Appendix H Noise Appendix





Project: Nr. Etna Affordable Housing Project Construction Noise Impact on Sensitive Receptors

Parameters
Construction Hours:
Leq to L10 factor

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Other Equipment	82	20%	320	63	09	63	9	250	9	25	99	
Roller	80	20%	320	28	51	54	2	520	55	48	5	
Vacuum Street Sweeper	82	10%	320	8	20	23	2	220	22	47	93	
Architectural Coating				63	29				57	53		
Air Compressor 1	78	40%	150	63	59	62	2	320	22	53	99	



8 Daytime hours (7 am to 7 pm) 0 Evening hours (7 pm to 10 pm) 0 Nighttime hours (10 pm to 7 am) Leg to L10 factor Parameters Construction Hours:

						ST-3					ST-4					114		
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Construction Phase Equipment Type	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance (ft)	Lmax	Leq	5	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Fed.	L10 Sh	Estimated Noise Shielding, dBA Distance (ft)	Distance (ft)	Lmax	Ped	L10 SF	Estimated Noise Shielding, dBA
Demo/Grading					02	89				49	61				14	69		
Excavator	3	81	40%	175	20	99	69	2	450	62	28	19	2	150	7.4	29	20	2
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Site Preparation				;	8	8	!	,		g	. 8	;	,		9	. 19	ļ.	,
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Graders	-	82	40%	275	92	19	2	40	220	29	22	28	40	250	98	62	98	9
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Excavator	-	81	40%	275	61	8 16	8 8	n un	289	- 18	5 5	3 25	n un	250	2 28	8 88	6 6	n un
Graders	-	88	40%	375	62	28	62	ro.	650	28	\$	25	40	320	83	28	62	9
Compactor (ground)	~ 10	8 8	20%	475	5 2	Z (2 2	ı, ı	750	2 2	S 5	g 4	φ.	420	8 1	£ t	8 8	ı, 0
Rubber Tired Loader		96	40%	275	20 4	22 4	8 8	n vo	220	8 8	3 4	25 4	n vo	250	ž 8	38	8 8	0 40
Tractor/Loader/Backhoe	2	80	25%	375	61	54	22	2	650	28	20	53	2	350	61	22	28	2
Drainage/Utilities/Trenching					99	99				26	28				29	99		
Air Compres sor	-	78	40%	175	62	28	61	2	450	54	20	53	2	150	63	69	62	2
Front End Loader	7 .	79	40%	275	25 25	88	19	ı, ı	550	% i	25 25	S 22	ıρı	250	8 1	20	25 25	ıç ı
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Compactor (ground)	- 2	8 8	20%	275	8 8	20 7	8 8	0 40	820	2 8	8 64	25	οu	250	64	8	8	0 40
Rubber Tired Loader	-	79	40%	375	92	23	92	2	220	23	49	52	49	320	257	23	92	2
Tractor/Loader/Backhoe	2	90	25%	375	61	ž,	24	9	029	8	8	8	40	320	61	56	88	9
									Comi	Community Plan	Amendmen	t and Rezo	ne en					
Foundations/Concrete Pour					29	8				29	26				89	2		
Compactor (ground)		83	20%	175	29	09	63	2	450	29	52	22	2	150	89	61	64	5
Pumps Tractor/Loader/Backhoe		E 08	25%	275	5 8	8 8	5 6	o vo	220	8 %	2 8	8 5	o o	220	Z 19	25 25	28 82	o o
Building Construction					62	09				22	53				63	61		
Air Compres sor		78	40%	175	62	88 8	61	10 1	450	75 t	200	23	5 1	150	88	69	2 1	5
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Vacuum Street Sweeper	-	82	10%	375	59	49	52	5	650	22	45	48	5	350	09	20	53	5
Paving					74	69				99	62				75	20		
Concrete Saw	-	06	20%	175	74	29	20	2	450	99	23	62	2	150	75	89	71	2
Graders		4 8	40%	275	8 7	5 4	3 7	n u	920	8 2	8 5	8 2	in ir	350	8 4	2 2	8 4	e u
Other Equipment		: 58	20%	380	8 2	26	8 2	o w	220	8 8	- 28	20 82	0 40	320	8 8	8	3 8	0 40
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All Compression		2	2/24	2	*	3	ŝ	,	201	š	3	3	,	2	3	5	د	,

Maximum Noise Level (Overlapping Phases)
Builting Construction/Paving/Architectural Coating
Source for Ref. Note Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Haul Trucks Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Sp	eed (mp	h)	Peak	Hour Vo	lume	Peak Hour Noise Level
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA)
Genessee Avenue									
Trips on Genessee Avenue	Hard	45	45	40	35	21	10	0	55.7
Trips on Balboa Avenue	Hard	45	45	40	35	21	10	Ω	55.7

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within ± 0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Existing + Project CNEL (dBA)

Roadway Segment	Existing Land Uses Located Along Roadway Segment	Existing	Existing with Project	Project Increment	Exceed Threshold?
		(A)	(B)	(B-A)	
Genessee Avenue					
n/o Clairemont Mesa Boulevard	Residential/Commercial	71.9	71.9	0.1	No
between Clairemont Mesa Boulevard and Bannock Avenue	Residential/Commercial	71.4	71.4	0.1	No
between Bannock Avenue and Chateau Drive	Residential	71.6	71.7	0.1	No
between Chateau Drive and Mount Herbert Avenue	Residential	71.5	71.6	0.1	No
between Mount Herbert Avenue and Derrick Drive	Residential/Commercial	71.3	71.4	0.1	No
between Derrick Drive and Mount Etna Drive	Commercial	71.6	71.8	0.2	No
between Mount Etna Drive and Balboa Avenue	Commercial	71.7	71.9	0.3	No
between Balboa Avenue and Mount Alifan Drive	Residential/Commercial	71.1	71.1	0.1	No
s/o Mount Alifan Drive	Residential/Commercial/Educ ational	72.0	72.1	0.1	No
Mount Everest Drive					
s/o Mount Alifan Drive	Residential	62.2	63.9	1.7	No
Balboa Avenue					
between Clairemont Drive and Mount Everest Boulevard	Residential	73.1	73.1	0.1	No
between Mount Everest Boulevard and Genesee Avenue	Residential/Commercial	72.6	72.6	0.0	No
between Genesee Avenue and Shopping Center Driveway	Commercial	72.8	72.9	0.1	No
between Shopping Center Driveway and Mount Abernathy Avenue	Commercial	73.2	73.3	0.1	No
between Mount Abernathy Avenue and Cannington Drive	Residential/Commercial	73.7	73.8	0.1	No
between Cannington Drive and Charger Boulevard	Residential/Educational	73.9	74.0	0.1	No
between Charger Boulevard and I-805 Southbound Ramps	Residential/Religious	74.8	74.9	0.1	No
between I-805 Southbound Ramps and I-805 Northbound Ramps	Freeway Overpass	74.4	74.4	0.0	No
e/o I-805 Northbound Ramps	Commercial	74.6	74.6	0.0	No

Roadway Segment	Existing Land Uses Located Along Roadway Segment	Future	Future with Project - 2021	Project Increment	Exceed Threshold?
		(A)	(B)	(B-A)	
Genessee Avenue					
n/o Clairemont Mesa Boulevard	Residential/Commercial	71.9	72.0	0.1	No
between Clairemont Mesa Boulevard and Bannock Avenue	Residential/Commercial	71.4	71.5	0.1	No
between Bannock Avenue and Chateau Drive	Residential	71.7	71.8	0.1	No
between Chateau Drive and Mount Herbert Avenue	Residential	71.5	71.7	0.1	No
between Mount Herbert Avenue and Derrick Drive	Residential/Commercial	71.4	71.5	0.1	No
between Derrick Drive and Mount Etna Drive	Commercial	71.7	71.9	0.2	No
between Mount Etna Drive and Balboa Avenue	Commercial	71.8	72.0	0.3	No
between Balboa Avenue and Mount Alifan Drive	Residential/Commercial	71.6	71.7	0.1	No
s/o Mount Alifan Drive	Residential/Commercial/Educ ational	72.2	72.2	0.1	No
Mount Everest Drive					
s/o Mount Alifan Drive	Residential	62.2	63.9	1.7	No
Balboa Avenue					
between Clairemont Drive and Mount Everest Boulevard	Residential	73.2	73.3	0.1	No
between Mount Everest Boulevard and Genesee Avenue	Residential/Commercial	72.7	72.7	0.0	No
between Genesee Avenue and Shopping Center Driveway	Commercial	73.0	73.2	0.1	No
between Shopping Center Driveway and Mount Abernathy Avenue	Commercial	73.4	73.5	0.1	No
between Mount Abernathy Avenue and Cannington Drive	Residential/Commercial	74.0	74.1	0.1	No
between Cannington Drive and Charger Boulevard	Residential/Educational	74.1	74.2	0.1	No
between Charger Boulevard and I-805 Southbound Ramps	Residential/Religious	75.2	75.3	0.1	No
between I-805 Southbound Ramps and I-805 Northbound Ramps	Freeway Overpass	74.4	74.5	0.0	No
e/o I-805 Northbound Ramps	Commercial	74.6	74.6	0.0	No

CNEL (dBA)

Roadway Segment	Existing Land Uses Located Along Roadway Segment	Future	Future with Project - 2050	Project Increment	Exceed Threshold?
		(A)	(B)	(B-A)	
Genessee Avenue					
n/o Clairemont Mesa Boulevard	Residential/Commercial	73.0	73.0	0.0	No
between Clairemont Mesa Boulevard and Bannock Avenue	Residential/Commercial	72.0	72.1	0.1	No
between Bannock Avenue and Chateau Drive	Residential	72.2	72.2	0.1	No
between Chateau Drive and Mount Herbert Avenue	Residential	71.9	72.0	0.1	No
between Mount Herbert Avenue and Derrick Drive	Residential/Commercial	71.8	71.9	0.1	No
between Derrick Drive and Mount Etna Drive	Commercial	72.2	72.4	0.1	No
between Mount Etna Drive and Balboa Avenue	Commercial	72.4	72.6	0.2	No
between Balboa Avenue and Mount Alifan Drive	Residential/Commercial	71.7	71.7	0.1	No
s/o Mount Alifan Drive	Residential/Commercial/Educ ational	72.7	72.7	0.1	No
Mount Everest Drive					
s/o Mount Alifan Drive	Residential	63.4	64.8	1.4	No
Balboa Avenue					<u> </u>
between Clairemont Drive and Mount Everest Boulevard	Residential	73.7	73.7	0.1	No
between Mount Everest Boulevard and Genesee Avenue	Residential/Commercial	73.5	73.5	0.0	No
between Genesee Avenue and Shopping Center Driveway	Commercial	73.4	73.5	0.1	No
between Shopping Center Driveway and Mount Abernathy Avenue	Commercial	73.7	73.8	0.1	No
between Mount Abernathy Avenue and Cannington Drive	Residential/Commercial	74.1	74.2	0.1	No
between Cannington Drive and Charger Boulevard	Residential/Educational	74.1	74.2	0.1	No
between Charger Boulevard and I-805 Southbound Ramps	Residential/Religious	75.0	75.1	0.1	No
between I-805 Southbound Ramps and I-805 Northbound Ramps	Freeway Overpass	74.5	74.5	0.0	No
e/o I-805 Northbound Ramps	Commercial	74.8	74.8	0.0	No

Cumulative - 2021 CNEL (dBA)

Roadway Segment	Existing Land Uses Located Along Roadway Segment	Existing	Future with Project - 2021	Project Increment	Exceed Threshold?
		(A)	(B)	(B-A)	
Genessee Avenue					
n/o Clairemont Mesa Boulevard	Residential/Commercial	71.9	72.0	0.2	No
between Clairemont Mesa Boulevard and Bannock Avenue	Residential/Commercial	71.4	71.5	0.2	No
between Bannock Avenue and Chateau Drive	Residential	71.6	71.8	0.2	No
between Chateau Drive and Mount Herbert Avenue	Residential	71.5	71.7	0.2	No
between Mount Herbert Avenue and Derrick Drive	Residential/Commercial	71.3	71.5	0.2	No
between Derrick Drive and Mount Etna Drive	Commercial	71.6	71.9	0.2	No
between Mount Etna Drive and Balboa Avenue	Commercial	71.7	72.0	0.4	No
between Balboa Avenue and Mount Alifan Drive	Residential/Commercial	71.1	71.7	0.6	No
s/o Mount Alifan Drive	Residential/Commercial/Educ ational	72.0	72.2	0.2	No
Mount Everest Drive					
s/o Mount Alifan Drive	Residential	62.2	63.9	1.7	No
Balboa Avenue					
between Clairemont Drive and Mount Everest Boulevard	Residential	73.1	73.3	0.3	No
between Mount Everest Boulevard and Genesee Avenue	Residential/Commercial	72.6	72.7	0.1	No
between Genesee Avenue and Shopping Center Driveway	Commercial	72.8	73.2	0.4	No
between Shopping Center Driveway and Mount Abernathy Avenue	Commercial	73.2	73.5	0.3	No
between Mount Abernathy Avenue and Cannington Drive	Residential/Commercial	73.7	74.1	0.4	No
between Cannington Drive and Charger Boulevard	Residential/Educational	73.9	74.2	0.4	No
between Charger Boulevard and I-805 Southbound Ramps	Residential/Religious	74.8	75.3	0.5	No
between I-805 Southbound Ramps and I-805 Northbound Ramps	Freeway Overpass	74.4	74.5	0.1	No
e/o I-805 Northbound Ramps	Commercial	74.6	74.6	0.1	No

Cumulative - 2050 CNEL (dBA)

Roadway Segment	Existing Land Uses Located Along Roadway Segment	Existing	Future with Project - 2050	Project Increment	Exceed Threshold?
		(A)	(B)	(B-A)	
Genessee Avenue					
n/o Clairemont Mesa Boulevard	Residential/Commercial	71.9	73.0	1.2	No
between Clairemont Mesa Boulevard and Bannock Avenue	Residential/Commercial	71.4	72.1	0.7	No
between Bannock Avenue and Chateau Drive	Residential	71.6	72.2	0.6	No
between Chateau Drive and Mount Herbert Avenue	Residential	71.5	72.0	0.5	No
between Mount Herbert Avenue and Derrick Drive	Residential/Commercial	71.3	71.9	0.6	No
between Derrick Drive and Mount Etna Drive	Commercial	71.6	72.4	0.7	No
between Mount Etna Drive and Balboa Avenue	Commercial	71.7	72.6	1.0	No
between Balboa Avenue and Mount Alifan Drive	Residential/Commercial	71.1	71.7	0.7	No
s/o Mount Alifan Drive	Residential/Commercial/Educ ational	72.0	72.7	0.7	No
Mount Everest Drive					
s/o Mount Alifan Drive	Residential	62.2	64.8	2.5	No
Balboa Avenue					
between Clairemont Drive and Mount Everest Boulevard	Residential	73.1	73.7	0.7	No
between Mount Everest Boulevard and Genesee Avenue	Residential/Commercial	72.6	73.5	0.8	No
between Genesee Avenue and Shopping Center Driveway	Commercial	72.8	73.5	0.7	No
between Shopping Center Driveway and Mount Abernathy Avenue	Commercial	73.2	73.8	0.6	No
between Mount Abernathy Avenue and Cannington Drive	Residential/Commercial	73.7	74.2	0.5	No
between Cannington Drive and Charger Boulevard	Residential/Educational	73.9	74.2	0.4	No
between Charger Boulevard and I-805 Southbound Ramps	Residential/Religious	74.8	75.1	0.3	No
between I-805 Southbound Ramps and I-805 Northbound Ramps	Freeway Overpass	74.4	74.5	0.2	No
e/o I-805 Northbound Ramps	Commercial	74.6	74.8	0.3	No



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Existing Source of Traffic Volumes: Chen Ryan, 2019

Roadway Segment	Ground	Distance from Roadway to	Sp	eed (mp	h)	Peak	Hour Vo	lume	Peak Hour Noise Leve
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,280	47	24	71.9
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,032	42	21	71.4
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,165	45	22	71.6
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,090	43	22	71.5
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,008	41	21	71.3
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,168	45	22	71.6
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,184	45	23	71.7
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	1,901	39	20	71.1
s/o Mount Alifan Drive	Hard	45	45	40	35	2,373	49	24	72.0
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	379	8	4	62.2
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	2,972	61	31	73.1
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,680	55	28	72.6
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	2,791	58	29	72.8
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,056	63	32	73.2
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,470	72	36	73.7
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,578	74	37	73.9
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,431	91	46	74.8
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,010	83	41	74.4
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,192	86	43	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Existing + Project Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Sp	eed (mp	h)	Peak	Hour Vo	olume	Peak Hour Noise Level
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,313	48	24	71.9
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,079	43	21	71.4
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,215	46	23	71.7
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,143	44	22	71.6
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,059	42	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,248	46	23	71.8
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,325	48	24	71.9
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	1,938	40	20	71.1
s/o Mount Alifan Drive	Hard	45	45	40	35	2,407	50	25	72.1
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	566	12	6	64
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,023	62	31	73.1
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,680	55	28	72.6
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	2,882	59	30	72.9
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,147	65	32	73.3
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,558	73	37	73.8
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,667	76	38	74.0
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,519	93	47	74.9
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,056	84	42	74.4
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,236	87	44	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Existing (Alternative 2)
Source of Traffic Volumes: Chen Ryan, 2019

Roadway Segment	Ground	Distance from Roadway to	Sp	eed (mp	h)	Peak	Hour Vo	lume	Peak Hour Noise Leve
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,303	47	24	71.9
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,060	42	21	71.4
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,195	45	23	71.7
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,121	44	22	71.5
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,039	42	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,213	46	23	71.7
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,255	47	23	71.8
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	1,924	40	20	71.1
s/o Mount Alifan Drive	Hard	45	45	40	35	2,393	49	25	72.1
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	469	10	5	63.1
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,002	62	31	73.1
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,685	55	28	72.6
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	2,848	59	29	72.9
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,110	64	32	73.3
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,522	73	36	73.8
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,631	75	37	73.9
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,483	92	46	74.8
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,037	83	42	74.4
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,219	87	43	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Existing (Alternative 3)
Source of Traffic Volumes: Chen Ryan, 2019

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Hour Vo	Peak Hour Noise Level	
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA)
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,303	47	24	71.9
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,060	42	21	71.4
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,195	45	23	71.7
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,121	44	22	71.5
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,039	42	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,212	46	23	71.7
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,233	46	23	71.8
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	1,924	40	20	71.1
s/o Mount Alifan Drive	Hard	45	45	40	35	2,392	49	25	72.1
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	448	9	5	62.9
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,002	62	31	73.1
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,702	56	28	72.6
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	2,848	59	29	72.9
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,110	64	32	73.3
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,522	73	36	73.8
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,631	75	37	73.9
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,483	92	46	74.8
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,037	83	42	74.4
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,219	87	43	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Near Term 2021 Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Peak Hour Noise Level		
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,330	48	24	71.9
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,069	43	21	71.4
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,201	45	23	71.7
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,126	44	22	71.5
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,044	42	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,209	46	23	71.7
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,232	46	23	71.8
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,151	44	22	71.6
s/o Mount Alifan Drive	Hard	45	45	40	35	2,451	51	25	72.2
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	379	8	4	62.2
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,101	64	32	73.2
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,749	57	28	72.7
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	2,956	61	30	73.0
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,191	66	33	73.4
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,688	76	38	74.0
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,808	79	39	74.1
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,906	101	51	75.2
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,085	84	42	74.4
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,213	87	43	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance. Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Near Term + Project 2021 Source of Traffic Volumes:

Roadway Segment	Ground	Roadway to	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level	
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA	
Genessee Avenue										
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,363	49	24	72.0	
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,116	44	22	71.5	
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,250	46	23	71.8	
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,179	45	22	71.7	
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,095	43	22	71.5	
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,289	47	24	71.9	
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,373	49	24	72.0	
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,180	45	22	71.7	
s/o Mount Alifan Drive	Hard	45	45	40	35	2,485	51	26	72.2	
Mount Etna Drive										
s/o Mount Alifan Drive	Hard	25	30	30	30	566	12	6	63.9	
Balboa Avenue										
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,153	65	33	73.3	
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,749	57	28	72.7	
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,047	63	31	73.2	
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,282	68	34	73.5	
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,776	78	39	74.1	
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,896	80	40	74.2	
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,971	103	51	75.3	
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,130	85	43	74.5	
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,256	88	44	74.6	

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Near Term + Project 2021 (Alternative 2)
Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Peak Hour Noise Leve		
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,352	49	24	72.0
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,097	43	22	71.5
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,231	46	23	71.8
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,157	44	22	71.6
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,075	43	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,253	46	23	71.8
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,303	47	24	71.9
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,170	45	22	71.6
s/o Mount Alifan Drive	Hard	45	45	40	35	2,472	51	25	72.2
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	469	10	5	63.1
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,131	65	32	73.3
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,754	57	28	72.7
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,013	62	31	73.1
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,246	67	33	73.4
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,740	77	39	74.1
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,861	80	40	74.2
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,950	102	51	75.3
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,112	85	42	74.5
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,239	87	44	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Near Term + Project 2021 (Alternative 3)
Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Peak Hour Noise Level		
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,352	49	24	72.0
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,097	43	22	71.5
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,231	46	23	71.8
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,157	44	22	71.6
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,075	43	21	71.4
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,252	46	23	71.8
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,280	47	24	71.9
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,170	45	22	71.6
s/o Mount Alifan Drive	Hard	45	45	40	35	2,471	51	25	72.2
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	448	9	5	62.9
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,131	65	32	73.3
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	2,771	57	29	72.8
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,013	62	31	73.1
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,246	67	33	73.4
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,740	77	39	74.1
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,861	80	40	74.2
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,950	102	51	75.3
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,112	85	42	74.5
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,239	87	44	74.6

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Horizon Year 2050 Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph		h) Peak Hour Volume			Peak Hour Noise Level	
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA)
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,949	61	30	73.0
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,367	49	24	72.0
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,444	50	25	72.2
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,309	48	24	71.9
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,280	47	24	71.8
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,493	51	26	72.2
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,600	54	27	72.4
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,183	45	23	71.7
s/o Mount Alifan Drive	Hard	45	45	40	35	2,765	57	29	72.7
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	495	10	5	63.4
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,414	70	35	73.7
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	3,259	67	34	73.5
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,201	66	33	73.4
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,444	71	36	73.7
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,793	78	39	74.1
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,812	79	39	74.1
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,656	96	48	75.0
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,132	85	43	74.5
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,423	91	46	74.8

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00 Analysis Scenario: Horizon Year + Project 2050 Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level	
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA	
Genessee Avenue										
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,982	61	31	73.0	
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,413	50	25	72.1	
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,494	51	26	72.2	
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,361	49	24	72.0	
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,331	48	24	71.9	
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,573	53	27	72.4	
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,740	57	28	72.6	
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,219	46	23	71.7	
s/o Mount Alifan Drive	Hard	45	45	40	35	2,798	58	29	72.7	
Mount Etna Drive										
s/o Mount Alifan Drive	Hard	25	30	30	30	681	14	7	64.8	
Balboa Avenue										
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,466	71	36	73.7	
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	3,259	67	34	73.5	
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,292	68	34	73.5	
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,535	73	36	73.8	
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,881	80	40	74.2	
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,900	80	40	74.2	
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,721	97	49	75.1	
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,178	86	43	74.5	
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,467	92	46	74.8	

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Horizon Year + Project 2050 (Alternative 2) Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Peak Hour Noise Level		
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,971	61	31	73.0
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,395	49	25	72.1
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,474	51	26	72.2
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,340	48	24	72.0
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,311	48	24	71.9
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,538	52	26	72.3
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,670	55	28	72.5
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,205	45	23	71.7
s/o Mount Alifan Drive	Hard	45	45	40	35	2,785	57	29	72.7
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	585	12	6	64.1
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,444	71	36	73.7
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	3,264	67	34	73.5
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,258	67	34	73.5
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,498	72	36	73.8
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,845	79	40	74.2
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,864	80	40	74.2
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,700	97	48	75.1
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,159	86	43	74.5
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,449	92	46	74.8

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.



Project Name: SD Crime Lab Affordable Housing Project Number: D150334.00

Analysis Scenario: Horizon Year + Project 2050 (Alternative 3)
Source of Traffic Volumes:

Roadway Segment	Ground	Distance from Roadway to	Speed (mph)			Peak	Peak Hour Noise Level		
	Туре	Receiver (feet)	Auto	MT	HT	Auto	MT	HT	(Leq(h) dBA
Genessee Avenue									
n/o Clairemont Mesa Boulevard	Hard	45	45	40	35	2,971	61	31	73.0
between Clairemont Mesa Boulevard and Bannock Avenue	Hard	45	45	40	35	2,395	49	25	72.1
between Bannock Avenue and Chateau Drive	Hard	45	45	40	35	2,474	51	26	72.2
between Chateau Drive and Mount Herbert Avenue	Hard	45	45	40	35	2,340	48	24	72.0
between Mount Herbert Avenue and Derrick Drive	Hard	45	45	40	35	2,311	48	24	71.9
between Derrick Drive and Mount Etna Drive	Hard	45	45	40	35	2,537	52	26	72.3
between Mount Etna Drive and Balboa Avenue	Hard	45	45	40	35	2,648	55	27	72.5
between Balboa Avenue and Mount Alifan Drive	Hard	45	45	40	35	2,205	45	23	71.7
s/o Mount Alifan Drive	Hard	45	45	40	35	2,784	57	29	72.7
Mount Etna Drive									
s/o Mount Alifan Drive	Hard	25	30	30	30	564	12	6	63.9
Balboa Avenue									
between Clairemont Drive and Mount Everest Boulevard	Hard	45	45	40	40	3,444	71	36	73.7
between Mount Everest Boulevard and Genesee Avenue	Hard	45	45	40	40	3,282	68	34	73.5
between Genesee Avenue and Shopping Center Driveway	Hard	45	45	40	40	3,258	67	34	73.5
between Shopping Center Driveway and Mount Abernathy Avenue	Hard	45	45	40	40	3,498	72	36	73.8
between Mount Abernathy Avenue and Cannington Drive	Hard	45	45	40	40	3,845	79	40	74.2
between Cannington Drive and Charger Boulevard	Hard	45	45	40	40	3,864	80	40	74.2
between Charger Boulevard and I-805 Southbound Ramps	Hard	45	45	40	40	4,700	97	48	75.1
between I-805 Southbound Ramps and I-805 Northbound Ramps	Hard	45	45	40	40	4,159	86	43	74.5
e/o I-805 Northbound Ramps	Hard	45	45	40	40	4,449	92	46	74.8

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998). The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5. Accuracy of the calculation is within $\pm 0.1~\text{dB}$ when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance.

For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.