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March 7, 2022

Mr. Brian Hardy Richland 3161 Michelson Drive, Suite 425 Irvine, CA 92612

SUBJECT: STONERIDGE COMMERCE CENTER SPECIFIC PLAN (SP No. 239, A1) ALTERNATIVE TRUCK ACCESS ROUTE NOISE ASSESSMENT (SOUTHERN TRUCK ROUTE)

Dear Mr. Brian Hardy:

Urban Crossroads, Inc. is pleased to provide the following Southern Truck Route Noise Assessment for the Stoneridge Commerce Center Specific Plan (SP No. 239, A1) which is located which is located on a 582.6-acre site west of Lakeview Avenue between Ramona Expressway and Nuevo Road in the County of Riverside. In April 2021, ECORP Consulting prepared the Noise Technical Memorandum for the Stoneridge Commerce Center Specific Plan Alternative Truck Route. The Memorandum evaluated the noise that would result from implementation of this Alternative Truck Route. While the Project site is located in unincorporated Riverside County, it is noted that the implementation of the Alternative Truck Route would mainly affect receptors in the City of Perris in terms of the resultant traffic noise. The contribution of noise would come from two main sources: the temporary construction equipment necessary from the recommended roadway improves (addition /widening of traffic lanes and traffic signal installation) and the increase in traffic on area roadways from the use of the Alternative Truck Route.

The purpose of this Southern Truck Route is evaluate the Project related off-site traffic noise levels consistent with the *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Alternative Truck Access Route Assessment (Southern Truck Route)* prepared by Urban Crossroads, Inc. on February 21, 2022.

OFF-SITE TRAFFIC NOISE METHODS AND PROCEDURES

The following section outlines the methods and procedures used to estimate and analyze the future traffic noise environment. Consistent with County of Riverside Noise Guidelines for Land Use Planning all transportation related noise levels are presented in terms of the 24-hour CNEL's.

FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (19) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (20) 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. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (21)

OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 1 presents the roadway parameters used to assess the Project's off-site transportation noise impacts. Table 1 identifies the 6 off-site study area roadway segments, jurisdiction, surrounding land uses, number of lanes and vehicle speeds. The ADT volumes used in this study area presented on Table 2 are based on the *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Alternative Truck Access Route Assessment (Southern Truck Route)* prepared by Urban Crossroads, Inc. on February 21, 2022, for the following traffic scenarios.

- 1. Existing plus Ambient Growth (EA) (2030) Conditions
- 2. Existing plus Ambient Growth plus Project (EAP) (2030) Conditions
- 3. Existing plus Ambient Growth plus Cumulative (EAC) (2030) Conditions
- 4. Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2030) Conditions
- 5. Horizon Year (2040) Without Project (Without MCP)
- 6. Horizon Year (2040) With Project (Without MCP)

The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of project traffic distributions. This analysis relies on a comparative evaluation of the offsite traffic noise impacts at a uniform distance of 100 feet from the centerline of the roadway segment without and with project ADT traffic volumes from the Project traffic study. Table 3 provides the time of day (daytime, evening, and nighttime) vehicle splits. Table 4 shows the traffic flow by vehicle type (vehicle mix) used for all traffic scenarios.

OFF-SITE TRAFFIC NOISE IMPACTS

To assess the off-site traffic CNEL noise level impacts associated with the Project, noise contours were developed based on an estimate of without and with Project. Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 5 through 10 present a



summary of the exterior dBA CNEL traffic noise levels without barrier attenuation. Appendix A includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (15) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

The Federal Interagency Committee on Noise (FICON) (16) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average daily noise level (CNEL) and equivalent continuous noise level (Leq).

As previously stated, the approach used in this noise study recognizes that there is no single noise increase that renders the noise impact significant, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (15) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or readily perceptible, 3 dBA or barely perceptible, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with the General Plan Noise Element Standards for Project Noise Impacts for Mobile Sources (10 p. VII 13), guidance provided by both the Federal Highway Administration (4 p. 9) and Caltrans (17 p. 2 48).



EA TRAFFIC NOISE LEVEL INCREASES

Table 5 shows the EA without Project conditions CNEL noise levels. The EA without Project exterior noise levels range from 45.1 to 76.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 6 shows the EA with Project (EAP) conditions ranging from 52.4 to 69.3 dBA CNEL. Table 11 shows that the Project off-site traffic noise level increases range from 0.3 to 3.7 dBA CNEL on the study area roadway segments. This condition is provided solely for informational purposes and will not occur, since the Project will not be fully developed and occupied under Existing conditions. Therefore, no mitigation measures are considered to reduce the EA with Project traffic noise level increases. The future long-range EAC (2030) and Horizon Year (2040) traffic noise conditions that include all cumulative projects are used to determine the significance of the Project off-site traffic noise level increases on the study area roadway segments.

EAC (2030) TRAFFIC NOISE LEVEL INCREASES

Table 7 presents the EAC (2030) without Project conditions CNEL noise levels. The EAC (2030) without Project exterior noise levels range from 52.4 to 70.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8 shows that the EAC (2030) with Project conditions will range from 56.1 to 71.3 dBA CNEL. Table 12 shows that the Project off-site traffic noise level increases range from 0.2 to 3.7 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to the Project-related traffic.

HORIZON YEAR (2040) WITHOUT MCP TRAFFIC NOISE LEVEL INCREASES

Table 9 presents the HY (2040) Without MCP without Project conditions CNEL noise levels. The HY (2040) Without MCP without Project exterior noise levels range from 56.9 to 72.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 10 shows that the HY (2040) Without MCP with Project conditions will range from 58.8 to 72.4 dBA CNEL. Table 15 shows that the Project off-site traffic noise level increases range from 0.0 to 1.9 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to the Project-related traffic.



CONCLUSIONS

Traffic generated by the operation of the proposed Project will influence the traffic noise levels in surrounding off-site areas. To quantify the off-site traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 6 roadway segments surrounding the Project site were calculated based on the change in the average daily traffic (ADT) volumes. The findings of the traffic noise analysis indicates that all the off-site study area roadway segments will experience *less than significant* Project-related traffic noise level increases. If you have any questions, please contact me directly at (949) 584-3148.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE Principal





ID	Roadway	Segment	Jurisdiction	Receiving Land Use	Lanes	Vehicle Speed (mph)
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	Riverside County	Residential and Undeveloped Land	2	55
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	City of Perris	Residential and Undeveloped Land	2	55
3	Dunlap Dr.	North of Nuevo Rd.	City of Perris	Residential	2	45
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	City of Perris	Residential and Undeveloped Land	2	45
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	City of Perris	Residential and Commercial	2	55
6	Redlands Av.	South of San Jacinto Av.	City of Perris	Residential and Commercial	2	55

TABLE 1: OFF-SITE ROADWAY PARAMETERS

¹ Stoneridge Commerce Center Specific Plan Alternative Truck Route - Noise Technical Memorandum, ECORP Consulting, Inc.

TABLE 2: AVERAGE DAILY TRAFFIC VOLUMES

			Average Daily Traffic Volumes (PCE) ¹						
ID	Roadway	Segment	EA		EAC (2030)	HY (2040) (Without MCP)		
			Without Project	With Project	Without Project	With Project	Without Project	With Project	
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	12,444	44,344	19,470	51,370	61,419	66,703	
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	11,539	44,939	16,681	50,081	59,878	63,474	
3	Dunlap Dr.	North of Nuevo Rd.	4,631	8,031	5,027	8,427	10,075	10,075	
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	1,101	1,101	2,589	2,589	3,096	4,784	
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	17,666	18,916	19,154	20,404	17,328	18,816	
6	Redlands Av.	South of San Jacinto Av.	32,718	38,790	34,606	40,678	31,590	33,478	

¹ Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Alternative Truck Access Route Assessment (Southern Truck Route), Urban Crossroads, Inc.

TABLE 3: TIME OF DAY VEHICLE SPLITS

Vehicle Type	Daytime (7 am - 7 pm)	Evening (7 pm - 10 pm)	Nighttime (10 pm - 7 am)
Automobiles	77.5%	12.9%	9.6%
Medium Trucks	84.8%	4.9%	10.3%
Heavy Trucks	86.5%	2.7%	10.8%

¹ County of Riverside Office of Industrial Hygiene.

TABLE 4: WITHOUT PROJECT VEHICLE MIX

Classification		Total		
Classification	Autos	Medium Trucks	Heavy Trucks	TOLAI
All Segments	97.42%	1.84%	0.74%	100.00%

¹ County of Riverside Office of Industrial Hygiene.

TABLE 5: EA WITHOUT PROJECT NOISE CONTOURS

10	Road	Segment	CNEL at 100 feet	Dis from	tance to Cont Centerline (I	our ⁻ eet)
			Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Cetner SP and Dunlap Dr.	65.1	47	102	219
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	64.8	45	97	208
3	Dunlap Dr.	North of Nuevo Rd.	58.6	17	38	81
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	7	14	31
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.6	60	128	277
6	Redlands Av.	South of San Jacinto Av.	69.3	90	194	417



10	Deed	Common to	CNEL at 100 feet	Dis from	tance to Cont Centerline (F	our Feet)
ID.	Noau	Segment	Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	67.1	64	137	295
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	66.4	57	124	266
3	Dunlap Dr.	North of Nuevo Rd.	59.0	18	40	85
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	56.1	12	25	55
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	67.0	63	136	292
6	Redlands Av.	South of San Jacinto Av.	69.6	93	201	433

TABLE 7: EAC (2030) WITHOUT PROJECT NOISE CONTOURS

10	Deed	Common t	CNEL at 100 feet	Dis from	tance to Cont Centerline (F	our [:] eet)
U	Noau	Segment	Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	70.6	110	237	511
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	70.7	111	239	516
3	Dunlap Dr.	North of Nuevo Rd.	61.0	25	54	117
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	7	14	31
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.9	62	134	290
6	Redlands Av.	South of San Jacinto Av.	70.0	101	217	468

TABLE 8: EAC (2030) WITH PROJECT NOISE CONTOURS

10	Deed		CNEL at 100 feet	Dis from	tance to Cont Centerline (F	our Feet)
	Noau	Segment	Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	71.3	121	262	564
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	71.2	119	257	554
3	Dunlap Dr.	North of Nuevo Rd.	61.2	26	56	121
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	56.1	12	25	55
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	67.3	66	141	305
6	Redlands Av.	South of San Jacinto Av.	70.3	104	224	483



TABLE 9: HORIZON YEAR	(2040)	WITHOUT PROJECT WITHOUT MCP NOISE CONTOURS
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10	Deed	Common to	CNEL at 100 feet	Distance to Contour from Centerline (Feet)		
	Noau	Segment	Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	72.0	137	295	635
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	71.9	135	290	625
3	Dunlap Dr.	North of Nuevo Rd.	62.0	29	63	136
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	56.9	13	29	62
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.5	59	127	273
6	Redlands Av.	South of San Jacinto Av.	69.2	88	189	408

TABLE 10: HORIZON YEAR (2040) WITH PROJECT WITHOUT MCP NOISE CONTOURS

5	Road	Segment	CNEL at 100 feet	Distance to Contour from Centerline (Feet)		
U			Centerline (dBA)	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	72.4	145	312	671
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	72.2	140	301	649
3	Dunlap Dr.	North of Nuevo Rd.	62.0	29	63	136
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	58.8	18	38	83
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.9	62	134	289
6	Redlands Av.	South of San Jacinto Av.	69.4	91	197	424

TABLE 11: EA WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

ID	Road Segment		C fron	NEL at 100 fe n Centerline (et dBA)	Incremental Noise Level Increase Threshold		
			No Project	With Project	Project Addition	Limit	Exceeded?	
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	65.1	67.1	2.0	1.5	Yes	
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	64.8	66.4	1.6	3.0	No	
3	Dunlap Dr.	North of Nuevo Rd.	58.6	59.0	0.4	5.0	No	
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	56.1	3.7	5.0	No	
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.6	67.0	0.4	1.5	No	
6	Redlands Av.	South of San Jacinto Av.	69.3	69.6	0.3	1.5	No	



TABLE 12: EAC (2030) WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

ID	Road	Segment	C from	NEL at 100 fe n Centerline (et dBA)	Increme Level I Thre	ntal Noise ncrease shold
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	70.6	71.3	0.7	1.5	No
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	70.7	71.2	0.5	1.5	No
3	Dunlap Dr.	North of Nuevo Rd.	61.0	61.2	0.2	3.0	No
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	56.1	3.7	5.0	No
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.9	67.3	0.4	1.5	No
6	Redlands Av.	South of San Jacinto Av.	70.0	70.3	0.3	1.5	No

TABLE 13: HORIZON YEAR (2040) WITH PROJECT WITHOUT MCP TRAFFIC NOISE LEVEL INCREASES

ID	Road Segment	Segment	C from	NEL at 100 fe n Centerline (et JBA)	Incremental Noise Level Increase Threshold		
			No Project	With Project	Project Addition	Limit	Exceeded?	
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	72.0	72.4	0.4	1.5	No	
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	71.9	72.2	0.3	1.5	No	
3	Dunlap Dr.	North of Nuevo Rd.	62.0	62.0	0.0	3.0	No	
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	56.9	58.8	1.9	5.0	No	
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.5	66.9	0.4	1.5	No	
6	Redlands Av.	South of San Jacinto Av.	69.2	69.4	0.2	1.5	No	



APPENDIX A

OFF-SITE TRAFFIC NOISE CONTOURS



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	FHWA-R	D-77-108 HIG	HWAY	NOISE	PREDIC		DEL (9/1	2/2021)	_	_
Scenar Road Nan Road Segme	io: EA ne: Nuevo Rd. nt: Between S	toneridge Cor	nmerce	Cetner	SP and	Project Na Job Nun Dunlap Dr	ame: Sto nber: 132	oneridge SP S 265	. Truck R	t
SITE	SPECIFIC I	NPUT DATA				NO	ISE MO	DEL INPUT	S	
Highway Data				s	Site Con	ditions (H	ard = 10	, Soft = 15)		
Average Daily	Traffic (Adt):	12,444 vehic	les				Au	tos: 15		
Peak Hour	Percentage:	8.08%			Me	dium Truck	s (2 Axle	es): 15		
Peak F	lour Volume:	1,005 vehicl	es		He	avy Trucks	; (3+ Axle	es): 15		
Ve	hicle Speed:	55 mph		V	ehicle (Mix				
Near/Far La	ne Distance:	12 feet		F	Veh	icleType	Da	y Evening	Night	Daily
Site Data						Au	os: 77	.5% 12.9%	9.6%	97.42%
Ba	rrier Heiaht:	0.0 feet			М	edium Truc	ks: 84	.8% 4.9%	10.3%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			1	Heavy Truc	ks: 86	.5% 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet			loise Sc	ource Elev	ations (i	in feet)		
Centerline Dist.	to Observer:	100.0 feet		Ē		Autos:	0 000	ווייט <i>טע</i>		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.297	7		
Observer Height	(Above Pad):	5.0 feet			Heav	/v Trucks:	8.004	4 Grade Ad	ljustment	0.0
P	ad Elevation:	0.0 feet		-	_				-	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent D	stance	(in feet)		
	Road Grade:	0.0%				Autos:	99.94	5		
	Left View:	-90.0 degr	ees		Mediu	m Trucks:	99.85	6		
	Right View:	90.0 degr	ees		Heat	/y Trucks:	99.86	5		
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos:	71.78	-2.8	0	-4.62	2	-1.20	-4.	77 0.	000	0.000
Medium Trucks:	82.40	-20.0	4	-4.61		-1.20	-4.	88 0.	000	0.000
Heavy Trucks:	86.40	-23.9	9	-4.61		-1.20	-5.	16 0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	d barrie	er attenu	uation)					
VehicleType	Leq Peak Ho	ur Leq Da	ay 🛛	Leq Ev	rening	Leq Nig	ght	Ldn	CI	NEL
Autos:	63	3.2	62.2		60.4		54.4	63.	0	63.6
Medium Trucks:	56	5.6	56.0		49.6		48.1	56.	5	56.8
Heavy Trucks:	56	5.6	56.1		47.1		48.3	56.	7	56.8
Vehicle Noise:	64	4.7	63.9		61.0		56.1	64.	6	65.1
Centerline Distant	ce to Noise C	ontour (in fee	et)							
			L	70 d	IBA	65 dB	A	60 dBA	55	dBA
			Ldn:		44		95	204	1	439
		(CNEL:		47		102	219	9	472

	FINANC	-11-100 1101			FREDIC				<u> </u>		
Scenari	o: EAP					Project	Name: S	Stoner	dge SP S.	Truck R	t
Road Nam	e: Nuevo Rd.					Job Nu	imber: 1	3265			
Road Segmer	nt: Between Ste	oneridge Com	merce C	etner	SP and	Dunlap [Dr.				
SITE	SPECIFIC IN	PUT DATA				Ν	OISE N	ODE	L INPUT	5	
Highway Data				5	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	19,470 vehicle	es				A	Autos:	15		
Peak Hour	Percentage:	8.08%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	our Volume:	1,573 vehicles	6		He	avy Truc	ks (3+ A	xles):	15		
Ve	hicle Speed:	55 mph		1	Vehicle N	lix					
Near/Far Lai	ne Distance:	12 feet		F	Vehi	cleType	1	Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
Bai	rier Height	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all. 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	100.0 feet			Vaias Ca	uree El	votiona	lin fe	of		
Centerline Dist.	to Observer:	100.0 feet		'	voise 30	urce Ele	valions		elj		
Barrier Distance	to Observer:	0.0 feet				Autos	. 0.0	00			
Observer Height (Above Pad):	5.0 feet			Mediur	n Trucks	. 2.2	97	Grade Ad	iuctmont	
Pa	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	104	Graue Au	lasiment	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	iivalent	Distanc	e (in f	eet)		
F	Road Grade:	0.0%				Autos	: 99.9	945			
	Left View:	-90.0 degree	es		Mediur	n Trucks	99.8	856			
	Right View:	90.0 degree	es		Heav	y Trucks	99.8	865			
-											
FHWA Noise Mode	el Calculations										
FHWA Noise Mode VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten
FHWA Noise Mode VehicleType Autos:	REMEL 71.78	Traffic Flow -0.85	Dista	nce -4.6	Finite	Road -1.20	Fresn	el -4.77	Barrier Att 0.0	en Ber 000	<i>m Atten</i> 0.000
FHWA Noise Mode VehicleType Autos: Medium Trucks:	REMEL 71.78 82.40	<i>Traffic Flow</i> -0.85 -18.09	Dista	nce -4.6 -4.6	<i>Finite</i>	Road -1.20 -1.20	Fresn	el -4.77 -4.88	Barrier Att 0.0 0.0	en Ber 000 000	m Atten 0.000 0.000
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks:	El Calculations REMEL 71.78 82.40 86.40	Traffic Flow -0.85 -18.09 -22.05	Dista	-4.6 -4.6 -4.6	<i>Finite</i> 2 1 1	Road -1.20 -1.20 -1.20	Fresn	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0	en Ber 000 000 000	m Atten 0.000 0.000 0.000
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	REMEL 71.78 82.40 86.40	Traffic Flow -0.85 -18.09 -22.05 out Topo and	Distai barrier a	-4.6 -4.6 -4.6 -4.6	<i>Finite</i> 2 1 1 uation)	Road -1.20 -1.20 -1.20	Fresne	e/ -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0	en Ber 000 000 000	<u>m Atten</u> 0.000 0.000 0.000
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	El Calculations REMEL 71.78 82.40 86.40 E Levels (withous Leg Peak Hou	Traffic Flow -0.85 -18.09 -22.05 out Topo and r Leq Day	Dista barrier a	nce -4.6 -4.6 -4.6 atten eq Ev	Finite 2 1 1 uation) vening	Road -1.20 -1.20 -1.20 Leq I	Fresno	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0	en Ber 000 000 000 000	<u>m Atten</u> 0.000 0.000 0.000
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	El Calculations REMEL 71.78 82.40 86.40 E Levels (withous Leq Peak Hou 65.	Traffic Flow -0.85 -18.09 -22.05 Out Topo and r Leq Day .1	Distant barrier a 64.1	-4.6 -4.6 -4.6 -4.6 atten eq E	Finite Finite 1 uation) vening 62.4	Road -1.20 -1.20 -1.20 Leq I	Fresno Vight 56.3	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	en Ber 000 000 000 000 Ci	<u>m Atten</u> 0.000 0.000 0.000 <u>0.000</u> <u>VEL</u> 65.5
FHVA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	21 Calculations REMEL 71.78 82.40 86.40 2 Levels (withous Leg Peak Hou 65. 58.	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day .1 .5	Distan barrier a 64.1 57.9	nce -4.6 -4.6 -4.6 atten eq Ev	<i>Finite</i> 2 1 1 <i>uation) vening</i> 62.4 51.6	Road -1.20 -1.20 -1.20 Leq I	Fresne Vight 56.3 50.0	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 Ldn 64.9 58.9	en Ber 000 000 000 Cl 9 5	<u>m Atten</u> 0.000 0.000 0.000 <u>0.000</u> <u>VEL</u> 65.5
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	2 Calculations REMEL 71.78 82.40 86.40 2 Levels (withough the formation of the formati	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day 1 5 5	Distan barrier a , L 64.1 57.9 58.0	nce -4.6 -4.6 -4.6 -4.6 atten eq E	Finite 2 1 1 uation) vening 62.4 51.6 49.0	Road -1.20 -1.20 -1.20 Leq I	Fresno Vight 56.3 50.0 50.3	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 Ldn 64.9 58.9	en Ber 000 000 000 000 000 000 000 000 000 0	m Atten 0.000 0.000 0.000 VEL 65.5 58.7 58.7
HWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	2 Calculations REMEL 71.78 82.40 86.40 2 Levels (without Leq Peak Hout 65 58 58 58 66	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day 1 5 5 7 7	Distan barrier a 64.1 57.9 58.0 65.9	nce -4.6 -4.6 -4.6 atten eq Ev	Finite 2 1 1 vening 62.4 51.6 49.0 62.9	Road -1.20 -1.20 -1.20 Leq I	Fresht light 56.3 50.0 50.3 58.0	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	en Ber 000 000 000 000 000 000 000 000 000 0	m Atten 0.000 0.000 0.000 VEL 65.5 58.7 58.7 67.7
FHWA Noise Mode VehicleType Autos: Medium Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Vehicle Noise: Centerline Distance	2 Calculations REMEL 71.78 82.40 86.40 2 Levels (witho Leq Peak Hou 65 58 58 66 10 Calculations 10 Calculations	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day 1 5 5 7 7 ntour (in feet)	Distai barrier 6 64.1 57.9 58.0 65.9	nce -4.6 -4.6 -4.6 atten eq E	Finite 2 1 1 uation) vening 62.4 51.6 49.0 62.9	Road -1.20 -1.20 -1.20 Leq I	Freshe light 56.3 50.0 50.3 58.0	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	en Ber 000 000 000 CI 0 5 5 5 5 5	<u>m Atten</u> 0.000 0.000 0.000 VEL 65.5 58.1 58.7 58.7
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	A Calculations REMEL 71.78 82.40 86.40 2 Levels (witho Leq Peak Hou 65 58 58 66 10 Calculations 10 Calculations	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day 1 5 5 7 ntour (in feet)	Distan barrier a 64.1 57.9 58.0 65.9	nce -4.6 -4.6 -4.6 atten eq Ev	Finite 2 1 1 uation) vening 62.4 51.6 49.0 62.9 1BA	Road -1.20 -1.20 -1.20 Leq I	Freshe light 56.3 50.0 50.3 58.0	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0 0.0 0 dBA	en Ber 000 000 000 C 000 C 00 5 5 5 5 5 5 5 5 5 5 5 5 5	m Atten 0.000 0.000 0.000 VEL 65.5 58.7 58.7 67.1 dBA
HWA Noise Mode Vehicle Type Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise Vehicle Type Autos: Medium Trucks: Vehicle Noise: Centerline Distance	A Caculations REMEL 71.78 82.40 86.40 2 Levels (withou Leq Peak Hou 65 58 58 66 66 66 66 66 66 66 66 66 6	Traffic Flow -0.85 -18.09 -22.05 Dut Topo and r Leq Day 1 5 7 ntour (in feet)	Distan barrier a 64.1 57.9 58.0 65.9 0 Ldn:	nce -4.6 -4.6 -4.6 atten eq Ev	Finite 2 1 1 1 1 1 1 1 1 1 1 1 2 1 1 2 1	Road -1.20 -1.20 -1.20 Leq I	Fresh Vight 56.3 50.0 50.3 58.0 IBA 127	el -4.77 -4.88 -5.16	Barrier Att 0.0 0.0 0.0 0.0 0 0.0 0 0 0 0 0 0 0 0	en Ber 000 000 000 Cl 00 5 5 5 5 5 5 5 5 5 5 5 5 5	<u>m Atten</u> 0.000 0.000 0.000 <u>VEL</u> 65.5 58.7 58.7 67.1 67.1

Monday, March 7, 2022

	FHWA-RI	0-77-108 HIGH	NAY NOI	SE PREDI	CTION MC	DDEL (9	/12/20	21)		
Scena Road Nan Road Segme	rio: EAC ne: Nuevo Rd. ent: Between St	oneridge Comr	nerce Cetr	ner SP and	Project I Job Nu I Dunlap D	Vame: S mber: 1 Ir.	Stonerio 3265	dge SP S.	Truck R	:t
SITE	SPECIFIC IN	IPUT DATA			N	DISE M	IODEL	INPUT:	5	
Highway Data				Site Col	nditions (l	Hard = :	10, Soi	ft = 15)		
Average Daily	Traffic (Adt):	44,344 vehicle	s			A	Autos:	15		
Peak Hou	Percentage:	8.08%		M	edium Tru	cks (2 A	xles):	15		
Peak I	Hour Volume:	3,583 vehicles		н	eavy Truck	ks (3+ A	xles):	15		
Ve	ehicle Speed:	55 mph		Vehicle	Mix					
Near/Far La	ane Distance:	12 feet		Venicle	nicleType	1	Dav	Evenina	Night	Daily
Site Data						utos:	77.5%	12.9%	9.6%	97.42%
Pa	rrior Hoight:	0.0 foot		٨	ledium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	Vall 1-Berm)	0.0 1001			Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		Maine O			(in 6-	- 41		
Centerline Dist.	to Observer:	100.0 feet		Noise S	ource Ele	vations	(In re	et)		
Barrier Distance	to Observer:	0.0 feet		Madi	Autos.	. 0.0	007			
Observer Height	(Above Pad):	5.0 feet		Hoa	W Trucks	. 2.2	104	Grade Ad	iustment	.00
P	ad Elevation:	0.0 feet		Tiea	vy mucks.	0.0	104	опаас нај	usinen	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Ec	uivalent l	Distanc	e (in fe	eet)		
	Road Grade:	0.0%			Autos.	99.9	945			
	Left View:	-90.0 degree	s	Media	ım Trucks.	99.8	356			
	Right View:	90.0 degree	s	Hea	vy Trucks.	99.8	365			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresne	el E	Barrier Att	en Ber	rm Atten
Autos:	71.78	2.72	-4	1.62	-1.20		4.77	0.0	000	0.000
Medium Trucks:	82.40	-14.52	-4	1.61	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	86.40	-18.47	-4	1.61	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and I	oarrier att	enuation)						
VehicleType	Leq Peak Hou	Ir Leq Day	Leq	Evening	Leg N	light		Ldn	C	NEL
Autos:	68	.7 (67.7	65.9)	59.9		68.	5	69.
Medium Trucks:	62	.1 (61.5	55.1	I	53.6		62.0	C	62.3
Heavy Trucks:	62	.1 (61.6	52.6	6	53.8		62.2	2	62.3
Vehicle Noise:	70	.3	69.4	66.5	5	61.6		70.2	2	70.0
Centerline Distan	ce to Noise Co	ontour (in feet)								-
			7	0 dBA	65 d	BA	6	0 dBA	55	dBA
			dn:	102		221		475		1,024
		Ch	IEL:	110		237		511		1,101

	THUR AND	-11-100 11101		NOIDE				//12/20	<i>,</i> , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Scena	rio: EAPC					Project	Name: S	Stoneri	dge SP S.	. Truck F	Rt
Road Nar	ne: Nuevo Rd.					Job Ni	mber: 1	3265			
Road Segme	ent: Between St	oneridge Com	merce	e Cetner	r SP and	Dunlap [Dr.				
SITE	SPECIFIC IN	PUT DATA				N	OISE N	IODE	L INPUT	S	
Highway Data					Site Con	ditions (Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	51,370 vehicle	es					Autos:	15		
Peak Hou	Percentage:	8.08%			Me	dium Tru	cks (2 A	xles):	15		
Peak I	Hour Volume:	4,151 vehicles	s		He	avy Truc	ks (3+ A	xles):	15		
Ve	ehicle Speed:	55 mph		-	Vahiala	<i>Aiv</i>					
Near/Far La	ane Distance:	12 feet		H	Venicle I Vehi	cleType		Dav	Evenina	Night	Daily
Sito Data					Veni	cierype A	utos	77 5%	12 Q%	9.6%	07 / 2%
Sile Dala						n dium Tr	ulus.	01 Q0/	12.5%	10.3%	1 97.4270
Ba	rrier Height:	0.0 feet			IVIC	loovu Tr	ucks:	04.070 96.5%	2 7%	10.37	0.74%
Barrier Type (0-V	Vall, 1-Berm):	0.0			,	icavy in	2013.	00.370	2.170	10.07	0.7470
Centerline D	ist. to Barrier:	100.0 feet		1	Noise So	urce Ele	vations	; (in fe	et)		
Centerline Dist.	to Observer:	100.0 feet				Autos	: 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks	: 2.2	297			
Observer Height	(Above Pad):	5.0 feet			Heav	y Trucks	: 8.0	004	Grade Ad	ljustmen	t: 0.0
P	ad Elevation:	0.0 feet		-	l ano Equ	ivalont	Dictor	o (in f	inot		
Ro	ad Elevation:	0.0 teet		- F	Lune Ly	Auton	. 001	245	000		
	Road Grade:	0.0%			Madiu	Autos	. 99.	940			
	Len view:	-90.0 degree	es		Wealur	n mucks	. 99.0	000			
	Right view:	90.0 degree	es		neav	y mucks	. 99.0	505			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresn	e/	Barrier Att	en Be	rm Atten
Autos:	71.78	3.36		-4.6	2	-1.20		-4.77	0.	000	0.000
Medium Trucks:	82.40	-13.88		-4.6	1	-1.20		-4.88	0.0	000	0.000
Heavy Trucks	86.40	-17.84		-4.6	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ir Leq Day	·	Leq E	vening	Leq I	light		Ldn	С	NEL
Autos:	69	.3	68.4		66.6		60.5		69.3	2	69.8
Medium Trucks	62	7	62.1		55.8		54.2		62.	7	62.9
Heavy Trucks	62	8	62.3		53.2		54.5		62.	8	63.0
Vehicle Noise:	70	.9	70.1		67.1		62.2		70.	8	71.3
Centerline Distan	ce to Noise Co	ontour (in feet,)								
				70 (dBA	65 c	BA	6	0 dBA	55	dBA
			Ldn:		113		243		524	t	1,129
		C	NEL:		121		262		564	Ļ	1,215

	FHWA-R	D-77-108 HIG	HWAY N	IOISE P	REDIO		DEL (9	/12/20)21)	_	_
Scenar Road Nam Road Segme	io: HY (Withou e: Nuevo Rd. nt: Between S	ut MCP) toneridge Con	merce	Cetner S	Project Name: Stoneridge SP S. Truck Rt Job Number: 13265 Cetner SP and Dunlap Dr.						
SITE	SPECIFIC IN	NPUT DATA				NC	DISE M	ODE	L INPUTS	3	
Highway Data				Si	te Cor	ditions (H	lard = :	10, So	ft = 15)		
Average Daily	Traffic (Adt):	61,419vehic	les				A	Autos:	15		
Peak Hour	Percentage:	8.08%			Me	edium Truc	:ks (2 A	xles):	15		
Peak H	lour Volume:	4,963 vehicle	es		He	eavy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	55 mph		Ve	hicle	Mix					
Near/Far La	ne Distance:	12 feet			Veh	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						AL	itos:	77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet			М	ledium Tru	cks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0				Heavy Tru	cks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		N	nise Sr	ource Ele	vations	(in fe	ef)		
Centerline Dist.	to Observer:	100.0 feet				Autos	0.0	00			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.2	97			
Observer Height (Above Pad):	5.0 feet			Hea	vv Trucks:	8.0	04	Grade Adj	ustment	: 0.0
Pa	ad Elevation:	0.0 feet									
Roa	ad Elevation:	0.0 feet		La	ine Eq	uivalent L	vistanc	e (in f	eet)		
	Road Grade:	0.0%				Autos:	99.9	145			
	Left View:	-90.0 degre	es		Mealu	m Trucks:	99.8	555			
	Right view:	90.0 degre	es		пеа	vy mucks.	99.8	600			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	el I	Barrier Atte	en Bei	rm Atten
Autos:	71.78	4.13	3	-4.62		-1.20		4.77	0.0	00	0.000
Medium Trucks:	82.40	-13.10)	-4.61		-1.20		4.88	0.0	00	0.000
Heavy Trucks:	86.40	-17.06	6	-4.61		-1.20		-5.16	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	l barrier	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y .	Leq Eve	ning	Leq N	ight		Ldn	С	NEL
Autos:	70	0.1	69.1		67.4		61.3		69.9)	70.5
Medium Trucks:	63	3.5	62.9		56.5		55.0		63.5	5	63.7
Heavy Trucks:	63	3.5	63.0		54.0		55.2		63.6	5	63.7
Vehicle Noise:	71	1.7	70.8		67.9		63.0		71.6	i	72.0
Centerline Distance	e to Noise C	ontour (in fee	t)								
			L	70 dE	3A	65 dl	BA	6	0 dBA	55	dBA
			Ldn:		127		274		590		1,272
		0	NEL:		137		295		635		1,369

	FHWA-RD	-77-108 HIGH	WAY N	OISE	PREDIC	TION M	ODEL (9	/12/20	021)		
Scenar	io: HYP (Witho	ut MCP)				Project	Name: S	toneri	dge SP S.	Truck F	Rt
Road Nam	e: Nuevo Rd.	,				Job Nu	imber: 1	3265	-		
Road Segme	nt: Between St	oneridge Com	merce (Cetner	SP and	Dunlap [Dr.				
SITE	SPECIFIC IN	PUT DATA				N	OISE M	ODE		s	
Highway Data				S	ite Con	ditions (Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	66,703vehicle	es				A	utos:	15		
Peak Hour	Percentage:	8.08%			Me	dium Tru	cks (2 A	xles):	15		
Peak H	lour Volume:	5,390 vehicle	s		He	avy Truc	ks (3+ A.	xles):	15		
Ve	hicle Speed:	55 mph		v	ehicle I	Nix					
Near/Far La	ne Distance:	12 feet		-	Vehi	icleType	Ĺ	Day	Evening	Night	Daily
Site Data						A	utos: ī	7.5%	12.9%	9.6%	97.42%
Ba	rrier Height	0.0 feet			Me	edium Tr	ucks: 8	34.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	/all_1-Berm):	0.0			ŀ	leavy Tr	ucks: 8	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet						(in \$-	- 41		
Centerline Dist.	to Observer:	100.0 feet		~	ioise so	ource Ele	evations		et)		
Barrier Distance	to Observer:	0.0 feet				Autos	. 0.0	00			
Observer Height ((Above Pad):	5.0 feet			Mediui	m Trucks	2.2	97	Grade Ad	iustmon	
Pa	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	04	Grade Auj	lusunen	. 0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distance	e (in f	eet)		
1	Road Grade:	0.0%				Autos	: 99.9	45			
	Left View:	-90.0 degre	es		Mediur	m Trucks	: 99.8	56			
	Right View:	90.0 degre	es		Heav	y Trucks	99.8	65			
FHWA Noise Mode	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	2/	Barrier Atte	en Bei	rm Atten
Autos:	71.78	4.49		-4.62	2	-1.20	-	4.77	0.0	000	0.000
Medium Trucks:	82.40	-12.75		-4.61	I	-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	86.40	-16.70		-4.61		-1.20	-	5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	/ I	Leq Ev	ening	Leq I	Vight		Ldn	С	NEL
Autos:	70	.5	69.5		67.7		61.7		70.3	3	70.9
Medium Trucks:	63	.8	63.3		56.9		55.4		63.8	3	64.1
Heavy Trucks:	63	.9	63.4		54.4		55.6		64.0)	64.1
		0	71.2		68.2		63.4		71.9	9	72.4
Vehicle Noise:	72	.0									
Vehicle Noise: Centerline Distant	72 ce to Noise Co	ntour (in feet)							1	
Vehicle Noise: Centerline Distance	72 ce to Noise Co	ntour (in feet		70 d	BA	65 c	IBA	6	0 dBA	55	dBA
Vehicle Noise: Centerline Distance	72 ce to Noise Co	ntour (in feet) Ldn:	70 d	BA 134	65 c	IBA 290	6	0 dBA 624	55	dBA 1,344

Monday, March 7, 2022

	FHWA-RD	-77-108 HIGHV	VAY N	OISE	PREDIC		IODEL	(9/12/2	021)			
Scenar Road Nam Road Segme	io: EA le: Nuevo Rd. nt: Between Du	nlap Dr. and E	/ans R	d.		Project Job N	Name: lumber:	Stoner 13265	idge SP	S. Tr	uck R	t
SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPU	JTS		
Highway Data				5	Site Con	ditions	(Hard :	= 10, Se	oft = 15)			
Average Daily	Traffic (Adt):	11,539vehicles	6					Autos:	15			
Peak Hour	Percentage:	8.08%			Me	dium Tr	ucks (2	Axles).	15			
Peak H	lour Volume:	932 vehicles			He	avy Tru	cks (3+	Axles).	15			
Ve	hicle Speed:	55 mph		1	/ehicle	Mix						
Near/Far La	ne Distance:	12 feet			Veh	icleType		Day	Evenin	g N	ight	Daily
Site Data							Autos:	77.5%	6 12.9	%	9.6%	97.429
Bai	rrier Heiaht:	0.0 feet			M	edium T	rucks:	84.8%	6 4.9	% 1	0.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			1	Heavy T	rucks:	86.5%	6 2.7	% 1	0.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		,	loise Sc	urce Fl	lovatio	ne (in f	oof)			
Centerline Dist.	to Observer:	100.0 feet		,	10/30 00	Auto	evalion	000				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s. 0	297				
Observer Height (Above Pad):	5.0 feet			Heav	v Truck	s: 8	004	Grade	Adius	ment:	0.0
Pa	ad Elevation:	0.0 feet										
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in	feet)			
1	Road Grade:	0.0%				Auto	s: 99	.945				
	Left View:	-90.0 degree:	3		Mediu	m Truck	s: 99	0.856				
	Right View:	90.0 degree:	6		Heav	y Truck	s: 99	1.865				
FHWA Noise Mode	el Calculations	1										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier	Atten	Ben	m Atten
Autos:	71.78	-3.13		-4.62	2	-1.20		-4.77		0.000		0.00
Medium Trucks:	82.40	-20.37		-4.6	1	-1.20		-4.88		0.000		0.00
Heavy Trucks:	86.40	-24.32		-4.0	I	-1.20		-5.70		0.000		0.00
Unmitigated Noise	e Levels (witho	ut Topo and b	arrier	atten	uation)			-				
VehicleType	Leq Peak Hou	r Leq Day	L	.eq Ev	rening	Leq	Night		Ldn		CI	VEL
Autos:	62.	8 6	1.9		60.1		54	.0	6	52.7		63.
Medium Trucks:	56.	2 5	5.6		49.3		47	.7	5	6.2		56.
Heavy Trucks:	56.	3 5	5.8		46.7		48	.0	5	06.3		56.
venicie Noise:	64.	4 C	3.0		00.0		55	.8	c	94.3		64.
Centerline Distance	e to Noise Co	ntour (in feet)		70 6	ID A	65	dB A	· · ·	60 d B A		55	d D A
		,		100	IDA 40	05	UBA		оо авА	04	55	417
			un. El·		42		9	7	1	94		417
		CN	LL.		40		9	,	4	00		448

	FHWA-RD-	77-108 HIGHWA	AY NOISE	PREDIC	TION MODI	EL (9/12/2	:021)		
Scenar	io: EAP				Project Nar	ne: Stone	ridge SP S.	Truck R	t
Road Nam	e: Nuevo Rd.				Job Numb	er: 13265	-		
Road Segme	nt: Between Dur	nlap Dr. and Eva	ns Rd.						
SITE	SPECIFIC INF	UT DATA			NOIS	E MODE		3	
Highway Data				Site Con	ditions (Har	rd = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	16,681 vehicles				Autos	: 15		
Peak Hour	Percentage:	8.08%		Me	dium Trucks	(2 Axles)	: 15		
Peak H	lour Volume: 1	,348 vehicles		He	avy Trucks (3+ Axles)	: 15		
Ve	hicle Speed:	55 mph	-	Vehicle A	lix				
Near/Far La	ne Distance:	12 feet		Vehi	cleType	Day	Evening	Night	Daily
Site Data					Auto	s: 77.5%	6 12.9%	9.6%	97.42%
Ba	rrier Heiaht:	0.0 feet		Me	dium Truck	s: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0		F	leavy Truck	s: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet	-	Noise So	urce Elevat	ions (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet	-		Autos:	0.000	,		
Barrier Distance	to Observer:	0.0 feet		Mediur	n Trucks:	2.297			
Observer Height (Above Pad):	5.0 feet		Heav	v Trucks:	8.004	Grade Adi	ustment	0.0
Pa	ad Elevation:	0.0 feet							
Roa	ad Elevation:	0.0 feet		Lane Equ	iivalent Dis	tance (in	feet)		
1	Road Grade:	0.0%			Autos:	99.945			
	Left View:	-90.0 degrees		Mediur	n Trucks:	99.856			
	Right View:	90.0 degrees		Heav	y Trucks:	99.865			
FHWA Noise Mode	el Calculations		I						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	-1.53	-4.6	32	-1.20	-4.77	0.0	000	0.000
Medium Trucks:	82.40	-18.76	-4.6	61	-1.20	-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-22.72	-4.6	61	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (withou	ut Topo and bar	rrier atter	nuation)					
VehicleType	Leq Peak Hour	Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos:	64.4	63.	5	61.7		55.6	64.3	3	64.9
Medium Trucks:	57.8	3 57.	2	50.9		49.3	57.8	3	58.0
Heavy Trucks:	57.9	57.	4	48.3		49.6	57.9)	58.1
Vehicle Noise:	66.0) 65.	2	62.2		57.4	65.9)	66.4
Centerline Distant	e to Noise Con	tour (in feet)							
			70	dBA	65 dBA		60 dBA	55	dBA
		Ldr	1:	53		115	248		534
		CNEL		57		124	266		574

	FHWA-RI	D-77-108 HIGH	IWAY NO	ISE PF	REDIC.	TION MO	DEL (9/1	2/2021)			
Scenari Road Nam Road Segmer	o: EAC e: Nuevo Rd. nt: Between D	unlap Dr. and	Evans Rd			Project N Job Nur	ame: Sto nber: 132	neridge 265	SP S. T	ruck Rt	
SITE	SPECIFIC IN	NPUT DATA				NO	ISE MO	DEL IN	IPUTS		
Highway Data				Site	e Conc	ditions (H	ard = 10	, Soft =	15)		
Average Daily	Traffic (Adt):	44,939vehicl	es				Au	tos: 1	5		
Peak Hour	Percentage:	8.08%			Med	dium Truc	ks (2 Axle	es): 1	5		
Peak H	our Volume:	3,631 vehicle	s		Hea	avy Truck	s (3+ Axle	es): 1	5		
Ve	hicle Speed:	55 mph		Val	viele N	liv					
Near/Far La	ne Distance:	12 feet		ver	Vehi		Da	Eve	nina	Niaht	Daily
Site Data					vern	летуре Ац	tos: 77	5% 1	2.9%	9.6%	97.42%
Ba	mian Haimhti	0.0 feet			Me	dium Tru	cks: 84	.8%	4.9%	10.3%	1.84%
Barrier Tupe (0 W	all 1 Rerm)	0.0 1001			н	leavy Tru	cks: 86	.5%	2.7%	10.8%	0.74%
Centerline Dis	all, 1-Denn). st. to Barrier:	100.0 feet		-							
Centerline Dist	to Observer:	100.0 feet		Noi	se So	urce Elev	ations (i	n feet)			
Barrier Distance	to Observer:	0.0 feet				Autos:	0.000)			
Observer Height (Above Pad):	5.0 feet		/	Aediun	n Trucks:	2.297	, 			
Pa	ad Elevation:	0.0 feet			Heavy	y Trucks:	8.004	t Gra	ae Aaju	stment:	0.0
Roa	ad Elevation:	0.0 feet		Lar	ne Equ	ivalent D	istance	(in feet)			
	Road Grade:	0.0%				Autos:	99.94	5			
	Left View:	-90.0 degre	es	/	Aediun	n Trucks:	99.85	3			
	Right View:	90.0 degre	es		Heavy	y Trucks:	99.86	5			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	се	Finite I	Road	Fresnel	Barr	ier Atter	n Berr	n Atten
Autos:	71.78	2.78		-4.62		-1.20	-4.	77	0.00	00	0.000
Medium Trucks:	82.40	-14.46		-4.61		-1.20	-4.	88	0.00	00	0.000
Heavy Trucks:	86.40	-18.42		-4.61		-1.20	-5.	16	0.00	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenua	tion)						
VehicleType	Leq Peak Hou	ur Leq Da	y Le	eq Even	ing	Leq Ni	ght	Ldr	1	CN	IEL
Autos:	68	3.7	67.8		66.0		59.9		68.6		69.2
Medium Trucks:	62	2.1	61.6		55.2		53.6		62.1		62.3
Heavy Trucks:	62	2.2	61.7		52.6		53.9		62.2		62.4
Vehicle Noise:	70).3	69.5		66.5		61.7		70.2		70.7
Centerline Distance	e to Noise C	ontour (in feel	9	70		05.15		co			-10.4
			l de:	TU aBA	102	05 dE	222	00 aE	470	55	1 020
		~	Lan:		103		223		4/9		1,033
		C	IVEL:				239		010		1,111

	FHWA-RD	0-77-108 HIGH	WAY NO	DISE	PREDICT	ION M	ODEL (9	/12/20	021)						
Scenar Road Narr Road Segme	Scenario: EAPC Road Name: Nuevo Rd. Road Segment: Between Dunlap Dr. and Evans R						Project Name: Stoneridge SP S. Truck Rt Job Number: 13265 Rd.								
SITE	SPECIFIC IN	PUT DATA				N	OISE N	ODE		s					
Highway Data				S	ite Cond	itions (Hard =	10, Sc	oft = 15)						
Average Daily	Traffic (Adt):	50,081 vehicle	es				A	Autos:	15						
Peak Hour	Percentage:	8.08%			Med	ium Tru	cks (2 A	xles):	15						
Peak H	lour Volume:	4,047 vehicle	6		Hea	vy Truc	ks (3+ A	xles):	15						
Ve	hicle Speed:	55 mph		V	ehicle M	ix									
Near/Far La	ne Distance:	12 feet		-	Vehic	leTvpe		Dav	Evenina	Niaht	Dailv				
Site Data							utos:	77.5%	12.9%	9.6%	97.42%				
Da	rrior Hoiah*	0.0 fect			Med	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%				
Barrier Type (0_14	/all_1-Rerm)	0.0 1001			He	eavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%				
Centerline Di	st. to Barrier	100.0 feet		-											
Centerline Dist.	to Observer:	100.0 feet		N	loise Sou	Irce Ele	evations	(in fe	eet)						
Barrier Distance	to Observer:	0.0 feet				Autos	: 0.0	00							
Observer Height	oserver Height (Above Pad): 5.0 feet					Medium Trucks: 2.297									
P	Pad Elevation: 0.0 feet					Trucks	: 8.0	104	Grade Au	usimeni	0.0				
Ro	ad Elevation:	0.0 feet		L	ane Equi	ivalent	Distanc	e (in f	feet)						
	Road Grade:	0.0%				Autos	: 99.9	945							
	Left View:	-90.0 degre	es		Medium	Trucks	: 99.8	356							
	Right View:	90.0 degre	es		Heavy	Trucks	99.8	865							
FHWA Noise Mod	el Calculation:	5													
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite F	Road	Fresne	e/	Barrier Att	en Ber	m Atten				
Autos:	71.78	3.25		-4.62		-1.20		4.77	0.0	000	0.00				
Medium Trucks:	92.40	-13 00		-4.62 -1.20 -4.88 0.000				0.00							
Medium Trucks: 82.40 -13.99 Heavy Trucks: 86.40 -17.95				-4.01		-1.20		4.00	0.0	000					
Heavy Trucks:	86.40	-17.95		-4.61		-1.20 -1.20		-4.00 -5.16	0.0	000	0.00				
Heavy Trucks: Unmitigated Noise	86.40 e Levels (with	-17.95	barrier a	-4.61	uation)	-1.20	light	-4.00 -5.16	0.0	000	0.00				
Heavy Trucks: Unmitigated Noise VehicleType Autos:	86.40 e Levels (with Leq Peak Hou	-17.95 -17.95 out Topo and r Leq Day	barrier a	-4.61 attenu eq Eve	ening	-1.20 -1.20 Leq I	Vight	-4.00 -5.16	0.0 0.0		0.00				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	86.40 e Levels (with Leq Peak Hou 69	-10.00 -17.95 put Topo and r Leq Day .2 6	barrier a	-4.61 attenu eq Eve	<i>ation)</i> ening 66.5	-1.20 -1.20 <i>Leq I</i>	Night 60.4	-4.00	Ldn 69.0	000 000 C/	0.00				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	86.40 e Levels (with Leq Peak Hou 69 62	-10.00 -17.95 out Topo and ir Leq Day .2 .6 6	barrier a 68.2 62.0	-4.61 attenu eq Eve	ening 66.5 55.7 53.1	-1.20 -1.20 <i>Leq I</i>	Night 60.4 54.1	-4.00	Ldn 69.0 62.0	200 200 200 20 20 20 20 20 20 20 20 20 2	0.000 VEL 69.0 62.0				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	86.40 86.40 <u>Leq Peak Hou</u> 69 62 62 70	-10.55 -17.95 out Topo and r Leq Day .2 .6 .6 .8	barrier a 68.2 62.0 62.1 70.0	-4.61 attenu eq Evi	ening 66.5 55.7 53.1 67.0	-1.20 -1.20 <i>Leq I</i>	<i>light</i> 60.4 54.1 54.4 62.1	-5.16	Ldn 69.0 62.0 70.0	000 000 0 0 3 7 7	0.00 VEL 69.0 62.0 62.1 71.2				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	e Levels (with Leg Peak Hou 69 62 62 70 ce to Noise Co	- 10:35 -17:95 out Topo and ir Leq Day .2 .6 .6 .8 ontour (in feet	barrier a 68.2 62.0 62.1 70.0	-4.61 attenu eq Eve	ation) ening 66.5 55.7 53.1 67.0	-1.20 -1.20 Leq I	<i>light</i> 60.4 54.1 54.4 62.1	-5.16	Ldn 69.0 62.0 62.1 70.7	C/ C/ C/ C/ C/ C/ C/ C/ C/ C/	0.000 NEL 69.1 62.1 62.1 71.1				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	86.40 86.40 Leq Peak Hou 69 62 62 70 cce to Noise Co	-17.95 -17.95	barrier a 68.2 62.0 62.1 70.0	-4.61 attenu eq Eve	<i>ation)</i> ening 66.5 55.7 53.1 67.0 BA	-1.20 -1.20 Leq I	light 60.4 54.1 54.4 62.1	-5.16	Ldn 69.0 62.0 70.1 50 dBA	CI CI CI CI CI CI CI CI CI CI CI CI CI C	0.000 NEL 69.6 62.8 62.8 71.2 dBA				
Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distant	86.40 e Levels (with Leq Peak Hou 69 62 62 62 70 70 ce to Noise Co	-17.95 -17.95	barrier a 68.2 62.0 62.1 70.0 Ldn:	-4.61 attenu eq Eve	<i>ening</i> 66.5 55.7 53.1 67.0 <i>BA</i> 111	-1.20 -1.20 Leq I	<i>light</i> 60.4 54.1 54.4 62.1 <i>IBA</i> 239	-5.16	Ldn 69.0 62.0 62.7 70.7 50 dBA 515	CI CI CI CI CI CI CI CI CI CI CI CI CI C	0.000 VEL 69.6 62.8 71.2 dBA 1,110				

Monday, March 7, 2022

FHWA-RD	-77-108 HIGHW	AY NOISE	E PREDIC	TION MO	DEL (9/12	2/2021)					
Scenario: HY (Without Road Name: Nuevo Rd. Road Segment: Between Du	: MCP) nlap Dr. and Eva	ıns Rd.		Project N Job Nui	lame: Stoi nber: 132	neridge SP S. 65	Truck F	Rt			
SITE SPECIFIC IN	PUT DATA			NC	ISE MO	DEL INPUT	s				
Highway Data			Site Con	ditions (H	lard = 10,	Soft = 15)					
Average Daily Traffic (Adt):	59,878vehicles				Aut	os: 15					
Peak Hour Percentage:	8.08%		Me	dium Truc	ks (2 Axle	s): 15					
Peak Hour Volume:	4,838 vehicles		He	avy Truck	s (3+ Axle	s): 15					
Vehicle Speed:	55 mph	ŀ	Vahiala	Mix							
Near/Far Lane Distance:	12 feet	ŀ	Venicie i	icleType	Da	Evening	Night	Daily			
Sito Data			ven	ICIE I YPE	100: 77	5% 12.0%	0.6%	07.429			
			14	nu adium Tru	cke: 84	8% / Q%	10.3%	1 8/19			
Barrier Height:	0.0 feet		Heavy Trucks: 86.5% 2.7% 10.3% 1.								
Barrier Type (U-Wall, 1-Berm):	0.0		,	icuvy iiu	UN3. 00.	2.170	10.070	0.147			
Centerline Dist. to Barrier:		Noise Source Elevations (in feet)									
Centerline Dist. to Observer:		Autos: 0.000									
Barrier Distance to Observer:		Mediu	m Trucks:	2.297							
Observer Height (Above Pad):	Observer Height (Above Pad): 5.0 feet					Grade Ad	justment	t: 0.0			
Fau Elevation.	0.0 feet	ŀ	Lane Fr	uivalent l)istance (in feet)					
Road Elevation.	0.0 1001	ŀ	Lano Lq	Autos:	00 0/5						
Loft View	0.0 /0 00 0 dogroop		Mediu	m Trucks:	00.856						
Pight View:	90.0 degrees		Heav	/v Trucks:	99.865						
rught view.	SULU GEGICES		//our	<i>, , , , , , , , , ,</i>	00.000						
FHWA Noise Model Calculations											
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Bei	rm Atten			
Autos: 71.78	4.02	-4.6	52	-1.20	-4.	77 0.0	000	0.00			
Medium Trucks: 82.40	-13.21	-4.6	51	-1.20	-4.6	58 0.0	000	0.00			
Heavy Trucks: 86.40	-17.17	-4.6	51	-1.20	-5.1	16 0.0	000	0.00			
Unmitigated Noise Levels (witho	ut Topo and ba	rrier attei	nuation)								
VehicleType Leq Peak Hou	r Leq Day	Leq E	vening	Leq N	ight	Ldn	C	NEL			
Autos: 70.	0 69	.0	67.3		61.2	69.8	В	70.			
Medium Trucks: 63.	4 62	.8	56.4 54.9 63.4				63.				
Heavy Trucks: 63.	4 62	.9	53.9 55.1 63.5					63.			
Vehicle Noise: 71.	Vehicle Noise: 71.6 70.7				67.8 62.9 71.5 7						
Centerline Distance to Noise Co.	ntour (in feet)										
		70	70 dBA 65 dBA 60 dBA 55 dBA				i dBA				
						125 269 581 1,2					
	Ld	n:	125		269	581		1,251			

	FHWA-RD	-77-108 HIGH	WAY	NOISE	PREDIC	TION M	ODEL (9	12/20	21)			
Scenar Road Nam Road Segme	io: HYP (Withou ne: Nuevo Rd. nt: Between Du	ut MCP) nlap Dr. and E	vans	Rd.		Project Job N	Name: S umber: 1	toneri 3265	dge SP S.	Truck	Rt	
SITE	SPECIFIC IN	PUT DATA				N	IOISE M	ODEI		5		
Highway Data				5	Site Con	ditions	(Hard = 1	0, So	ft = 15)			
Average Daily	Traffic (Adt):	63,474 vehicle	s				A	utos:	15			
Peak Hour	Percentage:	8.08%			Me	dium Tru	ucks (2 A	des):	15			
Peak H	lour Volume:	5,129 vehicles	\$		He	avy Truc	cks (3+ A)	(les):	15			
Ve	hicle Speed:	55 mph		1	/ohiclo I	Aiv						
Near/Far La	ne Distance:	12 feet			Vehi	cleTvpe)av	Evenina	Niaht	Daily	
Site Data				-			Autos: 7	7.5%	12.9%	9.6	% 97.42%	
Ba	rrier Height	0.0 feet			Me	edium Ti	rucks: 8	4.8%	4.9%	10.3	% 1.84%	
Barrier Type (0-M	/all_1_Rerm):	0.0 1001			F	leavy Ti	rucks: 8	6.5%	2.7%	10.8	% 0.74%	
Centerline Di	st to Barrier	100.0 feet		-					0			
Centerline Dist.	to Observer:	100.0 feet		/	voise So	urce El	evations	(in te	et)			
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.0	JU				
Observer Height	Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 8 004 Grade Adjustment: 0.0						
P	Pad Elevation: 0.0 feet					y Truck	S: 8.0	J4	Grade Auj	usime	11. 0.0	
Ro	ad Elevation:	0.0 feet		L	ane Equ	iivalent	Distance	e (in f	eet)			
	Road Grade:	0.0%				Auto	s: 99.9	45				
	Left View:	-90.0 degree	s		Mediur	n Truck	s: 99.8	56				
	Right View:	90.0 degree	s		Heavy Trucks: 99.865							
FHWA Noise Mod	el Calculations											
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresne	/ /	Barrier Atte	en B	erm Atten	
Autos:	71.78	4.28		-4.62	2	-1.20	-	4.77	0.0	000	0.000	
Medium Trucks:	82.40	-12.96		-4.61	-4.61 -1.20 -4.88 0.000 0						0.000	
Heavy Trucks:	86.40	-16.92		-4.61	1	-1.20	-	5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (witho	ut Topo and	barrie	r atten	uation)							
VehicleType	Leq Peak Hour	r Leq Day		Leq Ev	/ening	Leq	Night		Ldn	(CNEL	
Autos:	70.	2	69.3		67.5		61.4		70.1	1	70.7	
Medium Trucks:	63.	6	63.1		56.7		55.1		63.6	3	63.8	
Heavy Trucks:	63.	7	63.2		54.1		55.4		63.7	7	63.9	
Vehicle Noise:	71.	8	71.0		68.0 63.2 71.7					72.2		
Centerline Distant	ce to Noise Cor	ntour (in feet)										
			L	70 dBA 65 dBA 60 dBA 55			5 dBA					
			Ldn:	130 280 604			1,300					
		CI	VEL:		140 301 649 1,399					1,399		

	FHWA-R	D-77-108 HIG	HWAY	NOISE	PREDIO	CTION MC	DDEL (S	9/12/20)21)		
Scenario Road Name Road Segmen	o: EA e: Dunlap Dr. t: North of Ni	ievo Rd.				Project I Job Nu	Name: S Imber: 1	Stoner 13265	dge SP S.	Truck F	Rt
SITE S	PECIFIC IN	IPUT DATA				N	DISE N	IODE	L INPUTS	3	
Highway Data				S	ite Cor	nditions (l	Hard =	10, So	ft = 15)		
Average Daily 1	Traffic (Adt):	4,631 vehic	les					Autos:	15		
Peak Hour H	Percentage:	8.08%			Me	edium Tru	cks (2 A	(xles):	15		
Peak Ho	our Volume:	374 vehicle	s		He	avy Truck	ks (3+ A	xles):	15		
Veh	icle Speed:	45 mph			lahiala	Mise					
Near/Far Lan	e Distance:	12 feet		v	Vel	icle Type		Dav	Evening	Night	Daily
Site Data					Ver	A	utos:	77.5%	12.9%	9.6%	97.42%
Bar	riar Haishti	0.0 feet			N	ledium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0 W/	all 1 Porm):	0.0 1001				Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	t to Barrier	100.0 feet									
Centerline Dist. t	o Observer:	100.0 feet		N	loise S	ource Ele	vations	s (in fe	et)		
Barrier Distance t	o Observer:	0.0 feet				Autos.	: 0.0	000			
Observer Height (A	Above Pad):	5.0 feet			Mediu	im Trucks.	: 2.2	297	~		
Pa	d Elevation:	0.0 feet			Hea	vy Trucks.	: 8.0	004	Grade Adj	ustmen	t: 0.0
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent l	Distanc	e (in f	eet)		
R	Road Grade:	0.0%				Autos.	: 99.9	945			
	Left View:	-90.0 degre	es		Mediu	m Trucks.	: 99.8	356			
	Right View:	90.0 degre	es		Hea	vy Trucks.	99.8	365			
FHWA Noise Mode	I Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	68.46	-6.22	2	-4.62	2	-1.20		-4.77	0.0	00	0.000
Medium Trucks:	79.45	-23.46	6	-4.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-27.4		-4.61		-1.20		-5.16	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	l barrie	er attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	у	Leq Ev	ening	Leq N	light		Ldn	C	NEL
Autos:	56	3.4	55.5		53.7		47.6		56.3	5	56.9
Medium Trucks:	50).2	49.6		43.2	2	41.7		50.2	2	50.4
Heavy Trucks:	51	.0	50.5		41.5	5	42.7		51.1		51.2
Vehicle Noise:	58	3.3	57.4		54.3	5	49.6		58.2	2	58.6
Centerline Distance	e to Noise C	ontour (in fee	t)	70 -	D A	65 -	D A		O dBA		d D A
			I da:	70 a	DA 16	00 0	DA	6	U UBA	55	160
			Lan:		10		35		/5		102
		L L	INEL:		17		38		81		174

	FHWA-RL	0-77-108 HIGH	WATN	IUISE	PREDIC		DEL (9	12/20	J21)		
Scenar	io: EAP				Project Name: Stoneridge SP S. Truck Rt						
Road Nam	e: Dunlap Dr.					Job Nur	nber: 1	3265			
Road Segme	nt: North of Nu	evo Rd.									
SITE	SPECIFIC IN	PUT DATA				NO	ISE M	ODE		s	
Highway Data				S	Site Cond	ditions (H	lard = 1	0, Sc	ft = 15)		
Average Daily	Traffic (Adt):	5,027 vehicle	s		Autos: 15						
Peak Hour	Percentage:	8.08%			Med	dium Truc	ks (2 A	kles):	15		
Peak H	lour Volume:	406 vehicles			Hea	avy Truck	s (3+ A)	(les):	15		
Ve	hicle Speed:	45 mph		v	/ehicle N	lix					
Near/Far La	ne Distance:	12 feet		F	Vehi	cleType	L	Day	Evening	Night	Daily
Site Data						Au	tos: 7	7.5%	12.9%	9.6%	97.42%
Ba	rrier Heiaht:	0.0 feet			Me	dium Tru	cks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tru	cks: 8	6.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet			loiso So	urco Elos	ations	(in fe	uof)		
Centerline Dist.	to Observer:	100.0 feet		~	10/26 20	Autor:	auons	00	ey		
Barrier Distance	to Observer:	0.0 feet			Madium	Autos.	0.0	00			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks:	2.2	97 04	Grade Ad	iustment	0.0
P	ad Elevation:	0.0 feet			neav.	y muchs.	0.0	04	0/000 / 10	aounone.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent D	istance	e (in f	eet)		
	Road Grade:	0.0%				Autos:	99.9	45			
	Left View:	-90.0 degree	s		Mediur	n Trucks:	99.8	56			
	Right View:	90.0 degree	s		Heav	y Trucks:	99.8	65			
FHWA Noise Mod	el Calculation:	5									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	:/	Barrier Att	en Ber	m Atten
Autos:	68.46	-5.86		-4.62	2	-1.20	-	4.77	0.0	000	0.000
Medium Trucks:	79.45	-23.10		-4.61	1	-1.20	-	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-27.06		-4.61	1	-1.20	-	5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier	atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	1	Leq Ev	rening	Leq Ni	ght		Ldn	CI	VEL
Autos:	56	.8	55.8		54.0		48.0		56.6	5	57.2
Medium Trucks:	50	.5	50.0		43.6		42.0		50.5	ō	50.7
rieavy Irucks:	51	.4	50.9		41.9		43.1		51.5	-	51.6
venicle Noise:	58	.6	8.10		54.7		50.0		58.5	0	59.0
Centerline Distan	ce to Noise Co	ontour (in feet)				05.15					10.4
				70 d	IBA 47	65 dE	SA 07	6	U dBA	55	aBA
			Lan:		17		37		80		172

Monday, March 7, 2022

	FHWA-RD-	77-108 HIGHW	AY NOIS	E PREDIO	TION MOD	DEL (9/12/	2021)		
Scenario: Road Name: Road Segment:	EAC Dunlap Dr. North of Nuev	/o Rd.			Project Na Job Num	me: Stone ber: 1326	eridge SP S. 5	Truck F	Rt
SITE SP	ECIFIC INP	UT DATA			NO	SE MOD	EL INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, S	Soft = 15)		
Average Daily Tra	ffic (Adt):	8,031 vehicles				Autos	s: 15		
Peak Hour Per	rcentage:	8.08%		Me	dium Truck	s (2 Axles): 15		
Peak Hour	Volume:	649 vehicles		He	avy Trucks	(3+ Axles): 15		
Vehicl	e Speed:	45 mph		Vehiele	Mise				
Near/Far Lane	Distance:	12 feet		Venicie I	icleTvpe	Dav	Evenina	Niaht	Daily
Site Data					Aut	os: 77.5	% 12.9%	9.6%	97.42%
Barria	r Hoimhti	0.0 feet		м	edium Truc	ks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0 Wall	1 Borm):	0.0 1001			Heavy Truc	ks: 86.5	% 2.7%	10.8%	0.74%
Centerline Dist t	n Barrier:	100.0 feet							-
Centerline Dist. to (Observer:	100.0 feet		Noise So	ource Eleva	ations (in	feet)		
Barrier Distance to (Observer:	0.0 feet			Autos:	0.000			
Observer Height (Ab	ove Pad):	5.0 feet		Mediu	m Trucks:	2.297			
Pad F	Elevation:	0.0 feet		Hear	y Trucks:	8.004	Grade Ad	lustment	t: 0.0
Road E	Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)		
Roa	d Grade:	0.0%			Autos:	99.945	,		
1	eft View:	-90.0 degrees		Mediu	m Trucks:	99.856			
Ri	ght View:	90.0 degrees		Hear	y Trucks:	99.865			
FHWA Noise Model C	alculations								
VehicleType I	REMEL 1	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Bei	rm Atten
Autos:	68.46	-3.83	-4.	.62	-1.20	-4.77	7 0.0	000	0.00
Medium Trucks:	79.45	-21.07	-4.	.61	-1.20	-4.88	3 0.0	000	0.00
Heavy Trucks:	84.25	-25.02	-4.	.61	-1.20	-5.16	6 0.0	000	0.00
Unmitigated Noise Le	evels (withou	It Topo and ba	rrier atte	nuation)					
VehicleType Lee	q Peak Hour	Leq Day	Leq	Evening	Leq Nig	ıht	Ldn	С	NEL
Autos:	58.8	57	.8	56.1		50.0	58.6	6	59.3
Medium Trucks:	52.6	52	.0	45.6		44.1	52.5	5	52.0
Heavy Trucks:	53.4	52	.9	43.9		45.1	53.5	5	53.0
Vehicle Noise:	60.7	59	.8	56.7		52.0	60.6	3	61.0
Centerline Distance to	o Noise Con	tour (in feet)							
			70) dBA	65 dB,	4	60 dBA	55	i dBA
		Ld	In:	23		51	109		234
		CNE	L:	25		54	117		251

	FRWA-RD		VATING	JISE	PREDIC			12/20	(21)		
Scenar	io: EAPC					Project Na	me: Si	oneri	dge SP S.	Truck F	Rt
Road Nam	ie: Dunlap Dr.					Job Num	ber: 13	3265			
Road Segme	nt: North of Nue	evo Rd.									
SITE	SPECIFIC IN	PUT DATA				NO	SE M	ODE	L INPUTS	5	
Highway Data				S	ite Cond	ditions (Ha	ard = 1	0, So	ft = 15)		
Average Daily	Traffic (Adt):	8,427 vehicles	5				A	utos:	15		
Peak Hour	Percentage:	8.08%			Med	dium Truck	s (2 A)	(les):	15		
Peak H	lour Volume:	681 vehicles			Hea	avy Trucks	(3+ Ax	(les):	15		
Ve	hicle Speed:	45 mph		v	ehicle N	lix					
Near/Far La	ne Distance:	12 feet		F	Vehi	cleType	D	ay	Evening	Night	Daily
Site Data						Aut	os: 7	7.5%	12.9%	9.6%	6 97.42%
Ba	rrier Height:	0.0 feet			Me	edium Truc	ks: 8	4.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Truc	ks: 8	6.5%	2.7%	10.8%	6 0.74%
Centerline Di	st. to Barrier:	100.0 feet			laiaa Ca	uree Eleve	tiono	lin fo	of)		
Centerline Dist.	to Observer:	100.0 feet		~	ioise 30	Autoo:	auons	(<i>III 1</i> e	elj		
Barrier Distance	to Observer:	0.0 feet			Madium	Autos.	0.00	JU 7			
Observer Height	(Above Pad):	5.0 feet			Hear	n Trucks.	2.23	97 54	Grade Adi	iustman	+ 0.0
P			neav	y mucks.	0.00	J4	Grade Auj	usunen	1. 0.0		
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent Di	stance	e (in f	eet)		
	Road Grade:	0.0%				Autos:	99.94	45			
	Left View:	-90.0 degrees	3		Mediur	n Trucks:	99.8	56			
	Right View:	90.0 degree	\$		Heav	y Trucks:	99.80	65			
FHWA Noise Mod	el Calculations	1									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresne	1	Barrier Atte	en Be	erm Atten
Autos:	68.46	-3.62		-4.62	2	-1.20	-4	4.77	0.0	000	0.000
Medium Trucks:	79.45	-20.86		-4.61		-1.20	-4	4.88	0.0	000	0.000
Heavy Trucks:	84.25	-24.81		-4.61		-1.20	-	5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and b	arrier a	attenı	uation)						
VehicleType	Leq Peak Hou	r Leq Day	L	eq Ev	ening	Leq Nig	ht		Ldn	0	ONEL
Autos:	59.	.0 5	8.1		56.3		50.2		58.9	9	59.5
Medium Trucks:	52.	.8 5	2.2		45.8		44.3		52.8	3	53.0
Heavy Trucks:	53.	.6 5	3.1		44.1		45.3		53.7	7	53.8
Vehicle Noise:	60.	.9 6	0.0		56.9		52.2		60.8	3	61.2
Centerline Distand	ce to Noise Co	ntour (in feet)		70.1							
				70 d	BA	65 dB/	4 50	6	U dBA	53	5 aBA
			an:		24		52		112		242
		CN	EL:		26		90		121		260

	FHWA-R	D-77-108 HIG	HWAY N	NOISE P	REDIO	CTION MO	ODEL (S	9/12/2	021)		
Scenan Road Nam Road Segme	io: HY (Withou ne: Dunlap Dr. nt: North of Nu	ut MCP) uevo Rd.				Project I Job Nu	Name: S Imber: 1	Stonei 13265	idge SP S.	Truck	Rt
SITE	SPECIFIC IN	NPUT DATA				N	OISE N	IODE	L INPUTS	5	
Highway Data				Si	te Cor	ditions (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	10,075vehic	les					Autos:	15		
Peak Hour	Percentage:	8.08%			Me	edium Tru	cks (2 A	(xles)	15		
Peak H	lour Volume:	814 vehicle	es		He	avy Truc	ks (3+ A	Axles).	15		
Ve	hicle Speed:	45 mph		Ve	hiclo	Mix					
Near/Far La	ne Distance:	12 feet			Veh	icleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						A	utos:	77.5%	12.9%	9.69	6 97.42%
Bai	rrier Heiaht:	0.0 feet			М	ledium Tri	ucks:	84.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tri	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Di	st. to Barrier:	100.0 feet		N	nise Sr	ource Ele	vations	: (in f	pet)		
Centerline Dist.	to Observer:	100.0 feet				Autos	. 0.0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	. 23	297			
Observer Height (Above Pad):	5.0 feet			Heat	vv Trucks	80	004	Grade Adj	ustmer	nt: 0.0
Pa	ad Elevation:	0.0 feet		-							
Roa	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Distanc	e (in	feet)		
	Road Grade:	0.0%				Autos	: 99.9	945			
	Left View:	-90.0 degre	ees		Meaiu	m Trucks	99.8	856			
	Right View:	90.0 degre	ees		неа	vy Trucks	99.8	865			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier Atte	en Be	erm Atten
Autos:	68.46	-2.8	4	-4.62		-1.20		-4.77	0.0	00	0.000
Medium Trucks:	79.45	-20.0	В	-4.61		-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-24.04	4	-4.61		-1.20		-5.16	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	l barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	iy 🛛	Leq Eve	ening	Leq N	light		Ldn	0	ONEL
Autos:	59	9.8	58.8		57.1		51.0)	59.6		60.2
Medium Trucks:	50	3.6	53.0		46.6		45.1		53.5		53.8
Heavy Trucks:	54	1.4	53.9		44.9		46.1		54.5		54.6
Vehicle Noise:	61	1.6	60.8		57.7		53.0)	61.5		62.0
Centerline Distance	ce to Noise C	ontour (in fee	et)					1			
			L	70 dE	3A	65 a	IBA	1	60 dBA	5	5 dBA
			Ldn:		27		59		127		273
		(CNEL:		29 63 136 2					293	

	FHWA-RD	9-77-108 HIGH	WAY N	NOISEI	REDIC	TION MO	DEL (9/12/2	J21)		
Scenario Road Name	Scenario: HYP (Without MCP) Road Name: Dunlap Dr. Road Segment: North of Nuevo Rd.						lame: \$ mber:	Stoner 13265	idge SP S.	Truck R	t
Road Segmen	t: North of Nu	evo Rd.									
SITES	SPECIFIC IN	PUT DATA				NC	DISE	IODE	L INPUT	S	
Highway Data				S	ite Cond	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	10,075vehicle	es				,	Autos:	15		
Peak Hour I	Percentage:	8.08%			Med	dium Truc	cks (2 A	(xles):	15		
Peak He	our Volume:	814 vehicle	S		Hea	avy Truck	is (3+ A	(xles):	15		
Vel	nicle Speed:	45 mph		V	ehicle N	Aix					
Near/Far Lar	e Distance:	12 feet			Vehi	cleType		Day	Evening	Night	Daily
Site Data						Au	itos:	77.5%	12.9%	9.6%	97.42%
Bar	rier Height:	0.0 feet			Me	dium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			H	łeavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	t. to Barrier:	100.0 feet		A	oise So	urce Elev	vation	in fa	oof)		
Centerline Dist. t	o Observer:	100.0 feet			0130 00	Autor	0.0	000			
Barrier Distance t	o Observer:	0.0 feet			Mediur	n Trucks	2	207			
Observer Height (/	Above Pad):	5.0 feet			Heav	v Trucke	81	104	Grade Ad	liustment	0.0
Pa	Pad Elevation: 0.0 feet						0.	-04		,	0.0
Roa	d Elevation:	0.0 feet		L	ane Equ	ivalent D	Distand	e (in i	feet)		
F	Road Grade:	0.0%				Autos:	99.	945			
	Left View:	-90.0 degre	es		Mediun	n Trucks:	99.	356			
	Right View:	90.0 degre	es		Heav	y Trucks:	99.	365			
FHWA Noise Mode	I Calculations	5				-					
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	68.46	-2.84		-4.62		-1.20		-4.77	0.	000	0.00
Medium Trucks:	79.45	-20.08		-4.61		-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	84.25	-24.04		-4.61		-1.20		-5.16	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	r attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	· .	Leq Ev	ening	Leq N	ight		Ldn	CI	VEL
Autos:	59	.8	58.8		57.1		51.0		59.	6	60.
Meaium Trucks:	53	.6	53.0		46.6		45.1		53.	5	53.
rieavy Irucks:	54	.4	53.9		44.9		46.1		54.	5	54.
Vehicle Noise:	61	.6	60.8		57.7		53.0		61.	5	62.
Centerline Distanc	e to Noise Co	ntour (in feet)	70 d	DA I	65 di	DA.		OdPA	55	dBA
			I dn	70 0	27	05 UE	50		127	. 55	272
		C	NEL ·	21 59 127 29 63 126			2/3				
		0	V		23		05		100		200

Monday, March 7, 2022

	FHWA-RD	-77-108 HIGHV	VAY NOI	SE I	PREDIC	TION N	IODEL (9/12/2	021)			
Scenan Road Nam Road Segmei	io: EA le: Dunlap Dr. nt: Between Nu	ievo Rd. and Sa	an Jacinte	o Av	-	Project Job N	t Name: lumber:	Stoner 13265	idge SP S	. Tru	ck Rt	
SITE	SPECIFIC IN	PUT DATA				M	OISE	NODE	L INPUT	s		
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	1,101 vehicles	3					Autos:	15			
Peak Hour	Percentage:	8.08%			Me	dium Tr	ucks (2)	Axles):	15			
Peak H	lour Volume:	89 vehicles			He	avy Tru	cks (3+)	Axles):	15			
Ve	hicle Speed:	45 mph		V	ohiclo I	Mix						
Near/Far La	ne Distance:	12 feet		-	Veh	icleType		Dav	Evenina	Nic	aht	Daily
Site Data					1011	.0.01.900	Autos:	77.5%	12.9%		1.6%	97.42%
Ba	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10).3%	1.84%
Barrier Type (0-W	all 1-Berm)	0.0 1001			1	Heavy T	rucks:	86.5%	2.7%	10	.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet						- / 6				
Centerline Dist.	to Observer:	100.0 feet		N	oise so	ource E	evation	S (IN TO	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.	000				
Observer Height (Above Pad):	5.0 feet			Mealu	m Truck	S: 2.	297	Crada A	livet	mont	0.0
Pa	ad Elevation:	0.0 feet			Heav	у ттиск	S: 8.	004	Grade Ad	ijusii	nem.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in i	feet)			
	Road Grade:	0.0%				Auto	s: 99.	945				
	Left View:	-90.0 degrees	5		Mediu	m Truck	s: 99.	856				
	Right View:	90.0 degrees	6		Heav	y Truck	s: 99.	865				
FHWA Noise Mode	el Calculations	;										
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fresr	nel	Barrier At	ten	Berr	n Atten
Autos:	68.46	-12.46	-	4.62		-1.20		-4.77	0.	000		0.000
Medium Trucks:	79.45	-29.70	-	4.61		-1.20		-4.88	0.	.000		0.000
Heavy Trucks:	84.25	-33.65	-	4.61		-1.20		-5.16	0.	.000		0.00
Unmitigated Noise	Levels (witho	out Topo and b	arrier at	tenu	ation)							
VehicleType	Leq Peak Hou	r Leq Day	Lee	q Ev	ening	Leq	Night		Ldn		CN	IEL
Autos:	50.	2 4	9.2		47.4		41.4	4	50	.0		50.0
Medium Trucks:	43.	.9 4	3.4		37.0		35.	5	43	.9		44.
Heavy Trucks:	44.	.8 4	4.3		35.3		36.	5	44	.9		45.0
Vehicle Noise:	52.	.0 5	1.2		48.1		43.4	4	51	.9		52.4
Centerline Distand	e to Noise Co	ntour (in feet)										
				70 di	BA	65	dBA	6	60 dBA		55 (dBA
		L	.dn:		6		13		2	9		62
		CN	EL:		7		14		3	1		67

	FHWA-RL	0-77-108 HIGH	WAY N	IOISE F	REDIC	TION MC	DEL (9/12/20	J21)		
Scenar	io: EAP					Project N	lame:	Stoner	idge SP S	. Truck F	Rt
Road Nam	e: Dunlap Dr.					Job Nu	mber:	13265	-		
Road Segme	nt: Between Nu	levo Rd. and S	an Jaci	into Av.							
SITE	SPECIFIC IN	PUT DATA				NC	DISE I	NODE	L INPUT	S	
Highway Data				Si	ite Cond	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,589 vehicle	s					Autos:	15		
Peak Hour	Percentage:	8.08%			Med	dium Truc	:ks (2 .	Axles):	15		
Peak H	lour Volume:	209 vehicles			Hea	avy Truck	s (3+)	Axles):	15		
Ve	hicle Speed:	45 mph		V	obiclo M	liv					
Near/Far La	ne Distance:	12 feet			Vehi	cleTvpe		Dav	Evenina	Niaht	Dailv
Site Data						AL	itos:	77.5%	12.9%	9.6%	97.42%
Ba	rrior Hoight:	0.0 foot			Me	dium Tru	cks:	84.8%	4.9%	10.3%	5 1.84%
Barrier Type (0-W	all. 1-Berm):	0.0			H	leavy Tru	cks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Di	st. to Barrier:	100.0 feet						- 6- 4-	41		
Centerline Dist.	to Observer:	100.0 feet		N	oise so	Autoo	vation	S (IN 16	et)		
Barrier Distance	to Observer:	0.0 feet			Madium	Autos.	0.	207			
Observer Height (Heavy Trucks: 8 004 Grade Adjustment: 0.0								
Pa	ad Elevation:	0.0 feet			neav.	y mucks.	0.	004	Orade Ad	gasanon	. 0.0
Roa	ad Elevation:	0.0 feet		Lá	ane Equ	ivalent E	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos:	99	.945			
	Left View:	-90.0 degree	s		Mediur	n Trucks:	99	.856			
	Right View:	90.0 degree	s		Heav	y Trucks:	99	.865			
FHWA Noise Mode	el Calculation:	5									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier At	ten Be	rm Atten
Autos:	68.46	-8.75		-4.62		-1.20		-4.77	0.	000	0.000
Medium Trucks:	79.45	-25.98		-4.61		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	84.25	-29.94		-4.61		-1.20		-5.16	0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	l	Leq Eve	ening	Leq N	ight		Ldn	C	NEL
Autos:	53	.9	52.9		51.2		45.	1	53.	7	54.3
Medium Trucks:	47	.7 4	47.1		40.7		39.:	2	47.	6	47.9
Heavy Trucks:	48	.5	18.0		39.0		40.	2	48.	6	48.7
Vehicle Noise:	55	.7	54.9		51.8		47.	1	55.	6	56.1
Centerline Distanc	ce to Noise Co	ontour (in feet)									
			∟	70 dE	3A	65 dl	3A	6	U dBA	55	aBA
			Lan:		11		24		5	-	110
		Ci	IEL:		12		25	•	5)	118

	FHWA-R	D-77-108 HIG	SHWAY	NOISE	PREDI		IODEL (9/12/2	021)		
Scenar Road Nam Road Segme	Scenario: EAC Road Name: Dunlap Dr. Road Segment: Between Nuevo Rd. and San Jac SITE SPECIEIC INDUIT DATA					Project Job N	t Name: lumber:	Stoner 13265	idge SP S.	Truck F	Rt
SITE	SPECIFIC II	NPUT DATA	1			N	IOISE N	IODE	L INPUT	5	
Highway Data				5	Site Cor	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,101 vehi	cles					Autos:	15		
Peak Hour	Percentage:	8.08%			M	edium Tr	ucks (2 /	Axles):	15		
Peak H	lour Volume:	89 vehic	les		H	eavy Tru	cks (3+ A	Axles):	15		
Ve	hicle Speed:	45 mph			/ohiclo	Mix					
Near/Far La	ne Distance:	12 feet		F	Vel	nicleType	2	Dav	Evenina	Niaht	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet			N	ledium T	rucks:	84.8%	4.9%	10.3%	5 1.84%
Barrier Type (0-W	'all, 1-Berm):	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	100.0 feet		/	Voise S	ource El	levation	s (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet		-		Auto	s: 0.	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	ım Truck	s: 2.	297			
Observer Height (Above Pad):	5.0 feet			Hea	vy Truck	s: 8.	004	Grade Adj	iustmen	t: 0.0
Pa	ad Elevation:	0.0 feet		Ŀ.	_						
Roa	ad Elevation:	0.0 feet		4	ane Eq	uivalen	t Distand	ce (In :	teet)		
	Road Grade:	0.0%				Auto	s: 99.	945			
	Left View:	-90.0 degr	rees		Medil	Im Truck	s: 99.	856			
	Right View:	90.0 degr	rees		неа	vy Truck	s: 99.	865			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	/ Di	stance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	68.46	-12.4	16	-4.62	2	-1.20		-4.77	0.0	000	0.000
Medium Trucks:	79.45	-29.7	70	-4.6	1	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	84.25	-33.6	65	-4.6	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo an	d barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq E	/ening	Leq	Night		Ldn	C	NEL
Autos:	50	0.2	49.2		47.4	ļ	41.4	ļ.	50.0)	50.6
Medium Trucks:	43	3.9	43.4		37.0)	35.5	5	43.9)	44.1
Heavy Trucks:	44	1.8	44.3		35.3	3	36.5	5	44.9)	45.0
Vehicle Noise:	52	2.0	51.2		48.1		43.4	1	51.9)	52.4
Centerline Distant	e to Noise C	ontour (in fe	et)	70 4		65	dB A		C dBA	54	d B A
			l dr'	70 0	IDM 0	65	40		00 UDA 00	55	PUDA 60
			CNEL ·		0 7		13		29		67
			UNLL.		'		14		31		07

Scenari	o: EAPC					Project N	ame: Sto	neridge SP	S. Tru	ck Rt	
Road Nam	e: Dunlap Dr.					Job Nur	nber: 132	85			
Road Segmer	nt: Between Nu	ievo Rd. and S	San Jacir	nto Av	ι.						
SITE	SPECIFIC IN	PUT DATA				NO	ISE MO	DEL INPU	ITS		
Highway Data				S	Site Cond	ditions (H	ard = 10,	Soft = 15)			
Average Daily	Traffic (Adt):	2,589 vehicle	es				Aut	os: 15			
Peak Hour	Percentage:	8.08%			Med	dium Truc	ks (2 Axle	s): 15			
Peak H	our Volume:	209 vehicles	6		Hea	avy Truck:	s (3+ Axle	s): 15			
Ve	hicle Speed:	45 mph		v	/ehicle N	lix					
Near/Far Lai	ne Distance:	12 feet		F	Vehi	cleType	Da	/ Evenin	g Nig	ht	Daily
Site Data						Au	tos: 77.	5% 12.9	% 9	.6%	97.42%
Rai	rier Heiaht	0.0 feet			Me	dium Truc	:ks: 84.	8% 4.9	% 10	.3%	1.84%
Barrier Type (0-W	all. 1-Berm):	0.0			H	leavy Truc	ks: 86.	5% 2.7	% 10	.8%	0.74%
Centerline Dis	st. to Barrier:	100.0 feet			loiso So	urco Elov	atione (i	foot			
Centerline Dist.	to Observer:	100.0 feet		~	10138 30	Autoo:		i ieei)			
Barrier Distance	to Observer:	0.0 feet				Autos.	0.000				
Observer Height (Above Pad):	5.0 feet			Mealur	n Trucks:	2.297	Grade	Adjustr	nont	0.0
Pa	ad Elevation:	0.0 feet			Heav	y Trucks:	8.004	Grade	nujusii	ient.	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equ	ivalent D	istance (in feet)			
F	Road Grade:	0.0%				Autos:	99.945				
	Left View:	-90.0 degree	es		Mediun	n Trucks:	99.856				
	Right View:	90.0 degree	es		Heav	y Trucks:	99.865				
FHWA Noise Mode	el Calculation	5									
VehicleType	DEMEL		Dista					Demien	Atton	-	n Attan
	REIVIEL	Traffic Flow	Distar	nce	Finite	Road	Fresnel	Barrier	-ucn	Berr	II Allen
Autos:	68.46	Traffic Flow -8.75	Distar	nce -4.62	Finite	Road -1.20	Fresnel -4.	Barrier J 77	0.000	Berr	0.00
Autos: Medium Trucks:	68.46 79.45	Traffic Flow -8.75 -25.98	Distar	-4.62 -4.61	Finite 1	Road -1.20 -1.20	Fresnel -4.1 -4.1	Barrier 3 77 38	0.000	Berr	0.000
Autos: Medium Trucks: Heavy Trucks:	68.46 79.45 84.25	Traffic Flow -8.75 -25.98 -29.94	Distar	-4.62 -4.61 -4.61	Finite	Road -1.20 -1.20 -1.20	Fresnel -4. -4.	88 16	0.000	Berr	0.00
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise	68.46 79.45 84.25 E Levels (with	Traffic Flow -8.75 -25.98 -29.94 out Topo and	barrier a	-4.62 -4.61 -4.61 attenu	Finite	Road -1.20 -1.20 -1.20	Fresnel -4. -4.	Barrier) 77 38 16	0.000	Berr	0.00 0.00 0.00
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType	68.46 79.45 84.25 Levels (with Leq Peak Hou	Traffic Flow -8.75 -25.98 -29.94 Dut Topo and r Leq Day	barrier a	-4.62 -4.61 -4.61 attenu eq Ev	Finite	Road -1.20 -1.20 -1.20 Leq Ni	Fresnel -4.: -4.: -5. ght	Barrier 3 77 38 16 Ldn	0.000 0.000 0.000	Berr	0.00 0.00 0.00
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos:	68.46 79.45 84.25 Elevels (without Leg Peak Hout 53	Traffic Flow -8.75 -25.98 -29.94 Dut Topo and r Leq Day .9	barrier a	-4.62 -4.61 -4.61 attenu eq Ev	Finite	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresnel -4.: -5. ght 45.1	<i>Barrier 7</i> 77 38 16 <i>Ldn</i> 5	0.000 0.000 0.000 0.000 0.000	CN	0.00 0.00 0.00 <u>1EL</u> 54.3
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks:	68.46 79.45 84.25 Elevels (with Leg Peak Hou 53 47	Traffic Flow -8.75 -25.98 -29.94 Dut Topo and r Leq Day .9 .7	<i>barrier a</i> 52.9 47.1	-4.62 -4.61 -4.61 attenu eq Ev	<i>Finite</i> 2 1 1 <i>vening</i> 51.2 40.7	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresnel -4.: -4.: -5. ght 45.1 39.2	Barrier 7 77 38 16 Ldn 5 4	0.000 0.000 0.000 3.7 7.6	CN	0.00 0.00 0.00 <u>IEL</u> 54.3 47.9
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Heavy Trucks:	68.46 79.45 84.25 2 Levels (with Leq Peak Hou 53 47 48	Traffic Flow -8.75 -25.98 -29.94 Dut Topo and r Leq Day .9 .7 .5	barrier a 52.9 47.1 48.0	-4.62 -4.61 -4.61 attenu eq Ev	Finite 1 2 1 1 2 1 2 2 1 1 2 2 1 2 2 1 2 2 1 2 2 1 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresnel -4. -5. ght 45.1 39.2 40.2	Barrier 7 77 388 16 <u>Ldn</u> 5 4 4	0.000 0.000 0.000 3.7 7.6 8.6	CN	0.00 0.00 0.00 <u>IEL</u> 54.3 47.9 48.7
Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	REMEL 68.46 79.45 84.25 Levels (with Leq Peak Hou 53 47 48 55	Traffic Flow -8.75 -25.98 -29.94 Out Topo and r Leq Day 9 7 5 -7 7	barrier a 52.9 47.1 48.0 54.9	-4.62 -4.61 -4.61 attenu eq Ev	Finite 2 2 1 1 2 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 2 1	Road -1.20 -1.20 -1.20 <i>Leq Ni</i>	Fresnel -4.1 -5. ght 45.1 39.2 40.2 47.1	<u>Barrier</u> 77 38 16 <u>Ldn</u> 5 4 4 4 5	0.000 0.000 0.000 3.7 7.6 8.6 5.6	CN	0.00 0.00 0.00 <u>IEL</u> 54.: 47.: 48. 56.
Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distance	REMEL 68.46 79.45 84.25 E Levels (with Leq Peak Hou 53 47 48 55 55 te to Noise Co	Traffic Flow -8.75 -8.75 -25.98 -29.94 -29.94 Dut Topo and r Image: r Leq Day .9 .7 .5 .7 Image: r .7 .7 .7 Image: r .7 .7 .7	barrier a 52.9 47.1 48.0 54.9	nce -4.62 -4.61 -4.61 attenu eq Ev	Finite 2 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 2 1	Road -1.20 -1.20 -1.20 Leq Ni	Fresnel -4. -5. ght 45.1 39.2 40.2 47.1	<u>Ldn</u> 5 4 5	0.000 0.000 0.000 3.7 7.6 8.6 5.6	CN	0.00 0.00 0.00 1 <u>EL</u> 54. 47. 48. 56.
Autos: Medium Trucks: Heavy Trucks: Unmitigated Noise VehicleType Autos: Medium Trucks: Vehicle Noise: Centerline Distance	REMEL 68.46 79.45 84.25 b Levels (within Leq Peak Hou 53 47 48 55 te to Noise Co	Traffic Flow -8.75 -8.75 -25.98 -29.94 -2010 out Topo and r Leq Day -9 .7 .5 .7 .7	<i>barrier a</i> 52.9 47.1 48.0 54.9	nce -4.62 -4.61 -4.61 attenu eq Ev	Finite 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 1 2 1	Road -1.20 -1.20 -1.20 -1.20 Leq Ni 65 dE	Fresnel -4. -4. -5. 45.1 39.2 40.2 47.1	Ldn 5 60 dBA	0.000 0.000 0.000 3.7 7.6 8.6 5.6	Вегг СЛ	0.000 0.000 0.000 1EL 54.: 47.: 48.: 56.:
Autos: Medium Trucks: Heavy Trucks: VehicleType Autos: Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	REMEL 68.46 79.45 84.25 2 Levels (with Leg Peak Hou 53 47 48 55 55 te to Noise Co	Traffic Flow -8.75 -8.75 -25.98 -29.94 -29.94 Dut Topo and r Leq Day 9 7 -5 -5 7 -7	barrier a 52.9 47.1 48.0 54.9	nce -4.62 -4.61 -4.61 attenu eq Ev	Finite 2 2 1 1 2 1 2 1 2 1 1 2 1 1 2 1 2 1 2 1	Road -1.20 -1.20 -1.20 Leq Ni 65 dE	Fresnel -4. -4. -5. 45.1 39.2 40.2 47.1 	Earner . 77 88 16 <u>Ldn</u> 5 4 4 5 60 dBA	0.000 0.000 0.000 3.7 7.6 8.6 5.6 51	Ch 55 c	0.000 0.000 0.000 1EL 54.3 48.7 56.3 21BA 110

Monday, March 7, 2022

FHW	/A-RD-7	7-108 HIGHWAY	NOISE			ODEL (S	9/12/20	021)		
Scenario: HY (W Road Name: Dunla Road Segment: Betwe	/ithout M p Dr. en Nue	/ICP) vo Rd. and San J	acinto A	w.	Project Job Nu	Name: S umber: 1	Stoner 13265	idge SP S.	Truck F	Rt
SITE SPECIF	IC INP	UT DATA			N	OISE N	IODE	L INPUTS	3	
Highway Data				Site Con	ditions (Hard =	10, So	oft = 15)		
Average Daily Traffic (A	dt):	3,096 vehicles					Autos:	15		
Peak Hour Percenta	ge: 8	8.08%		Me	dium Tru	cks (2 A	(xles):	15		
Peak Hour Volu	me:	250 vehicles		He	avy Truc	ks (3+ A	xles):	15		
Vehicle Spe	ed:	45 mph	-	Vehicle I	Mix					
Near/Far Lane Distar	ice:	12 feet	ŀ	Vehicle	icleTvpe		Dav	Evenina	Niaht	Daily
Site Data					A	utos:	77.5%	12.9%	9.6%	6 97.42%
Barrier Heid	nht.	0.0 feet		Me	edium Tr	ucks:	84.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-Wall, 1-Bei	m);	0.0		ŀ	leavy Tr	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Dist. to Ban	rier: 1	100.0 feet	-	Noine Co	uree Ele	vetien	in to	ant)		
Centerline Dist. to Obser	ver: 1	100.0 feet	-	Noise 30	Autor	valions		el)		
Barrier Distance to Obser	ver:	0.0 feet		Modiu	Autos m Trucks	. 0.0	000			
Observer Height (Above Pa	ad):	5.0 feet		Heav	n Trucks	. 2.4	04	Grade Adi	ustman	t· 0.0
Pad Elevat	ion:	0.0 feet		Tieav	y mucka	. 0.0	04	Orade Auj	usunen	. 0.0
Road Elevat	ion:	0.0 feet		Lane Equ	uivalent	Distanc	e (in f	feet)		
Road Gra	ide:	0.0%			Autos	: 99.9	945			
Left Vi	ew:	-90.0 degrees		Mediu	m Trucks	: 99.8	356			
Right Vi	ew:	90.0 degrees		Heav	ry Trucks	: 99.8	365			
FHWA Noise Model Calcul	ations									
VehicleType REME	L T	raffic Flow Di	istance	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos: 6	68.46	-7.97	-4.6	62	-1.20		-4.77	0.0	00	0.000
Medium Trucks:	79.45	-25.21	-4.6	61	-1.20		-4.88	0.0	00	0.000
Heavy Trucks: 8	34.25	-29.16	-4.6	61	-1.20		-5.16	0.0	00	0.000
Unmitigated Noise Levels	(withou	t Topo and barri	ier attei	nuation)						
VehicleType Leq Pea	k Hour	Leq Day	Leq E	vening	Leq I	Vight		Ldn	C	NEL
Autos:	54.7	53.7		51.9		45.9	1	54.5	;	55.1
Medium Trucks:	48.4	47.9		41.5		39.9		48.4		48.0
Heavy Trucks:	49.3	48.8		39.7		41.0		49.4		49.
Vehicle Noise:	56.5	55.7		52.5		47.9		56.4		56.9
Centerline Distance to Noi	se Cont	tour (in feet)								
			70	dBA	65 0	IBA	6	60 dBA	55	5 dBA
		Ldn:		12		27		58		124
		CNEL:		13		29		62		133
		CNEL:		13		29		62		133

	FHWA-RD	D-77-108 HIGH	WAY NO	SE PREDI		DDEL (S	0/12/20	21)		
Scenari Road Nam Road Segmer	o: HYP (Witho e: Dunlap Dr. ht: Between No	out MCP) uevo Rd. and S	an Jacint	o Av.	Project I Job Nu	Vame: S mber: 1	Stoneri 3265	dge SP S.	Truck R	t
SITE S	SPECIFIC IN	IPUT DATA			N	DISE N	IODE	L INPUTS	5	
Highway Data				Site Co.	nditions (Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	4,784 vehicle	s				Autos:	15		
Peak Hour	Percentage:	8.08%		М	edium Tru	cks (2 A	xles):	15		
Peak H	our Volume:	387 vehicles	5	н	eavy Truc	ks (3+ A	xles):	15		
Vel	hicle Speed:	45 mph		Vahiala	Mise					
Near/Far Lar	ne Distance:	12 feet		Venicle	NIIX NicleType	1	Dav	Evening	Niaht	Daily
Site Data					A	utos:	77.5%	12.9%	9.6%	97.42%
Box	viar Hainhti	0.0 feet		٨	ledium Tri	icks:	84.8%	4.9%	10.3%	1.84%
Bar Parrier Type (0 W	ner Height:	0.0 feet			Heavy Tri	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	all, 1-Dellin).	100.0 feet								
Centerline Dist	o Observer:	100.0 feet		Noise S	ource Ele	vations	; (in fe	et)		
Barrier Distance I	o Observer:	0.0 feet			Autos	: 0.0	000			
Observer Height (Above Pad):	5.0 feet		Media	Im Trucks	: 2.2	297			
Pa	d Elevation:	0.0 feet		Hea	vy Trucks	: 8.0	004	Grade Adj	ustment	0.0
Roa	d Elevation:	0.0 feet		Lane Ec	uivalent	Distanc	e (in f	eet)		
F	Road Grade:	0.0%			Autos	99.9	945			
	Left View:	-90.0 degree	s	Media	ım Trucks	99.8	356			
	Right View:	90.0 degree	s	Hea	vy Trucks	99.8	365			
FHWA Noise Mode	I Calculation:	s								
VehicleType	REMEL	Traffic Flow	Distanc	ce Finite	e Road	Fresn	el I	Barrier Atte	n Ber	m Atten
Autos:	68.46	-6.08	-	4.62	-1.20		-4.77	0.0	00	0.000
Medium Trucks:	79.45	-23.32	-	4.61	-1.20		-4.88	0.0	00	0.000
Heavy Trucks:	84.25	-27.27	-	4.61	-1.20		-5.16	0.0	00	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier at	tenuation)						
VehicleType	Leq Peak Hou	ir Leq Day	Lei	q Evening	Leq N	light		Ldn	CI	VEL
Autos:	56	.6	55.6	53.8	3	47.8		56.4		57.0
Medium Trucks:	50	.3	49.7	43.4	1	41.8		50.3		50.5
Heavy Trucks:	51	.2	50.7	41.6	6	42.9		51.2		51.4
Vehicle Noise:	58	.4	57.6	54.4	1	49.8		58.3		58.8
Centerline Distanc	e to Noise Co	ontour (in feet)								
				70 dBA	65 d	BA	6	0 dBA	55	dBA
			Ldn:	17		36		77		166
		CI	VEL:	18		38		83		178

	FHWA-R	D-77-108 HIGH	WAY I	NOISE F	REDIC		DEL (9/1	2/2021)	_	_
Scenar Road Nan Road Segme	io: EA ne: San Jacint nt: Between N	o Av. Iurrieta Rd. and	d Redla	nds Av.		Project Na Job Nun	ame: Sto nber: 132	oneridge SP S 265	. Truck R	tt
SITE	SPECIFIC I	NPUT DATA				NO	ISE MO	DEL INPUT	S	
Highway Data				S	ite Con	ditions (H	ard = 10	, Soft = 15)		
Average Daily	Traffic (Adt):	17,666 vehicl	es				Au	tos: 15		
Peak Hour	Percentage:	8.08%			Me	dium Truck	ks (2 Axle	es): 15		
Peak F	lour Volume:	1,427 vehicle	s		He	avy Trucks	6 (3+ Axle	es): 15		
Ve	hicle Speed:	55 mph		V	hicle	Mix				
Near/Far La	ne Distance:	12 feet			Veh	icleType	Da	evening	Night	Daily
Site Data						Au	tos: 77	.5% 12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			М	edium Truc	:ks: 84	.8% 4.9%	10.3%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			1	Heavy Truc	:ks: 86	.5% 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		N	oise So	ource Elev	ations (i	in feet)		
Centerline Dist.	to Observer:	100.0 feet				Autos:	0.000)		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.297	7		
Observer Height	(Above Pad):	5.0 feet			Hear	/y Trucks:	8.004	4 Grade Ad	ljustment	: 0.0
P	ad Elevation:	0.0 feet				, 		(in fr + 4)		
Ro	ad Elevation:	0.0 feet		La	ane Eq	uivalent D	Istance	(in reet)		
	Road Grade:	0.0%			Marthe	Autos:	99.94	5		
	Left View:	-90.0 degre	es		Mealu	m Trucks:	99.85	5		
	Rigili view.	90.0 degre	es		i icai	ly muchs.	99.00	5		
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos:	71.78	-1.28	3	-4.62		-1.20	-4.	77 0.	000	0.000
Medium Trucks:	82.40	-18.52	2	-4.61		-1.20	-4.	.88 0.	000	0.000
Heavy Trucks:	86.40	-22.47		-4.61		-1.20	-5.	.16 0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Da	y	Leq Eve	ening	Leq Nig	ght	Ldn	C	NEL
Autos:	64	1.7	63.7		61.9		55.9	64.	5	65.1
Medium Trucks:	58	3.1	57.5		51.1		49.6	58.	1	58.3
Heavy Trucks:	58	3.1	57.6		48.6		49.8	58.	2	58.3
Vehicle Noise:	66	5.3	65.4		62.5		57.6	66.	2	66.6
Centerline Distant	ce to Noise C	ontour (in fee	t)						-	
			L	70 dE	BA	65 dB	A	60 dBA	55	dBA
			Ldn:		55		119	25	(7	554
		C	NEL:		60		128	27	r	596

	FHWA-RD	-77-108 HIGH	WAY NO	DISE	PREDIC	TION MO	DDEL (S	9/12/2	021)		
Scenari	o: EAP					Project	Name: S	Stoner	idge SP S.	Truck F	Rt
Road Nam	e: San Jacinto	Av.				Job NL	imber: 1	13265	-		
Road Segmer	t: Between M	urrieta Rd. and	Redland	ds Av.							
SITE	SPECIFIC IN	PUT DATA				N	OISE N	IODE		s	
Highway Data				S	ite Con	ditions (Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	19,154 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	8.08%			Me	dium Tru	cks (2 A	(xles)	15		
Peak H	our Volume:	1,548 vehicles	\$		He	avy Truc	ks (3+ A	(xles):	15		
Vel	nicle Speed:	55 mph		v	ehicle N	lix					
Near/Far Lar	ne Distance:	12 feet		F	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
Bar	rier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	t. to Barrier:	100.0 feet			loise So	urco Ele	vations	in fa	oof)		
Centerline Dist. I	to Observer:	100.0 feet		-	10/30 00	Autos	. 0.0	000			
Barrier Distance	o Observer:	0.0 feet			Mediur	n Trucks	. 0.0	207			
Observer Height (J	Above Pad):	5.0 feet			Heav	n Trucks	. 2.4	104	Grade Ad	liustmen	+ 0.0
Pa	d Elevation:	0.0 feet			Tieav	y mucks	. 0.0	JU4	0,000,10	Jaounon	0.0
Roa	d Elevation:	0.0 feet		L	ane Equ	ivalent	Distanc	e (in i	feet)		
F	Road Grade:	0.0%				Autos	: 99.9	945			
	Left View:	-90.0 degree	s		Mediur	n Trucks	: 99.	356			
	Right View:	90.0 degree	es		Heav	y Trucks	99.	865			
FHWA Noise Mode	Calculations	;									
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresn	el	Barrier Att	en Bei	rm Atten
Autos:	71.78	-0.93		-4.62	2	-1.20		-4.77	0.0	000	0.000
Medium Trucks:	82.40	-18.16		-4.61	I	-1.20		-4.88	0.0	000	0.00
Heavy Trucks:	86.40	-22.12		-4.61	I	-1.20		-5.16	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenı	uation)						
VehicleType	Leq Peak Hou	r Leq Day	L	eq Ev	ening	Leq I	light		Ldn	С	NEL
Autos:	65	.0	64.1		62.3		56.2		64.9	9	65.
Medium Trucks:	58	.4	57.8		51.5		49.9)	58.4	4	58.
Heavy Trucks:	58	.5	58.0		48.9		50.2		58.	5	58.
		6	65.8		62.8		58.0	1	66.	5	67.
Vehicle Noise:	66							_			
Vehicle Noise: Centerline Distanc	66 e to Noise Co	ntour (in feet,						r		1	
Vehicle Noise: Centerline Distanc	66 e to Noise Co	ntour (in feet,		70 d	BA	65 a	BA	e	60 dBA	55	dBA
Vehicle Noise: Centerline Distanc	66 e to Noise Co	ntour (in feet,	Ldn:	70 d	'BA 59	65 c	BA 126	ť	60 dBA 272	55	dBA 585

Monday, March 7, 2022

	FHWA-RI	D-77-108 HIGH\	VAY NOI	SE PREDI		IODEL (9	/12/20	021)		
Scena Road Nar Road Segme	rio: EAC ne: San Jacinto ent: Between M	o Av. urrieta Rd. and	Redlands	Av.	Project Job N	Name: S lumber: 1	toneri 3265	dge SP S.	Truck R	t
SITE	SPECIFIC IN	IPUT DATA			N	IOISE M	ODE	L INPUTS	3	
Highway Data				Site Co	nditions	(Hard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	18,916vehicle	5			A	utos:	15		
Peak Hou	r Percentage:	8.08%		M	edium Tr	ucks (2 A	xles):	15		
Peak I	Hour Volume:	1,528 vehicles		н	eavy Tru	cks (3+ A.	xles):	15		
V	ehicle Speed:	55 mph		Vehicle	Mix					
Near/Far La	ane Distance:	12 feet		Venicle	hicleType		Dav	Evenina	Niaht	Dailv
Site Data						Autos: 7	77.5%	12.9%	9.6%	97.429
B	arriar Haight	0.0 feet		/	Aedium T	rucks: 8	34.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	Vall 1-Rerm)	0.0			Heavy T	rucks: 8	36.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		Maine 6			6	- 41		
Centerline Dist.	to Observer:	100.0 feet		Noise S	ource El	evations	(In re	et)		
Barrier Distance	to Observer:	0.0 feet		14-15	Auto	s: 0.0	00			
Observer Height (Above Pad): 5.0 feet				Medi	um Truck	S: 2.2	97	Crada Adi	untmont	
F	ad Elevation:	0.0 feet		nea	ivy muck	5. 0.0	04	Grade Auj	usunen	0.0
Ro	ad Elevation:	0.0 feet		Lane E	quivalent	Distance	e (in f	eet)		
	Road Grade:	0.0%			Auto	s: 99.9	45			
	Left View:	-90.0 degree	s	Medi	um Truck	s: 99.8	56			
	Right View:	90.0 degree	S	Hea	ivy Truck	s: 99.8	65			
FHWA Noise Moo	lel Calculation	s								
VehicleType	REMEL	Traffic Flow	Distanc	e Finit	e Road	Fresne	e/ .	Barrier Atte	en Ber	m Atten
Autos	71.78	-0.98	-	4.62	-1.20	-	4.77	0.0	00	0.00
Medium Trucks	82.40	-18.22	-	4.61	-1.20	-	4.88	0.0	00	0.00
Heavy Trucks	86.40	-22.17	-	4.61	-1.20	-	5.16	0.0	00	0.00
Unmitigated Nois	e Levels (with	out Topo and b	arrier at	tenuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Leo	q Evening	Leq	Night		Ldn	CI	VEL
Autos	65	i.0 6	4.0	62.	2	56.2		64.8	3	65.
Medium Trucks	58	.4 5	7.8	51.	4	49.9		58.3	5	58.0
Heavy Trucks	58	1.4 5	7.9	48.	9	50.1		58.5	5	58.
Vehicle Noise	66	6.6 6	5.7	62.	В	57.9		66.5	5	66.
Centerline Distan	ce to Noise Co	ontour (in feet)								-
			1	70 dBA	65	dBA	6	0 dBA	55	dBA
		L	.dn:	58		125		269		580
		CN	EL:	62 134 290 6			624			

	THWAND	-//-100 migh	WAT	NOISE	FREDIC		LC (9/12	2021)		
Scenar	io: EAPC					Project Na	me: Ston	eridge SP S.	Truck R	t
Road Nam	e: San Jacinto	Av.				Job Num	ber: 1326	5		
Road Segme	nt: Between Mu	rrieta Rd. and	Redla	inds Av.						
SITE	SPECIFIC IN	PUT DATA				NOI	SE MOD	EL INPUT	s	
Highway Data				S	ite Cond	litions (Ha	rd = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	20,404 vehicle	s				Auto	s: 15		
Peak Hour	Percentage:	8.08%			Med	lium Truck	s (2 Axles): 15		
Peak H	lour Volume:	1,649 vehicles	5		Hea	avy Trucks	(3+ Axles): 15		
Ve	hicle Speed:	55 mph		v	ehicle N	lix				
Near/Far La	ne Distance:	12 feet		-	Vehi	cleType	Day	Evening	Night	Daily
Site Data						Auto	os: 77.5	% 12.9%	9.6%	97.42%
Ba	rrier Height	0.0 feet			Me	dium Truc	ks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			н	leavy Truc	ks: 86.5	% 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet			laise Sa	urco Eleva	tions (in	foot)		
Centerline Dist.	to Observer:	100.0 feet		-	0130 00	Autos:	0 000	1000		
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks	2 207			
Observer Height	(Above Pad):	5.0 feet			Heav	v Trucks:	8 004	Grade Ad	iustment	0.0
P	ad Elevation:	0.0 feet		_	nour,	, maono.	0.001			
Ro	ad Elevation:	0.0 feet		L	ane Equ	ivalent Di	stance (i	n feet)		
	Road Grade:	0.0%				Autos:	99.945			
	Left View:	-90.0 degree	s		Mediun	n Trucks:	99.856			
	Right View:	90.0 degree	s		Heav	y Trucks:	99.865			
FHWA Noise Mod	el Calculations									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-0.65		-4.62	2	-1.20	-4.7	7 0.0	000	0.000
Medium Trucks:	82.40	-17.89		-4.61		-1.20	-4.8	8 0.0	000	0.000
Heavy Trucks:	86.40	-21.85		-4.61		-1.20	-5.1	5 0.0	000	0.000
Unmitigated Noise	e Levels (witho	ut Topo and	barrie	r attenı	uation)					
VehicleType	Leq Peak Hour	· Leq Day		Leq Ev	rening	Leq Nig	ht	Ldn	CI	NEL
Autos:	65.	3	64.3		62.6		56.5	65.1	1	65.7
Medium Trucks:	58.	7	58.1		51.8		50.2	58.	7	58.9
Heavy Trucks:	58.	7	58.2		49.2		50.5	58.8	3	58.9
Vehicle Noise:	66.	9	66.1		63.1		58.2	66.8	3	67.3
Centerline Distant	ce to Noise Cor	ntour (in feet)								
				70 d	BA	65 dB/	4	60 dBA	55	dBA
			Ldn:		61		131	283		610
		CI	VEL:		66		141	305		656

FHV	VA-RD-	77-108 HIGH	WAY	NOISE	PREDI		DEL (9/1	2/2021)			
Scenario: HY (V Road Name: San J Road Segment: Betwe	Vithout lacinto / een Mur	MCP) Av. rrieta Rd. and	Redla	ands Av		Project N Job Nur	ame: Sto nber: 13	oneridge SP 265	S. Tru	ck Rt	
SITE SPECIF	IC INP	UT DATA				NO	ISE MO	DEL INPU	TS		
Highway Data				1	Site Cor	nditions (H	ard = 10), Soft = 15)			
Average Daily Traffic (A	Adt):	17,328 vehicle	s				Au	tos: 15			
Peak Hour Percenta	age:	8.08%			Me	edium Truc	ks (2 Axi	es): 15			
Peak Hour Volu	me: 1	,400 vehicles	6		He	eavy Trucks	s (3+ Axi	es): 15			
Vehicle Spe	eed:	55 mph			/ehicle	Mix					
Near/Far Lane Dista	nce:	12 feet		F	Veh	nicleType	Da	ay Evenin	g Nig	ht	Daily
Site Data						Au	tos: 77	.5% 12.9	% 9	.6%	97.42%
Barrier Hei	ght:	0.0 feet			M	ledium Truc	cks: 84	4.9%	% 10	.3%	1.84%
Barrier Type (0-Wall, 1-Be	rm):	0.0				Heavy Truc	cks: 86	6.5% 2.79	% 10	.8%	0.74%
Centerline Dist. to Bar	rier:	100.0 feet		7	Voise S	ource Elev	ations (in feet)			
Centerline Dist. to Obser	ver:	100.0 feet		F		Autos:	0.00	0			
Barrier Distance to Obser	ver:	0.0 feet			Mediu	m Trucks:	2.29	7			
Observer Height (Above P	ad):	5.0 feet			Hea	vy Trucks:	8.00	4 Grade /	Adjustri	nent: (0.0
Pad Eleva	tion:	0.0 feet		H	ana Fa	wivelent D	iotonoo	(in feet)			
Road Eleva	tion:	0.0 feet		4	ane Eq	Autoo:	on or				
Road Gr	ade:	0.0%			Modiu	MULOS.	99.94	0 6			
Right V	iew. iew:	-90.0 degree	25		Hea	vv Trucks:	99.00	5			
rught v	iew.	50.0 degree	50		nea	ry maono.	55.00	0			
FHWA Noise Model Calcul	lations										
VehicleType REMI	EL	Traffic Flow	Dis	stance	Finite	Road	Fresnel	Barrier /	Atten	Berm	Atten
Autos:	71.78	-1.36		-4.6	2	-1.20	-4	.77	0.000		0.000
Medium Trucks:	82.40	-18.60		-4.6	1	-1.20	-4	.88	0.000		0.000
neavy flucks.	00.40	-22.30		-4.0	1	-1.20	-0	.10	0.000		0.000
Unmitigated Noise Levels	(withou	It Topo and	barrie	er atten	uation)						
Venicle I ype Leq Pea	K HOUR	Leq Day		Leq E	/ening	Leq NI	gnt	Lan		CN	
Medium Trucks:	64.0 E0.0)	03.0 E7.4		61.8	,	30.0 40.5	5	4.4 0.0		E0.0
Heavy Trucks:	58.0	,)	57.5		48.5		49.5	5	0.0 8 1		58.2
Vehicle Noise:	66.2	2	65.3		62.4	,	57.5	6	6.1		66.5
Centerline Distance to No	ise Con	tour (in feet						-			-
Contentine Distance to No	00 001	iou. miee,		70 0	1BA	65 dB	A	60 dBA		55 d	BA
			Ldn:		55		118	2	54		547
		Ci	VEL:		59		127	2	73		589

	FHWA-RD	0-77-108 HIGH	WAYN	OISE	PREDIC	TION M	ODEL (9	/12/20	021)			
Scenari	o: HYP (Witho	out MCP)			Project Name: Stoneridge SP S. Truck Rt							
Road Nam	e: San Jacinto	Av.				Job Nu	imber: 1	3265	-			
Road Segmer	nt: Between M	urrieta Rd. and	Redlan	ids Av								
SITE	SPECIFIC IN	PUT DATA				N	OISE N	ODE		s		
Highway Data				5	Site Con	ditions (Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	18,816vehicle	es				A	Autos:	15			
Peak Hour	Percentage:	8.08%			Me	dium Tru	cks (2 A	xles):	15			
Peak H	our Volume:	1,520 vehicles	6		He	avy Truc	ks (3+ A	xles):	15			
Vei	hicle Speed:	55 mph		1	/ehicle N	Nix						
Near/Far Lai	ne Distance:	12 feet			Vehi	cleType	1	Day	Evening	Night	Daily	
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%	
Rai	rier Heiaht	0.0 feet			Me	edium Tri	ucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	all. 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	t. to Barrier:	100.0 feet			laisa Sa	urco El	wationa	(in f	nof)			
Centerline Dist.	to Observer:	100.0 feet		,	voise so	Autoo	valions	00	el)			
Barrier Distance	to Observer:	0.0 feet				Autos	. 0.0	00				
Observer Height (Above Pad):	5.0 feet			Mediur	TI Trucks	. 2.2	97	Grade Ad	iustment		
Pa	ad Elevation:	0.0 feet			neav	y mucks	. 0.0	104	Orade Au	usinen	0.0	
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distanc	e (in f	feet)			
F	Road Grade:	0.0%				Autos	: 99.9	945				
	Left View:	-90.0 degree	es		Mediur	n Trucks	99.8	856				
	Right View:	90.0 degree	es		Heav	y Trucks	99.8	865				
FHWA Noise Mode	Calculation:	5									-	
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten	
Autos:	71.78	-1.00		-4.62	2	-1.20		4.77	0.0	000	0.000	
Medium Trucks:	82.40	-18.24		-4.61	1	-1.20		4.88	0.0	000	0.000	
Heavy Trucks:	86.40	-22.20		-4.61	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrier	atten	uation)							
VehicleType	Leq Peak Hou	r Leq Day	' L	.eq Ev	/ening	Leq I	light		Ldn	CI	VEL	
Autos:	65	.0	64.0		62.2		56.2		64.8	3	65.4	
Medium Trucks:	58	.4	57.8		51.4		49.9		58.3	3	58.6	
Heavy Trucks:	58	.4	57.9		48.9		50.1		58.	5	58.6	
Vehicle Noise:	66	.5	65.7		62.8		57.9		66.4	4	66.9	
	- A- N-i O-	ntour (in feet									-	
Centerline Distanc	e to Noise Co											
Centerline Distanc	e to Noise Co			70 a	iBA	65 a	IBA	6	60 dBA	55	UDA	
Centerline Distanc	e to Noise Co		Ldn:	70 a	<i>IBA</i> 58	65 a	IBA 125	6	0 dBA 268	55	578	

Monday, March 7, 2022

	FHWA-RD	-77-108 HIGH\	VAY NO	DISE	PREDIC	TION M	ODEL (9	9/12/2	021)		
Scenario Road Name Road Segmen	o: EA 9: Redlands A t: South of Sa	v. an Jacinto Av.				Project Job N	Name: S umber: ·	Stoner 13265	idge SP S.	Truck	Rt
SITE S	PECIFIC IN	PUT DATA				N	OISE N	IODE		s	
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	32,718vehicle	5				,	Autos:	15		
Peak Hour I	Percentage:	8.08%			Mee	dium Tru	icks (2 A	Axles):	15		
Peak Ho	our Volume:	2,644 vehicles			Hei	avy Truc	:ks (3+ A	(xles	15		
Veh	nicle Speed:	55 mph		v	ehicle N	lix					
Near/Far Lar	e Distance:	12 feet		Ē	Vehi	cleType		Day	Evening	Night	Daily
Site Data						4	Autos:	77.5%	12.9%	9.69	% 97.42%
Bar	rier Heiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3	% 1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8	% 0.74%
Centerline Dis	t. to Barrier:	100.0 feet		N	loise So	urce El	evation	: (in fe	pet)		
Centerline Dist. t	o Observer:	100.0 feet		Ë	0.00 00	Autor	e' 0 (200			
Barrier Distance t	o Observer:	0.0 feet			Mediur	n Trucki	5. 0.1 5. 2'	207			
Observer Height (/	Above Pad):	5.0 feet			Heav	v Trucki	5. 2.1 5 [.] 81	104	Grade Ad	iustmer	nt: 0.0
Pa	d Elevation:	0.0 feet			mour	,	. 0.1				
Roa	d Elevation:	0.0 feet		L	ane Equ	iivalent	Distanc	e (in t	feet)		
F	Road Grade:	0.0%				Autos	s: 99.	945			
	Left View:	-90.0 degree	5		Mediur	n Trucks	s: 99.	856			
	Right View:	90.0 degree	S		Heav	y Trucks	s: 99.	865			
FHWA Noise Mode	I Calculations	;									
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresn	el	Barrier Att	en Be	erm Atten
Autos:	71.78	1.40		-4.62		-1.20		-4.77	0.0	000	0.000
Medium Trucks:	82.40	-15.84		-4.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-19.79		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and b	arrier a	attenu	ation)						-
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Ev	ening	Leq	Night		Ldn	(CNEL
Autos:	67	.4 6	6.4		64.6		58.6	5	67.2	2	67.8
Medium Trucks:	60	.8 6	0.2		53.8		52.3	5	60.7	7	61.0
Heavy Trucks:	60	.8 6	0.3		51.3		52.5	5	60.9	9	61.0
Vehicle Noise:	68	.9 6	8.1		65.2		60.3	5	68.8	3	69.3
Centerline Distanc	e to Noise Co	ntour (in feet)									
				70 di	BA	65 (dBA	6	60 dBA	5	5 dBA
		L	.dn:		84		180		388		836
		CN	EL:		90		194		417		899

	FRWA-KL		WAT	NUISE	PREDIC			9/12/2	021)		
Scenar	io: EAP					Project	Name: S	Stoner	idge SP S.	Truck I	Rt
Road Nam	e: Redlands A	.v.				Job N	umber: 1	13265			
Road Segme	nt: South of Sa	an Jacinto Av.									
SITE	SPECIFIC IN	PUT DATA				N	OISE N	IODE		s	
Highway Data				S	Site Con	ditions	(Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	34,606 vehicle	es					Autos:	15		
Peak Hour	Percentage:	8.08%			Me	dium Tru	icks (2 A	(xles)	15		
Peak H	lour Volume:	2,796 vehicles	6		He	avy Truc	:ks (3+ A	(xles):	15		
Ve	hicle Speed:	55 mph		1	/ehicle N	lix					
Near/Far La	ne Distance:	12 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	6 97.42%
Ba	rrior Hoight:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	6 1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Di	st. to Barrier:	100.0 feet			laisa Sa	urco El	wation	(in f	nof)		
Centerline Dist.	to Observer:	100.0 feet		,	10/36 30	Autor		000	eey		
Barrier Distance	to Observer:	0.0 feet			Madiu	Autos	s. 0.0	007			
Observer Height	(Above Pad):	5.0 feet			Wealur	n Trucks	s. 2.4	297	Grade Ad	iuctmor	+ 0.0
P	ad Elevation:	0.0 feet			neav	y mucks	s. 0.0	JU4	Grade Au	lasunei	1. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Equ	iivalent	Distanc	e (in i	feet)		
	Road Grade:	0.0%				Autos	s: 99.9	945			
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 99.	856			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 99.6	865			
FHWA Noise Mod	el Calculation:	5									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresn	el	Barrier Att	en Be	erm Atten
Autos:	71.78	1.64		-4.62	2	-1.20		-4.77	0.0	000	0.000
Medium Trucks:	82.40	-15.60		-4.61	1	-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-19.55		-4.61	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	r	Leq Ev	/ening	Leq I	Night		Ldn	(CNEL
Autos:	67	.6	66.6		64.9		58.8		67.4	4	68.0
Medium Trucks:	61	.0	60.4		54.1		52.5		61.0)	61.2
Heavy Trucks:	61	.0	60.5		51.5		52.8		61.	1	61.2
Vehicle Noise:	69	.2	68.4		65.4		60.5		69.	1	69.6
Centerline Distant	ce to Noise Co	ontour (in feet)							-	
			L	70 a	IBA	65 0	JBA	6	о ава	5	5 aBA
		-	Lan:		87		187		403		868
		Ci	VEL:		93		201		433		934

	FHWA-R	D-77-108 HIGH	WAY N	OISE P	REDIC	CTION MC	DDEL (9/12/2	021)		
Scenai Road Nan Road Segme	rio: EAC ne: Redlands A ent: South of S	λν. an Jacinto Av.				Project N Job Nu	lame: \$ mber: `	Stoner 13265	idge SP S.	Truck F	Rt
SITE	SPECIFIC II	IPUT DATA				N	DISE N	IODE	L INPUT	5	
Highway Data				Si	te Con	ditions (F	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	38,790 vehicl	es				,	Autos:	15		
Peak Hour	Percentage:	8.08%			Me	dium Truc	cks (2 A	Axles):	15		
Peak H	Hour Volume:	3,134 vehicle	s		He	avy Truck	(S (3+ A	(xles	15		
Ve	ehicle Speed:	55 mph		Ve	hicle	Mix					
Near/Far La	ane Distance:	12 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Heiaht:	0.0 feet			М	edium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	Vall, 1-Berm):	0.0			1	Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	ist. to Barrier:	100.0 feet		N	oise So	ource Ele	vations	s (in fe	et)		
Centerline Dist.	to Observer:	100.0 feet				Autos	0.0	200			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	2.	297			
Observer Height	(Above Pad):	5.0 feet			Heav	/v Trucks:	8.0	004	Grade Adj	iustmen	t: 0.0
P	ad Elevation:	0.0 feet		-							
Ro	ad Elevation:	0.0 feet		La	ine Eq	uivalent L	Jistand	e (in i	reet)		
	Road Grade:	0.0%				Autos:	99.	945			
	Left View:	-90.0 degre	es		Meaiu	m Trucks:	99.	856			
	Right View:	90.0 degre	es		Heat	/y Trucks:	99.	865			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el	Barrier Atte	en Be	rm Atten
Autos:	71.78	2.14		-4.62		-1.20		-4.77	0.0	000	0.000
Medium Trucks:	82.40	-15.10		-4.61		-1.20		-4.88	0.0	000	0.000
Heavy Trucks:	86.40	-19.06		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	/ L	eq Eve	ning	Leq N	light		Ldn	C	NEL
Autos:	68	3.1	67.1		65.4		59.3	5	67.9	9	68.5
Medium Trucks:	61	.5	60.9		54.6		53.0)	61.5	5	61.7
Heavy Trucks:	61	.5	61.0		52.0		53.2	2	61.6	3	61.7
Vehicle Noise:	69	9.7	68.8		65.9		61.0)	69.6	6	70.0
Centerline Distan	ce to Noise C	ontour (in feel)								
				70 dE	BA	65 di	BA	6	60 dBA	55	i dBA
			Ldn:		94		202		435		936
		С	NEL:		101		217		468		1,007

	FHWA-RD	-77-108 HIGH	NAY NO	OISE	PREDIC	TION MO	DEL (9	/12/20	021)				
Scenario: EAPC					Project Name: Stoneridge SP S. Truck Rt								
Road Name: Redlands Av.					Job Number: 13265								
Road Segmen	t: South of Sa	an Jacinto Av.											
SITES		NOISE MODEL INPUTS											
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	40,678vehicle	s				A	utos:	15				
Peak Hour I	Percentage:	8.08%			Medium Trucks (2 Axles): 15								
Peak Hour Volume: 3,287 vehicles					Heavy Trucks (3+ Axles): 15								
Vel	nicle Speed:	55 mph		V	Vehicle Mix								
Near/Far Lane Distance: 12 feet					Vehi	cleType	L	Day	Evening	Night	Daily		
Site Data						Au	tos:	7.5%	12.9%	9.6%	97.42%		
Barrier Height: 0.0 feet					Me	dium Tru	cks: 8	34.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm): 0.0					H	leavy Tru	cks: 8	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	t. to Barrier:	100.0 feet			oico So	urco Elos	atione	(in fo	of				
Centerline Dist. t	o Observer:	100.0 feet		14	Autos: 0.000								
Barrier Distance to Observer: 0.0 feet					Medium Trucks: 2,207								
Observer Height (Above Pad): 5.0 feet					Heavy Trucks: 2.251								
Pa	d Elevation:	0.0 feet			neav	y macks.	0.0	04			0.0		
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)								
Road Grade: 0.0%					Autos: 99.945								
Left View: -90.0 degrees				Medium Trucks: 99.856									
Right View: 90.0 degrees					Heavy Trucks: 99.865								
FHWA Noise Mode	I Calculations	;											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	e/ .	Barrier Att	en Ber	m Atten		
Autos:	71.78	2.35		-4.62		-1.20		4.77	0.0	000	0.000		
Medium Trucks:	82.40	-14.89		-4.61		-1.20	-4.88		0.0	000	0.000		
Heavy Trucks:	86.40 -18.85			-4.61	.61 -1.20 -5.16 0.000				000	0.00			
Unmitigated Noise	Levels (witho	out Topo and I	oarrier a	attenu	ation)						-		
VehicleType	Leq Peak Hour Leq Day		L	eq Evening		Leq Night			Ldn	CI	CNEL		
Autos:	68.3		67.3	65.6		59.5			68.1		68.		
Medium Trucks:	61.7		51.1	5		53.2			61.7		61.		
Heavy Irucks: 61.7		61.2			52.2	53.5			61.8		61.		
Vehicle Noise:	69.	.9 (59.1		66.1		61.2		69.8	3	70.3		
Centerline Distanc	e to Noise Co	ntour (in feet)											
				70 di	BA	65 dE	SA 000	6	U dBA	55	aBA		
		1	_an:		97		208		449		967		
		~					004		100				

Monday, March 7, 2022

	FHWA-RD	0-77-108	HIGHWA	Y NOISE	E PREDIC	TION MC	DEL (9/12/2	021)						
Scenario: HY (Without MCP) Road Name: Redlands Av. Road Segment: South of San Jacinto Av.						Project Name: Stoneridge SP S. Truck Rt Job Number: 13265									
SITE S	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS								
Highway Data					Site Con	ditions (F	lard =	10, Sc	oft = 15)		-				
Average Daily	Traffic (Adt):	31,590v	ehicles				,	Autos:	15						
Peak Hour	Percentage:	8.08%			Medium Trucks (2 Axles): 15										
Peak H	our Volume:	2,552 ve	hicles		He	avy Truck	(3+ A	(xles	15						
Vel	nicle Speed:	55 m	ph	-	Vehicle	Mix					-				
Near/Far Lar	ne Distance:	12 fe	et	-	Venicle	icleTvpe		Dav	Evenina	Niaht	Daily				
Site Data						A	utos:	77.5%	12.9%	9.6%	6 97.429				
Box	riar Haight	0.0.6	t		М	edium Tru	icks:	84.8%	4.9%	10.39	6 1.849				
Ddi Barrier Tyne (0-W	all 1-Berm)	0.01	eel			leavy Tru	icks:	86.5%	2.7%	10.8%	6 0.749				
Centerline Dis	t to Barrier	100.0 f	eet	-											
Centerline Dist. to Observer: 100.0 feet				-	Noise Source Elevations (in feet)										
Barrier Distance t	o Observer:	0.0 f	eet			Autos:	0.0	000							
Observer Height (Observer Height (Above Pad): 5.0 feet				Medium Trucks: 2.297										
Pa	d Elevation:	0.0 f	eet		Hear	y Trucks:	8.0	004	Grade Ad	justmen	<i>it:</i> 0.0				
Roa	d Elevation:	0.0 f	eet		Lane Eq	uivalent I	Distand	e (in i	feet)		-				
F	Road Grade:	0.0%		ľ		Autos:	99.	945			-				
	Left View:	-90.0 c	legrees		Mediu	m Trucks:	99.	856							
	Right View:	90.0 c	legrees		Hear	y Trucks:	99.	865							
FHWA Noise Mode	I Calculation:	5													
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fresn	el	Barrier Att	en Be	erm Atten				
Autos:	71.78		1.25	-4.6	52	-1.20		-4.77	0.0	000	0.00				
Medium Trucks:	82.40	-1	15.99	-4.6	51	-1.20		-4.88	0.0	000	0.00				
Heavy Trucks:	86.40	-*	19.95	-4.6	51	-1.20		-5.16	0.0	000	0.00				
Unmitigated Noise	Levels (with	out Topo	and barr	rier atter	nuation)										
VehicleType	Leq Peak Hou	r Le	q Day	Leq E	vening	Leq N	light		Ldn	C	SNEL				
Autos:	67	.2	66.2	-	64.5		58.4	Ļ	67.	D	67.				
Medium Trucks:	60	.6	60.0)	53.7		52.1		60.	6	60.				
Heavy Trucks:	60	.6	60.1		51.1		52.4	-	60.	7	60.				
Vehicle Noise:	68	.8	68.0)	65.0		60.1		68.	7	69.				
Centerline Distanc	e to Noise Co	ontour (ir	n feet)	70											
			1.2	70	aBA	65 di	5A	6	o dBA	5	o dBA				
			Ldn.		82		1/6		379	1	817				
			CNEL:		88		189		408	,	875				

	FHWA-RI	0-77-108 HIGHW	AY NOIS	SE PREDIC	CTION MC	DEL (9	/12/20	21)							
Scenari Road Nam Road Segmer		Project Name: Stoneridge SP S. Truck Rt Job Number: 13265													
SITE	NOISE MODEL INPUTS														
Highway Data				Site Conditions (Hard = 10, Soft = 15)											
Average Daily Peak Hour Peak H Ve	Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15														
Near/Far La	Near/Far Lane Distance: 12 feet					VehicleType Day Evening Night Daily									
Site Data				Ven	icie i ype Δι	itos:	77 5%	12 Q%	0.6%	07 / 2%					
Barrier Type (0-W	r rier Height: 'all, 1-Berm):	0.0 feet 0.0		м	edium Tru Heavy Tru	icks: 8 icks: 8	34.8% 36.5%	4.9% 2.7%	10.3% 10.8%	1.84% 0.74%					
Centerline Dis	st. to Barrier:	100.0 feet		Noise Source Elevations (in feet)											
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0											
Roa	Lane Equivalent Distance (in feet)														
,	Autos: 99.945 Medium Trucks: 99.856 Heavy Trucks: 99.865														
FHWA Noise Mode	el Calculation	5													
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresne	el l	Barrier Atte	en Be	rm Atten					
Autos:	71.78	1.50	-4	.62	-1.20		4.77	0.0	000	0.000					
Medium Trucks: Heavy Trucks:	82.40 86.40	-15.74 -19.69	-4	1.61 1.61	-1.20 -1.20		4.88 5.16	0.0	000	0.000					
Unmitigated Noise	Levels (with	out Topo and ba	arrier att	enuation)											
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq N	light		Ldn	C	NEL					
Autos:	67	.5 66	6.5	64.7		58.7		67.3	3	67.9					
Medium Trucks:	60	.9 60	0.3	53.9		52.4		60.8	3	61.1					
Heavy Trucks:	60	.9 60).4	51.4	52.6		61.0)	61.1					
Vehicle Noise:	69	.0 68	5.2	65.3		60.4		68.9	J	69.4					
Centerline Distance	e to Noise Co	ntour (in feet)	7	Oden	65 4	DA I	6	0 48 4	50	dBA					
			10	U UDA 95	05 01	192	0	204	55	940					
		CNE		91		197		424		913					