

Appendix H

Brodiaea Development Residential Project Vesting Tentative Tract Map No. 39162 (PEN25-0013)

Noise Measurement Data



Measurements By:



May 2025

Long-Term 24-Hour Noise Measurement Field Data Sheet

Recorded By: <i>C. Liminski</i>	Date: <i>3/20 - 3/21/25</i>
Site Number: <i>LT-1</i>	Job Number: <i>2025-053</i>
Start Time: <i>5:00 PM 3/20/25</i>	End Time: <i>5:00 PM 3/21/25</i>
Location/Address: <i>Utility Pole across Brodiaca, north of 14272 Annadale Dr</i>	
Primary Noise Source: <i>Brodiaca Ave Traffic</i>	
Secondary Noise Source: <i>Morano Beach Drive 3 Alessandro Traffic</i>	

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	10/01/2024	✓
	Microphone	Larson Davis	377B02	346688	10/01/2024	✓
	Preamp	Larson Davis	PRMLxT1L	069947	09/30/2024	✓
	Calibrator	Larson Davis	CAL200	17325	10/03/2024	✓

Calibration Data	
Offset Before Measurement Period	Offset After Measurement Period
Calibration Time: <i>4:47 PM</i>	Calibration Time: <i>5:10 PM</i>
Calibration Offset (+): <i>-0.03</i>	Calibration Offset (+): <i>-0.07</i>

Weather Data				
Est.	Sky Conditions: <i>Clear</i>			
	Avg Wind Speed (mph)	Max Wind Speed	Temperature ° F	Humidity %
	<i>4 mph</i>	<i>5.8 mph</i>	<i>75°</i>	<i>28.8%</i>

CNEL/Ldn	Additional Field Notes

Manual Traffic Counts (15 minutes in both directions)		
Roadway Segment:		
Autos	Medium Duty (2 axle 6 tires)	Heavy Duty (3+ axle)

Photo(s) of Measurement Location

Short-Term 15-Minute Noise Measurement Field Data Sheet

Recorded By: <i>C. Uminski</i>	Date: <i>3/20/25</i>
Site Number: <i>ST-1</i>	Job Number: <i>2025-053</i>
Start Time: <i>4:22 PM</i>	End Time: <i>4:37 PM</i>
Location/Address: <i>Northern Portion of APN 478-070-05, between -016 & -017</i>	
Primary Noise Source: <i>Residences to the north, rooster</i>	
Secondary Noise Source: <i>Morano Beach & Alessandro ROW Traffic</i>	

Equipment

Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	10/01/2024	✓
	Microphone	Larson Davis	377B02	346688	10/01/2024	✓
	Preamp	Larson Davis	PRMLxT1L	069947	09/30/2024	✓
	Calibrator	Larson Davis	CAL200	17325	10/03/2024	✓

Calibration Data

Offset Before Measurement Period		Offset After Measurement Period	
Calibration Time: <i>3:22 PM</i>		Calibration Time: <i>4:43 PM</i>	
Calibration Offset (+-): <i>+0.13</i>		Calibration Offset (+-): <i>+0.02</i>	

Weather Data

Est.	Sky Conditions: <i>Clear</i>			
	Avg Wind Speed (mph)	Max Wind Speed	Temperature ° F	Humidity %
	<i>4 mph</i>	<i>5.8 mph</i>	<i>75°</i>	<i>28.8%</i>

Noise Meter Data Outputs (dBA)

Leq	Lmin	Lmax	Ln
<i>52.4</i>	<i>35.7</i>	<i>73.9</i>	

Manual Traffic Counts (15 minutes in both directions)

Roadway Segment:		
Autos	Medium Duty (2 axle 6 tires)	Heavy Duty (3+ axle)

Photo(s) of Measurement Location



203

Short-Term 15-Minute Noise Measurement Field Data Sheet

Recorded By: C. Uminshi	Date: 3/20/25
Site Number: ST-2	Job Number: 2025-053
Start Time: 3:58 PM	End Time: 4:13 PM
Location/Address: Brodiaea Ave ROW, in front of 28211 Brodiaea Ave	
Primary Noise Source: Brodiaea Ave	
Secondary Noise Source: Morano Beach Drive	

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	10/01/2024	✓
	Microphone	Larson Davis	377B02	346688	10/01/2024	✓
	Preamp	Larson Davis	PRMLxT1L	069947	09/30/2024	✓
	Calibrator	Larson Davis	CAL200	17325	10/03/2024	✓

Calibration Data	
Offset Before Measurement Period	Offset After Measurement Period
Calibration Time: 3:22 PM	Calibration Time: 4:43 PM
Calibration Offset (+-): +0.13	Calibration Offset (+-): +0.02

Weather Data				
Est.	Sky Conditions: Clear			
	Avg Wind Speed (mph)	Max Wind Speed	Temperature ° F	Humidity %
	4 mph	5.8 mph	75°	26.8%

Noise Meter Data Outputs (dBA)			
Leq	Lmin	Lmax	Ln
61.7	37.3	76.7	

Manual Traffic Counts (15 minutes in both directions)		
Roadway Segment: Brodiaea Ave from Annadale Dr. to Morningside Dr.		
Autos	Medium Duty (2 axle 6 tires)	Heavy Duty (3+ axle)
26	2	0

Photo(s) of Measurement Location



LTX
202

Short-Term 15-Minute Noise Measurement Field Data Sheet

Recorded By: <i>C. Uminski</i>	Date: <i>3/20/25</i>
Site Number: <i>ST-3</i>	Job Number: <i>2025-053</i>
Start Time: <i>3:30 PM</i>	End Time: <i>3:45 PM</i>
Location/Address: <i>Southbound Moreno Beach Drive Sidewalk, east of 14357 Moreno Beach Dr</i>	
Primary Noise Source: <i>Moreno Beach Drive</i>	
Secondary Noise Source:	

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0006133	10/01/2024	✓
	Microphone	Larson Davis	377B02	346688	10/01/2024	✓
	Preamp	Larson Davis	PRMLxT1L	069947	09/30/2024	✓
	Calibrator	Larson Davis	CAL200	17325	10/03/2024	✓

Calibration Data	
Offset Before Measurement Period	Offset After Measurement Period
Calibration Time: <i>3:22 PM</i>	Calibration Time: <i>4:43 PM</i>
Calibration Offset (+-): <i>+0.13</i>	Calibration Offset (+-): <i>+0.02</i>

Weather Data				
Est.	Sky Conditions: <i>Clear</i>			
	Avg Wind Speed (mph)	Max Wind Speed	Temperature ° F	Humidity %
	<i>4 mph</i>	<i>5.8 mph</i>	<i>75°</i>	<i>28.8%</i>

Noise Meter Data Outputs (dBA)			
Leq	Lmin	Lmax	Ln
<i>67.7</i>	<i>41.4</i>	<i>79.8</i>	

Manual Traffic Counts (15 minutes in both directions)		
Roadway Segment: <i>Moreno Beach Drive from Brodiaca to Marketplace</i>		
Autos	Medium Duty (2 axle 6 tires)	Heavy Duty (3+ axle)
<i>315</i>	<i>9</i>	<i>4</i>

Photo(s) of Measurement Location



Summary

File Name on Meter LxT_Data.202.s
 File Name on PC LxT_0006133-20250320 153046-LxT_Data.202.ldbin
 Serial Number 0006133
 Model SoundTrack LxT®
 Firmware Version 2.404
 User
 Location
 Job Description
 Note

Measurement

Description

Start 2025-03-20 15:30:46
 Stop 2025-03-20 15:46:14
 Duration 00:15:27.9
 Run Time 00:15:27.9
 Pause 00:00:00.0

 Pre-Calibration 2025-03-20 15:24:13
 Post-Calibration None
 Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
 Peak Weight Z Weighting
 Detector Slow
 Preamplifier PRMLxT1L
 Microphone Correction Off
 Integration Method Exponential
 Overload 120.9 dB

	A	C	Z
Under Range Peak	77.5	74.5	79.5 dB
Under Range Limit	23.8	24.5	30.1 dB
Noise Floor	14.7	15.3	21.0 dB

	First	Second	Third
Instrument Identification			

Results

LASeq	67.7 dB		
LASE	97.4 dB		
EAS	607.097 $\mu\text{Pa}^2\text{h}$		
EAS8	18.843 mPa^2h		
EAS40	94.215 mPa^2h		
LZpk (max)	2025-03-20 15:32:45	102.8 dB	
LASmax	2025-03-20 15:33:27	79.8 dB	
LASmin	2025-03-20 15:36:37	41.4 dB	
SEA	-99.94 dB		

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpk > 135.0 dB	0	0.0 s
LZpk > 137.0 dB	0	0.0 s
LZpk > 140.0 dB	0	0.0 s

Community Noise	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB
	67.7	67.7	-99.94	67.7	67.7	-99.94	-99.94	

LCSeq	74.8 dB
LASeq	67.7 dB
LCSeq - LASeq	7.1 dB
LAleq	69.6 dB
LAeq	67.8 dB
LAleq - LAeq	1.8 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	67.8					
LS(max)	79.8	2025/03/20 15:33:27				
LS(min)	41.4	2025/03/20 15:36:37				
Lpk(max)					102.8	2025/03/20 15:32:45

Overload Count	0
Overload Duration	0.0 s

Summary

File Name on Meter LxT_Data.203.s
File Name on PC LxT_0006133-20250320 155924-LxT_Data.203.lbin
Serial Number 0006133
Model SoundTrack LxT®
Firmware Version 2.404
User
Location
Job Description
Note

Measurement

Description
Start 2025-03-20 15:59:24
Stop 2025-03-20 16:14:25
Duration 00:15:00.9
Run Time 00:15:00.9
Pause 00:00:00.0

Pre-Calibration 2025-03-20 15:24:03
Post-Calibration None
Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamplifier PRMLxT1L
Microphone Correction Off
Integration Method Exponential
Overload 120.9 dB

	A	C	Z
Under Range Peak	77.5	74.5	79.5 dB
Under Range Limit	23.8	24.5	30.1 dB
Noise Floor	14.7	15.3	21.0 dB

Instrument Identification

	First	Second	Third
--	--------------	---------------	--------------

Results

LASeq	61.7 dB		
LASE	91.2 dB		
EAS	148.059 $\mu\text{Pa}^2\text{h}$		
EAS8	4.733 mPa^2h		
EAS40	23.666 mPa^2h		
LZpk (max)	2025-03-20 15:59:26	98.5 dB	
LASmax	2025-03-20 16:02:36	76.7 dB	
LASmin	2025-03-20 16:06:12	37.3 dB	
SEA	-99.94 dB		

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpk > 135.0 dB	0	0.0 s
LZpk > 137.0 dB	0	0.0 s
LZpk > 140.0 dB	0	0.0 s

Community Noise	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB
	61.7	61.7	-99.94	61.7	61.7	-99.94	-99.94	

LCSeq	66.5 dB
LASeq	61.7 dB
LCSeq - LASeq	4.8 dB
LAleq	64.1 dB
LAeq	61.7 dB
LAleq - LAeq	2.4 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	61.7					
LS(max)	76.7	2025/03/20 16:02:36				
LS(min)	37.3	2025/03/20 16:06:12				
Lpk(max)					98.5	2025/03/20 15:59:26

Overload Count	0
Overload Duration	0.0 s

Summary

File Name on Meter LxT_Data.204.s
File Name on PC LxT_0006133-20250320 162331-LxT_Data.204.ldbin
Serial Number 0006133
Model SoundTrack LxT®
Firmware Version 2.404
User
Location
Job Description
Note

Measurement

Description

Start 2025-03-20 16:23:31
Stop 2025-03-20 16:38:32
Duration 00:15:00.9
Run Time 00:15:00.9
Pause 00:00:00.0

Pre-Calibration 2025-03-20 15:24:03
Post-Calibration None
Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamplifier PRMLxT1L
Microphone Correction Off
Integration Method Exponential
Overload 120.9 dB

	A	C	Z
Under Range Peak	77.5	74.5	79.5 dB
Under Range Limit	23.8	24.5	30.1 dB
Noise Floor	14.7	15.3	21.0 dB

	First	Second	Third
--	-------	--------	-------

Instrument Identification

Results

LASeq	52.4 dB		
LASE	81.9 dB		
EAS	17.395 $\mu\text{Pa}^2\text{h}$		
EAS8	556.096 $\mu\text{Pa}^2\text{h}$		
EAS40	2.780 mPa^2h		
LZpk (max)	2025-03-20 16:28:22	100.0 dB	
LASmax	2025-03-20 16:32:58	73.9 dB	
LASmin	2025-03-20 16:25:31	35.7 dB	
SEA	-99.94 dB		

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LZpk > 135.0 dB	0	0.0 s
LZpk > 137.0 dB	0	0.0 s
LZpk > 140.0 dB	0	0.0 s

Community Noise	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB
	52.4	52.4	-99.94	52.4	52.4	-99.94	-99.94	

LCSeq	61.2 dB
LASeq	52.4 dB
LCSeq - LASeq	8.8 dB
LAleq	59.0 dB
LAeq	52.4 dB
LAleq - LAeq	6.6 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	52.4					
LS(max)	73.9	2025/03/20 16:32:58				
LS(min)	35.7	2025/03/20 16:25:31				
Lpk(max)					100.0	2025/03/20 16:28:22

Overload Count	0
Overload Duration	0.0 s

Summary

File Name on Meter LxT_Data.205.s
File Name on PC LxT_0006133-20250320 164452-LxT_Data.205.ldbin
Serial Number 0006133
Model SoundTrack LxT®
Firmware Version 2.404
User
Location
Job Description
Note

Measurement

Description

Start 2025-03-20 16:44:52
Stop 2025-03-21 17:07:16
Duration 24:16:47.500
Run Time 24:16:47.500
Pause 00:00:00.0

Pre-Calibration 2025-03-20 15:24:03
Post-Calibration None
Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
Peak Weight Z Weighting
Detector Slow
Preamplifier PRMLxT1L
Microphone Correction Off
Integration Method Exponential
Overload 120.9 dB

	A	C	Z
Under Range Peak	77.5	74.5	79.5 dB
Under Range Limit	23.8	24.5	30.1 dB
Noise Floor	14.7	15.3	21.0 dB

	First	Second	Third
--	-------	--------	-------

Instrument Identification

Results

LASeq 62.6 dB
LASE 112.0 dB
EAS 17.673 mPa²h
EAS8 5.823 mPa²h
EAS40 29.115 mPa²h
LZpk (max) 2025-03-20 16:48:43 121.4 dB
LASmax 2025-03-21 03:10:45 102.0 dB
LASmin 2025-03-21 01:05:18 32.1 dB
SEA 134.2 dB

	Exceedance Counts	Duration
LAS > 85.0 dB	8	37.6 s
LAS > 115.0 dB	0	0.0 s
LZpk > 135.0 dB	0	0.0 s
LZpk > 137.0 dB	0	0.0 s
LZpk > 140.0 dB	0	0.0 s

Community Noise	LDN	LDay 07:00-22:00	LNight 22:00-07:00	LDEN	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00	dB
	70.2	61.5	64.1	70.3	62.0	58.6	64.1	

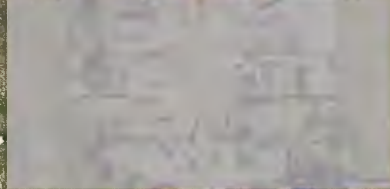
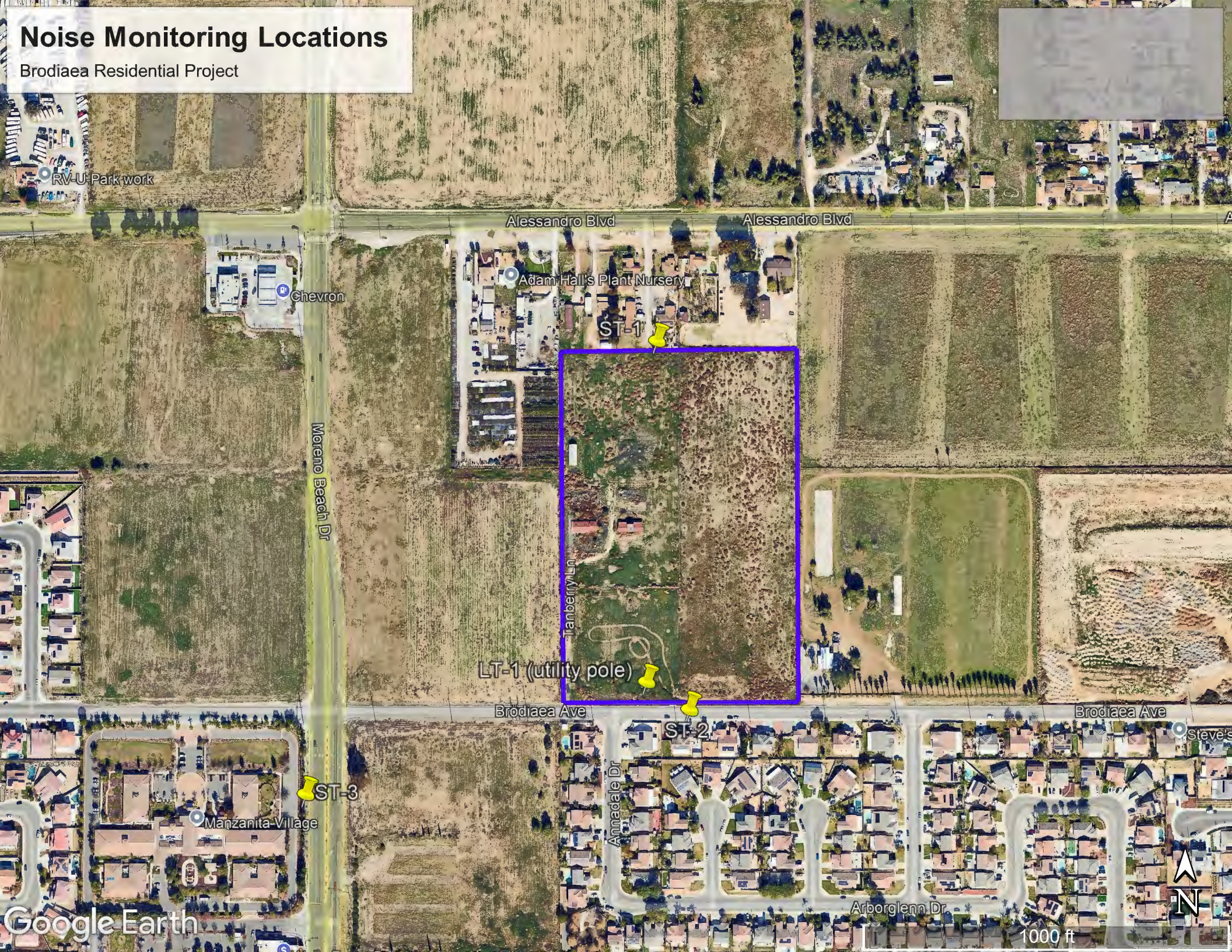
LCSeq	66.5 dB
LASeq	62.6 dB
LCSeq - LASeq	3.9 dB
LAleq	66.4 dB
LAeq	62.7 dB
LAleq - LAeq	3.7 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	62.7					
LS(max)	102.0	2025/03/21 3:10:45				
LS(min)	32.1	2025/03/21 1:05:18				
Lpk(max)					121.4	2025/03/20 16:48:43

Overload Count	2
Overload Duration	4.0 s

Noise Monitoring Locations

Brodiaea Residential Project



RV-U Park work

Chevron

Alessandro Blvd

Alessandro Blvd

Adam Hall's Plant Nursery

ST-1

Moreno Beach Dr

Manberry Ln

LT-1 (utility pole)

Brodiaea Ave

ST-2

Brodiaea Ave

Steve's

ST-3

Manzanita Village

Annadale Dr

Arboglenn Dr

Google Earth

1000 ft



Traffic Noise Calculator: FHWA 77-108

Project Title: Moreno Valley - Wilmont Residential

ID	Output			Inputs													Auto Inputs					
	dBA at 50 feet			Distance to CNEL Contour			Peak Time	Roadway Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance
L _{eq} 24hr	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA																	
1	55.5	58.4	59.0	9	20	43	Existing AM	Moreno Beach & Brodiaea	1,244	45	0.0%	97.4%	1.8%	0.7%	75.5%	14.0%	10.5%	2	Soft	50	0.5	20
2	55.8	58.7	59.3	10	21	45	Existing + Project AM	Moreno Beach & Brodiaea	1,338	45	0.0%	97.4%	1.8%	0.7%	75.5%	14.0%	10.5%	2	Soft	50	0.5	20
3	56.3	59.2	59.8	10	23	49	Existing PM	Moreno Beach & Brodiaea	1,507	45	0.0%	97.4%	1.8%	0.7%	75.5%	14.0%	10.5%	2	Soft	50	0.5	20
4	56.7	59.5	60.2	11	24	51	Existing + Project PM	Moreno Beach & Brodiaea	1,633	45	0.0%	97.4%	1.8%	0.7%	75.5%	14.0%	10.5%	2	Soft	50	0.5	20