# Table of Contents

## Introduction
- Goals and Objectives / Project Study Scope 4
- Opportunities and Constraints 5
- Project Study Location Map 6
- Project Location Map 7
- Points of Inspiration / Regional Identity 8
- Corridor Theme 9

## Aesthetic Treatments
- Interchange and Overcrossing Location Map 10

## Bridge Treatments
- Map of Interchanges Designated for Gateway Treatment 11
- Gateway Interchange Bridge Treatment Guidelines 12
- Interchange/Overcrossing Bridge Treatment Guidelines 13
- Typical Bridge Plinth 14
- Typical Concrete Barrier 15
- Typical Bridge Fence 16
- Typical Slope Paving 17

## Sound Walls
- Sound Walls with Aesthetic Features 18
- Sound Wall Pilaster 19
- Standard Sound Walls: Non-Visible / Case-by-Case 20
Table of Contents

Retaining walls 25
   Visible Case-by-case 26
   Non-Visible Case-by-case 26

Landscaping 27
   Typical Landscaping Concept 28
   Plant Palette 29

Inert Materials 30
   Typical Gravel Layout 31

Hardscape 32
   Hardscape Guidelines 33

Irrigation 34
   Irrigation Design Guidelines 35

Lighting 36
   Highway Lighting 37
Introduction
Goals and Objectives

- The Corridor Master Plan is a design guideline for all highway projects on Route 60 in Moreno Valley City Limits, creating a unified and cohesive corridor.
- As stated in December 18, 2008, Guidelines can also be incorporated in I-215 Corridor if the Council so desires.

Project Study Scope

The Corridor Master Plan will provide aesthetic guidelines for new retrofit highway projects. This will be accomplished by the following major actions:

- Create a sense of place relating to the City’s history and natural surrounding.
- Preserve and enhance community character.
- Include aesthetics on structures.
- Employing decorative rock and inert material.
- Use materials reflecting the character of the area.
- Coordinating of colors of materials.
- Ensuring a safe and durable design.
- Recommending appropriate plants a lasting roadside environment.
- Implementing water conservation techniques.
- Coordinating with water quality best management practices.
- Identify potential gateway interchanges and recommend enhancements.
Opportunities and Constraints

Opportunities

• Create a cohesive corridor.
• Tie Corridor Master Plan to existing “Highway 60 Corridor Design Manual Landscape Guidelines.”
• Identify potential “Gateways-Designated” interchanges in the city.
• Provide landscape guidelines to reduce water consumption and work load.
• Design a highway that fits into the natural environment and local community.
• Take advantage of the scenic views found along the corridor.

Constraints

• Existing advertising billboards cause substantial visual impacts on the highway.
• Overhead utility lines.
• Limited water resources.
• Limited maintenance resources.
• Acknowledge material and textures that are currently in use within the corridor such as rock blankets, fractured rib wall texture and wave design.
• Limited right of way.
• Current condition of the existing landscape.
• Limited plant palette for environmental and highway conditions.
• Limited economic resources.
• Exposure for graffiti.
Project Study Location Map
Moreno Valley City Limits

Project Limit Route 60 PM 12.0
(Junction of I-215)

Project Limit Route 60 PM 23.0
(East of Gilman Springs Road)
Regional Identity

Moreno Valley: “People, Pride, Progress”
An area once comprised of three rural communities, Sunnymead, Edgemont and Moreno, the City of Moreno Valley, incorporated in 1984, has twice emerged as one of the fastest growing cities in the United States.

The Mountains
One of the most visible geographical features in Moreno Valley, visible from almost anywhere in the City, is Box Springs Mountain. This mountain at the northwest end of the City towers over the City, providing a concrete landmark. The side facing the City has a large "M" constructed on it.

Points of Inspiration

City seal: incorporate into pilaster of the bridge ends.

Existing Aesthetic Treatment
Rt. 60 at Perris Blvd.

Moreno Valley Logo: incorporate into sound wall aesthetic treatment.
Corridor Theme

City of Moreno Valley seal on the pilaster (plinth) at bridge termini.

Mountains that are part of the seal on the bridge abutment.

Walls in between the bridges showing the City logo, trees with the birds soaring from the trees.

Colored pavers continue lines of gravel mulch to show the sweeping mountains around the bridge.

Theme shown is modified: This feature subject to available space of bridge wall.
Aesthetic Treatments
Interchange and Overcrossing Location Map

Legend

- Star: Interchanges Designated for Gateway Treatment
- Circle: Interchange
- Green Star: Overcrossing
- Red Star: Future Overcrossing

City of Riverside

Project Limit PM 12.0
- Frederick St
- Graham St
- Heacock St
- Indian St
- Perris Blvd

Project Limit PM 23.0
- Nason St
- Moreno Beach Dr
- Gilman Springs Rd
- Theodore St
- Redlands Blvd

Day St (pending annexation)
Bridge Treatments
Map of Interchanges Designated for Gateway Treatment
(Per City Council Meeting Study Session on 3/16/2010)
Gateway Interchange Bridge Treatment Guidelines

- Gateway-Designated Interchanges are identified based on the entrance and exit of the city.
- The treatments in a ‘Gateway-Designated’ interchange are intended to be a level above treatments used in other interchanges.
- Recommended gateway bridge treatments are to include:
  - Decorative fencing with mountain panels.
  - Black picket fencing.
  - Plinth with City seal.
  - Colored Gravel incorporated in the bridge slope paving.
- Optional gateway interchange bridge treatments include:
  - Mountains on abutment, if space is available
  - Decorative lighting.

Plinth Features
- City of Moreno Valley seal in full color.
- Plinth shall be gray in color.
- Anti-graffiti coating on plinth, seal and all concrete.

Fence Feature
- Black picket fencing (steel).
- Mountain motif panel in black.

Decorative Lighting (option)
- Light standard as gateway identity.
- Light standard location continues into barrier as pilaster.
Interchange/Overcrossing Bridge Treatment Guidelines
(Non-Gateway Locations)

- **Recommended interchange/overcrossing bridge treatments to include:**
  - Black picket fencing.
  - Plinth with City seal.
  - Colored gravel incorporated in the bridge slope paving.
- **Optional bridge treatments include:**
  - Decorative lighting.
  - Mountains on abutment walls, if space is available.

---

**Fence Feature**
- Black picket fencing (steel).
- No Mountain motif panels.

**Plinth Features**
- City of Moreno Valley seal in full color.
- Plinth shall be natural gray concrete in color.
- Anti-graffiti coating on plinth, seal and all concrete.

---

Graphics provided by Parsons
Typical Bridge Plinth

Plinth Features
- City seal shall be in color concrete.
- Plinth and seal shall be treated with an anti-graffiti coating.
- Plinth shall be natural gray concrete in color.
- Seal excludes text (use limited by Caltrans).

Graphics provided by Parsons
Typical Concrete Barrier

Concrete Barrier Feature

- All bridge barriers shall have fractured rib texture.
- Barrier on the structure shall be gray in color.

Graphics provided by Parsons
Potential ‘Gateway Designated’ Interchange Fence Feature
• Black picket fencing (steel).
• Mountain motif panel in black.

Non-Gateway Fence Feature
• Black picket fencing (steel).
• No Mountain motif panels.

Graphics provided by Parsons
Typical Slope Paving

The selected materials for slope paving under bridges are as follows:

Colored gravel with red and brown tones will be used to create swales or waves under the bridge, connecting the hardscape to the landscape. This design concept will be applied to all slope paving areas.

Slope paving with color gravel set in concrete. Note: Slope paving design will have a unified connection with the colored gravel design in the landscaped area.
Sound Walls
Sound Walls with Aesthetic Features: Visible / Case-by-case.

Visible sound walls front public spaces and will incorporate aesthetic features determined on a case-by-case basis. Walls visible from primary city streets, frontage of retail development, parks or other facilities of general public use are considered visible and warrant aesthetic features.

Visible sound walls should have aesthetic features that incorporate the theme:
- Elements of the City logo (tree and flying bird).
- Free flowing wave.

Proposed Architectural Treatment:
- Exaggerated Grape Stake
- Bush Hammer
- Sandblast
- Rocky Mountain Flagstone
- Fractured Rib

Graphics provided by Parsons
Sound Wall Pilaster

- **Pilaster Feature.**
  - Pilaster insert shall be tan in color to match existing sound wall.

**Proposed Architectural Treatment**

*Field Stone*

Color #30450
Federal Std. 595B

Graphics provided by Parsons
Standard Sound Walls: Non-Visible / Case-by-Case

Non-Visible sound walls do not warrant the aesthetic treatments of the visible sound walls fronting public spaces. Sound walls abutting private property, parking areas, loading docks or other utilitarian functions are considered Non-Visible.

**Sound Walls**
- Sound walls are used to reduce noise to communities located along the highway. They must be constructed per Caltrans standards. They should be treated with an anti-graffiti coating.
- New and existing sound walls are to have vine planting.
- Standard sound walls can be used on a case-by-case basis, where visibility is limited, to match existing, or to fill gaps between standard sound walls.

**Planting at Noise Barriers**
- Planting should be incorporated as an integral component of noise barrier work to discourage graffiti and address visual impact issues. Wherever graffiti removal or other visual issues represent an ongoing maintenance concern, consideration must be given to covering new or existing noise barriers with vines and/or placing plants to screen the noise barriers to reduce worker exposure and life-cycle maintenance costs related to graffiti removal.
- The vine growth on the wall will reduce the harshness of the wall and create a pleasant traveler experience.
- The sound walls will have an opening in the lower portion of the wall that allows for the growth of vines.
- Vine openings shall conform to Caltrans standards.
Retaining Walls
Retaining Walls (follow the same guidelines for sound walls)

Visible / Case-by-case: Retaining walls fronting public spaces will incorporate aesthetic features determined on a case-by-case basis. Walls visible from primary city streets, frontage of retail development, parks or other facilities of general public use are considered visible and warrant the same aesthetic features as visible sound walls. Top of panel wall may have curve or flat edge determined on a case by case basis.

Non-Visible / Case-by-case: Retaining walls which do not front public spaces are considered non-visible and do not warrant the aesthetic treatments of the visible retaining walls which front public spaces. Retaining walls abutting private property, parking areas, loading docks or other utilitarian functions are considered non-visible.
Landscaping
Typical Landscaping Concept

Landscape Design Objectives:
Low growing ground covers allow views of the patterns.
• Ground cover for color, preserving the line of sight.
• Drought-tolerant plant palette material to be low water use.
• Landscape areas within the interchange shall have bands of gravel mulch.
• The gravel mulch will consist of three colors in shades of red and brown.
• A specimen oak tree or suitable replacement may be planted in all interchanges considered gateways.
• Plant palette to substantially conform with Master Plan.
• Plant palette to incorporate majority of plants listed in existing “Highway 60 Corridor Design Manual Landscape Guidelines”.

Low growing ground cover.
Colored gravel bands.
# Plant Palette

<table>
<thead>
<tr>
<th>Botanic Name</th>
<th>Common Name</th>
<th>Height</th>
<th>Flower Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia redolens</td>
<td>Prostate Acacia</td>
<td>1’ – 6’</td>
<td>Yellow</td>
<td>Drought tolerant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Large scale ground cover</td>
</tr>
<tr>
<td>Carpobrotus edulis</td>
<td>Hottentot Fig</td>
<td>12”</td>
<td>Pink</td>
<td>Succulent ground cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low Maintenance</td>
</tr>
<tr>
<td>Lonicera japonica 'Halliana'</td>
<td>Halls Honeysuckle</td>
<td>18”</td>
<td>White</td>
<td>Vigorous vine or ground cover for cover large areas</td>
</tr>
<tr>
<td>Trachelospermum jasminoides</td>
<td>Star Jasmine</td>
<td>Low</td>
<td>White</td>
<td>Evergreen, woody vine</td>
</tr>
<tr>
<td>Lantana varities</td>
<td>Lantana</td>
<td>12” – 24”</td>
<td>Varies</td>
<td>Color Accent</td>
</tr>
<tr>
<td>Leucophyllum frutescens</td>
<td>Texas Ranger</td>
<td>6’ -8’</td>
<td>Violet</td>
<td>Drought tolerant</td>
</tr>
<tr>
<td>Chitalpa tashkentensis</td>
<td>Tashkent Chitalpa</td>
<td>20’ – 30’</td>
<td>White/ Lavender</td>
<td>Multi-trunk does well in highway conditions</td>
</tr>
<tr>
<td>Olea europaea ‘Swan Hill’</td>
<td>Fruitless Olive</td>
<td>25’ -30’</td>
<td>White</td>
<td>Single or Multi-stemmed Tree or Large Shrub.</td>
</tr>
<tr>
<td>Phoenix canariensis</td>
<td>Canary Island Palm</td>
<td>to 60’</td>
<td></td>
<td>Needs Maintenance Agreement for fronds</td>
</tr>
<tr>
<td>Pinus canariensis</td>
<td>Canary Island Pine</td>
<td>50’ – 80’</td>
<td></td>
<td>Narrow Columnar Tree, Weeping Needles</td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coast Live Oak</td>
<td>20’ – 70’</td>
<td></td>
<td>Evergreen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Must have good drainage</td>
</tr>
<tr>
<td>Washingtonia filifera</td>
<td>California Fan Palm</td>
<td>to 60’</td>
<td></td>
<td>Needs Maintenance Agreement for fronds</td>
</tr>
<tr>
<td>Washingtonia robusta</td>
<td>Mexican Fan Palm</td>
<td>to 100’</td>
<td></td>
<td>Needs Maintenance Agreement for fronds</td>
</tr>
</tbody>
</table>
Inert Materials
**Typical Gravel Layout**

**Hardscape Design Objectives:**

- Large bands of colored gravel within the interchange landscape areas to enhance theme.
- Gravel areas will connect to the bands of gravel mulch in the slope paving of the bridge structure.
- Low-growing ground cover shall be planted near and around the gravel area to preserve.

**Gravel Design Objectives:**

- Use colored gravel to create patterned and textured ground treatments that are aesthetically rich.
- Ground treatment should coordinate in size, texture, color, and aggregate mix with the surrounding landscape.

**Benefits:**

- Installing colored gravel is a low tech process that can be accomplished by any contractor and repaired by Maintenance crews with existing equipment. Gravels that match soils in the project site are usually locally available.
- One of the least expensive control treatments available.
- Requires minimal maintenance and allows for infiltration of storm water into the soil.
Hardscape
Hardscape Guidelines

Hardscape Design Objectives:

- The selected rock blanket material will establish a consistent order along the freeway shoulder through several segments.
- Rock blanket to be installed in gore areas per Caltrans standards include a 30 foot recovery zone.
- Rock blanket shall be in grey tones to match the existing rock blanket.
- Rock blanket in gore areas shall be in curved forms per plan.
- Rock blanket shall be used along shoulder ramps and gore areas.
- Pedestrian crosswalk, ramps, sidewalk and surface must comply with Title 24 Americans with Disabilities Act (ADA).
- Avoid leaving narrow unpaved spaces.
- Select ground treatment in all non-paved areas that meets both aesthetics and maintenance requirements.
Irrigation
Irrigation Design Guidelines

**Irrigation Design**

- Provide crossovers under roads and in bridge structure to be included in roadwork/structural projects for future water and electrical lines.
- Relocate irrigation controllers, backflow preventers, remote control valves and similar facilities to protected areas or adjacent to the right of way fence.
- Replace all obsolete irrigation components.
- Use non-potable water (wells, underground water, reclaimed water) suitable for irrigation when practical.
- Group all control valves (irrigation components, i.e., fillings, wires, spray heads, pipe, backflows, valves, etc.) together for easy access.
- Use remote irrigation control systems (RICS) to allow for effective water management.
- See Highway Design Manual Chapter 900.
Lighting
Highway Lighting

Freeway Lighting
On freeways, highway safety lighting should be installed at particular points in interchange areas. This lighting serves to illuminate areas of potential vehicle conflict and to delineate exit ramps, entrance ramps, and island noises.

Standard Lighting
The current lighting fixture found on Route 60 in the Moreno Valley City Limits is a standard Caltrans lighting treatment, the “Cobra” fixture, which provides lighting throughout the corridor to meet the safety requirements set by Caltrans.

Freeway Structure Lighting
Lighting under a freeway structure is considered warranted at the following locations:
- The lighting is for the purpose of illuminating lanes, deceleration lanes, weaving areas or walkways.
- It is a part of local street lighting.

Signature Lighting
- Through special lighting the driver is aware of a main entry to the city.
- Signature lighting to be typically used on City-jurisdiction bridges and roadways.
- Allow for special lighting on gateways.
- Establish an identity for Route 60 within Moreno Valley City Limits.

Level of Illumination for Underpasses:
Lighting should be bright enough to accommodate the needs of people with vision impairments and provide increased comfort levels for all pedestrians. Indirect lighting such as reflected off the underpass wall or ceiling minimizes shadow and glare, benefits users with vision impairment (FHWA).