in 2001/2002. The western portion of the site contains an industrial complex occupied by Eldorado Stone, which includes one (1) large warehouse/distribution structure with approximately 130,000 s.f. of building area and an approximate height of 37 feet, one (1) office building with approximately 12,000 s.f. of building area and an approximate height of 37 feet, a parking lot, and paved areas utilized as outdoor storage. The central portion of the site contains a large storm water detention basin associated with the Eldorado Stone facility. The eastern portion of the site is vacant under existing conditions and is routinely maintained (*i.e.,* disced) to remove vegetation from the site to reduce the risk of fire. Ornamental landscaping, including trees, is present along the western, northern, and southern perimeters of the Eldorado Stone facility and interior to the site at building entrances and within parking/storage areas. The central and eastern portions of the site do not contain any formal landscaping, and are characterized by ruderal plants and weeds. No trees are present on the central and eastern portions of the subject property. There are no rock outcroppings or

unique topographic features on the Project site. The existing conditions of the Project site were previously shown on Figure 2-4, *Aerial Photograph*.

To illustrate the existing visual conditions of the Project site in more detail, a photographic inventory was prepared. Figure 4.1-1, *Site Photograph Key Map*, depicts the locations of five (5) vantage point photographs, each of which are described below. These photographs, shown on Figure 4.1-2 through Figure 4.1-4, provide a representative visual inventory of the site's visual characteristics as seen from surrounding public viewing areas.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken from the Project site's northeast corner looking southwest. The left-hand side of the photograph provides a view along the site's eastern boundary, adjacent to Kitching Street. The center of the photograph looks southwest, across the Project site. The right-hand side of the photo looks along the site's northern boundary, adjacent to Edwin Road. In the foreground of the photograph, evidence of on-going weed abatement activities (*i.e.*, discing) on the property is clearly visible. An abandoned modular unit defaced with graffiti also is in the foreground, on the left-hand side of the photograph. In the mid-ground, on the left-hand side of the photograph (looking off-site), the Moreno Valley Regional Water Reclamation Facility is visible. In the mid-ground, on the right-hand side of the photo, the Eldorado Stone industrial development on the western portion of the Project site is visible. In the far right-hand side of the photograph, an off-site under-construction industrial warehouse facility is visible north of Edwin Road. Along the horizon in the central portion of the photograph, the Walgreens distribution warehouse facility is visible (located off-site and immediately south of the Project site). As illustrated by this photograph, there are no scenic resources on-site, nor are views of scenic vistas or prominent topographic features afforded from this location.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken from the Project site's southeast corner, looking northwest. The left-hand side of the photograph looks along the site's southern boundary, adjacent to Modular Way. The right-hand side of the photograph looks along the site's eastern boundary, adjacent to Kitching Street. The foreground of the photograph shows the eastern portion of the property vegetated with weeds and ruderal, non-native shrubbery. As shown in the mid-ground of the photograph, on the left-hand side, the Project site contains several abandoned modular units (several of which are defaced with graffiti). Behind the modular units, the existing on-site Eldorado Stone industrial facility is visible. In the foreground, in the central and right-hand portions of the photograph, evidence of on-going weed abatement activities (*i.e.*, discing) on the site is clearly visible. The off-site Moreno Valley Regional Water Reclamation Facility also is visible in the mid-ground, in the extreme right-hand portion of the photograph (looking off-site). Along the horizon, in the central and right-hand portions of the photograph, the Box Springs Mountains and Reche Canyon area are visible, albeit substantially obscured by a large warehouse building (which is currently under construction north of the Project site) and atmospheric haze, which is common in western Riverside County.

Figure 4.1-1

Site Photographs Key Map

Southeast

Northwest

Site Photo 1: At Northeast Intersection of Edwin Rd. and Kitching St., looking Southeast to Northwest

Southwest

Northeast

Site Photo 2: At Southeast Intersection of Modular Way and Kitching St., looking Southwest to Northeast

NOT TO SCALE

Figure 4.1-2
Site Photographs 1 & 2

- Site Photograph 3 (Figure 4.1-3): Site Photograph 3 was taken at the approximate midpoint of the site's southern boundary along Modular Way, looking north. The photograph depicts a 180-degree view of the Project site, with the site's eastern boundary on the right-hand side of the photograph and the site's western boundary on the left-hand side of the photograph. The foreground of the photograph depicts the sidewalk, ornamental landscaping, and black, tubular steel fence located along the Project site's southern border. In the mid-ground, in the left-hand side of the photograph, the Eldorado Stone warehouse structure is visible, although mostly obscured by the fencing. In the center of the photograph, in the mid-ground, the industrial warehouse building under construction to the north of the Project site is partially visible (although mostly obscured by the tubular steel fence). On the right-hand side of the photograph, in the mid-ground, an abandoned modular unit is visible. Along the horizon, on the right-hand side of the photograph (looking off-site) the Russell Mountains are visible.

- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the Project site's southwest corner, looking northeast. The left-hand side of the photograph looks north along the site's western boundary, adjacent to Perris Boulevard. The center of the photograph looks across the Project site. The right-hand side of the photograph looks east along the site's southern boundary, adjacent to Modular Way. The immediate foreground of the photograph is dominated by urban development features associated with Perris Boulevard and Modular Way, including street signs, street lights, and cement sidewalks. Existing ornamental landscaping (trees, turf and scattered shrubs) and the black, tubular steel fence that runs along the perimeter of the Eldorado Stone facility are visible in the mid-ground of the photograph. The Eldorado Stone office building is partially visible from this vantage point on the left-hand side of the photograph, but is mostly obscured by landscaping and fencing. The Russell Mountains are partially visible on the right-hand side of the photograph (along the horizon) from this location.

- Site Photograph 5 (Figure 4.1-4): Site Photograph 5 was taken from the Project site's northwest corner, looking southeast. The left-hand side of the photograph looks east along the site's northern boundary. The center of the photograph looks across the Project site. The right-hand side of the photograph looks south along the Project site's western boundary with Perris Boulevard. In the foreground, in the left-hand and center portions of the photograph, is a paved driveway offering access to the northwestern corner of the Project site. In the foreground on the right-hand side of the photograph, urban development features are visible, including a street light and cement sidewalk. The mid-ground of the photograph depicts the black, tubular steel fence along the perimeter of the Eldorado Stone facility as well as ornamental landscaping adjacent to Perris Boulevard. Along the horizon on the left-hand side of the photograph and above the fence line, a large off-site industrial warehouse building and the Russell Mountains are partially visible. The Eldorado Stone warehouse structure is partially visible along the horizon line and above the fence line in the central and right-hand portions of the photograph.

West

East

Site Photo 3: At Southern Edge of Modular Way, looking West to East

Northwest

Southeast

Site Photo 4: At Southwest Intersection of Modular Way and Perris Blvd., looking Northwest to Southeast

NOT TO SCALE

Figure 4.1-3
Site Photographs 3 & 4

Northeast

Southwest

Site Photo 5: At Northwestern Edge of Perris Blvd., looking Northeast to Southwest

NOT TO SCALE

Figure 4.1-4
Site Photograph 5

Under existing conditions, the Eldorado Stone facility operating on the western portion of the Project site contains several sources of artificial light. There are approximately 50 artificial light sources (*e.g.*, building mounted lights/floodlights, pole mounted lights) installed at the existing warehouse structure, office building, and parking and storage areas within the Eldorado Stone facility. Furthermore, there are streetlights installed immediately west of the Project site along Perris Boulevard and immediately south of the Project site along Modular Way; all existing street lights are installed off-site within the public rights-of-ways. In addition to the lighting on-site and immediately adjacent to the Project site, the surrounding area is developed with numerous industrial facilities, each of which contain additional sources of artificial light: a large, under-construction warehouse facility to the north, the Walgreens distribution warehouse facility to the south, the Harbor Freight Tools distribution warehouse facility to the southwest, and the Moreno Valley Regional Water Reclamation Facility to the east.

Mt. Palomar Observatory, located in the northern portion of San Diego County, has noted that the continued urbanization of southwestern Riverside County reduces the usefulness of the observatory due to emission of artificial lighting from streetlights, automobiles, residences, and businesses (CalTech n.d.). This type of lighting condition is known as "sky glow." Properties located within a 45-mile radius of the Mt. Palomar Observatory are considered to have the potential to contribute to lighting impacts at the observatory. Although the City of Moreno Valley General Plan does not address the Mt. Palomar Observatory, the Project site is identified by the Riverside County General Plan as being located within a 45-mile distance of the facility, which is referred to as "Zone B" of the "Mt. Palomar Nighttime Lighting Policy Area" (Riverside County 2003, Mead Valley Area Plan Figure 6).

The City of Moreno Valley General Plan includes policies related to development along "Scenic Routes," in addition to policies related to "View Corridors" (Moreno Valley 2006b 7-13). However, as shown on Figure 4.1-5, *City of Moreno Valley Major Scenic Resources*, the Project site is not located within close proximity to, or within the view of, any designated scenic route or view corridor.

4.1.2 BASIS FOR DETERMINING SIGNIFICANCE

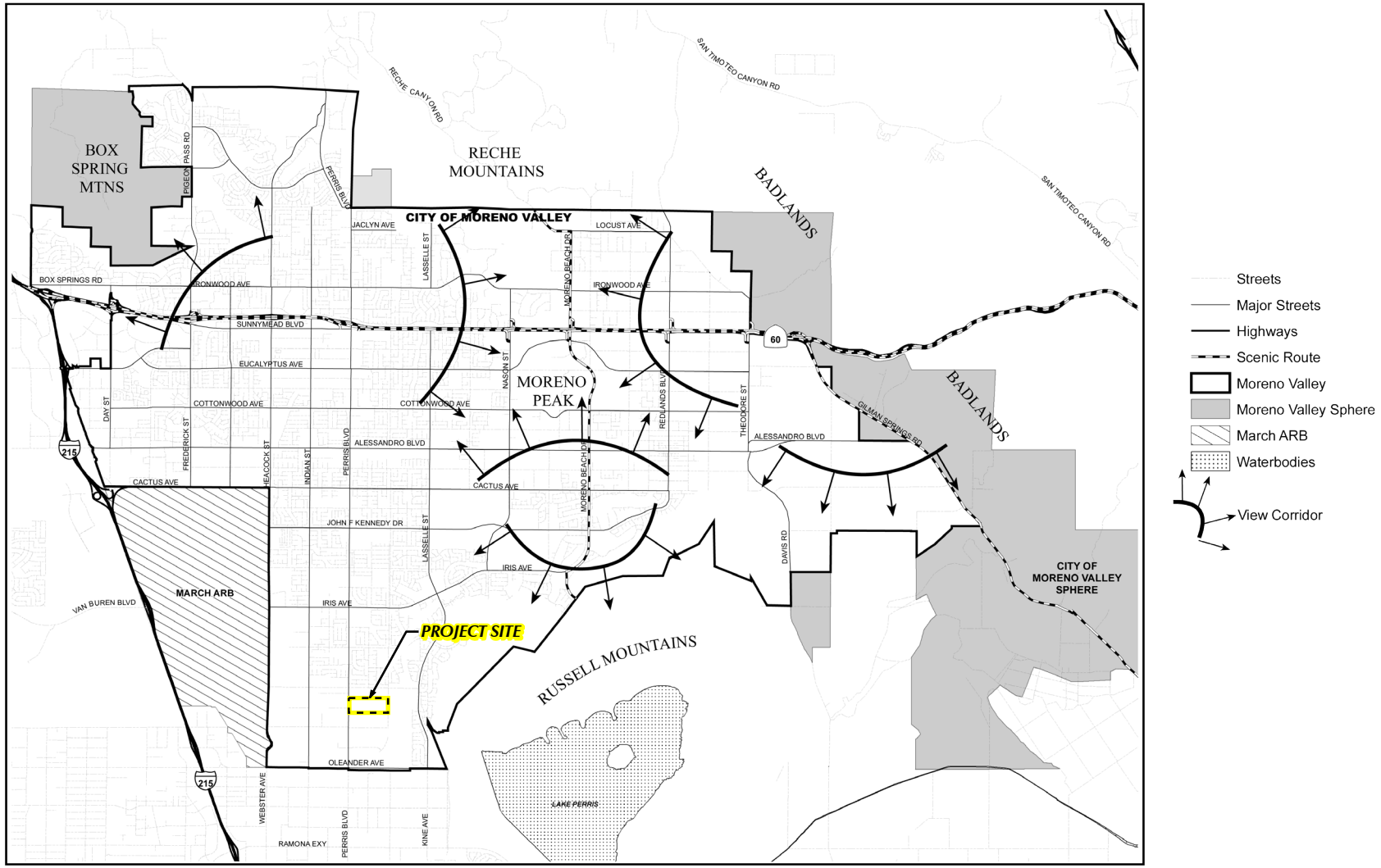
The proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

1. *Have a substantial adverse effect on a scenic vista;*

2. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*

3. *Substantially degrade the existing visual character or quality of the site and its surroundings; or*

4. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*



Source: City of Moreno Valley General Plan (07-11-2006)

NOT TO SCALE

Figure 4.1-5
City of Moreno Valley Major Scenic Resources

4.1.3 IMPACT ANALYSIS

Threshold 1: Would the Project have a substantial adverse effect on a scenic vista?

The photographs provided on Figure 4.1-2 through Figure 4.1-4 depict the subject property under existing conditions. As shown, the western portion of the Project site is occupied by an industrial facility (Eldorado Stone), the central portion of the site contains a water detention basin, and the eastern portion of the site is vacant. The Project site does not contribute to a scenic vista under existing conditions, and the City of Moreno Valley General Plan Final Program EIR does not identify any scenic vistas or scenic corridors within the vicinity of the Project site (City of Moreno Valley 2006b 7-13).

Scenic vistas within Moreno Valley are defined by the Box Springs Mountains and Reche Canyon area to the north, the "Badlands" to the northeast, and the Russell Mountains to the east. The Project site is located within a relatively flat valley floor approximately 0.7-mile to the west of the Russell Mountains, which are identified as a scenic resource by the City of Moreno Valley General Plan (City of Moreno Valley 2006a, Figure 7-2). The General Plan distinguishes the scenic viewshed for the Russell Mountains as occurring from the north (*i.e.*, lands to the north of the Russell Mountains looking south toward the Mountains), whereas the Project site is located to the west of the Mountains.

Under existing conditions, views of the Russell Mountains are partially obstructed along the western Project boundary by the Eldorado Stone industrial structures measuring 37 feet in height, fencing, and landscaping. Implementation of the proposed Project would result in the construction of a logistics warehouse building with an approximate height of 42 feet above finished grade and architectural projections reaching up to 47 feet above finished grade. The proposed building would be five (5) feet taller than the existing on-site buildings and 10 feet taller on the proposed building's corners where architectural projections would accent the building's office areas. The proposed logistics warehouse building would be set back from the Perris Boulevard public right-of-way by approximately 150 feet. The proposed 150-foot setback is approximately 30 feet farther away from the Perris Boulevard public right-of-way than the existing Eldorado Stone office building and 225 closer to the Perris Boulevard public right-of-way than the existing Eldorado Stone warehouse building. Because the proposed logistics warehouse building would be taller than the existing on-site buildings, views of the Russell Mountains experienced from Perris Boulevard would be impeded to a greater degree than occurs under existing conditions. However, the proposed Project would not block views to the Russell Mountains from public viewing areas along Perris Boulevard because views of the Mountains would still be visible beyond the building and along the horizon. The change in view obstruction would not be perceived as substantial. Implementation of the proposed Project also would not block views of the Russell Mountains from public viewing areas along the northern and southern boundaries of the subject property as the Mountains would still be visible beyond the proposed warehouse building. Views of the Russell Mountains from the Project site's eastern boundary would not be affected by the proposed Project due to the location of the Mountains in relation to the Project site.

The proposed Project also would have a less-than-significant impact on public views of the Box Spring Mountains to the northwest of the subject property and the Reche Canyon area to the north. The distance and location of the Box Spring Mountains and Reche Canyon area in relation to the Project site do not provide prominent, distinct views of these scenic resources from the Project site under existing conditions. The views that are available under existing conditions, primarily from the Project's southern and eastern boundaries, would not be obstructed by the redevelopment of the Project site. The proposed Project would not block views of these landforms from public viewing areas (*i.e.*, public roads); these features would still be visible beyond the building and along the horizon. The Project site does not afford any views of the Badlands; therefore, implementation of the proposed Project would not adversely impact any public view of the Badlands.

Based on the foregoing analysis, the proposed Project would not have a substantial adverse effect on scenic vistas, and a less-than-significant impact would occur.

Threshold 2: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project site is not located within or adjacent to a scenic highway corridor and does not contain scenic resources, such as trees of scenic value, rock outcroppings, or historic buildings. Furthermore, there are no State-designated or eligible scenic highways within the City of Moreno Valley (Caltrans "Eligible (E) and Officially Designated (OD) Routes"). The nearest State-eligible scenic highway to the Project site is I-215 (between SR-74 near Perris to SR-74 near Romoland), which is located approximately 6.0 miles south of the Project site. Additionally, the Project site is located approximately 4.7 miles south of State Route 60, which the City of Moreno Valley General Plan identifies as a "Scenic Route," (Moreno Valley 2006b 7-13). The Project's proposed development features (one warehouse building with associated features) would not be visible from either I-215 (between SR-74 near Perris to SR-74 near Romoland) or State Route 60 due to intervening development and distance. Because the Project site is not visible from a state scenic highway and contains no scenic resources, the proposed Project would not adversely impact the viewshed within a scenic highway corridor and would not damage important scenic resources within a scenic highway corridor, including trees, rock outcroppings, and historic buildings. No impact would occur.

Threshold 3: Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

❑ Construction-Related Activities

As described in Subsection 3.3.4.A of this EIR, the proposed Project would be constructed in one phase over a period of approximately 11 months. Heavy equipment would be used, which would be visible to the immediately surrounding areas during the temporary construction period. Construction activities are a common occurrence in the developing Inland Empire region of southern California,

particularly in the rapidly developing MVIAP area, and are not considered to substantially degrade the area's visual quality. Furthermore, except for the short-term use of cranes during building construction and lifts during the architectural coating phase, the construction equipment is expected to be low in height and not substantially visible to the surrounding area. All Project-related construction activities would be temporary in nature and all construction equipment would be removed from the Project site following completion of the Project's construction activities. Project-related changes to local visual character and quality would be less than significant during temporary, near-term construction activities.

❑ Project Buildout

At buildout of the proposed Project, views of the site from the surrounding area would change from that of a partially developed property featuring an existing covered warehouse/manufacturing structure, office building, outdoor parking/storage areas, and vacant land to a redeveloped site containing one (1) large logistics warehouse building. As more fully described in EIR Section 3.0, the proposed Project would result in the construction and operation of an approximately 1,109,378 s.f. logistics warehouse building with 256 loading docks erected by conventional concrete tilt-up construction. Example building elevations were previously depicted on Figure 3-5, *Architectural Elevations*. In addition to the logistics warehouse structure, the site also would contain surface parking areas and drive aisles, loading docks, screen walls (measuring up to 14 feet in height), fencing, landscaping elements, water quality detention/basins, utility infrastructure, and other site improvements.

In order to determine if the proposed Project would substantially degrade the existing visual character or quality of the site and its surroundings, an analysis of Site Photographs 1 through 5 (refer to Figure 4.1-2 through Figure 4.1-4) is provided on the following pages. Refer also to the Project's proposed Plot Plan (Figure 3-4), conceptual architectural elevations (Figure 3-5), and conceptual landscape plan (Figure 3-6) for illustrations of the proposed site layout and architectural and landscape design.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken from the Project site's northeast corner looking southwest. This vantage point would be visible at the corner of Kitching Street and Edwin Road. The northeast corner of the proposed logistics warehouse building would be visible from this location, as well as partial views of the northern and eastern edges of the warehouse building. Upon buildout of the Project, the immediate foreground of this photograph (from the left-hand side of the photograph to the center) would contain ornamental landscaping surrounding a water quality detention basin. A driveway and drive aisle would also be visible in the foreground from this vantage point (from the center of the photograph extending to the right-hand side). In the left-hand side of the photograph, in the mid-ground, a drive-aisle and landscaping would be visible, as well as the eastern edge of the warehouse facility. Also in the mid-ground (center of the photograph), the corner of the proposed warehouse building would be visible. The corner of the warehouse building would house an office area featuring enhanced architectural treatments. In the right-hand side of the

photograph (in the mid-ground), a 14-foot tall masonry screen wall painted to match the building's color palette would be visible. The screen wall and landscaping visible from this vantage point would obscure views of the building's loading bays; a portion of the proposed warehouse building would be visible above the masonry wall line. The visual prominence of the screen wall would be reduced by densely planted flowering, deciduous accent trees, and large canopied deciduous trees and evergreen coniferous trees along Edwin Road. The tree understory would be planted with a combination of shrubs and groundcover.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken from the Project site's southeast corner looking northwest. From this location, the southwest corner of the warehouse building would be visible in the center of the photograph, with the building's eastern edge extending north in the right-hand side of the photograph and the building's southern edge extending west in the left-hand side of the photograph. From the left-hand side of the photograph and extending to the right-hand side of the photograph, the foreground would be dominated by landscaping (trees and groundcover) planted along the perimeter of the water quality/detention basin proposed in the southeast corner of the site. In the left-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen and landscaping would be visible. The proposed warehouse building would be partially visible beyond the masonry wall, while the loading docks would be screened by the aforementioned masonry wall. In the center of the photograph (in the mid-ground), the corner of the warehouse facility would be visible, as would a drive aisle. This corner of the building would contain an office area featuring enhanced architectural treatments. In the right-hand side of the photograph (in the mid-ground) a drive aisle, landscaping, and a water-quality/detention basin would be visible. Views of the horizon on the right- and left-hand sides of the photograph would not be obscured with buildout of the Project. However, distant views of the Box Springs Mountains along the horizon line in the central portion of the photograph may be partially obstructed due to the close proximity of the proposed warehouse building and landscaping, but the view would not be completely obstructed.

- Site Photograph 3 (Figure 4.1-3): Site Photograph 3 was taken at the approximate midpoint of the site's southern boundary with Modular Way. The photograph depicts a 180-degree view of the Project site, facing north, with the site's eastern boundary on the right-hand side of the photograph, and the site's western boundary on the left-hand side of the photograph. At Project buildout, this vantage point would provide a view of the southern edge of the proposed warehouse building. Views of the foreground from this vantage point would include a cement sidewalk and ornamental landscaping, as occurs under existing conditions. A 14-foot tall masonry wall painted to match the building's color palette would be visible in the mid-ground from this vantage point (from left to right). The visual prominence of the screen wall would be reduced by densely planted trees, shrubs, and groundcover. The southern edge of the proposed warehouse building would be partially visible beyond the masonry wall. Architectural enhancements as proposed along the southern edge of the warehouse building to break-up the wall plane and provide visual interest.

- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the corner of Modular Way and Perris Boulevard, looking northeast. The southwest corner of the proposed logistics warehouse building would be visible from this location, as well as partial views of the southern and western edges of the warehouse building. The immediate foreground of this photograph (from the left-hand side to the right-hand side) would include a cement sidewalk and ornamental landscaping adjacent to Perris Boulevard and Modular Way, as occurs under existing conditions. In the left-hand side of the photograph, the mid-ground would contain an employee/visitor parking area and a drive-aisle. Both of these features would be partially obscured by proposed landscaping; the western edge of the proposed warehouse building also would be partially obscured by landscaping. In the mid-ground (center of the photograph), the corner of the warehouse facility would feature enhanced architectural treatments. In the right-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen wall painted to match the building's color palette would be visible. The screen wall would obscure views of the loading bays and partially obscure the proposed warehouse building. The visual prominence of the screen wall would be reduced by densely planted flowering, deciduous accent trees, and large canopied deciduous trees and evergreen coniferous trees along Modular Way. Views of the Russell Mountains would be partially obstructed along the horizon line at this vantage point (at the central and right-hand portions of the photograph); however, views of the Mountains are already partially obstructed under existing conditions by the Eldorado Stone facility. Furthermore, the proposed Project would not detract from the visual prominence of the Russell Mountains from this vantage point; the Mountains would continue to be seen by a viewer from this location.

- Site Photograph 5 (Figure 4.1-4): Site Photograph 5 was taken from the Project site's northwest corner, looking southeast. From this viewpoint, the left-hand side of the photograph would offer views along the logistics warehouse building's northern edge, with the building's northwest corner visible in the center of the photograph, and the building's western edge visible along the right-hand side of the photograph. The immediate foreground of the photograph would contain an employee/visitor parking area, drive aisle, and associated landscaping (left-hand and center portions of the photograph). On the right-hand side of the photograph (in the foreground) a driveway and ornamental landscaping adjacent to Perris Boulevard would be visible, similar to existing conditions. In the left-hand side of the photograph (in the mid-ground) a 14-foot tall masonry screen wall painted to match the building's color palette would be visible. The screen wall would obscure views of the loading bays and partially obscure views of the proposed warehouse building, although the building would be visible beyond the screen wall. The northwest corner of the proposed warehouse building would be visible in the central foreground from this viewing area. This corner of the building would feature enhanced architectural treatments. To the right of the office area, the western edge of the warehouse building, employee/visitor parking areas, a drive aisle and landscaping would be visible. Views of the Russell Mountains would be partially obstructed along the horizon line at this vantage point; however, views of the Mountains are already partially obstructed under existing conditions by the Eldorado Stone facility. Furthermore,

the Project would not detract from the visual prominence of the Russell Mountains from this vantage point; the Mountains would continue to be seen by a viewer from this location.

As indicated in the above descriptions, buildout of the proposed Project would change the existing visual character of the Project site from a property partially developed with industrial uses occupied by Eldorado Stone to that of a redeveloped property containing one (1) logistics warehouse building and associated site improvements. Although the aesthetic changes to the Project site would be noticeable, the Project would not change the visual character of the Project as the site contains industrial buildings under existing conditions and would contain an industrial building under proposed conditions. With respect to changes to visual quality, the Project incorporates a number of features intended to soften the visual prominence of the building and its loading docks from public viewing areas, including enhanced architectural treatments and landscaping. The Project also incorporates 14-foot tall walls to screen loading and docking bays from public views along Modular Way, Perris Boulevard, Kitching Street and Edwin Road. The visual prominence of these screening walls would be reduced through the installation of landscaping (trees, shrubs, and groundcover) in front of the walls. These visual features of the proposed development would help ensure a high-quality aesthetic for the site, consistent with the design standards called for by the MVIAP. Therefore, based on the foregoing analysis, implementation of the proposed Project would not result in any significant adverse impacts to the visual character or quality of the Project site.

With respect to the visual character of the surrounding area, the proposed Project would be visually compatible with the existing industrial land uses to the north, south, southwest, and east of the Project site. Large warehouse buildings having similar architectural characteristics as proposed by the Project are located to the immediate north and south and are approved to be constructed to the immediate west. Accordingly, implementation of the Project would not substantially degrade the existing visual character of the Project site's surroundings, and impacts would be less than significant.

Based on the foregoing analysis, development of the site with a 1,109,378 s.f. logistics warehouse complete with a parking area, drive aisles, loading docks, walls and fencing, landscaping elements, water quality detention/basins, utility infrastructure, and other site improvements would not substantially degrade the visual quality or character of the Project site or surrounding area. As such, the Project would result in a less-than-significant impact.

Threshold 4: Create a new source of substantial light or glare, which would adversely affect daytime or nighttime view of the area?

Under existing conditions, the western portion of the Project site is developed and includes sources of artificial light associated with operation of the existing Eldorado Stone facility. Existing light sources include exterior building and pole-mounted light fixtures. These existing light sources would be eliminated by the Project and replaced with new lighting sources for operation of the proposed Project.

The MVIAP includes standards for lighting within the Area Plan as follows:

> *Exterior light fixtures shall be designed and placed so as not to provide light spillage on adjacent properties or public rights-or-way. The use of "full cut off' fixtures should be used adjacent to the MARB/MIP to reduce nighttime glare towards the flight line* (City of Moreno Valley, 2002).

In addition, §9.08.100 of the City of Moreno Valley Municipal Code addresses light and glare, and requires the following:

> *All outdoor lighting associated with nonresidential uses shall be fully shielded and directed away from surrounding residential uses. Such lighting shall not exceed one-quarter foot-candle minimum maintained lighting measured from within five feet of any property line, and shall not blink, flash, oscillate, or be of unusually high intensity or brightness* (City of Moreno Valley n.d.).

The proposed Project is designed to adhere to the requirements of both the City Municipal Code §9.08.100 and the MVIAP, and future implementing permits and approvals (*i.e.*, building permits) would be required to demonstrate compliance with these standards. Compliance would ensure that the proposed Project does not produce substantial amounts of light or glare from artificial lighting sources that would adversely affect the day or nighttime views of adjacent properties.

With respect to daytime glare impacts that could result from reflective building materials, the proposed Project would involve the construction and operation of one logistics warehouse building. The majority of the exterior building surfaces would consist of tilt-up concrete construction that does not include any physical properties that would produce substantial amounts of glare. Although the north, south, west, and east elevations of the proposed warehouse building would provide enhanced architecture, including the use of blue-glazed, low-reflective glass, the use of this material would not adversely affect daytime views of any surrounding properties because the glass would not be mirrored. Accordingly, a less-than-significant daytime glare impact would occur.

As noted previously, the Project site is located within a 45-mile radius of the Mt. Palomar Observatory. Light pollution is not addressed by the City of Moreno Valley's General Plan or Municipal Code; however, the 45-mile radius surrounding the Mt. Palomar Observatory is defined by Riverside County Ordinance No. 655 as an area in which light pollution may impact the functionality of the observatory. Any development project within a 45-mile radius of the observatory that would add artificial light sources has the potential to contribute to sky glow effects, which could adversely affect operations at the observatory. Although the Project is located in the City of Moreno Valley and is not subject to Riverside County Ordinance No. 655, the light pollution effects of the Project on the Mt. Palomar Observatory should still be considered The proposed Project would be required to comply with City of Moreno Valley Municipal Code §9.08.100, which requires shielded fixtures and prohibits unusually high intensity or brightness to minimize light pollution (and thereby minimizing

potential impacts associated with artificial lighting, including but not limited to effects on nighttime observations at the Mt. Palomar Observatory).

Although implementation of the Project would not introduce substantial sources of artificial lighting and glare and would result in a less-than-significant impact to daytime and nighttime views in the area, this EIR recommends mitigation to ensure that the Project complies with the MVIAP and City of Moreno Valley Municipal Code §9.08.100 (refer to Subsection 4.1.6, below).

4.1.4 CUMULATIVE IMPACT ANALYSIS

The City of Moreno Valley's General Plan EIR (City of Moreno Valley 2006b 5.11-5), concluded that buildout of the City in accordance with its General Plan would not have any significant direct or cumulative impacts to local or regional aesthetics with enforcement of the City's General Plan and Specific Plans. As previously stated, the proposed Project is consistent with the City's General Plan and MVIAP and would therefore not result in any cumulative aesthetics impacts. Furthermore, and as noted under the discussion of Threshold 1, the Project site contains an industrial facility and disturbed, vacant land under existing condition and does not offer a scenic vista. Views of the Box Springs Mountains, Reche Canyon area, and the Russell Mountains are available from public viewing areas adjacent to the Project site; however, such views are available throughout the City of Moreno Valley and are not unique to the Project site's vicinity. Additionally, and as shown on Figure 4.1-5, the City of Moreno Valley General Plan does not identify any scenic routes or view corridors within close proximity of the Project site. With buildout of the proposed Project and other developments within the Project's viewshed, which would include buildout of the MVIAP and surrounding areas, there would be a less than significant cumulative effect to any existing scenic vistas. Accordingly, no cumulatively considerable impact to scenic vistas would occur with buildout of the proposed Project.

As noted under the analysis of Threshold 2, the Project site is not located within close proximity to any designated Scenic Routes and does not contain any scenic resources under existing conditions, including, but not limited to, trees, rock outcroppings, and historic buildings. Therefore, the proposed Project has no potential to directly impact a scenic resource or to contribute to a cumulatively significant scenic resource impact. As such, no impact would occur.

With respect to visual quality and character of the site and surrounding area, under cumulative conditions the geographic area of the MVIAP would be industrial in character as the MVIAP area would be fully built-out with business park/light industrial land uses. As with the proposed Project, uses within the MVIAP would be subject to the development regulations and design standards contained in the MVIAP. Mandatory compliance to these development regulations and design standards would ensure that the business park/light industrial development within the remaining undeveloped portions of the MVIAP would incorporate high quality building materials, site design, and landscaping so as to minimize the potential for adverse effects associated with visual quality. The building that would be constructed on the Project site and other buildings within the MVIAP would be similar in character and would display the aesthetic qualities required by the MVIAP.

These qualities have been incorporated into the proposed Project's design as described in EIR Section 3.0, *Project Description*. As such, the cumulative impact would be less than significant and the proposed Project would not considerably contribute to an adverse cumulative impact to the existing visual character or quality of the Project site or its surroundings.

With respect to potential cumulative light and glare impacts, City of Moreno Valley Municipal Code §9.08.100 sets a maximum limit of 0.25 foot candles of "spill over" lighting that can directly or indirectly affect adjacent properties and requires light fixtures to incorporate shielding to prevent potential glare impacts. Similarly, the County of Riverside and cities in the surrounding area enforce similar light pollution regulations (Riverside County Ord. 655, City of Perris Zoning Ord. Sec. 19.01 *et. seq.*, City of Riverside Municipal Code Sec. 19.590.070). As noted previously, the Project site is located within a 45-mile radius of the Mt. Palomar Observatory. Areas within 45 miles of the Mt. Palomar Observatory have been identified by the County of Riverside as having the potential to adversely affect nighttime operations at the Observatory. However, as noted above, all development with artificial light sources located within the City of Moreno Valley and surrounding areas are required to comply with the applicable lighting restrictions of the City Municipal Code §9.08.100 (or the applicable lighting restrictions applied by their respective City/County). The restriction on "spill over" lighting enforced by these lighting regulations has the effect of minimizing light and glare that would create sky glow. Additionally, development projects with artificial light sources in surrounding jurisdictions would be required to comply with the light reduction requirements applicable in their respective jurisdiction. Therefore, because City of Moreno Valley Municipal Code §9.08.100 and the light control regulations of other jurisdictions within the 45-mile radius of the Observatory would minimize the amount of sky glow that could affect nighttime operations at the observatory the cumulative effect would be less than significant. Because the proposed Project is mandated to comply with the City's Municipal Code, the Project's contribution to sky glow impacts to the Mt. Palomar Observatory is determined to be less than cumulatively considerable.

4.1.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Less-than-Significant Impact. The Project site does not comprise all or part of a scenic vista and no unique or scenic vistas are visible from the property. The Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features; therefore, impacts to scenic vistas resulting from the Project would be less than significant.

Threshold 2: No Impact. The Project has no potential to damage scenic resources within a scenic highway corridor. The Project site is not located within the viewshed of a scenic highway and the Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings. Accordingly, a significant impact to scenic resources within a state scenic highway has no potential to occur.

Threshold 3: Less-than-Significant Impact. The Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas during Project construction or operation. Although the Project would result in a change to the existing visual character of the site,

the Project proposes a number of site design, architectural, and landscaping elements consistent with the requirements of the MVIAP that would ensure the provision of a high quality development. Furthermore, buildout of the Project would be consistent with the industrial character of the site and surrounding area which is made up of warehouse and industrial facilities. Impacts would be less than significant.

Threshold 4: Less-than-Significant Impact. The Project would not create substantial light or glare. Compliance with the MVIAP requirements for lighting and mandatory compliance with City of Moreno Valley Municipal Code §9.08.100 would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

4.1.6 MITIGATION

Although the proposed Project would not introduce substantial sources of artificial lighting and glare and would result in a less-than-significant impact to daytime and nighttime views in the area, the following mitigation measures are recommended to ensure compliance with the MVIAP and City of Moreno Valley Municipal Code §9.08.100.

MM 4.1-1 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way, in conformance with City of Moreno Valley Municipal Code §9.08.100.

MM 4.1-2 Prior to building permit issuance, the City of Moreno Valley shall review construction drawings to ensure that proposed Project complies with all applicable development regulations and design standards of the Moreno Valley Industrial Area Plan (Specific Plan No. 208), including standards related to the design of artificial lighting contained within Section III, Development Standards and Guidelines, and Section IV, Development Framework.

4.2 AIR QUALITY

This Subsection is based on two technical studies that were prepared by Urban Crossroads, Inc. to evaluate the Project's potential to adversely affect local and regional air quality. These studies include the following: 1) "Modular Logistics Center Air Quality Impact Analysis," dated September 26, 2014, which is included as *Technical Appendix B1* to this EIR (Urban Crossroads 2014a); and 2) "Modular Logistics Center Mobile Source Health Risk Assessment," dated June 18, 2014, which is included as *Technical Appendix B2* to this EIR (Urban Crossroads 2014b).

4.2.1 EXISTING CONDITIONS

A. Atmospheric Setting

The Project site is located in the South Coast Air Basin (SCAB, or "Basin") which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB encompasses approximately 6,745 square miles and includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and the Jacinto Mountains to the north and east, respectively; and the San Diego County line to the south (Urban Crossroads 2014a 10).

B. Regional Climate and Meteorology

The regional climate – temperature, wind, humidity, precipitation, and the amount of sunshine – has a substantial influence on air quality. The distinctive climate of the SCAB is determined by its terrain and geographical location, which comprises a coastal plain connected to broad valleys and low hills surrounded by the Pacific Ocean and high mountains. The annual average temperatures throughout the SCAB vary from the low to middle 60s, measured in degrees Fahrenheit (F). Inland areas in the SCAB, like where the Project site is located, show more variability in annual minimum and maximum temperatures than coastal areas within the SCAB due to a decreased marine influence (Urban Crossroads 2014a 10-11).

The climate of the SCAB is characterized as semi-arid; however, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB and the relative high humidity heightens the conversion of sulfur dioxide to sulfates. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland (Urban Crossroads 2014a 10).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution, as the direction and speed of wind patterns determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind

flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. During the nighttime, heavy, cool air descends mountain slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counter-clockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections (Urban Crossroads 2014a 11).

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level (Urban Crossroads 2014a 11).

A second inversion-type forms in conjunction with the drainage of cool air off of the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides and carbon monoxide, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline (Urban Crossroads 2014a 11).

C. *Air Quality Pollutants and Associated Health Effects*

The federal government and State of California have established maximum permissible concentrations for common air pollutants that may pose a risk to human health or would otherwise degrade air quality and adversely affect the environment. These regulated air pollutants are referred to as "criteria pollutants." An overview of the common criteria air pollutants in the SCAB, their sources, and associated effects to human health are summarized on the following pages.

- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest in the winter during the morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. CO is emitted directly from internal combustion engines; therefore, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections (Urban Crossroads 2014a 14).

CO combines with hemoglobin to produce carboxyhemoglobin (COHb), which interferes with the transport of oxygen throughout the body. The most common symptoms associated with CO poisoning include headache, nausea, vomiting, dizziness, fatigue, and weakness. Exposure to CO can also result in chest pain. Individuals most at risk to the effects of CO include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic oxygen deficiency (Urban Crossroads 2014a 18).

- Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X) (Urban Crossroads 2014a 14).

  SO_2 is a respiratory irritant to people afflicted with asthma. After a few minutes exposure to low levels of SO_2, asthma sufferers can experience breathing difficulties, including airway constriction, resistance to air flow, and reduction in breathing capacity. Although healthy individuals do not exhibit similar acute breathing difficulties in response to SO_2 exposure at low levels, animal studies suggest that very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract (Urban Crossroads 2014a 19).

- Nitrogen Oxides (NO_X) consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO_2 absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than measured by regional monitoring stations (Urban Crossroads 2014a 14-15).

  Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_X. Short-term exposure to NO_X can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO_X can result in larger decreases in lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema), as these individual are more susceptible to the effects of NO_X than healthy individuals (Urban Crossroads 2014a 19).

- Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X) (both byproducts of internal combustion engine exhaust), undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are

generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant (Urban Crossroads 2014a 15).

Short-term exposure (lasting for a few hours) to ozone at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for ozone effects. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high ozone levels (Urban Crossroads 2014a 18).

- Particulate Matter (PM) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particles 10 microns or smaller (PM_{10}) easily become airborne and can reduce visibility. Particles 2.5 microns or smaller ($PM_{2.5}$), often referred to as fine particles, are formed in the atmosphere from sulfates or nitrates, a byproduct of primary gaseous emissions of SO_2 and NO_X (Urban Crossroads 2014a 15).

  Elevated ambient concentrations of particulate matter (PM_{10} and $PM_{2.5}$) have been linked to respiratory infections, number and severity of asthma attacks, and increased hospital admissions. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to a decrease in respiratory lung volumes in children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children, appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$ (Urban Crossroads 2014a 18-19).

- Volatile Organic Compounds (VOCs) are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed and do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor. Examples of VOC include gasoline, alcohol, and the paints used for solvents (Urban Crossroads 2014a 15). Odors generated by VOCs can irritate the eye, nose, and throat, which can reduce respiratory volume. Studies have shown that odor-associated VOCs can stimulate sensory nerves leading to neurochemical changes that may compromise the immune system (Urban Crossroads 2014a 20).

- Reactive Organic Gases (ROGs) Similar to VOCs, ROGs are also precursors in forming ozone. ROGs consist of compounds containing methane ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. The SCAQMD uses the terms ROG and VOC interchangeably. (Urban Crossroads 2014a 15).

- Lead (Pb) is a heavy metal that is highly persistent in the environment. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters (Urban Crossroads 2014a 15).

  Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure (Urban Crossroads 2014a 19-20).

D. Existing Air Quality

The quality of the air is measured based upon ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect, as well health effects of each pollutant regulated under these standards are detailed in Table 4.2-1, *Ambient Air Quality Standards.*

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), inhalable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99% of the daily concentrations, averaged over three years, are equal to or less than the standard (Urban Crossroads 2014a 12).

Table 4.2-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM10)[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[8]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration

measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3.] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4.] Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[5.] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health

[6.] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7.] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8.] On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[9.] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm

[10.] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm

[11.] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[12.] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[13.] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: Urban Crossroads 2014a, Table 2-1

❑ Regional Air Quality

Criteria Air Pollutants

The SCAQMD monitors levels of various criteria air pollutants at 40 monitoring stations throughout its jurisdiction. In 2012, the most recent year for which detailed data is available, the federal and state ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$ were exceeded on at least one day at most monitoring locations within the SCAB (Urban Crossroads 2014a 14). Measured levels of NO_2, SO_2, CO, sulfates, and lead within the SCAB did not exceed Federal or State standards in 2012 (Urban Crossroads 2014a 14).

The attainment status for criteria pollutants within the SCAB is summarized in Table 4.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB).*

Table 4.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Nonattainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead[1]	Attainment	Attainment

Source: Urban Crossroads 2014a, Table 2-2

SCAQMD's *Fiscal Year 2012-2103 Budget & Work Program* (herein incorporated by reference and available for review at the location cited in Section 7.0, *References*, (SCAQMD 2013 2) states that although the SCAB has suffered unhealthful air since World War II and is one of the most unhealthful air basins in the United States, the 65-year history of the region's air pollution control efforts is, in many ways, one of the world's key success stories. Peak ozone levels have been cut by almost three-fourths since air monitoring began in the 1950 and population exposure was cut in half during the 1980s alone (SCAQMD 2013 2). Thus, overall air quality within the SCAB is dramatically improving as the result of regulatory programs and is expected to continue to improve in the future as regulations become more stringent. As stated in SCAQMD's *Fiscal Year 2012-2013 Budget and Work Program*:

> "Ozone levels have fallen by about three-quarters since peaks in the mid-1950s. Lead, nitrogen dioxide, sulfur dioxide, and carbon monoxide levels have gone down from nonattainment to full attainment of federal health standards. In November 2008, US EPA revised the lead standard from a 1.5 µg/m3 quarterly average to a 0.15 µg/m3 rolling 3-month average. The current Basin lead network remains below the new

standard…. In 2011, the Basin exceeded the current federal 8-hour ozone standard on 107 days. 2010 was the cleanest year on record for ozone in the Basin, exceeding the federal standard on 102 days. The standard was exceeded on 113 days in 2009.

In 2007 US EPA formally redesignated the Basin from nonattainment to full attainment of the federal health standard for carbon monoxide. Basin-wide maximum levels of carbon monoxide have been consistently measured at more than 30% below the federal standard since 2004. In 2010, US EPA established a new NO_2 1-hour standard at a level of 100 ppb (0.100ppm) and SO_2 1-hour standard at a level of 75 ppb (0.075 ppm). In 2011, a few sites in Los Angeles County exceeded the new 1-hour NO_2 standard on one day. Based on the 3-year design values, the region continues to remain in attainment of the NO_2 and SO_2 standards.

In 2006, US EPA rescinded the annual federal standard for PM10 but retained the 24-hour standard. Ambient levels of PM_{10} in the Basin meet the federal 24-hour PM_{10} standard and the SCAQMD has requested US EPA to redesignate the Basin as in attainment of the health based standard for PM_{10}. $PM_{2.5}$ levels have decreased dramatically in the Basin since the beginning of the decade; however, regional concentrations continue to exceed the federal annual and 24-hour standards." (SCAQMD 2013 pp. 3-4).

Continued improvement in air quality is expected to occur through the continued implementation of federal, state, and SCAQMD regulations such as California's low sulfur diesel fuel programs, and renewable electricity standards. California AB 1493, enacted on July 22, 2002, required the California Air Resources Board (CARB) to develop and adopt regulations that reduce passenger vehicle and light duty truck emissions. Although the regulation was stalled by automaker lawsuits and by the U.S. EPA denial of an implementation waiver to the state of California, in June 2009, the U.S. EPA granted the waiver request. The standards phase in during the 2009 through 2016 vehicle model years. When fully phased in, the near term (2009-2012) standards are projected to result in about a 22-percent reduction of greenhouse gas emissions compared with the 2002 fleet, and the mid-term (2013-2016) standards will result in about a 30-percent reduction. Executive Order S-01-07 (2007) directed the establishment of a Low Carbon Fuel Standard, and CARB adopted the Low Carbon Fuel Standard on April 23, 2009. The standard reduces the carbon intensity of California's transportation fuels by at least 10 percent by 2020. Although there have been legal challenges to this standard, it has been upheld to-date, allowing the CARB to continue to implement and enforce the regulation. Regarding renewable electricity standards, Executive Order S-21-09 (2009) requires the state's load serving entities to meet a 33 percent renewable energy target by 2020. The CARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. The CARB Truck and Bus Regulation requires diesel trucks and buses to be upgraded to reduce emissions. The regulation applies to nearly all privately and federally-owned diesel fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. By January 1, 2012, heavier trucks must have been retrofitted with PM filters. By January 1, 2015, older trucks will need

to be replaced and by January 1, 2023, nearly all trucks and buses must have 2010 model year engines or equivalent.

A more detailed account of regional air quality improvement is contained in *Technical Appendix B1*, Section 2.8, Regional Air Quality Improvement.

Toxic Air Contaminants

In 1998, following a 10-year scientific assessment process, the CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. Subsequently, the SCAQMD initiated a comprehensive urban toxic air pollution study, called *MATES-II* (*Multiple Air Toxics Exposure Study in the South Coast Air Basin*). *MATES-II* showed the average cancer risk within the SCAB ranging from 1,100 in a million to 1,750 in a million, with an average regional risk of about 1,400 in a million. SCAQMD concluded that diesel particulate matter (DPM) accounted for more than 70 percent of the identified cancer risk (Urban Crossroads 2014a 27).

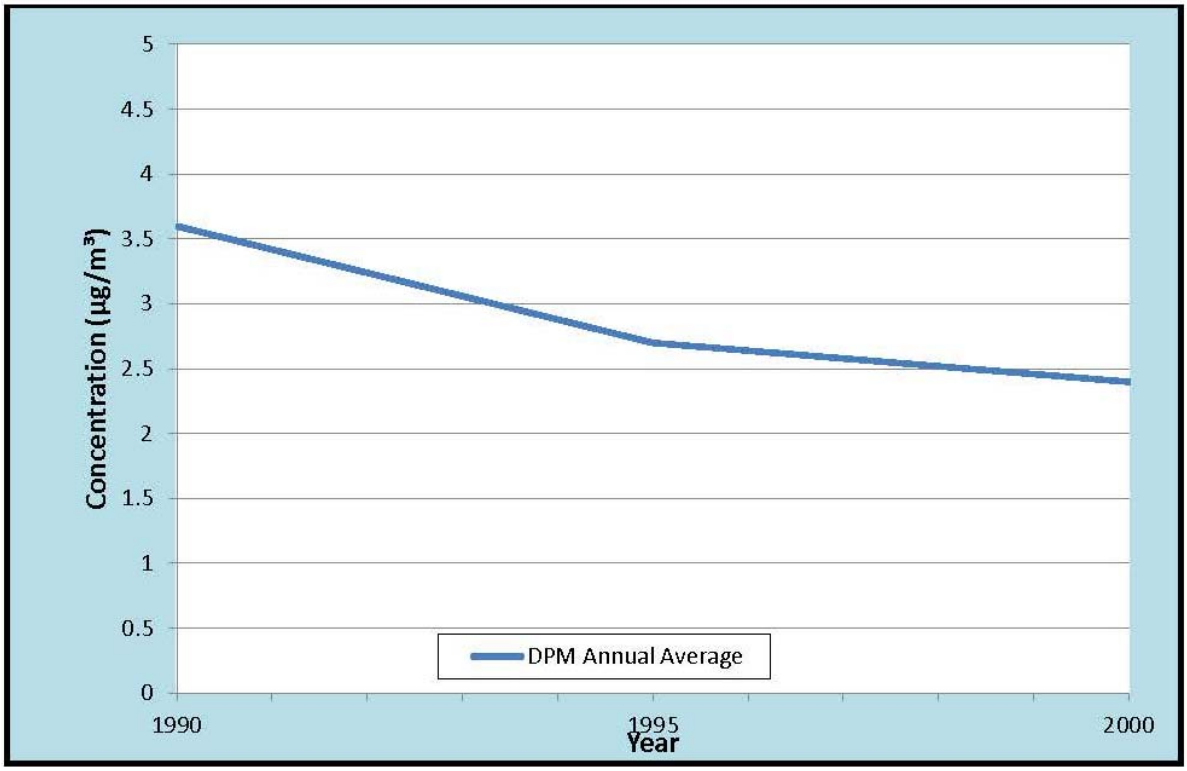
In 2008, SCAQMD updated the *MATES-II* report. The updated report, *MATES-III*, is the most comprehensive dataset of ambient air toxic levels and health risks within the SCAB. The *MATES-III* report estimates the average basin-wide excess cancer risk level within the SCAB to be approximately 1,200 in one million. The average basin-wide excess cancer risk estimates were based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are within the local area of the Project site. However, *MATES-III* extrapolated the excess cancer risk levels throughout the SCAB by modeling specific geographic grids. *MATES-III* modeling predicted an excess cancer risk of 587 in one million for the Project area. DPM accounts for 83.6% of the total risk shown in MATES III (MATES III Carcinogenic Interactive Map; Urban Crossroads 2014b 27).

As shown on Table 4.2-3, *Diesel Particulate Matter Annual Average Concentration,* annual DPM concentrations have been steadily declining since 1990, which has resulted in a concomitant reduction in the annual average basin-wide cancer risk (refer to Table 4.2-4, *Annual Average SCAB Cancer Risk*). Further reductions in diesel risk exposure are anticipated to result from the CA EPA Air Resource Board's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (Urban Crossroads 2014a 28).

❑ Local Air Quality

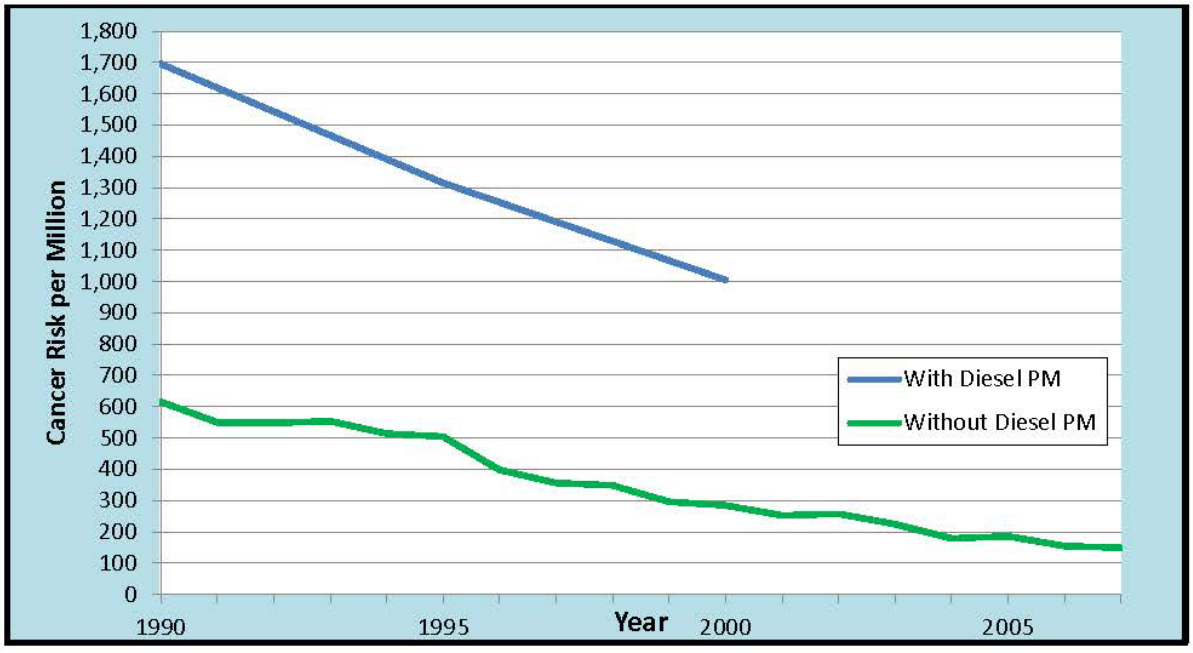
The nearest long-term monitoring air quality monitoring site for O_3 and PM_{10} is the SCAQMD Perris monitoring station (SRA 24), located approximately 5.7 miles south of the Project site. Data for CO, NO_2, $PM_{2.5}$ was obtained from the Metropolitan Riverside County 2 monitoring station (SRA 23), located approximately 11.25 miles northwest of the Project site. It should be noted that the Metropolitan Riverside County 2 monitoring station was utilized in lieu of the Perris monitoring station only in instances where data was not available from the Perris site (Urban Crossroads 2014a 14). Table 4.2-5, *Project Area Air Quality Monitoring Summary 2011-2013*, provides a summary of ambient air quality conditions in the general vicinity of the Project site over the most recent three-year period for which air quality data is available, that being the years 2011-2013.

Table 4.2-3 Diesel Particulate Matter Annual Average Concentration



Source: Urban Crossroads 2014a Table 2-10

Table 4.2-4 Annual Average SCAB Cancer Risk



Source: Urban Crossroads 2014a Table 2-11

Table 4.2-5 Project Area Air Quality Monitoring Summary 2011-2013

POLLUTANT	STANDARD	YEAR		
		2011	2012	2013
Ozone (O_3)[a]				
Maximum 1-Hour Concentration (ppm)		0.125	0.111	0.108
Maximum 8-Hour Concentration (ppm)		0.112	0.093	0.090
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	44	28	--
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	77	64	--
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	2	0	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	54	46	34
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)[b]				
Maximum 1-Hour Concentration (ppm)		--	--	4.5
Maximum 8-Hour Concentration (ppm)		1.5	1.5	1.4
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO_2)[b]				
Maximum 1-Hour Concentration (ppm)		0.057	0.060	0.053
Annual Arithmetic Mean Concentration (ppm)		0.017	0.017	--
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})[a]				
Maximum 24-Hour Concentration ($\mu g/m^3$)		65	62	70
Number of Samples		60	60	57
Number of Samples Exceeding State Standard	> 50 $\mu g/m^3$	3	1	--
Number of Samples Exceeding Federal Standard	> 150 $\mu g/m^3$	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)[b]				
Maximum 24-Hour Concentration ($\mu g/m^3$)		51.6	30.2	33.4
Annual Arithmetic Mean ($\mu g/m^3$)		11.8	11.4	11.6
Number of Samples Exceeding Federal 24-Hour Standard	> 35 $\mu g/m^3$	2	0	--

-- = data not available from either SCAQMD or EPA
[a] Data for ozone and PM10 was obtained from the Perris monitoring station (SRA 24)
[b] Data for CO, NO2, and PM2.5 was obtained from the Metropolitan Riverside County 2 monitoring station (SRA 23)

Source: Urban Crossroads 2014a Table 2-3

❑ Air Quality Conditions at Project Site

The Project site contains industrial land uses (*i.e.*, Eldorado Stone office building and warehouse) and vacant land. While the portion of the site developed with industrial land uses generates air emissions under existing conditions, such emissions are primarily associated with intermittent vehicle traffic to and from the property and are assumed to be below applicable SCAQMD regional and localized significance thresholds.

The remaining portions of the property, approximately 21.5 acres, are vacant under existing conditions and do not generate quantifiable air emissions. Maintenance activities at the Project site

(*i.e.*, discing of the land for fire fuel management) may generate temporary fugitive dust emissions (PM_{10} and $PM_{2.5}$); however, because detailed information is not available and given the infrequent and intermittent nature of site maintenance activities, temporary fugitive dust emissions that may be generated during site maintenance activities cannot be accurately calculated and would be speculative in nature.

Existing air quality conditions at the Project site are, therefore, similar to local ambient conditions presented in Table 4.2-5.

E. Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations governing air quality emissions.

❑ Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years. The CAA establishes the federal air quality standards, the National Ambient Air Quality Standards (NAAQS), and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA, which identify specific emission reduction goals for areas not meeting the NAAQS, require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.2-1 provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) which are emitted as byproducts of the combustion process.

❑ California Regulations

The California Air Resources Board (CARB), which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the California Ambient Air Quality Standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

All air pollution control districts have been formally designated as being in attainment or non-attainment for each CAAQS. Refer to Table 4.2-2 for attainment status of the SCAB. Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals.

❑ Air Quality Management Planning

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, and in conformance with California Health & Safety Code §40702 et seq. and the California Clean Air Act, the SCAQMD has adopted an Air Quality Management Plan (AQMP) to plan for the regional improvement of air quality. AQMPs are updated regularly in order to more effectively reduce emissions and accommodate growth. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. The most recent AQMP was adopted by the SCAQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) prepared by the Southern California Association of Governments (SCAG) and updated emission inventory methodologies for various source categories. The 2012 AQMP is based on assumptions provided by both CARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012-2035 RTP/SCS. The 2012 AQMP also assumes that such development projects will implement strategies to reduce air emissions generated during the construction and operational phases of development.

4.2.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to air quality if the Project or any Project-related component would:

1. *Conflict with or obstruct implementation of the applicable air quality plan;*

2. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*

3. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);*

4. *Expose sensitive receptors to substantial pollutant concentrations; or*

5. *Create objectionable odors affecting a substantial number of people.*

Within the context of the above threshold considerations, emissions generated by a development project would be significant under Thresholds 2 and 3 if emissions are projected to exceed the regional thresholds established by the SCAQMD for criteria pollutants and would be significant under Threshold 4 if emissions are projected to exceeded the localized thresholds established by the State of California and the SCAQMD for criteria pollutants. The criteria applicable to the proposed Project are summarized in Table 4.2-6, *Regional and Localized Thresholds for Criteria Pollutants*. Pursuant to SCAQMD guidance, any development project in the SCAB with daily emissions that would exceed any of the thresholds summarized in Table 4.2-6 would be considered to have a significant impact to air quality on both a direct (individual) and cumulatively considerable basis (Urban Crossroads 2014a 32).

In addition, pursuant to the significance thresholds established by the SCAQMD, any project that would emit toxic air contaminants, like diesel particulate matter (DPM), and expose sensitive receptor populations to an incremental cancer risk of greater than 10 in one million is considered to have a significant impact to air quality under Threshold 4 (Urban Crossroads 2014b 1) on both direct and cumulatively considerable levels.

The SCAQMD published a report giving direction on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD 2003). In this report the SCAQMD states on page D-3:

"…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project

Table 4.2-6 Regional and Localized Thresholds for Criteria Pollutants

Pollutant	Construction	Operations
Regional Thresholds		
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
Sox	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Localized Thresholds		
NOx (1-Hour)	0.18 ppm	0.18 ppm
PM10 (24-Hour)	10.40 µg/m3	2.50 µg/m3
PM2.5 (24-Hour)	10.40 µg/m3	2.50 µg/m3
CO (1-Hour)	20 ppm	20 ppm
CO (8-Hour)	9 ppm	9 ppm

NOTE: ppm = parts per million; µg/m3 = micrograms per cubic meter.
Source: Urban Crossroads 2014a, Table 3-1.

> increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.
>
> Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Given this direction from the SCAQMD, the proposed Project evaluated in this EIR would result in a significant direct and cumulatively considerable impact associated with carcinogenic risk if it would increase risk by more than 10 persons per one million people.

The SCAQMD has also established non-carcinogenic risk parameters. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that

adverse health effects are not expected. Thus, non-carcinogenic exposures of less than 1.0 are considered less-than-significant on a direct and cumulatively considerable basis under Threshold 4.

4.2.3 IMPACT ANALYSIS

Threshold 1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The 2012 SCAQMD AQMP is the applicable air quality plan for the Project area, which estimates long-term air quality conditions for the SCAB. The air quality conditions presented in the 2012 AQMP are based in part on the growth forecasts that were used as inputs for the regional transportation model. The growth forecasts utilized in the 2012 AQMP are based on the growth projections identified by SCAG in its *2012-2035 RTP/SCS*. The *RTP/SCS* assumes that development in the various incorporated and unincorporated areas within the SCAB will occur in accordance with the adopted general plans for these areas. In addition, the air quality conditions presented in the 2012 AQMP are based on the assumption that future development projects will implement strategies to reduce emissions generated during the construction and operational phases of development (Urban Crossroads 2014a 54). Accordingly, if a proposed project is consistent with these growth forecasts, and if available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is considered to be consistent with the 2012 AQMP.

The SCAQMD has established criteria for determining consistency with the 2012 AQMP. These criteria are defined in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD *CEQA Air Quality Handbook* and are discussed below.

- ***Consistency Criterion No. 1:*** *The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

  Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. Violations of the CAAQS and NAAQS would occur if localized significance thresholds (LSTs) were exceeded. As evaluated under Threshold 4 (below), the Project would not exceed localized significance thresholds for any criteria pollutant during its construction or during long-term operation. Accordingly, localized emissions resulting from the Project would not contribute substantially to an existing or potential future violation or a delay in the attainment of air quality standards.

  As discussed under Thresholds 2 and 3 (below), the Project is anticipated to exceed regional threshold criteria for NO_X during short-term construction activities and long-term operational activities. Although short-term construction and long-term operational emissions generated by the Project would exceed the SCAQMD's regional threshold criteria, the Project's emissions are already accounted for in the AQMP and the AQMP's air quality attainment goals. That is, the land uses proposed by the Project are consistent with land uses and development intensities reflected in the currently adopted City of Moreno Valley General Plan and are, therefore, within

the scope of air quality considerations reflected in the AQMP. As such, implementation of the Project would neither increase the frequency or severity of existing air quality violations disclosed in the AQMP nor cause or contribute to new violations that are not already disclosed or anticipated by the AQMP. Moreover, the Project's urban location and proximity to local and regional transportation facilities act to reduce vehicle miles traveled and associated mobile-source (vehicular) emissions. Additionally, the Project's incorporation of mandatory energy-efficient technologies as required by the California Green Building Standards Code (CALGreen) and mandatory compliance with SCAQMD rules and control requirements act to reduce stationary-source air emissions. These Project attributes and features are consistent with and support the AQMP's air pollution reduction strategies and promote timely attainment of the AQMP's air quality standards.

On the basis of the preceding discussion, the Project is determined to be consistent with Consistency Criterion No. 1.

- ***Consistency Criterion No. 2:*** *The proposed project will not exceed the assumptions in the AQMP based on the years of project buildout phase.*

  The growth forecasts used in the AQMP to project future emissions levels are based in part on land use data provided by lead agency general plan documentation. Projects that propose to increase the intensity of use on a subject property may result in higher traffic volumes than accounted for in the applicable local general plan, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. If however, a project does not exceed the growth projections in the applicable local general plan, then the project is considered to be consistent with the growth assumptions in the AQMP.

  Development of the Project site is governed by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (MVIAP). The City of Moreno Valley General Plan designates the Project site for "Business Park/Light Industrial" land uses. Similarly, the MVIAP calls for the site to be developed with "Industrial" land uses. The proposed Project is consistent with the land use designations of the General Plan and the MVIAP. The Project also does not plan to increase the development intensity on the subject property beyond that currently anticipated for the subject site as reflected on the General Plan Land Use Map and in the MVIAP. Because the land use proposed by the Project is consistent with the adopted General Plan, the Project is in compliance with Consistency Criterion No. 2.

In summary, because the proposed Project satisfies both of the two aforementioned criteria for determining consistency, the Project is deemed consistent with the 2012 AQMP. As such, the Project would not conflict with or result in the obstruction of the applicable AQMP and no impact would occur.

Threshold 2:	***Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***
Threshold 3:	***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

A. Construction Emissions

❑ Methodology for Calculating Project Construction Emissions

On October 2, 2013, the SCAQMD released the latest version of the California Emissions Estimator Model (CalEEMod™ v 2013.2.2). This model was used to estimate Project-related emissions of criteria pollutants NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO, associated with construction proposed by the Project. Construction-related emissions would be expected from the following construction activities:

- Demolition;
- Site Preparation;
- Grading;
- Building Construction;
- Paving;
- Painting (Architectural Coatings); and
- Construction Workers Commuting.

The assumptions for each phase of Project construction were input into the CalEEMod™ model using anticipated construction characteristics (*e.g.*, construction activities, construction equipment list) and a schedule provided by the Project Applicant. In all instances where construction information was not provided and/or not available, the analysis utilizes the default CalEEMod™ model assumptions (Urban Crossroads 2014a 34). A list of the construction equipment assumed in the analysis of Project-related construction emissions is provided in Section 3.0, *Project Description*, of this EIR. Refer to Pages 33 through 37 of the Air Quality Impact Analysis (*Technical Appendix B1*) for more details on the methodology utilized to estimate Project-related construction emissions.

❑ Project Construction Emissions Impact Analysis

For purposes of analysis, it is assumed that construction of the Project would commence in December 2014 and last through September 2015. If construction activities occur at a later date than assumed in this EIR, emissions quantities associated with construction equipment exhaust would be less than disclosed in this Subsection due to the application of more restrictive regulatory requirements for construction equipment and on-going replacement of older construction fleet equipment with newer, less-polluting equipment by construction contractors. The estimated maximum daily construction emissions associated with Project construction are presented in Table 4.2-7, *Construction Emissions Summary (Pounds per Day)*. Detailed construction-related emissions model outputs are presented in Appendix 3.1 of *Technical Appendix B1* to this EIR).

Table 4.2-7 Construction Emissions Summary (Pounds per Day)

Year	VOC	NOx	CO	SOx	PM10	PM2.5
2015	18.78	247.40	147.05	0.27	22.21	10.34
Maximum Daily Emissions	**18.78**	**247.40**	**147.05**	**0.27**	**22.21**	**10.34**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-3

Project-related construction emissions of VOCs, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed SCAQMD's regional criteria thresholds (refer to Table 4.2-7). Accordingly, the Project would not emit substantial concentrations of these pollutants during construction and would not cause or contribute to an existing or projected air quality violation, on either a direct or cumulatively considerable basis. The Project would result in less-than-significant impacts associated with emissions of VOCs, CO, SO_X, PM_{10} and $PM_{2.5}$ during Project construction and mitigation is not required.

Although the Project would generate less-than-significant levels of VOC emissions during the construction phase, this EIR recommends the application of Mitigation Measure MM 4.2-1 to assure compliance with SCAQMD Rule 1113 and further reduce VOC emissions below the levels listed above in Table 4.2-7. This EIR also recommends the application of Mitigation Measures MM 4.2-2 and MM 4.2-3 to assure compliance with SCAQMD Rules 403, 1186, and 1186.1 and further reduce the Project's less-than-significant construction emissions of particulate matter below the levels indicated in Table 4.2-7. Additionally, although the Project's construction emissions of SO_X are below the SCAQMD's thresholds of significance, this EIR recommends Mitigation Measure MM 4.2-4 to assist in ensuring compliance with SCAQMD Rule 431.2 requirements to use liquid fuels with low sulfur content. Refer to Subsection 4.2.6, below, for recommended mitigation.

As shown on Table 4.2-7, the Project is projected to exceed SCAQMD regional criteria pollutant thresholds for emissions of NO_X during construction-related activities. The SCAB does not attain state criteria for NO_X emissions, as previously presented in Table 4.2-2. Furthermore, NO_X is a precursor for ozone, a pollutant for which the SCAB does not attain Federal or State standards. Accordingly, the Project's emissions of NO_X during construction-related activities would violate the SCAQMD regional threshold and would result in a considerable net increase of a criteria pollutant for which the Project region is in non-attainment. The Project's NO_X emissions from construction-related activities would result in a significant impact to the environment on both a direct and cumulatively considerable short-term basis. Refer to Subsection 4.2.6, below, for recommended mitigation.

B. Operational Emissions

CalEEMod™ v 2013.2.2 was used to estimate emissions of criteria pollutants NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO, associated with long-term operation of the proposed Project. During long-term

operation of the Project, emissions would be expected from vehicles, combustion emissions associated with use of natural gas and electricity, fugitive dust related to vehicular travel, use of landscape maintenance equipment, and architectural coatings (painting). The methodologies used to assess air pollutant emissions associated with each of these activities is summarized below and discussed in detail in Section 3.5 of the Air Quality Impact Analysis (*Technical Appendix B1* to this EIR).

Vehicles

Air pollutant emissions would result from the operation of motor vehicles by Project visitors, employees, and customers. Project-related vehicular air pollutant emissions are dependent on the Project's daily vehicle trip generation and the characteristics of those trips. Information related to the Project's daily vehicle trip generation and trip characteristics was obtained from the Project's traffic report contained as *Technical Appendix H1* to this EIR. As summarized in *Technical Appendix H1*, the Project would generate 2,619 Passenger Car Equivalent (PCE) trips per day. It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of PCEs in an effort to recognize and acknowledge the effects of heavy vehicles at intersections in the Project's study area and in accordance with traffic engineering best practices. The PCE trips were not used for the purposes of quantifying air pollutant emissions; rather, to be more representative of actual emissions, the actual number of passenger cars (including light trucks) and heavy trucks were used in the air quality analysis. The vehicle fleet mix, in terms of actual vehicles, as derived from *Technical Appendix H1* to this EIR, is comprised of approximately 76% passenger cars and 24% trucks (i.e., 1,416 passenger car trips and 447 truck trips per day). For analysis purposes, 12.5% of all trucks were assumed to be Light-Heavy-Duty, 12.5% of all trucks were assumed to be Medium-Heavy-Duty, and 75% of all trucks were assumed to be Heavy-Heavy Duty (Urban Crossroads 2014a 39).

The Project-generated daily passenger car and truck trips utilized in this analysis were obtained from the Project's traffic impact analysis report and are derived from trip generation rates specified in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012. Use of the ITE rates are standard industry practice for the calculation of projected traffic volumes in traffic studies supporting CEQA documents throughout the State of California (Urban Crossroads 2014a 40).

A technical deficiency inherent in calculating the projected air pollutant emissions associated with the Project's traffic is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips a project would generate multiplied by average trip length. This method of estimating VMT for use in calculating vehicle emissions can result in the over-estimation and double-counting of emissions because for a distribution warehouse business center such as the proposed Project, the land use is likely to attract (divert) existing vehicle trips that are already in the circulation system as opposed to generating new trips. As such, the proposed Project would merely redistribute existing mobile source emissions. Accordingly, the use of models that measure overall emissions can overstate emission levels without acknowledging that some level of emissions associated with a project under study would still occur

in the region regardless of whether the Project is built. As such, the estimation of air pollutant emissions associated with the proposed Project and disclosed herein assumes a VMT value that very likely overestimates the actual impact of the Project (Urban Crossroads 2014a 41).

In the last several years, the SCAQMD has provided numerous comments on the trip length for warehouse/distribution and industrial land use projects. The SCAQMD asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse/distribution center and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles and/or to destinations outside of California. The SCAQMD states that for this reason, the model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length (Urban Crossroads 2014a 41).

SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region (which includes the proposed Project site) is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks (Urban Crossroads 2014a 42).

Trip lengths and VMT estimates employed in *Technical Appendix B1* and this EIR Subsection generate vehicular-source emissions that would represent a maximum impact scenario. Other EIRs for land use development projects with similar land uses as the proposed Project for which the City of Moreno Valley served as the CEQA Lead Agency have utilized these same or similar VMT estimates. To maintain analytic consistency and establish the maximum impact scenario, the following approach has been utilized in calculating emissions associated with vehicles accessing the Project (Urban Crossroads 2014a 42).

For analysis of the Project's passenger car trips, the Riverside County CalEEMod™ default of a 9.5-mile one-way trip length was assumed. The CalEEMod™ model defaults relies on data provided by SCAG for trip length. For heavy duty trucks, an average trip length was derived from distances from the Project site to the far edges of the South Coast Air Basin (SCAB) based on the Project's traffic pattern shown in *Technical Appendix H1*. It is appropriate to stop the VMT calculation at the boundary of the SCAB because any activity beyond that boundary would be speculative (the SCAB encompasses 6,745 square miles) and because the selected approach is consistent with professional industry practice (Urban Crossroads 2014a 42).

- Project site to the Port of Los Angeles/Long Beach: 80 miles;
- Project site to East on State Route 60: 30 miles;
- Project site to San Diego County line: 60 miles;
- Project site to Inland Empire: 50 miles;
- Project site to Perris destinations: 10 miles; and
- Project site to Moreno Valley destinations: 10 miles.

The air pollutant emissions analysis presented in *Technical Appendix B1* and this EIR Subsection assumes that 50% of all delivery trips would travel to and from the Project and the Port of Los Angeles/Long Beach, 10% would travel east on the State Route 60, 20% would travel to San Diego County, 10% would travel to the Inland Empire, 5% would travel to City of Perris destinations, and the remainder would travel to City of Moreno Valley destinations, resulting in an average Project-related truck trip length of 61 miles (Urban Crossroads 2014a 42).

Two separate model runs were utilized in order to more accurately model air pollutant emissions resulting from Project-related vehicle operations. The first model run analyzed Project-related passenger car emissions, which assumed a trip length of 9.5 miles and a vehicle fleet mix of 100% Light-Duty-Auto vehicles. The second model run analyzed Project-related truck emissions, which assumed an average truck trip length of 61 miles and a vehicle fleet mix of 12.5% Light-Heavy-Duty trucks, 12.5% Medium-Heavy-Duty trucks, and 75% Heavy-Heavy-Duty trucks (Urban Crossroads 2014a 42).

Fugitive Dust from Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every operational development project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (Regional Air Incentives Market RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod™ model (Urban Crossroads 2014a 43).

Consumer Products

Consumer projects include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds

which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on assumptions provided in the CalEEMod™ model. In the case of the industrial warehouse uses proposed by the Project, no substantive on-site use of consumer products is anticipated (Urban Crossroads 2014a 43).

Architectural Coatings

Over a period of time the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using the CalEEMod™ model (Urban Crossroads 2014a 43).

On-Site Equipment

It is common for an industrial warehouse project to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD; high-cube warehouse projects typically have 3.1 yard trucks per one million square feet of building space. For the proposed Project, on-site modeled operational equipment includes four (4) 200 hp yard tractors operating at four (4) hours a day for 260 days of the year. The emissions associated with on-site equipment were calculated using the CalEEMod model. (Urban Crossroads 2014a pp. 43-44)

❑ Project Operational Emissions Impact Analysis

Long-term emissions associated with Project operation are presented in Table 4.2-8, *Operational Emissions Summary (Pounds per Day)*. Detailed emissions model outputs are presented in Appendix 3.1 of the Air Quality Impact Analysis (*Technical Appendix B1* to this EIR).

Both the emissions from the Project and the SCAQMD thresholds are quantified in terms of emissions for one (1) day of operation. As summarized in Table 4.2-8, the Project's emissions of VOCs, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed SCAQMD regional thresholds during long-term operational activities on a daily basis. Accordingly, the Project would not emit substantial concentrations of these pollutants during long-term operation and would not contribute to an existing or projected air quality violation on either a direct or cumulatively considerable basis. The Project would result in less-than-significant impacts associated with long-term emissions of VOCs, CO, SO_X, PM_{10} and $PM_{2.5}$ t and mitigation is not required.

The Project would, however, exceed the regional threshold of significance established by the SCAQMD for emission of NO_X (refer to Table 4.2-8). Furthermore, the SCAB is a designated non-

Table 4.2-8 Operational Emissions Summary (Pounds per Day)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source	0.07	0.64	0.54	3.83e-3	0.05	0.05
Mobile (Trucks)	13.57	310.20	118.43	0.77	28.38	11.96
Mobile (Passenger Cars)	3.40	2.86	39.30	0.10	9.61	2.58
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**52.07**	**326.86**	**162.21**	**0.88**	**38.47**	**14.98**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source	0.07	0.64	0.54	3.83e-3	0.05	0.05
Mobile (Trucks)	13.82	323.14	124.00	0.77	28.39	11.97
Mobile (Passenger Cars)	3.20	3.03	34.42	0.09	9.61	2.57
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**52.12**	**339.97**	**162.90**	**0.87**	**38.48**	**14.98**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-5

attainment area for NO_X concentrations and for ozone concentrations (NO_X is a precursor for ozone),as previously described. Accordingly, the Project's long-term emissions of NO_X would result in a considerable net increase of a criteria pollutant for which the Project region is in non-attainment (*i.e.* NO_X and ozone). The Project's NO_X emissions during long-term operation would result significant direct and cumulatively considerable impacts on the environment and mitigation measures would be required to reduce these impacts (refer to MM 4.2-6 through MM 4.2-13 in Section 4.2.6, below).

Emissions of NO_X are the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards. Sources of on-site air pollution that are within the direct control of the Project Applicant and future tenants of the Project and that are addressed by building design and operation are below the significance thresholds (as disclosed in the paragraph above). Furthermore, all new development in California must comply with the California Green Building Standards Code (CALGreen Code (2013)). Therefore, the proposed Project like all other development projects in California would be obligated to implement the applicable provisions of CALGreen. Compliance with the applicable provisions of CALGreen would result in some reduction of the Project's NO_X emissions; however, impacts would not be substantially reduced because the Project's impacts are primarily caused by mobile source

emissions, which are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley. Mobile emissions are regulated by federal, state, and SCAQMD mandates.

The application of mobile source emission requirements that exceed federal, state, and SCAQMD mandates in a single locale such as the City of Moreno Valley would not result in the improvement of regional air quality and would not ensure uniform CEQA review throughout the SCAB. For example, if the City applied emission control requirements to one or more development projects more stringently than state and federal laws already mandate, the realities of the southern California economy would render that development project less competitive in attracting tenants. Perspective tenants that will not or cannot meet the heightened requirement would simply occupy another site in the Inland Empire area, resulting in no improvement to the air quality in the SCAB. Thus, the criteria pollutant emissions would simply be shifted to another portion of the SCAB and the SCAB's overall air quality would not be benefited. As previously mentioned, although the SCAB experiences some of the worst air quality levels in the United States, air quality in the SCAB has dramatically improved over the past 30 years and is expected to continue improving through the enforcement of state and federal laws.

Threshold 4: Would the Project expose sensitive receptors to substantial pollutant concentrations?

A. Construction Localized Emissions

❑ Methodology for Calculating Project Construction Localized Emissions

Localized emissions associated with Project-related construction activities were estimated and evaluated in accordance with SCAQMD's *Final Localized Significance Threshold Methodology*. SCAQMD's *Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis only emissions included in the CalEEMod™ on-site emissions outputs were considered (Urban Crossroads 2014a 47).

The Perris Valley Source Receptor Area (SRA) was utilized as the baseline for ambient air quality because the Perris Valley station is the closest monitoring station to the Project site for which air quality data is available. SCREEN3, a U.S. EPA approved air quality model containing algorithms associated with the U.S. EPA's *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources* was used to calculate localized pollutant concentrations for construction activities. Based on the construction fleet information provided by the Project Applicant and CalEEMod™ model defaults, the analysis performed in *Technical Appendix B2* and presented in this Subsection assumes a maximum of 9.5 acres would be disturbed on the Project site on any given day during peak construction activities (Urban Crossroads 2014a 47).

The nearest receptor for purposes of determining impacts related to CO and NO_2 emissions (defined as a place where an individual could remain for a one (1) or eight (8) hour time period) is a logistics

warehouse building located immediately adjacent to and north of the Project site (under construction as of the writing of this EIR). Notwithstanding, the SCAQMD's Final LST Methodology requires that receptors be plotted at a distance of 25 meters from a project site, even if a project may have receptors closer than 25 meters. Accordingly, based on SCAQMD's Final LST Methodology, a 25 meter receptor distance is utilized in order to determine the LSTs for emissions of CO and NO_2. (Urban Crossroads 2014a pp. 47-48)

The nearest sensitive receptor land use for purposes of determining impacts related to PM_{10} and $PM_{2.5}$ (defined as a place where an individual could remain for 24-hours) would be the existing non-conforming residence located approximately 240 feet (73 meters) northwest of the Project boundary, south of Rivard Road and west of Perris Boulevard (Urban Crossroads 2014a 48).

Refer to Section 3.6 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) for a detailed explanation of the model inputs and equations used in the analysis of construction-related localized emissions.

❑ Project Construction Localized Emissions Impact Analysis

Table 4.2-9, *Construction Localized Emissions Summary,* summarizes the Project's construction-related localized emissions. Detailed construction-related localized emissions model outputs are presented in Appendix 3.2 of *Technical Appendix B1* to this EIR. As shown, Project-related construction emissions would not exceed the SCAQMD Localized Threshold for CO, NO_2, PM_{10}, or $PM_{2.5}$. Localized emission levels would be further reduced with the incorporation of the construction-related mitigation measures presented below in Subsection 4.2.6. Accordingly, construction of the proposed Project would not result in the exposure of any sensitive receptors to substantial pollutant concentrations on a direct or cumulatively considerable basis. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

Table 4.2-9 Construction Localized Emissions Summary

Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.46	0.33	0.02	1.86	0.89
Background Concentration [A]	3.10	1.70	0.06		
Total Concentration	**3.56**	**2.03**	**0.08**	1.86	0.89
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm

Source: Urban Crossroads 2014a Table 3-9

B. Operational Localized Emissions

❑ Methodology of Estimating Operational Localized Emissions

Criteria Pollutant Emissions

The LST analysis includes on-site sources only; however, the CalEEMod™ outputs do not separate on-site and off-site emissions from mobile sources. Emissions from on-site activity including area, energy, and on-site equipment were obtained from CalEEMod, emissions from on-site passenger car and truck travel and idling were calculated using EMFAC 2011. (Urban Crossroads 2014a 51)

The nearest receptor for purposes of determining impacts related to CO and NO_2 emissions (defined as a place where an individual could remain for a one (1) or eight (8) hour time period) is a logistics warehouse building located immediately adjacent to and north of the Project site (under construction as of the writing of this EIR). Notwithstanding, the SCAQMD's Final LST Methodology requires that receptors be plotted at a distance of 25 meters from a project site, even if a project may have receptors closer than 25 meters. Accordingly, based on SCAQMD's Final LST Methodology, a 25 meter receptor distance is utilized in order to determine the LSTs for emissions of CO and NO_2. (Urban Crossroads 2014a pp. 47-48)

The nearest sensitive receptor land use for purposes of determining impacts related to PM_{10} and $PM_{2.5}$ (defined as a place where an individual could remain for 24-hours) would be the existing non-conforming residence located approximately 240 feet (73 meters) northwest of the Project boundary, south of Rivard Road and west of Perris Boulevard (Urban Crossroads 2014a 48).

Section 3.7 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) for a detailed explanation of the model inputs and equations used in the analysis of operational-related localized emissions.

Diesel Particulate Emissions

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM_{10}) generated with the 2011 version of the Emission FACtor model (EMFAC) developed by the CARB. EMFAC 2011 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2011, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day (Urban Crossroads 2014b pp. 9-10). Refer to Section 2.2 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the model inputs and equations used in the estimation of Project-related DPM emissions.

The effect of Project-related DPM emissions was quantified in accordance with the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling*

Emissions for CEQA Air Quality Analysis. Pursuant to SCAQMD's recommendations, emissions were quantified using the U.S. EPA's AERMOD model (Urban Crossroads 2014b 14). Refer to Section 2.3 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the model inputs and equations used in the estimation of average particulate concentrations associated with operations at the Project site.

Health risks associated with exposure to DPM emissions are defined in terms of the probability of developing cancer or adverse, chronic non-cancer health effects as a result of exposure to a chemical at a given concentration. The cancer and non-cancer risk probabilities are determined through a series of equations to calculate unit risk factor, cancer potency factor, and chronic daily intake. The equations and input factors utilized in the Project analysis were obtained from the California EPA, Office of Environmental Health Hazard (Urban Crossroads 2014b pp.19-20). Refer to Section 2.4 of the Project's Mobile Source Health Risk Assessment (*Technical Appendix B2* to this EIR) for a detailed description of the variable inputs and equations used in the estimation of receptor population health risks associated with Project operations.

Potential receptor population health risks were calculated for the maximally exposed residential receptor (MEIR), the maximally exposed individual worker (MEIW), and the maximally exposed school child (MEISC) located within a 1,320 foot radius of the Project site and its primary truck route. Proximity to sources of DPM is critical to determining the potential health hazard impacts. Industry research, including studies by the CARB and SCAQMD, show a 70% drop in DPM pollution levels from mobile sources (*i.e.*, vehicles) at a distance of 500 feet from roadways/freeways, and an 80% drop in DPM pollution levels from mobile sources at a distance of 1,000 feet from logistics center sites (Urban Crossroads 2014b 34). Accordingly, the 1,320 foot buffer area surrounding the Project site and its primary truck route utilized in *Technical Appendix B2* to this EIR and this EIR Subsection provides an appropriate geographic study area.

As identified in the Project's traffic study (refer to *Technical Appendix H1*), 95 percent of the truck traffic associated with the Project travels to the Project site from the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 5 percent of truck traffic is from the local vicinity of Moreno Valley (5 percent south from Perris Boulevard). Additionally, 90 percent of the truck traffic associated with the Project travels from the Project site to the I-215 freeway via Harley Knox Boulevard and Indian Street. The other 10 percent of truck traffic serves the local vicinity of Moreno Valley (10 percent travels north to Perris Boulevard). The analysis presented in *Technical Appendix B2* and this EIR Subsection provides an evaluation of potential health risks within the 1,320-foot buffer area along the route from the Project site to I-215 via Harley Knox Boulevard and Indian Street (Urban Crossroads 2014b 35). Because the ultimate destination(s) of the Project's truck traffic trips within the cities of Moreno Valley and Perris are unknown, it would be speculative to estimate a travel route for these local truck trips (Urban Crossroads 2014b 35). The evaluation of speculative impacts is prohibited pursuant to §15145 of the CEQA Guidelines; therefore, technical quantification of potential health risk impacts associated with the 10 percent of Project truck traffic that travels north to Perris Boulevard is not required. Qualitatively, the Project-related health risk associated with 10 percent of the Project's traffic that travels north would be proportionately less than the health

risk associated with the other 90 percent of the Project's truck traffic that travels south and that is quantitatively evaluated herein.

The MEIR is an existing non-conforming residence located approximately 0.05 miles northwest of the Project site, specifically located south of Rivard Road and west of Perris Boulevard. The MEIW would be located immediately adjacent to the Project site (to the north); this site is an under construction warehouse building that is anticipated to be occupied by the Project's opening year. The MEISC would be located at the El Potrero Elementary School, located approximately 0.33-mile northeast of the Project site (Urban Crossroads 2014b 25).

For purposes of evaluating the Project's potential to contribute to cumulative health risk impacts associated with DPM emissions, the Project's expected DPM emissions are considered with the expected emissions of all past, present, and probable future projects located within a 1,320 foot radius of the Project site and the Project's primary truck route (to/from I-215 via Harley Knox Boulevard and Indian Street), in addition to expected traffic along the truck route as described in *Technical Appendix H1*. As described above, a study area that includes a 1,320 foot buffer area surrounding the Project site and its primary truck route is a conservative and appropriate geographic study area for evaluating potential health risks from DPM emissions. A total of 15 development projects are located within the 1,320 foot buffer area surrounding the Project site and its primary truck route, and the expected DPM emissions of these projects and traffic using the truck route are included in the Project's cumulative DPM health risk impact analysis (Urban Crossroads 2014b pp. 35-41). Refer to Section 2.8 of *Technical Appendix B2* and EIR Section 4.0.3 for a detailed description of the development projects included in the cumulative impact analysis.

CO "Hot Spots"

A CO "Hot Spot" Analysis was not performed to evaluate the effect of Project-related vehicular emissions on localized concentrations of CO at intersections in the vicinity of the Project site. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 2003 AQMP, CO "Hot Spots" are typically associated with idling vehicles at extremely busy intersections (*i.e.*, intersections with an excess of 100,000 vehicle trips per day) in areas with unusual meteorological and topographical conditions (Urban Crossroads 2014a 53). Based on an analysis of the busiest intersections within the Project's vicinity, Urban Crossroads was determined that none of the intersections in the vicinity of the Project would have peak traffic volumes exceeding those at the intersections modeled in the 1992 CO Plan/2003 AQMP analysis. In addition, there are no unique topographical or meteorological conditions in the Project vicinity that could contribute to the formation of a CO "Hot Spot." Furthermore, a study prepared by the Bay Area Air Quality Management District (BAAQMD) determined that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO "Hot Spot" impact. The proposed Project would only generate 2,619 vehicle trips over an entire day (Passenger Car Equivalent) and would not remotely approach

the volume of hourly traffic required to generate a CO "Hot Spot" (Urban Crossroads 2014a 53). Therefore, Project-related vehicular emissions would not result in a substantial contribution of CO concentrations at intersections in the vicinity of the Project site and a CO "Hot Spot" analysis is not warranted (Urban Crossroads 2014a 53).

❑ Project Operational Localized Emissions Impact Analysis

Criteria Pollutant Emissions

Table 4.2-10, *Operational Localized Emissions Summary*, presents the results of the long-term localized significance threshold analysis. Detailed operational localized emissions model outputs are presented in Appendix 3.2 of *Technical Appendix B1* to this EIR. As shown, estimated Project-related long-term operational emissions would not exceed localized thresholds established by the SCAQMD. Accordingly, long-term operation of the proposed Project would not result in the exposure of any sensitive receptors to substantial pollutant concentrations on a direct or cumulatively considerable basis. Therefore, the Project would result in less- than- significant impacts and no mitigation is required.

Table 4.2-10 Operational Localized Emissions Summary

Operation	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Operation)	
Peak Day Localized Emissions	0.03	0.02	0.002	3.14e-2	2.90e-2
Background Concentration [A]	3.10	1.70	0.06		
Total Concentration	**3.13**	**1.72**	**0.062**	**3.14e-3**	**2.90e-3**
SCAQMD Localized Significance Threshold	20	9	0.18	2.50	2.50
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm

Source: Urban Crossroads 2014a, Table 3-11

Although the proposed Project would not generate substantial localized pollutant concentrations during long-term operational activities, this EIR recommends mitigation to further reduce the Project's less-than-significant operational localized emissions below the levels disclosed in Table 4.2-10 (refer to Mitigation Measures MM 4.2-6 through MM 4.2-13 under Subsection 4.2.6, below).

Diesel Particulate Emissions

The Project's operational activities would generate/attract diesel-fueled trucks. Diesel trucks produce diesel particulate matter (DPM), which is known to be associated with health hazards, including cancer. To evaluate the Project's potential to expose nearby sensitive receptors to substantial amounts of DPM during long-term operation, a Mobile Source Health Risk Assessment was prepared for the proposed Project and is included as *Technical Appendix B2* to this EIR.

Project-related DPM health risks were evaluated under three (3) receptor scenarios which are described below. Detailed air dispersion model outputs and risk calculations are presented in Appendices 5.1 and 5.2, respectively, of *Technical Appendix B2*.

At the MEIR, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 5.67 in one million (assuming that the resident(s) at this property would stay at their home 24 hours per day, seven (7) days per week, 365 days per year, for 70 years). A cancer risk of 5.67 in one million would not exceed the SCAQMD cancer risk threshold of 10 in one million (Urban Crossroads 2014b 25). At this same location, the non-cancer health risk index attributable to the proposed Project would be 0.0036, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads 2014b 26). Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of residential receptors to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

At the MEIW, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 5.60 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million (Urban Crossroads 2014b 25). The MEIW analysis assumes the employees would work in the Project area for 40 years. At this same location, the non-cancer health risk index attributable to the proposed Project would be 0.0178, which would not exceed the SCAQMD non-cancer health risk index of 1.0 (Urban Crossroads 2014b 26). Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of nearby workers to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

At the MEISC, the maximum cancer risk attributable to the proposed Project's DPM emissions is estimated to be 0.165 in one million and the non-cancer health risk index attributable to the proposed Project's DPM emissions would be 0.00082 (Urban Crossroads 2014b pp. 25-26). Both the estimated cancer risk and non-cancer health risk index would not exceed SCAQMD thresholds of significance. Accordingly, long-term operations at the Project site would not directly cause or contribute in a cumulatively considerable manner to the exposure of nearby school child receptors to substantial DPM emissions. Therefore, the Project would result in less-than-significant impacts and no mitigation is required.

Although the proposed Project would expose nearby residential receptors, workers, and school children to less-than-significant direct and less-than-significant cumulatively considerable DPM concentrations, mitigation is recommended by this EIR to further reduce diesel-particulate matter emissions associated with long-term Project operations (refer to Mitigation Measures MM 4.2-6 through MM 4.2-12 under Subsection 4.2.6, below).

Threshold 5: Would the Project create objectionable odors affecting a substantial number of people?

The Project could produce odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Accordingly, the proposed Project would not create objectionable odors affecting a substantial number of people during construction. Therefore, the Project would result in less-than-significant impacts during short-term construction activities and no mitigation is required.

During long-term operation, the proposed Project would include warehouse distribution land uses, which are not typically associated with objectionable odors. The temporary storage of refuse associated with the proposed Project's long-term operational use could be a potential source of odor; however, Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations, thereby precluding any significant odor impact. Furthermore, the proposed Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation. As such, long-term operation of the proposed Project would not create objectionable odors affecting a substantial number of people and the Project would have a less-than-significant impact.

Although Project-related odor impacts would be less than significant, this EIR recommends mitigation to ensure compliance with SCAQMD Rule 402 (refer to Mitigation Measure MM 4.2-15 under Subsection 4.2.6, below).

4.2.4 CUMULATIVE IMPACT ANALYSIS

The Project proposes to construct and operate one (1) industrial warehouse building in accordance with the Industrial land use designation applied to the property by the City of Moreno Valley General Plan and the MVIAP. As such, the Project would be consistent with the growth forecasts used in the SCAQMD's AQMP to predict future air quality conditions in the SCAB. Accordingly, emissions that would be generated by the Project are accounted for in the AQMP, and the Project would not conflict with or obstruct the implementation of the SCAQMD on a cumulatively considerable basis.

As indicated in the analysis of Thresholds 2 and 3 in Subsection 4.2.3 above, the Project would exceed SCAQMD criteria pollutant standards for emissions of NO_X during short-term construction and long-term operational activities. Because NO_X is a precursor for ozone, a pollutant for which the SCAB is in non-attainment under both federal and state criteria, the Project's short- and long-term emissions would also cumulatively contribute a criteria pollutant for which the Project region in in

non-attainment (*i.e.*, NO_X and ozone). These impacts are concluded to be cumulatively significant, the Project's contribution would be cumulatively considerable, and mitigation would be required.

As demonstrated in the analysis of Threshold 4, above, air emissions generated by the Project during construction and operation would not violate the SCAQMD localized thresholds for NO_x, CO, PM_{10}, or $PM_{2.5}$. Surrounding the Project site, the parcel to the immediate north is under construction and development is scheduled to be completed prior to the commencement of construction on the Project site. Land to the east is developed as a water treatment facility and land to the south is developed with a warehouse use; thus, no construction activities are expected on those lands. The only potential for construction activity to occur in the immediate vicinity of the Project site simultaneously with Project-related construction activities is an approved but not yet built warehouse project on the west side of Perris Boulevard. Should construction activities occur on that parcel concurrently with Project-related construction activities, localized significance thresholds would still not be exceeded and thus the cumulative effect would be less than significant. As shown in Table 4.2-9, Project-related construction emission levels fall far below the significance thresholds and even the doubling of localized emission quantities would not result in exceeding the thresholds. Under long-term operating conditions, emissions associated with Project operations would be far below the SCAQMD's thresholds of significance for localized emissions. Therefore, it is reasonable to conclude that even when the Project's operational emissions combined with localized emissions from other development projects within close proximity to the Project site, such emissions would not exceed SCAQMD thresholds. Accordingly, long-term operation of the Project would not expose nearby sensitive receptors to substantial localized pollutant concentrations, and a cumulatively considerable impact would not occur.

As further discussed under the analysis of Threshold 4, DPM emissions generated by the Project during long-term operation would not exceed the SCAQMD's incremental carcinogenic or non-carcinogenic health hazard risk thresholds for the maximally exposed residential, worker, or school child scenarios. The cumulative carcinogenic health risk from DPM emissions in the Project's cumulative study area is presented in Table 4.2-11, *Cumulative Carcinogenic Health Risk*.

Table 4.2-11 quantifies estimated DPM carcinogenic health risks for existing, ambient air conditions in the surrounding area, as well as expected DPM carcinogenic risks from the Project and cumulative development projects. As shown in Table 4.2-11, with implementation of the Project and nearby cumulative development projects, the carcinogenic health risk would increase by greater than or equal to 15.67 in one million at the Project's MEIR, by greater than or equal to 15.60 in one million at the Project's MEIW, and by greater than or equal to 10.165 at the Project's MEISC. Under each of the MEIR, MEIW, and MEISC scenarios, the Project's contribution to the carcinogenic health risk would be less than 10 in one million, which is less than the SCAQMD's threshold for cumulatively considerable impacts (Urban Crossroads 2014b pp. 35-36). Accordingly, this EIR acknowledges a significant cumulative impact, but the proposed Project would not contribute to a cumulatively considerable increase in carcinogenic health risks from DPM emissions in the vicinity of the Project site or its primary truck route.

Table 4.2-11 Cumulative Carcinogenic Health Risk

	Cancer Risk as Maximum Sensitive Receptor (risk in one million)			
	Existing	Project Site	Cumulative Projects	Total Cumulative Risk
Maximum Impact to All Receptors Without Project	587		>10	>597
Maximum Impact to Nearest Residential With Project	587	5.67	>10	>592.67
Maximum Impact to Nearest Worker With Project	587	5.60	>10	>592.60
Maximum Impact to Nearest School With Project	587	0.165	>10	>587.17
	Source: **MATES III Carcinogenic Risk Interactive Map** (http://www2.aqmd.gov/webappl/matesiii/) (SCAQMD 2008).			

Source: Urban Crossroads 2014b, Table 2-9

Due to the very low nature of non-cancer risk levels in the Project area, the cumulative non-cancer risk in the vicinity of the Project site is less than significant and the Project's contribution to non-cancer risk would be less than cumulatively considerable.

As indicated in the analysis of Threshold 5, above, there are no components of the proposed Project's construction or long-term operation that would result in the exposure of a substantial number of sensitive receptors to objectionable odors. There also are no odor emitters in the Project's cumulative study area which, when combined with Project-related odors, could affect a substantial number of people. Accordingly, a cumulatively significant impact would not occur.

4.2.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: No Impact. The proposed Project would not conflict with or obstruct implementation of the SCAQMD AQMP.

Thresholds 2 and 3: Significant Direct and Cumulatively Considerable Impact (Short-Term and Long-Term). The Project's emissions of NO_X during short-term construction and long-term operational activities would violate the SCAQMD regional threshold. Short- and long-term emissions of NO_X also would contribute to an existing air quality violation in the SCAB (*i.e.,* non-attainment status for NO_X and ozone – NO_X is a precursors for ozone). As such, Project-related emissions would violate SCAQMD air quality standards and contribute to the non-attainment of a criteria pollutant (*i.e.,* NO_X and ozone), which is significant on a direct and cumulatively considerable basis.

Threshold 4: Less-than-Significant Impact. The average carcinogenic risk to sensitive receptors in the vicinity of the Project site due to toxic air contaminates is approximately 587 cases per one million people. Risk attributable to the proposed Project would be 5.67 in one for the maximally

exposed individual receptor, 5.60 in one million for the maximally exposed individual worker, and 0.165 in one million for the maximally exposed school child. The cumulative health risk to sensitive receptors is significant, but the Project's contribution to the cumulative risk would be less than cumulatively considerable based on a significance threshold of 10 in one million. The maximum non-cancer health risk index attributable to the proposed Project would be 0.0036, which would also be less than significant and less than cumulatively considerable compared to the SCAQMD non-cancer health risk index of 1.0.

Threshold 5: Less-than-Significant Impact. Although short-term construction activities could produce odors associated with construction equipment exhaust, the application of asphalt, and the application of architectural coatings, standard construction requirements would minimize odor impacts to less than significant levels. Odors associated with long-term operation of the proposed Project would not significantly impact nearby sensitive receptors.

4.2.6 MITIGATION

Although the Project's construction related emissions of VOC would be less than significant, the following mitigation measure is recommended to further reduce the Project's less-than-significant impact.

MM 4.2-1 Prior to building permit issuance, the City of Moreno Valley shall verify that the following note is specified on all building plans. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All surface coatings shall consist of Zero-Volatile Organic Compound paints (no more than 150 gram/liter of VOC) and/or be applied with High Pressure Low Volume (HPLV) applications consistent with SCAQMD Rule 1113.

Although the Project's construction emissions of particulate matter (PM_{10} and $PM_{2.5}$) would be less than significant, the following mitigation measures are recommended to further reduce the Project's less-than-significant impact.

MM 4.2-2 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City of Moreno Valley shall verify that the following notes are specified on the grading plan. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes shall also be specified in bid documents issued to prospective construction contractors.

a) All clearing, grading, earth-moving, and excavation activities shall cease when winds exceed 25 miles per hour.

b) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day.

c) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads.

d) The cargo area of all vehicles hauling soil, sand, or other loose earth materials shall be covered.

MM 4.2-3 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM10 Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers" by complying with the following requirements. To ensure and enforce compliance with these requirements and reduce the release of criteria pollutant emissions into the atmosphere during construction, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors.

a) If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning.

b) Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM_{10}-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.

Although the Project's construction emissions of SO_X would be less than significant, the following mitigation measure is recommended to further reduce the Project's less-than-significant impact.

MM 4.2-4 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels" by complying with the following requirement. To ensure and enforce compliance with this requirement and thereby limit the release of sulfur dioxide (SO_X) into the atmosphere from the burning of fuel, prior to grading and building permit issuance, the City of Moreno Valley shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

a) All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.

The following mitigation measures is recommended to reduce the Project's significant, short-term construction-related impact associated with the emissions of NO_X and NO_X contributions to the SCAB's non-attainment status for ozone. These measures also would further reduce the Project's less-than-significant impact associated with short-term diesel particulate matter emissions.

MM 4.2-5 The Project shall comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling" by complying with the following requirements. To ensure and enforce compliance with these requirements and thereby limit the release of diesel particulate matter, oxides of nitrogen, and other criteria pollutants into the atmosphere from the burning of fuel, prior to grading permit and building permit issuance, the City of Moreno Valley shall verify that the following notes are included on the grading and building plans. Project construction contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

a) The contractor shall utilize off-road diesel-powered construction equipment (greater than or equal to 150 horsepower) certified California Air Resources Board (CARB) Tier 3 or better.

b) Temporary signs shall be placed on the construction site at all construction vehicle entry points and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in

place during the duration of construction activities at all loading, unloading, and equipment staging areas.

c) During construction activities, the construction contractor shall maintain a list of diesel-powered construction equipment used on the site, including type/engine year of equipment, number of equipment, and equipment horsepower. The construction contractor shall also maintain a log of the daily operating hours of each piece of diesel-powered equipment by horsepower hours. The construction contractor shall ensure that the usage of diesel-powered construction equipment does not exceed 26,992 horsepower-hours per day during days when soil import activities are occurring and does not exceed 32,768 horsepower-hours per day on days when there is no soil import.

d) High pressure injectors shall be used on all diesel powered construction equipment over 100 horsepower.

e) All construction-related on-road diesel-powered haul trucks shall be 2007 or newer model year or 2010 engine compliant vehicles.

f) On all construction-related equipment that has a particulate trap, the trap shall be Level 3 CARB certified.

g) Electric-powered construction equipment and tools shall be used when technically feasible.

h) Biodiesel fuel or other alternatives to diesel fuel shall be used to power construction equipment when technically feasible.

i) Construction vehicles shall use the City's designated truck route.

j) Construction parking shall be located and configured to minimize traffic interference on public streets.

The following measures are recommended to reduce the Project's significant long-term operational-related impact associated with the emissions of NO_X and the contributions of this pollutant to the SCAB's non-attainment status for ozone. These measures also would further reduce the Project's less than significant impact associated with long-term emissions of localized criteria pollutants and diesel particulate matter.

MM 4.2-6 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to occupancy permit issuance, the City of Moreno Valley shall conduct a site inspection to ensure that the signs are in place.

MM 4.2-7 Prior to the issuance of building permits, the City of Moreno Valley shall verify that the parking lot striping and security gating plan allows for adequate truck stacking at gates to prevent queuing of trucks outside the property.

MM 4.2-8 Prior to the issuance of a building permit, documentation shall be provided to the City of Moreno Valley demonstrating that the building design meets the 2013 California Title 24 Energy Efficiency Standards.

MM 4.2-9 Prior to issuance of an occupancy permit, documentation shall be provided to the City of Moreno Valley demonstrating the appliances and fixtures installed in restrooms and employee break areas are Energy Star rated.

MM 4.2-10 Prior to the issuance of permits that would allow the installation of landscaping, the City of Moreno Valley shall review and approve landscaping plans for the site which show a plant palette emphasizing drought-tolerant plants and use of water-efficient irrigation techniques.

MM 4.2-11 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about the availability of the following and their benefits to air quality: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the City of Moreno Valley; 4) access to alternative fueling stations in the City of Moreno Valley that supply compressed natural gas (closest station is located on Indian Street, south of Nandina Avenue); and 5) the United States Environmental Protection Agency's SmartWay program.

MM 4.2-12 Prior to the issuance of occupancy permits, the Project's property owner shall provide documentation to the Planning Division verifying that provisions are included in the building's lease agreement that inform tenants about 1) locations of the nearest existing and planned Metrolink stations; and 2) the benefits of implementing a voluntary carpool or rideshare program for employees.

MM 4.2-13 In the event that the future building tenant attracts trucks that need continual power, the loading docks designated to accommodate such trucks shall be equipped with electrical power hookups from the building's electrical system to allow the truck to comply with the CARB 5-minute idling restriction and reduce air emissions associated with the burning of fuel.

MM 4.2-14 The building design shall include conduit and plug-in locations for electric yard tractors, fork lifts, reach stackers, and sweepers.

Although the Project's short-term construction and long-term operational odor impacts would be less than significant, the following mitigation measure is recommended to ensure compliance with SCAQMD Rule 402 and minimize the potential for odors on the Project site.

MM 4.2-15 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." To ensure and enforce compliance with this requirement, which applies to the release of odorous emissions into the atmosphere, prior to the issuance of grading and building permits, the City of Moreno Valley shall verify that the following note is included on grading and building plans. During Project construction, contractors shall be required to ensure compliance with Rule 402 and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the building's lease agreement.

a) Compliance with South Coast Air Quality Management District (AQMD) Rule 402 "Nuisance" is required. Rule 402 states that air contaminants and other materials shall not be discharged from any source whatsoever in quantities that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Public nuisance violations can occur when a considerable number of individuals complain to AQMD of odors, paint overspray, or other bothersome conditions that appear to be related to the operation of a business in the neighboring vicinity.

4.2.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 2 and 3: Less-than-Significant Impact with Mitigation (Short-term), Significant and Unavoidable Impact, Direct and Cumulatively Considerable (Long-term). As shown in Table 4.2-12, *Construction Emissions Summary (Pounds per Day) – With Mitigation*, with incorporation of Mitigation Measures MM 4.2-5, the Project's short-term construction-related emission of NO_X would be reduced to below the SCAQMD regional thresholds of significance. Accordingly, construction-related emissions would not violate any applicable air quality standard, would not substantially contribute to an existing regional air quality violation, and would not result in a cumulatively considerable contribution to the net increase of any criteria pollutants for which the region is non-attainment. Therefore, short-term construction-related air quality impacts would be less than significant with mitigation.

Table 4.2-12 Construction Emissions Summary (Pounds per Day) – With Mitigation

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2015	5.97	96.54	75.46	0.19	7.57	3.76
Maximum Daily Emissions	**5.97**	**96.54**	**75.46**	**0.19**	**7.57**	**3.76**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-4.

Although implementation of Mitigation Measures MM 4.2-6 through MM 4.2-12 would reduce long-term operational emissions of NO_X, Project-related operational emissions of NO_X would remain above regional significance thresholds (refer to Table 4.2-13, *Operational Emissions Summary (Pounds per Day) – With Mitigation*). Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards, and beyond the direct control of the Project Applicant and/or future tenants of the Project site. No other mitigation measures are available that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce that have a proportional nexus to the Project's level of impact. As such, it is concluded that the Project's long-term emissions of NO_x would violate SCAQMD air quality standards. In addition, the Project's long-term emissions of and NO_x would cumulatively contribute to an existing air quality violation in the SCAB (*i.e.*, NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (*i.e.*, federal and state ozone concentrations). Accordingly, the Project's long-term emissions of NO_X are concluded to result in a significant and unavoidable impact on both a direct and cumulatively considerable basis.

Table 4.2-13 Operational Emissions Summary (Pounds per Day) – With Mitigation

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source Emissions	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source Emissions	0.05	0.48	0.40	2.88e-3	0.04	0.04
Mobile Emissions (Trucks)	13.46	307.18	117.64	0.76	28.10	11.84
Mobile Emissions (Passenger Cars)	3.3644	2.76	37.89	0.10	9.21	2.47
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**51.90**	**323.58**	**159.89**	**0.87**	**37.78**	**14.74**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source Emissions	34.13	1.51e-3	0.16	1.00e-5	5.70e-4	5.70e-4
Energy Source Emissions	0.05	0.48	0.40	2.88e-3	0.04	0.04
Mobile Emissions (Trucks)	13.72	319.98	123.22	0.76	28.11	11.85
Mobile Emissions (Passenger Cars)	3.17	2.93	33.27	0.09	9.21	2.47
On-Site Equipment	0.90	13.16	3.78	0.01	0.43	0.39
Maximum Daily Emissions	**51.97**	**336.55**	**160.83**	**0.86**	**37.79**	**14.75**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Urban Crossroads 2014a Table 3-6.

4.3 BIOLOGICAL RESOURCES

This subsection assesses the proposed Project's potential to impact sensitive biological resources that may be present on-site or within off-site improvement areas. As previously described in EIR Section 3.0, *Project Description*, off-site improvement areas associated with the Project include the construction of frontage improvements to and utility service connections within abutting roadways, including Perris Boulevard, Modular Way, Kitching Street, and Edwin Road. The analysis in this subsection is based in part on information contained in a site-specific general biological resources assessment prepared by Alden Environmental, Inc. titled, "General Biological Resources Assessment for the Modular Logistics Project," dated October 1, 2014. The technical report is provided as *Technical Appendix C1 t*o this EIR. The analysis in this subsection is also based on the site-specific burrowing owl survey report prepared by Alden Environmental, Inc. titled, "Burrowing Owl Survey Results Report for the Dorado Property," dated September 10, 2013. The technical report is provided in *Technical Appendix C2* to this EIR.

4.3.1 EXISTING CONDITIONS

A. Scope and Methodology for the Biological Resources Assessment

Biologists from Alden Environmental, Inc. conducted a site-specific evaluation of biological resources present or potentially present on the Project site. Methods of study included a review of relevant literature and databases, pedestrian-based field surveys, and wildlife observations. Background research included a review of current, local, state, and federal regulations, historical and current aerial photographs, United States Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps, the California Natural Diversity Data Base (CNDDB), and the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Alden Environmental, Inc. assessed resources on the Project site using methodologies and accepted scientific and technical standards and survey requirements issued by the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), and Western Riverside County MSHCP (Alden 2014 1).

The field studies focused on a number of primary objectives that would satisfy the special provisions of the Western Riverside County MSHCP and also comply with CEQA requirements, including: (1) general reconnaissance surveys and vegetation mapping; (2) general wildlife surveys; (3) habitat assessments and surveys for special-status plants (including species with applicable Western Riverside County MSHCP survey requirements); and (4) habitat assessments and focused surveys for special-status animals (including species with applicable Western Riverside County MSHCP survey requirements); and (5) assessments for areas subject to the jurisdiction of the USACE pursuant to Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and Section 13050(e) (et seq.) of the California Water Code (CWC), and CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code. Observations of plant and wildlife species were recorded during each of the above mentioned survey efforts and are contained within *Technical Appendices C1 and C2*.

The focused burrowing owl survey was conducted according to the burrowing owl survey instructions for the Western Riverside MSHCP (Alden 2014 2). Refer to *Technical Appendices C1 and C2* for detailed descriptions of the scopes and methodologies used for the general biological resource assessment and the burrowing owl survey reports.

B. Special Status Native Plant Populations and Natural Communities

The Project site is located within the MSHCP Criteria Area Species Survey (CASSA), as well as the Narrow Endemic Plant Species Survey Area (NEPSSA). Alden Environmental, Inc. evaluated the Project site for the presence of special status native plant populations and natural communities. Plant species were considered based on a number of factors, including: 1) species identified by the California Natural Diversity Database (CNDDB) as occurring (either currently or historically) on or in the vicinity of the Project site; 2) Western Riverside County MSHCP survey areas; and 3) any other special-status plants that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on the Project site. Plant species detected on site and recorded during field surveys were also assessed for potential riparian/riverine and jurisdictional (*i.e.*, wetland features) areas (Alden 2014 3).

❑ Vegetation Communities Observed On-Site

Alden Environmental, Inc. conducted a general biological survey and vegetation mapping of the Project site on November 26, 2013. Under existing conditions, the eastern portion of the Project site (approximately 13 acres) is undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. The western portion of the property does not support native vegetation communities and is classified as "developed" (Alden 2014 4, Figure 4). The eastern portion of the Project site is a highly disturbed fallow field that consists of tilled non-native grasses and exotic forb species that provides no native habitat for plant species. The eastern portion of the Project site is classified as "disturbed habitat" (Alden 2014 4, Figure 4).

❑ Narrow Endemic and Criteria Area Plants

The CASSA identified Coulter's goldfields (*Lasthenia glabrata*), Davidson's saltscale (*Atriplex serenana*), little mousetail (*Mysurus minumus*), mud nama (*Nama stenocarpum*), Parish's brittlescale (*Atriplex parishii*), round-leaved filaree (*California macrophylla*), San Jacinto Valley crownscale (*Atriplex coronata*), smooth tarplant (*Centromadia pungens*), and thread-leaved brodiaea (*Brodiaea filifolia*) as having the potential to occur on or near the Project site. Additionally, the NEPSSA identified *San Diego ambrosia (Ambrosia* pumila), many-stemmed dudleya (*Dudleya multicaulis)*, spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii*) as having the potential to occur on or near the Project site (Alden 2014 3).

❑ Special Status Native Plant Populations Observed On-Site

No sensitive plant species were observed by Alden Environmental during the November 2013 field survey. Given the developed and highly disturbed nature of the Project site, the site was found to be unsuitable for the plant species identified as potentially occurring within the area by the CASSA, NEPSSA, or MSHCP (Alden 2014 pp. 3, 5).

C. Special Status Wildlife Species

Alden Environmental, Inc. evaluated the Project site for the presence of special status wildlife species. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the property, 2) Western Riverside County MSHCP species survey areas applicable to the property, and 3) any other special-status wildlife that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on the site.

❑ Special Status Wildlife Observed On-Site

In addition to the general biological survey and vegetation mapping conducted in November 2013, Alden Environmental also conducted a focused burrowing owl surveys on August 8, 15, 19, and 21, 2013. Animal species that were observed or detected on the site or foraging over the site during field surveys are identified by their scientific name in Appendix C to *Technical Appendix C1* as: red-tailed hawk, house finch, killdeer, rock dove, common raven, California horned lark, American kestrel, Say's phoebe, European starling, Cassin's kingbird, barn owl, mourning dove, coyote, desert cottontail, Botta's pocket gopher, and Common side-blotched lizard. Of the 16 wildlife species observed on the Project site only one (1) species, the California horned lark, is classified as a "special status" species (Alden 2014 5).

- **California Horned Lark.** The California horned lark is not a state- or-federally listed species; however, this species is on the State Watch List. The California horned lark is a Covered Species under the Western Riverside County MSHCP. It is a common-to-abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. The California horned lark breeds and resides in the coastal region of California from Sonoma County southeast to the United States/Mexican border, including most of the San Joaquin Valley, and eastward to the foothills of the Sierra Nevada. Range-wide, California horned larks breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. In non-agricultural lands, the California horned lark typically inhabits areas of short vegetation or bare ground, including shortgrass prairie, deserts, brushy flats, and alpine habitat. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands.

No burrowing owls or signs of their use of the property (*i.e.*, scat, tracks, pellets, or feathers) were observed on the Project site during focused surveys for the species conducted by Alden

Environmental, Inc. However, the potential for the burrowing owl to migrate onto the undeveloped eastern portion of the site is high because it provides suitable habitat for the species (Alden Environmental 2014 5).

- **Western burrowing owl.** The burrowing owl is designated as a CDFW California Species of Special Concern. In California, burrowing owls are restricted to the central valley extending from Redding south to the Grapevine, east through the Mojave Desert and west to San Jose, the San Francisco Bay area, the outer coastal foothills area which extend from Monterey south to San Diego, and the Sonoran desert. The burrowing owl is a resident in the open areas of the lowlands over much of the Southern California region. The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident. The species also may use areas such as, but not limited to, golf courses, cemeteries, road allowances within developed areas, airports, vacant lots, fairgrounds, abandoned buildings, and irrigation ditches. Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. They may also dig their own burrow in soft, friable soil and may also use pipes, culverts, and nest boxes where burrows are scarce.

D. Nesting Birds

Numerous non-native trees occur within the existing site landscaping along the site's frontages on Perris Boulevard and Modular Way. The trees are small in size and are considered to have low potential to support nesting raptor species, although they may provide habitat for smaller, migratory birds (Alden 2014 5). Although biologists from Alden Environmental, Inc. did not observe nesting birds on the Project site, there is potential that migratory birds could nest on the property. The Migratory Bird Treaty Act (MBTA) and CDFW Code prohibit impacts to nesting birds.

E. MSHCP Riparian/Riverine Areas and Vernal Pools

No areas meeting the MSHCP definition of riparian or riverine habitats or vernal pools were observed on the Project site (Alden 2014 pp. 5-6).

F. Jurisdictional Waters

The Project site is flat and does not support any drainages, water courses, vernal pools, or wetland habitats that would be under the jurisdiction of the USACE, CFDW, or the RWQCB (Alden 2014 5).

G. Regulatory Setting

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state and federally listed plants and animals; aquatic resources, including rivers and

creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities. Provided below is an overview of applicable federal, state, and regional laws, regulations, and requirements.

❑ State and/or Federally Listed Plants and Animals

State of California Endangered Species Act

California's Endangered Species Act (CESA) provides definitions for endangered species, threatened species, and candidate species of California. Listed endangered and threatened species are protected by the CESA and candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Article 3, Sections 2080 through 2085, of the CESA address the taking of threatened, endangered or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) provides definitions for endangered species and threatened species of the U.S. Under provisions of Section 9(a) (1) (B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a) (2) (b) of the FESA addresses the protections afforded to listed plants.

State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the

action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a) (2).

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCPs) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

Take Authorizations Pursuant to the Western Riverside County MSHCP

The Western Riverside County MSHCP, a regional HCP, was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the USFWS, CDFW, and participating entities. The intent of the Western Riverside County MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the Western Riverside County MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the Western Riverside County MSHCP and to provide for an overall Conservation Area that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The Western Riverside County MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species.

Through agreements with the USFWS and the CDFW, the Western Riverside County MSHCP designates 146 special-status animal and plant species that receive some level of coverage under the plan. Of the 146 "Covered Species" designated under the Western Riverside County MSHCP, the majority of these species have no additional survey/conservation requirements. In addition, through compliance with the Western Riverside County MSHCP, the MSHCP provides mitigation for project-specific impacts to Covered Species so that the impacts would be reduced to below a level of significance pursuant to CEQA. The Project site is located within the Western Riverside County MSHCP burrowing owl survey area, which requires project-specific survey requirements for the species because it is designated as a "Covered Species not yet adequately conserved" (Volume I, Section 6.1.2 of the Western Riverside County MSHCP document).

4.3.2 BASIS FOR DETERMINING SIGNIFICANCE

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, §21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California to:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in §15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. CEQA Guidelines §15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species"*

Therefore, for the purpose of analysis in this EIR, the proposed Project would result in a significant impact to biological resources if the Project or any Project-related component would:

1. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service;*

2. *Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U. S. Fish Wildlife Service;*

3. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

4. *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan.

4.3.3 IMPACT ANALYSIS

Threshold 1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?

A. Impacts to Vegetation Communities

As discussed in Subsection 4.3.1B, the western portion of the Project site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. As such, the developed western portion of the property does not support native vegetation communities (Alden 2014 4). The eastern portion of the Project site is a highly disturbed fallow field that consists of tilled non-native grasses and exotic forb species that is classified as "disturbed habitat" and does not support sensitive plant species (Alden 2014 4). As such, the proposed Project would have no potential to impact any natural or sensitive vegetation community. Therefore, the Project would result in less-than-significant impacts and no mitigation would be required.

B. Impacts to Special Status Native Plant Populations

As documented by Alden Environmental, Inc. no special status plant species were observed during site visits and none are expected on the site given the disturbed and developed nature of the property (Alden 2014 5). Because natural plant communities are absent on the Project site, there is no potential for the Project to directly or indirectly impact special-status plants species. Therefore, the Project would result in less-than-significant impacts and no mitigation would be required.

C. Impacts to Special Status Wildlife Species

One (1) special-status wildlife species was observed on the Project site during biological field surveys in November 2013: the California horned lark. Because the California horned lark is a species that is "covered" by the Western Riverside County MSHCP, impacts to this special status species would be less than significant. An Implementation Agreement (IA) between the USFWS, the CDFW, and participating government bodies, including the City of Moreno Valley, was executed and associated 10(a)(1)(B) Permit No. TE-088609 was issued on June 22, 2004. For properties such as the Project site that are located outside of a Western Riverside County MSCHP Criteria Area, impacts to plant and animal species identified in the Western Riverside County MSHCP as "Covered Species Adequately Conserved" are authorized by Permit No. TE-088609. The Project Applicant will be required to pay the City of Moreno Valley's Western Riverside County MSHCP Mitigation Fee, which supplements the financing and acquisition of lands supporting species covered by the MSHCP

and to pay for new development's share of this cost. Although impacts to the California horned lark would be less than significant with mandatory compliance to the Western Riverside County MSHCP, this EIR recommends mitigation to ensure that the Project Applicant pays the appropriate Western Riverside County MSHCP Mitigation Fee.

Although no burrowing owl or signs of burrowing owl were observed on the site, the eastern undeveloped portion of the site contains habitat suitable to burrowing owl (Alden 2013 3). As such, it is possible the species could migrate onto the property prior to construction, resulting in a potentially significant impact. A pre-construction survey for the western burrowing owl is required prior to Project-related ground-disturbing activities and mitigation will be necessary if the species is found to be present.

D. Indirect Impacts to Special Status Biological Resources

The proposed Project would not result in significant indirect impacts to special-status biological resources. The Project site is not located in or adjacent to the Western Riverside County MSHCP Conservation Area; therefore, the Project is not required to implement measures pursuant to the *MSHCP Urban Wildland Interface Guidelines* specified in Volume I, Section 6.1.4 of the MSHCP. There are no other components of the proposed Project that could indirectly impact special-status biological resources. Accordingly, no indirect impacts to candidate, sensitive, or special-status species would occur.

Threshold 2:	***Would the Project have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Wildlife Service?***

None of the existing habitat types within the Project's impact area are considered riparian habitats, nor are these habitats identified as sensitive natural communities in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. Accordingly, the proposed Project has no potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. As such, no impact would occur.

Threshold 3:	***Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

There are no riparian/riverine communities or potential jurisdictional areas located on the Project site. The property is flat and does not support any aquatic features necessary for the development of these habitats (Alden 2014 4). The Project site does not support any drainages, water courses, vernal pools, or wetland habitat that would be considered jurisdictional by the USACE, CDFW, or the RWQCB (Alden 2014 5). Therefore, the proposed Project has no potential to result in a substantial

adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marshes, vernal pools, or coastal wetlands, through direct removal, filling, hydrological interruption, or other means. No impact would occur.

Threshold 4: Would the Project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

There are no water bodies on or adjacent to the site that could support fish; therefore, there is no potential for the Project to interfere with the movement of fish. There are also no native wildlife nurseries on or adjacent to the site; therefore, there is no potential for the Project to impede the use of a native wildlife nursery site. As such, no impact would occur.

Although wildlife could move through or within the Project site, the existing urban land uses that surround the site impede substantial wildlife movement throughout the Project site's vicinity. In addition, implementation of the Project would not have the ability to interfere with an established migratory wildlife corridor, because the site does not serve as a corridor nor is it connected to an established corridor. Additionally, the Project site is not located adjacent to the Western Riverside County MSHCP Criteria Area or any MSHCP Preserve; thus, the Project has no potential to result in wildlife movement impacts within a MSHCP Preserve. As such, the Project would result in a less-than-significant impact on wildlife movement.

The proposed Project would, result in minimal removal of vegetation (*i.e.*, trees and shrubs) from the Project site that has the potential to support nesting migratory birds. Impacts to such species are prohibited under the MBTA and California Fish and Game Code. The Project's potential to impact nesting migratory birds is a significant impact for which mitigation is required.

Threshold 5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Moreno Valley Municipal Code contains provisions for the protection of the Stephens' Kangaroo Rat pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County" (refer to Title 8, Chapter 8.60 of the Municipal Code). The Project site is not located within an identified reserve area for the Stephens' Kangaroo Rat. In addition, the Project site does not contain suitable habitat for the Stephens' Kangaroo Rat and the species was not observed on the subject property during site-specific biological surveys conducted in 2013. Accordingly, the Project is exempt from the focused survey requirements for the Stephens' Kangaroo Rat established by the Municipal Code. The Project Applicant is required to contribute a local development impact and mitigation fee, which requires a fee payment to assist the City in implementing the habitat conservation plan for the Stephens' Kangaroo Rat. With mandatory compliance with standard regulatory requirements (*i.e.*, development impact and mitigation fee payment), the proposed Project would not conflict with any City policies or ordinances related to the protection of the Stephens' Kangaroo Rat. Although a less-than-significant impact would occur with

implementation of the proposed Project, this EIR recommends mitigation to ensure compliance with the City's Stephens' Kangaroo Rat development impact and mitigation fee.

The City of Moreno Valley Municipal Code requires development projects that remove existing, mature trees (defined as a 4-inch or greater trunk diameter) to replace each removed tree at a 3:1 ratio with a minimum 24-inch box size tree (refer to Title 9, Chapter 9.17 of the Municipal Code). Although the majority of the Project site consists of developed and disturbed land, numerous trees are present along the Project site's frontages on Perris Boulevard and Modular Way and within internal parking lots. As previously described in EIR Section 3.0, *Project Description*, the Project would retain all existing trees along the site's frontage with Perris Boulevard and Modular Way to the extent feasible. The number of trees to be removed on-site cannot be quantified at this time because the decision to retain or remove individual trees will be made in the field during construction by the Project construction contractor; however, it is estimated that up to approximately 100 trees could be removed during construction. Based on the proposed Project's conceptual landscaping plan, approximately 316 trees would be installed on-site with a minimum 24-inch box size at initial planting (plus an additional 55 trees with a minimum 15-gallon size at planting), which would more than exceed the ratio of 3:1 required by the City's Municipal Code. As such, a less-than-significant impact would occur.

The City of Moreno Valley does not have any additional policies or ordinances in place to protect biological resources.

Threshold 6: ***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?***

The following is an analysis of the proposed Project's compliance with the Western Riverside County MSHCP's Reserve Assembly Requirements as well as other applicable MSHCP requirements pursuant to the following sections of the MSHCP: Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*; Section 6.1.3, *Protection of Narrow Endemic Plant Species*; Section 6.1.4, *Guidelines Pertaining to the Urban/Wildland Interface*; and Section 6.3.2, *Additional Survey Needs and Procedures.*

❑ Project Relation to Reserve Assembly

The Project site occurs within the overall Plan Area of the Western Riverside County MSHCP. As indicated in the discussion below, all surveys required by the Western Riverside County MSHCP have been conducted on the Project site and off-site improvement areas. The Project site does not occur within a Western Riverside County MSHCP Criteria Area. As such, the proposed Project is not required to set aside conservation lands pursuant to the Western Riverside County MSHCP, and the proposed Project is not subject to the MSHCP's Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process, or Joint Project Review (JPR). Accordingly, the proposed Project would not conflict with the Western Riverside County MSHCP Reserve Assembly requirements and no impact would occur.

❑ Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

As previously discussed in Subsection 4.3.1F, the Project site does not contain any drainages that meet the definition of riparian/riverine areas as defined by the Western Riverside County MSHCP. In addition, vernal pools, vernal swales, alkali scalds, or other seasonal wet habitats were not identified on the Project site or within the Project's off-site impact areas during field surveys conducted in late 2013 (Alden 2014 5). Therefore, the proposed Project would have no impact on riparian/riverine areas or vernal pools, or the species associated with these habitat types. Accordingly, the proposed Project has no potential to conflict with Volume I, Section 6.1.2 of the Western Riverside County MSHCP. No impact would occur.

❑ Protection of Narrow Endemic Plants

Section 6.1.3 of the Western Riverside County MSHCP requires that within the Narrow Endemic Plant Species Survey Area (NEPSSA), site-specific focused surveys for Narrow Endemic Plant Species are required for all public and private projects where appropriate soils and habitat are present. The majority of the site is within the MSHCP Criteria Area Species Survey Area (CASSA), as well as the Narrow Endemic Plant Species Survey Area (NEPSSA). The CASSA identifies Coulter's goldfields (*Lasthenia glabrata*), Davidson's saltscale (*Atriplex serenana*), little mousetail (*Myosurus minimus*), mud nama (*Nama stenocarpum*), Parish's brittlescale (*Atriplex parishii*), round-leaved filaree (*California macrophylla*), San Jacinto Valley crownscale (*Atriplex coronata*), smooth tarplant (*Centromadia pungens*), and thread-leaved brodiaea (*Brodiaea filifolia*) as potentially occurring sensitive species on the site. Additionally, the NEPSSA identified San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis)*, California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii*) as potentially occurring sensitive species on site. Special attention was paid to the potential for these species to occur on site during the on-site focused surveys conducted by Alden Environmental. As previously discussed in Subsection 4.3.1B, no sensitive plant species were observed on the Project site and due to the developed and disturbed nature of the property, the habitat on site is not considered suitable for sensitive plant species with the potential to occur in the Project area (Alden 2014 pp. 4-5).

The entire site is developed and/or highly disturbed and does not support suitable habitat for any CASSA or NEPSSA sensitive species. Additionally, The CNDDB database search did not identify any sensitive plant species that have been known to occur on site or within the Project vicinity. The site does not support alkaline marshes, wet meadows, vernal pools, wetlands, or chaparral/coastal sage scrub habitats; therefore, no suitable habitat is present for all but one of the species identified as potentially occurring by the MSHCP, the smooth tarplant.

Suitable habitat for the smooth tarplant includes alkali scrub, alkali playas, and grasslands with alkaline affinities. The soil on site is mapped as Domino silt loam with saline-alkaline characteristics. The soil on-site has been heavily disturbed and disked regularly, thereby altering its characteristics and reducing the potential for this species to occur. Additionally, this species typically leaves behind

dried stems, leaves, and flowers that persist throughout the year and allow for species identification outside of the flowering season. No signs of this species were observed during the field visits conducted by Alden Environmental. Based on these conditions, the smooth tarplant is not present and is not expected to occur or establish on the site.

Based on the heavily disturbed nature of the site and the lack of suitable habitat, focused rare plant surveys are not required, and neither are surveys for other Narrow Endemic Plants. Accordingly, the proposed Project would not conflict with Volume I, Section 6.1.3 of the Western Riverside County MSHCP. No impact would occur.

❑ Guidelines Pertaining to Urban/Wildland Interface

The Western Riverside County MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the Western Riverside County MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area and edge effects with the potential to adversely affect biological resources within the Conservation Area are required to be evaluated. Edge effects are identified in the MSCHP as: Drainage; Toxics; Lighting; Noise; Invasive Species; Barriers; and Grading/Land Development. The Project site does not occur within or adjacent to a MSCHP Criteria Area or existing Conservation Area, or any Public/Quasi-Public lands. As such, the proposed Project would not have the potential to create indirect effects on the MSHCP Conservation Area and is not be subject to the Urban/Wildland Interface Guidelines. The proposed Project, therefore, is consistent with Section 6.1.4 of the Western Riverside County MSHCP. No impact would occur.

❑ Additional Needs Survey and Procedures

Western Riverside County MSHCP Section 6.3.2 identifies that in addition to the Narrow Endemic Plant Species addressed in Section 6.1.3, additional surveys may be needed for other certain plant and animal species in conjunction with MSHCP implementation in order to achieve full coverage for these species. Within areas of suitable habitat, focused surveys are required for additional plant species if a project site occurs within a designated CAPSSA, or special animal species survey area (*i.e.*, burrowing owl, amphibians, and mammals).

As discussed above under the analysis of Threshold 1, a focused survey for the western burrowing owl was completed in 2013 in accordance with the Western Riverside County MSHCP Burrowing Owl Survey Area requirements. The survey determined that no burrowing owls or signs of burrowing owl were present on the Project site (Alden 2013 3); therefore, no impact to an observed special-status species would occur. However, the species is migratory and could migrate onto the property prior to ground-disturbing construction activities. Therefore, a pre-construction survey for the species will be required and mitigation would be necessary if the species is found to be present.

4.3.4 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan buildout in the City of Moreno Valley and other jurisdictions in the region within the boundaries of the Western Riverside County MSHCP.

Implementation of the proposed Project would result in permanent ground disturbance to the entire Project site. Additionally, the Project would require some off-site improvements, including frontage improvements to and utility service connections within abutting roadways, including Perris Boulevard, Modular Way, Kitching Street, and Edwin Road.

The primary effects of the proposed Project, when considered with the build out of long range plans in the region, would be the cumulative loss of vacant land that can support habitat for sensitive species. With respect to special-status species, although habitat offered on approximately 13 acres in the eastern portion of the Project site is of substantially lesser quality than habitat that is found in undisturbed natural areas within the geographic area covered by the Western Riverside County MSHCP, it still provides open spaces for foraging, refuge, nesting, and areas that can be used for species reproduction.

Anticipated cumulative impacts are addressed within the region by the Western Riverside County MSHCP and the adopted "The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California." The Western Riverside County MSHCP, as currently adopted, addresses 146 "Covered Species" that represent a broad range of habitats and geographical areas within Western Riverside County, including threatened and endangered species and regionally- or locally-sensitive species that have specific habitat requirements and conservation and management needs. The Western Riverside County MSHCP addresses biological impacts for take of Covered Species within the MSHCP area. Impacts to Covered Species and establishment and implementation of a regional conservation strategy and other measures included in the Western Riverside County MSHCP address the federal, state, and local mitigation requirements for these species and their habitats. Specifically, Section 4.4 of the Western Riverside County MSHCP states that:

> *The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.*

It goes on to state that:

> *The LDMF [Local Development Mitigation Fee] is to be charged throughout the Plan Area to all future development within the western part of the County and the Cities in order to provide a coordinated conservation area and implementation*

> *program that will facilitate the preservation of biological diversity, as well as maintain the region's quality of life.*

The reason for the imposition of the Mitigation Fee over the entire region is that the loss of habitat for endangered species is a regional problem resulting from the cumulative effect of continuing development throughout all of the jurisdictions in Western Riverside County. Finally, Section 5.1 of the Western Riverside County MSHCP states that:

> *It is anticipated that new development in the Plan Area will fund not only the mitigation of the impacts associated with its proportionate share of regional development, but also the impacts associated with the future development of more than 332,000 residential units and commercial and industrial development projected to be built in the Plan Area over the next 25 years.*

As the construction of buildings, infrastructure, and all alterations of the land within areas that are outside of the Criteria Area are permitted under the Western Riverside County MSHCP (see MSHCP Section 2.3.7.1), cumulative impacts to biological resources with the exception of MSHCP non-covered species would be less than significant provided that the terms of the MSHCP are fully implemented (MSHCP Final EIR/EIS, Section 4.4.1.6). The Western Riverside County MSHCP database was consulted for the proposed Project and the recommended focused surveys for the western burrowing owl have been conducted. The Project Applicant is required to pay the required MSHCP mitigation fees per the City of Moreno Valley Municipal Code Title 3, Chapter 3.48 (and pursuant to mitigation measures recommended by this EIR, (refer to Subsection 4.3.6 below). The proposed Project would comply with the requirements of the Western Riverside County MSHCP and, thus, would not conflict with its adopted policies. Accordingly, because the proposed Project is required to comply with the Western Riverside County MSHCP and pay the required MSHCP mitigation fee, the proposed Project would have less-than-significant cumulatively considerable impacts to MSHCP covered species.

Although the Project site occurs within the Western Riverside MSHCP, NEPSSA, and CASSA, the entire Project site is either developed or disturbed and does not contain sensitive species or suitable habitat for any CASSA or NEPSSA sensitive species (Alden 2014 3). Because the proposed Project and all other developments within the Western Riverside County MSHCP Study Area would be required to comply with the MSHCP, Project impacts to MSHCP, CASSA, or NEPPSA sensitive species would be less than significant and less than cumulatively considerable.

Regarding special-status wildlife, the proposed Project would eliminate actual or potential live-in habitat for the California horned lark and the western burrowing owl. Because the proposed Project and other cumulative developments would be required to comply with the Western Riverside County MSHCP, potential Project-related impacts to the California horned lark is concluded to be less than significant on a cumulative basis because adequate habitat for these species would be accommodated through the Western Riverside County MSHCP Reserve System. Cumulative effects to raptor foraging habitat are addressed through the MSHCP. The Project is required to comply with the City

of Moreno Valley Municipal Code Title 3, Chapter 3.48, MSHCP Fee Program, which requires a per-acre local development mitigation fee that provides revenue to acquire and preserve vegetation communities and natural areas that are known to support threatened, endangered or key sensitive populations of plant and wildlife species. Mandatory payment of the MSHCP Fee would reduce any Project-related impact to raptor foraging habitat to below a level of significance. MSHCP Section 5.3.5, "Identifying Wildlife Habitat Types" describes the general California Wildlife Habitat Relationships (CWHR) methodology used to identify the planned MSHCP Conservation Area. The CWHR "makes predictions about a habitat's value to wildlife in terms of its capacity to fulfill reproduction, foraging, and cover needs of wildlife" (MSHCP Volume 1, Section 5.3.5). Thus, the MSHCP accounts for foraging.

The burrowing owl is fairly ubiquitous within the Project vicinity; as such, it is reasonable to conclude that impacts to habitat for this species are occurring throughout the cumulative study area. As such, cumulative impacts are significant and the proposed Project's potential impacts to burrowing owls that may be located on the site prior to Project construction would be cumulatively considerable. Mitigation would be required.

The Project site does not contain habitat of wetlands or riparian areas, including areas that may be subject under the jurisdiction of the USACOE, RWQCB, and/or CDFW. Therefore, the proposed Project would not impact any wetlands or riparian/riverine areas and would therefore not result in any cumulatively considerable impacts to wetlands and riparian/riverine areas.

As indicated under the discussion and analysis of Threshold 4, the proposed Project would not significantly impact wildlife movement corridors because such corridors already are accommodated by the Western Riverside County MSHCP and the Project site is not targeted for conservation as part of any proposed or existing linkages by the MSHCP. In addition, there are no native wildlife nursery sites within the Project vicinity. While Western Riverside County is becoming increasingly urbanized, which could restrict wildlife movement, the MSHCP, and the Conservation Areas established therein, was developed with several goals that specifically support wildlife movement. Accordingly, cumulative impacts to wildlife movement are less than significant. As concluded by the MSHCP's Final EIR/EIS, "The MSHCP provides for the movement of native resident and migratory species and for genetic flow identified for Covered Species. Therefore, impacts related to cores and linkages resulting from the Plan are considered less than significant" (MSHCP Volume 4: Final EIR/EIS, Section 4.1.5). As such, the proposed Project would not result in cumulatively considerable impacts to wildlife movement corridors or native wildlife nursery sites.

The proposed Project would remove vegetation from the site (*i.e.*, trees and shrubs) that has the potential to support nesting migratory birds protected by the MBTA and California Fish and Game Code. Other projects within the Western Riverside County area would similarly have the potential to impact protected nesting migratory birds and also be subject to compliance with the MBTA. The Project's potential impact to nesting birds would be cumulatively considerable absent compliance to the MBTA.

The proposed Project would not conflict with any local policies or ordinances protecting biological resources. Other development projects in the City of Moreno Valley also would be required to comply with the City's Municipal Code. Accordingly, cumulative effects associated with compliance to local policies or ordinances protecting biological resources would be less than significant and the proposed Project's contribution would be less than cumulatively considerable.

4.3.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Significant Direct and Cumulative Impact. No sensitive vegetation communities or candidate, sensitive, or special-status plant species are located on the Project site. The loss of habitat for the California horned lark is less than significant with mandatory Western Riverside County MSHCP compliance because the species is a MSHCP Covered Species. Although the western burrowing owl is not present on the Project site, the species could be impacted if it migrates onto the property prior to the commencement of ground-disturbing construction activities, which is a potentially significant direct and cumulatively considerable impact.

Threshold 2: No Impact. The Project site does not contain any riparian habitat or other sensitive natural community; therefore, the Project would have no impact on riparian or other sensitive habitats as defined by the CDFW or USFWS.

Threshold 3: No Impact. There are no federally protected wetlands on the Project site or within the Project's off-site impact area; therefore, no impact to wetlands would occur.

Threshold 4: Significant Direct and Cumulative Impact. There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting, migratory birds protected by the MBTA and California Fish and Game Code if construction activities were to occur during the migratory bird nesting season.

Threshold 5: Less-Than-Significant Impact. The Project would not conflict with any local policies or ordinances governing biological resources.

Threshold 6: Significant Direct and Cumulative Impact. The Project site is subject to the Western Riverside County MSHCP and its survey requirements for the western burrowing owl. Although compliant with all MSHCP provisions and although the western burrowing owl is absent on the property, the eastern portion of the property contains suitable habitat for the species. If the species is present on the property at the time a grading permit is issued, impacts would be significant, requiring mitigation.

4.3.6 MITIGATION

MM 4.3-1 The Project shall comply with City of Moreno Valley Municipal Code Title 3, Chapter 3.48, *Western Riverside County Multiple Species Habitat Conservation Plan Fee Program*, which requires a per-acre local development impact and mitigation fee.

The Project Applicant shall pay Western Riverside County MSHCP development impact and mitigation fees, less fee credits associated with prior development of the Project site to the City prior to the issuance of a building permit.

MM 4.3-2 Within 30 days prior to grading, a qualified biologist shall conduct a survey of the undeveloped portions of the property and make a determination regarding the presence or absence of the burrowing owl in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area*. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Moreno Valley Planning Division prior to the issuance of a grading permit and subject to the following provisions:

a) In the event that the pre-construction survey identifies no burrowing owls on the property, a grading permit may be issued without restriction.

b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that Objectives 1-4 have been met. A grading permit shall only be issued, either:

- Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or

- A determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

MM 4.3-3 As a condition of approval for all grading permits, the removal of trees shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:

a) A migratory nesting bird survey of all trees to be removed shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing. The migratory nesting bird survey shall be conducted by a qualified biologist within three (3) days prior to initiating tree removal or vegetation clearing within 500 feet of a mature tree.

b) A copy of the migratory nesting bird survey results report shall be provided to the City of Moreno Valley Planning Division. If the survey identifies the presence of active nests, then the qualified biologist shall provide the City of Moreno Valley Planning Division with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the City of Moreno Valley Planning Division and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and City Planning Division verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.

MM 4.3-4 The Project shall comply with the City of Moreno Valley Municipal Code Title 8, Chapter 8.60, *Threatened and Endangered Species*, which requires a per-acre local development impact and mitigation fee pursuant to the City's adopted "Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County,

California" and as established pursuant to Fee Resolution 89-92. Prior to the issuance of grading or improvement permits, the Project Applicant shall pay fees, less fee credits associated with prior development of the Project site, to the City in accordance with the City's Fee Resolution 89-92.

4.3.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1 and 6. Less-than-Significant Impact with Mitigation. Implementation of MM 4.3-1 would ensure that the Project Applicant pays the City's required Western Riverside County MSHCP development impact and mitigation fees to assist the City in the implementation of the Western Riverside County MSHCP. Implementation of MM 4.3-2 would ensure that pre-construction surveys are conducted for the western burrowing owl to determine the presence or absence of the species on the Project site prior to Project-related grading activities. If the species is present, the mitigation requires avoidance and/or relocation of burrowing owls in conformance with accepted protocols for the species. As such, impacts would be less-than-significant with mitigation.

Threshold 4: Less-than-Significant Impact with Mitigation. Implementation of MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting migratory birds to determine presence or absence prior to Project-related tree removals. If the species is present, the mitigation requires avoidance of migratory bird nests during the breeding season in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to nesting migratory birds would be reduced to below a level of significance. As such, impacts would be less-than-significant with mitigation.

Threshold 5: Less-than-Significant Impact. As previously discussed under the impact evaluation for Threshold 5 (refer to Subsection 4.3.3), the Project would not conflict with any local policies or ordinances related to the protection of biological resources upon mandatory compliance with provisions of the City of Moreno Valley Municipal Code. However, MM 4.3-4 has been applied to the Project to ensure that the Project complies with the City's Municipal Code and pays the appropriate Stephens' Kangaroo Rat development impact and mitigation fee. As such, impacts would be less-than-significant with mitigation.

4.4 CULTURAL RESOURCES

4.4.1 EXISTING CONDITIONS

This analysis in this subsection is based on the site-specific cultural resources assessment prepared by Brian F. Smith & Associates (BFSA) titled, "A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, California," and dated December 16, 2013. The technical report is provided as *Technical Appendix D1* to this EIR. The analysis in this subsection is also based on the site-specific paleontological resource and monitoring assessment titled, "Paleontological Resource and Monitoring Assessment, Modular Logistics Center Project, City of Moreno Valley, Riverside County, California," and dated December 13, 2013. The technical report is provided as *Technical Appendix D2* to this EIR. Information used to support the analysis in this subsection also was obtained from the Cultural Resources section (Section 5.10, pp. 5.10-1 – 16) of the certified Final Program EIR prepared for the City of Moreno Valley General Plan (SCH No. 2000091075), dated July 2006 (Moreno Valley 2006b), and the Riverside County General Plan Multipurpose Open Space Element (Riverside County 2003).

A. Scope and Methodology for the Cultural Resources Assessment

❑ Literature Review

Prior to conducting the site-specific cultural resources assessment, a BFSA archaeologist conducted a California Historic Resources Information System (CHRIS) records search, at the Eastern Information Center (EIC), at the University of California, Riverside in Riverside, CA. The purpose of the records search was to enable BFSA archeologists to determine whether any cultural resources investigations had previously been conducted or whether any cultural resources had been recorded within or adjacent to the Project area. The EIC also provided the standard review of the National Register of Historic Places (NHP) and the Office of Historic Preservation Historic Property Directory. Land patent records held by the Bureau of Land Management (BLM) and accessible through the BLM Government Land Office (GLO) website were also reviewed by BFSA. In addition, the BFSA research library was consulted for any relevant historical information (BFSA 2013a 3.02).

❑ Field Methods

As previously discussed in Subsection 3.0 *Project Description*, under existing conditions, the eastern portion of the Project site (approximately 13.0 acres) is undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building and a maintained detention basin surrounded by fencing. BFSA conducted an intensive pedestrian survey on the eastern disturbed but undeveloped portion of the Project site on December 2, 2013. In addition, all areas in the developed western portion of the property that were not covered with parking lots and buildings were visually inspected by BFSA investigators. Digital photographs were taken of the Project area and are included within *Technical Appendix D1* to this EIR.

B. General Regional Prehistory Description

The Paleo Indian, Archaic Period Milling Stone Horizon, and Late Prehistoric Shoshonean groups are the three generational groups represented in Western Riverside County. Because these culture sequences have been used to describe archeological manifestations in the region, the following discussion of the cultural history of Western Riverside County references the Western Pluvial Lakes Tradition, San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, Sayles Complex, and the San Luis Rey Complex. The Late Prehistoric component of Western Riverside County was represented by the Luiseño, with influences from the Gabrielino, Cahuilla and Serrano Indians. Each of these pre-historical periods in time is briefly described below and documented in more detail in *Technical Appendix D1* to this EIR. The geologic framework divides the culture chronology of the area into the following segments:

- Late Pleistocene/Paleo Indian Period (11,500 to circa 9,000 (Years Before Present (YBP)). The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000YBP). In North America, the Paleo Indian Period began at approximately 11,000 YBP with the Clovis Culture. Large fluted points particularly characterize the Clovis culture in addition to knives, scrapers, choppers, perforators, and casual flake tools that dominate later Pleistocene sites (BFSA 2013a 2.0-7). Clovis sites have not been identified in the Project area, although Clovis-like fluted points have been found in a variety of settings in southern California, including passes in the Cuyamaca and Tehachapi mountains, valleys in the Mojave Desert and Owens Valley, and the shorelines of Little Lake, Searles Lake, Panamint Lake, and ancient Lake Mojave (BFSA 2013a 2.0-7). The recovery of isolated fluted points would suggest that at the end of the Pleistocene, small groups of people sharing Clovis-like traits were present in southern California. The variety of fluted points in a variety of settings would suggest that the Paleo Indians were likely attracted to multiple habitat types including mountains, marshlands, estuaries, and lakeshores (BFSA 2013a 2.1-7).

- Early and Middle Holocene/Archaic Period (circa 9,000 to 1,300 YBP). The Archaic Period of prehistory begins with the onset of the Holocene around 9,000 YBP. The Paleo-environmental record for the inland valleys, where the Project site is located, is poorly understood as most of the paleoenvironmental reconstructions have been located along the coast and further east into the desert (BFSA 2013a 2.1-7). At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established. The sedimentation of the lagoons resulted in the decline in larger shellfish, loss of drinking water, and a reduction in the availability of Torrey Pine nuts. This resulted in a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploration of terrestrial small game and plants, including acorns (BFSA 2013a 2.0-8-9). The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, or horizons, including Western Pluvial Lakes, San Dieguito, La Jolla, Encinitas, Milling Stone, Pauma, and Sayles. These cultures are further documented within *Technical*

Appendix D1 to this EIR. Overlapping radiocarbon dates and different artifact types between sites identified as Western Pluvial Lakes, San Dieguito, La Jolla, Encinitas, Milling Stone, Sayles, and/or Pauma suggest a generalized hunting and gathering pattern that was employed for over 8,000 years. The large amount of marine shell and fish, along with some mammal bone as found in early Holocene sites next to lagoons, changes as one moves inland (BFSA 2013a 2.0-16). At these sites, an increase in sites and artifact assemblages likely reflects the same people moving along drainages between the coast and mountains, exploiting both marine (fish and mollusks) and terrestrial (small and large game, plants, and lithic materials) resources (BFSA 2013a 2.0-17).

- Late Holocene/Late Prehistoric/San Luis Rey Period (1,300 YBP to 1769). Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Technological developments during this period include the introduction of the bow and arrow between A.D. 400 and A.D. 600. This period is divided into the San Luis Rey I phase and San Luis Rey II phase. San Luis Rey I is characterized by the use of portable shaped or unshaped slab mutates, manos and pestles, and non-portable bedrock milling features. Cremations, bone awls, and stone and shell ornaments are also prominent in the material culture. Ceramic cooking and storage vessels, cremation urns, and polychrome pictographs augment the later San Luis Rey II assemblage (BFSA 2013a 2.0-17). The fluorescence of rock art likely appeared as the result of increased populations and sedentism. Flaked stone dart points are dominated by the Cottonwood Triangular series, but Desert Side-Notched and Dos Cabazas Serrated styles also occur (BFSA 2013a 2.0-17). Subsidence is thought to have focused on the utilization of acorns, a storable species that allowed for relative sedentism and increased population densities (BFSA 2013a 2.0-17).

C. General Ethnography Description

Ethnohistoric and ethnographic evidence indicates that three (3) Shoshonean-speaking groups occupied portions of Riverside County, including the Cahuilla, the Gabielino, and the Luiseño (BFSA 2013a 2.0-17). The geographic boundaries between these groups in prehistoric and proto-historic times is difficult to place, but the Project site is located well within the borders of ethnographic Luiseño territory (BFSA 2013a 2.0-17).

- Luiseño. The Luiseño were a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Range Mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present day San Juan Capistrano (BFSA 2013a 2.0-19). The Luiseño occupied sedentary villages, most often

located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching, as well as in areas that offered thermal and defensive protection. Inland groups occupied fishing and gathering sites along the coast that were used intensively from January to March when inland food resources were scarce. Most of the village would relocate to mountain oak groves to harvest acorns in October and November. The Luiseño remained at village sites for the remainder of the year, where food resources were within a days travel (BFSA 2013a 2.0-19-20). House structures were conical, partially subterranean, and thatched with reeds, brush, or bark (BFSA 2013a 2.0-21). Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wooden tip or a lithic point usually fashioned from locally available metavolcanic material or quartz. Throwing sticks were made out of wood. The Luiseño had a well-developed basket industry. Ceramic containers were shaped by paddle and anvil and fired in shallow open pits. Other utensils included wooden implements, steatite bowls, and ground stone manos, metates, mortars, and pestles. Personal adornment items were made from bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell.

- Cahuilla. At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the west, and the Santa Ana River to the north (BFSA 2013a 2.0-21). Cahuilla villages were typically permanent and located on low terraces within canyons and in proximity to water sources. Villages were occupied throughout the year; however during a several-week period in the Autumn, most of the village members relocated to mountain oak groves to take part in acorn harvesting (BFSA 2013a 2.0-22). Cahuilla houses were dome-shaped or rectangular thatched structures. Other structures within the village included sweathouses and graneries. The use of plant resources by the Cahuilla is well documented. Hunting implements included the bow and arrow, throwing sticks and clubs. Grinding tools used in food processing included manos, mutates, and wooden mortars. Baskets were made from rush, deer grass, and skunkbrush. Coiled-ware baskets were either flat bowl-shaped, deep, inverted cone-shaped, or rounded and flat-bottomed. Cahuilla pottery was made from thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes (BFSA 2013a 2.0-23).

- Gabrielino. The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange Counties, The southern extent of this culture is bounded by Aliso Creek, the eastern extent is located east of current day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several of the Channel Islands. Because of their access to a steatite source from Santa Catalina Island, the Gabrielino were among the wealthiest and most populous aboriginal groups in southern California. The Gabrielino traded their materials and

resources as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (BFSA 2013a 2.0-24). The Gabrielino lived in permanent villages and smaller resource-gathering camps at various times of the year depending on the seasonality of each resource. Permanent villages were located along rivers and streams, as well as sheltered areas along the coast (BFSA 2013a 2.0-24). Gabrielino houses were domed, circular structures made of thatched vegetation. Hunting implements included wooden clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. Other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, mutates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush, deer grass, and skunkbrush. Soapstone, or steatite, procured from the Santa Catalina quarries was used for making pipes, animal carvings, ritual objects, ornaments, and cooking objects (BFSA 2013a 2.0-25-26).

D. General Regional History Description

The historic background of the Project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations as well as expanding the knowledge of and access to new resources in the region. In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California and gradually expanded their use of the interior valley (Western Riverside County) for raising grain and cattle to support the missions. The San Gabriel Mission claimed lands in what are now Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey claimed land in what is now Lake Elsinore, Temecula, and Murrieta (BFSA 2013a 2.0-26). In the mid-to-late 1770's, Juan Batista de Anza described fertile valleys, lakes, and sub-desert areas as he passed through much of Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles. Before constructing Mission San Luis Rey in northern San Diego County, in 1797, Father Presidente Lausen, Father Norberto de Santiago, and Corporal Pedro Lisalde led an expedition form Mission San Juan Capistrano through southwestern Riverside County in search of a new mission site. While no missions were ever built in what would become Riverside County, many mission outposts were established in the early years of the nineteenth century which extended the missions' influence to the backcountry. Two of the mission outposts were located in San Jacinto and Temecula in Riverside County (BFSA 2013a 2.0-26-27).

Mexico gained independence in 1822 and desecularized the missions in 1832 signifying the end of the Mission Period. By this time, the missions owned some of the best and most fertile land in southern California and the new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. These land grants (ranchos) included Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potero, and San Jacinto Viejo, which were located in present-day Riverside County. Rancho Jurupa, which was given to Juan Bandini in 1838, was the first land grant located in present-

day Riverside County. These ranchos were all located in the valley environments typical of Western Riverside County (BFSA 2013a 2.0-27).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, leading to California becoming a state in 1880. These events generated a steady flow of settlers into the area. With completion of the transcontinental railroad in 1869, land speculators, developers, and colonists began to invest in southern California. The first colony to exist in Riverside County was known as the Riverside colony. Judge John Wesley North, an abolitionist from Tennessee, brought a group of associates and co-investors to southern California and founded Riverside on part of the Jurupa Rancho. A few years later, the navel orange was planted and found to be such a success that it quickly became the agricultural staple of the region (BFSA 2013a 2.0-28). In May of 1893, voters living within portions of San Bernardino County and San Diego County approved the formation of Riverside County. By the time of Riverside County's formation, due to the successful cultivation of the navel orange, Riverside had grown to become the wealthiest city per capita in the country (BFSA 2013a 2.0-28-29).

E. Prehistory and Historic Archeological Resources

As documented in *Technical Appendix D1*, the EIC archeological records search for a 1.0-mile radius around the Project area did not report any previously recorded sites within the Project site boundaries. However, nine (9) cultural resource locations have been recorded within a 1.0-mile radius of the Project area, including four (4) prehistoric sites and five (5) historic sites. Two of the prehistoric sites are large complexes of rock shelters, rock art, cupule features, and milling features. The cultural resource locations previously recorded within a 1.0-mile radius of the Project site are listed in 4.4E.Table 4.4-1, *Archaeological Sites Located within One-Mile of the Project Site*.

Table 4.4-1 Archaeological Sites Located within One-Mile of the Project Site

Site(s)	Description
RIV-530 and RIV-4206	Bedrock milling sites
P-33-11604 and P-33-15854	Historic irrigation elements
RIV-11,291	Historic grain mill foundations
RIV-8222	Historic agricultural structure ruins
RIV- 7649	Historic structure (formerly barracks)
RIV-12/4417/8235 and RIV-331	Prehistoric rock shelters, rock art, and bedrock milling features

Source: BFSA 2013a Table 4.1-1

In total, twenty-four (24) cultural resource studies have been conducted within a 1.0-mile radius of the Project area. The records search indicated that there was one previous cultural resource study conducted within the Project site. The previous study did not identify the presence of cultural resources on the Project site (BFSA 2013a 4.0-1).

The Project site was used for agricultural production from approximately the 1950s to 2000. The eastern portion of the property (approximately 13.0 acres) is undeveloped land that was formerly used for the storage of modular units and storage containers. The developed, western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building, and a maintained detention basin surrounded by fencing. Due to the Project site's prior and current development, the majority of the Project site is characterized by BFSA archeologists as disturbed (BFSA 2013a 4.0-2). No historic or prehistoric cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and it was concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the frequent and ongoing clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site (BFSA 2013a 5.0-1).

F. Paleontological Resources

According to the City of Moreno Valley General Plan Final EIR, the City of Moreno Valley contains sedimentary rock units with potential to contain significant nonrenewable paleontological (fossil) resources. These sedimentary units are referred to as the Mt. Eden Formation and the San Timoteo Formation (City of Moreno Valley 2006b 5.10-10). The Mt. Eden Formation is described as being primarily reddish sandstone and dark green and brown clay with local reddish fanglomerate and conglomerate. The age of the fossils contained in the Formation and the dark reddish brown coloration distinguish the Mt. Eden formation from the younger, green to gray, tan and red weathering of the San Temoteo Formation. Fossilized fauna include cricetine rodent, horse and proboscidean (extinct animals related to elephants) (City of Moreno Valley 2006b 5.10-10). The San Timoteo Formation is a widespread deposit of sands, gravels, and clays that extends northward from the foothills of the San Jacinto Mountains for a distance of nearly 20 miles. The San Timoteo Formation contains fossils of land animals and plant species, and represents sediments deposited from about 3.5 to 0.7 million years ago during Late Pliocene to middle Pleistocene time. The presence of non-marine fossils within a sequence of rocks spanning such a long time has led to several studies of the depositional environments and paleontology of the formation (California Department of Conservation 2002a).

According to Figure 5.10-3 of the Moreno Valley General Plan Final EIR (City of Moreno Valley 2006b 5.10-11), the Project area is characterized as having a "Low" potential for containing paleontological resource deposits. The General Plan Final EIR explains that this is because the Project site, as with most of the City of Moreno Valley, is covered with recent alluvium. These sediments overlie fossiliferous sedimentary units of the Mt. Eden Formation and the San Timoteo Formation. Excavation to depths normal for development generally would not penetrate recent alluvial sediments to encounter fossiliferous deposits. Areas within the City that are thought to have the greatest potential for encountering paleontological resources occur in the hills in the east end of

the City, in an area known as the "Badlands." The Project site is not located in this portion of the City.

Contrary to the Moreno Valley General Plan Final EIR, according to Figure OS-8 of the Riverside County Multipurpose Open Space Element, the Project area is categorized as having a High Potential/Sensitivity (High B) for paleontological resources (Riverside County 2003) which is based on the presence of geologic formations or mappable rock units that contain fossilized body elements, and trace fossils such as tracks, nests, and eggs. The category "High B" indicates that fossils are likely to be encountered at or below four (4) feet of depth, and may be impacted during excavation by construction activities. BFSA's records search on a nearby property concluded that the Holocene alluvium is considered to be too recently deposited to have the potential to contain fossil resources and is assigned a "low paleontological sensitivity." However, the older Pleistocene alluvial fan deposits have a high potential to contain significant nonrenewable paleontological resources and are assigned a "high paleontological resource sensitivity." Similar older Pleistocene sediments throughout the lowland (valley) areas of Riverside County and the Inland Empire have been reported to yield significant fossils of plants and extinct terrestrial mammals from the last Ice Age. The collections and records search report did not identify any known fossil localities from within 1.0-mile radius of the Project site, which includes the area for this Project site analyzed in this EIR (BFSA 2013b 1-2).

4.4.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to cultural resources if the Project OR any Project-related component would:

1. *Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5;*

2. *Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations, Section 15064.5;*

3. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or*

4. *Disturb any human remains, including those interred outside of formal cemeteries.*

4.4.3 IMPACT ANALYSIS

Threshold 1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?

No historic sites or historic resources are present on the Project site. The Project site was used for agricultural production from approximately the 1950s to 2000. The eastern portion of the Project site (approximately 13.0 acres) is undeveloped land that receives routine maintenance for fire fuel management and weed abatement. The developed western portion of the site contains a large warehouse facility, paved outdoor storage areas and parking lots, an office building and a maintained

detention basin surrounded by fencing. All existing structures on-site are of modern construction, do not contain any distinctive architectural features of historical importance, and are not associated with events or people that made significant contributions to the broad patterns of California's history and cultural heritage and, therefore, do not meet the definition of historical resources as defined by California Code of Regulations §15064.5. Therefore, implementation of the proposed Project has no potential to result in a substantial adverse change to any significant historic resource, because no such resources exist in the Project's ground disturbance area. No impact would occur.

Threshold 2: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations, Section 15064.5?

BFSA archaeologist conducted a California Historic Resources Information System (CHRIS) records search at the Eastern Information Center (EIC), at the University of California, Riverside in Riverside, CA and an intensive pedestrian survey on the undeveloped, eastern portion of the Project site on December 2, 2013. In addition, all areas in the developed western portion of the property that were not covered in parking lots and existing buildings were visually inspected by BFSA investigators. No archaeological cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and BFSA concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the ongoing clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site (BFSA 2013a 5.0-1). Regardless, if significant resources as defined in California Code of Regulations §15064.5 are unearthed during Project-related construction activities, they could be significantly impacted if not appropriately treated. The Project's potential to impact previously undiscovered prehistoric archaeological resources during its construction process, which could result in an adverse change in the significance of the resources pursuant to California Code of Regulations §15064.5, is a potentially significant impact for which mitigation would be required.

Threshold 3: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

No unique geologic features are present on the Project site. According to Figure 5.10-3 of the Moreno Valley General Plan Final EIR (City of Moreno Valley 2006b 5.10-11), the Project area is characterized as having a "Low" potential for containing paleontological resource deposits. Contrary to the Moreno Valley General Plan Final EIR, according to Figure OS-8 of the Riverside County Multipurpose Open Space Element, the Project area is categorized as having a High Potential/Sensitivity (High B) for paleontological resources (Riverside County 2003). The category "High B" indicates that fossils are likely to be encountered at or below four (4) feet of depth. BFSA's records search on a nearby project (contained in *Technical Appendix D2*) concluded that the Holocene alluvium, present on the Project site is considered to be too recently deposited to have the

potential to contain fossil resources and is assigned a "low paleontological sensitivity." However, the older Pleistocene alluvial fan deposits have a high potential to contain significant nonrenewable paleontological resources and are assigned a "high paleontological resource sensitivity." Similar older Pleistocene sediments throughout the lowland (valley) areas of Riverside County and the Inland Empire have been reported to yield significant fossils of plants and extinct terrestrial mammals from the last Ice Age. The collections and records search report, however, did not identify any known fossil localities from within 1.0-mile radius of the Project site, which includes the area for this Project site analyzed in this EIR (BFSA 2013b 1-2).

As previously summarized in EIR Section 4.5, *Geology and Soils*, the Project site is generally underlain by pavements, aggregate base, artificial fill, and alluvium. No paleontological resources have been identified on the Project site and the likelihood of resources to be encountered above four (4) feet is low. The proposed Project would result in ground disturbing activities to depths of no more than four (4) feet, with a deeper excavation of approximately nine (9) feet for the two detention basins.

Because of the high paleontological sensitivity of the older alluvial deposits across the Project site and beneath the thin veneer of younger alluvium, the potential exists to uncover paleontological resources during ground disturbing activities to construct the detention basins. If such resources were discovered on-site and destroyed during construction activities, a significant impact would occur. Therefore, mitigation would be required to reduce the Project's potential impact to paleontological resources below a level of significance.

Threshold 4: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site by BFSA in 2013 did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code, §7050.5 "Disturbance of Human Remains." According to §7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code §5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains

and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code §5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. With mandatory compliance to California Health and Safety Code §7050.5 and Public Resources Code §5097.98, the Project would result in less-than-significant impacts to human remains.

Although impacts to human remains would be less than significant, this EIR recommends mitigation to ensure compliance with California Health and Safety Code §7050.5 and California Public Resources Code §5097.98 (refer to Subsection 4.4.6, below).

4.4.4 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers redevelopment of the Project site in conjunction with other development projects in the vicinity of the Project site resulting from full General Plan buildout in the City of Moreno Valley and other jurisdictions in the region identified in Subsection 4.0.2.

Record searches and field surveys of the Project area indicate the absence of significant historical sites and resources on the Project site; therefore, the Project has no potential to contribute towards a significant cumulative impact to historical sites and resources.

No prehistoric archaeological resources were identified on the site during field investigations conducted in 2013. A records search by BFSA indicated that no prehistoric resources were previously recorded on the Project site. No historic or prehistoric cultural resources were identified by BFSA archeologists during the December 2013 intensive pedestrian survey and it was concluded that due to the disturbed nature of the site and its past uses, if surface deposits of cultural resources were present, they would have been previously disturbed and likely removed. Also, any traces of buried resources would have been exposed by the recent clearing of brush and weeds, and would have been easily identifiable by the field surveys (BFSA 2013a 4.0-2). In addition, the review of the archeological records search information and historical background data for the surrounding area indicated that prehistoric and historic resources are sparse within the immediate vicinity of the Project site. As discussed above under the analysis for Threshold 2, the Project site does not contain any important, known archeological resources and is located within an area that has a low potential for such resources to be discovered. In the unlikely event that such resources are buried beneath the surface of the Project site and/or off-site improvement area which are unearthed and not properly treated, the Project has the potential to significantly impact archeological resources. Other projects within the traditional Tribal Use Area of the Luiseño and Cahuilla tribes would similarly have the potential to impact unknown, subsurface prehistoric archaeological resources during ground-disturbing activities. Therefore, the Project's potential to contribute a cumulatively considerable

impact to subsurface archaeological deposits is a potentially significant impact for which mitigation would be required.

As indicated above under the discussion of Threshold 3, no paleontological resources have been identified on the Project site and the likelihood of resources to be encountered above four (4) feet is low. The proposed Project would result in ground disturbing activities to depths of no more than four (4) feet, with a deeper excavation of approximately nine (9) feet for the two detention basins. Because of the high paleontological sensitivity of the older alluvial deposits across the Project site and beneath the thin veneer of younger alluvium, the potential exists to uncover paleontological resources during ground disturbing activities associated with excavating the detention basins. Other development projects in the cumulative study area with similar geologic characteristics as the Project would have a similar potential to uncover unique paleontological resources. Therefore, the Project's potential to result in a cumulatively considerable impact to a unique paleontological resource is a potentially significant impact for which mitigation would be required.

Finally, due to mandatory compliance required of all ground-disturbing construction activities with the provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq., human remains would be assured proper treatment if encountered. Because other development projects within the City of Moreno Valley and elsewhere in the region similarly would be required to comply with state law, any cumulative impact associated with human remains discovery would be reduced to below a level of significance.

4.4.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: No Impact. The Project would not impact a historic resource. No historic sites are present on the Project site or in its off-site improvement area; therefore, no historic sites could be altered or destroyed by construction or operation of the proposed Project.

Threshold 2: Significant Direct and Cumulative Impact. Implementation of the Project has the potential, however unlikely, to unearth and adversely impact archaeological resources that may be buried beneath the ground surface during Project construction activities.

Threshold 3: Significant Direct and Cumulative Impact. Implementation of the Project has the potential, however unlikely, to unearth and adversely impact paleontological resources that may be buried beneath the ground surface during excavation of the detention basins.

Threshold 4: Less-than-Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 and California Public Resources Code §5097 et. seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.

4.4.6 MITIGATION

The following mitigation measures are recommended to reduce the Project's potential to result in significant to archeological and paleontological resources during construction-related activities.

Archaeological Resources

MM 4.4-1 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.

MM 4.4-2 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils.

MM 4.4-3 During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as the monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure MM 4.4-4 shall apply.

MM 4.4-4 If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center.

Paleontological Resources

MM 4.4-5 Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City of Moreno Valley that a qualified paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities for the Project's detention basins and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

MM 4.4-6 During excavation activities for the detention basins, a qualified paleontological monitor shall monitor excavation activities below four (4) feet in depth. The Paleontological monitor shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontological monitor must be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have a low potential to contain or yield fossil resources.

MM 4.4-7 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the Western Science Museum in Hemet, California, is required for significant discoveries.

MM 4.4-8 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Moreno Valley prior to issuance of the Project's first occupancy permit..

Although impacts to human remains would be less than significant, the following mitigation measure is recommended to ensure compliance with California Health and Safety Code §7050.5 and California Public Resources Code §5097.98.

MM 4.4-9 Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note shall also be specified in bid documents issued by prospective construction contractors.

a) If human remains are encountered, California Health and Safety Code §7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.

4.4.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold 2: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.4-1 through MM 4.4-4 would ensure that any significant archaeological resource uncovered on the Project site would be properly treated and mitigated to a level of less than significant. As such, impacts would be less-than-significant with mitigation.

Threshold 3: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.4-5 through MM 4.4-9 would ensure that any significant paleontological resource uncovered on the Project site during excavation activities in older Pleistocene alluvial fan deposits would be properly treated and mitigated to a level of less than significant. As such, impacts would be less-than-significant with mitigation.

4.5 GEOLOGY AND SOILS

This subsection assesses the existing surface and subsurface geologic conditions and features of the Project site and determines the potential for impacts associated with these features. The analysis is based in part on information contained in the report titled "Geotechnical Investigation and Liquefaction Evaluation Proposed Dorado Logistics Center NEC of Perris Boulevard and Modular Way Moreno Valley, California," prepared by Southern California Geotechnical, Inc. and dated October 3, 2012. The geotechnical investigation is provided as *Technical Appendix E1* to this EIR. In addition, information used to support the analysis in this subsection was obtained from the Geology and Soils section (Section 5.6, pp. 5.6-1 – 5.6-12) of the certified Final Program EIR prepared for the City of Moreno Valley General Plan (SCH No. 2000091075), dated July 2006 (Moreno Valley 2006b).

4.5.1 EXISTING CONDITIONS

A. Regional Geology

The Project site is located within the Peninsular Range Geomorphic Province, a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded on the east by the Colorado Desert. The Peninsular Range is characterized by steep, elongated ranges and valleys that generally trend northwesterly (California Department of Conservation 2002). More specifically, the Project site is situated within the Perris Block unit, which is mass of granitic rock. Thin sedimentary, metamorphic, and volcanic units locally mantle the bedrock with alluvial deposits filling in the lower valley and drainage areas. The Perris Block is bounded by the San Jacinto fault zone to the northeast, the Elsinore fault zone to the southwest, and the Santa Ana River (City of Moreno Valley 2006b 5.6).

B. Geotechnical Conditions

Southern California Geotechnical, Inc. performed visual site reconnaissance, subsurface exploration, field and laboratory testing, and a geotechnical engineering analysis on the Project site. The developed, western portion of the site generally is underlain with artificial fill materials extending to depths of approximately nine (9) feet, with native alluvial soils located underneath. The undeveloped, eastern portion of the Project site generally is underlain by native alluvial soil. The geotechnical conditions at the time of subsurface exploration are documented below.

❑ Pavements

Pavements were encountered at the ground surface in three (3) of the borings obtained by Southern California Geotechnical, Inc. The pavements consisted of approximately five (5) to seven (7) inches of Portland cement concrete with no discernable underlying aggregate base (Southern California Geotechnical, Inc. 2012 7).

- **Aggregate Base**

A layer of aggregate base approximately two (2) to three (3) inches thick was encountered in the center of the Project site, within the parking/storage portion of the Eldorado Stone facility (Southern California Geotechnical, Inc. 2012 7).

- **Artificial Fill**

Artificial fill soils were encountered beneath existing pavements and aggregate base areas within the developed, western portion of the site. Southern California Geotechnical Inc., observed the fill soils extending to depths of approximately 2.5 to nine (9) feet, and consisting of medium stiff to very stiff, mottled, sandy clays and medium dense sandy silts (Southern California Geotechnical, Inc. 2012 7).

- **Alluvium**

Southern California Geotechnical Inc., encountered native alluvial soils extending to the maximum explored depth of 50 feet below existing site grades beneath the entirety of the Project site. Native alluvial soils were encountered beneath the artificial fills, aggregate base, and existing pavement in the developed portion of the Project site, and at the surface in the vacant, eastern portion of the site. The alluvial soils consist of interbeded layers of stiff to hard clayey silts, sandy clays, and loose to medium dense sandy silts, silty sands, and clayey sands (Southern California Geotechnical, Inc. 2012 8).

C. Surface Water and Groundwater

Southern California Geotechnical Inc. did not observe any surface water on the Project site; however, free water was encountered in one (1) subsurface boring on the Project site at a depth of 25 feet. Based on the observed water level reading and the moisture content of recovered soil samples, Southern California Geotechnical, Inc. determined the static groundwater table existed at a depth of approximately 25 feet across the Project site at the time of subsurface exploration (Southern California Geotechnical, Inc. 2012 8).

D. Site Topography

The majority of the Project site slopes gently towards the center of the property where there is a constructed storm water detention basin. The eastern portion of the Project site slopes gently to the southeast at a gradient of less than one percent. The topographic low point on the property is at the bottom of the detention basin located in the center of the property at approximately 1,468 feet AMSL. There are no unique topographic features or steep natural slopes present on the property. The earthen storm water detention basin in the center of the Project site contains the only manufactured slopes on the Project site. Figure 3-3, *Topographic Map*, illustrates the Project site's existing topographic conditions.

E. Seismic Hazards

The geologic structure of the Southern California area is dominated by northwest-trending faults associated with the San Andreas Fault system. The San Andreas Fault system includes several major branches, including the San Jacinto and Elsinore faults, as well as numerous minor branches. The San Andreas, Elsinore, and San Jacinto faults are known to have ruptured the ground surface during historic seismic events. The Project site is located in an area that is subject to strong ground motions due to earthquakes (Southern California Geotechnical, Inc. 2012 12). Figure 4.5-1, *Earthquake Fault Zones*, depicts the known active earthquake faults within the vicinity of the Project site. An active fault is defined by the California Geological Survey as one which has experienced surface displacement within the Holocene Epoch (roughly the last 11,000 years). As depicted on Figure 4.5-1, the nearest known active fault is the San Jacinto Valley section of the San Jacinto Fault Zone (Casa Loma Fault), which is located 6.2 miles east of the Project site (City of Moreno Valley Final Program EIR Figure 5.6-2). No active or potentially active faults occur on the Project site, and the site does not lie within an identified Alquist-Priolo Earthquake Fault Zone or within a City-designated fault zone (City of Moreno Valley 2006b 5.6-4; Southern California Geotechnical, Inc. 2012 12).

Secondary hazards associated with ground shaking associated with earthquakes include surface rupture, ground failure, unstable soils and slopes (liquefaction). Each of these hazards is briefly described below.

❑ Fault Rupture

Fault rupture can occur along pre-existing, known active fault traces; however, fault rupture also can splay from known active faults or rupture along unidentified fault traces. As shown on Figure 4.5-1, no known faults are mapped trending through or toward the site. Therefore, the potential for significant fault rupture on the Project site is low (Southern California Geotechnical Inc. 2012 12).

❑ Liquefaction

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions, which causes the soil to behave as a viscous liquid. Liquefaction is generally limited to the upper 50 feet of subsurface soils. Research and historical data indicate that loose granular soils below a near-surface groundwater table are most susceptible to liquefaction, while the stability of most clayey material is not adversely affected by vibratory motion. Therefore, in order for the potential effects of liquefaction to be manifested at the ground surface, soils generally must be granular, loose to medium dense, relatively saturated near the ground surface and subjected to a sufficient magnitude and duration of ground shaking. According to the Moreno Valley General Plan FEIR Figure 5.6-2, *Seismic Hazards*, the Project site is not located within a potential liquefaction zone (City of Moreno Valley 2006b Figure 5.6-2). In addition, Southern California Geotechnical Inc. determined that the subsurface conditions (very stiff sandy clays) encountered at boring locations are not susceptible to liquefaction (Southern California Geotechnical, Inc. 2012 14).

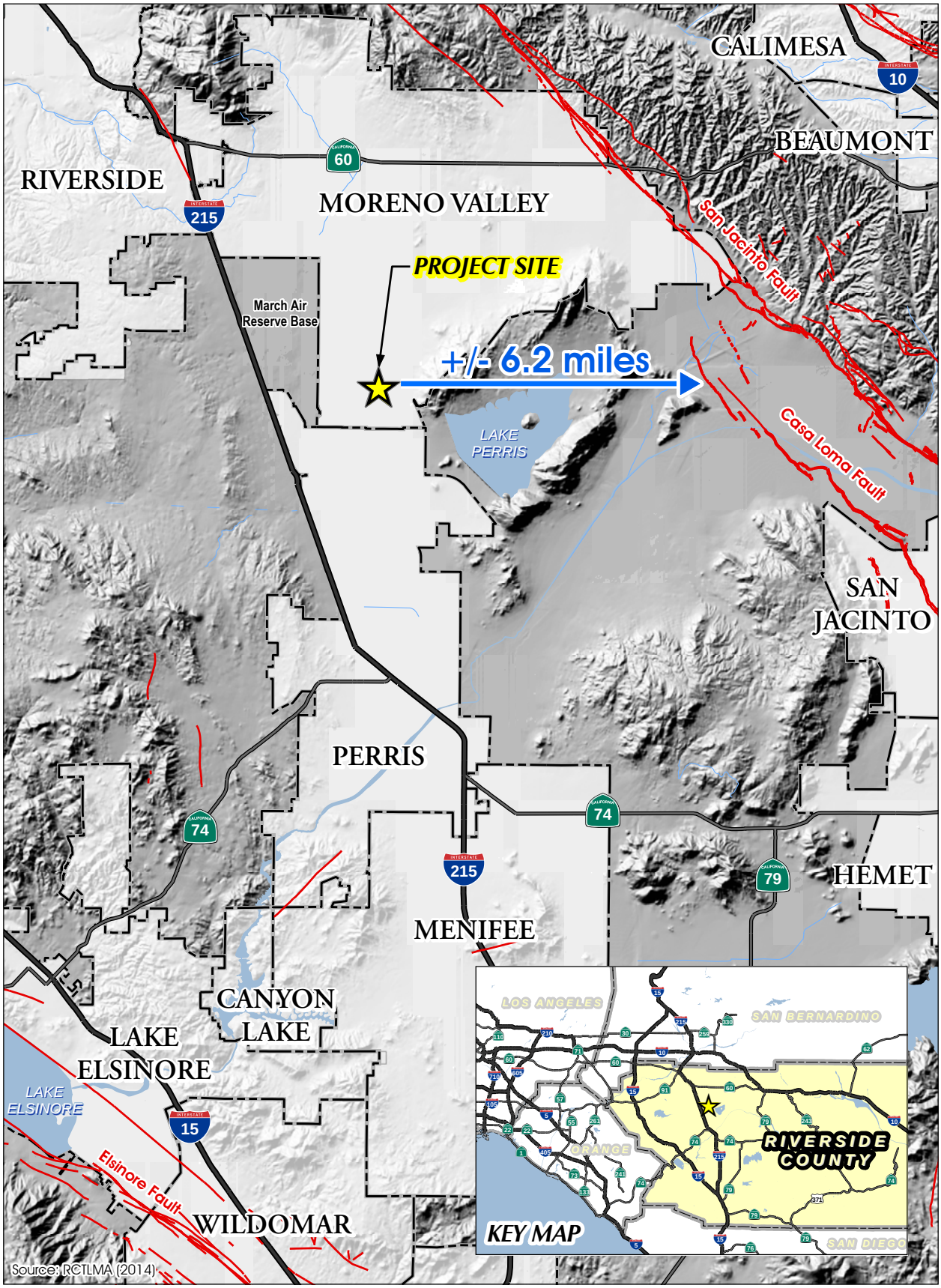


Figure 4.5-1

Earthquake Fault Zones

❑ Unstable Soils and Slopes

The Project site is generally flat and does not contain any steep natural slopes or rock outcroppings. The Project site does contain one storm water detention basin with earthen, manufactured slopes; however, these slopes are not substantial (*i.e.*, less than eight (8) feet in height) and are engineered to maximize stability during seismic events. As such, the site is not susceptible to seismically induced landslides and rockfalls.

F. Slope and Soil Instability Hazards

❑ Soil Erosion

Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Additionally, the slope gradient on which a given soil is located also contributes to the soil's resistance to erosive forces. Because water is able to flow faster down steeper gradients, the steeper the slope on which a given soil is located, the more readily it will erode. The soils series on the Project site range from fair to good and poor to fair stability, which corresponds to a minimal to significant potential for water erosion (USDA 2014, City of Moreno Valley 2006b 5.6-3).

Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. It mostly affects dry, sandy soils in flat, bare areas, but wind erosion may occur wherever soil is loose, dry, and finely granulated. Under existing conditions, the developed western portion of the Project site has no potential to contribute windblown soil and sand because this portion of the site does not contain exposed topsoil. Under existing conditions, the eastern, undeveloped portion of the Project site has the potential to contribute windblown soil and sand because this portion of the Project site does not contain vegetative cover; this eastern portion of the site is routinely disced and contains areas of loose and dry topsoil.

❑ Settlement Potential

Laboratory testing conducted by Southern Geotechnical, Inc. indicates that the near surface artificial fill soils within the developed, western portion of the Project site possess a low potential for settlement, as these soils were placed as engineered, compacted fill (Southern California Geotechnical Inc. 2012 pp. 14-15). The native alluvial soils encountered in the eastern portion of the Project site possess physical properties that make these soils susceptible to settlement (Southern California Geotechnical Inc. 2012 15).

❑ Shrinkage/Subsidence Potential

Subsidence is a gradual settling or sudden sinking of the ground surface. The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Laboratory testing on soil samples taken from the site by Southern California Geotechnical, Inc. indicate that removal and re-compaction of the near surface soils is estimated to

result in an average shrinkage of 12 to 16 percent (Southern California Geotechnical, Inc. 2012 16). Therefore, the subject property has the potential for shrinkage and subsidence.

❑ Soil Expansion Potential

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. Based on expansion index testing on soil samples taken from the Project site, Southern California Geotechnical, Inc. determined that the site's soils consisting of silty clays, clayey silts, and sandy clays have a low to medium expansion potential (Southern California Geotechnical, Inc. 2012 15).

❑ Landslide Potential

The Project site and immediately surrounding properties are flat to gently sloping and contain no large and/or steep natural or manufactured slopes; thus, there is no potential for landslides to occur on or immediately adjacent to the site.

G. Applicable Environmental Regulations

❑ Alquist-Priolo Earthquake Fault Zoning Act (CA Pub. Res. Code §2621 et Seq.)

The Alquist-Priolo Special Studies Zone Act was signed into law in 1972 and renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994. The primary purpose of the Alquist-Priolo Act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault.

❑ Seismic Hazards Mapping Act (CA Pub. Res. Code §2690 et Seq.)

The Seismic Hazards Mapping Act of 1990 is a statewide seismic hazard mapping and technical advisory program in California to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes. The California Geologic Survey (CGS) is the principal State implementing agency which has mapped out seismic zones requiring the completion of site-specific geotechnical investigations prior to construction of a project.

❑ California Building Standards Code, Title 24

The California Building Standards Code (CBSC) (California Code of Regulations, Title 24) is the standard from which California buildings derive appropriate building design standards related to building foundation support, protection from seismic ground motion, and soil and slope instability. The International Building Code (IBC) used by the International Code Council establishes design and construction standards for buildings and facilities. The California Building Code (CBC, California Code of Regulations, Title 24, Part 2) component of the CBSC incorporates the IBC as well as other uniform codes into its code standards.

❑ South Coast Air Quality Management District, Rule 403

The South Coast Air Quality Management District (SCAQMD) is responsible for enforcing air pollution control measures in the South Coast Air Basin, within which the Project site is located. Rule 403 addresses blowing dust from construction sites and is applicable to the Project due to its potential to result in wind erosion during grading and construction activities.

❑ Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)) is the principal federal statute that addresses water resources. The provision of the CWA applicable to geology and soils is CWA Section 402, which applies to all construction sites of over one acre in size and, in part, serves to control the potential impacts of erosion. CWA Section 402 authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit. In addition, the NPDES program requires Municipal Separate Storm Sewer System (MS4) permits to regulate storm water discharges from municipal sewer systems.

H. Applicable Local Ordinances

❑ Moreno Valley Municipal Code §9.08.160

In cases where a proposed project falls within an earthquake fault zone as shown on the maps prepared by the State Geologist, Municipal Code §9.08.160 requires compliance with all of the provisions of the Alquist-Priolo Act and the adopted policies and criteria of this ordinance.

❑ Moreno Valley Municipal Code §8.21.150

Municipal Code §8.21.150 establishes standards and requirements for grading permits. This ordinance requires a soils engineering and engineering geology report (geotechnical report) be prepared for all grading projects. Recommendations contained in the approved geotechnical report are required to be incorporated into the grading plans and specifications and shall become conditions of the grading permit for the Project.

❑ Moreno Valley Municipal Code §8.21.160

Municipal Code §8.21.160 requires that all earth moving or grading operations requiring a grading permit also have an approved erosion control plan. The erosion control plan is required to be submitted to the City Engineer for approval concurrent with the grading permit and/or grading plan submittal. The erosion control plan shall include details of protective measures necessary to protect adjoining public or private property from damage by erosion, flooding, or mud and/or debris deposits which may originate from the site or result from proposed grading operations.

- **Moreno Valley Municipal Code §8.23**

Municipal Code §8.23 requires that all projects comply with California Building Codes and the International Building Codes. The City's Building and Safety Division is responsible for providing technical expertise in reviewing and enforcing the Building Code. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public. The Building Code contains minimum baseline standards to guard against unsafe development.

4.5.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to geology and soils if the Project or any Project-related component would:

1. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:*
    i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;*
    ii. *Strong seismic ground shaking;*
    iii. *Seismic-related ground failure, including liquefaction; or*
    iv. *Landslides.*
2. *Result in substantial soil erosion or the loss of topsoil;*
3. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*
4. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or*
5. *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.*

4.5.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:***
	i. ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;***
	ii. ***Strong seismic ground shaking;***
	iii. ***Seismic-related ground failure, including liquefaction; or***
	iv. ***Landslides?***

❑ Rupture of Known Earthquake Fault

There are no known active or potentially active faults on the Project site or trending toward the Project site. In addition, the Project site is not located within a mapped Alquist-Priolo Earthquake Fault Zone (Southern California Geotechnical, Inc. 2012 12). The closest mapped active fault to the Project site is located approximately 6.2 miles east of the Project site (Casa Loma Fault, City of Moreno Valley Final Program EIR Figure 5.6-2). There are no other conditions on-site or in the surrounding area that provide evidence of any other faults that could impact the Project site. Accordingly, the proposed Project would not expose people or structures to potential adverse effects, including the risk of loss, injury or death, involving the rupture of a known earthquake fault. No impact would occur and mitigation is not required.

❑ Strong Seismic Ground Shaking

The Project site is located in a seismically active area of Southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the Southern California area. As a mandatory condition of Project approval, the Project would be required to construct proposed structures in accordance with the California Building Code (CBC), also known as California Code of Regulations (CCR), Title 24 and the City Building Code. The CBC and City Building Code are designed to preclude significant adverse effects associated with strong seismic ground shaking. In addition, in accordance with Mitigation Measure 4.5-2 and required by code, the Project will be conditioned to comply with the site-specific ground preparation and construction recommendations contained in the geotechnical report prepared for the Project. Refer to *Technical Appendix E1*. Mandatory compliance with these standard and site-specific design and construction measures would ensure than the Project has a less-than-significant impact associated with seismically induced ground shaking. As such, the Project would not expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking.

Although impacts associated with seismic shaking would be less than significant, this EIR recommends mitigation to ensure compliance with the California Code of Regulations, Title 24 and

the site-specific design recommendations contained within the Project's geotechnical report (refer to Subsection 4.5.6, below).

❑ Seismic-Related Ground Failure

Southern Geotechnical Inc. determined that the subsurface soil conditions at the Project site are not susceptible to liquefaction (Southern California Geotechnical, Inc. 2012 14). Furthermore, the proposed Project is required to be designed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBC and City Building Code. Also, the Project would be required to comply with the site-specific grading and construction recommendations contained within the Project's geotechnical report (pursuant to the City's conditions of approval), which are anticipated to further reduce the risk of seismic-related ground failure. As such, the Project would result in less-than-significant impacts associated with seismic-related ground failure and/or liquefaction hazards.

Although impacts associated with seismic-related ground failure would be less than significant, this EIR recommends mitigation to ensure that the Project would be implemented in accordance with the recommendations included in the Project's geotechnical report (refer to Subsection 4.5.6, below).

❑ Landslides

The Project site is relatively flat, as is the surrounding area. There are no hillsides or steep slopes on the Project site or in the immediate vicinity of the site. Accordingly, the Project site is located within an area having low potential for landslides and development on the subject property would not be exposed landslide risks. The Project would not result in the creation of any new on-site slopes, with the exception of the approximate 9-foot manufactured slopes around the perimeter of the proposed water quality/detention basins with a maximum incline of 3:1; therefore, these slopes would not contain a significant slope and would be engineered to maximize stability so as to not pose a threat to future site workers or the proposed building on-site. As such, the Project would result in less-than-significant impacts associated with landslides and mitigation is not required.

Threshold 2: Would the Project result in substantial soil erosion or the loss of topsoil?

Development of the Project site would disturb the subject property during grading and construction and expose underlying soils, which would increase erosion susceptibility. In the long-term, development of the Project site would introduce additional impervious surfaces and landscaping on the Project site, thereby reducing the potential for erosion and loss of topsoil.

❑ Temporary Construction-Related Activities

Under existing conditions, the western portion of the Project site is developed with industrial land uses and does not contain exposed soils subject to erosion; however, the undeveloped, eastern portion of Project site is subject to some wind and water erosion under existing conditions, due to routine weed abatement activities which regularly remove vegetative cover and disturb on-site soils.

Proposed demolition, grading, and construction activities on the western portion of the Project site would expose underlying soils beneath the existing Eldorado Stone facility; proposed grading and construction activities on the eastern portion of the site would continue to temporarily expose underlying soils on this portion of the property. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing surface cover and vegetation and exposure of these erodible materials to wind and water. Based on the foregoing, the Project site would be susceptible to erosion during the construction phase of the Project.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. The City's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measures (*i.e.*, Best Management Practices) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges during construction. In addition, the Project would be required to comply with §8.21.160 of the City's Municipal Code during all grading and construction activities involving the movement or exposure of earth materials. Municipal Code §8.21.160 establishes requirements for the control of erosion during construction (including wind erosion). Further, as described previously in EIR Subsection 4.2, *Air Quality*, the Project would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. With mandatory compliance to the erosion control measures noted in the Project's SWPPP, as well as applicable regulatory requirements, the potential for substantial water and/or wind erosion during Project construction would be less than significant.

Although the Project would result in less-than-significant impacts to soil erosion during construction, this EIR recommends mitigation to ensure compliance with regulatory permitting requirements and minimize the potential for erosion at the Project site during temporary construction activities (refer to Subsection 4.5.6, below).

❑ Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Implementation of the Project would result in less long-term erosion and loss of topsoil than occurs under the site's existing conditions.

The City's MS4 NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a Project-specific Water Quality Management Plan (WQMP). The WQMP (refer to *Technical Appendix E2*) identifies an effective combination of erosion control and sediment control measures (*i.e.*, Best Management Practices) to reduce or eliminate discharge to surface water from

storm water and non-storm water discharges. The WQMP for the Project requires post-construction measures to ensure on-going erosion protection. Compliance with the WQMP would be required as a condition of Project approval and long-term maintenance of on-site water quality features is required. Therefore, implementation of the proposed Project would not result in substantial soil erosion during long-term operational activities; impacts would be less than significant.

Although long-term operation of the Project would result in less-than-significant soil erosion impacts, this EIR recommends mitigation to ensure compliance with regulatory permitting requirements and minimize the potential for erosion at the Project site during long-term operational activities (refer to Subsection 4.5.6, below).

Threshold 3:	***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

The Project site is flat and gently sloping and contains no substantial natural or man-made slopes. There is no evidence of on-site landslides on or near the Project site, nor are there any exposed boulders that could result in rock fall hazards. Slopes constructed as part of the Project are limited to the approximate 9-foot manufactured slopes along the perimeter of the proposed water quality/detention basins, which would be engineered for long term stability and would be required to comply with the site-specific recommendations contained within the Project's geotechnical reports. Accordingly, the Project would result in less-than-significant impacts associated with landslides and rock fall hazards..

Laboratory testing conducted by Southern Geotechnical, Inc. indicates that the near surface alluvial soils on the Project site have the potential for subsidence and collapse (Southern California Geotechnical Inc. 2012 15). However, the Project's geotechnical report indicates that the property's subsidence and collapse potential would be reduced to less-than-significant levels through removal of undocumented fill soils and compressible native alluvium down to competent materials and replacement with properly compacted fill, which is included as a recommendation in the Project's geotechnical report. Refer to *Technical Appendix E1*. The proposed Project would be required to incorporate the recommendations contained within *Technical Appendix E1* into the grading plan for the Project through standard conditions of approval. As such, implementation of the Project would result in less-than-significant impacts associated with soil subsidence and collapse. Although potential impacts associated with soil subsidence and collapse would be less than significant, Mitigation Measure 4.5-2 has nonetheless been identified out an abundance of caution to ensure compliance with the recommendations of the site-specific geotechnical report.

Lateral spreading is primarily associated with liquefaction hazards, and occurs when the ground slides on a buried liquefied layer, potentially resulting in damage to structures placed above such layers. As noted above under the discussion of Threshold 1, the potential for liquefaction at the site is considered low based on a site-specific analysis conducted by Southern California Geotechnical,

Inc. Similarly, and based on the findings of the site-specific geotechnical report, the potential for lateral spreading on the Project site would be low and thus result in less-than-significant impacts.

Threshold 4: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Note: Appendix G of the CEQA Guidelines references Table 18-1-B of the 1994 Uniform Building Code (UBC). This Table no longer exists. The adopted 2001 California Building Code included a "Classification of Expansive Soil" that correlated an expansion index with the potential for soil expansion. The subsequent updates to the California Building Code (2007 and 2010), contained information on expansive soils, but no longer included a reference to Table 18-1-B. The Building Code currently in effect, the 2013 CBC, references ASTM D-4829, a standard procedure for testing and evaluating the expansion index (or expansion potential) of soils established by ASTM International, which was formerly known as the American Society for Testing and Materials (ASTM).

As documented in the Project's geotechnical report contained as *Technical Appendix E1*, the Project site contains soils with "low" to "medium" expansion potential. With mandatory implementation of standard building requirements, including the requirements of the CBC and City Building Code, and the site-specific grading and construction recommendations contained within the Project's geotechnical report, on-site soils would be adequately stabilized to accommodate the proposed development. Accordingly, implementation of the proposed Project would result in less-than-significant impacts associated with expansive soils.

Although impacts associated with expansive soils would be less than significant, this EIR recommends mitigation to ensure compliance with the Project's geotechnical report and applicable regulatory requirements (refer to Subsection 4.5.6, below).

Threshold 5: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project does not propose the use of septic tanks or alternative waste water disposal systems. The Project would install domestic sewer infrastructure and connect to the EMWD's existing sewer conveyance and treatment system. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur and mitigation is not required.

4.5.4 CUMULATIVE IMPACT ANALYSIS

As noted in the foregoing analysis of the Project's direct impacts, all potential Project-specific impacts related to geology and soils would be below the thresholds of significance identified in Subsection 4.5.2 through conformance as part of the Project's design and conformance with the

geotechnical recommendations contained within the Project geotechnical report (*Technical Appendix E1*) and compliance with standard regulatory requirements.

With exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, issues including fault rupture, seismic ground shaking, liquefaction, landslides, and expansive soils would involve effects to (and not from) the proposed development, and are specific to on-site conditions. Accordingly, addressing these potential hazards for the development proposed on the Project site have no relationship to, or impact on, off-site areas. Due to the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties.

As discussed under Threshold 2, during both near-term construction and long-term operation, measures would be incorporated into the Project's design to ensure that substantial erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with SWPPPs and WQMPs. All projects in the cumulative study area also would be required to comply with SCAQMD Rule 403 and grading requirements of the local governing body (i.e. City Municipal Code §8.21.160), which would preclude wind-related erosion hazards during construction. Project-level mitigation is intended to ensure compliance with these codes and regulations; other development projects within the cumulative study area also would be required to comply with these applicable building codes. Therefore, because the Project would result in less than significant erosion impacts, and because other projects within the cumulative study area would be subject to similar requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant and the Project's contribution would be less than cumulatively considerable.

4.5.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Less-than-Significant Impact. The Project would not expose people or structures to substantial adverse seismic risks. There are no known active or potentially active faults on the Project site or trending toward the Project site. As with all properties within the Southern California region, the Project site is subject to seismic ground shaking associated with earthquakes. However, mandatory compliance with local and state ordinances and building codes would ensure that development is built as required to attenuate the risk to life or property to less than significant levels. The risk of liquefaction is low. The site would be designed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBC and City Building Code, as well as the site-specific recommendations contained within the Project's geotechnical report, which are anticipated to further reduce the risk of seismic-related ground failure. As such, impacts associated with seismic-related ground failure and/or liquefaction hazards would be less than significant. There is no risk of landslide.

Threshold 2: Less-than-Significant Impact. The Project would prepare and implement a SWPPP and WQMP, and also would be required to comply with the provisions of the City's MS4 NPDES Municipal Stormwater Permit, to minimize the potential for substantial waterborne erosion at the Project site during temporary near-term construction activities and long-term operational activities. Additionally, the Project would be required to comply with City Municipal Code §8.21.160 and SCAQMD Rule 403 to preclude substantial wind erosion.

Threshold 3: Less-than-Significant Impact. There is no potential for the Project to cause rockfalls, landslides, or lateral spreading. Soils on the site have the potential for collapse and subsidence; however, potential adverse effects associated with such conditions would be reduced to less-than-significant levels with mandatory compliance to the recommendations provided within the Project's geotechnical study, including requirements to remove and recompact areas where unstable soil conditions exist.

Threshold 4: Less than Significant Impact. The soils on the Project site have a low to medium expansion potential under existing conditions. Potential adverse effects associated with expansive soils would be reduced to less-than-significant levels with mandatory compliance with the recommendations provided within the Project geotechnical study, including requirements to remove and recompact areas where such unsuitable soil conditions exist.

Threshold 5: No Impact. The Project would not install septic tanks or alternative wastewater disposal systems. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

4.5.6 MITIGATION

Although impacts associated with seismic ground shaking would be less than significant, mitigation measures below are recommended to ensure that the Project complies with standard regulatory requirements and site-specific design recommendations to minimize potential hazards associated with seismic events.

4.5-1 Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.

a. Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.

4.5-2 Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Applicant shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Report on file with the City associated with PA13-0063. The City shall verify that all of the recommendations given in the Project's Geotechnical Report and written determination are incorporated into the grading and building

specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.

Although the Project would not result in substantial soil erosion, the mitigation measures below are recommended to ensure that the Project complies with standards regulatory permitting requirements to minimize the potential for soil erosion:

4.5-3 Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Moreno Valley prior to issuance of the first grading permit.

4.5-4 Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

4.5-5 Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with PA13-0063 and permit periodic inspection of the construction site by City of Moreno Valley staff or its designee to confirm compliance.

4.6 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a report prepared by Urban Crossroads, Inc. titled "Modular Logistics Center Greenhouse Gas Analysis," dated September 26, 2014, and included as *Technical Appendix F* to this EIR. The technical report and analysis in this subsection assess the proposed Project's potential to generate greenhouse gas emissions that could contribute to global climate change and its associated environmental effects.

4.6.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

Global climate change (GCC) refers to the change in average meteorological conditions on the Earth with respect to temperature, wind patterns, precipitation, and storms. Debate exists within the scientific community regarding the extent to which GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred naturally over the course of thousands or millions of years and that these historical changes to the Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, other scientists believe that the climate shift taking place since approximately year 1900 is occurring at a quicker rate and magnitude than in the past as a result of human activity and industrialization (Urban Crossroads 2014c 10).

Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases (GHGs) in the Earth's atmosphere. These gases include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), and fluorinated gases. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. These gases that trap heat in the atmosphere are referred to collectively in this EIR as GHGs, which are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural GHG effect, the Earth's average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently (Urban Crossroads 2014c pp. 10-11).

It is not possible for an individual project like the proposed Project to generate enough GHG emissions to make a discernible change in global climate (Urban Crossroads 2014c 8). However, the proposed Project may participate in the potential for GCC through its incremental contribution of GHG emissions when considered in combination with other worldwide sources of GHGs.

B. Greenhouse Gases

Emissions of CO_2, N_2O, and CH_4 are the focus of evaluation in this Subsection because these gases are the primary contributors to GCC from land development projects. Although other substances such as fluorinated gases also contribute to GCC, sources of fluorinated gases are not well defined and no accepted emissions factors or methodology exist to accurately calculate these gases (Urban Crossroads 2014c 12).

GHGs have varying global warming potential (GWP) values. GWP values represent the potential of a gas to trap heat in the atmosphere. CO_2 is used as the reference gas for GWP, and thus has a GWP of 1. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.6-1, *GWP and Atmospheric Life of Select GHGs*. As shown in Table 4.6-1, GWP ranges from 1 for CO_2 to 23,900 for sulfur hexaflouroethene (SF_6).

Table 4.6-1 GWP and Atmospheric Life of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100 year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12 ± 3	21
Nitrous Oxide (N_2O)	120	310
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CH_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: Urban Crossroads 2014c, Table 2-2.

Provided below is a description of the various gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Sections 2.4, 2.5, and 2.6 of *Technical Appendix F* and the reference sources cited therein.

- Water Vapor (H_2O) is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation, thereby allowing less energy to reach the Earth's surface and heat it up. There are no human health effects from water vapor itself;

however, when some pollutants come in contact with water vapor, they can dissolve and the water vapor can then act as a pollutant-carrying agent.

- Carbon Dioxide (CO_2) is an odorless and colorless GHG that is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Manmade sources include: the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases CO_2 emissions has increased dramatically. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Exposure to CO_2 in high concentrations can cause human health effects, but outdoor levels are not high enough to adversely affect human health.

- Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning. No human health effects are known to occur from atmospheric exposure to methane.

- Nitrous Oxide (N_2O) concentrations began to rise in the atmosphere at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is used as an aerosol spray propellant, (*e.g.*, in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. Also known as laughing gas, N_2O is a colorless GHG that can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage.

- Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 and have no natural source. CFCs were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was

undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, due to their long atmospheric lifetime, some of the CFCs will remain in the atmosphere for over 100 years.

- Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order largest to smallest), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23 emissions. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No human health effects are known to result from exposure to HFCs, which are manmade and used for applications such as automobile air conditioners and refrigerants.

- Perfluorocarbons (PFCs) are primarily produced for aluminum production and semiconductor manufacture. PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. No human health effects are known to result from exposure to PFCs.

- Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The U.S. Environmental Protection Agency (EPA) indicates that concentrations in the 1990's were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

C. *Greenhouse Gas Emissions Inventories*

❑ Global

Worldwide anthropogenic (man-made) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Man-made GHG emissions data for Annex I nations are available through Year 2011. For the Year 2011, the sum of these emissions totaled approximately 25,285,543 gigagrams of carbon dioxide equivalent (GgCO2e), as shown in Table 4.6-2, *Top GHG Producer Countries and the European Union*, which equates to approximately 25,285.54 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). The GHG emissions in more recent years may differ from the inventories presented in Table 4.6-2; however, the data is representative of the currently available inventory date (Urban Crossroads 2014c pp. 10-11).

Table 4.6-2 Top GHG Producer Countries and the European Union

EMITTING COUNTRIES	GHG EMISSIONS ($GgCO_2e$) IN 2011
China	8,715,307
United States	6,665,700
European Union	4,550,212
Russian Federation	2,320,834
India	1,725,762
Japan	1,307,728
Total	**25,285,543**

Gg = gigagram
Source: Urban Crossroads 2014c, Table 2-1.

❑ United States

As noted in Table 4.6-2, the United States, as a single country, was the second highest producer of GHG emissions in 2011. The primary GHG emitted by human activities in the United States was CO_2, representing approximately 83% of the United States' total GHGs. CO_2 from fossil fuel combustion, the largest source of United States' GHG emissions, accounted for approximately 78% of the United States' 2011 GHG emissions (Urban Crossroads 2014c 11).

❑ State of California

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based upon the 2012 GHG inventory data (*i.e.*, the latest year for which data is available, 2000 – 2012 GHG inventory), California emitted 459 MMTCO2e including emissions resulting from imported electrical power in 2012. Based on the CARB inventory data and GHG inventories compiled by the World Resources Institute, California's total statewide GHG emissions rank second in the United States (Texas is number one) with emissions of 415 MMTCO2e, excluding emissions related to imported power (Urban Crossroads 2014c 11).

Although California's rate of growth of GHG emissions is slowing, the state is still a substantial contributor to the United States' GHG emissions inventory total. Despite a population increase of 16% between 1990 and 2004, and based on a review of GHG inventories for those years, California had significantly slowed the rate of growth of GHG emissions. This is in part due to the implementation of energy efficiency programs as well as adoption of strict emission controls by federal and state agencies (Urban Crossroads 2014c 12).

D. Potential Effects of Climate Change in California

The California Environmental Protection Agency (CalEPA) published a report titled "Scenarios of Climate Change in California: An Overview" (herein called the "Climate Scenarios report") in February 2006, that is generally instructive about effects of climate change in California. The Climate Scenarios report used a range of emissions scenarios developed by the Intergovernmental

Panel on Climate Change (IPCC) to project a series of potential warming ranges (*i.e.*, temperature increases) that may occur in California during the 21st century: lower warming range (3.0-5.5°F); medium warming range (5.5-8.0°F); and higher warming range (8.0-10.5°F). The Climate Scenarios report then presents an analysis of future climate in California under each warming range, that while uncertain, present a picture of the GCC induced trends in California (California Environmental Protection Agency 2006).

In addition, the California Natural Resources Agency adopted a "California Climate Adaptation Strategy" in 2009. This report details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes, and responds to the Governor's Executive Order S-13-2008 that called on state agencies to develop California's strategy to identify and prepare for expected climate impacts (California Natural Resources Agency 2009).

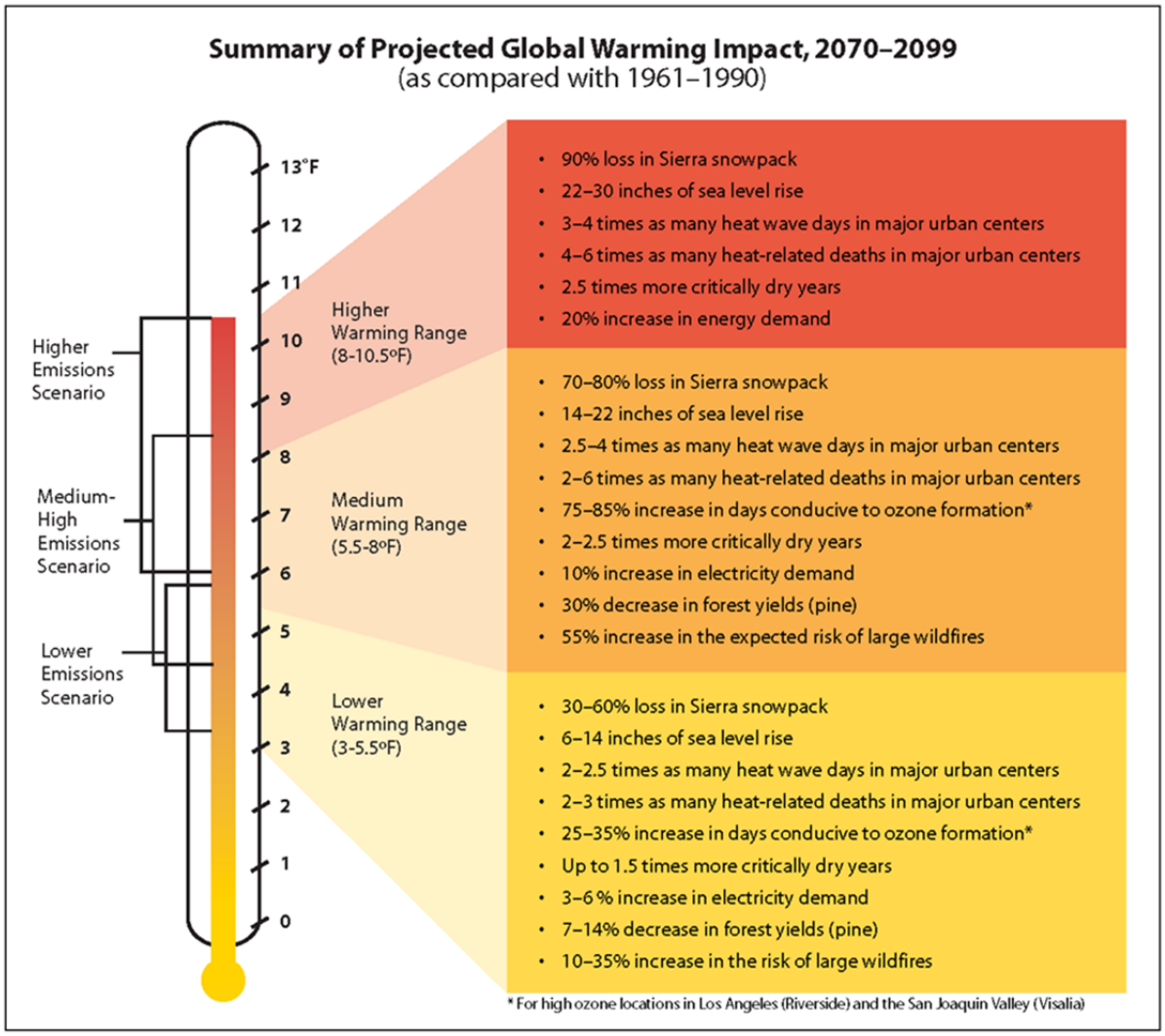
According to these reports, substantial temperature increases arising from increased GHG emissions worldwide could result in a variety of effects to the people, economy, and environment of California, with the severity of the effects depending upon actual future emissions of GHGs and associated degree of warming. Table 4.6-3, *Summary of Projected Global Warming Impact, 2070-2099 (as compared with 1961-1990)*, presents the potential impacts of global warming.

Under the emissions scenarios of the Climate Scenarios and California Climate Adaption Strategy reports, the impacts of climate change in California have the potential to include, but are not limited to, the following areas. For more information, refer to Section 2.5 of *Technical Appendix F* and the reference sources cited therein.

- Human Health Effects. The potential human health effects related directly to GHG emissions (including CO_2, N_2O, and CH_4) from development projects are still being debated in the scientific community. The contribution that these GHGs make to GCC have the potential to cause adverse effects to human health in various ways. Increases in the Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change also could cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

- Water Resource Effects. A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. Additionally, if temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70% to 90%. The loss of snowpack could pose

Table 4.6-3 Summary of Projected Global Warming Impact, 2070-2099 (as compared with 1961-1990)



challenges to water managers, hamper hydropower generation, and adversely affect winter tourism. The State's water supplies are also at risk from rising sea levels. An influx of salt water could degrade California's estuaries, wetlands, and groundwater aquifers and be a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

- Agriculture Effects. Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. California farmers could face water shortages. Crops may grow faster and be more susceptible to pests and disease outbreaks due to higher atmospheric temperatures. Faster plant growth could worsen the quantity and quality of yield for some crops such as wine

grapes, fruit, and nuts. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, there may still be a water shortage for the agricultural industry. In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants.

- Forest and Landscape Effects. GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. Continued GCC also has the potential to alter natural ecosystems and biological diversity, including a decrease in forest productivity, as a result of increasing temperatures.

- Sea Level Effects. Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

E. Regulatory Setting

Below is an account of the regulatory programs, policies, laws, and regulations that are applicable to GHG emissions and GCC in California. For more information, refer to Section 2.7 of *Technical Appendix F* and the reference sources cited therein.

❑ International Regulations and the Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail GCC. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Kyoto protocol are met, global GHG emissions could be reduced an estimated 5% from 1990 levels during the first commitment period of 2008-2012. Notably, while the United States is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the United States is not bound by the

Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto.

❑ Federal Regulations and the Clean Air Act

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the U.S. Environmental Protection Agency (EPA) issued an Endangerment Finding under §202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them.

Previously the EPA had not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 [2007]), however, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress.

Although GCC did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the state's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975.

❑ Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

California Code of Regulations, Title 24, Part 11 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3)

Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The currently applicable version of this code is CALGreen 2013, which achieves a 25% greater energy efficiency than its 2009 predecessor.

❑ California Assembly Bill No. 1493 (AB 1493)

AB 1493 required CARB to develop and adopt the nation's first GHG emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in California. Further, the legislature stated that technological solutions to reduce GHGs would stimulate the California economy and provide jobs.

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of §1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1 (Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in her official capacity as Executive Director of the California Air Resources Board, et al.). The suit, heard in the U.S. District Court for the Eastern District of California, contended that California's implementation of regulations, that in effect regulate vehicle fuel economy, violates various federal laws, regulations, and policies. In January 2007, the judge hearing the case accepted a request from the State Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court Case, Massachusetts vs. EPA, the primary issue in question was whether the federal CAA provides authority for U.S. EPA to regulate CO2 emissions. In April 2007, the U.S. Supreme Court ruled in Massachusetts' favor, holding that GHGs are air pollutants under the CAA. On December 11, 2007, the judge in the Central Valley Chrysler-Jeep case rejected each plaintiff's arguments and ruled in California's favor. On December 19, 2007, the U.S. EPA denied California's waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging U.S. EPA's denial on January 2, 2008.

The Obama administration subsequently directed the U.S. EPA to re-examine their decision. On May 19, 2009, challenging parties, automakers, the State of California, and the federal government reached an agreement on a series of actions that would resolve these current and potential future disputes over the standards through model year 2016. In summary, the U.S. EPA and the U.S. Department of Transportation agreed to adopt a federal program to reduce GHGs and improve fuel economy, respectively, from passenger vehicles in order to achieve equivalent or greater GHG benefits as the AB 1493 regulations for the 2012–2016 model years. Manufacturers agreed to

ultimately drop current and forego similar future legal challenges, including challenging a waiver grant, which occurred on June 30, 2009. The State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by "pooling" California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with U.S. EPA-adopted GHG standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the AB 1493 regulations. Both of these programs are aimed at light-duty auto and light-duty trucks.

CARB's on-road heavy-duty diesel vehicles regulations require diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavy trucks were required to be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. CARB reports that by January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The heavy-duty vehicles regulation applies to nearly all privately- and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds.

❑ Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snow pack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020, and to 80% below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

❑ California Assembly Bill 32 (AB 32)

In September 2006, Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to Year 1990 levels by the year 2020. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions that started to be phased in, in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG

emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required that CARB adopt a quantified cap on GHG emissions representing Year 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also included guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission Year 1990 levels were estimated at 427 million metric tons (MMTs) (emission sources by sector were: transportation – 35%; electricity generation – 26%; industrial – 24%; residential – 7%; agriculture – 5%; and commercial – 3%). Accordingly, 427 MMTs of CO_2 equivalent was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 MMT for 2000 and 532 MMT for 2010. "Business as usual" conditions (without the reductions to be implemented by CARB regulations) for Year 2020 were projected to be 596 MMTs.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plans, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94% of the point source CO_2 emissions in the State.

On December 11, 2008, CARB adopted a scoping plan to reduce GHG emissions to 1990 levels. Table 4.6-4, *Scoping Plan GHG Reduction Measures*, shows the proposed reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the Year 2020 emissions reduction, local land use changes are estimated to result in a reduction of 5 MMTCO2e, which is approximately 3% of the Year 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15% of 2006 levels by 2020 to ensure that municipal and community-wide emissions match the state's reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2% through land use planning, resulting in a potential GHG reduction of 2 MMTCO2e (or approximately 1.2% of the GHG reduction target).

On May 22, 2014, CARB approved the first update to the Scoping Plan. The update recalculates 1990 GHG emissions using new global warming potentials (GWPs) identified in the Intergovernmental Panel on Climate Change Fourth Assessment Report released in 2007. Using the new GWPs, the 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan was adjusted to 431 MTCO2e. Based on the revised 2020 emissions, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO2e.

Table 4.6-4 Scoping Plan GHG Reduction Measures

Recommended Reduction Measures	*Reductions Counted toward 2020 Target of 169 MMT CO2e*	*Percentage of Statewide 2020 Target*
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB. 2008, MMTons CO2e: million metric tons of CO2e
[1]Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.
[2]According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 Target

Source: Urban Crossroads 2014c, Table 2-3.

❑ California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill 1368 (SB 1368), which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Due to the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368.

❑ Senate Bill 97 (SB 97)

Pursuant to the direction of SB 97, OPR released preliminary draft CEQA Guideline amendments for GHG emissions on January 8, 2009, and the Natural Resources Agency adopted the Guideline amendments and they became effective on March 18, 2010. Of note, the CEQA Guidelines state that a CEQA lead agency shall have discretion to determine whether to use a quantitative model or methodology, or in the alternative, rely on a qualitative analysis or performance based standards. CEQA Guideline § 15064.4(a) state that "[a] lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use… ; or (2) Rely on a qualitative analysis or performance based standards."

CEQA emphasizes that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]). Section 15064.4(b) of the CEQA Guidelines provides direction for lead agencies for assessing the significance of impacts of GHG emissions. The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence.

❑ Executive Order S-01-07

On January 18, 2007, California Governor Schwarzenegger, through Executive Order S-01-07, mandated a statewide goal to reduce the carbon intensity of California's transportation fuel by at least

10% by the Year 2020. The order also requires that a California-specific low carbon fuel standard be established for transportation fuels.

❑ Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to the Year 2010. In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by the Year 2020.

❑ Senate Bill 375 (SB 375)

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs did not meet the GHG reduction targets, transportation projects are not eligible for funding programmed after January 1, 2012. Applicable to the proposed Project is the Southern California Association of Governments' (SCAG's) *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*).

❑ CARB's Preliminary Draft Staff Proposal for Interim Significance Thresholds

Separate from its Scoping Plan approved in December of 2008, CARB issued a Staff Proposal in October 2008, as its first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. CARB staff's objective in this proposal is to develop a threshold of significance that will result in the vast majority (approximately 90% statewide) of GHG emissions from new industrial projects being subject to CEQA's requirement to impose feasible mitigation. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. These draft thresholds are under revision in response to public comments. There is no timetable for finalized thresholds at this time.

As currently proposed by CARB staff, the threshold consists of a quantitative threshold of 7,000 metric tons of CO2e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions (which have not yet been developed). CARB's proposal was not final at the time that the NOP for this EIR was released for public review (March 2014). Further, CARB's proposal sets forth draft thresholds for industrial projects that have high operational stationary GHG emissions, such as manufacturing plants, or uses that utilize

combustion engines. Mobile source emissions are not addressed. The GHG emissions that would be emitted by the Project evaluated in this EIR would be mostly from mobile sources, and as such, the CARB proposal would not be applicable to the proposed Project because it excludes transportation (mobile) sources.

- **South Coast Air Quality Management District Recommendations for Significance Thresholds**

In April 2008, the South Coast Air Quality Management District (SCAQMD), convened a "GHG CEQA Significance Threshold Working Group," in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents. The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential, non-residential, industrial, etc. However, final thresholds were never discussed or adopted for land development projects. Notwithstanding, in December 2008, staff presented the SCAQMD Governing Board with a significance threshold for development projects that are stationary sources of air pollutants where the SCAQMD is the lead agency. This threshold utilizes a tiered approach to determine a project's significance, with 10,000 MTCO2e as a numerical screening threshold for "industrial project" stationary sources of air pollution. However, when setting the 10,000 MTCO2e threshold, the SCAQMD did not consider mobile sources (vehicular travel); rather, the threshold was intended for "heavy industrial" stationary source emitters such as boilers, refineries, etc. As such, the 10,000 MTCO2e threshold would misrepresent the significance of emissions associated with land uses (like those of the proposed Project) where the majority of GHG emissions are related to mobile sources regulated by state and federal agencies. Thus, the SCAQMD's draft screening threshold is not applicable to the Project.

In 2010, the SCAQMD Working Group authored an alternative, tiered approach for evaluating the significance of GHG emissions from development projects. Under the Working Group's alternative approach, development projects that are not exempt from CEQA and that would exceed a numerical screening threshold (either 3,000 MTCO2e for all project types or 3,500 MTCO2e for residential land uses, 1,400 MTCO2e for commercial land uses, or 3,000 MTCO2e for mixed-use projects) would result in a cumulatively considerable impact associated with GHG emissions, unless the project can demonstrate that it meets a project-level efficiency target or reduces emissions by an undefined percentage. The Working Group set the project-level efficiency target for the Year 2020 at 4.8 MTCO2e per service population. The Working Group made no formal recommendations to the SCAQMD regarding significance thresholds for GHG emissions, and the SCAQMD did not take action on the Working Group's alternative approach. The Working Group last convened in 2010 and it is unclear if the SCAQMD will re-initiate the working group or if the process has been abandoned altogether.

The SCAQMD has adopted rules that address GHG reductions (i.e., Rules 2700, 2701, and 2702). However, these rules address boilers and process heaters, forestry, and manure management projects, none of which are proposed or required by the proposed Project.

❑ City of Moreno Valley

On October 9, 2012, the Moreno Valley City Council approved an *Energy Efficiency and Climate Action Strategy* and related GHG analysis. The *Energy Efficiency and Climate Action Strategy* document identifies potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The majority of the policies are directed at municipal operations of the City, but the document also contains recommended policies for the community at large (including private development projects). These recommended policies include but are not limited to: energy efficiency, water use reduction, trip reduction, solid waste diversion, and educational policies. The overall goal of the *Energy Efficiency and Climate Action Strategy* is to ensure that the City is consistent with and would not otherwise conflict with the provisions of AB 32.

4.6.2 BASIS FOR DETERMINING SIGNIFICANCE

In order to assess the significance of the proposed Project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. As discussed in Subsection 4.6.1 above, while Project-related GHG emissions can be estimated, the direct impacts of such emissions on GCC is *de minimis* considering the worldwide scope of climate change. There is no evidence at this time that would indicate that the small quantity of emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project has no potential to result in a direct impact to GCC; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively considerable way.

The CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to:

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

2. *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

Because AB 32 is the primary plan, policy or regulation adopted in the State of California to reduce GHG emissions, the proposed Project would have a cumulative considerable significant impact on GCC if the Project would impede compliance with the GHG emissions reduction mandate established by AB 32, which requires that California's GHG emissions limit be reduced to Year 1990 levels by the Year 2020. The CARB Scoping Plan and CAT Report (2006) were prepared in response to the California Governor's Executive Order S-3-05 and summarize measures than can be implemented to achieve the GHG emissions reductions goals of AB 32. Additionally, analysis prepared by CARB supporting AB 32, indicates that a reduction of 28.5% below the "business as usual" scenario is required to meet the goals of AB 32. To comply with AB 32 on a city-wide level, on October 9, 2012, the Moreno Valley City Council approved an *Energy Efficiency and Climate Action Strategy* and the related Greenhouse Gas Analysis. The *Strategy* and *Analysis* document identify potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The *Strategy* also prioritizes implementation of programs, policies, and projects based upon energy efficiency, cost efficiency and potential resources. The accompanying *Greenhouse Gas Analysis* provides a more scientific approach and recommends a target to reducing community-wide GHG emissions consistent with the State reduction goals in AB 32. Therefore, should the proposed Project be consistent with AB-32 and the City's *Energy Efficiency and Climate Action Strategy*, impacts would be less than cumulatively considerable.

For information purposes, and because the City of Moreno Valley does not have an adopted, quantified significance threshold for GHG emissions, the analysis below also includes a numeric calculation of the Project's GHG emissions and compares that numeric value to the SCAQMD's draft screening threshold of 10,000 MTCO2, which is not adopted but was proposed by SCAQMD staff as a numerical screening threshold for stationary source where the SCAQMD serves as lead agency. As previously described, the application of SCAQMD's draft screening threshold for GHG emissions to a development proposal like the proposed Project, where GHG emissions would result primarily from mobile sources rather than stationary sources, presents a highly conservative comparison of Project emission levels to a numerical value that the SCAQMD has suggested for screening projects to determine if a more detailed analysis should be completed to evaluate impacts.

Also for information purposes, the analysis below includes a numeric calculation of the Project's GHG emissions and compares that numeric value to the SCAQMD GHG CEQA Significance Threshold Working Group's project-level efficiency target of 4.8 MTCO2e per service population (for the Year 2020). As previously described, the Working Group did not formally recommend the project-level efficiency target to the SCAQMD for approval and the SCAQMD did not take formal action to adopt or reject the project-level efficiency target.

4.6.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***
Threshold 2:	***Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

The Project would be consistent with the subject property's underlying land use designations and would not increase the development intensity on the subject property beyond what is currently anticipated by the General Plan Land Use Map. Because the Project would be consistent with the adopted General Plan, the Project also would be consistent with SCAG's *2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, which is based on the land use pattern and transportation network contained in local general plans. The Project's consistency with the land use and transportation assumptions within the *RTP/SCS* ensures the Project would not conflict with the *RTP/SCS*'s goal to reduce regional GHG emissions by reducing regional per capita vehicle miles traveled.

Furthermore, activities associated with the proposed Project would be required to comply with all mandatory regulatory requirements imposed by the State to directly or indirectly reduce GHG emissions, including, but not limited to:

- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles;
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction;
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances;
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by Year 2020;
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent to ensure efficient landscapes in new development and reduced water waste in existing landscapes; Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions; and
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by Year 2010 and 33 percent by Year 2020.

Although the Project would be required to comply with the above-listed regulations and policies for reducing GHG emissions in the State of California, provided below is an analysis of the proposed Project's ability to achieve the GHG reduction goal of AB 32 on a project-specific basis, which is the primary policy/regulation adopted in the State to reduce GHG emissions. Analysis also is provided

regarding the proposed Project's consistency with the City of Moreno Valley's *Energy Efficiency and Climate Action Strategy*.

A. Methodology for Estimating Project-Related Greenhouse Gas Emissions

CEQA Guidelines §15064.4(b)(1) states that a CEQA lead agency may use a model or methodology to quantify GHG emissions associated with a project. On October 2, 2013, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) released the latest version (v2013.2.2.) of the California Emissions Estimator Model (CalEEMod™) (Urban Crossroads 2014c 43). The purpose of this model is to estimate air quality and GHG emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. As such, the October 2013 (v2013.2.2.) CalEEMod™ was used to estimate Project-related emissions to determine construction and operational air quality impacts (Urban Crossroads 2014c pp. 43-44). Output from the model runs for both Project-related construction and operational activity are provided in Appendix 3.1 of *Technical Appendix F*.

Due to the lack of consensus guidance on life-cycle analysis (LCA) methodology, a full LCA is not included in the Project's Greenhouse Gas Analysis (*Technical Appendix F*). LCA (*i.e.*, assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development and infrastructure) depends on emission factors or econometric factors that are not well established for all processes. At this time a LCA would be extremely speculative and thus has not been prepared (Urban Crossroads 2014c 44).

❑ Methodology for Estimating Project-Related Construction Emissions

Construction activities associated with the proposed Project would result in emissions of GHGs from the following construction activities:

- Demolition;
- Site Preparation;
- Grading;
- Building Construction;
- Paving;
- Architectural Coatings (Painting); and
- Construction Workers Commuting.

Information about the Project's anticipated construction schedule and equipment as supplied by the Project Applicant was input into the CalEEMod™ model and defaults for all other assumptions were utilized. Refer to Appendix 3.1 of *Technical Appendix F* to this EIR for more details on the construction emissions estimate methodology. Refer also to the specific detailed modeling inputs/outputs contained in Appendix 3.1 of *Technical Appendix F*. A summary of construction equipment assumptions by phase that were used as model inputs is provided in Section 3.0, *Project Description* (Table 3-2).

In accordance with SCAQMD recommendations, the Project's construction phase GHG emissions were quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project per the recommended SCAQMD methodology, the total GHG emissions associated with the Project's proposed construction activities was calculated, divided by the project life span default (*i.e.*, 30 years), and then added to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30 year period and added to the annual operational phase GHG emissions (Urban Crossroads 2014c 44).

❑ Methodology for Estimating Project-Related Operational Emissions

Operational activities associated with the proposed Project would result in emissions of GHGs from the following primary sources, each of which is discussed below: 1) Building Energy Use; 2) Water Supply, Treatment and Distribution; 3) Solid Waste 4) Mobile Source Emissions.

Building Energy Use

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Using defaults built into the California Emissions Estimator Model™ (CalEEMod™), the proposed Project would demand 3,574,906 kilowatts hours of electricity per year (kWh/yr) (Urban Crossroads 2014c 45).

Water Supply, Treatment and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. The Project's water demand is based on the Water Supply Assessment (*Technical Appendix I*) prepared for the Project by EMWD (Urban Crossroads 2014c 45), which states that the proposed Project is estimated to result in a demand for approximately 38.03 acre-feet of water per year (or about 33,951 gallons per day) . The Project also is estimated to result in an average daily demand of 86,428 gallons per day of wastewater treatment capacity (based on EMWD's wastewater generation factor of 1,700 gallons per day per acre for light industrial land uses).

Solid Waste

The Project would result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, through adherence to mandatory requirements for reducing the amount of waste generated, recycling, and/or composting. Waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste estimated to be generated by the proposed Project were calculated by the CalEEMod™ model using default parameters (Urban Crossroads 2014c 45).

On-Site Equipment

It is common for an industrial warehouse project to utilize cargo handling equipment. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 horse power to 200 horse power. Based on the latest available information from SCAQMD, high-cube warehouse projects typically have 3.1 yard tractors per million square feet of building space. For the Project, four (4) 200 horsepower yard tractors were assumed to operate fourt (4) hours per day for 260 days of the year. The emissions associated with on-site equipment were calculated using the CalEEMod model. (Urban Crossroads 2014c 45)

Mobile Source Emissions

A majority of the proposed Project's GHG emissions would result from mobile sources, including daily operation of motor vehicles by visitors, employees, and customers. The Project's GHG emissions are dependent on the Project's daily vehicle trip generation and the characteristics of those trips. Information related to the Project's daily vehicle trip generation and trip characteristics was obtained from the Project's traffic report contained as *Technical Appendix H1* to this EIR. It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of heavy vehicles at intersections in the Project's study areas and in accordance with traffic engineering best practices. The PCE trips were not used for the purposes of quantifying GHG emissions; rather, to be more representative of actual emissions, the actual number of passenger cars (including light trucks) and heavy trucks were used in the analysis. The vehicle fleet mix, in terms of actual vehicles, as derived from the traffic impact analysis for the Project, is comprised of approximately 76% passenger cars and 24% trucks. For analysis purposes, 12.5% of all trucks were assumed to be Light-Heavy-Duty, 12.5% of all trucks were assumed to be Medium-Heavy-Duty, and 75% of all trucks were assumed to be Heavy-Heavy Duty (Urban Crossroads 2014c 46).

A technical deficiency inherent in calculating the projected mobile source vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips a project would generate multiplied by average trip length. This method of estimating VMT for use in calculating vehicle emissions can result in the over-estimation and double-counting of emissions because for a logistics warehouse building such as the proposed Project, the land use is likely to attract (divert) existing vehicle trips that are already in the circulation system as opposed to generating new trips. As such, the proposed Project would merely redistribute existing mobile source emissions. Accordingly, the use of models that measure overall emissions can overstate emission levels without acknowledging that some level of emissions associated with a project under study would still occur in the region regardless of whether the project is built. As such, the estimation of GHG emissions associated with the proposed Project and disclosed herein assumes a VMT value that very likely overestimates the actual impact of the Project (Urban Crossroads 2014c pp.47-48).

In the last several years, the SCAQMD has provided numerous comments on the trip rate and trip length for warehouse/distribution and industrial land use projects. SCAQMD staff suggests the use of a greatly exaggerated trip generation rate, but there is no evidentiary basis to support a speculative hypothesis that the proposed Project would generate traffic greater than the trip generation rates specified in the Institute of Transportation Engineers (ITE) Trip Generation manual (8th Edition, 2008). Use of the ITE rates standard industry practice for the calculation of projected traffic volumes in traffic studies supporting CEQA documents throughout the State of California.

The SCAQMD staff also asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse/distribution center and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles and/or to destinations outside of California. The SCAQMD states that for this reason, the model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length (Urban Crossroads 2014c 48). SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region (which includes the proposed Project site) is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks (Urban Crossroads 2014c 48).

Trip lengths and VMT estimates employed in *Technical Appendix F* and this EIR Subsection generate vehicular-source emissions that would represent a maximum impact scenario. Other EIRs for land use development projects with similar land uses as the proposed Project for which the City of Moreno Valley served as the CEQA Lead Agency have utilized these same or similar VMT estimates. To maintain analytic consistency and establish the maximum impact scenario, the following approach is used to calculate emissions associated with vehicles accessing the Project (Urban Crossroads 2014c pp. 48-49).

For analysis of the Project's passenger car trips, the Riverside County CalEEMod™ default of a 9.5-mile one-way trip length was assumed. The CalEEMod™ model defaults relies on data provided by SCAG for trip length. For heavy duty trucks, an average trip length was derived from distances from the Project site to the far edges of the South Coast Air Basin (SCAB) based on the Project's traffic pattern shown in *Technical Appendix H1*. It is appropriate to stop the VMT calculation at the boundary of the SCAB because any activity beyond that boundary would be speculative (the SCAB encompasses 6,745 square miles) and because the selected approach is consistent with professional industry practice (Urban Crossroads 2014c 49).

- Project site to the Port of Los Angeles/Long Beach: 80 miles;
- Project site to East on State Route 60: 30 miles;
- Project site to San Diego County line: 60 miles;
- Project site to Inland Empire: 50 miles;
- Project site to Perris destinations: 10 miles; and

- Project site to Moreno Valley destinations: 10 miles.

The GHG analysis presented in *Technical Appendix F* and this EIR Subsection assumes that 50% of all delivery trips would travel to and from the Project and the Port of Los Angeles/Long Beach, 10% would travel East on the State Route 60, 20% would travel to San Diego County, 10% would travel to the Inland Empire, 5% would travel to City of Perris destinations, and the remainder would travel to City of Moreno Valley destinations, resulting in an average Project-related truck trip length of 61 miles (Urban Crossroads 2014c 49).

Two separate model runs were utilized in order to more accurately model GHG emissions resulting from Project-related vehicle operations. The first model run analyzed Project-related passenger car emissions, which assumed a trip length of 9.5 miles and a vehicle fleet mix of 100% Light-Duty-Auto vehicles. The second model run analyzed Project-related truck emissions, which assumed an average truck trip length of 61 miles and a vehicle fleet mix of 12.5% Light-Heavy-Duty trucks, 12.5% Medium-Heavy-Duty trucks, and 75% Heavy-Heavy-Duty trucks (Urban Crossroads 2014c 49).

B. Project-Related GHG Emissions Impact Analysis

❑ Quantification of Project-Related GHG Emissions

A summary of the proposed Project's estimated annual operational GHG emissions, including the amortized construction emissions, is provided in Table 4.6-5, *Total Annual Greenhouse Gas Emissions (BAU).* This represents the "business as usual" (BAU) scenario, which does not take into account applicable regulatory developments since the publication of the CARB Scoping Plan in 2006 (discussed above) and mitigation measures or design features of the Project that would reduce GHG emissions from direct and indirect sources. The operational GHG emissions for the Project's BAU scenario, including the amortized construction emissions, are estimated to be 18,322.72 MTCO2e per year. The primary source of Project-related GHG emissions would occur from mobile sources (trucks and passenger cars traveling to and from the Project site).

As shown in Table 4.6-6, *Total GHG Emissions (Proposed Project)*, the total GHG emissions generated by the Project, when accounting for applicable regulatory requirements that have gone into effect since the Year 2006, Project design features, and the mitigation measures set forth in Subsection 4.6.6 of this EIR would reduce the Project's operational GHG emissions, including the amortized construction emissions, to 14,453.47 MTCO2e per year (Urban Crossroads 2014c 49). By comparing the "BAU" and "Proposed Project" scenarios, the data shows that the proposed Project's GHG emissions would be approximately 21% less than the BAU scenario (refer to Table 4.6-7, *Summary of GHG Emissions: BAU vs. Project*).

As indicated in §15064(b) of the State CEQA Guidelines, the determination of significance of greenhouse gases is not "ironclad;" rather, the "determination of whether a project may have a significant effect on the environment calls for a "careful judgment" by the City "based to the extent

Table 4.6-5 Total Annual Greenhouse Gas Emissions (BAU)

Emission Source	Emissions (metric tons per year)			
	CO2	CH4	N2O	Total CO2E
Annual construction-related emissions amortized over 30 years	99.75	0.64	--	100.15
Area	0.03	1.60e-4	--	0.04
Energy	1,222.11	0.05	0.01	1,227.22
Mobile Sources (Trucks)	14,458.98	0.58	--	14,471.06
Mobile Sources (Passenger Cars)	1,811.08	0.16	--	1,814.39
On-Site Equipment	184.40	0.02	--	184.80
Waste	211.68	12.51	--	474.40
Water Usage	44.76	0.20	5.20e-3	50.67
Total CO_2E (All Sources)	**18,322.72**			

Source: CalEEMod™ model output, See Appendix 3.1of *Technical Appendix F* for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.
Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent
Source: Urban Crossroads 2014c, Table 3-1

Table 4.6-6 Total GHG Emissions (Proposed Project)

Emission Source	Emissions (metric tons per year)			
	CO2	CH4	N2O	Total CO2E
Annual construction-related emissions amortized over 30 years	99.75	0.64	--	100.15
Area	0.03	9.00e-5	--	0.04
Energy	825.15	0.05	0.01	830.59
Mobile Sources (Trucks)	11,800.93	0.08	--	11,802.51
Mobile Sources (Passenger Cars)	1,057.62	0.04	--	1,058.42
On-Site Equipment	152.67	0.05	--	153.70
Waste	211.68	12.51	--	474.40
Water Usage	28.92	0.16	4.18e-3	33.66
Total CO2E (All Sources)	**14,453.47**			
SCAQMD Service Population (SP) Threshold	**4.8MTC02e/SP**			
Service Population	**594 Employees**			
Metric Tons CO2e per Service Population	**24.33**			

Source: CalEEMod™ model output, See Appendix 3.1of *Technical Appendix F* for detailed model outputs.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.
Table results include scientific notation. *e* is used to represent *times ten raised to the power of* (which would be written as x 10^{b}") and is followed by the value of the exponent
Source: Urban Crossroads 2014c, Table 3-2.

Table 4.6-7 Summary of GHG Emissions: BAU vs. Project

Category	CO2e Emissions	
	BAU	Project (With regulatory requirements and applicable mitigation measures)
	Metric Tons per Year	
Construction	100.15	100.15
Area	0.04	0.04
Energy Use	1,227.22	830.59
Mobile Sources (Trucks)	14,471.04	11,802.51
Mobile Sources (Passenger Cars)	1,814.39	1,058.42
On-Site Equipment	184.80	153.70
Waste Disposed	474.40	474.40
Water Use	50.67	33.66
Total	**18,322.72**	**14,453.47**
Project Improvement over BAU	**21.12%**	

Source: Urban Crossroads 2014c. Table 1-1

possible on scientific and factual data." The City of Moreno Valley has not adopted a numeric threshold of significance for GHG emissions.

The SCAQMD's draft screening threshold of 10,000 MTCO2e for "industrial projects" applies to stationary sources (such as manufacturing plants or uses that utilize combustion engines) and not mobile sources, and is not used as a significance threshold by the City of Moreno Valley. Nevertheless, comparison of the GHG emissions from the Project's stationary, area sources (construction, area, energy use, waste disposal, and water usage) indicates that the Project's emissions from such sources would be well below the draft SCAQMD screening threshold for stationary sources. With regard to GHG emissions from mobile sources, as discussed above under Subsection 4.6.3A0, the estimation of the Project's mobile source GHG emissions is highly speculative because the methodology to quantify mobile source GHG emissions assumes that all of the vehicle trips to and from the Project site would be new, rather than redistributed vehicle trips from other areas. No methods or models exist to estimate the Project's net contribution to regional or global vehicle miles traveled. Because the estimation of the Project's contribution to mobile source GHG emissions is speculative, and based on the absence of applicable numerical thresholds for mobile source GHG emissions, use of a quantitative threshold of significance is not meaningful. Regardless, for information disclosure purposes it is acknowledged that the Project's total annual emissions (stationary and mobile source emissions combined) of 18,322.72 MTCO2e (BAU

scenario) or 14,453.47 MTCO2e (when accounting for applicable regulatory requirements, Project design features and mitigation measures) would be higher than the SCAQMD's draft numerical screening threshold of 10,000 MTCO2e per year for "industrial project" stationary sources.

Table 4.6-6 summarizes the Project's emissions against the project-level efficiency target formulated by the SCAQMD GHG CEQA Significance Threshold Working Group. As shown, the Project is estimated to generate approximately 24.59 MTCO2e per service population on an annual basis, which would exceed the Working Group's annual efficiency target of 4.8 MTCO2e per service population.

As previously noted, the SCAQMD's screening threshold and the project-level efficiency target are not adopted by the SCAQMD and are not used as a significance threshold by the City of Moreno Valley. Accordingly, a qualitative analysis set forth below is used by the City of Moreno Valley to determine significance of the Project's GHG emissions, based on consistency with regional and state GHG plans. Specifically, compliance with the CARB Scoping Plan, the State of California's Climate Action Team Report (2006), and the City of Moreno Valley's *Energy Efficiency and Climate Action Strategy* are used. The analysis below sets out the factual basis for the City's determination regarding the effect of Project-related GHG emissions.

❑ Consistency with CARB Scoping Plan

As previously discussed in Subsection 4.6.1E, CARB identified measures to reduce state-wide GHG emissions and achieve the emissions reductions goals of AB 32 in its Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with AB 32's mandate to reduce GHG emissions. Many of the strategies identified in the Scoping Plan are not applicable at the project-level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the proposed Project, such as energy efficiency features required by CALGreen. Table 4.6-8, *CARB Scoping Plan Consistency*, presents the 39 recommended actions identified by CARB in its Scoping Plan. Of the 39 measures identified, those that would be applicable to the Project consist primarily of actions related to transportation, electricity and natural gas use, green building design, and industrial land uses. The Project's consistency with applicable measures of the CARB Scoping Plan is also summarized in Table 4.6-8. A detailed description of the Project's consistency with the CARB Scoping Plan recommended actions is presented in Section 2.10 of *Technical Appendix F* to this EIR. As shown in Table 4.6-8, the Project is consistent with the applicable, recommended measures of the CARB Scoping Plan.

Table 4.6-8 CARB Scoping Plan Consistency

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	NO	NO
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	NO	NO
T-3	Transportation	Regional Transportation-Related GHG Targets	NO	NO
T-4	Transportation	Vehicle Efficiency Measures	NO	NO
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	NO	NO
T-6	Transportation	Goods-movement Efficiency Measures	NO	NO
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	NO	NO
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	NO	NO
T-9	Transportation	High Speed Rail	NO	NO
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards	YES	NO
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	NO	NO
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	NO	NO
E-4	Electricity and Natural Gas	Million Solar Roofs	YES	NO
CR-1	Electricity and Natural Gas	Energy Efficiency	YES	NO
CR-2	Electricity and Natural Gas	Solar Water Heating	NO	NO
GB-1	Green Buildings	Green Buildings	YES	NO
W-1	Water	Water Use Efficiency	YES	NO
W-2	Water	Water Recycling	NO	NO
W-3	Water	Water System Energy Efficiency	YES	NO
W-4	Water	Reuse Urban Runoff	NO	NO
W-5	Water	Increase Renewable Energy Production	NO	NO
W-6	Water	Public Goods Charge (Water)	NO	NO
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	YES	NO
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	NO	NO
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	NO	NO
I-4	Industry	Refinery Flare Recovery Process Improvements	NO	NO
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	NO	NO
RW-1	Recycling & Waste Management	Landfill Methane Control (Discrete Early Action)	NO	NO
RW-2	Recycling & Waste Management	Additional Reductions in Landfill Methane – Capture Improvements	NO	NO
RW-3	Recycling & Waste Management	High Recycling/Zero Waste	NO	NO
F-1	Forestry	Sustainable Forest Target	NO	NO
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	NO	NO
H-2	High Global Warming Potential Gases	SF_6 Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	NO	NO
H-3	High Global Warming Potential Gases	Reduction in Perflourocarbons in Semiconductor Manufacturing (Discrete Early Action)	NO	NO
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	NO	NO
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	NO	NO
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	NO	NO
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	NO	NO
A-1	Agriculture	Methane Capture at Large Dairies	NO	NO

Source: Urban Crossroads 2014c, Table 2-5

❑ Consistency with GHG Emission Reduction Strategies of the 2006 CAT Report

The 2006 CAT Report was prepared in response to Executive Order S-3-05 and includes recommended strategies for reducing California's GHG emissions and achieving the goals of Executive Order S-3-05 and AB 32. Project's that are consistent with the CAT strategies also would be consistent with the mandates of Executive Order S-3-05 and AB 32 to reduce GHG emissions.

Table 4.6-9, *Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report*, lists the recommended GHG emission reduction strategies from the 2006 CAT report and also summarizes the Project's consistency with each applicable emission reduction strategy. As indicated in Table 4.6-9, the proposed Project would be consistent with all applicable GHG reduction strategies contained within the 2006 report.

❑ Consistency with City of Moreno Valley Energy Efficiency and Climate Action Strategy

The City of Moreno Valley *Energy Efficiency and Climate Action Strategy* is a policy document that identifies ways in which the City government can reduce its GHG emissions and energy and water consumption. The *Energy Efficiency and Climate Action Strategy* also outlines actions the community may take to reduce GHG emissions and water and energy consumption. The *Strategy* defines a baseline for the City's GHG emissions, projects how these emissions will grow, and includes strategies to reduce emissions to a level consistent with California's emissions reduction target. The actions listed in the Strategy complement the City's General Plan polices. The purpose and intent of these policies is to achieve compliance with AB32 and reduce GHG emissions by 15% by 2020. In 2020, the City is projected to emit a total of 1,298,543 MTCO2e without the incorporation of GHG reduction policies (City of Moreno Valley 2012 6).

While the statewide reduction measures would reduce the bulk of Moreno Valley's emissions and make a substantial contribution toward reaching the 2020 reduction target, the City would still need to supplement the statewide measures with the implementation of local reduction policies, in order to achieve a 15% reduction in GHG by 2020 (City of Moreno Valley 2012 6). The proposed Project's consistent with the City's *Energy Efficiency and Climate Action Strategy*, as it applies to redevelopment of an industrial property, is summarized in Table 4.6-10, *Project Compliance with Applicable City of Moreno Valley Energy Efficiency and Climate Action Strategy*.

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
California Air Resource Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Other Light Duty Vehicle Technology New standards would be adopted to phase in beginning in the 2017 model.	
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	
Diesel Anti-Idling In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Compliant. Heavy-duty diesel trucks that access the project site will be required to limit idling to no more than five minutes.
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak-tightness to the pass criteria for vehicular Inspection and Maintenance programs; 5) Enforce federal ban on releasing HFCs.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Transportation Refrigeration Units (TRUs), Off-Road Electrification, Port Electrification Strategies to reduce emissions from TRUs, increase off-road electrification, and increase use of shore-side/port electrification.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions. Further, no refrigerated truck units will access the Project site, nor does the Project proposed refrigerated warehousing.
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Reduced Venting and Leaks in Oil and Gas Systems Rule considered for adoption by the Air Pollution Control Districts for improved management practices.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Hydrogen Highway The California Hydrogen Highway Network (CA H_2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Integrated Waste Management Board	
Achieve 50 percent Statewide Recycling Goal Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent has been achieved on a statewide basis. Therefore, a 2 percent additional reduction is needed.	Compliant. The project is required to comply with the City's Source Reduction and Recycling Element (SRRE). To this end, the Project design includes provisions for tenants to recycle. In accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued.
Zero Waste - High Recycling Additional recycling beyond the State's 50 percent recycling goal.	
Department of Forestry	
Forest Management Strategies for storing more carbon through forest management activities can involve a range of management activities such as increasing either the growth of individual trees, the overall age of trees prior to harvest, or dedicating land to older age trees.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
Forest Conservation Conservation projects are designed to minimize/prevent the climate change emissions that are associated with the conversion of forestland to non-forest uses by adding incentives to maintain an undeveloped forest landscape.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Fuels Management/Biomass Large, episodic, unnaturally hot fires are an increasing trend on California's wild lands because of decades of fire suppression activities, sustained drought, and increasing insect, disease, and invasive plans infestations. Actions taken to reduce wildfire severity through fuel reduction and biomass development would reduce climate change emissions from wildfire, increase carbon sequestration, replace fossil fuels, and provide significant economic development opportunities.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	The Project does not involve or propose a formal urban forestry program. Nor has the City adopted or implemented an urban forestry program. Notwithstanding, the Project will construct landscaping improvements, including tree plantings, consistent with the City's landscape design guidelines.
Afforestation/Reforestation Projects Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Department of Water Resources	
Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	Compliant. The Project shall implement U.S. EPA Certified WaterSense labeled or equivalent faucets and high-efficiency toilets (HETs), and implement water-conserving shower heads where applicable.
California Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Compliant. Project will be compliant with incumbent California Code of Regulations, Title 24 (Energy Efficiency Standards for Residential and Nonresidential Buildings).
Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Compliant. Appliances purchased for use in the Project will be consistent with all applicable energy efficiency standards.
Fuel-Efficient Replacement Tires & Inflation Programs State legislation (Chapter 912, Statues of 2001) directed the Energy Commission to investigate and to recommend ways to improve fuel efficiency of vehicle tires. The bill established a statewide program to encourage the production and use of more fuel efficient tires.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Cement Manufacturing Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Municipal Utility Strategies Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Alternative Fuels: non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Table 4.6-9 Project Compliance with Applicable GHG Emissions Reduction Strategies of the 2006 CAT Report

Strategy	Remarks
Business Transportation and Housing	
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. Governor Schwarzenegger is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity, and a quality environment.	Compliant. The Project is proximate to serving transportation corridors, thereby promoting operational efficiencies.
Measures to Improve Transportation Energy Efficiency Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	Compliant. The Project promotes transportation efficiencies through its location proximate to serving transportation corridors. Moreover, distribution warehouse uses such as those proposed by the Project act to consolidate regional transport and delivery of goods, thereby reducing VMT within the region, further improving transportation efficiencies. trips
Department of Food and Agriculture	
Conservation tillage/cover crops Conservation tillage and cover crops practices are increasingly being used by California farmers for a variety of reasons, including improved soil tilth, improved water use efficiency, reduced tillage requirements, saving labor and fuel, and reduced fertilizer inputs.	The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
Enteric Fermentation Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
State and Consumer Services Agency	Not Applicable.
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.	Compliant. The Project will meet or surpass Title 24 Energy Efficiency standards, acting to reduce area source GHG emissions. Further, State mandated programs (Pavely et al.) will act to substantively reduce mobile-source GHG emissions. Additionally, the Project is required to comply with the mandatory provisions of the California Green Building Standards Code (CALGreen) pursuant to the California Code of Regulations, Title 24, which became effective on January 1, 2011.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33 percent renewables in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.
California Solar Initiative Installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses; increased use of solar thermal systems to offset the increasing demand for natural gas; use of advanced metering in solar applications; and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Compliant. Project buildings will be designed to accommodate renewable energy sources, such as photovoltaic solar energy systems as is economically and physically feasible.
Investor-Owned Utility This strategy includes energy efficiency programs, combined heat and power initiative, and electricity sector carbon policy for investor owned utility.	Not Applicable. The noted measures are beyond the purview of the Project. Their implementation by the State and others will act to reduce areawide GHG emissions.

Source: Urban Crossroads 2014c, Table 2-6

Table 4.6-10 Project Compliance with Applicable City of Moreno Valley Energy Efficiency and Climate Action Strategy

ID#	Strategy	Remarks
R2-T1:	Land Use Based Trips and VMT Reduction Policies. Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.	Project consistency: Not applicable.
R2-T3:	Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.	Project consistency: Consistent with implementation of recommended Mitigation Measures MM4.2-12, MM4.6-3, and MM 4.6-4.
R2-E1:	New Construction Residential Energy Efficiency Requirements. Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards. (Reach Code)	Project consistency: Not applicable; this measure applies to residential projects.
R2-E2:	New Construction Residential Renewable Energy. Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.	Project consistency: Not applicable; this measure applies to residential projects.
R2-E5:	New Construction Commercial Energy Efficiency Requirements. Require energy efficient design for all new commercial buildings to be 10% beyond the current Title 24 standards. (Reach Code)	Project consistency: Consistent. The City's Climate Action Strategy was established under an older version of Title 24. The current, applicable Title 24 standards are more stringent than previous versions of the code and would achieve greater than the 10% energy reduction envisioned by R2-E5. Furthermore, Mitigation Measures MM 4.2-8, MM 4.2-9, MM 4.6-1, MM 4.6-2, and MM 4.6-5 are recommended to encourage even greater energy efficient building design than required by Title 24.
R3-E1:	Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining. Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.	Project consistency: Not applicable.
R3-L2:	Heat Island Plan. Develop measures that address "heat islands." Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.	Project consistency: Consistent; the Project will comply with the City of Moreno Valley's landscaping requirements.
R2-W1:	Water Use Reduction Initiative. Consider adopting a per capita water use reduction goal, which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.	Project consistency: Consistent. California Green Building Standards Code, Chapter 5, Division 5.3, Section 5.303.2 requires that indoor water use be reduced by 20 percent. Section 5.304.3 requires irrigation controllers and sensors. Mitigation Measures MM 4.2-9 and MM 4.2-10 require water conservation.
R3-W1:	Water Efficiency Training and Education. Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.	Project consistency: Not applicable.
R2-S1:	City Diversion Program. For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.	Project consistency: Consistent. the Project will comply with the City of Moreno Valley's citywide goal of solid waste reduction. Additionally the Project will be compliant with the City of Moreno Valley's Municipal Code 8.80.030 by implementing a Waste Management Plan.

Source: Urban Crossroads 2014c pp. 29-30

❑ Conclusion

As previously indicated in Subsection 4.6.2, neither the City of Moreno Valley nor the SCAQMD have adopted a threshold of significance for determining the cumulative significance of a Project's GHG emissions on GCC. In the absence of an adopted quantitative threshold of significance, and for purposes of analysis within this Subsection, the applicable threshold of significance is whether or not the Project would comply with AB32 by reducing annual GHG emissions by 28.5% or greater on a Project-specific basis as compared to the BAU scenario, and compliance with the City's *Energy Efficiency and Climate Action Strategy* as it applies to redevelopment of an industrial property.

The Project would generate GHG emissions amounting to approximately 14,453.47 MTCO2e per year, which represents a GHG emissions reduction of approximately 21.12% as compared to the BAU scenario. As shown in Table 4.6-6, a majority of the Project's emissions – 12,860.93 MTCO2e (or 89%) – would be generated by mobile sources (*i.e.*, trucks and passenger vehicles) which are regulated by federal and state emissions and fuel use standards and outside of the control of the Project Applicant and future tenants of the Project. Furthermore, as indicated in the above discussion and analysis, the proposed Project would be consistent with applicable recommended measures and actions of the CARB Scoping Plan and the applicable GHG emission reduction strategies set forth in the 2006 CAT Report. Regardless, the Project would not achieve AB 32's GHG emissions reduction goal of 28.5% compared to BAU; therefore, the Project is determined to generate GHG emissions that may have a cumulatively considerable contribution to GCC.

4.6.4 CUMULATIVE IMPACT ANALYSIS

GCC occurs as the result of global emissions of GHGs. An individual project such as the proposed Project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines §15130[f]).

Accordingly, the Project-specific impact analysis provided in Subsection 4.6.3 reflects a cumulative impact analysis of the Project's GHG emissions, and concludes that because the proposed Project would not achieve AB 32's goal to reduce GHG emissions by 28.5% or greater on a project-specific basis as compared to the BAU scenario, the Project would result in a cumulatively considerable emissions of GHGs as well as a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

4.6.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds 1 and 2: Significant Cumulatively Considerable Impact. Greenhouse gases would be emitted by the Project, primarily from mobile sources (vehicles traveling to and from the Project site). Given the methodologies applied in the GHG analysis and the number of traffic trips and vehicle miles traveled that are assumed in the analysis, the proposed Project would not reduce GHG emissions by 28.5% or greater as compared to the business as usual (BAU) scenario, pursuant to the

mandates of AB 32. Therefore, because compliance with AB 32 is the significance criterion applied by the City of Moreno Valley, the Project is determined to result in GHG emissions that may have a cumulatively considerable effect on the environment. In addition, the Project would result in a cumulatively considerable conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (AB 32). The Project would, however, comply with applicable provisions of the City's *Energy Efficiency and Climate Action Strategy* as it applies to redevelopment of an industrial property.

4.6.6 MITIGATION MEASURES

The following measures are recommended to ensure that Project-related stationary source emissions of GHGs are reduced to the maximum practical extent. In addition, Mitigation Measures MM 4.2-6 through MM 4.2-12 in Subsection 4.2, *Air Quality*, also would reduce GHG emissions.

MM 4.6-1 Electricity for the office components of the building shall be provided either from solar panels installed on the structure, or from a utility provider that receives its energy from alternative (non-fossil fuel) sources.

MM 4.6-2 Prior to issuance of a building permit, the City of Moreno Valley shall verify that the structure's roof is designed to support the future installation of solar panels.

MM 4.6-3 Prior to issuance of a building permit, the City of Moreno Valley shall verify that a minimum of two (2) electric vehicle charging stations for passenger cars are designated for installation in a passenger car parking lot on the property. Installation of a minimum of two (2) operating charging stations shall be verified by the City of Moreno Valley prior to issuance of an occupancy permit.

MM 4.6-4 Prior to issuance of an occupancy permit, the City of Moreno Valley shall verify that the parking lot is marked in compliance with the California Green Building Standards Code (CalGreen, 2013), which requires that a certain number of parking spaces be designated for any combination of low-emitting, fuel-efficient and carpool/vanpool vehicles. The designated parking stalls are required to be painted "Clean Air Vehicle" (CalGreen, 2013, Table 5.106.5.2).

MM 4.6-5 Prior to the approval of permits and approvals that would permit the installation of landscaping, the City of Moreno Valley shall review landscape plans to verify that trees will be planted in locations where tree placement would assist with passive solar heating and cooling of the structure, while also avoiding interference with vehicle movements and building operations.

4.6.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (*i.e.*, trucks and cars). The application of Mitigation Measures MM 4.2-6 through 4.2-12 in EIR Subsection 4.2, *Air Quality*, and Mitigation Measures MM 4.6-1 through MM 4.6-4 listed above would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source

GHG emissions (which comprise approximately 89% of the Project's total GHG emissions). Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley. No additional mitigation measures that are feasible for the Project Applicant to implement and the City of Moreno Valley to enforce and that have a proportional nexus to the Project's impact are available to substantially reduce the Project's mobile source GHG emissions. Imposing emissions controls on vehicles that would travel to and from the Project site, beyond the controls that are mandated by state and federal law and controls in place at the Ports of Los Angeles and Long Beach, would not be feasible given the realities of the southern California economy and the nature of local control in the City of Moreno Valley. Accordingly, implementation of the Project would result in a cumulatively considerable significant and unavoidable impact.

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing emissions and particularly diesel particulate matter. More specifically, the CARB Drayage Truck Regulation, the CARB statewide On-road Truck and Bus Regulation, and the Ports of Los Angeles and Long Beach "Clean Truck Program" (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet. In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these and other regulatory requirements. More restrictive programs are infeasible to impose on a single-development project basis in the City of Moreno Valley.

4.7 NOISE

This following analysis is based on a technical noise study prepared by Urban Crossroads, Inc. entitled "Modular Logistics Center Noise Impact Analysis City of Moreno Valley," dated April 23, 2014d, and included as *Technical Appendix G* to this EIR. The report considers potential noise impacts associated with the construction and operation of the proposed Project.

4.7.1 EXISTING CONDITIONS

A. Study Area Description

The Project site is located in the southern portion of the City of Moreno Valley, north of Modular Way, south of Edwin Road, west of Kitching Street, and east of Perris Boulevard. Surrounding land uses are described in EIR Section 2.0, *Environmental Setting.* The nearest noise sensitive receptor is a non-conforming residential home located approximately 240 feet northwest of the Project site (Urban Crossroads 2014d 19).

B. Noise Fundamentals

❑ Noise Definitions

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Because the range of sound that the human ear can detect is so large, the scale used to measure sound intensity is based on multiples of 10, the logarithmic scale. The unit of measure in which a sound intensity is described is the decibel (dB). Each interval of 10 dB indicates a sound energy 10 times greater than before, which is perceived by the human ear as being roughly twice as loud. A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum; dBA is adjusted to reflect only those frequencies which are audible to the human ear (Urban Crossroads 2014d 4). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet (Urban Crossroads 2014d 7).

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most commonly used figure is the equivalent level (Leq). Leq are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). Leq represents a steady sound level containing the same total energy as a time-varying level over a given sample period (Urban Crossroads 2014d 8). Consequently, Leq can vary depending on the time of day.

Peak hour noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour levels may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24 hour noise level, is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 dB to sound levels in the evening from 7 p.m. to 10 a.m., and the addition of 10 dB to sound levels at night between 10 p.m. and 7 a.m. These additions are made to account for the noise sensitive time periods during the evening and nighttime

hours when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure (Urban Crossroads 2014d 8).

❑ Effects of Noise

Harmful effects of noise can include speech interference, sleep disruption, loss of hearing, and disruptions to performance and learning processes. Approximately 10% of the population has a very low tolerance for noise and will object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Another 25% of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA is considered "barely perceptible," and changes of 5 dBA are considered "readily perceptible" (Urban Crossroads 2014d 11).

❑ Sound Propagation

When sound propagates over a distance, it changes in level and frequency content (Urban Crossroads 2014d 6). The manner in which noise reduces with distance depends on geometric spreading, atmospheric effects, and shielding.

Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (Urban Crossroads 2014d 8).

Ground Absorption of Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in traffic noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water) no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. For the purposes of analysis, soft site conditions were used to analyze the traffic noise impacts for the Project study area because there is landscaping between the Project site's perimeter roads and on-site development areas, and along other roadways in the study area. Soft site conditions account for the sound propagation loss over natural surfaces such as soft earth and ground vegetation (Urban Crossroads 2014d 23).

Atmospheric Effects

Receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (500 feet or greater) due to atmospheric temperature inversions. Other factors that may affect noise levels include air temperature, humidity, and turbulence (Urban Crossroads 2014d 9).

Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Solid objects or barriers are most effective at attenuating noise levels. For vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The noise analysis conducted in *Technical Appendix G* and evaluated in this EIR does not consider the planting of vegetation to be a noise abatement measure (Urban Crossroads 2014d 9).

❑ Traffic Noise Prediction

According to the *Highway Traffic Noise Analysis and Abatement Policy and Guidance* provided by the Federal Highway Administration (FHWA), the level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the vehicle mix within the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, assuming that the speed and vehicle mix do not change, results in a noise level increase of 3 dBA. The vehicle mix on a given roadway may also have an effect on community noise levels. As the number of medium and heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels will increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires on the roadway (Urban Crossroads 2014d 9).

❑ Noise Control and Noise Barrier Attenuation

Noise control is the process of obtaining an acceptable noise environment for a particular observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to any and all of these three elements (Urban Crossroads 2014d 10).

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of the noise source (Urban Crossroads 2014d 10).

❑ Land Use Compatibility

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than are commercial or

industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development. For these reasons, land use compatibility with the noise environment is an important consideration in the planning and design process (Urban Crossroads 2014d 10).

❑ Vibration

Vibration is the periodic oscillation of a medium or object. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB. (Urban Crossroads 2014d 11)

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. (Urban Crossroads 2014d 11)

C. Existing Noise Conditions

On November 7, 2013 and December 18, 2013, Urban Crossroads, Inc. recorded 24-hour noise readings using Piccolo Type 2 integrating sound level meter and data loggers at four (4) noise level measurement locations in the Project area. More information about the sound level meters is provided in *Technical Appendix G* to this EIR. One (1) sound level meter was positioned at the nearest noise-sensitive receptor located approximately 240 feet northwest of the Project site, west of Perris Boulevard and north of San Michelle Road. In addition, three (3) sound level meters were placed at representative noise-sensitive receptors in the general vicinity of the Project site. Figure 4.7-1, *Noise Measurement Locations,* shows the noise measurement locations in relation to the Project site (locations L1 through L4).

The results of the noise level measurements are presented in Table 4.7-1, *Existing Ambient Noise Level Measurements*, and are summarized below. Table 4.7-1 identifies the average daytime (7 a.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) ambient noise levels at each noise level measurement location. (Refer to Appendix 5.2 within *Technical Appendix G* for the noise measurement worksheets utilized to produce the results of the noise levels described in Table 4.7-1, including a summary of the hourly noise levels and the minimum and maximum observed noise levels at each of the measurement locations.) A summary of the existing noise levels at the four (4) noise measurement locations is presented below. (Urban Crossroads 2014d 22)

- Location L1 is located approximately 717 feet west of the Project site, west of Perris Boulevard and north of San Michelle Road. Location L1 represents the off-site noise levels at the nearest noise sensitive residential receptor location. The existing daytime hourly ambient noise levels ranged from 60.3 to 64.1 dBA Leq resulting in an energy (logarithmic) average

daytime noise level of 62.2 dBA Leq. During the nighttime hours, the measured ambient noise levels ranged from 57.4 to 66.2 dBA Leq producing an energy (logarithmic) average nighttime noise level of 62.7 dBA Leq. Based on the collection of 24 hourly noise levels, the Community Noise Equivalent Level (CNEL) for overall exterior noise level is 69.2 dBA CNEL.

- Location L2 represents the residential community located approximately 911 feet north of the Project site, on the north side of the Perris Valley Storm Drain Channel at the end of Kitching Street. Based on the collection of24 hourly noise levels, the overall exterior noise at Location L2 is calculated to be of 57.8 dBA CNEL. The hourly noise levels measured at Location L2 ranged from 48.8 to 54.9 dBA Leq during the daytime hours and from 48.8 to 53.4 dBA Leq during the nighttime hours. The energy (logarithmic) average daytime noise level was calculated at 51.8 dBA Leq with an average nighttime noise level of 50.9 dBA Leq.
- Location L3 represents the existing noise sensitive receptors located approximately 1,705 feet east of the Project site in the residential neighborhood of Callerio Vista. Based on the collection of 24 hourly noise levels, the overall exterior noise level at Location L3 is calculated to be 58.6 CNEL. The hourly noise levels measured at Location L3 ranged from 50.2 to 62.7 dBA Leq resulting in an energy (logarithmic) average daytime noise level of 56.4 dBA Leq. During the nighttime hours, the measured ambient noise levels ranged from 41.4 to 55.8 dBA Leq producing an energy (logarithmic) average nighttime noise level of 50.3 dBA Leq.
- Location L4 represents the existing ambient noise levels approximately 1,688 feet southwest of the Project site at an existing residential home located south of Nandina Avenue. Based on the collection of 24 hourly noise levels, the overall exterior noise level is calculated to be of 67.8 dBA CNEL. The existing daytime hourly noise levels were measured at 60.1 to 64.6 dBA Leq with the nighttime hours ranging from 56.8 to 63.9 dBA Leq. The energy (logarithmic) average daytime noise level was calculated at 62.3 dBA Leq with an average nighttime noise level of 61.0 dBA Leq.

D. Existing Ground-Borne Vibration

Ground-borne vibration is usually localized to areas within about 100 feet from the vibration source (California Department of Transportation 2004 Appendix A). There are no existing sources of measured ground-borne vibration on or within 100 feet of the Project site.

E. Existing Noise Standards (Policies and Regulations)

Local noise guidelines are often based on the broader guidelines established by state and federal agencies. Following is a description of the existing noise regulatory setting for the proposed Project. Because the Project's local road traffic distribution (and associated vehicular noise) is projected to route through the City of Moreno Valley and the City of Perris, the noise criteria for the City of Moreno Valley and the City of Perris are presented below.

❑ California Office of Planning and Research General Plan Guidelines

The City of Moreno Valley General Plan does not include a noise element or specific transportation related noise standards; rather, noise is considered in the Environmental Safety section of the General

Plan Safety Element. While the General Plan provides background and noise fundamentals, it does not identify criteria to assess the impacts associated with off-site transportation related noise impacts. Therefore, for purposes of evaluating traffic-related noise impacts within the City of Moreno Valley, the analysis in this EIR instead relies on the noise criteria derived from the standards provided in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. These standards are used by many California cities and counties and specify the maximum noise levels allowable for new developments. A copy of the *General Plan Guidelines* is provided as Appendix 3.1 to the Project's Noise Impact Analysis (see *Technical Appendix G*) (Urban Crossroads 2014d pp. 13-14).

❑ City of Moreno Valley Noise Ordinance

The Noise Ordinance included in Chapter 11.80 of the City of Moreno Valley's Municipal Code provides performance standards and noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts.

Section 11.80.030.C, *Nonimpulsive Sound Decibel Limits*, provides the following restriction:

> *No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2 when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance. (Moreno Valley n.d. Section 11.80.030.C)*

Table 11.80.030-2 of the City's Noise Ordinance is replicated at the end of this EIR section as Table 4.7-2, *Maximum Sound Levels (in dBA) For Source Land Uses.* Table 4.7-2 shows that the daytime and nighttime standards for commercial uses (including the warehouse use proposed by the Project) are 65 dBA and 60 dBA, respectively (City of Moreno Valley Municipal Code Table 11.80.030-2).

The City of Moreno Valley also has established restrictions on the time of day that construction activities can occur. Noise Ordinance Section 11.80.030.D.7, *Construction and Demolitions*, states: "No person shall operate or cause operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 8:00 p.m. and 7:00 a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee" (City of Moreno Valley Municipal Code Section 11.80.030.D.7). The City's Noise Ordinance does not address construction-related noise volumes during permitted construction hours.

❑ City of Perris General Plan Noise Element

The City of Perris General Plan standards also are derived from standards contained in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. The Noise Element includes standards for land use compatibility for community noise exposure. Goal 1 of the City's Noise Element requires that the State of California Noise/Land Use Compatibility Criteria be used in determining land use compatibility for new development. At different exterior noise levels,

individual land uses are identified as "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." The City of Perris General Plan's *Land Use/Noise Compatibility Guidelines*, which are presented as General Plan Exhibit N-1, are designed to ensure noise compatibility of proposed land uses with the predicted future noise environment and illustrate the ranges of allowable exterior noise levels for various land uses based on the 2003 State of California General Plan Guidelines (City of Perris 2005).

The City of Perris utilizes the CNEL scale as the criterion for assessing the compatibility of residential land uses with transportation related noise sources. For noise sensitive uses such as residential uses, the exterior noise level standard is 65 dBA CNEL and the interior noise standard is 45 dBA CNEL. Commercial uses are not considered noise sensitive uses and are evaluated with respect to the Noise/Land Use Compatibility Criteria that defines an ambient noise level ranging from 65 dBA CNEL to 75 dBA CNEL as conditionally acceptable (City of Perris 2005).

4.7.2 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to noise if the Project or any Project-related component would:

1. *Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
2. *Expose persons to or generate excessive groundborne vibration or groundborne noise levels;*
3. *Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
4. *Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
5. *For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or*
6. *For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.*

While the CEQA Guidelines and the City of Moreno Valley noise standards provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts under Threshold 1, they do not define the levels at which increases are considered substantial for use under Thresholds 2, 3, or 4. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receptors in order to determine if a noise increase represents a significant adverse environmental impact.

Noise impacts would be considered significant if any of the following occur as a direct result of the proposed Project:

- If Project-related construction activities occur on any weekday during noise sensitive hours (8:00 p.m.to 7:00 a.m.) or would exceed a maximum sound level of 65 dBA Leq at a distance of 200 feet from the Project site and effect a sensitive noise receptor;
- If Project-related operational (stationary source) noise levels exceed the daytime and nighttime maximum sound levels of 65 dBA CNEL and 60 dBA CNEL, respectively (City of Moreno Valley Noise Ordinance Table 11.80.030-02) beyond 200 feet from the Project's property boundary;
- If short-term Project-related construction activities exceed 80 vibration decibels (VdB) at noise sensitive receiver locations; or
- If Project-related operational activities exceed 70 vibration decibels (VdB) at noise sensitive receiver locations.

The level of significance attributed to the Project's cumulative contribution to noise impacts is based on the noise levels that occur with and without the Project. The significance of cumulative noise impacts varies depending on the condition of the environment and the Project-related noise level increases. For example, if the ambient noise environment is quiet and the new noise source greatly increases the noise levels, an impact may occur even though the noise criteria might not be exceeded. In areas where the without Project noise levels range from 60 to 65 dBA, noise levels increases of 1 dBA cannot be perceived (except in carefully controlled laboratory experiments), an increase of 3 dBA is considered "barely perceptible" and an increase of 5 dBA is considered "readily perceptible." For the purpose of this analysis, a "readily perceptible" 5 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are below 60 dBA and the with-Project noise levels exceeds the City's noise standard for the adjacent land use. A 3 dBA or greater Project-related operational noise level increase is considered a significant impact when the without-Project noise levels are between 60 and 65 dBA and the with-Project noise levels exceeds the City's noise standard for the adjacent land use. When the without-Project noise levels already exceed 65 dBA at a sensitive noise receptor location, any increase of 1.5 dBA or greater as a result of Project operations is considered a cumulatively considerable contribution to the community noise environment.

4.7.3 IMPACT ANALYSIS

Threshold 1:	***Would the Project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***
Threshold 3:	***Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project?***
Threshold 4:	***Would the Project result in a substantially temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Project?***

A. Short-Term Construction Noise Impacts

- **Methodology for Estimating Project Construction Equipment Reference Noise Levels**

In January 2006, the Federal Highway Administration (FHWA) published a national database of construction equipment reference noise emission levels. The database provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation (Urban Crossroads 2014d pp. 45-46). Noise levels generated by heavy construction equipment can range from approximately 70 dBA in excess of 100 dBA when measured at 50 feet. These noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 78 dBA measured at 50 feet from the noise source to the receptor would be reduced to 72 dBA at 100 feet from the source to the receptor, and would be further reduced to 66 dBA at 200 feet from the source to the receptor (Urban Crossroads 2014d 46). Construction-related noise levels were predicted based on the types and numbers of heavy equipment expected to be used during Project construction activities as previously described in EIR Section 3.0, *Project Description*.

- **Project Construction Noise Impact Analysis**

Construction activities associated with the proposed Project, especially activities involving heavy equipment, would create intermittent periods of noise when construction equipment is in operation and would cause a short-term increase in ambient noise levels. Examples of construction equipment that generate noise includes but is not limited to graders, bulldozers, trucks, power tools, concrete mixers, jackhammers, and portable generators. Construction of the proposed Project is expected to occur in four (4) stages: 1) site preparation and demolition, 2) grading and subsurface improvements, 3) building construction, 4) landscaping, fencing/wall, and other site improvements installation. The highest construction noise levels would occur during the grading phase (Urban Crossroads 2014d 47).

To assess the construction-related noise levels expected from the proposed Project, analysis of the Project's construction noise level impacts were completed for the ten (10) noise receiver locations identified on Figure 4.7-2, *Noise Receiver Locations.* Receiver locations R3, R4, R7, R8, and R9 represent residential communities in the Project site's vicinity and are considered "noise-sensitive" receptors. Receiver locations R1, R2, R5, R6, and R10 represent areas that are zoned for industrial

land use. There are seven (7) non-conforming residential homes currently located in the industrial zone, south of the Perris Valley Storm Drain Channel and north of Grove View Road.

The projected noise levels used for analysis assume the worst-case noise environment, with all construction equipment operating simultaneously, at full power, at the same location on the Project site. In reality, noise levels would vary day-to-day and would vary throughout the days, as it is highly unlikely that all pieces of construction equipment would simultaneously operate at the same time and location. As shown in Table 4.7-3, *Construction Equipment Noise Levels*, Project-related construction activities are estimated to reach a maximum noise level of 78.4 dBA Leq when measured 200 feet from the Project site. Noise levels experienced by receivers located closer than 200 feet from the Project site would be louder than noise levels at and beyond 200 feet. The nearest noise sensitive receptor is a non-conforming residential property, located approximately 240 feet west of the Project site, west of Perris Boulevard. Receiver locations R3, R4, R7, R8, and R9, located within residential communities, would experience construction-related noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours, assuming a clear line of site from the construction equipment to the receiver. The construction-related noise level impacts experienced by noise receiver locations R3, R4, R7, R8, and R9 would not exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with the existing backyard perimeter walls and the intervening development that blocks or partially blocks the line of sight (Urban Crossroads 2014d 46). Receiver locations R2, R4, R9, and R10 would not exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours. Noise sensitive receivers R1, R5, and R6, located within areas zoned for industrial use, are expected to experience noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours. Therefore, Project construction-related activities would represent a short-term significant impact to non-conforming residential uses near the Project site in the industrial zone.

B. Long-Term Operational Impacts

❑ Transportation-Related Noise

Methodology for Estimating Project Operational Traffic Noise

Future roadway noise impacts from vehicular traffic were projected using a computer program that replicates the FHWA and Model Inputs Traffic Noise Prediction Model- FHWA-RD-77-108 (the "FHWA Model"). Future noise impacts to properties along local roads from vehicular traffic were calculated along the Project's predicted local traffic route where fifty (50) or more peak hour trips would be contributed. A total of 17 roadway segments were evaluated based on the traffic impact study area utilized in the Project's Traffic Impact Analysis (refer to *Technical Appendix H1).*

The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the REMEL to account for the roadway classification (e.g., collector, secondary, major, or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the

ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period (Urban Crossroads 2014d 23).

Table 4.7-4, *Off-Site Roadway Parameters*, presents the FHWA Model roadway parameters used by Urban Crossroads in the Project's traffic impact analysis (Refer to *Technical Appendix H1*) for each of the 17 study area roadway segments. For the purpose of the noise analysis (Refer to *Technical Appendix G*), soft site conditions were used to analyze the traffic noise conditions in the Project study area (Urban Crossroads 2014d 23). Table 4.7-5, *Average Daily Traffic Volumes*, and Table 4.7-6, *Time of Day Vehicle Splits*, present the hourly traffic flow distributions (vehicle mix) used for the noise analysis (Refer to *Technical Appendix G*). To quantify the off-site traffic noise levels, the FHWA noise prediction model inputs were modified to account for the increased heavy truck activities within the Project study area. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model (Urban Crossroads 2014d 23).

Transportation-Related Noise Impact Analysis

Generally, traffic noise impacts are analyzed both to ensure that a project would not adversely impact the acoustic environment of the surrounding community and also to ensure that a project site is not exposed to an unacceptable level of noise resulting from the ambient noise environment acting upon the property. The proposed Project consists of the construction and operation of one (1) logistics warehouse building and is not considered to be sensitive to noise exposure. Thus, the analysis herein focuses on the Project's potential to increase traffic noise as a result of vehicles traveling to and from the property.

Noise contours (representing the 55, 60, 65, and 70 dBA noise levels) along the 17 local roadway segments to which the Project would contribute 50 or more peak hour trips were calculated for the without-Project and with-Project scenarios to assess the Project's incremental traffic-related noise impact on local roads. Traffic noise contours were modeled for each scenario studied in the Project's Traffic Impact Analysis (*Technical Appendix H1*) and include the Existing (2013) and Year 2018 noise scenarios. The noise contours assume a normal "soft" condition and do not take into account the effect of any existing noise barriers or topography (walls, fences, berms, etc.) that may attenuate ambient noise levels. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Traffic noise contour boundaries are typically calculated at distances of 100 feet from a roadway centerline. In addition, because the noise contours reflect modeling of vehicular noise along area roadways, they appropriately do not reflect noise contribution from surrounding operational activities that occur as part of commercial and industrial uses, aircraft operations, or other uses within the study area. Noise contour boundaries for Existing (2013) conditions are summarized in Table 4.7-7 and Table 4.7-8. Noise contour boundaries for Year 2018 conditions are summarized in Table 4.7-9 and Table 4.7-10. Traffic noise contour worksheets are contained in Appendix 7.1 of *Technical Appendix H1*.

Pursuant to the *Thresholds of Significance* (refer to Subsection 4.7.2, above), the Project would have the potential to contribute to a cumulatively considerable noise impact if the Project (in this case, the Project's traffic) would generate substantial noise. Substantial noise is defined as 5 dBA or more when the without project noise environment is less than 60 dBA CNEL, 3 dBA or more when the

without project noise environment is between 60 and 65 dBA CNEL, or 1.5 dBA or more when the without project noise environment exceeds 65 dBA CNEL.

Table 4.7-11, *Existing (2013) Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the existing (2013) noise conditions to the noise conditions that would result with implementation of the proposed Project in the absence of cumulative development and ambient growth. Under existing (2013) conditions, operation of the proposed Project would cause an increased noise level of 0.0 to 10.9 dBA CNEL along local roads (as measured 100 feet from the roadway centerline). With the addition of Project-related traffic to the Existing (Year 2013) noise environment, the noise levels along study area roadway segments would range between 57.7 to 70.4 dBA CNEL (as measured from the roadway centerline).

As shown in Table 4.7-11, under Existing (Year 2013) conditions, Project-related traffic would contribute over 5.0 dBA CNEL along three (3) study-area roadway segments where the without-Project noise levels are below 60.0 dBA CNEL and the Project has the potential to contribute to a cumulatively considerable effect at each of the listed roadway segments.

- Kitching Street, south of Modular Way;
- Modular Way, west of Kitching Street; and
- Globe Street, west of Kitching Street

None of the three (3) roadway segments listed above are adjacent to noise-sensitive land uses, and none of the three (3) above-listed roadway segments would exceed the City's noise standard for adjacent land uses with the addition of Project traffic. Therefore, the Project would result in a less-than-significant impact to sensitive receptors and noise levels would not exceed applicable standards.

Additionally, Project-related traffic would contribute less than 3 dBA along all study area roadway segments where the without-Project noise levels are between 60 and 65 dBA CNEL under Existing (Year 2013) conditions.

The Project would cause noise levels to exceed 65.0 dBA CNEL along one (1) roadway segment under Existing (Year 2013) conditions; the Harley Knox Boulevard segment west of Perris Boulevard (an increase from 63.8 to 65.2 dBA CNEL, refer to Table 4.7-11). However, there are no noise-sensitive land uses adjacent to this roadway segment and this area is planned for long-term industrial use. Because there are no noise-sensitive land uses adjacent to this roadway segment and because the long-term use of this area (i.e., industrial) is compatible with noise levels below 70.0 dBA CNEL, the Project would not directly result in the exposure of sensitive receptors to noise levels in excess of applicable standards. As such, the Project would result in less-than-significant impacts related to noise.

Furthermore, Project-related traffic would increase noise levels by at least 1.5 dBA CNEL along one (1) roadway segment (Indian Street, south of Grove View Road) where the without-Project noise levels exceed 65 dBA CNEL under existing (year 2013) conditions, and the Project has the potential to contribute to a cumulatively significant effect at this roadway segment. However, because there are no noise-sensitive land uses adjacent to the segment of Indian Street south of Grove View Road, the Project would not contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards. Therefore, the Project would result in less-than-significant impacts associated

with off-site transportation-related noise and impacts would be less than cumulatively considerable under Existing (Year 2013) plus Project conditions.

Table 4.7-12, *Year 2018 Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the projected noise conditions in the Year 2018 (including cumulative development and ambient growth) to the noise conditions that would result with addition of the proposed Project. Under Year 2018 conditions, off-site roadway noise levels along the 17 studied roadway segments would increase from 0.0 to 10.9 dBA CNEL (as measured 100 feet from the roadway centerline) with addition of the proposed Project. With the addition of Project-related traffic to the projected Year 2018 noise environment, the noise levels along study area roadway segments would range between 59.0 dBA CNEL and 72.2 dBA CNEL.

As shown in Table 4.7-12, *Year 2018 Off-Site Project-Related Traffic Noise Impacts*, the addition of Project-related traffic to projected 2018 traffic is calculated to increase noise levels by a maximum of 10.9 dBA CNEL. Five (5) roadway segments where without-Project noise levels are below 60 dBA CNEL, would be subject to noise level increases of at least 5.0 dBA CNEL, thereby having the potential to contribute to a cumulatively considerable effect:

- Kitching Street, north of Modular Way
- Kitching Street, south of Modular Way
- Modular Way, east of Perris Boulevard
- Modular Way, west of Kitching Street
- Globe Street, west of Kitching Street.

However, none of the five (5) roadway segments listed above are adjacent to any noise-sensitive land uses and the Project's effects would be less-than-significant. In addition, these roadways exist adjacent to industrially zoned lands where such roadway noise is typical. Furthermore, the remaining 12 study area roadway segments would not be subjected to Project-traffic related noise level increases in excess of 0.6 dBA CNEL for Year 2018 projected conditions and the Project's incremental noise contributions along these roadways would be considered "barely perceptible" (i.e., less than 1.5 dBA CNEL). Accordingly, the addition of Project-related traffic would not represent a substantial, permanent increase in noise levels above ambient conditions and would not result in the exposure of sensitive receptors to noise levels in excess of applicable standards. Therefore, the Project would result in less-than-significant impacts associated with off-site transportation-related noise and impacts would be less than cumulatively considerable under Existing (Year 2018) plus Project conditions.

❑ Stationary Noise

Methodology for Estimating Project Operational Stationary Noise

Operational noise levels at the Project site would be very similar to operational noise levels generated at other distribution warehouse facilities in southern California. Reference noise level measurements were collected by Urban Crossroads on Tuesday, January 22, 2013, at two operating warehouse facilities in Anaheim, California (Veg Fresh Farms and the FedEx distribution facility, both located at East Orangethorpe Avenue). From a noise standpoint, a warehouse facility's operational characteristics are the primary factors that affect operational noise levels; the geographic location of the facility does not substantially influence operational noise levels. The noise level measurements

collected from the Veg Fresh Farms and FedEx warehouse facilities in Anaheim, California are representative of stationary noise levels expected at the Project site because these facilities have 24-hour operational activities that are comparable to those proposed at the Project site. The reference noise level measurements include the daytime and nighttime noise levels associated with idling trucks, delivery truck activities, parking, backup alarms and the use of refrigerated containers or reefers. Although a tenant requiring refrigeration is not expected to occupy the Project site, the inclusion of refrigeration activities as part of the reference noise level allows analysis of a higher intensity operation than a non-refrigeration operation that would likely occupy the Project site.

Based on the noise level measurements collected by Urban Crossroads from the reference Veg Fresh Farms and the FedEx distribution facilities, a noise level of 69.1 dBA Leq is used as the reference noise level for the Project's operational activities. The reference noise level was measured at a distance of 25 feet from the noise source (loading dock) and with an estimated noise source height of eight (8) feet. The reference noise levels describe the worst-case noise condition with full 24-hour daytime and nighttime distribution activities. It is likely overstates the noise level impacts that will actually occur at the Project site. The specific noise levels at the Project site will depend on the actual tenant (which is not yet known), the intensity and the daytime/nighttime hours of operation.

Stationary Noise Impact Analysis

The proposed Project consists of the construction and operation of one (1) logistics warehouse building. Stationary noise sources associated with operation of the Project would include but not be limited to idling trucks, delivery truck activities, parking, backup alarms, and HVAC equipment. The reference noise levels describe the worst-case noise condition with full 24-hour daytime and nighttime distribution activities. In reality, operational noise levels would vary throughout the day and would not be constant.

Based upon the reference noise levels, as described above, Table 4.7-13, *Operational Noise Level Projections*, presents the exterior operational noise levels expected from Project operation at each receiver location shown in Figure 4.7-2. The operational noise level calculations shown on Table 4.7-13 identify the distance from the reference noise source (i.e., truck loading and parking areas) to the noise receivers, the distance attenuation, and the estimated Project-related hourly noise levels. As indicated in Table 4.7-13, the hourly operational noise levels that are expected from Project operations are calculated to range from 30.6 dBA Leq to 41.2 dBA Leq, which is below both the daytime (65 dBA Leq) and nighttime (60 dBA Leq) City of Moreno Valley exterior noise standards (City of Moreno Valley Municipal Code Section 11.80).

Table 4.7-14 and Table 4.7-15 summarize the local daytime and nighttime noise environments when Project operational noise is added to ambient noise conditions. As indicated in Table 4.7-14 and Table 4.7-15, noise levels would range from 50.3 to 62.7 dBA Leq when combined with the existing ambient noise level measurements. The analysis in Table 4.7-14 indicates that the proposed Project would contribute an operational noise level impact of up to 0.2 dBA Leq at noise receiver location R7 during daytime hours (7:00 a.m. to 10:00 p.m.). The analysis in Table 4.7-15 indicates that the Project would contribute an operational noise level impact of up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 during nighttime hours (10:00 p.m. to 7:00 a.m.). The Project's contribution of noise at noise receiver locations R3, R7, and R8 is determined to be a less-than-significant impact because noise levels at these locations would remain below acceptable standards

(i.e., 65 dBA Leq during daytime hours and 60 dBA Leq during nighttime hours) and the Project's noise contribution at these locations would not be perceptible. At receiver locations R1, R2, R4, R5, R6, and R10, the Project would contribute 0.0 dBA Leq to the noise environment during daytime and nighttime hours. Applying the *Thresholds of Significance* (refer to Subsection 4.7.2 above), the expected operational noise level increase of up to 0.2 dBA Leq would not represent a substantial, permanent increase above ambient conditions.

The Project's northernmost driveway along Perris Boulevard would be used by trucks and passenger cars entering and exiting the proposed warehouse facility, receiving approximately 300 passenger car equivalent (PCE) trips per day (see Figure 4.8-12 of this EIR). Vehicle traffic at the Project's northernmost driveway along Perris Boulevard would not be a source of substantial Project-related operational noise because the Project's use of this driveway would be intermittent throughout any given day and vehicle noise at this driveway likely would not be discernable above background traffic noise along Perris Boulevard (as summarized in Tables 4.7-11 and 4.7-12) or background noise on the Project site (as summarized in Tables 4.7-13 through 4.7-15). Accordingly, long-term use of the Project's northernmost driveway along Perris Boulevard is not expected to create a substantial, permanent increase above ambient conditions or expose sensitive receptors to noise levels in excess of applicable standards.

In summary, the Project's operational activities would not create a substantial, permanent increase in noise levels above the ambient conditions, and would not cause or contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards.

Threshold 2: Would the Project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

A. Short-Term Construction Vibration Impacts

The Project's construction-related vibration levels were predicted using reference construction equipment vibration levels and logarithmic equations contained in the Federal Transit Administration's (FTA) 2006 publication: "Transit Noise and Vibration Impact Assessment" (Urban Crossroads 2014d 49).

Construction activities that would occur within the Project site are expected to include grading and excavation, which have the potential to generate low levels of intermittent, localized ground-borne vibration. Vibration levels anticipated to result from Project-related construction activities were calculated at each of the ten (10) receiver locations identified on Figure 4.7-2. In addition, Project construction-related vibration levels were calculated at a non-specific receiver location 200 feet from the Project site. The results of the vibration analysis for Project-related construction activities are summarized in Table 4.7-16, *Construction Equipment Vibration Levels*. As shown in Table 4.7-16, Project-related construction activities are expected to create a peak vibration level of 59.9 VdB when measured at 200 feet from the Project site, and would not expose any nearby receptor (i.e., R1-R10) to peak vibration levels in excess of 57.5 VdB. Because the amount of vibration generated by the Project would be well below a level of significance threshold (80 VdB, refer to Subsection 4.7.2), the Project's short-term construction activities would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Therefore, the Project would result in less-than-significant impacts associated with construction vibration.

B. Long-Term Operational Vibration Impacts

Under long-term conditions, operational activities of the proposed Project would not include nor require equipment, facilities, or activities that would result in perceptible groundborne vibration. Trucks would travel to-and-from the Project site during long-term operation; however, vibration levels for heavy trucks operating at low-to-normal speeds on smooth, paved surfaces – as is expected on the Project site and along surrounding roadways – are typically below the human threshold of perception (65 VdB, Urban Crossroads 2014d 43). Accordingly, long-term operation of the Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels, and a less-than-significant impact would occur.

Threshold 5: ***For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?***

According to the City of Moreno Valley General Plan FEIR Figure 5.4-1, *March Reserve Air Base Noise Impact Area*, the Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. Accordingly, the Project would have a less-than-significant impact associated with airport-related noise.

The proposed Project does not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with the proposed Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise.

Threshold 6: ***For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?***

Although the Project site is located 1.0 mile west of the March ARB, this airfield is not a private airfield and there are no other private airfields or airstrips in the vicinity of the Project site. Therefore, the proposed Project would not expose people to excessive noise levels associated with operations at a private airstrip and no impact would occur.

4.7.4 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan buildout in the City of Moreno Valley and surrounding areas. The analysis of potential cumulative impacts is divided into four general topics of discussion by combining the *Thresholds of Significance* (listed above in Subsection 4.7.2) into groupings of like topics.

A. Substantial Noise Increase or Violations (Thresholds 1, 3, and 4)

❑ Short-Term Cumulative Construction-Noise Impacts

Construction activities associated with the Project, especially activities involving heavy equipment, would create intermittent periods of noise when construction equipment is in operation and cause a short-term increase in ambient noise levels. The peak noise level anticipated during construction activities would occur during mass grading of the site, which would result in Project-related noise levels of 78.4 dBA Leq at a distance of 200 feet from the noise source. Noise levels within 200 feet would be louder than noise levels at and beyond 200 feet. The nearest noise sensitive receptor is located approximately 240 feet west of the Project site, west of Perris Boulevard. As previously indicated in Subsection 4.7.3, receiver locations R3, R4, R7, R8, and R9, located within residential communities would experience noise levels that would exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with a clear line of sight from the noise source to the receiver. The construction-related noise level impacts at noise receiver locations R3, R4, R7, R8, and R9 are not expected to exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours with the existing backyard perimeter walls (Urban Crossroads 2014d 46) from construction of the proposed Project alone. Noise receiver locations R2, R4, R9, and R10 would not experience noise levels that exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours from construction of the proposed Project alone. Noise sensitive receivers R1, R5, and R6, located within areas zoned for industrial use, are expected to exceed the City of Moreno Valley 65 dBA Leq construction noise level limit during the daytime hours from construction of the proposed Project alone.

Construction-related Project noise combined with ambient noise, construction noise, and vehicular noise from potential cumulative development projects would have a cumulative effect on noise sensitive receiver locations R2, R4, R9, and R10. As indicated previously in EIR Subsection 2.3, some of the properties located in the immediate vicinity of the Project site are vacant or contain non-conforming uses and are anticipated to develop with industrial and warehouse uses consistent with their General Plan land use and zoning designations. In the event that construction activities occur on any properties surrounding the site simultaneous with Project-related construction activities, and that also contribute construction noise to receiver locations R2, R4, R9 and R10, a cumulative impact may occur and the Project's construction-related noise contribution to the overall noise level would be cumulatively considerable. Such noise level increases would represent a cumulatively considerable substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. Because construction noise would be temporary in nature, Project construction activities would result in a less than cumulatively considerable substantial permanent (long-term) increase in ambient noise levels in the Project vicinity above levels existing without the Project.

❑ Long-Term Cumulative Transportation-Related Noise Impacts

Under existing with Project conditions, the proposed Project is expected to generate transportation-related noise level increases up to 10.9 dBA CNEL. However, none of the roadway segments that are subjected to potentially significant levels of Project-related traffic noise contain sensitive receptors. Therefore, pursuant to the Thresholds of Significance (refer to Subsection 4.7.2), the Project's traffic-related noise impacts along other study area roadway segments (17 total) would be less than cumulatively considerable under Existing (Year 2013) conditions.

By the Year 2018, the concentration of Project traffic on study area roadways (as a percentage of total traffic) would decrease as the overall volume of background traffic increases, and the Project's contribution of traffic-related noise to study area roadways would decrease concomitantly. Under Year 2018 with Project conditions, the Project is expected to generate transportation-related noise level increases of up to 10.9 dBA CNEL (refer to Table 4.7-12). However, none of the five (5) roadway segments subject to noise increases in excess of 5.0 dBA CNEL, which constitutes a "readily perceptible" noise increase, are adjacent to any noise-sensitive land uses and the Project's effects would be less-than-significant (Urban Crossroads 2014d 35). Furthermore, the remaining 12 study area roadway segments would not be subjected to Project-traffic related noise level increases in excess of 0.6 dBA CNEL for Year 2018 projected conditions and the Project's incremental noise contributions along these roadways would be considered "barely perceptible" (i.e., less than 1.5 dBA CNEL). Therefore noise impacts under the Year 2018 scenario would be less than cumulatively considerable.

❑ Long-Term Cumulative Stationary Noise Impacts

The proposed Project would contribute operational noise levels of up to 0.2 dBA Leq at noise receiver location R7 during daytime hours (7:00 a.m. to 10:00 p.m.) and up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 during nighttime hours (10:00 p.m. to 7:00 a.m.). The Project's contribution of noise at a level of up to 0.2 dBA Leq at noise receiver locations R3, R7, and R8 is considered less than cumulatively considerable because noise levels at these locations would remain below acceptable standards (i.e., 65 dBA Leq during daytime hours and 60 dBA Leq during nighttime hours) and the Project's noise contribution to noise at these locations would not be perceptible. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments and a change of 3 dBA is considered "barely perceptible" (Urban Crossroads 2014d 11). A level of 0.2 dBA is well below the level that can be perceived. At receiver locations R1, R2, R4, R5, R6, and R10, the proposed Project would contribute 0.0 dBA Leq to the noise environment during daytime and nighttime hours. Applying the *Thresholds of Significance* (refer to Subsection 4.7.2 above), the expected operational noise level increase of up to 0.2 dBA Leq would not represent a substantial, permanent increase above ambient conditions. Thus, the Project's operational activities would not cumulatively contribute to the creation of a significant and substantial, permanent increase in noise levels above the ambient conditions, and would not cause or contribute to the exposure of sensitive receptors to noise levels in excess of applicable standards. Accordingly, the Project would have a less-than-significant operational noise impact and impacts would be less than cumulatively considerable.

B. Groundborne Vibration and Groundborne Noise (Threshold 2)

The types of construction equipment that would be used to implement the proposed Project would not create vibration amplitudes that could cause structural damage to nearby structures. The nearest existing off-site structures are located more than 100 feet from the nearest point of construction activities and would not be exposed to substantial ground-borne vibration due to the temporary operation of heavy construction equipment on the Project site. In addition, there would be no other construction activities occurring simultaneously within 100 feet of the Project site. Under long-term operating conditions, the Project would not involve the use of equipment, facilities, or activities that would result in perceptible groundborne vibration. Accordingly, the Project has no potential to

cumulatively contribute to excessive groundborne vibration and noise and impacts would be less than cumulatively considerable.

C. Public and Private Airport-Related Noise Levels (Thresholds 5 and 6)

The proposed Project does not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with the proposed Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively contribute to impacts associated with noise from a public airport, public use airport, or private airstrip. Additionally, the Project is not a noise-sensitive land use and operation of the Project would not contribute towards the exposure of people to excessive airport-related noise.

4.7.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds 1, 3, and 4: Significant Direct and Cumulatively Considerable Impact (Short-Term): Noise generated by Project construction activities would temporarily impact non-conforming residential properties located in the industrial zone. In the event that Project construction activities occur simultaneously with other construction activities that affect the same nearby noise-sensitive receptors as the Project, there is potential for a significant cumulative short-term impact to occur, with the Project's contribution to the impact being cumulatively considerable. Under long-term operation, the Project would not expose persons to or generate noise levels in excess of local standards and would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Threshold 2: Less-than-Significant Impact. The Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Threshold 5: Less-than-Significant Impact. The Project site is located outside of the March ARB 60 dBA CNEL noise contour and would not be subjected to excessive noise levels due to the site's proximity to March ARB. In addition, according to the California Governor's Office of Planning and Research, noise levels up to 75 dBA CNEL are considered "normally acceptable" for industrial developments, indicating that no special noise insulation requirements would be necessary to address airport-related noise levels. As such, the Project would not expose people to excessive noise levels associated with the operation of an airport.

Threshold 6: No Impact. The Project would not expose people to excessive noise levels associated with the operation of a private airstrip.

4.7.6 MITIGATION

MM 4.7-1 Prior to the issuance of any building or grading permits, the City of Moreno Valley Land Development Division and Building and Safety Division shall review building and grading plans to ensure that the following notes are included. Project contractors shall be required to comply with these notes and maintain written records of such compliance that can be inspected by the City of Moreno Valley upon request.

a) All construction activities, including but not limited to haul truck deliveries, shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code).

b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

c) Construction contractors shall place all stationary construction equipment and equipment staging areas so that all emitted noise is directed towards the center of the property and away from the property boundaries.

d) Construction contractors shall locate equipment staging in areas on the Project site that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project site.

e) Construction contractors limit all haul truck deliveries to the same hours specified for construction equipment (pursuant to Chapter 11.80 of the City of Moreno Valley Municipal Code). Haul trucks using City streets shall use the City's designated truck routes.

4.7.7 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds 1, 3, and 4: Significant Unavoidable Direct and Cumulatively Considerable Impact (Short-Term). Although implementation of Mitigation Measure MM 4.7-1 would reduce construction-related noise levels, this measure would not reduce construction-related noise impacts to non-conforming sensitive receptors located near the Project site in the industrial zone. These properties would experience noise levels above 65 dBA Leq. during construction of the Project and other simultaneous construction projects and operational activities in the area. Additional feasible mitigation measures with a proportional nexus to the Project's level of impact are not available to further reduce Project-related construction noise levels.

Table 4.7-1 Existing Ambient Noise Level Measurements

Location[1]	Date	Description	Hourly Noise Level (Leq dBA)[2]		CNEL
			Daytime (7am to 10pm)	Nighttime (10pm to 7am)	
L1	12/18/2013	Southwest of the Project site across Perris boulevard and north of San Michele Road	62.2	62.7	69.2
L2	12/18/2013	North of the Project site across the wash basin at the end of Kitching Street	51.8	50.9	57.8
L3	12/18/2013	East of the Project site in an existing residential neighborhood located on Callerio Vista	56.4	50.3	58.6
L4	11/7/2013	Southwest of the Project site in an existing residential neighborhood south of Nandina Avenue.	62.2	61.0	67.8

[1] See Figure 4.7-1 for the location of the noise level measurement locations.
[2] Energy (logarithmic) average hourly levels. The long-term measurements printouts are included in Appendix 5.1.
Source: Urban Crossroads 2014d, Table 5-1

Table 4.7-2 Maximum Sound Levels (in dBA) For Source Land Uses

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
60	55	65	60

Source: City of Moreno Valley Municipal Code Table 11.80.030-2

Table 4.7-3 Construction Equipment Noise Levels

Noise Receiver[1]	Construction Phase Hourly Noise Level (dBA Leq)[2]																											
	Demolition (Phase 1)	Demolition (Phase 1.1)	Grading (Phase 1)	Grading (Phase 1.1)	Grading (Phase 2)	Grading (Phase 3)	Plumbing Underslab (Phase 1)	Plumbing Underslab (Phase 1.1)	Plumbing-Building	Electrical-Underground	Electrical-Building (Phase 1)	Electrical-Building (Phase 1.1)	Structural Concrete (Phase 1)	Structural Concrete (Phase 2)	Structural Concrete (Phase 3)	Structural Concrete (Phase 4)	Structural Concrete (Phase 5)	Structural Concrete (Phase 6)	Structural Concrete (Phase 7)	Structural Steel	Fire Protection-Site	Fire Protection-Overhead	Reinforcing Steel	Site Utilities- Storm	Site Utilities-Sewer	Site-Utilities-Water	Roof Structure	Peak[3]
@200'	71.9	62.7	78.4	70.5	72.8	72.8	65.0	63.0	**56.0**	62.0	59.0	62.0	68.0	68.3	59.0	60.0	60.0	62.0	56.0	67.3	66.9	66.9	59.0	70.1	65.5	65.5	72.8	**78.4**
R1	60.8	51.6	67.3	59.4	61.7	61.7	53.9	51.9	44.9	50.9	47.9	50.9	56.9	57.2	47.9	48.9	48.9	50.9	44.9	56.2	55.9	55.9	47.9	59.0	54.4	54.4	61.7	**67.3**
R2	57.7	48.6	64.2	56.4	58.7	58.7	50.8	48.8	41.8	47.8	44.8	47.8	53.8	54.1	44.8	45.8	45.8	47.8	41.8	53.1	52.8	52.8	44.8	56.0	51.4	51.4	58.6	64.2
R3	58.7	49.5	65.2	57.3	59.7	59.7	51.8	49.8	42.8	48.8	45.8	48.8	54.8	55.1	45.8	46.8	46.8	48.8	42.8	54.1	53.8	53.8	45.8	56.9	52.3	52.3	59.6	**65.2**
R4	53.3	44.1	59.7	51.9	54.2	54.2	46.4	44.4	37.4	43.4	40.4	43.4	49.4	49.7	40.4	41.4	41.3	43.4	37.4	48.7	48.3	48.3	40.4	51.5	46.9	46.9	54.2	**59.7**
R5	70.3	61.1	76.8	68.9	71.2	71.2	63.4	61.4	54.4	60.4	57.4	60.4	66.4	66.7	57.4	58.4	58.4	60.4	54.4	65.7	65.4	65.4	57.4	68.5	63.9	63.9	71.2	**76.8**
R6	62.1	52.9	68.6	60.7	63.0	63.0	55.2	53.2	46.2	52.2	49.2	52.2	58.2	58.5	49.2	50.2	50.2	52.2	46.2	57.5	57.2	57.2	49.2	60.3	55.7	55.7	63.0	**68.6**
R7	59.1	49.9	65.5	57.7	60.0	60.0	52.2	50.2	43.1	49.2	46.2	49.2	55.2	55.5	46.2	47.2	47.1	49.1	43.1	54.5	54.1	54.1	46.2	57.3	52.7	52.7	60.0	**65.5**
R8	58.6	49.5	65.1	57.3	59.6	59.6	51.7	49.7	42.7	48.7	45.7	48.7	54.7	55.0	45.7	46.7	46.7	48.7	42.7	54.0	53.7	53.7	45.7	56.9	52.3	52.3	59.5	**65.1**
R9	53.8	44.6	60.2	52.4	54.7	54.7	46.9	44.9	37.9	43.9	40.9	43.9	49.9	50.2	40.9	41.9	41.9	43.9	37.9	49.2	48.8	48.8	40.9	52.0	47.4	47.4	54.7	60.2
R10	55.2	46.0	61.6	53.8	56.1	56.1	48.3	46.3	39.3	45.3	42.3	45.3	51.3	51.6	42.3	43.3	43.2	45.3	39.3	50.6	50.2	50.2	42.3	53.4	48.8	48.8	56.1	61.6

[1] Noise receiver locations are shown on Figure 4.7-2.
[2] Construction noise calculations by phase are included in Appendix 9-2.
[3] Estimated construction noise levels during peak operating conditions assuming clear line of sight from noise sensitive receiver.

Table 4.7-4 Off-Site Roadway Parameters

ID	Roadway	Segment	Jurisdiction	Roadway Classification[1]	Lanes	Vehicle Speed (MPH)
1	Patterson Av.	s/o Harley Knox Bl.	Perris	Collector	2	45
2	Indian St.	n/o Grove View Rd.	Moreno Valley	Minor Arterial	4	45
3	Indian St.	s/o Grove View Rd.	Moreno Valley	Minor Arterial	4	45
4	Perris Blvd.	n/o San Michele Rd.	Moreno Valley	Divided Arterial	6	50
5	Perris Blvd.	s/o San Michele Rd.	Moreno Valley	Divided Arterial	6	50
6	Perris Blvd.	n/o Grove View Rd.	Moreno Valley	Divided Arterial	6	50
7	Perris Blvd.	s/o Grove View Rd.	Moreno Valley	Divided Arterial	6	50
8	Perris Blvd.	s/o Harley Knox Bl.	Perris	Divided Arterial	6	50
9	Kitching St.	n/o Modular Wy.	Moreno Valley	Arterial	4	50
10	Kitching St.	s/o Modular Wy.	Moreno Valley	Arterial	4	50
11	Modular Way	e/o Perris Blvd.	Moreno Valley	Collector	2	45
12	Modular Way	w/o Kitching St.	Moreno Valley	Collector	2	45
13	Globe St.	w/o Kitching St.	Moreno Valley	Collector	2	45
14	Harley Knox Blvd.	e/o I-15 Fwy.	Perris	Arterial	4	45
15	Harley Knox Blvd.	w/o Patterson Av.	Perris	Arterial	4	45
16	Harley Knox Blvd.	e/o Patterson Av.	Perris	Arterial	4	45
17	Harley Knox Blvd.	w/o Perris Blvd.	Perris	Arterial	4	45

[1] Road Classifications based upon the General Plan Circulation Element.
Source: Urban Crossroads 2014d, Table 6-1

Table 4.7-5 Average Daily Traffic Volumes

ID	Roadway	Segment	Average Daily Traffic (1,000's)[1]			
			Existing		Year 2018	
			No Project	With Project	No Project	With Project
1	Patterson Av.	s/o Harley Knox Bl.	1.4	1.5	1.9	2.0
2	Indian St.	n/o Grove View Rd.	6.6	6.7	23.1	23.2
3	Indian St.	s/o Grove View Rd.	8.1	9.0	22.1	23.0
4	Perris Blvd.	n/o San Michele Rd.	18.8	19.4	25.9	26.5
5	Perris Blvd.	s/o San Michele Rd.	17.9	18.4	24.7	25.1
6	Perris Blvd.	n/o Grove View Rd.	16.9	17.5	28.1	28.8
7	Perris Blvd.	s/o Grove View Rd.	17.3	18.2	28.6	29.5
8	Perris Blvd.	s/o Harley Knox Bl.	16.2	16.6	26.7	27.0
9	Kitching St.	n/o Modular Wy.	0.8	1.7	0.6	1.3
10	Kitching St.	s/o Modular Wy.	0.3	0.9	0.3	1.5
11	Modular Way	e/o Perris Blvd.	0.6	0.8	0.3	0.8
12	Modular Way	w/o Kitching St.	0.6	0.7	0.3	0.8
13	Globe St.	w/o Kitching St.	1.4	2.6	1.6	2.7
14	Harley Knox Blvd.	e/o I-15 Fwy.	13.3	14.7	31.1	32.5
15	Harley Knox Blvd.	w/o Patterson Av.	12.2	13.6	33.1	34.4
16	Harley Knox Blvd.	e/o Patterson Av.	10.8	12.2	31.7	33.1
17	Harley Knox Blvd.	w/o Perris Blvd.	5.4	5.6	13.1	13.7

Source: Urban Crossroads 2014d, Table 6-2

Table 4.7-6 Time of Day Vehicle Splits

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7am-7pm)	77.5%	84.8%	86.5%
Evening (7pm-10pm)	12.9%	4.9%	2.7%
Nighttime (10pm-7am)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Urban Crossroads 2014d, Table-6-3.

Table 4.7-7 Existing (2013) Without Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	57.7	RW	RW	70	151
2	Indian St.	n/o Grove View Rd.	64.6	44	94	203	436
3	Indian St.	s/o Grove View Rd.	65.5	50	108	232	500
4	Perris Blvd.	n/o San Michele Rd.	70.2	104	224	482	1,039
5	Perris Blvd.	s/o San Michele Rd.	70.0	101	217	467	1,005
6	Perris Blvd.	n/o Grove View Rd.	69.8	97	208	449	968
7	Perris Blvd.	s/o Grove View Rd.	69.9	98	212	456	983
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	94	203	437	941
9	Kitching St.	n/o Modular Wy.	56.4	RW	RW	57	123
10	Kitching St.	s/o Modular Wy.	52.1	RW	RW	RW	64
11	Modular Way	e/o Perris Blvd.	54.0	RW	RW	40	86
12	Modular Way	w/o Kitching St.	54.0	RW	RW	40	86
13	Globe St.	w/o Kitching St.	57.7	RW	RW	70	151
14	Harley Knox Blvd.	e/o I-15 Fwy.	67.8	71	153	329	709
15	Harley Knox Blvd.	w/o Patterson Av.	67.4	67	144	311	670
16	Harley Knox Blvd.	e/o Patterson Av.	66.9	62	133	287	617
17	Harley Knox Blvd.	w/o Perris Blvd.	63.8	39	84	180	389

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-1

Table 4.7-8 Existing (2013) With Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	57.7	RW	RW	71	152
2	Indian St.	n/o Grove View Rd.	64.6	44	94	203	437
3	Indian St.	s/o Grove View Rd.	67.0	63	136	294	633
4	Perris Blvd.	n/o San Michele Rd.	70.4	106	228	491	1,058
5	Perris Blvd.	s/o San Michele Rd.	70.4	106	228	490	1,057
6	Perris Blvd.	n/o Grove View Rd.	70.1	102	220	474	1,021
7	Perris Blvd.	s/o Grove View Rd.	70.4	106	228	491	1,058
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	94	204	438	945
9	Kitching St.	n/o Modular Wy.	61.0	RW	54	116	250
10	Kitching St.	s/o Modular Wy.	63.0	RW	73	158	341
11	Modular Way	e/o Perris Blvd.	58.4	RW	37	79	170
12	Modular Way	w/o Kitching St.	60.2	RW	48	103	223
13	Globe St.	w/o Kitching St.	63.1	RW	75	162	349
14	Harley Knox Blvd.	e/o I-15 Fwy.	68.8	83	178	385	829
15	Harley Knox Blvd.	w/o Patterson Av.	68.5	79	171	368	792
16	Harley Knox Blvd.	e/o Patterson Av.	68.1	75	162	349	751
17	Harley Knox Blvd.	w/o Perris Blvd.	65.2	48	103	222	479

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-2

Table 4.7-9 Year 2018 Without Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	59.0	RW	40	86	185
2	Indian St.	n/o Grove View Rd.	70.0	101	217	467	1,006
3	Indian St.	s/o Grove View Rd.	69.8	98	210	453	977
4	Perris Blvd.	n/o San Michele Rd.	71.6	129	277	597	1,286
5	Perris Blvd.	s/o San Michele Rd.	71.4	125	268	578	1,246
6	Perris Blvd.	n/o Grove View Rd.	72.0	136	293	630	1,358
7	Perris Blvd.	s/o Grove View Rd.	72.1	137	296	638	1,374
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	131	283	609	1,313
9	Kitching St.	n/o Modular Wy.	55.1	RW	RW	47	102
10	Kitching St.	s/o Modular Wy.	52.1	RW	RW	RW	64
11	Modular Way	e/o Perris Blvd.	51.0	RW	RW	RW	54
12	Modular Way	w/o Kitching St.	51.0	RW	RW	RW	54
13	Globe St.	w/o Kitching St.	58.3	RW	RW	77	166
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.5	125	269	580	1,249
15	Harley Knox Blvd.	w/o Patterson Av.	71.7	130	281	605	1,302
16	Harley Knox Blvd.	e/o Patterson Av.	71.5	127	273	587	1,265
17	Harley Knox Blvd.	w/o Perris Blvd.	67.7	70	151	326	702

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d Table 7-3

Table 4.7-10 Year 2018 With Project Conditions Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	Patterson Av.	s/o Harley Knox Bl.	59.0	RW	40	86	186
2	Indian St.	n/o Grove View Rd.	70.0	101	217	467	1,007
3	Indian St.	s/o Grove View Rd.	70.5	108	232	499	1,076
4	Perris Blvd.	n/o San Michele Rd.	71.7	130	281	605	1,304
5	Perris Blvd.	s/o San Michele Rd.	71.7	129	278	600	1,292
6	Perris Blvd.	n/o Grove View Rd.	72.2	140	302	651	1,404
7	Perris Blvd.	s/o Grove View Rd.	72.4	144	310	667	1,438
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	132	284	611	1,316
9	Kitching St.	n/o Modular Wy.	60.6	RW	51	109	235
10	Kitching St.	s/o Modular Wy.	63.0	RW	73	158	341
11	Modular Way	e/o Perris Blvd.	57.6	RW	RW	69	149
12	Modular Way	w/o Kitching St.	59.7	RW	44	95	205
13	Globe St.	w/o Kitching St.	63.3	RW	77	166	358
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.9	134	289	623	1,341
15	Harley Knox Blvd.	w/o Patterson Av.	72.2	139	300	646	1,392
16	Harley Knox Blvd.	e/o Patterson Av.	72.0	136	293	632	1,362
17	Harley Knox Blvd.	w/o Perris Blvd.	68.3	77	166	358	771

[1] "RW" = Location of the respective noise contour falls within the right-of-way of the road.
Source: Urban Crossroads 2014d, Table 7-4

Table 4.7-11 Existing (2013) Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact?
			No Project	With Project	Project Addition	
1	Patterson Av.	s/o Harley Knox Bl.	57.7	57.7	0.1	No
2	Indian St.	n/o Grove View Rd.	64.6	64.6	0.0	No
3	Indian St.	s/o Grove View Rd.	65.5	67.0	1.5	Yes
4	Perris Blvd.	n/o San Michele Rd.	70.2	70.4	0.1	No
5	Perris Blvd.	s/o San Michele Rd.	70.0	70.4	0.3	No
6	Perris Blvd.	n/o Grove View Rd.	69.8	70.1	0.4	No
7	Perris Blvd.	s/o Grove View Rd.	69.9	70.4	0.5	No
8	Perris Blvd.	s/o Harley Knox Bl.	69.6	69.6	0.0	No
9	Kitching St.	n/o Modular Wy.	56.4	61.0	4.6	No
10	Kitching St.	s/o Modular Wy.	52.1	63.0	10.9	Yes
11	Modular Way	e/o Perris Blvd.	54.0	58.4	4.4	No
12	Modular Way	w/o Kitching St.	54.0	60.2	6.2	Yes
13	Globe St.	w/o Kitching St.	57.7	63.1	5.4	Yes
14	Harley Knox Blvd.	e/o I-15 Fwy.	67.8	68.8	1.0	No
15	Harley Knox Blvd.	w/o Patterson Av.	67.4	68.5	1.1	No
16	Harley Knox Blvd.	e/o Patterson Av.	66.9	68.1	1.3	No
17	Harley Knox Blvd.	w/o Perris Blvd.	63.8	65.2	1.4	No

Source: Urban Crossroads 2014d Table 7-5

Table 4.7-12 Year 2018 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact?
			No Project	With Project	Project Addition	
1	Patterson Av.	s/o Harley Knox Bl.	59.0	59.0	0.0	No
2	Indian St.	n/o Grove View Rd.	70.0	70.0	0.0	No
3	Indian St.	s/o Grove View Rd.	69.8	70.5	0.6	No
4	Perris Blvd.	n/o San Michele Rd.	71.6	71.7	0.1	No
5	Perris Blvd.	s/o San Michele Rd.	71.4	71.7	0.2	No
6	Perris Blvd.	n/o Grove View Rd.	72.0	72.2	0.2	No
7	Perris Blvd.	s/o Grove View Rd.	72.1	72.4	0.3	No
8	Perris Blvd.	s/o Harley Knox Bl.	71.8	71.8	0.0	No
9	Kitching St.	n/o Modular Wy.	55.1	60.6	5.5	Yes
10	Kitching St.	s/o Modular Wy.	52.1	63.0	10.9	Yes
11	Modular Way	e/o Perris Blvd.	51.0	57.6	6.6	Yes
12	Modular Way	w/o Kitching St.	51.0	59.7	8.7	Yes
13	Globe St.	w/o Kitching St.	58.3	63.3	5.0	Yes
14	Harley Knox Blvd.	e/o I-15 Fwy.	71.5	71.9	0.5	No
15	Harley Knox Blvd.	w/o Patterson Av.	71.7	72.2	0.4	No
16	Harley Knox Blvd.	e/o Patterson Av.	71.5	72.0	0.5	No
17	Harley Knox Blvd.	w/o Perris Blvd.	67.7	68.3	0.6	No

Source: Urban Crossroads 2014d, Table 7-6

Table 4.7-13 Operational Noise Level Projections

Receiver Location[1]	Project Noise[2]	Distance From Source To Receiver (Feet)[3]	Distance Attenuation[4]	Hourly Noise Levels[5]
@200	69.1	200'	-18.1	51.0
R1	69.1	1,080'	-32.7	36.4
R2	69.1	1,034'	-32.3	36.8
R3	69.1	1,077'	-32.7	36.4
R4	69.1	2,100'	-38.5	30.6
R5	69.1	623'	-27.9	41.2
R6	69.1	832'	-30.4	38.7
R7	69.1	922'	-31.3	37.8
R8	69.1	979'	-31.9	37.2
R9	69.1	1,988'	-38.0	31.1
R10	69.1	1,597'	-36.1	33.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] The reference noise level measurements include the daytime and nighttime noise levels associated with idling trucks, delivery truck activities, parking, backup alarms , refrigerated containers or reefers, as well as loading and unloading of dry goods. Reference noise level measurements were collected from the existing 24-hour operations of Veg Fresh Farms and FedEx distribution facility located at 500 East Orangethorpe Avenue in the City of Anaheim. The reference noise level measurements were collected on Tuesday, January 22, 2013.
[3] Estimated distances to nearest loading dock activities.
[4] Noise levels diminish at a rate 6 dBA per doubing of distance and a reference distance of 25 feet.
[5] Estimated project stationary source noise levels.
Source: Urban Crossroads 2014d Table 8-1

Table 4.7-14 Daytime (7:00 A.M. to 10:00 P.M.) Operational Noise Levels

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]
R1	36.4	L1	62.2	62.2	0.0
R2	36.8	L1	62.2	62.2	0.0
R3	36.4	L2	51.8	51.9	0.1
R4	30.6	L3	56.4	56.4	0.0
R5	41.2	L1	62.2	62.2	0.0
R6	38.7	L1	62.2	62.2	0.0
R7	37.8	L2	51.8	52.0	0.2
R8	37.2	L2	51.8	51.9	0.1
R9	31.1	L3	56.4	56.4	0.0
R10	33.0	L4	62.2	62.2	0.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] Total project operational noise levels with mitigation as shown on Urban Crossroads 2014d, Table 8-1.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown on Urban Crossroads 2014d, Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
Source: Urban Crossroads 2014d, Table 8-2

Table 4.7-15 Nighttime (10:00 P.M. to 7:00 A.M) Operational Noise Level Impacts

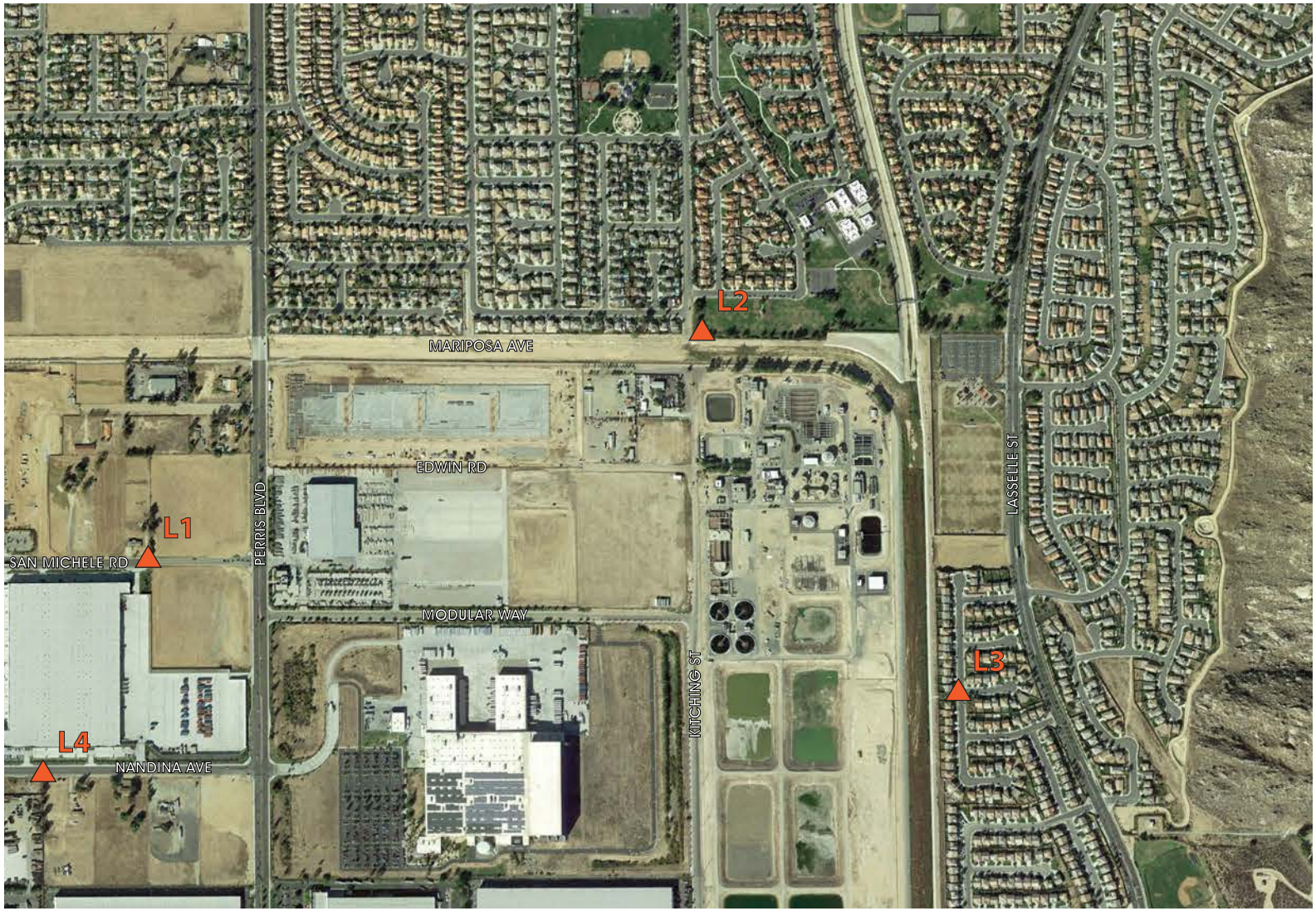
Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Contribution[6]
R1	36.4	L1	62.2	62.2	0.0
R2	36.8	L1	62.2	62.2	0.0
R3	36.4	L2	51.8	51.9	0.1
R4	30.6	L3	56.4	56.4	0.0
R5	41.2	L1	62.2	62.2	0.0
R6	38.7	L1	62.2	62.2	0.0
R7	37.8	L2	51.8	52.0	0.2
R8	37.2	L2	51.8	51.9	0.1
R9	31.1	L3	56.4	56.4	0.0
R10	33.0	L4	62.2	62.2	0.0

[1] See Figure 4.7-2 for the noise receiver locations.
[2] Total project operational noise levels with mitigation as shown on Table 8-1.
[3] Reference noise level measurement locations as shown in Urban Crossroads 2014d, Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown on Urban Crossroads 2014d, Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
Source: Urban Crossroads 2014d, Table 8-3

Table 4.7-16 Construction Equipment Vibration Levels

Noise Receiver[1]	Distance To Property Line (In Feet)	Receiver Vibration Levels (VdB)[2]					Significant Impact[3]
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Peak Vibration	
@200'	200	30.9	51.9	58.9	59.9	59.9	No
R1	717	14.3	35.3	42.3	43.3	43.3	No
R2	1,020	9.7	30.7	37.7	38.7	38.7	No
R3	911	11.2	32.2	39.2	40.2	40.2	No
R4	1,705	3.0	24.0	31.0	32.0	32.0	No
R5	240	28.5	49.5	56.5	57.5	57.5	No
R6	618	16.2	37.2	44.2	45.2	45.2	No
R7	875	11.7	32.7	39.7	40.7	40.7	No
R8	920	11.0	32.0	39.0	40.0	40.0	No
R9	1,608	3.7	24.7	31.7	32.7	32.7	No
R10	1,370	5.8	26.8	33.8	34.8	34.8	No

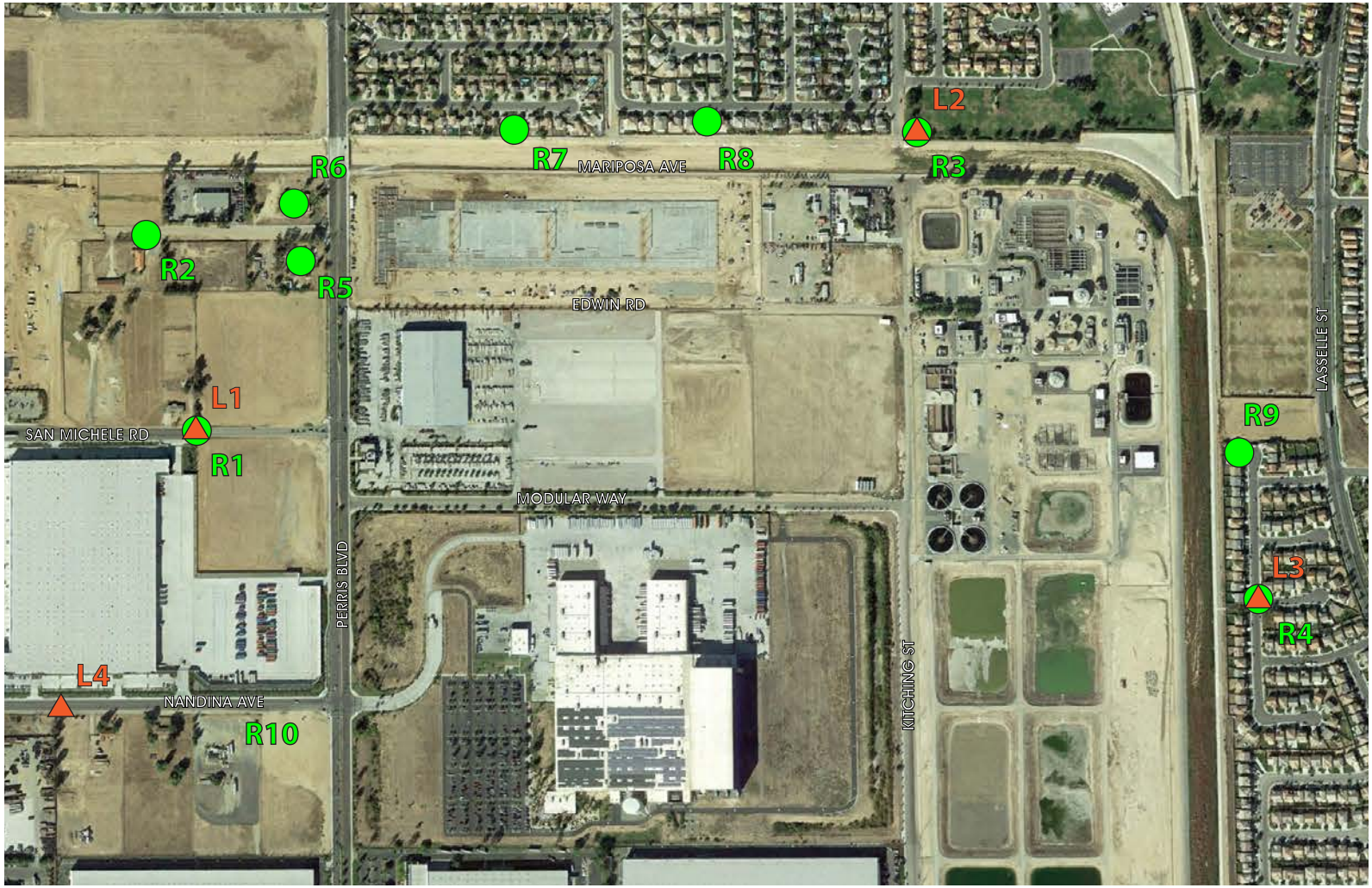
[1] Noise receiver locations are shown on Figure 4.7-2.
[2] Based on the Vibration Source Levels of Construction Equipment included in *Technical Appendix G*.
[3] Does the Peak Vibration exceed the FTA maximum acceptable vibration standard of 80 (VdB).
Source: Urban Crossroads 2014d, Table 9-2



Source: Urban Crossroads (Technical Appendix G)

NOT TO SCALE

Figure 4.7-1
Noise Measurement Locations



LEGEND

Noise Measurement Locations

Noise Receiver Locations

Source: Urban Crossroads (Technical Appendix G)

NOT TO SCALE

Figure 4.7-2

Noise Receiver Locations

4.8 TRANSPORTATION/TRAFFIC

The following analysis is based on three technical studies prepared by Urban Crossroads, Inc. to evaluate the Project's potential to adversely affect local and regional circulation. These studies include the following: 1) "Modular Logistics Center, Traffic Impact Analysis, City of Moreno Valley, California" and dated June 9, 2014, which is included as *Technical Appendix H1* to this EIR (Urban Crossroads 2014e); 2) "Modular Logistics Center Traffic Impact Analysis – Supplemental Basic Freeway Segment Analysis" and dated March 17, 2014, which is included as *Technical Appendix H2* to this EIR (Urban Crossroads 2014f); and 3) "Modular Logistics Center Site Access Evaluation" and dated March 13, 2014, which is included as *Technical Appendix H3* to this EIR (Urban Crossroads 2014g). These reports consider potential traffic impacts associated with construction and operation of the proposed Project and recommend improvements to mitigate impacts considered significant in comparison to stated thresholds. *Technical Appendices H1* through *H3* were prepared in accordance with the City of Moreno Valley, Transportation Engineering Division's *Traffic Impact Analysis Preparation Guide* (August 2007). The Project's Traffic Study Scoping Agreement, which was approved by the City of Moreno Valley prior to the commencement of the traffic impact analyses, is included as Appendix 1.1 of *Technical Appendix H1*. Also, where appropriate, *Technical Appendices H1* through *H3* address requirements as identified by the County of Riverside Congestion Management Program (CMP), California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies* (December 2002).

4.8.1 STUDY AREA DESCRIPTION

The study area for purposes of evaluating Project-related effects to the local transportation and circulation network was defined in conformance with the requirements of the City of Moreno Valley, Transportation Engineering Division's *Traffic Impact Analysis Preparation Guide*. Based on the City's guidelines, the area to be studied by a project's TIA shall include any roadway segment or any intersection of "Collector" or higher classification street with "Collector" or higher classification streets, at which a proposed project would add 50 or more AM peak hour (7:00 AM – 9:00 AM) or PM peak hour (4:00 PM – 6:00 PM) trips (Urban Crossroads 2014e 3). The "50 peak hour trip" criteria utilized by the City of Moreno Valley is consistent with the methodology utilized by many other jurisdictions, including the County of Riverside, and generally represents a threshold of trips at which a typical intersection would have the potential to be impacted. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a valid and proven way to establish a study area (Urban Crossroads 2014 pp. 3, 5). Following the City's guidelines, intersections and connecting roadway segments that would receive 50 or more peak hour trips from the Project are included in the study area. Intersections and connecting roadway segments that would receive less than 50 peak hour trips from the Project are not included, and are not required to be included in the study area because a contribution of less than 50 peak hour trips is regarded to be a less than significant direct impact and a less than cumulatively considerable impact based on the significance criteria applied by the City of Moreno Valley in this EIR.

The study area for purposes of evaluating Project-related effects to the state highway system was defined in conformance with Caltrans' *Guide for the Preparation of Traffic Impact Studies*

(December 2002) and a letter dated February 10, 2014, from Caltrans to the City of Moreno Valley clarifying the application of their *Guide for the Preparation of Traffic Impact Studies* to the analysis of state highway facilities in CEQA documents (Kopulsky 2014).

A. Intersections

Twenty-two (22) study area intersections were identified for analysis based on the City's *Traffic Impact Analysis Preparation Guide* analysis methodology and recommendations from the City of Moreno Valley, Traffic Engineering Division, and are listed in Table 4.8-1, *Study Area Intersection Analysis Locations*. The study area intersection's jurisdictional location and the ID number assigned to each intersection also are identified in Table 4.8-1. As noted in Table 4.8-1, six (6) of the intersections in the Project's study area would be developed as part of the Project and do not currently exist.

The proposed Project would contribute fewer than 50 peak hour trips to intersections located within the City of Riverside and unincorporated Riverside County; thus, intersections in those jurisdictions do not warrant analysis. Intersections in the study area that would receive 50 or more peak hour trips from the proposed Project are located within, and under the jurisdiction of, the City of Moreno Valley (15 intersections), City of Perris (five (5) intersections), and Caltrans (two (2) intersections).

B. Roadway Segments

Forty-five (45) study area roadway segments were identified for analysis based on the City's *Traffic Impact Analysis Preparation Guide* analysis methodology and recommendations from the City of Moreno Valley, Traffic Engineering Division. Table 4.8-2, *Study Area Roadway Segment Analysis Locations*, provides a list of the study area roadway segments, each with an ID number noted.

The proposed Project would contribute fewer than 50 peak hour trips to roadway segments located within the City of Riverside; thus, roadway segments in those jurisdictions do not warrant analysis. Roadway segments in the study area and that would receive 50 or more peak hour trips from the proposed Project are located within, and under the jurisdiction of, the City of Moreno Valley (25 roadway segments), the City of Perris (18 roadway segments), and the County of Riverside (two (2) roadway segments).

C. Freeway Mainline Segments

Based on communication with Caltrans District 8, Caltrans requests quantitative analysis of Project-related traffic on freeway mainline segments where the project would add 50 or more peak hour trips and/or the most heavily impacted segment in each direction. Because impacts to freeway segments dissipate with distance from the point of state highway system entry (at ramps receiving project traffic), Caltrans indicates that when a project's traffic volumes dissipate to fewer than 50 peak hour trips on a freeway mainline segment, they become unrecognizable from other traffic on the state highway system (Kopulsky 2014). Thus, Caltrans does not require a project's entire vehicular travel path on State facilities to be studied. The freeway mainline segments included in the Project's study area are listed in Table 4.8-3, *Study Area Freeway Mainline Segments*. Pursuant to Caltrans

direction, there are 50 freeway mainline analysis locations, including northbound and southbound segments of I-215, eastbound and westbound segments of SR-60 (west of I-215 and east of SR-91), and eastbound and westbound segments of SR-91, that receive 50 or more Project peak-hour trips. The Project would not contribute 50 or more peak hour trips to any eastbound or westbound segment of SR-60 east of I-215 or west of SR-91 (Urban Crossroads 2014f pp. 2-3). I-215 and SR-60 overlap between I-215 and SR-91. As such, the overlapping freeway mainline segments can be referred to as either "I-215" or "SR-60." For purposes of analysis in this Subsection and *Technical Appendix H2*, all eastbound/westbound mainline segments of SR-60 located west of I-215 and east of SR-91 are evaluated as northbound/southbound segments of I-215 (refer to Table 4.8-3). All freeway mainline segments are under the jurisdiction of Caltrans.

D. Freeway Merge/Diverge Ramp Junctions

The Project study area includes four (4) freeway merge/diverge ramp junction locations for I-215, in both the northbound and southbound locations. These locations are where the highest volumes of Project traffic would merge and diverge across freeway lanes and potentially disrupt traffic flow. The freeway mainline merge/diverge ramp junctions in the Project study area are listed in Table 4.8-4, *Study Area Freeway Merge/Diverge Ramp Junctions*. All freeway ramp junctions are under the jurisdiction of Caltrans.

E. Freeway Ramps

The proposed Project's traffic would access I-215 primarily at Harley Knox Boulevard. Consistent with Caltrans traffic study guidelines, the I-215 ramp intersections at Harley Knox Boulevard are included in the Project study area.

4.8.2 EXISTING CONDITIONS

The Project site is located in the southern portion of the City of Moreno Valley, east of Perris Boulevard, north of Modular Way, west of Kitching Street, and south of Edwin Road. . Figure 4.8-1, *City of Moreno Valley General Plan Circulation Plan*, and Figure 4.8-2, *City of Moreno Valley General Plan Roadway Cross-Sections*, show the City's roadway designations and cross-sections for the major roads located adjacent to and surrounding the Project site. I-215 is located approximately two (2) miles west of the Project site, SR-60 is located approximately 4.7 miles north of the Project site, and SR-91 is located approximately 11.1 miles north of the Project site, respectively.

A. Existing Intersection Traffic Counts

Manual AM and PM peak hour turning movement counts at study area intersections were collected in January, May, October, and November 2013 (Urban Crossroads 2014e 35). The traffic count dates were representative of typical weekday peak hour traffic conditions in the study area, as no observations were made in the field by Urban Crossroads that would indicate atypical traffic conditions on these dates. The counts include the vehicle classifications as shown below, per City of Moreno Valley requirements:

- Passenger Cars

- 2-Axle Trucks
- 3-Axle Trucks
- 4 or More Axle Trucks

To represent the effect that large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into Passenger Car Equivalents (PCEs) for the purpose of conducting the Project's traffic analysis. By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for large vehicles to accelerate and decelerate is longer than for passenger cars, and varies depending on the type of vehicle and number of axles. For the purpose of the Project's TIA contained in *Technical Appendix H1* and the analysis presented in this EIR Subsection, a PCE factor of 1.5 was applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement.

Existing (2013) weekday average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Figure 4.8-3, *Existing (2013) Average Daily Traffic (ADT).* Existing (2013) ADT volumes are based upon factored intersection peak hour counts collected by Urban Crossroads using the following formula for each intersection leg (Urban Crossroads 2014 38):

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

Based on a comparison of PM peak hour traffic count data to 24-hour traffic counts collected along roadway segments in close proximity to the study area, Urban Crossroads determined that the PM peak hour volumes are approximately eight (8) to nine (9) percent of the total 24-hour daily volume on select segments. As such, the above equation is appropriately utilized to approximate the ADT volume on the study area roadway segments based on the same relationship (*i.e.*, eight (8) percent PM peak-to-daily relationship) (Urban Crossroads 2014e 38). Existing weekday AM and PM peak hour traffic volumes for the study area intersections are shown on Figure 4.8-4, *Existing (2013) AM Peak Hour Intersection Volumes (PCE),* and Figure 4.8-5, *Existing (2013) PM Peak Hour Intersection Volumes (PCE).* All of the traffic volumes illustrated on these exhibits and used in the analysis presented in this EIR Subsection and in the TIA contained in *Technical Appendix H1* are shown in terms of PCE.

B. Existing Freeway Mainline Segment & Interchange Traffic Volumes

Freeway mainline segment and interchange traffic volume data for I-215 and SR-91 was obtained from Caltrans' Performance System Website (PeMS). The data obtained from Caltrans was dated September 24th to September 26th, and these the most recent dates for which reliable data was available at the time this EIR was prepared. In an effort to conduct a conservative analysis, the maximum value observed within the three (3) day period was utilized for the morning (AM) and evening (PM) peak hours (Urban Crossroads 2014e 23, Urban Crossroads 2014f 6).

Consistent with industry-standard methodology (*i.e.*, Highway Capacity Manual 2000) actual vehicles, as opposed to PCE volumes, were utilized to calculate density and the associated level of service (LOS) letter grade for each of the analyzed freeway segments. Truck traffic, expressed as a

percentage of total traffic, is included as part of the data used to perform the density calculation. Because the peak hour directional volumes are based on actual vehicles (and not PCE volumes), the peak hour freeway mainline segment traffic volume data differs slightly from the peak hour volume data presented in the *Technical Appendix H1*, which is presented in PCE. This difference is expected, and does not indicate an error in volume development (Urban Crossroads 2014e 23).

C. Existing Intersection Conditions

The operating characteristics (*e.g.*, travel lanes, stop controls) of the sixteen (16) existing intersections within the study area are illustrated on Figure 4.8-6, *Study Area Intersections: Existing (2013) Through Lanes and Intersection Controls*. The additional six (6) intersections in the study area not shown in Figure 4.8-6 are planned, future intersections that do not currently exist.

Existing (2013) traffic operations were evaluated for the sixteen (16) existing study area intersections based on the analysis methodologies presented in Subsection 4.8.4A, *Methodology for Estimating Project-Related Traffic Impacts*. Included in Subsection 4.8.4A is a discussion of level of service (LOS), which is used to describe the performance of an intersection, roadway segment, or other transportation facility. The LOS for existing study area roadway segments are summarized in Table 4.8-5, *Intersection Analysis for Existing (2013) Conditions*. As shown in Table 4.8-5, all 16 existing intersections in the Project's study area operate at an acceptable LOS under Existing (2013) conditions.

D. Existing Roadway Conditions

Existing (2013) traffic operations were evaluated for the study area roadway segments based on the analysis methodologies presented in Subsection 4.8.4A. The LOS for study area roadway segments are summarized in Table 4.8-6, *Roadway Segment Analysis for Existing (2013) Conditions*. As shown in Table 4.8-6, the only roadways segment within the Project's study area that operates at deficient LOS under Existing (2013) conditions is Perris Boulevard north of Harley Knox Boulevard (which operates at LOS "E"). Although the roadway segment of Perris Boulevard north of Harley Knox Boulevard operates at LOS "E" under existing conditions, traffic movement along this roadway segment is considered to be acceptable because the intersections on northern and southern extents of this segment operate at acceptable LOS, which demonstrates that traffic flow through the roadway segment is relatively smooth (Urban Crossroads 2014e 44).

E. Existing Freeway Mainline Segment Conditions

The operating characteristics (*i.e.*, travel lanes) of Project study area freeway mainline segments were recorded by Urban Crossroads during field observations in October 2013. Existing (2013) freeway mainline segment traffic operations were evaluated based on the methodologies presented in Subsection 4.8.4A. The LOS for study area freeway mainline segments is summarized in Table 4.8-7, *Freeway Mainline Segment Analysis for Existing (2013) Conditions*. As shown in Table 4.8-7, all of the freeway mainline segments in the Project study area operate at an acceptable LOS under Existing (2013) conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street (which operates at LOS "E" during the PM peak hour).

F. Existing Freeway Ramp Merge/Diverge Conditions

The operating characteristics (*i.e.*, travel lanes) of Project study area freeways were recorded by Urban Crossroads during field observations in October 2013. Existing (2013) traffic operations were evaluated for study area freeway ramp merge/diverge areas based on the methodologies presented in Subsection 4.8.4A. The LOS for study area freeway ramp merge/diverge areas are summarized in Table 4.8-8, *Freeway Ramp Merge/Diverge Analysis for Existing (2013) Conditions*. As shown in Table 4.8-8, all freeway ramp merge/diverge areas in the Project study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard, which operates at LOS "E" during the PM peak hour.

G. Existing Freeway Ramp Conditions

Existing (2013) freeway ramp queuing in the Project study area was evaluated using the methodologies presented in Subsection 4.8.4A. As summarized in Table 4.8-9, *Freeway Ramp Stacking Summary for Existing (2013) Conditions*, all freeway ramps in the Project study area feature acceptable stacking lengths under Existing (2013) conditions.

H. Existing Mass Transit

The study area is currently served by the Riverside Transit Agency (RTA) with bus services along Perris Boulevard via Route 19. An existing bus stop is located at the approximate mid-point of the Project site's western boundary with Perris Boulevard. There is no commuter rail service in the City of Moreno Valley under existing conditions; however, in February 2014, construction broke ground on the "Perris Valley Line," a 24-mile extension of the Metrolink commuter rail service. The Perris Valley Line, which is scheduled to be operational in late-2015, will provide service from Downtown Riverside to Perris along the west side of I-215 (Downey). A station for the Perris Valley Line is planned at Alessandro Boulevard, approximately 6.3 roadway miles from the Project site.

I. Existing Pedestrian and Bicycle Facilities

Field observations conducted by Urban Crossroads indicate nominal pedestrian and bicycle activity within the study area, which is likely attributable to the limited residential and commercial development within and immediately surrounding the Project site (Urban Crossroads 2014e 29). Figure 4.8-7, *City of Moreno Valley Master Plan of Trails*, shows that there are no trails or planned trails in the vicinity of the Project site. Figure 4.8-8, *City of Moreno Valley Bike Plan*, shows planned bike routes in the area. A Class III bikeway facility is planned along San Michele Road and Indian Street, approximately 0.5-mile west of the Project site.

J. Existing Truck Routes

Figure 4.8-9, *City of Moreno Valley Truck Routes*, shows the designated truck route map for the City of Moreno Valley; this map also was used to predict the route of truck traffic under future conditions (Urban Crossroads 2014e 35). As shown on Figure 4.8-9, designated truck routes in the vicinity of the Project site include Perris Boulevard (adjacent to the Project site), San Michele Road, Nandina Avenue, and Indian Street. Moreno Valley sets forth regulations for the City's designated truck

routes in *Title 12 Vehicles and Traffic* of the City's Municipal Code. Moreno Valley Municipal Code Chapter 12.36.050 states the following:

> *"Whenever any truck route has been duly established pursuant to this chapter and so designated by appropriate signs, the operation of any vehicle exceeding a maximum gross weight limit of three tons shall drive on such route or routes and none other.*
>
> *When the truck route established pursuant to this chapter for Heacock Street and Reche Vista Road northerly of Ironwood Avenue to the northerly city limits has been so designated by appropriate signs, the operation thereon of any vehicle which exceeds a maximum gross weight limit of twelve (12) tons or which has more than three axles shall be unlawful.*
>
> *Nothing in this section shall prohibit the operator of any vehicle exceeding the various maximum gross weights established by this section coming from a truck route established hereunder from having ingress and egress by direct route to and from restricted streets when necessary for the purpose of making pickups or deliveries of goods, wares, or merchandise from or to any building or structure located on such restricted streets or for the purpose of delivering materials to be used in the actual and bona fide repair, alteration, remodeling or construction of any building or structure upon such restricted streets for which a building permit has previously been obtained therefor, nor shall this section prohibit an operator from proceeding by direct route to or from a legal parking place pursuant to a valid permit obtained under Chapter 12.38 of this code (Ord. 283 § 1.1, 1990; Ord. 128 § 1.2, 1987; Ord. 105 § 1.5, 1986).*

The City of Perris also has an established truck route. Designated City of Perris truck routes in the vicinity of the Project site include Harley Knox Boulevard and Indian Street (City of Perris 2005 Exhibit CE-9).

K. Existing Regional and Local Transportation Programs and Plans

Following is a discussion of planning efforts, programs, and policies regarding transportation that have applicability to the proposed Project.

❑ SCAG Regional Transportation Plan (RTP)

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code §6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On April 4, 2012, SCAG adopted a Regional Transportation Plan (RTP) with goals to: 1) maximize mobility and accessibility for all people and goods in the region; 2) ensure travel safety and reliability for all people and goods in the region; 3) preserve and ensure a

sustainable transportation system; 4) maximize productivity of the transportation system; 5) protect the environment, improve air quality, and promote energy efficiency; 6) encourage land use and growth patterns that complement the transportation investments and improve the cost-effectiveness of expenditures; and 7) maximize the security of the transportation system (Southern California Association of Governments 2012). Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation.

As a MPO and public agency, SCAG develops transportation that transcends jurisdictional boundaries that affect the quality of life for Southern Californian as a whole. SCAG's *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (*RTP/SCS*) includes a chapter titled "Goods Movement" that is applicable to the proposed Project. It states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. Also, existing infrastructure, equipment, and trade flows in the SCAG region provide a substantial competitive advantage and serve as a major economic incentive for importers to move freight requiring train loading through Southern California (SCAG 2011 11). To that end, the Goods Movement section of the RTP/SCS sets forth regional strategies to achieve an efficient movement of goods. It recognizes that the SCAG region will experience dramatic increases in truck traffic on east-west corridors that will cause increased congestion and longer delays to both trucks and general traffic on existing routes (SCAG 2011 20). The Goods Movement section of the RTP/SCS suggests the construction of a regional freight corridor that would increase capacity to accommodate the projected growth in truck activity, but such a corridor is not yet in the planning stages. Other strategies also are presented, such as highway strategies, bottleneck strategies, rail strategies, and capacity enhancements on the existing infrastructure system.

❑ County of Riverside Congestion Management Program (CMP)

The Riverside County CMP was prepared by the Riverside County Transportation Commission (RCTC) in accordance with Proposition 111, passed in June 1990. The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality. Deficiencies along the CMP system are identified by RCTC when they occur so that improvement measures can be identified. Understanding the reason for these deficiencies and identifying ways to reduce the impact along a critical CMP corridor is intended to conserve scarce funding resources and help target those resources appropriately. In the vicinity of the Project site, I-215 is the only CMP Roadway (Riverside County Transportation Commission 2011 pp. 2-5).

❑ Riverside County Integrated Project (RCIP)

The RCIP is Riverside County's comprehensive, three-part, integrated program to determine future habitat conservation, transportation, and housing and economic needs in Riverside County. The RCIP addresses traffic congestion by addressing future traffic and multi-model circulation issues through the Community & Environmental Transportation Acceptability Process (CETAP). This

element of RCIP identifies the locations for new transportation facilities that will help benefit commuters and serve Riverside County's growing economy. Selection of new transportation corridors are intended to be integrated with decisions on land use and environmentally sensitive areas (Riverside County 2003a). CETAP does not identify any new, planned transportation corridors in close proximity to the Project site.

❑ City of Moreno Valley General Plan Circulation Element

The purpose of the City of Moreno Valley's General Plan Circulation Element is to ensure a complete, balanced, and well-maintained circulation system that relies on vehicular travel and transit, and incorporates alternative modes including bikeways and pedestrian facilities (Moreno Valley 2006a). A primary objective of the Circulation Element is to ensure that the effects of future new development on the City's transportation system are understood and that the improvements needed to support new growth are planned and properly funded. Refer to Figure 4.8-1 and Figure 4.8-2 for illustrations of the City's General Plan Circulation Element exhibits.

❑ City of Perris General Plan Circulation Element

The City of Perris' General Plan Circulation Element is designed to accommodate anticipated transportation needs based on various land uses within the region (City of Perris 2005). Refer to Figure 4.8-10, *City of Perris* , and Figure 4.8-11, *City of Perris General Plan Roadway* Cross-Sections, for illustrations of the City of Perris' General Plan Circulation Element exhibits.

4.8.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact to the transportation/traffic system if the Project or any Project-related component would:

1. *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

2. *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*

3. *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*

4. *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*

5. *Result in inadequate emergency access; or*

6. *Conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

A. *Determining the Significance of Impacts*

❑ Roadway Segments and Intersections

For purposes of determining the significance of traffic impacts under this Subsection and in accordance with the City of Moreno Valley's *Traffic Impact Analysis Preparation Guide*, and applicable City of Perris and County of Riverside traffic impact evaluation guidelines, a significant direct traffic impact would occur when the addition of Project traffic (as measured by 50 or more peak hour trips) to Existing (2013) traffic conditions (E+P) causes an intersection or roadway segment that operates at an acceptable LOS under Existing (2013) traffic conditions (*i.e.*, LOS "D" or better) to fall to LOS "E" or "F"(if a roadway segment operates at LOS "E" or LOS "F" but the intersections on both extents of the roadway segment operates at LOS "D" or better, then traffic flow through the roadway segment is considered acceptable). Therefore, E+P traffic conditions are compared to Existing (2013) traffic conditions to identify significant Project-related impacts to local roadway segments and intersections.

A cumulatively considerable impact would occur when a roadway segment or intersection is projected to operate at an unacceptable LOS with the addition of future traffic. The addition of Project-related traffic is considered cumulatively considerable if the Project would contribute 50 or more peak hour trips to a roadway section or intersection projected to operate at an unacceptable LOS. Cumulative traffic impacts are created as a result of a combination of the proposed Project together with other future developments that contribute to the overall traffic impacts requiring additional improvements to maintain acceptable LOS operations with or without the Project. The Project's contribution to a cumulatively significant impact can be reduced to less-than-significant if the Project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

❑ Freeway Mainline Segments and Ramp Junctions

Regarding Caltrans' ramp to arterial intersections and other Caltrans maintained facilities (*e.g.*, freeways), the published Caltrans *Guide for the Preparation of Traffic Impact Studies* (2002) states the following:

> *"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."*

The City of Moreno Valley consulted with Caltrans regarding the proposed Project. A letter dated February 10, 2014, from Caltrans District 8 to the City of Moreno Valley clarifies the significance

thresholds for impacts to the state highway system. Caltrans District 8 recommended that the City consider impacts to be significant if the Project would degrade the LOS of a state highway facility from "D" or better to "E" or "F" (direct impact) or if the Project would exacerbate an already deficient condition (LOS "E" or "F") on a state highway facility (cumulatively considerable impact). Caltrans specified that for industrial, warehouse, and logistics center development projects in the MVIAP, quantitative analysis of Project-related traffic on freeway mainline segments should occur where the project would add 50 or more peak hour trips, and that when a project's traffic volumes dissipate to fewer than 50 peak hour trips, they become unrecognizable from other traffic on the highway system (Kopulsky 2014). For this reason, the addition of 50 or more peak hour trips to a state highway facility that operates at LOS "E" or "F" is considered a cumulatively considerable impact in this EIR.

Although Caltrans utilizes LOS "D" as their stated threshold or acceptable operating conditions, the RCTC has adopted LOS "E" as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. For purposes of the analysis in this Subsection, LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans.

4.8.4 IMPACT ANALYSIS

A. Methodology for Estimating Project-Related Traffic Impacts

❑ Level of Service (LOS)

Traffic operations of roadway facilities are described using the term Level of Service (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS "A," representing completely free-flow conditions, to LOS "F," representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, which is an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow. Table 4.8-10 and Table 4.8-11 summarize typical operational conditions at signalized and unsignalized intersections for each LOS classification, respectively, and Table 4.8-12 summarizes the typical operational conditions for roadway segments for each LOS classification.

The definition of an intersection deficiency in the City of Moreno Valley is based on the City of Moreno Valley General Plan Circulation Element. The City of Moreno Valley General Plan states that target LOS "C" or LOS "D" be maintained along City roads (including intersections) wherever possible. LOS "D" is the limit of acceptable traffic operations at intersections of roads with the classification of Collector or higher with other roads having a classification of Collector or higher. LOS "D" also is the limit of acceptable traffic operations in the City of Perris and the County of Riverside (Urban Crossroads 2014e pp. 26-27).

LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans (Urban Crossroads 2014e 26). Table 4.8-13 and Table 4.8-14

summarize typical operational conditions and freeway mainline segments and freeway merge/diverge areas, respectively.

❑ Intersection Capacity Analysis

The intersection LOS analysis is based on the traffic volumes observed during peak hour conditions. The following peak hours were selected for analysis because these hours are typically experience the most traffic during a 24-hour period:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

For signalized intersections, the City of Moreno Valley requires operations analysis based on the methodology described in Chapter 16 of the Highway Capacity Manual (HCM). Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay (Urban Crossroads 2014e 17). For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4.8-10.

Per the Caltrans *Guide for the Preparation of Traffic Impact Studies*, the traffic modeling and signal timing optimization software package Synchro (Version 8 Build 804) was used to analyze signalized intersections under Caltrans' jurisdiction, which include the I-215 Freeway ramps at Harley Knox Boulevard. All other study area intersections outside of Caltrans' jurisdiction were analyzed using the software package Traffix (Version 8.0 R1, 2008) (Urban Crossroads 2014e 18).

For unsignalized intersections, the City of Moreno Valley requires that operations be evaluated using the methodology described in Chapter 17 of the HCM. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (Urban Crossroads 2014e 19). The LOS rating is based on the weighted average control delay expressed in seconds per vehicle, as shown in Table 4.8-11.

For a more detailed discussion on intersection capacity analysis methodology, refer to *Technical Appendix H1*.

❑ Traffic Signal Warrant Analysis

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. The signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD), as amended by the *MUTCD 2012 California Supplement*, is used for all study area intersections

(Urban Crossroads 2013 25). For more information on signal warrant methodology, refer to Section 2.7 of *Technical Appendix H1*.

Traffic signal warrant analyses were performed for all of the study area intersections that are not signalized under Existing (2013) conditions. A signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this signal warrant condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. Ultimately the need for a traffic signal at any intersection should be evaluated by the City Engineer. Signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above LOS "D" or operate below LOS "D" and not meet a signal warrant (Urban Crossroads 2014e pp. 25-26).

❑ Roadway Segment Capacity Analysis

Roadway segment operations were evaluated using the City of Moreno Valley Daily Roadway Capacity Values provided in the City's *Traffic Impact Analysis Preparation Guide*, summarized in Table 4.8-12. These roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration, and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic), and pedestrian and bicycle traffic. As such, where the ADT-based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes (Urban Crossroads 2013 pp. 19, 21).

❑ Freeway Segment Analysis

Freeway mainline segments within the Project study area were broken into segments defined by freeway-to-arterial interchange locations and evaluated based on peak hour directional volumes. The freeway mainline segment analysis utilized the methodology described in Chapter 23 of the HCM and was performed using Highway Capacity Software Plus (HCS+). The performance measure used by Caltrans to determine the performance of a freeway mainline segment is density; density is expressed in terms of passenger cars per mile per lane (Urban Crossroads 2014e 23, Urban Crossroads 2014f 6). Table 4.8-13 summarizes the freeway mainline segment LOS thresholds for each density range utilized in the analysis. For more information on the freeway mainline segment analysis methodology, refer to Section 2.5 of *Technical Appendix H1* and *Technical Appendix H2*.

The number of lanes along freeway mainline segments under existing, baseline conditions was obtained by Urban Crossroads during field observations in October 2013. Improvements to numerous freeway facilities in the Project's study area are in various stages of planning, design, and construction. The planned enhancements to the regional freeway system in the Project vicinity are summarized below:

- I-215 Widening: RCTC has plans in place for the widening of the I-215 Freeway through the Project study area; however, a schedule for the widening of I-215 between Nuevo Road in the City of Perris and Box Springs Road in the City of Riverside has not be set due to the state's on-going budget challenges. The I-215 expansion project will add a carpool lane (high-occupancy vehicle lane) in each direction to a 10.75-mile section of the freeway. Once the I-215 expansion costs and funding are determined, the planning, design and construction process is estimated to last approximately 8.5 years. The future expansion of I-215 was not assumed to be in place for either the Existing (2013) or Opening Year (2018) analysis scenarios (Urban Crossroads 2014g 7-8).
- I-215 Interchange Improvements: The I-215/Cactus Avenue interchange will be improved to extend the northbound auxiliary lane between Alessandro Boulevard and Cactus Avenue (expected to be completed by 2018), and the I-215/Van Buren Boulevard interchange will be improved to include northbound and southbound auxiliary lanes between Cactus Avenue and Van Buren Boulevard (expected to be completed by 2014). These I-215 interchange improvements are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).
- I-215/SR-60 Carpool Lanes: As of the writing of this EIR, the extension of carpool lanes along the I-215/SR-60 is under construction. When finished, the project will connect the existing carpool lanes on both sides of the I-215. Construction of the carpool lanes is expected to be completed by Summer 2014. The I-215/SR-60 carpool lanes are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).
- SR-91 Carpool and Express Lanes: Several construction projects are underway to improve traffic mobility along SR-91, including the construction of one carpool lane in each direction between Adams Street and the SR-60/SR-91/I-215 freeway interchange (expected to be complete by Summer 2014), the addition of express and mixed flow lanes in each direction between SR-71 and I-15, and the addition of an eastbound mixed flow lane between I-15 and Pierce Street (expected to be complete by 2017). These SR-91 improvements are assumed to be in place for the Opening Year (2018) analysis scenario (Urban Crossroads 2014g 8).

❑ Freeway Merge/Diverge Ramp Junction Analysis

The merge/diverge analysis is based on the HCM Ramps and Ramp Junctions analysis method and performed using HCS+ software. Although the HCM indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis presented in *Technical Appendix H1* and this subsection was performed at all ramp locations with respect to the nearest on- or off-ramp at each interchange in an effort to be consistent with Caltrans guidance/comments on other projects along the I-215 corridor. The results (reported in passenger car per mile per lane) are calculated based on the existing number of travel lanes, number of lanes at the on- and off-ramps both at the analysis junction and at upstream and downstream locations (if applicable), and acceleration/deceleration lengths at each merge/diverge point (Urban Crossroads 2014e 24). Table 4.8-14 summarizes the freeway merge/diverge ramp junction LOS thresholds utilized in the analysis. For more information on the

freeway merge/diverge ramp junction analysis methodology, refer to Section 2.6 of *Technical Appendix H1*.

❑ Freeway Ramp Queuing Analysis

The traffic progression analysis tool and HCM intersection analysis program, Synchro, was used to assess the potential impacts/needs of the freeway ramps with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps are based upon the 95th percentile queue resulting from the Synchro queuing analysis. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group (Urban Crossroads 2014e pp. 21-22). For more information on the freeway ramp queuing analysis methodology, refer to section 2.4 of *Technical Appendix H1*.

❑ Future Year Background Traffic

Future year background traffic forecasts are based upon a background (ambient) growth rate of 2% per year, compounded annually. As directed by City of Moreno Valley staff, future year background traffic forecasts are defined as Existing (2013) traffic conditions plus five (5) years of ambient growth. The total ambient growth rate assumed for the Project is 10.4% (Urban Crossroads 2014e 61). This ambient growth factor is intended to approximate area-wide growth not accounted by known cumulative development projects analyzed in *Technical Appendix H1*. According to regional population projections included in SCAG's 2012 RTP, the population of western Riverside County is projected to increase by 41% between the Years 2010 and 2035, which corresponds to a compounded annual growth rate of 1.38%. During the same time period, the 2012 RTP estimates employment in western Riverside County to increase by 112%, which corresponds to a compounded annual growth rate of 3.06%. Accordingly, the 2% annual growth rate utilized in *Technical Appendix H1* and this Subsection accurately approximates the anticipated growth in regional traffic volumes, especially when considered in addition to Project-related traffic and traffic generated by other known development projects. This methodology would tend to overstate, as opposed to understate, potential impacts to traffic and circulation (Urban Crossroads 2014e pp. 61-62).

❑ Opening Year (2018) Analysis

The analysis contained in *Technical Appendix H1* and this Subsection assumes lane configurations and traffic controls to be in place for Opening Year (2018) conditions are consistent with those previously discussed under Subsection 4.8.2, with the exception of the following improvements which have been recently completed (2014) or will be completed prior to opening of the Project (Urban Crossroads 2014 2014e 87):

- Widening of Perris Boulevard to its ultimate full-width from the City of Moreno Valley city limit to Ramona Expressway; and
- Construction of Project driveways and those facilities assumed to be constructed to provide access to the site.

The analysis does not assume the planned future roadway extension of Heacock Street to Harley Knox Boulevard under Opening Year (2018) conditions. With the future Heacock Street extension in

place, traffic along Heacock Street would no longer be diverted to Indian Street to connect to Harley Knox Boulevard, thereby reducing potential impacts to intersections and roadway segments along Indian Street between Nandina Avenue and Harley Knox Boulevard (Urban Crossroads 2014e pp. 87, 95). As such, the analysis presented in this EIR provides a conservative, "worst case" analysis of potential effects to Indian Street.

❑ Cumulative Impact Analysis

CEQA Guidelines §15130 requires that an EIR disclose the impact from the Project along with the incremental impacts from closely related past, present, and reasonably foreseeable future projects (*i.e.*, cumulative impact analysis). A list of 112 cumulative projects was developed using data collected from other recent traffic studies conducted in close proximity to the proposed Project and consultation between Urban Crossroads, Inc. and City of Moreno Valley staff. This comprehensive list of projects was assumed for purposes of the analysis in *Technical Appendix H1* and this Subsection (Urban Crossroads 2014e pp. 62-70). Descriptive and locational information about each development project considered in the cumulative impact analysis can be found in Section 4.7 of *Technical Appendix H1* and Section 4.0.3 of this EIR.

❑ Fair Share Calculation

In cases where *Technical Appendix H1* and this Subsection identify that the proposed Project would have a significant cumulative impact to a roadway facility, and the recommended mitigation measures is a "fair share" monetary contribution toward the construction of planned roadway improvements, the Project's fair share contribution is determined by the following equation (Urban Crossroads 2014e pp. 27-28):

Project Fair Share % = Project Traffic / (Total Traffic - Existing Baseline Traffic)

Refer to Section 2.10 of *Technical Appendix H1* for more information on the methodology used to calculate the Project's fair share contribution toward planned roadway improvements.

Threshold 1:	***Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

The Project proposes to provide two (2) driveways onto Perris Boulevard, three (3) driveways onto Modular Way, one (1) driveway onto Kitching Street, and two (2) driveways onto Edwin Road, and improve the site-adjacent segments of Edwin Road, Kitching Street, and Modular way (a portion thereof). The Project's southernmost driveway at Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would have the option to be restricted for use by passenger vehicles only or be fully accessible for use by passenger vehicles and trucks. The proposed roadway improvements were previously described in EIR Section 3.0, *Project Description*, and would be ensured as part of the Project's Conditions of Approval, which will be issued by the City of Moreno

Valley prior to consideration of the proposed Project for approval. The construction of these roadway improvements is assumed throughout the analyses under this Threshold.

The analysis of Threshold 1 focuses on potential impacts to local roadways, based on applicable LOS standards established by the City of Moreno Valley General Plan and the City of Perris General Plan. Refer to Threshold 2 for an analysis of potential impacts to the Riverside County CMP roadway network, including I-215 and SR-91, based on the acceptable LOS "D" standard recommended by Caltrans (Kopulsky 2014).

A. Project Vehicle Trip Generation

Vehicle trip generation represents the amount of traffic that is both attracted to and produced by a development project. Determining traffic generation for a specific project is, therefore, based upon forecasting the amount of traffic and mix of vehicles (*e.g.*, passenger cars, light trucks, heavy trucks) that is expected to be both attracted to and produced by the specific land uses being proposed for a given project. The vehicle trip generation rates utilized to estimate the amount of traffic that would be generated by the proposed Project are based on data collected by the Institute of Transportation Engineers (ITE) and presented in their most recent edition of the *Trip Generation* manual (9th Edition, 2012). Assumptions on the mix of vehicles that would access the Project site are based on field observations conducted by Counts Unlimited on behalf of Urban Crossroads, Inc. in September 2013 at six (6) high-cube distribution warehouse facilities located in the City of Moreno Valley. The surveyed warehouse facilities were selected in consultation with City of Moreno Valley staff and were each determined by City staff to be suitable for use by the Project for estimating vehicle trips by vehicle classification (Urban Crossroads 2014e 51). Although the use of public transit, walking, and/or bicycling have the potential to reduce Project-related vehicular traffic, such reductions were purposely not taken in this analysis in order to provide a worst-case analysis of the Project's potential to result in significant traffic impacts. The proposed Project is estimated to generate 1,863 daily vehicle trips, including 1,416 passenger car trips and 447 truck trips.

Table 4.8-15, *Project Trip Generation*, summarizes the ITE-recommended trip generation rates of 1.68 vehicle trips per thousand square feet and vehicle mix for the high-cube warehouse land use proposed by the Project, with PCE factors applied. Consistent with standard traffic engineering practice in Southern California, PCE factors have been applied to Project-related traffic due to the expected heavy truck component of the Project's traffic. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and LOS analyses. As previously described in Subsection 4.8.2A, a PCE factor of 1.5 was applied to 2-axle trucks, a factor of 2.0 for 3-axle trucks and a factor of 3.0 for 4+-axle trucks. After converting to PCE, the Project is estimated to generate 2,619 PCE daily trips, including 171 trips during the AM peak hour and 187 trips during the PM peak hour (refer to Table 4.8-16, *Project Trip Generation Summary* (Urban Crossroads 2014e 52). The adjusted trip rates and vehicle mix presented in Table 4.8-16 are utilized throughout the analysis in *Technical Appendix H1* and this Subsection to determine the Project's effect to the transportation and circulation network.

As mentioned above, the trip generation rates used in this analysis are rates recommended by the ITE, which are based on national data collection and scientific study. Additionally, the Commercial Real Estate Development Association (formerly known by the acronym NAIOP), commissioned a study of high-cube warehouses of over 500,000 square feet in size in the Inland Empire in 2011 using data collected in 2008. The NAIOP study, prepared by Kunzman Associates, Inc. and herein incorporated by reference and available for public review at the City of Moreno Valley Community and Economic Development Department, Planning Division, covered 31 warehouse sites and was overseen by a Technical Advisory Group with representatives of the City of Moreno Valley, WRCOG, RCTC, San Bernardino Associated Governments (SANBAG) and the University of California, Riverside. That study revealed that no single trip generation rate is uniformly applicable to all warehouse projects, but that on average, trips generated by large warehouses in the Inland Empire are 0.9904 trips per thousand square feet, which is less than the 1.68 trips per thousand square feet recommended by the ITE and used in this analysis.

B. Project Vehicle Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that would be utilized by Project traffic. The distribution pattern for truck and passenger vehicle trips that would be generated by the Project were developed based on existing travel patterns in the area, the geographical location of the Project site, the location of the local designated truck route, and the site's proximity to the regional arterial and state highway system, as well as recommendations provided by the City of Moreno Valley Public Works Department, Transportation Engineering Division. The total volume on each roadway was divided by the Project's total traffic generation to indicate the percentage of Project traffic that would use each component of the local and regional roadway system in each relevant direction. The traffic distribution pattern for Project-related passenger car trips is graphically depicted on Figure 4.8-12, *Project Passenger Car Trip Distribution*, while the traffic distribution pattern for Project-related truck trips is graphically depicted on Figure 4.8-13, *Project Truck Trip Distribution.*

The assignment of Project traffic to the adjoining roadway system is based upon the Project's trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of Project occupancy. Based on the identified Project traffic generation and trip distribution patterns, Project ADT volumes for the weekday are shown on Figure 4.8-14, *Project Average Daily Traffic (PCE).* The Project's contribution of traffic to study area intersections during the AM and PM peak hours are shown on Figure 4.8-15 and Figure 4.8-16, respectively.

C. Analysis Scenarios

Potential impacts to the transportation and circulation network are assessed for each of the conditions listed below.

- Short-Term Construction Conditions
- Existing (2013) Conditions

- Existing (2013) plus Project Conditions
- Opening Year (2018) plus Ambient Growth plus Cumulative Development Projects
- Opening Year (2018) plus Ambient Growth plus Project Conditions plus Cumulative Development Projects

The Short-Term Construction Conditions analysis determines the potential for Project construction-related traffic or construction-related activities (*i.e.*, construction activities within the public right-of-way) to result in an adverse effect to the local roadway system. Types of traffic anticipated during construction include employees traveling to/from the Project site as well as deliveries of construction materials to the Project site.

Information for Existing (2013) conditions is disclosed in Subsection 4.8.2, above, and represents the baseline traffic conditions as they existed at the approximate time the NOP for this EIR was released for public review.

The Existing (2013) plus Project Conditions determines direct Project-related traffic impacts that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon Existing (2013) conditions. The Existing (2013) plus Project scenario is presented to disclose direct impacts as required by CEQA.

The Opening Year (2018) analysis includes an evaluation of traffic conditions at the "opening" of the Project. Pursuant to the methodology established by the City of Moreno Valley in their *Traffic Impact Analysis Preparation Guide*, "opening year" is defined as Existing (2013) conditions plus five (5) years. In the case of the Project, Opening Year is defined as 2018. The Opening Year (2018) analysis compares Existing plus Ambient Growth plus Cumulative Development traffic conditions to Existing plus Ambient Growth plus Project plus Cumulative Development traffic conditions in order to determine if improvements funded through local and regional transportation mitigation fee programs such as the Transportation Uniform Mitigation Fee (TUMF) program, City of Moreno Valley Development Impact Fee (DIF) program, or other approved funding mechanisms can accommodate future anticipated traffic at the applicable target LOS. If the funded improvements can provide the target LOS with the addition of Project traffic, then the Project's participation in mandatory funding mechanisms (TUMF, DIF, and/or others) is considered to be adequate mitigation for the Project's contribution to cumulative traffic impacts as imposed through Conditions of Approval applied to the Project by the City of Moreno Valley. If other improvements are needed beyond the funded improvements (such as localized improvements to non-TUMF or non-DIF facilities), they are identified as such.

D. Short-Term Construction Traffic Impact Analysis

During the construction phase of the Project, traffic to and from the Project site would be generated by activities such as construction employee trips, delivery of construction materials, and use of heavy equipment. Approximately 75 construction workers would work on the Project site on a daily basis. Based on the anticipated construction schedule, most construction workers would arrive to and depart

from the Project site outside of the peak hours. As such, vehicular traffic associated with construction employees would be less than daily and peak hour traffic volumes generated during Project operational activities, and would not result in a substantial adverse effect to the local roadway system (Urban Crossroads 2014e 57). Deliveries of construction materials to the Project site would also have a nominal effect to the local roadway network; construction materials would be delivered to the site throughout the construction phase based on need and would not occur on an everyday basis. Heavy equipment would be utilized on the Project site during the construction phase. As most heavy equipment is not authorized to be driven on a public roadway, most equipment would be delivered and removed from the site via flatbed trucks. As with the delivery of construction materials, the delivery of heavy equipment to the Project site would not occur on a daily basis, but would occur periodically throughout the construction phase based on need. As shown in Table 4.8-5, all 16 existing intersections in the Project's study area operate at an acceptable LOS under Existing (2013) conditions. As described above under Subsection 4.8.2D, *Existing Roadway Conditions*, all 45 roadway segments in the Project's study area operate at acceptable levels under Existing (2013) conditions. The addition of temporary, Project-related construction traffic to these transportation facilities would not degrade LOS to a deficient level. Accordingly, traffic generated by the Project's construction phase would not result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. As such, a less-than-significant impact would occur during the Project's construction phase.

Although the Project would result in a less-than-significant effect to the local circulation system during short-term construction activities, Mitigation Measure MM 4.8-1 has nonetheless been identified out an abundance of caution to ensure that the Project's construction-related traffic does not result in substantial adverse effects to the local circulation network (refer to Subsection 4.8.7, below).

E. Existing (2013) plus Project Traffic Analysis (E+P)

This subsection presents an analysis of existing (2013) traffic volumes plus traffic generated by the proposed Project (Existing plus Project, or E+P). The reason this particular analysis scenario is provided is to disclose the potential for direct impacts to the existing environment as required by CEQA. The E+P scenario rarely materializes as an actual scenario in the real world. The time period between the environmental baseline date and the date project buildout occurs often can be a period of several years or more. In the case of the proposed Project, the estimated time period between the distribution of the NOP for the Project's EIR (2013) and estimated Project buildout (2015) is two (2) years. During this time period, traffic conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Therefore the E+P scenario is very unlikely to materialize in real world conditions and thus does not accurately describe the environment will exist when the proposed Project is constructed and becomes operational. Regardless, the E+P scenario is evaluated to satisfy CEQA requirements to identify the Project's impacts to the existing environment.

The lane configurations and traffic controls assumed to be in place for E+P conditions are identical to those that are in place under Existing (2013) conditions, with the exception of all site-adjacent roadway and site access improvements (*i.e.*, Project driveways) that would be installed by the Project and described in EIR Section 3.0.

Projected ADT volumes for E+P conditions are shown on Figure 4.8-17, *Existing plus Project (E+P) Average Daily Traffic*. Peak hour study area intersection turning movement volumes for E+P traffic conditions are shown on Figure 4.8-18, *Existing plus Project (E+P) Intersection Volumes – AM Peak Hour*, and Figure 4.8-19, *Existing plus Project (E+P) Intersection Volumes – PM Peak Hour*, respectively.

❑ Intersection Operations Analysis

Table 4.8-17, *Existing plus Project (E+P) Intersection Analysis*, summarizes the peak hour LOS at Project study area intersections under E+P conditions. The analysis presented in Table 4.8-17 assumes that vehicle traffic at the Project's southernmost driveway along Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would be restricted to passenger vehicle traffic only. As shown in Table 4.8-17, all 22 intersections in the Project study area are projected to operate at acceptable LOS during the AM and PM peak hours with the addition of Project traffic to the Existing (2013) condition. Therefore, implementation of the proposed Project would result in less-than-significant impacts to study area intersections under E+P conditions.

Table 4.8-18, *Existing plus Project (E+P) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)*, summarizes the peak hour LOS at the Perris Boulevard/San Michele Road intersection in the event that trucks are allowed to directly access the Project site from this intersection. If trucks were to use the Perris Boulevard/San Michele Road intersection to access the site, the intersection would be able to provide acceptable LOS under E+P traffic conditions, as shown in Table 4.8-18. Therefore, the Project would have a less-than-significant impact on the Perris Boulevard/San Michele Road intersection.

❑ Traffic Signal Warrant Analysis

Based on projected E+P traffic volumes, no unsignalized intersections in the Project study area warrant consideration for a traffic signal under E+P conditions (Urban Crossroads 2014e 80). As such, the Project would result in a less-than-significant impact on unsignalized traffic intersections.

❑ Roadway Segment Operations Analysis

Table 4.8-19, *Existing plus Project (E+P) Roadway Segment Volume/Capacity Analysis*, summarizes the projected daily traffic volumes and volume-to-capacity ratio along all roadway segments in the Project study area under E+P conditions. As shown in Table 4.8-19, all roadways segments in the Project study area would operate at LOS with the addition of Project traffic to the Existing (2013) condition, with the exception of the Perris Boulevard segment north of Harley Knox Boulevard (which is projected to operate at LOS "F" under E+P conditions). Although the roadway segment of Perris Boulevard north of Harley Knox Boulevard is projected to operate at LOS "F" under E+P

traffic conditions, traffic movement along this roadway segment is considered to be acceptable because the intersections on northern and southern extents of this segment operate at acceptable LOS, which demonstrates that traffic flow through the roadway segment is relatively smooth (Urban Crossroads 2014e 80). As such, the proposed Project would result in a less-than-significant impact to study area roadway segments under E+P conditions.

F. Opening Year (2018) Traffic Analysis

As described above under the E+P traffic analysis, implementation of the Project would result in less-than-significant, direct effects to intersections and roadway segments within the Project study area. However, the incremental addition of Project traffic when combined with traffic from ambient growth and other nearby projects has the potential to cause or compound cumulatively adverse effects to the local circulation network. The Opening Year (2018) traffic conditions analysis identifies the Project's potential to have a cumulatively considerable contribution to cumulative traffic impacts on the local circulation system based on a comparison of the traffic volumes expected in Year 2018, including background traffic from ambient growth and local cumulative development projects, without the proposed Project (Existing plus Ambient Growth plus Cumulative Developments, or E+A+C) and with the proposed Project (Existing plus Ambient Growth plus Project Conditions plus Cumulative Developments, or E+A+P+C). A total of 112 other known cumulative development projects in local area were included in the Opening Year (2018) analysis, in addition to an ambient growth rate factor of 10.4%. As specified in Subsection 4.8.4A, a significant cumulative impact would occur when a roadway segment or intersection is projected to operate at an unacceptable LOS with the addition of future traffic. The addition of Project-related traffic is considered cumulatively considerable if the Project would contribute 50 or more peak hour trips to a roadway section or intersection projected to operate at an unacceptable LOS.

The lane configurations and traffic controls assumed to be in place for the Opening Year (2018) traffic impact analysis are identical to those assumed for the E+P analysis. This is a worst-case scenario assumption used to reveal impacts to the local roadway network assuming that no roadway or intersection improvements would occur between 2013 and 2018. If improvements do occur, LOS conditions would improve.

Projected ADT volumes for Opening Year (2018) without Project traffic conditions are shown on Figure 4.8-20, *Opening Year (2018) without Project Average Daily Traffic*. Peak hour study area intersection turning movement volumes for Opening Year (2018) without Project traffic conditions are shown on Figure 4.8-21, *Opening Year (2018) without Project Intersections Volumes – AM Peak Hour*, and Figure 4.8-22, *Opening Year (2018) without Project Intersection Volumes – PM Peak Hour*, respectively.

Projected ADT volumes for Opening Year (2018) with Project traffic conditions are shown on Figure 4.8-23, *Opening Year (2018) with Project Average Daily Traffic*. Peak hour study area intersection turning movement volumes for Opening Year (2018) with Project traffic conditions are shown on

Figure 4.8-24, *Opening Year (2018) with Project Intersection Volumes – AM Peak Hour*, and Figure 4.8-25, *Opening Year (2018) with Project Intersection Volumes – PM Peak Hour*, respectively.

❑ Intersection Operations Analysis

Table 4.8-20, *Opening Year (2018) Intersection Analysis*, summarizes the LOS of study area intersections during the AM and PM peak hours under Opening Year (2018) conditions both with and without Project traffic. As shown in Table 4.8-20, under Opening Year (2018) without Project conditions (E+A+C), the following six (6) study area intersections are projected to operate at unacceptable LOS during peak hours:

- Intersection No. 1: I-215 Southbound Ramps/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 3: Western Way/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 4: Patterson Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 5: Webster Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 6: Indian Street/Grove View Road in the AM and PM peak hours; and
- Intersection No. 7: Indian Street/Harley Knox Boulevard in the AM and PM peak hours.

When Project traffic is added to Opening Year (2018) conditions (E+A+P+C), all of the intersections listed above would continue to operate at unacceptable LOS (refer to Table 4.8-20). Because the Project would contribute 50 or more peak hour trips to the above-listed intersections under Opening Year (2018) with Project traffic conditions, the Project's impact to these intersections would be cumulatively considerable. The addition of Project traffic to Opening Year (2018) traffic conditions also would contribute to the degradation of traffic operations from acceptable to unacceptable LOS at one additional intersection (I-215 Northbound Ramps/Harley Knox Boulevard during the PM peak hour, refer to Table 4.8-20), resulting in a cumulatively considerable impact.

The analysis presented in Table 4.8-20 assumes that vehicle traffic at the Project's southernmost driveway along Perris Boulevard (*i.e.*, the Perris Boulevard/San Michele Road intersection) would be restricted to passenger vehicle traffic only. If trucks were to directly access the Project site from the Perris Boulevard/San Michele Road intersection under Opening Year (2018) conditions (E+A+P+C), this intersection would continue to operate at acceptable LOS (refer to Table 4.8-21, *Opening Year (2018) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)*). Based on the information presented in Table 4.8-20 and Table 4.8-21, the Project would have a less-than-significant impact on the Perris Boulevard/San Michele Road intersection under Opening Year (2018) conditions.

❑ Traffic Signal Warrant Analysis

For Opening Year (2018) without and with Project conditions, the Indian Street/Grove View Road intersection meets the minimum conditions for which a traffic signal may be warranted. No other

unsignalized intersections in the Project study area warrant consideration for a traffic signal under Opening Year (2018) conditions without or with the Project (Urban Crossroads 2014e 100). As noted previously, meeting a traffic signal warrant does not require that a traffic signal be installed at a particular location. Rather, a traffic signal warrant means that other traffic factors and conditions should be evaluated in order to determine whether a signal is actually justified. As shown in Table 4.8-20, the Indian Street/Grove View Road intersection is projected to experience extreme traffic delays (LOS "F") under Opening Year (2018) conditions without and with Project traffic, and as such *Technical Appendix H1* recommends a traffic signal at this intersection under Opening Year (2018) conditions. The Project's contribution of traffic to the Indian Street/Grove View Road intersection is a cumulatively considerable impact because the Project would contribute substantial traffic (*i.e.*, 50 or more peak hour trips) to an intersection that operates at deficient LOS and warrants a traffic signal under Opening Year (2018) traffic conditions.

❑ Roadway Segment Operations Analysis

Table 4.8-22, *Opening Year (2018) Roadway Segment Volume/Capacity Analysis*, summarizes the LOS of study area roadway segments under Opening Year (2018) conditions both with and without Project traffic. As shown in Table 4.8-22, under Opening Year (2018) without Project conditions (E+A+C), the following 10 study area intersections are projected to operate at unacceptable LOS:

- Segment No. 3: Harley Knox Boulevard, I-215 Northbound Ramps to Western Way;
- Segment No. 4: Harley Knox Boulevard, East of Western Way;
- Segment No. 5: Harley Knox Boulevard, West of Patterson Avenue;
- Segment No. 6: Harley Knox Boulevard, East of Patterson Avenue;
- Segment No. 7: Harley Knox Boulevard, West of Webster Avenue;
- Segment No. 8: Harley Knox Boulevard, East of Webster Avenue;
- Segment No. 9: Harley Knox Boulevard, West of Indian Street;
- Segment No. 17: Indian Street, North of Grove View Road;
- Segment No. 18: Indian Street, South of Grove View Road; and
- Segment No. 19: Indian Street, North of Harley Knox Boulevard.

As shown in Table 4.8-22, all of the 10 above-listed roadway segments would continue to operate an unacceptable LOS under Opening Year (2018) conditions with the addition of Project traffic (E+A+P+C). Because the Project would contribute 50 or more peak hour trips to the roadway segments listed above under Opening Year (2018) with Project traffic conditions, the Project's impact to these roadway segments would be cumulatively considerable. Project-related traffic would not contribute to LOS deficiencies at any additional study area roadway segments, beyond those listed above, under Opening Year (2018) conditions.

Threshold 2: ***Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

The Riverside County Congestion Management Plan (CMP) prepared by the RCTC is applicable to the Project because of the subject property's proximity to freeways that are designated as part of the Riverside County CMP roadway system. The RCTC has adopted LOS "E" as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. For purposes of the analysis in this Subsection, however, LOS "D" is considered to be the limit of acceptable traffic operations for the state highway system, as recommended by Caltrans (Kopulsky 2014).

For purposes of analysis, the segments of I-215 (northbound and southbound directions) and SR-91 (eastbound and westbound directions) located near the Project site have been broken into smaller segments defined by the freeway-to-arterial interchange locations. The Project would contribute peak hour vehicle trips to the state highway system, including segments of I-215 and SR-91. Potential impacts to I-215 and SR-91 were evaluated using the same analysis scenarios presented above under Threshold 1 (*i.e.*, E+P, E+A+C, and E+A+P+C).

The analysis provided in the Traffic Impact Analysis (*Technical Appendix H1*) and summarized on the following pages evaluates the Project's addition of actual vehicles (passenger cars and trucks) to study area freeway mainline segments and does not adjust traffic volumes to PCE-equivalent traffic volumes (Urban Crossroads 2014e 23).

A. Short-Term Construction CMP Impact Analysis

As previously described under the analysis for Threshold 1, above, an average of 75 construction workers would be on the Project site on a daily basis. Because construction activities on the Project site are estimated to commence at 7:00 am and last until 6:00 pm on a daily basis (weekdays only), most construction workers would travel to/from the Project site outside of the peak hour. Therefore, the Project would not generate substantial peak-hour traffic during the construction phase. As shown in Table 4.8-9 all four (4) freeway ramps in the Project's study area provide adequate stacking lengths under Existing (2013) conditions. Because the Project would not generate substantial peak-hour traffic during the construction phase, the temporary addition of Project-related traffic to freeway ramps has no potential to degrade traffic movement (*i.e.*, stacking) to a deficient level.

As shown in Table 4.8-7, all freeway mainline segments in the Project's study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street, which operates at LOS "E" during the PM peak hour. Pursuant to Caltrans standards, Project-related construction traffic would result cumulatively considerable impact to this freeway mainline segment if the amount of Project construction traffic totals more than 50 peak hour trips at this segment during the PM peak hour (4:00 PM to 6:00 PM). The Project would generate very few construction-related inbound trips to the Project site in the PM peak hour – well fewer than 50 trips. Thus, the Project's construction-related impact to the SR-91

eastbound segment between Central Avenue and 14th Street in the PM peak hour would be less than cumulatively considerable.

As shown in Table 4.8-8, all freeway ramp merge/diverge areas in the Project's study area operate at acceptable LOS under Existing (2013) conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard, which operates at LOS "E" during the PM peak hour. Thus, Project-related construction traffic has the potential to have a cumulatively considerable impact to the I-215 Southbound Off-Ramp at Harley Knox Boulevard if the amount of Project construction traffic totals more than 50 peak hour trips at this ramp during the PM peak hour (4:00 PM to 6:00 PM). The addition of 50 or more peak hour trips is considered by Caltrans to be cumulatively considerable. The Project would generate very few construction-related inbound trips to the Project site in the PM peak hour – well fewer than 50 trips. Thus, the Project's construction-related impact to the I-215 Southbound Off-Ramp at Harley Knox Boulevard in the PM peak hour would be less than cumulatively considerable.

Based on the foregoing information, traffic generated by the Project's construction phase would not result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The proposed Project would result in less-than-significant impacts during the Project's construction phase. Although the Project would result in a less-than-significant effect to the local circulation system during short-term construction activities, this EIR recommends mitigation to ensure that the Project's construction-related traffic does not result in substantial adverse effects to the local circulation network (refer to Subsection 4.8.7, below).

B. Existing (2013) plus Project CMP Impact Analysis

As previously stated, for purposes of full disclosure and in an effort to satisfy CEQA Guidelines §15125(a), this subsection presents an analysis of existing traffic volumes plus traffic generated by the proposed Project (Existing plus Project, or E+P). The E+P scenario rarely materializes as an actual scenario in the real world because it takes time to construct a development Project and environmental conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Regardless, the E+P scenario is analyzed to satisfy CEQA requirements to identify the Project's direct impacts to the existing environment.

❑ Freeway Mainline Segment Operations Analysis

Table 4.8-7 summarizes the LOS of freeway mainline segments within the Project study area with the addition of Project traffic to Existing (2013) conditions. The freeway mainline segments selected for evaluation in Table 4.8-7 include all freeway mainline segments where the Project would contribute 50 or more peak hour trips, in conformance with Caltrans direction (Kopulsky 2014). As shown in Table 4.8-7, all freeway mainline segments in the Project study area operate at acceptable LOS during the AM and PM peak hours under E+P traffic conditions, with the exception of the SR-91 eastbound segment between Central Avenue and 14th Street, which operates at LOS "E" during the PM peak hour. The SR-91 eastbound segment between Central Avenue and 14th Street operates

at unacceptable LOS under Existing (2013) conditions without Project-related traffic (refer to Subsection 4.8.2E); therefore, the Project would not cause the LOS deficiency at this freeway mainline segment. As such, the Project's contribution of traffic to the SR-91 eastbound segment between Central Avenue and 14th Street would be less than significant on a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

The freeway mainline segments listed in Table 4.8-7 include the segments that would receive the highest concentration of traffic from the Project. However, Project-related traffic does not stop at the limits of the freeway mainline segments listed in Table 4.8-7. Rather, Project-related traffic continues to travel throughout the Southern California region along the state highway system, dissipating as distance from the Project site increases. As such, Project-related traffic has the potential to travel along other freeway mainline segments that experience unacceptable levels of congestion, including but not limited to segments of I-5, I-15, I-110, I-405, I-710, and SR-60, among others. All state highway system facilities that operate at an unacceptable LOS are considered to be cumulatively impacted. The Project's contribution of traffic to congested freeway mainline segments, including freeway segments included in the Riverside County CMP roadway system, is a cumulatively considerable impact on segments where the Project would contribute 50 or more peak hour trips.

❑ Freeway Ramp Operations Analysis

Pursuant to Caltrans direction, the Project's effect on freeway ramps that would receive 50 or more peak hour trips from the Project was studied. The only freeway ramps that would receive 50 or more peak hour trips from the Project are the northbound and southbound I-215 ramps at Harley Knox Boulevard. Table 4.8-23, *Existing (2013) plus Project Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange*, summarizes freeway ramp queuing at the I-215/Harley Knox Boulevard during the AM and PM peak hours under E+P traffic conditions. As shown on Table 4.8-23, all freeway ramps at the I-215/Harley Knox Boulevard interchange experience acceptable stacking lengths during the AM and PM peak hours under E+P traffic conditions, which would preclude "spill back" of traffic from this interchange onto mainline segments of I-215. Accordingly, implementation of the Project would result in less-than-significant impacts to freeway ramp operations under E+P traffic conditions.

❑ Freeway Merge/Diverge Operations Analysis

Table 4.8-24, *Existing (2013) plus Project Freeway Ramp Merge/Diverge Analysis*, summarizes traffic operations at freeway ramp junction merge/diverge areas within the Project study area under E+P traffic conditions. Per the direction of Caltrans, locations where a Project's traffic would result in 50 or more peak hour trips merging and diverging across lanes of freeway interchanges require study. As shown in Table 4.8-24, freeway ramp junction merge/diverge areas at the I-215/Harley Knox Boulevard interchange are projected to operate at acceptable LOS during AM and PM peak hours under E+P traffic conditions, with the exception of the I-215 Southbound Off-Ramp at Harley Knox Boulevard (which would operate at LOS "E" during the PM peak hour). As previously

described in Subsection 4.8.2F, the I-215 Southbound off-ramp at Harley Knox Boulevard operates at LOS "E" during the PM peak hour under Existing (2013) conditions without Project-related traffic; therefore, the Project would not directly cause or worsen the LOS deficiency at this freeway ramp junction merge/diverge area. As such, the Project's contribution of traffic to freeway ramp junction merge/diverge areas would be less than significant on a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

C. Opening Year (2018) CMP Impact Analysis

The Opening Year (2018) conditions analysis determines the Project-related effects to I-215 and SR-91 based on a comparison of the traffic volumes expected in Year 2018 without and with development of the Project, including background traffic from ambient growth and cumulative development projects.

❑ Freeway Mainline Segment Operations Analysis

Table 4.8-25, *Opening Year (2018) Freeway Segment Analysis*, summarizes the LOS of freeway mainline segments within the Project study area under Opening Year (2018) conditions both without and with Project traffic. As shown in Table 4.8-25, under Opening Year (2018) without Project conditions (E+A+C), the following four (4) study area freeway mainline segments are project to operate at unacceptable LOS during peak hours:

- I-215 Southbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the AM and PM peak hours);
- I-215 Northbound, between Box Springs Road and SR-60/I-215 Freeway (LOS "E" during the AM and PM peak hours);
- I-215 Northbound, between SR-60 Freeway and Eucalyptus Avenue (LOS "F" during the PM peak hour); and
- I-215 Northbound, between Van Buren Boulevard and Harley Knox Boulevard (LOS "F" during the PM peak hour).

As shown in Table 4.8-25, the four (4) above-listed freeway mainline segments would continue to operate an unacceptable LOS under Opening Year (2018) conditions with the addition of Project traffic (E+A+P+C), and the LOS at the I-215 Northbound mainline segment between Box Springs Road and SR-60/I-215 Freeway would degrade from LOS "E" to LOS "F" during the PM peak hour. Because the Project would contribute 50 or more peak hour trips to the freeway mainline segments listed above under Opening Year (2018) with Project traffic conditions, the Project's impact to these freeway mainline segments would be cumulatively considerable.

The freeway mainline segments selected for evaluation in Table 4.8-25 include all freeway mainline segments where the Project would contribute 50 or more peak hour trips, in conformance with Caltrans direction. The freeway mainline segments listed in Table 4.8-25 include the segments that would receive the highest concentration of traffic from the Project. However, Project-related traffic

does not stop at the limits of the freeway mainline segments listed in Table 4.8-25. Rather, Project-related traffic continues to travel throughout the Southern California region along the state highway system, dissipating as distance from the Project site increases. As such, Project-related traffic has the potential to travel along freeway mainline segments that may experience unacceptable levels of congestion under Opening Year (2018) conditions, including but not limited to segments of I-5, I-15, I-110, I-405, I-710, and SR-60, among others. All state highway system facilities that operate at an unacceptable LOS are considered to be cumulatively impacted. The Project's contribution of traffic to congested freeway mainline segments, including freeway segments included in the Riverside County CMP roadway system, is a cumulatively considerable impact on segments where the Project would contribute 50 or more peak hour trips.

❑ Freeway Ramp Operations Analysis

Pursuant to Caltrans direction, the Project's effect on freeway ramps that would receive 50 or more peak hour trips from the Project was studied. The only freeway ramps that would receive 50 or more peak hour trips from the Project are the northbound and southbound I-215 ramps at Harley Knox Boulevard. Table 4.8-26, *Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange*, summarizes freeway ramp queuing at the I-215/Harley Knox Boulevard during the AM and PM peak hours under Year (2018) conditions without and with Project traffic. As shown on Table 4.8-26, all freeway ramps in the Project study area would experience acceptable stacking lengths during the AM and PM peak hours under Opening Year (2018) conditions with the exception of the I-215 Northbound Ramp at Harley Knox Boulevard, which is projected to experience long queues during the AM peak hour (both without and with Project-related traffic). Thus, no new deficiencies would be created by the Project. Regardless, the Project would contribute more than 50 peak hour trips to the freeway mainline segments adjacent to this freeway ramp and the addition of Project-related traffic to this freeway ramp would further contribute to unacceptable vehicle queues under Opening Year (2018) conditions. The Project's impact is determined to be cumulatively considerable.

❑ Freeway Merge/Diverge Operations Analysis

Table 4.8-27, *Opening Year (2018) Freeway Ramp Merge/Diverge Analysis*, summarizes traffic operations at freeway ramp junction merge/diverge areas within the Project study area under Opening Year (2018) traffic conditions without and with Project-related traffic. Per the direction of Caltrans, locations where a project's traffic would result in 50 or more peak hour trips merging and diverging across lanes of freeway interchanges require study. As shown in Table 4.8-27, the following three (3) freeway ramp junction merge/diverge areas within the Project study area are projected to operate at unacceptable LOS during peak hours:

- I-215 Southbound Off-Ramp at Harley Knox Boulevard in the AM and PM peak hours;
- I-215 Southbound On-Ramp at Harley Knox Boulevard in the AM and PM peak hours; and
- I-215 Northbound On-Ramp at Harley Knox Boulevard in the PM peak hour.

Each of the three (3) above-listed freeway ramp junction merge/diverge areas would operate at unacceptable conditions in the Opening Year (2018) without Project traffic; therefore, the addition of Project traffic would not cause or worsen the LOS deficiency at any of the freeway ramp junction merge/diverge areas listed above (refer to Table 4.8-27). As such, the Project's contribution of traffic to freeway ramp junction merge/diverge areas would be less than significant a direct basis, but cumulatively considerable because the Project would add 50 or more peak hour trips to a deficient operating condition.

Threshold 3: ***Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

The proposed Project does not include an air travel component (*e.g.*, runway, helipad, drones); therefore, there is no potential for the Project to alter air traffic patterns by increasing air traffic levels.

The Project does not include any component that would obstruct the flight path and change air traffic patterns. As previously described in EIR Section 3.0, the Project-site would be developed with a large logistics warehouse building, parking areas, detention basins and landscaping, which are all uses deemed compatible for the subject property by the MVIAP, the March ARB Air Installation Compatible Use Zone Study (AICUZ) (Department of the Air Force 2005), the March ARB/Inland Port Airport Joint Land Use Study (March Joint Powers Authority 2010), the 1984 Airport Land Use Compatibility Plan for March ARB (Riverside County Airport Land Use Commission 1986), and the draft update to the 1984 Airport Land Use Compatibility Plan (Riverside County Airport Land Use Commission 2013). The approximately 42-foot height of the proposed warehouse building would be compatible with aircraft operations at March ARB and would not obstruct flight operations (March Joint Powers Authority 2010 Exhibit 3-4, Riverside County Airport Land Use Commission 2013 Table MA-2). In addition, the Project does not propose any features that may attract birds that can pose a safety risk to air traffic patterns. Landscaping on the Project site would be spaced to avoid large contiguous tree canopies and on-site detention basins would drain within 72 hours. As such, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns and result in substantial safety risks. Therefore, the Project would result in less-than-significant impacts to air traffic patterns and associated safety risks.

Threshold 4: ***Would the Project substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?***

The large warehouse proposed by the Project would be compatible with existing development in the surrounding area and the long-term planning vision for the area as called for by the City of Moreno Valley General Plan and the MVIAP. The Project also would be located adjacent to the City's designated truck route. As such, there would be no transportation hazards created as a result of an incompatible land use. Refer to Threshold 3 for a discussion of compatibility with the nearby March ARB.

All proposed improvements within the public right-of-ways of Perris Boulevard, Modular Way, Kitching Street, and Edwin Road would be installed in conformance with City design standards. The City of Moreno Valley Transportation Engineering Division has reviewed the Project's application materials (refer to EIR Section 3.0, *Project Description*) and determined that no hazardous transportation design features would be introduced by the Project. Additionally, the Project would be required to implement a temporary traffic control plan during construction activities to safely route traffic through the area during temporary construction activities and maintain adequate emergency access (refer to Mitigation Measure MM 4.8-1 in Subsection 4.8.7, below).

Accordingly, the proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use. Therefore, the Project would result in less-than-significant impacts.

Threshold 5: Would the Project result in inadequate emergency access?

The proposed Project would result in the construction and long-term operation of one warehouse building on the Project site, which would require the need for emergency access to-and-from the site. During the course of the City of Moreno Valley's review of the proposed Project, the Project's design was reviewed to ensure that adequate access to-and-from the site would be provided for emergency vehicles. Furthermore, as described above under the response to Threshold 4, adequate emergency access would be maintained along adjacent public roadways during temporary construction activities. Therefore, the Project would result in less-than-significant impacts. Regardless, the City of Moreno Valley also will require that the Project provide adequate paved access to-and-from the site as a condition of Project approval, in addition to a traffic control plan as required by Mitigation Measure MM 4.8-1.

Threshold 6: Would the Project conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed Project consists of one new distribution warehouse building, which is a land use that is not likely to attract large volumes of pedestrian, bicycle, or transit traffic. Regardless, the Project is designed to comply with all applicable transportation policies.

The Project is designed to accommodate pedestrians via sidewalks provided along adjacent public roadways. Landscaping is designed to be installed along the Project's perimeter, which would separate the adjacent public roadway rights-of-way (and their associated streetscapes and sidewalks) from the proposed Project's interior, eliminating any conflict between Project operations and the sidewalks along of perimeter roadways. Furthermore, all Project driveways would be stop-sign controlled and sight distance at each Project driveway is required to be reviewed by the City of Moreno Valley at the time improvement plans are submitted to ensure that sight distance meets City standards.

The City of Moreno Valley General Plan does not designate any public roadway segments adjacent to the Project site (*i.e.*, Perris Boulevard, Modular Way, Kitching Street, and Edwin Road) as a bikeway (refer to Figure 4.8-8). The nearest City-designated bikeways to the Project site are located approximately 0.5-mile west of the subject property, along Indian Street and San Michele Road. As required by the City, bike racks would be provided at the proposed building.

Bus service in the local area is available along Perris Boulevard via RTA Bus Route 19. There is one (1) bus stop located along the Project's frontage with Perris Boulevard. The Project would retain the existing bus stop and would not conflict with RTA bus transit operations. Accordingly, the Project could not conflict with local public transit service.

Off site, trucks accessing the Project are required to use approved truck routes within the Cities of Moreno Valley and Perris, which would minimize conflicts with passenger vehicles, bicyclists, and pedestrians and would maximize the safety of the multi-model circulation system.

As demonstrated by the foregoing analysis, the Project would not conflict with adopted policies, plans or programs related to alternative transportation, or otherwise substantially decrease the performance or safety of such facilities, and a less-than-significant impact would occur.

4.8.5 CUMULATIVE IMPACT ANALYSIS

The analysis under Threshold 1 determined the Project's potential to affect the local transportation network on a cumulative basis. As concluded under Threshold 1, the addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions.

Cumulatively Impacted Intersections

- Intersection No. 1: I-215 Southbound Ramps/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 2: I-215 Northbound Ramps/Harley Knox Boulevard in the PM peak hour;
- Intersection No. 3: Western Way/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 4: Patterson Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 5: Webster Avenue/Harley Knox Boulevard in the AM and PM peak hours;
- Intersection No. 6: Indian Street/Grove View Road in the AM and PM peak hours; and
- Intersection No. 7: Indian Street/Harley Knox Boulevard in the AM and PM peak hours.

Cumulatively Impacted Roadway Segments

- Segment No. 3: Harley Knox Boulevard, I-215 Northbound Ramps to Western Way;
- Segment No. 4: Harley Knox Boulevard, East of Western Way;

- Segment No. 5: Harley Knox Boulevard, West of Patterson Avenue;
- Segment No. 6: Harley Knox Boulevard, East of Patterson Avenue;
- Segment No. 7: Harley Knox Boulevard, West of Webster Avenue;
- Segment No. 8: Harley Knox Boulevard, East of Webster Avenue;
- Segment No. 9: Harley Knox Boulevard, West of Indian Street;
- Segment No. 17:Indian Street, North of Grove View Road;
- Segment No. 18: Indian Street, South of Grove View Road; and
- Segment No. 19: Indian Street, North of Harley Knox Boulevard.

Four (4) of the cumulatively impacted intersections and seven (7) of the cumulatively impacted roadway segments are at Harley Knox Boulevard in the City of Perris' jurisdiction. Future improvements to Harley Knox Boulevard are planned to be funded by the City of Perris though the North Perris Road and Bridge Benefit District (NPRBBD). Because the proposed Project is located in the City of Moreno Valley, it is not subject to NPRBBD fee payments. Additionally, two (2) of the cumulatively impacted intersections are at I-215 ramps in Caltrans' jurisdiction. Caltrans does not have a fee or other mitigation program in place for the mitigation of direct or cumulative impacts caused by private development projects on the State Highway System (Kopulsky 2014). The remaining one (1) cumulatively impacted intersection and three (3) cumulatively impacted roadway segments occur along Indian Street in the City of Moreno Valley. As previously described under Subsection 4.8.4A, the analysis of Opening Year (2018) traffic impacts presented in this Subsection does not assume the planned future extension of Heacock Street to Harley Knox Boulevard, which would substantially reduce traffic volumes on Indian Street and would improve the LOS of Indian Street roadway segments and intersections to acceptable LOS. The Project's contribution of traffic to the significant cumulative impact at the Indian Street/Grove View Road and Indian Street/Harley Knox Boulevard intersections and the Indian Street Roadway segments from north of Grove View Road to north of Harley Knox Boulevard are determined to be cumulatively considerable and unavoidable in the short-term. These impacts would be alleviated in the future once Heacock Street is extended to Harley Knox Boulevard.

The analysis under Threshold 2 determined the Project's potential to affect the state highway system on cumulative basis. As concluded under Threshold 2, the addition of Project traffic to the state highway system would result in a cumulatively considerable contribution of traffic to congested state facilities that that receive 50 or more peak hour trips from the Project, including I-215 and SR-91 freeway mainline segments and the interchange and merge/diverge pattern at the I-215/Harley Knox Boulevard interchange. As indicated by Caltrans, it has no fee programs or other mitigation programs in place for the mitigation of direct or cumulative impacts caused by development projects in the MVIAP on freeway segments. Caltrans also indicates that mitigation of direct and cumulative impacts to freeway ramps are satisfied by mandatory participation in the TUMF program (Kopulsky 2014). Improvements to the I-215/Harley Knox Boulevard on- and off-ramps are fully accounted for by the TUMF Nexus fee program, and specifically the NPRBBD. The NPRBBD is a consolidation of TUMF, DIF and other facilities within a specific boundary. The program enables the City of Perris to retain a predetermined portion of the TUMF generated within the NPRBBD boundaries to

improve facilities within the boundaries rather than forward the full TUMF to Western Riverside Council of Governments (WRCOG) for future distribution. Based on information obtained from the WRCOG, the I-215/Harley Knox Interchange is included in TUMF for improvement with a $10.9 million construction budget, and the WRCOG believes that this budget amount is sufficient to fully improve the ramps and approaches (WRCOG 2013). TUMF funds are collected for improvements necessitated by growth with a 2035 time horizon and improvements are expected to be in place in the intervening years. However, no schedule is prescribed by the TUMF program. At the present time, there is no current planning effort underway by either the City of Perris or Caltrans to improve the interchange; however, the City of Perris expects planning to get underway in the next five years. The WRCOG's TUMF program was established to provide funding for infrastructure improvements warranted by development projects in the region that contribute vehicular traffic to the circulation network. As stated in the TUMF Nexus Study, "the idea behind a uniform mitigation fee is to have new development throughout the region contribute equally to paying the cost of improving the transportation facilities that serve longer distance trips between communities. Thus, the fee should be used to improve transportation facilities that serve trips between communities within the region (primarily arterial roadways) as well as the infrastructure for public transportation" (WRCOG 2009 vi). The TUMF Nexus Study (2009), which is herein incorporated by reference and available for public review at the location indicated in EIR Section 7.0, *References*, establishes a nexus or reasonable relationship between the TUMF fee's use and the type of project for which the fee is required. CEQA allows for the assessment of a fee as an appropriate form of mitigation when it is linked to a specific mitigation program. In this case, the TUMF is an established mitigation program.

The proposed Project has no potential to contribute to significant cumulatively considerable impacts under the topics discussed under Thresholds 3, 4, and 5 because the Project has no potential to result in changes to air traffic patterns, to result in transportation design safety concerns, or to adversely affect emergency access on a direct or cumulative basis. As such, no impact would occur.

Regarding Threshold 6, the Project would not conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities and thus has no potential to contribute to a cumulative impact. The Project consists of one distribution warehouse building, which is likely to attract passenger cars and trucks and only small volumes of pedestrian, bicycle, or transit traffic. The Project would have a less-than-significant cumulatively considerable impact to adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, as well as a less-than-significant cumulatively considerable impact to the performance of such facilities.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold 1: Significant Cumulatively Considerable Impact. The addition of Project traffic to the existing and planned circulation network would make a cumulatively considerable contribution to the cumulative impact of seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions.

Threshold 2: Significant Cumulatively Considerable Impact. The Project would not degrade the LOS of any CMP or state highway system facility from an acceptable to an unacceptable LOS; thus, direct impacts to CMP facilities would be less than significant. The Project's traffic would use CMP and state highway system facilities throughout Southern California, including I-215, I-5, I-15, I-110, I-405, I-710, SR-91 and SR-60, among others, segments of which operate at deficient LOS and are thus significantly and cumulatively impacted by area-wide development. The Project's contribution to the cumulative impact would be cumulatively considerable in locations where the Project would contribute 50 or more peak hour trips. CMP and state highway facilities that would receive 50 or more Project-related peak hour trips include four (4) segments of I-215 and one (1) segment of SR-91, as well as the I-215/Harley Knox Boulevard freeway ramps and the merge/diverge pattern at this interchange.

Threshold 3: Less-than-Significant Impact. The proposed Project does not include an air travel component and would not affect local air traffic levels. In addition, the Project would not introduce any feature into the local area that would alter or obstruct air traffic patterns.

Threshold 4: Less-than-Significant Impact. Implementation of the proposed Project would not substantially increase transportation safety hazards due to incompatible uses or design features.

Threshold 5: Less-than-Significant Impact. Adequate emergency access would be provided to the Project site during both short-term construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.

Threshold 6: Less than Significant Impact. The proposed Project is consistent with adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, and is designed to minimize potential conflicts with non-vehicular means of transportation. Potential impacts to the performance or safety of transit, bicycle, and pedestrian systems would be less than significant.

4.8.7 MITIGATION

MM 4.8-1 Prior to the issuance of grading or building permits, the Project Proponent shall prepare and the City of Moreno Valley shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the *California Manual on Uniform Traffic Control Devices*. A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors. The temporary traffic control plan shall require the following:

- Delivery trucks shall utilize the most direct route between the site and the I-215 Freeway via Harley Knox Boulevard to Perris Boulevard;
- The construction contractor shall assure that construction-related haul trips, including but not limited to the transportation of construction materials, earth materials, and/or heavy equipment to and from the Project site be limited to no more than 50 passenger car equivalent (PCE) trips (i.e., 25 inbound and 25

outbound trips, or any combination thereof) during the AM peak hour (7:00am-9:00am) or PM peak hour (4:00pm-6:00pm). A two-axle truck trip is the equivalent of 1.5 PCE trips; a three-axle truck trip is the equivalent of 2.0 PCE trips; and a four-axle or larger truck trip is the equivalent of 3.0 PCE trips. The construction contractor shall maintain a written log of daily AM and PM peak hour delivery activities, which shall be available for City of Moreno Valley inspection upon request.

MM 4.8-2 The Project shall implement frontage improvements along Perris Boulevard, Modular Way, Kitching Street and Edwin Road, in accordance with City of Moreno Valley requirements as specified in the Project's Conditions of Approval.

MM 4.8-3 Prior to the issuance of building or occupancy permits, the Project shall comply with the City of Moreno Valley Development Impact Fee (DIF) program, which requires the payment of a fee to the City (less fee credits), a portion of which is applied to reduce traffic congestion by funding the installation of intersection improvements.

MM 4.8-4 Prior to the issuance of the Project's first occupancy permit, the Project shall comply with the Transportation Uniform Mitigation Fee (TUMF) program, which funds off-site regional transportation improvements.

4.8.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold 1: Significant Unavoidable Cumulatively Considerable Impact. Implementation of Mitigation Measures MM 4.8-3 and MM 4.8-4 would require the Project to participate in funding programs, including TUMF and City of Moreno Valley DIF, to address the Project's fair share payment toward cumulative impacts to study area intersections and roadway segments that are projected to operate at deficient LOS.

The alleviation of deficient operating conditions along Indian Street will occur when Heacock Avenue is extended to Harley Knox Boulevard. The City of Moreno Valley is committed to undertaking the Heacock Avenue extension, but a schedule for the extension is not yet in place.

Similarly, alleviation of deficient operating conditions along Harley Knox Boulevard (except for the intersections of Harley Knox Boulevard/Western Way, Harley Knox Boulevard/Indian Street, and Harley Knox Boulevard/Perris Boulevard, which require improvements beyond those currently identified in the NPRBBD) will occur when the roadway and its intersections are improved as funded by the NPRBBD. The City of Perris is committed to undertaking the Harley Knox Boulevard improvements, but a schedule for the improvements is not yet in place. Improvement schedules for both of these roads are partially dependent on the pace of new development and associated pace of fee collection that occurs under the Moreno Valley DIF, the TUMF, and the NPRBBD.

Under CEQA, a fair share monetary contribution to a mitigation fund is adequate mitigation if the funds are part of a reasonable plan that the relevant agency (in this case City of Moreno Valley and City of Perris) is committed to implementing. As such, the proposed Project can mitigate its

cumulatively considerable contribution to impacts along Indian Street through payment of the Moreno Valley DIF and impacts at the I-215 Southbound Ramps/Harley Knox Boulevard and I-215 Northbound/Harley Knox Boulevard intersections through payment of the TUMF. Regardless, because the improvements may not be in place at their time of need, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations.

Additionally, because the Project site is not located in the fee area of the NPRBBD, there is no mechanism available for the Project to participate in an established fee program for improvements to Harley Knox Boulevard. Therefore, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at four (4) Harley Knox Boulevard intersections and seven (8) Harley Knox Boulevard roadway segments and a long-term impact at the intersections of Harley Knox Boulevard/Western Way and Harley Knox Boulevard/Indian Street (which require improvements beyond those currently identified in the NPRBBD). No other feasible mitigation measures for these cumulatively considerable impacts are available to the Project that would have a proportional nexus to the Project's traffic impact to these facilities. More detail is below.

Intersection Operations

As shown in Table 4.8-28, *Opening Year (2018) Intersection Analysis with Recommended Mitigation*, all study area intersections would operate at acceptable LOS under Opening Year (2018) traffic conditions with the construction of intersection improvements programmed to be funded by the Moreno Valley DIF, TUMF, and NPRBBD; except, the following study area intersections are projected to require improvements above and beyond those currently programmed:

- Western Way/Harley Knox Boulevard;
- Indian Street/Grove View Road; and
- Indian Street/Harley Knox Boulevard.

All of the above-listed intersections, with the exception of the Indian Street/Grove View Road intersection, are under the jurisdiction of the City of Perris; therefore, the City of Moreno Valley cannot assure improvements to these intersections. Because there is no assurance the City of Perris will improve the Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard intersections to an acceptable LOS operating condition, the Project would result in significant and unavoidable long-term cumulatively considerable impacts to this intersection.

As shown in Table 4.8-28, the Indian Street/Grove View Road intersection would operate at acceptable LOS under the Opening Year (2018) scenario with the installation of traffic signals. Although this intersection is located within the City of Moreno Valley and the City has the authority to implement improvements to these intersections, the City Department of Public Works has determined that traffic signals are not desirable at this intersection because of anticipated future traffic volume reductions along Indian Street upon completion of the planned Heacock Street extension to Harley Knox Boulevard. As previously described under Subsection 4.8.4A, the analysis of potential Opening Year (2018) traffic impacts presented in this Subsection does not assume the

planned future extension of Heacock Street to Harley Knox Boulevard. Once the future Heacock Street extension is in place, traffic volumes along Indian Street would be reduced because traffic would no longer be diverted from Heacock Street onto Indian Street in order to connect to Harley Knox Boulevard. The anticipated future reductions in traffic volumes along Indian Street would result in a concomitant improvement to the performance of intersections along Indian Street, including the Indian Street/Grove View Road intersection. As shown in Table 4.8-20, the Indian Street/Grove View Road intersection would operate at acceptable LOS upon completion of the planned Heacock Street extension and without a traffic signal. Accordingly, the Project's contribution of traffic to the significant cumulative impact at the Indian Street/Grove View Road intersection is determined to be cumulatively considerable and unavoidable in the short-term and would be eliminated once Heacock Street is extended to Harley Knox Boulevard.

Roadway Segment Operations

As shown in Table 4.8-29, *Opening Year (2018) Roadway Segment Volume/Capacity Analysis with Recommended Mitigation*, all roadway segments in the Project study area would operate at acceptable LOS under Opening Year (2018) with recommended improvements, with the exception of the segment of Harley Knox Boulevard west of Patterson Avenue (which is projected to operate at LOS "E"). The intersection adjacent to this roadway segment (*i.e.*, the Patterson Avenue/Harley Knox Boulevard intersection) is projected to operate at an acceptable LOS during peak hours under Opening Year (2018) with recommended improvements (refer to Table 4.8-28). Because the intersection adjacent to the Harley Knox Boulevard segment west of Patterson Avenue experiences acceptable traffic flow, traffic operations along the roadway segment are not considered to be deficient (Urban Crossroads 2014e 112). Accordingly, with implementation of Mitigation Measures MM 4.8-3 and MM 4.8-4, the Project's contribution to cumulative impacts to study area roadway segments would be less than cumulatively considerable in the long-term.

Threshold 2: Significant Unavoidable Cumulatively Considerable Impact. Implementation of the proposed Project would contribute traffic trips to congested freeway mainline segments in the Southern California region, including the contribution of more than 50 peak hour trips to four (4) mainline segments of I-215 and one (1) mainline segment of SR-91 within the Project study area that operate at an unacceptable LOS. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern.

Freeway Mainline Segment Operations

Under short-term (2013) traffic conditions, the Project would contribute cumulatively considerable traffic volumes to a congested segment of SR-91 (SR-91 eastbound segment between Central Avenue and 14th Street). As shown in Table 4.8-25, this segment of SR-91 would operate at acceptable LOS under Opening Year (2018) traffic conditions – both with and without Project-related traffic – upon the completion of several in-progress freeway improvement projects (previously described under Subsection 4.8.4A). Accordingly, the Project's contribution of traffic to the significant cumulative impact along the SR-91 eastbound segment between Central Avenue and 14th Street is determined to

be cumulatively considerable and unavoidable in the short-term and would be eliminated upon the completion of in-progress improvements to SR-91.

As previously described under Subsection 4.8.4A, freeway expansion projects are planned or in-progress for I-215 mainline segments within the Project study area, including one major proposal to widen a 10.75-mile segment of I-215. There is no timeline for the beginning or completion of the project to widen I-215 due to funding shortfalls. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance that planned improvements will be in place prior to occupancy of the Project (Year 2015). Accordingly, the Project's contribution of traffic to congested I-215 freeway segments would represent a cumulatively considerable and unavoidable impact.

Freeway Ramp Operations

Table 4.8-30, *Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange with Planned Improvements*, summarizes projected vehicle queues at the I-215/Harley Knox Boulevard interchange under Opening Year (2018) traffic conditions upon the completion of planned improvements to I-215. As shown in Table 4.8-30, all freeway ramps at the I-215/Harley Knox Boulevard interchange are projected to operate with acceptable stacking distances in the Opening Year (2018) with planned improvements. However, there is no timeline for the beginning or completion of the construction of planned improvements to I-215. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance planned improvements will be in place prior to occupancy of the Project (Year 2015). As such, the Project's cumulative impact to the I-215 Northbound ramp at Harley Knox Boulevard is determined to be significant and unavoidable short-term impact. The Project's impact will be eliminated upon the completion of planned improvements to I-215.

Freeway Ramp Operations

Table 4.8-31, *Opening Year (2018) Freeway Ramp Merge/Diverge Analysis with Planned Improvements*, summarizes LOS at merge/diverge areas at the I-215/Harley Knox Boulevard interchange under Opening Year (2018) traffic conditions upon the completion of planned improvements to I-215. As shown in Table 4.8-32, the LOS at the merge/diverge areas at the I-215/Harley Knox Boulevard interchange would improve with the completion of planned improvements but would still experience unacceptable LOS in all movement directions, with the exception of the northbound off-ramp. There is no timeline for the beginning or completion of the construction of planned improvements to I-215. Because I-215 is under the jurisdiction of Caltrans, the City of Moreno Valley cannot assure improvements to I-215 and there is no assurance planned improvements will be in place prior to occupancy of the Project (Year 2015). As such, the Project's cumulative impact to merge/diverge areas at the southbound on/off-ramps and northbound off-ramp at the I-215/Harley Knox Boulevard are determined to be a significant and unavoidable short- and long-term impact.

Table 4.8-1 Study Area Intersection Analysis Locations

ID	Intersection Location	Jurisdiction
1	I-215 Southbound Ramps / Harley Knox Boulevard	Caltrans
2	I-215 Northbound Ramps / Harley Knox Boulevard	Caltrans
3	Western Way / Harley Knox Boulevard	Perris
4	Patterson Avenue / Harley Knox Boulevard	Perris
5	Webster Avenue / Harley Knox Boulevard	Perris
6	Indian Street / Grove View Road	Moreno Valley
7	Indian Street / Harley Knox Boulevard	Perris
8	Perris Boulevard / Driveway 1	Moreno Valley
9	Perris Boulevard / San Michele Road (Driveway 2)	Moreno Valley
10	Perris Boulevard / Modular Way	Moreno Valley
11	Perris Boulevard / Nandina Avenue (Walgreens)	Moreno Valley
12	Perris Boulevard / Grove View Road (Globe Street)	Moreno Valley
13	Perris Boulevard / Harley Knox Boulevard	Perris
14	Driveway 3 / Modular Way – Future Intersection	Moreno Valley
15	Driveway 4 / Modular Way – Future Intersection	Moreno Valley
16	Driveway 5 / Edwin Road – Future Intersection	Moreno Valley
17	Driveway 6 / Edwin Road – Future Intersection	Moreno Valley
18	Driveway 7 / Modular Way – Future Intersection	Moreno Valley
19	Kitching Street / Edwin Road	Moreno Valley
20	Kitching Street / Driveway 8 – Future Intersection	Moreno Valley
21	Kitching Street / Modular Way	Moreno Valley
22	Kitching Street / Globe Street	Moreno Valley

Source: Urban Crossroads, Inc. 2014e, Table 1-1.

Table 4.8-2 Study Area Roadway Segment Analysis Locations

ID	Roadway Segments	Jurisdiction
1	Harley Knox Boulevard, West of I-215 Freeway	County of Riverside
2	Harley Knox Boulevard, I-215 SB Ramps to I-215 NB Ramps	County of Riverside
3	Harley Knox Boulevard, I-215 NB Ramps to Western Way	Perris
4	Harley Knox Boulevard, East of Western Way	Perris
5	Harley Knox Boulevard, West of Patterson Avenue	Perris
6	Harley Knox Boulevard, East of Patterson Avenue	Perris
7	Harley Knox Boulevard, West of Webster Avenue	Perris
8	Harley Knox Boulevard, East of Webster Avenue	Perris
9	Harley Knox Boulevard, West of Indian Street	Perris
10	Harley Knox Boulevard, East of Indian Street	Perris
11	Harley Knox Boulevard, West of Perris Boulevard	Perris
12	Western Way, North of Harley Knox Boulevard	Perris
13	Patterson Avenue, North of Harley Knox Boulevard	Perris
14	Patterson Avenue, South of Harley Knox Boulevard	Perris
15	Webster Avenue, North of Harley Knox Boulevard	Perris
16	Webster Avenue, South of Harley Knox Boulevard	Perris
17	Indian Street, North of Grove View Road	Moreno Valley
18	Indian Street, South of Grove View Road	Moreno Valley
19	Indian Street, North of Harley Knox Boulevard	Perris
20	Indian Street, South of Harley Knox Boulevard	Perris
21	Perris Boulevard, North of Driveway 1	Moreno Valley
22	Perris Boulevard, Driveway 1 to San Michele Road	Moreno Valley
23	Perris Boulevard, San Michele Road to Modular Way	Moreno Valley
24	Perris Boulevard, South of Modular Way	Moreno Valley
25	Perris Boulevard, North of Nandina Avenue	Moreno Valley

Table 4.8-2 Study Area Roadway Segment Analysis Locations (cont.)

ID	Roadway Segments	Jurisdiction
26	Perris Boulevard, South of Nandina Avenue	Moreno Valley
27	Perris Boulevard, North of Grove View Road	Moreno Valley
28	Perris Boulevard, South of Grove View Road	Moreno Valley
29	Perris Boulevard, North of Harley Knox Boulevard	Perris
30	Perris Boulevard, South of Harley Knox Boulevard	Perris
31	San Michele Road, West of Perris Boulevard	Moreno Valley
32	Modular Way, Perris Boulevard to Driveway 3	Moreno Valley
33	Modular Way, Driveway 3 to Driveway 4	Moreno Valley
34	Modular Way, Driveway 4 to Driveway 7	Moreno Valley
35	Modular Way, Driveway 7 to Kitching Street	Moreno Valley
36	Grove View Road / Globe Street, East of Indian Street	Moreno Valley
37	Grove View Road / Globe Street, West of Perris Boulevard	Moreno Valley
38	Grove View Road / Globe Street, East of Perris Boulevard	Moreno Valley
39	Grove View Road / Globe Street, West of Kitching Street	Moreno Valley
40	Kitching Street, North of Edwin Road	Moreno Valley
41	Kitching Street, Edwin Road to Driveway 8	Moreno Valley
42	Kitching Street, Driveway 8 to Modular Way	Moreno Valley
43	Kitching Street, South of Modular Way	Moreno Valley
44	Kitching Street, North of Globe Street	Moreno Valley
45	Kitching Street, South of Globe Street	Moreno Valley

Source: Urban Crossroads, Inc. 2014e, Table 1-2.

Table 4.8-3 Study Area Freeway Mainline Segments

ID	Freeway	Direction	Segment
1	SR-91	Eastbound	I-15 Freeway to McKinley St.
2	SR-91	Eastbound	McKinley St. to Riverwalk Pkwy.
3	SR-91	Eastbound	Riverwalk Pkwy. To Magnolia Av.
4	SR-91	Eastbound	Magnolia Av. to La Sierra Av.
5	SR-91	Eastbound	La Sierra Av. to Tyler Av.
6	SR-91	Eastbound	Tyler Av. to Van Buren Bl.
7	SR-91	Eastbound	Van Buren Bl. to Adams St.
8	SR-91	Eastbound	Adams St. to Madison St.
9	SR-91	Eastbound	Madison St. to Arlington Av.
10	SR-91	Eastbound	Arlington Av. to Central Av.
11	SR-91	Eastbound	Central Av. to 14th St.
12	SR-91	Eastbound	14th St. to University Av.
13	SR-91	Eastbound	University Av. to Spruce St.
14	SR-91	Eastbound	Spruce St. to I-215 Freeway
15	I-215	Southbound	SR-60/SR-91 Freeway to Blaine St.
16	I-215	Southbound	Blaine St. to University Av.
17	I-215	Southbound	University Av. to Martin Luther King Bl.

Table 4.8-3 Study Area Freeway Mainline Segments (cont.)

ID	Freeway	Direction	Segment
18	I-215	Southbound	Martin Luther King Bl. to Central Av.
19	I-215	Southbound	Central Av. to Box Springs Rd.
20	I-215	Southbound	Box Springs Rd. to SR-60/I-215 Freeway
21	I-215	Southbound	SR-60 Freeway to Eucalyptus Av.
22	I-215	Southbound	Eucalyptus Av. to Alessandro Bl.
23	I-215	Southbound	Alessandro Bl. to Cactus Av.
24	I-215	Southbound	Cactus Av. to Van Buren Bl.
25	I-215	Southbound	Van Buren Bl. to Harley Knox Bl.
26	SR-91	Westbound	I-15 Freeway to McKinley St.
27	SR-91	Westbound	McKinley St. to Riverwalk Pkwy.
28	SR-91	Westbound	Riverwalk Pkwy. To Magnolia Av.
29	SR-91	Westbound	Magnolia Av. to La Sierra Av.
30	SR-91	Westbound	La Sierra Av. to Tyler Av.
31	SR-91	Westbound	Tyler Av. to Van Buren Bl.
32	SR-91	Westbound	Van Buren Bl. to Adams St.
33	SR-91	Westbound	Adams St. to Madison St.
34	SR-91	Westbound	Madison St. to Arlington Av.
35	SR-91	Westbound	Arlington Av. to Central Av.
36	SR-91	Westbound	Central Av. to 14th St.
37	SR-91	Westbound	14th St. to University Av.
38	SR-91	Westbound	University Av. to Spruce St.
39	SR-91	Westbound	Spruce St. to I-215 Freeway
40	I-215	Northbound	SR-60/SR-91 Freeway to Blaine St.
41	I-215	Northbound	Blaine St. to University Av.
42	I-215	Northbound	University Av. to Martin Luther King Bl.
43	I-215	Northbound	Martin Luther King Bl. to Central Av.
44	I-215	Northbound	Central Av. to Box Springs Rd.
45	I-215	Northbound	Box Springs Rd. to SR-60/I-215 Freeway
46	I-215	Northbound	SR-60 Freeway to Eucalyptus Av.
47	I-215	Northbound	Eucalyptus Av. to Alessandro Bl.
48	I-215	Northbound	Alessandro Bl. to Cactus Av.
49	I-215	Northbound	Cactus Av. to Van Buren Bl.
50	I-215	Northbound	Van Buren Bl. to Harley Knox Bl.

Source: Urban Crossroads, Inc. 2014f, Table 1.

Table 4.8-4 Study Area Freeway Merge/Diverge Ramp Junctions

ID	Freeway Merge/Diverge Ramp Junctions
1	I-215 Freeway – Southbound, Off Ramp at Harley Knox Boulevard (Diverge)
2	I-215 Freeway – Southbound , On Ramp at Harley Knox Boulevard (Merge)
3	I-215 Freeway – Northbound, On-Ramp at Harley Knox Boulevard (Merge)
4	I-215 Freeway – Northbound, Off-Ramp at Harley Knox Boulevard (Diverge)

Source: Urban Crossroads, Inc. 2014e, Table 1-4.

Table 4.8-5 Intersection Analysis for Existing (2013) Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	28.1	29.8	C	C
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	17.6	18.3	B	B
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	16.2	11.9	C	B
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	20.6	13.2	C	B
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	0	1	0	1	1	0	16.4	17.1	C	C
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	13.3	16.4	B	C
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	32.2	31.7	C	C
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	29.9	15.7	C	B
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	3.9	3.6	A	A
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	31.8	30.8	C	C
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	20.3	20.4	C	C
13	Perris Bl. / Harley Knox Bl.	TS	1	1	0	0	1	1	1	0	1	0	0	0	15.4	16.4	B	B
14	Driveway 3 / Modular Wy.		Future Intersection															
15	Driveway 4 / Modular Wy.		Future Intersection															
16	Driveway 5 / Edwin Rd.		Future Intersection															
17	Driveway 6 / Edwin Rd.		Future Intersection															
18	Driveway 7 / Modular Wy.		Future Intersection															
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A
20	Kitching St. / Driveway 8		Future Intersection															
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	7.4	7.6	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.4	9.8	A	A

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

Source: Urban Crossroads, Inc. 2014e, Table 3-1.

Table 4.8-6 Roadway Segment Analysis for Existing (2013) Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing (2013)	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	6,564	0.18	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	10,020	0.28	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	13,260	0.37	A	D
4		East of Western Way	4U	35,900	12,696	0.35	A	D
5		West of Patterson Avenue	4U	35,900	12,168	0.34	A	D
6		East of Patterson Avenue	2D	18,000	10,800	0.60	A	D
7		West of Webster Avenue	2D	18,000	9,300	0.52	A	D
8		East of Webster Avenue	2D	18,000	9,300	0.52	A	D
9		West of Indian Street	3D	26,900	10,560	0.39	A	D
10		East of Indian Street	3D	26,900	5,688	0.21	A	D
11		West of Perris Boulevard	2D	18,000	5,400	0.30	A	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	924	0.07	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	252	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,404	0.11	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	24	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	72	0.01	A	D
17	Indian Street	North of Grove View Road	2D	18,750	6,600	0.35	A	D
18		South of Grove View Road	2D	18,750	8,088	0.43	A	D
19		North of Harley Knox Boulevard	2D	18,000	7,260	0.40	A	D
20		South of Harley Knox Boulevard	4D	25,900	4,404	0.17	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	18,816	0.33	A	D
22		Driveway 1 to San Michele Road	6D	56,300	18,828	0.33	A	D
23		San Michele Road to Modular Way	6D	56,300	17,952	0.32	A	D
24		South of Modular Way	6D	56,300	17,772	0.32	A	D
25		North of Nandina Avenue	6D	56,300	17,448	0.31	A	D
26		South of Nandina Avenue	6D	56,300	17,316	0.31	A	D
27		North of Grove View Road	6D	56,300	16,860	0.30	A	D
28		South of Grove View Road	6D	56,300	17,256	0.31	A	D
29		North of Harley Knox Boulevard	2D	18,000	18,048	**1.00**	**E**	D
30		South of Harley Knox Boulevard	2D	18,000	16,224	0.90	D	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	1,764	0.09	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	252	0.01	A	D
33		Driveway 3 to Driveway 4	2D	18,750	252	0.01	A	D
34		Driveway 4 to Driveway 7	2D	18,750	252	0.01	A	D
35		Driveway 7 to Kitching Street	2D	18,750	252	0.01	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	1,752	0.09	A	D
37		West of Perris Boulevard	2D	18,750	1,140	0.06	A	D
38		East of Perris Boulevard	2D	18,750	1,848	0.10	A	D
39		West of Kitching Street	2D	18,750	1,416	0.08	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	468	0.04	A	D
42		Driveway 8 to Modular Way	2U	12,500	516	0.04	A	D
43		South of Modular Way	2U	12,500	288	0.02	A	D
44		North of Globe Street	2U	12,500	588	0.05	A	D
45		South of Globe Street	2U	12,500	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 3-2.

Table 4.8-7 Freeway Mainline Segment Analysis for Existing (2013) Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	Existing (2013)			Existing Plus Project		
					Volume	Density[2]	LOS	Volume	Density[2]	LOS
SR-91 Freeway	Eastbound	I-15 Freeway to McKinley St.	4	AM	5,825	23.8	C	5,883	24.2	C
				PM	5,974	24.5	C	6,003	24.7	C
		McKinley St. to Riverwalk Pkwy.	3	AM	5,430	31.7	D	5,488	32.6	D
				PM	5,473	32.2	D	5,502	32.5	D
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,937	27.5	D	4,995	28.2	D
				PM	4,955	27.7	D	4,984	27.9	D
		Magnolia Av. to La Sierra Av.	4	AM	4,835	19.4	C	4,893	19.8	C
				PM	4,743	19.1	C	4,772	19.2	C
		La Sierra Av. to Tyler Av.	4	AM	4,610	18.7	C	4,668	19.0	C
				PM	4,926	20.0	C	4,955	20.1	C
		Tyler Av. to Van Buren Bl.	4	AM	5,148	20.5	C	5,206	20.8	C
				PM	4,924	19.6	C	4,953	19.8	C
		Van Buren Bl. to Adams St.	4	AM	2,811	11.2	B	2,869	11.5	B
				PM	3,765	15.0	B	3,794	15.2	B
		Adams St. to Madison St.	3	AM	4,287	22.9	C	4,345	23.4	C
				PM	5,336	30.4	D	5,365	30.6	D
		Madison St. to Arlington Av.	4	AM	4,728	18.8	C	4,786	19.1	C
				PM	5,541	22.1	C	5,570	22.3	C
		Arlington Av. to Central Av.	4	AM	4,429	17.6	B	4,487	17.9	B
				PM	4,666	18.6	C	4,695	18.8	C
		Central Av. to 14th St.	3	AM	5,563	32.5	D	5,621	33.4	D
				PM	5,982	**37.4**	E	6,011	**37.7**	E
		14th St. to University Av.	4	AM	4,924	19.6	C	4,982	19.9	C
				PM	5,764	23.1	C	5,793	23.3	C
		University Av. to Spruce St.	5	AM	5,253	16.7	B	5,311	17.0	B
				PM	4,551	14.5	B	4,580	14.7	B
		Spruce St. to I-215 Freeway	4	AM	4,161	16.6	B	4,219	16.9	B
				PM	3,609	14.4	B	3,638	14.5	B
I-215 Freeway	Southbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,066	16.6	B	5,127	16.9	B
				PM	4,665	15.3	B	4,696	15.4	B
		Blaine St. to University Av.	4	AM	4,853	19.9	C	4,914	20.2	C
				PM	5,208	21.4	C	5,239	21.5	C
		University Av. to Martin Luther King Bl.	4	AM	5,122	21.0	C	5,183	21.4	C
				PM	6,202	26.1	D	6,233	26.3	D
		Martin Luther King Bl. to Central Av.	5	AM	4,794	15.7	B	4,855	16.0	B
				PM	6,987	23.1	C	7,018	23.2	C
		Central Av. to Box Springs Rd.	5	AM	3,603	11.8	B	3,663	12.1	B
				PM	5,719	18.7	C	5,750	18.8	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	4,773	19.5	C	4,833	19.9	C
				PM	7,260	32.9	D	7,291	33.2	D
		SR-60 Freeway to Eucalyptus Av.	5	AM	6,064	20.3	C	6,125	20.5	C
				PM	6,011	20.1	C	6,042	20.2	C
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,348	18.1	C	3,408	18.5	C
				PM	4,782	26.7	D	4,813	27.1	D
		Alessandro Bl. to Cactus Av.	4	AM	3,321	13.5	B	3,382	13.8	B
				PM	4,949	20.1	C	4,980	20.2	C
		Cactus Av. to Van Buren Bl.	3	AM	2,793	15.2	B	2,854	15.7	B
				PM	3,897	21.2	C	3,928	21.5	C
		Van Buren Bl. to Harley Knox Bl.	3	AM	4,728	25.4	C	4,789	26.0	C
				PM	5,541	32.1	D	5,572	32.3	D

Table 4.8-7 Freeway Mainline Segment Analysis for Existing (2013) Conditions (cont.)

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	Existing (2013)			Existing Plus Project		
					Volume	Density[2]	LOS	Volume	Density[2]	LOS
SR-91 Freeway	Westbound	I-15 Freeway to McKinley St.	4	AM	4,326	17.5	B	4,336	17.5	B
				PM	4,542	18.3	C	4,568	18.4	C
		McKinley St. to Riverwalk Pkwy.	3	AM	4,452	24.2	C	4,462	24.2	C
				PM	4,651	25.5	C	4,677	25.7	C
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,217	22.7	C	4,227	22.8	C
				PM	4,380	23.7	C	4,406	23.9	C
		Magnolia Av. to La Sierra Av.	3	AM	3,958	21.2	C	3,968	21.3	C
				PM	4,330	23.4	C	4,356	23.6	C
		La Sierra Av. to Tyler Av.	3	AM	4,412	24.2	C	4,422	24.3	C
				PM	4,748	26.5	D	4,774	26.7	D
		Tyler Av. to Van Buren Bl.	4	AM	3,458	13.8	B	3,468	13.8	B
				PM	3,785	15.1	B	3,811	15.2	B
		Van Buren Bl. to Adams St.	4	AM	4,668	18.6	C	4,678	18.6	C
				PM	5,491	21.9	C	5,517	22.1	C
		Adams St. to Madison St.	4	AM	4,429	17.6	B	4,439	17.7	B
				PM	4,627	21.9	C	4,653	18.5	C
		Madison St. to Arlington Av.	3	AM	4,728	25.7	C	4,738	25.8	C
				PM	5,336	30.4	D	5,362	30.6	D
		Arlington Av. to Central Av.	4	AM	3,782	15.0	B	3,792	15.1	B
				PM	3,776	15.0	B	3,802	15.2	B
		Central Av. to 14th St.	3	AM	3,995	21.2	C	4,005	21.3	C
				PM	4,627	25.0	C	4,653	25.2	C
		14th St. to University Av.	4	AM	5,563	22.2	C	5,573	22.3	C
				PM	5,982	24.1	C	6,008	24.2	C
		University Av. to Spruce St.	6	AM	4,027	10.7	A	4,037	10.7	A
				PM	3,885	10.3	A	3,911	10.4	A
		Spruce St. to I-215 Freeway	4	AM	4,300	17.1	B	4,310	17.1	B
				PM	3,739	14.9	B	3,765	15.1	B
I-215 Freeway	Northbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	549	18.0	B	5,506	18.0	C
				PM	4,753	15.6	B	4,800	15.8	B
		Blaine St. to University Av.	5	AM	6,760	22.3	C	6,777	22.3	C
				PM	5,620	18.4	C	5,667	18.7	C
		University Av. to Martin Luther King Bl.	4	AM	5,735	23.8	C	5,753	23.8	C
				PM	5,399	22.2	C	5,445	22.5	C
		Martin Luther King Bl. to Central Av.	4	AM	5,924	24.7	C	5,941	24.8	C
				PM	5,647	23.4	C	5,693	23.7	C
		Central Av. to Box Springs Rd.	5	AM	5,607	18.4	C	5,624	18.4	C
				PM	4,577	15.0	B	4,623	15.2	B
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	6,155	25.9	C	6,172	25.9	C
				PM	5,868	24.4	C	5,915	24.6	C
		SR-60 Freeway to Eucalyptus Av.	3	AM	3,615	20.1	C	3,632	20.2	C
				PM	3,929	21.9	C	3,976	22.2	C
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,283	17.8	B	3,301	17.9	B
				PM	3,329	18.0	B	3,376	18.3	C
		Alessandro Bl. to Cactus Av.	4	AM	3,934	16.0	B	3,951	16.0	B
				PM	4,021	16.3	B	4,067	16.6	B
		Cactus Av. to Van Buren Bl.	3	AM	3,960	21.6	C	3,977	21.8	C
				PM	2,810	15.3	B	2,857	15.6	B
		Van Buren Bl. to Harley Knox Bl.	3	AM	3,217	17.0	B	3,234	17.1	B
				PM	4,169	22.0	C	4,216	22.5	C

[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).
* BOLD = Unacceptable Level of Service

Source: Urban Crossroads, Inc. 2014f, Table 3.

Table 4.8-8 Freeway Ramp Merge/Diverge Analysis for Existing (2013) Conditions

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	31.3	D	**35.2**	**E**
		On-Ramp at Harley Knox Bl.	3	26.8	C	30.5	D
	Northbound	On-Ramp at Harley Knox Bl.	3	21.5	C	26.3	C
		Off-Ramp at Harley Knox Bl.	3	20.1	C	25.3	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1] Number of lanes are in the specified direction and is based on existing conditions.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 3-5.

Table 4.8-9 Freeway Ramp Stacking Summary for Existing (2013) Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	352 [2]	331 [2]	Yes	Yes
	SBR	270	36	48	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	27	21	Yes	Yes
	NBR	265	41	43	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 3-3.

Table 4.8-10 Signalized Intersection LOS Thresholds

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Applicable to all study area intersections (including those in the City of Perris and Caltrans intersections)
Source: Urban Crossroads, Inc. 2014e, Table 2-1.

Table 4.8-11 Unsignalized Intersection LOS Thresholds

Level of Service	Description	Average Control Per Vehicle (Seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

Applicable to all study area intersections (including those in the City of Perris and Caltrans intersections)
Source: Urban Crossroads, Inc. 2014e, Table 2-2.

Table 4.8-12 Roadway Segment Capacity LOS Thresholds

City of Moreno Valley:

Facility Type	Level of Service Capacity[1]				
	A	B	C	D	E
Six Lane Divided Arterial	33,900	39,400	45,000	50,600	56,300
Four Lane Divided Arterial	22,500	26,300	30,000	33,800	37,500
Four Lane Undivided Arterial	15,000	17,500	20,000	22,500	25,000
Two Lane Industrial Collector	7,500	8,800	10,000	11,300	12,500
Two Lane Undivided Residential	N/A	N/A	N/A	N/A	2,000

[1] *These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's TIA Preparation Guidelines (August 2007). These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective roadway classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.*

City of Perris and County of Riverside:

Facility Type	Level of Service Capacity[1]				
	A	B	C	D	E
Six Lane Urban Arterial	32,340	37,730	43,100	48,500	53,900
Four Lane Urban Arterial	21,540	25,130	28,700	32,300	35,900
Two Lane Arterial	10,800	12,600	14,400	16,200	18,000
Four Lane Secondary Arterial	15,540	18,130	20,700	23,300	25,900
Two Lane Collector	7,800	9,100	10,400	11,700	13,000

[1] *Source: Table CE-9 of the City of Perris General Plan Circulation Element and Figure C-2 of the County of Riverside General Plan Circulation Element. All capacity exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.*

Source: Urban Crossroads, Inc. 2014e, Table 2-3.

Table 4.8-13 Freeway Mainline Segment LOS Thresholds

Level of Service	Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow.	>45.0

[1] *pc/mi/ln = passenger cars per mile per lane. Source: HCM 2000, Chapter 23*

Source: Urban Crossroads, Inc. 2014e, Table 2-4.

Table 4.8-14 Freeway Merge and Diverge LOS Thresholds

Level of Service	Density Range (pc/mi/ln)[1]
A	0.0 – 11.0
B	11.1 – 18.0
C	18.1 – 26.0
D	26.1 – 35.0
E	35.1 – 45.0
F	>45.0

[1] *pc/mi/ln = passenger cars per mile per lane. Source: HCM 2000, Chapter 25*

Source: Urban Crossroads, Inc. 2014e, Table 2-5.

Table 4.8-15 Project Trip Generation Rates

Land Use	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
High-Cube Warehouse[3]	TSF	152	0.08	0.03	0.11	0.04	0.08	0.12	1.68
76.0% Passenger Cars			0.061	0.023	0.084	0.030	0.061	0.091	1.277
3% 2-Axle Trucks (PCE = 1.5)			0.004	0.001	0.005	0.002	0.004	0.005	0.076
3% 3-Axle Trucks (PCE = 2.0)			0.005	0.002	0.007	0.002	0.005	0.007	0.101
18% 4-Axle+ Trucks (PCE = 3.0)			0.043	0.016	0.059	0.022	0.043	0.065	0.907

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation, Ninth Edition (2012).

[2] Vehicle Mix Source: Based on actual vehicle classification surveys conducted at various high-cube distribution warehouse locations in the City of Moreno Valley

[3] TSF = thousand square feet

Source: Urban Crossroads, Inc. 2014e, Table 4-1.

Table 4.8-16 Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Building 1	**1,109.378**	TSF							
Passenger Cars:			67	25	93	34	67	101	1,416
Truck Trips:									
2-axle:			*4*	*1*	*5*	*2*	*4*	*6*	*84*
3-axle:			*5*	*2*	*7*	*3*	*5*	*8*	*112*
4+-axle:			*48*	*18*	*66*	*24*	*48*	*72*	*1,006*
- Net Truck Trips (PCE)			*57*	*21*	*79*	*29*	*57*	*86*	*1,202*
Modular Logistics Total Trips (PCE)[2]			***125***	***47***	***171***	***62***	***125***	***187***	***2,619***

[1] TSF = Thousand Square Feet.

[2] Based on the following Passenger Car Equivalent Factors: 2-axle = 1.5 PCE, 3-axle = 2.0 PCE, 4+-axle = 3.0 PCE. See Table 1.

[3] TOTAL TRIPS (PCE) = Passenger Cars + Net Truck Trips (PCE).

Source: Urban Crossroads, Inc. 2013, Table 4-2.

Table 4.8-17 Existing plus Project (E+P) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Existing (2013)				Existing Plus Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	28.1	29.8	C	C	39.9	34.0	D	C
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	17.6	18.3	B	B	17.4	18.2	B	B
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	16.2	11.9	C	B	17.0	12.5	C	B
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	20.6	13.2	C	B	21.0	18.6	C	B
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	1	1	0	1	1	0	16.4	17.1	C	C	18.5	19.1	C	C
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	13.3	16.4	B	C	14.0	19.5	B	C
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	32.2	31.7	C	C	33.2	31.7	C	C
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A	10.8	10.2	B	B
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	29.9	15.7	C	B	30.2	28.1	C	C
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	3.9	3.6	A	A	4.1	3.7	A	A
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	31.8	30.8	C	C	32.1	30.9	C	C
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	20.3	20.4	C	C	20.7	21.1	C	C
13	Perris Bl. / Harley Knox Bl.	TS	1	1	0	0	1	1	1	0	1	0	0	0	15.4	16.4	B	B	16.8	17.4	B	B
14	Driveway 3 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.9	8.8	A	A
15	Driveway 4 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.8	8.8	A	A
16	Driveway 5 / Edwin Rd.	**CSS**	0	0	**1**	0	0	0	0	0	0	1	0	0	Future Intersection				8.3	8.4	A	A
17	Driveway 6 / Edwin Rd.	**CSS**	0	**1**	0	0	0	0	0	1	0	0	1	0	Future Intersection				8.3	8.4	A	A
18	Driveway 7 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.7	8.7	A	A
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A	8.4	9.5	A	A
20	Kitching St. / Driveway 8	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	Future Intersection				8.4	8.6	A	A
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	7.4	7.6	A	A	7.6	8.1	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.4	9.8	A	A	9.7	10.5	A	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

Source: Urban Crossroads, Inc. 2014e, Table 5-1.

Table 4.8-18 Existing plus Project (E+P) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)

#	Intersection	Traffic Control[2]	2014 Traffic Study				With Truck Traffic			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Perris Bl. / St. Michele Rd.-Driveway	TS	30.2	28.1	C	C	30.2	28.1	C	C

[1] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014g, Table 1

Table 4.8-19 Existing plus Project (E+P) Roadway Segment Volume/Capacity Analysis

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing Plus Project	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	6,564	0.18	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	10,853	0.30	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	14,655	0.41	A	D
4		East of Western Way	4U	35,900	12,696	0.35	A	D
5		West of Patterson Avenue	4U	35,900	13,563	0.38	A	D
6		East of Patterson Avenue	2D	18,000	12,265	0.68	B	D
7		West of Webster Avenue	2D	18,000	10,766	0.60	A	D
8		East of Webster Avenue	2D	18,000	10,766	0.60	A	D
9		West of Indian Street	3D	26,900	12,026	0.45	A	D
10		East of Indian Street	3D	26,900	6,272	0.23	A	D
11		West of Perris Boulevard	2D	18,000	5,984	0.33	A	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	924	0.07	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	252	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,474	0.11	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	24	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	72	0.01	A	D
17	Indian Street	North of Grove View Road	2D	18,750	6,670	0.36	A	D
18		South of Grove View Road	2D	18,750	8,969	0.48	A	D
19		North of Harley Knox Boulevard	2D	18,000	8,142	0.45	A	D
20		South of Harley Knox Boulevard	4D	25,900	4,404	0.17	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	19,472	0.35	A	D
22		Driveway 1 to San Michele Road	6D	56,300	19,413	0.34	A	D
23		San Michele Road to Modular Way	6D	56,300	18,396	0.33	A	D
24		South of Modular Way	6D	56,300	18,438	0.33	A	D
25		North of Nandina Avenue	6D	56,300	18,113	0.32	A	D
26		South of Nandina Avenue	6D	56,300	17,981	0.32	A	D
27		North of Grove View Road	6D	56,300	17,525	0.31	A	D
28		South of Grove View Road	6D	56,300	18,194	0.32	A	D
29		North of Harley Knox Boulevard	2D	18,000	18,986	**1.05**	**F**	D
30		South of Harley Knox Boulevard	2D	18,000	16,578	**0.92**	**E**	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	1,976	0.11	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	757	0.04	A	D
33		Driveway 3 to Driveway 4	2D	18,750	757	0.04	A	D
34		Driveway 4 to Driveway 7	2D	18,750	757	0.04	A	D
35		Driveway 7 to Kitching Street	2D	18,750	737	0.04	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	2,563	0.14	A	D
37		West of Perris Boulevard	2D	18,750	1,951	0.10	A	D
38		East of Perris Boulevard	2D	18,750	2,992	0.16	A	D
39		West of Kitching Street	2D	18,750	2,559	0.14	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	720	0.06	A	D
42		Driveway 8 to Modular Way	2U	12,500	1,244	0.10	A	D
43		South of Modular Way	2U	12,500	1,431	0.11	A	D
44		North of Globe Street	2U	12,500	1,731	0.14	A	D
45		South of Globe Street	2U	12,500	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Impact Analysis Preparation Guidelines Division's Traffic Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 5-2.

Table 4.8-20 Opening Year (2018) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												2018 Without Project				2018 With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		Level of Service		Delay[2] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.	TS	0	0	0	0	1	1	0	2	d	1	2	0	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
2	I-215 NB Ramps / Harley Knox Bl.	TS	0	1	1	0	0	0	1	2	0	0	2	d	34.9	48.8	C	D	36.7	**59.5**	D	**E**
3	Western Wy. / Harley Knox Bl.	CSS	0	0	0	0	1	0	0	2	0	0	2	d	**53.9**	**95.3**	**F**	**F**	**61.1**	**>100.0**	**F**	**F**
4	Patterson Av. / Harley Knox Bl.	TS	0	1	0	0	1	d	1	1	1	1	1	0	**171.2**	**182.9**	**F**	**F**	**191.1**	**>200.0**	**F**	**F**
5	Webster Av. / Harley Knox Bl.	CSS	0	1	0	0	1	0	0	1	0	1	1	0	**62.2**	**>100.0**	**F**	**F**	**80.6**	**>100.0**	**F**	**F**
6	Indian St. / Grove View Rd.	CSS	0	1	0	1	1	0	0	0	0	1	0	1	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
	-With Heacock Extension	CSS	0	1	0	1	1	0	0	0	0	1	0	1	15.2	23.9	C	C	16.1	32.1	C	D
7	Indian St. / Harley Knox Bl.	TS	2	2	1	1	2	0	1	1	1	2	2	0	**>200.0**	**78.0**	**F**	**E**	**>200.0**	**87.8**	**F**	**F**
8	Perris Bl. / Driveway 1	CSS	0	3	0	0	3	0	0	0	0	0	0	1	0.0	0.0	A	A	12.1	11.1	B	B
9	Perris Bl. / St. Michele Rd.-Driveway 2	TS	1	3	0	1	3	0	1	1	0	1	1	1	21.6	24.6	C	C	39.7	37.5	D	D
10	Perris Bl. / Modular Wy.	CSS	0	3	0	0	3	0	0	0	0	0	0	1	11.7	10.8	B	B	12.0	11.1	B	B
11	Perris Bl. / Nandina Av.-Walgreens	TS	1	3	0	1	3	1>	1	2	0	1	1	1	39.3	38.0	D	D	39.6	38.2	D	D
12	Perris Bl. / Grove View Rd.-Globe St.	TS	1	3	0	1	2	1	1	2	d	1	1	d	21.4	23.8	C	C	21.8	24.2	C	C
13	Perris Bl. / Harley Knox Bl.[4]	TS	1	1	0	0	1	1	1	0	1	0	0	0	27.8	29.6	C	C	30.4	30.0	C	C
14	Driveway 3 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.9	8.8	A	A
15	Driveway 4 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.8	8.9	A	A
16	Driveway 5 / Edwin Rd.	**CSS**	0	0	**1**	0	0	0	0	0	0	1	0	0	Future Intersection				8.3	8.4	A	A
17	Driveway 6 / Edwin Rd.	**CSS**	0	**1**	0	0	0	0	0	1	0	0	1	0	Future Intersection				8.4	8.4	A	A
18	Driveway 7 / Modular Wy.	**CSS**	0	0	0	0	**1**	0	1	1	0	0	1	d	Future Intersection				8.7	8.7	A	A
19	Kitching St. / Edwin Rd.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.1	A	A	8.4	9.6	A	A
20	Kitching St. / Driveway 8	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	Future Intersection				8.4	8.6	A	A
21	Kitching St. / Modular Wy.	AWS	1	1	0	0	1	0	1	0	1	0	0	0	1.3	1.9	A	A	1.3	1.9	A	A
22	Kitching St. / Globe St.	CSS	0	1	0	0	1	0	1	0	1	0	0	0	9.5	9.9	A	A	9.8	10.7	A	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-215 ramp locations at Harley Knox Boulevard have been analyzed using the Synchro software (Version 8).

[3] CSS = Cross-street Stop; TS = Traffic Signal; AWS= All ways stop

[4] Assumes the lanes recently constructed by the City of Perris as part of their widening project of Perris Boulevard.

Source: Urban Crossroads, Inc. 2014e, Table 6-1.

Table 4.8-21 Opening Year (2018) Perris Blvd./San Michele Rd. Intersection Analysis (Truck Access Option)

#	Intersection	Traffic Control[2]	2014 Traffic Study				With Truck Traffic			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Perris Bl. / San Michele Rd.-Driveway	TS	39.7	37.5	D	D	39.8	37.6	D	D

[1] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014g, Table 2.

Table 4.8-22 Opening Year (2018) Roadway Segment Volume/Capacity Analysis

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2018 Without Project	V/C	LOS	Acceptable LOS	2018 With Project	V/C	LOS	Acceptable LOS
1	Harley Knox Boulevard	West of I-215 Freeway	4D	35,900	12,221	0.34	A	D	12,221	0.34	A	D
2		I-215 SB Ramps to I-215 NB Ramps	4D	35,900	21,791	0.61	A	D	22,624	0.63	A	D
3		I-215 NB Ramps to Western Way	4U	35,900	31,127	0.87	D	D	32,522	**0.91**	**E**	D
4		East of Western Way	4U	35,900	32,440	0.90	D	D	33,835	**0.94**	**E**	D
5		West of Patterson Avenue	4U	35,900	33,046	**0.92**	**E**	D	34,441	**0.96**	**E**	D
6		East of Patterson Avenue	2D	18,000	31,663	**1.76**	**F**	D	33,128	**1.84**	**F**	D
7		West of Webster Avenue	2D	18,000	31,734	**1.76**	**F**	D	33,200	**1.84**	**F**	D
8		East of Webster Avenue	2D	18,000	32,034	**1.78**	**F**	D	33,500	**1.86**	**F**	D
9		West of Indian Street	3D	26,900	30,234	**1.12**	**F**	D	31,700	**1.18**	**F**	D
10		East of Indian Street	3D	26,900	12,716	0.47	A	D	13,300	0.49	A	D
11		West of Perris Boulevard	2D	18,000	13,140	0.73	C	D	13,724	0.76	C	D
12	Western Way	North of Harley Knox Boulevard	2U	13,000	1,414	0.11	A	D	1,414	0.11	A	D
13	Patterson Avenue	North of Harley Knox Boulevard	2U	13,000	303	0.02	A	D	303	0.02	A	D
14		South of Harley Knox Boulevard	2U	13,000	1,849	0.14	A	D	1,919	0.15	A	D
15	Webster Avenue	North of Harley Knox Boulevard	2U	13,000	26	0.00	A	D	26	0.00	A	D
16		South of Harley Knox Boulevard	2U	13,000	400	0.03	A	D	400	0.03	A	D
17	Indian Street	North of Grove View Road	2D	18,750	23,129	**1.23**	**F**	D	23,199	**1.24**	**F**	D
18		South of Grove View Road	2D	18,750	22,132	**1.18**	**F**	D	23,013	**1.23**	**F**	D
19		North of Harley Knox Boulevard	2D	18,000	17,818	**0.99**	**E**	D	18,700	**1.04**	**F**	D
20		South of Harley Knox Boulevard	4D	25,900	7,800	0.30	A	D	7,800	0.30	A	D
21	Perris Boulevard	North of Driveway 1	6D	56,300	25,644	0.46	A	D	26,300	0.47	A	D
22		Driveway 1 to San Michele Road	6D	56,300	25,920	0.46	A	D	26,505	0.47	A	D
23		San Michele Road to Modular Way	6D	56,300	24,708	0.44	A	D	25,153	0.45	A	D
24		South of Modular Way	6D	56,300	24,588	0.44	A	D	25,254	0.45	A	D
25		North of Nandina Avenue	6D	56,300	26,340	0.47	A	D	27,005	0.48	A	D
26		South of Nandina Avenue	6D	56,300	26,616	0.47	A	D	27,281	0.48	A	D
27		North of Grove View Road	6D	56,300	28,128	0.50	A	D	28,793	0.51	A	D
28		South of Grove View Road	6D	56,300	28,608	0.51	A	D	29,546	0.52	A	D
29		North of Harley Knox Boulevard[2]	6D	53,900	31,572	0.59	A	D	32,510	0.60	A	D
30		South of Harley Knox Boulevard[2]	6D	53,900	26,676	0.49	A	D	27,030	0.50	A	D
31	San Michele Road	West of Perris Boulevard	2D	18,750	7,464	0.40	A	D	7,676	0.41	A	D
32	Modular Way	Perris Boulevard to Driveway 3	2D	18,750	288	0.02	A	D	793	0.04	A	D
33		Driveway 3 to Driveway 4	2D	18,750	288	0.02	A	D	793	0.04	A	D
34		Driveway 4 to Driveway 7	2D	18,750	288	0.02	A	D	793	0.04	A	D
35		Driveway 7 to Kitching Street	2D	18,750	288	0.02	A	D	773	0.04	A	D
36	Grove View Road / Globe Street	East of Indian Street	2D	18,750	1,932	0.10	A	D	2,742	0.15	A	D
37		West of Perris Boulevard	2D	18,750	1,380	0.07	A	D	2,191	0.12	A	D
38		East of Perris Boulevard	2D	18,750	2,460	0.13	A	D	3,604	0.19	A	D
39		West of Kitching Street	2D	18,750	1,572	0.08	A	D	2,715	0.14	A	D
40	Kitching Street	North of Edwin Road	2U	12,500	24	0.00	A	D	24	0.00	A	D
41		Edwin Road to Driveway 8	2U	12,500	516	0.04	A	D	768	0.06	A	D
42		Driveway 8 to Modular Way	2U	12,500	564	0.05	A	D	1,292	0.10	A	D
43		South of Modular Way	2U	12,500	312	0.02	A	D	1,455	0.12	A	D
44		North of Globe Street	2U	12,500	648	0.05	A	D	1,791	0.14	A	D
45		South of Globe Street	2U	12,500	996	0.08	A	D	900	0.07	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] Assumes the lanes recently constructed by the City of Perris as part of their widening project of Perris Boulevard.

Source: Urban Crossroads, Inc. 2014e, Table 6-2.

Table 4.8-23 Existing (2013) plus Project Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange

Intersection	Movement	Stacking Distance (Feet)	Existing (2013)				Existing Plus Project			
			95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]		95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	352 [2]	331 [2]	Yes	Yes	432 [2]	372 [2]	Yes	Yes
	SBR	270	36	48	Yes	Yes	36	48	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	27	21	Yes	Yes	27	21	Yes	Yes
	NBR	265	41	43	Yes	Yes	42	43	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 5-3.

Table 4.8-24 Existing (2013) plus Project Freeway Ramp Merge/Diverge Analysis

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	Existing (2013)				Existing Plus Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	31.3	D	**35.2**	**E**	31.9	D	**35.5**	**E**
		On-Ramp at Harley Knox Bl.	3	26.8	C	30.5	D	26.8	C	30.7	D
	Northbound	On-Ramp at Harley Knox Bl.	3	21.5	C	26.3	C	21.7	C	26.8	C
		Off-Ramp at Harley Knox Bl.	3	20.1	C	25.3	C	20.2	C	25.4	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 5-5.

Table 4.8-25 Opening Year (2018) Freeway Segment Analysis

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	2018 Without Project			2018 With Project		
					Volume[2]	Density[3]	LOS	Volume[2]	Density[3]	LOS
SR-91 Freeway	Eastbound	I-15 Freeway to McKinley St.	5	AM	6,374	20.6	C	6,432	20.9	C
				PM	6,458	20.9	C	6,487	21.0	C
		McKinley St. to Riverwalk Pkwy.	4	AM	5,934	24.2	C	5,992	24.6	C
				PM	6,019	24.6	C	6,048	24.7	C
		Riverwalk Pkwy. to Magnolia Av.	3	AM	5,470	32.1	D	5,528	33.0	D
				PM	5,460	32.0	D	5,489	32.3	D
		Magnolia Av. to La Sierra Av.	4	AM	5,316	21.4	C	5,374	21.8	C
				PM	5,228	21.0	C	5,257	21.2	C
		La Sierra Av. to Tyler Av.	4	AM	5,050	20.5	C	5,108	20.8	C
				PM	5,311	21.6	C	5,340	21.7	C
		Tyler Av. to Van Buren Bl.	4	AM	5,493	21.9	C	5,551	22.3	C
				PM	5,312	21.2	C	5,341	21.4	C
		Van Buren Bl. to Adams St.	4	AM	3,391	13.5	B	3,449	13.8	B
				PM	4,305	17.1	B	4,334	17.2	B
		Adams St. to Madison St.	3	AM	4,675	25.3	C	4,733	25.9	C
				PM	5,553	32.4	D	5,582	33.0	D
		Madison St. to Arlington Av.	4	AM	4,199	16.8	B	4,248	17.1	B
				PM	5,013	20.1	C	5,038	20.3	C
		Arlington Av. to Central Av.	4	AM	4,064	16.2	B	4,114	16.5	B
				PM	4,413	17.6	B	4,438	17.7	B
		Central Av. to 14th St.	3	AM	4,813	26.5	D	4,863	27.0	D
				PM	5,420	31.4	D	5,445	31.9	D
		14th St. to University Av.	4	AM	4,405	17.6	B	4,454	17.9	B
				PM	5,302	21.2	C	5,327	21.5	C
		University Av. to Spruce St.	5	AM	4,616	14.8	B	4,666	15.0	B
				PM	4,286	13.7	B	4,311	13.8	B
		Spruce St. to I-215 Freeway	4	AM	3,732	14.9	B	3,781	15.3	B
				PM	3,591	14.4	B	3,616	14.5	B
I-215 Freeway	Southbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,644	18.5	C	5,705	18.8	C
				PM	5,297	17.4	B	5,328	17.5	B
		Blaine St. to University Av.	4	AM	5,395	22.2	C	5,456	22.6	C
				PM	5,750	23.8	C	5,781	24.0	C
		University Av. to Martin Luther King Bl.	4	AM	5,659	23.4	C	5,720	23.8	C
				PM	6,702	29.0	D	6,733	29.4	D
		Martin Luther King Bl. to Central Av.	5	AM	5,546	18.1	C	5,607	18.4	C
				PM	7,725	26.0	D	7,756	26.1	D
		Central Av. to Box Springs Rd.	5	AM	4,557	14.9	B	4,618	15.1	B
				PM	6,759	22.1	C	6,790	22.4	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	4,701	19.4	C	4,762	19.8	C
				PM	6,962	30.7	D	6,993	31.2	D
		SR-60 Freeway to Eucalyptus Av.	5	AM	8,582	31.9	D	8,643	32.3	D
				PM	8,157	28.9	D	8,188	29.0	D
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,817	20.7	C	3,878	21.1	C
				PM	5,235	30.4	D	5,266	30.9	D
		Alessandro Bl. to Cactus Av.	4	AM	3,818	15.5	B	3,879	15.8	B
				PM	5,436	22.2	C	5,467	22.4	C
		Cactus Av. to Van Buren Bl.	4	AM	3,274	13.3	B	3,335	13.7	B
				PM	4,602	18.8	C	4,633	18.9	C
		Van Buren Bl. to Harley Knox Bl.	3	AM	6,826	--	F	6,887	--	F
				PM	6,947	--	F	6,978	--	F

Table 4.8-25 Opening Year (2018) Freeway Segment Analysis (cont.)

Freeway	Direction	Mainline Segment	Lanes[1]	Time Period	2018 Without Project			2018 With Project		
					Volume[2]	Density[3]	LOS	Volume[2]	Density[3]	LOS
SR-91 Freeway	Westbound	I-15 Freeway to McKinley St.	4	AM	4,829	19.5	C	4,839	19.5	C
				PM	5,444	22.0	C	5,470	22.2	C
		McKinley St. to Riverwalk Pkwy.	3	AM	5,041	28.3	D	5,051	28.4	D
				PM	5,483	32.0	D	5,509	32.5	D
		Riverwalk Pkwy. to Magnolia Av.	3	AM	4,656	25.5	C	4,666	25.6	C
				PM	5,011	28.1	D	5,037	28.3	D
		Magnolia Av. to La Sierra Av.	3	AM	4,387	23.8	C	4,397	23.8	C
				PM	4,898	27.2	D	4,924	27.4	D
		La Sierra Av. to Tyler Av.	3	AM	4,719	26.3	D	4,729	26.4	D
				PM	5,242	30.5	D	5,268	30.7	D
		Tyler Av. to Van Buren Bl.	4	AM	3,943	15.7	B	3,953	15.7	B
				PM	4,390	17.5	B	4,416	17.6	B
		Van Buren Bl. to Adams St.	4	AM	4,949	19.7	C	4,959	19.7	C
				PM	5,862	23.6	C	5,888	23.8	C
		Adams St. to Madison St.	4	AM	4,746	18.9	C	4,756	18.9	C
				PM	5,077	20.2	C	5,103	20.3	C
		Madison St. to Arlington Av.	3	AM	4,283	23.0	C	4,291	23.1	C
				PM	4,838	26.6	D	4,860	27.0	D
		Arlington Av. to Central Av.	4	AM	3,584	14.3	B	3,592	14.4	B
				PM	3,694	14.8	B	3,716	14.9	B
		Central Av. to 14th St.	3	AM	3,772	20.1	C	3,780	20.2	C
				PM	4,332	23.3	C	4,354	23.4	C
		14th St. to University Av.	4	AM	4,908	19.6	C	4,916	19.7	C
				PM	5,293	21.2	C	5,316	21.4	C
		University Av. to Spruce St.	6	AM	3,744	10.0	A	3,752	10.0	A
				PM	3,726	9.9	A	3,749	10.0	A
		Spruce St. to I-215 Freeway	4	AM	3,848	15.4	B	3,856	15.4	B
				PM	3,455	13.8	B	3,477	14.0	B
I-215 Freeway	Northbound	SR-60/SR-91 Freeway to Blaine St.	5	AM	5,854	19.2	C	5,871	19.3	C
				PM	5,445	17.8	B	5,492	18.0	C
		Blaine St. to University Av.	5	AM	6,933	23.0	C	6,950	23.1	C
				PM	6,174	20.2	C	6,221	20.5	C
		University Av. to Martin Luther King Bl.	4	AM	6,175	26.0	C	6,192	26.1	D
				PM	6,031	25.2	C	6,078	25.5	C
		Martin Luther King Bl. to Central Av.	4	AM	6,319	26.8	D	6,336	27.0	D
				PM	6,376	27.1	D	6,423	27.3	D
		Central Av. to Box Springs Rd.	5	AM	6,233	20.4	C	6,250	20.5	C
				PM	5,441	17.7	B	5,488	18.0	C
		Box Springs Rd. to SR-60/I-215 Freeway	4	AM	7,685	**37.1**	E	7,702	**37.6**	E
				PM	8,163	**44.2**	E	8,210	--	F
		SR-60 Freeway to Eucalyptus Av.	3	AM	4,722	27.6	D	4,739	28.0	D
				PM	5,995	--	F	6,042	--	F
		Eucalyptus Av. to Alessandro Bl.	3	AM	3,777	20.4	C	3,794	20.5	C
				PM	3,909	21.1	C	3,956	21.5	C
		Alessandro Bl. to Cactus Av.	5	AM	4,414	14.3	B	4,431	14.4	B
				PM	4,564	14.8	B	4,611	15.0	B
		Cactus Av. to Van Buren Bl.	4	AM	4,538	18.5	C	4,555	18.6	C
				PM	3,520	14.3	B	3,567	14.5	B
		Van Buren Bl. to Harley Knox Bl.	3	AM	4,191	23.2	C	4,208	23.3	C
				PM	6,162	--	F	6,209	--	F

[1] Number of lanes are in the specified direction and reflect new auxiliary lanes and assume the HOV lane in each direction.
[2] Volumes shown on this table have been reduced to account for the proposed HOV lane in each direction.
[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).
* **BOLD** = Unacceptable Level of Service

Source: Urban Crossroads, Inc. 2014g, Table 4.

Table 4.8-26 Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange

Intersection	Movement	Stacking Distance (Feet)	2018 Without Project				2018 With Project			
			95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]		95th Percentile Stacking Distance Required (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	1,102 [2]	739 [2]	Yes	Yes	1,175 [2]	778 [2]	Yes	Yes
	SBR	270	107	70	Yes	Yes	114	80	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	117	55	Yes	Yes	117	55	Yes	Yes
	NBR	265	**530** [2]	87	**No**	Yes	**549** [2]	100	**No**	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Source: Urban Crossroads, Inc. 2014e, Table 6-3.

Table 4.8-27 Opening Year (2018) Freeway Ramp Merge/Diverge Analysis

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	2018 Without Project				2018 With Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	**48.5**	**F**	**47.5**	**F**	**49.5**	**F**	**48.1**	**F**
		On-Ramp at Harley Knox Bl.	3	**36.0**	**E**	**43.0**	**F**	**36.1**	**E**	**43.2**	**F**
	Northbound	On-Ramp at Harley Knox Bl.	3	28.6	D	**41.5**	**F**	28.8	D	**41.9**	**F**
		Off-Ramp at Harley Knox Bl.	3	28.2	D	33.4	D	28.3	D	33.4	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Source: Urban Crossroads, Inc. 2014e, Table 6-5.

Table 4.8-28 Opening Year (2018) Intersection Analysis with Recommended Mitigation

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	I-215 SB Ramps / Harley Knox Bl.																	
	- Without Improvements	TS	0	0	0	0	1	1	0	2	d	1	2	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	TS	0	0	0	**2**	1	**0**	0	2	d	**2**	2	0	28.8	22.7	C	C
2	I-215 NB Ramps / Harley Knox Bl.																	
	- Without Improvements	TS	0	1	1	0	0	0	1	2	0	0	2	d	36.7	**59.5**	D	**E**
	- With Improvements	TS	0	1	1	0	0	0	1	2	0	0	2	**1>>**	19.6	13.1	B	B
3	Western Wy. / Harley Knox Bl.																	
	- Without Improvements	CSS	0	0	0	0	1	0	0	2	0	0	2	d	**61.1**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	0	0	0	1	0	**1**	2	0	0	2	d	28.2	14.4	C	B
4	Patterson Av. / Harley Knox Bl.																	
	- Without Improvements	TS	0	1	0	0	1	d	1	1	1	1	1	0	**191.1**	**>200.0**	**F**	**F**
	- With Improvements	TS	0	1	0	0	1	d	1	**2**	1	1	**2**	0	23.1	22.7	C	C
5	Webster Av. / Harley Knox Bl.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	0	**80.6**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	**2**	0	1	**2**	0	10.4	15.6	B	B
6	Indian St. / Grove View Rd.																	
	- Without Improvements	CSS	0	1	0	1	1	0	0	0	0	1	0	1	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	**2**	0	1	**2**	0	0	0	0	1	0	1	13.7	17.5	B	B
7	Indian St. / Harley Knox Bl.																	
	- Without Improvements	**TS**	2	2	1	1	2	0	1	1	1	2	2	0	**>200.0**	**87.8**	**F**	**F**
	- With Improvements	**TS**	2	2	1	1	2	**1>**	**2**	**2**	1	2	2	0	38.5	50.8	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop c
For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are show

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

Source: Urban Crossroads, Inc. 2014e, Table 6-6.

Table 4.8-29 Opening Year (2018) Roadway Segment Volume/Capacity Analysis with Recommended Mitigation

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2018 With Project	V/C	LOS	Acceptable LOS
3	Harley Knox Boulevard	I-215 NB Ramps to Western Way	**4D**	**35,900**	**32,522**	**0.91**	**E**	D
4		East of Western Way	**4D**	**35,900**	**33,835**	**0.94**	**E**	D
5		West of Patterson Avenue	**4D**	**35,900**	**34,441**	**0.96**	**E**	D
6		East of Patterson Avenue	**4D**	**35,900**	**33,128**	**0.92**	**E**	D
7		West of Webster Avenue	**4D**	**35,900**	**33,200**	**0.92**	**E**	D
8		East of Webster Avenue	**4D**	**35,900**	**33,500**	**0.93**	**E**	D
9		West of Indian Street	**4D**	**35,900**	31,700	0.88	D	D
17	Indian Street	North of Grove View Road	**4D**	**37,500**	23,198	0.62	B	D
18		South of Grove View Road	**4D**	**37,500**	23,013	0.61	B	D
19		North of Harley Knox Boulevard	**4D**	**37,500**	18,700	0.50	A	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of Moreno Valley's Transportation Division's Traffic Impact Analysis Preparation Guidelines (August 2007), the City of Perris General Plan Circulation Element, or the County of Riverside General Plan Circulation Element. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

Source: Urban Crossroads, Inc. 2014e, Table 6-8.

Table 4.8-30 Opening Year (2018) Peak Hour Stacking Summary at I-215/Harley Knox Boulevard Interchange with Planned Improvements

Intersection	Movement	Stacking Distance (Feet)	2018 With Project				2018 With Project, With Improvements			
			95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]		95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Harley Knox Bl.	SBL/T	1,330	1,175 [2]	778 [2]	Yes	Yes	350	244	Yes	Yes
	SBR	270	114	80	Yes	Yes	44	67	Yes	Yes
I-215 NB Ramps / Harley Knox Bl.	NBL/T	1,120	117	55	Yes	Yes	285	94	Yes	Yes
	NBR	265	**549** [2]	100	**No**	Yes	266	54	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

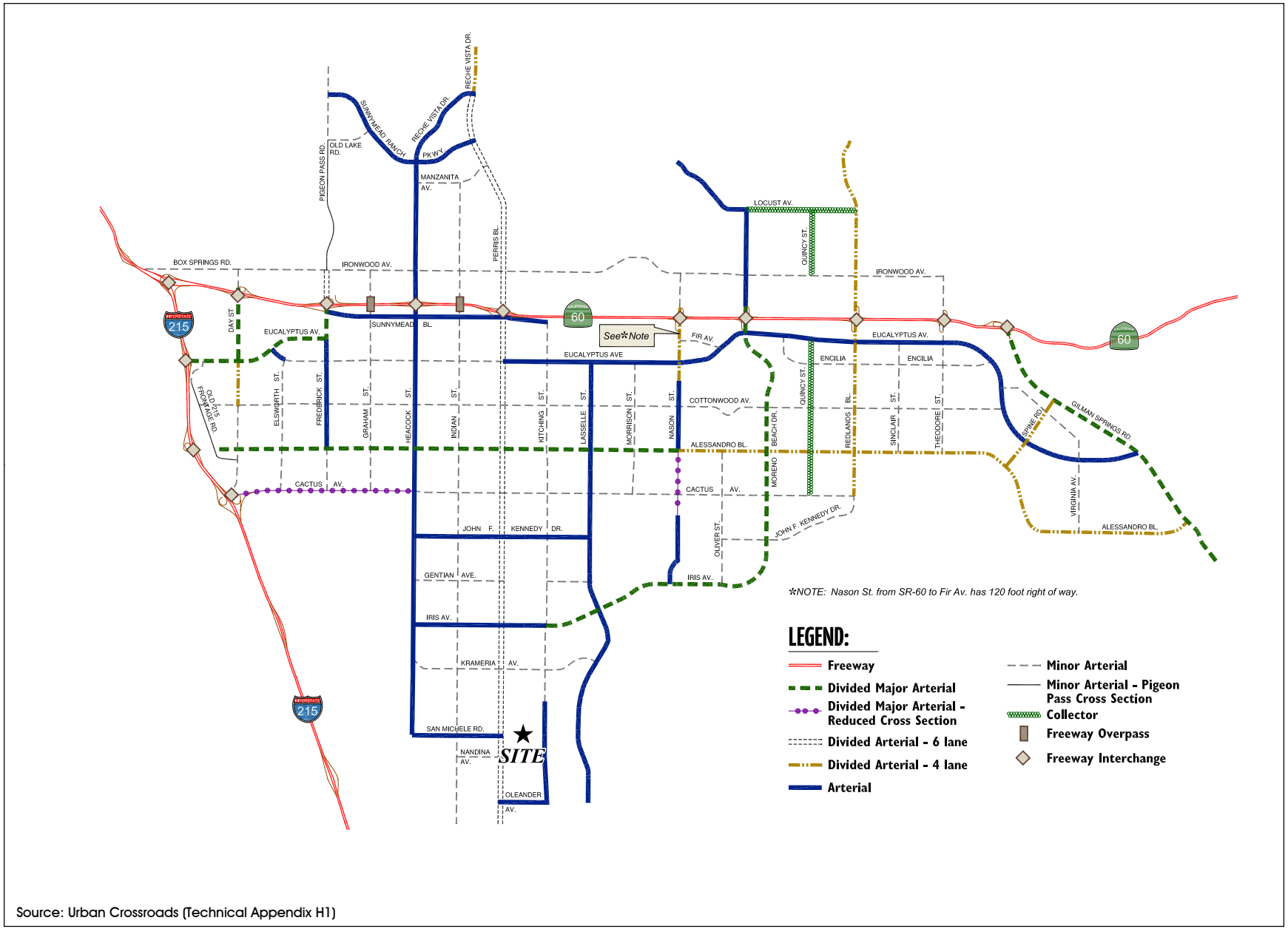
Source: Urban Crossroads, Inc. 2014e, Table 6-7.

Table 4.8-31 Opening Year (2018) Freeway Ramp Merge/Diverge Analysis with Planned Improvements

Freeway	Direction	Ramp or Segment	Lanes on Freeway[1]	2018 With Project				2018 With Project, With Improvements			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[2]	LOS	Density[2]	LOS	Density[2]	LOS	Density[2]	LOS
I-215 Freeway	Southbound	Off-Ramp at Harley Knox Bl.	3	**49.5**	**F**	**48.1**	**F**	**40.7**	**E**	**38.9**	**E**
		On-Ramp at Harley Knox Bl.	3	**36.1**	**E**	**43.2**	**F**	31.6	D	**37.0**	**E**
	Northbound	On-Ramp at Harley Knox Bl.	3	28.8	D	**41.9**	**F**	25.9	C	**38.1**	**E**
		Off-Ramp at Harley Knox Bl.	3	28.3	D	33.4	D	25.3	C	29.6	D

[1] Number of lanes are in the specified direction and is based on existing conditions plus the construction of an HOV lane in each direction.
[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

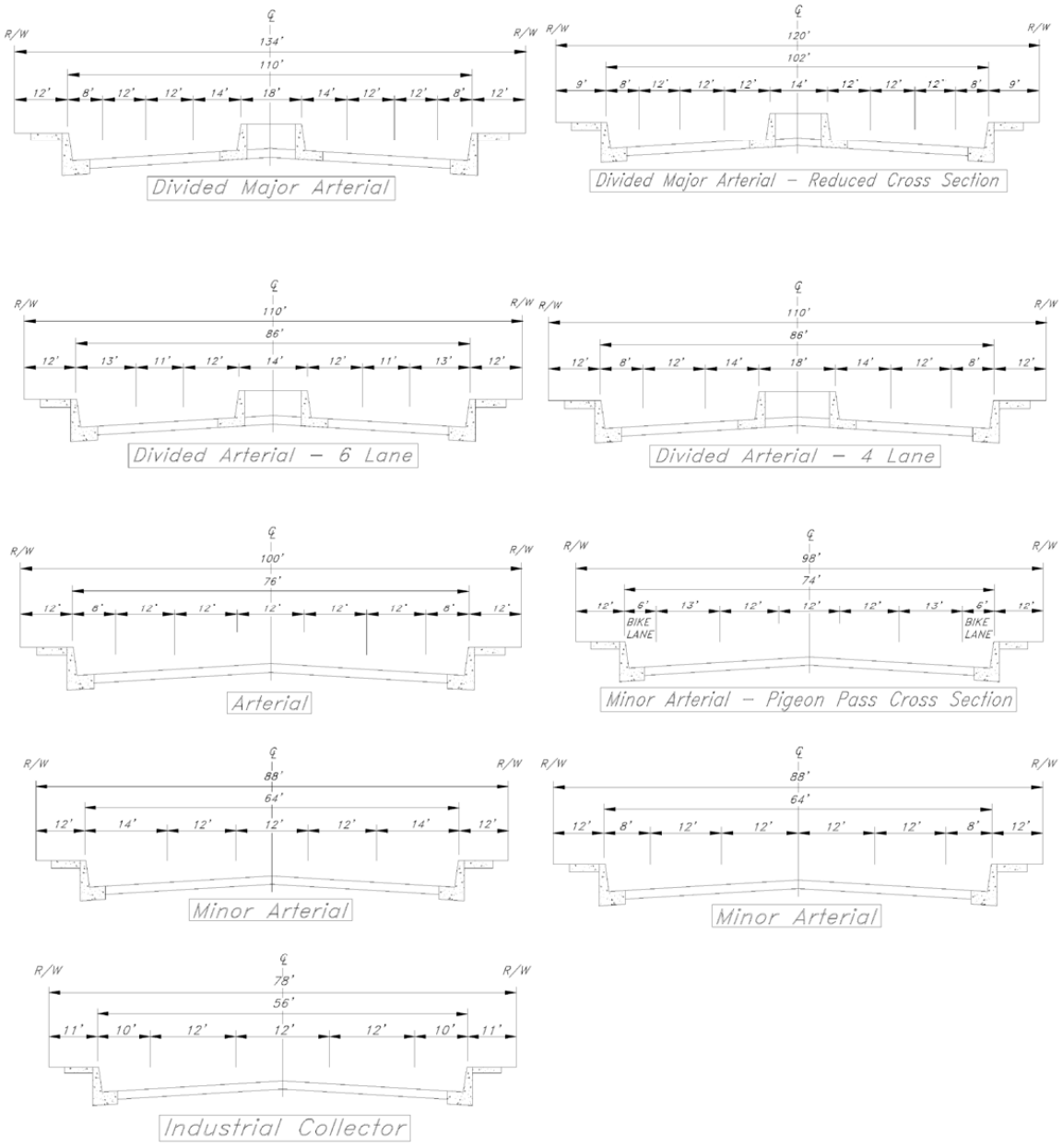
Source: Urban Crossroads, Inc. 2014e, Table 6-10.



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

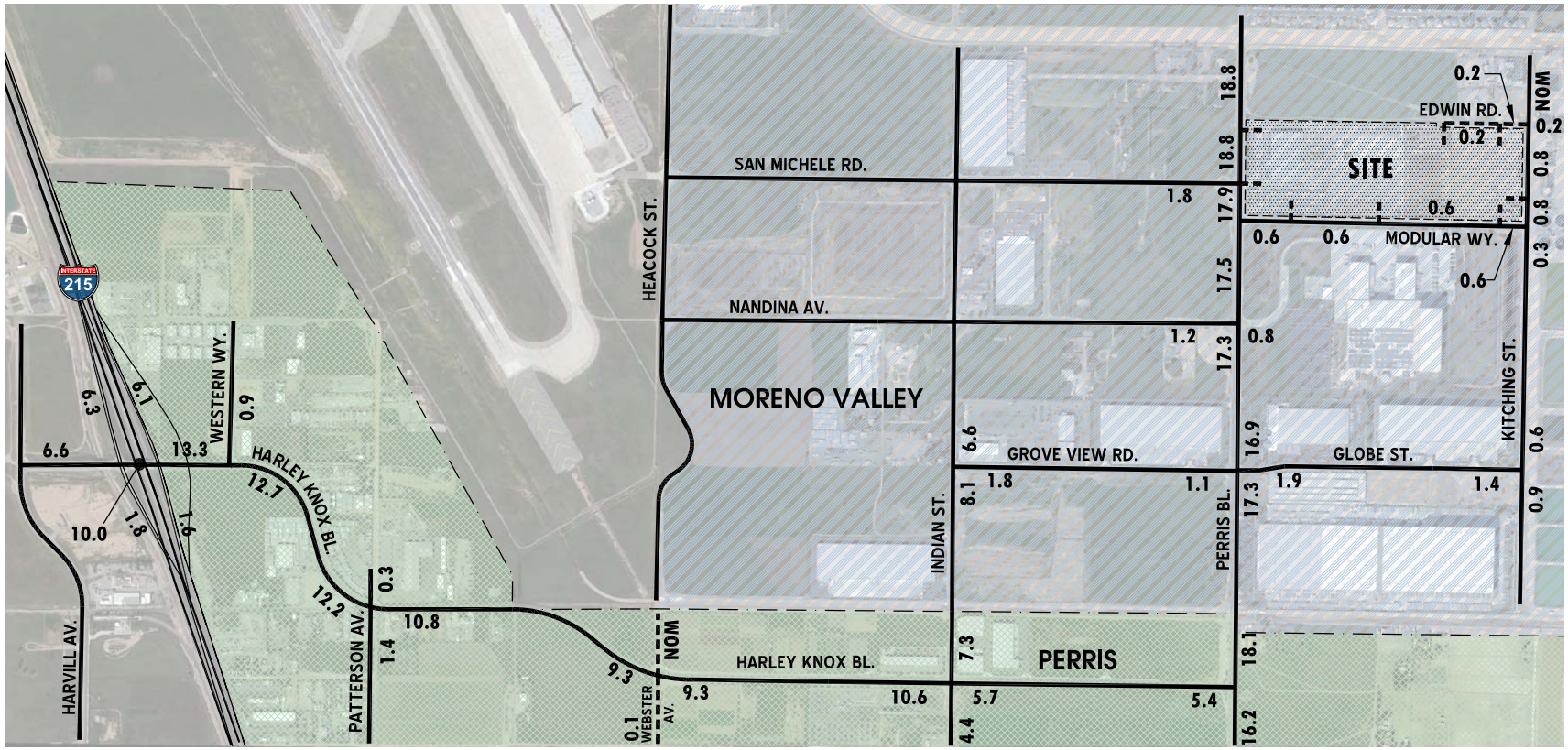
Figure 4.8-1
City of Moreno Valley General Plan Circulation Plan



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-2
City of Moreno Valley General Plan Roadway Cross-Sections



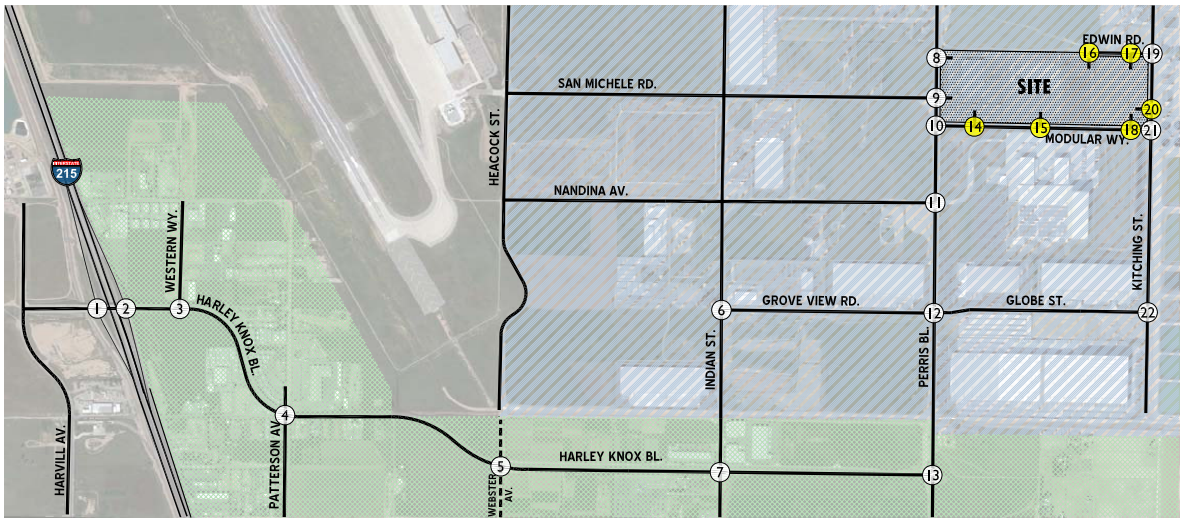
LEGEND:

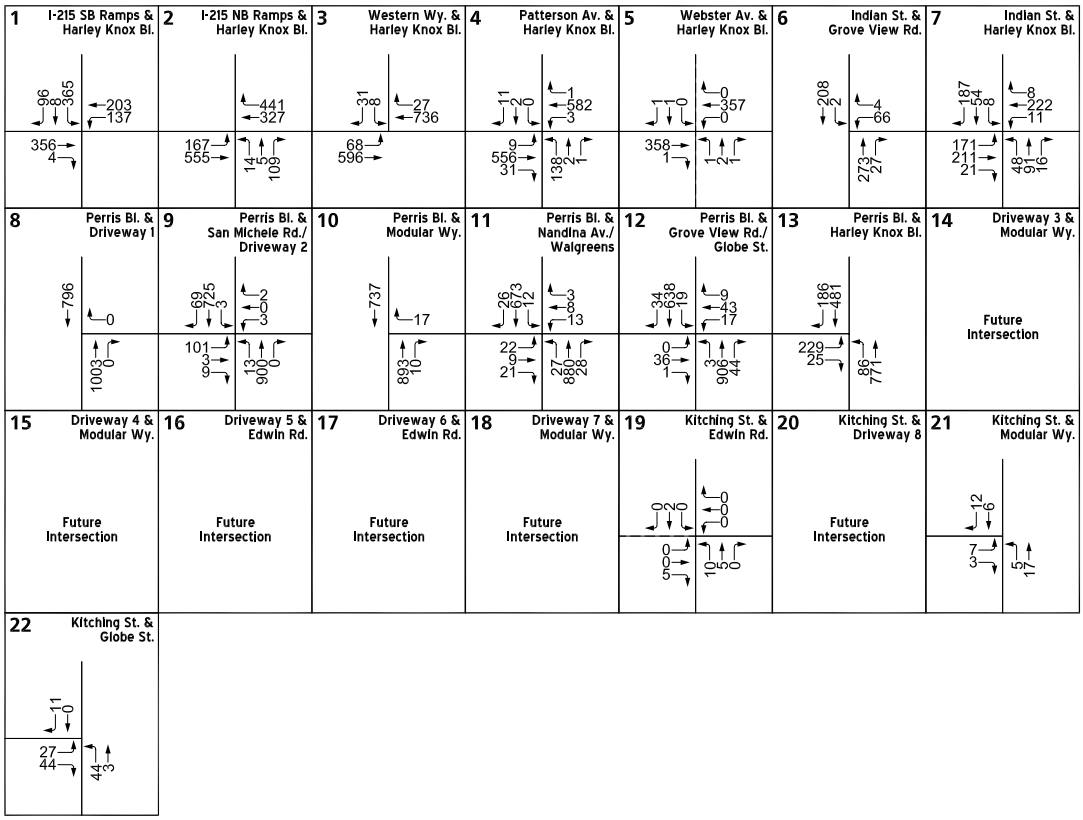
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-3
Existing (2013) Average Daily Traffic (ADT)



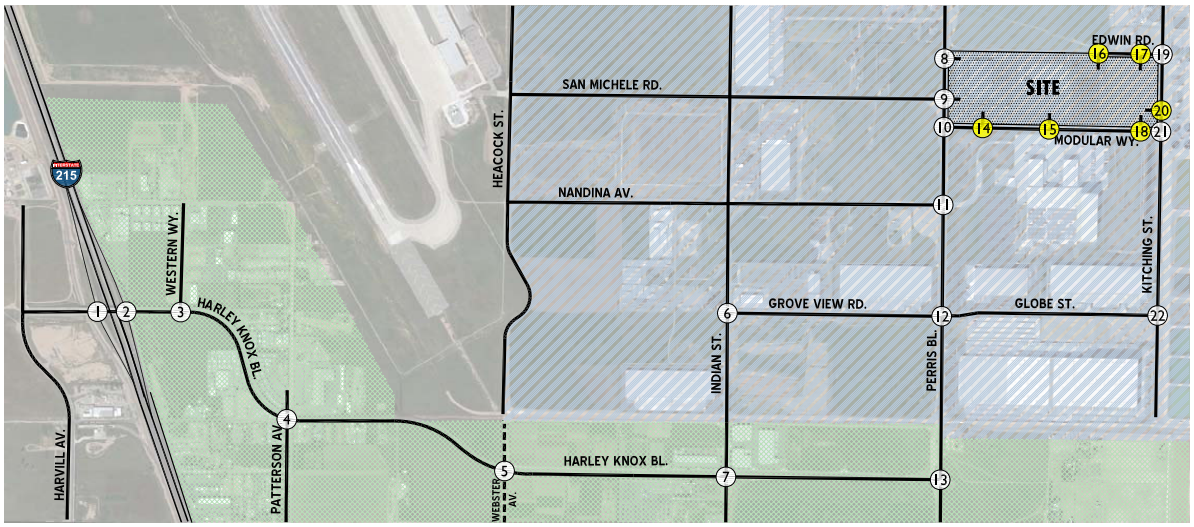


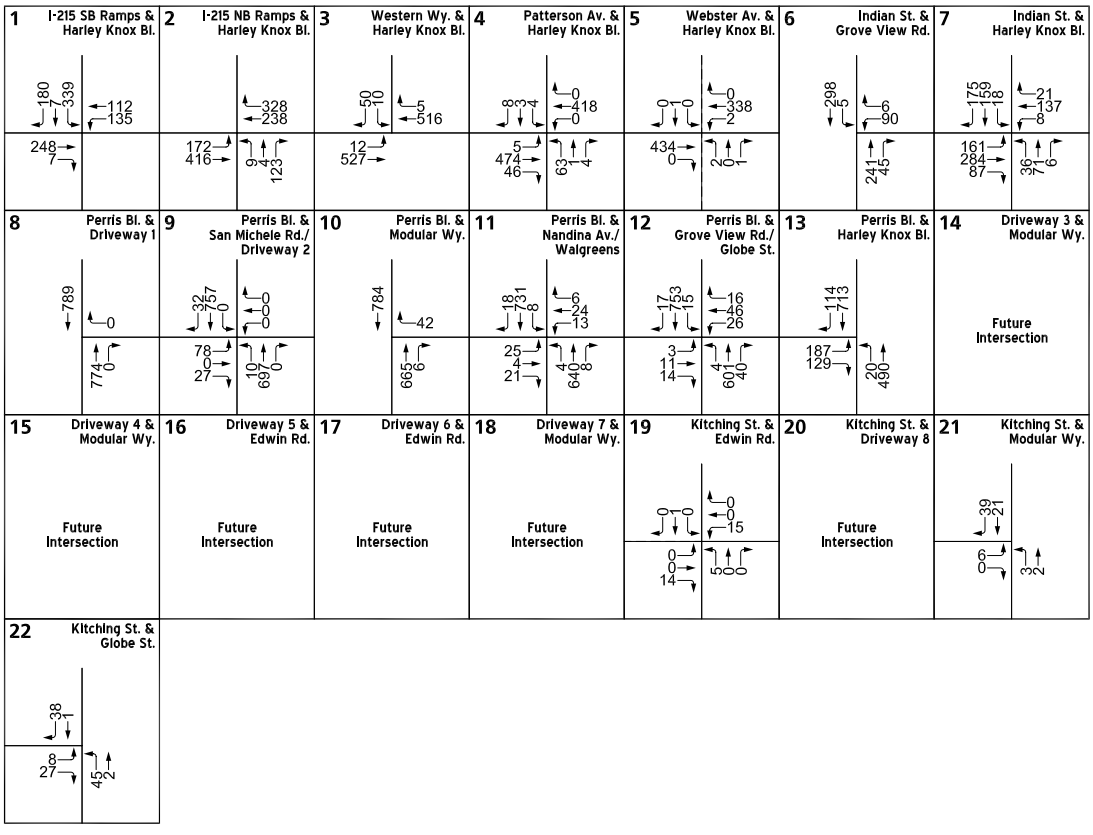
Source: Urban Crossroads (Technical Appendix H1)

Figure 4.8-4

NOT TO SCALE

Existing (2013) AM Peak Hour Intersection Volumes

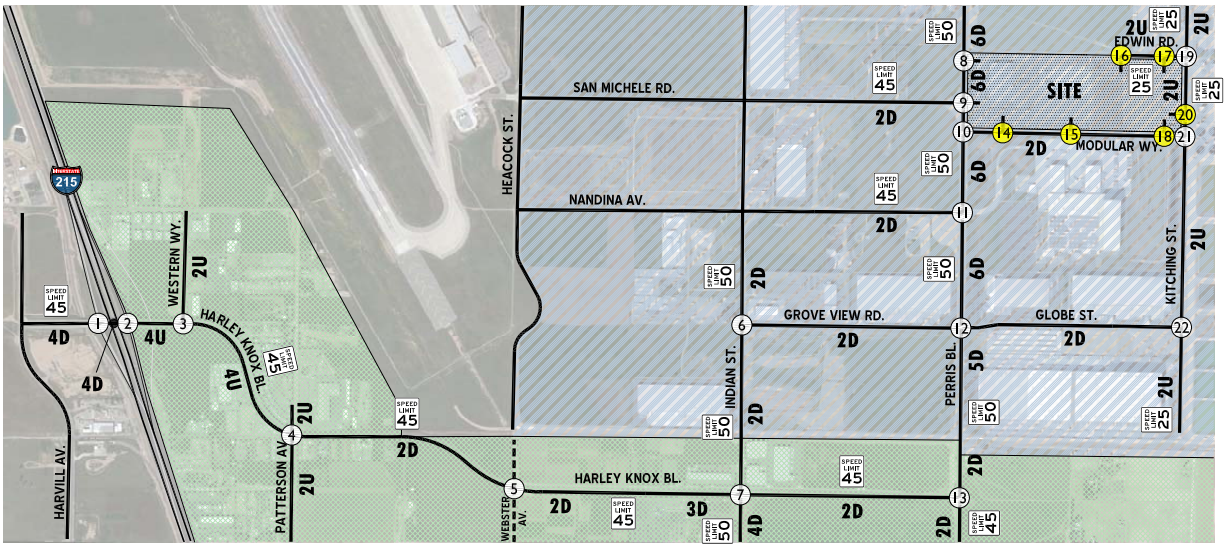


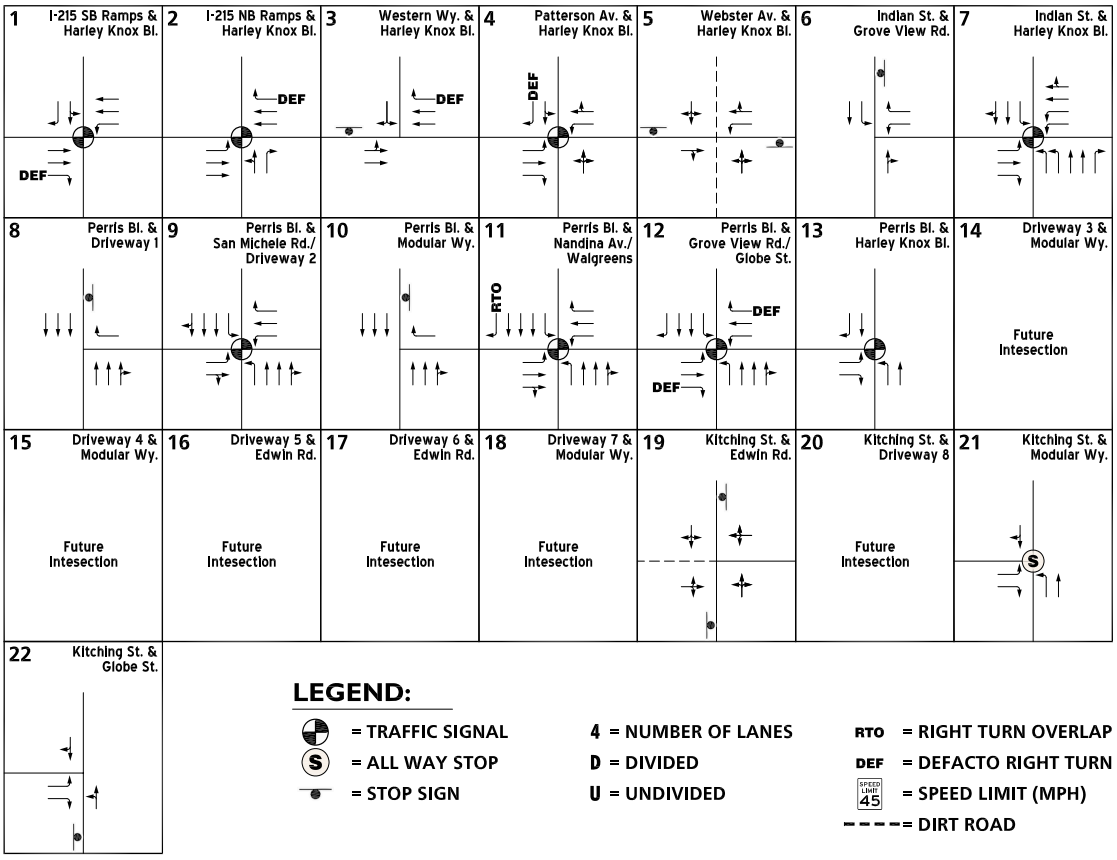


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-5
Existing (2013) PM Peak Hour Intersection Volumes



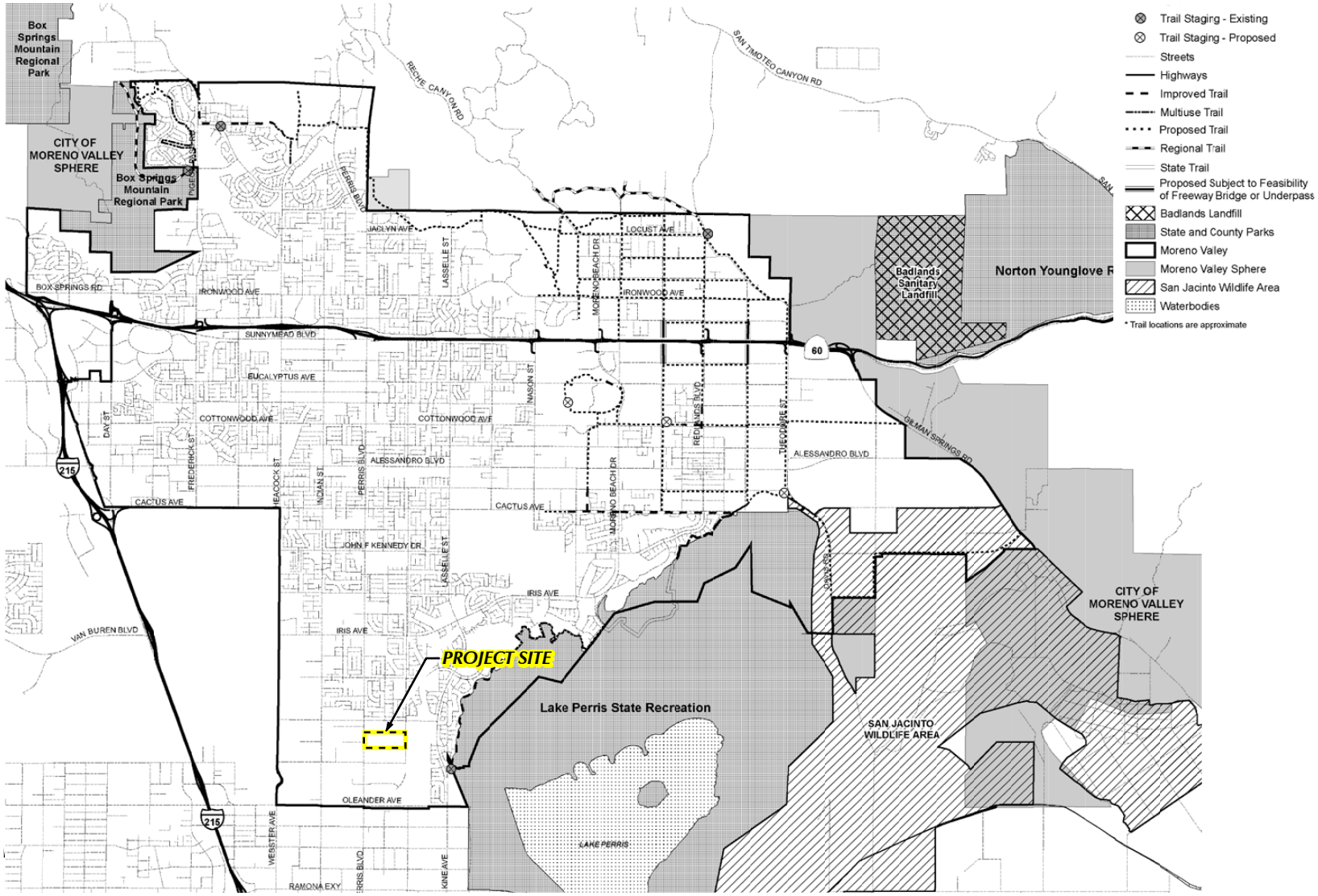


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-6

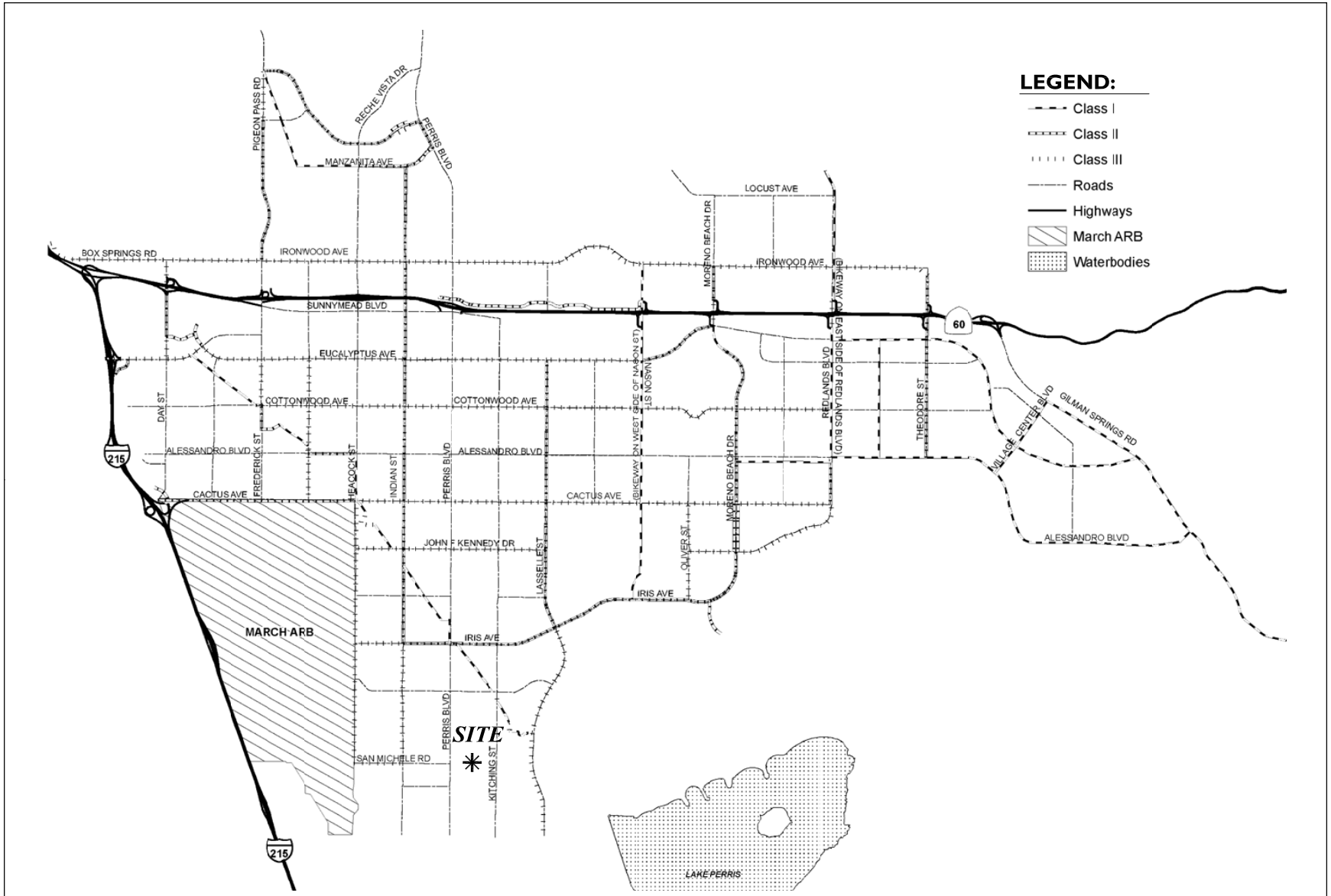
Study Area Intersections: Existing (2013) Through Lanes and Intersection Controls



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

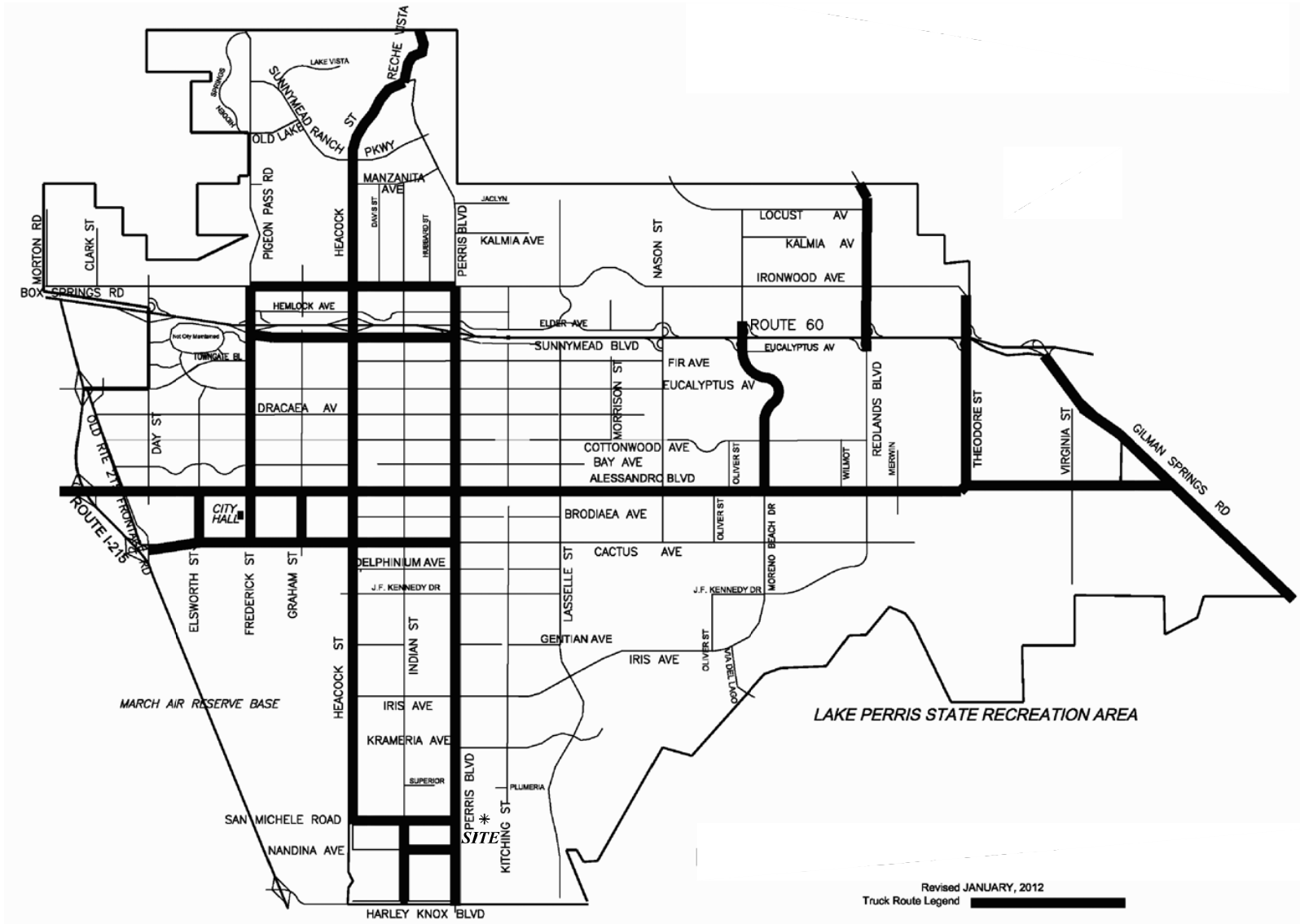
Figure 4.8-7
City of Moreno Valley Master Plan of Trails



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

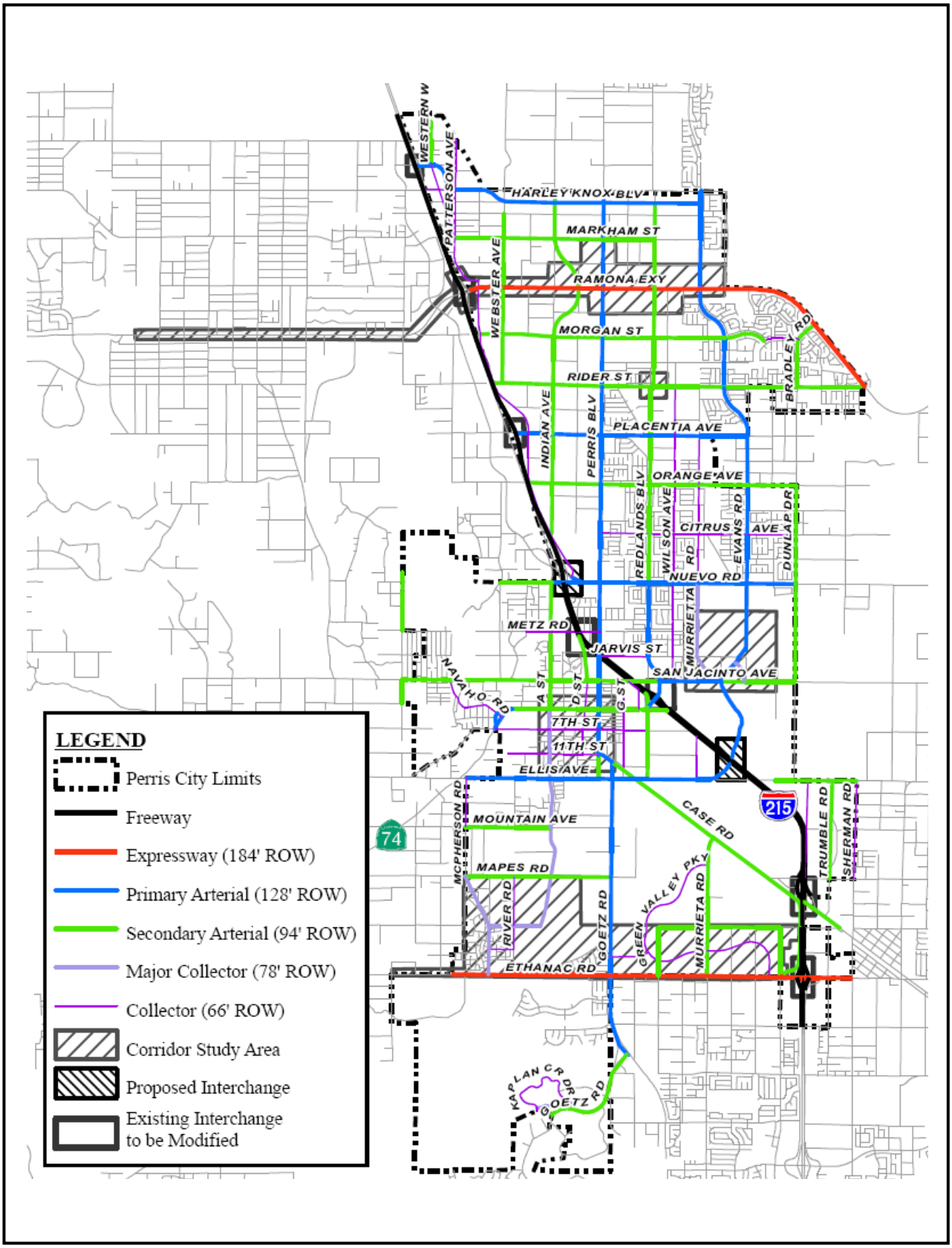
Figure 4.8-8
City of Moreno Valley Bike Plan



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-9
City of Moreno Valley Truck Routes

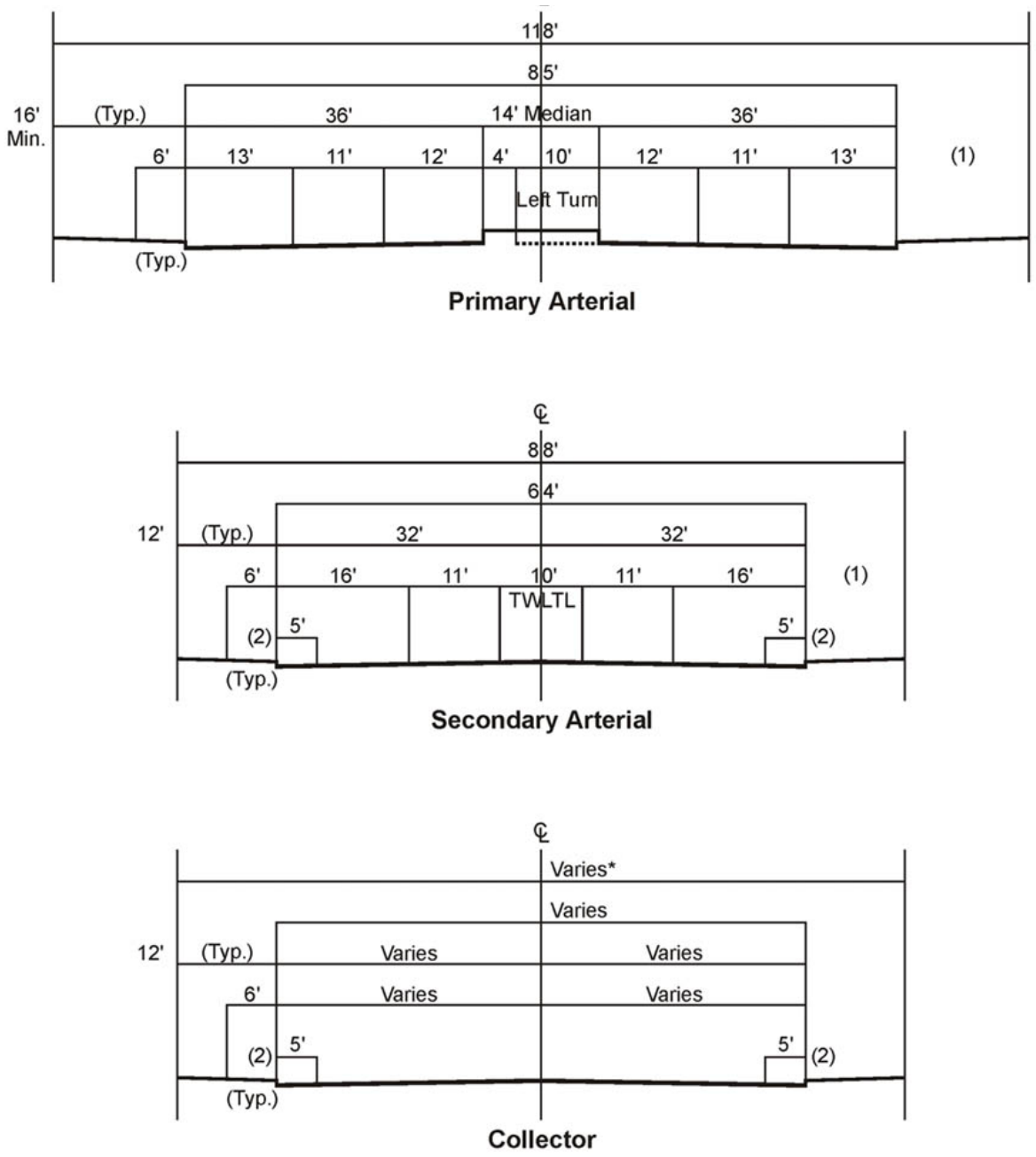


Source: City of Perris General Plan, Circulation Element (8/2008)

Figure 4.8-10

NOT TO SCALE

CITY OF PERRIS GENERAL PLAN CIRCULATION PLAN



Legend

(1) No stopping any time both sides.

(2) Bike lane where designated.

* The width of the collector street can range from 40 feet to 64 feet curb-to-curb.

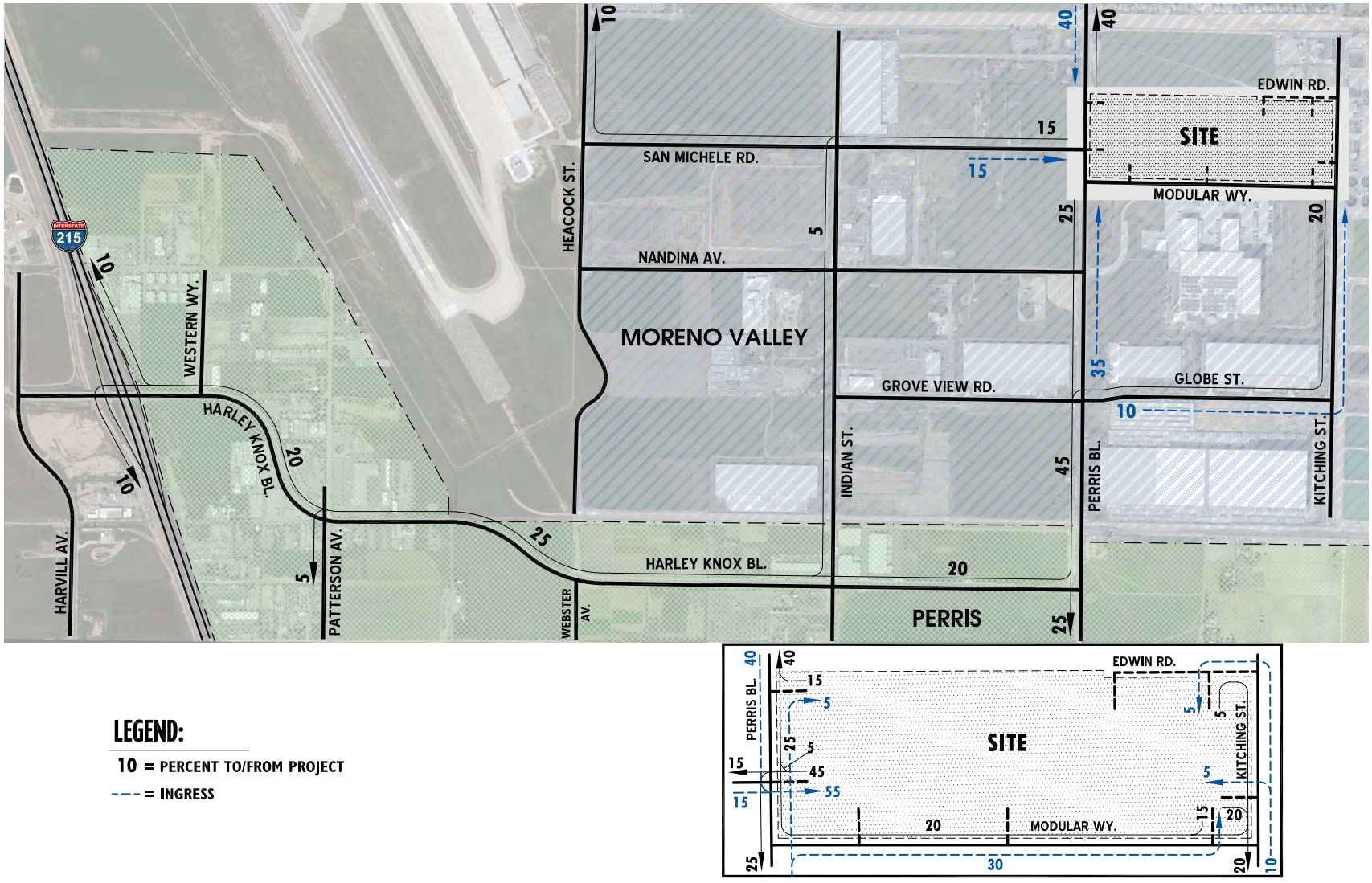
TWLTL = Two Way Left Turn Lane

Source: City of Perris General Plan - Circulation Element (08/2008)

Figure 4.8-11

NOT TO SCALE

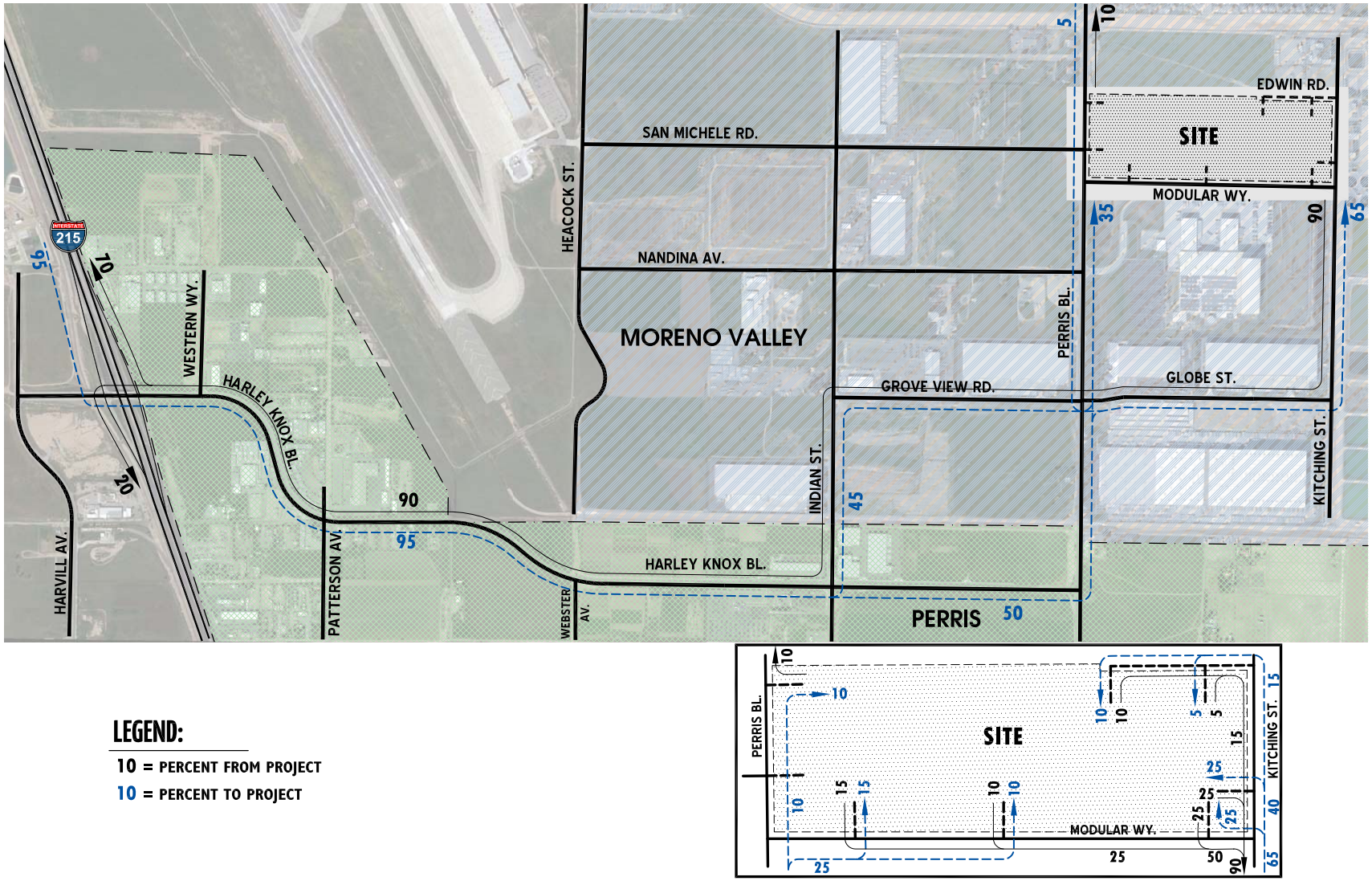
City of Perris General Plan Roadway Cross-Sections



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

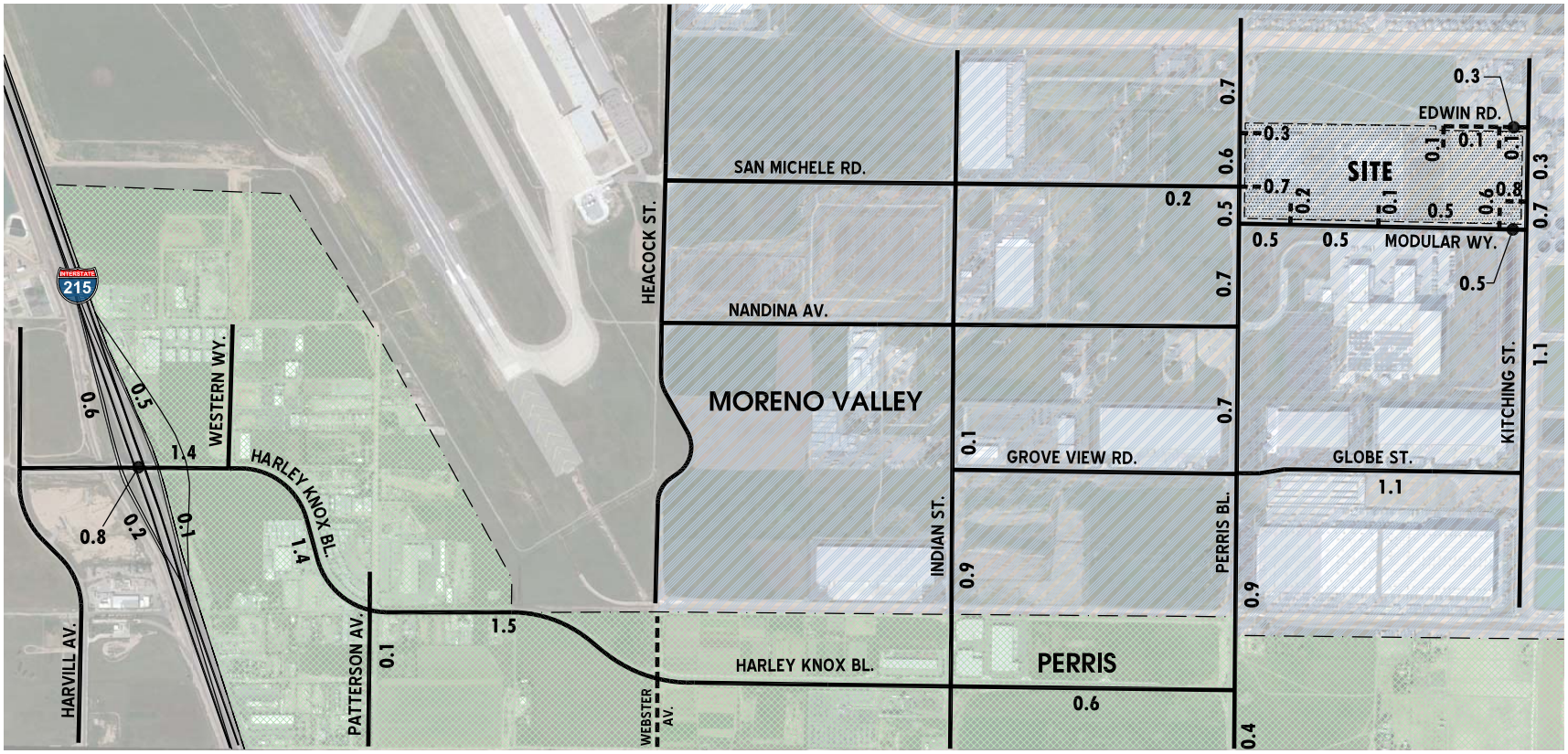
Figure 4.8-12
Project Passenger Car Trip Distribution



Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-13
Project Truck Trip Distribution



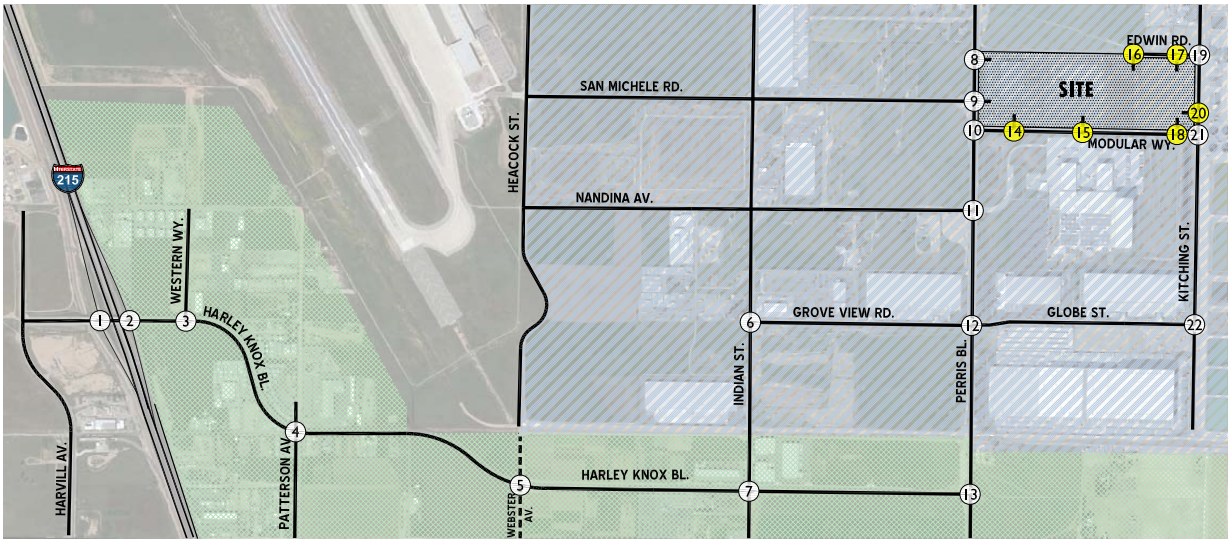
LEGEND:

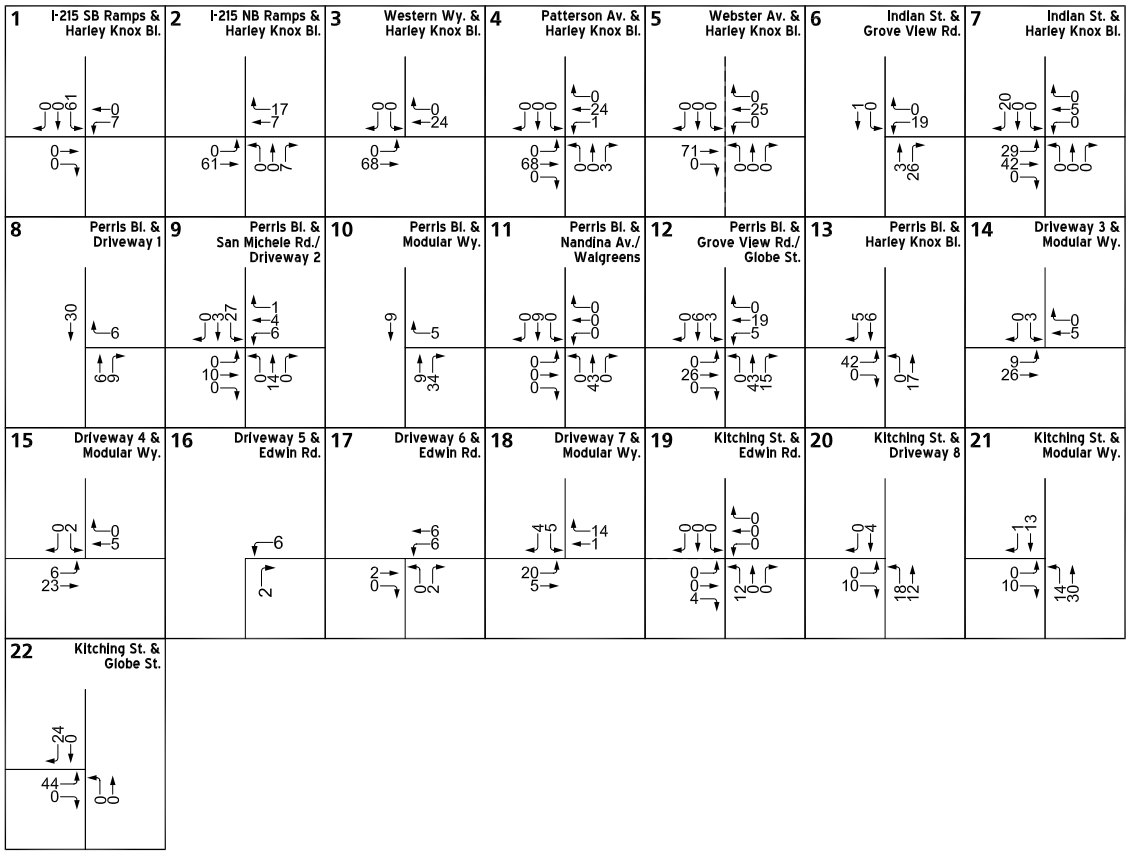
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-14
Project Average Daily Traffic (PCE)

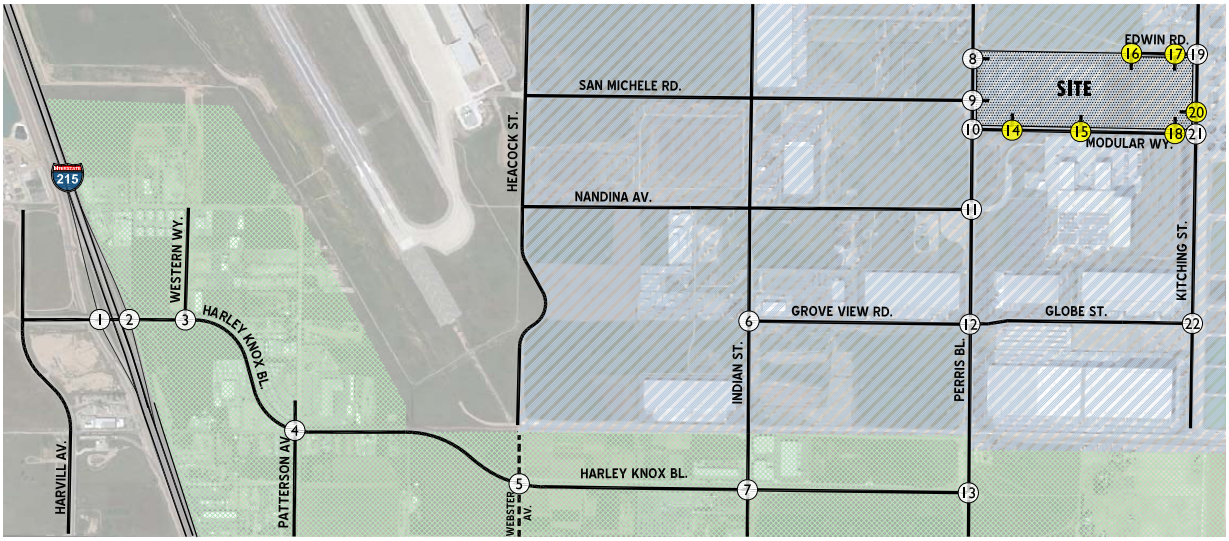


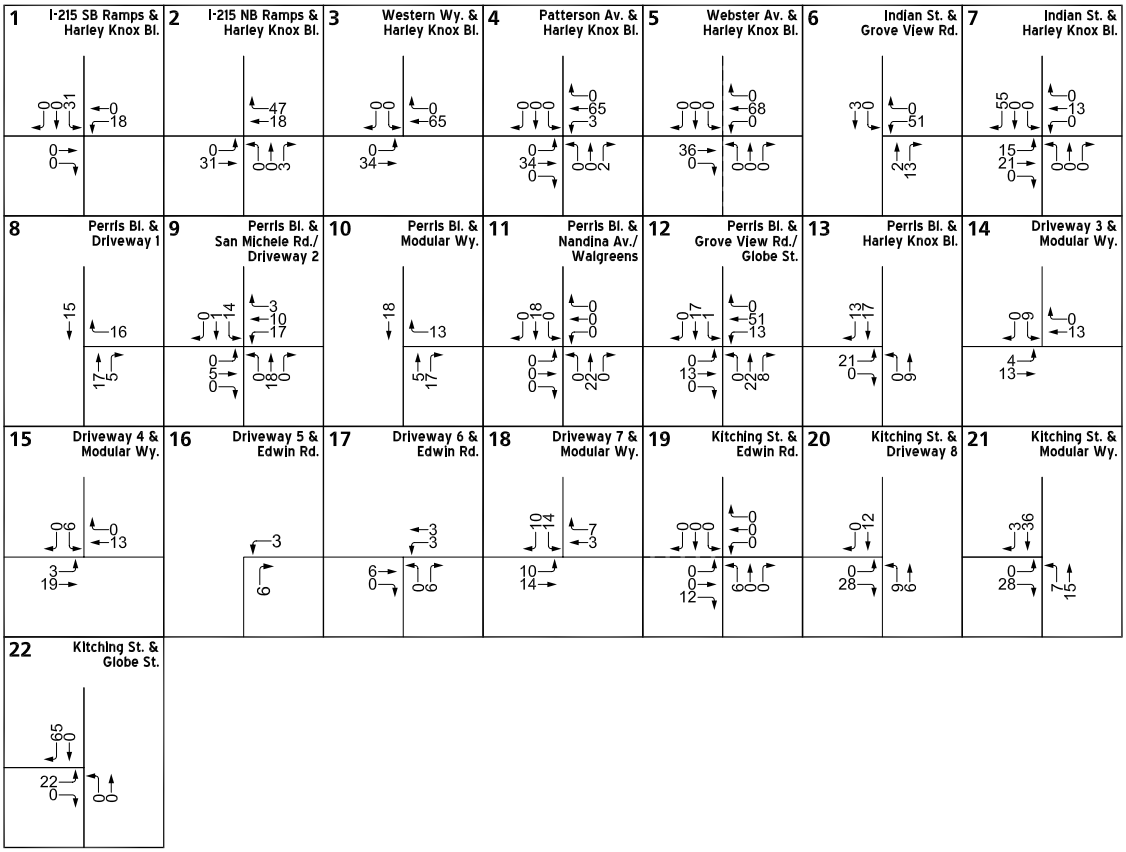


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-15
Project AM Peak Hour Intersection Volumes (PCE)

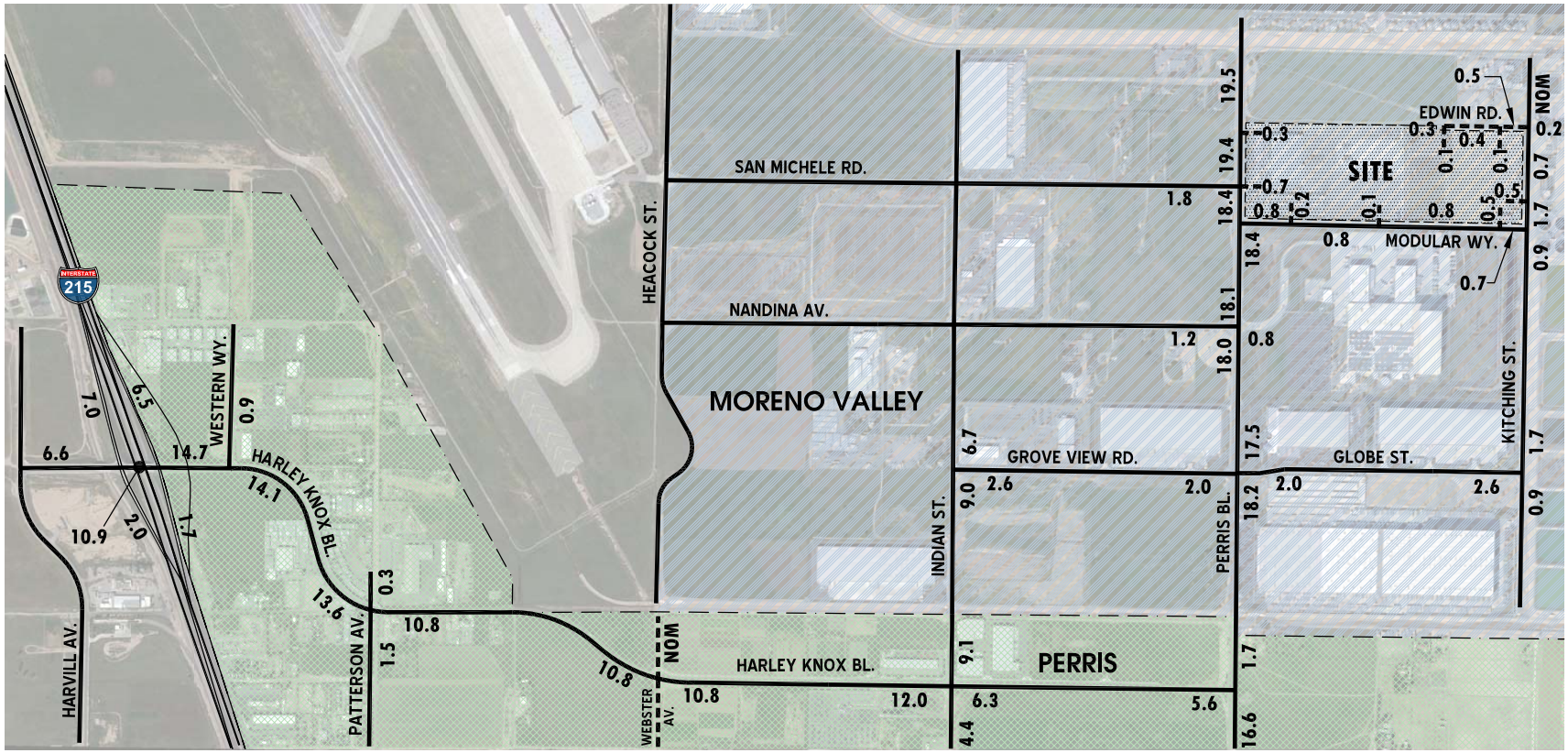




Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-16
Project PM Peak Hour Intersection Volumes (PCE)



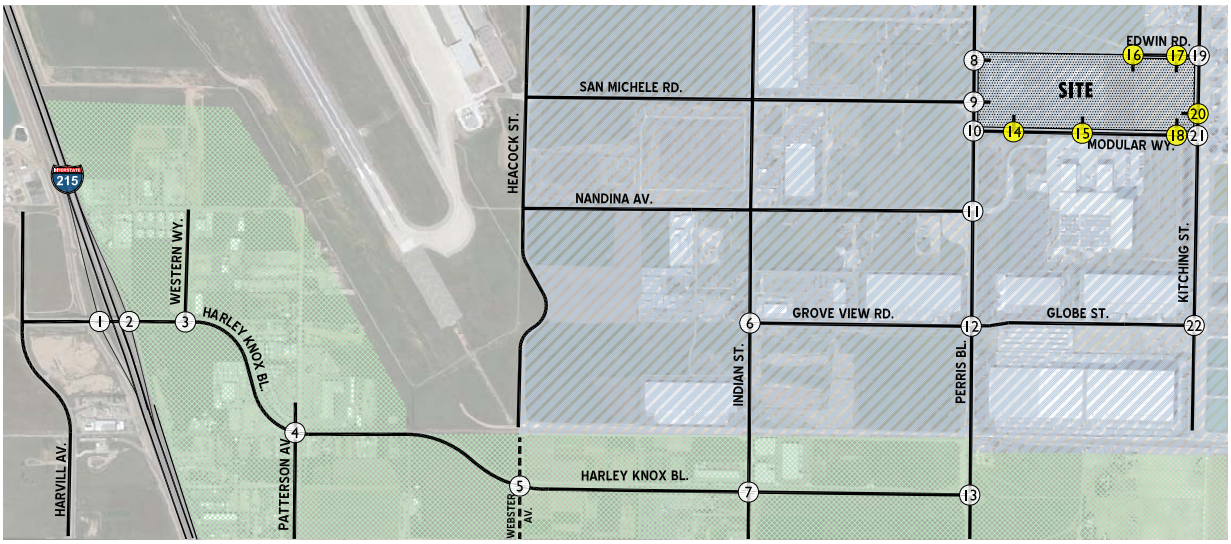
LEGEND:

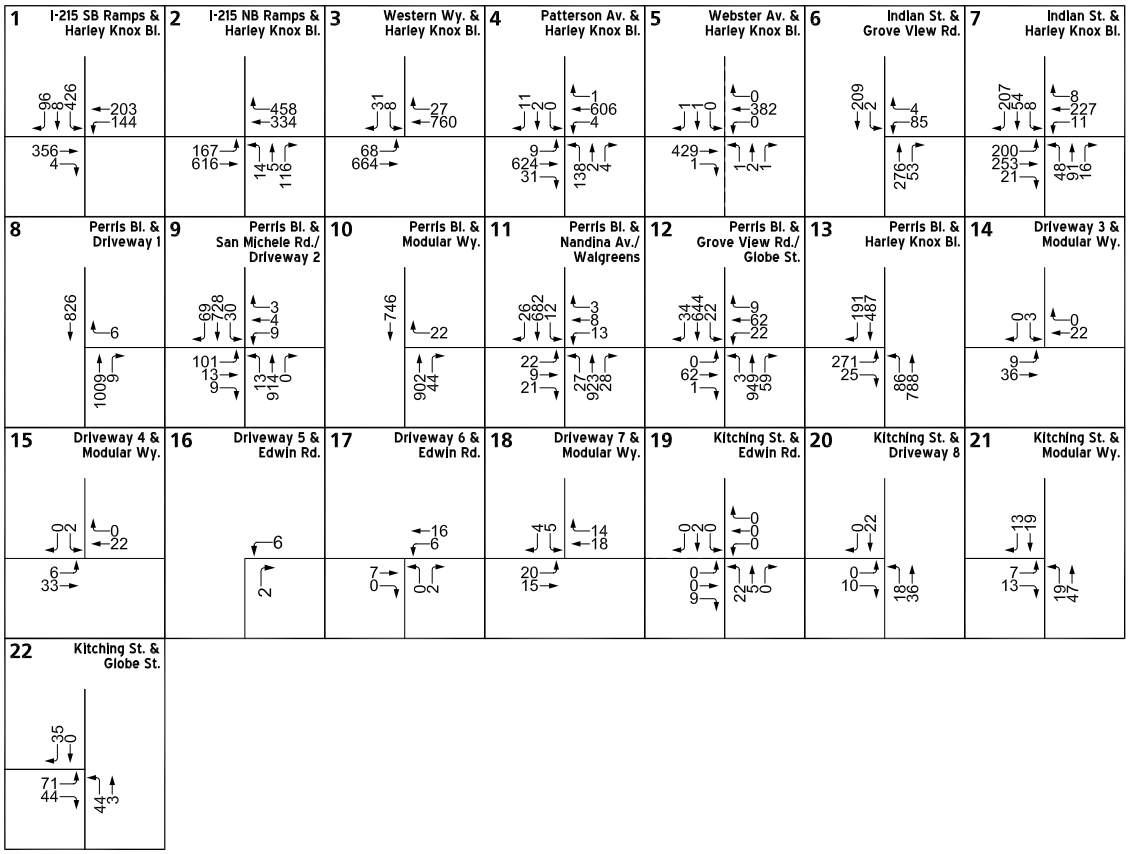
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-17
Existing plus Project (E+P) Average Daily Traffic



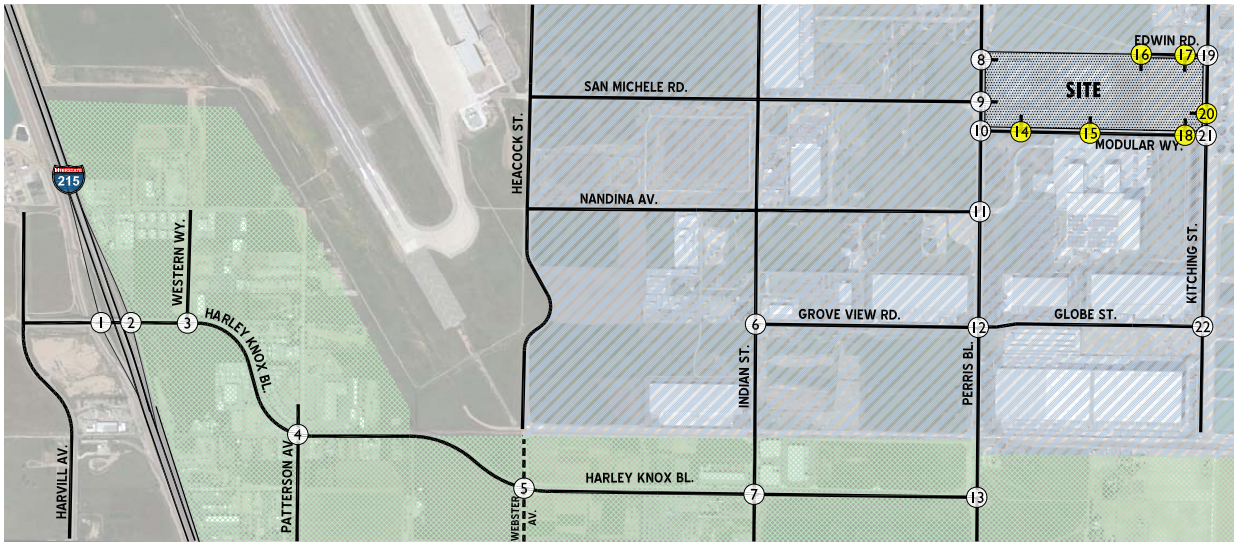


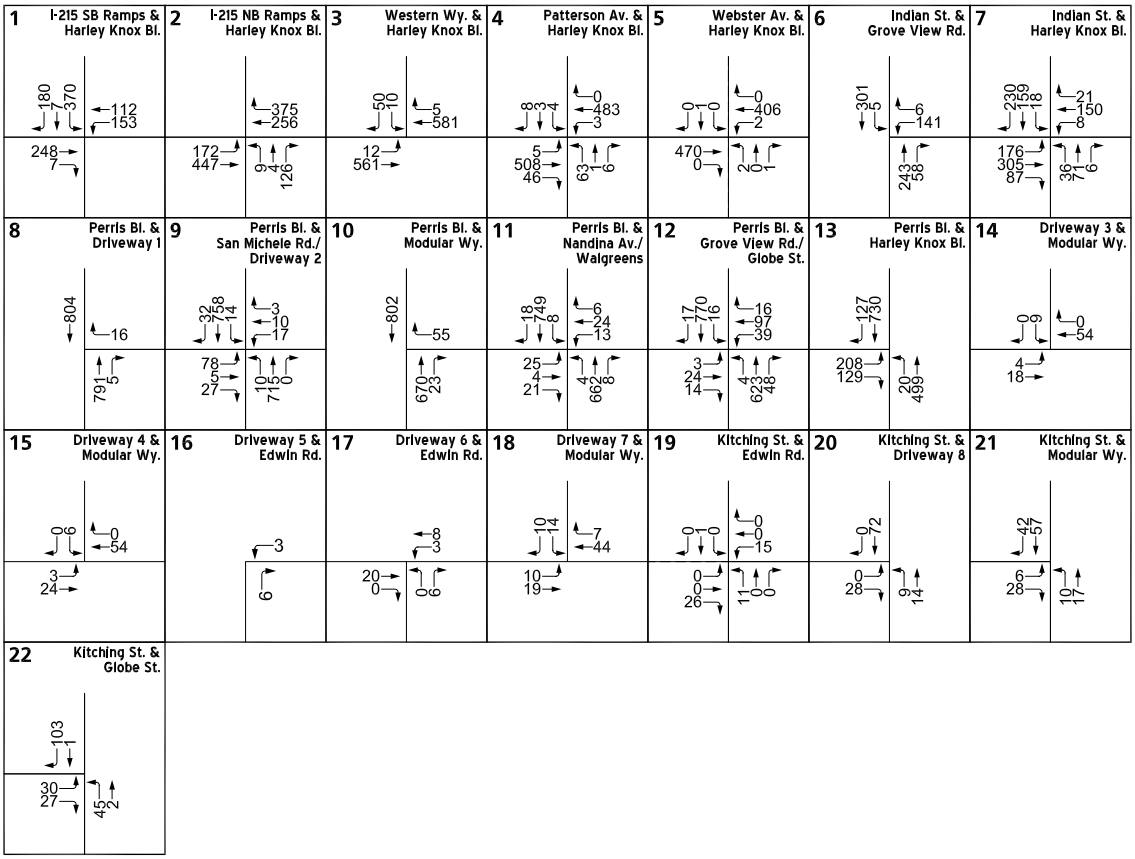
Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-18

Existing plus Project (E+P) Intersection Volumes - AM Peak Hour



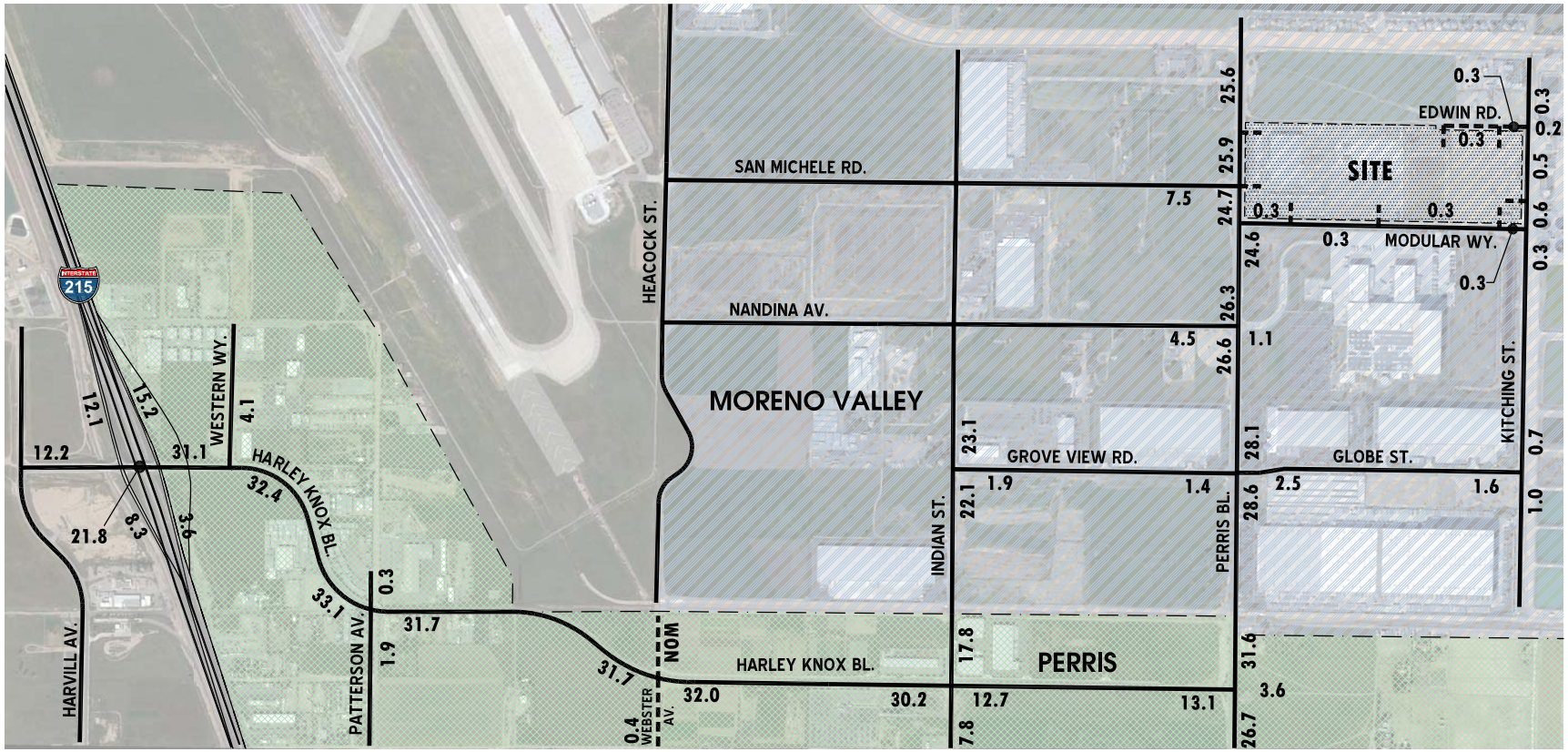


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-19

Existing plus Project (E+P) Intersection Volumes - PM Peak Hour



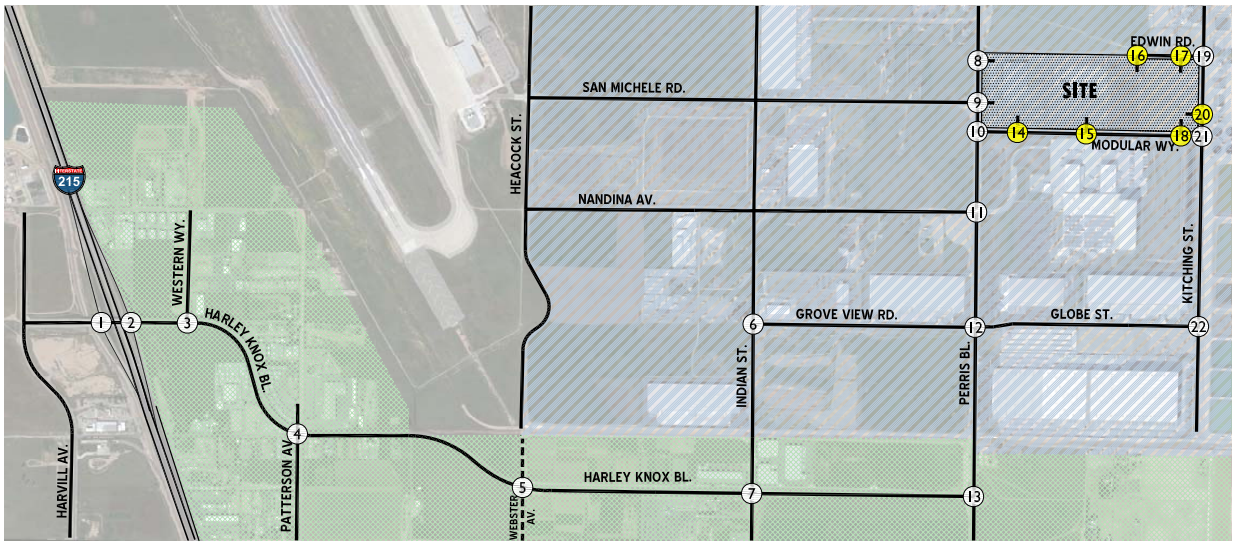
LEGEND:

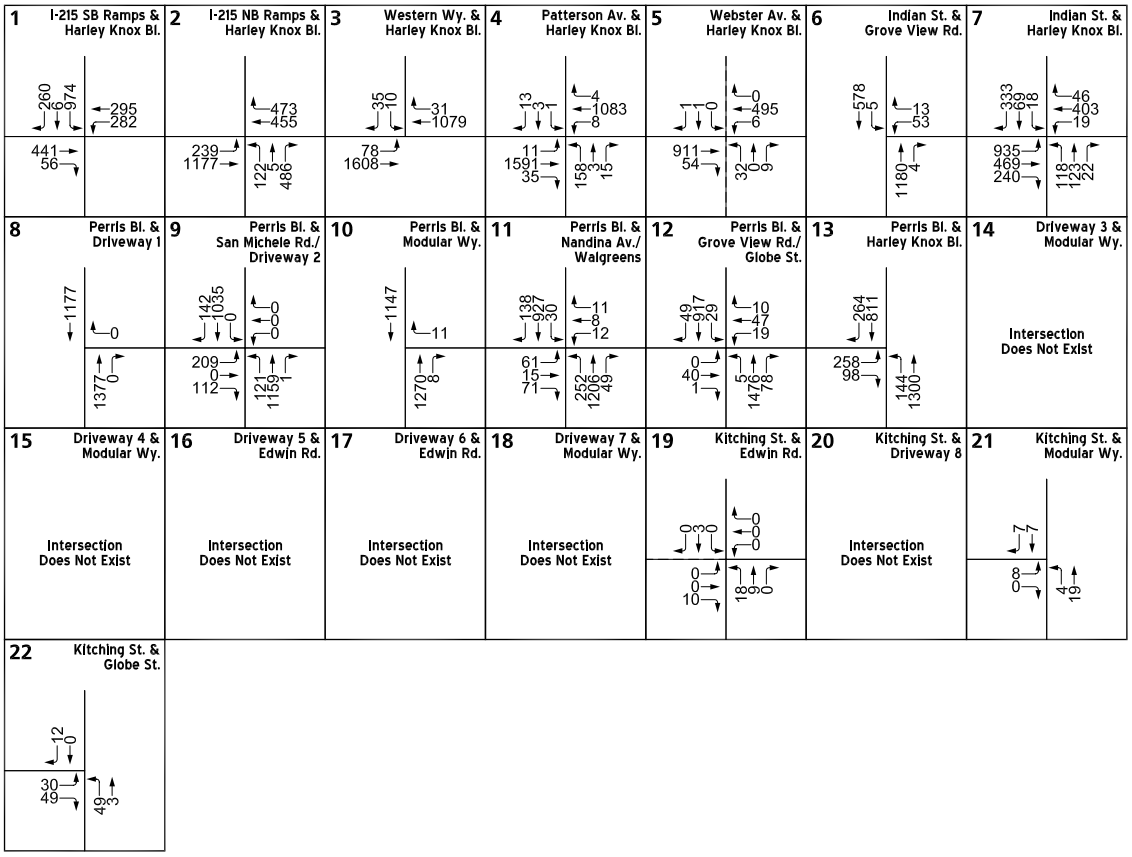
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-20
Opening Year (2018) without Project Average Daily Traffic



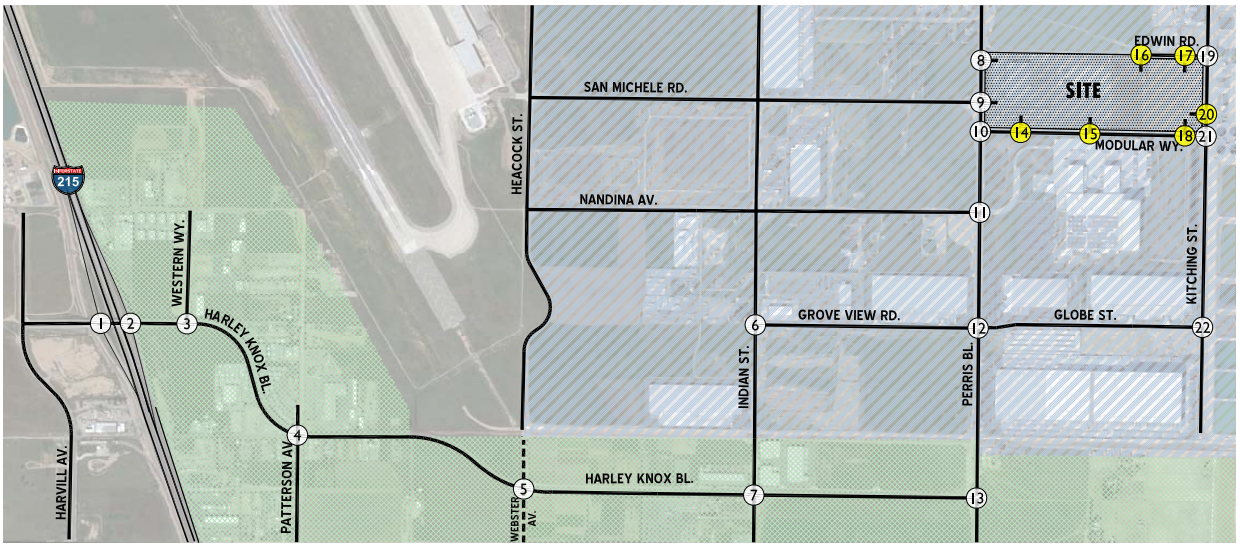


Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-21

Opening Year (2018) without Project Intersection Volumes -AM Peak Hour



1 I-215 SB Ramps & Harley Knox Bl.
335 7 665 → 155 578 ←
423 → 109 →

2 I-215 NB Ramps & Harley Knox Bl.
→ 961 686 ←
350 → 738 → 47 4 247 ←

3 Western Wy. & Harley Knox Bl.
58 12 → 7 1638 ←
39 → 1083 →

4 Patterson Av. & Harley Knox Bl.
7 4 5 → 1 1609 10 ←
6 → 1077 → 56 → 72 2 8 ←

5 Webster Av. & Harley Knox Bl.
0 1 0 → 0 980 17 ←
572 → 32 → 65 0 14 ←

6 Indian St. & Grove View Rd.
1377 14 → 11 48 ←
695 → 37 →

7 Indian St. & Harley Knox Bl.
763 321 75 → 20 516 18 ←
414 → 459 → 140 → 269 106 11 ←

8 Perris Bl. & Driveway 1
1032 → 0 ←
1105 → 0 ←

9 Perris Bl. & San Michele Rd./ Driveway 2
147 898 14 → 0 0 0 ←
211 → 0 → 141 → 123 890 1 ←

10 Perris Bl. & Modular Wy.
1039 → 17 ←
1003 → 7 ←

11 Perris Bl. & Nandina Av./ Walgreens
25 1107 53 → 0 0 14 ←
135 → 2 → 204 → 4 872 17 ←

12 Perris Bl. & Grove View Rd./ Globe St.
29 1292 27 → 18 51 29 ←
3 → 1 → 5 → 975 68 ←

13 Perris Bl. & Harley Knox Bl.
361 1130 → ←
246 → 252 → 51 783 ←

14 Driveway 3 & Modular Wy.
Intersection Does Not Exist

15 Driveway 4 & Modular Wy.
Intersection Does Not Exist

16 Driveway 5 & Edwin Rd.
Intersection Does Not Exist

17 Driveway 6 & Edwin Rd.
Intersection Does Not Exist

18 Driveway 7 & Modular Wy.
Intersection Does Not Exist

19 Kitching St. & Edwin Rd.
0 2 0 → 0 0 17 ←
0 → 15 → 9 0 0 ←

20 Kitching St. & Driveway 8
Intersection Does Not Exist

21 Kitching St. & Modular Wy.
15 23 → ←
7 → 0 → 1 2 ←

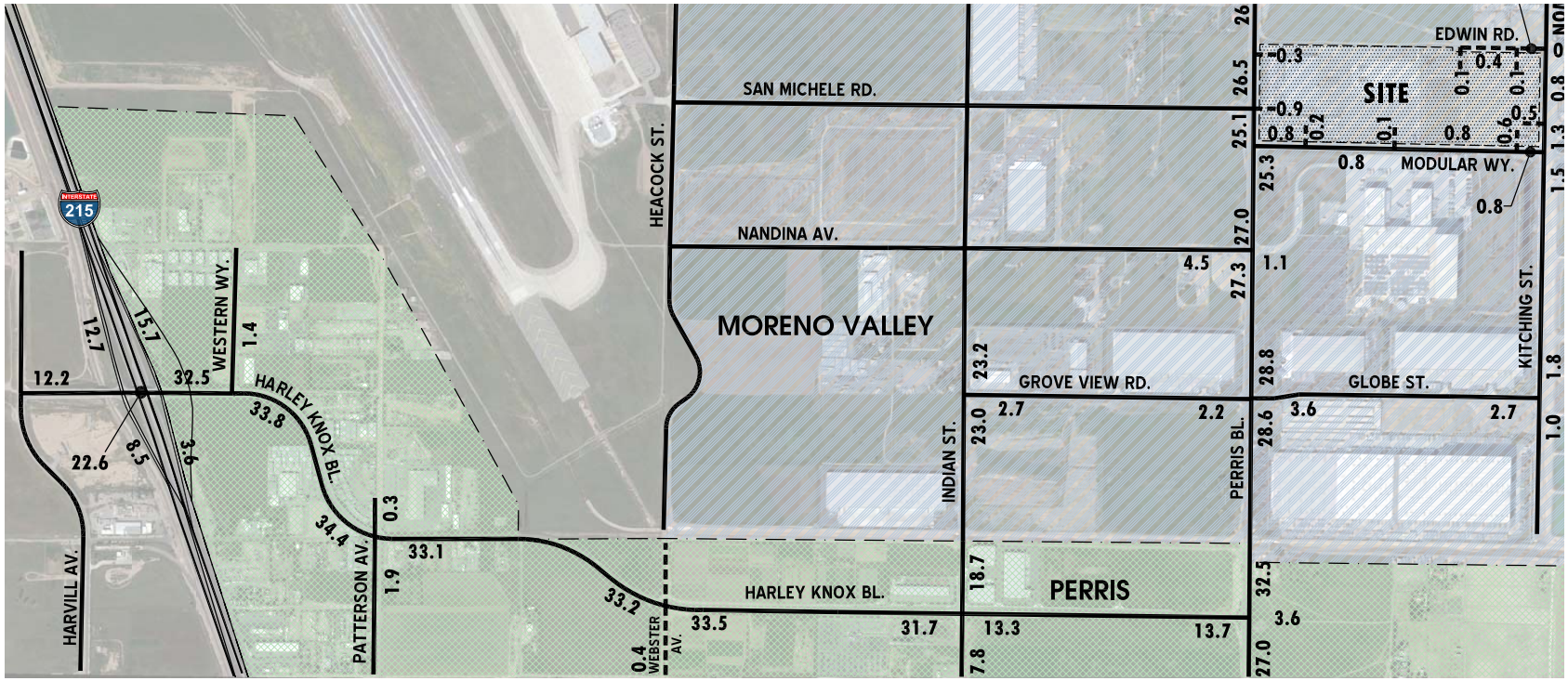
22 Kitching St. & Globe St.
42 1 → ←
30 → 9 → 50 2 ←

Source: Urban Crossroads (Technical Appendix H1)

Figure 4.8-22

NOT TO SCALE

Opening Year (2018) without Project Intersection Volumes - PM Peak Hour



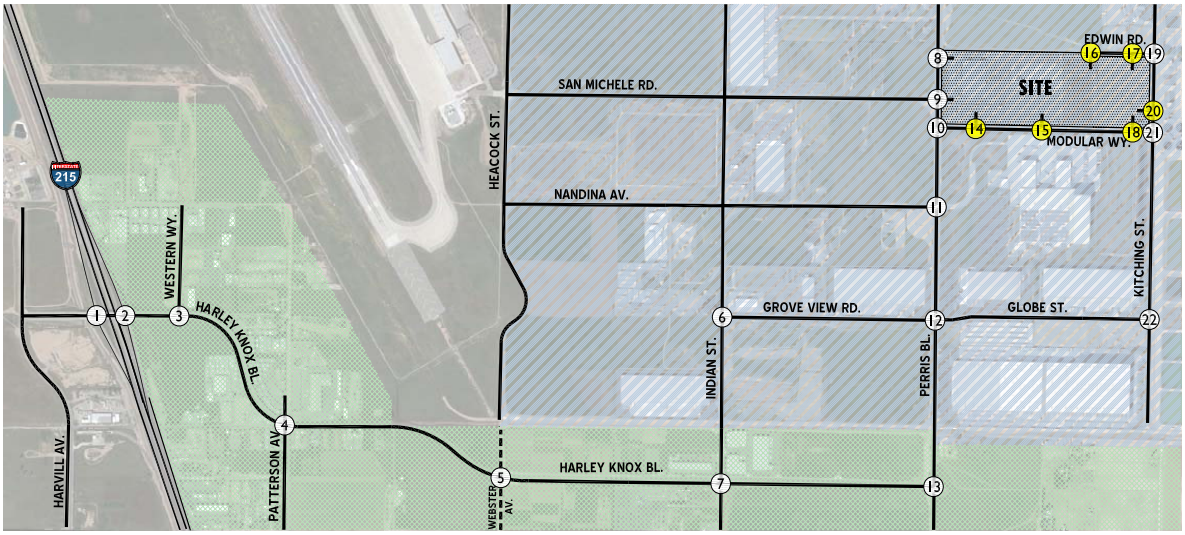
LEGEND:

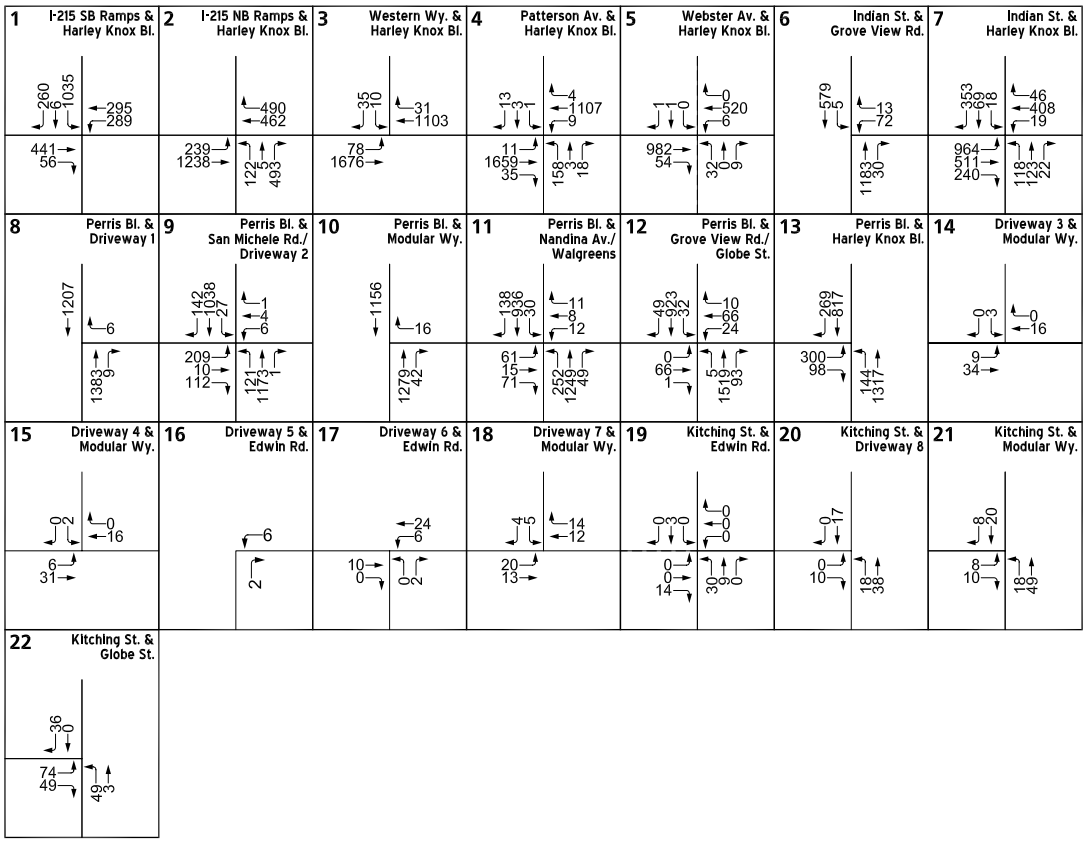
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-23
Opening Year (2018) with Project Average Daily Traffic



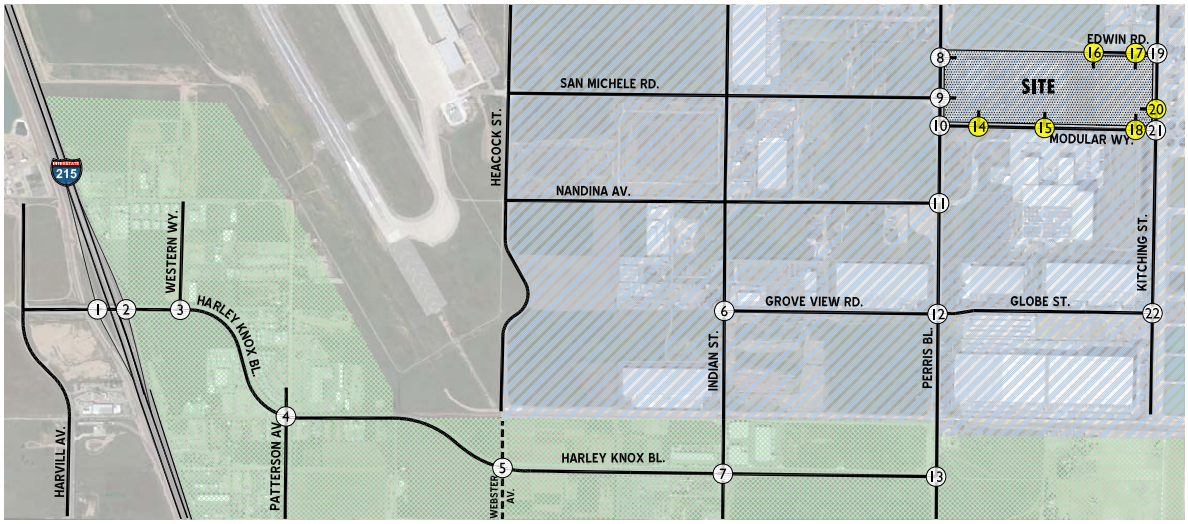


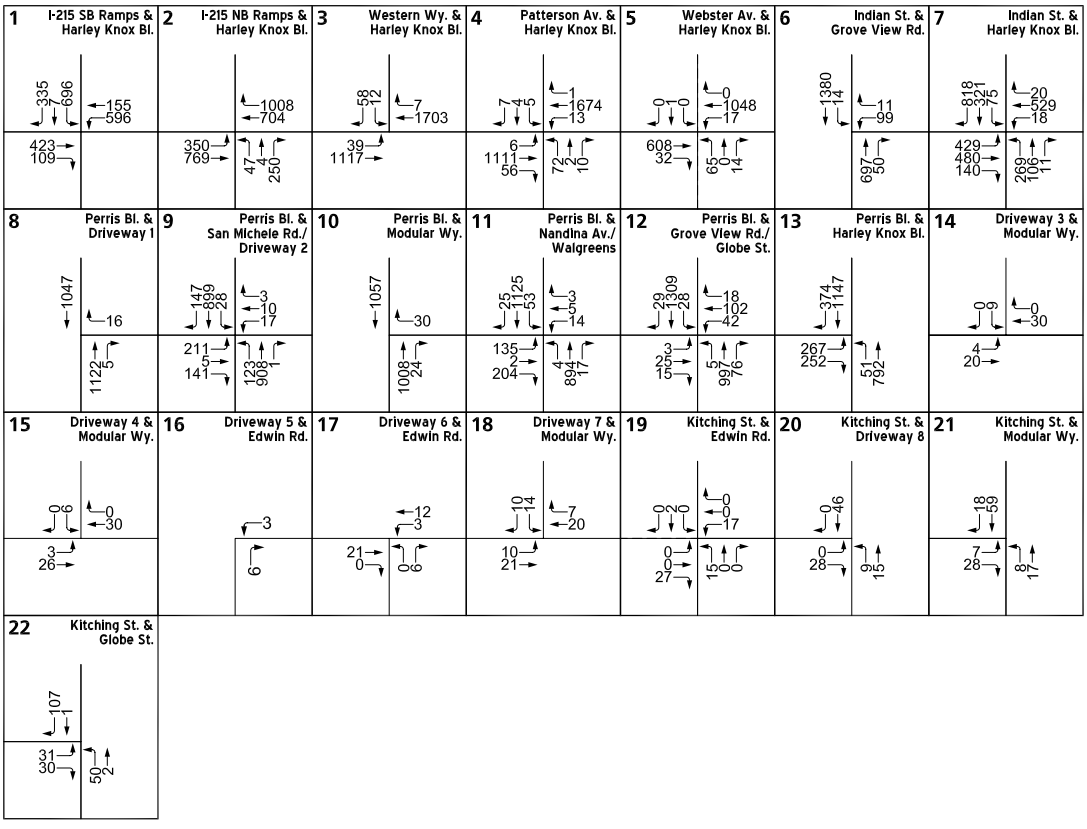
Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-24

Opening Year (2018) with Project Intersection Volumes - AM Peak Hour





Source: Urban Crossroads (Technical Appendix H1)

NOT TO SCALE

Figure 4.8-25
Opening Year (2018) with Project Intersection Volumes - PM Peak Hour

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines §15126[b]). As described in detail in Section 4.0 of this EIR, the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after implementation of relevant standard conditions of approval, compliance with applicable regulations, and application of feasible mitigation measures. The significant impacts that cannot be mitigated to a level below significant consist of the following:

- Air Quality Thresholds 2 and 3: Significant and Unavoidable Direct and Cumulatively Considerable Impact. After the application of feasible mitigation measures, Project-related operational emissions of NO_X would remain above regional significance thresholds. Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards and beyond the direct control of the Project Applicant and/or future tenants of the Project site. In addition, the Project's long-term emissions of NO_X would cumulatively contribute to an existing air quality violation in the SCAB (i.e., NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and state ozone concentrations).

- Greenhouse Gas Emissions Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (i.e., trucks and cars). The application of mitigation measures would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions, which comprise more than 90 percent of the Project's total GHG emissions. Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley.

- Noise Thresholds 1, 3, and 4: Significant and Unavoidable Cumulatively Considerable Impact. Although mitigation measures would reduce construction-related noise levels, there are no feasible measures to ensure that sensitive receptors in the Project's vicinity would not be significantly impacted by cumulative construction noise if other construction projects occur simultaneously with the Project and cause noise levels at sensitive receptors to exceed 65 dBA Leq. The nearest sensitive receptor (a non-conforming residential structure) is located approximately 240 feet to the northwest of the Project site.

- Transportation/Traffic Threshold 1: Significant and Unavoidable Cumulatively Considerable Impact. The addition of Project-related traffic to the existing and planned circulation

network would make a cumulatively considerable contribution to deficient operating conditions at seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions. The Project would mitigate its cumulatively considerable contribution to these impacts through payment of fees pursuant to the Moreno Valley DIF and TUMF; however, because improvements to the affected facilities may not be in place before the Project becomes operational, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, until planned improvements are implemented. Additionally, the Project would have a cumulatively considerable long-term impact at the intersections of Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard, which require improvements beyond those currently identified in the NPRBBD.

- Transportation/Traffic Threshold 2: Significant and Unavoidable Cumulatively Considerable Impact. The proposed Project would contribute traffic trips to congested freeway mainline segments in the Southern California region, including four (4) mainline segments of I-215 and one (1) mainline segment of SR-91, where the Project's contribution of traffic would be cumulatively considerable. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. There is no mitigation program offered by Caltrans for state highway freeway segments significantly impacted by the Project. The Harley Knox/I-215 interchange is scheduled for improvements funded by the TUMF program, but the interchange is not scheduled to be improved before the proposed Project is expected to become operational.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines §15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources are not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of the proposed Project, but development of the Project site as proposed is not expected to negatively affect the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), compliance with which reduces a building operation's energy volume that is produced by fossil fuels.

Implementation of the proposed Project would result in the commitment of future generations to one logistics warehouse building on the proposed Project site. Surrounding the Project site, several large-scale industrial and warehouse buildings have been developed and there are several approved development projects in this area that are pending construction. As demonstrated in the analysis presented throughout EIR Section 4.0, long-term operation of the proposed Project would not result in significant physical environmental effects to nearby properties. Although the Project would cause or contribute to significant unavoidable impacts associated with air quality (direct and cumulatively considerable), greenhouse gas emissions (cumulatively considerable), noise (cumulatively considerable), and transportation/traffic (cumulatively considerable), as previously summarized in Subsection 5.1, these effects would not commit surrounding properties to land uses other than the uses currently planned by the City of Moreno Valley General Plan and the MVIAP.

As concluded in EIR Subsection 5.4.2, below, the Project would be required to comply with federal, state, and local regulations related to hazardous materials, which would ensure that construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

As previously disclosed in Section 3.0, *Project Description*, the proposed Project's electricity demand would be 3,754,906 kWh/yr and the Project's natural gas demand would be 2,374,070 kBTU/year. To reduce the Project's energy needs and fossil fuel consumption, and thereby reduce air emissions, the Project is required to ensure mandatory compliance with applicable regulatory requirements imposed by the State of California and the SCAQMD (as summarized in EIR Subsections 4.2 and 4.6), which would reduce the Project's level of demand for energy resources. Therefore, the proposed Project would not result in the wasteful use of energy or the consumption of resources that are not justified based on the scale of the proposed Project.

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which the proposed Project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines §15126.2(d)). New employees and new residential populations represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environs where population growth results in increased demand for service and commodity markets responding to the new population. Economic growth would likely take place as a result of the proposed Project's operation as a logistics warehouse building, but the intensity of economic growth would occur consistent with planned growth identified in the City of Moreno Valley General Plan and in the General Plans of adjacent jurisdictions. The Project is consistent with land use designations assigned to the property by the City of Moreno Valley General Plan and the MVIAP.

Further, the Project is consistent with SCAG's *2012-2035 Regional Transportation Plan/ Sustainable Communities Strategy* (*RTP/SCS*), and particularly the chapter titled "Goods Movement" that is applicable to the proposed Project. The *RTP/SCS* states that the SCAG region hosts one of the largest clusters of logistics activity in North America. Logistics activities, and the jobs that go with them, depend on a network of warehousing and distribution facilities, highway and rail connections, and intermodal rail yards. The "Goods Movement" chapter of the *RTP/SCS* states that goods movement and freight transportation are essential to supporting the SCAG regional economy and quality of life. According to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. The report goes on to state that unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of space of approximately 227 million square feet will occur (SCAG 2013 4-39). Thus, the proposed Project helps to fill a regional need for warehouse space and accommodates projected growth and the Southern California economy, rather than inducing growth.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Southern California Association of Governments (SCAG). Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

Development of the Project site with a logistics warehouse building may entice the development of surrounding parcels designated for industrial development and that are currently undeveloped. However, these surrounding properties already are planned for long-term development with business park/industrial land uses by the City of Moreno Valley General Plan and the MVIAP and implementation of the proposed Project would not directly promote growth on these adjacent and surrounding properties. Because development on nearby parcels would be consistent with the City's General Plan and the MVIAP, growth-inducing impacts of the Project would be less than significant. The Project is not expected to induce growth or land use changes on other parcels in the vicinity, as other lands surrounding the site are either already developed or planned to be developed consistent with their General Plan and MVIAP land use designations.

Projected growth quantifications for the Project are most meaningful for the geographic area covered by the Western Riverside Council of Governments (WRCOG). This area includes the cities of Banning, Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, Temecula, Wildomar, as well as portions of unincorporated Riverside County. The most recent growth forecasts for the WRCOG area is reflected below in Table 5-1, *Western Riverside County Growth Forecasts, 2010-2035*. Because the Project is consistent with the City of Moreno Valley General Plan it is also consistent with the growth forecasts summarized in Table 5-1, as the forecasts considered buildout of the City General Plan.

Table 5-1 Western Riverside County Growth Forecasts, 2010-2035

CATEGORY	YEAR 2010	YEAR 2020	YEAR 2035
Population	1,741,597	2,140,500	2,749,200
Households	525,018	667,500	881,300
Employment	434,126	750,000	1,002,000

Source: Western Riverside County Council of Governments "Western Riverside County Growth Forecasts 2010-2035" (adopted Fall 2011).

"Jobs-to-housing ratio" measures the extent to which job opportunities in a given geographic area are sufficient to meet the employment needs of area residents. However, as noted in the City's General Plan, "The land use plan allows for an adequate number of jobs to meet the needs of local residents" (Moreno Valley 2006a 2-6). The proposed Project would attract new businesses to the Project site that would provide jobs to the Project area; therefore, the proposed Project would assist the City in improving the jobs-housing ratio, which under existing conditions is lower than the statewide and regional average (indicating the City of Moreno Valley and surrounding areas experience a relatively low jobs-to-housing ratio).

Indirect growth-inducing impacts at the local level result from a demand for additional goods and services associated with the increase in people in the area, including employees. This occurs in suburban or rural environments where population growth results in increased demand for service and commodity markets responding to the new population. This type of growth is, however, a regional phenomenon resulting from introduction of a major employment center or regionally significant housing project. The implementation of the proposed Project would result in indirect growth-inducing impacts of the region, but not beyond that which is already envisioned by the City of Moreno Valley General Plan.

5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT AS PART OF THE INITIAL STUDY PROCESS

CEQA Guidelines §15128 requires that an EIR:

> *"…contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."*

An Initial Study was prepared for the proposed Project, which is included as *Technical Appendix A* to this EIR. Through the Initial Study process, the City of Moreno Valley determined that the proposed Project could potentially cause adverse effects, and an EIR is required. Nine (9) environmental issues were found not to have the potential to cause significant adverse effects: Agricultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. Therefore, these issue areas are not required to be discussed in Section 4.0, *Environmental Analysis*, of this EIR. A brief summary of issues found not to be significant is presented below, with a more detailed analysis provided in *Technical Appendix A*.

5.4.1 AGRICULTURAL RESOURCES

The Project site is not used for agriculture. The Project site contains lands classified as "Farmland of Local Importance," "Other Land," and "Urban and Built-Up Land" by the Farmland Mapping and Monitoring Program (FMMP) and does not contain any soils mapped by the California Department of Conservation as "Prime Farmland," Unique Farmland," or "Farmland of Statewide Importance." As such, a significant impact due to the conversion of important farmland types would not occur with implementation of the Project.

The Project site is not within an agricultural preserve, nor is it subject to a Williamson Act contract. Under existing conditions, the Project site contains an approximately 38-acre industrial development (stone and manufactured stone products) and approximately 13 acres of undeveloped land that receives routine maintenance for fire fuel management and weed abatement. Lands surrounding the proposed Project site are not used for agricultural production and include undeveloped lands, warehouse distribution land uses, commercial land uses, and the Moreno Valley Regional Water Reclamation Facility. The Project site is zoned for industrial land uses and the immediate surrounding area is similarly zoned. Because the Project site is not located in or adjacent to an agricultural preserve and because neither the Project site nor any immediately surrounding property is zoned for agricultural use, the proposed Project would not conflict with an existing agricultural use, zoning, or a Williamson Act contract.

The Project site does not contain forest land, and no forest land is located adjacent to or within the vicinity of the Project site. Furthermore, no portion of the proposed Project site or surrounding area is zoned for forest land or timberland. Accordingly, the Project has no potential to result in the loss of forest land or convert forest land or a non-forest use.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Agricultural Resources.

5.4.2 HAZARDS AND HAZARDOUS MATERIALS

A Phase 1 Environmental Assessment was prepared for the Project site by Kennedy/Jenks Consultants (refer to *Technical Appendix J* to this EIR). No evidence of past or current usage, storage, or disposal of large quantities of hazardous materials was observed on the property during a survey of the site. The current tenant of the site (Eldorado Stone) stores and uses small quantities of chemicals in their warehouse operations, which would be removed with implementation of the proposed Project. Kennedy/Jenks did not report any environmental concerns and stated that no further hazardous materials testing of the property is required.

During construction of the proposed Project, a limited amount of hazardous materials would be transported to, stored, and used on the property (fuel, paint, etc.), that are typical in a construction operation and do not create a significant hazard to the public or environment. The specific business or tenant that will occupy the Project's proposed building is not known at this time. The Project site is located within the MVIAP, and is designated for "Industrial" land uses. Based on the list of land uses permitted in the MVIAP's Industrial zone, it is possible that hazardous materials could be used during the course of daily operations. Future tenant(s) are required to comply with all federal, state, county, and local hazardous materials regulations, as overseen and enforced by the California Department of Toxic Substances Control, the Riverside County Department of Environmental Health

and the Moreno Valley Fire Department. Furthermore, the City of Moreno Valley Fire Prevention Bureau requires the issuance of a permit to store, dispense, use or handle hazardous material; to conduct processes which produce conditions hazardous to life or property; or to install equipment used in connection with such activities. Each application for a permit is required to include a hazardous materials management plan (HMMP). With mandatory adherence to federal, state, county, and local requirements associated with hazardous material transport, storage, and use, the proposed Project would not create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials.

The nearest school facility is the El Potrero Elementary School, located approximately 0.35-mile to the northeast of the Project site. There are no existing or planned school sites within one-quarter mile of the Project site. Accordingly, the proposed Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

According to the California Department of Toxic Substances Control's "EnviroStor" database, the proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, the proposed Project would not result in a significant hazard to the public or environment.

The Project site is located approximately one mile east of the March Air Reserve Base. Pursuant to the March Air Reserve Base Compatible Use Zone Study commissioned by the United States Air Force and as depicted on Figure 6-5, *Air Crash Hazards*, of the Moreno Valley General Plan, the Project site is not located within a zone subject to hazards related to air crashes. According to the March ARB/Inland Port Airport Joint Land Use Study (March Joint Powers Authority 2010), the Project site is located within arrival and departure flight tracts at altitudes between 4,000 and 10,000 feet and is located outside of areas mapped as subject to airport-related noise impacts. The property is located in Compatibility Zones D and E. Zone D indicates that property is subject to noise and risks associated with aircraft operations, but the impacts are sufficiently minimal that land use restrictions are generally unnecessary. Zone E indicates occasional overflights, with low noise and safety impacts. Accordingly, implementation of the proposed Project would not result in a safety hazard for people residing or working in the Project area.

There are no private airfields or airstrips in the vicinity of the Project site. Because no private airports are located nearby, the potential for the proposed Project to result in a safety hazard would not occur.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the proposed Project would be required to maintain adequate emergency access for emergency vehicles as required by the City. Because the proposed Project would not interfere with an adopted emergency response or evacuation plan, the potential for the proposed Project to impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan would not occur.

Pursuant to Figure 5.5-2, *Floodplains and High Fire Hazard Areas*, of the City of Moreno Valley General Plan EIR, the Project site is not located within a high wildfire hazard area. The Project site is located in an area that has been largely developed and is surrounded on all sites by either

developed properties or paved roads. No wildlands are located on or adjacent to the Project site. Accordingly, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Hazards and Hazardous Materials.

5.4.3 HYDROLOGY AND WATER QUALITY

Redevelopment of the Project site as proposed by the Project would involve demolition, clearing, grading, paving, utility installation, building construction, and landscaping activities, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures. Pursuant to the requirements of the Santa Ana Regional Water Quality Control Board and the City Moreno Valley, the Project would be required to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a Storm Water Pollution Prevention Program (SWPPP) for construction-related activities, including grading. The SWPPP would specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. With mandatory compliance with the SWPPP, the proposed Project would not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant.

The Project also would be required to implement a Water Quality Management Plan (WQMP), pursuant to the City of Moreno Valley requirements (Municipal Code §8.10), which would be incorporated as part of the conditions of approval for the Project. The WQMP is a post-construction management program that ensures the on-going protection of the watershed basin by requiring structural and programmatic controls. A preliminary WQMP has been prepared for the proposed Project by Albert A. Webb Associates and is on file with the City of Moreno Valley (and also included as *Technical Appendix E2* to this EIR). The WQMP identifies structural controls (including two water quality/detention basins) and programmatic controls (including maintenance requirements, educational materials for tenants/occupants, common area litter control, etc.) to minimize, prevent, and/or otherwise appropriately treat storm water runoff flows before they are discharged from the site. Mandatory compliance with the WQMP would ensure that the Project does not violate any water quality standards or waste discharge requirements during long-term operation. Therefore, water quality impacts associated with post-development activities would be less than significant.

As depicted on Figure 5.7-2, Groundwater Basins, of the City of Moreno Valley General Plan EIR, the Project site is located within the Perris North Groundwater Basin. There are few domestic uses

for groundwater within the City, due to salinity/water quality issues, and the City primarily relies on imported water from EMWD for its domestic water supply. The Project does not propose the installation of any water wells that would directly extract groundwater; however, the increase in impervious surface cover that would occur with redevelopment of the site could reduce the amount of water percolating down into the underground aquifer that underlies the Project site and a majority of the City (although the Project's proposed water quality/detention basin would allow for some infiltration/groundwater recharge). However, and as noted in the City's General Plan EIR (Page 5.7-12), "the impact of an incremental reduction in groundwater would not be significant as domestic water supplies are not reliant on groundwater as a primary source." With buildout of the Project, the local groundwater levels would not be adversely affected. Therefore, impacts to groundwater supplies and recharge would be less than significant.

The Project would involve mass grading of the site, which would nominally alter the existing drainage pattern. Under existing conditions, runoff from the developed portions of the property sheet flow into an on-site detention basin. After implementation of the proposed Project, runoff from developed portions of the property would also flow into an on-site detention basin which would allow settling/infiltration. As such, there would not be any significant increases in erosion or siltation on- or off-site. In addition, the proposed Project is required to implement BMPs via a SWPPP and WQMP to minimize the discharge of pollutants in stormwater, including silt and soil from erosion. Therefore, impacts would be less than significant.

The proposed Project would not substantially alter the existing drainage patterns of the site. Under existing conditions, runoff from the developed portions of the Project site flow into an on-site detention basin. Upon implementation of the proposed Project, runoff would also flow into an on-site detention basin. Flooding on- or off-site would not occur due to the proposed construction of on-site detention basins and storm drain facilities because these proposed facilities would attenuate the rate and volume of storm water discharge to be similar to the rate and volume that occurs under existing conditions. As a result, implementation of the proposed Project would not increase the potential for flooding on- or off-site; therefore, impacts would be less than significant.

The proposed Project is required to be designed to ensure that post-development runoff rates and volumes closely resemble those that occur under existing conditions. Because the Project would attenuate the discharge of storm water from the Project site to match existing conditions, existing off-site storm water drainage facilities that receive storm water runoff from the Project site have adequate capacity to convey storm water runoff discharged from the Project. Further, the Project's storm water drainage plan is subject to review by Riverside County Flood Control and Water Conservation District (RCFCWCD) to ensure that proposed development/improvements are consistent with the local drainage master plan. The former property owner paid fees to the Riverside County Flood Control and Water Conservation District for the Perris Valley Storm Drain when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Because existing and planned storm drain facilities have sufficient capacity to convey runoff from the Project site, the Project would not create or contribute runoff which would exceed the capacity of any existing or planned storm water drainage system. With compliance with the Project's WQMP, which identifies BMPs to be incorporated into the Project to ensure that long-term operation of the proposed Project does not result in substantial amounts of polluted runoff, impacts would be less than significant. In addition, the Project would be required to comply with the requirements of the City of Moreno Valley's NPDES permit, which would reduce the amount of

sediment in runoff discharged from the site during grading and construction activities. Accordingly, the proposed Project would not create or contribute substantial additional sources of polluted runoff. Impacts would be less than significant.

There are no conditions associated with the proposed Project beyond that which is described above that could result in the substantial degradation of water quality. Accordingly, impacts are less than significant.

The proposed Project does not include housing. Therefore, there is no potential for housing to be located within a 100-year flood hazard zone and no significant impacts would occur from implementing the proposed Project.

According to Figure 5.5-2, *Floodplains and High Fire Hazards*, of the Moreno Valley General Plan EIR, and City of Moreno Valley General Plan Figure 6-4, *Flood Hazards*, the proposed Project site is not located within or adjacent to a 100-year floodplain. As such, the proposed Project has no potential to place structures within a 100-year flood hazard area that could impede or redirect flood flows. Accordingly, a significant flood hazard would not occur with implementation of the proposed Project.

The nearest dam to the Project site, Lake Perris, is located approximately 1.2 miles east of the subject property. According to Figure 5.5-2, *Floodplains and High Fire Hazards*, of the Moreno Valley General Plan EIR, and City of Moreno Valley General Plan Figure 6-4, *Flood Hazards*, the Project site and surrounding areas are not subject to dam inundation hazards. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1430G, dated August 28, 2008, the entire Project site is prone to some degree of flooding during rare storm events from the Perris Valley Storm Drain Channel, which is located approximately 0.12-mile north and approximately 0.25-mile east of the Project site. Specifically, the entire Project site is located within FEMA Flood Zone X (Shaded), which is generally correlated with areas of moderate flood hazard (greater than 0.2-percent annual-chance), usually consisting of the area between the limits of the 100-year and 500-year floods. Zone X (Shaded) also is used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one (1) foot or drainage areas less than one (1) square mile. However, the Project is required to be constructed in accordance with all applicable building code requirement, which would preclude any significant injuries or the loss of life or property due to flooding. Accordingly, impacts are less than significant.

Therefore, for the reasons stated above, the Project would result in less-than-significant impacts to Hydrology and Water Quality.

5.4.4 LAND USE AND PLANNING

The Project site consists of approximately 50.84-acres of land, the majority of which is developed. Redevelopment of the Project site by the proposed construction and operation of a logistics warehouse building would not physically disrupt or divide the arrangement of an established community. The Project site is located in a developing area of the City of Moreno Valley that is designated for industrial development. The property is proposed to be redeveloped in accordance with its assigned General Plan and MVIAP land use designations. Properties adjacent to the Project

site have either been developed or are planned for long-term development with industrial land uses. Development of the proposed warehouse building on the subject property would not conflict with applicable land use plans, policies, or regulations, including the applicable goals of SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (refer to Table 5-2, below).

Table 5-2 Analysis of Consistency with SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts.
G2	Maximize mobility and accessibility for all people and goods in the region.	No inconsistency identified. EIR Subsection 4.8 evaluates Project-related traffic impacts and specifies the mitigation measures that would be imposed to ensure that roadway and intersection and intersection improvements needed to accommodate Project traffic volumes are implemented concurrent with proposed development.
G3	Ensure travel safety and reliability for all people and goods in the region.	No inconsistency identified. As disclosed in EIR Subsection 4.8, the Project would be compatible with existing and planned land uses, and there is no component of the Project that would result in a substantial safety hazard to motorists (refer to analysis under Threshold 4). Furthermore, EIR Subsection 4.8 specifies the mitigation measures that would be implemented by the Project to ensure that roadway and intersection improvements meet safety standards and operate as efficiently as is feasible.
G4	Preserve and ensure a sustainable regional transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would have no adverse effect on such planning or maintenance efforts.
G5	Maximize the productivity of our transportation system.	No inconsistency identified. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would be consistent with the City of Moreno Valley General Plan, which meets this goal to maximize productivity.
G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	No inconsistency identified. An analysis of the Project's environmental impacts is provided throughout this EIR, and mitigation measures are specified where warranted. Air quality is addressed in EIR Subsection 4.2, and mitigation measures have been incorporated to reduce, to the extent feasible, the Project's air quality impacts. Additionally, and as discussed in EIR Subsection 4.6, the Project would incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy. Additionally, sidewalks are already provided along the Project's frontage with Modular Way and Perris Boulevard.

Table 5-2 Analysis of Consistency with SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
G7	Actively encourage and create incentives for energy efficiency, where possible.	No inconsistency identified. This policy provides guidance to City staff to establish local incentive programs to encourage and promote energy efficient development.
G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	No inconsistency identified. This policy provides guidance to City staff to establish a local land use plan that facilitates the use of transit and non-motorized forms of transportation. The Project is consistent with the existing City of Moreno Valley General Plan.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	No inconsistency identified. This policy provides guidance to City staff to monitor the transportation network and to coordinate with other agencies as appropriate.

Source: *SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy.* (Refer to the following web site for more information: http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf.)

The Project site does not provide access to established communities and would not isolate any established communities or residences from neighboring communities. Therefore, Project implementation would not physically divide an established community and no impact would occur.

The Project proposes to redevelop the subject property to accommodate a logistics warehouse building, which would be consistent with the "Business Park/Light Industrial" land use designation applied to the site by the General Plan and the "Industrial" zoning designation applied to the site by the MVIAP. As part of its review of the proposed Plot Plan application, the City of Moreno Valley will ensure consistency with applicable policies of the General Plan and MVIAP, and will ensure mandatory conformance with the City's Municipal Code requirements. As such, the Project would not conflict with applicable local land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effects and impacts would be less than significant.

As discussed in EIR Subsection 4.3, *Biological Resources*, the proposed Project is subject to the Western Riverside County MSHCP, which is the habitat conservation plan applicable to the City of Moreno Valley and the proposed Project site. The proposed Project is not located within any MSHCP-designated Criteria Cells or Cell Groups, and the proposed Project's impact area does not contain any riparian/riverine areas or vernal pools. The Project is subject to pre-construction surveys for the burrowing owl and mitigation measures are applied in Subsection 4.3 to ensure that the Project would comply with the MSHCP, including species-specific survey and conservation requirements for the burrowing owl. From a land use and planning perspective, the Project would not conflict with the Western Riverside County MSHCP because the property is not designated for conservation and would comply with all required species survey requirements.

For the reasons stated above, the proposed Project would result in less-than-significant impacts to Land Use and Planning.

5.4.5 MINERAL RESOURCES

The Project site is not located within an area known to be underlain by regionally- or locally-important mineral resources, or within an area that has the potential to be underlain by regionally- or locally-important mineral resources, as disclosed by the City of Moreno Valley General Plan and its associated EIR. Accordingly, implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. In addition, the City's General Plan does not identify any locally-important mineral resource recovery sites on site or within close proximity to the Project site. Accordingly, impacts to Mineral Resources would not occur.

5.4.6 POPULATION AND HOUSING

The proposed Project would develop the subject property with a logistics warehouse building in accordance with the "Business Park/Light Industrial" land use designations applied to the site by the City of Moreno Valley General Plan and the MVIAP. Accordingly, the Project would not result in growth that was not already anticipated by the City of Moreno Valley General Plan and evaluated in the City of Moreno Valley General Plan EIR. The Project site is served by existing public roadways and utility infrastructure is already installed beneath public rights of way that abut the property. As such, implementation of the Project would not result in substantial, unanticipated direct or indirect growth in the area that would increase the population beyond projections, and impacts are evaluated as less than significant.

The Project site does not contain any residential structures under existing conditions. Accordingly, implementation of the Project would not displace housing or people, and would not necessitate the construction of replacement housing elsewhere. Significant impacts would not occur.

Therefore, for the reasons stated above, the proposed Project would not result in a significant impact to Population and Housing.

5.4.7 PUBLIC SERVICES

Fire Protection

The Moreno Valley Fire Department (MVFD) provides primary fire protection services to the Project area from Station No. 91 (College Park) and Station No. 65 (Kennedy Park). Station 91 is located at 16110 Lasselle Street. Station 65 is located at 15111 Indian Street. A majority of the Project site is already developed and receives fire protection services, so redevelopment of the Project site as proposed would add minimal extra demand on the provision of service.

The MVFD's response time goal is to arrive at the scene of a fire in five (5) minutes, 90% of the time. Allowing one (1) minute for suit-up, the on-road travel time goal is four (4) minutes. To supplement their existing fire stations, the MVFD plans to construct a fire station within the MVIAP to provide primary service to all properties within the MVIAP and immediately adjacent areas. The MVFD has already acquired a property for the future fire station within the MVIAP area, on San Michele Road, between Perris Boulevard and Indian Avenue. Construction of the new fire station is dependent on funding collected by the City through the City of Moreno Valley's Development

Impact Fee (DIF) Ordinance (Ordinance No. 695). This ordinance requires a fee payment prior to the issuance of building permits that the City applies to the funding of public facilities, including fire protection facilities, vehicles and equipment.

The proposed Project is required to comply with Ordinance No. 695 and pay fees that would be allocated by the City toward the construction of the new fire station on San Michelle Road. Implementation of the Project would not directly trigger the need to construct the new fire station, but would cumulatively contribute toward both the need for the new station and the City's ability to move forward with its construction as DIF fees are collected from building permit applicants throughout the City. The City and MVFD have a constitutional obligation to provide adequate fire protection services within its service area. The construction and operation of a new fire station on a property owned for such purpose by the MVFD is not the responsibility of the proposed Project and the City has already analyzed the programmatic impacts of the proposed fire station in its General Plan EIR (certified July 11, 2006) and in the environmental assessments prepared in connection with the City's Capital Improvement Program on which the City's DIF Ordinance is based. Further, should the new fire station not be operational before the proposed Project is constructed, there is no basis to conclude that potential dangers associated with response times that may exceed MVFD's five (5) minute response time goal would cause a substantial adverse effect to the environment or on human beings. The Project site is already developed and receives fire protection services. No physical impact beyond that already planned to serve existing and future development would occur. For these reasons, impacts associated with the provision of fire protection services are less than significant.

The proposed Project would be required to provide a minimum of fire safety and support fire suppression activities, including type of building construction, fire sprinklers, a fire hydrant system and paved access of the property, which would minimize the risk of fire on the subject property and maximize the MVFD's ability to provide fire protection services to the Project.

Police Protection

Because a majority of the property is developed under existing conditions, it already receives police protection services. No additional police protection service demand would occur as a result of the property's redevelopment as proposed by the Project. Accordingly, the proposed Project would not cause or contribute to the need for the construction of new or physically altered police facilities. Prior to the issuance of building permits, the Project Applicant would be required to comply with the provisions of the City of Moreno Valley's Development Impact Fee Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including police facilities. The former property owner paid DIF fees when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Based on the foregoing, the proposed Project would receive adequate police protection service, and would not result in the need for new or physically altered police protection facilities. Impacts to police protection facilities are therefore evaluated as less than significant.

Public Schools

The Project would not create a direct demand for public school services, as the subject property would be developed solely with a logistics warehouse building and would not generate any school-

aged children requiring public education. The addition of intensification of employment-generating uses on the Project site would assist in the achievement of the City's goal to provide a better jobs/housing balance within the City and the larger western Riverside County region. Thus, the Project is not expected to draw new residents to the region and would therefore not indirectly generate additional school-aged students requiring public education. Because the Project would not directly generate students and is not expected to indirectly draw students to the area, the proposed Project would not result in the need to construct new or physically altered public school facilities. Regardless, the Project Applicant would be required to contribute development impact fees to the Val Verde Unified School District, in compliance with California Senate Bill 50 (Greene). Mandatory payment of school fees would be required prior to the issuance of building permits. The former property owner paid school fees to the Val Verde Unified School District when the Project site was previously developed under approved PA00-0025, and fee credits are available to the proposed Project. Project-related impacts to public schools are evaluated as less than significant.

Parks and Recreation Facilities

As discussed in Subsection 5.4.8, below, the proposed Project would not create a demand for public park facilities and would not result in the need to modify existing or construct new park facilities. Accordingly, implementation of the Project would not adversely affect any park facility and impacts are regarded as less than significant.

Other Public Facilities

The proposed Project would not result in a demand for other public facilities/services, including libraries, community recreation centers, or animal shelters. As such, implementation of the Project would not adversely affect other public facilities or require the construction of new or modified facilities.

For the reasons stated above, the proposed Project would result in less-than-significant impacts to Public Services.

5.4.8 RECREATION

The Project proposes to redevelop the site with one logistics warehouse building. The Project does not propose any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Accordingly, implementation of the Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park.

The Project does not propose to construct any new on- or off-site recreational facilities and would not expand any existing off-site recreational facilities. Therefore, adverse environmental impacts related to the construction or expansion of recreational facilities would not occur with implementation of the Project.

As such, implementation of the proposed Project would not result in any significant impacts associated with Recreation.

5.4.9 UTILITIES AND SERVICE SYSTEMS

Wastewater service is provided to the Project site by Eastern Municipal Water District (EMWD). EMWD is required to operate all of its treatment facilities in accordance with the waste treatment and discharge standards and requirements set forth by the Regional Water Quality Control Board (RWQCB). The proposed Project would not install or utilize septic systems or alternative wastewater treatment systems; therefore, the Project would have no potential to violate the applicable wastewater treatment requirements established by the RWQCB.

The proposed Project would require the installation of water and wastewater conveyance lines to serve the proposed logistics warehouse building and connect to existing, off-site facilities in the abutting public roadways. With the exception of new on-site water and sewer service lines, the Project would not create the need for any new or expanded water or wastewater facility (such as treatment facilities, storage tanks, pump stations or trunk sewers). The construction of on-site water and sewer lines would result in physical impacts to the surface and subsurface of the Project site (with small encroachments into adjacent public rights-of-way of developed/paved streets); however, these impacts are considered to be inherent to the Project's construction phase and are evaluated throughout this EIR accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this EIR, as feasible. There would be no significant environmental effects created particular to water or sewer line installation.

The proposed Project would require the construction of a stormwater drainage conveyance system on the Project site to serve the proposed logistics warehouse building, parking areas, and other site features, but would not require any improvements to regional storm drain facilities. The construction of on-site stormwater drainage facilities would result in physical impacts to the surface and subsurface of the Project site (with small encroachments into adjacent public right-of-way of developed/paved streets); however, these impacts are considered to be inherent to the Project's construction phase and are evaluated throughout this EIR accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this EIR, as feasible. There would be no significant environmental effects created particular to the construction of stormwater drainage facilities.

EMWD is responsible for supplying potable water to the Project site and the region. As discussed in EMWD's *2010 Urban Water Management Plan*, adequate water supplies are projected to be available to meet EMWD's estimated water demand in all types of climate conditions in all types of climate conditions for at least the next 22 years (Eastern Municipal Water District 2011 pp. 30-31). EMWD projections for future water demand are based on population projections of the Southern California Association of Governments (SCAG), which rely on the adopted land use designations contained within the general plans that cover the geographic area of EMWD's service area. The proposed Project is consistent with the "Business Park/Light Industrial" land use designation applied to the subject property by the City of Moreno Valley General Plan. As such, development of the Project site with industrial uses such as those proposed by the Project has already been assumed by the EMWD in its projections of future water supply and demand. Furthermore, EMWD has prepared a water supply assessment for the proposed Project (included as *Technical Appendix I* to this EIR) to assess the ultimate effect of the Project's water demands and service needs. The water supply assessment was prepared in accordance with Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221).

As documented in *Technical Appendix I*, EMWD estimates the Project would generate an annual water volume of 38.03 acre-feet. Based on a review of existing and anticipated future water supplies and demands, EMWD has determined that adequate water supplies are available to service proposed development (see *Technical Appendix I)*. Accordingly, sufficient water supplies are available to serve the Project and implementation of the Project would not require any new or expanded water entitlements. The Project's effect to EMWD's water network would be less than significant.

Wastewater flows generated by the Project would be conveyed to the Perris Valley Regional Water Reclamation Facility, which is owned and operated by EMWD. In April 2014, an expansion project was completed on the Perris Valley Regional Water Reclamation Facility to expand its daily treatment capacity from 14 million gallons per day to 22 million gallons per day to provide sufficient treatment for anticipated regional growth. The facility receives approximately 14 million gallons of wastewater flows per day and, therefore, has an excess treatment capacity of approximately 8 million gallons per day (Schulte 2014). The Project is anticipated to generate 43,295 gallons of wastewater per day (Raines 2014). This generally corresponds to approximately five-tenths of one percent (0.5%) of the existing treatment capacity at the Perris Valley Regional Water Reclamation Facility. Due to the relatively small amount of wastewater that would be generated by proposed Project and the amount of existing and planned available capacity at this facility, it is determined that the Perris Valley Regional Water Reclamation Facility would have sufficient capacity to treat wastewater generated by the Project. Impacts would be less than significant.

Implementation of the proposed Project would generate solid waste requiring off-site disposal during short-term construction and long-term operational activities. Waste generated by the construction process would primarily consisting of demolition debris, discarded materials and packaging. Based on a proposed building area of 1,109,378 square feet and a construction waste generation factor of 4.34 pounds per square foot, approximately 38,240 tons of waste would be generated over the course of the construction phase. The Project would be required to comply with City of Moreno Valley Ordinance No. 706, which requires a minimum of 50 percent of all construction waste and debris to be recycled. According to the Project Applicant's construction contractor, approximately 97 percent of the waste generated during the Project's construction phase (approximately 37,712 tons) would either be processed and re-used on-site or recycled (Molle 2013). During long-term operation of the Project, it is estimated that approximately 1.42 pounds of waste would be generated for every 100 square feet of building area (utilizing waste generation rates from CalRecycle), which would correlate to approximately 7.9 tons of waste per day. Solid waste generated by the proposed Project would be disposed at the El Sobrante Landfill (which received approximately 42,336 tons of waste per week during the first quarter of 2014 and has a permitted disposal capacity of 70,000 tons per week), the Badlands Sanitary Landfill (which received approximately 1,994 tons of waste per day during the first quarter of 2014 and has a permitted disposal capacity of 4,000 tons per day), and/or the Lamb Canyon Sanitary Landfill (which received approximately 1,634 tons of waste per day during the first quarter of 2014 and has a permitted disposal capacity of 5,000 tons per day) (Riverside County Waste Management Department 2014). As described above, each of these landfills receive well below their maximum permitted daily disposal volume. Furthermore, each of these landfills have the potential for future expansion and none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction or operational periods – the El Sobrante Landfill has sufficient available capacity until at least 2045, the Badlands Sanitary Landfill has sufficient available capacity until at least 2024, and the Lamb Canyon Sanitary Landfill has sufficient available capacity until at least 2021. (CalRecycle 2014)

Accordingly, the Project would be served by landfills with sufficient available capacity to accept waste generated by the Project. Impacts would be less than significant.

The Project would be required to comply with the City of Moreno Valley's waste reduction programs, including recycling and other diversion programs to divert the amount of solid waste deposited in landfills. As such, the Project applicant or master developer would be required to implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would provide adequate areas for collecting and loading recyclable materials where solid waste is collected. Additionally, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future tenant(s) of the proposed Project would be required to arrange for recycling services, if the tenant generates four (4) or more cubic yards of solid waste per week. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

For the reasons stated above, the proposed Project would result in less than significant impacts to Utilities and Service Systems.

6.0 ALTERNATIVES TO THE PROPOSED PROJECT

State CEQA Guidelines §15126.6(a) indicates the scope of alternatives to a proposed project that must be evaluated:

> "*An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*"

As discussed in Section 4.0 of this EIR, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are:

- Air Quality Thresholds 2 and 3: Significant and Unavoidable Direct and Cumulatively Considerable Impact. After the application of feasible mitigation measures, Project-related operational emissions of NO_X would remain above regional significance thresholds. Operational emissions of NO_X are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards and beyond the direct control of the Project Applicant and/or future tenants of the Project site. In addition, the Project's long-term emissions of NO_X would cumulatively contribute to an existing air quality violation in the SCAB (i.e., NO_X and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and state ozone concentrations).

- Greenhouse Gas Emissions Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (i.e., trucks and cars). The application of mitigation measures would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions, which comprise more than 90 percent of the Project's total GHG emissions. Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley.

- Noise Thresholds 1, 3, and 4: Significant and Unavoidable Cumulatively Considerable Impact. Although mitigation measures would reduce construction-related noise levels, there are no feasible measures to ensure that sensitive receptors in the Project's vicinity would not be significantly impacted by cumulative construction noise if other construction projects occur simultaneously with the Project and cause noise levels at sensitive receptors to exceed 65 dBA Leq. The nearest sensitive receptor (a non-conforming residential structure) is located approximately 240 feet to the northwest of the Project site.

- Transportation/Traffic Threshold 1: Significant and Unavoidable Cumulatively Considerable Impact. The addition of Project-related traffic to the existing and planned circulation network would make a cumulatively considerable contribution to deficient operating conditions at seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions. The Project would mitigate its cumulatively considerable contribution to these impacts through payment of fees pursuant to the Moreno Valley DIF and TUMF; however, because improvements to the affected facilities may not be in place before the Project becomes operational, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, until planned improvements are implemented. Additionally, the Project would have a cumulatively considerable long-term impact at the intersections of Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard, which require improvements beyond those currently identified in the NPRBBD.

- Transportation/Traffic Threshold 2: Significant and Unavoidable Cumulatively Considerable Impact. The proposed Project would contribute traffic trips to congested freeway mainline segments in the southern California region, including four (4) mainline segments of I-215 and one (1) mainline segment of SR-91, where the Project's contribution of traffic would be cumulatively considerable. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. There is no mitigation program offered by Caltrans for state highway freeway segments significantly impacted by the Project. The Harley Knox/I-215 interchange is scheduled for improvements funded by the TUMF program, but the interchange is not scheduled to be improved before the proposed Project is expected to become operational.

CEQA Guidelines §15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services. This is considered to be the No Project Alternative. The No Project Alternative, described in detail below, is identified as the most environmentally superior alternative. CEQA requires that if the environmentally superior alternative is determined to be a No Project Alternative, then another environmentally superior alternative should be identified among the other alternatives, if the analysis indicates that significant impacts can be avoided by one or more of the other alternatives. Therefore, the Vacant Lot Development Alternative is identified as the environmentally superior alternative.

6.1 ALTERNATIVES UNDER CONSIDERATION

The following scenarios have been identified as potential alternatives to implementation of the proposed Project.

❑ No Project Alternative

The No Project Alternative considers no additional development on the Project site beyond that which occurs under existing conditions. This alternative was selected by the Lead Agency for the purpose of conducting a comparative analysis of the environmental effects of the proposed Project to the environmental effects of the No Project alternative which would leave the property in its existing condition. Under existing conditions a portion of the property is vacant and a portion of the property is developed with light industrial uses, outdoor storage areas, a large paved parking area, and a water quality/detention basin. If the proposed Project were not approved, it is reasonable to expect that the undeveloped portions of the property would remain vacant; however, the use of the e existing industrial warehouse building, industrial office building, outdoor storage areas, and large paved parking area would continue.

❑ Vacant Lot Development Alternative

The Vacant Lot Development Alternative would retain the existing light industrial land uses on the western portion of the property and would develop one (1) 200,000 s.f. building on the vacant, eastern portion of the property. For purposes of this analysis, the new 200,000 s.f. building was assumed to support as light-industrial land uses in accordance with the City of Moreno Valley General Plan and the MVIAP, and not high-cube warehouse as proposed by the Project. The Vacant Lot Alternative was selected for consideration by the Lead Agency to evaluate whether or not a less-intensive development proposal would reduce the Project's significant and unavoidable impacts to air quality, greenhouse gases, transportation/traffic, and noise.

❑ Small Buildings Alternative

The Small Buildings Alternative would develop two (2) 400,000 s.f. light industrial buildings on the Project site. This alternative would result in an approximately 28 percent reduction in building area as compared to the proposed Project, but would require additional surface parking area pursuant to the City of Moreno Valley's requirements for this building type. The land uses on the Project site under the Small Buildings Alternative would be similar to the proposed Project. This alternative was selected for consideration by the Lead Agency to compare the environmental effects of the proposed Project (one large building that is likely to attract one tenant) against the environmental effects of constructing multiple, smaller buildings that would generate fewer daily truck trips to determine if this alternative development scenario would reduce the Project's significant and unavoidable impacts to air quality, greenhouse gases, transportation/traffic, and noise.

❑ Reduced Project Alternative

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while

keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately 309,378 s.f. (or 28 percent) as compared to the proposed Project. The Reduced Project Alternative was selected by the Lead Agency to determine if a smaller building size would substantially reduce the Project's significant and unavoidable impacts associated to air quality, greenhouse gases, transportation/traffic, and noise.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines §15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines §15126.6(f) (1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. Alternative land uses for the property (residential, retail, mixed-use, etc.) were considered and rejected because these land uses are not consistent with the property's General Plan and MVIAP land use designations. An evaluation of alternative sites was rejected for the reasons described below.

❑ Alternative Sites

CEQA does not require that an analysis of alternative sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the *"key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR"* [CEQA Guidelines §15126.6(f)(2)].

The Project site is designated "Light Industrial" by the City of Moreno Valley General Plan. In addition to the General Plan, the site is also subject to the MVIAP. The MVIAP applies an

"Industrial" designation to the Project site and provides specific zoning designations and standards for development within its geographical boundaries and. The proposed Project is consistent with the land use designation applied to the property by the City of Moreno Valley General Plan and further detailed by the MVIAP. An examination of alternative sites is typically not necessary when a proposed development project is consistent with the applicable land use plan, because it can be reasonably assumed that development would ultimately occur in conformance with the applicable land use designation, whether by the Project Applicant or by others in the future. In cases where a proposed project is consistent with the applicable General Plan, the alternatives analysis should typically focus on options for developing the site consistent with adopted plan policies and the discussion of alternatives should search for an environmentally superior version of the project on the site instead of an alternative site.

The 50.84-acre Project site in its existing condition is mostly developed with industrial land uses, outdoor storage areas, paved parking areas, and a water quality/detention basin, with the exception of approximately 13 acres in the eastern portion of the subject property. The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. The site contains no sensitive vegetation communities or special-status plant species and is not located within an MSHCP Criteria Area. The property is generally flat with a topographic relief of approximately 14 feet with no unique topographic or geologic features.

The property is located in a portion of the City of Moreno Valley that is developing as a center for distribution warehousing and light industrial land uses. All undeveloped properties surrounding the proposed Project site are designated for industrial development pursuant to the City's General Plan and the MVIAP. Surrounding land use includes the following:

North: North of the Project site is Edwin Road and a property that is currently under construction to accommodate a large distribution warehouse building. As part of that construction process, Edwin Road is being extended to the west and will terminate in a cul-de-sac. To the north of the parcel under construction is the Perris Valley Storm Drain Channel.

South: Immediately to the south of the Project site is Modular Way, south of which is a distribution warehouse building occupied by Walgreens. Further south are additional distribution warehouse buildings, including but not limited to buildings occupied by Ross and Home Depot.

West: Perris Boulevard abuts the Project site to the west. West of Perris Boulevard are a collection of warehouse distribution buildings (including but not limited to buildings occupied by Harbor Freight Tools and O'Reilly Auto Parts), truck trailer parking yards, and small parcels that are either undeveloped or contain small commercial, industrial, or manufacturing structures intermixed with several non-conforming residential land uses.

East: To the east of the Project site lie Kitching Street and the Moreno Valley Regional Water Reclamation Facility, a wastewater treatment facility operated by the Eastern Municipal Water District (EMWD).

Based on a review of aerial photography, the City of Moreno Valley General Plan Land Use Plan Map, and a list of approved/pending development proposals within the City of Moreno Valley (refer to Figure 4.0-1, *Cumulative Development Location Map*, and Table 4-1, *Cumulative Project List*), there are no other available, undeveloped properties of similar size (i.e., approximately 50 acres) and similar zoning designation (i.e., "Business Park" or "Light Industrial") in the City of Moreno Valley.

If alternative sites located within the City of Moreno Valley not zoned for "Business Park" or "Light Industrial" land uses are considered, there would not be any site that would offer less developmental and environmental constraints, or fewer environmental impacts than the proposed Project site. Development of the Project in an alternate location would have similar impacts as would occur with implementation of the Project at its proposed location, with the potential for greater impacts. Alternative sites available for development likely would be vacant under existing conditions; any environmental effect resulting from development of a vacant, undeveloped property would be considered to be a "new" impact. The proposed Project site supports approximately 142,000 s.f. of light industrial land uses; therefore, the long-term operational environmental effects from redevelopment of the Project site are only considered to be a "new" impact once they exceed those impacts that occur on the Project site under existing conditions. Furthermore, all undeveloped land within the City of Moreno Valley similar in size to the Project site (i.e., approximately 50 acres) and not part of an approved/pending development proposal is located farther from major regional transportation routes (I-215 and local truck routes) than the Project site Therefore, operational impacts associated with traffic and vehicular noise and air emissions would be greater as the vehicles would need to travel farther distances on local roads to reach the state highway system. Therefore, redevelopment of the Project site as proposed by the Project would result in a smaller net increase of total development (and, potentially, environmental effects) in the local area than would result from the development of a vacant property.

In addition, according to SCAG's *Comprehensive Regional Goods Movement Plan and Implementation Strategy*, the SCAG region will run out of suitably zoned vacant land designated for warehouse facilities in about the year 2028 (SCAG 2013 4-39). At that time, forecasts show that the demand for warehousing space will be over one billion square feet. The report goes on to state that unless other land not currently zoned for warehousing becomes available, SCAG forecasts that by year 2035, a projected shortfall of space of approximately 227 million square feet will occur (SCAG 2013 4-39). Thus, it is likely that selection of an alternative site would merely displace the development activity proposed by the Project to another location resulting in the same or greater environmental effects, given the regional demand for logistics and warehousing space in the SCAG region.

For these reasons, an alternative site analysis is not required for the proposed Project.

❑ Loading Bay Reposition Alternative

During public comment on this EIR's NOP, a member of the public suggested studying an alternative that does not include loading docks on the north side of the building. The City of Moreno Valley determined that such an alternative is not feasible and would not result in reduced environmental effects compared to the effects of the proposed Project.

Eliminating loading docks on the north side of the structure and placing them on other façades would result in no measureable improvement to the environment. To the immediate north of the Project site is a distribution warehouse structure under construction. The loading docks proposed by the Project are designed to face another warehouse and would be approximately 960 feet from the nearest residential home located north of the Perris Valley Storm Drain Channel. Industry research, including studies by the CARB and SCAQMD, show a 70% drop in DPM pollution levels from mobile sources (*i.e.*, vehicles) at a distance of 500 feet from roadways/freeways, and an 80% drop in DPM pollution levels from mobile sources at a distance of 1,000 feet from logistics center sites (Urban Crossroads 2014b 34). Furthermore, at a logistics warehouse building, loading bays (also called "docks") are used for the receiving of goods and the shipment of goods. It is standard industry practice to locate receiving docks and shipping docks on opposite sides of the building. Given the rectangular shape of the property and the building proposed by the Project, there is not enough linear space available on the east and west sides of the building to provide a sufficient number of dock doors to allow for the elimination of docks on the northern side of the structure. Therefore, the elimination of dock doors on the north side of the proposed structure is not feasible.

6.3 ALTERNATIVE ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. A conclusion is provided for each impact as to whether the alternative results in one of the following: (1) reduction or elimination of the proposed Project's impact, (2) a greater impact than would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-1 at the end of this section compares the environmental hazard and resource impacts of the alternatives with those of the proposed Project and identifies the ability of the Alternative to meet the basic objectives of the Project. As described in EIR Subsection 3.2, the proposed Project's basic objectives are:

A. To redevelop a vacant or underutilized industrially-zoned property that has access to available infrastructure.

B. To attract new employment-generating businesses to the Moreno Valley Industrial Area Plan area, thereby providing a more equal jobs-housing balance both in the City of Moreno Valley and in Riverside County/Inland Empire Area and reducing the need for members of the local workforce to commute outside the area for employment.

C. To redevelop a vacant or underutilized property with a structure that has architectural design and operational characteristics that complement existing and planned development in the immediate vicinity.

D. To make efficient use of a property by maximizing its buildout potential based on City of Moreno Valley Municipal Code standards.

E. To construct and operate a logistics warehouse building in conformance with the land use designations applied to the property by the City of Moreno Valley General Plan and the Moreno Valley Industrial Area Plan (Specific Plan 208).

F. To develop a logistics warehouse building with loading bays that can accommodate light industrial and warehouse distribution tenants within close proximity to Moreno Valley's designated truck route and regional transportation routes.

G. To develop a logistics warehouse building that appeals to light industrial and warehouse distribution tenants seeking to locate in the Moreno Valley area.

H. To develop a logistics center warehouse building that is feasible to construct and operate and is economically competitive with other similar buildings in the local area and region.

6.3.1 NO PROJECT ALTERNATIVE

The No Project Alternative allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the property were to be unchanged from existing conditions for the foreseeable future. The 50.84-acre Project site in its existing condition is developed with industrial land uses, outdoor storage areas, paved parking areas, and a water quality/detention basin, with the exception of approximately 13 acres in the eastern portion of the subject property. The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. The site contains no sensitive vegetation communities or special-status plant species and is not located within an MSHCP Criteria Area. The property is generally flat with a topographic relief of approximately 14 feet with no unique topographic or geologic features. Refer to the description of the Project site's existing physical conditions in Section 2.0 of this EIR.

❑ Aesthetics

The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. Under existing conditions, the site is developed with two buildings, an outdoor storage area, a parking area, and sparse landscaping. The eastern portion of the Project site is largely developed and contains storage containers that have been vandalized. Under the No Project Alternative, the visual character and quality of the site would be maintained in its existing condition. No additional structures, landscaping, or sources of artificial light would be introduced on the property beyond that which occurs under existing conditions. Buildout of the site with proposed

Project would create a single, cohesive development that would utilize the entire site. The Project would be fully landscaped and would complete street improvements on surrounding roadways. Therefore, the proposed Project would have a higher aesthetic quality than this Alternative. Selection of this Alternative would result in greater aesthetic impacts than the proposed Project.

❑ Air Quality

As identified in EIR Subsection 4.2, the proposed Project would result in air quality emissions during Project construction and significant and unavoidable direct and cumulatively considerable unavoidable impacts to air quality due to NO_X emissions during long-term operational activities, primarily from mobile source emissions. Under the No Project Alternative, no new development would occur on the Project site; therefore, there would be no potential sources of increased short-term or long-term air pollutant emissions. Selection of this Alternative would avoid all of the proposed Project's short- and long-term air quality impacts.

❑ Biological Resources

The vacant portions of the site contain heavily disturbed vegetation communities consisting of ornamental or ruderal vegetation that is routinely maintained (i.e., disced) for fire management. Under the No Project Alternative, the Project site would remain in its existing condition and the Project's potential impacts to the burrowing owl and nesting birds would not occur.

❑ Cultural Resources

The No Project Alternative would leave the property in its existing condition; no grading would occur under this Alternative and there would be no potential impacts to subsurface archeological or paleontological resources that may exist beneath the ground surface. Selection of this Alternative would avoid all site disturbances on the vacant portions of the property other than the routine weed abatement activities that occur under existing conditions.

❑ Geology and Soils

The No Project Alternative would result in no grading of the property; therefore, no impacts to geology or soils would occur. Because no new structures would be constructed, there would be no increased risks associated with seismic ground shaking or geologic hazards. Selection of this Alternative would avoid the Project's impacts to geology and soils. Neither the proposed Project nor the No Project Alternative would result in significant or cumulatively considerable impacts to geology and soils.

❑ Greenhouse Gas Emissions

As identified in EIR Subsection 4.6, the proposed Project would result in GHG emissions during Project construction and significant and unavoidable cumulatively considerable unavoidable GHG impacts during long-term operational activities, primarily from mobile source emissions. Under the No Project Alternative, no new development would occur on the Project site; therefore, there would be no potential sources of increased short-term or long-term GHG emissions. Selection of this

Alternative would avoid all of the proposed Project's short- and long-term effects associated with GHG emissions.

- **Noise**

Because no new development would occur on the site, there would be no new sources of stationary noise and no new traffic trips would be generated; thus, the No Project Alternative would not contribute to an incremental increase in area-wide noise levels. Selection of this Alternative would avoid all Project-related construction noise impacts, including the cumulatively considerable contribution to construction noise effecting sensitive receptors should Project construction occur simultaneously with other noise-generating construction projects that affect the same sensitive receptors.

- **Transportation/Traffic**

Under the No Project Alternative, no new development would occur on the property and no additional traffic would be generated. Because there would be no new development on the Project site under this Alternative, no monetary contributions would be made by the Project Applicant to the Moreno Valley DIF or the TUMF. The proposed Project's significant traffic impacts would be avoided through selection of the No Project Alternative.

- **Conclusion**

Implementation of the No Project Alternative would result in no physical environmental impacts beyond those that have historically occurred on the property. All significant effects of the proposed Project would be avoided or lessened by the selection of this alternative.

The No Project Alternative would fail to meet all of the Project's objectives. This alternative would fail to make efficient use of an underutilized property and fail to redevelop the property with a large warehouse building that would attract new businesses and jobs to the City of Moreno Valley. Furthermore, retention of the site in its existing, partially-developed condition would be inconsistent with the General Plan and the MVIAP, which calls for development of the entire Project site with light industrial land uses. Moreover, selection of the No Project Alternative, while preventing further development of the property, would not result in a reduction in demand for distribution warehousing building space in western Riverside County and the Southern California region.

6.3.2 VACANT LOT DEVELOPMENT ALTERNATIVE

The Vacant Lot Development Alternative was selected to evaluate the comparative environmental benefits of foregoing the single, large high-cube warehouse building on the subject property as proposed by the Project and instead retaining the existing light industrial land uses on the western portion of the property and developing the eastern, undeveloped portion of the property (approximately 13 acres) with one (1) 200,000 s.f. light industrial building. Roadway improvements would be identical to the proposed Project under this Alternative. This Alternative would be consistent with the subject property's General Plan and MVIAP land use designations. This

Alternative was selected to determine if developing only the eastern portion of the property would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and transportation/traffic impacts.

❑ Aesthetics

The Vacant Lot Development Alternative would not alter the existing visual character of the western 38 acres of the Project site; no additional structures, landscaping, or sources of artificial light would be introduced on this portion of the property beyond what occurs under existing conditions. The eastern 13 acres of the Project site would be transformed from a vacant, undeveloped lot with ruderal vegetation and several abandoned modular structures to a light industrial complex with a similar size, scale, and aesthetic character as the existing light industrial structures on the western portion of the site.

As previously described in EIR Subsection 4.1, the Project site is not visible from any state- or locally-designated scenic highway. Accordingly, neither the proposed Project nor this Alternative would negatively impact views from any scenic highway. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the property after development of this Alternative would be similar to that of the proposed Project, as both the Project and this Alternative would be subject to the development standards (i.e., architecture and landscaping) imposed on new development by the MVIAP. Neither the proposed Project nor this Alternative would result in significant direct or cumulatively considerable impact to aesthetics.

❑ Air Quality

The Vacant Lot Development Alternative would have a shorter construction phase than the proposed Project because this Alternative would not require the demolition of the existing structures on the western portion of the subject property, would reduce the overall grading footprint by approximately 75 percent, and would reduce the construction of new building area on the subject property by approximately 82 percent. As such, the total amount of air pollutant emissions generated during the construction phase would be reduced under this Alternative as compared to the Project. However, the daily intensity of construction activities on the subject property would be similar under this Alternative or the proposed Project; therefore, the total daily emissions during the construction phase would be the same as the proposed Project. As with the proposed Project, this alternative would also require mitigation measures to reduce short-term emissions of NO_x to a level below significant. With required mitigation, neither this Alternative nor the proposed Project would result in a violation of an air quality standard or contribution to a projected air quality violation during the construction phase.

This Alternative would generate approximately 1,394 actual daily vehicle trips (utilizing the ITE trip rate for general light industrial, not adjusted for PCE). The Project would generate approximately 1,863 actual daily vehicle trips (not adjusted for PCE). Accordingly, average daily vehicle trips associated with long-term operation of the Vacant Lot Development Alternative would be approximately 25 percent less than traffic that would be generated by the Project. As such, air

pollutant emissions associated with long-term operation of the Vacant Lot Development Alternative would be reduced as compared to the Project; however, this alternative would not avoid the Project's significant air quality effects. This Alternative would require implementation of mitigation measures similar to those imposed on the proposed Project and even with incorporation of these measures, long-term operation of this Alternative would exceed the SCAQMD's daily criteria pollutant threshold for NO_X and would contribute to an existing air quality violation (i.e., violation of ozone standards). Accordingly, this alternative would reduce but not avoid the proposed Project's significant and unavoidable impact due to operational NO_X emissions.

As with the proposed Project, impacts to nearby sensitive receptors would be less than significant under this Alternative. Like the Project, construction (short-term) and operational (long-term) criteria pollutant emissions under this Alternative would be below the SCAQMD localized thresholds of significance, and diesel particulate emissions would not expose sensitive receptors to significant cancer and non-cancer health risks. However, these less-than-significant impacts to sensitive receptors would be reduced under this alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,394 average daily trips, as compared to 1,863 average daily trips under the proposed Project, not adjusted for PCE).

The Vacant Lot Development Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

Under existing conditions, the majority of the Project site is developed with light industrial land uses (approximately 38 acres) with the remaining, vacant portion of the site (approximately 13 acres) routinely disturbed for weed abatement. Both the Project and the Vacant Lot Development Alternative would develop the vacant 13-acre portion of the Project site and would have similar potential to adversely impact the western burrowing owl. The Vacant Lot Development Alternative would be required to implement the same mitigation measures as the Project to reduce potential impacts to the western burrowing owl to less-than-significant levels. The Vacant Lot Development Alternative would not remove any landscaping (i.e., shrubs or trees) from the western portion of the Project site and, therefore, would avoid the Project's potential less-than-significant effect (after mitigation) to migratory bird species.

❑ Cultural Resources

There are no known historic resources on the property and no known or recorded archeological or paleontological resources are present on the property. In addition, the likelihood of unearthing archeological or paleontological resources is low. Although Vacant Lot Development Alternative would have a smaller development footprint than the Project, this Alternative and the Project would

have similar impacts to cultural resources because both proposals would impact the only remaining land within the Project site with the potential, albeit low, to contain significant cultural resources (i.e., the undeveloped 13 acres in the eastern portion of the Project site with a relatively intact subsurface). Accordingly, this Alternative would be subject to the same regulatory requirements and mitigation measures as the proposed Project to reduce potential cultural resource impacts to less-than-significant levels.

❑ Geology and Soils

This Alternative would physically disturb approximately 13 acres, an approximately 75 percent smaller disturbance footprint than the Project. Because the Vacant Lot Development Alternative would have a smaller impact footprint than the Project, the potential for soil erosion during the construction phase would be lessened – although soil erosion impacts would be less significant under both the Project and this Alternative due to mandatory compliance with federal, state and local water quality standards. This Alternative would be required to comply with the same mandatory regulatory requirements and mitigation measures as the proposed Project to reduce potential impacts associated with seismic ground shaking and ground failure to less-than-significant levels.

❑ Greenhouse Gas Emissions

The Vacant Lot Development Alternative would involve the construction and operation of 200,000 s.f. of light industrial land uses, which would generate approximately 1,394 average daily vehicle trips. Due to the reduction in the amount of average daily vehicle trips associated with this Alternative (469 fewer average daily vehicle trips than the Project), mobile-source related GHG emissions would be substantially decreased as compared to the proposed Project (mobile source emissions account for more than 90 percent of the Project's GHG emissions). Additionally, because this alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative.

Mitigation measures to reduce GHG emissions, similar to those applied to the proposed Project, would be required of this Alternative, including those imposed to address air quality impacts. With compliance to these mitigation measures to reduce near and long-term GHG emissions, combined with the substantial reduction in building intensity that would occur under this Alternative, this Alternative would reduce the cumulatively considerable impact associated with the Project's GHG emissions to less-than-significant levels. Compliance with required mitigation measures also would ensure this Alternative would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the site would be similar under the Vacant Lot Development Alternative and the proposed Project; however, because construction activities would occur over a smaller physical area and less building area would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during

the construction phase would decrease under this Alternative as compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar under this Alternative and the Project, and the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Vacant Lot Development Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 469 fewer average daily vehicle trips than the Project and, therefore, would contribute less traffic-related noise to local roadways. The Vacant Lot Development Alternative and the Project would both result in less-than-significant off-site, traffic-related noise impacts during long-term operation, but impacts would be lessened under this Alternative. Long-term noise impacts from operations on the Project site would be similar under the Vacant Lot Development Alternative and the proposed Project. Like the proposed Project, the Vacant Lot Development Alternative would install perimeter walls, which would act as noise barriers to minimize the amount of noise emitted from the subject property. Due to the construction of perimeter walls on the Project site and the distance from the site to the nearest noise-sensitive receptor, long-term operation of both the Vacant Lot Development Alternative and the Project would not expose noise sensitive land uses to noise levels in excess of the City of Moreno Valley's allowable standard; impacts would be less than significant.

- **Transportation/Traffic**

The Vacant Lot Development Alternative would result in the construction and operation of a 200,000 s.f. light industrial building on the eastern portion of the Project site, which would result in the generation of approximately 1,394 actual vehicle trips on a daily basis (utilizing the ITE trip generation rates for light industrial land uses, not adjusted for PCE). For comparison purposes, the proposed Project would generate approximately 1,863 actual vehicle trips on a daily basis (not adjusted for PCE). Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Vacant Lot Development Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Vacant Lot Development Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the Project, because this Alternative would generate approximately 469 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way, Kitching Street, and Edwin Road would occur under both the Vacant Lot Development Alternative and the proposed Project, and would be required to comply with City requirements to preclude the potential for introducing hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ Conclusion

Selection of the Vacant Lot Development Alternative would avoid the Project's cumulatively considerable and unavoidable impact related to GHG emissions. The Vacant Lot Development Alternative also would lessen the Project's significant and unavoidable impacts to air quality, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. In addition, this Alternative would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics and cultural resources would be similar under the Vacant Lot Development Alternative and the Project.

The Vacant Lot Development Alternative would fail to meet most of the Project's objectives. The only two objectives of the Project that would be met by the Vacant Lot Development Alternative – to attract new business/job opportunities to the City of Moreno Valley and to develop a vacant/underutilized property in a manner that complements surrounding development – would be achieved less effectively by this Alternative than by the proposed Project..

6.3.3 SMALL BUILDINGS ALTERNATIVE

The Small Buildings Alternative was selected to evaluate the comparative environmental benefits of constructing two (2) 400,000 s.f. high-cube light industrial warehouse buildings on-site in lieu of the single, large building proposed by the Project. The two buildings, combined, would include a maximum building area of 800,000 s.f., or 309,378 s.f. less building area than proposed by the Project (a reduction in building area of approximately 28 percent). The Small Buildings Alternative would have an identical development footprint as the proposed Project. Roadway improvements would be identical to the proposed Project under this Alternative. This Alternative would be consistent with the subject property's General Plan and MVIAP land use designations. The Small Buildings Alternative was selected for evaluation to determine if developing the site with two smaller warehouse buildings would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and transportation/traffic impacts.

❑ Aesthetics

Neither the proposed Project nor the Small Buildings Alternative would negatively impact views from any state- or locally-designated scenic highway segment due to distance and intervening development. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the property after development of the Small Buildings Alternative would be similar to that of the Project, although there would be more buildings with each building individually having a lesser bulk and scale than the proposed Project. Furthermore, under this Alternative, there would be

more tenants located on-site than would occur with the Project, some of which may have outdoor storage. Neither the proposed Project nor the Small Buildings Alternative would result in significant direct or cumulatively considerable aesthetic impacts.

❑ Air Quality

The construction activities required to implement the Small Buildings Alternative would be similar to the Project. Although the Small Buildings Alternative would result in a reduction in building area, this Alternative would require the construction of more walls for the individual buildings and would require more area requiring paint, thereby increasing the emission of VOCs under short-term construction conditions (construction-related VOC impacts would remain less-than-significant, however). Both the Small Buildings Alternative and the proposed Project would generate significant NO_X emissions during the construction phase; however, with the implementation of required mitigation, neither this Alternative nor the proposed Project would violate an air quality standard or contribute to a projected air quality violation during construction activities.

The two (2) buildings developed under this Alternative would generate approximately 1,885 PCE vehicle trips per day (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project), which corresponds to an approximately 28 percent decrease in average daily traffic as compared to the Project. As with the Project, long-term operation of the Small Buildings Alternative would exceed SCAQMD regional air quality thresholds for NO_X and would contribute to an existing regional air quality violation (i.e., unacceptable ozone concentrations). No mitigation is available to fully mitigate long-term mobile source emissions of NO_X to less-than-significant levels. Implementation of the Project also would result in a significant and unavoidable air quality impact associated with long-term emissions of NO_X; however, due to the decrease in daily vehicle trips, air quality impacts would be reduced by the selection of the Small Buildings Alternative.

Neither the Small Buildings Alternative nor the Project would expose nearby sensitive receptors to substantial pollutant concentrations, including localized criteria pollutants and diesel particulate matter, during short-term construction or long-term operational activities. However, these less-than-significant impacts to sensitive receptors would be reduced under this alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,885 daily PCE vehicle trips, as compared to 2,619 daily PCE vehicle trips under the proposed Project).

The Small Buildings Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

This Alternative would have an identical development footprint as the Project. As such, impacts to biological resources that would occur under this Alternative are the same as those impacts described

in EIR Subsection 4.3 for the proposed Project. No biological resource impacts would be reduced or avoided.

❑ Cultural Resources

The Small Buildings Alternative would physically disturb the same physical area as the proposed Project, to similar depths below the existing ground surface. Accordingly, potential impacts to cultural resources would be identical under either the Small Buildings Alternative or the proposed Project, and both development scenarios would be subject to the same regulatory requirements and mitigation measures to reduce potential impacts to less-than-significant levels.

❑ Geology and Soils

This Alternative would require a similar amount of earthwork and grading as the proposed Project. As such, impacts to geology and soils under the Small Buildings Alternative would be similar to those identified for the Project. Like the proposed Project, the Small Buildings Alternative would be required to comply with the requirements of the CBC and City Building Code. While construction in accordance with the CBC and City Building Code would not make structures totally resistant to seismic shaking, they would be designed not to collapse. Furthermore, the Small Buildings Alternative would be required to comply with the recommendations contained in the Project's geotechnical report, including requirements to remove and recompact areas where unstable soil conditions exist, to preclude potential adverse soil conditions. Impacts to geology and soils would be similar to those of the proposed Project.

❑ Greenhouse Gas Emissions

The Small Buildings Alternative would involve the construction and operation of a total of 800,000 s.f. of high cube warehouse building area. Due to the reduction in the amount of traffic associated with this Alternative (734 fewer average daily PCE trips), mobile-source GHG emissions would decrease as compared to the proposed Project. Additionally, because the Small Buildings Alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative. Mitigation measures similar to those applied to the proposed Project associated GHG emissions would apply to this Alternative, including those imposed to address air quality emissions. Incorporation of these measures is anticipated to reduce short- and long-term emissions of GHGs. Regardless, as with Project, GHG emissions produced by Small Buildings Alternative would be cumulatively considerable and no mitigation is available to reduce emissions to less-than-significant levels.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the subject property would be similar under the Small Buildings Alternative and the proposed Project; however, because two buildings would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during the construction phase would slightly increase under this Alternative as

compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar both the Small Buildings Alternative and the Project; therefore, the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Small Buildings Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 734 fewer average daily trips than the Project and, therefore, would contribute less traffic-related noise to local roadways than the Project. The Small Buildings Alternative would result in less-than-significant off-site, traffic-related noise impacts during long-term operation, which is similar to the conclusion reached for the Project. Like the proposed Project, the Small Buildings Alternative would install walls along the perimeter of the subject property, which would act as noise barriers to minimize the amount of noise emitted from the subject property. With construction of these walls, nearby sensitive receptors (i.e., non-conforming residential uses) would experience noise levels below the City's exterior noise standard. As such, impacts would be less than significant and would be similar to the proposed Project.

- **Transportation/Traffic**

The Small Buildings Alternative would result in the construction and operation of a total of 800,000 s.f. of high-cube light industrial warehouse uses on the subject property, which would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project). In comparison, the proposed Project would generate approximately 2,619 PCE vehicle trips on a daily basis. Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Small Buildings Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Small Buildings Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the Project, because this Alternative would generate approximately 734 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way, Kitching Street, and Edwin Road would occur under both the Small Buildings Alternative and the proposed Project, and would be required to comply with

City requirements to preclude the potential for introducing safety hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ **Conclusion**

Selection of the Small Buildings Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. Potential impacts to aesthetics, biological resources, cultural resources, and geology/soils would be similar under the Small Buildings Alternative and the proposed Project.

The Small Buildings Alternative would fail to meet the Project's objective to maximize buildout potential of the site based on City of Moreno Valley Municipal Code standards. This Alternative would meet all other Project objectives (but less effectively than the Project), and it may be difficult to attract high-quality tenants seeking to locate in the Moreno Valley area due to the smaller-sized buildings as compared to the large building proposed by the Project.

6.3.4 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative considers redevelopment of the western portion of the subject property (approximately 38 acres) with one (1) 800,000 s.f. high-cube warehouse building, while keeping the remaining approximately 13 acres of the property as vacant, undeveloped land. Under this Alternative, the building area on the subject property would be reduced by approximately 309,378 s.f. (or 28 percent) as compared to the proposed Project. This Alternative would not install frontage improvements to Kitching Street or Modular Way. The Reduced Project Alternative was selected by the Lead Agency to evaluate whether replacing the existing light-industrial structures on-site with a high-cube warehouse building and leaving the eastern portion of the subject property in its existing condition would reduce the Project's significant and unavoidable air quality, greenhouse gas, noise, and/or transportation/traffic impacts.

❑ **Aesthetics**

Neither the proposed Project nor the Reduced Project Alternative would negatively impact views from any state- or locally-designated scenic highway segment due to distance and intervening development. Also, neither this Alternative nor the proposed Project would damage scenic on-site resources, because such resources are not present on the property. The aesthetic quality and character of the western portion property (approximately 38 acres) after development of the Reduced Project Alternative would be similar to that of the Project, although the building provided by the Reduced Project Alternative would have a slightly lesser bulk and scale than the proposed Project. Under this Alternative, the aesthetic quality and character of the eastern 13 acres of the subject property would not change from existing conditions. Neither the proposed Project nor this Alternative would result in significant direct or cumulatively considerable impact to aesthetics.

❑ Air Quality

Under the Reduced Project Alternative, the extent of construction activities would be reduced as compared to the Project; as such, construction-related air quality emissions would be lessened. As with the proposed Project, this Alternative would require mitigation measures to reduce short-term emissions of NO_X to a level below significant, but to a lesser degree. With required mitigation, neither this Alternative nor the proposed Project would result in a violation of an air quality standard or contribution to a projected air quality violation, although short-term construction emissions would be reduced under this alternative as compared to the proposed Project.

This Alternative would generate approximately 1,885 PCE vehicle trips per day (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project) due to the reduction in total building area on-site. Average daily vehicle traffic associated with long-term operation of the Reduced Project Alternative would be approximately 28 percent less than traffic that would be generated by the Project. Accordingly, air pollutant emissions associated with long-term operation of the Reduced Project Alternative would be reduced as compared to the Project; however, this alternative would require the implementation of mitigation measures similar to those imposed on the proposed Project. Even with the incorporation of mitigation measures, long-term operation of this alternative would result in significant and unavoidable impacts due to emissions of NO_X, which would violate the SCAQMD regional air quality standard and would contribute to an existing air quality violation (i.e., ozone). Because the proposed Project would generate more average daily vehicle trips than would occur under this Alternative, impacts due to a conflict with the SCAQMD regional air quality standard and the level of contribution to an existing air quality violation (i.e., ozone) would be reduced under this Alternative. Accordingly, the Reduced Project Alternative would reduce, but not avoid, the proposed Project's significant and unavoidable impact due to operational NO_X emissions.

As with the proposed Project, impacts to nearby sensitive receptors would be less than significant under this Alternative. Similar to the Project, emissions under this Alternative would be below the SCAQMD localized thresholds of significance, and diesel particulate emissions would not expose sensitive receptors to significant cancer and non-cancer risks. However, these less-than-significant impacts to sensitive receptors would be reduced under this Alternative in comparison to the proposed Project due to the reduction in daily vehicular trips (i.e., 1,885 average daily PCE trips, as compared to 2,619 average daily PCE trips under the proposed Project).

The Small Buildings Alternative would generate odors during short-term construction activities (e.g., diesel exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the proposed Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Accordingly, short- and long-term odor impacts would be similar under both this Alternative and the proposed Project, and would be less than significant.

❑ Biological Resources

The Reduced Project Alternative would not impact the vacant, undeveloped 13 acres in the eastern portion of the subject property beyond those impacts that have historically occurred on the site (as previously described, the site is routinely disced for weed abatement and fire fuel management). As such, this Alternative would avoid the Project's less-than-significant impact (after mitigation) to the western burrowing owl. All other impacts to biological resources would be similar to the Project.

❑ Cultural Resources

The only ground disturbance that would occur on the subject property with the Reduced Project Alternative would occur on the western portion of the property which is developed under existing conditions. The Reduced Project Alternative would not impact the eastern portion of the Project site (approximately 13 acres) which is undeveloped under existing conditions. Because the western portion of the site was previously graded/developed, the likelihood of uncovering prehistoric artifacts or paleontological resources on this portion of the property is considered nil. As such, the Reduced Project Alternative would avoid the Project's less-than-significant impact to cultural resources.

❑ Geology and Soils

This Alternative would conduct earthwork and grading activities on approximately 13 less acres than the Project. Regardless, impacts to geology and soils under the Reduced Project Alternative would be similar to those identified for the Project. Like the proposed Project, the Reduced Project Alternative would be required to comply with the requirements of the CBC and City Building Code. While construction in accordance with the CBC and City Building Code would not make structures totally resistant to seismic shaking, they would be designed not to collapse. Furthermore, the Reduced Project Alternative would be required to comply with the recommendations contained in the Project's geotechnical report, including requirements to remove and recompact areas where unstable soil conditions exist, to preclude potential adverse soil conditions. Impacts to geology and soils would be similar to those of the proposed Project.

❑ Greenhouse Gas Emissions

The Reduced Project Alternative would involve the construction and operation of an 800,000 s.f. high cube warehouse building. Due to the reduction in the amount of traffic associated with this Alternative (734 fewer average daily PCE trips), mobile-source GHG emissions would decrease as compared to the proposed Project. Additionally, because the Reduced Project Alternative would involve less building area, non-mobile source operational GHG emissions (fossil fuel use for building operation) also would be reduced under this Alternative. Mitigation measures similar to those applied to the proposed Project associated GHG emissions would apply to this Alternative, including those imposed to address air quality emissions. Incorporation of these measures is anticipated to reduce short- and long-term emissions of GHGs. Regardless, as with Project, GHG emissions produced by Reduced Project Alternative would be cumulatively considerable and no mitigation is available to reduce emissions to less-than-significant levels.

❑ Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of construction activities conducted on the site would be similar under the Reduced Project Alternative and the proposed Project; however, because construction activities would occur over a smaller physical area and less building area would be constructed on-site under this Alternative, it is anticipated that the duration of noise impacts during the construction phase would decrease under this Alternative as compared to the proposed Project. Regardless, the types of construction equipment used and the types of construction activities conducted on-site would be similar under this Alternative and the Project, and the peak daily noise levels generated during the construction phase would also be similar. As such, and similar to the conclusion reached for the Project, short-term noise levels generated during construction of this Alternative would be significant and unavoidable.

Under long-term operational conditions, noise generated by the Reduced Project Alternative primarily would be associated with vehicles traveling to and from the site and on-site vehicle idling, maneuvering and parking. This Alternative would generate approximately 734 fewer average daily trips than the Project and, therefore, would contribute less traffic-related noise to local roadways than the Project. The Reduced Project Alternative would result in less-than-significant off-site, traffic-related noise impacts during long-term operation, which is similar to the conclusion reached for the Project. Like the proposed Project, the Reduced Project Alternative would install walls along the perimeter of the subject property, which would act as noise barriers to minimize the amount of noise emitted from the subject property. With construction of these walls, nearby sensitive receptors (i.e., non-conforming residential uses) would experience noise levels below the City's exterior noise standard. As such, impacts would be less than significant and would be similar to the proposed Project.

❑ Transportation/Traffic

The Reduced Project Alternative would result in the construction and operation of an 800,000 s.f. of high-cube light industrial warehouse building on the subject property, which would generate approximately 1,885 PCE vehicle trips on a daily basis (utilizing the same ITE trip generation rate and vehicle fleet mix applied to the proposed Project). In comparison, the proposed Project would generate approximately 2,619 PCE vehicle trips on a daily basis. Despite the reduction in daily traffic trips that would occur with selection of this Alternative, this Alternative is not expected to avoid any of the Project's cumulatively considerable and unavoidable impacts to study area intersections or roadway segments under Opening Year (2018) traffic conditions (refer to EIR Subsection 4.8). The severity of impacts to study area intersections and roadway segments would be reduced under the Small Buildings Alternative, as compared to the Project, but would not be avoided.

This Alternative is anticipated to result in cumulatively considerable impacts to the same congested CMP facilities (freeway mainline segments, freeway ramp interchanges, freeway ramp merge/diverge areas) as the proposed Project (refer to EIR Subsection 4.8). The Reduced Project Alternative would reduce the severity of identified impacts to CMP facilities, as compared to the

Project, because this Alternative would generate approximately 734 fewer daily traffic trips, but all impacts are expected to remain significant and unavoidable.

Frontage improvements along Modular Way and Kitching Street would not occur under the Reduced Project Alternative (as they would under the proposed Project), which could adversely affect future traffic operations along one or both of these roadways. Like the proposed Project, the Reduced Project Alternative would be required to comply with City requirements to preclude the potential for introducing safety hazards due to a design feature, and to ensure adequate access (including emergency access) to/from the site.

❑ Conclusion

Selection of the Reduced Project Alternative would reduce, but not avoid, the Project's significant and unavoidable impacts to air quality, greenhouse gases, noise, and transportation/traffic, although such impacts would not be fully avoided under this Alternative. The Reduced Project Alternative also would avoid the Project's less-than-significant effect to cultural resources and would reduce the Project's less-than-significant effects to biological resources and geology/soils. Potential impacts to aesthetics would be similar under the Reduced Project Alternative and the proposed Project.

The Reduced Project Alternative would fail to meet the Project's objective to achieve maximum buildout potential of the site based on City of Moreno Valley Municipal Code standards. The Reduced Project Alternative, while providing a high-cube warehouse building space in close proximity to major regional transportation corridors, would attract fewer jobs to the City of Moreno Valley as compared to the proposed Project. The Reduced Project Alternative would meet all other Project objectives, but less effectively than the Project.

Table 6-1 Alternatives - Comparison of Environmental Impacts

ENVIRONMENTAL TOPIC	PROPOSED PROJECT SIGNIFICANCE OF IMPACTS AFTER MITIGATION	LEVEL OF IMPACT COMPARED TO THE PROPOSED PROJECT			
		NO PROJECT ALTERNATIVE	VACANT LOT DEVELOPMENT ALTERNATIVE	SMALL BUILDINGS ALTERNATIVE	REDUCED PROJECT ALTERNATIVE
Aesthetics	Less-than-Significant	Increased	Similar	Similar	Similar
Air Quality	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
Biological Resources	Less-than-Significant	Avoided	Reduced	Similar	Reduced
Cultural Resources	Less-than-Significant	Avoided	Similar	Similar	Avoided
Geology and Soils	Less-than-Significant	Avoided	Reduced	Similar	Similar
Greenhouse Gas Emissions	Significant and Unavoidable	Avoided	Avoided	Reduced but not avoided	Reduced but not avoided
Noise	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
Transportation/Traffic	Significant and Unavoidable	Avoided	Reduced but not avoided	Reduced but not avoided	Reduced but not avoided
ABILITY TO MEET THE BASIC OBJECTIVES OF THE PROJECT[1]					
Objective A:		No	No	Yes	Yes
Objective B:		No	Yes, but to a lesser extent	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective C:		No	Yes, but to a lesser extent	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective D:		No	No	No	No
Objective E:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective F:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective G:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective H:		No	No	Yes, but to a lesser extent	Yes, but to a lesser extent

1. Refer to EIR Subsection 6.3 for a list of the proposed Project's basic objectives.
2. Impacts avoided or reduced would likely be displaced to another location in Western Riverside County, because the alternatives would not reduce the market demand for the high cube industrial warehouse space to the extent of the proposed Project.

7.0 REFERENCES

7.1 PERSONS INVOLVED IN PREPARATION OF THIS EIR

CITY OF MORENO VALLEY COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT, PLANNING DIVISION

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Chris Ormsby, AICP, Interim Planning Official/Senior Planner
Claudia Manrique, Associate Planner

T&B PLANNING, INC.

Tracy Zinn, AICP, Principal. B.S. Regional Planning and Geography
David Ornelas, Project Manager. B.A. Urban Studies and Planning
Connie Anderson, Consulting Analyst. B.S. Land Use
John LaMar, Staff Planner, Environmental Analyst
Sarah Pierce, Staff Planner, Environmental Analyst
Eric Horowitz, GISP, GIS Manager. B.A. Urban and Regional Planning; M.S. Geographic Information Systems

7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Modular Logistics Center EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of Moreno Valley Community and Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, California, 92552.

Appendix A Initial Study for Modular Logistics Center, Notice of Preparation, and Written Comments.

Appendix B1 Urban Crossroads. 2014a. *Modular Logistics Center Air Quality Impact Analysis City of Moreno Valley*. September 26, 2014.

Appendix B2 Urban Crossroads. 2014b. *Modular Logistics Center Mobile Source Health Risk Assessment City of Moreno Valley*. June 18, 2014.

Appendix C1 Alden Environmental, Inc. 2014. *General Biological Resources Assessment for the Modular Logistics Project.* October 1, 2014.

Appendix C2 Alden Environmental Inc. 2013. *Burrowing Owl Survey Results Report for the Dorado Property*. September 10, 2013.

Appendix D1 Brian Smith & Associates. BFSA 2013a. *A Phase I Cultural Resources Assessment for the Modular Logistics Center*. December 13, 2013.

Appendix D2 Brian Smith & Associates. BFSA 2013b. *Paleontological Resource and Monitoring Assessment Modular Logistics Project City of Moreno Valley Riverside County, California.* December 13, 2013.

Appendix E1 Southern California Geotechnical. 2012. *Geotechnical Investigation and Liquefaction Proposed Dorado Logistics Center*. October 3, 2012.

Appendix E2 Albert A. Webb Associates. 2013. *Project Specific Preliminary Water Quality Management Plan (WQMP) for Modular Logistics Center*. October 13, 2013.

Appendix F Urban Crossroads, 2014c. *Modular Logistics Center Greenhouse Gas Analysis.* September 26, 2014.

Appendix G Urban Crossroads. 2014d. *Modular Logistics Center Noise Impact Analysis City of Moreno Valley.* April 23, 2014.

Appendix H1 Urban Crossroads. 2014e. *Modular Logistics Center Traffic Impact Analysis City of Moreno Valley, California.* June 9, 2014.

Appendix H2 Urban Crossroads. 2014f. *Modular Logistics Center Traffic Impact Analysis – Supplemental Basic Freeway Segment Analysis.* March 17, 2014.

Appendix H3 Urban Crossroads. 2014g. *Modular Logistics Center Site Access Evaluation.* March 13, 2014.

Appendix I Eastern Municipal Water District. EMWD 2014. *Water Supply Assessment for the Modular Logistics Center*. January 22, 2014.

Appendix J Kennedy/Jenks Consultants. 2012. *Phase I Environmental Site Assessment 17300 Perris Boulevard Moreno Valley, California*. October 3, 2012.

Appendix K Written Correspondence

7.3 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

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7.5 PERSONS CONSULTED IN PREPARATION OF THIS EIR

The following persons were consulted during the preparation of this EIR.

Colliers International (Thomas Taylor, Steven Bellitti, Josh Hayes, Summer Coulter). 2014. Letter to Claudia Manrique, Associate Planner, City of Moreno Valley. 14 May 2014.

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Raines, Brian. Civil Engineer. Eastern Municipal Water District. E-mail. "Re: WW Generation Rates – First Nandina Logistics Ctr." E-mail to John LaMar. 28 April 2014.

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Claudia Manrique

From: George Hague <gbhague@gmail.com>
Sent: Monday, March 02, 2015 11:29 PM
To: Claudia Manrique
Cc: Richard Sandzimier
Subject: Planning Commission and Modular Logistic Center warehouse
Attachments: 2015.02.26 Petition for Writ of Mandate-Complaint Prologis Final - endorsed.pdf

Good afternoon/evening Planning Commissioner,

The below comes from pages 5-2 and 5-3 of the Modular Logistic Center (MLC) Final EIR - Please Read. These are areas which they will not do what is necessary to mitigate the impacts and therefore we will have to live with them. The sad part is that they used a flawed method to calculate the number of daily truck trips this project would generate. Even though we are still in an economic slump, 18 months ago they decided to study the traffic from six high cube warehouses in Moreno Valley and came up with significantly less daily truck trips than what should be applied to this project. We all hope we will return to a robust economy, but when we do their traffic analysis will be shown to be totally bogus. Even with these low numbers you can read the impacts they will have on our already non-atttainment air quality and clogged traffic.

Myself and many others use SR-60 to travel and so will this project's traffic, but since it is about 4.7 miles away our City is not requiring them to show the impact they will have on Moreno Valley residents using SR-60. The cumulative impacts on that road will be significant. With ProLogis, Aldi, Skechers and the proposed World Logistic Center warehouse project also using SR-60 as well as all the other warehouse projects within five miles of this one, SR-60 will become a nightmare. All of these projects' cumulative impacts need to thoroughly analyzed and not discounted, because they are a certain number of arbitrary miles away. This project needs to provide the traffic analysis, using the true truck trips numbers, for the full stretch of SR-60 that goes through Moreno Valley or the Final EIR will be considered inadequate.

Please do what you can to stop the use of Heacock Street as a truck route. There are three Moreno Valley USD schools whose property touch Heacock Street. The health of students should not be compromised by all the toxic diesel trucks from warehouses being approved in the southwest part of our City.

Attached below my name is the petition filed against the City on their recent approval of the ProLogis Eucalyptus warehouse project. It points out many problems with that warehouse that are also problems with the Modular Logistic Center warehouse project which will be before you Thursday March 12th. Please take the time to read their concerns -- including the health impacts to warehouse workers who must breath the toxic diesel truck pollution. The first 18 pages contain the most important information. You need to make sure many of the issues raised do not happen with the MLC project.

Take care,

George Hague

Attachment 9

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines §15126[b]). As described in detail in Section 4.0 of this EIR, the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after implementation of relevant standard conditions of approval, compliance with applicable regulations, and application of feasible mitigation measures. The significant impacts that cannot be mitigated to a level below significant consist of the following:

- Air Quality Thresholds 2 and 3: Significant and Unavoidable Direct and Cumulatively Considerable Impact. After the application of feasible mitigation measures, Project-related operational emissions of NO_x would remain above regional significance thresholds. Operational emissions of NO_x are primarily the result of mobile source emissions (vehicles traveling to and from the Project site), which are regulated by state and federal emissions and fuel use standards and beyond the direct control of the Project Applicant and/or future tenants of the Project site. In addition, the Project's long-term emissions of NO_x would cumulatively contribute to an existing air quality violation in the SCAB (i.e., NO_x and ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and state ozone concentrations).

- Greenhouse Gas Emissions Thresholds 1 and 2: Significant and Unavoidable Cumulatively Considerable Impact. Almost all of the Project's GHG emissions would be produced by mobile sources (i.e., trucks and cars). The application of mitigation measures would reduce Project-related GHG emissions; however, these measures would not substantially reduce Project-related mobile source GHG emissions, which comprise more than 90 percent of the Project's total GHG emissions. Mobile source emissions are regulated by state and federal emissions and fuel use standards, and are outside of the control of the Project Applicant, future Project tenants, and the City of Moreno Valley.

- Noise Thresholds 1, 3, and 4: Significant and Unavoidable Cumulatively Considerable Impact. Although mitigation measures would reduce construction-related noise levels, there are no feasible measures to ensure that sensitive receptors in the Project's vicinity would not be significantly impacted by cumulative construction noise if other construction projects occur simultaneously with the Project and cause noise levels at sensitive receptors to exceed 65 dBA Leq. The nearest sensitive receptor (a non-conforming residential structure) is located approximately 240 feet to the northwest of the Project site.

- Transportation/Traffic Threshold 1: Significant and Unavoidable Cumulatively Considerable Impact. The addition of Project-related traffic to the existing and planned circulation network would make a cumulatively considerable contribution to deficient operating conditions at seven (7) intersections and 10 roadway segments under Opening Year (2018) traffic conditions. The Project would mitigate its cumulatively considerable contribution to these impacts through payment of fees pursuant to the Moreno Valley DIF and TUMF; however, because improvements to the affected facilities may not be in place before the Project becomes operational, this EIR

recognizes a short-term and unavoidable cumulatively considerable impact at these locations, until planned improvements are implemented. Additionally, the Project would have a cumulatively considerable long-term impact at the intersections of Western Way/Harley Knox Boulevard and Indian Street/Harley Knox Boulevard, which require improvements beyond those currently identified in the NPRBBD.

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Transportation/Traffic Threshold 2: Significant and Unavoidable Cumulatively Considerable Impact. The proposed Project would contribute traffic trips to congested freeway mainline segments in the Southern California region, including four (4) mainline segments of I-215 and one (1) mainline segment of SR-91, where the Project's contribution of traffic would be cumulatively considerable. In addition, the Project would have a cumulatively considerable impact to unacceptable LOS at the Harley Knox Boulevard/I-215 interchange and merge/diverge pattern. There is no mitigation program offered by Caltrans for state highway freeway segments significantly impacted by the Project. The Harley Knox/I-215 interchange is scheduled for improvements funded by the TUMF program, but the interchange is not scheduled to be improved before the proposed Project is expected to become operational.

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SUPERIOR COURT FOR THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF RIVERSIDE

LABORERS INTERNATIONAL UNION OF NORTH AMERICA, LOCAL UNION NO. 1184, an organized labor union, Petitioner and Plaintiff, v. CITY OF MORENO VALLEY, a municipality; and CITY COUNCIL OF THE CITY OF MORENO VALLEY, Respondents and Defendants; PROLOGIS, INC., a Maryland corporation; PROLOGIS CALIFORNIA INC., a Delaware corporation; PROLOGIS, L.P., a Delaware partnership; PROLOGIS LOGISTICS SERVICES INCORPORATED, a Delaware corporation; and ROES 1 through 10, Real Parties in Interest and Defendants.	Case No.: VERIFIED PETITION FOR WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF (California Environmental Quality Act ("CEQA"), Pub. Res. Code § 21000, et seq.; Code of Civil Procedure §§ 1094.5, 1085) Dept: CEQA Case

Petitioner and Plaintiff Laborers International Union of North America, Local Union No. 1184 (hereinafter "Petitioner" or "LIUNA") petitions this Court for a writ of mandate directed to Respondents and Defendants City of Moreno Valley and City Council of the City of Moreno Valley (collectively "Respondents" or "City"), and by this verified petition and complaint, allege as follows:

1. Petitioner brings this action to challenge the unlawful actions of Respondents in approving Resolution No. 2015-04 certifying the Final Environmental Impact Report ("Final EIR") and adopting the findings and statement of overriding considerations and approving the mitigation monitoring program for the ProLogis Eucalyptus Industrial Park Project (the "Project" or "ProLogis Project"), and approving the related General Plan Amendment (Resolution No. 2015-05), Zone Change (Ordinance No. 883), Plot Plans (Resolution No. 2015-06) and Tentative Parcel Map (Resolution No. 2015-07) allowing development of the Project. These actions were taken by Respondents in violation of the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 *et seq*., and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq.

2. The Project is a proposed industrial park including four warehouse distribution buildings totaling more than 1,500,000 square feet. The Project site consists of 122 acres, currently undeveloped and historically used for agriculture, in the City of Moreno Valley, in Riverside County, California.

3. Respondents prepared and relied on an EIR that falls well below CEQA's minimum standards. The EIR is deficient in its discussion and analysis of the ProLogis Project's significant impacts on greenhouse gas ("GHG") emissions, cumulative traffic impacts, operational air pollution, construction pollution and health risks to workers. The EIR also impermissibly fails to address significant new information in its cumulative impacts analysis with respect to the proposed nearby World Logistics Center ("WLC") Project, a massive new warehouse and distribution facility proposed to be located adjacent to the ProLogis Project. These and other violations of CEQA were carefully documented during administrative proceedings on the Project, but were never rectified by the City.

4. According to Respondents' EIR, the Project is expected to emit approximately 79,000 metric tons of carbon dioxide equivalents ("CO2e") per year. This represents 10% of the City's targeted annual GHG emissions for the entire city by the year 2020. The EIR includes some GHG emission mitigation measures and concludes, without any analysis, that the measures will reduce GHG emissions for the project to below 10,000 metric tons, the applicable threshold of significance.

The Final EIR contains no estimate of the reductions purported to be achieved by any individual mitigation measure and no means to evaluate whether the claimed emission reductions have any basis in reality. Moreover, the Final EIR fails to account for the approximately 700,000 metric tons of GHG emissions expected to be generated by the proposed adjacent WLC project. The GHG emissions identified in the WLC draft EIR represent significant new information that Respondents fail to acknowledge or address, in violation of CEQA. Similarly, the EIR's cumulative impacts assessment fails to consider the significant new information regarding traffic impacts associated with the WLC project. The two projects are adjacent to each other, and are forecast to generate trips through many of the same intersections, interchanges, on- and off-ramps and freeway segments. The failure to consider this significant new information on traffic impacts is a fatal flaw and violation of CEQA.

5. The EIR makes a key error in its air pollution emissions analysis that leads to significant underestimating of the Project's air pollution emissions. The EIR uses an unsupported figure of 1.96 daily truck trips per 1000 square feet in modeling the Project's mobile source pollution emissions, rather than the 2.59 trips per 1000 square feet as recommended by the South Coast Air Quality Management District ("SCAQMD"). This failure to disclose the full extent of the Project's air pollution impacts requires that the EIR be revised and recirculated. Finally, the EIR fails to include all feasible mitigation measures to reduce the Project's significant impacts from its air pollution impacts, and other mitigation measures are discretionary and not enforceable. Unless all feasible mitigation measures are incorporated into the EIR and made mandatory and enforceable, CEQA prohibits the City from making a finding of overriding considerations for the Project's NOx, ROG, PM10 and GHG emissions.

6. Respondents prejudicially abused their discretion in certifying the EIR and approving the Project. Accordingly, Respondents' approval of the Project and certification of the Final EIR must be set aside.

PARTIES

7. Petitioner LIUNA is a non-profit, unincorporated association and a labor organization representing employees throughout Riverside County. LIUNA Local Union No. 1184 has numerous

members residing and working in and around the City of Moreno Valley and Riverside County. LIUNA Local Union No. 1184's purposes include, but are not limited to, advocating on behalf of its members to ensure safe workplace environments; working to protect recreational opportunities for its members to improve its members quality of life when off the job; advocating to assure its members access to safe, healthful, productive, and esthetically and culturally pleasing surroundings on and off the job; promoting environmenta1ly sustainable businesses and development projects on behalf of its members, including providing comments raising environmental concerns and benefits on proposed development projects; advocating for changes to proposed development projects that will help to achieve a balance between employment, the human population, and resource use which will permit high standards of living and a wide sharing of life's amenities by its members as well as the general public; advocating for steps to preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice; and advocating on behalf of its members for programs, policies, and development projects that promote not only good jobs but also a healthy natural environment and working environment, including but not limited to advocating for changes to proposed projects and policies that, if adopted, would reduce air, soil and water pollution, minimize harm to wildlife, conserve wild places, reduce traffic congestion, reduce global warming impacts, and assure compliance with applicable land use ordinances; and working to attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, ,or other undesirable and unintended consequences.

8. LIUNA Local Union No. 1184 and its members in Riverside County have several distinct legally cognizable interests in this project. LIUNA Local Union No. 1184 members live, work and recreate in Riverside County. LIUNA Local Union No. 1184 members may also be exposed to construction and operational hazards from toxic air pollution emissions that have not been adequately analyzed or mitigated. The interests of LIUNA Local Union No. 1184 members are unique and will be directly impacted by the project. Petitioner brings this action on behalf of itself, its members, and the public interest.

9. LIUNA and its members have a direct and beneficial interest in Respondents' compliance with laws bearing upon approval of the Project. These interests will be directly and adversely affected by the Project, which violates provisions of law as set forth in this Petition and would cause substantial harm to the natural environment and the quality of life in the surrounding community. The maintenance and prosecution of this action will confer a substantial benefit on the public by protecting the public from the environmental and other harms alleged herein. LIUNA and its members actively participated in meetings hosted by the City leading up to the proposal and adoption of the Project and Final EIR. LIUNA and its members submitted comments to Respondents objecting to and commenting on the Project and the EIR.

10. Respondent City of Moreno Valley is the "lead agency" for the Project for purposes of Public Resources Code § 21067, and has principal responsibility for conducting environmental review for the Project and taking other actions necessary to comply with CEQA.

11. Respondent City Council of Moreno Valley is the governing body of the City and is ultimately responsible for reviewing and approving or denying the Project. The City Council and its members are sued here in their official capacities.

12. On January 29, 2015, the City issued a Notice of Determination for the Project. The January 29, 2015, Notice of Determination identifies "Prologis" as the applicant for the Project and the only real party in interest pursuant to Public Resources Code § 21167.6.5. However, "Prologis" maintains a number of corporate entities that have registered to do business in California. Petitioner is informed and believes and thereupon alleges that four "Prologis" entities may have an interest in this action.

13. Real Party in Interest PROLOGIS, INC. is a Maryland corporation with its main headquarters in San Francisco, California. Petitioner is informed and believes and thereupon alleges that PROLOGIS, INC. is the applicant for the Project.

14. Real Parties in Interest PROLOGIS CALIFORNIA INC., PROLOGIS, L.P., and PROLOGIS LOGISTICS SERVICES INCORPORATED, are two Delaware corporations and a Delaware partnership. Petitioner is informed and believes and thereupon alleges that each of these entities is affiliated with PROLOGIS, INC. Petitioner is informed and believes and thereupon alleges

that one or more of these entities may comprise, in whole or in part, the "Prologis" identified in the Notice of Determination and may have an interest in the Project.

JURISDICTION AND VENUE AND CERTIFICATE OF COUNSEL AS TO PROPER COURT BRANCH

15. Pursuant to California Code of Civil Procedure section 1085 (alternatively section 1094.5) and Public Resources Code sections 21168.5 (alternatively section 21168) and 21168.9, this Court has jurisdiction to issue a writ of mandate to set aside Respondents' decision to certify the EIR and approve the Project. The Court has jurisdiction to issue declaratory relief pursuant to Code of Civil Procedure § 1060 and injunctive relief pursuant to Code of Civil Procedure § 525 *et seq*.

16. Venue is proper in this Court because this action challenges acts done by a public agency, and the causes of action alleged in this Petition and Complaint arose in the County of Riverside. Venue also is proper in this Court because the City is located in the County of Riverside. Pursuant to Superior Court Local Rule 3115 and Section (f) the Court's Administrative Order dated January 5, 2015, this case is filed in the Riverside Historic Courthouse, 4050 Main Street, Riverside, California, 92501, because the decisions and project at issue occurred in the City of Moreno Valley.

17. Petitioner has complied with the requirements of Public Resources Code section 21167.5 by serving a written notice of Petitioner's intention to commence this action on Respondents on February 25, 2015. A copy of the written notice and proof of service is attached hereto as Exhibit A.

18. Petitioner is complying with the requirements of Public Resources Code section 21167.6 by concurrently filing a notice of its election to prepare the record of administrative proceedings relating to this action, a copy of which is attached hereto as Exhibit B.

19. Petitioner is complying with the requirements of Public Resources Code section 21167.7 by sending a copy of this Petition and Complaint to the California Attorney General on February 26, 2015. A copy of the letter transmitting this Petition is attached hereto as Exhibit C.

20. Petitioner has performed any and all conditions precedent to filing this instant action and has exhausted any and all available administrative remedies to the extent required by law.

21. Petitioner has no plain, speedy or adequate remedy in the course of ordinary law unless this Court grants the requested writ of mandate to require Respondents to set aside their certification of the EIR and approval of the Project. In the absence of such remedies, Respondents' decision will remain in effect in violation of state law.

STATEMENT OF FACTS

Project Background

22. The proposed Project is located in the City of Moreno Valley, Riverside County. The approximately 122.8 acre site is located south of the SR-90 freeway between Redlands Boulevard and Moreno Beach Drive in the eastern portion of the City. Much of the site has historically been used for agricultural purposes—though ProLogis has already removed hundreds of citrus trees from the property—and other portions of the property are unimproved vacant land. The original proposed Project called for more than 2.2 million feet of warehouse space over 6 buildings, but the Final EIR considered and the City adopted a "Reduced Intensity Alternative" which would result in the construction and development of approximately 1.5 million square feet of distribution warehouse space in 4 buildings. The buildings will be constructed to allow access for the loading and unloading of products from diesel trailer trucks.

23. The Final EIR states that the purpose of the proposed Project is to provide a new facility specializing in warehouse distribution services, and asserts that the completed Project will achieve, among others, the following objectives: (1) providing industrial warehouse facilities that meet the substantial and unmet demands of businesses located in the City and County; (2) encouraging warehouse distribution services that take advantage of the area's close proximity to various freeways and transportation corridors; (3) clustering industrial warehouse uses near access points to the state highway system to reduce traffic congestion on surfaced streets and to reduce air pollutant emissions from vehicle sources; and (4) reducing peak hour vehicle trips, energy and water consumption compared to existing General Plan land uses.

24. On February 4, 2013, the City circulated for public comment a Draft EIR for the WLC project, a 41,600,000 square foot warehouse and distribution center located adjacent to the proposed ProLogis Project site. The WLC project, along with the ProLogis Project, will generate

thousands of daily diesel truck trips to and from these side-by side locations. The WLC project represents significant new information that must be considered by Respondents in its cumulative impacts analysis of GHG emissions and traffic impacts for the ProLogis Project. However, Respondents certified the Final EIR for the Project without addressing this significant new information.

25. The EIR violates CEQA in a number of ways, including its analysis of GHG emissions and mitigation measures, failure to consider cumulative impacts of the WLC project with respect to GHG emissions and traffic impacts, underestimating air pollution impacts from mobile sources, failure to adopt and/or make mandatory all feasible mitigation measures for NOx and PM10 emissions during construction and operation of the Project prior to making a finding of overriding considerations, and relying on a faulty health risk assessment in finding no significant health risks to workers.

Greenhouse Gas Emissions

26. The EIR estimates that annual GHG emissions from operations at the Project site will be 79,000 metric tons of carbon dioxide equivalents ("CO2e"). No GHG emission estimate is provided in either the DEIR or FEIR for the Reduced Intensity Alternative approved by the City. The Project's estimated GHG emissions far exceed the applicable threshold of significance—10,000 metric tons of CO2e—set by the SCAQMD. Recognizing the need to reduce GHG emissions to a less than significant level, Respondents include a number of mitigation measures aimed at reducing GHG emissions. The EIR makes the wholly unsupported conclusion that the mitigation measures will reduce the Project's GHG emissions to below the threshold of significance. However, there is no analysis whatsoever of the reductions to be achieved by any of the mitigation measures and there is no substantial evidence to support the assertion that these measures will in fact reduce GHG emissions below the significance threshold.

27. In comments on both the draft and final EIRs, Petitioner pointed out Respondents' failure to quantify the purported reductions in GHG emissions. The Final EIR confirms that the City has performed no estimates of the GHG emission reductions by any of the mitigation measures it claims will address those emissions. It is clear that there is no substantial evidence in the record to

show that mitigation measures will reduce the Project's annual GHG emissions from 79,000 metric tons to less than 10,000 metric tons. As a result, the EIR cannot support a conclusion that the Project's GHG emissions will result in less than significant impacts. The EIR must be revised to include a quantitative analysis of reductions in GHG emissions to be achieved by the mitigation measures. If the 10,000 metric ton threshold of significance is not met, additional mitigation measures including electrified loading docks, mandated use of solar panels, on-site solar power storage, additional pollution control devices on trucks serving the facility, and if all feasible mitigation measure do not reduce emissions below the significance threshold, the use of offset credits. In the alternative, the City must acknowledge the significant impact of the Project's GHG emissions and make a finding of overriding considerations supported by a showing that all feasible mitigation measures have been required.

Significant New Information – World Logistics Center Project

28. The massive WLC project has progressed to the Final EIR stage. The City has refused to address the significant new information relating to the cumulative impacts on traffic and GHG emissions of the ProLogis and WLC projects.

29. The City has a stated goal of 798,693 total CO2e emissions for the entire City by the year 2020. The ProLogis Project's estimated GHG emissions of 79,000 metric tons are nearly 10% of that goal. The World Logistics Center Project is expected to emit around 700,000 metric tons of GHGs per year. The two projects combined would account for essentially the City's entire GHG reduction target for 2020. The City's processing of the WLC EIR injects significant new information that was not even acknowledged or addressed in the ProLogis EIR. CEQA mandates that the City address this significant new information and recirculate the EIR.

30. Similarly, the traffic analysis in the ProLogis EIR fails to consider vehicle trips to and from the proposed WLC project. The two proposed projects are located side-by-side on the west and east sides of Redlands Boulevard, and are forecast to generate trips through many of the same intersections and freeway segments, interchanges and on/off ramps. To properly evaluate the cumulative traffic impacts, the City must address the significant new information represented by the WLC project proposed to be built directly adjacent to the ProLogis Project.

Air Pollution Emissions

31. The EIR's estimate of the Project's air pollution emissions from mobile sources is not based on substantial evidence. The EIR makes a significant error in its air pollution emissions analysis relying on an unsupported estimate of the Project's daily truck trips of 1.96 daily trips per 1000 square feet. In order to avoid underestimating the number of trips associated with large warehouse distribution centers, the SCAQMD recommends using a rate of 2.59 daily truck trips per 1000 square feet when modeling air pollution emissions from mobile sources. By using the lower uncorroborated figure, the City is underestimating air pollution emissions from mobile sources by about one-third. The EIR's failure to disclose the full extent of the Project's air pollution impacts requires the revision and recirculation of the EIR to discuss the impacts and any additional necessary mitigation measures.

32. Among the air pollutants that will be emitted during operation of the Project's warehouse facilities are reactive organic gases ("ROGs") and nitrogen oxide ("NOx"). The EIR states that the Project's direct and cumulative impacts of ROGs and NOx will remain significant even after the identified mitigation measures are implemented. Therefore, CEQA mandates that the EIR must require all feasible mitigation measures to reduce these impacts. There are additional mitigation measures available that were not included in the EIR by the City, including but not limited to electrified loading docks for all refrigeration units and the use of fuel cell trucks to reduce NOx emissions. The SCAQMD also submitted comments to the EIR with a list of additional feasible mitigation measures to reduce air pollutants. The EIR includes a number of measures that are discretionary rather than mandatory. CEQA prohibits the City from making a statement of overriding considerations without incorporating all feasible mitigation measures as mandatory and enforceable requirements.

33. The EIR fails to include all feasible mitigation measures to reduce significant impacts to air quality during construction of the Project. The City recognizes that Project construction will have significant impacts due to its particulate matter emissions (dust), but adopts a statement of overriding considerations. Additional mitigation measures are available but were not included in the EIR. One such measure is monitoring for opacity during all construction activities using a

Ringelmann Chart. This measure would ensure that the Project's particulate matter emission control measures during construction are properly implemented and effective. Because this measure is feasible, would help to ensure the efficacy of other mitigation measures and would further reduce excessive particulate matter emissions during Project construction, it must be included. CEQA prohibits the City from adopting a statement of overriding considerations without incorporating all feasible mitigation measures as mandatory and enforceable.

Health Risks to Workers

34. The EIR's discussion of health risks to workers significantly underestimates exposures to toxic air contaminants and the resulting cancer risks. The health risk assessment upon which the EIR relies in analyzing health risks assumes that the Project's construction phase will take four months, rather than the 11.4 months reported in the EIR. Nor does the EIR disclose or refer to the actual data and assumptions that support the health risk assessment. The EIR's discussion of health risks from Project construction is therefore not based upon substantial evidence.

35. The EIR's discussion of health risks to workers also underestimates the risks of worker exposure to diesel particulate matter during operation of the proposed facility, and lacks sufficient data to allow a proper evaluation of such health risks. The EIR is based on the faulty assumption that the trailer trucks using the facility will be 87.5% diesel, a figure based on an outdated model. In addition, the health risk assessment supporting the EIR is ambiguous, as it is unclear whether diesel truck emissions were calculated based on a 12-hour work day or a 24-hour work day. The EIR's discussion of health risks to workers from Project operation is therefore not based upon substantial evidence.

Project History, Environmental Review, and Approval

36. The Project was originally reviewed by the City's Project Review Staff Committee in September 2007. Based on the information in the Initial Study, a notice of preparation of an EIR was issued on February 4, 2008, with the public comment period running from February 4, 2008 to March 4, 2008. On February 13, 2008, Respondents held a public meeting to consider comments regarding the scope of the EIR.

37. The Draft EIR was issued on July 17, 2012, and a 45-day public comment period ran from July 18 to September 4, 2012. LIUNA submitted extensive written and oral comments on the Draft EIR, identifying numerous inadequacies in the document. LIUNA's comments included but were not limited to the following:

a. The Draft EIR failed to provide support for the conclusion that mitigation measures would reduce greenhouse gas emissions to less than significant levels;

b. The Draft EIR failed to adequately analyze impacts to air quality because it underestimated potential particulate emissions during construction and failed to accurately compare construction emissions to daily construction significance thresholds;

c. The Draft EIR failed to adequately analyze impacts to air quality because it failed to properly identify and address the Project's operational air emissions; and

d. The Draft EIR failed to adequately analyze impacts to air quality because it failed to disclose impacts to offsite receptors and failed to adequately analyze cumulative impacts.

38. In February 2014, the City issued its Final EIR for the Project, which included responses to public comments. At the March 13, 2014 Planning Commission public hearing, LIUNA pointed out that its comments were not addressed in the Final EIR, and the hearing was continued to April 24, 2014 so the City could update the Final EIR to include LIUNA's comments and the City's response.

39. On April 23, 2014, LIUNA submitted additional comments, including that the proposed World Logistics Center and its massive GHG emissions is significant new information that must be addressed in the final EIR's cumulative impact analyses. LIUNA's comments also underscored ongoing concerns regarding the Project's air pollution emissions and hazards to workers and others.

40. At the April 24, 2014 meeting, the Planning Commission recommended approval of the Project and certification of the Final EIR. LIUNA provided oral comments at the April 24, 2014 Planning Commission meeting.

41. On June 20, 2014, LIUNA submitted comments reiterating its main concerns with the shortcomings of the EIR prepared for the proposed Prologis project.

42. The City Council held a hearing on the Project on June 24, 2014. At the conclusion of the June 24, 2014 hearing, the City Council scheduled a follow-up hearing for July 8, 2014. At the July 8, 2014 hearing, the City Council elected to postpone consideration of the Project. The City rescheduled the agenda item for the project for August 26, 2014. At the August 26 meeting, the City Council continued the public hearing on the Project at the request of the applicant so the applicant could develop its Reduced Intensity Alternative.

43. The Final EIR was updated in September 2014 to reflect the Reduced Intensity Alternative, and was recirculated to interested parties. A public hearing was scheduled for October 14, 2014 to discuss the Reduced Intensity Alternative. LIUNA attended the October 14, 2014 hearing. At the October 14 meeting, the City Council voted to continue consideration of the Project to December 9, 2014.

44. On November 4, 2014, a general election was held which included various seats on the City Council. As a result of the election, three new City Council members were seated at the December 9 City Council meeting. Prior to that meeting, the Project applicant requested a continuance of the public hearing on the Project to provide the new City Council members adequate time to review the staff report and related documents for the Project. The continuance was granted and the public hearing for the Project was set for January 27, 2015.

45. On January 27, 2015, the City Council held a public hearing on the proposed Project and revised final EIR. LIUNA made oral comments at the hearing. The hearing extended past midnight and, on January 28, 2015, the City Council approved the Project and certified the Final EIR by a 3-2 vote.

46. Pursuant to Public Resources Code § 21152, on January 29, 2015, Respondents prepared a notice of determination. The notice of determination was filed by the County Clerk of Riverside County on January 30, 2015.

47. Petitioner, other agencies, interested groups, and individuals participated in the administrative proceedings leading up to Respondents' approval of the project and certification of the

EIR, by participating in hearings thereon and/or by submitting letters commenting on Respondents' Notice of Preparation, Draft EIR and Final EIR. Petitioner attempted to persuade Respondents that their environmental review did not comply with the requirements of CEQA, to no avail. Respondents' approval of the Project and certification of the EIR is not subject to further administrative review by Respondents. Petitioner has availed itself of all available administrative remedies for Respondents' violation of CEQA.

48. Petitioner has no plain, speedy, or adequate remedy in the ordinary course of law within the meaning of Code of Civil Procedure § 1086, in that Respondents' approval of the Project and associated EIR is not otherwise reviewable in a manner that provides an adequate remedy. Accordingly, Petitioner seeks this Court's review of Respondents' approval of the Project and certification of their EIR, to rectify the violations of CEQA.

49. Respondents are threatening to proceed with implementation of the Project in the near future. Implementation of the project will irreparably harm the environment in that Respondents will commence with construction activities pursuant to the flawed Final EIR prepared for the Project resulting in greenhouse gas emissions, traffic, air quality, and other environmental impacts to Petitioner and its members. Preliminary and permanent injunctions should issue restraining Respondents from proceeding with the Project relying upon the Final EIR.

LEGAL BACKGROUND

50. CEQA (Pub. Resources Code § 21000 et seq.) requires that an agency analyze the potential environmental impacts of the Project, i.e., its proposed actions, in an environmental impact report ("EIR") (except in certain limited circumstances). (See, e.g., PRC § 21100). The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652). "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109).

51. CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1)). "Its purpose is to inform the public and its responsible

officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564). The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comrs*. (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*")).

52. Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (CEQA Guidelines § 15002(a)(2) and (3); *Citizens of Goleta Valley* 52 Cal.3d at 564). Mitigation measures must be fully enforceable and not deferred. (CEQA Guidelines § 15126.4; *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 308-309). A mitigation measure, e.g., the preparation of a remediation plan that is not part of the record, is not an adequate mitigation measure under CEQA. (*Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 331-332). The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (Guidelines § 15002(a)(2)).

53. If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (Pub. Resources Code § 21081; 14 Cal. Code Regs. § 15092(b)(2)(A) & (B)).

54. An EIR must discuss significant cumulative impacts. (CEQA Guidelines section 15130(a).) This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable…'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered

together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines section 15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." (CEQA Guidelines section 15355(a)). Reasonably foreseeable projects include projects for which environmental review by an agency has been initiated. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 870; *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 74-77.

55. Where the agency adds "significant new information" to an EIR prior to final EIR certification, the lead agency must issue a new notice and must recirculate the revised EIR, or portions of the EIR, for additional commentary and consultation. (Pub. Resources Code § 21092.1; CEQA Guidelines § 15088.5). Pursuant to the Guidelines, significant new information can include "changes in the project or environmental setting as well as additional data or other information." (CEQA Guidelines § 15088.5(a)). New information is significant where it "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect…." (*Id*.) "'Significant new information' requiring recirculation includes, for example, a disclosure showing that: (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented. [or] (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance….." (*Id*.)

56. While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Jets*, 91 Cal. App. 4th 1344, 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of Cal.*, 47 Cal. 3d 376, 391 409, fn. 12 (1988)).

FIRST CAUSE OF ACTION
(Violations of CEQA; EIR Does Not Comply With CEQA)

57. Petitioner hereby realleges and incorporates paragraphs 1 through 56, inclusive.

58. CEQA requires the lead agency for a project to prepare an EIR that complies with the requirements of the statute. The lead agency also must provide for public review and comment on

the project and associated environmental documentation. An EIR must provide sufficient environmental analysis such that decision-makers can intelligently consider environmental consequences when acting on proposed projects.

59. Respondents violated CEQA by certifying an EIR for the Project that is inadequate and fails to comply with CEQA. Among other things, Respondents:

a. Failed to adequately disclose or analyze the Project's significant impacts on the environment, including, but not limited to, the Project's impacts on greenhouse gas emissions, operational air pollution including emissions of reactive organic gases and nitrogen oxide, construction pollution including emissions of particulate matter and health impacts on workers;

b. Improperly deferred mitigation measures to address air pollution impacts;

c. Failed to adequately mitigate Project GHG emissions, air pollution, traffic, and health hazards impacts; and

d. Failed to revise and recirculate the EIR in response to significant new information that occurred after the release of the Project's draft EIR regarding the newly proposed World Logistics Center project and its environmental impacts and, as a result, failed to analyze significant cumulative impacts resulting from the Project and the proposed World Logistics Center project, including greenhouse gas emissions and traffic impacts.

60. As a result of the foregoing defects, Respondents prejudicially abused their discretion by certifying an EIR that does not comply with CEQA and by approving the Project in reliance thereon. Accordingly, Respondents' certification of the EIR and approval of the Project must be set aside.

SECOND CAUSE OF ACTION
(Violations of CEQA; Inadequate Findings)

61. Petitioner hereby realleges and incorporates paragraphs 1 through 60, inclusive.

62. CEQA requires that a lead agency's findings for the approval of a project be supported by substantial evidence in the administrative record. CEQA further requires that a lead agency provide an explanation of how evidence in the record supports the conclusions it has reached.

63. Respondents violated CEQA by adopting findings that are inadequate as a matter of law in that they are not supported by substantial evidence in the record, including, but not limited to,

the following:

a. The determination that the Project's greenhouse gas impacts would be less than significant and/or that adopted mitigation measures would avoid or lessen the Project's significant effects on the environment, without any analysis of the efficacy of such mitigation measures or identifying any reviewable basis for concluding that greenhouse gas emissions will be reduced to below the applicable threshold of significance;

b. The adoption of a statement of overriding considerations with respect to the Project's significant impacts from operational and construction air emissions, without analyzing and mandating all feasible mitigation measures; and

c. The adoption of a statement of overriding considerations with respect to the Project's significant impacts from operational and construction air emissions while including a number of mitigation measures that are discretionary and unenforceable.

64. As a result of the foregoing defects, Respondents prejudicially abused their discretion by making determinations or adopting findings that do not comply with the requirements of CEQA and approving the Project in reliance thereon. Accordingly, Respondents' certification of the EIR and approval of the Project must be set aside.

THIRD CAUSE OF ACTION
(Injunctive and Declaratory Relief Against Respondents and Real Parties in Interest)

65. Petitioner hereby realleges and incorporates paragraphs 1 through 64, inclusive.

66. Petitioner has no plain, speedy, or adequate remedy at law. Unless enjoined, Respondents and Real Parties will implement the Project despite their lack of compliance with CEQA. Petitioner will suffer irreparable harm by Respondents' failure to take the required steps to protect the environment and Real Parties' initiation of construction of the Project. Declaratory relief is appropriate under Code of Civil Procedure § 1060, injunctive relief is appropriate under Code of Civil Procedure § 525 *et seq*. and a writ of mandate is appropriate under Code of Civil Procedure § 1085 *et seq*. and 1094.5 *et seq.* and under Public Resources Code § 21168.9, to prevent irreparable harm to the environment.

WHEREFORE, Petitioner prays for judgment as hereinafter set forth.

PRAYER

WHEREFORE, petitioner prays for the following relief:

1. For a stay of Respondents' decisions certifying the EIR and approving the Project pending trial.

2. For a temporary restraining order and preliminary injunction restraining Respondents and Real Parties in Interest from taking any actions to initiate construction of the Project relying in whole or in part upon the EIR and Project approvals pending trial.

3. For a peremptory writ of mandate, permanent injunction and declaratory relief directing:

   a. Respondents to vacate and set aside their certification of the EIR for the Project and the decisions approving the Project and accompanying General Plan amendments and zoning changes.

   b. Respondents and Real Parties in Interest to suspend all activity under the certification of the EIR and approval of the Project that could result in any change or alteration to the physical environment until Respondents have taken actions that may be necessary to bring the certification and Project approvals into compliance with CEQA.

   c. Respondents to prepare, circulate, and consider a new and legally adequate EIR and otherwise to comply with CEQA in any subsequent action taken to approve the Project.

4. For its costs of suit.

5. For an award of attorney fees pursuant to Code of Civil Procedure § 1021.5 and any other applicable provisions of law or equity.

6. For other equitable or legal relief that the Court considers just and proper.

Dated: February 26, 2015 LOZEAU DRURY LLP

Michael R. Lozeau
Attorney for LIUNA Local Union No. 1184

VERIFICATION

I, Michael R. Lozeau, am an attorney for Petitioner Laborers International Union of North America, Local Union 1184 in this action. I am verifying this Petition pursuant to California Code of Civil Procedure section 446. Petitioner is located outside of the County of Alameda, where I have my office. I have read the foregoing Petition. I am informed and believe that the matters in it are true and on that ground allege that the matters stated in the Petition are true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: February 26, 2015

Michael R. Lozeau
Attorney for Petitioner

EXHIBIT A

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By U.S. Mail and E-mail

February 25, 2015

City of Moreno Valley
Mayor Jesse L. Molina and City Council
City Clerk Jane Halstead
City Attorney Suzanne Bryant
Moreno Valley City Hall
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552
Email: CityClerk@moval.org

RE: Notice of Intent to File Suit Under the California Environmental Quality Act Regarding the Certification of the Final Environmental Impact Report for the ProLogis Eucalyptus Industrial Park Project by the City of Moreno Valley

Dear Mayor Molina, City Clerk Halstead, and City Attorney Bryant:

I am writing on behalf of Laborers' International Union of North America, Local Union 1184 ("LIUNA") ("Petitioners"), regarding the ProLogis Eucalyptus Industrial Park Project ("Project").

Please take notice, pursuant to Public Resources Code ("PRC") § 21167.5, that Petitioners intend to file a Verified Petition for Peremptory Writ of Mandate and Complaint for Declaratory and Injunctive Relief ("Petition") under the provisions of the California Environmental Quality Act ("CEQA"), PRC § 21000 et seq., against Respondents and Defendants City of Moreno Valley and City Council of Moreno Valley (collectively, "City"), in the Superior Court for the County of Riverside, challenging the January 27-28, 2015 certification of the FEIR and adoption of related CEQA findings for the Project by Respondents on the grounds that the EIR does not comply with CEQA in that it fails to adequately analyze and mitigate significant environmental impacts, and that the City's CEQA findings are not supported by substantial evidence in the record.

The petition being filed will seek the following relief:

1. For a stay of Respondents' decisions certifying the EIR and approving the Project pending trial.

2. For a temporary restraining order and preliminary injunction restraining Respondents and Real Parties in Interest from taking any actions to initiate construction of the Project relying in whole or in part upon the EIR and Project approvals pending trial.

3. For a peremptory writ of mandate, permanent injunction and declaratory relief directing:

   a. Respondents to vacate and set aside their certification of the EIR for the Project and the decisions approving the Project and accompanying General Plan amendments and zoning changes.

   b. Respondents and Real Parties in Interest to suspend all activity under the certification of the EIR and approval of the Project that could result in any change or alteration to the physical environment until Respondents have taken actions that may be necessary to bring the certification and Project approvals into compliance with CEQA.

   c. Respondents to prepare, circulate, and consider a new and legally adequate EIR and otherwise to comply with CEQA in any subsequent action taken to approve the Project.

4. For its costs of suit.

5. For an award of attorney fees pursuant to Code of Civil Procedure § 1021.5 and any other applicable provisions of law or equity.

6. For other equitable or legal relief that the Court considers just and proper.

Petitioners urge Respondents to rescind their certification of the FEIR and related CEQA findings for the Project, to conduct the appropriate environmental review, and to prepare the appropriate CEQA document for the Project as required by law.

Sincerely,

Michael R Lozeau

Michael Lozeau
Attorneys for Petitioner and Plaintiff Laborers' International Union of North America, Local Union 1184

PROOF OF SERVICE

I, Stacey Oborne, declare as follows:

I am a resident of the State of California, and employed in Oakland, California. I am over the age of 18 years and am not a party to the above-entitled action. My business address is 410 12th Street, Suite 250, Oakland, California, 94607.

On February 25, 2015, I served a copy of the foregoing document(s) entitled:

Notice of Intent to File Suit Under the California Environmental Quality Act Regarding the Certification of the Final Environmental Impact Report for the ProLogis Eucalyptus Industrial Park Project by the City of Moreno Valley

on the following parties:

City of Moreno Valley
Mayor Jesse L. Molina and City Council
City Clerk Jane Halstead
City Attorney Suzanne Bryant
Moreno Valley City Hall
14177 Frederick Street
P.O. Box 88005
Moreno Valley, CA 92552
Email: CityClerk@moval.org

☒	**BY MAIL. By placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid for First Class mail, in the United States mail at Oakland, California addressed as set forth above.**
☒	**BY EMAIL. By emailing the document to the City Clerk.**

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed February 25, 2015 at Oakland, California.

Stacey Oborne

EXHIBIT B

Michael R. Lozeau (Cal. Bar No. 142893)
Richard T. Drury (Cal. Bar No. 163559)
LOZEAU | DRURY LLP
410 12th Street, Suite 250
Oakland, CA 94607
Tel: (510) 836-4200
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E-mail: michael@lozeaudrury.com
richard@lozeaudrury.com

Attorneys for Petitioners

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF RIVERSIDE

LABORERS INTERNATIONAL UNION OF NORTH AMERICA, LOCAL UNION NO. 1184, an organized labor union, Petitioner, v. CITY OF MORENO VALLEY, a municipality; and CITY COUNCIL OF THE CITY OF MORENO VALLEY, Respondents; PROLOGIS, INC., a Maryland corporation; PROLOGIS CALIFORNIA INC., a Delaware corporation; PROLOGIS, L.P., a Delaware partnership; PROLOGIS LOGISTICS SERVICES INCORPORATED, a Delaware corporation; and ROES 1 through 10, Real Parties in Interest.	CASE NO.: **PETITIONER'S NOTICE OF INTENT TO PREPARE ADMINISTRATIVE RECORD** (California Environmental Quality Act ("CEQA"), Pub. Res. Code § 21000, et seq.; Code of Civil Procedure §§ 1094.5, 1085) Dept: CEQA Case

Pursuant to Public Resources Code § 21167(b)(2), Petitioner LABORERS' INTERNATIONAL UNION OF NORTH AMERICA LOCAL UNION NO. 1184 ("Petitioner") hereby notifies all parties that Petitioner elects to prepare the administrative record relating to the above-captioned action relating to certification of the EIR for and approval of the ProLogis Eucalyptus Industrial Park Project by Respondents CITY OF MORENO VALLEY and CITY COUNCIL OF THE CITY OF MORENO VALLEY ("Respondents").

Respondents and Real Parties in Interest are directed not to prepare the administrative record for this action and not to expend any resources to prepare said administrative record.

February 26, 2015

LOZEAU DRURY LLP

Michael R. Lozeau

Attorneys for Petitioners

EXHIBIT C

Michael R. Lozeau (Cal. Bar No. 142893)
Richard T. Drury (Cal. Bar No. 163559)
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richard@lozeaudrury.com

Attorneys for Petitioners

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF RIVERSIDE

LABORERS INTERNATIONAL UNION OF NORTH AMERICA, LOCAL UNION NO. 1184, an organized labor union, Petitioner and Plaintiff, v. CITY OF MORENO VALLEY, a municipality; and CITY COUNCIL OF THE CITY OF MORENO VALLEY, Respondents and Defendants;	CASE NO.: **NOTICE TO ATTORNEY GENERAL - VERIFIED PETITION FOR WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF** (California Environmental Quality Act ("CEQA"), Pub. Res. Code § 21000, et seq.; Code of Civil Procedure §§ 1094.5, 1085) Dept: CEQA Case
PROLOGIS, INC., a Maryland corporation; PROLOGIS CALIFORNIA INC., a Delaware corporation; PROLOGIS, L.P., a Delaware partnership; PROLOGIS LOGISTICS SERVICES INCORPORATED, a Delaware corporation; and ROES 1 through 10, Real Parties in Interest and Defendants.	

To the Attorney General of the State of California:

PLEASE TAKE NOTICE, pursuant to Public Resources Code § 21167.7 and Code of Civil Procedure § 388, that on February 26, 2015, Petitioner LABORERS' INTERNATIONAL UNION OF NORTH AMERICA LOCAL UNION NO. 1184 ("Petitioner") filed a Verified Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief ("Petition") against Respondents

CITY OF MORENO VALLEY and CITY COUNCIL OF THE CITY OF MORENO VALLEY ("Respondents") and Real Parties in Interest PROLOGIS, INC., a Maryland corporation; PROLOGIS CALIFORNIA, INC., a Delaware Corporation; PROLOGIS, L.P., a Delaware Partnership; PROLOGIS LOGISTICS SERVICES INCORPORATED, a Delaware corporation; and ROES 1 through 10, (collectively, "Real Parties") in Riverside County Superior Court.

The Petition alleges, *inter alia*, violations of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq., in connection with Respondents' certification of the Environmental Impact Report ("EIR") for the ProLogis Eucalyptus Industrial Park Project. A copy of the Petition is attached to this Notice.

February 26, 2015

LOZEAU DRURY LLP

Michael R. Lozeau
Attorneys for Petitioner

PROOF OF SERVICE

I, Stacey Oborne, declare as follows:

I am a resident of the State of California, and employed in Oakland, California. I am over the age of 18 years and am not a party to the above-entitled action. My business address is 410 12th Street, Suite 250, Oakland, CA 94607.

I am readily familiar with our business' practice for collection and processing of documents for mailing with the U.S. Postal Service, and that the below-named document was deposited with the U.S. Postal Service with fully prepaid postage thereon on the date set forth below at Oakland, California.

On February 26, 2015 I served the **NOTICE TO ATTORNEY GENERAL - VERIFIED PETITION FOR WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF** by placing a true copy thereof in an envelope, sealing, and placing it for collection and mailing following ordinary business practices addressed as follows:

Office of the Attorney General 1300 "I" Street Sacramento, CA 95814-2919	

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed February 26, 2015 at Oakland, California.

Stacey Oborne

PLANNING COMMISSION
STAFF REPORT

Case:	PA14-0042 – Plot Plan PA14-0043 – General Plan Amendment PA14-0044 – Zone Change
Date:	March 12, 2015
Applicant:	Latco Enterprises
Representative:	Pacific Development Solutions Group
Location:	Southeast corner of Eucalyptus Avenue and Edgemont Street
Proposal:	General Plan Amendment from Commercial (C) to Residential 20 (R20) and Zone Change from Community Commercial (CC) to Residential 20 (R20) for development of a Plot Plan for a 112 unit apartment project on 6.63 acres. The project proposes 14 two-story buildings with a mix of 1 and 2 bedroom units and with covered parking to include carports and garages.
Recommendation:	Approval

SUMMARY

Latco Enterprises proposes to develop a 112 unit apartment project on the 6.63 acres of Assessor's Parcel Numbers 263-120-020 and 263-120-025 located at the southeast corner of Eucalyptus Avenue and Edgemont Street. Development of the proposed apartments requires approval of a General Plan Amendment and Zone Change to establish the R20 zone at this site.

PROJECT DESCRIPTION

The applicant, Latco Enterprises, has submitted three applications for development of the Edgemont Apartments project, which include a General Plan Amendment, Zone Change, and Plot Plan, in order to develop a 112 unit apartment project on 6.63 acres (Assessor's Parcel Numbers 263-120-020 and 263-120-025) located at the southeast corner of Eucalyptus Avenue and Edgemont Street.

Project

Site

The project site is located at the southeast corner of Eucalyptus Avenue and Edgemont Street. The project site is a vacant rectangular shaped parcel that is comprised of level to rolling topography.

The site was used as a chicken farm and ranch from approximately 1948 till 1967. For the last approximately 45 years the site has been vacant. In April 2009, the site's General Plan designation was changed from Residential/Office to Commercial and the zoning on the site was changed from Office Commercial (OC) to Community Commercial (CC) concurrently with the approval of a mini-storage facility. The owner of the property has indicated that the mini-storage facility was not developed due to changing market conditions and diminished demand for mini-storage. The change from a proposed commercial to residential use on the project site is reflective of a reconsideration of land use patterns in this area of the community.

There are no rock outcroppings, hilltops or steep slopes on the project site. The site is routinely disked for weed abatement to clear it of brush and weedy vegetation.

The project site is currently zoned Community Commercial (CC) with a Commercial General Plan land use designation. The applicant proposes changes to both the General Plan and Zoning designations.

Surrounding Area

The developed uses in the area are mostly single-family residences to the north, west and south with a mobile home park located to the east and an office building and Edgemont Elementary School also located to the north.

General Plan land use designations in the vicinity are primarily Residential Office (R/O) along Eucalyptus Avenue with some limited Commercial (C) designated land located to the west at or near the intersection of Eucalyptus Avenue and Valley Springs Parkway. The Edgemont Elementary School site across the street to the north has a zoning designation of Public (P).

Zoning designations in the vicinity are primarily Office Commercial (OC) along Eucalyptus Avenue with some limited Community Commercial (CC) designated land located to the west at or near the intersection of Eucalyptus Avenue and Valley Springs Parkway. Edgemont Elementary School across the street to the north has a

Public (P) zoning designation. South of and adjacent to the project site, properties are zoned R10 and R15, allowing for multiple family development.

Land Use Changes

The current General Plan land use designation for the project site is Commercial (C) and the current zoning is Community Commercial (CC). The applicant proposes to change the General Plan land use designation to Residential 20 and the Zoning designation to Residential 20 District (R20).

The proposed change from Commercial to Residential 20 will establish a multiple family land use designation that is compatible with surrounding residential land uses and will promote development of the site's undeveloped parcels. This is consistent with General Plan Community Goal 2.1, which states, "a pattern of land uses, which organizes future growth, minimizes conflicts between land uses, and which promotes the rational utilization of presently underdeveloped and undeveloped parcels".

The development of the 56 one bedroom and 56 two bedroom units proposed at this location would address General Plan Community Goal 2.4 which encourages a supply of housing in sufficient numbers suitable to meet the diverse needs of future residents and to support healthy economic development without creating an oversupply of any particular type of housing.

The loss of the Commercial land use at this location would eliminate the possibility of achieving the stated purpose of General Plan Objective 2.4, to, "Provide commercial areas within the City that are conveniently located, efficient, attractive, and have safe and easy pedestrian and vehicular circulation in order to serve the retail and service commercial needs of Moreno Valley residents and businesses. However, in reviewing the proposed land use change, consideration was given to the amount of existing Commercial designated property available for development located in close proximity to the project site at the intersections of Eucalyptus Avenue and Valley Springs Parkway to the west and Eucalyptus Avenue and Day Street to the east.

The Transportation Engineering Division required a Traffic Impact Study for the proposed project to address the potential increase in traffic with the approval of the proposed project. Based on the results of the Traffic Impact Study, no unacceptable service levels or other negative impacts to the City's circulation system have been identified.

The proposed General Plan Amendment is consistent with General Plan Circulation Element Goal 5.1 as it will result in development of a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map, Figure 9-1. The project design provides appropriate vehicular and emergency response access to development and is considerate of and supports mobility requirements of the system's users.

Plot Plan

Plot Plan PA14-0043 proposes the development of a 112 unit apartment project on the project site's 6.63 acres. The project will include 14 two-story buildings with a mix of 56 one bedroom and 56 two bedroom units. The developer proposes to secure the site with decorative perimeter fencing and walls. Project amenities include a pool, recreation center, private open space, carport parking and single-car garages.

Access/Parking

Primary access to the proposed apartment project is from Edgemont Street with secondary/emergency access provided at Eucalyptus Avenue.

Municipal Code Section 9.11 requires a total of 196 parking spaces including 112 covered spaces for the proposed apartment project. The project as designed provides a total of 196 parking spaces including 77 carports and 52 single-car garages for a total of 129 covered parking spaces which exceeds the covered parking requirement for this use. The project as designed and conditioned satisfies all parking requirements of the City's Municipal Code.

Design/Landscaping

The proposed project includes 14 two story apartment buildings. The design of the development relies on simple massing with details that include tile roofs, stucco exterior walls, window surrounds and trim, articulated roof overhangs, and arch details at the stair enclosures and private patios. Variation among the buildings is created with multiple color schemes and an assortment of details, including exposed rafter tails, louvers, medallions and light fixtures.

The recreation building includes stone veneer and is consistent with project architecture in colors, materials and level of detail

All walls and fences on the site are proposed to be constructed with decorative block. The walls and fences for this project are conditioned to be consistent with the City's Municipal Code standards for placement, height and materials.

This project has been reviewed and the design of the proposed plot plan conforms to all development standards of the R20 zone and the design guidelines for multiple family uses as required within the City's Municipal Code.

REVIEW PROCESS

In the review of this project, consideration was given to the potential impact to surrounding land uses by the proposed project.

The project was reviewed by the Project Review Staff Committee (PRSC) in October, November and December 2014.

Planning also coordinated with representatives from Moreno Valley Unified School District, Pechanga Cultural Resources – Temecula Band of San Luiseno Mission Indians, and the Riverside County Airport Land Use Commission (ALUC).

Coordination with the above agencies and the applicant resulted in conditions of approval that are included in the recommended resolutions to address and protect potential impacts to cultural resources and to ensure compatibility with the 2014 March

Airport Land Use Compatibility Plan adopted by the Riverside County Airport Land Use Commission on November 13, 2014.

The City of Moreno Valley has coordinated with representatives of Pechanga Cultural Resources in accordance with the SB 18 consultation process.

ENVIRONMENTAL

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects.

An Initial Study / Mitigated Negative Declaration were prepared which assessed the potential of the proposed project to impact the environment. The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The project is located within Area D of the March Airport Land Use Compatibility Plan. In order to demonstrate compliance with the requirements of the plan, the following mitigation measures have been placed on the project:

- **HAZ-1** Prior to the issuance of the Certificate of Occupancy, the project applicant shall execute an aviation easement with the March Joint Powers Authority that provides for the dedication of the easement to March Inland Port Authority; and

- **HAZ-2** Prior to the occupancy of any apartment unit, the project applicant shall prepare general lease agreements for the project that shall include electromagnetic radiation notification.

The following additional mitigation measures have been included to reduce impacts to noise and traffic to less than significant:

- **NOI-1** is provided that would require that the project applicant restrict the use of large bulldozers and other large equipment (greater than 150 horsepower) from operating within 15 feet of any off-site structure.

- **TRA-1** – Prior to the issuance of a Certificate of Occupancy, the project applicant shall construct the following improvements at the intersection of Edgemont Street/Eucalyptus Avenue:

  - Widen the northbound approach on Edgemont Street, between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and 40 foot curb-to-curb width, and contain the following geometrics:
    - One southbound return (through) lane;
    - One northbound left turn lane (Eucalyptus Avenue to project driveway); and
    - One northbound right turn lane (Eucalyptus Avenue to project driveway).

- **TRA-2** – Prior to the issuance of a Certificate of Occupancy, the project applicant shall pay their fair-share cost to construct the following improvements on Edgemont Street, between Eucalyptus Avenue and the project driveway. Therefore, the following improvement would be required:

  - Widen the segment of Edgemont Street between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and contain the following geometrics:

    - One southbound return (through) lane with 12 to 14 feet of width;
    - One northbound left turn lane (Eucalyptus Avenue to project driveway) with a 12 foot width;
    - One northbound right turn lane (Eucalyptus Avenue to project driveway) with a 14 foot width;
    - New curb and gutter shall be constructed along the project frontage on the east side of Edgemont Street and at least 100 feet of new curb and gutter shall be constructed on the west side of Edgemont Street, south of Eucalyptus Avenue. From that point to the south, the edge of pavement may be unimproved, but a minimum 12 foot wide paved southbound lane shall be provided to the project's southern boundary.

A mitigation monitoring program has been prepared to ensure implementation of the mitigation measures (see Attachment 6).

Based on the results of the Mitigated Negative Declaration, there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties or the environment as a whole, therefore, adoption of the Mitigated Negative Declaration is recommended.

NOTIFICATION

The public hearing notice for this project was published in the local newspaper on February 20, 2015. Public notice was sent to all property owners of record within 300 feet of the project site on February 26, 2015. The public hearing notice for this project was also posted on the project site on February 26, 2015.

Planning received two phone calls in response to noticing efforts. Both callers had questions about the notice but stated no concerns with the project. One of the callers is the owner of the single-family residence on Eucalyptus Avenue located immediately to the east of the project site.

REVIEW AGENCY COMMENTS

Staff received the following responses to the Project Review Staff Committee transmittal; which was sent to all potentially affected reviewing agencies.

Agency	Response Date	Comments
Edgemont Community Services District	08/08/14	Will Serve Letter
Moreno Valley Utility	09/22/15	No service in this area
Box Springs Mutual Water Company	12/06/14	Will Serve Letter
Riverside Transit Authority	01/30/15	No planned service
Airport Land Use Commission	02/18/15	Finding of Consistency

The Riverside County Airport Land Use Commission (ALUC) identified to the City that based on the project's location and description, the project should be submitted to the County for review by ALUC. The applicant submitted information to ALUC and the project was scheduled for a public hearing before ALUC on February 5, 2015. Following the public hearing, ALUC found the Edgemont Apartments project to be consistent with the 2014 March Air Reserve Base Airport Land Use Compatibility Plan.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2015-06 and thereby **RECOMMEND** that the City Council:

1. **ADOPT** a Mitigated Negative Declaration for General Plan Amendment application PA14-0043, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** General Plan Amendment application PA14-0043 based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

AND;

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2015-07 and thereby **RECOMMEND** that the City Council:

1. **ADOPT** a Mitigated Negative Declaration for Zone Change application PA14-0044, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** Zone Change application PA14-0044 based on the findings contained in this resolution, and as shown on the attachment included as Exhibit A.

AND;

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2015-08 and thereby **RECOMMEND** that the City Council:

1. **ADOPT** a Mitigated Negative Declaration for Plot Plan application PA14-0042, pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** Plot Plan application PA14-0042 based on the findings contained in this resolution, and subject to the attached conditions of approval included as Exhibit A.

Prepared by:

Jeff Bradshaw
Associate Planner

Approved by:

Richard J. Sandzimier
Planning Official

ATTACHMENTS:

1. Public Hearing Notice
2. Planning Commission Resolution No. 2015-06
3. Planning Commission Resolution No. 2015-07
4. Planning Commission Resolution No. 2015-08
5. Mitigated Negative Declaration
6. Initial Study Checklist
7. Mitigation Monitoring Program
8. Architectural Plans
9. Preliminary Grading Plan
10. Aerial Map

Notice of PUBLIC HEARING

This may affect your property. Please read.

Notice is hereby given that a Public Hearing will be held by the Planning Commission of the City of Moreno Valley on the following item(s):

CASE: PA14-0042 – Plot Plan
PA14-0043 – General Plan Amendment
PA14-0044 – Zone Change

APPLICANT: Latco Enterprises

OWNER: Jim Kimmel

REPRESENTATIVE: Pacific Development Solutions Group

LOCATION: Southeast corner of Eucalyptus Avenue and Edgemont Street

PROPOSAL: General Plan Amendment from Commercial (C) to Residential 20 (R20) and Zone Change from Community Commercial (CC) to Residential 20 (R20) for development of a Plot Plan for a 112 unit apartment project on 6.63 acres. The project proposes 14 two-story buildings with a mix of 1 and 2 bedroom units and with covered parking to include carports and garages.

ENVIRONMENTAL DETERMINATION: Mitigated Negative Declaration

COUNCIL DISTRICT: 5

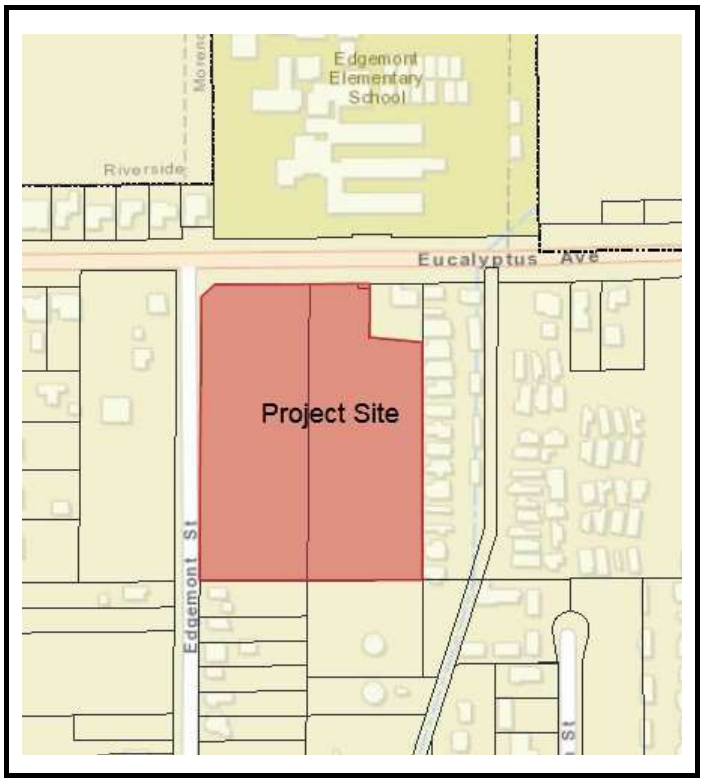
STAFF RECOMMENDATION: Approval

Any person interested in any listed proposal can contact the Community & Economic Development Department, Planning Division, at 14177 Frederick St., Moreno Valley, California, during normal business hours (7:30 a.m. to 5:30 p.m., Monday through Thursday and Fridays from 7:30 a.m. to 4:30 p.m.), or may telephone (951) 413-3206 for further information. The associated documents will be available for public inspection at the above address.

In the case of Public Hearing items, any person may also appear and be heard in support of or opposition to the project or recommendation of adoption of the Environmental Determination at the time of the Hearing.

The Planning Commission, at the Hearing or during deliberations, could approve changes or alternatives to the proposal.

If you challenge any of these items in court, you may be limited to raising only those items you or someone else raised at the Public Hearing described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing.



LOCATION N ∅

PLANNING COMMISSION HEARING

City Council Chamber, City Hall
14177 Frederick Street
Moreno Valley, Calif. 92553

DATE AND TIME: March 12, 2015 at 7 PM

CONTACT PLANNER: Jeff Bradshaw

PHONE: (951) 413-3224

Attachment 1

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PLANNING COMMISSION RESOLUTION NO. 2015-06

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PA14-0043: AN AMENDMENT TO THE GENERAL PLAN LAND USE MAP, CHANGING THE LAND USE DESIGNATION FROM COMMERCIAL (C) TO RESIDENTIAL 20 INVOLVING APPROXIMATELY 6.63 ACRES GENERALLY LOCATED AT THE SOUTHEAST CORNER OF EDGEMONT STREET AND EUCALYPTUS AVENUE.

WHEREAS, the applicant, Latco Enterprises filed Application No. PA14-0043, requesting an amendment to the Moreno Valley General Plan, as described in the title of this resolution and the attached Exhibit A.

WHEREAS, on March 12, 2015, the Planning Commission of the City of Moreno Valley held a public hearing to consider the subject applications and all of the environmental documentation prepared for the project.

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

WHEREAS, the Planning Commission considered the initial study prepared for the project for the purpose of compliance with the California Environmental Quality Act (CEQA). Based on the initial study, it was determined that the project impacts are less than significant with mitigation and approval of a Mitigated Negative Declaration is recommended.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed general plan amendment and zone change are consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: The project includes three (3) applications, a General Plan Amendment and Zone Change, to allow the modification of the existing land use of two (2) parcels (Assessor's Parcel Numbers 263-120-020

and 263-120-025) and a Plot Plan for development of a 112 unit apartment project. This project proposes to change the General Plan designation for 6.63 acres from Commercial (C) to Residential 20 (R20).

The site was used as a chicken farm and ranch from approximately 1948 till 1967. For the last approximately 45 years the site has been vacant. In April 2009, the site's General Plan designation was changed from Residential/Office to Commercial and the zoning on the site was changed from Office Commercial (OC) to Community Commercial (CC) concurrently with the approval of a mini-storage facility. The owner of the property has indicated that the mini-storage facility was not developed due to changing market conditions and diminished demand for mini-storage. The change from a proposed commercial to residential use on the project site is reflective of a reconsideration of land use patterns in this area of the community.

The topography of the site is relatively flat. The area surrounding the site has been developed primarily with residential land uses. Several non-residential uses are scattered along Eucalyptus Avenue in the vicinity of the project site. The residences close to the project site are in Office Commercial zoned areas and are considered pre-existing, non-conforming land uses. Properties in the vicinity of the site along Eucalyptus Avenue are mostly zoned Office Commercial (OC) with some Community Commercial (CC) zoning to the west at Old 215/Valley Springs Parkway and Public (P) zoning where Edgemont Elementary School is located across the street to the north.

Consistent with General Plan Community Goals 2.1 and 2.4, the proposed General Plan Amendment will establish a multiple family land use designation that is compatible with surrounding residential land uses and will promote development of the site's undeveloped parcels.

2. **Health, Safety and Welfare –** The proposed general plan amendment will not be detrimental to the public health, safety or welfare.

FACT: The proposed General Plan Amendment will not result in unacceptable levels of protection from natural and man-made hazards to life, health, and property and is therefore consistent with General Goal 9.6.1. The project site is located within approximately 2,000 feet of Fire Station #6 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations. The proposed General Plan Amendment will not allow for development that would be inconsistent with General Plan Objective 6.1 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage due to seismic ground shaking and secondary effects

or General Plan Objective 6.2 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. The proposed project is not exempt from CEQA. It was determined that an Initial Study would be prepared to determine whether the proposed project may have a significant effect on the environment.

An Initial Study / Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment and the related Plot Plan application to impact the environment. The proposed project includes the development of the project site with a 112 unit apartment complex on approximately 6.63 acres. The project site is located in the City of Moreno Valley, County of Riverside and Sate of California (State). The project site is located at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street.

The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project.

The Mitigated Negative Declaration has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY RECOMMENDS** that the City Council:

1. **ADOPT** a Mitigated Negative Declaration for Application No. PA14-0043 pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** General Plan Amendment Application No. PA14-0043, based on the findings contained in this resolution.

APPROVED this 12th day of March, 2015.

_____
Jeffrey Sims
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

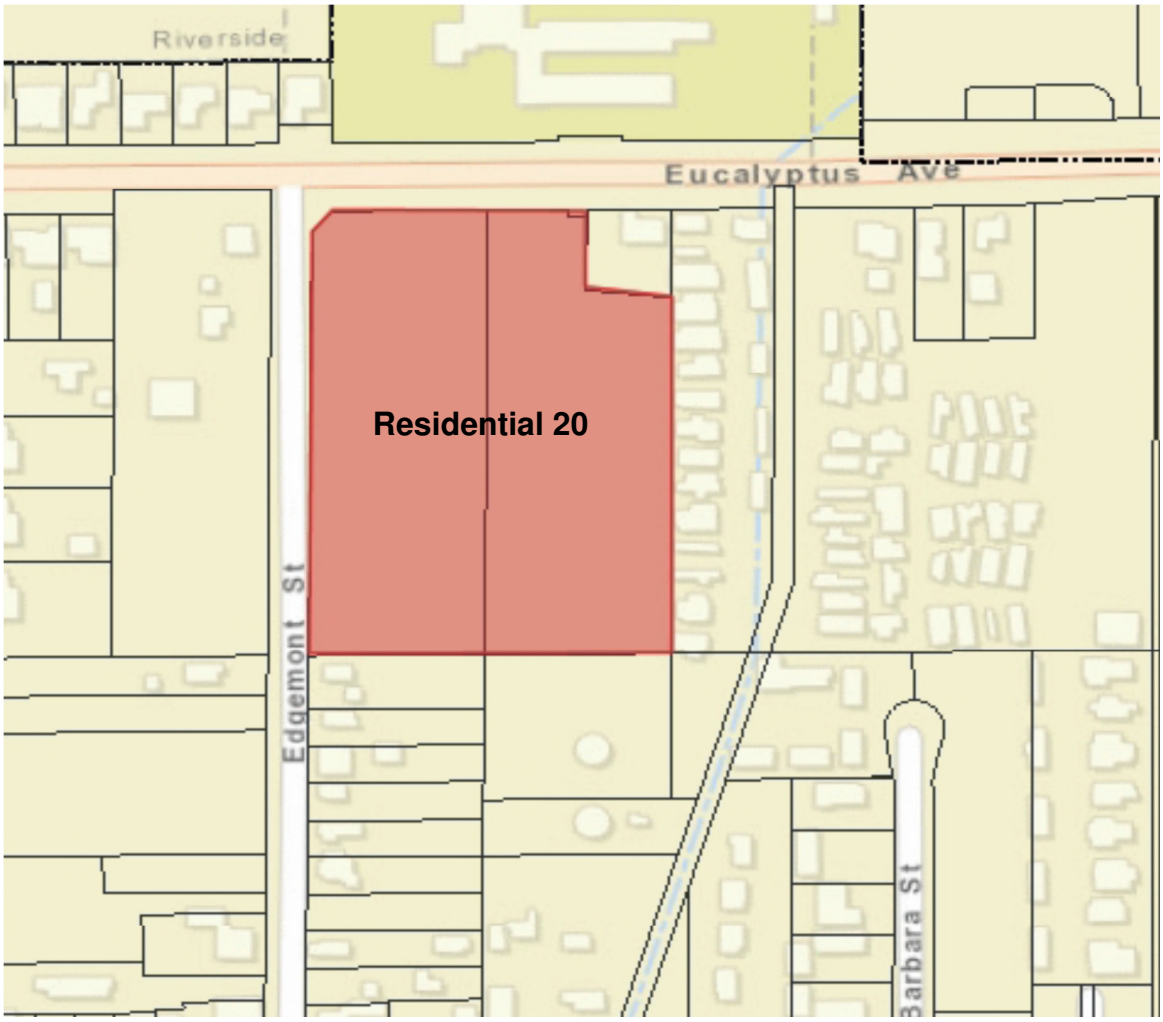
APPROVED AS TO FORM:

_____
City Attorney

ATTACHED: General Plan Amendment Map

GENERAL PLAN AMENDMENT

Application No. PA014-0043
APN's 263-120-020 and 263-120-025
Resolution No. 2015-06



N

ADOPTED_____

EFFECTIVE_____

Exhibit A

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PLANNING COMMISSION RESOLUTION NO. 2015-07

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PA14-0044: AN AMENDMENT TO THE OFFICIAL ZONING ATLAS, CHANGING THE ZONING CLASSIFICATION FROM COMMUNITY COMMERCIAL (CC) TO RESIDENITAL 20 (R20), INVOLVING APPROXIMATELY 6.63 ACRES GENERALLY LOCATED AT THE SOUTHEAST CORNER OF EDGEMONT STREET AND EUCALYPTUS AVENUE.

WHEREAS, the applicant, Latco Enterprises filed Application No. PA14-0044, requesting an amendment to Page 68 of the Official Zoning Atlas to the zoning classification for certain property, as described in the title of this resolution and the attached Exhibit A.

WHEREAS, on March 12, 2015, the Planning Commission of the City of Moreno Valley held a public hearing to consider the subject applications and all of the environmental documentation prepared for the project.

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

WHEREAS, the Planning Commission considered the initial study prepared for the project for the purpose of compliance with the California Environmental Quality Act (CEQA). Based on the initial study, it was determined that the project impacts are less than significant with mitigation and approval of a Mitigated Negative Declaration is recommended.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found and determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed amendment and pre-zoning is consistent with the General Plan, and its goals, objectives, policies and programs.

FACT: The project includes three (3) applications, a General Plan Amendment and Zone Change, to allow the modification of the

existing land use of two (2) parcels (Assessor's Parcel Numbers 263-120-020 and 263-120-025) and a Plot Plan for development of a 112 unit apartment project. This project proposes to change the General Plan designation for 6.63 acres from Commercial (C) to Residential 20 (R20).

The site was used as a chicken farm and ranch from approximately 1948 till 1967. For the last approximately 45 years the site has been vacant. In April 2009, the site's General Plan designation was changed from Residential/Office to Commercial and the zoning on the site was changed from Office Commercial (OC) to Community Commercial (CC) concurrently with the approval of a mini-storage facility. The owner of the property has indicated that the mini-storage facility was not developed due to changing market conditions and diminished demand for mini-storage. The change from a proposed commercial to residential use on the project site is reflective of a reconsideration of land use patterns in this area of the community.

The topography of the site is relatively flat. The area surrounding the site has been developed primarily with residential land uses. Several non-residential uses are scattered along Eucalyptus Avenue in the vicinity of the project site. The residences close to the project site are in Office Commercial zoned areas and are considered pre-existing, non-conforming land uses. Properties in the vicinity of the site along Eucalyptus Avenue are mostly zoned Office Commercial (OC) with some Community Commercial (CC) zoning to the west at Old 215/Valley Springs Parkway and Public (P) zoning where Edgemont Elementary School is located across the street to the north.

Consistent with General Plan Community Goals 2.1 and 2.4, the proposed General Plan Amendment will establish a multiple family land use designation that is compatible with surrounding residential land uses and will promote development of the site's undeveloped parcels.

2. **Conformance with the Zoning Regulations –** The proposed zoning is consistent with the purposes and intent of Title 9 of the City of Moreno Valley Municipal Code.

   FACT: As proposed, the Change of Zone from Community Commercial (CC) to Residential 20 (R20) for the 6.63 acre project site is consistent with the purposes and intent of Title 9. A residential development under the R20 would continue to further the comprehensive and orderly development of the site and surrounding areas.

The area surrounding the site has been developed primarily with residential land uses. Several non-residential uses are scattered along Eucalyptus Avenue in the vicinity of the project site. The residences close to the project site are in Office Commercial zone areas and are considered pre-existing, non-conforming land uses. Properties in the vicinity of the site along Eucalyptus Avenue are mostly zoned Office Commercial (OC) with some Community Commercial (CC) zoning to the west at Old 215/Valley Springs Parkway and Public (P) zoning where Edgemont Elementary School is located.

Existing single-family residences are located to south, west, and northeast of the project site. Single-family residence and a mobile home park are located immediately to the east of the project site. Edgemont Elementary School is located to north of the project site across Eucalyptus Avenue. There is an office building located to the northeast at the intersection of Day Street and Eucalyptus Avenue of the project site in the City of Riverside.

The proposed Residential 20 (R20) use is compatible with the established land use designations of the parcels in the area. The change from a proposed commercial to residential use on the project site is reflective of a reconsideration of land use patterns in this area of the community.

3. **Health, Safety and Welfare –** The proposal will not be detrimental to the public health, safety or welfare.

FACT: The proposed Zone Change will not result in unacceptable levels of protection from natural and man-made hazards to life, health, and property and is therefore consistent with General Goal 9.6.1. The project site is located within approximately 2,000 feet of Fire Station #6 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations. The proposed Zone Change will not allow for development that would be inconsistent with General Plan Objective 6.1 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage due to seismic ground shaking and secondary effects or General Plan Objective 6.2 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.

The proposed Zone Change will not adversely affect the public health, safety or general welfare. The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects.

An Initial Study / Mitigated Negative Declaration were prepared which assessed the potential of the proposed Zone Change and the related Plot Plan application to impact the environment. The proposed project includes the development of the project site with a 112 unit apartment complex on approximately 6.63 acres. The project site is located in the City of Moreno Valley, County of Riverside and Sate of California (State). The project site is located at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street.

The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project.
The Mitigated Negative Declaration has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY RECOMMENDS** that the City Council:

1. **ADOPT** a Negative Declaration for Application No. PA14-0044 pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** Change of Zone Application No. PA14-0044, based on the findings contained in this resolution.

APPROVED this 12th day of March, 2015.

_____
Jeffrey Sims
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

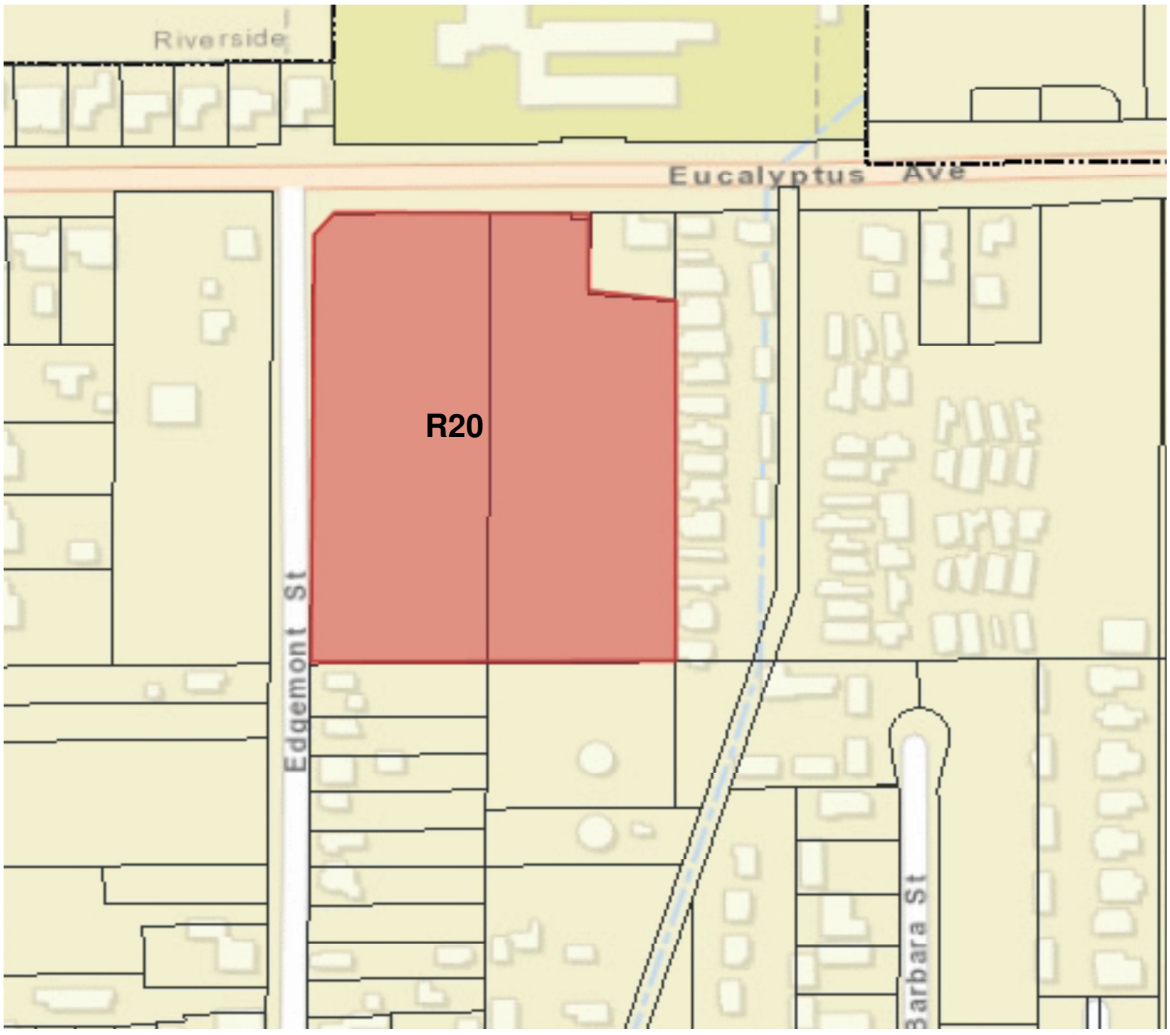
APPROVED AS TO FORM:

_____
City Attorney

ATTACHED: Zone Change Map

ZONE CHANGE

Application No. PA14-0044
APN's 263-120-020 and 263-120-025
Resolution No. 2015-07



N

ADOPTED_____

EFFECTIVE_____

Exhibit A

RESOLUTION NO. 2015-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PA14-0042: A PLOT PLAN FOR DEVELOMENT OF A 112 UNIT APARTMENT PROJECT ON A 6.63 ACRE PARCEL GENERALLY LOCATED AT THE SOUTHEAST CORNER OF EDGEMONT STREET AND EUCALYPTUS AVENUE.

WHEREAS, Latco Enterprises, has filed an application for the approval of Plot Plan application PA14-0042 for development of a 112 unit apartment project as described in the title of this Resolution; and

WHEREAS, on March 12, 2015, the Planning Commission of the City of Moreno Valley held a meeting to consider the application.

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

WHEREAS, there is hereby imposed on the subject development project certain fees, dedications, reservations and other exactions pursuant to state law and City ordinances.

WHEREAS, conditions of approval have been prepared for the project and are attached to this resolution as Exhibit A.

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found and determined by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on March 12, 2015, including written and oral staff reports, and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed use is consistent with the General Plan, and its goals, objectives, policies and programs.

FACT: The development of the 56 one bedroom and 56 two bedroom units proposed by the project at this location would address General Plan Community Goal 2.4 which encourages a supply of housing in sufficient numbers suitable to meet the diverse needs of future residents and to support healthy economic development without creating an oversupply of any particular type of housing.

General Plan Objective 2.2.10 which specifies that the primary purpose of areas designated Residential 20 is to provide a range of high density multi-family housing types. Developments within Residential 20 areas shall also provide amenities, such as common open spaces and recreational facilities. The maximum density shall be 20 dwelling units per acre. As designed and conditioned, the proposed 112 unit apartment is consistent with the consistent with the above stated objective.

The proposed General Plan Amendment is consistent with General Plan Circulation Element Goal 5.1 by developing a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map, Figure 9-1, which provides access to development and supports mobility requirements of the system's users.

The proposed apartment project would not be in conflict with existing General Plan policies, goals, objectives and programs of the General Plan.

2. **Conformance with Zoning Regulations –** The proposed use complies with all applicable zoning and other regulations.

FACT: The project has been designed and conditioned for consistency with Municipal Codes Sections 9.02.070 Plot Plans, 9.03.040 Residential Site Development Standards, and 9.16 Design Guidelines.

The project site is currently zoned Community Commercial (CC). The project proposes a Zone Change to R20 to allow for development of multiple family residential uses. Subject to approval of the related General Plan Amendment (PA14-0043) and Zone Change application (PA14-0044) the proposed use will comply with all applicable zoning and other regulations.

3. **Health, Safety and Welfare –** The proposed use will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity.

FACT: The proposed General Plan Amendment will not result in unacceptable levels of protection from natural and man-made hazards to life, health, and property and is therefore consistent with General Goal 9.6.1. The project site is located within approximately 2,000 feet of Fire Station #6 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations. The proposed General Plan Amendment will not allow for development that would be inconsistent with General Plan Objective 6.1 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage due to seismic ground shaking and secondary effects or General Plan Objective 6.2 to minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. The proposed project is not exempt from CEQA. It was determined that an Initial Study would be prepared to determine whether the proposed project may have a significant effect on the environment.

An Initial Study / Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment, Zone Change and Plot Plan applications to impact the environment. The proposed project includes the development of the project site with a 112 unit apartment complex on approximately 6.63 acres. The project site is located in the City of Moreno Valley, County of Riverside and Sate of California (State). The project site is located at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street.

The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project.

The Mitigated Negative Declaration has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

4. **Location, Design and Operation –** The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

FACT: The project site is surrounded by development with improved street frontage along Eucalyptus Avenue and Edgemont Street and is surrounded by substantially urban uses. The area surrounding the proposed project includes single-family residences, an elementary school, and an office building across the street to the north and a single-family residence and mobile home park to the east. Land uses to the south include single-family residences and water tanks owned by Box Springs Mutual Water Company. Land uses to the west include vacant land and single-family residences.

The proposed apartment project is a permitted use in the R20 zone and the design of the proposed plot plan conforms to all development standards of the R20 zone and the design guidelines for multiple family uses as required within the City's Municipal Code. The project as designed and conditioned and subject to approval of the proposed Zone Change from CC to R20, is compatible with existing and proposed land uses in the vicinity.

C. FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan fee, Bridge and Thoroughfare Mitigation fee (Future) and Traffic Signal Mitigation fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for PA14-0042, incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d)(1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any impact fee, dedication, reservation, or other exaction described in this resolution begins on the effective date of this resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project

and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the Statute of Limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY RECOMMENDS** that the City Council:

1. **ADOPT** a Negative Declaration for Application No. PA14-0042 pursuant to the California Environmental Quality Act (CEQA) Guidelines; and

2. **APPROVE** Plot Plan Application No. PA14-0042, based on the findings contained in this resolution.

APPROVED this 12th day of March, 2015.

_____
Jeffrey Sims
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

Attached: Conditions of Approval

Exhibit A

CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL FOR PA14-0042
PLOT PLAN FOR A 112 UNIT APARTMENT PROJECT
ASSESSOR'S PARCEL NUMBERS: 263-120-020 AND 263-120-025

APPROVAL DATE:
EXPIRATION DATE:

_X_ Planning (P), including School District (S), Post Office (PO), Building (B)
_X_ Fire Prevention Bureau (F)
_X_ Public Works Department – Land Development Division (LD)
_X_ Public Works Department – Transportation Engineering Division (TE)
_X_ Financial & Management Services Dept. – Special Districts Division (SD)
_X_ Police Department (PD)

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Division

For questions regarding any Planning condition of approval, please contact the Planning Division at (951) 413-3206.

P1. Approval of Plot Plan PA14-0042 is subject to approval of General Plan Amendment application PA14-0043 and Zone Change application PA14-0044.

P2. Plot Plan PA14-0042 has been approved for development of a 112 unit apartment project on the 6.63 acres of Assessor's Parcel Numbers 263-120-020 and 263-120-025.

P3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever. Use means the beginning of substantial construction contemplated by this approval within the three-year period, which is thereafter pursued to completion, or the beginning of substantial utilization contemplated by this approval. (MC 9.02.230)

P4. The site shall be developed in accordance with the approved plans on file in the Community & Economic Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced

thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

P5. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

P6. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

P7. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), proposed for this development shall be designed in conformance with the sign provisions of the Municipal Code or approved sign program, if applicable, and shall require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

P8. The design of all swales and basins that are visible from the public right-of-way shall be integrated with the surrounding landscape areas.

Prior to Issuance of Grading Permits

P9. (GP) All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

P10. (GP) Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the City of Moreno Valley that a Cultural Resources Monitoring Agreement has been secured for qualified Tribal representatives, and that a professional archaeological monitor has been retained by the Applicant to conduct monitoring of all mass grading and trenching activities and has the authority to temporarily halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist and Tribal representatives shall attend the pre-grading meeting with the City and contractors to explain and coordinate the requirements of the monitoring program.

P11. (GP) Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that appropriate Native American representative(s), Project Archaeologist and the Tribal representative(s) shall be allowed to monitor and have received a minimum of 30 days advance notice of all mass grading and trenching activities. During grading and trenching operations, the Tribal representatives and the project archaeological monitor shall observe all mass grading and trenching activities per the Cultural Resources Monitoring Agreement. If the Archaeologist or Tribal representatives

suspect that an archaeological resource may have been unearthed, the archaeologist, in consultation with the tribal representative, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.

P12. If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and representatives of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). A treatment plan and/or preservation plan shall be prepared and by the archaeological monitor and reviewed by representatives of the appropriate Native American Tribe(s), the Project Applicant, and the City Planning Division and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The landowner shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe(s) for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated, as determined by the treatment plan, according to the current professional repository standards and may include the Pechanga Band's curatorial facility.

P13. (GP) Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan:

"If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

P15. (GP) Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan:

"If any suspected paleontological resources are discovered during ground-disturbing activities, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call a qualified paleontologist to the site to assess

the significance of the find. A qualified paleontologist shall evaluate the suspected resource. If the paleontologist determines that the find is not unique, construction shall be permitted to proceed. However, if the paleontologist determines that further information is needed to evaluate significance, the City of Moreno Valley shall be notified and a treatment plan shall be prepared and implemented in consultation with the City to protect the identified paleontological resource(s) from damage and destruction."

P16. If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98.

P17. (GP) If potential historic, archaeological, or paleontological resources are uncovered during excavation or construction activities at the project site, work in the affected area will cease immediately and a qualified person (meeting the Secretary of the Interior's standards (36CFR61)) shall be consulted by the applicant to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, prehistoric, or paleontological resource. Determinations and recommendations by the consultant shall be implemented as deemed appropriate by the Community & Economic Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all affected Native American Tribes before any further work commences in the affected area.

P18. (GP) Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

P19. (GP) Prior to approval of any grading permit, the developer shall submit for review and approval of a tree plan to the Planning Division. The plan shall identify all mature trees (4 inch trunk diameter or larger) on the subject property and City right-of-way. Using the grading plan as a base, the plan shall indicate trees to be relocated, retained, and removed. Replacement trees shall be shown on the plan, be a minimum size of 24 inch box, and meet a ratio of three replacement trees for each mature tree removed or as approved by the Planning Official. (GP Objective 4.4, 4.5, DG)

P20. (GP) Prior to approval of any grading permits, plans for any security gate system shall be submitted to the Planning Division for review and approval.

P21. (GP) Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of the Multiple Species Habitat Conservation Plan.

P22. (GP) Prior to the issuance of building permits, the site plan shall show decorative concrete paving for all driveway ingress/egress locations of the project.

P23. (GP) Decorative concrete shall be used to delineate pedestrian pathways across circulation aisles/paths within the drive aisles throughout the development to connect dwellings with open spaces and/or recreational uses and/or the public right-of-way. The pathways shall be shown on the precise grading plan. Accessible pedestrian pathways interior to the site cannot be painted. If delineation is necessary, then an alternative material is required. (GP Objective 46.8, DG)

P24. (GP) Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required along the southern and eastern property lines.
B. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.
C. Perimeter fencing and gates shall be decorative tubular steel or comparable materials and shall include decorative block pilasters and a cap.

P25. (GP) Prior to issuance of a grading permit, the following mitigation measure contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

- Mitigation Measure NOI-1 is provided that would require that the project applicant restrict the use of large bulldozers and other large equipment (greater than 150 horsepower) from operating within 15 feet of any off-site structure.

Prior to Issuance of Building Permits

P26. (BP) Prior to issuance of building permits, for multi-family projects that propose phased occupancy, a phasing plan application shall be submitted to the Planning Division for approval.

P27. (BP) Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria: transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building(s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30, DG)

P28. (BP) Prior to issuance of building permits, screening details shall be addressed on plans for trash enclosures submitted for Planning Division review and approval. For trash enclosures, landscaping shall be included on at least three sides. The trash enclosure, including any roofing, shall be compatible with the architecture for the project. (GP Objective 43.6, DG)

P29. (BP) Prior to issuance of building permits, two copies of a detailed, on-site, computer generated, point-by- point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used and shall include style, illumination, location, height and method of shielding. The lighting shall be designed in such a manner so that it does not exceed one-quarter foot-candle minimum maintained lighting measured from within five feet of any property line. The lighting level for all parking lots or structures shall be a minimum coverage of one foot-candle of light with a maximum of eight foot-candles. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, DG)

P30. (BP) Prior to issuance of building permits, the developer or developer's successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), Multi-species Habitat Conservation Plan (MSHCP) mitigation fees, and the City's adopted Development Impact Fees. (Ord)

P31. (BP) Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee

shall apply. The plans shall be prepared in accordance with the City's Landscape Standards and shall include:

A. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.
B. A drought tolerant, low water using landscape palette shall be utilized throughout the project. Sod shall be limited to gathering areas.
C. Street trees shall be provided every 40 feet on center in the right of way.
D. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.
E. Enhanced landscaping shall be provided at all driveway entries and street corner locations
F. The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.
G. Landscaping shall be provided on three sides of any trash enclosure.
H. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the project.

P32. (BP) Prior to the issuance of building permits, the plot plan shall include decorative concrete paving for all driveway ingress/egress locations for the project.

Prior to Issuance of Certificate of Occupancy

P33. (CO) Prior to issuance of Certificates of Occupancy or building final, all required landscaping and irrigation shall be installed. (MC 9.03.040)

P34. (CO) Prior to the issuance of Certificates of Occupancy or building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

P35. (CO) Prior to issuance of a certificate of occupancy, the following mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

- HAZ-1 – Prior to the issuance of the Certificate of Occupancy, the project applicant shall execute an aviation easement with the March Joint Powers Authority that provides for the dedication of the easement to March Inland Port Authority; and

- HAZ-2 – Prior to the occupancy of any apartment unit, the project applicant shall prepare general lease agreements for the project that shall include electromagnetic radiation notification.

- TRA-1 – Prior to the issuance of a Certificate of Occupancy, the project applicant shall construct the following improvements at the intersection of Edgemont Street/Eucalyptus Avenue:

  - Widen the northbound approach on Edgemont Street, between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and 36 foot curb-to-curb width, and contain the following geometrics:
    - One southbound return (through) lane;
    - One northbound left turn lane (Eucalyptus Avenue to project driveway); and
    - One northbound right turn lane (Eucalyptus Avenue to project driveway).

- TRA-2 – Prior to the issuance of a Certificate of Occupancy, the project applicant shall pay their fair-share cost to construct the following improvements on Edgemont Street, between Eucalyptus Avenue and the project driveway. Therefore, the following improvement would be required:

  - Widen the segment of Edgemont Street between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and contain the following geometrics:

    - One southbound return (through) lane with 12 to 14 feet of width;
    - One northbound left turn lane (Eucalyptus Avenue to project driveway) with a 12 foot width;
    - One northbound right turn lane (Eucalyptus Avenue to project driveway) with a 14 foot width;
    - New curb and gutter shall be constructed along the project frontage on the east side of Edgemont Street and at least 100 feet of new curb and gutter shall be constructed on the west side of Edgemont Street, south of Eucalyptus Avenue. From that point to the south, the edge of pavement may be unimproved, but a minimum 12 foot wide paved southbound lane shall be provided to the project's southern boundary.

Riverside County Airport Land Use Commission (ALUC)

The Airport Land Use Commission adopted a Consistency finding for this project with the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan at a public hearing on March 5, 2015 subject to the following conditions of approval:

P36. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

P37. The following uses shall be prohibited:

(a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

(b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

(c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses included landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

P38. The following notice shall be provided to all potential purchasers of the property, and shall be recorded as a deed notice:

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you

complete your purchase and determine whether they are acceptable to you. Business and Professions Code Section 11010(b)(13)(A)

P39. Any ground-level or abovegrou nd water retention or detention basin or facilities shall be designed so as to provide for a detention period for the design storm that does not exceed 48 hours and to remain totally dry between rainfalls. Vegetation in and around such facilities that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature.

P40. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive or irrigation controllers, access gates, etc.

Questions related to ALUC conditions P36 through P40 should be directed to personnel with the Riverside County Airport Land Use Commission at (951) 955-5132.

Building and Safety Division

B1. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Code, (CBC) Part 2, Title 24, California Code of Regulations including requirements for allowable area, occupancy separations, fire suppression systems, etc. The current code edition is the 2013 CBC including new energy regulations effective July 1, 2014.

B2. The proposed project may be classified as an R-2/U and A/B occupancy and shall comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2013 California Plumbing Code Table 4-1.

B3. The proposed development shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11A for accessibility standards for the disabled including all access to the site, parking, path of travel, apartment units, swimming pool and spa, exits, restrooms, customer and worker spaces, recreation facilities, etc.

B4. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

B5. The proposed development may be subject to the payment of required development fees as required by the City's Fee Ordinance at the time an application is submitted or prior to the issuance of permits as determined by the City.

B6. The proposed project may be subject to approval by the servicing Water District and all applicable fees and charges shall be paid to the District prior to permit issuance. Contact the appropriate water district for details.

B7. Prior to final inspection, all plans shall be placed on a CD Rom for reference and verification. Plans will include "as built" plans, revisions and changes. The CD will also include Title 24 energy calculations, structural calculations and all other pertinent information. It will be the responsibility of the developer and or the building or property owner(s) to bear all costs required for this process. The CD will be presented to the Building and Safety Division for review prior to final inspection and building occupancy. The CD will become the property of the Moreno Valley Building and Safety Division. In addition, a site plan showing the path of travel from public right of way with elevations will be required.

B8. Any construction within the city shall only be as follows: Monday through Friday (except for holidays which occur on week days), six a.m. to eight p.m.; weekends and holidays (as observed by the city and described in Chapter 2.55 of the MVMC), seven a.m. to eight p.m., unless written approval is obtained from the city building official or city engineer.

B9. Contact the Building Safety Division for permit application submittal requirements.

SCHOOL DISTRICT

S1. (BP) Prior to issuance of building permits, the developer shall provide to the Community Development Director a written certification by the affected school district that either: (1) the project has complied with the fee or other exaction levied on the project by the governing board of the district, pursuant to Government Code Section 65996; or (2) the fee or other requirement does not apply to the project.

UNITED STATES POSTAL SERVICE

PO1. (BP) Prior to the issuance of building permits, the developer shall contact the U.S. Postal Service to determine the appropriate type and location of mailboxes.

FIRE PREVENTION BUREAU

1. **While attic fire sprinklers are not required by NFPA 13R it is the Fire Chief's recommendation that sprinkler design for these units include appropriate upright sprinklers to be installed in attic spaces based on previous experience with unprotected attic space involved in a fire for protection of residents and property.**

With respect to the conditions of approval, the following fire protection measures shall be provided in accordance with Moreno Valley City Ordinances and/or recognized fire protection standards:

F1. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in force at the time of building plan submittal.

F2. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering __**1500**_ **GPM for**_**2**_ hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for the project will be determined at time of submittal. (CFC 507. 3, Appendix B). **The 75% reduction in fire flow was granted for the use of fire sprinklers throughout the facility. The reduction shall only apply to fire flow; hydrant spacing shall be per the fire flow requirements listed in CFC Appendix B and C.**

F3. Industrial, Commercial, Multi-family, Apartment, Condominium, Townhouse or Mobile Home Parks. A combination of on- site and off-site super fire hydrants (6" x 4" x 2 ½" x 2 ½") and super enhanced fire hydrants (6" x 4" x 4" x 2 ½") shall not be closer than 40 feet and more than 150 feet from any portion of the building as measured along approved emergency vehicular travel ways. The required fire flow shall be available from any adjacent fire hydrant(s) in the system. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, super or enhanced fire hydrants as determined by the fire code official shall be provided at spacing not to exceed 500 feet of frontage for transportation hazards. (CFC 507.5.7 & MVMC 8.36.060 Section K, L)

F4. Prior to issuance of Certificate of Occupancy or Building Final, "Blue Reflective Markers" shall be installed to identify fire hydrant locations in accordance with

City specifications. (CFC 509.1 and MV City Standard Engineering Plan 422 a, b, c)

F5. During phased construction, dead end roadways and streets which have not been completed shall have a turn-around capable of accommodating fire apparatus. (CFC 503.1 and 503.2.5)

F6. If construction is phased, each phase shall provide an approved emergency vehicular access way for fire protection prior to any building construction. (CFC 501.4)

F7. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)

F8. Prior to construction and issuance of building permits, all locations where structures are to be built shall have an approved Fire Department emergency vehicular access road (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4 and MV City Standard Engineering Plan 108d)

F9. Prior to construction and issuance of Building Permits, fire lanes and fire apparatus access roads shall have an unobstructed width of not less than twenty–four (24) or thirty (30) feet as approved by the Fire Prevention Bureau and an unobstructed vertical clearance of not less the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

F10. Prior to construction, all roads, driveways and private roads shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])

F11. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)

F12. Prior to building construction, dead end roadways and streets which have not been completed shall have a turnaround capable of accommodating fire apparatus. (CFC 503.2.5)

F13. The angle of approach and departure for any means of Fire Department access shall not exceed 1 ft. drop in 20 ft. (0.3 m drop in 6 m), and the design limitations of the fire apparatus of the Fire Department shall be subject to approval by the AHJ. (CFC 503 and MVMC 8.36.060)

F14. Prior to issuance of the building permit for development, independent paved access to the nearest paved road, maintained by the City shall be designed and constructed by the developer within the public right of way in accordance with City Standards. (MVMC 8.36.060, CFC 501.4)

F15. Prior to issuance of Certificate of Occupancy or Building Final, all residential dwellings shall display street numbers in a prominent location on the street side of the residence in such a position that the numbers are easily visible to approaching emergency vehicles. The numbers shall be located consistently on each dwelling throughout the development. The numerals shall be no less than four (4) inches in height and shall be low voltage lighted fixtures. (CFC 505.1, MVMC 8.36.060[I])

F16. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of six (6) inches in height for buildings and six (6) inches in height for suite identification on a contrasting background. Unobstructed lighting of the address(s) shall be by means approved by the Fire Prevention Bureau and Police Department. In multiple suite centers (strip malls), businesses shall post the name of the business on the rear door(s). (CFC 505.1, MVMC 8.36.060[I])

F17. Prior to issuance of a Certificate of Occupancy or Building Final, a "Knox Box Rapid Entry System" shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Chief. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)

F18. Prior to issuance of Building Permits, the applicant/developer shall participate in the Fire Impact Mitigation Program. (Fee Resolution as adopted by City Council)

F19. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire sprinkler system based on square footage and type of construction, occupancy or use. Fire sprinkler plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9, MVMC 8.36.100[D])

F20. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)

F21. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall:

a) Be signed by a registered civil engineer or a certified fire protection engineer;
b) Contain a Fire Prevention Bureau approval signature block; and
c) Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau.

After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

Existing fire hydrants on public streets are allowed to be considered available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3)

F22. Complete plans and specifications for fire alarm systems, fire-extinguishing systems (including automatic sprinklers or standpipe systems), clean agent systems (or other special types of automatic fire-extinguishing systems), as well as other fire-protection systems and appurtenances thereto shall be submitted to the Moreno Valley Fire Prevention Bureau for review and approval prior to system installation. Submittals shall be in accordance with CFC Chapter 9 and associated accepted national standards.

F23. Emergency and Fire Protection Plans shall be provided when required by the Fire Prevention Bureau. (CFC Section 105, MVMC 8.36.100[A])

F24. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer must submit a simple plot plan, a simple floor plan, and other plans as requested, each as an electronic file in .dwg format, to the Fire Prevention Bureau. Alternate file formats may be acceptable with approval by the Fire Chief.

F25. Approval of the safety precautions required for buildings being constructed, altered or demolished shall be required by the Fire Chief in addition to other approvals required for specific operations or processes associated with such construction, alteration or demolition. (CFC Chapter 33 & CBC Chapter 33)

F26. Construction or work for which the Fire Prevention Bureau's approval is required shall be subject to inspection by the Fire Chief and such construction or work shall remain accessible and exposed for inspection purposes until approved. (CFC Section 105)

F27. The Fire Prevention Bureau shall maintain the authority to inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the Fire Chief for the purpose of ascertaining and causing to be corrected any conditions which would reasonably tend to cause fire or contribute to its spread, or any violation of the purpose or provisions of this code and of any other law or standard affecting fire safety. (CFC Section 105)

F28. Permit requirements issued, which designate specific occupancy requirements for a particular dwelling, occupancy, or use, shall remain in effect until such time as amended by the Fire Chief. (CFC Section 105)

F29. In accordance with the California Fire Code Appendix Chapter 1, where no applicable standards or requirements are set forth in this code, or contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards as are approved shall be deemed as prima facie evidence of compliance with the intent of this code as approved by the Fire Chief. (CFC Section 102.8)

F30. Any alterations, demolitions, or change in design, occupancy and use of buildings or site will require plan submittal to the Fire Prevention Bureau with review and approval prior to installation. (CFC 102.3)

F31. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.

PUBLIC WORKS DEPARTMENT – LAND DEVELOPMENT DIVISION

Note: All Special Conditions are in **Bold** lettering and follow the standard conditions.

The following are the Public Works Department – Land Development Division Conditions of Approval for this project and shall be completed at no cost to any government agency. All questions regarding the intent of the following conditions shall be referred to the Public Works Department – Land Development Division.

LD1. (G) The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). (MC 9.14.010)

LD2. (G) If the project involves the subdivision of land, maps may be developed in phases with the approval of the City Engineer. Financial security shall be provided for all improvements associated with each phase of the map. The boundaries of any multiple map increment shall be subject to the approval of the City Engineer. The City Engineer may require the dedication and construction of necessary utilities, streets or other improvements outside the area of any particular map, if the improvements are needed for circulation, parking, access, or for the welfare or safety of the public. (MC 9.14.080, GC 66412 and 66462.5) If the project does not involve the subdivision of land and it is necessary to dedicate right-of-way/easements, the developer shall make the appropriate offer of dedication by separate instrument. The City Engineer may require the construction of necessary utilities, streets or other improvements beyond the project boundary, if the improvements are needed for circulation, parking, access, or for the welfare or safety of the public.

LD3. (G) Developer shall correctly show all existing easements, traveled ways, and drainage courses on all plans.

LD4. (G) In the event right-of-way or offsite easements are required to construct offsite improvements necessary for the orderly development of the surrounding area to meet the public health and safety needs, the developer shall make a good faith effort to acquire the needed right-of-way in accordance with the Land Development Division's administrative policy. In the event that the developer is unsuccessful, he shall enter into an agreement with the City to acquire the necessary right-of-way or offsite easements and complete the improvements at such time the City acquires the right-of-way or offsite easements which will

permit the improvements to be made. The developer shall be responsible for all costs associated with the right-of-way or easement acquisition. (GC 66462.5)

LD5. (G) If improvements associated with this project are not initiated within two years of the date of approval of the Public Improvement Agreement, the City Engineer may require that the improvement cost estimate associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the Public Improvement Agreement or issuance of a permit.

LD6. (G) The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:

(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.

(b) Observance of working hours as stipulated on permits issued by the Public Works Department.

(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.

(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements shall be adhered to during the grading operations.

Violation of any condition or restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor(s) to remedies as noted in the City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

LD7. (G) The developer shall protect downstream properties from damage caused by alteration of drainage patterns, i.e., concentration or diversion of flow. Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. (MC 9.14.110)

LD8. (G) Public drainage easements, when required, shall be a minimum of 25 feet wide and shall be shown on the map and plan, and noted as follows: "Drainage Easement – no structures, obstructions, or encroachments by land fills are allowed." In addition, the grade within the easement area shall not exceed a 3:1 (H:V) slope, unless approved by the City Engineer.

LD9. (G) A detailed final drainage study shall be submitted to the City Engineer for review and approval at the time of any improvement or grading plan submittal. The study shall be prepared by a registered civil engineer and shall include existing and proposed hydrologic conditions. Hydraulic calculations are required for all drainage control devices and storm drain lines. (MC 9.14.110). Prior to approval of the related improvement or grading plans, the developer shall submit the approved drainage study, on compact disk, in (.pdf) digital format to the Land Development Division of the Public Works Department.

LD10. (G) Water quality basins designed to meet Water Quality Management Plan (WQMP) requirements for Multi-family residential development may not be used as a construction best management practice. The water quality basin shall be maintained for the entire duration of project construction and be used to treat runoff from those developed portions of the project. The water quality basin shall be protected from upstream construction related runoff by having proper best management practices in place and maintained. The water quality basin shall be graded per the approved design drawings and once landscaping and irrigation has been installed, it and its maintenance shall be turned over to an established Homeowner's Association.

LD11. (G) Prior to final map approval, commencing applicable street improvements, or obtaining the first building permit, the developer shall enter into a Development Impact Fee (DIF) Improvement Credit Agreement to secure credit and reimbursement for the construction of applicable arterial street, traffic signal, and/or interchange improvements. If the developer fails to complete this agreement prior to the timing as specified above, no credits or reimbursements will be given. The applicant shall pay Arterial Streets, Traffic Signals, and Interchange Improvements development impact fees adopted by the City Council by resolution. (Ord. 695 § 1.1 (part), 2005) (MC 3.38.030, .040, .050)

LD12. (G) Prior to final map approval, commencing applicable street improvements, or obtaining the first building permit, the developer shall enter into a Transportation Uniform Mitigation Fee (TUMF) Improvement Credit Agreement to secure credit and reimbursement for the construction of applicable improvements. If the developer fails to complete this agreement by the timing as specified above, no

credits or reimbursements will be given for any work. Prior to approval of the TUMF Improvement Credit Agreement, an approved engineer's cost estimate and street improvement plan are required.

LD13. (G) The final conditions of approval issued by the Planning Division subsequent to Planning Commission approval shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plan sets on twenty-four (24) inch by thirty-six (36) inch mylar and submitted with the plans for plan check. These conditions of approval shall become part of these plan sets and the approved plans shall be available in the field during grading and construction.

LD14. (G) Upon approval of the tentative tract map by the Planning Commission, the Developer shall submit the approved tentative tract map on compact disk in (.dxf) digital format to the Land Development Division of the Public Works Department.

LD15. (G) This Project will be required to submit design plans for plan review of Rough Grading Plans, Precise Grading Plans, Street Improvement Plans, Storm Drain Plans, Sewer and Water Plans, Landscape and Irrigation Plan(s) prepared for the "Water Quality Ponds/Bio-Swales", Traffic Control Plans and Signing and Striping Plans, on 24"x36" sheet size for City review, approval and signed by a registered civil engineer and other registered/licensed professional as required.

LD16. (RG) Prior to rough grading plan approval, this project shall submit for review and approval a lot line adjustment for the intention of eliminating the common lot line between APNs 263-120-020 and 263-120-025.

LD17. (BP) Prior to building permit issuance, this project shall record the lot line adjustment mentioned in condition of approval LD17.

LD18. (GPA) Prior to approval of Rough and Precise Grading plans, the developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. This includes accommodating existing drainage entering the project from off-site. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. A grading permit shall be obtained from the Public Works Department, Land Development Division prior to commencement of any grading outside of the City maintained road right-of-way.

d. All improvement plans are substantially complete and appropriate clearance and at-risk letters are provided to the City. (MC 9.14.030)

e. The developer shall submit a soils and geologic report to the Public Works Department – Land Development Division. The report shall address the soil's stability and geological conditions of the site.

LD19. (GPA) Prior to Rough and Precise Grading plan approval, the developer shall select and implement treatment control best management practices (BMPs) that are medium to highly effective for treating Pollutants of Concern (POC) for the project. Projects where National Pollution Discharge Elimination System (NPDES) mandates water quality treatment control best management practices (BMPs) shall be designed per the City of Moreno Valley guidelines or as approved by the City Engineer.

LD20. (GPA) Prior to approval of the Rough grading plans for projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB). The WDID# shall be noted on the grading plans prior to issuance of the first grading permit.

LD21. (GPA) Prior to the Rough and Precise Grading plan approval, , the Developer shall submit two (2) copies of the final project-specific Water Quality Management Plan (F-WQMP) for review and approval by the City Engineer that :

a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;

b. Incorporates Source Control BMPs and provides a detailed description of their implementation;

c. Incorporates Treatment Control BMPs and provi des information regarding design considerations;

d. Describes the long-term oper ation and maintenance requirements for BMPs requiring maintenance; and

e. Describes the mechanism for f unding the long-term operation and maintenance of the BMPs.

f. The approved F-WQMP shall be submi tted to the Storm Water Program Manager on compact disk(s) in Microsoft Word format;

g. Upon appr oval, a F-WQMP Identificati on Number is issued by the Storm Water Management Section and shall be noted on the r ough grading plans as confirmation that a project-s pecific F-WQMP approval has been obtained;

h. The approved final project-specific WQMP shall be incorporated by reference or attached to the project's Storm Water Pollution Prevention Plan as the Post-Construction Management Plan.

A copy of the final F-WQMP template can be obtained on the City's Website or by contacting the Land Development Divis ion of the Public Works Department.

LD22. (GPA) Prior to the approval of t he grading plans, the developer shall pay applicable remaining grading plan check and inspection fees.

LD23. (GP) Prior to the issuance of a gr ading permit the developer shall s ubmit recorded slope easem ents from adjacent la ndowners in all areas where grading resulting in slopes is proposed t o take place outside of the project boundaries. For all other offsite grading, written permission from adjacent property owners shall be submitted.

LD24. (GP) Prior to issuanc e of a grading permit, if the pro ject does not involve the subdivision of land and if the developer chooses to construct the project in construction phases, a Construction Phasing Plan for the construction of on-site public and private improv ements shall be reviewed and approv ed by the City Engineer.

LD25. (GP) Prior to issuanc e of a grading permit, if the fee has not already been paid prior to map approval, the developer sha ll p ay Area Drainage Plan (ADP) fees. The developer shall provide a receipt to the City showing t hat ADP fees have

been paid to Riverside County Flood Control and Water Conservation District. (MC 9.14.100).

LD26. (GP) Prior to issuance of a grading permit, security, in the form of a cash deposit (preferable), letter of credit, or performance bond shall be required to be submitted as a guarantee of the completion of the grading required as a condition of approval of the project. (MC 8.21.070)

LD27. (GP) Prior to issuance of a grading permit, security, in the form of a cash deposit (preferable), letter of credit, or performance bond shall be required to be submitted as a guarantee of the implementation and maintenance of erosion control measures required as a condition of approval of the project. At least twenty-five (25) percent of the required security shall be in cash and shall be deposited with the City. (MC 8.21.160)

Prior to Map Approval or Recordation

LD28. (OC) Prior to an Occupancy Permit, the developer shall submit a copy of the Covenants, Conditions and Restrictions (CC&Rs) to the Land Development Division for review and approval. The CC&Rs shall include, but not be limited to, access easements, reciprocal access, private and/or public utility easements as may be relevant to the project, and documentation informing future owners of their implementation and maintenance requirement of the approved F-WQMP. In addition, for multi-family residential development, the developer shall submit bylaws and articles of incorporation for review and approval as part of the maintenance agreement for any water quality basin.

LD29. (IP) Prior to approval of the Improvement Plans, all street dedications shall be irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer. All dedications shall be free of all encumbrances as approved by the City Engineer.

LD30. (PGP) Prior to the Precise Grading Plan Permit, if the developer chooses to construct the project in construction phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be reviewed and approved by the City Engineer. This approval must be obtained prior to the Developer submitting a Phasing Plan to the California State Department of Real Estate.

LD31. (BP) Prior to issuance of the first building permit, this project is subject to requirements under the current permit for storm water activities required as part

of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act and must adhere to the following requirements:

a. Establish a Home Owners Assoc iation (HOA) to finance the maintenance of the "Water Quality Ponds/Bio-swales" . Any lots which are identified a s "Water Quality Ponds/Bio-Swales" shall be owned in fee by the HOA.

b. Dedicate a maintenance easement to the City of Moreno Valley.

c. Execute a maintenance agreement between the City of Moreno Valley and the HOA. The maintenance agreement must be approved by City Council.

d. Establish a trust fund per the terms of the maintenance agreement.

e. Provide a certificate of insuranc e per t he terms of the maintenance agreement.

f. Select one of the followin g options to meet the fi nancial responsibility t o provide storm water utilities services for the required continuous operation, maintenance, monitoring system ev aluations and enhancements, remediation and/or repl acement, all in accordance with Resolution No . 2002-46.

   i. Participate in the mail ballo t proceeding in co mpliance with Proposition 218, for the Resident ial NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process, or

   ii. Establish an endowm ent to cover fu ture maintenance costs for the Residential NPDES Regulatory Rate Schedule.

g. Notify the Special Distri cts Division of the financial option selec ted. The final option selected shall be in place pr ior to the issuance of certi ficate of occupancy. (California Government Code & Municipal Code)

LD32. (GP) Prior to the issuance of any Grading Permit, the Grading Plan(s) and Landscape and Irrigation Plan(s) prepared fo r the "Water Quality Ponds/Bio-Swales" shall be drawn on twenty-four (24) inch by thirty-six (36) inch mylar and signed by a registered civil eng ineer or other registered/ licensed professional as required. The dev eloper, or the developer's succ essors or assignees shall secure the initials of the Engineering Division Manager or his designe e on the mylars prior to the plans being approved by the City Engineer. (MC 9.14.100.C.2)

LD33. (IPA) Prior to approval of the improvement plans, the developer shall submit clearances from all applicable agencies, and pay all outstanding plan check fees. (MC 9.14.210)

LD34. (IPA) All public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer in order for the Public Improvement Agreement and accompanying security to be executed.

LD35. (IPA) The street improvement plans shall comply with all applicable City standards and the following design standards throughout this project:

a. Corner cutbacks in conformance with City Standard MVSI-165-0 shall be shown on the Improvement Plans, and offered for dedication by separate instrument.

b. Lot access to major thoroughfares shall be restricted except at intersections and approved entrances as shown on the approved plot plan.

c. The minimum centerline and flow line grades shall be one percent unless otherwise approved by the City Engineer. (MC 9.14.020)

d. All street intersections shall be at ninety (90) degrees plus or minus five (5) degrees per City Standard No. MVSI-106A-0, or as approved by the City Engineer. (MC 9.14.020)

e. All reverse curves shall include a minimum tangent of one hundred (100) feet in length.

LD36. (IPA) Prior to approval of the improvement plans, the developer shall pothole to determine the exact location of existing wet and dry underground utilities. The improvement plans shall be designed based on the pothole field investigation results. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations. Any conflicting utilities shall be identified and addressed on the plans. The pothole survey data shall be submitted with the street improvement plans for reference purposes.

LD37. (IPA) Prior to approval of the improvement plans, the developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, those

access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless approved otherwise by the City Engineer.

LD38. (IPA) Prior to approval of the improvement plans, drainage facilities with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided. (MC 9.14.110)

LD39. (IPA) Prior to the approval of the improvement plans, the hydrology study shall show that the 10-year storm flow will be contained within the curb and the 100-year storm flow shall be contained within the street right-of-way. In addition, one lane in each direction shall not be used to carry surface flows during any storm event for street sections equal to or larger than a minor arterial. When any of these criteria is exceeded, additional drainage facilities shall be installed. (MC 9.14.110 A.2)

LD40. (IPA) The project shall be designed to accept and properly convey all off-site drainage flowing onto or through the site. All storm drain design and improvements shall be subject to review and approval of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of the Development Code will apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the Public Works Department – Land Development Division. (MC 9.14.110) .

LD41. (IPA)Prior to storm drain plan approval, the plans shall clearly identify the maintenance responsibility of proposed storm drain lines. Generally, those storm drains within private streets will be maintained by a homeowner's association and those within public streets by the City or RCFC&WCD.

LD42. (CP) All work performed within the City right-of-way requires an encroachment permit. As determined by the City Engineer, security may be required for work within the right-of-way. Security shall be in the form of a cash deposit or other approved means. The City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of the construction permit. All inspection fees shall be paid prior to issuance of construction permit. (MC 9.14.100)

LD43. (CP) Prior to issuance of an encroachment permit, all public improvement plans prepared and signed by a registered civil engineer in accordance with City standards, policies and requirements shall be approved by the City Engineer.

LD44. (CP) Prior to issuance of an encroachment permit, the developer shall submit all improvement plans on compact disks, in (.dxf) digital format to the Land Development Division of the Public Works Department.

LD45. (CP) Prior to issuance of construction permits, the developer shall pay all applicable inspection fees.

LD46. (BP) Prior to issuance of building permits for non-subdivision projects, all street dedications shall be irrevocably offered to the public and shall continue in force until the City accepts or abandons such offers, unless otherwise approved by the City Engineer. All dedications shall be free of all encumbrances as approved by the City Engineer.

LD47. (BP) Prior to the issuance of the first building permit (excluding model homes), the Developer shall execute and record a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," to provide public notice of the requirement to implement the approved final project-specific WQMP and the maintenance requirements associated with the WQMP

> A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant," can be obtained by contacting the Land Development Division of the Public Works Department.

LD48. (BP) Prior to issuance of a building permit (excluding model homes), an approval by the City Engineer is required of the water quality control basin(s). The developer shall provide certification to the line, grade, flow test and system invert elevations.

LD49. (BP) Prior to issuance of a building permit, all pads shall meet pad elevations per approved plans as noted by the setting of "Blue-top" markers installed by a registered land surveyor or licensed engineer, and the Engineer of Record and/or the Geotechnical Engineer shall provide pad certifications verifying the graded pads are in accordance with the approved grading plans.

LD50. (BP) Prior to issuance of a building permit, the developer shall submit for review and approval, a Waste Management Plan (WMP) that shows data of waste tonnage, supported by original or certified photocopies of receipts and weight tags or other records of measurement from recycling companies and/or landfill

and disposal companies. The Waste Management Plan shall contain the following:

a. The estimated volume or weight of project waste to be generated by material type. Project waste or debris may consist of vegetative materials including trees, tree parts, shrubs, stumps, logs, brush, or any other type of plants that are cleared from a site. Project waste may also include roadwork removal, rocks, soils, concrete and other material that normally results from land clearing.

b. The maximum volume or weight of such materials that can be feasibly diverted via reuse and recycling.

c. The vendor(s) that the applicant proposes to use to haul the materials.

d. Facility(s) the materials will be hauled to, and their expected diversion rates.

e. Estimated volume or weight of clearing, grubbing, and grading debris that will be landfilled.

Approval of the WMP requires that at least fifty (50) percent of all clearing, grubbing, and grading debris generated by the project shall be diverted, unless the developer is granted an exemption. Exemptions for diversions of less than fifty (50) percent will be reviewed on a case by case basis. (AB939, MC 8.80)

LD51. (BP) Prior to issuance of the first building permit, the developer shall record with the County-Clerk Recorder a "Covenant and Agreement" that informs future property owners and Home Owners Association (HOA) of the requirement to maintain bio-retention facility, as shown on the Grading Plans on file at the City of Moreno Valley Public Works Department as a bio-retention/detention basin. The owner will not be allowed to build over, grade, or otherwise modify the bio-retention/detention basin. The "Covenant and Agreement" shall be in a form acceptable to the City of Moreno Valley. Proof of recordation must be provided to the City prior to issuance of the first building permit (excluding model homes).

LD52. (CO) Prior to issuance of the last certificate of occupancy or building final, the developer shall pay all outstanding fees.

LD53. (CO) Prior to issuance of the first certificate of occupancy (excluding model homes), this project is subject to requirements under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act. In compliance

with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Following are the requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

   i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

   ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. (California Government Code & Municipal Code)

LD54. (CO) The City of Moreno Valley has an adopted Development Impact Fee (DIF) nexus study. All projects unless otherwise exempted shall be subject to the payment of the DIF prior to issuance of the first occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy. Cottonwood Avenue may be eligible for DIF credits for eligible improvements. The developer would have to enter into a credit agreement to secure credit.

LD55. (CO) The City of Moreno Valley has an adopted area wide Transportation Uniform Mitigation Fee (TUMF). All projects unless otherwise exempted shall be subject to the payment of the TUMF prior to issuance of the first occupancy. The fees are subject to the provisions of the enabling ordinance and the fee schedule in effect at the time of occupancy.

LD56. (CO) Prior to issuance of a certificate of the first occupancy or building final, the developer shall construct <u>all</u> public improvements in conformance with applicable City standards, except as noted in the Special Conditions, including but not limited to the following applicable improvements:

a. Street improvements in cluding, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandr el, sidewalks, drive approaches, pedestrian ramps, street lights, signing, s triping, under sidewalk drains, landscaping and irrigation, medi ans, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities includ ing, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under gro unding of existing an d pr oposed utility lin es less tha n 115,000 volts.

f. Relocation of overhead electric al utilit y lin es includ ing, but not l imited to: electrical, cable and telephone.

LD57. (CO) Prior to issuance of the first ce rtificate of occupancy or building final, all existing and new utilities adjacent to and on-site shall be plac ed underground in accordance with City of Moreno Valley ordinances. (MC 9.14.130)

LD58. (CO) Prior to issuanc e of a certi ficate of occupancy or building final for the last 20% or las t 5 lots (whichever is gr eater, unless as otherwise determined by the City Engineer) residential buildings of any Phas e, punc h list work for improvements and capping of streets in that phase must be completed and approved for acceptance by the City.

LD59. (CO) Prior to issuance of the first ce rtificate of occupancy or building final, in order to treat for water quality the sub-ar ea tributary to the basin, the Developer must comply with the following:

a. The water quality basin and all asso ciated treatment control BMPs and all hardware per the approved civil drawing must be c onstructed, certified and approved by the City Engineer includ ing, but not limited to, piping, forebay, aftbay, trash rack, etc.) Landscape and irriga tion plans are not approved for installation at this time.

b. Provide the City with an Engineer's Line and Grade Certification.

c. Perform and pass a flow test per City test procedures.

LD60. (CO) Prior to issuanc e of a certi ficate of occupancy or building final for the last 20% of the permitted structures or the last five (5) lots (whichever is greater) for any Phase of the development , the Developer shall:

a. Notify City Staff (Land Development Div ision) prior to construction and installation of all structural BMPs so that an inspection(s) can be performed.

b. Demonstrate that all structural BMPs de scribed in the appr oved final project-specific WQMP have been c onstructed and ins talled in conformance with the approved plans, r eports, recommendations and specifications;

c. Demonstrate that Devel oper is prepared to implem ent all non-structural BMPs described in the approved final project-specific WQMP; and

d. Demonstrate that an adequat e number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality basin , including regrading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval from City to install irrigation and landscaping.

h. Complete installation of irrigation and landscaping.

LD61. (CO) Prior to issuance of a certificate of occupancy or building final, the applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constr ucted and functional in accordance with the approved Final Water Quality Management Plan (WQMP)

b. Certification of best management practices (BMPs) from a state lic ensed civil engineer. An orig inal WQMP BMP Certificat ion shall be s ubmitted to the City for review and approval.

LD62. (AOS) Aggregate slur ry, as defined in Section 203-5 of Stand ard Specifications for Public Works Construction, may be requi red just prior to the end of the one-year warranty period of the pub lic streets at the discretion of the City Engineer. If slurry is required, the developer/contra ctor must provide a slurry mix design

submittal for City Engineer approval. The latex additive shall be Ultra Pave 70 (for anionic – per project geotechnical report) or Ultra Pave 65 K (for cationic – per project geotechnical report) or an approved equal. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and- one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

SPECIAL CONDITIONS

LD63. Prior to rough grading the developer shall obtain from all on-site easements holders written permission for right of entry for grading and construction.

LD64. Prior to rough grading plan approval, the plans shall clearly show that any slope near the public right-of-way has a minimum set-back area at 2% maximum of 2 feet before the start of the top or toe of slope.

LD65. Prior to rough grading plan approval, the grading plans shall clearly demonstrate that drainage is properly collected and conveyed. The plans shall show all necessary on-site and off-site drainage improvements to properly collect and convey drainage entering, within and leaving the project. This may include, but not be limited to on-site and perimeter drainage improvements to properly convey drainage within and along the project site, and downstream off-site improvements. The developer will be required to obtain the necessary permission for off-site construction, including easements.

LD66. Prior to approval of any grading permit, the developer shall provide Final Drainage Study and shall clearly demonstrate this project's increased runoff mitigation. This project shall not discharge runoff at a rate greater in the post-developed condition than that in the pre-developed condition, for any given storm event. The storms to be studied include the 1-hour, 3-hour, 6-hour and 24-hour duration events for the 2-year, 5-year, 10-year and 100-year return frequencies. Final approved study to be provided in electronic format.

LD67. Prior to any grading plan permit, as all of this site resides in FEMA flood zone designation Zone X Shaded which, by definition, could include 100 year flooding up to 1 foot, the plans shall clearly demonstrate that any

building finished floor elevations shall be 1 foot minimum above the 100-year base flood elevation.

LD68. Prior to any grading plan permit, emergency overflow areas shall be shown at all applicable drainage improvement locations in the event that the drainage improvement fails or exceeds full capacity. This may include, but not be limited to, an emergency spillway in the basin and an emergency overflow at any sump catch basin location. The developer is responsible for securing any necessary on-site or off-site drainage easements as required for emergency overflow.

LD69. Prior to issuance of a building permit, the developer shall guarantee the construction of the following improvements by entering into a public improvement agreement and posting security. The improvements shall be completed prior to occupancy of the first building or as otherwise determined by the City Engineer.

a. Eucalyptus Avenue, Divided Major Arterial, City Standard MVSI-101A-0 (134' RW / 110' CC) shall construct pavement to current City Standards and install, replace and/or repair any missing, damaged or substandard improvements, 7 feet of additional right-of-way, or that amount required to ensure a 67' centerline to right-of-way distance, shall be dedicated on the south side of Eucalyptus Avenue along the project's north frontage per separate instrument.

b. Edgemont Street, General Local Street, City Standard MVSI-107A-0 (56' RW / 36' CC) shall be constructed to half-width plus an additional 12 feet west of the centerline, along the entire project's west frontage. 4 feet of additional right-of-way shall be dedicated on the east side of Edgemont Street along the project's west frontage per separate instrument. Improvements shall consist of, but not be limited to, pavement, base, redwood header, curb, gutter, mid-block cross gutter as needed and as approved by the City Engineer, sidewalk, driveway approaches, drainage structures, any necessary offsite improvement transition/joins to existing, streetlights, pedestrian ramps, removal/relocation and/or undergrounding of any power poles with overhead utility lines less than 115,000 volts, and dry and wet utilities.

c. Driveway approach shall be constructed per City Standard No. MVSI-112C-0. All plans shall show an additional 4-foot right-of-way

dedication behind driveway approaches to accommodate pedestrian access.

d. No decorative pavers shall be placed within the public right-of-way.

e. Pavement core samples of existing pavement may be taken and findings submitted to the City for review and consideration of a lesser width of pavement improvements at time of design plan review. The City will determine the adequacy of the existing pavement structural section. If the existing pavement section is found to be adequate, then a lesser width than that specified above for street pavement improvements may be allowed, as approved by the City Engineer. If the existing pavement section is found to be inadequate, the Developer shall construct the streets to the limits as listed above.

LD70. Prior to issuance of a building permit, additional right-of-way shall be dedicated, per separate instrument, to accommodate the corner cutback area at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street per City Standard No. MVSI-165-0

LD71. Prior to issuance of a building permit, the applicant shall schedule a walk through with a Public Works Inspector to inspect existing improvements within public right-of-way along project frontage. The applicant will be required to install, replace and/or repair any missing, damaged or substandard improvements including handicap access ramps that do not meet current City standards. The applicant shall post security to cover the cost of the repairs and complete the repairs within the time allowed in the public improvement agreement used to secure the improvements.

LD72. Prior to issuance of the first occupancy permits, all overhead utility lines less than 115,000 volts fronting or within the entire project site boundary shall be placed underground per Section 9.14.130C of the City Municipal Code.

LD73. The Applicant shall prepare and submit for approval a final, project-specific water quality management plan (F-WQMP) for PA14-0032 Tract No. 34544 Project (Project). The F-WQMP shall be consistent with the approved Amended P-WQMP and in full conformance with the document; "Water Quality Management Plan, A Guidance Document for the Santa Ana Region of Riverside County," with an approval date of October 22, 2012 (WQMP

Guidance). The F-WQMP shall be submitted and approved prior to application for and issuance of grading permits or building permits. At a minimum, the F-WQMP shall include the following: LID principles; Harvest and Use BMPs (as applicable); Source control BMPs; LID BMPs; Operation and Maintenance requirements for BMPs; sources of funding for BMP implementation; and including those requirements as identified within the F-WQMP and as referenced in part below:

a. Overall, the proposed LID BMP concept is accepted as the conceptual LID BMP implementation for the proposed site.

b. The Applicant has proposed to incorporate the use of a bioretention facility and pumping system. Final design details of this pump system and LID BMPs must be provided in the first submittal of the F-WQMP. The sizes of all LID BMPs are to be determined using the current procedures set forth the Riverside County Flood Control and Water Conservation District's Design Handbook for Low Impact Development Best Management Practices. The Applicant acknowledges that more area than currently shown on the plans may be required to treat site runoff as required by the WQMP guidance, subject to "effective area" requirements.

c. The Applicant shall substantiate all applicable Hydrologic Condition of Concern (HCOC) issues in the first submittal of the F-WQMP, if applicable.

d. All proposed LID BMP's shall be designed in accordance with the County's LID BMP Design Handbook. This includes, but is not limited to, media mix, underdrain locations, retaining wall designs (as applicable), soil media depths, etc.

e. In first submittal of the Final WQMP, Applicant shall submit a landscape plan detailing all plant species and/or grasses proposed within all LID BMPs. The proposed species shall be consistent with use in the soil media depths proposed in the facilities.

LD74. Prior to precise grading plan approval, the plans shall clearly show that the developer has made every attempt to treat runoff, prior to the runoff reaching the treatment control Best Management Practice(s) (BMPs), via maximum use of site design and source control BMPs.

LD75. Prior to precise grading plan approval, the plans shall show roof drains directed to a landscaped areas rather than being routed directly to the parking lot or roadway. Alternatively, roof drain flows can be directed to private storm drains which will connect to the treatment control best management practice.

LD76. Prior to issuance of a building permit, the applicant shall schedule a walk through with a Public Works Inspector to inspect existing improvements within public right-of-way along project frontage. The applicant will be required to install, replace and/or repair any missing, damaged or substandard improvements including handicap access ramps that do not meet current City standards. The applicant shall post security to cover the cost of the repairs and complete the repairs within the time allowed in the public improvement agreement used to secure the improvements.

LD77. The following project engineering design plans (24"x36" sheet size) shall be submitted for review and approval as well as additional plans deemed necessary by the City during the plan review process:

a. Rough Grading Plan
b. Precise Grading Plan
c. Street Improvement Plan
d. Signing and Striping Plan
e. Traffic Control Plan
f. Final Drainage Study
g. Final WQMP
i. As-Built Plans of all "plans" listed above.

PUBLIC WORKS DEPARTMENT – TRANSPORTATION ENGINEERING DIVISION

Based on the information contained in our standard review process we recommend the following conditions of approval be placed on this project:

GENERAL CONDITIONS

TE1. Eucalyptus Avenue is classified as a Divided Major Arterial (134'RW/110'CC) per City Standard Plan No. MVSI -101A-0. Traffic Signal Interconnect per City Standard Plan No. MVSI-186-0 shall be installed along project frontage. Any improvements undertaken by this project shall be consistent with the City's standards for this facility or as approved by the City Engineer.

TE2. Edgemont Street is classified as a Local Street (56'RW/36'CC) per City Standard Plan No. MVSI-107A-0. Improvements to Edgemont Street shall include a northbound left turn lane at Eucalyptus Avenue with 150' minimum for storage. Pavement transitions may also be necessary. Any improvements undertaken by this project shall be consistent with the City's standards for this facility or as approved by the City Engineer.

TE3. Driveways shall conform to Section 9.11.080, and Table 9.11.080-14 of the City's Development Code – Design Guidelines and shall be designed and constructed as per City of Moreno Valley Standard No. MVSI-112C-0. Driveway access shall be the following, with signing as necessary:

- Edgemont Street driveway: Full access.
- Eucalyptus Avenue driveway: Access restricted to emergency vehicle.

TE4. The Edgemont Street gated entrance shall be provided with the following:

a) A storage lane with 60' provided for queuing.
b) A second storage lane for visitors to stop in prior to the gate to utilize a call box (or other device) to receive permission to enter the site.
c) Signing and striping for a and b.
d) A turnaround outside the gates.
e) No Parking signs shall be posted in the turnaround areas.
f) A separate pedestrian entry.
g) Presence loop detectors (or another device) within 1 to 2 feet of the gates that ensures that the gates remain open while any vehicle is in the queue.

All of these features must be kept in working order.

TE5. Conditions of approval may be modified or added if a phasing plan is submitted for this development.

PRIOR TO IMPROVEMENT PLAN APPROVAL OR CONSTRUCTION PERMIT

TE6. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4.

TE7. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

TE9. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A, B, C-0.

PRIOR TO CERTIFICATE OF OCCUPANCY OR BUILDING FINAL

TE10. (CO) Prior to issuance of a Certificate of Occupancy, all approved street improvements shall be installed to the satisfaction of the City Engineer.

TE11. (CO) Prior to issuance of a Certificate of Occupancy, all approved signing and striping shall be installed per current City Standards

PRIOR TO ACCEPTANCE OF STREETS INTO THE CITY-MAINTAINED ROAD SYSTEM

TE12. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Special Districts Division

Note: All Special Conditions, Modified Conditions, or Clarification of Conditions are in bold lettering. All other conditions are standard to all or most development projects.

Acknowledgement of Conditions

The following items are the Special Districts Division's Conditions of Approval for project **PA14-0042 (Plot Plan)**; this project shall be completed at no cost to any Government Agency. All questions regarding the following Conditions including but not limited to intent, requests for change/modification, variance and/or request for extension of time shall be sought from the Special Districts Division of the Financial & Management Services Department 951.413.3480 or by emailing specialdistricts@moval.org.

General Conditions

SD1. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

SD2. The Moreno Valley Community Services District Zone A (Parks & Community Services) tax is assessed per parcel or per dwelling unit for parcels with more than one dwelling unit. Upon the issuance of building permits, the Zone A tax will be assessed based on one hundred and twelve (112) dwelling units.

SD3. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

SD4. The ongoing maintenance of any landscaping required to be installed behind the curb on **Eucalyptus Avenue and Edgemont Street** shall be the responsibility of the property owner.

SD5. This project is located within the boundaries of the Edgemont Community Services District (ECSD). The required installation of any new or changes to any existing street lights for this project fall within the jurisdiction of the Edgemont Community Services District. The Developer will coordinate the preparation of all documentation and installation of street lights for this project with the ECSD to meet their legal and administrative requirements prior to street light installation. This includes, but is not necessarily limited to any fees, charges, or balloting costs that may be associated with the installation of new or changes to existing

street light facilities. Contact the Edgemont Community Services District at 951.784.2632, Edgemont Community Services District, P. O. Box 5436, Riverside, CA 92517 for further information.

Prior to Building Permit Issuance

SD6. (BP) This project has been conditioned to provide a funding source for the continued maintenance, enhancement, and or retrofit of neighborhood parks, open spaces, linear parks, and/or trails systems. The Developer shall satisfy this condition with one of the options below.

a. Participate in a special election for annexation into **Community Facilities District No. 1** and pay all associated costs with the special election process and formation, if any; or

b. Establish an endowment fund to cover future maintenance costs for new neighborhood parks.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance of its selected financial option. If option a. is selected, the special election will require a 90 day process prior to building permit issuance to allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

Annexation to CFD No. 1 shall be completed or proof of payment to establish the endowment fund shall be provided prior to the issuance of the first building permit for this project.

SD7. (BP) This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for **Public Safety** services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days to process prior to issuance of the first building permit to allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

SD8. (BP) This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for **maintenance/services** and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process to allow adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the certificate of occupancy.

SD9. *Commercial* (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the monitoring of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). If participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit to allow adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

POLICE DEPARTMENT

The Moreno Valley Police Department has identified several areas of concern and has some recommendations with the current project.

PD1. Address numbers on all buildings/residences should be placed in the most visible location on the building and be illuminated. Address numbers should also be pained on the curbs in front of the residence.

PD2. Apartment numbers or letters should be clearly visible from the street.

PD3. Rooftop addressing of all buildings is recommended.

PD4. Alarm systems installed on public buildings such as the management office and maintenance office, and pool area.

PD5. The parking lots, street and buildings should be well lit. Minimize the shadows cast by landscaping and trees on the property, walkways and public areas.

PD6. If there is going to be a community mail box area it needs to be well lit, in a highly visible public place and made to resist/deter mail theft.

PD7. A public emergency phone (land line) should be available at the public pool area.

PD8. If the complex is going to be gated, install gates that can be opened by emergency vehicles activating the light bars (red/blue lights).

PD9. All exterior doors shall have a vandal resistant light fixture installed above the door. The doors shall be illuminated with a minimum one foot candle illumination at ground level, evenly dispersed.

PD10. Ensure any trees surrounding building rooftops be kept at a distance to prevent roof accessibility by potential burglars. Since trees also act as a natural ladder, the branches must be pruned to have at least six foot clearance from the buildings.

PD11. Addition of a city wide camera system at the corner of Eucalyptus Avenue and Edgemont Street.

PD12. The owner or owner's representative shall establish and maintain a relationship with the City of Moreno Valley and cooperate with the Problem Oriented Policing (POP) program, or its successors.

NEGATIVE DECLARATION

PROJECT TITLE AND FILE NUMBER: PA14-0042 – Plot Plan, PA14-0043 – General Plan Amendment, and PA14-0044 – Zone Change
PROJECT APPLICANT: Latco Enterprises **TELEPHONE NUMBER:** (949) 276-4402
PROJECT LOCATION: Southeast corner of Eucalyptus Avenue and Edgemont Street, Moreno Valley, Riverside County, CA
PROJECT DESCRIPTION: General Plan Amendment from Commercial (C) to Residential 20 (R20) and Zone Change from Community Commercial (CC) to Residential 20 (R20) for development of a Plot Plan for a 112 unit apartment project on 6.63 acres. The project proposes 14 two-story buildings with a mix of 1 and 2 bedroom units and with covered parking to include carports and garages.

FINDING

The City of Moreno Valley has reviewed the above project in accordance with the City of Moreno Valley's Guidelines for the Implementation of the California Environmental Quality Act, and has determined that an Environmental Impact Report need not be prepared because:

[ ] The proposed project will not have a significant effect on the environment.

[x] Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures described in the attached Initial Study and hereby made a part of this Negative Declaration have been added to the project. The Final Conditions of Approval contain the final form and content of all mitigation measures.

This determination is based upon an Initial Study. The project file, including the Initial Study and related documents is available for review during normal business hours (7:30 a.m. to 5:30 p.m. Monday through Thursday, and 7:30 a.m. to 4:30 p.m. on Friday) at the City of Moreno Valley, Community & Economic Development Department, Planning Division, 14177 Frederick Street, Moreno Valley, California 92553, Telephone (951) 413-3206.

PREPARED BY: Jeff Bradshaw	DATE: January 31, 2015

NOTICE

The public is invited to comment on the Negative Declaration. The appropriateness and adoption of the Negative Declaration is considered at the time of project approval in light of comments received.

DATE ADOPTED: _____ BY:

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City of Moreno Valley

California Environmental Quality Act (CEQA)

Initial Study (IS) / Mitigated Negative Declaration (MND)

Edgemont Apartments

(Case Number P-14-017)

Lead Agency:

City of Moreno Valley
Community & Economic Development Department
Planning Division
14177 Frederick Street
Moreno Valley, California 92552

Project Applicant:

LACTO SC, INC.
940 Calle Negocio, Suite 200
San Clemente, California 92673
(949) 276-4402

CEQA Consultant:

Vista Community Planners (Vista)
1278 Glenneyre Street, Suite 110
Laguna Beach, California 92561

January 2015

Table of Contents

Appendices

1.0 INTRODUCTION

1.1. Document Purpose and Scope

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects.

This Initial Study (IS) / Mitigated Negative Declaration (MND) assesses the potential of the proposed Edgemont Apartments project (proposed project) to impact the environment. The proposed project includes the development of the project site with a 112 unit apartment complex on approximately 5.89 acres (248,051 square feet). The project site is located in the City of Moreno Valley (City), County of Riverside (County) and Sate of California (State). The project site is located at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street.

The proposed project is not exempt from CEQA. The City prepared this Initial Study (IS) to determine whether the proposed project may have a significant effect on the environment. This IS provides the documentation of the factual basis for the finding in a Negative Declaration that the proposed project will not have a significant effect on the environment. This IS has determined that there is no substantial evidence that the proposed project may have a significant effect. Therefore, the City as the Lead Agency has prepared a Negative Declaration (ND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

This IS/MND is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project.

1.2 Document Organization

This IS/MND includes the flowing sections:

Section 1.0 Introduction

Provides information about CEQA and its requirements for environmental review and explains that an MND was prepared by the City of Moreno Valley to evaluate the proposed Project's potential to impact the physical environment.

Section 2.0 Project Description and Setting

Provides information about the proposed Project's location and planning objectives and includes a description of the proposed Project's physical features and construction and operational characteristics.

Section 3.0 Environmental Checklist

Includes the Environmental Checklist and evaluates the proposed Project's potential to result in significant adverse effects to the physical environment.

Section 4.0 References

Provides reference information for all information sources consulted during the preparation of this IS.

2.0 PROJECT DESCRIPTION AND SETTING

2.1. Project Overview

The proposed project includes the development of the project site with a 112 unit apartment complex on approximately 5.89 acres (248,051 square feet). The proposed project would include demolition and removal of all on-site structures and plant materials. The project site would be graded and the construction of 112 apartments, off-street parking, on-site circulation, community building, pool and deck, tot-lot, and outdoor space area would occur. Access to the proposed project would be provided via a gated entrance for vehicles and a separate pedestrian gate.

2.2 Project Background

The project site was used for agricultural use (chicken and ranch) from approximately 1948 -1967. Since that time, according to the SCE Engineering Phase I report, the project site has been vacant land. In April 2009, the project site was subject to a General Plan Amendment (GPA) and Zone Change (ZC). The GPA changed the project site designation from Residential/Office to Commercial. The ZC changed the project site zoning from Office Commercial (OC) to Community Commercial (CC).

2.3 Project Location

The project site is currently vacant and comprised of two (2) rectangular-shaped assessor parcels. The project site has topography that varies from level to rolling. The project site has over the past several years been routinely disked for weed abatement in accordance with the requirements of the City.

The project site is located in the City of Moreno Valley (City), County of Riverside (County) and Sate of California (State). The project site is located on the south side of Eucalyptus Avenue between Day Street and the Interstate-215 (I-215) interchange near the City's northern boundary. Specifically, the project site is located at the southeast corner of the intersection of Eucalyptus Avenue and Edgemont Street. Figure 1: *Regional Location Map* provides the regional context. Figure 2: *Local Vicinity Map* and Figure 3: *Aerial View* provides a more precise location and boundaries of the proposed project.

Assessor's Parcel Number(s)

The project site is comprised of the following assessor's parcel numbers:

- 263-120-020
- 263-120-025

2.4 Environmental Setting and Surrounding Land Uses

The topography of the project site is relatively flat with elevations ranging from approximately 1,540 to 1,550 feet about sea level. The area surrounding the project site has been developed primarily with residential land uses. Several non-residential uses are scattered along Eucalyptus Avenue in the vicinity of the project site. The majority of the residences in close proximity to the project site are located within the Office Commercial zone and are considered pre-existing, non-conforming land uses. Properties in the vicinity of the project site along Eucalyptus

Avenue are mostly zoned Office Commercial (OC) with some Community Commercial (CC) zoning to the west at Old 215/Valley Springs Parkway and Public (P) zoning where Edgemont Elementary School is located.

Existing single-family residences are located to south, west, and northeast of the project site. Single-family residence and a mobile home park are located immediately to the east of the project site. Edgemont Elementary School is located to north of the project site across Eucalyptus Avenue. There is an office building located to the northeast at the intersection of Day Street and Eucalyptus Avenue of the project site in the City of Riverside. These uses are shown on Figure 3: *Aerial View* and Figure 4: *Surrounding Land Uses.*

2.5 Description of the Proposed Project

The proposed project would include the construction of 112 residential apartments. The proposed site plan is depicted on Figure 1, *Site Plan*. The apartments would include the construction of two (2) building types including eight (8) units in each building. As indicated on Figure 5: *Site Plan* two (2) building types are proposed. The proposed Building 1 floor plan and elevations are provided on Figure 6: *Building 1 Floor Plans* and Figure 7: *Building 1 Elevations*. Building 1 would include one (1) bedroom and one (1) bath apartments as noted in Table 1: *Project Statistics*. Each apartment would include approximately 928 square feet including living area, patio, and entry. Each building would be two (2) stories in height. A total of 56 of these one (1) bedroom and one (1) bath apartments would be constructed. A total of 50% of the total units (112) would be the one (1) bedroom and one (1) bath apartments.

As indicated on Figure 5: *Site Plan* Building 2 would include two (2) bedroom and two (2) bath apartments also as noted in Table 1: *Project Statistics*. The proposed Building 2 floor plan and elevations are provided on Figure 8: *Building 2 Floor Plans* and Figure 9: *Building 2 Elevations*. Each apartment would be approximately 1,202 square feet including living area, patio, and entry. Each building would be two (2) stories in height. A total of 56 of these two (2) bedroom and two (2) bath apartments would be constructed. A total of 50% of the total apartments (112) would be two (2) bedroom and two (2) bath apartments.

The proposed project includes development of 112 residential apartments on 5.89 acres. The overall density of the proposed project would be approximately 19.7 dwelling units per acre.

Parking

The proposed project would provide a total of 196 off-street parking spaces. Table 2: *Proposed Off-Street Parking Statistics* indicates the proposed parking to be provided and spaces required by the City Municipal Code. Table 2: *Proposed Off-Street Parking Statistics* indicates the proposed project off-street parking. Additionally, Table 2: *Proposed Off-Street Parking Statistics* indicates the City Municipal Code required off-street parking. The proposed project total parking requirement equals 112 covered spaces and 84 other spaces for a total of 196 spaces. The proposed project would provide 129 covered spaces and 67 other spaces for a total of 196 spaces. Therefore, the proposed project meets City standards for parking.

Table 1: Project Statistics

Residential Units	No. Units (%)	Unit Type	Living Area[1]	Patio[1]	Entry[1]	Wh/Sto[1]	Total[1]	No. Units	Buildings Total[1]
Building 1(8 plex)	56 (50%)	1br/1ba							
First Floor			796	123	39	17	975	4	3,900
Second Floor			796	76	39	17	928	4	3,712
Sub-Total Area Building 1									7,612
Building 2(8 plex)	56 (50%)	2br/2ba							
First Floor			1,086	118	36	17	1,257	4	5,028
Second Floor			1,086	68	36	17	1,207	4	4,828
Sub-Total Area Building 2									9,856
Total									**112 (100%)**

Notes:
1 Square feet
Source: The Vernal Group

Table 2: Proposed Off-Street Parking Statistics

City Requirements						
Unit Type	**Number Units**	**% Total Units**	**Parking Required**	**Covered**	**Other**	**Total**
1br/1ba	456	50%	1.50	56	28	
2br/2ba	56	50%	2.00	56	56	
Total	*112*	*100%*		*112*	*84*	*196*
Proposed Project						
Parking Site Plan				**Covered**	**Other**	**Total**
Other					67	
Carports				77		
Garages				52		
Total				*129*	*67*	*196*
Total						**0**

Source: City of Moreno Valley Municipal Code and The Vernal Group.

Access

The proposed project would provide a public (resident, guest, and deliveries) driveway access from a single gated, un-signalized driveway on Edgemont Street located approximately 300-feet south of Eucalyptus Avenue. The gated driveway entrance would provide 120-feet of stacking over two (2) inbound lanes (60 feet per lane), with one (1) lane designated as a resident-only lane, and the other would be a resident and guest lane with a directory/kiosk. The proposed project would provide a single outbound lane at this gate. In addition, a secondary driveway has would be provided on Eucalyptus Avenue for emergency access only.

The proposed project would provide internal vehicular circulation based on a loop driveway aisle that measures 25-feet wide with 44-foot turn radii. The internal vehicular circulation has been designed to meet the City's design standards.

Drainage

The project site generally drains via sheet flow from the northwest corner to the southeast corner and across the adjacent property southerly ultimately to the improved Edgemont Channel B North Fork. The Edgemont Channel B North Fork is a Riverside County Flood Control and Water Conservation District (RCFCWCD) facility.

The proposed project would include the construction of an on-site storm drainage system to capture and carry on-site drainage to the southeast corner of the project site. At the southeast corner of the project site an off-site storm drain pipe would transport captured stormwater in and through the property to the south. The on-site and off-site storm drains will convey the proposed project stormwater to the Edgemont Channel instead of surface flowing across the adjacent parcel.

The proposed project would not exceed pre-project conditions for stormwater discharge. The proposed project includes infrastructure to detain and treat stormwater on-site and discharge it to the storm drain system at rates that would not exceed the capacity of the receiving flood control channel.

Landscape and Fencing

There are no existing significant trees or vegetation on the project site. The proposed project would be appropriately landscaped as shown on Figure 10: *Landscape Plan.* The proposed project would include new curb, gutter, and curb adjacent sidewalks along Edgemont Street and curb separated along Eucalyptus Avenue. The proposed project would include a community building, pool and deck, tot-lot, and outdoor space area central located within the apartment complex. Pedestrian access would be provided from each of the apartment buildings to these areas.

A new six-foot (6') wrought iron fence with pilasters every 30-feet on-center would be constructed along both Edgemont Street and Eucalyptus Avenue inside of the property line in each case. A new six-foot (6') block wall would be constructed along the southerly property line. A landscaped and access area of approximately 20-feet would occur between the southerly property line and the nearest structure. An existing chain link fence would remain to the south of the new block wall on the southerly property line. A new six-foot (6') block wall would remain along the easterly property line adjacent to the existing mobile home park. An eight-foot (8') landscaped area would be located adjacent to the new six-foot (6') block wall. Adjacent to the R/O Zoned area to the northeast of the project site, a new six-foot (6') wrought iron fence with pilaster every 30-feet on-center would be constructed. An existing chain link fence would remain to the south of the new block wall on the southerly property line.

Grading and Construction

The project applicant has stated that grading and construction would start immediately after City approvals and would be expected to occur by Summer 2016. Grading is anticipated to include 1,860 cubic yards of cut, 16,643 cubic yards of fill and 14,783 cubic yards of import. For the purposes of providing a "worst case" analysis, this Initial Study/Mitigated Negative Declaration (IS/MND) will assume that all improvements are completed by 2016. Occupancy will commence in 2016 with full occupancy to occur in a timely manner thereafter.

2.6 Existing General Plan Designation and Zoning

The project site is designated Commercial by the City of Moreno Valley General Plan. The project applicant is requesting a General Plan Amendment (GPA) to Residential 20 (Max 20 du/ac).

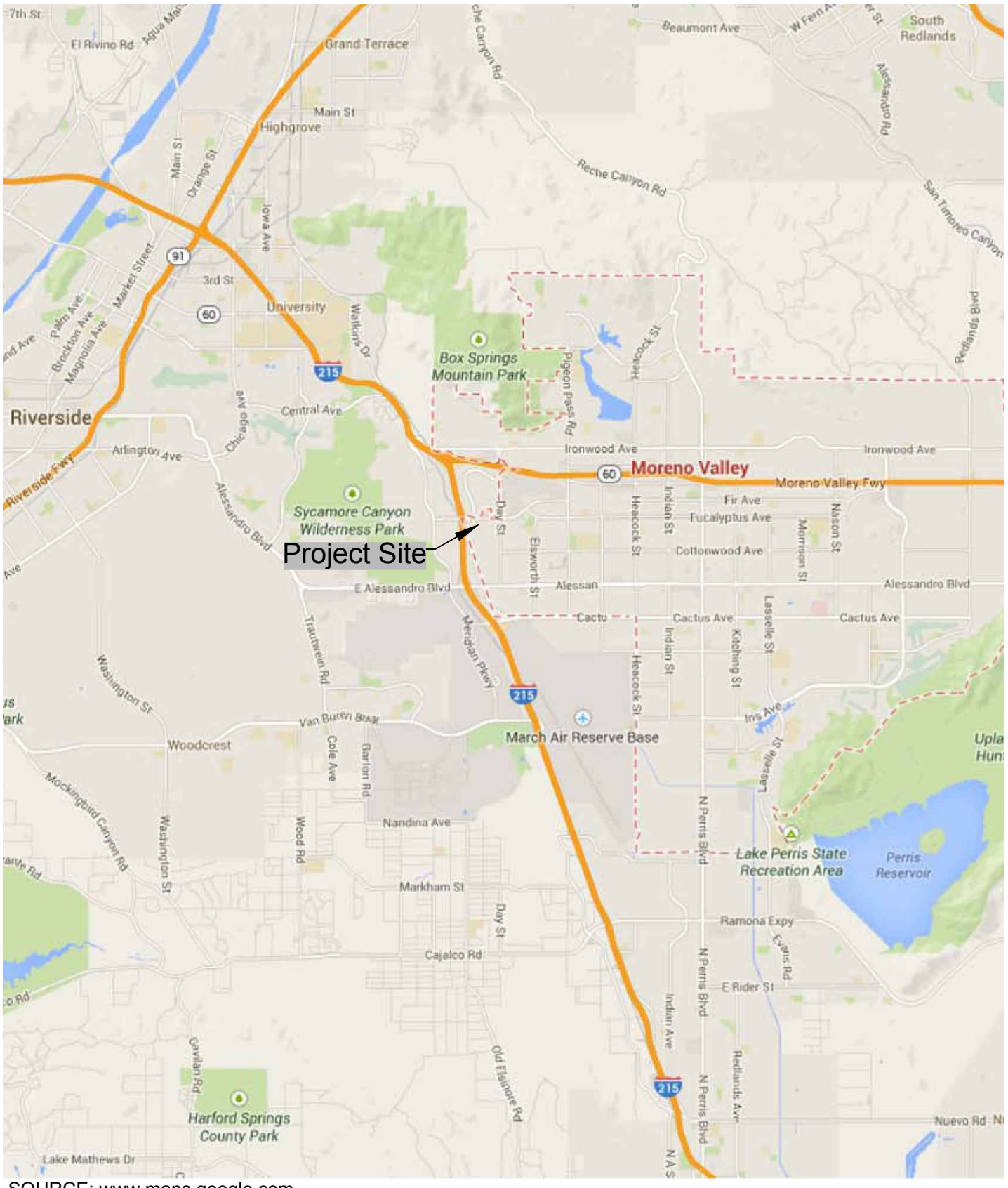
The project site is presently zoned Community Commercial by the City of Moreno Valley Zoning Map. The project application is requesting a Zone Change to Residential 20 (Max 20 du/ac). Figure 11: *General Plan (Existing and Proposed)* and Figure 12: *Zoning (Existing and Proposed)* illustrate these proposed changes.

2.7 Discretionary Actions

This IS/MND addresses the potential environmental effects of the proposed Edgemont Apartments project, including all of the associated discretionary actions and approvals required to implement the proposed project, as well as all subsequent construction and operational activities. As part of the proposed project, the will consider approval:

The City will need to approve Case Number 14-017, which includes:

- Certification of the Environmental Documentation;
- Approval of a General Plan Amendment;
- Approval of a Zone Change; and,
- Approval of the Plot Plan, Floor Plans, Elevations, and Landscape Plans.



SOURCE: www.maps.google.com

REGIONAL LOCATION MAP

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA

NO SCALE

N

FIGURE 1

SOURCE: City of Moreno Valley GIS

LOCAL VICINITY MAP

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE

N

FIGURE 2

SOURCE: City of Moreno Valley GIS

AERIAL VIEW

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE

N

FIGURE 3

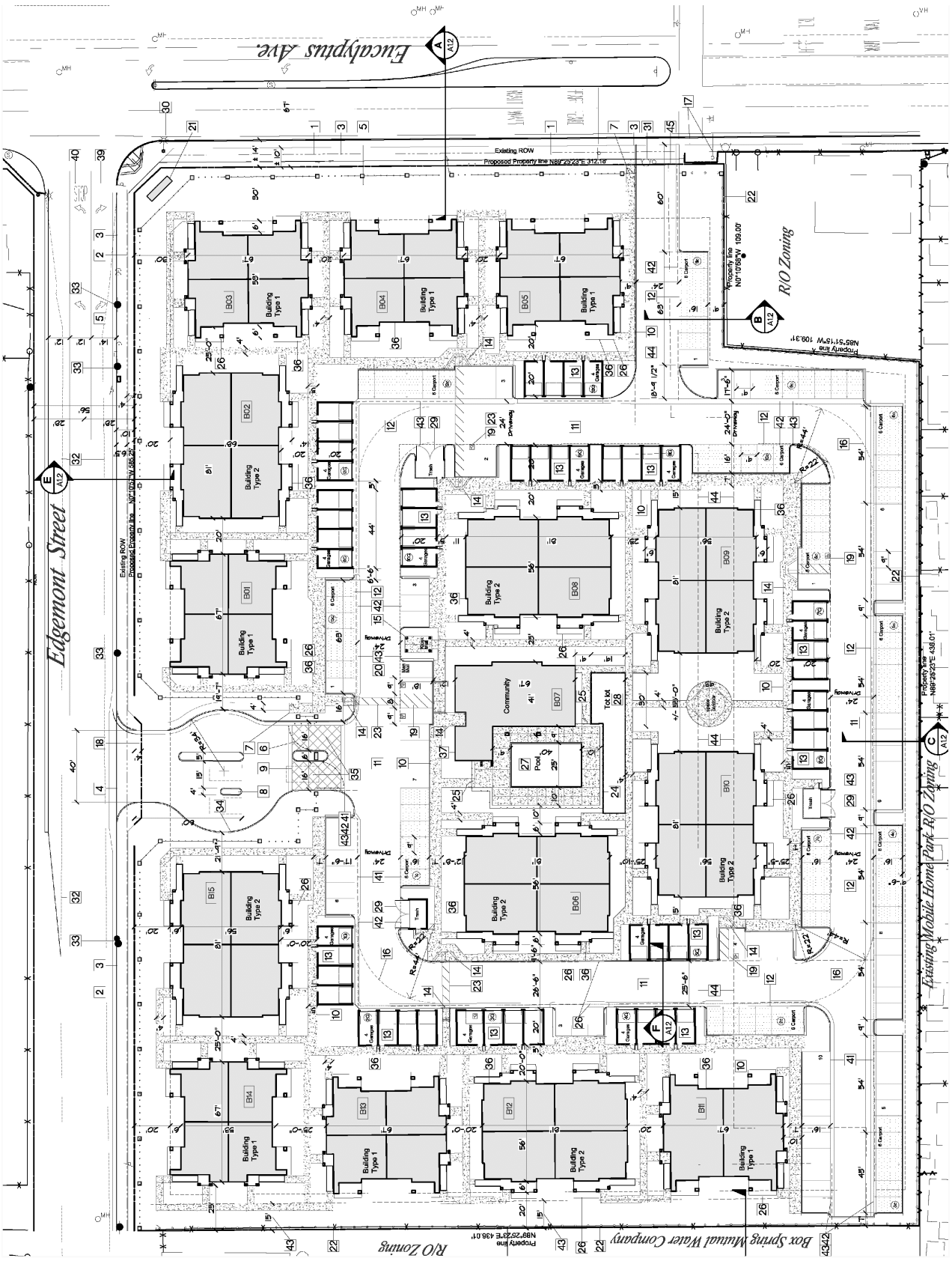
SOURCE: City of Moreno Valley GIS

SURROUNDING LAND USES

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE
N

FIGURE 4



SOURCE: The Vernal Group.

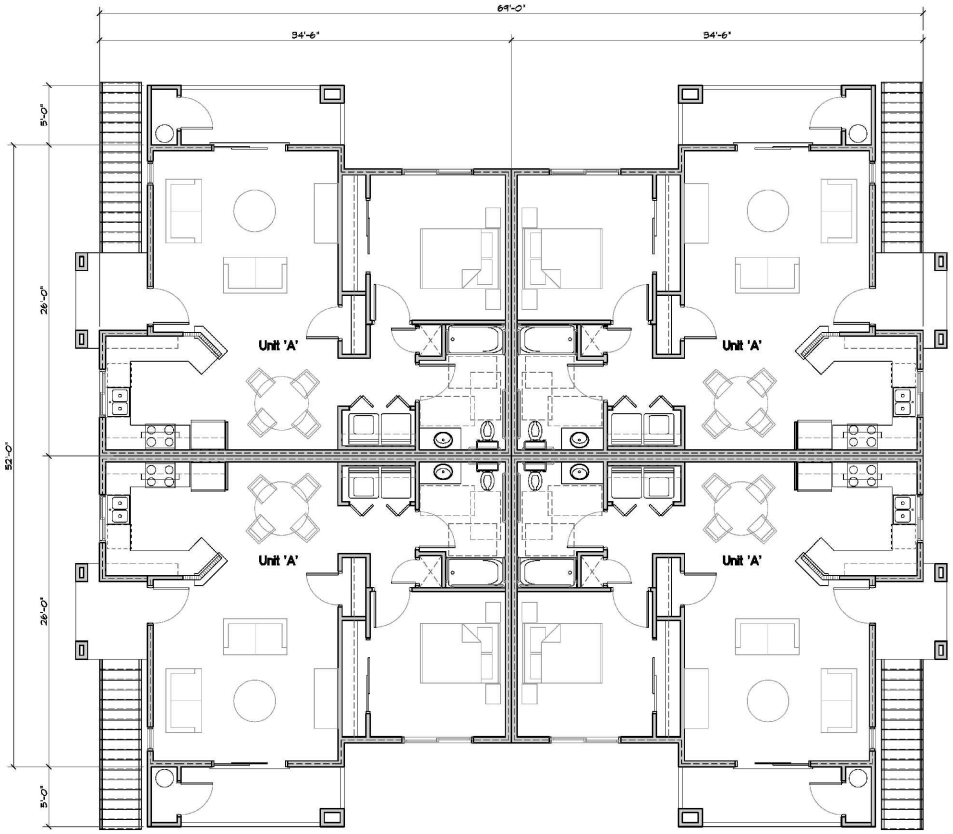
SITE PLAN

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

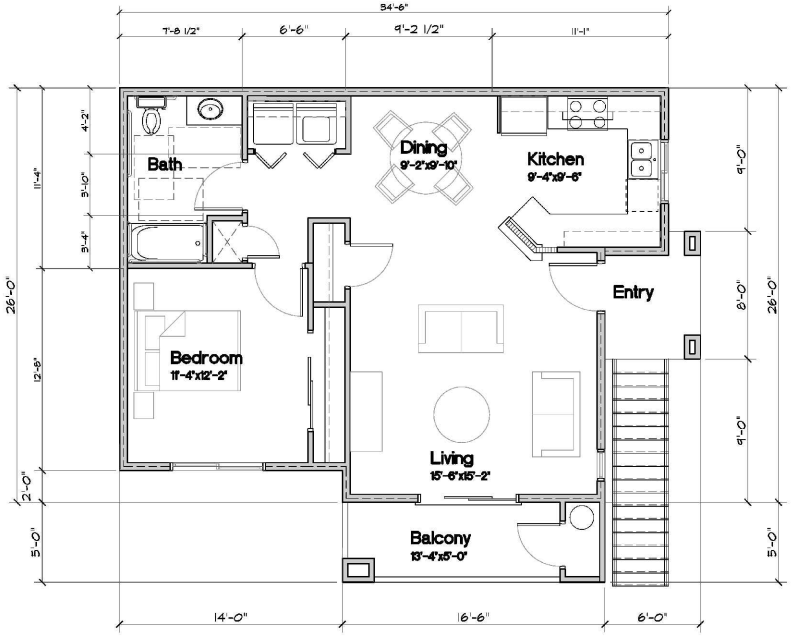
VISTA
NO SCALE

N

FIGURE 5



Building 1
3/16"=1'-0"



Unit A Floor Plan
1/4"=1'-0"

AREA	
LIVING AREA	= 807 sf
BALCONY	= 66 sf
ENTRY	= 39 sf
MH	= 14 sf
TOTAL AREA	= 928 sf

SOURCE: The Vernal Group.

BUILDING 1 FLOOR PLANS

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE
N

FIGURE 6

FRONT ELEVATION
[REAR SIMILAR]

SIDE ELEVATION
[OPPOSITE SIMILAR]

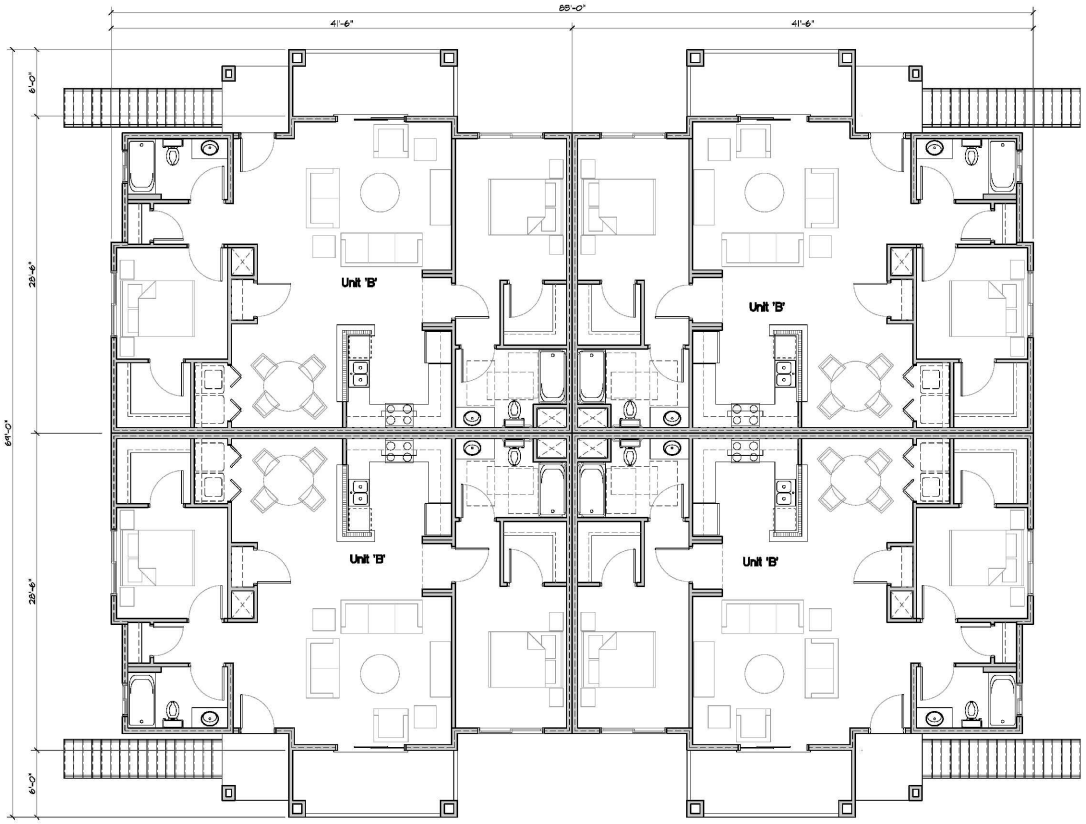
SOURCE: The Vernal Group.

BUILDING 1 ELEVATIONS

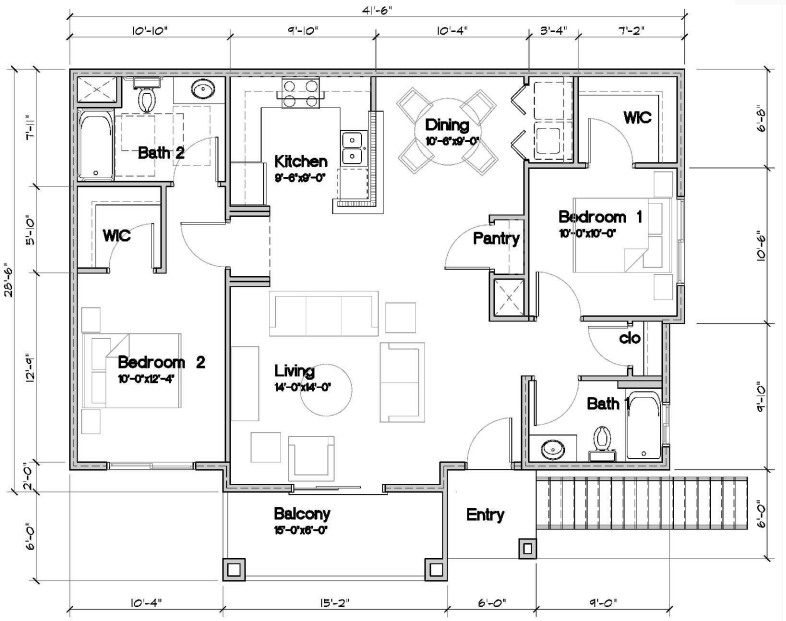
EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE
N

FIGURE 7



Building 2
3/16"=1'-0"



Unit B Floor Plan
1/4"=1'-0"

AREA
LIVING AREA = 1158 sf
BALCONY = 91 sf
ENTRY = 99 sf
TOTAL AREA = 1257 SQ. FT.

SOURCE: The Vernal Group.

BUILDING 2 FLOOR PLANS

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE

N

FIGURE 8

FRONT ELEVATION
[REAR SIMILAR]

SIDE ELEVATION
[OPPOSITE SIMILAR]

SOURCE: The Vernal Group.

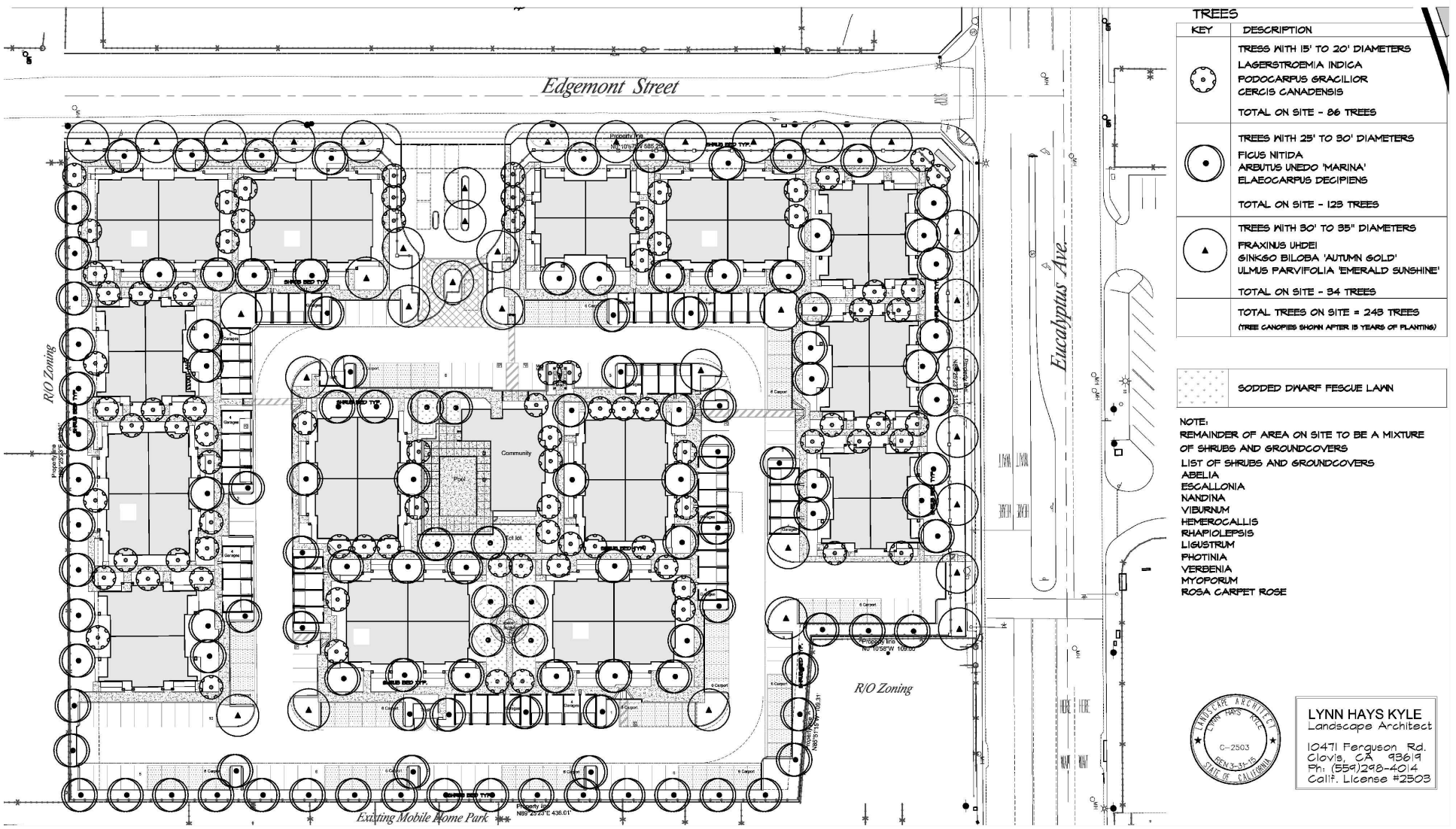
BUILDING 2 ELEVATIONS

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA
NO SCALE

N

FIGURE 9



SOURCE: Lynn Hays Kyle Landscape Architect.

LANDSCAPE PLAN

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

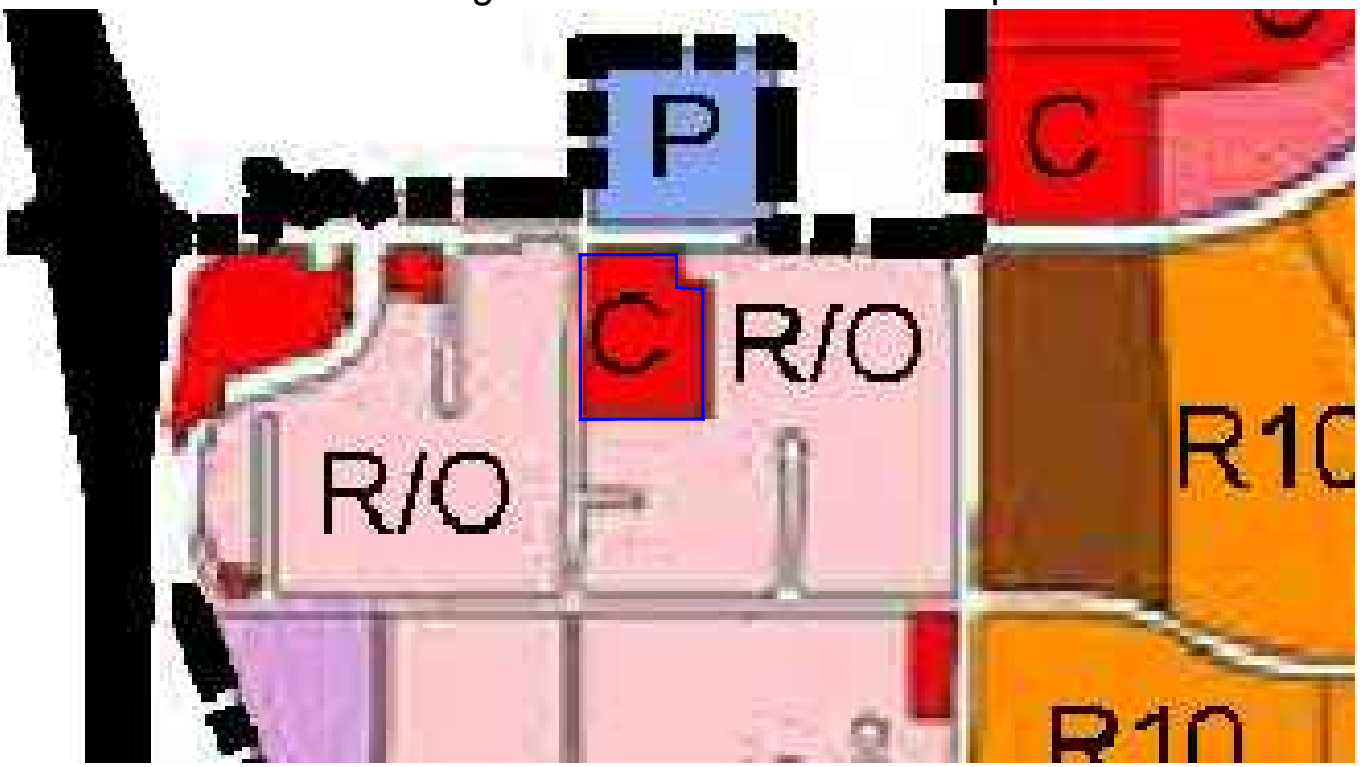
VISTA

NO SCALE

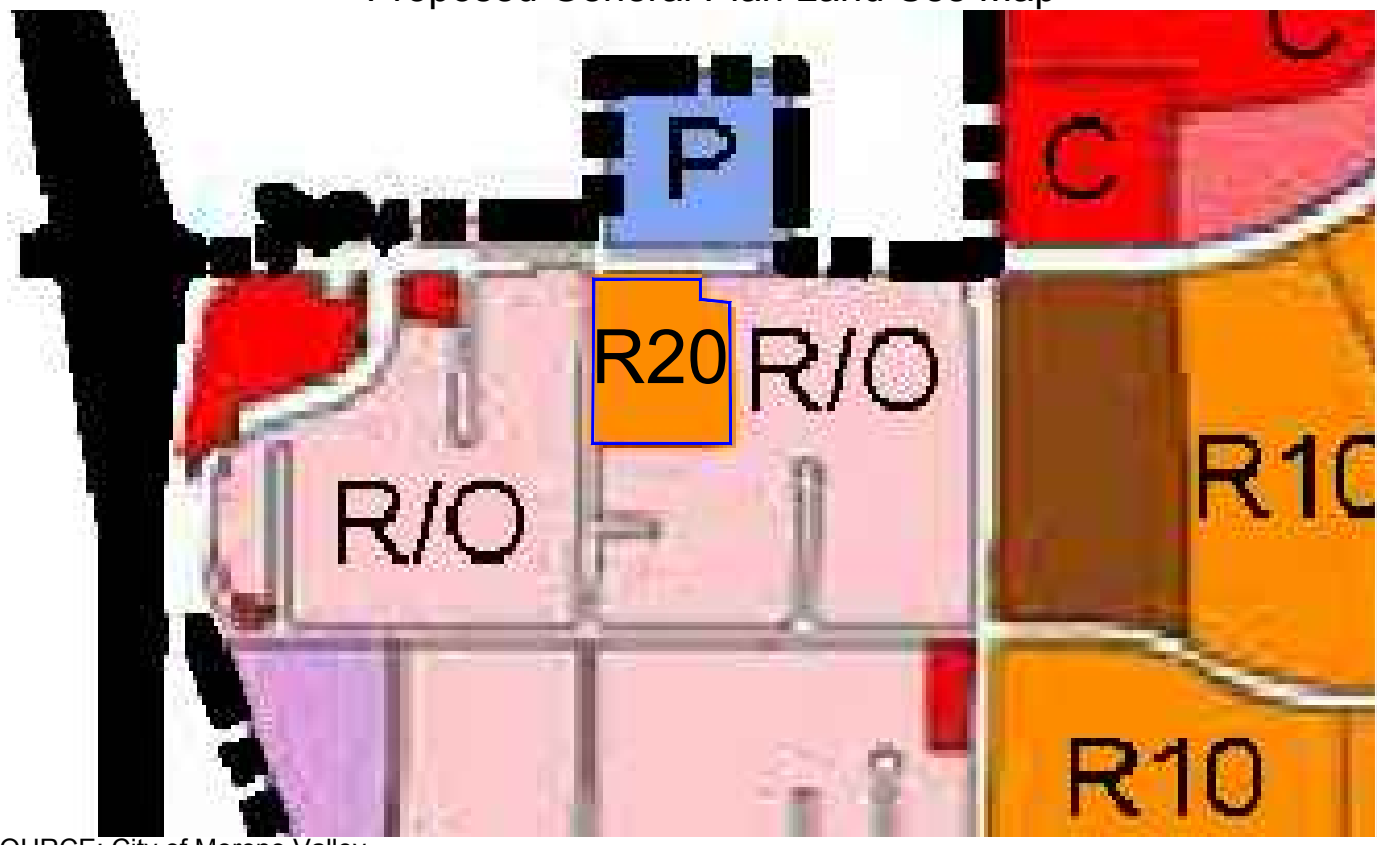
N

FIGURE 10

Existing General Plan Land Use Map



Proposed General Plan Land Use Map



SOURCE: City of Moreno Valley.

GENERAL PLAN (EXISTING AND PROPOSED)

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA

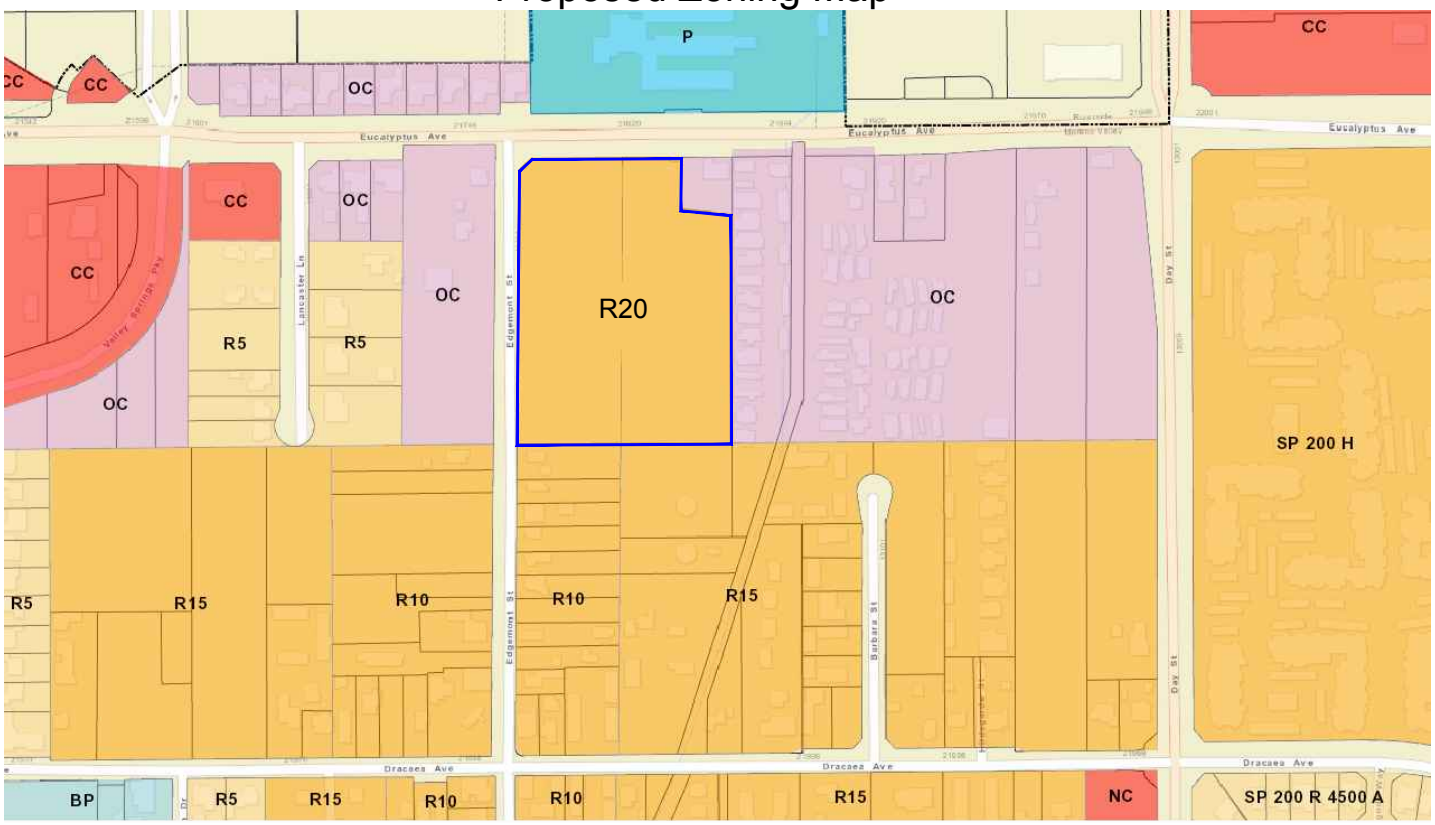
NO SCALE

N

FIGURE 11

Existing Zoning Map

Proposed Zoning Map



SOURCE: City of Moreno Valley.

ZONING (EXISTING AND PROPOSED)

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA

NO SCALE

N

FIGURE 12

3.0 ENVIRONMENTAL CHECKLIST AND ANALYSIS

INITIAL STUDY/
ENVIRONMENTAL CHECKLIST FORM
CITY OF MORENO VALLEY

1. Project Title: Edgemont Apartments (Case #P14-017)

2. Lead Agency Name and Address: City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 926553

3. Contact Person and Phone Number: Jeff Bradshaw
(951) 413-3224

4. Project Location: Southeast corner of Eucalyptus Avenue and Edgemont Street

5. Project Sponsor's Name and Address: LACTO SC, INC.
940 Calle Negocio, Suite 200
San Clemente, California 92673
(949) 276-4402

6. General Plan Designation:

Existing	Commercial
Proposed	Residential 20 (Max 20 du/ac)

7. Zoning:

Existing	Community Commercial
Proposed	Residential 20 (Max 20 du/ac)

8. Description of the Project:

Refer to Section 2.0 of this Initial Study.

9. Surrounding Land Uses and Setting:

The area surrounding the project site has been developed primarily with residential land uses. Several non-residential uses are scattered along Eucalyptus Avenue in the vicinity of the project site. The majority of the residences in close proximity to the project site are located within the Office Commercial zone and are considered pre-existing, non-conforming land uses. Properties in the vicinity of the project site along Eucalyptus Avenue are

mostly zoned Office Commercial (OC) with some Community Commercial (CC) zoning to the west at Old 215/Valley Springs Parkway and Public (P) zoning where Edgemont Elementary School is located.

Existing single-family residences are located to south, west, and northwest of the project site. Single-family residence and a mobile home park are located immediately to the east of the project site. Edgemont Elementary School is located to north of the project site across Eucalyptus Avenue. There is an office building located to the northeast at the intersection of Day Street and Eucalyptus Avenue of the project site in the City of Riverside.

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement).

The proposed project as proposed will require the approval of an encroachment permit from the Riverside County Flood Control and Water Conservation District (RCFC&WCD).

The proposed project as proposed will require an easement from the Box Springs Mutual Water Company (BSMWC) to convey stormwater to the Edgemont Channel.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below(■) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Greenhouse Gas Emissions		Population/Housing
	Agricultural Resources		Hazards & Hazardous Materials		Public Services
	Air Quality		Hydrology/Water Quality		Recreation
	Biological Resources		Land Use/Planning		Transportation/Traffic
	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Geology/Soils		Noise		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	X
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potential significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Jaclyn M Jonkovich 1-31-2015

Signature Date

Printed Name For

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?			**X**	

The project site is not located in an area identified in the City General Plan as an aesthetic resource or a significant visual resource. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Since the proposed project is proposed in an area where development has taken place over the years, the effect should be a less than significant effect on existing scenery in the area. The proposed project as designed and conditioned would assure a design standard that would not have a substantial adverse effect on the scenic vista of the area. Therefore related to scenic vistas, less than significant impacts would occur and no mitigation would be required.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?			**X**	

There are no rock outcroppings or historic buildings on the project site. There are no state scenic highways in the vicinity of the site. The project site has been disked over the years for weed abatement. The proposed project will not substantially damage scenic resources as designed and conditioned. Therefore related to damage to scenic resources including trees, rock outcroppings, and historic buildings within a state scenic highway less than significant impacts would occur and no mitigation would be required.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?			**X**	

The project site is currently vacant and is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north. Subject to approval of a General Plan Amendment and Zone Change, the proposed project would be consistent with existing land uses as designed and conditioned.

The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project residential character is compatible with existing adjacent residential uses. The closest single-family residential uses to the proposed project are located immediately to the east of the project site. These existing single-family homes would be buffered by proposed project design features. These design features include: a new six-foot (6") block wall, landscape area; placement of off-street parking in open areas and carports along the easterly side of the property; and the setback of proposed residential structures. The proposed project closest residential structure to the easterly property line is approximately 61-feet. These factors would provide buffer to the adjacent single family residences to the east of the proposed project.

The proposed project is across Eucalyptus Avenue from the existing elementary school. No conflicts would be

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
anticipated with the distance to the elementary school. Therefore related to substantially degrade the existing visual character or quality of the site and its surroundings, less than significant impacts would occur and no mitigation would be required.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	
The proposed project would create additional light or glare as the project site is currently vacant. City Municipal Code requirements, including the shielding of lighting and restrictions on the intensity of exterior lighting would reduce light and glare impacts to City accepted levels on surrounding properties. The project is located outside of the Palomar Lighting District. Therefore related to a new source of substantial light or glare which would adversely affect day or nighttime views in the area, less than significant impacts would occur and no mitigation would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

II. AGRICULTURE & FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project?**

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?				**X**

The project site is not designated as prime farmland on the State Important Farmland Map. Implementation of the proposed project does not have the potential to result in impacts to Farmland because the project site does not contain designated anticipated Farmland. Therefore related to Farmland, no impacts would occur and no mitigation measures would be required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**

The project site is not currently in agricultural use. There are no existing surrounding agricultural uses to the project site. The project site. There are no existing surrounding sites under Williamson Act contract. The City Municipal Code allows for agricultural uses such as crops in all zoning districts. Therefore related to existing agricultural use, existing zoning for agricultural use, or sites under Williamson Act contract, no impacts would occur and no mitigation measures would be required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**

The project site is not zoned or designated on the City's General Plan for forest land, timberland, or timberland zoned Timberland Production. Therefore related to forest land, timberland, or timberland zoned timberland production, no impacts would occur and no mitigation measures would be required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**

The project site is not forest land as defined by Public Resources Code section 1220(g). The project site does not involve the loss of forest land or the conversion of forest land to non-forest use. Therefore related loss of forest land or the conversion of forest land to non-forest use, no impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**
The project site is currently vacant and is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north. There are no immediate surrounding agricultural uses. Additionally, no agricultural uses are proposed in the vicinity of the project site based on the City's General Plan. The proposed project would not involve changes to the existing environment, which would result in the conversion of farmland to non-agricultural use. The project site is not forest land as defined by Public Resources Code section 1220(g). Therefore related to other changes in the existing environment which, due to their location of nature, could result in conversion of Farmland, to non-agricultural uses of conversion of forest land to non-forest uses, no impacts would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	

The proposed project may conflict with or obstruct implementation of the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans (GP) and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one (1) or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two (2) key indicators of consistency:

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in the *Air Quality and Greenhouse Gas Emissions Impact Analysis, Edgemont Apartments Project*, VISTA Environmental, July 28, 2014 (Air Quality & GHG Study), short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance

or local thresholds of significance. The long-term operation of the proposed project would not result in significant impacts based on SCAQMD thresholds of significance. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, related to no long-term impact would occur and no mitigation measures would be required. Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to insure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2012-2035 Regional Transportation/Sustainable Communities Strategy consists of three sections: Core Chapters, Ancillary Chapters, and Bridge Chapters. The Growth Management, Regional Mobility, Air Quality, Water Quality, and Hazardous Waste Management chapters constitute the Core Chapters of the document. These chapters currently respond directly to federal and state requirements placed on Southern California Association Governments (SCAG). Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City's General Plan Land Use Plan defines the assumptions that are represented in the AQMP.

The project site is currently designated as Commercial (C) in the City's General Plan and is also zoned Commercial. The proposed project would require a General Plan Amendment (GPA) that would re-designate the project site to Residential Maximum 20 dwelling units per acre and a zone change (ZC) to R-20. Although the proposed project is currently inconsistent with the City's General Plan land use designation for the project site, the proposed project would result in a less intensive land use than what the project site is currently designated (i.e., commercial to residential). Furthermore, the proposed project would be consistent with the adjacent residential land uses and would be in substantial compliance with the Land Use Element goals and policies. Therefore, the proposed project would not result in an inconsistency with the current land use designation. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore related to conflict with or obstruct implementation of the applicable air quality plan, less than significant impacts would occur and no mitigation measures would be required.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.			**X**	

The proposed project may violate an air quality standard or contribute substantially to an existing or projected air quality violation. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Construction Emissions

The proposed project would consist of the construction of 112 residential apartment units, a community center with a pool, and tot lot. The proposed project would also include approximately two (2) acres of parking space and on-site roads. The construction emissions have been analyzed for both regional and local air quality impacts as well as potential toxic air impacts and odor impacts.

Construction-Related Regional Impacts

The construction-related criteria pollutant emissions for each phase are shown below in Table 3: *Construction-Related Criteria Pollutant Emissions*. Table 3: *Construction-Related Criteria Pollutant Emissions* shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore related to construction-related regional air quality, less than significant impacts would occur and no mitigation measures would be required.

Table 3: Construction-Related Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Site Preparation [1]						
Onsite[2]	5.26	56.89	42.63	0.04	7.05	3.87
Offsite[3]	0.13	0.68	1.70	0.00	0.25	0.08
Total	**5.39**	**57.57**	**44.33**	**0.04**	**7.30**	**3.95**
Grading[1]						
Onsite	3.83	40.42	26.67	0.03	4.92	3.46
Offsite	1.75	29.61	19.62	0.07	2.38	1.01
Total	**5.58**	**70.03**	**46.29**	**0.10**	**7.30**	**4.47**
Building Construction						
Onsite	3.66	30.03	18.75	0.03	2.12	1.99
Offsite	0.73	3.18	9.84	0.02	1.53	0.45
Total	**4.39**	**33.21**	**28.59**	**0.05**	**3.65**	**2.44**
Paving						
Onsite	2.35	22.39	14.82	0.02	1.26	1.16
Offsite	0.06	0.07	0.85	0.00	0.17	0.05
Total	**2.41**	**22.46**	**15.67**	**0.02**	**1.43**	**1.21**
Architectural Coatings						
Onsite	47.20	2.37	1.88	0.00	0.20	0.20
Offsite	0.09	0.11	1.30	0.00	0.26	0.07
Total	**47.29**	**2.48**	**3.18**	**0.00**	**0.46**	**0.27**
SCQAMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Site preparation and grading emissions based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] Onsite emissions from equipment not operated on public roads.
[3] Offsite emissions from vehicles operating on public roads.
Source: CalEEMod Version 2013.2.2.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin (Basin). The proposed project has been analyzed for the potential local air quality impacts created from construction-related fugitive dust and diesel emissions, and from toxic air contaminants.

Local Air Quality Impacts from Construction

The local air quality emissions from construction were analyzed through utilizing the methodology described in Localized Significance Threshold Methodology (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary emissions of concern are NOx, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality.

The emission thresholds were calculated based on the Perris Valley source receptor area and a disturbance of five (5) acres which is the nearest acreage available to the proposed project disturbance area. The nearest off-site sensitive receptors to the proposed project are mobile homes as near as five feet (5') east of the project site. According to the LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. Table 4: *Local Construction Emissions at the Nearest Receptors* shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated emissions thresholds.

Table 4: Local Construction Emissions at the Nearest Receptors

Phase	Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Site Preparation	56.89	42.63	7.05	3.87
Grading	40.42	26.67	4.92	3.46
Building Construction	30.03	18.75	2.12	1.99
Paving	22.39	14.82	1.26	1.16
Architectural Coatings	2.37	1.88	0.20	0.20
SCAQMD Thresholds for 25 meters (82 feet) or less[1]	**270**	**1,577**	**13**	**8**
Exceeds Threshold?	No	No	No	No

Notes:
[1] The nearest sensitive receptors are mobile home located as near as five feet east of the project site. According to LST methodology any receptor closer than 25 meters should be based on the 25-meter threshold.
Source: Vista Environmental, calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for five acres in Perris Valley.

The data provided in able Table 4: *Local Construction Emissions at the Nearest Receptors* shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds. Therefore related to construction-related

local air quality, less than significant impacts would occur and no mitigation measures would be required.

Construction-Related Toxic Air Contaminant Impacts

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the relatively limited number of heavy-duty construction equipment and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. Therefore related to construction-related short-term toxic air contaminant, less than significant impacts would occur and no mitigation measures would be required.

Operational Emissions

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips and through operational emissions from the on-going use of the proposed project. The following section provides an analysis of potential long-term air quality impacts due to: regional air quality and local air quality impacts with the on-going operations of the proposed project. The potential operations-related air emissions have been analyzed below for the regional and local criteria pollutant emissions and cumulative impacts.

Operations-Related Criteria Pollutant Analysis

The worst-case summer or winter VOC, NOx, CO, SO2, PM10, and PM2.5 emissions created from the proposed project's long-term operations have been calculated and are summarized below in Table 5: *Operational Air Pollutions Emissions*.

Table 5: Operational Air Pollution Emissions

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area Sources[1]	4.50	0.11	9.37	0.00	0.05	0.05
Energy Usage[2]	0.05	0.39	0.17	0.00	0.03	0.03
Mobile Sources[3]	2.89	9.49	32.48	0.08	5.52	1.56
Total Emissions	7.44	9.99	42.02	0.08	5.60	1.64
SCQAMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Area sources consist of emissions from hearths, consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from natural gas usage (excluding hearths).
[3] Mobile sources consist of emissions from vehicles and road dust.
Source: Vista Environmental, calculated from CalEEMod Version 2013.2.2.

The data provided in Table 5: *Operational Air Pollutions Emissions* shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore related to operations-related regional air quality, less than significant impacts would occur and no mitigation measures would be required.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin (SCAB). The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analysis analyzes the vehicular CO emissions, local impacts from on-site operations, and toxic air contaminant impacts from on-site diesel trucks.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards.

To determine if the proposed project could cause emission levels in excess of the CO standards 2, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" typically occur at intersections with a Level of Service (LOS) E or worse. The LOS is a measure used by traffic engineers to quantify the delay that occurs at intersections from additional vehicular traffic. When an intersection operates at LOS E or F, SCAQMD recommends performing a CO hotspot analysis if the volume to capacity ratio increases by two percent or more.

The Traffic Impact Analysis prepared for the proposed project found that the proposed project would not decrease the LOS at any intersection and no analyzed intersection would operate at LOS E or worse. No CO "hotspot" modeling was performed. Therefore related to operations-related long-term air quality, no impact would occur and no mitigation measures would be required.

Local Air Quality Impacts from Onsite Operations

The local air quality impacts from the operation of the proposed project would occur from emissions generated on-site. Sources of onsite operational emissions include architectural coatings off-gassing, landscaping equipment emissions, natural gas appliance emissions and on-site vehicular emissions. Because of the residential nature of the proposed project, the majority of the proposed project's operational emissions are from vehicles traveling on roadways away from the project site. These emissions are then spread over a vast area traversed by various mobile sources and do not

result in localized air quality impacts in proximity to the project site. As such, localized operational modeling for project operations are not prepared for residential developments. Therefore related to operations-related short-term air quality, no impact would occur and no mitigation measures would be required.

Operations-Related Toxic Air Contaminant Impacts

Particulate matter (PM) from diesel exhaust is the predominant Toxic Air Contaminant (TAC) in most areas and according to The California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program. A nominal number of diesel truck trips would be generated by the proposed residential project. Therefore related to operations-related toxic air contaminants, less than significant impacts would occur and no mitigation would be required.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	

The proposed project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel throughout the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature. The project area is out of attainment for ozone and PM10 and PM2.5 particulate matter. In accordance with CEQA Guidelines Section 15130(b), this analysis of cumulative impacts incorporates a three-tiered approach to assess cumulative air quality impacts.

- Consistency with the SCAQMD project specific thresholds for construction and operations;
- Project consistency with existing air quality plans; and
- Assessment of the cumulative health effects of the pollutants.

Consistency with Project Specific Thresholds

Construction-Related Impacts

The project site is located in the Basin, which is currently designated by the EPA as a non-attainment area for ozone, PM10, and PM2.5. The ozone, PM10, and PM2.5 emissions associated with the proposed project have been calculated. The above analysis found that development of the proposed project would result in less than significant regional and local emissions of the precursors to ozone, PM10 and PM2.5 during construction of the proposed project. Therefore related consistency with project specific thresholds that are construction-related, no impact would occur and no mitigation measures are required.

Operational-Related Impacts

The greatest cumulative operational impact on the air quality to the Basin will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development. In accordance with SCAQMD methodology, projects that do not exceed SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The data shows that for the on-going operations activities for the proposed project, the VOC, NOx, CO, SO2, PM10, and PM2.5 emissions would not exceed the SCAQMD thresholds of significance. Therefore related consistency with project specific thresholds that are operations-related, less than significant cumulative impacts would occur and no mitigation measures would be required.

Consistency with Air Quality Plans

As detailed above (b), the project site is currently designated as Commercial (C) in the General Plan and is also zoned Commercial. The proposed project would require a General Plan Amendment that would re-designate the project site to Residential Maximum 20 dwelling units per acre and a zone change to R-20. Although the proposed project is currently inconsistent with the General Plan land use designation for the project site, the proposed project would result in a less intensive land use than what the project site is currently designated (i.e., commercial to residential). Furthermore, the proposed project would be consistent with the adjacent residential land uses and would be in substantial compliance with the Land Use Element goals and policies. The proposed project would not result in an inconsistency with the current land use designation. The proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMPs for the Basin. Therefore related to consistency with air quality plans, no impact would occur and no mitigation measures would be required.

Cumulative Health Impacts

The Basin is designated as nonattainment for ozone, NO2, PM10, and PM2.5, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (elderly, children, and the sick). Therefore, when the

concentrations of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects. The regional analysis found that the proposed project would not exceed the SCAQMD regional significance thresholds for VOC, NOx (ozone precursors), PM10 and PM2.5. Therefore related to cumulative health, no impacts would occur and no mitigation measures would be required.

d) Expose sensitive receptors to substantial pollutant concentrations?			**X**	

The proposed project may expose sensitive receptors to substantial pollutant concentrations. The local concentrations of emissions produced in the nearby vicinity of the proposed project, which may expose sensitive receptors to substantial concentrations have been calculated for both construction and operations, which are discussed separately below.

Construction-Related Sensitive Receptor Impacts

The nearest off-site sensitive receptor to the proposed project are mobile homes as near as five feet east of the project site. The analysis above (b) found that construction of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance. Therefore related to the construction-related exposure of sensitive receptors to substantial pollutant concentrations, no impact would occur and no mitigation measures would be required.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the proposed project may expose sensitive receptors to substantial pollutant concentrations in the immediate vicinity of the proposed project from on-site operations or near intersections where the proposed project would substantially increase the vehicular traffic and resultant CO concentrations.

The local air quality impacts from the operation of the proposed project would occur from emissions generated on-site. The analysis provided above (b) found that the operation of the proposed project would result in emissions from architectural coatings off-gassing, landscaping equipment emissions, natural gas appliance emissions and on-site vehicular emissions. Because of the residential nature of the proposed project, the majority of the proposed project's operational emissions are from vehicles traveling on roadways away from the project site. These emissions are then spread over a vast area traversed by various mobile sources and do not result in localized air quality impacts in proximity to the project site. As such, localized operational modeling for project operations are not prepared for residential developments. Therefore, the on-going operations of the proposed project would not exceed local emissions thresholds at the nearest sensitive receptors to the project site from operational activities and no mitigation measures would be required.

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided above (b) shows that the proposed

project would not decrease the Level of Service (LOS) at any analyzed intersection to LOS E or worse and no analyzed intersection would operate at a LOS E or worse. Therefore related to operation-related exposure of sensitive receptors to substantial pollutant concentrations, less than significant impacts would occur and no mitigation measures would be required.

e) Create objectionable odors affecting a substantial number of people?			**X**	

The proposed project would not create objectionable odors affecting a substantial number of people. Potential odor impacts have been analyzed separately for construction and operations below.

Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Therefore due to the transitory nature of construction odors, less than significant impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Potential Operations-Related Odor Impacts

Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from odor emissions from the trash storage areas. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402, no significant impact related to odors would occur during the on-going operations of the proposed project. Therefore related to operation-related odors, less than significant impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?			**X**	

The project site potentially provides habitat that the proposed project could impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDF&W) or U. S. Fish and Wildlife Service (USF&WS).

The project site has topography that varies from level to rolling. The project site over the past several years routinely has been disked for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach).

In order to determine the significance of the proposed project impacts, Ecological Sciences, Inc. conducted focused burrowing owl (BUOW) surveys on July 3-6, 2014. Surveys for BUOW were conducted in accordance with current Multiple Species Habitat Conservation Plan (MSHCP) guidelines. Accordingly, a series of 4 morning (one hour before sunrise to two hours after sunrise) surveys were conducted over a four-day period per current protocol. Pursuant to survey protocol, surveyors initially used binoculars to scan all suitable habitat/potential refugia prior to the start of pedestrian surveys. Following the initial site scan, a systematic survey for burrows, burrowing owls, and owl sign was conducted by walking through suitable habitat over the entire survey area (i.e. the project site and within 150 meters where possible). To the extent possible, pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 30 meters (±100 feet) and were reduced to account for differences in terrain, vegetation density, and ground surface visibility (where necessary).

Potentially suitable burrows were examined for sign of BUOW use such as the presence of owl pellets, prey remains, or feathers at potential burrow entrances. Burrows were inspected with the aid of a mirror to better view burrow interiors. Any owls using habitat areas adjacent to the project site were also noted (if present). Weather conditions

were characterized as variable from clear (0 percent cloud cover), to partly cloudy (50% cloud cover). Ambient air temperatures were 71-88° F with generally calm conditions (0-5 mph breezes).

No direct burrowing owl observations or sign (pellets, fecal material, or prey remains) were recorded during the July 2014 focused surveys. Birds observed generally included those species that are accustomed to nearby human presence such as common raven (Corvus corax), American crow (Corvus brachyrhynchos), northern mockingbird (Mimus polyglottos), western kingbird (Tyrannus verticalis), European starling (Sturnus vulgaris), rock dove (Columba livia), mourning dove (Zenaida macroura), house finch (Carpodacus mexicanus), and house sparrow (Passer domesticus). No California ground squirrel were recorded.

Only a few suitable potential BUOW burrows/refugia were recorded on the project site likely because of discing activities and other long-standing anthropogenic disturbances that reduce potential small mammal colonies (e.g., ground squirrel). Although the BUOW is well known to occur in certain disturbed situations, the BUOW generally prefers moderately to heavily grazed grasslands for nesting and roosting and generally avoids recently disced fields that occlude/collapse ground squirrel burrows or other refugia. Only marginally suitable nesting and foraging habitat for BUOW is present on site. None of the burrows/refugia inspected during the July 2014 focused surveys were determined to be currently occupied or recently used by BUOW based on the lack of owl observations and absence of sign around burrow entrances. Surveys of the project site and scanning adjacent areas during peak BUOW activity times did not reveal any indication that this species was currently present or utilizing adjacent sites for foraging purposes. In accordance with MSCHP protocols, the proposed project will be required to repeat the BUOW survey 30 days prior to construction.

Therefore related to potential substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDF&W) or U. S. Fish and Wildlife Service (USF&WS) less than significant impacts would occur and no mitigation measures would be required.

b) Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Wildlife Service?				**X**

The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and

grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach).

Therefore related to riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game (CDF&W) or U. S. Wildlife Service (USF&WS), no impacts would occur and no mitigation measures would be required.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**

The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no significant existing trees or vegetation on the project site. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach).

Therefore related to federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, no impacts would occur and no mitigation measures would be required.

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?				**X**

The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the

west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach).

Therefore related to the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites, no impacts would occur and no mitigation measures would be required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**

The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach).

Therefore related to any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, no impacts would occur and no mitigation measures would be required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				**X**

The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the

west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north.

Ecological Sciences, Inc. indicates that the project site is has been primarily colonized by ruderal (weedy) herbs and grasses. Invasive species such as Russian thistle (Salsola tragus), pigweed (Chenopodium album), cheeseweed (Malva parviflora), brome grasses (Bromus spp.), oat (Avena sp.), mustard (Brassica sp.), Bermuda grass (Cynodon dactylon), filaree (Erodium cicutarium), spotted spurge (Euphorbia maculata), and puncture vine (Tribulus terrestris) were recorded. Ornamental trees present included gum tree (Eucalyptus sp.), Peruvian pepper (Schinus molle), and China berry (Melia azedarach). Furthermore, in accordance with MSHCP, the proposed project will be required to pay Multiple Species Conservation Habitat Plan (MSCHCP) impact fees prior to issuance of building permits.

Therefore related to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, no impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resources pursuant to Section 15064.5?				**X**
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				**X**

Based upon inspection of the project site and review of the cultural resources databases (Cultural Resources Assessment, BRC Consulting, December 2014), there are no known archaeological resources on the project site. There are no historical structures existing on the project site. There are no known paleontological or unique geological features on the project site. Additionally, the City's Final Program EIR (June 2006), Figure 5.10-3 list the project site as low potential for paleontological sensitive area based on extensive field work (Page 5.10-10).

The proposed project requires City approval of a General Plan Amendment (GPA). Since there is a GPA required for the project, Native American tribal groups were contacted by City Staff in accordance with the requirements of SB18. The City Staff received requests for consultation from both the Pechanga and Soboba bands of the Luiseno Indians. BRC Consulting, Inc. (BRC) performed field survey work accompanied by Pechanga Band of Luiseno Indians Monitor Shannon Smith, as request. During the survey work BRC did not discover cultural resources (including prehistoric or historic-period archaeological sites or historic period buildings) or evidence for cultural resources sensitivity within the project site.

Therefore related to historical resources, archaeological resources, and paleontological resource pursuant to Section 15064.5, no impact would occur and no mitigation measures would be required.

d) Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

There are no know any human remains, including those interred outside of formal cemeteries on the project site (Cultural Resources Assessment, BRC Consulting, December 2014). The City General Plan Final EIR found that:

> "*There are no known human remains in the project area. However, grading activities could uncover previously unknown human remains especially in areas that have not been surveyed. Grading activities will result in a significant impact to this issue throughout development of the project area. Implementation of the existing regulations and practices described in the Existing Setting subsection as well as Mitigation Measure C1 will reduce this impact to a level less than significant*." (Moreno Valley GP FEIR, Page 5.10-15)

However, should human remains be encountered on the project site, State Health and Safety Code Section 7050.5, and standard City Conditions of Approval reduce this impact to less than significant levels.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
The closest mapped active faults to the project site are the San Jacinto Fault, located 6.2 miles from the project site; the San Andreas Fault, located 15.2 miles from the project site; and, the Elsinore fault, located 16.4 miles from the project site. The project site is not located within an Alquist-Priolo Earthquake Hazard Zone or within a fault zone designated by the Riverside County Land Information System. A review of aerial photos and literature research conducted by Alta California Geochemical, Inc. indicated that faulting is absent from the project site. Therefore related to rupture of a known earthquake fault, the proposed project would have less than significant impacts and no mitigation measures would be required.				
(ii) Strong seismic ground shaking?			X	
The closest mapped active faults to the project site are the San Jacinto Fault, located 6.2 miles from the project site; the San Andreas Fault, located 15.2 miles from the project site; and, the Elsinore fault, located 16.4 miles from the project site. This faulting is not considered a significant constraint to development on the project site with the use of current development codes. Therefore related to strong seismic ground shaking, the proposed project would have less than significant impacts and no mitigation measures would be required.				
(iii) Seismic-related ground failure, including liquefaction?			X	
Seismic agitation of relatively loose saturated sands, silty sands, and some silts could potentially result in a buildup of pore pressure. If the pore pressure exceeds the overburden stresses, a temporary quick condition known as liquefaction can occur. Liquefaction effects can manifest in several ways including: 1) loss of bearing; 2) lateral spread; 3) dynamic settlement; and 4) flow failure. Later spreading has typically been the most damaging mode of failure. In general, the more recent that sediment has been deposited, the more likely it will be susceptible to liquefaction. Other factors that must be considered are: groundwater, confining stresses, relative density, and the intensity and duration of seismically-induced ground shaking. The project site is designated by the Riverside County Land Information System as having a "low' susceptibility to liquefaction. Due to the in-place density of the old alluvial fan deposits combined with the deep depth to groundwater the potential for liquefaction to occur on-site is very low based on existing conditions (Alta California Geotechnical, Inc.). Therefore related to seismic-related ground failure, including liquefaction, the proposed project would have less				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
than significant impacts and no mitigation measures would be required.				
(iv) Landslides?				**X**
The project site is not near or adjacent to the mountainside areas. Due to a lack of slopes within or nearby the project site seismically induced landsliding is not anticipated to pose a danger to the project site. Therefore related to landslides, the proposed project would have no impact and no mitigation measures would be required.				
(b) Result in substantial soil erosion or the loss of topsoil?			**X**	
Although the proposed project has the potential to result in erosion of soils during construction activities, erosion would be addressed through the implementation of existing erosion control standards and policies imposed by the City grading permit requirements. In addition, prior to the issuance of the grading permits for the proposed project, the project applicant shall apply for a General Construction National Pollutant Discharge Elimination System (NPDES) Stormwater Permit from the Regional Water Quality Control Board. Once completed, the buildings, paving, and landscaping that will occupy the project site will establish a condition presenting negligible potential for soil erosion. Therefore related to substantial soil erosion or the loss of topsoil, upon compliance with standard regulatory requirements less than significant impacts would occur and no mitigation measures would be required.				
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
Dry sand settlement is the process of non-uniform settlement of the ground surface during a seismic event. Based on the relatively fine-grained nature and/or in-situ density of the on-site soils, the potential for dry sand settlement to occur on project site is considered minimal. Therefore related to unstable soil, less than significant impacts would occur and no mitigation measures would be required.				
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			**X**	
Expansion index testing was performed on samples taken during the previous investigation. Based on the results, it is anticipated that the majority of materials onsite will vary in expansion potential from "very low" to "low" in general conformance with ASTM Test Method 4829 (Alta California Geotechnical, Inc.). Therefore related to expansive soil, less than significant impacts would occur and no mitigation measures would be required.				
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				**X**
The proposed project will operate on a sewer system that will be reviewed, approved, and installing according to Edgemont Community Services District requirements. The proposed project will not be introducing septic tanks or				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
alterative water disposal systems. Therefore related to septic tanks and soils, no impact would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

VII. GREENHOUSE GAS EMISSIONS. Would this project?				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	

The proposed project may generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would result in the development of 112 residential apartment units, a community center with a pool and tot lot. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, off-road equipment, waste disposal, water usage, and construction equipment.

The City has adopted the City of Moreno Valley Greenhouse Gas Analysis that requires a 15 percent reduction in GHG emissions between years 2007 and 2020. In order to determine if the proposed project would comply with the Plan's Standards, the GHG emissions from the proposed project were analyzed for both year 2016, (opening year of the proposed project) and year 2020. Using year 2016 versus 2007 provides a worst-case analysis, since the State has enacted several laws that took effect after 2007 that reduce GHG emissions and using the latter date means that less GHG reductions can be accounted for from the State measures.

The project's GHG emissions have been calculated with CalEEMod model based on the parameters detailed above. A summary of the results is shown below in Table 6: *Project Related Greenhouse Gas Annual Emissions*.

The data provided in Table 6: *Project Related Greenhouse Gas Annual Emissions* shows that the proposed project would create 1,410.86 $MTCO_2e$ per year based on the default year 2016 GHG emissions rates and in year 2020 would produce 1,141.37 $MTCO_2e$ per year that is based on approved Statewide GHG reduction regulations that would be fully implemented by year 2020 as well as from GHG emission reduction design features that have been incorporated into the proposed site plan. Table 6: *Project Related Greenhouse Gas Annual Emissions* shows that through implementation of EO S-1-07, that establishes performance standards for the carbon intensity of transportation fuels, AB 149, which limits GHG emissions from new vehicles sold in California, implementation of the CCR Title 24, Part 6 2013 Building Energy Efficiency Standards and CCR Title 24 Part 11 2013 CalGreen Standards that improves the energy efficiency of the proposed project, and project design features such as providing sidewalks, limiting the number of fireplaces, providing recycling bins, and planting a minimum of 243 trees on the project site, the proposed project's GHG emissions would be reduced by 19 percent and would meet the City's minimum 15 percent GHG reduction standard. In addition, the proposed project would be below the SCAQMD draft residential significance threshold of 3,500 $MTCO_2e$ per year for both the year 2016 and year 2020 GHG emissions. Therefore related to generation of GHG emissions that would occur from development and operation of the proposed project, less than significant impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 6: Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)					
	Bio-CO_2	NonBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Year 2016 Emissions						
Area Sources[1]	0.00	2.13	2.13	0.00	0.00	2.17
Energy Usage[2]	0.00	234.65	234.65	0.01	0.00	235.75
Mobile Sources[3]	0.00	1,082.82	1,082.82	0.04	0.00	1,083.60
Solid Waste[4]	10.46	0.00	10.46	0.62	0.00	23.44
Water and Wastewater[5]	2.31	41.82	44.13	0.24	0.00	51.03
Construction[6]	0.00	20.25	20.25	0.00	0.00	20.32
Vegetation[7]						-5.45
Total 2016 Emissions	**12.77**	**1,381.67**	**1,394.44**	**0.91**	**0.00**	**1,410.86**
Year 2020 Emissions						
Area Sources	0.00	2.13	2.13	0.00	0.00	2.17
Energy Usage	0.00	212.78	212.78	0.01	0.00	213.75
Mobile Sources	0.00	855.58	855.58	0.03	0.00	856.11
Solid Waste	5.23	0.00	5.23	0.31	0.00	11.72
Water and Wastewater	1.85	35.49	37.34	0.19	0.00	42.86
Construction	0.00	20.14	20.14	0.00	0.00	20.21
Vegetation						-5.45
Total 2020 Emissions	**7.08**	**1,126.12**	**1,133.20**	**0.54**	**0.00**	**1,141.37**
Percent Reduction between 2016 and 2020						**19%**
City of Moreno Valley Reduction Threshold						**15%**
SCAQMD Draft Threshold of Significance for Residential Uses						**3,500**

Notes:
[1] Area sources consist of GHG emissions from hearths, consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of GHG emissions from electricity and natural gas usage (not including hearths).
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[6] Construction emissions amortized over 30 years.
[7] Vegetation sequestration amortized over 30 years.
Source: CalEEMod Version 2013.2.2.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The applicable plans for the proposed project are the City of Moreno Valley Greenhouse Gas Analysis, adopted February 2012 and the City of Moreno Valley Energy Efficiency and Climate Action Strategy, adopted October 2012. The City has adopted these plans in order to assist the City in conforming to the GHG emissions reductions as mandated under AB 32. Both Plans provide the same reduction measures to be implemented in new developments to reduce GHG emissions as well as a GHG emissions reduction target of 15 percent below 2007 GHG emissions levels by 2020. Consistent with the CARB Scoping Plan, the City has chosen a reduction target of 15 percent below 2007 GHG emissions levels by 2020. Therefore, the proposed project would be considered to be

inconsistent with the City's Plans if the proposed project did not implement all applicable measures identified in the Plans and if the proposed project's GHG emissions are not 15 percent less than GHG emissions from business-as-usual conditions for a similar size project in year 2007.

The applicable measures provided in the City's GHG Plans were incorporated into the project design of the proposed project and include providing housing along a high quality transit corridor, promotion of alternative transportation methods through the providing of sidewalks throughout the project, utilization of shade trees and covered parking to reduce heat island impacts, utilization of low-flow water fixtures and smart irrigation controls to reduce water use, and through providing recycling bins to reduce waste sent to landfills. With implementation of various state requirements as well as from GHG emission reduction design features that have been incorporated into the proposed site plan, the proposed project's GHG emissions would be reduced by 19 percent by year 2020. Therefore, the proposed project would not conflict with the City's GHG reduction plans.

In addition to the City's GHG reduction plans, the SCAQMD initiated a Working Group to develop a GHG emissions policy and provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,500 MTCO2e for residential uses. Although the SCAQMD provided substantial evidence supporting the use of the above threshold, they have not been formally adopted because the SCAQMD is awaiting the outcome of the pending appeal of the California Building Industry Association v. Bay Area Air Quality Management District (BAAQMD), is resolved. Table 6: *Project Related Greenhouse Gas Annual Emissions* shows that both the year 2016 business-as-usual GHG emissions and the year 2020 GHG emissions would be below the SCAQMD draft residential significance threshold of 3,500 MTCO2e per year. Therefore related to conflicts with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases, less than significant impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project?				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	

Rough grading of the project site could potentially expose the public through the routine transportation or disposal of hazardous materials. The Phase II report prepared by SCS Engineers indicates that detectable concentrations of arsenic are present in the shallow soil in the soil samples collected at the project site. Arsenic concentrations at the project site exceed the residential California Human Health Screening Levels (CHHSL). However, arsenic is commonly present in California soils in concentrations that exceed risk criteria under naturally occurring conditions, and the arsenic concentrations in shallow soil at the project site are within naturally occurring background concentrations and do not appear to be indicative of a release of arsenic. Compliance with City Standards requiring the preparation of Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP) would reduce this impact to less than significant levels.

Additionally, the Phase II report prepared by SCS Engineers indicated the results of the organochlorine pesticide analysis of the shallow soil samples. They indicate that no reported concentrations of organochlorine pesticides above the laboratory reporting limit are present in the shallow soil samples collected at the project site. Compliance City Standards requiring preparation of Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP) would reduce this impact to less than significant levels.

Although the grading and construction activities would require the use and transport of potentially toxic construction materials, potential hazards related to this would be minimized through the compliance with existing Federal and State Occupation Safety and Health (OSHA) regulatory requirements. In addition, although the construction activities and the on-going maintenance of the landscaping and structures would include the use of hazardous materials such as gasoline, diesel fuel, herbicides, and solvents, the use of these materials would be typical of landscaping and building maintenance and would pose a low risk of hazard. Development of the proposed project would not create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Therefore related to routine transportation or disposal of hazardous materials, less than significant impacts and no mitigation measures would be required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	

The proposed project is located across the street (Edgemont) from the Edgemont Elementary School. However, implementation of the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
material, substances, or waste. Therefore related to hazardous emissions or materials within one-quarter mile of a school, the proposed project would have less than significant impacts and no mitigation measures would be required.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?				**X**
The Phase I Report (SCS Engineers) conducted a database search for the project site. Local, state, and federal regulatory databases were reviewed for the site. The project site was not listed on any of the regulatory databases reviewed. Therefore, the development of the proposed project would not result in an impact due to the creation of a significant hazard to the public or the environment. Therefore related to database list, no impacts would occur and no mitigation measures would be required.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		**X**		
The project site is located within the March Air Reserve Base Influence Area. The March Air Reserve Base is located approximately 2.4 miles to the south of the project site. According the March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan and Compatibility Map (June 2013) the project site is located within Zone D (Flight Corridor Buffer). Zone D has no residential limits regarding density. The zone has prohibited uses of hazards to flight. This includes physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited. Man-made features must be designed to avoid heightened attraction of birds. The proposed project consists of a 5.89-acre apartment complex with 112 dwelling units which is not a prohibited use. The proposed project would be compatible with the March Air Reserve Base Influence Area and the land use intensity for the project site with inclusion of Mitigation Measure HAZ-1 and HAZ-2. The development of the proposed project would not introduce people into an area where there is a safety hazard as a result of a public airport or public use airport. Therefore related to airport land use plans, less than significant impacts would occur and no mitigation measures would be required.				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		**X**		
The project site is not located within the vicinity of a private airport. The closest public airstrip is the March Air Reserve Base located approximately 2.5 miles to the south of the project site. The development of the proposed project would have less than significant impacts with Mitigation Measures HAZ-1 and HAZ-2 regarding introducing people into an area where there is a safety hazard as a result of a private airstrip. Therefore related to private airstrips, less than significant				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
impacts would occur with mitigation.				
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
The City would provide emergency response and evacuation plans for the project site and vicinity. The proposed project would provide a public (resident, guest, and deliveries) driveway access from a single gated, un-signalized driveway on Edgemont Street located approximately 300-feet south of Eucalyptus Avenue. In addition, a secondary driveway will be provided on Eucalyptus Avenue for emergency access only. Although the development of the proposed project would result in development of an undeveloped site, no significant changes in the circulation patterns in the project vicinity would occur. The development of the proposed project would not impair the ability of the City to implement its emergency response plan or utilize emergency evacuation routes. Therefore related to emergency response plans, no impact would occur and no mitigation measures would be required.				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				**X**
The project site is not located within or adjacent to an area subject to wildland fires. The development of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore related to wildland fires, no impact would occur and no mitigation measures would be required.				

Mitigation Measures

HAZ-1 Prior to the issuance of the Certificate of Occupancy, the project applicant shall execute an aviation easement with the March Joint Powers Authority that provides for the dedication of the easement to March Inland Port Authority.

HAZ-2 Prior to the occupancy of any apartment unit, the project applicant shall prepare general lease agreements for the project that shall include electromagnetic radiation notification.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			**X**	

The proposed project would potentially have significant short-term and long-term impacts on water quality standards or waste discharge requirements. The project site is currently vacant. The project site generally drains via sheet flow from the northwest corner to the southeast corner and across the adjacent property southerly ultimately to the improved Edgemont Channel B North Fork. The Edgemont Channel B North Fork is a Riverside County Flood Control and Water Conservation District (RCFCWCD) facility.

The proposed project would include the construction of an on-site storm drainage system to capture and carry on-site drainage to the southeast corner of the project site. At the southeast corner of the project site an off-site storm drain pipe would transport captured stormwater in and through the property to the south. The on-site and off-site storm drains will convey the proposed project stormwater to the Edgemont Channel instead of surface flowing across the adjacent parcel.

The proposed project would not exceed pre-project conditions for stormwater discharge. The proposed project includes infrastructure to detain and treat stormwater on-site and discharge it to the storm drain system at rates that would not exceed the capacity of the receiving flood control channel.

Construction

The proposed project could potentially result in short-term adverse construction-related impacts to surface water quality. Grading and construction would expose ground surfaces and increase the potential for erosion and the off-site transport of sediment in stormwater runoff. Additionally, the use of construction equipment and other materials could result in water quality impacts, if spills come into contact with stormwater and polluted runoff enters downstream receiving waters. The construction-related stormwater pollutant discharges from the project site would be temporary and would be controlled through compliance with the applicable National Pollution Discharge Elimination System (NPDES) permitting process.

Development of the project site is in excess of one (1) acre; therefore, the proposed project would be required to obtain coverage under the NPDES General Construction permit. The NPDES permit ensures that the State's mandatory standards for clean water and the Federal minimums are met. Compliance with the permit would prevent sedimentation and soil erosion through preparation and implementation of a Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP). This would include preparation of annual compliance reports and periodic inspections by the State Regional Water Quality Control Board (SRWQCB) staff.

The proposed project SWPPP will describe the construction operator's activities to comply with the requirements in the NPDES permit. Required elements of the SWPPP will include:

1. Site description addressing the elements and characteristics specific to the project site;

2. Descriptions of Best Management Practices (BMPs) for erosion and sediment controls;

3. (3) BMPs for construction waste handling and disposal;

4. Implementation of approved local plans; and,

5. Proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements.

The proposed project SWPPP will facilitate a process whereby the operator evaluates potential pollutant sources at the project site and selects and implements Best Management Practices (BMPs) to prevent or control the discharge of pollutants in stormwater runoff. The SWPPP will be approved by the (State Water Quality Control Board (SWQCB) prior to issuance of a grading or building permit. Therefore related to construction water quality standards, the proposed project would have less than significant impacts with mitigation.

Post Construction

The proposed project could potentially result in long-term adverse construction-related impacts to surface water quality. The Edgemont Channel downstream of Interstate 215 (I-215) is not an improved facility. The proposed project would create a Hydrologic Condition of Concern (HCOC), a potentially significant off-site impact to water quality standards or waste discharge requirements. The post construction-related stormwater pollutant discharges from the project site would be controlled through compliance with the applicable National Pollution Discharge Elimination System (NPDES) permitting process.

The WQMP will describe the responsibilities of the post-construction project owner(s) to comply with the requirements in the NPDES for post-construction urban runoff management. The WQMP will include:

1. Routine Non-Structural and Source Control BMPs;

2. Site Design and Treatment Control BMPs;

3. Operation and Maintenance implementation responsibilities and funding sources;

4. Pollutants of Concern;

5. Hydrologic Conditions of Concern; and,

6. Outdoor Activities.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Therefore related to post-construction water quality standards, the proposed project would have less than significant impacts and no mitigation measures would be required.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			**X**	
The availability of groundwater and issues involving the adequacy of recharge capability are regional in nature. The Groundwater Management Act (AB 3030) (CWC 2011) provides a systematic procedure for an existing local agency to develop a groundwater management plan. AB 3030 allows a local agency whose service includes a groundwater basin that is not already subject to groundwater management pursuant to law or court order to adopt and implement a groundwater management plan and includes plans to mitigate overdraft conditions, control brackish water, and to monitor and replenish groundwater. It is anticipated that potable water for the proposed project would continue to be supplied by the Box Springs Mutual Water Company (BSMWC). The BSMWC has an existing waterline that transects the project site in a north to south direction connecting to their aboveground water storage tanks on the adjacent parcel to the south. Development of the project site would significantly increase the amount of impervious surfaces such as building roofs, paving, etc. However, as a part of the WQMP for the project and as a result of the HCOC, the propose project will collect and retain and percolate the difference between pre-development and post-development flows for a 24-hour, 10-year storm frequency event. In addition, all dry weather flows will be collected and retained. The stormwaters and dry weather flows will be retained and percolated in an underground chamber and rock leach field. Therefore related to potential interfere with groundwater recharge activities, less than significant impacts would occur with no mitigation measures would be required.				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			**X**	
The drainage patterns through the project site would be slightly modified by the development of the proposed project (see "a" above). However, the potential for adverse erosion and sedimentation effects would be reduced to a less than significant level with the preparation and implementation of project-specific drainage improvements, and an SWPPP, as discussed above. Therefore related to substantially altering the existing drainage pattern of the project site, less than significant impacts would occur and no mitigation measures would be required.				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or surface runoff in a manner which			**X**	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
would result in flooding on- or off site?				
The development of the proposed project would significantly increase impervious surfaces on the project site. However, due to the retention and percolation of stormwaters on-site (see "b" above), there is no significant change in the amount of water that percolates into the ground and no increase of the amount of water that is discharged to the storm drain system would be anticipated to occur. In addition, all of the stormwaters that leave the project site are collected in a storm drain pipe that conveys the stormwater to the Edgemont Channel, eliminating any project storm flows from surface flowing across the adjacent project. Therefore relate to a potential increase in the rate of surface runoff in a manner that would result in flooding on- or off-site, less than significant impacts would occur and no mitigation measures would be required.				
e) Create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			**X**	
The proposed project would not exceed the capacity of storm drain facilities that serve the project site and surrounding areas. There is no significant increase of the amount of water that would be anticipated to be discharged to the storm drain system. The proposed project provides for the retention and percolation of stormwaters on-site (see "b" above). Therefore related to the capacity of storm drain facilities that serve the project site and surrounding areas, less than significant impacts would occur and no mitigation measures would be required.				
f) Otherwise substantially degrade water quality?			**X**	
The proposed project would not otherwise substantially degrade water quality. The proposed project would comply with requirements of the project's SWPPP, WQMP, and project site improvements. Therefore related to otherwise substantially degrading of water quality, less than significant impacts would occur and no mitigation measures would be required.				
g) Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			**X**	
The proposed project lies within the Flood Insurance Rate Map Community Panel No. 06065C0745G, dated August 28, 2008 and is partially located in Zone X (Other Flood Areas) and Zone A. Zone X is defined as "Areas of 0.2% annual chance flood; areas of 1% annual change flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." Zone A is defined as "No Base Flood Elevations defined." Project design features provide that all finish floor elevations for habitable structures in the Zone X portions of the proposed project are a minimum of one (1) foot above the fronting curb elevation on the low side of the drives. Therefore related to 100-year flood hazard areas as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, upon compliance with project design features less than significant impacts would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			**X**	
See paragraph "g" above. While the proposed project would place structures within the Zone X area, the structures and drives are oriented such that any floodwaters would exit the propose project at the same location (southeast corner of the project) that they exit in the pre-development condition. In addition, any project storm flows exiting the project at the southeast corner of the site would be contained within an underground storm drain pipe that connects to the Edgemont Channel, negating any possibility of surface erosion of the adjacent parcel. Therefore related to 100-year flood hazard area structures which would impede or redirect flood flows, less than significant impacts would occur and no mitigation measures would be required.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				**X**
The project site is not within a dam failure inundation area. The proposed project, as designed, would not create hazards in this regard. Therefore related to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, no impact would occur and no mitigation measures would be required.				
j) Inundation by seiche, tsunami, or mudflow?				**X**
Seiches are oscillations of the surface of inland bodies of water that vary in period from a few minutes to several hours. Seismic excitation can induce such oscillations. Tsunamis are large sea waves produced by submarine earthquakes or volcanic eruptions. The proposed project is not near a large body of water, or the Pacific Ocean, and the site is relatively flat without any hills (which can produce mudflows). Therefore relate to a seiche, tsunami, or mudflow, no impact would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?			**X**	

The proposed project would establish a gated apartment complex. Gating the apartment complex would establish a physical barrier across the project site. The project site has topography that varies from level to rolling. The project site has been routinely disked over the past several years for weed abatement in accordance with the requirements of the City. There are no existing significant trees or vegetation on the project site. The project site is bounded by existing single-family residences to the west and south, a water tank to the south, a mobile home park to the east, and single-family residences and an elementary school to the north. The proposed project would include the construction of 112 residential apartments. The proposed site plan is depicted on Figure 5: *Site Plan*. The proposed project would provide a public (resident, guest, and deliveries) driveway access from a single gated, un-signalized driveway on Edgemont Street located approximately 300-feet south of Eucalyptus Avenue. In addition, a secondary driveway will be provided on Eucalyptus Avenue for emergency access only. There are no existing significant trees or vegetation on the project site. The proposed project would be appropriately landscaped. The proposed project would include new curb, gutter, and curb adjacent sidewalks along Edgemont Street and curb separated along Eucalyptus Avenue. The proposed project would include a community building, pool and deck, tot-lot, and outdoor space area central located within the apartment complex. Pedestrian access would be provided from each of the apartment buildings to these areas.

A new six-foot (6') wrought iron fence with pilaster every 30-feet on-center would be constructed along both Edgemont Street and Eucalyptus Avenue inside of the property line in each case. A new six-foot (6') block wall would be constructed along the southerly property line. A new six-foot (6') block wall would remain along the easterly property line adjacent to the existing mobile home park. Adjacent to the R/O Zoned area to the northeast of the project site, a new six-foot (6') wrought iron fence with pilaster every 30-feet on-center would be constructed. An existing chain link fence would remain to the south of the new block wall on the southerly property line.

The area surrounding the project site has been developed with primarily with residential land uses. Several non-residential uses scattered along Eucalyptus Avenue in the vicinity of the project site. The majorities of the residences in close proximity to the project site are located within the Office Commercial zone and are considered pre-existing, non-conforming land uses. Existing single-family residences are located to south, west, and northwest of the project site. Single-family residence and a mobile home park are located immediately to the east of the project site. Edgemont Elementary School is located to north of the project site across Eucalyptus Avenue. There is an office building located to the northeast at the intersection of Day Street and Eucalyptus Avenue of the project site in the City of Riverside.

As noted above, the proposed project would provide sidewalks along both Edgemont Street and Eucalyptus Avenue. The new sidewalks would provide access to the mobile home park to the east and single-family home to the south. The project would not establish a physical barrier that would divide the community. Therefore related to physically divide an established community, less than significant impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	

The proposed development of the project is governed by land use plans, policies, or regulations of agencies with jurisdiction over the project site, including the City General Plan, the March Air Reserve Base Airport Influence Area, and other land use plans and policies for the project area. In addition, the project site is located within the six-county region which comprises the Southern California Association of Governments (SCAG) planning area. Further, the proposed project is located within the South Coast Air Basin (SCAB) and is, therefore, within the jurisdiction of the SCAQMD. The Air Quality Management Plan (AQMP), which was adopted by SCAG and the SCAQMD, establishes an air pollutant control program to achieve the attainment of State and Federal air quality standards in the Basin. According the March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan and Compatibility Map (June 2013) the project site is located within Zone D (Flight Corridor Buffer). Zone D has no residential limits regarding density.

The proposed project includes a General Plan Amendment (GPA) and Change of Zone (ZC) that would provide for establishment of the proposed residential uses. The nature and intensity of the proposed uses for the overall project are not inconsistent or incompatible with existing or proposed uses and do not present the potential for conflict with the City's General Plan or other City land use policies directed at avoiding or mitigating environmental effects. Therefore related to applicable land use plans, less than significant impacts would occur and no mitigation measures would be required. Section III., *Air Quality*, above discusses the consistency with the proposed project with the SCAQMD AQMP. Section VIII., *Hazards and Hazardous Materials,* above discusses the consistency with the proposed project with the March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan and Compatibility Map (June 2013).

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				**X**

The project site is not within any applicable habitat conservation plan or natural community conservation plan. Furthermore, in accordance with MSHCP, the proposed project will be required to pay Multiple Species Conservation Habitat Plan (MSCHCP) impact fees prior to issuance of building permits. Therefore related to applicable habitat conservation plan or natural community conservation plan, no impact would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

(a. & B.) The project site is located in an urbanized area with additional development occurring in the vicinity. No active mines or mineral recovery programs are currently active on the project site or in the vicinity of the project site. No mineral deposits have been identified in the City General Plan on the project site. Therefore related to loss of availability of a known mineral resource that would be of value to the region and the residents of the state, no impact would occur and no mitigation measures would be required. Additionally, therefore related to loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, no impact would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	

The proposed project would not expose persons to or generate noise levels in excess of standards established in the City General Plan or Noise Ordinance or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the construction and operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include grading of the 5.69 acre project site, building construction of the 112 residential apartment units, paving of the onsite roads and parking spaces, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are mobile homes as near as five feet (5') to the east, a single-family home as near as 10 feet to the south, a single-family home as near as 60 feet to the west, and Edgemont Elementary School as near as 100 feet to the north.

Section 11.80.030(B) of the City's Municipal Code limits all noise sources in the City to the noise levels where a high probability hearing loss would occur as determined by the Center for Disease Control and Prevention and OSHA. Notable noise level thresholds are 90 dBA for eight (8) hours and 105 dBA for one (1) hour (Details related to State and Federal Criteria Pollutant Standards are located in the Noise Impact Analysis Table B dated July 31, 2014). Section 11.80.030(D)(7) of the City's Municipal Code provides additional prohibitions on construction activities by restricting construction activities from occurring between the hours of 8:00 p.m. and 7:00 a.m..

The construction noise impacts nearby have been calculated through use of the Roadway Construction Noise Model (RCNM) and the parameters and assumptions of the Noise Impact Analysis dated July 31, 2014, in order to determine if the proposed construction activities would exceed the City noise standards. According to the project applicant the site preparation and grading activities that would occur near the homes would consist of the use of dozers, graders and scrappers that would make several passes over each portion of the project site, which will limit site preparation and grading activities near any particular sensitive receptor to less than one (1) hour intervals. However the building construction, paving and painting activities would have the potential to occur in the proximity of the same sensitive receptor for eight (8) continuous hours. Therefore, the one (1) hour standard of 105 dB has been utilized as the threshold for site preparation and grading activities and the eight (8) hour standard of 90 dB has been utilized as the threshold for building construction, paving, and painting activities. The results are shown below in Table 7: *Worse-Case Construction Noise Levels at Nearest Sensitive Receptor*.

Table 7: Worst-Case Construction Noise Levels at Nearest Sensitive Receptor

Construction Phase	Distance to Nearest Sensitive Receptor (feet)	Construction Noise Level (dBA Leq)	Threshold1 (dBA Leq)
Site Preparation	5	98	105
Grading	5	97	105
Building Construction	30	81	90
Paving	15	85	90
Painting	30	78	90

Notes:
1 Threshold for site preparation and grading activities based on Section 11.80.030(B) of the Municipal Code's one hour standard of 105 dB and threshold for building construction, paving, and painting activities based on OSHA eight hour standard of 90 dB.
Source: RCNM, Federal Highway Administration, 2006

Table 7: *Worse-Case Construction Noise Levels at Nearest Sensitive Receptor* shows that greatest noise impacts would occur during the site preparation phase of construction, with a noise level as high as 98 dBA Leq at the nearest offsite residential use. Table 7: *Worse-Case Construction Noise Levels at Nearest Sensitive Receptor* also shows that none of the construction phases would exceed the City's noise standards for each particular use, which is based on the anticipated duration of each impact. Through adherence to the limitation of allowable construction times provided in Section 11.80.030(D)(7) of the City's Municipal Code, the construction-related noise levels would not exceed any standards. Therefore related to the construction-related noise of the proposed project, less than significant impacts would occur and no mitigation measures would be required.

Operational-Related Noise

The proposed project would consist of the development of 112 residential apartment units. The proposed development would be adjacent to Eucalyptus Avenue and Edgemont Street, which may create noise levels in excess of City standards at the proposed residential uses.

The City's General Plan Policy 6.3.1 requires that sound mitigation be provided for new multiple-family residential buildings that are exposed to future exterior noise levels that exceed 20 dBA CNEL above the 45 dBA CNEL interior noise standard, or exceed 65 dBA CNEL at the exterior of the proposed residential apartment units.

In order to quantify the traffic noise impacts at the locations of the proposed homes, the exterior noise levels were calculated through use of the FHWA RD-77-108 traffic noise prediction model. The model was based on the nearest location that a home may be placed to Eucalyptus Avenue and Edgemont Street for the year 2016 with project traffic conditions provided in the Traffic Impact Analysis. The calculated exterior noise levels at the nearest patio, first floor façade, and second floor façade are shown below in Table 8: *Proposed Residential Exterior Noise Levels*.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 8: Proposed Residential Exterior Noise Levels

Roadway	Distance to Nearest Home[1] (Feet)	Calculated Noise Levels (dBA CNEL)		
		At Patio	First Floor Façade	Second Floor Facade
Eucalyptus Avenue	82	64.8	64.1	64.5
Edgemont Street	58	50.4	49.0	49.4

Notes:
[1] Measured from centerline of road.
Source: FHWA RD-77-108 Model.

Table 8: *Proposed Residential Exterior Noise Levels*. shows that none of the calculated exterior noise levels would exceed the City's 65 dBA CNEL exterior noise standard. The City utilized the 20 dBA difference between exterior and interior noise levels that are specified in the City's General Plan Policy 6.3.1 because this is the minimum exterior to interior attenuation that residential homes typically provide. Based on this attenuation rate, since all calculated exterior noise levels are below 65 dBA CNEL, it can be concluded that the interior noise would be below the 45 dBA CNEL interior noise standard. It should be noted that through implementation of the required Title 24 Part 6 building energy efficiency standards, that require the use of double paned windows and other noise and energy conservation building products, new multiple-family residential units typically have attenuation rates in the 25 to 30 dB range, so utilization of the 20 dB attenuation rate would be considered a conservative or worst-case analysis. The operational-related noise impacts to the proposed project would not exceed any standards. Therefore related to the operational-related noise impacts, less than significant impacts would occur and no mitigation measures would be required

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		**X**		

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include grading of the 5.69 acre project site, building construction of the 112 residential apartment units, paving of the onsite roads and parking spaces, and application of architectural coatings. The nearest sensitive receptors to the project site are mobile homes as near as five feet to the east, a single-family home as near as 10 feet to the south, a single-family home as near as 60 feet to the west, and Edgemont Elementary School as near as 100 feet to the north.

Section 9.10.170 of the City's Municipal Code limits vibration levels created on the project site from being felt at or beyond the property line. Since the City's Municipal does not provide a quantifiable vibration level, Caltrans guidance has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second Peak

Particle Velocity (PPV).

The primary source of vibration during construction would be from the operation of a bulldozer. From Table 9: *Vibration Source Levels for Construction Equipment* a large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite receptor would be 0.52 inch per second PPV. The vibration level at the nearest offsite receptor would exceed the 0.25 inch per second PPV threshold detailed above. This would be considered a potentially significant impact.

Table 9: Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second)	Approximate Vibration Level (Lv)at 25 feet
Pile driver (impact) - Upper range	1.518	112
Pile driver (impact) - typical	0.644	104
Pile driver (sonic) - Upper range	0.734	105
Pile driver (sonic) - typical	0.170	93
Clam shovel drop (slurry wall)	0.202	94
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: Federal Transit Administration, May 2006.		

Mitigation Measure NOI-1 is provided that would require that the project applicant restrict the use of large bulldozers and other large equipment (greater than 150 horsepower) from operating within 15 feet of any off-site structure. Through implementation of Mitigation Measure NO-1, the vibration impacts would be reduced to 0.16 inch per second PPV or less at the nearest offsite structures, which is within the 0.25 inch per second PPV threshold. Therefore related to construction-related vibration, the proposed project would have less than significant impacts with mitigation.

Operations-Related Vibration Impacts

The on-going operation of the proposed project would not include the operation of any known vibration sources. Therefore related to operations-related vibration, less than significant impacts would occur and no mitigation measures would be required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	

The ongoing operation of the proposed project may result in a potential substantial permanent increase in ambient

noise levels in the project vicinity above existing levels without the proposed project. Potential noise impacts associated with the operations of the proposed project would be from project-generated vehicular traffic on the project vicinity roadways.

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three (3) primary factors: (1) the volume of traffic; (2) the speed of traffic; and, (3) the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway so the proposed project's potential off-site noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

Objective 6.5 of the City's General Plan Noise Element, requires the City to minimize noise impacts from significant noise generators including roadway noise impacts. However neither the General Plan nor the CEQA Guidelines define what constitutes a "substantial permanent increase to ambient noise levels", as such, this impact analysis has utilized guidance from the Federal Transit Administration for a moderate impact.

The potential offsite traffic noise impacts created by the on-going operations of the proposed project have been analyzed through utilization of the FHWA model and parameters and the FHWA model noise calculation spreadsheets. The proposed project's offsite traffic noise impacts have been analyzed for the existing and opening year 2016 conditions and are discussed below.

Existing Conditions

The proposed project's potential offsite noise impacts have been calculated through a comparison of the Existing scenario to the Existing With Project scenario. The results of this comparison are shown in Table 10: *Existing Project Traffic Noise Contributions*.

Table 10: Existing Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			Increase Threshold[2]
		Existing	Existing Plus Project	Project Contribution	
Eucalyptus Avenue	West of Edgemont Street	66.9	67.0	0.1	+1 dBA
Eucalyptus Avenue	East of Edgemont Street	71.9	71.9	0.0	+1 dBA
Edgemont Street	South of Eucalyptus Avenue	48.4	50.9	2.5	+7 dBA
Edgemont Street	South of Project Driveway	50.1	52.8	2.7	+5 dBA

Notes:
[1] Distance to nearest residential or school use does not take into account existing noise barriers.
2 Increase threshold based on the significance thresholds defined in Transit Noise and Vibration Impact Assessment, prepared by Federal Transit Administration, 2006, for a moderate impact.
Source: FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table 10: *Existing Project Traffic Noise Contributions* shows that for the Existing conditions, the proposed project's

permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the increase thresholds detailed above. Therefore related to a substantial permanent increase in ambient noise levels for the existing condition, less than significant impacts would occur and no mitigation measures would be required.

Opening Year 2016 Conditions

The proposed project's potential offsite noise impacts have been calculated through a comparison of the year 2016 without project scenario to the year 2016 with project scenario. The results of this comparison are shown in Table 11: *Opening Year 2016 Project Traffic Noise Contributions*.

Table 11: Opening Year 2016 Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			Increase Threshold[2]
		2016 No Project	2016 Plus Project	Project Contribution	
Eucalyptus Avenue	West of Edgemont Street	67.1	67.3	0.2	+1 dBA
Eucalyptus Avenue	East of Edgemont Street	72.1	72.2	0.1	+1 dBA
Edgemont Street	South of Eucalyptus Avenue	48.6	51.2	2.6	+7 dBA
Edgemont Street	South of Project Driveway	50.3	53.0	2.7	+5 dBA

Notes:
1 Distance to nearest residential or school use does not take into account existing noise barriers.
2 Increase threshold based on the significance thresholds defined in Transit Noise and Vibration Impact Assessment, prepared by Federal Transit Administration, 2006, for a moderate impact.
Source: FHWA Traffic Noise Prediction Model- FHWA-RD-77-108.

Table 11: *Opening Year 2016 Project Traffic Noise Contributions* shows that for the opening year 2016 conditions, the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the increase thresholds detailed above. Therefore related to a substantial permanent increase in ambient noise levels for the opening year 2016 conditions, less than significant impacts would occur and no mitigation measures would be required.

d) A substantially temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	

The proposed project may create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above noise levels existing without the proposed project. The construction activities for the proposed project are anticipated to include grading of the 5.69 acre project site, building construction of the 112 residential apartment units, paving of the onsite roads and parking spaces, and application of architectural coatings. The nearest sensitive receptors to the project site are mobile homes as near as five feet (5') to the east, a single-family home as near as 10 feet to the south, a single-family home as near as 60 feet to the west, and Edgemont Elementary School as near as 100 feet to the north.

The construction noise impacts to the nearby sensitive receptors has been previously analyzed above (a), which found that that greatest noise impacts would occur during the site preparation phase of construction, with a noise level as

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

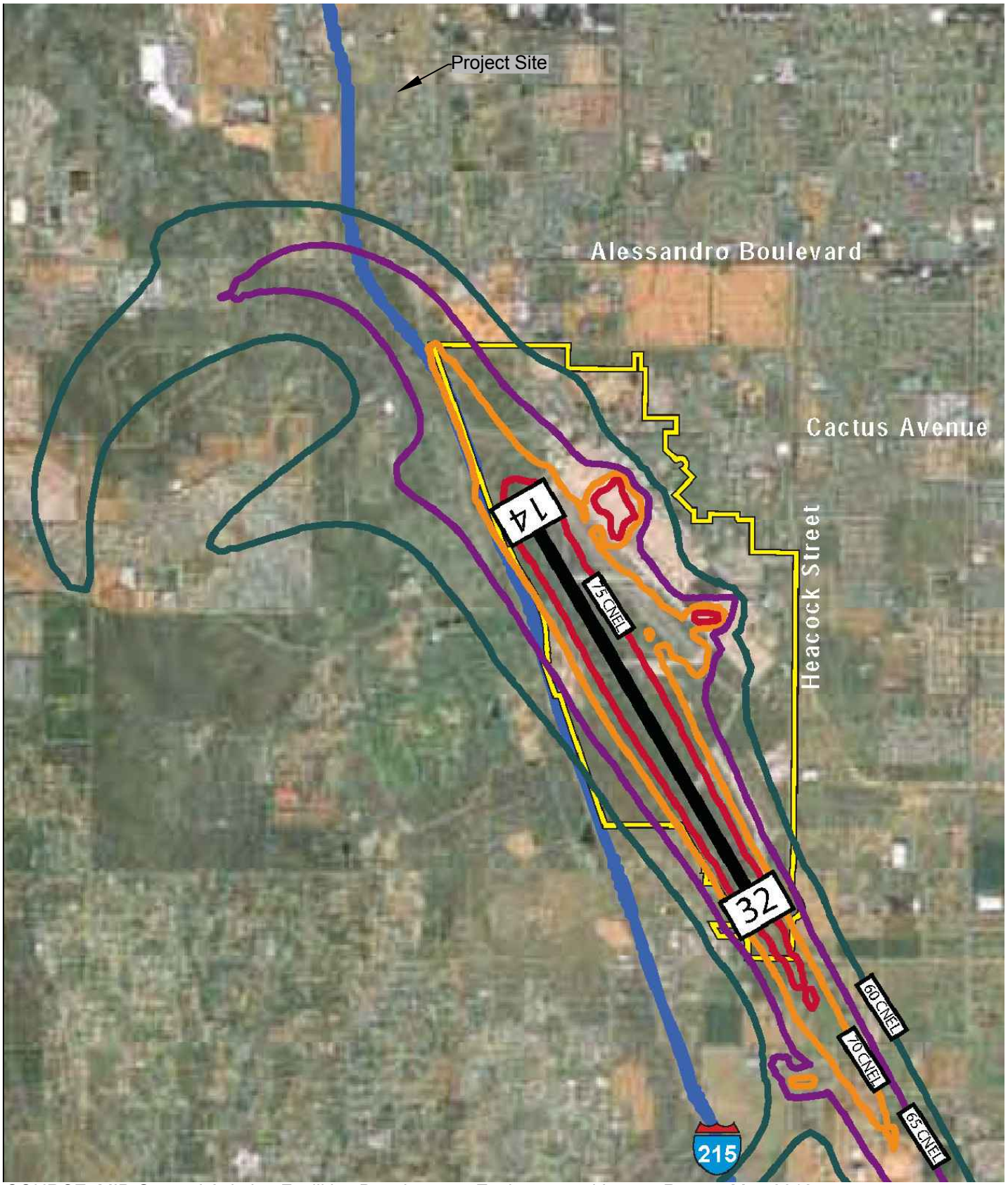
high as 98 dBA Leq at the nearest offsite residential use. The analysis above (a) also found that none of the construction phases would exceed the City's noise standards for each particular use, which is based on the anticipated duration of each impact. The City noise standards were developed based on a standard where a high probability hearing loss would occur as determined by the Center for Disease Control and Prevention and OSHA and represent the City's standard for determining what constitutes a substantial temporary increase in ambient noise levels. Through adherence to the limitation of construction activities to between 7:00 a.m. and 8:00 p.m. as detailed in Section 11.80.030(D)(7) of the City's Municipal Code, the proposed project would not create a substantial temporary or periodic increase in ambient noise levels. Therefore related to substantial temporary or periodic increase in ambient noise levels, less than significant impacts would occur and no mitigation measures would be required.

e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			**X**	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			**X**	

The proposed project may expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is March Air Reserve Base that is located as near as two (2) miles south of the project site. As detailed in Figure 13: *March Air Reserve Base Noise Contours for Year 2025 Operations*, the project site is located outside of the 60 dBA CNEL noise contours. Site observations during the noise measurements found that although aircraft noise is occasionally audible at the project site, the noise created by the aircraft is not loud enough to measurably increase the ambient noise levels at the project site, which are primarily created by the nearby roads and Interstate 215. Therefore related to aircraft noise, less than significant impacts would occur and no mitigation measures would be required.

Mitigation Measures

NOI-1 The project applicant shall require that all construction contractors restrict the operation of any construction equipment that is powered by a greater than 150 horse power engine from operating within 15 feet of any off-site structure.



SOURCE: MIP General Aviation Facilities Development Environmental Impact Report, May 2012.

MARCH AIR RESERVE BASE NOISE CONTOURS FOR YEAR 2025 OPERATIONS

EDGEMONT APARTMENTS PROJECT - CITY OF MORENO VALLEY

VISTA

NO SCALE

N

FIGURE 13

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				**X**
The proposed project is consistent with the population growth and projected development in the City of Moreno Valley's General Plan. Growth in population as a result of the proposed project is within both jurisdictions' projections. Therefore related to substantial population growth, less than significant impacts would occur and no mitigation measures would be required.				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**
There are no existing residential dwelling units on the subject site. Therefore, the development of the proposed project would not displace existing housing, necessitating the construction of replacement housing elsewhere. Therefore related to displacement of substantial numbers of existing housing necessitating the construction of replacement housing elsewhere, no impact would occur and no mitigation measures would be required				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**
There are no existing residential dwelling units on the subject site. The development of the proposed project would not displace existing housing, necessitating the construction of replacement housing elsewhere. Therefore related to the displacement of substantial numbers of people necessitating the construction of replacement housing elsewhere, no impact would occur and no mitigation measures would be required				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?			**X**	

Fire and emergency medical services to the project vicinity are provided by the City Fire Department. The proposed residential development would result in the addition of an approximately 5.89 acre apartment complex with 112 dwelling units. The addition of these structures and residents would increase the number of responses for fire protection services and emergency medical services to the project site and vicinity.

Consistent with the City's standard requirements, the project applicant will pay development impact fees to address the proposed project's incremental need for fire protection services and facilities. Therefore related to fire protection, with the payment of development fees, less than significant impacts would occur and no mitigation measures would be required.

b) Police protection?			**X**	

The development of the proposed project would result in an incremental increase in the number of residential units and residents in the area served by the City Police Department. According to the Police Department, the proposed project would not adversely impact the level of service provided. Therefore related to police protection with the payment of development fees, less than significant impacts would occur and no mitigation measures would be required.

c) Schools?			**X**	

The development of the proposed project would result in an incremental increase in the number of residential units and school age residents in the Moreno Valley Unified School District.

As permitted by State law, school districts assess school impact fees to help finance needed facilities and services. Prior to the issuance of building permits, the project applicant would be required to pay school fees to the Moreno Valley Unified School District. Therefore related to the incremental increase in the number of residential units with school age residents in the Moreno Valley Unified School Distinct with the payment of the required school fees in accordance with the provisions of the State law, less than significant impacts would occur and no mitigation measure would be required.

d) Parks?			**X**	

With the addition of 112 dwelling units, the development of the proposed project is not anticipated to result in a significant increase in demand for parks or governmental services related to parks. The proposed project includes a community and pool area. The proposed project would pay fees in accordance with adopted City polices related to park fees. Therefore related to parks, less than significant impacts would occur and no mitigation measures would be

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
required.				
e) Other public facilities?			**X**	
The development of the proposed project would result in an incremental increase in the Moreno Valley Library District service area. The proposed residential development would result in the addition of 112 dwelling units. According to the Moreno Valley Library District, the property tax resource associated with the proposed residential development would support the additional need for staff and materials. Therefore related to other public facilities including library services, less than significant impacts would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			**X**	
The proposed project would include the development of an approximately 5.89 acre apartment complex with 112 dwelling units. Furthermore, the proposed project includes a clubhouse and pool area. The proposed project would not significantly increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore related to increase in existing recreational uses, less than significant impacts would occur and no mitigation measures would be required.				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**
The proposed project would include the development of an approximately 5.89 acre apartment complex with 112 dwelling units. The proposed project includes the building of a private clubhouse and pool area that would serve as a resident recreational facility. It is not anticipated that a recreational facility would need to be expanded. Therefore related to expansion of recreational facilities no impact would occur and no mitigation measures would be required.				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		**X**		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		**X**		

The following section provides the conclusions for the traffic analysis of the proposed project based on Arch Beach Consulting Traffic Impact Analysis August 2014.

Project Trip Generation

The proposed project is the development of 112 apartment DUs on a vacant 5.69 acre parcel on the southeast corner of Edgemont Street/Eucalyptus Avenue in the western part of the City. Per Institute of Transportation Engineers (ITE) trip rates, the proposed project would generate approximately 745 daily trips, 57 a.m. peak hour trips (11 inbound and 46 outbound), and 69 p.m. peak hour trips (45 inbound and 24 outbound).

Existing plus Project

Based on the Existing plus Project Level of Services (LOS) analysis, the study area roadway segments would continue to operate with satisfactory LOS (LOS D or better) with addition of traffic from the proposed project. However, the intersection of Edgemont Street/Eucalyptus Avenue is forecast to operate from LOS D to LOS E with addition of traffic from the proposed project. Per the City's significance criteria, this would be a significant impact.

Mitigation Measure TRA-1 is required for the significantly impacted intersection of Edgemont Street/Eucalyptus Avenue which is forecast to operate from LOS D to LOS E with addition of traffic from the proposed project. With the implementation of Mitigation Measure TRA-1 above, the intersection would operate with satisfactory LOS at LOS D, and the project's impact would be mitigated to less than significant and the project's impact would be reduced to a less than significant level.

Opening Year 2016 plus Project

Based on the Existing plus Project LOS analysis, the study area roadway segments would continue to operate with satisfactory LOS (LOS D or better) with addition of traffic from the proposed project. However, the intersection of Edgemont Street/Eucalyptus Avenue is forecast to operate from LOS D to LOS E with addition of traffic from the proposed project. Per the City's significance criteria, this would be a significant impact.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation Measure TRA-1 mitigates the cumulatively impacted intersection of Edgemont Street/Eucalyptus Avenue which is forecast to operate from LOS D to LOS E with addition of traffic under cumulative project conditions. With the implementation of Mitigation Measure TRA-1, the intersection delay would be reduced by 10.0 seconds (46.6 seconds to 36.6 seconds), however, the intersection would still operate at LOS E. The upper limit of delay (satisfactory) LOS D is 35.0 seconds. Implementation of Mitigation Measure TRA-1 would improve delay to just 1.6 seconds over the LOS D threshold.

Next, a peak hour traffic signal warrant was conducted per the MUTCD. Per the peak hour signal warrant, the minimum peak hour volume threshold for a single-lane minor street approach to warrant a signal is 100 vehicles per hour. In the p.m. peak hour of the Opening Year plus Project condition, the total northbound approach volume is 54 vehicles. Therefore, the minor street volume threshold would not be met and a traffic signal would not be warranted.

Although the intersection delay would improve by 10.0 seconds (or just 1.6 seconds over the LOS D threshold), it would continue to operate at LOS E with the geometric improvements outlined above, and a peak hour traffic signal warrant would not be met. For those delayed vehicles on the northbound approach, there are other available routes to I-215 and Day Street via Dracaea Avenue to the south. Therefore, since the intersection's peak hour volumes would not warrant the installation of a traffic signal and the availability of other routes to access I-215 and Day Street, the proposed project would not create a significant impact at Edgemont Street/Eucalyptus Avenue and the project's impact would be reduced to a less than significant level with anticipated re-routing of project traffic to other available routes.

Based on the Opening Year 2016 plus Project LOS analysis, the roadway segment of Edgemont Street, from Eucalyptus Avenue to Dracaea Avenue is forecast to operate from LOS A-D to LOS E with addition of traffic from the proposed project. Per the City's significance criteria, this would be a significant impact. With the implementation of Mitigation Measure TRA-2, the roadway segment capacity would be at LOS A-D (from LOS E) and the project's impact would be reduced to a less than significant level. Therefore, the overall opening year 2016 plus project's impacts have been reduced to less than significant levels with mitigation.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			**X**	

The development of the proposed project would not result in a change in air traffic patterns, including any change in traffic levels or location. Therefore related to air traffic patterns, no impact would occur and no mitigation measures would be required.

d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				**X**

Public (resident, guest, and deliveries) driveway access to the proposed project would be provided from a single gated, un-signalized driveway on Edgemont Street located approximately 300 feet south of Eucalyptus Avenue. The gated

driveway entrance would provide 120 feet of stacking over two inbound lanes (60 feet per lane). In addition, a secondary driveway will be provided on Eucalyptus Avenue for emergency access only. In addition, based on the peak hour intersection LOS analysis reported above, the driveway intersection with Edgemont Street is forecast to operate at LOS A in both peak hours during the Opening Year of the project. Review of the street geometrics of Edgemont Street, at the proposed project driveway, indicates no visual obstructions along the roadway to prohibit drivers to maneuver in, and out of, the driveway area.

Internal circulation within the project site is based on a loop driveway aisle that measures 25 feet wide with 44 foot turn radii, and has been designed to meet the City's design standards. The proposed project would not substantially increase hazards due to a design feature or incompatible uses. Therefore related to increased hazards, no impact would occur and no mitigation measures would be required.

e) Result in inadequate emergency access?				**X**

The project as designed and conditioned is consistent with City standards. The project site will be readily accessible for emergency access. The proposed project would provide a public (resident, guest, and deliveries) driveway access from a single gated, un-signalized driveway on Edgemont Street located approximately 300-feet south of Eucalyptus Avenue. In addition, a secondary driveway will be provided on Eucalyptus Avenue for emergency access only. Therefore related to emergency access, no impact would occur and no mitigation measures would be required.

f) Conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				**X**

The proposed project would not conflict with adopted policies or programs supporting alternative transportation, including bicycle use and transit facilities. The proposed project will construct their frontage along Edgemont Street and Eucalyptus Street to the City's standards and will be consistent with existing facilities. Therefore, with the project designed to City standards, there would be no impacts to pedestrian and bicycle circulation with the proposed project. Therefore related to conflicts with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, of other decrease the performance or safety of such facilities, no impact would occur and no mitigation measures would be required.

Mitigation Measures

TRA-1 Prior to the issuance of a Certificate of Occupancy, the project applicant shall construct the following improvements at the intersection of Edgemont Street/Eucalyptus Avenue:

- Widen the northbound approach on Edgemont Street, between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and 36 foot curb-to-curb width, and contain the following geometrics:

- One southbound return (through) lane
- One northbound left turn lane (Eucalyptus Avenue to project driveway)
- One northbound right turn lane (Eucalyptus Avenue to project driveway).

TRA-2 Prior to the issuance of a Certificate of Occupancy, the project applicant shall pay their fair-share cost to construct the following improvements on Edgemont Street, between Eucalyptus Avenue and the project driveway. Therefore, the following improvement would be required:

- Widen the segment of Edgemont Street between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and contain the following geometrics:
  - One southbound return (through) lane with 12 to 14 feet of width
  - One northbound left turn lane (Eucalyptus Avenue to project driveway) with a 12 foot width
  - One northbound right turn lane (Eucalyptus Avenue to project driveway) with a 14 foot width
- New curb and gutter shall be constructed along the project frontage on the east side of Edgemont Street and at least 100 feet of new curb and gutter shall be constructed on the west side of Edgemont Street, south of Eucalyptus Avenue. From that point to the south, the edge of pavement may be unimproved, but a minimum 12 foot wide paved southbound lane shall be provided to the project's southern boundary.
- The project contribution to new traffic at this roadway segment is 91.9 percent.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			**X**	
As designed and conditioned, the proposed project will not exceed wastewater treatment requirements of the Regional Water Quality Control Board. Therefore related to exceeding wastewater treatment less than significant impacts would occur and no mitigation measures would be required.				
b) Require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
The proposed project will not exceed the existing or planned capacity of the Box Springs Mutual Water Company and/or Edgemont Community Services District. Therefore related to water and wastewater treatment facilities or expansion less than significant impacts would occur and no mitigation measures would be required.				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
The proposed project would not result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The development of the proposed project would result in the provision of an on-site storm drainage system that would convey runoff from the project site into the existing off-site facilities nearest to the project site. Therefore related to construction of new storm water drainage facilities, less than significant impacts would occur and no mitigation measures would be required.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
The project site is within an area with existing water infrastructure and supplies. The development of the proposed project would result in an increase in the demand for local water supplies. Therefore with sufficient water supplies available from existing entitlements to serve the project site less than significant impacts would occur and no mitigation measures would be required.				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
The project site is within an area with existing water infrastructure and supplies. The development of the proposed project would result in an increase in the demand for local water supplies. With sufficient water supplies, via the Box Springs Mutual Water Company, are available from existing entitlements to serve the proposed project. The				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

wastewater treatment provider, Edgemont Community Service District, has been advised of the proposed project and has not provided any indication of inadequate wastewater treatment capacity. Therefore related to wastewater treatment less than significant impacts would occur and no mitigation measures would be required.

f)) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			**X**	

The needs of the project for solid waste capacity would be negligible. The project will be served by a landfill in the Badlands with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Source: Draft EIR for the General Plan Update. Therefore related to landfill capacity, less than significant impacts would occur and no mitigation measures would be required.

g) Comply with federal, state, and local statues and regulations related to solid waste?				**X**

The project does not conflict with federal, state, and local statues and regulations related to solid waste. Waste collection services in City of Moreno Valley incorporate waste reduction provisions directed at compliance with State waste stream diversion regulations. Therefore related to federal, state, and local statues and regulations related to solid waste, no impacts would occur and no mitigation measures would be required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			**X**	
As discussed in previous Sections 1. through 16 above, the proposed project will not cause impacts upon biological or cultural resources that are not less than significant. The proposed project will obtain a grading permit from the Lead Agency. The proposed project will require final grading and excavation activities for the individual building pads, detention basin, roads, and the placement of infrastructure and utility lines on the project site. The proposed project would not result in the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Therefore related to the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; or, eliminate important examples of the major periods of California history or prehistory, less than significant impacts would occur and no mitigation would be required.				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				**X**
Although the proposed project would have impacts that are individually less than significant limited, they would not be cumulatively considerable with respect to air quality, noise, land use and planning, and transportation and traffic. Therefore related to impacts that could be considered cumulatively considerable, no impacts would occur and no mitigation measures would be required.				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				**X**
The proposed project would not have environmental effects which will cause substantial adverse effects on human				

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

beings, either directly or indirectly. The construction activities and on-going operation of the proposed project would not generate significant environmental effects which would cause an adverse effect on human beings, either directly or indirectly. Therefore related to substantial adverse effects on human beings, either directly or indirectly, no impacts would occur or no mitigation measures would be required.

4.0 REFERENCES

4.0 References

1. Air Quality and Greenhouse Gas Emissions Impact Analysis, Edgemont Apartments Project, VISTA Environmental, July 28, 2014

2. Cultural Resources Assessment – Edgemont Apartments Project, BCR Consulting, LLC., December 2014

3. City of Moreno Valley, General Plan, as updated in July 2006

4. City of Moreno Valley, General Plan Final Program EIR SCH #20091075, P & D Consultants, July 2006

5. City of Moreno Valley, Zoning Ordinance, as updated on May 2014

6. Focused Western Burrowing Owl Survey, Assessor's Parcel Numbers 263-120-020 and -025, Ecological Sciences, Inc., July 15, 2014

7. Hydrology Report, Edgemont Apartments, MDS Consulting, August 2014

8. Limited Phase II Soil Sampling, Assessor's Parcel Numbers 263-120-020 and -025, SCS Engineers, June 27, 2014

9. March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, Mead & Hunt, June 2013

10. Noise Impact Analysis, Edgemont Apartments Project, VISTA Environmental, July 31, 2014

11. Phase I Environmental Site Assessment, Assessor's Parcel Numbers 263-120-020 and -025, SCS Engineers, June 27, 2014

12. Preliminary Geotechnical Investigation, Project No. 1-0129, Alta California Geotechnical Inc., June 18, 2014

13. Summary of Infiltration Testing, Project No. 1-0129, Alta California Geotechnical Inc., July 1, 2014

14. Traffic Impact Study, Edgemont Street Apartments, Arch Beach Consulting, October 2014

15. WQMP Report, Edgemont Apartments, MDS Consulting, August 2014

Edgemont Apartments – Mitigation Monitoring and Reporting Program

Introduction

This Mitigation Monitoring and Reporting Program has been prepared for the use in implementing mitigation for the Edgemont Apartments Mitigated Negative Declaration (MND). The program has been prepared in compliance with State law and the MND prepared for the project.

The California Environmental Quality Act (CEQA) requires adoption of a reporting or monitoring program for those measures places on a project to mitigated or avoid adverse effects on the environment (Public Resources Code Section 21081.6). The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation.

The monitoring program contains the following elements:

- 1. The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- 2. A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.
- 3. The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program. As changes are made, new monitoring compliance procedures are records will be developed and incorporated into the program.

Mitigation Monitoring and Responsibilities

As the Leady Agency, the City of Moreno Valley is responsible for ensuring full compliance with the mitigation measures adopted for the proposed project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the project. In this regards, the responsibilities for implementation have been assigned to the Applicant, Contractor, or a combination thereof. If during the course of project implementation, any of the mitigation measures identified herein cannot be successfully implemented, the City shall be immediately informed, and the City will then inform any affected responsible agencies. The City, in conjunction with any affected responsible agencies, will then determine if modification to the project is required and/or whether alternative mitigation is appropriate.

Mitigation Monitoring and Reporting Program Checklist

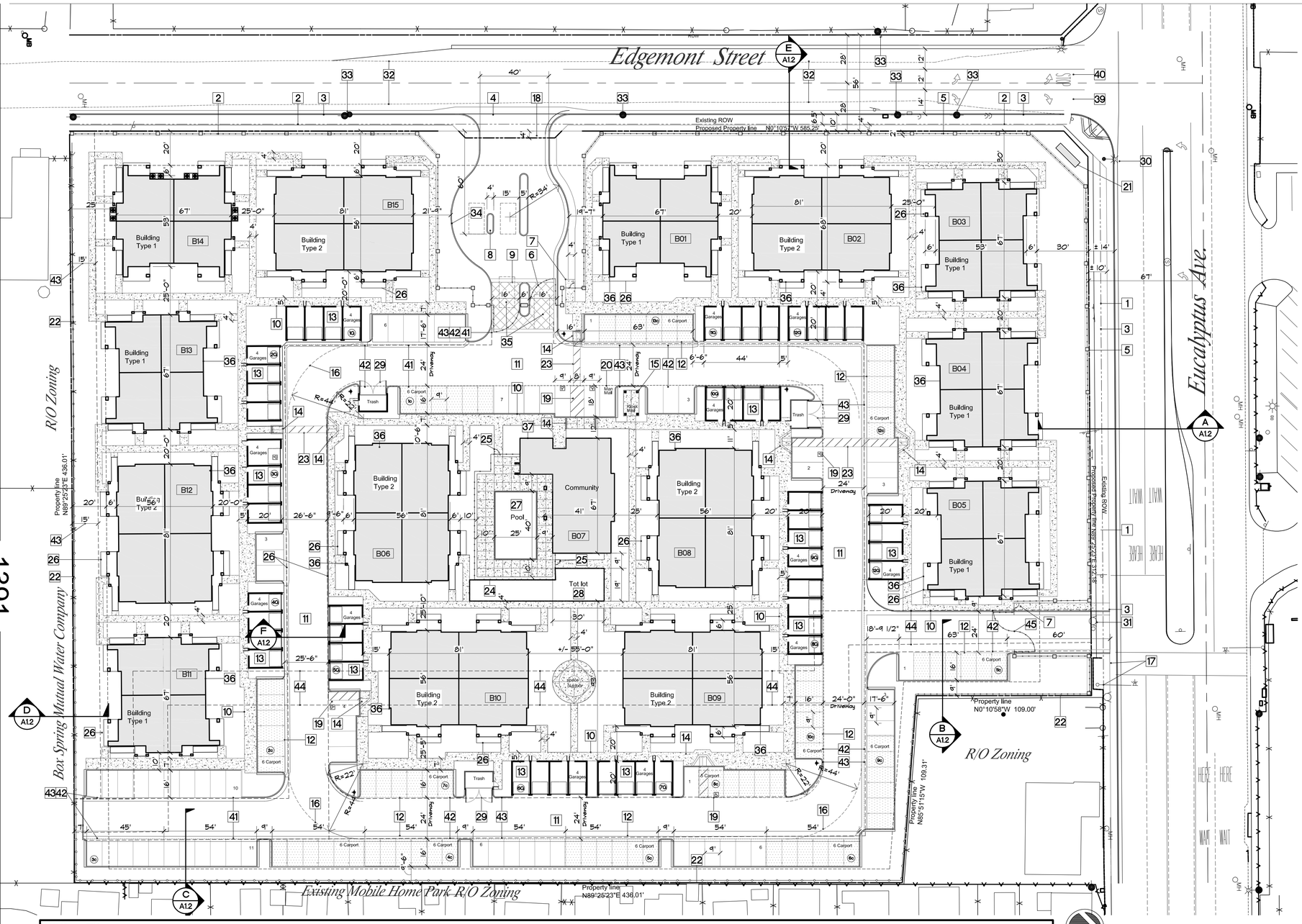
Project: Edgemont Apartments Applicant: LATCO

Date: March 12, 2015

Mitigation Measure No./ Implementation Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Verified Date/Initials	Sanctions for Non-Compliance
Hazards/Hazardous Materials						
HAZ-1 Prior to the issuance of the Certificate of Occupancy, the project applicant shall execute an aviation easement with the March Joint Powers Authority that provides for the dedication of the easement to March Inland Port Authority.	City of Moreno Valley Building and Safety, Engineering, Planning Division	n/a	Prior to Certificate of Occupancy	Review aviation easement		Withhold Certificate of Occupancy
HAZ-2 Prior to the occupancy of any apartment unit, the project applicant shall prepare general lease agreements for the project that shall include electromagnetic radiation notification.	City of Moreno Valley Building and Safety, Engineering, Planning Division	n/a	Prior to Occupancy Permit	Review of general lease agreements		Withhold Occupancy Permit
Noise						
NOI-1 The project applicant shall require that all construction contractors restrict the operation of any construction equipment that is powered by a greater than 150 horse power engine from operating within 15 feet of any off-site structure.	City of Moreno Valley Building and Safety, Engineering, Planning Division	Ongoing during construction	Throughout construction	Review of construction documents and on-site inspection		Withhold Grading Permit or Stop Work Order

Mitigation Measure No./ Implementation Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Verified Date/Initials	Sanctions for Non-Compliance
Traffic/Transportation						
TRA-1 Prior to the issuance of a Certificate of Occupancy, the project applicant shall construct the following improvements at the intersection of Edgemont Street/Eucalyptus Avenue: § Widen the northbound approach on Edgemont Street, between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and 36 foot curb-to-curb width, and contain the following geometrics: § One southbound return (through) lane One northbound left turn lane (Eucalyptus Avenue to project driveway) One northbound right turn lane (Eucalyptus Avenue to project driveway).	City of Moreno Valley Building and Safety, Engineering, Planning Division	Ongoing during construction	Prior to Certificate of Occupancy	Review of construction documents and on-site inspection		Withhold Certificate of Occupancy
TRA-2 Prior to the issuance of a Certificate of Occupancy, the project applicant shall pay their fair-share cost to construct the following improvements on Edgemont Street, between Eucalyptus Avenue and the project driveway.	City of Moreno Valley Building and Safety, Engineering, Planning Division	Ongoing during construction	Prior to Certificate of Occupancy	Review of construction documents and on-site inspection		Withhold Certificate of Occupancy

Mitigation Measure No./ Implementation Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Verified Date/Initials	Sanctions for Non-Compliance
Therefore, the following improvement would be required: • Widen the segment of Edgemont Street between Eucalyptus Avenue and the project driveway to have a 56 foot right-of-way (ROW) and contain the following geometrics: o One southbound return (through) lane with 12 to 14 feet of width o One northbound left turn lane (Eucalyptus Avenue to project driveway) with a 12 foot width o One northbound right turn lane (Eucalyptus Avenue to project driveway) with a 14 foot width o New curb and gutter shall be constructed along the project frontage on the east side of Edgemont Street and at least 100 feet of new curb and gutter shall be constructed on the west side of Edgemont Street, south of Eucalyptus Avenue. From that point to the south, the edge of pavement may be unimproved, but a minimum 12 foot wide paved southbound lane shall be provided to the project's southern boundary.						



Site Plan

Scale = 1"=30'-0"

Project Data:	
Use:	Multi Family Apartments
Owner:	Latco SC, Inc 940 Calle Negocio, Suite 200 San Clemente, CA. 92673
Contact:	Wes Alston P.O. Box 14679 Long Beach, CA. 90853
Address:	Eucalyptus Street Moreno Valley, Ca.
Site Area:	Gross Acreage = 6.63 Acres Net Acreage = 5.69 Acres Disturbed Acreage = 6.34 Acres
A.P.N.:	263-120-020 & 263-120-025
Existing Zone: Proposed Zone:	Office / Commercial R-20
Flood Zone	X shaded & unshaded

Number of Stories:	1 and 2 Story
Building Occupancy:	R2 , A/B & U
Construction Type:	VB
Density:	= 112 D.U. / 5.89 AC = 19.7 D.U. / AC

Utilities

Electricity:
Moreno Valley Electric utility: 1(877) 811-8700
Southern California Edison: 1(800)684-8123
(turn on/off)

Natural Gas:
The Gas Company 1(800)427-2200

Telephone:
AT&T 1(800)310-2355

Trash Service
Waste management of Inland Valley
1(800) 423-9986

Trash Service
Waste management of Inland Valley
1(800) 423-9986

Water
Box Spring Mutual Water Company
1(951) 653-6419

Sewer
Edgemont Community Service District
1(951) 653-5120

School District
Moreno Valley Unified School District
1(951) 571-7500

Building Type 1 Area:

First Floor Units
Unit A1 = 1br/1ba
Living = 796 sf
Patio = 123 sf
Entry = 39 sf
Wh/sto = 17 sf
Total = 975 sf x (4) = 3,900sf

Second Floor Units
Unit A2 = 1br/1ba
Living = 796 sf
Deck = 76 sf
Entry = 39 sf
Wh/sto = 17 sf
Total = 928 sf x (4) = 3,712sf

Total Area Building Type 1 = 7,612 sf

Building Type 2 Area:

First Floor Units
Unit B1 = 2br/2ba
Living = 1098 sf
Patio = 118 sf
Entry = 36 sf
Wh/sto = 17 sf
Total = 1269 sf x (4) = 5,076 sf

Second Floor Units
Unit B2 = 2br/2ba
Living = 1098 sf
Deck = 68 sf
Entry = 36 sf
Wh/sto = 17 sf
Total = 1219 sf x (4) = 4,876 sf

Total Area Building Type 2 = 9,952 sf

Building & Unit Totals
Building 1
7 bldgs x 8 d.u. =(56)1br/1ba
Building 2
7 bldgs x 8 d.u. = (56) 2br/2ba
Total D.U. = 112 units

Mix Ratio:
1br/1ba = 56 = 50%
2br/2ba = 56 = 50%

Community Building Area

Building Area
Office Space = 470 sf
Lounge/RR = 1,577 sf
Exercise Room = 440 sf
Storage = 201 sf
Patio = 117 sf
Entry = 49 sf
Total = 2,854 sf

Garages

4-Car Garage = 880 sf
880sf x (12) =10,560 sf
Accessible Garage = 980 sf
980 sf x (1) = 980 sf
Total (13) = 11,540 sf

Carports

6-Car Carport = 972 sf
972sf x (12) =11,664 sf
Accessible Carport = 900 sf
900 sf x (1) = 900 sf
Total (13) = 12,564 sf

Parking

Parking Required:
1.5 stall per 1ba/1ba = 56 D.U. = 84 stalls
2 stall per 2ba/2ba = 56 D.U. = 112 stalls
Total Stalls = 196 stalls
Guest parking included in minimum requirements
Required Covered 1 for each unit type equals = 112 covered

Parking Provided:
Covered
Carports = 77
Garages = 52
Total Covered = 129 stalls
Open std stalls = 67
Total Parking =196 stalls
6 accessible of each type of the total provided

Open Space Requirements

Required 300 sq. ft. of open space per each dwelling unit
= 112 D.U. x 300 sq. ft. = 33,600 sq. ft.
Total open space provided
Building foot prints = 65,184 sq. ft.
Garage foot prints = 11,540 sq. ft.
AC paving areas = 63,282 sq. ft.
Total covered area = 140,006 sq. ft.
Minus Site Area
= 248,051 - 140,006 = 108,045 sq. ft of = 44% of Open Space

No.	Description
1	7' Right of way dedication on Eucalyptus street
2	4' Right of way dedication on Edgemont street
3	Curb, gutter and sidewalk per City of Moreno Valley standards see civil drawings
4	Driveway approach per City standard MVSI-112C-0
5	6' High wrought iron fence with 24" sq. decorative pilasters every 25'o.c. centered on 24" monstrip
6	6' High wrought iron vehicular motorized gate with approved knox box for emergency access
7	3' wide pedestrian gate with access key pad and lever hardware. Also post diagram of complex showing location of viewer and the building designations
8	Directory and entry key pad at by-pass lane
9	Decorative stamped concrete at entry drive
10	Concrete sidewalks, 4' wide typical (7' wide where adjacent to parking) see sheet A0.1 for typical requirements for sidewalks
11	Asphaltic (A/C) paving
12	Pre-engineered double post carport, metal roof with wood fascia to match dwelling units (separate submittal)
13	Detached garages. Reference Sheet A2.x
14	Curb ramp with detectable marning
15	Mail kiosk, Mail boxes per PostMaster approved selections
16	Turning radius for fire truck access shown for reference
17	Existing Pedestrian crossing signal and cross walk
18	4' foot right a way shall be dedicated behind the driveway approach per City standard No. 118C
19	Accessible parking stall with signage and stripping see details on sheet A1.2
20	Reserved parking stall for Postman
21	Monument sign
22	6' High CMU Wall painted
23	Accessible path of travel 2% max cross slope with 5% slope in direction of travel, indicated with decorative paving
24	6' High wrought iron fence at pool area
25	5' Wide wrought iron gate at pool area with panic hardware
26	Fenced private patio area, typical see enlarged unit plans
27	Pool under separate submittal. This includes walks and fenced area, shown only for reference
28	Tot lot area play equipment by others
29	Trash enclosure per City standard No.660A with roof, paint CMU to match buildings
30	Existing street light to remain in place
31	Existing fire hydrant to be relocated
32	Existing paved street to be removed and new paving per city public work standards
33	Existing high power lines to be undergrounded
34	No Parking Sign shall be posted in turnaround area per City Moreno requirements
35	Presence loop detectors within 1 or 2 feet of the gates that ensures that the gates remain open while any vehicle is in the queue
36	All residential dwellings shall display street numbers in a prominent location on the street side of the residence in such a position that the numbers are easily visible. The numbers shall be no less than four inches in height and shall be low voltage lighted fixtures
37	All Commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numbers shall be no less than six inches in height and six inches in height for suite identification on contrasting background.
38	A "Knox Box Rapid Entry System" shall be provided. The knox-box shall be installed in an accessible location approved by the Fire Chief. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel
39	New right turn lane, see Civil drawings
40	New Left turn lane, see Civil drawings
41	Storm drain easement dedicated to the city of Moreno Valley
42	Water easement dedicated to Box Springs Mutual Water Co.
43	Sewer easement dedicated to Edgemont Community Service District
44	Existing Water easement (undertermined width) To be quit claimed
45	Swing gate for Emergency and Fire vehicles only. Provide knox box per city standards

Site Plan Key Notes

Symbol	Description
X	Keynotes, see this sheet
1G	Garage building identification number
1c	Carport identification number
B04	Building identification number
	Proposed Fire Hydrant

Symbol Legend

Attachment 8

City Case # PA14-0042

Moreno Valley Apartments Ca.

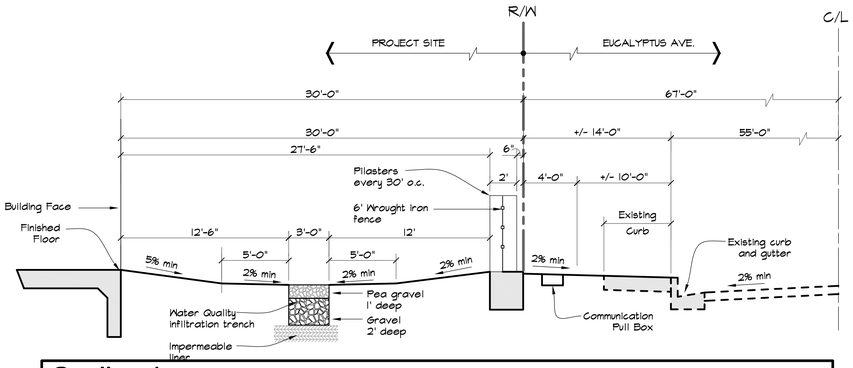
THE VERNAL GROUP
1035 E. Olive Ave. • Fresno, Ca. 93728 • Ph: (559) 222-9480 • Fax:(559) 222-9479
Architecture and Planning • www.vernalgroup.com • E-Mail: info@vernalgroup.com

REVISIONS

PROJECT 1.19.48.1
DATE: 03.03.15
DR: SMJ

A1.0
SHEET

LICENSED ARCHITECT
Paul N. Miller
C 27442
Renewal Date: 2/28/15
STATE OF CALIFORNIA



Section A
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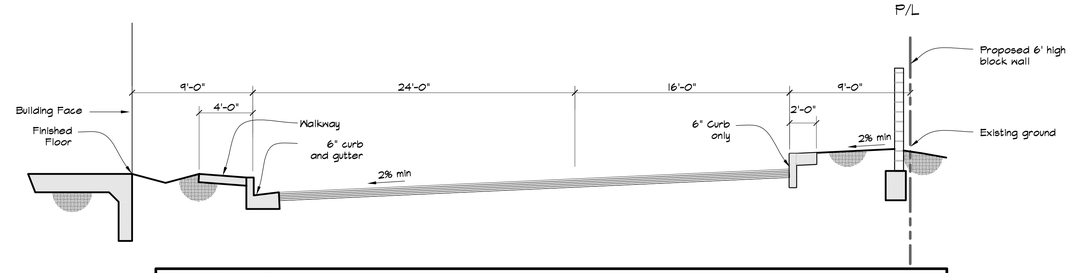

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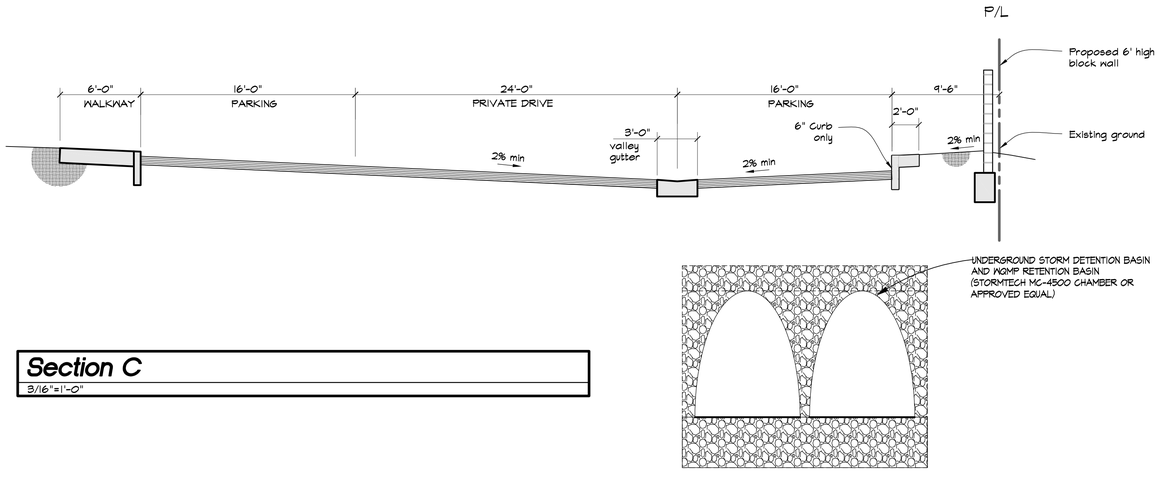

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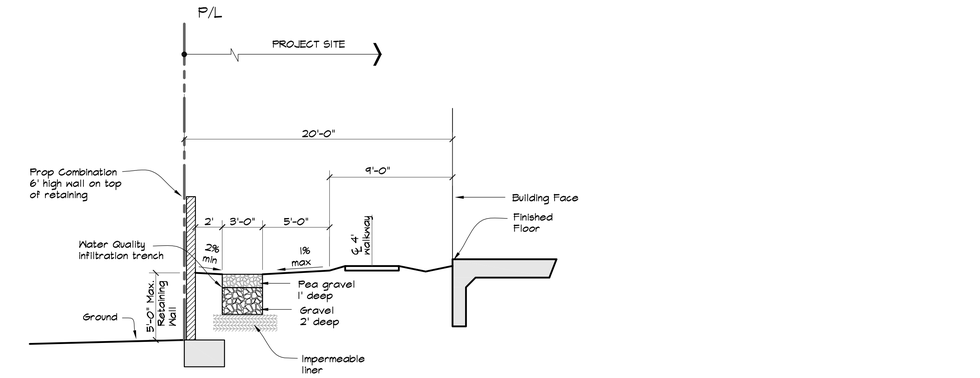

Section D
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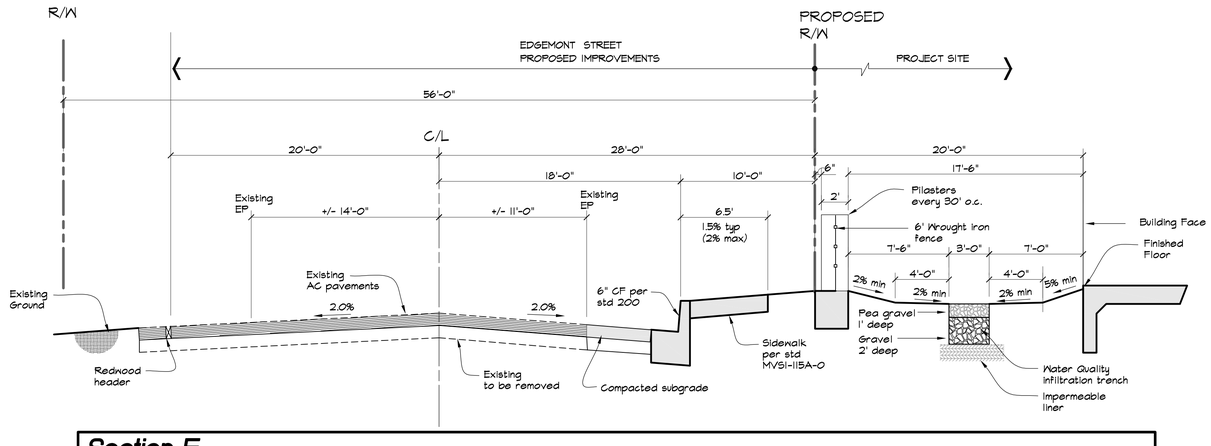

Section E
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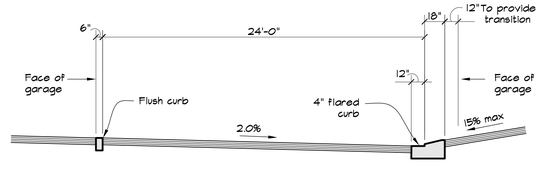

Section F
3/16"=1'-0"

City Case # PA14-0042

Moreno Valley Apartments Ca.

-1392-

REVISIONS

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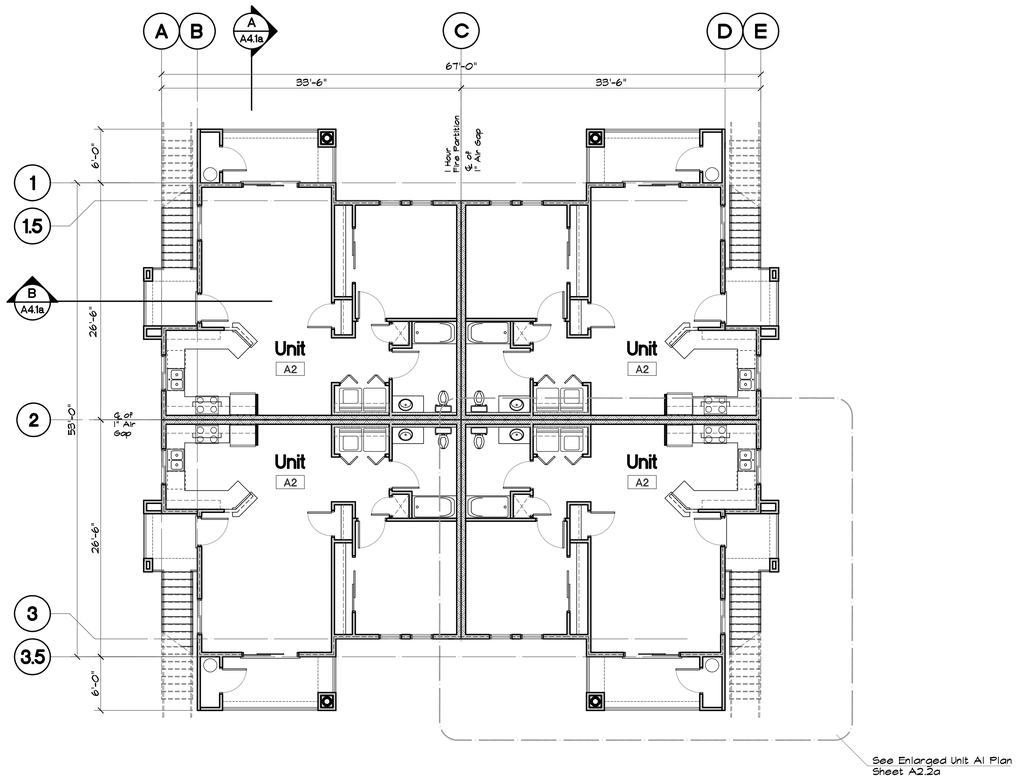
LICENSED ARCHITECT
Paul N. Miller
C 27442
Renewal Date: 2/28/15
STATE OF CALIFORNIA

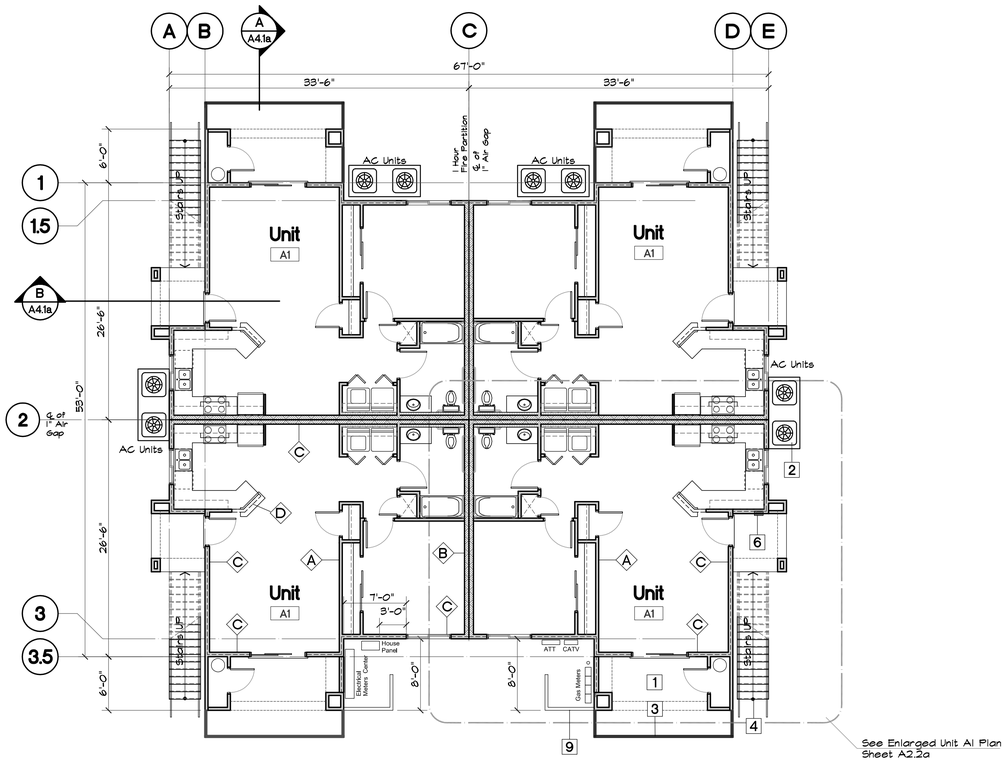
PROJECT: 1.30.08.1
DATE: 03.03.15
DR: sj

A1.2
SHEET



Building Type 1 - Second Floor

1/8"=1'-0"



Building Type 1 - First Floor

1/8"=1'-0"

Item	Wall	Description	Type	Fire	Insul.	Acoustics
A		Interior 2x4 studs @16" o.c.	B on 9/A0.3	--	--	--
B		Fire Partition bearing. Double ron of 2x6 studs @16" o.c.	C on 9/A0.3	1 Hour	--	Sound atten. batt insulation
C		Exterior load bearing, 2x6 studs @16" o.c.	A2 on 8/A0.3	--	R-19 min.	
D		Furred plumbing wall. 2x4 studs @16" o.c.	D on 10/A0.3	--	--	Sound atten. batt insulation
E		+42" partial-height wall. 2x4 studs @16" o.c.	B on 9/A0.3	--	--	

Wall Legend

F.O.S. denotes face of stud - F.O.F. denotes face of finish (Dimensions are to face of stud U.N.O.)

No.	Description
1	Porch slab. 4" concrete slab with broom finish. Slope away from building 2% maximum
2	Condensing Unit on concrete pad screed by landscaping
3	5 Foot high wood fence at patio area
4	Pre-Fabricated steel stairs with concrete treads see building sections
5	Roof overhang shown dashed
6	2a:10bc rated fire extinguisher mounted so that top is not more than 5 feet from floor in cabinet
7	Electrical meters see site plan sheet A1.0 and Electrical drawings for additional information
8	Gas meter location reference plumbing drawings
9	Utility screen at all utilities typical

Floor Plan Legend

City Case # PA14-0042

Moreno Valley Apartments Ca.

-1393-

REVISIONS

1

2

3

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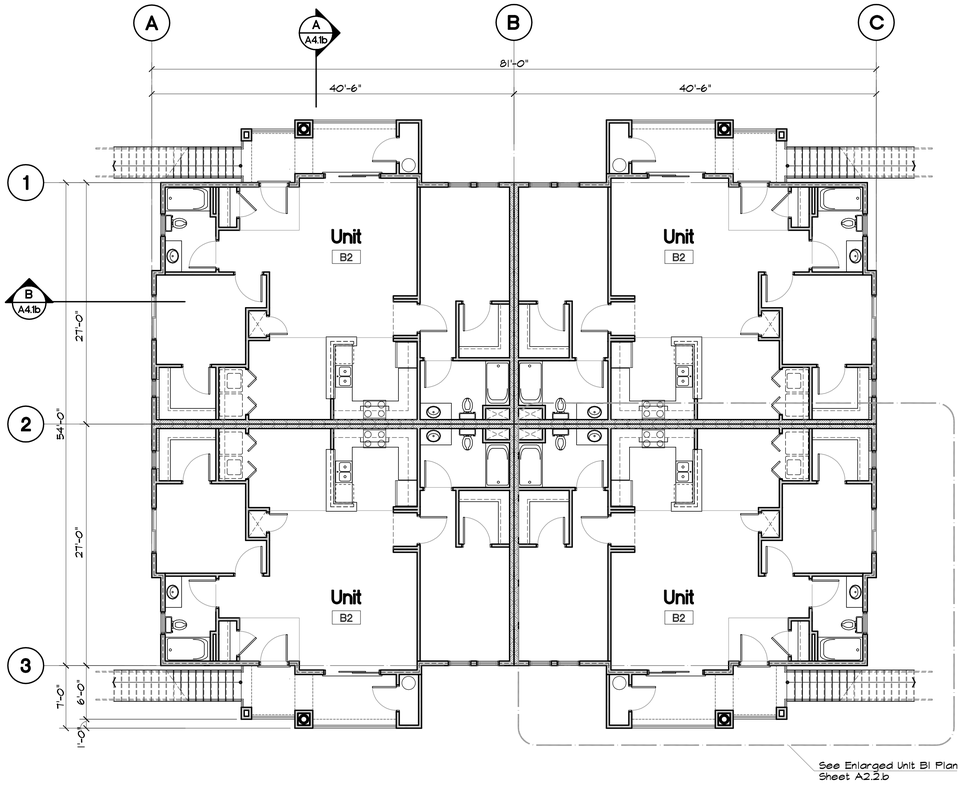
Paul N. Miller
C 27442
Renewal Date: 2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

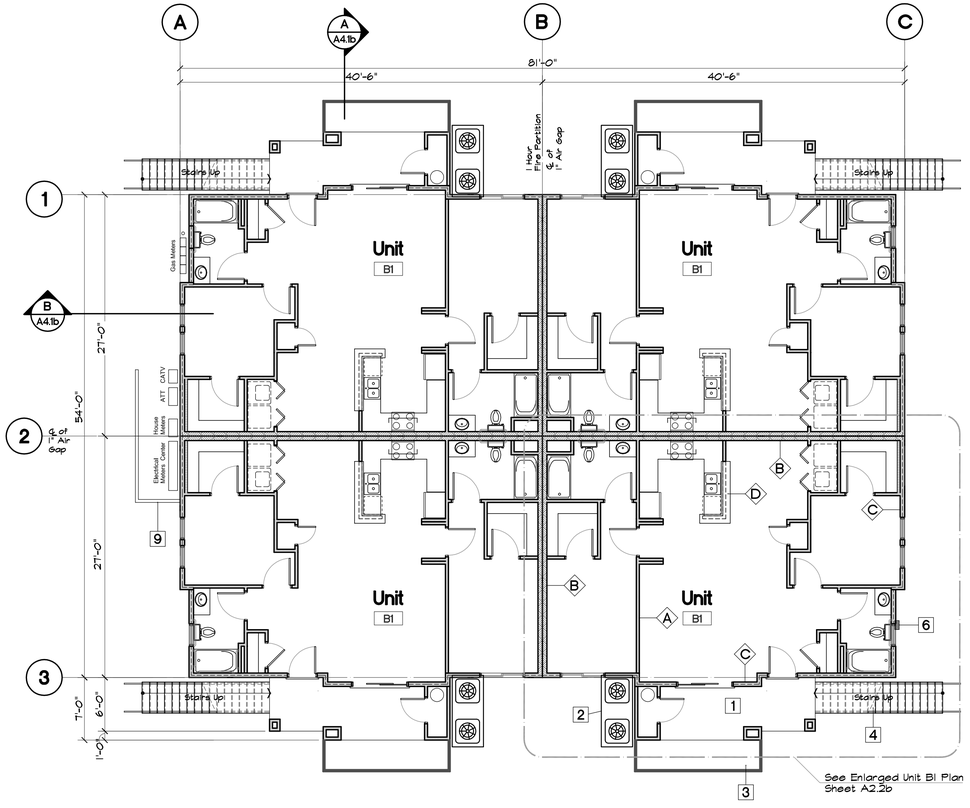
PROJECT: 13.048.1
DATE: 03.03.15
DR: sj

A2.1a
SHEET



Building Type 2 - Second Floor

1/8"=1'-0"



Building Type 2 - First Floor

1/8"=1'-0"

Item	Wall	Description	Type	Fire	Insul.	Acoustics
A		Interior 2x4 studs @16" o.c.	B on 9/A0.3	--	--	--
B		Fire Partition bearing. Double ron of 2x6 studs @16" o.c.	C on 9/A0.3	1 Hour	--	Sound atten. batt insulation
C		Exterior load bearing, 2x6 studs @16" o.c.	A2 on B/A0.3	--	R-19 min.	
D		Furred plumbing wall. 2x4 studs @16" o.c.	D on 10/A0.3	--	--	Sound atten. batt insulation
E		+42" partial-height wall. 2x4 studs @16" o.c.	B on 9/A0.3	--	--	

Wall Legend

F.O.S. denotes face of stud - F.O.F. denotes face of finish (Dimensions are to face of stud U.N.O.)

No.	Description
1	Porch slab: 4" concrete slab with broom finish. Slope away from building 2% maximum
2	Condensing Unit on concrete pad screed by landscaping
3	5 Foot high wood fence at patio area
4	Pre-Fabricated steel stairs with concrete treads see building sections
5	Roof overhang shown dashed
6	2a:10bc rated fire extinguisher mounted so that top is not more than 5 feet from floor in cabinet
7	Electrical meters see site plan sheet A1.0 and Electrical drawings for additional information
8	Gas meter location reference plumbing drawings
9	Utility screen at all utilities typical

Floor Plan Legend

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Architecture and Planning • www.vernalgroup.com • E-Mail: info@vernalgroup.com

REVISIONS

PROJECT: 13048.1
DATE: 03.03.15
DR: sj

Paul N. Miller
C 27442
Renewal Date:
2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

A2.1b
SHEET

City Case # PA14-0042

Moreno Valley Apartments Ca.

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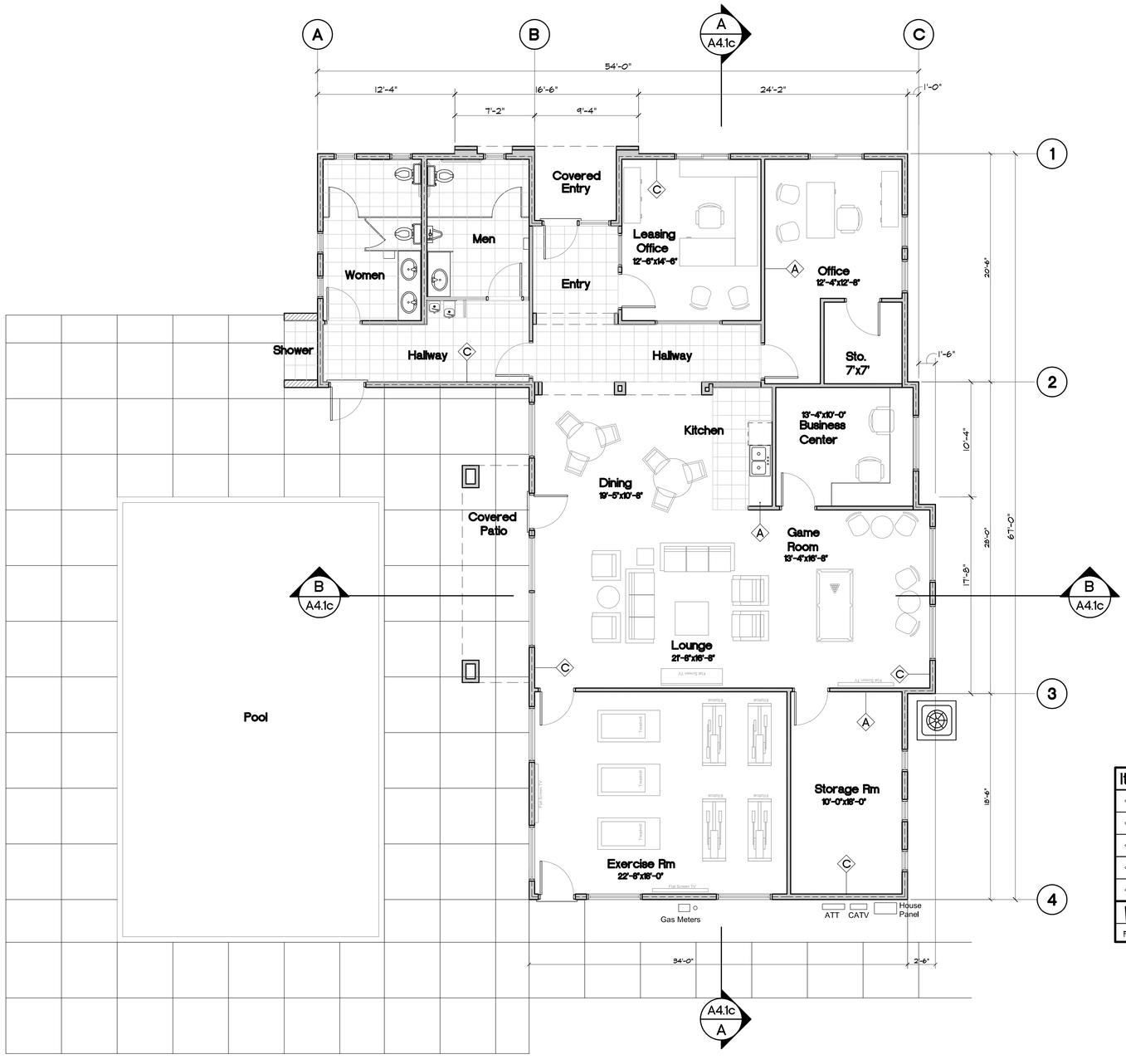
REVISIONS



Item	Wall	Description	Type	Fire	Insul.	Acoustics
A		Interior 2x4 studs @16" o.c.	B on 9/A0.3	--	--	--
B		Fire Partition bearing, Double ron of 2x6 studs @16" o.c.	C on 9/A0.3	1 Hour	--	Sound atten. batt insulation
C		Exterior load bearing, 2x6 studs @16" o.c.	A2 on 8/A0.3	--	R-19 min.	
D		Furred plumbing wall, 2x4 studs @16" o.c.	D on 10/A0.3	--	--	Sound atten. batt insulation
E		+42" partial-height wall, 2x4 studs @16" o.c.	B on 9/A0.3	--	--	

Wall Legend

F.O.S. denotes face of stud - F.O.F. denotes face of finish (Dimensions are to face of stud U.N.O.)

Clubhouse / Leasing Office

Area = 2,888 sf Scale: 1/4"=1'-0"

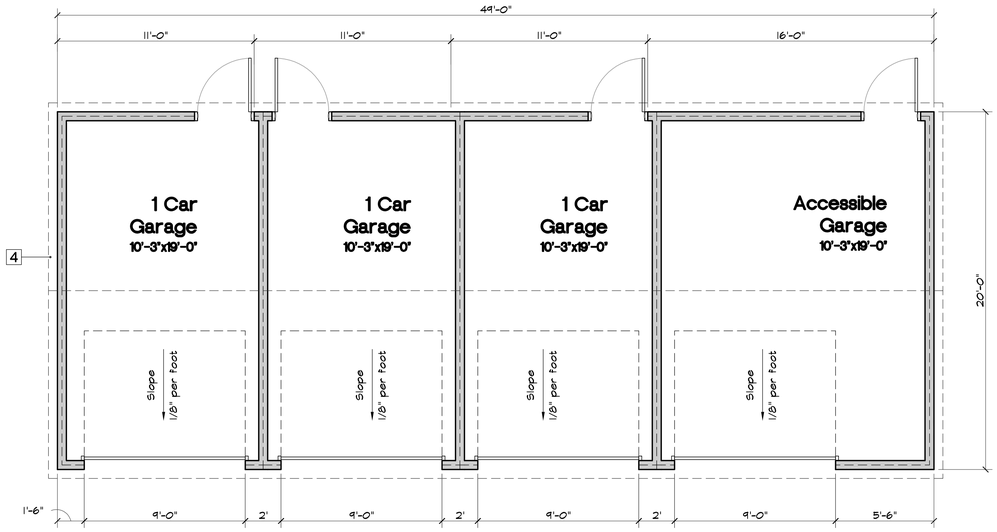
Paul N. Miller
C 27442
Renewal Date: 2/28/15
LICENSED ARCHITECT STATE OF CALIFORNIA

PROJECT: 13.018.1
DATE: 03.03.15
DR: sj

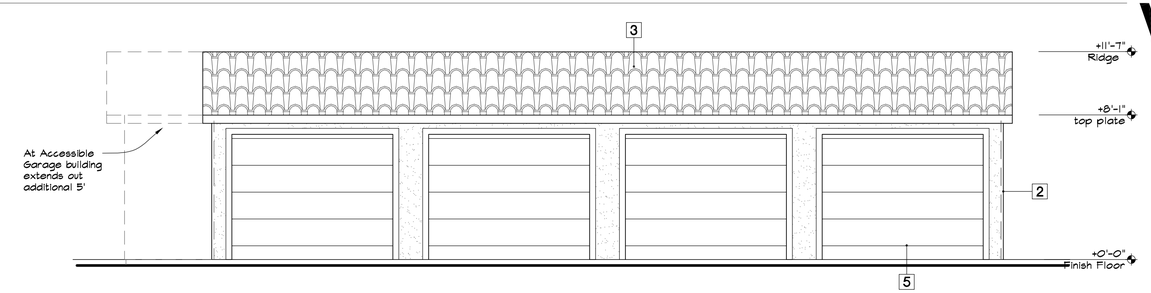
A2.1c
SHEET

City Case # PA14-0042

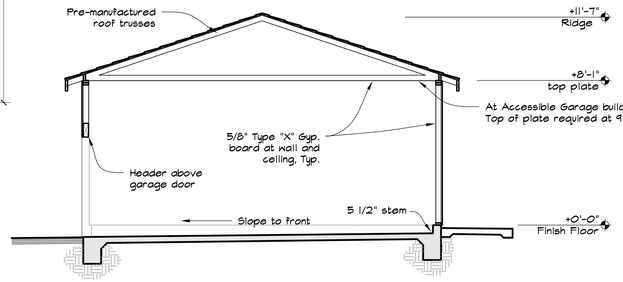
Moreno Valley Apartments Ca.



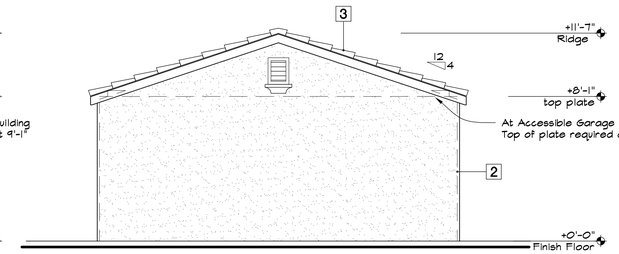
4 Car Garage - With Accessible Garage
1/4"=1'-0"



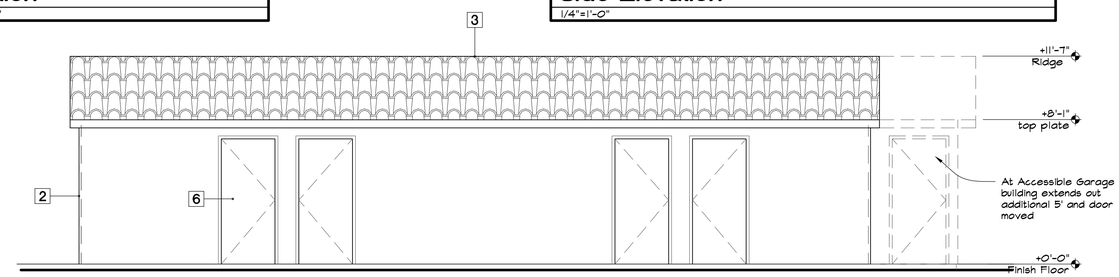
Front Elevation
1/4"=1'-0"



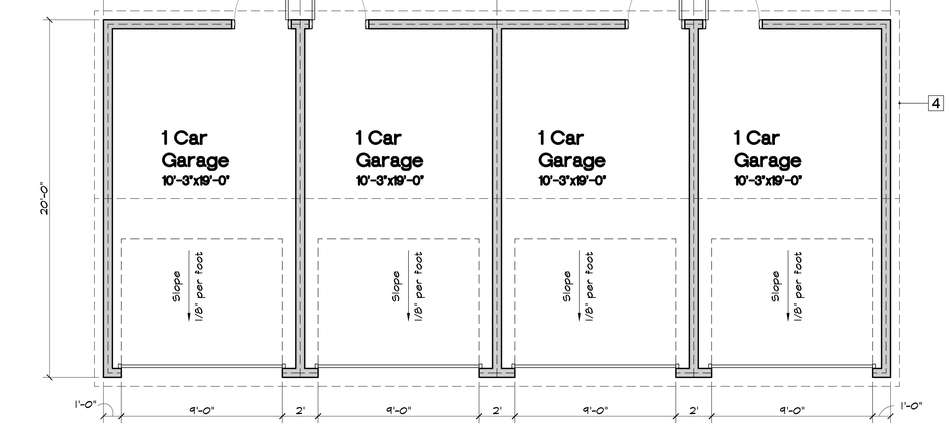
Section
1/4"=1'-0"



Side Elevation
1/4"=1'-0"



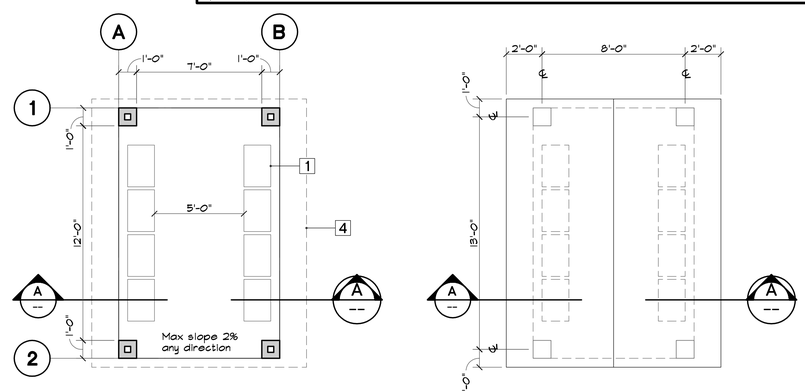
Rear Elevation
1/4"=1'-0"



4 Car Garage
1/4"=1'-0"

No.	Description
1	Cluster mail box units Salsbury model 3312
2	Cement plaster finish over CMU columns
3	Concrete roof tile
4	Roof overhang shown dashed
5	Sectional metal roll-up garage door
6	Hollow metal door see door schedule
7	-

Elevations Key Notes



Mail Box Kiosk
1/4"=1'-0"

City Case # PA14-0042

Moreno Valley Apartments Ca.

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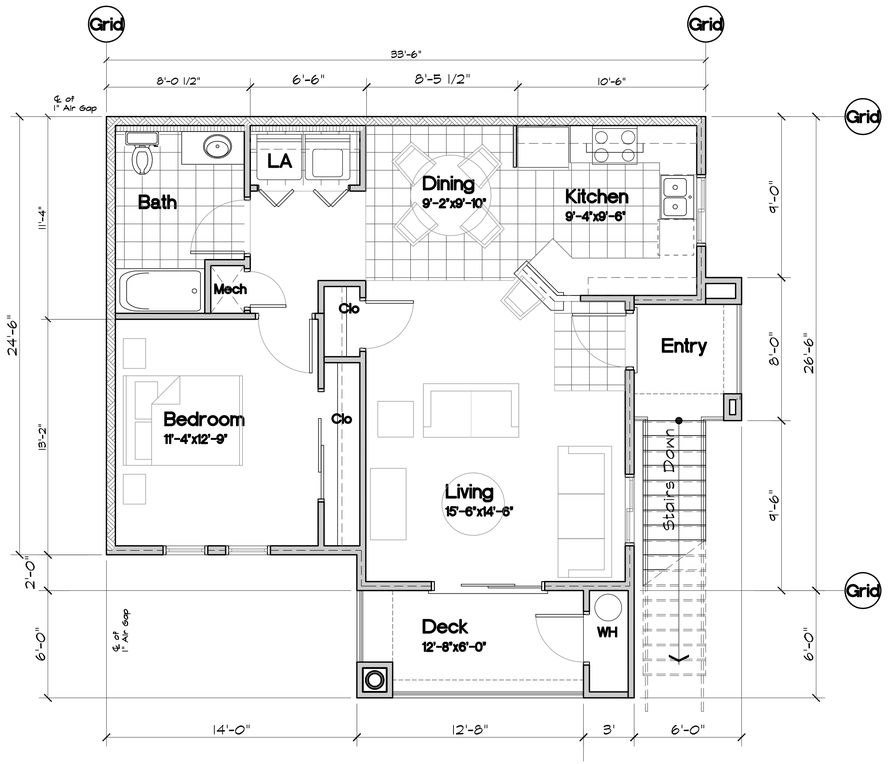
REVISIONS

LICENSED ARCHITECT Paul N. Miller C 27442 Renewal Date 2/28/15 STATE OF CALIFORNIA

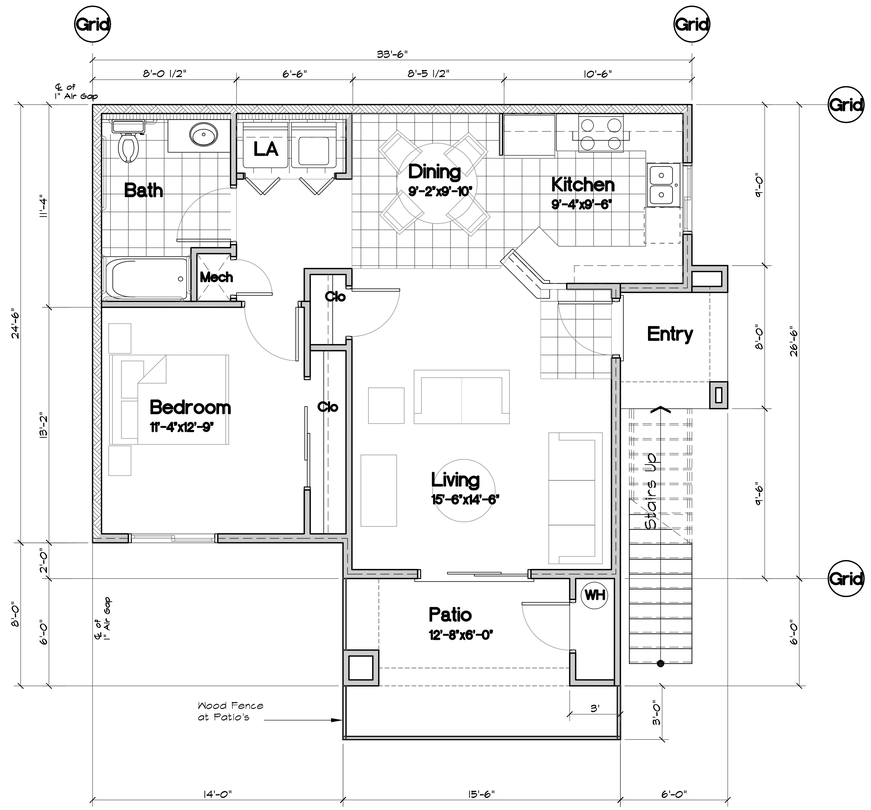
PROJECT: 13048.1
DATE: 03.03.15
DR: sj

A2.1d
SHEET



Second Floor - Unit A2

1/4"=1'-0"



First Floor - Unit A1

1/4"=1'-0"

Item	Wall	Description	Type	Fire	Insul.	Acoustics
A		Interior 2x4 studs @16" o.c.	B on 9/A0.3	--	--	--
B		Fire Partition bearing. Double ron of 2x6 studs @16" o.c.	C on 9/A0.3	1 Hour	--	Sound atten. batt insulation
C		Exterior load bearing, 2x6 studs @16" o.c.	A2 on 8/A0.3	--	R-19 min.	
D		Furred plumbing wall, 2x4 studs @16" o.c.	D on 10/A0.3	--	--	Sound atten. batt insulation
E		+42" partial-height wall, 2x4 studs @16" o.c.	B on 9/A0.3	--	--	

Wall Legend

F.O.S. denotes face of stud - F.O.F. denotes face of finish (Dimensions are to face of stud U.N.O.)

-1397-

REVISIONS

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PROJECT: 13048.1
DATE: 03.03.15
DR: sj

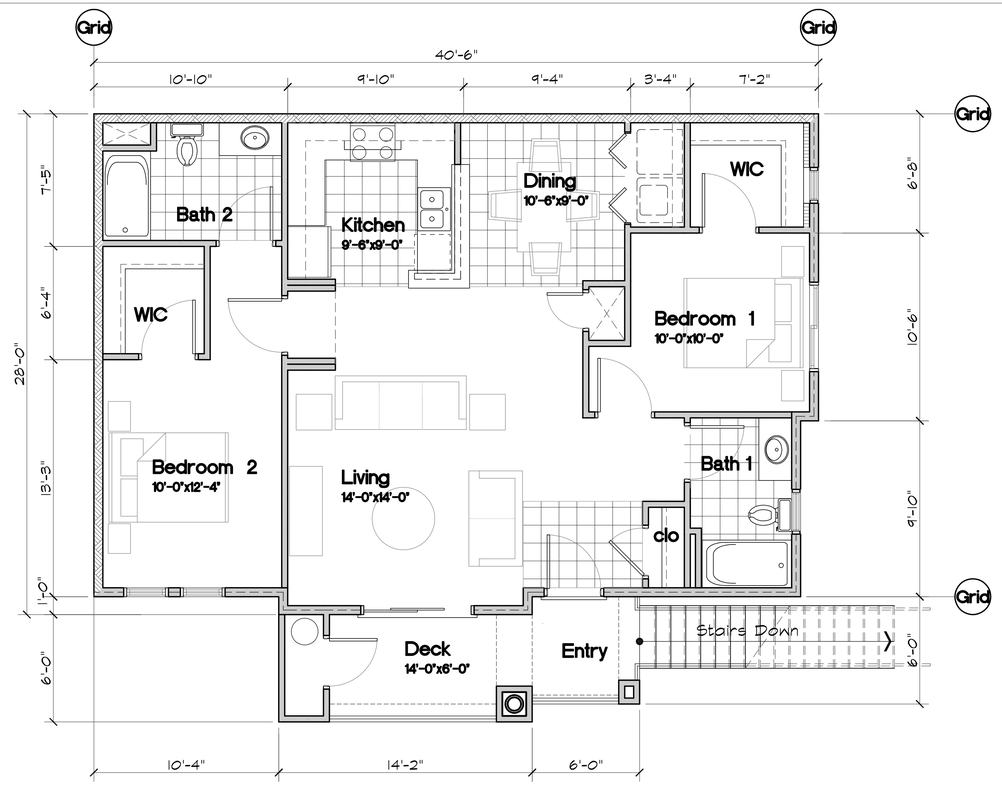
A2.2
SHEET

Paul N. Miller
C 27442
Renewal Date: 2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

City Case # PA14-0042

Moreno Valley Apartments Ca.

-1398-



Second Floor - Unit B2

1/4"=1'-0"

First Floor - Unit B1

1/4"=1'-0"

Item	Wall	Description	Type	Fire	Insul.	Acoustics
A		Interior 2x4 studs @16" o.c.	B on 9/A0.3	--	--	--
B		Fire Partition bearing. Double row of 2x6 studs @16" o.c.	C on 9/A0.3	1 Hour	--	Sound atten. batt insulation
C		Exterior load bearing, 2x6 studs @16" o.c.	A2 on 8/A0.3	--	R-19 min.	
D		Furred plumbing wall. 2x4 studs @16" o.c.	D on 10/A0.3	--	--	Sound atten. batt insulation
E		+42" partial-height wall. 2x4 studs @16" o.c.	B on 9/A0.3	--	--	

Wall Legend

F.O.S. denotes face of stud - F.O.F. denotes face of finish (Dimensions are to face of stud U.N.O.)

City Case # PA14-0042

Moreno Valley Apartments Ca.

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REVISIONS

LICENSED ARCHITECT
Paul N. Miller
C 27442
Renewal Date: 2/28/15
STATE OF CALIFORNIA

PROJECT 13048.1
DATE 03.03.15
DR. sj

A2.2b
SHEET

No.	Description
1	Monier tile roofing system
2	24 Ga. galvanized metal gutter and trim, color to match trim.
3	3"x2" Galvanized metal downspout with splash block. Downspout to match wall color.

Roof Plan Key Notes

Paul N. Miller
C 27442
Renewal Date: 2/28/15
LICENSED ARCHITECT STATE OF CALIFORNIA

Scale:1/4"=1'-0"

Roof Plan Building 1

City Case # PA14-0042

Moreno Valley Apartments Ca.

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REVISIONS

PROJECT: 1-0048.1
DATE: 03.03.15
DR: sj

A2.4a
SHEET

No.	Description
1	Monier tile roofing system
2	24 Ga. galvanized metal gutter and trim, color to match trim.
3	3"x2" Galvanized metal downspout with splash block. Downspout to match wall color.

Roof Plan Key Notes

Scale:1/4"=1'-0"

Roof Plan Building 2

City Case # PA14-0042

Moreno Valley Apartments Ca.

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Architecture and Planning • www.vernalgroup.com • E-Mail: info@vernalgroup.com

REVISIONS

PROJECT: 1.1648.1
DATED: 03.03.15
DR: sj

A2.4b
SHEET

LICENSED ARCHITECT
Paul N. Miller
C 27442
Renewal Date: 2/28/15
STATE OF CALIFORNIA

Scale:1/4"=1'-0"

No.	Description
1	Monier tile roofing system
2	24 Ga. galvanized metal gutter and trim, color to match trim.
3	3"x2" Galvanized metal downspout with splash block. Downspout to match wall color.

Roof Plan Key Notes

Paul N. Miller
C 27442
Renewal Date:
2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

Roof Plan - Community Building

City Case # PA14-0042

Moreno Valley Apartments Ca.

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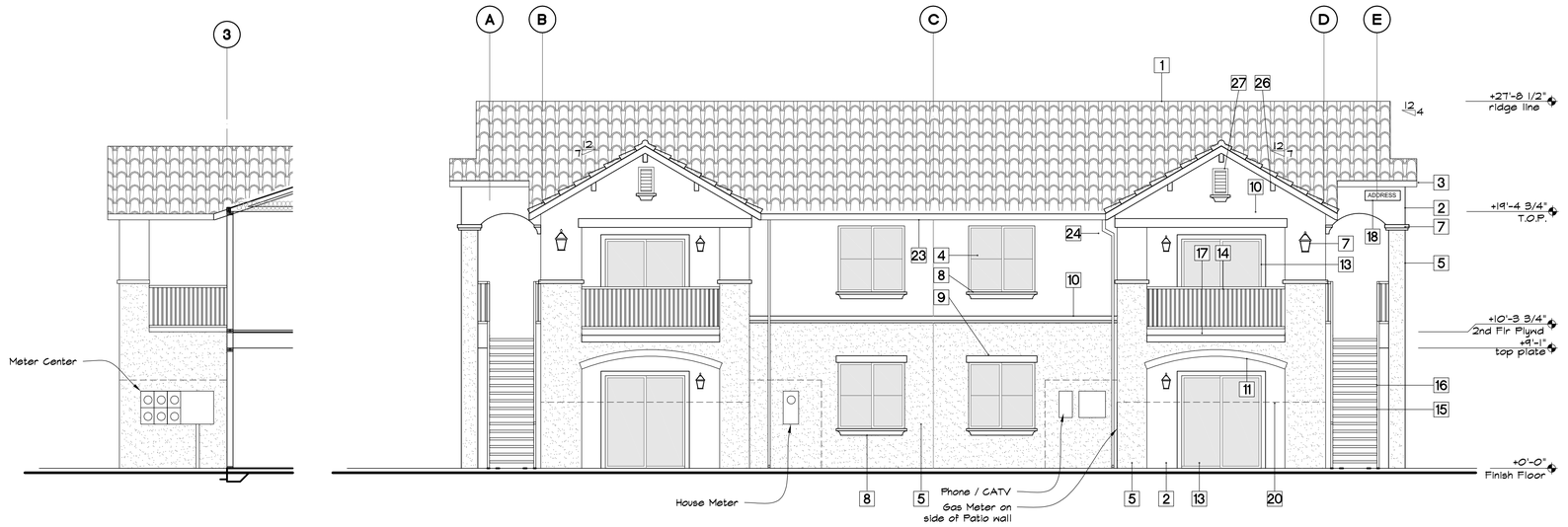
REVISIONS

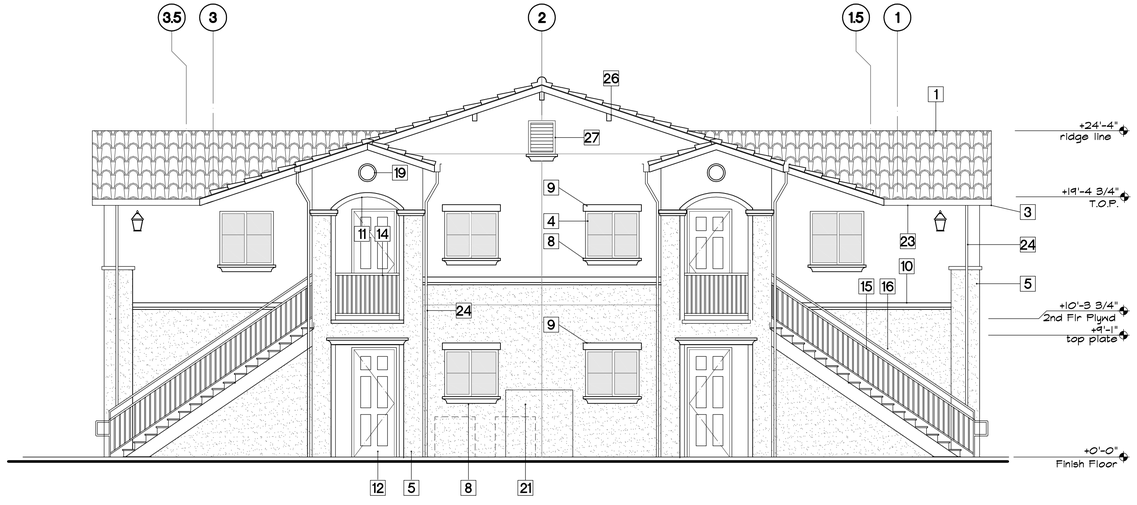
PROJECT: 130418.1
DATE: 03.03.15
DR: sdj

A2.4C
SHEET



Front Elevation Building 1 / Rear Elevation Sim

3/16"=1'-0"



Side Elevation Building 1 - Unit A

1/8"=1'-0"

No.	Description
1	Concrete tile
2	7/8" Cement plaster o/ metal lath o/ (2) layers type 'D' building paper o/ plywood sheathing
3	2x6 Fascia board painted
4	Vinyl windows dual glazing, see window schedule
5	Hatch indicates accents stucco color
6	Not Used
7	Foam trim at columns
8	Foam trim at window sill
9	Foam trim at window header
10	Foam trim band
11	Foam trim at opening
12	Hollon metal front entry door, see door schedule
13	Sliding glass door with foam trim
14	42" high wrought guardrails
15	Pre-fabricated steel stairs with concrete treads see sections
16	Handrails and Guardrails see sections
17	Light weight concrete deck with water proof membrane
18	Building address min 4" high letters with contrasting background visible from street
19	2 foot diameter Decorative gable vent
20	5 foot high fence at patio areas see enlarged plans
21	Electrical meter center see electrical drawings behind 6 foot high screen wall
22	Exterior wall mounted lights
23	5" Rectangular metal roof gutter
24	5" Metal downspout
25	Not used
26	2x8 rafter tails at gable painted
27	Rectangular gable vent with foam trim at sill
28	AC units on concrete pad see mechanical drawings
29	Gas Meter location see plumbing drawings
30	6' high x 5' long x 2'-6" deep CMU compartment with tile finish for accessible exterior shower. Shower shall include grab bars, fold down seat, control and shower spray unit see details

Elevations Key Notes

Wall Elevation Building Type 1		Surface area per floor	Openings (all windows & doors unprotected)	Openings (windows unprotected, 1-hour doors)	Max area wall openings per table 705.8	
					10' to < 15' Fire separation distance	15' to < 20' Fire separation distance
1 Front	1st Floor	612 sq. ft.	134sf / 22%	N/A	15% of wall area*	25% of wall area*
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
2 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		
3 Rear	1st Floor	612 sq. ft.	134sf / 22%	N/A		
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
4 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		

Exterior Wall Openings

* Reference Site Plan for Fire Separation Distance or assumed Property Line

City Case # PA14-0042

Moreno Valley Apartments Ca.

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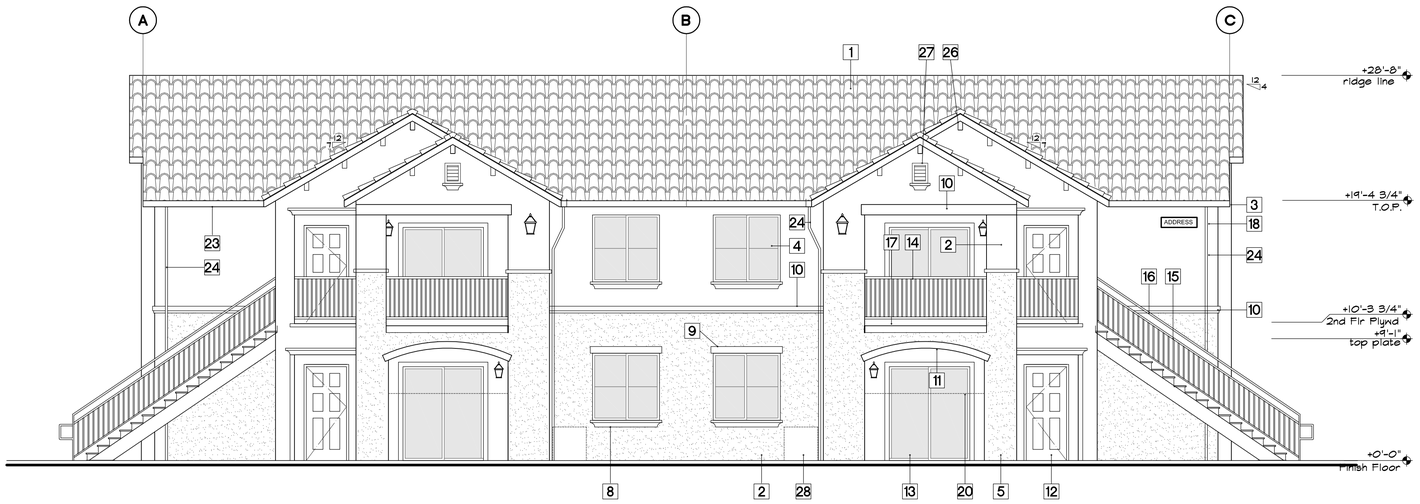
REVISIONS

Paul N. Miller
C 27442
Renewal Date:
2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

PROJECT: 130418.1
DATE: 03.03.15
DR: srj

A3.1a
SHEET

-1402-

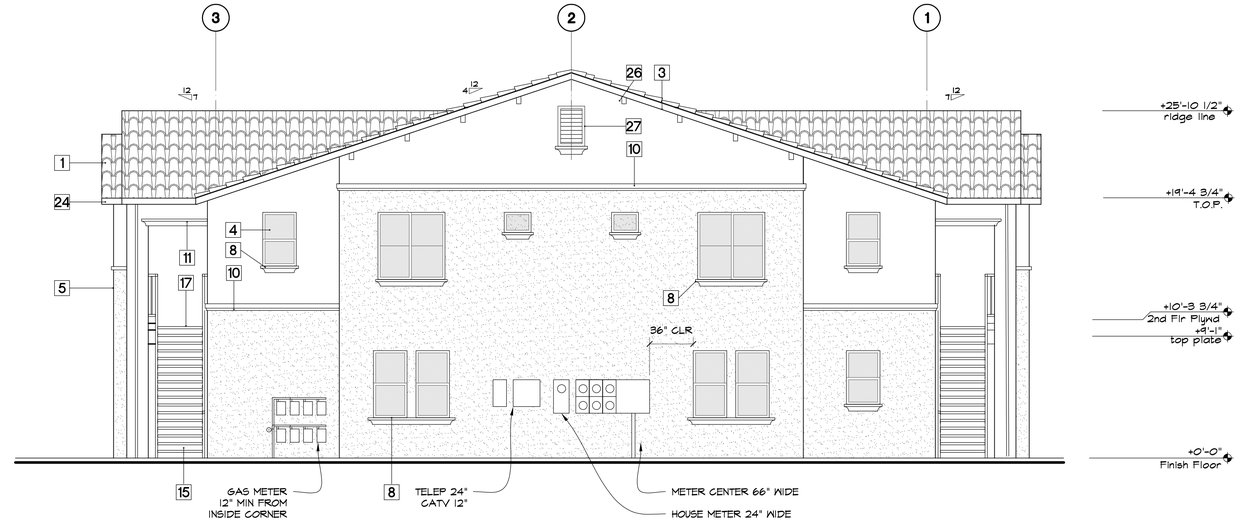


Front Elevation Building 2 / Rear Elevation Sim

3/16"=1'-0"

No.	Description
1	Concrete tile
2	7/8" Cement plaster o/ metal lath o/ (2) layers type 'D' building paper o/ plywood sheathing
3	2x6 Fascia board painted
4	Vinyl windows dual glazing, see window schedule
5	Hatch indicates accents stucco color
6	Not Used
7	Foam trim at columns
8	Foam trim at window sill
9	Foam trim at window header
10	Foam trim band
11	Foam trim at opening
12	Hollow metal front entry door, see door schedule
13	Sliding glass door with foam trim
14	42" high wrought guardrails
15	Pre-fabricated steel stairs with concrete treads see sections
16	Handrails and Guardrails see sections
17	Light weight concrete deck with water proof membrane
18	Building address min 4" high letters with contrasting background visible from street
19	2 foot diameter Decorative gable vent
20	5 foot high fence at patio areas see enlarged plans
21	Electrical meter center see electrical drawings behind 6 foot high screen wall
22	Exterior wall mounted lights
23	5" Rectangular metal roof gutter
24	5" Metal downspout
25	Not used
26	2x8 rafter tails at gable painted
27	Rectangular gable vent with foam trim at sill
28	AC units on concrete pad see mechanical drawings
29	Gas Meter location see plumbing drawings
30	6' high x 5' long x 2'-6" deep CMU compartment with tile finish for accessible exterior shower. Shower shall include grab bars, fold down seat, control and shower spray unit see details

Elevations Key Notes



Side Elevation Building 2 - Unit B

1/8"=1'-0"

Wall Elevation Building Type 1		Surface area per floor	Openings (all windows & doors unprotected)	Openings (windows unprotected, 1-hour doors)	Max area wall openings per table 705.8	
					10' to < 15' Fire separation distance	15' to < 20' Fire separation distance
1 Front	1st Floor	612 sq. ft.	134sf / 22%	N/A	15% of wall area*	25% of wall area*
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
2 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		
3 Rear	1st Floor	612 sq. ft.	134sf / 22%	N/A		
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
4 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		

Exterior Wall Openings

* Reference Site Plan for Fire Separation Distance or assumed Property Line

Scale:1/4"=1'-0"

City Case # PA14-0042

Moreno Valley Apartments Ca.

THE VERNAL GROUP
1035 E. Olive Ave. - Fresno, Ca. 93728 - Ph: (559) 222-9480 - Fax:(559) 222-9479
Architecture and Planning - www.vernalgroup.com - E-Mail: info@vernalgroup.com

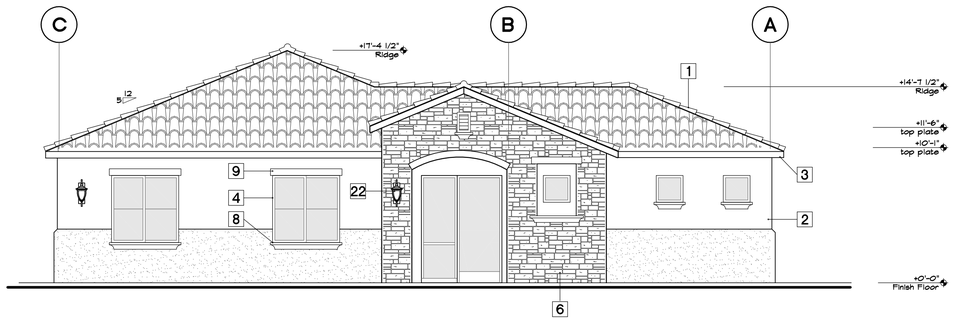
REVISIONS

Paul N. Miller
C 27442
Renewal Date: 2/28/15
LICENSED ARCHITECT
STATE OF CALIFORNIA

PROJECT: 130418.1
DATE: 03.03.15
DR: sfj

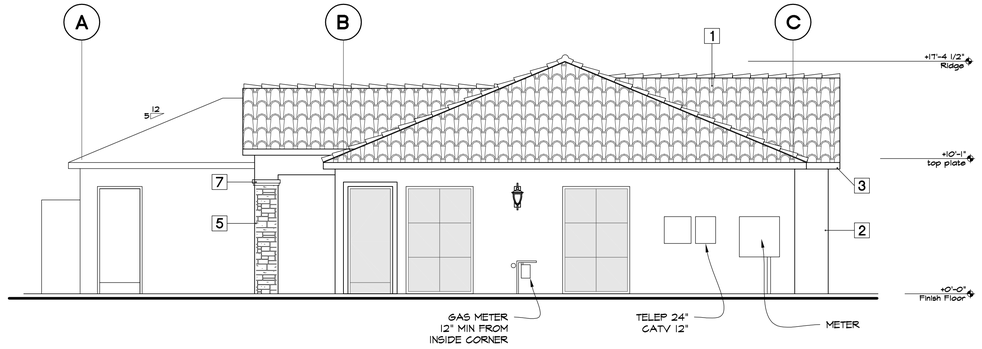
A3.1b
SHEET

-1403-



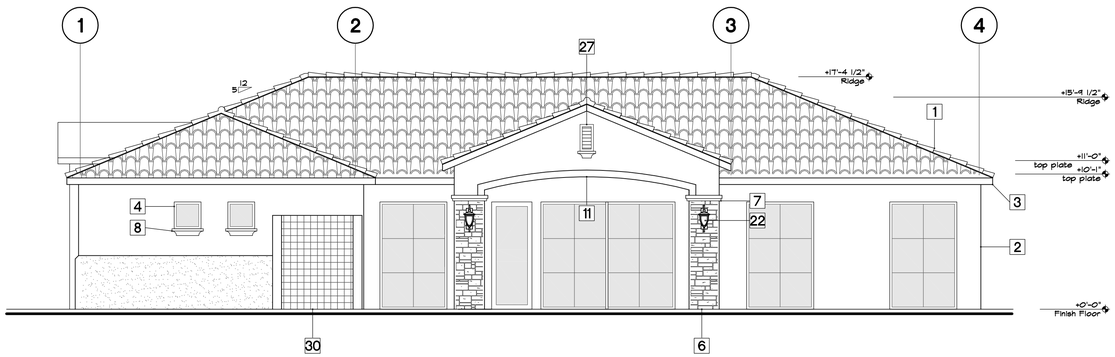
East Elevation

3/16"=1'-0"



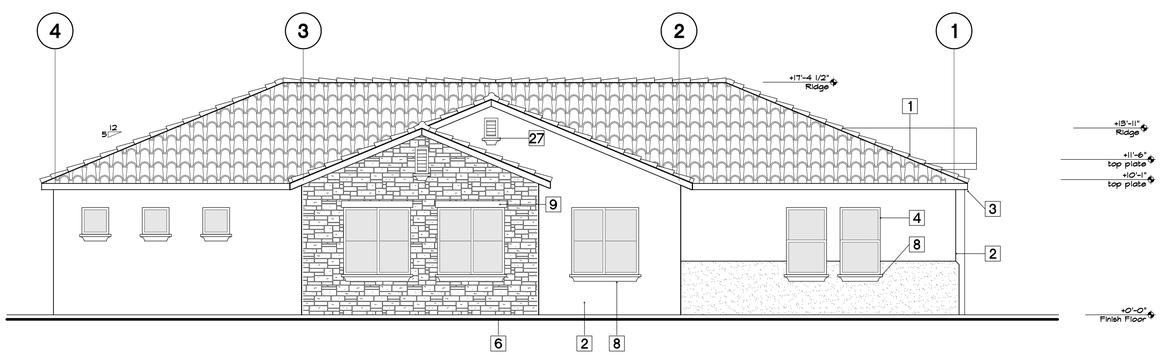
West Elevation

3/16"=1'-0"



South Elevation

1/8"=1'-0"



North Elevation

1/8"=1'-0"

No.	Description
1	Concrete tile
2	7/8" Cement plaster o/ metal lath o/ (2) layers type 'D' building paper o/ plywood sheathing
3	2x6 Fascia board painted
4	Vinyl windows dual glazing, see window schedule
5	Hatch indicates accents stucco color
6	Not Used
7	Foam trim at columns
8	Foam trim at window sill
9	Foam trim at window header
10	Foam trim band
11	Foam trim at opening
12	Hollow metal front entry door, see door schedule
13	Sliding glass door with foam trim
14	42" high wrought guardrails
15	Pre-fabricated steel stairs with concrete treads see sections
16	Handrails and Guardrails see sections
17	Light weight concrete deck with water proof membrane
18	Building address min 4" high letters with contrasting background visible from street
19	2 foot diameter Decorative gable vent
20	5 foot high fence at patio areas see enlarged plans
21	Electrical meter center see electrical drawings behind 6 foot high screen wall
22	Exterior wall mounted lights
23	5" Rectangular metal roof gutter
24	5" Metal downspout
25	Not used
26	2x8 rafter tails at gable painted
27	Rectangular gable vent with foam trim at sill
28	AC units on concrete pad see mechanical drawings
29	Gas Meter location see plumbing drawings
30	6' high x 5' long x 2'-6" deep CMU compartment with tile finish for accessible exterior shower. Shower shall include grab bars, fold down seat, control and shower spray unit see details

Elevations Key Notes

Wall Elevation Building Type 1		Surface area per floor	Openings (all windows & doors unprotected)	Openings (windows unprotected, 1-hour doors)	Max area wall openings per table 705.8 10' to < 15' Fire separation distance	Max area wall openings per table 705.8 15' to < 20' Fire separation distance
1 Front	1st Floor	612 sq. ft.	134sf / 22%	N/A	15% of wall area*	25% of wall area*
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
2 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		
3 Rear	1st Floor	612 sq. ft.	134sf / 22%	N/A		
	2nd Floor	531 sq. ft.	134sf / 25%	N/A		
4 Side	1st Floor	674 sq. ft.	76sf / 11%	N/A		
	2nd Floor	822 sq. ft.	92sf / 11%	N/A		

Exterior Wall Openings

* Reference Site Plan for Fire Separation Distance or assumed Property Line

City Case # PA14-0042

Moreno Valley Apartments Ca.

-1404-

REVISIONS

THE VERNAL GROUP
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PROJECT 1-1948.1
DATE 03.03.15
DR: srj

A3.1c
SHEET

LICENSED ARCHITECT
Paul N. Miller
C 27442
Renewal Date: 2/28/15
STATE OF CALIFORNIA

PRELIMINARY GRADING PLAN
MORENO VALLEY APARTMENTS
CITY OF MORENO VALLEY, CA

GENERAL NOTES

1. NUMBER OF UNITS: 112 APARTMENT UNITS (2 STORIES) AND A RECREATION BUILDING
2. THERE ARE NO KNOWN EXISTING WELLS IRRIGATION LINES, CESSPOOLS, SEPTIC TANKS AND SEWAGE LEACH FIELDS.
3. ALL INTERNAL DRIVES TO BE PRIVATELY OWNED AND MAINTAINED.
4. THERE ARE NO KNOWN PREVIOUSLY FILLED AREAS WITHIN THE SITE; INCLUDING ANY LIQUID OR SOLID WASTE DISPOSAL SITES.
5. A PROPERTY OWNER ASSOCIATION WILL BE REQUIRED TO MAINTAIN ALL COMMON FACILITIES, VISIBLE FRONT YARDS AND REVERSE FRONTAGE AREAS NOT ACCEPTED BY THE CITY'S SPECIAL DISTRICTS.
7. A PROPERTY OWNER ASSOCIATION WILL BE REQUIRED TO MAINTAIN THE PRIVATE DRIVES, COMMON AREA AMENITIES AND COMMON LANDSCAPING AREAS.
9. ALL UNITS TO BE FIRE SPRINKLERED.

ZONING
EXISTING CURRENT: OFFICE/COMMERCIAL
PROPOSED: R-20

LOT SUMMARY
GROSS ACREAGE= 6.63 ACRES (TO CENTERLINE PERIMETER STREETS)
NET ACREAGE = 5.69 ACRES (TO STREET RIGHT OF WAY LINES)
DISTURBED ACREAGE= 6.34 ACRES

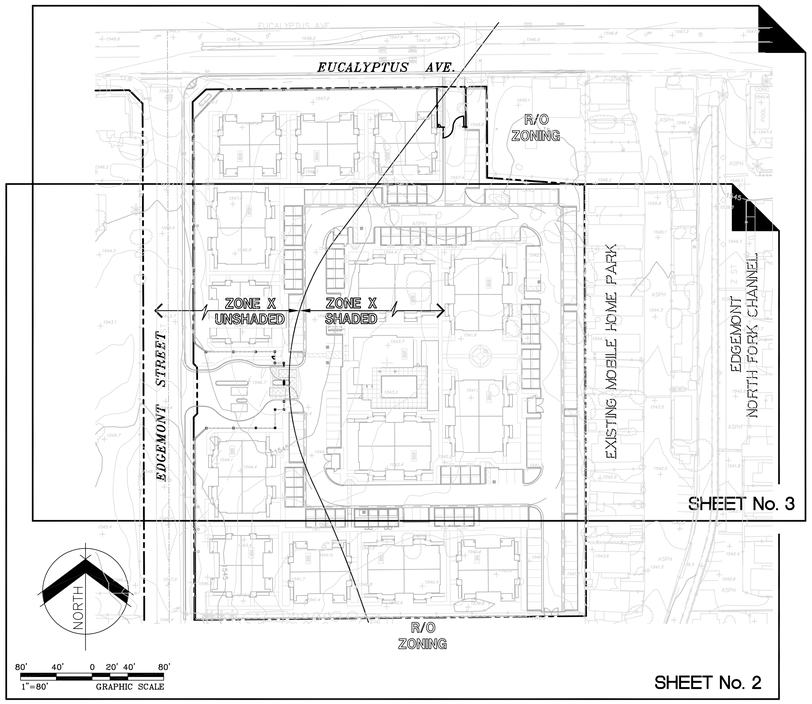
LAND USE SUMMARY
14 BUILDINGS
112 DWELLING UNITS
196 PARKING STALLS
1 RECREATIONAL BUILDING W/POOL

FLOOD ZONE
ZONE X – SHADED (OTHER FLOOD AREAS)
ZONE X – UNSHADED (OTHER AREAS)

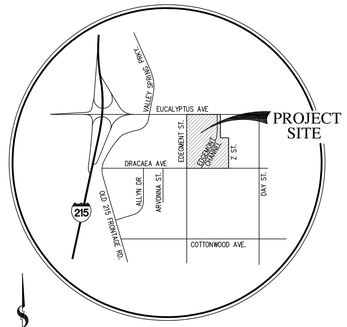
ASSESSOR'S PARCEL NUMBERS
A.P.N. 263-120-020
A.P.N. 263-120-025

PROPERTY ADDRESS
EUCALYPTUS STREET
MORENO VALLEY, CALIFORNIA

UTILITIES
ELECTRICITY
SOUTHERN CALIFORNIA EDISON: 1(800) 684-8123 (TURN ON/OFF)
NATURAL GAS
THE GAS COMPANY: (800) 427-2200
TELEPHONE
AT&T : (800) 310-2355
TRASH SERVICE
WASTE MANAGEMENT OF INLAND VALLEY: (800) 423-9986
WATER
BOX SPRING MUTUAL WATER COMPANY: (951) 653-6419
SEWER
EDGEMONT COMMUNITY SERVICES DISTRICT: (951) 653-5120



INDEX MAP
SCALE: 1"=80'



VICINITY MAP
NOT TO SCALE

ABBREVIATION

BEGIN OF VERTICAL CURVE	BVC
CATCH BASIN	CB
END OF VERTICAL CURVE	EVC
EXISTING	EX.
FIRE HYDRANT	FH
MIDDLE OF VERTICAL CURVE	MVC
MAXIMUM	MAX.
PROPOSED FINISH FLOOR ELEVATION	FF=720.5
PROPOSED PAD ELEVATION	PAD=720.0
STORM DRAIN	SD
TOP OF CURB	TC

LEGEND
AREA DRAINS
AC PAVING
CONCRETE
DECORATIVE PAVING
EXISTING STREET ELEVATION (60.80)
PROPOSED STORM DRAIN SD
PROPOSED SEWER SYSTEM SS
PROPOSED WATER SYSTEM W
PROPOSED CONCRETE DRAINAGE DITCH
PERIMETER TUBULAR FENCE
PROPOSED RETAINING WALL
PROPOSED CENTERLINE
PROPOSED VARIABLE SLOPE
TENTATIVE TRACT BOUNDARY
BUILDING IDENTIFICATION NUMBER B15/2
BUILDING TYPE
TRASH ENCLOSURE PER CITY OF MORENO VALLEY STANDARD MVGF-660A-F-0 T

EASEMENT NOTES
A – STORM DRAIN EASEMENT PROPOSED TO BE DEDICATED TO THE CITY OF MORENO VALLEY.
B – WATER EASEMENT PROPOSED TO BE DEDICATED TO BOX SPRINGS MUTUAL WATER CO.
C – SEWER EASEMENT PROPOSED TO BE DEDICATED TO EDGEMONT COMMUNITY SERVICES DISTRICT.
D – EXIST. BOX SPRINGS MUTUAL WATER CO. WATER EASEMENT (UNDETERMINED WIDTH) TO BE QUITCLAIMED.

NOTE: INTERIOR STREETS FOR VEHICULAR EMERGENCY ACCESS PURPOSES DEDICATED TO THE CITY OF MORENO VALLEY.

EARTHWORK QUANTITIES

DESCRIPTION	CUT CU YDS	CUT AREA	FILL CU YDS	FILL AREA
MASS EXCAVATION	1,860 CY	67,990 SF	11,272 CY	182,522 SF
SHRINKAGE 10%	-186 CY			
UNSUITABLE REMOVAL 4.5 FT.	39,853 CY		43,838 CY	
TOTAL EARTHWORK	41,527 CY		55,110 CY	
		IMPORT	13,583 CY	
		TOTAL AREA	250,513 SF	5.7 ACRES

LEGAL DESCRIPTION
LOT 9 AND 10 OF EDGEMONT GARDENS. IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE,STATE OF CALIFORNIA, AS SHOWN ON THE MAP IN BOOK 11, PAGE 30, OF MAP, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

EXCEPTING THEREFROM THAT PORTION OF LOT 10, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 10, SAID NORTHEAST CORNER BEING A POINT IN THE SOUTHERLY LINE OF LOT A, EUCALYPTUS AVENUE, AS SHOWN ON SAID MAP; THENCE, SOUTH 89°24'12" WEST, (FORMERLY RECORDED SOUTH 89°25' WEST) ALONG SAID SOUTHERLY LINE OF LOT A, A DISTANCE OF 109.00 FEET, THENCE SOUTH 00°12'14" EAST, (FORMERLY RECORDED SOUTH 00°10' EAST) PARALLEL WITH THE EASTERLY LINE OF SAID OF LOT 10, A DISTANCE OF 139.00 FEET; THENCE, SOUTH 85°52'26" EAST, A DISTANCE OF 109.31 FEET TO SAID EASTERLY LINE OF LOT 10; THENCE, NORTH 00°12'14" WEST (FORMERLY RECORDED NORTH 00°10' WEST) ALONG SAID EASTERLY LINE, A DISTANCE OF 148.00 FEET TO THE POINT OF BEGINNING.

SHEET INDEX

OWNER

LATCO SC, INC.
940 CALLE NEGOCIO, SUITE 200
SAN CLEMENTE, CA. 92673

APPLICANT / DEVELOPER

LATCO SC, INC.
940 CALLE NEGOCIO, SUITE 200
SAN CLEMENTE, CA. 92673
CONTACT: WES ALSTON
P.O. BOX 14679
LONG BEACH, CA. 90853
PH: (951) 212-8468

ENGINEER

MDS CONSULTING
17320 REDHILL AVENUE, SUITE 350
IRVINE, CA. 92614
PH: (949) 251-8821

REGISTERED PROFESSIONAL ENGINEER STANLEY C. MORSE No. 20596 Exp. 9-30-15 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
DATE:_____
STANLEY C. MORSE EXP. DATE 9/30/15
R.C.E. 20596

CHANGE	DATE	REVISION

PREPARED BY:

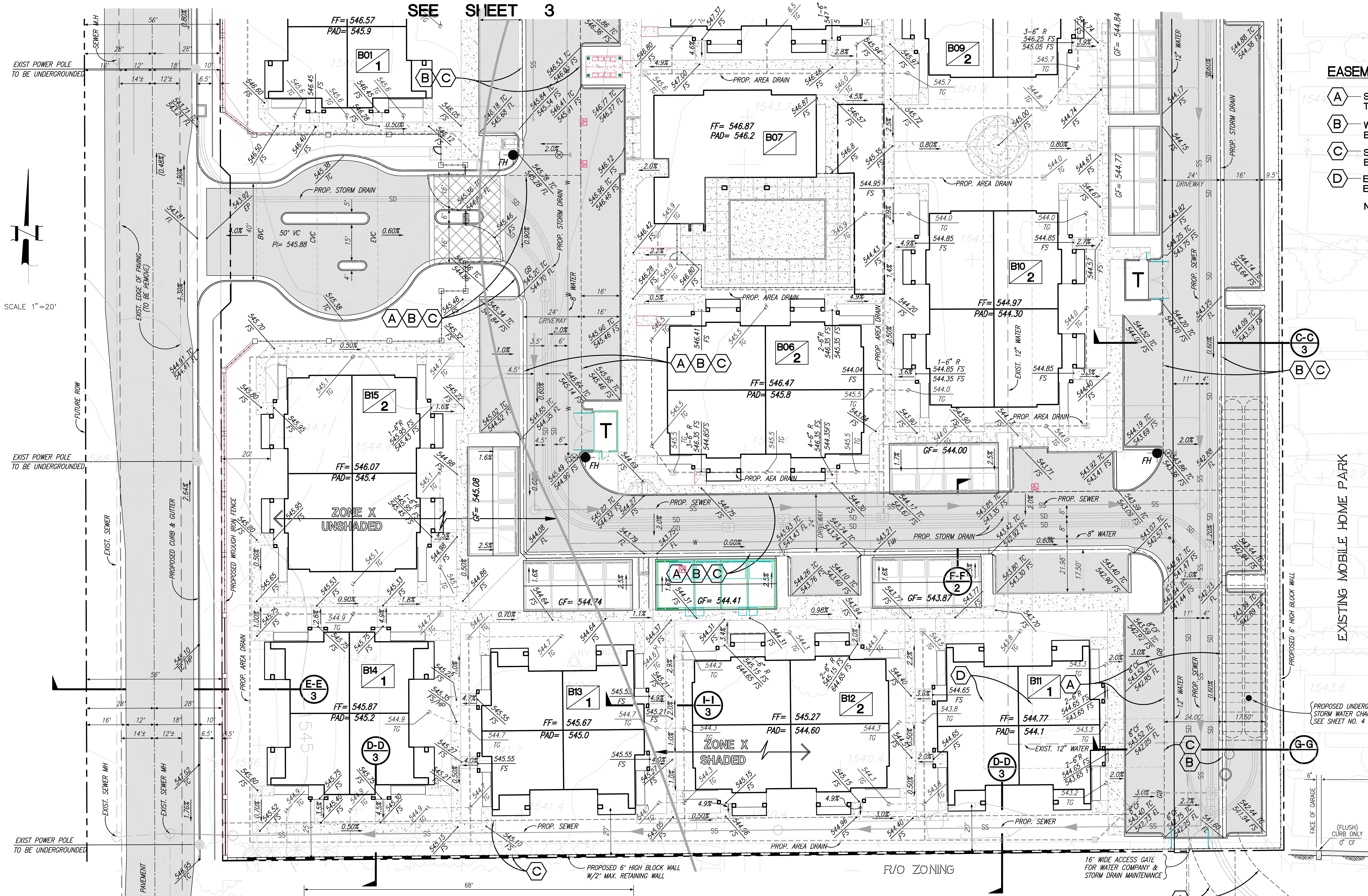
MDS CONSULTING
MORSE SCHULTZ
17320 Redhill Avenue
Suite 350
Irvine, CA 92614
Voice: 949-251-8821
FAX: 949-251-0516
PLANNERS ENGINEERS SURVEYORS

PA14-0042
MORENO VALLEY APARTMENTS PRELIMINARY GRADING PLAN

SHEET 1 of 5

Attachment 9

-1405-



EASEMENT NOTES

(A) STORM DRAIN EASEMENT PROPOSED TO BE DEDICATED TO THE CITY OF MORENO VALLEY.

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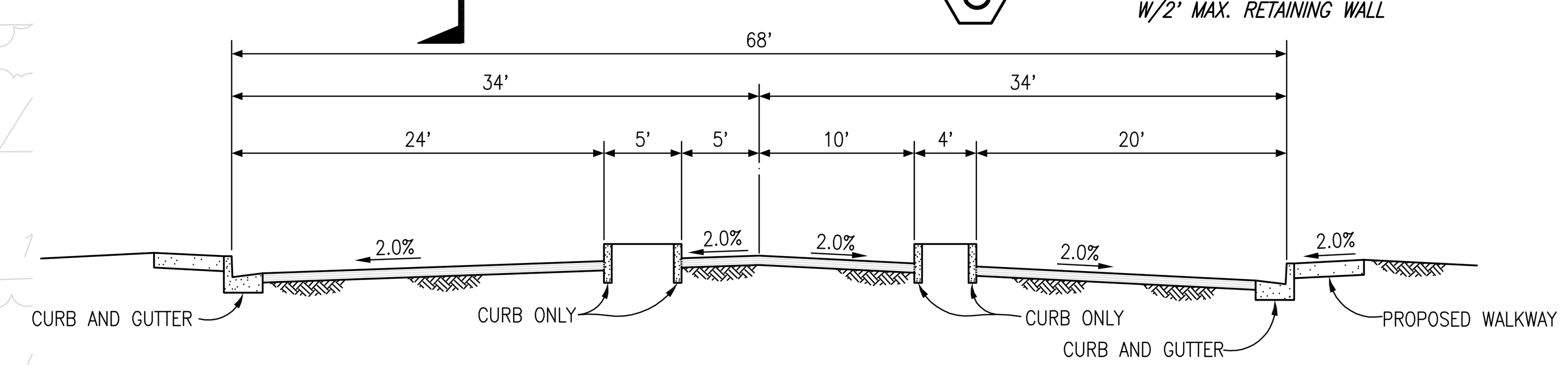
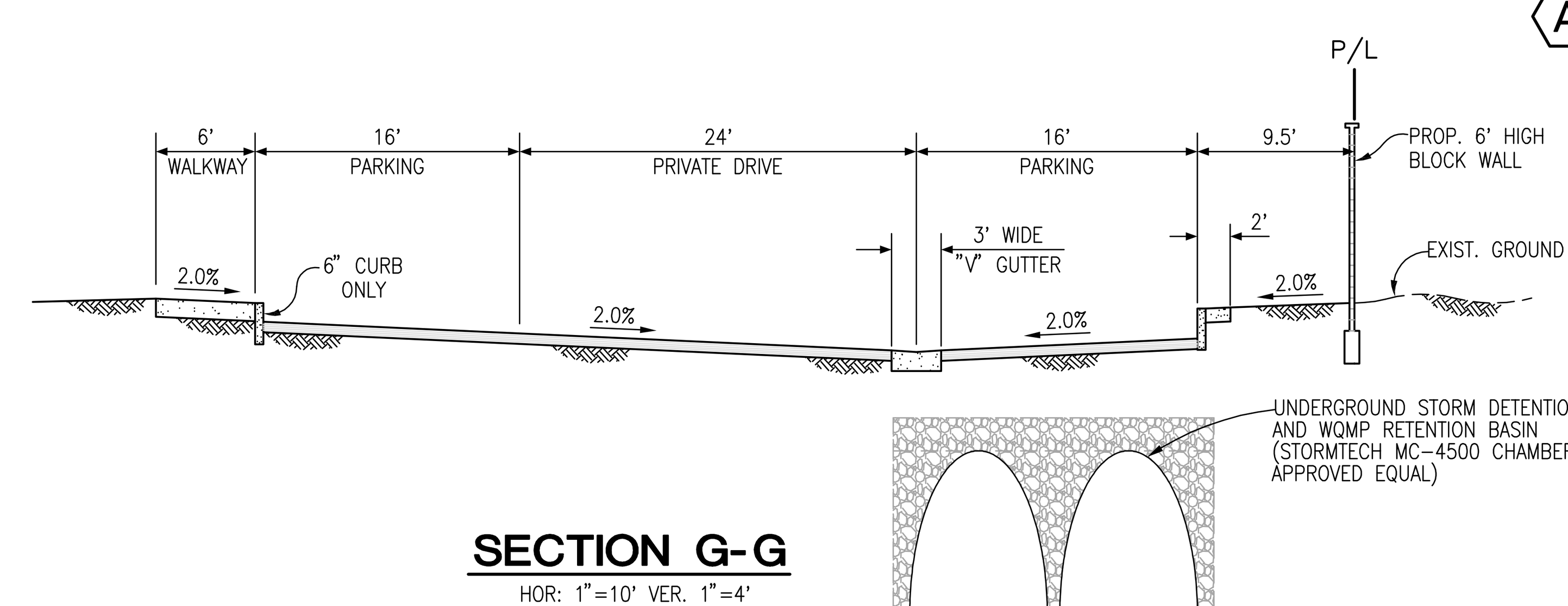


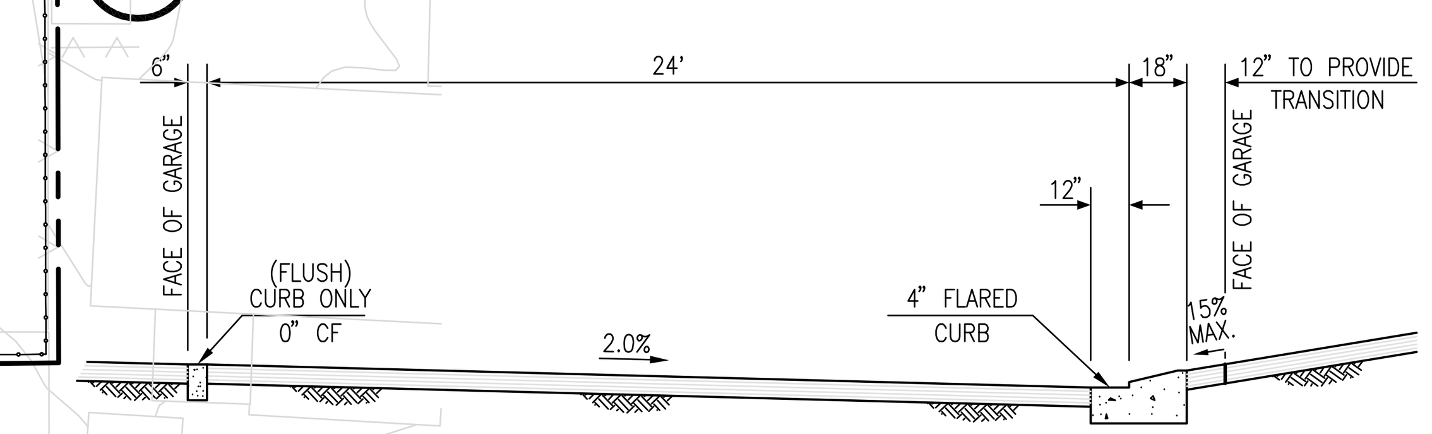
ENTRY STREET

HOR: 1"=10' VER. 1"=4'



SECTION G-G

HOR: 1"=10' VER. 1"=4'



TYPICAL PRIVATE INTERIOR DRIVE

SECTION F-F

SCALE 1"=5'

CHANGE	DATE	REVISION

PREPARED BY:

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Suite 350
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FAX: 949-251-0516

PLANNERS ENGINEERS SURVEYORS

PA14-0042

MORENO VALLEY APARTMENTS PRELIMINARY GRADING PLAN

SHEET 2 of 5

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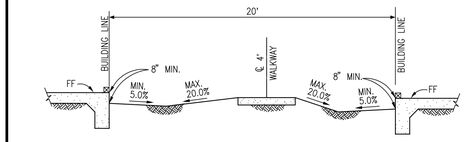
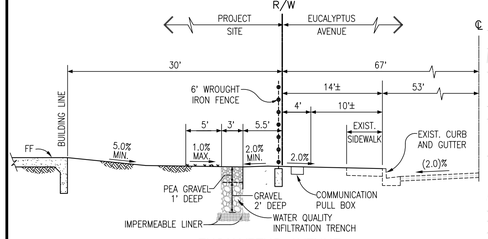


SECTION I -I

SCALE: H=V; 1"=5'

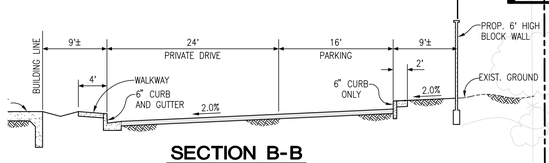


EUCALYPTUS AVENUE

PER MVSI-186-0

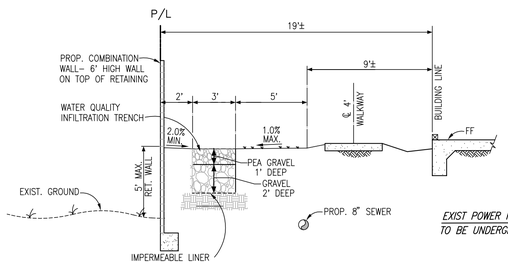
SECTION A-A

HOR: 1"=10' VER. 1"=4'



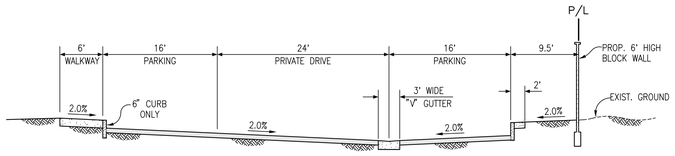
SECTION B-B

HOR: 1"=10' VER. 1"=4'



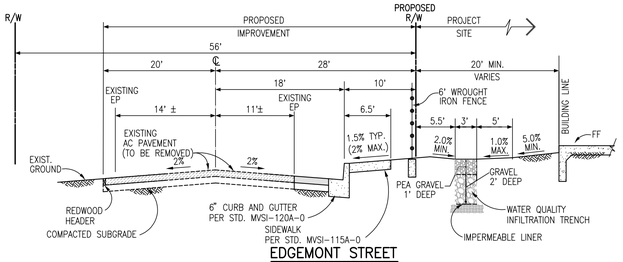
SECTION D-D

SCALE: H=V; 1"=5'



SECTION C-C

HOR: 1"=10' VER. 1"=4'

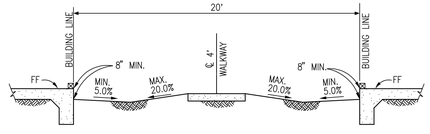


EDGEMONT STREET

PER MVSI-107A-0

SECTION E-E

SCALE 1"=10'



SECTION H-H

SCALE: H=V; 1"=5'

EASEMENT NOTES

- (A) STORM DRAIN EASEMENT PROPOSED TO BE DEDICATED TO THE CITY OF MORENO VALLEY.
- (B) WATER EASEMENT PROPOSED TO BE DEDICATED TO BOX SPRINGS MUTUAL WATER CO.
- (C) SEWER EASEMENT PROPOSED TO BE DEDICATED TO EDGEMONT COMMUNITY SERVICES DISTRICT.
- (D) EXIST. BOX SPRINGS MUTUAL WATER CO. WATER EASEMENT (UNDETERMINED WIDTH) TO BE QUITCLAIMED.

NOTE: INTERIOR STREETS FOR VEHICULAR EMERGENCY ACCESS PURPOSES DEDICATED TO THE CITY OF MORENO VALLEY.

EUCALYPTUS AVE.

EDGEMONT STREET

EXISTING MOBILE HOME PARK

R/O ZONING

SCALE 1"=20'

ZONE X UNSHADED

ZONE X SHADED

SEE SHEET 2

CHANGE	DATE	REVISION

PREPARED BY:

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17320 Redhill Avenue
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FAX: 949-251-0516
PLANNERS ENGINEERS SURVEYORS

PA14-0042

MORENO VALLEY APARTMENTS
PRELIMINARY GRADING PLAN

-1407-

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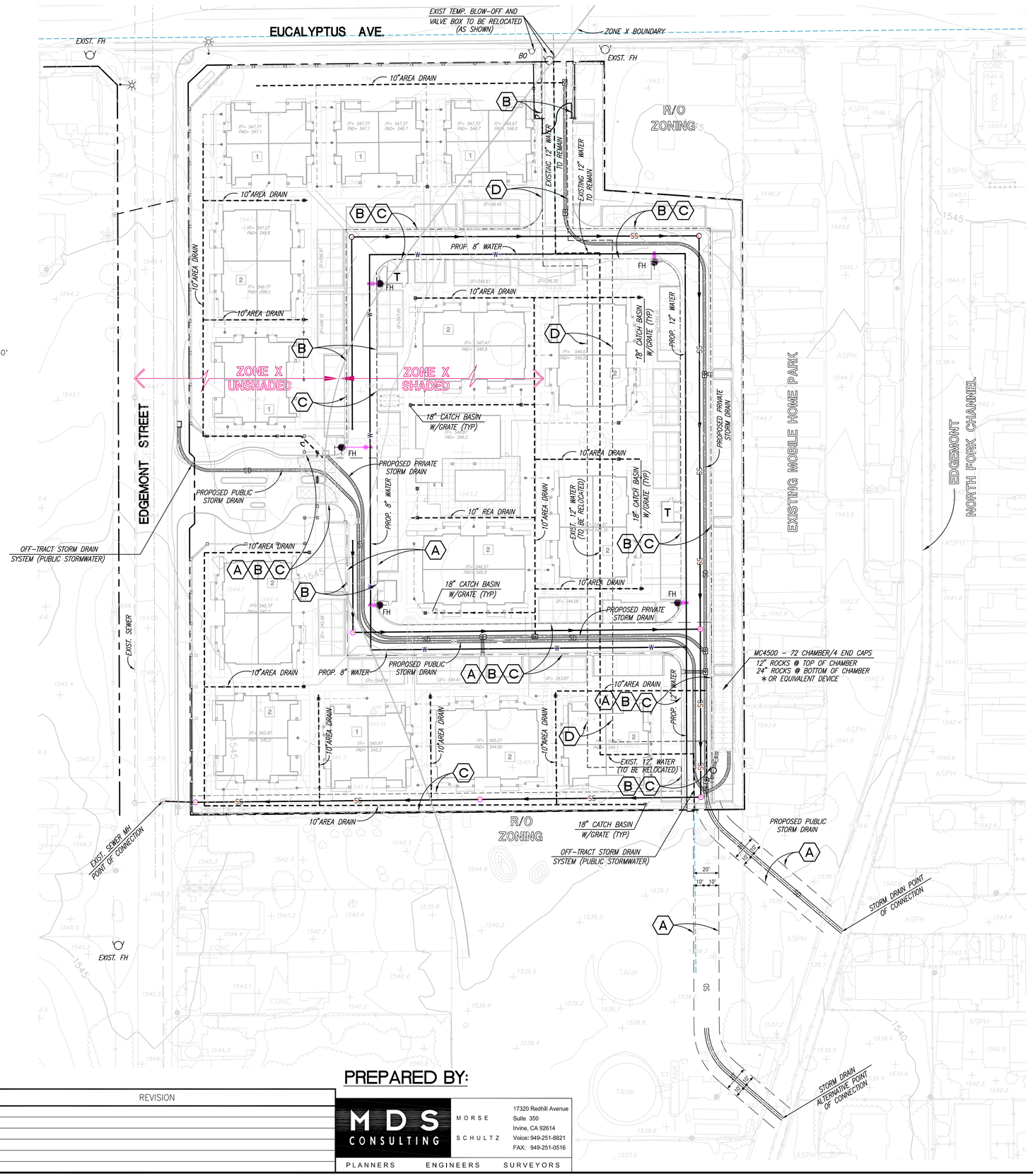

SCALE 1"=40'

LEGEND:

- PROPOSED STORM DRAIN AS NOTED — SD
- PROPOSED 8" SEWER SYSTEM — SS
- PROPOSED WATER SYSTEM AS NOTED — W
- EXISTING 12"WATER
- EXISTING SEWER
- PROPOSED 12" WATER — 12"W
- AREA DRAIN PIPE
- AREA DRAINS
- FIRE HYDRANT
- EXISTING FIRE HYDRANT
- EXISTING STREET LIGHT
- STORMTECH CHAMBERS

EASEMENT NOTES

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NOTE: INTERIOR STREETS FOR VEHICULAR EMERGENCY ACCESS PURPOSES DEDICATED TO THE CITY OF MORENO VALLEY.

STORM DRAIN NOTES

1. PUBLIC STORMWATERS IN EDGEMONT STREET WILL BE CAPTURED IN A CATCH BASIN AT THE PROJECT ENTRANCE STREET AND CONVEYED THROUGH THE PROJECT UNTREATED TO THE EDGEMONT NORTH FORK CHANNEL.
2. THE ON-SITE STORMWATERS WILL BE CAPTURED AND CONVEYED THROUGH THE PROJECT TO THE UNDERGROUND STORMWATER CHAMBER. WHERE THE DIFFERENCE BETWEEN THE PRE- AND POST- DEVELOPED FLOWS WILL BE RETAINED AND INFILTRATED.

-1408-

CHANGE	DATE	REVISION

PREPARED BY:

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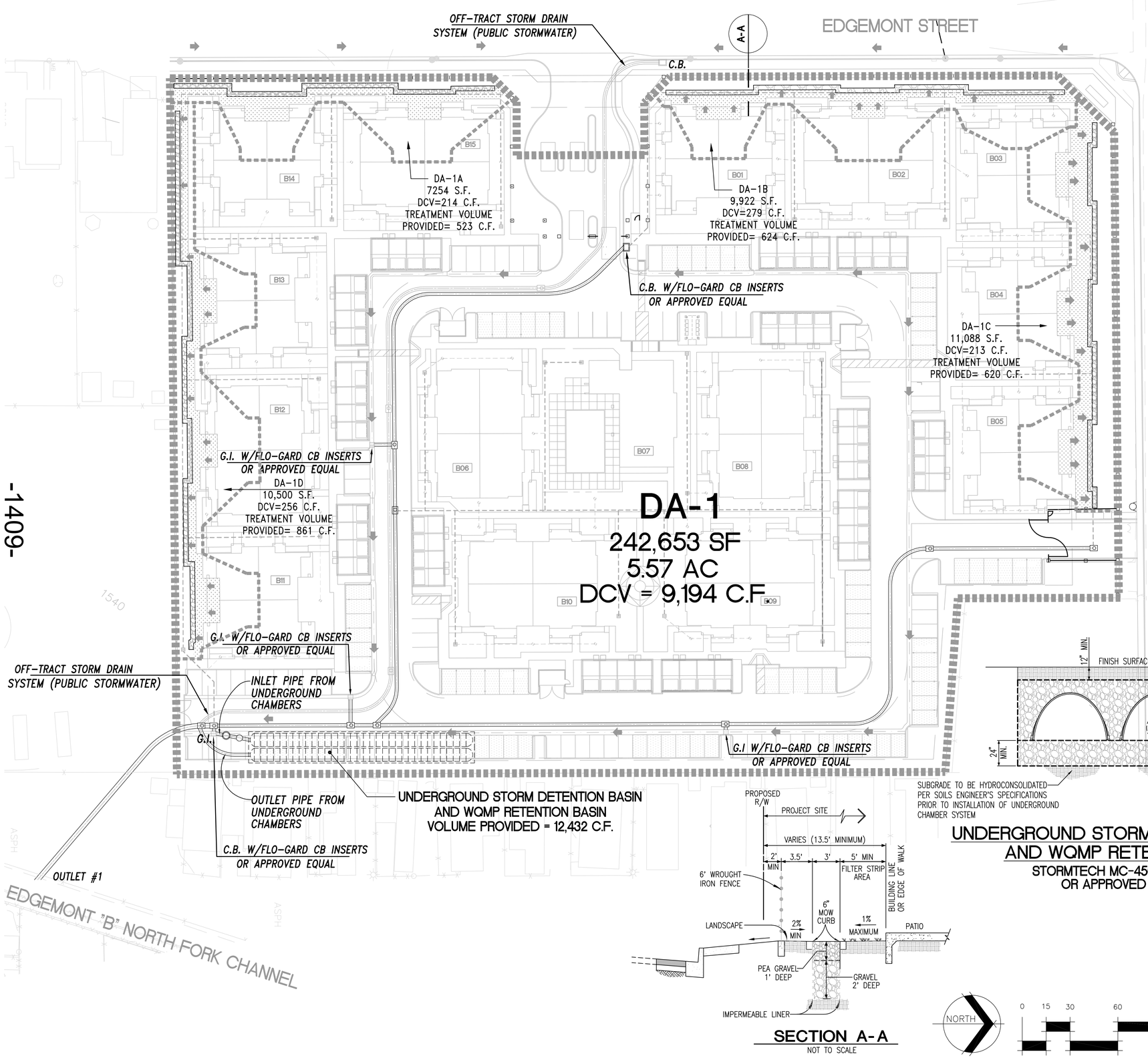
FAX: 949-251-0516
PLANNERS ENGINEERS SURVEYORS

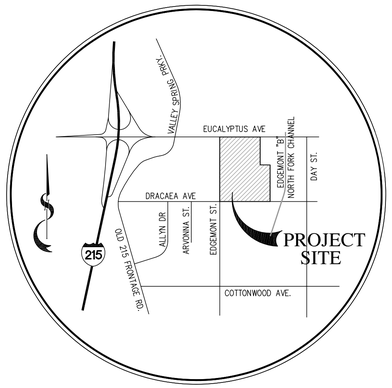
PA14-0042

MORENO VALLEY APARTMENTS
PRELIMINARY UTILITY PLAN

SHEET 4 of 5



-1409-

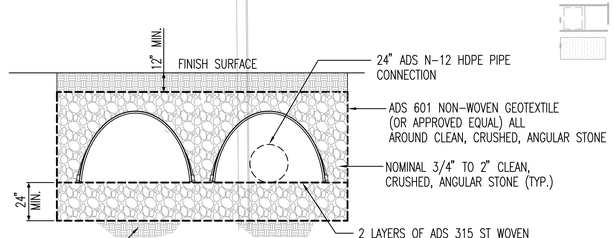


VICINITY MAP
NOT TO SCALE

LEGEND

- PRIVATE STORM DRAIN SYSTEM
- CATCH BASIN (C.B.) WITH FLOW-GUARD INSERTS OR APPROVED EQUAL
- GRATE INLET (G.I.) WITH FLOW GUARD INSERTS OR APPROVED EQUAL
- PUBLIC STORM DRAIN SYSTEM CATCH BASIN (C.B.)
- DRAINAGE AREA BOUNDARY
- DIRECTION OF SURFACE FLOW
- AREA DRAIN PIPE & AREA DRAIN INLET
- B09 BUILDING NUMBER
- INFILTRATION TRENCH DRAINAGE AREA BOUNDARY
- FILTER STRIP AREA
- INFILTRATION TRENCH
- DA-1 DRAINAGE AREA
- DA-1A SUB-DRAINAGE AREA
- GARAGE
- CARPORT

SECTION A-A
NOT TO SCALE



UNDERGROUND STORM DETENTION BASIN AND WQMP RETENTION BASIN
STORMTECH MC-4500 CHAMBER
OR APPROVED EQUAL

APPLICANT / DEVELOPER
LATCO SC, INC.
940 CALLE NEGOCIO, SUITE 200
SAN CLEMENTE, CA. 92673

PREPARED BY:
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PRELIMINARY
WATER QUALITY MANAGEMENT PLAN
MORENO VALLEY APARTMENTS
CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

DATE: November 2014

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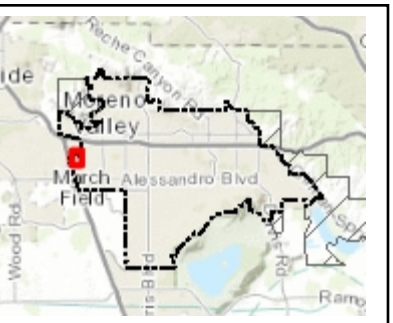
Aerial Map



Legend

- Public Facilities
  - Public Facilities
  - Fire Stations
- Parcels
- City Boundary
- Sphere of Influence

Notes

849.8 0 424.88 849.8 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 3/5/2015

Attachment 10

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