APPENDIX M

NOISE

Noise Measurement Survey

Project Number: 20252445
Project Name: NWOS Legacy Ranch

Test Personnel: Corey Knips
Equipment: LD Spark 706RC (SN: 17814)

Site Number: LT-1 Dates: 8/5/25-8/11/25

Time: From 10:00 a.m. To 10:00 a.m.

Site Location: 29943 Camino Capistrano, San Juan Capistrano, CA. At the Swanner House. On an orange tree near the northern corner of the property. Approximately 380 feet from the I-5 centerline.

Primary Noise Sources: Traffic on I-5 and Camino Capistrano. Occasional events at the Swanner House.

Comments:

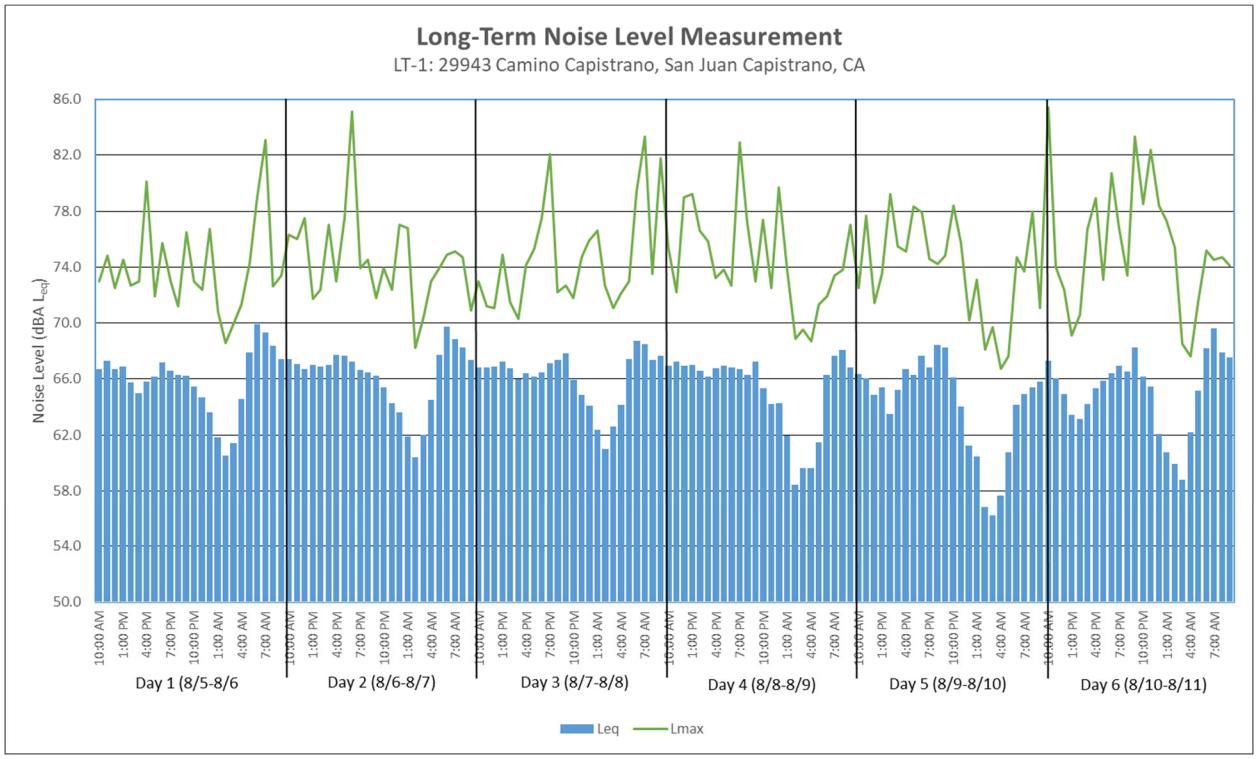
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Noise Level (dBA)											
	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
10:00 AM	66.7	73.0	67.4	76.3	66.8	73.0	67.0	75.5	66.3	72.5	67.3	85.4
11:00 AM	67.3	74.8	67.0	76.0	66.8	71.2	67.2	72.2	66.0	77.7	66.0	74.0
12:00 PM	66.7	72.5	66.7	77.5	66.9	71.1	66.9	79.0	64.8	71.4	64.9	72.4
1:00 PM	66.9	74.5	67.0	71.7	67.2	74.9	67.0	79.2	65.4	73.5	63.4	69.1
2:00 PM	65.7	72.7	66.9	72.4	66.8	71.5	66.6	76.6	63.5	79.2	63.2	70.6
3:00 PM	65.0	73.0	67.0	77.0	66.0	70.3	66.2	75.8	65.2	75.5	64.2	76.7
4:00 PM	65.8	80.1	67.7	73.0	66.4	74.1	66.7	73.2	66.7	75.1	65.3	78.9
5:00 PM	66.2	71.9	67.6	77.5	66.2	75.3	66.9	73.8	66.3	78.3	65.9	73.1
6:00 PM	67.2	75.7	67.3	85.1	66.4	77.5	66.8	72.7	67.6	77.9	66.4	80.7
7:00 PM	66.6	73.0	66.6	73.9	67.1	82.1	66.7	82.9	66.8	74.6	66.9	76.8
8:00 PM	66.3	71.2	66.4	74.5	67.3	72.2	66.3	77.2	68.4	74.2	66.5	73.4
9:00 PM	66.2	76.5	66.2	71.8	67.8	72.7	67.2	73.0	68.2	74.8	68.2	83.3
10:00 PM	65.4	73.0	65.4	73.9	65.9	71.8	65.3	77.4	66.1	78.4	66.1	78.5
11:00 PM	64.7	72.4	64.2	72.4	64.9	74.7	64.2	72.5	64.0	75.7	65.4	82.4
12:00 AM	63.6	76.7	63.6	77.0	64.1	75.9	64.2	79.7	61.2	70.2	62.1	78.4
1:00 AM	61.8	70.8	61.9	76.8	62.4	76.6	62.0	73.8	60.5	73.1	60.8	77.3
2:00 AM	60.5	68.6	60.4	68.2	61.0	72.7	58.4	68.9	56.8	68.1	59.9	75.4
3:00 AM	61.4	70.0	62.0	70.4	62.6	71.1	59.6	69.5	56.1	69.7	58.8	68.5
4:00 AM	64.6	71.3	64.5	73.0	64.2	72.1	59.6	68.7	57.7	66.7	62.2	67.6
5:00 AM	67.9	74.3	67.7	73.9	67.4	73.0	61.5	71.3	60.7	67.6	65.1	71.5
6:00 AM	69.9	79.0	69.7	74.9	68.7	79.4	66.3	71.9	64.2	74.7	68.2	75.2
7:00 AM	69.3	83.1	68.8	75.1	68.5	83.3	67.6	73.4	64.9	73.7	69.6	74.5
8:00 AM	68.4	72.6	68.3	74.7	67.4	73.5	68.0	73.8	65.4	78.0	67.9	74.7
9:00 AM	67.4	73.4	67.4	70.9	67.6	81.8	66.8	77.0	65.8	71.1	67.5	74.1

Source: Compiled by LSA Associates, Inc. (2025).
Note: Noise measurements were conducted from August 5, 2025 at 10:00 a.m. to August 11, 2025 at 10:00 a.m.
dBA = A-weighted decibel L_{max} = maximum instantaneous noise level
L_{eq} = equivalent continuous sound level



Noise Measurement Survey

Project Number: 20252445
Project Name: NWOS Legacy Ranch

Test Personnel: Corey Knips
Equipment: LD Spark 706RC (SN: 18571)

Site Number: LT-2 Dates: 8/5/25-8/11/25

Time: From 10:00 a.m. To 10:00 a.m.

Site Location: 29943 Camino Capistrano, San Juan Capistrano, CA. At the Swanner House. On a tree at the edge of the parking lot. Approximately 300 feet from the I-5 centerline.

Primary Noise Sources: Traffic on I-5 and Camino Capistrano. Occasional events at the Swanner House.

Comments:

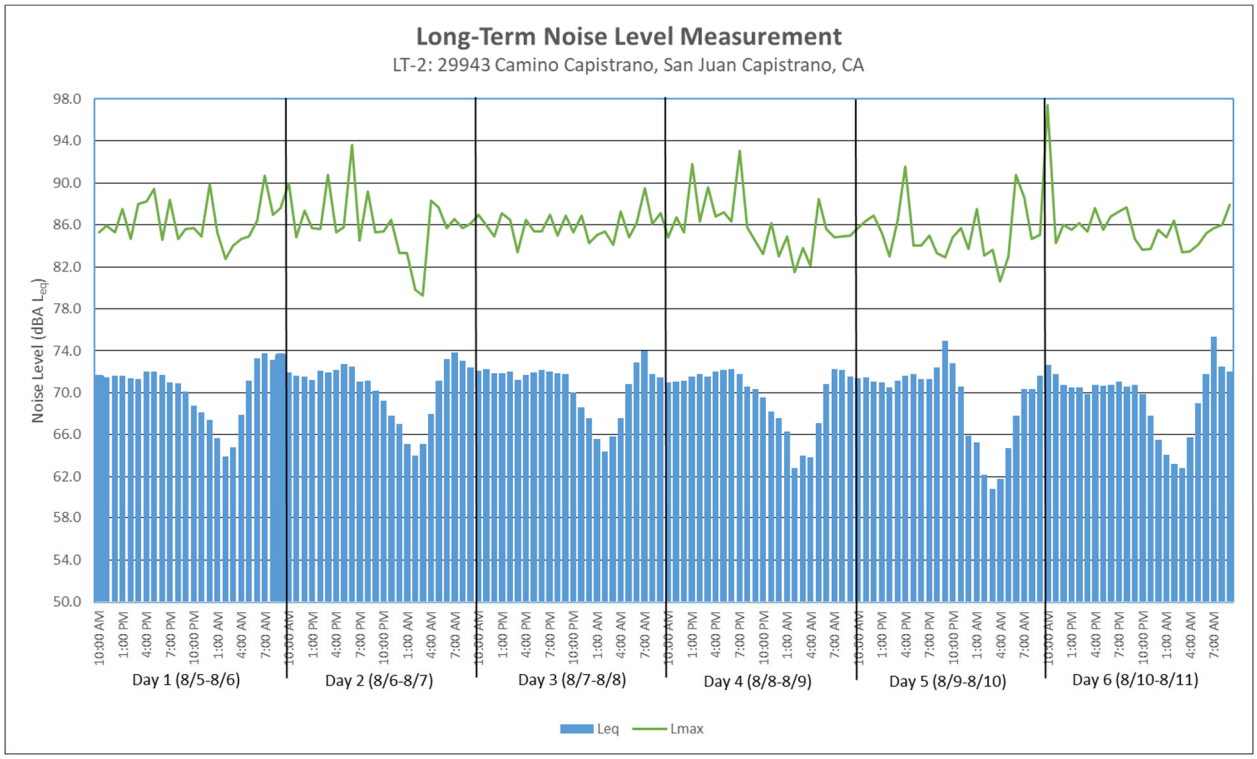
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Noise Level (dBA)											
	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
10:00 AM	71.5	85.3	72.0	90.0	72.1	87.0	71.0	84.8	71.4	85.7	72.7	97.4
11:00 AM	71.5	85.9	71.6	84.8	72.2	86.0	71.1	86.7	71.5	86.4	71.8	84.3
12:00 PM	71.6	85.3	71.6	87.4	71.8	84.9	71.1	85.3	71.1	86.9	70.8	86.0
1:00 PM	71.7	87.5	71.2	85.7	71.9	87.1	71.5	91.8	71.0	85.2	70.5	85.5
2:00 PM	71.4	84.7	72.1	85.6	72.0	86.5	71.8	86.3	70.5	83.0	70.5	86.2
3:00 PM	71.3	88.0	71.9	90.8	71.2	83.4	71.6	89.6	71.1	86.5	69.9	85.4
4:00 PM	72.0	88.2	72.2	85.3	71.7	86.5	72.0	86.8	71.6	91.6	70.7	87.6
5:00 PM	72.0	89.4	72.7	85.8	71.9	85.4	72.2	87.2	71.8	84.0	70.7	85.5
6:00 PM	71.7	84.6	72.5	93.6	72.2	85.4	72.2	86.3	71.3	84.0	70.7	86.8
7:00 PM	71.0	88.4	71.0	84.5	72.0	87.0	71.8	93.1	71.3	85.0	71.1	87.3
8:00 PM	70.9	84.7	71.1	89.2	71.8	85.0	70.6	85.8	72.4	83.3	70.6	87.7
9:00 PM	70.1	85.6	70.2	85.3	71.8	86.9	70.4	84.4	74.9	82.9	70.8	84.7
10:00 PM	68.8	85.7	69.2	85.4	70.0	85.3	69.5	83.2	72.8	84.8	69.9	83.6
11:00 PM	68.1	84.9	67.8	86.5	68.6	86.9	68.2	86.2	70.6	85.7	67.8	83.7
12:00 AM	67.4	89.9	67.0	83.3	67.6	84.3	67.6	83.0	65.9	83.7	65.5	85.5
1:00 AM	65.7	85.3	65.1	83.3	65.6	85.1	66.3	84.9	65.3	87.5	64.1	84.8
2:00 AM	63.9	82.8	64.0	79.8	64.4	85.4	62.8	81.5	62.2	83.1	63.2	86.4
3:00 AM	64.8	84.0	65.1	79.3	65.8	84.1	64.0	83.8	60.9	83.6	62.8	83.4
4:00 AM	67.9	84.7	68.0	88.3	67.6	87.3	63.8	82.1	61.8	80.6	65.7	83.5
5:00 AM	71.2	84.9	71.1	87.7	70.8	84.8	67.1	88.5	64.7	83.0	69.0	84.1
6:00 AM	73.3	86.4	73.2	85.7	72.9	86.2	70.8	85.6	67.8	90.8	71.7	85.2
7:00 AM	73.8	90.7	73.9	86.6	74.0	89.5	72.2	84.8	70.3	88.6	75.4	85.7
8:00 AM	73.2	87.0	73.1	85.7	71.8	86.1	72.2	84.9	70.3	84.7	72.5	86.0
9:00 AM	73.5	87.6	72.4	86.1	71.5	87.1	71.6	85.0	71.7	85.1	72.0	87.9

Source: Compiled by LSA Associates, Inc. (2025).
Note: Noise measurements were conducted from August 5, 2025 at 10:00 a.m. to August 11, 2025 at 10:00 a.m.
dBA = A-weighted decibel L_{max} = maximum instantaneous noise level
L_{eq} = equivalent continuous sound level



Noise Measurement Survey

Project Number: 20252445
Project Name: NWOS Legacy Ranch

Test Personnel: Corey Knips
Equipment: LD Spark 705+ (SN: 40632)

Site Number: LT-3 Dates: 8/5/25-8/7/25

Time: From 10:00 a.m. To 10:00 a.m.

Site Location: 30300 Camino Capistrano, San Juan Capistrano, CA. At the Camino Health Center. In the parking lot on a light pole. Approximately 270 feet from the I-5 centerline.

Primary Noise Sources: Traffic on I-5 and Camino Capistrano.

Comments:

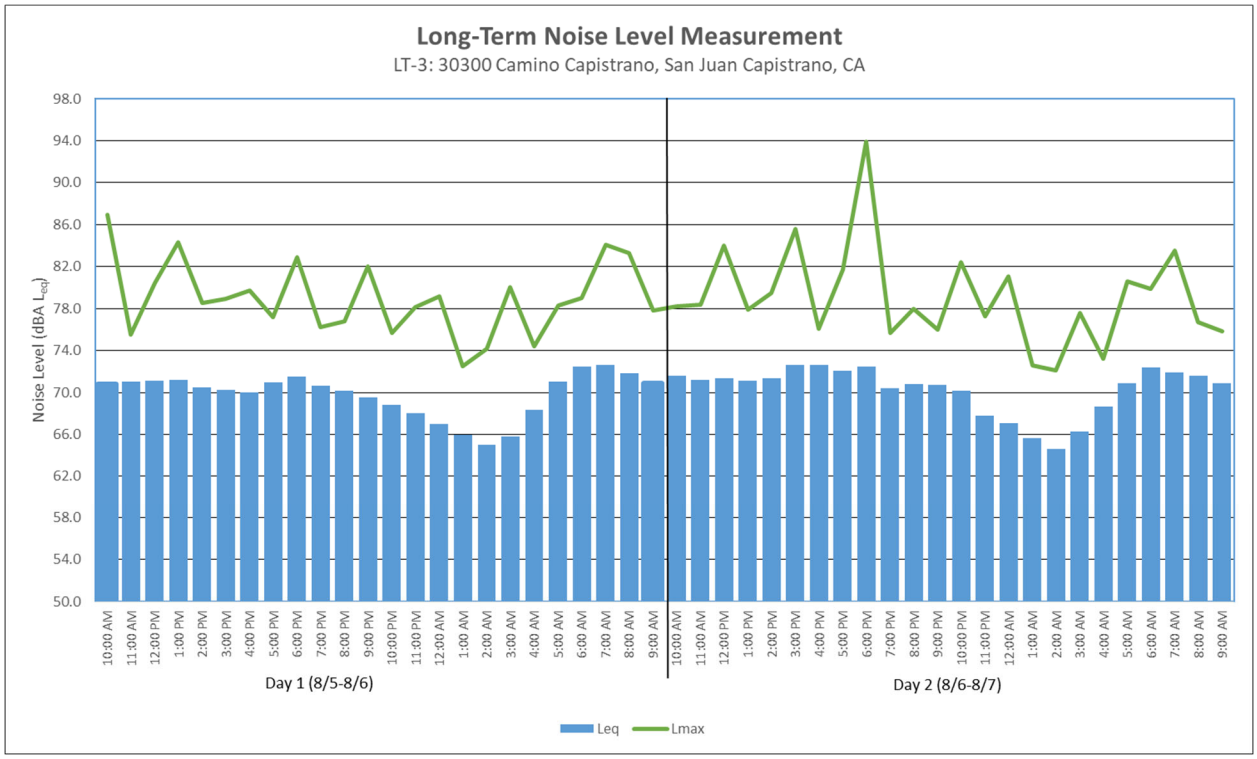
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-3

Start Time	Noise Level (dBA)			
	Day 1		Day 2	
	L_{eq}	L_{max}	L_{eq}	L_{max}
10:00 AM	70.8	86.9	71.6	78.2
11:00 AM	71.0	75.5	71.2	78.4
12:00 PM	71.1	80.4	71.4	84.0
1:00 PM	71.2	84.3	71.1	77.9
2:00 PM	70.5	78.5	71.4	79.5
3:00 PM	70.2	78.9	72.6	85.6
4:00 PM	70.0	79.7	72.6	76.1
5:00 PM	71.0	77.2	72.1	81.7
6:00 PM	71.5	82.9	72.5	93.9
7:00 PM	70.6	76.2	70.4	75.7
8:00 PM	70.1	76.8	70.8	78.0
9:00 PM	69.5	82.0	70.7	76.0
10:00 PM	68.8	75.7	70.1	82.4
11:00 PM	68.0	78.1	67.8	77.3
12:00 AM	67.0	79.2	67.1	81.1
1:00 AM	66.0	72.5	65.6	72.6
2:00 AM	65.0	74.2	64.6	72.1
3:00 AM	65.8	80.0	66.2	77.6
4:00 AM	68.3	74.4	68.6	73.2
5:00 AM	71.1	78.3	70.9	80.6
6:00 AM	72.4	79.0	72.4	79.9
7:00 AM	72.6	84.1	71.9	83.5
8:00 AM	71.9	83.3	71.6	76.7
9:00 AM	70.9	77.8	70.9	75.8

Source: Compiled by LSA Associates, Inc. (2025).
Note: Noise measurements were conducted from August 5, 2025 at 10:00 a.m. to August 7, 2025 at 10:00 a.m.
dBA = A-weighted decibel L_{max} = maximum instantaneous noise level
L_{eq} = equivalent continuous sound level



Noise Measurement Survey

Project Number: 20252445
Project Name: NWOS Legacy Ranch

Test Personnel: Corey Knips
Equipment: LD Spark 706RC (SN: 17637)

Site Number: LT-4 Dates: 8/5/25-8/11/25

Time: From 11:00 a.m. To 11:00 a.m.

Site Location: 30333 Camino Capistrano, San Juan Capistrano, CA. At the Groves Apartments. On a light pole near the southwest corner of the dog park area. Approximately 1,085 feet from the I-5 centerline and 105 feet from the Camino Capistrano centerline.

Primary Noise Sources: Traffic on I-5 and Camino Capistrano.

Comments:

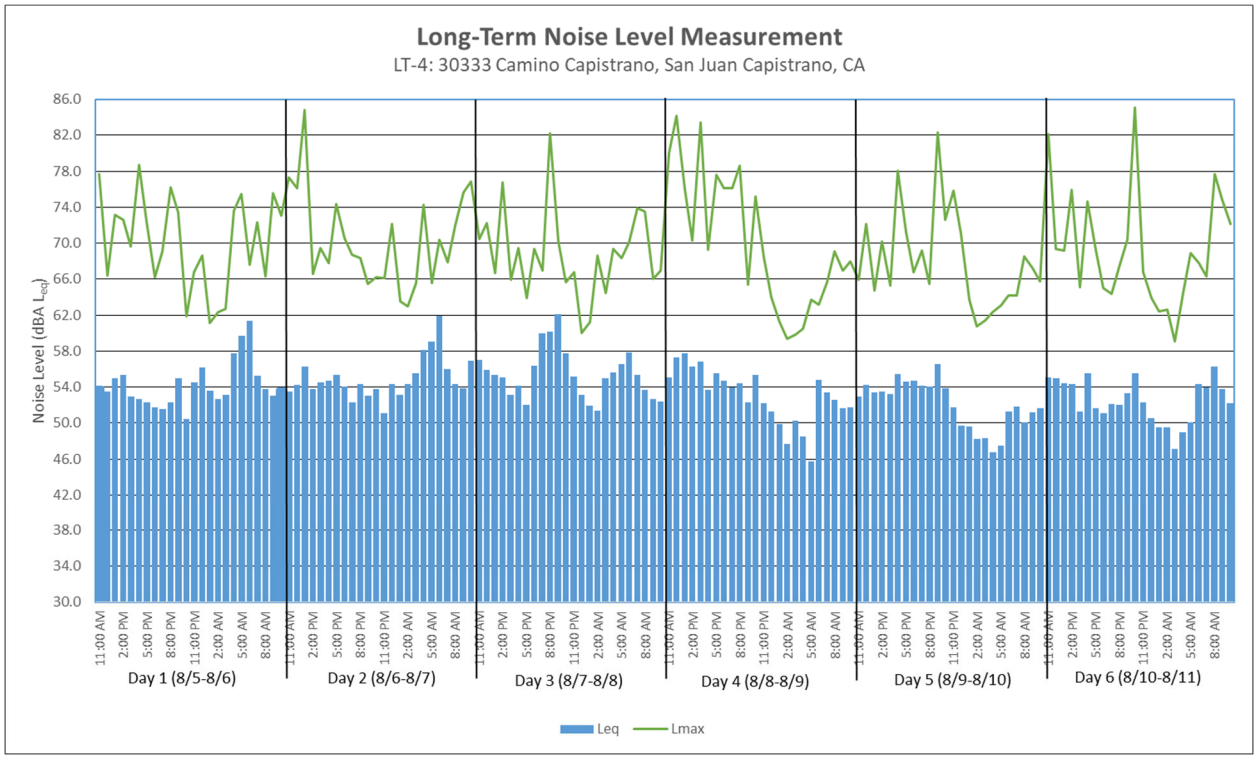
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-4

Start Time	Noise Level (dBA)											
	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
11:00 AM	53.9	77.7	53.5	77.3	57.1	70.5	55.1	80.0	53.0	65.9	55.1	82.1
12:00 PM	53.5	66.4	54.3	76.1	55.9	72.2	57.3	84.2	54.3	72.1	55.0	69.4
1:00 PM	54.9	73.2	56.3	84.8	55.3	66.7	57.8	76.0	53.4	64.7	54.4	69.2
2:00 PM	55.3	72.6	53.8	66.6	55.1	76.8	56.3	70.3	53.5	70.2	54.3	75.9
3:00 PM	52.9	69.6	54.5	69.5	53.1	65.9	56.8	83.4	53.2	65.3	51.3	65.1
4:00 PM	52.7	78.7	54.7	67.8	54.1	69.5	53.7	69.3	55.5	78.1	55.6	74.6
5:00 PM	52.3	72.4	55.3	74.4	52.0	63.9	55.5	77.6	54.6	71.2	51.7	69.3
6:00 PM	51.8	66.2	54.0	70.6	56.3	69.4	54.7	76.1	54.7	66.8	51.0	65.0
7:00 PM	51.6	69.1	52.3	68.7	60.0	67.0	54.0	76.1	54.2	69.2	52.1	64.4
8:00 PM	52.3	76.2	54.3	68.3	60.2	82.2	54.4	78.6	54.1	65.5	52.0	67.3
9:00 PM	54.9	73.4	53.1	65.5	62.1	70.2	52.3	65.4	56.6	82.3	53.4	70.4
10:00 PM	50.4	61.9	53.8	66.2	57.7	65.7	55.4	75.2	53.9	72.6	55.6	85.1
11:00 PM	54.5	66.8	51.1	66.1	55.2	66.8	52.2	68.4	51.8	75.8	52.3	66.8
12:00 AM	56.2	68.6	54.4	72.1	53.1	60.0	51.3	64.0	49.7	71.0	50.5	63.9
1:00 AM	53.6	61.1	53.2	63.5	52.0	61.2	49.9	61.2	49.6	63.7	49.5	62.4
2:00 AM	52.7	62.3	54.3	63.0	51.4	68.6	47.6	59.4	48.2	60.8	49.5	62.6
3:00 AM	53.1	62.7	55.6	65.6	55.0	64.5	50.2	59.8	48.3	61.4	47.1	59.1
4:00 AM	57.8	73.6	58.1	74.3	55.6	69.4	48.5	60.5	46.8	62.3	48.9	64.5
5:00 AM	59.7	75.5	59.0	65.6	56.6	68.3	45.7	63.7	47.5	63.1	50.1	68.9
6:00 AM	61.4	67.6	61.9	70.4	57.8	70.1	54.8	63.2	51.2	64.2	54.3	67.8
7:00 AM	55.3	72.3	56.0	67.9	55.4	73.9	53.4	65.7	51.8	64.2	54.0	66.3
8:00 AM	53.8	66.3	54.3	72.0	53.7	73.5	52.6	69.1	50.1	68.5	56.2	77.7
9:00 AM	53.0	75.6	53.9	75.7	52.6	66.0	51.7	67.0	51.1	67.2	53.8	74.8
10:00 AM	53.7	73.1	57.0	76.9	52.4	67.0	51.7	68.0	51.7	65.8	52.2	72.1

Source: Compiled by LSA Associates, Inc. (2025).
Note: Noise measurements were conducted from August 5, 2025 at 11:00 a.m. to August 11, 2025 at 11:00 a.m.
dBA = A-weighted decibel L_{max} = maximum instantaneous noise level
L_{eq} = equivalent continuous sound level



Noise Measurement Survey

Project Number: 20252445
Project Name: NWOS Legacy Ranch

Test Personnel: Corey Knips
Equipment: LD Spark 703+ (SN: 20224)

Site Number: LT-5 Dates: 8/5/25-8/11/25

Time: From 11:00 a.m. To 11:00 a.m.

Site Location: Near the western project boundary. On an orange tree in an undeveloped part of project site. Approximately 185 feet from the rail centerline and 1,400 feet from the I-5 centerline.

Primary Noise Sources: Faint traffic on I-5.

Comments:

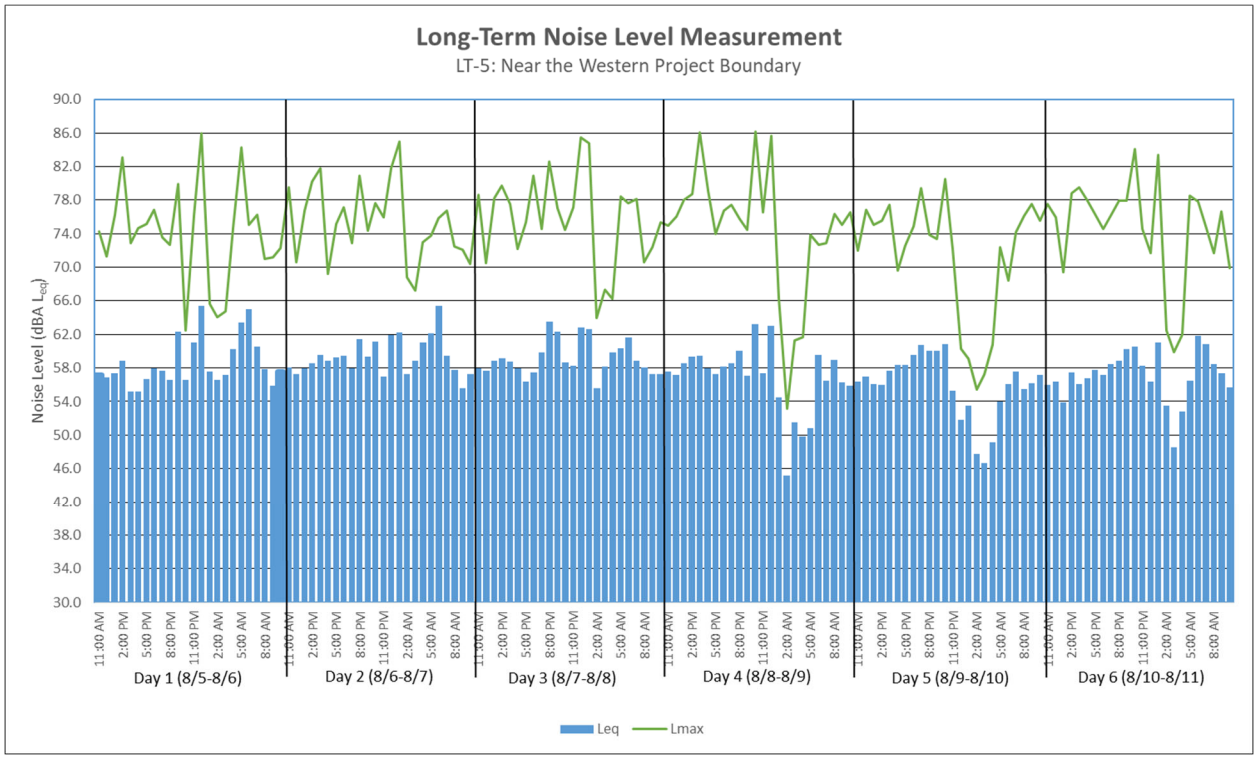
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-5

Start Time	Noise Level (dBA)											
	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
11:00 AM	57.2	74.3	58.1	79.5	58.0	78.6	57.6	75.0	56.4	72.0	55.9	77.5
12:00 PM	56.9	71.3	57.2	70.6	57.7	70.5	57.1	76.1	56.9	76.8	56.4	76.0
1:00 PM	57.4	76.3	58.0	76.7	58.8	78.2	58.6	78.0	56.1	75.1	53.9	69.4
2:00 PM	58.8	83.1	58.6	80.2	59.1	79.7	59.3	78.7	56.0	75.6	57.5	78.8
3:00 PM	55.1	72.9	59.5	81.8	58.8	77.5	59.4	86.1	57.7	77.4	56.1	79.5
4:00 PM	55.2	74.7	58.8	69.2	58.0	72.2	57.9	79.1	58.3	69.6	56.8	77.9
5:00 PM	56.6	75.2	59.2	75.2	56.4	75.4	57.3	74.0	58.4	72.6	57.8	76.4
6:00 PM	58.0	76.8	59.5	77.1	57.4	80.9	58.2	76.7	59.5	74.9	57.1	74.6
7:00 PM	57.6	73.6	57.9	72.9	59.8	74.6	58.6	77.4	60.8	79.4	58.5	76.2
8:00 PM	56.5	72.7	61.5	80.9	63.5	82.6	60.0	75.8	60.0	73.9	58.8	77.9
9:00 PM	62.3	79.9	59.3	74.4	62.3	77.0	57.0	74.5	60.0	73.4	60.2	77.9
10:00 PM	56.6	62.5	61.1	77.6	58.7	74.5	63.2	86.2	60.8	80.5	60.5	84.1
11:00 PM	61.1	76.2	56.9	76.0	58.3	77.1	57.4	76.5	55.3	72.2	58.3	74.6
12:00 AM	65.4	86.0	61.9	81.8	62.8	85.5	63.0	85.7	51.8	60.3	56.3	71.7
1:00 AM	57.5	65.6	62.2	85.0	62.6	84.8	54.5	66.3	53.5	59.1	61.1	83.4
2:00 AM	56.6	64.1	57.3	68.8	55.5	64.0	45.2	53.2	47.7	55.4	53.5	62.5
3:00 AM	57.2	64.8	58.9	67.2	58.2	67.3	51.6	61.3	46.7	57.2	48.6	59.9
4:00 AM	60.3	74.7	61.0	73.0	59.9	66.2	49.8	61.7	49.1	60.8	52.8	62.0
5:00 AM	63.5	84.3	62.1	73.8	60.4	78.4	50.8	73.9	54.0	72.4	56.5	78.5
6:00 AM	65.0	75.1	65.4	75.9	61.6	77.6	59.5	72.7	56.1	68.4	61.9	77.8
7:00 AM	60.5	76.3	59.4	76.7	58.9	78.1	56.5	72.9	57.6	74.2	60.8	75.0
8:00 AM	57.8	71.0	57.8	72.5	58.0	70.6	59.0	76.4	55.5	76.2	58.5	71.7
9:00 AM	55.9	71.2	55.6	72.1	57.2	72.4	56.3	75.1	56.2	77.5	57.4	76.6
10:00 AM	57.6	72.3	57.2	70.4	57.3	75.4	55.9	76.5	57.2	75.6	55.7	69.9

Source: Compiled by LSA Associates, Inc. (2025).
Note: Noise measurement was conducted from August 5, 2025 at 11:00 a.m. to August 11, 2025 at 11:00 a.m.
dBA = A-weighted decibel L_{max} = maximum instantaneous noise level
L_{eq} = equivalent continuous sound level



Construction Traffic Noise Calculator

Construction Phase	Start Date	End Date	Offroad Equipment	One Way Trip Per Day			Days per Phase	Total Trips Per Day	Equivalent One Way Trip Per Day			Total Equivalent Trips Per Day	Overlap?	Overlap Trips
				Worker	Vendor	Haul			Worker	Vendor	Haul			
Demolition	6/4/2029	6/29/2029	6	15.00	0.00	0.95	20	16	15	0	13	28		
Site Preparation	7/2/2029	2/8/2030	7	17.50	0.00	0.00	160	18	18	0	0	18		
Grading	2/11/2030	9/20/2030	8	20.00	0.00	0.00	160	20	20	0	0	20		
Building Construction	9/23/2030	11/14/2031	9	67.08	28.67	0.00	300	96	68	257	0	325		
Paving	11/17/2031	2/6/2032	6	15.00	0.00	0.00	60	15	15	0	0	15		
Architectural Coating	2/9/2032	6/11/2032	1	13.42	0.00	0.00	90	13	14	0	0	14		
Maximum								**96**				**325**		

Speed (mph)	MT Factor	HT Factor
25	12.6	39.8
30	8.9	26.3
35	7.1	19.1
40	5.8	15.1
45	5.0	12.9
50	4.5	11.5
55	4.1	10.4
60	3.7	9.6
70	3.2	8.3

Roadway	Speed	Existing Volume	MT Factor	HT Factor	Total Equivalent Vehicles	Noise Increase (dBA)
Camino Capistrano	45	4,195	5	12.9	325	0.3

TABLE Existing -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Camino Capistrano North of Junipero Serra Road
NOTES: Legacy Ranch - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5679 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	56.7	112.4	237.4

TABLE Existing -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Camino Capistrano and Lion Way
NOTES: Legacy Ranch - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13754 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.5	164.5	351.1

TABLE Existing -03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Lion Way and I-5 Southbound Ramps
NOTES: Legacy Ranch - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13754 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.5	164.5	351.1

TABLE Existing -04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps
NOTES: Legacy Ranch - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16220 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	87.9	183.2	391.7

TABLE Existing -05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road
NOTES: Legacy Ranch - Existing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15403 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.2	177.1	378.5

TABLE Existing With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Camino Capistrano North of Junipero Serra Road
NOTES: Legacy Ranch - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6341 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	0.0	60.2	120.6	255.3

TABLE Existing With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Camino Capistrano and Lion Way
NOTES: Legacy Ranch - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14196 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	81.0	167.9	358.6

TABLE Existing With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Lion Way and I-5 Southbound Ramps
NOTES: Legacy Ranch - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14196 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	81.0	167.9	358.6

TABLE Existing With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps
NOTES: Legacy Ranch - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16496 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.22

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	88.8	185.2	396.2

TABLE Existing With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road
NOTES: Legacy Ranch - Existing With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15513 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.5	177.9	380.3

TABLE 2032 Cumulative NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Camino Capistrano North of Junipero Serra Road
NOTES: Legacy Ranch - 2032 Cumulative NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6141 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	59.1	118.1	249.9

TABLE 2032 Cumulative NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Camino Capistrano and Lion Way
NOTES: Legacy Ranch - 2032 Cumulative NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15353 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.0	176.7	377.7

TABLE 2032 Cumulative NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Lion Way and I-5 Southbound Ramps
NOTES: Legacy Ranch - 2032 Cumulative NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17983 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	93.7	196.0	419.5

TABLE 2032 Cumulative NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps
NOTES: Legacy Ranch - 2032 Cumulative NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19190 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	97.5	204.6	438.0

TABLE 2032 Cumulative NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road
NOTES: Legacy Ranch - 2032 Cumulative NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16948 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	90.3	188.6	403.3

TABLE 2032 Cumulative P-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Camino Capistrano North of Junipero Serra Road
NOTES: Legacy Ranch - 2032 Cumulative P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6803 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	62.6	126.1	267.4

TABLE 2032 Cumulative P-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Camino Capistrano and Lion Way
NOTES: Legacy Ranch - 2032 Cumulative P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15795 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	86.5	180.1	384.9

TABLE 2032 Cumulative P-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between Lion Way and I-5 Southbound Ramps
NOTES: Legacy Ranch - 2032 Cumulative P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18425 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	95.1	199.2	426.4

TABLE 2032 Cumulative P-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Southbound and I-5 Northbound Ramps
NOTES: Legacy Ranch - 2032 Cumulative P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19466 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	98.4	206.5	442.2

TABLE 2032 Cumulative P-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/11/2026
ROADWAY SEGMENT: Junipero Serra Road Between I-5 Northbound Ramps and Rancho Viejo Road
NOTES: Legacy Ranch - 2032 Cumulative P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17058 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 25 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	90.7	189.4	405.1
