

APPENDIX R

Noise Modeling

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Existing
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	11,400	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	15,400	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 161	1,800	50	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	6,000	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	5,000	50	50	97.5	1.5	1	87		13	
6	Douglas Road	Sunrise Boulevard	Grant Line Road	2,300	50	50	97.5	1.5	1	87		13	
7	International Drive	South White Rock Road	Zinfandel Drive	12,000	45	50	97.5	1.5	1	87		13	
8	International Drive	Zinfandel Drive	Kilgore Road	6,800	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Zinfandel Drive	Sunrise Boulevard	20,800	45	50	97.5	1.5	1	87		13	
10	White Rock Road	Sunrise Boulevard	Grant Line Road	4,400	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,300	45	50	97.5	1.5	1	87		13	
12	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,300	45	50	97.5	1.5	1	87		13	
13	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	26,400	50	50	97.5	1.5	1	87		13	
14	Mather Field Road	US 50 eastbound ramps	International Drive	33,700	50	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	22,700	45	50	97.5	1.5	1	87		13	
16	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	41,900	45	50	97.5	1.5	1	87		13	
17	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
18	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	74,400	45	50	97.5	1.5	1	87		13	
19	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	70,700	45	50	97.5	1.5	1	87		13	
20	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	52,100	45	50	97.5	1.5	1	87		13	
21	Sunrise Boulevard	Folsom Boulevard	White Rock Road	38,700	45	50	97.5	1.5	1	87		13	
22	Sunrise Boulevard	White Rock Road	Douglas Road	24,600	50	50	97.5	1.5	1	87		13	
23	Sunrise Boulevard	Douglas Road	SR 16	20,000	50	50	97.5	1.5	1	87		13	
24	Sunrise Boulevard	SR 16	Grant Line Road	10,700	50	50	97.5	1.5	1	87		13	
25	Hazel Avenue	Winding Way	US 50 westbound ramps	53,000	45	50	97.5	1.5	1	87		13	
26	Grant Line Road	White Rock Road	Douglas Road	6,000	50	50	97.5	1.5	1	87		13	
27	Grant Line Road	Douglas Road	SR 16	6,700	50	50	97.5	1.5	1	87		13	
28	Grant Line Road	SR 16	Sunrise Boulevard	5,600	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Existing
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	70.0	58.9	61.1	70.8	60	190	600	1897	5998
2	SR 16	Sunrise Boulevard	Grant Line Road	71.3	60.2	62.4	72.1	81	256	810	2562	8102
3	Kiefer Boulevard	Grant Line Road	north of SR 161	60.8	50.3	52.7	61.7	7	23	74	235	742
4	Mather Boulevard	Femoyer Street	Douglas Road	66.0	55.5	57.9	66.9	25	78	247	782	2473
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	65.2	54.7	57.2	66.2	21	65	206	652	2061
6	Douglas Road	Sunrise Boulevard	Grant Line Road	61.8	51.3	53.8	62.8	9	30	95	300	948
7	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.8	60.5	68.8	38	120	380	1200	3796
8	International Drive	Zinfandel Drive	Kilgore Road	65.2	55.3	58.1	66.3	22	68	215	680	2151
9	White Rock Road	Zinfandel Drive	Sunrise Boulevard	70.1	60.2	62.9	71.2	66	208	658	2081	6580
10	White Rock Road	Sunrise Boulevard	Grant Line Road	63.3	53.4	56.2	64.4	14	44	139	440	1392
11	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.8	71.1	64	203	642	2031	6422
12	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.1	58.2	61.0	69.3	42	133	421	1331	4207
13	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.4	61.9	64.4	73.4	109	344	1088	3441	10881
14	Mather Field Road	US 50 eastbound ramps	International Drive	73.5	63.0	65.4	74.4	139	439	1389	4393	13890
15	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.4	60.6	63.3	71.6	72	227	718	2271	7181
16	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.1	63.2	66.0	74.2	133	419	1326	4192	13255
17	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
18	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.6	65.7	68.5	76.7	235	744	2354	7443	23537
19	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.4	65.5	68.2	76.5	224	707	2237	7073	22366
20	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.1	64.2	66.9	75.2	165	521	1648	5212	16482
21	Sunrise Boulevard	Folsom Boulevard	White Rock Road	72.8	62.9	65.6	73.9	122	387	1224	3872	12243
22	Sunrise Boulevard	White Rock Road	Douglas Road	72.1	61.6	64.1	73.1	101	321	1014	3206	10140
23	Sunrise Boulevard	Douglas Road	SR 16	71.2	60.7	63.2	72.2	82	261	824	2607	8244
24	Sunrise Boulevard	SR 16	Grant Line Road	68.5	58.0	60.5	69.5	44	139	441	1395	4410
25	Hazel Avenue	Winding Way	US 50 westbound ramps	74.1	64.2	67.0	75.3	168	530	1677	5302	16767
26	Grant Line Road	White Rock Road	Douglas Road	66.0	55.5	57.9	66.9	25	78	247	782	2473
27	Grant Line Road	Douglas Road	SR 16	66.5	56.0	58.4	67.4	28	87	276	873	2762
28	Grant Line Road	SR 16	Sunrise Boulevard	65.7	55.2	57.6	66.6	23	73	231	730	2308

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Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	12,900	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	15,400	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	1,800	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	12,900	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	11,700	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,000	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	6,800	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	24,000	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,600	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,300	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,300	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	26,900	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	38,200	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,100	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	42,100	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	70.5	59.5	61.7	71.3	68	215	679	2146	6787
2	SR 16	Sunrise Boulevard	Grant Line Road	71.3	60.2	62.4	72.1	81	256	810	2562	8102
3	Kiefer Boulevard	Grant Line Road	north of SR 16	56.3	47.9	51.3	57.9	3	10	31	98	311
4	Mather Boulevard	Femoyer Street	Douglas Road	69.3	58.8	61.3	70.3	53	168	532	1681	5317
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	68.9	58.4	60.8	69.8	48	152	482	1525	4822
6	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.8	60.5	68.8	38	120	380	1200	3796
7	International Drive	Zinfandel Drive	Kilgore Road	65.2	55.3	58.1	66.3	22	68	215	680	2151
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	70.7	60.8	63.5	71.8	76	240	759	2401	7592
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.7	55.8	58.6	66.8	24	76	240	760	2404
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.8	71.1	64	203	642	2031	6422
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.1	58.2	61.0	69.3	42	133	421	1331	4207
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.5	62.0	64.5	73.5	111	351	1109	3506	11088
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.0	63.5	66.0	75.0	157	498	1575	4979	15745
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.5	60.6	63.4	71.6	73	231	731	2311	7308
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.1	63.3	66.0	74.3	133	421	1332	4212	13318

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Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	74,700	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	72,400	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	55,200	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	43,200	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	30,200	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	11,400	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,200	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	8,000	50	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	6,700	50	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	5,600	50	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	13,500	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	4,500	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	27,700	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	23,000	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.6	65.7	68.5	76.7	236	747	2363	7473	23631
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.5	65.6	68.3	76.6	229	724	2290	7243	22904
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.3	64.4	67.2	75.4	175	552	1746	5522	17463
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.2	63.4	66.1	74.4	137	432	1367	4322	13666
6	Sunrise Boulevard	White Rock Road	Douglas Road	73.0	62.5	65.0	74.0	124	394	1245	3936	12448
7	Sunrise Boulevard	SR 16	Grant Line Road	68.8	58.3	60.7	69.7	47	149	470	1486	4699
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.2	64.3	67.1	75.4	171	542	1715	5422	17146
9	Grant Line Road	White Rock Road	Douglas Road	67.2	56.8	59.2	68.2	33	104	330	1043	3297
10	Grant Line Road	Douglas Road	SR 16	66.5	56.0	58.4	67.4	28	87	276	873	2762
11	Grant Line Road	SR 16	Sunrise Boulevard	65.7	55.2	57.6	66.6	23	73	231	730	2308
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	69.5	59.0	61.5	70.5	56	176	556	1760	5564
13	Douglas Road	Americanos Boulevard	Grant Line Road	64.7	54.3	56.7	65.7	19	59	185	587	1855
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	72.6	62.1	64.6	73.6	114	361	1142	3610	11417
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	71.8	61.3	63.8	72.8	95	300	948	2998	9480

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Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline PP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	18,800	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	17,000	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	2,200	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	17,200	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	16,600	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,300	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	7,300	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	26,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,500	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,400	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	27,600	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	41,700	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,500	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	43,200	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline PP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	72.1	61.1	63.3	73.0	99	313	989	3128	9891
2	SR 16	Sunrise Boulevard	Grant Line Road	71.7	60.7	62.8	72.5	89	283	894	2828	8944
3	Kiefer Boulevard	Grant Line Road	north of SR 16	57.2	48.7	52.2	58.8	4	12	38	120	380
4	Mather Boulevard	Femoyer Street	Douglas Road	70.6	60.1	62.5	71.5	71	224	709	2242	7089
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	70.4	59.9	62.4	71.4	68	216	684	2164	6842
6	International Drive	South White Rock Road	Zinfandel Drive	67.8	57.9	60.6	68.9	39	123	389	1230	3891
7	International Drive	Zinfandel Drive	Kilgore Road	65.5	55.6	58.4	66.6	23	73	231	730	2309
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	71.1	61.2	64.0	72.2	84	265	838	2651	8383
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.8	55.9	58.6	66.9	24	77	244	770	2436
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.9	71.1	65	205	649	2051	6485
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.2	58.3	61.0	69.3	42	134	424	1341	4239
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.6	62.1	64.6	73.6	114	360	1138	3597	11376
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.4	63.9	66.4	75.4	172	544	1719	5435	17188
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.6	60.7	63.5	71.7	74	235	743	2351	7434
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.2	63.4	66.1	74.4	137	432	1367	4322	13666

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Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline PP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	78,600	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	60,900	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	50,100	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	41,800	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	15,800	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,800	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	11,600	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	10,100	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	7,000	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	20,700	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	4,500	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	36,600	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	33,200	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline PP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.8	66.0	68.7	77.0	249	786	2487	7863	24865
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.7	65.9	68.6	76.9	243	769	2433	7693	24327
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.7	64.9	67.6	75.9	193	609	1927	6092	19266
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.9	64.0	66.7	75.0	158	501	1585	5012	15849
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.4	63.9	66.4	75.4	172	545	1723	5448	17229
7	Sunrise Boulevard	SR 16	Grant Line Road	70.2	59.7	62.2	71.1	65	206	651	2059	6512
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.3	64.4	67.1	75.4	173	548	1734	5482	17336
9	Grant Line Road	White Rock Road	Douglas Road	70.0	59.0	61.2	70.9	61	193	610	1930	6103
10	Grant Line Road	Douglas Road	SR 16	69.4	58.4	60.6	70.3	53	168	531	1680	5314
11	Grant Line Road	SR 16	Sunrise Boulevard	67.8	56.8	59.0	68.7	37	116	368	1165	3683
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	71.4	60.9	63.3	72.3	85	270	853	2698	8532
13	Douglas Road	Americanos Boulevard	Grant Line Road	64.7	54.3	56.7	65.7	19	59	185	587	1855
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	73.8	63.4	65.8	74.8	151	477	1509	4770	15086
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	73.4	62.9	65.4	74.4	137	433	1368	4327	13684

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline AC
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	17,100	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	17,000	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	2,000	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	16,600	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	15,800	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,200	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	7,100	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	26,200	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,500	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,400	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	27,500	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	41,200	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,500	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	43,200	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline AC
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	71.7	60.7	62.9	72.6	90	284	900	2845	8997
2	SR 16	Sunrise Boulevard	Grant Line Road	71.7	60.7	62.8	72.5	89	283	894	2828	8944
3	Kiefer Boulevard	Grant Line Road	north of SR 16	56.8	48.3	51.7	58.4	3	11	35	109	345
4	Mather Boulevard	Femoyer Street	Douglas Road	70.4	59.9	62.4	71.4	68	216	684	2164	6842
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	70.2	59.7	62.2	71.1	65	206	651	2059	6512
6	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.9	60.6	68.9	39	122	386	1220	3859
7	International Drive	Zinfandel Drive	Kilgore Road	65.4	55.5	58.3	66.5	22	71	225	710	2246
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	71.1	61.2	63.9	72.2	83	262	829	2621	8288
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.8	55.9	58.6	66.9	24	77	244	770	2436
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.9	71.1	65	205	649	2051	6485
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.2	58.3	61.0	69.3	42	134	424	1341	4239
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.6	62.1	64.6	73.6	113	358	1133	3584	11335
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.4	63.9	66.3	75.3	170	537	1698	5370	16982
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.6	60.7	63.5	71.7	74	235	743	2351	7434
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.2	63.4	66.1	74.4	137	432	1367	4322	13666

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline AC
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	77,700	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	59,600	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	49,000	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	40,600	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	13,500	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,600	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	10,900	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	9,600	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	6,700	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	23,100	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	6,800	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	33,200	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	27,300	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline AC
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.8	65.9	68.6	76.9	246	777	2458	7773	24581
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.7	65.8	68.5	76.8	240	759	2401	7593	24011
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.6	64.8	67.5	75.8	189	596	1885	5962	18855
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.8	63.9	66.6	74.9	155	490	1550	4902	15501
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.3	63.8	66.2	75.2	167	529	1673	5292	16734
7	Sunrise Boulevard	SR 16	Grant Line Road	69.5	59.0	61.5	70.5	56	176	556	1760	5564
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.3	64.4	67.1	75.4	173	546	1727	5462	17273
9	Grant Line Road	White Rock Road	Douglas Road	69.8	58.7	60.9	70.6	57	181	573	1813	5735
10	Grant Line Road	Douglas Road	SR 16	69.2	58.2	60.4	70.0	51	160	505	1597	5051
11	Grant Line Road	SR 16	Sunrise Boulevard	67.7	56.6	58.8	68.5	35	111	353	1115	3525
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	71.8	61.4	63.8	72.8	95	301	952	3011	9521
13	Douglas Road	Americanos Boulevard	Grant Line Road	66.5	56.0	58.5	67.5	28	89	280	886	2803
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	73.4	62.9	65.4	74.4	137	433	1368	4327	13684
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	72.6	62.1	64.5	73.5	113	356	1125	3558	11252

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline BIM
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	17,100	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	17,200	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	2,000	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	16,500	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	15,700	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,100	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	7,100	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	26,000	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,500	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,400	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	27,500	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	41,200	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,500	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	43,000	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline BIM
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	71.7	60.7	62.9	72.6	90	284	900	2845	8997
2	SR 16	Sunrise Boulevard	Grant Line Road	71.8	60.7	62.9	72.6	90	286	905	2862	9049
3	Kiefer Boulevard	Grant Line Road	north of SR 16	56.8	48.3	51.7	58.4	3	11	35	109	345
4	Mather Boulevard	Femoyer Street	Douglas Road	70.4	59.9	62.3	71.3	68	215	680	2151	6801
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	70.2	59.7	62.1	71.1	65	205	647	2046	6471
6	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.8	60.6	68.8	38	121	383	1210	3828
7	International Drive	Zinfandel Drive	Kilgore Road	65.4	55.5	58.3	66.5	22	71	225	710	2246
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	71.0	61.2	63.9	72.2	82	260	823	2601	8225
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.8	55.9	58.6	66.9	24	77	244	770	2436
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.9	71.1	65	205	649	2051	6485
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.2	58.3	61.0	69.3	42	134	424	1341	4239
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.6	62.1	64.6	73.6	113	358	1133	3584	11335
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.4	63.9	66.3	75.3	170	537	1698	5370	16982
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.6	60.7	63.5	71.7	74	235	743	2351	7434
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.2	63.3	66.1	74.3	136	430	1360	4302	13603

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline BIM
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	77,500	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75,700	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	59,300	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	48,700	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	40,000	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	13,300	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,600	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	10,500	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	9,600	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	6,700	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	21,800	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	5,400	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	33,900	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	27,000	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline BIM
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.8	65.9	68.6	76.9	245	775	2452	7753	24517
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.7	65.8	68.5	76.8	239	757	2395	7573	23948
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.6	64.7	67.5	75.7	188	593	1876	5932	18760
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.8	63.9	66.6	74.9	154	487	1541	4872	15406
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.2	63.7	66.2	75.2	165	521	1649	5214	16487
7	Sunrise Boulevard	SR 16	Grant Line Road	69.4	59.0	61.4	70.4	55	173	548	1734	5482
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.3	64.4	67.1	75.4	173	546	1727	5462	17273
9	Grant Line Road	White Rock Road	Douglas Road	69.6	58.6	60.8	70.4	55	175	552	1747	5524
10	Grant Line Road	Douglas Road	SR 16	69.2	58.2	60.4	70.0	51	160	505	1597	5051
11	Grant Line Road	SR 16	Sunrise Boulevard	67.7	56.6	58.8	68.5	35	111	353	1115	3525
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	71.6	61.1	63.5	72.5	90	284	899	2841	8985
13	Douglas Road	Americanos Boulevard	Grant Line Road	65.5	55.0	57.5	66.5	22	70	223	704	2226
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	73.5	63.0	65.5	74.5	140	442	1397	4419	13973
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	72.5	62.0	64.5	73.5	111	352	1113	3519	11129

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NCP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	17,600	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	16,600	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	2,000	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	16,400	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	15,600	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,200	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	7,100	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	26,300	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,500	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,500	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	27,500	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	41,000	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,600	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	43,200	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NCP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	71.9	60.8	63.0	72.7	93	293	926	2928	9260
2	SR 16	Sunrise Boulevard	Grant Line Road	71.6	60.6	62.7	72.4	87	276	873	2762	8734
3	Kiefer Boulevard	Grant Line Road	north of SR 16	56.8	48.3	51.7	58.4	3	11	35	109	345
4	Mather Boulevard	Femoyer Street	Douglas Road	70.4	59.9	62.3	71.3	68	214	676	2138	6760
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	70.1	59.7	62.1	71.1	64	203	643	2033	6430
6	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.9	60.6	68.9	39	122	386	1220	3859
7	International Drive	Zinfandel Drive	Kilgore Road	65.4	55.5	58.3	66.5	22	71	225	710	2246
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	71.1	61.2	63.9	72.2	83	263	832	2631	8320
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.8	55.9	58.6	66.9	24	77	244	770	2436
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.9	71.1	65	205	649	2051	6485
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.2	58.3	61.0	69.3	43	135	427	1351	4271
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.6	62.1	64.6	73.6	113	358	1133	3584	11335
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.3	63.8	66.3	75.3	169	534	1690	5344	16899
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.6	60.7	63.5	71.7	75	236	747	2361	7466
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.2	63.4	66.1	74.4	137	432	1367	4322	13666

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NCP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	77,600	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	59,700	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	49,100	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	40,800	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	13,800	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,700	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	10,300	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	8,700	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	6,500	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	22,800	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	5,200	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	33,600	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	29,800	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline NCP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.8	65.9	68.6	76.9	245	776	2455	7763	24549
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.7	65.8	68.5	76.8	240	759	2401	7593	24011
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.6	64.8	67.5	75.8	189	597	1889	5972	18886
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.8	63.9	66.7	74.9	155	491	1553	4912	15533
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.3	63.8	66.3	75.3	168	532	1682	5318	16817
7	Sunrise Boulevard	SR 16	Grant Line Road	69.6	59.1	61.6	70.6	57	180	569	1799	5688
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.3	64.4	67.1	75.4	173	547	1730	5472	17304
9	Grant Line Road	White Rock Road	Douglas Road	69.5	58.5	60.7	70.3	54	171	542	1714	5419
10	Grant Line Road	Douglas Road	SR 16	68.8	57.8	59.9	69.6	46	145	458	1447	4577
11	Grant Line Road	SR 16	Sunrise Boulevard	67.5	56.5	58.7	68.4	34	108	342	1081	3420
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	71.8	61.3	63.7	72.7	94	297	940	2972	9398
13	Douglas Road	Americanos Boulevard	Grant Line Road	65.4	54.9	57.3	66.3	21	68	214	678	2143
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	73.5	63.0	65.4	74.4	138	438	1385	4379	13849
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	72.9	62.5	64.9	73.9	123	388	1228	3884	12283

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline ID
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	18,200	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	17,000	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	2,000	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	17,500	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	16,700	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	12,200	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	7,200	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	26,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	7,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,600	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	13,500	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	27,600	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	42,000	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	23,700	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	43,200	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline ID
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	72.0	61.0	63.1	72.8	96	303	958	3028	9575
2	SR 16	Sunrise Boulevard	Grant Line Road	71.7	60.7	62.8	72.5	89	283	894	2828	8944
3	Kiefer Boulevard	Grant Line Road	north of SR 16	56.8	48.3	51.7	58.4	3	11	35	109	345
4	Mather Boulevard	Femoyer Street	Douglas Road	70.6	60.2	62.6	71.6	72	228	721	2281	7213
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	70.4	59.9	62.4	71.4	69	218	688	2177	6883
6	International Drive	South White Rock Road	Zinfandel Drive	67.7	57.9	60.6	68.9	39	122	386	1220	3859
7	International Drive	Zinfandel Drive	Kilgore Road	65.5	55.6	58.3	66.6	23	72	228	720	2278
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	71.1	61.2	64.0	72.2	84	265	838	2651	8383
9	White Rock Road	Sunrise Boulevard	Grant Line Road	65.8	55.9	58.6	66.9	24	77	244	770	2436
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	70.0	60.1	62.9	71.2	65	206	652	2061	6517
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	68.2	58.3	61.0	69.3	43	135	427	1351	4271
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	72.6	62.1	64.6	73.6	114	360	1138	3597	11376
13	Mather Field Road	US 50 eastbound ramps	International Drive	74.4	64.0	66.4	75.4	173	547	1731	5474	17311
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	70.6	60.8	63.5	71.8	75	237	750	2371	7498
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	73.2	63.4	66.1	74.4	137	432	1367	4322	13666

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline ID
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	19,700	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	78,100	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76,500	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	60,400	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	50,000	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	42,300	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	14,100	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	54,700	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	11,000	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	9,700	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	6,800	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	24,100	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	5,600	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	34,700	50	50	97.5	1.5	1	87		13	
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	29,400	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Baseline ID
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	69.8	60.0	62.7	71.0	62	197	623	1971	6232
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	75.8	65.9	68.7	76.9	247	781	2471	7813	24707
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	75.7	65.8	68.6	76.8	242	765	2420	7653	24201
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.7	64.8	67.6	75.8	191	604	1911	6042	19108
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	73.9	64.0	66.7	75.0	158	500	1582	5002	15818
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.5	64.0	66.4	75.4	174	551	1744	5513	17435
7	Sunrise Boulevard	SR 16	Grant Line Road	69.7	59.2	61.7	70.7	58	184	581	1838	5812
8	Hazel Avenue	Winding Way	US 50 westbound ramps	74.3	64.4	67.1	75.4	173	547	1730	5472	17304
9	Grant Line Road	White Rock Road	Douglas Road	69.8	58.8	61.0	70.6	58	183	579	1830	5787
10	Grant Line Road	Douglas Road	SR 16	69.3	58.2	60.4	70.1	51	161	510	1614	5103
11	Grant Line Road	SR 16	Sunrise Boulevard	67.7	56.7	58.9	68.5	36	113	358	1131	3578
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	72.0	61.5	64.0	73.0	99	314	993	3141	9933
13	Douglas Road	Americanos Boulevard	Grant Line Road	65.7	55.2	57.6	66.6	23	73	231	730	2308
14	Sunrise Boulevard	Douglas Road	Kiefer Boulevard	73.6	63.1	65.6	74.6	143	452	1430	4523	14302
15	Sunrise Boulevard	Kiefer Boulevard	SR 16	72.9	62.4	64.8	73.8	121	383	1212	3832	12118

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	21,900	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	25,100	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	6,300	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	22,300	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	26,000	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	60,800	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	65,600	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,400	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,500	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,600	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	27,900	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,200	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	67,800	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	30,800	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	78,000	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	72.8	61.8	63.9	73.6	115	364	1152	3644	11522
2	SR 16	Sunrise Boulevard	Grant Line Road	73.4	62.4	64.5	74.2	132	418	1321	4176	13206
3	Kiefer Boulevard	Grant Line Road	north of SR 16	61.7	53.3	56.7	63.4	11	34	109	344	1088
4	Mather Boulevard	Femoyer Street	Douglas Road	71.7	61.2	63.6	72.6	92	291	919	2907	9192
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	72.4	61.9	64.3	73.3	107	339	1072	3389	10717
6	International Drive	South White Rock Road	Zinfandel Drive	74.7	64.8	67.6	75.9	192	608	1923	6082	19234
7	International Drive	Zinfandel Drive	Kilgore Road	75.1	65.2	67.9	76.2	208	656	2075	6563	20753
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	424	1341	4242	13413
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	163	515	1629	5152	16292
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	90	286	905	2861	9048
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.3	61.5	64.2	72.5	88	279	883	2791	8826
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.3	75.3	170	537	1698	5370	16982
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.5	66.0	68.5	77.5	279	884	2795	8837	27945
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.6	72.9	97	308	974	3081	9744
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.8	65.9	68.7	76.9	247	780	2468	7803	24675

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	42,200	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	97,400	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	97,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	60,400	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	55,700	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	41,300	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	26,400	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	121,100	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	45,500	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	29,000	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	25,400	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	26,300	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	17,600	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	35,900	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	14,800	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.1	63.3	66.0	74.3	134	422	1335	4222	13350
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.8	66.9	69.6	77.9	308	974	3081	9744	30813
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.8	66.9	69.7	77.9	310	979	3097	9794	30971
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.7	64.8	67.6	75.8	191	604	1911	6042	19108
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.3	64.5	67.2	75.5	176	557	1762	5572	17621
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.4	63.9	66.3	75.3	170	538	1702	5383	17023
7	Sunrise Boulevard	SR 16	Grant Line Road	72.4	61.9	64.4	73.4	109	344	1088	3441	10881
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.7	67.8	70.6	78.8	383	1211	3831	12115	38310
9	Grant Line Road	White Rock Road	Douglas Road	76.0	64.9	67.1	76.8	239	757	2394	7570	23939
10	Grant Line Road	Douglas Road	SR 16	74.0	63.0	65.2	74.8	153	482	1526	4825	15258
11	Grant Line Road	SR 16	Sunrise Boulevard	73.4	62.4	64.6	74.3	134	423	1336	4226	13363
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	72.4	61.9	64.4	73.4	108	343	1084	3428	10840
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.7	60.2	62.6	71.6	73	229	725	2294	7254
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	73.8	63.3	65.7	74.7	148	468	1480	4679	14797
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	69.9	59.4	61.9	70.9	61	193	610	1929	6100

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	6,800	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	9,200	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	3,900	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	5,600	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	29,300	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,600	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,300	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	53,900	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	37,800	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	60,700	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	55,800	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	18,800	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	26,700	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	28,900	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	28,400	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	24,300	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	17,100	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.1	53.6	57.1	63.7	12	37	117	371	1175
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	63.4	54.9	58.4	65.0	16	50	159	503	1589
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	59.7	51.2	54.6	61.3	7	21	67	213	674
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	61.2	52.8	56.2	62.9	10	31	97	306	967
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.4	60.0	63.4	70.1	51	160	506	1601	5061
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.2	52.8	56.2	62.9	10	31	97	306	967
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.7	53.3	56.7	63.4	11	34	109	344	1088
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.1	62.6	66.1	72.7	93	294	931	2944	9311
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	69.5	61.1	64.5	71.2	65	206	653	2065	6530
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.7	64.8	67.6	75.8	192	607	1920	6072	19203
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.4	64.5	67.2	75.5	177	558	1765	5582	17652
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	69.6	59.7	62.5	70.8	59	188	595	1881	5947
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	71.2	61.3	64.0	72.3	84	267	845	2671	8447
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	71.5	61.6	64.4	72.6	91	289	914	2891	9143
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	71.4	61.5	64.3	72.5	90	284	898	2841	8984
16	Americanos Boulevard	White Rock Road	Douglas Road	70.7	60.9	63.6	71.9	77	243	769	2431	7687
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	69.2	59.3	62.1	70.3	54	171	541	1711	5410

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	25,500	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	27,300	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	7,200	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	26,100	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	30,700	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	61,700	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	67,600	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,700	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	28,000	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,600	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	69,900	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	31,200	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	79,000	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	73.5	62.4	64.6	74.3	134	424	1342	4243	13416
2	SR 16	Sunrise Boulevard	Grant Line Road	73.8	62.7	64.9	74.6	144	454	1436	4542	14363
3	Kiefer Boulevard	Grant Line Road	north of SR 16	62.3	53.9	57.3	64.0	12	39	124	393	1244
4	Mather Boulevard	Femoyer Street	Douglas Road	72.4	61.9	64.3	73.3	108	340	1076	3402	10758
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	73.1	62.6	65.0	74.0	127	400	1265	4001	12654
6	International Drive	South White Rock Road	Zinfandel Drive	74.8	64.9	67.6	75.9	195	617	1952	6172	19519
7	International Drive	Zinfandel Drive	Kilgore Road	75.2	65.3	68.0	76.3	214	676	2139	6763	21385
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	425	1344	4252	13445
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	164	517	1636	5172	16355
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	91	287	908	2871	9079
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.4	61.5	64.2	72.5	89	280	886	2801	8858
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.4	75.4	171	542	1715	5422	17146
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.6	66.2	68.6	77.6	288	911	2881	9111	28811
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.7	73.0	99	312	987	3121	9870
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.9	66.0	68.7	77.0	250	790	2499	7903	24992

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	43,100	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	100,000	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	101,000	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	63,500	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	59,100	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	47,500	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	30,100	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	122,600	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	52,200	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	36,600	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	29,200	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	35,900	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	18,400	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	42,400	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	15,100	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.2	63.4	66.1	74.4	136	431	1363	4312	13635
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.9	67.0	69.7	78.0	316	1000	3164	10004	31635
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.9	67.1	69.8	78.1	320	1010	3195	10104	31951
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.9	65.0	67.8	76.0	201	635	2009	6352	20088
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.6	64.7	67.5	75.7	187	591	1870	5912	18696
6	Sunrise Boulevard	White Rock Road	Douglas Road	75.0	64.5	66.9	75.9	196	619	1958	6191	19578
7	Sunrise Boulevard	SR 16	Grant Line Road	73.0	62.5	64.9	73.9	124	392	1241	3923	12406
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.8	67.9	70.6	78.9	388	1226	3878	12265	38785
9	Grant Line Road	White Rock Road	Douglas Road	76.6	65.5	67.7	77.4	275	868	2746	8685	27464
10	Grant Line Road	Douglas Road	SR 16	75.0	64.0	66.2	75.9	193	609	1926	6089	19256
11	Grant Line Road	SR 16	Sunrise Boulevard	74.1	63.0	65.2	74.9	154	486	1536	4858	15363
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	73.8	63.3	65.7	74.7	148	468	1480	4679	14797
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.9	60.4	62.8	71.8	76	240	758	2398	7584
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	74.5	64.0	66.4	75.4	175	553	1748	5526	17476
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	70.0	59.5	62.0	71.0	62	197	622	1968	6224

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	7,200	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	10,700	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	9,400	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	16,000	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	32,700	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,800	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,400	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	58,500	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	43,100	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	62,600	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	57,600	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	21,100	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	41,300	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	34,600	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	31,900	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	29,100	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	25,500	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative PP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.3	53.9	57.3	64.0	12	39	124	393	1244
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	64.0	55.6	59.0	65.7	18	58	185	584	1848
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	63.5	55.0	58.5	65.1	16	51	162	513	1624
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	65.8	57.3	60.8	67.4	28	87	276	874	2764
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.9	60.5	63.9	70.5	56	179	565	1786	5649
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.4	52.9	56.4	63.0	10	32	100	317	1002
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.8	53.4	56.8	63.4	11	35	111	350	1106
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.4	63.0	66.4	73.1	101	320	1011	3196	10105
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	70.1	61.6	65.1	71.7	74	235	745	2354	7445
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.9	65.0	67.7	76.0	198	626	1980	6262	19804
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.5	64.6	67.3	75.6	182	576	1822	5762	18222
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	70.1	60.3	63.0	71.3	67	211	668	2111	6675
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	73.0	63.2	65.9	74.2	131	413	1307	4132	13065
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	72.3	62.4	65.1	73.4	109	346	1095	3461	10946
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	71.9	62.0	64.8	73.0	101	319	1009	3191	10092
16	Americanos Boulevard	White Rock Road	Douglas Road	71.5	61.6	64.4	72.7	92	291	921	2911	9206
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	71.0	61.1	63.8	72.1	81	255	807	2551	8067

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	24,100	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	25,500	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	6,800	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	24,400	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	28,700	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	61,400	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	66,800	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,600	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,700	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	27,900	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,400	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	68,900	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	31,000	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	78,600	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	73.2	62.2	64.4	74.0	127	401	1268	4010	12680
2	SR 16	Sunrise Boulevard	Grant Line Road	73.5	62.4	64.6	74.3	134	424	1342	4243	13416
3	Kiefer Boulevard	Grant Line Road	north of SR 16	62.1	53.6	57.1	63.7	12	37	117	371	1175
4	Mather Boulevard	Femoyer Street	Douglas Road	72.1	61.6	64.0	73.0	101	318	1006	3180	10057
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	72.8	62.3	64.7	73.7	118	374	1183	3741	11829
6	International Drive	South White Rock Road	Zinfandel Drive	74.8	64.9	67.6	75.9	194	614	1942	6142	19424
7	International Drive	Zinfandel Drive	Kilgore Road	75.1	65.3	68.0	76.3	211	668	2113	6683	21132
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	425	1344	4252	13445
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	163	516	1632	5162	16324
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	91	287	908	2871	9079
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.3	61.5	64.2	72.5	88	279	883	2791	8826
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.3	75.3	171	540	1706	5396	17064
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.6	66.1	68.5	77.5	284	898	2840	8981	28399
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.7	72.9	98	310	981	3101	9807
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.8	66.0	68.7	77.0	249	786	2487	7863	24865

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	42,800	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	99,000	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	99,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	62,400	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	57,900	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	45,100	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	28,100	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	121,900	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	49,100	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	32,500	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	27,800	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	31,600	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	18,000	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	39,700	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	14,900	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.2	63.3	66.1	74.3	135	428	1354	4282	13540
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.8	67.0	69.7	78.0	313	990	3132	9904	31319
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.9	67.0	69.7	78.0	316	999	3160	9994	31604
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.8	65.0	67.7	76.0	197	624	1974	6242	19740
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.5	64.6	67.4	75.6	183	579	1832	5792	18317
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.7	64.3	66.7	75.7	186	588	1859	5878	18589
7	Sunrise Boulevard	SR 16	Grant Line Road	72.7	62.2	64.7	73.6	116	366	1158	3663	11582
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.7	67.9	70.6	78.9	386	1219	3856	12195	38563
9	Grant Line Road	White Rock Road	Douglas Road	76.3	65.3	67.5	77.1	258	817	2583	8169	25833
10	Grant Line Road	Douglas Road	SR 16	74.5	63.5	65.7	75.3	171	541	1710	5407	17099
11	Grant Line Road	SR 16	Sunrise Boulevard	73.8	62.8	65.0	74.7	146	463	1463	4625	14626
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	73.2	62.7	65.2	74.2	130	412	1302	4119	13025
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.8	60.3	62.7	71.7	74	235	742	2346	7419
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	74.2	63.7	66.2	75.1	164	517	1636	5175	16363
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	69.9	59.5	61.9	70.9	61	194	614	1942	6141

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	7,000	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	10,000	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	8,100	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	14,500	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	30,800	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,700	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,400	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	56,800	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	41,100	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	61,800	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	56,900	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	20,700	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	36,800	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	32,300	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	30,700	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	26,700	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	21,300	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative AC
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.2	53.8	57.2	63.8	12	38	121	382	1209
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	63.7	55.3	58.7	65.4	17	55	173	546	1727
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	62.8	54.4	57.8	64.5	14	44	140	442	1399
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	65.4	56.9	60.4	67.0	25	79	250	792	2505
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.6	60.2	63.6	70.3	53	168	532	1682	5320
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.3	52.9	56.3	62.9	10	31	98	311	985
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.8	53.4	56.8	63.4	11	35	111	350	1106
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.3	62.8	66.3	72.9	98	310	981	3103	9812
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	69.9	61.4	64.9	71.5	71	225	710	2245	7100
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.8	64.9	67.7	75.9	196	618	1955	6182	19551
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.4	64.6	67.3	75.6	180	569	1800	5692	18000
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	70.0	60.2	62.9	71.2	65	207	655	2071	6548
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	72.5	62.7	65.4	73.7	116	368	1164	3681	11642
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	72.0	62.1	64.8	73.1	102	323	1022	3231	10218
15	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	71.8	61.9	64.6	72.9	97	307	971	3071	9712
16	Americanos Boulevard	White Rock Road	Douglas Road	71.2	61.3	64.0	72.3	84	267	845	2671	8447
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	70.2	60.3	63.0	71.3	67	213	674	2131	6738

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	24,000	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	25,600	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	6,800	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	24,200	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	28,400	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	61,300	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	66,700	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,700	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	27,900	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,400	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	68,700	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	31,000	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	78,600	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	73.2	62.2	64.3	74.0	126	399	1263	3993	12627
2	SR 16	Sunrise Boulevard	Grant Line Road	73.5	62.4	64.6	74.3	135	426	1347	4259	13469
3	Kiefer Boulevard	Grant Line Road	north of SR 16	62.1	53.6	57.1	63.7	12	37	117	371	1175
4	Mather Boulevard	Femoyer Street	Douglas Road	72.0	61.6	64.0	73.0	100	315	997	3154	9975
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	72.7	62.3	64.7	73.7	117	370	1171	3702	11706
6	International Drive	South White Rock Road	Zinfandel Drive	74.8	64.9	67.6	75.9	194	613	1939	6132	19392
7	International Drive	Zinfandel Drive	Kilgore Road	75.1	65.2	68.0	76.3	211	667	2110	6673	21101
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	425	1344	4252	13445
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	164	517	1636	5172	16355
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	91	287	908	2871	9079
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.3	61.5	64.2	72.5	88	279	883	2791	8826
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.3	75.3	171	540	1706	5396	17064
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.6	66.1	68.5	77.5	283	895	2832	8954	28316
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.7	72.9	98	310	981	3101	9807
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.8	66.0	68.7	77.0	249	786	2487	7863	24865

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	42,800	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	98,800	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	99,700	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	62,200	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	57,700	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	44,700	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	27,900	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	121,800	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	48,500	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	32,600	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	27,500	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	30,800	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	18,200	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	39,500	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	15,100	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.2	63.3	66.1	74.3	135	428	1354	4282	13540
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.8	67.0	69.7	78.0	313	988	3126	9884	31256
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.9	67.0	69.7	78.0	315	997	3154	9974	31540
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.8	64.9	67.7	75.9	197	622	1968	6222	19677
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.5	64.6	67.4	75.6	183	577	1825	5772	18253
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.7	64.2	66.7	75.7	184	583	1842	5826	18424
7	Sunrise Boulevard	SR 16	Grant Line Road	72.7	62.2	64.6	73.6	115	364	1150	3637	11500
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.7	67.9	70.6	78.9	385	1218	3853	12185	38532
9	Grant Line Road	White Rock Road	Douglas Road	76.3	65.2	67.4	77.1	255	807	2552	8069	25517
10	Grant Line Road	Douglas Road	SR 16	74.5	63.5	65.7	75.4	172	542	1715	5424	17152
11	Grant Line Road	SR 16	Sunrise Boulevard	73.8	62.8	64.9	74.6	145	458	1447	4575	14468
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	73.1	62.6	65.0	74.0	127	401	1270	4015	12695
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.8	60.3	62.8	71.8	75	237	750	2372	7502
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	74.2	63.7	66.1	75.1	163	515	1628	5148	16281
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	70.0	59.5	62.0	71.0	62	197	622	1968	6224

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	6,900	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	9,800	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	8,000	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	14,000	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	30,600	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,800	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,300	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	56,900	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	41,200	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	61,700	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	56,800	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	20,700	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	36,200	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	32,500	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	30,400	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	25,900	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	19,500	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative BIM
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.1	53.7	57.1	63.8	12	38	119	377	1192
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	63.7	55.2	58.7	65.3	17	54	169	535	1693
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	62.8	54.3	57.8	64.4	14	44	138	437	1382
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	65.2	56.8	60.2	66.8	24	76	242	765	2418
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.6	60.2	63.6	70.2	53	167	529	1672	5286
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.4	52.9	56.4	63.0	10	32	100	317	1002
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.7	53.3	56.7	63.4	11	34	109	344	1088
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.3	62.9	66.3	72.9	98	311	983	3108	9829
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	69.9	61.5	64.9	71.5	71	225	712	2251	7117
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.8	64.9	67.6	75.9	195	617	1952	6172	19519
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.4	64.6	67.3	75.6	180	568	1797	5682	17969
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	70.0	60.2	62.9	71.2	65	207	655	2071	6548
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	72.5	62.6	65.3	73.6	115	362	1145	3621	11452
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	72.0	62.1	64.9	73.1	103	325	1028	3251	10281
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	71.7	61.8	64.6	72.8	96	304	962	3041	9617
16	Americanos Boulevard	White Rock Road	Douglas Road	71.0	61.1	63.9	72.1	82	259	819	2591	8194
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	69.8	59.9	62.6	70.9	62	195	617	1951	6169

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	24,400	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	25,400	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	6,800	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	24,200	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	28,500	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	61,400	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	66,800	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,600	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,700	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	27,900	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,400	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	68,800	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	31,100	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	78,700	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	73.3	62.2	64.4	74.1	128	406	1284	4060	12837
2	SR 16	Sunrise Boulevard	Grant Line Road	73.4	62.4	64.6	74.3	134	423	1336	4226	13363
3	Kiefer Boulevard	Grant Line Road	north of SR 16	62.1	53.6	57.1	63.7	12	37	117	371	1175
4	Mather Boulevard	Femoyer Street	Douglas Road	72.0	61.6	64.0	73.0	100	315	997	3154	9975
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	72.8	62.3	64.7	73.7	117	371	1175	3715	11747
6	International Drive	South White Rock Road	Zinfandel Drive	74.8	64.9	67.6	75.9	194	614	1942	6142	19424
7	International Drive	Zinfandel Drive	Kilgore Road	75.1	65.3	68.0	76.3	211	668	2113	6683	21132
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	425	1344	4252	13445
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	163	516	1632	5162	16324
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	91	287	908	2871	9079
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.3	61.5	64.2	72.5	88	279	883	2791	8826
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.3	75.3	171	540	1706	5396	17064
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.6	66.1	68.5	77.5	284	897	2836	8967	28358
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.7	72.9	98	311	984	3111	9839
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.8	66.0	68.7	77.0	249	787	2490	7873	24897

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	42,800	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	99,000	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	99,900	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	62,400	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	57,900	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	45,300	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	28,500	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	121,900	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	48,500	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	31,700	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	27,400	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	31,400	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	18,100	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	41,000	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	14,900	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.2	63.3	66.1	74.3	135	428	1354	4282	13540
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.8	67.0	69.7	78.0	313	990	3132	9904	31319
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.9	67.0	69.7	78.0	316	999	3160	9994	31604
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.8	65.0	67.7	76.0	197	624	1974	6242	19740
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.5	64.6	67.4	75.6	183	579	1832	5792	18317
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.8	64.3	66.7	75.7	187	590	1867	5904	18672
7	Sunrise Boulevard	SR 16	Grant Line Road	72.8	62.3	64.7	73.7	117	371	1175	3715	11747
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.7	67.9	70.6	78.9	386	1219	3856	12195	38563
9	Grant Line Road	White Rock Road	Douglas Road	76.3	65.2	67.4	77.1	255	807	2552	8069	25517
10	Grant Line Road	Douglas Road	SR 16	74.4	63.4	65.6	75.2	167	527	1668	5274	16678
11	Grant Line Road	SR 16	Sunrise Boulevard	73.8	62.7	64.9	74.6	144	456	1442	4559	14416
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	73.2	62.7	65.1	74.1	129	409	1294	4093	12942
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.8	60.3	62.7	71.7	75	236	746	2359	7460
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	74.3	63.8	66.3	75.3	169	534	1690	5344	16899
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	69.9	59.5	61.9	70.9	61	194	614	1942	6141

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	6,900	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	9,800	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	8,600	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	15,300	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	30,600	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,800	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,400	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	57,200	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	41,700	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	61,700	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	56,900	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	20,600	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	36,200	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	33,100	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	30,600	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	26,500	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	20,900	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative NCP
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.1	53.7	57.1	63.8	12	38	119	377	1192
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	63.7	55.2	58.7	65.3	17	54	169	535	1693
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	63.1	54.6	58.1	64.7	15	47	149	470	1486
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	65.6	57.2	60.6	67.2	26	84	264	836	2643
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.6	60.2	63.6	70.2	53	167	529	1672	5286
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.4	52.9	56.4	63.0	10	32	100	317	1002
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.8	53.4	56.8	63.4	11	35	111	350	1106
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.3	62.9	66.3	73.0	99	312	988	3125	9881
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	69.9	61.5	64.9	71.6	72	228	720	2278	7203
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.8	64.9	67.6	75.9	195	617	1952	6172	19519
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.4	64.6	67.3	75.6	180	569	1800	5692	18000
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	70.0	60.1	62.9	71.2	65	206	652	2061	6517
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	72.5	62.6	65.3	73.6	115	362	1145	3621	11452
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	72.1	62.2	64.9	73.2	105	331	1047	3311	10471
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	71.7	61.9	64.6	72.9	97	306	968	3061	9680
16	Americanos Boulevard	White Rock Road	Douglas Road	71.1	61.2	64.0	72.2	84	265	838	2651	8383
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	70.1	60.2	62.9	71.2	66	209	661	2091	6612

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	SR 16	Excelsior Road	Eagles Nest Road	24,900	55	50	97.5	1.5	1	87		13	
2	SR 16	Sunrise Boulevard	Grant Line Road	25,900	55	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Grant Line Road	north of SR 16	6,800	35	50	97.5	1.5	1	87		13	
4	Mather Boulevard	Femoyer Street	Douglas Road	24,800	50	50	97.5	1.5	1	87		13	
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	29,200	50	50	97.5	1.5	1	87		13	
6	International Drive	South White Rock Road	Zinfandel Drive	61,500	45	50	97.5	1.5	1	87		13	
7	International Drive	Zinfandel Drive	Kilgore Road	67,100	45	50	97.5	1.5	1	87		13	
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	42,500	45	50	97.5	1.5	1	87		13	
9	White Rock Road	Sunrise Boulevard	Grant Line Road	51,700	45	50	97.5	1.5	1	87		13	
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	28,700	45	50	97.5	1.5	1	87		13	
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	28,000	45	50	97.5	1.5	1	87		13	
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	41,400	50	50	97.5	1.5	1	87		13	
13	Mather Field Road	US 50 eastbound ramps	International Drive	69,100	50	50	97.5	1.5	1	87		13	
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	31,100	45	50	97.5	1.5	1	87		13	
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	78,800	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	SR 16	Excelsior Road	Eagles Nest Road	73.4	62.3	64.5	74.2	131	414	1310	4143	13100
2	SR 16	Sunrise Boulevard	Grant Line Road	73.5	62.5	64.7	74.4	136	431	1363	4309	13627
3	Kiefer Boulevard	Grant Line Road	north of SR 16	62.1	53.6	57.1	63.7	12	37	117	371	1175
4	Mather Boulevard	Femoyer Street	Douglas Road	72.1	61.7	64.1	73.1	102	323	1022	3232	10222
5	Douglas Road	Mather Boulevard	Sunrise Boulevard	72.9	62.4	64.8	73.8	120	381	1204	3806	12036
6	International Drive	South White Rock Road	Zinfandel Drive	74.8	64.9	67.6	75.9	195	615	1946	6152	19456
7	International Drive	Zinfandel Drive	Kilgore Road	75.2	65.3	68.0	76.3	212	671	2123	6713	21227
8	White Rock Road	Zinfandel Drive	Sunrise Boulevard	73.2	63.3	66.0	74.3	134	425	1344	4252	13445
9	White Rock Road	Sunrise Boulevard	Grant Line Road	74.0	64.1	66.9	75.1	164	517	1636	5172	16355
10	Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	71.5	61.6	64.3	72.6	91	287	908	2871	9079
11	Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	71.4	61.5	64.2	72.5	89	280	886	2801	8858
12	Mather Field Road	Folsom Boulevard	US 50 westbound ramps	74.4	63.9	66.3	75.3	171	540	1706	5396	17064
13	Mather Field Road	US 50 eastbound ramps	International Drive	76.6	66.1	68.6	77.6	285	901	2848	9007	28481
14	Zinfandel Drive	Folsom Boulevard	US 50 westbound ramps	71.8	61.9	64.7	72.9	98	311	984	3111	9839
15	Zinfandel Drive	US 50 eastbound ramps	White Rock Road	75.9	66.0	68.7	77.0	249	788	2493	7883	24928

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Zinfandel Drive	White Rock Road	International Drive	43,000	45	50	97.5	1.5	1	87		13	
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	99,400	45	50	97.5	1.5	1	87		13	
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	100,300	45	50	97.5	1.5	1	87		13	
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	62,800	45	50	97.5	1.5	1	87		13	
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	58,300	45	50	97.5	1.5	1	87		13	
6	Sunrise Boulevard	White Rock Road	Douglas Road	46,000	50	50	97.5	1.5	1	87		13	
7	Sunrise Boulevard	SR 16	Grant Line Road	28,900	50	50	97.5	1.5	1	87		13	
8	Hazel Avenue	Winding Way	US 50 westbound ramps	122,100	45	50	97.5	1.5	1	87		13	
9	Grant Line Road	White Rock Road	Douglas Road	49,500	55	50	97.5	1.5	1	87		13	
10	Grant Line Road	Douglas Road	SR 16	33,100	55	50	97.5	1.5	1	87		13	
11	Grant Line Road	SR 16	Sunrise Boulevard	27,900	55	50	97.5	1.5	1	87		13	
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	32,400	50	50	97.5	1.5	1	87		13	
13	Douglas Road	Americanos Boulevard	Grant Line Road	18,400	50	50	97.5	1.5	1	87		13	
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	41,200	50	50	97.5	1.5	1	87		13	
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	15,100	50	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Zinfandel Drive	White Rock Road	International Drive	73.2	63.3	66.1	74.3	136	430	1360	4302	13603
2	Sunrise Boulevard	Gold Country Boulevard	Coloma Road	76.9	67.0	69.7	78.0	314	994	3145	9944	31445
3	Sunrise Boulevard	Coloma Road	US 50 westbound ramps	76.9	67.0	69.8	78.0	317	1003	3173	10034	31730
4	Sunrise Boulevard	US 50 eastbound ramps	Folsom Boulevard	74.9	65.0	67.7	76.0	199	628	1987	6282	19867
5	Sunrise Boulevard	Folsom Boulevard	White Rock Road	74.5	64.7	67.4	75.7	184	583	1844	5832	18443
6	Sunrise Boulevard	White Rock Road	Douglas Road	74.8	64.3	66.8	75.8	190	600	1896	5996	18960
7	Sunrise Boulevard	SR 16	Grant Line Road	72.8	62.3	64.8	73.8	119	377	1191	3767	11912
8	Hazel Avenue	Winding Way	US 50 westbound ramps	77.8	67.9	70.6	78.9	386	1221	3863	12215	38627
9	Grant Line Road	White Rock Road	Douglas Road	76.3	65.3	67.5	77.2	260	824	2604	8236	26043
10	Grant Line Road	Douglas Road	SR 16	74.6	63.6	65.7	75.4	174	551	1741	5507	17415
11	Grant Line Road	SR 16	Sunrise Boulevard	73.9	62.8	65.0	74.7	147	464	1468	4642	14679
12	Douglas Road	Sunrise Boulevard	Rancho Cordova Parkway	73.3	62.8	65.3	74.3	134	422	1335	4223	13354
13	Douglas Road	Americanos Boulevard	Grant Line Road	70.9	60.4	62.8	71.8	76	240	758	2398	7584
14	Sunrise Boulevard	Kiefer Boulevard	SR 16	74.4	63.9	66.3	75.3	170	537	1698	5370	16982
15	Douglas Road	Rancho Cordova Parkway	Americanos Boulevard	70.0	59.5	62.0	71.0	62	197	622	1968	6224

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	7,000	35	50	97.5	1.5	1	87		13	
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	10,100	35	50	97.5	1.5	1	87		13	
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	9,300	35	50	97.5	1.5	1	87		13	
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	15,500	35	50	97.5	1.5	1	87		13	
5	Zinfandel Drive	Mather Boulevard	Douglas Road	31,300	35	50	97.5	1.5	1	87		13	
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	5,800	35	50	97.5	1.5	1	87		13	
7	Zinfandel Drive	Kiefer Boulevard	SR 16	6,300	35	50	97.5	1.5	1	87		13	
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	57,900	35	50	97.5	1.5	1	87		13	
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	42,400	35	50	97.5	1.5	1	87		13	
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	62,000	45	50	97.5	1.5	1	87		13	
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	57,200	45	50	97.5	1.5	1	87		13	
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	21,000	45	50	97.5	1.5	1	87		13	
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	38,200	45	50	97.5	1.5	1	87		13	
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	33,800	45	50	97.5	1.5	1	87		13	
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	31,100	45	50	97.5	1.5	1	87		13	
16	Americanos Boulevard	White Rock Road	Douglas Road	27,200	45	50	97.5	1.5	1	87		13	
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	21,500	45	50	97.5	1.5	1	87		13	

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative ID
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Chrysanthy Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	62.2	53.8	57.2	63.8	12	38	121	382	1209
2	Chrysanthy Boulevard	Rancho Cordova Parkway	Americanos Boulevard	63.8	55.3	58.8	65.4	17	55	174	552	1745
3	Kiefer Boulevard	Zinfandel Drive	Sunrise Boulevard	63.4	55.0	58.4	65.1	16	51	161	508	1606
4	Kiefer Boulevard	Sunrise Boulevard	Rancho Cordova Parkway	65.6	57.2	60.6	67.3	27	85	268	847	2677
5	Zinfandel Drive	Mather Boulevard	Douglas Road	68.7	60.3	63.7	70.3	54	171	541	1710	5407
6	Zinfandel Drive	Douglas Road	Kiefer Boulevard	61.4	52.9	56.4	63.0	10	32	100	317	1002
7	Zinfandel Drive	Kiefer Boulevard	SR 16	61.7	53.3	56.7	63.4	11	34	109	344	1088
8	Sunrise Boulevard	Douglas Road	Chrysanthy Boulevard	71.4	62.9	66.4	73.0	100	316	1000	3163	10002
9	Sunrise Boulevard	Chrysanthy Boulevard	Kiefer Boulevard	70.0	61.6	65.0	71.7	73	232	732	2316	7324
10	Rancho Cordova Parkway	US 50	Easton Valley Parkway	74.8	64.9	67.7	75.9	196	620	1961	6202	19614
11	Rancho Cordova Parkway	Easton Valley Parkway	White Rock Road	74.5	64.6	67.3	75.6	181	572	1810	5722	18095
12	Rancho Cordova Parkway	White Rock Road	Douglas Road	70.1	60.2	63.0	71.2	66	210	664	2101	6643
13	Rancho Cordova Parkway	Douglas Road	Chrysanthy Boulevard	72.7	62.8	65.6	73.8	121	382	1208	3821	12085
14	Rancho Cordova Parkway	Chrysanthy Boulevard	Kiefer Boulevard	72.2	62.3	65.0	73.3	107	338	1069	3381	10693
15	Americanos Boulevard	Rancho Cordova Parkway	White Rock Road	71.8	61.9	64.7	72.9	98	311	984	3111	9839
16	Americanos Boulevard	White Rock Road	Douglas Road	71.2	61.4	64.1	72.4	86	272	860	2721	8605
17	Americanos Boulevard	Douglas Road	Chrysanthy Boulevard	70.2	60.3	63.1	71.3	68	215	680	2151	6802

Appendix Noise 1
Traffic Noise Prediction Model, (FHWA RD-77-108)



Model Input Assumptions

Project Name : Suncreek
Project Number : 05110083.01

Modeling Condition :

Ground Type : Hard

K Factor :

Metric (L_{eq}, L_{dn}, CNEL) : Ldn

Traffic Desc. (Peak or ADT) : ADT

	ADT	MT	MT %	HT	HT %
Route 5	237000	5026	2.1%	4550	1.9%
Route 134	231000	3127	1.4%	1392	0.6%

Source: Caltrans 2008 Annual Average Daily Truck Traffic on the California State Highway System

Appendix Noise 2a
TNM Noise Barrier Heights Output

Receiver Name	No. #DUs	Existing Lden	No Barrier Lden Calculated	Increase over existing		Type Impact	With Barrier		Noise Reduction Calculated	Goal	Calculated minus Goal
				Crit'n	Calculated		Crit'n Sub'l Inc	Calculated Lden			
		dBa	dBa	dBa	dB		dBa	dB	dB	dB	
Receiver 001	565	1	0	73.1	66	73.1	10 Snd Lvl	66.7	6.4	8	-1.6
Receiver 002"	566	1	0	74.1	66	74.1	10 Snd Lvl	66.5	7.6	8	-0.4
Receiver 003"	567	1	0	70.6	66	70.6	10 Snd Lvl	65.5	5.1	8	-2.9
Receiver 004"	568	1	0	69.7	66	69.7	10 Snd Lvl	64.2	5.5	8	-2.5
Receiver 005"	569	1	0	67.3	66	67.3	10 Snd Lvl	61.6	5.7	8	-2.3
Receiver 006"	570	1	0	71.2	66	71.2	10 Snd Lvl	64.4	6.8	8	-1.2
Receiver 007"	571	1	0	70.8	66	70.8	10 Snd Lvl	62.5	8.3	8	0.3
Receiver 008"	572	1	0	70.7	66	70.7	10 Snd Lvl	62.4	8.3	8	0.3
Receiver 009"	573	1	0	70.2	66	70.2	10 Snd Lvl	62.2	8	8	0
Receiver 010"	574	1	0 inactive		66 inactive		10 inactive	inactive	inactive	8 inactive	
Receiver 011"	575	1	0 inactive		66 inactive		10 inactive	inactive	inactive	8 inactive	
Receiver 012"	576	1	0 inactive		66 inactive		10 inactive	inactive	inactive	8 inactive	
Receiver 013"	577	1	0 inactive		66 inactive		10 inactive	inactive	inactive	8 inactive	
Receiver 014"	578	1	0	70.4	66	70.4	10 Snd Lvl	62.4	8	8	0
Receiver 015"	579	1	0	70.9	66	70.9	10 Snd Lvl	62.7	8.2	8	0.2
Receiver 016"	580	1	0	70.8	66	70.8	10 Snd Lvl	61.9	8.9	8	0.9
Receiver 017"	581	1	0	70.9	66	70.9	10 Snd Lvl	63.2	7.7	8	-0.3
Receiver 018"	582	1	0	73.2	66	73.2	10 Snd Lvl	66	7.2	8	-0.8
Receiver 019"	583	1	0	71.5	66	71.5	10 Snd Lvl	62.2	9.3	8	1.3
Receiver 020"	584	1	0	52.2	66	52.2	10 ----	50.4	1.8	8	-6.2
Receiver 021"	585	1	0	53.5	66	53.5	10 ----	52.1	1.4	8	-6.6
Receiver 022"	586	1	0	58.1	66	58.1	10 ----	55.3	2.8	8	-5.2
Receiver 023"	587	1	0	71.6	66	71.6	10 Snd Lvl	63.7	7.9	8	-0.1
School1b"	588	1	0	51.4	66	51.4	10 ----	49.4	2	8	-6
School1a"	589	1	0	52.2	66	52.2	10 ----	50	2.2	8	-5.8
Receiver 024"	590	1	0	59.6	66	59.6	10 ----	56.1	3.5	8	-4.5
Receiver 025"	591	1	0	59	66	59	10 ----	56.1	2.9	8	-5.1

Receiver 026"	592	1	0	60.4	66	60.4	10 ----	56.6	3.8	8	-4.2
Receiver 027"	593	1	0	60.3	66	60.3	10 ----	56.6	3.7	8	-4.3
Receiver 028"	594	1	0	61.4	66	61.4	10 ----	59	2.4	8	-5.6
Receiver 029"	595	1	0	66	66	66	10 Snd Lvl	60	6	8	-2
Receiver 030"	596	1	0	73.9	66	73.9	10 Snd Lvl	66.1	7.8	8	-0.2
Receiver 031"	597	1	0	75	66	75	10 Snd Lvl	68.4	6.6	8	-1.4
Receiver 032"	598	1	0	74.6	66	74.6	10 Snd Lvl	67.6	7	8	-1
Receiver 033"	599	1	0	75.1	66	75.1	10 Snd Lvl	68	7.1	8	-0.9
Receiver 034"	600	1	0	75.1	66	75.1	10 Snd Lvl	67.9	7.2	8	-0.8
Receiver 035"	601	1	0	74.2	66	74.2	10 Snd Lvl	65.2	9	8	1
Receiver 036"	602	1	0	74.3	66	74.3	10 Snd Lvl	67.6	6.7	8	-1.3

Appendix Noise 2b
TNM Noise Barrier Heights Output

Receiver Name	No. #DUs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier		Goal	Calculated minus Goal
		Lden	Lden	Lden	Lden	Crit'n	Calculated		Crit'n	Calculated		
		dba	dba	dba	dB	dba	dB		dba	dB	dB	dB
Receiver 047	613	1	0	71.6	66	71.6	10	Snd Lvl	64.9	6.7	8	-1.3
Receiver 049"	615	1	0	70.1	66	70.1	10	Snd Lvl	63.8	6.3	8	-1.7
Receiver 051"	617	1	0	73	66	73	10	Snd Lvl	72.9	0.1	8	-7.9
Receiver 057"	623	1	0	72.4	66	72.4	10	Snd Lvl	65.4	7	8	-1
Receiver 058"	624	1	0	63.6	66	63.6	10	----	62.7	0.9	8	-7.1
Receiver 061"	627	1	0	72.3	66	72.3	10	Snd Lvl	64.3	8	8	0
Receiver 063"	629	1	0	65.1	66	65.1	10	----	58.1	7	8	-1
Receiver 069"	635	1	0	72.6	66	72.6	10	Snd Lvl	63.6	9	8	1
Receiver 074"	640	1	0	65.5	66	65.5	10	----	58.3	7.2	8	-0.8
Receiver 076"	642	1	0	58	66	58	10	----	54.2	3.8	8	-4.2
Receiver 078"	644	1	0	61	66	61	10	----	55.4	5.6	8	-2.4
Receiver 079"	645	1	0	59.2	66	59.2	10	----	55.5	3.7	8	-4.3
Receiver 080"	646	1	0	63.7	66	63.7	10	----	56.3	7.4	8	-0.6
Receiver 081"	647	1	0	63.8	66	63.8	10	----	57	6.8	8	-1.2
Receiver 082"	648	1	0	64.5	66	64.5	10	----	56.3	8.2	8	0.2
Receiver 083"	649	1	0	63.7	66	63.7	10	----	58.3	5.4	8	-2.6
Receiver 084"	650	1	0	64.6	66	64.6	10	----	60.9	3.7	8	-4.3
Receiver 085"	651	1	0	63.6	66	63.6	10	----	56.7	6.9	8	-1.1
Receiver 086"	652	1	0	73.1	66	73.1	10	Snd Lvl	68.9	4.2	8	-3.8
Receiver 089"	655	1	0	65	66	65	10	----	56.9	8.1	8	0.1
Receiver 091"	657	1	0	64.2	66	64.2	10	----	56.6	7.6	8	-0.4
Receiver 092"	658	1	0	64	66	64	10	----	56.2	7.8	8	-0.2
Receiver 093"	659	1	0	63.6	66	63.6	10	----	57.1	6.5	8	-1.5
Receiver 094"	660	1	0	59.7	66	59.7	10	----	54.3	5.4	8	-2.6
Receiver 095"	661	1	0	73.3	66	73.3	10	Snd Lvl	68.8	4.5	8	-3.5
Receiver 096"	662	1	0	65	66	65	10	----	58.9	6.1	8	-1.9
Receiver 097"	663	1	0	64.5	66	64.5	10	----	58.3	6.2	8	-1.8
Receiver 098"	664	1	0	63.4	66	63.4	10	----	56.4	7	8	-1

Receiver 099"	665	1	0	64.5	66	64.5	10 ----	56.9	7.6	8	-0.4
Receiver 100"	666	1	0	63.7	66	63.7	10 ----	57.1	6.6	8	-1.4
Receiver 102"	668	1	0	56.7	66	56.7	10 ----	53.6	3.1	8	-4.9
Receiver 103"	669	1	0	62	66	62	10 ----	61.7	0.3	8	-7.7
Receiver 104"	670	1	0	63	66	63	10 ----	61.4	1.6	8	-6.4
Receiver 105"	671	1	0	66.8	66	66.8	10 Snd Lvl	61.9	4.9	8	-3.1
Receiver 106"	672	1	0	62.6	66	62.6	10 ----	62.5	0.1	8	-7.9
Receiver 107"	673	1	0 inactive		66 inactive		10 inactive	inactive	inactive	8 inactive	
Receiver 109"	676	1	0	54.9	66	54.9	10 ----	50.3	4.6	8	-3.4
Receiver 110"	677	1	0	62	66	62	10 ----	55.4	6.6	8	-1.4
Receiver 112"	679	1	0	53.5	66	53.5	10 ----	50	3.5	8	-4.5
Receiver 113"	680	1	0	63	66	63	10 ----	55.8	7.2	8	-0.8
Receiver 114"	681	1	0	66.8	66	66.8	10 Snd Lvl	58.9	7.9	8	-0.1
Receiver 115"	682	1	0	53.3	66	53.3	10 ----	51.5	1.8	8	-6.2
Receiver 116"	683	1	0	52.8	66	52.8	10 ----	50.1	2.7	8	-5.3
Receiver 119"	686	1	0	52.5	66	52.5	10 ----	51	1.5	8	-6.5
Receiver 120"	688	1	0	72.5	66	72.5	10 Snd Lvl	64.7	7.8	8	-0.2
Receiver 121"	689	1	0	65.8	66	65.8	10 ----	57.3	8.5	8	0.5
Receiver 124"	692	1	0	51.5	66	51.5	10 ----	50.3	1.2	8	-6.8
Receiver 128"	696	1	0	51	66	51	10 ----	49.9	1.1	8	-6.9
Receiver 130"	698	1	0	72.5	66	72.5	10 Snd Lvl	64.9	7.6	8	-0.4
Park2a"	699	1	0	60.4	66	60.4	10 ----	60.2	0.2	8	-7.8
Receiver 132"	701	1	0	72.7	66	72.7	10 Snd Lvl	64.3	8.4	8	0.4
Receiver 133"	702	1	0	50.6	66	50.6	10 ----	49.4	1.2	8	-6.8
Receiver 142"	711	1	0	72.4	66	72.4	10 Snd Lvl	64.4	8	8	0
Receiver 143"	715	1	0	72.4	66	72.4	10 Snd Lvl	64.9	7.5	8	-0.5
Receiver 144"	716	1	0	72.7	66	72.7	10 Snd Lvl	66.9	5.8	8	-2.2
Receiver 145"	717	1	0	72.5	66	72.5	10 Snd Lvl	65.8	6.7	8	-1.3
Receiver 146"	718	1	0	72.7	66	72.7	10 Snd Lvl	64.5	8.2	8	0.2
Park2b"	719	1	0	62.2	66	62.2	10 ----	55.8	6.4	8	-1.6
Receiver 147"	721	1	0	72.8	66	72.8	10 Snd Lvl	64.6	8.2	8	0.2
Receiver 148"	722	1	0	72.7	66	72.7	10 Snd Lvl	64.3	8.4	8	0.4
Receiver 148"	724	1	0	72.3	66	72.3	10 Snd Lvl	64.5	7.8	8	-0.2
Receiver 149"	725	1	0	73.5	66	73.5	10 Snd Lvl	66	7.5	8	-0.5
Receiver 150"	727	1	0	73.5	66	73.5	10 Snd Lvl	66.8	6.7	8	-1.3
Receiver 151"	728	1	0	73.5	66	73.5	10 Snd Lvl	65.6	7.9	8	-0.1
Receiver 152"	729	1	0	73.6	66	73.6	10 Snd Lvl	66.7	6.9	8	-1.1
Receiver 153"	730	1	0	73.9	66	73.9	10 Snd Lvl	68.1	5.8	8	-2.2

Receiver 154"	731	1	0	73.6	66	73.6	10 Snd Lvl	66.3	7.3	8	-0.7
Receiver 155"	732	1	0	73.9	66	73.9	10 Snd Lvl	66.7	7.2	8	-0.8
Receiver 156"	733	1	0	74.8	66	74.8	10 Snd Lvl	67.7	7.1	8	-0.9

Appendix Noise 2c
TNM Noise Barrier Heights Output

Receiver Name	No. #DUs	Existing Lden	No Barrier Lden Calculated	Increase over existing		Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Goal	Calculated minus Goal	
				Crit'n	Calculated						Crit'n
		dB	dB	dB	dB		dB	dB	dB	dB	
Receiver 037	603	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 038"	604	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 039"	605	1	0	74	66	74	10 Snd Lvl	74	0	8	-8
Receiver 040"	606	1	0	74	66	74	10 Snd Lvl	74	0	8	-8
Receiver 041"	607	1	0	74	66	74	10 Snd Lvl	74	0	8	-8
Receiver 042"	608	1	0	74	66	74	10 Snd Lvl	74	0	8	-8
Receiver 043"	609	1	0	74.1	66	74.1	10 Snd Lvl	74.1	0	8	-8
Receiver 044"	610	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 045"	611	1	0	74.1	66	74.1	10 Snd Lvl	74.1	0	8	-8
Receiver 046"	612	1	0	74.1	66	74.1	10 Snd Lvl	74.1	0	8	-8
Receiver 048"	614	1	0	71.2	66	71.2	10 Snd Lvl	71.2	0	8	-8
Receiver 050"	616	1	0	66	66	66	10 Snd Lvl	66	0	8	-8
Receiver 052"	618	1	0	65.4	66	65.4	10 ----	65.4	0	8	-8
Receiver 053"	619	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 054"	620	1	0	65.6	66	65.6	10 ----	65.6	0	8	-8
Receiver 055"	621	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 056"	622	1	0	65	66	65	10 ----	65	0	8	-8
Receiver 059"	625	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 060"	626	1	0	64.7	66	64.7	10 ----	64.7	0	8	-8
Receiver 062"	628	1	0	64.7	66	64.7	10 ----	64.7	0	8	-8
Receiver 064"	630	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 065"	631	1	0	64.6	66	64.6	10 ----	64.6	0	8	-8
Receiver 066"	632	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 067"	633	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 068"	634	1	0	64.5	66	64.5	10 ----	64.5	0	8	-8
Receiver 070"	636	1	0	65	66	65	10 ----	65	0	8	-8
Receiver 071"	637	1	0	65.4	66	65.4	10 ----	65.4	0	8	-8
Receiver 072"	638	1	0	65.1	66	65.1	10 ----	65.1	0	8	-8

Receiver 073"	639	1	0	65.4	66	65.4	10 ----	65.4	0	8	-8
Receiver 075"	641	1	0	64.5	66	64.5	10 ----	64.5	0	8	-8
Receiver 077"	643	1	0	65	66	65	10 ----	65	0	8	-8
Receiver 087"	653	1	0	65	66	65	10 ----	65	0	8	-8
Receiver 088"	654	1	0	66.8	66	66.8	10 Snd Lvl	66.8	0	8	-8
Receiver 090"	656	1	0	65.1	66	65.1	10 ----	65.1	0	8	-8
Receiver 101"	667	1	0	64.9	66	64.9	10 ----	64.9	0	8	-8
School2b"	674	1	0	61.4	66	61.4	10 ----	61.4	0	8	-8
Receiver 108"	675	1	0	64.8	66	64.8	10 ----	64.8	0	8	-8
Receiver 111"	678	1	0	65.1	66	65.1	10 ----	65.1	0	8	-8
Receiver 117"	684	1	0	64.9	66	64.9	10 ----	64.9	0	8	-8
Receiver 118"	685	1	0	65.1	66	65.1	10 ----	65.1	0	8	-8
School2a"	687	1	0	60.7	66	60.7	10 ----	60.7	0	8	-8
Receiver 122"	690	1	0	65.5	66	65.5	10 ----	65.5	0	8	-8
Receiver 123"	691	1	0	64.8	66	64.8	10 ----	64.8	0	8	-8
Receiver 125"	693	1	0	66.1	66	66.1	10 Snd Lvl	66.1	0	8	-8
Receiver 126"	694	1	0	64.8	66	64.8	10 ----	64.8	0	8	-8
Receiver 127"	695	1	0	65	66	65	10 ----	65	0	8	-8
Receiver 129"	697	1	0	65.1	66	65.1	10 ----	65.1	0	8	-8
Receiver 131"	700	1	0	64.9	66	64.9	10 ----	64.9	0	8	-8
Receiver 134"	703	1	0	65.4	66	65.4	10 ----	65.3	0.1	8	-7.9
Receiver 135"	704	1	0	60.5	66	60.5	10 ----	60.5	0	8	-8
Receiver 136"	705	1	0	65.5	66	65.5	10 ----	65.5	0	8	-8
Receiver 137"	706	1	0	63.6	66	63.6	10 ----	63.5	0.1	8	-7.9
Receiver 138"	707	1	0	65.3	66	65.3	10 ----	65.3	0	8	-8
Receiver 139"	708	1	0	63.6	66	63.6	10 ----	63.5	0.1	8	-7.9
Receiver 140"	709	1	0	66.3	66	66.3	10 Snd Lvl	66.3	0	8	-8
Receiver 141"	710	1	0	65.2	66	65.2	10 ----	65.1	0.1	8	-7.9
Park1a"	712	1	0	64.8	66	64.8	10 ----	57.6	7.2	8	-0.8
School2c"	713	1	0	59.5	66	59.5	10 ----	59.5	0	8	-8
Park1b"	714	1	0	61.1	66	61.1	10 ----	54.9	6.2	8	-1.8
School2d"	720	1	0	59.5	66	59.5	10 ----	59.5	0	8	-8
Park1c"	723	1	0	63.2	66	63.2	10 ----	59.8	3.4	8	-4.6
Park1d"	726	1	0	62.9	66	62.9	10 ----	58.8	4.1	8	-3.9
Receiver 157"	734	1	0	60.8	66	60.8	10 ----	60	0.8	8	-7.2
Receiver 158"	735	1	0	61.1	66	61.1	10 ----	55.2	5.9	8	-2.1
Receiver 174"	751	1	0	74.6	66	74.6	10 Snd Lvl	74.6	0	8	-8
Receiver 175"	752	1	0	59.1	66	59.1	10 ----	55.1	4	8	-4

Receiver 176"	753	1	0	73.9	66	73.9	10 Snd Lvl	73.9	0	8	-8
Receiver 177"	754	1	0	74.4	66	74.4	10 Snd Lvl	74.4	0	8	-8
Receiver 178"	755	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 180"	757	1	0	59.5	66	59.5	10 ----	54.9	4.6	8	-3.4
Receiver 181"	758	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 183"	760	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 184"	761	1	0	60	66	60	10 ----	55.6	4.4	8	-3.6
Receiver 185"	762	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 186"	763	1	0	75	66	75	10 Snd Lvl	75	0	8	-8
Receiver 187"	764	1	0	62.8	66	62.8	10 ----	57.1	5.7	8	-2.3
Receiver 188"	765	1	0	75.6	66	75.6	10 Snd Lvl	75.6	0	8	-8
Receiver 190"	767	1	0	74.7	66	74.7	10 Snd Lvl	74.7	0	8	-8
Receiver 191"	768	1	0	62.5	66	62.5	10 ----	57.5	5	8	-3
Receiver 193"	770	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 198"	775	1	0	65.9	66	65.9	10 ----	59.2	6.7	8	-1.3
Receiver 199"	776	1	0	73.9	66	73.9	10 Snd Lvl	73.9	0	8	-8
Receiver 201"	778	1	0	74	66	74	10 Snd Lvl	74	0	8	-8
Receiver 203"	780	1	0	66.9	66	66.9	10 Snd Lvl	61.9	5	8	-3
Receiver 205"	782	1	0	75.5	66	75.5	10 Snd Lvl	68.6	6.9	8	-1.1

Appendix Noise 2d
TNM Noise Barrier Heights Output

Receiver Name	No.	#DUs	Existing Lden	No Barrier Lden	Increase over existing	Type	With Barrier Calculated Lden	Noise Reduction Calculated	Goal	Calculated minus Goal	
			dB	dB	dB	dB	dB	dB	dB	dB	
Receiver 1f	736	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 1f	737	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 1f	738	1	0	74.4	66	74.4	10 Snd Lvl	74.4	0	8	-8
Receiver 1f	739	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 1f	740	1	0	74.5	66	74.5	10 Snd Lvl	74.5	0	8	-8
Receiver 1f	741	1	0	73.9	66	73.9	10 Snd Lvl	73.9	0	8	-8
Receiver 1f	742	1	0	74.5	66	74.5	10 Snd Lvl	74.5	0	8	-8
Receiver 1f	743	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 1f	744	1	0	74.3	66	74.3	10 Snd Lvl	74.3	0	8	-8
Receiver 1f	745	1	0	74.6	66	74.6	10 Snd Lvl	74.6	0	8	-8
Receiver 1f	746	1	0	74.1	66	74.1	10 Snd Lvl	74.1	0	8	-8
Receiver 1g	747	1	0	74.4	66	74.4	10 Snd Lvl	74.4	0	8	-8
Receiver 1g	748	1	0	74.2	66	74.2	10 Snd Lvl	74.2	0	8	-8
Receiver 1g	749	1	0	71.4	66	71.4	10 Snd Lvl	71.4	0	8	-8
Receiver 1g	750	1	0	64.3	66	64.3	10 ----	64.3	0	8	-8
Receiver 1g	756	1	0	69.4	66	69.4	10 Snd Lvl	69.4	0	8	-8
Receiver 1h	759	1	0	66.3	66	66.3	10 Snd Lvl	66.3	0	8	-8
Receiver 1i	766	1	0	49.1	66	49.1	10 ----	49	0.1	8	-7.9
Receiver 1j	769	1	0	51.7	66	51.7	10 ----	51.6	0.1	8	-7.9
Receiver 1k	771	1	0	70.4	66	70.4	10 Snd Lvl	62.6	7.8	8	-0.2
Receiver 1k	774	1	0	49.5	66	49.5	10 ----	49.4	0.1	8	-7.9
Receiver 2l	777	1	0	49.8	66	49.8	10 ----	49.6	0.2	8	-7.8
Receiver 2l	779	1	0	70.4	66	70.4	10 Snd Lvl	62.7	7.7	8	-0.3
Receiver 2l	781	1	0	50.6	66	50.6	10 ----	50.3	0.3	8	-7.7
Receiver 2l	783	1	0	70.4	66	70.4	10 Snd Lvl	62.8	7.6	8	-0.4
Receiver 2l	784	1	0	50.8	66	50.8	10 ----	50.6	0.2	8	-7.8
Receiver 2l	785	1	0	50.2	66	50.2	10 ----	50.1	0.1	8	-7.9
Receiver 2l	786	1	0	49.8	66	49.8	10 ----	49.5	0.3	8	-7.7

Receiver 21	787	1	0	70.7	66	70.7	10 Snd Lvl	63	7.7	8	-0.3
Receiver 21	788	1	0	55.9	66	55.9	10 ----	55.8	0.1	8	-7.9
Receiver 21	789	1	0	58.8	66	58.8	10 ----	58.7	0.1	8	-7.9
Receiver 21	790	1	0	70	66	70	10 Snd Lvl	63	7	8	-1
Receiver 21	791	1	0	60.3	66	60.3	10 ----	60.2	0.1	8	-7.9
Receiver 21	792	1	0	54.5	66	54.5	10 ----	54.1	0.4	8	-7.6
Receiver 21	793	1	0	74.4	66	74.4	10 Snd Lvl	66.6	7.8	8	-0.2
Receiver 21	794	1	0	72.8	66	72.8	10 Snd Lvl	64.5	8.3	8	0.3
Receiver 21	795	1	0	74.1	66	74.1	10 Snd Lvl	68	6.1	8	-1.9
Receiver 21	796	1	0	74.7	66	74.7	10 Snd Lvl	67	7.7	8	-0.3
Receiver 22	797	1	0	75.2	66	75.2	10 Snd Lvl	67.1	8.1	8	0.1
Receiver 22	798	1	0	73.1	66	73.1	10 Snd Lvl	66.7	6.4	8	-1.6
Receiver 22	799	1	0	75.3	66	75.3	10 Snd Lvl	67	8.3	8	0.3
Receiver 22	800	1	0	74.6	66	74.6	10 Snd Lvl	68	6.6	8	-1.4
Receiver 22	801	1	0	74.3	66	74.3	10 Snd Lvl	65.2	9.1	8	1.1
Receiver 22	802	1	0	73.2	66	73.2	10 Snd Lvl	67.4	5.8	8	-2.2
Receiver 22	803	1	0	73.3	66	73.3	10 Snd Lvl	67.4	5.9	8	-2.1
Receiver 22	804	1	0	72.9	66	72.9	10 Snd Lvl	64.4	8.5	8	0.5
Receiver 22	805	1	0	72.9	66	72.9	10 Snd Lvl	64.2	8.7	8	0.7
Receiver 22	806	1	0	75.7	66	75.7	10 Snd Lvl	68.2	7.5	8	-0.5
Receiver 23	807	1	0	73	66	73	10 Snd Lvl	66.8	6.2	8	-1.8
Receiver 23	808	1	0	70.5	66	70.5	10 Snd Lvl	63.6	6.9	8	-1.1
Receiver 23	809	1	0	70.3	66	70.3	10 Snd Lvl	61.9	8.4	8	0.4
Receiver 23	810	1	0	70.5	66	70.5	10 Snd Lvl	61.3	9.2	8	1.2
Receiver 23	811	1	0	70.6	66	70.6	10 Snd Lvl	62.4	8.2	8	0.2
Receiver 23	812	1	0	68	66	68	10 Snd Lvl	68	0	8	-8
Receiver 15	814	1	0	58	66	58	10 ----	56.7	1.3	8	-6.7
Receiver 15	815	1	0	63.1	66	63.1	10 ----	60.9	2.2	8	-5.8

Appendix B
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative with Quarry Trucks
Ground Type : Hard
Metric (L_{eq}, L_{dn}, CNEL) : Ldn

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	NP - Grant Line Road	Douglas Road	SR 16	31,130	55	50	90.2	1.5	8.3	87		13	
2	NCP - Grant Line Road	Douglas Road	SR 16	33,830	55	50	90.8	1.5	7.7	87		13	
3	PP - Grant Line Road	Douglas Road	SR 16	38,730	55	50	91.7	1.5	6.8	87		13	
4	BIM - Grant Line Road	Douglas Road	SR 16	34,730	55	50	91	1.5	7.5	87		13	
5	ACS - Grant Line Road	Douglas Road	SR 16	34,630	55	50	90.9	1.5	7.6	87		13	
6	ID - Grant Line Road	Douglas Road	SR 16	35,230	55	50	91.1	1.5	7.4	87		13	

Appendix B
Traffic Noise Prediction Model, (FHWA RD-77-108)
Predicted Noise Levels



Project Name : Suncreek
Project Number : 05110083.01
Modeling Condition : Cumulative with Quarry Trucks
Metric (Leq, Ldn, CNEL) : Ldn

Segment	Roadway	Segment		Noise Levels, dB Ldn				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	NP - Grant Line Road	Douglas Road	SR 16	74.0	63.3	74.7	77.5	282	893	2825	8932	28246
2	NCP - Grant Line Road	Douglas Road	SR 16	74.4	63.7	74.7	77.7	296	937	2964	9372	29636
3	PP - Grant Line Road	Douglas Road	SR 16	75.0	64.2	74.8	78.1	321	1015	3211	10153	32108
4	BIM - Grant Line Road	Douglas Road	SR 16	74.5	63.8	74.7	77.8	301	951	3006	9506	30061
5	ACS - Grant Line Road	Douglas Road	SR 16	74.5	63.8	74.7	77.8	302	954	3016	9536	30156
6	ID - Grant Line Road	Douglas Road	SR 16	74.6	63.8	74.7	77.8	303	958	3031	9585	30310

Appendix Noise 4
Project-Generated Construction Source Vibration Prediction Model

Suncreek 2010



Location	Distance to Nearest Receiver in feet	Predicted Vibration Level (PPV)		Predicted Vibration Level (VdB)		Equipment	Reference Distance	PPV at	Approximate
		Bulldozer	Trucks	Bulldozer	Trucks			25 feet (in/sec) ¹	Lv (VdB) at 25 feet ²
CA Threshold (0.08 PPV)	25	1.518	0.076			Pile Driver	25	1.518	112
CA Threshold (80VdB)	25			112	86	Trucks	25	0.076	86

Notes:

¹ Where PPV is the peak particle velocity

² Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.

Source: Caltrans 2002, FTA 2006

Appendix Noise 4
Project-Generated Construction Source Vibration Prediction Model

Suncreek 2010



Location	Distance to Nearest Receiver in feet	Predicted Vibration Level (PPV)		Predicted Vibration Level (VdB)		Equipment	Reference Distance	PPV at	Approximate
		Pile Driver	Bulldozer	Pile Driver	Bulldozer			25 feet	Lv (VdB) at
								(in/sec) ¹	25 feet ²
CA Threshold (0.08 PPV)	100	0.190	0.011			Pile Driver	25	1.518	112
CA Threshold (80VdB)	50			103	78	Bulldozer	25	0.089	87

Notes:

¹ Where PPV is the peak particle velocity

² Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.

Source: Caltrans 2002, FTA 2006