

E. Noise Calculations

Forward Landfill Expansion

Supplemental Environmental Impact Report

Noise Appendix

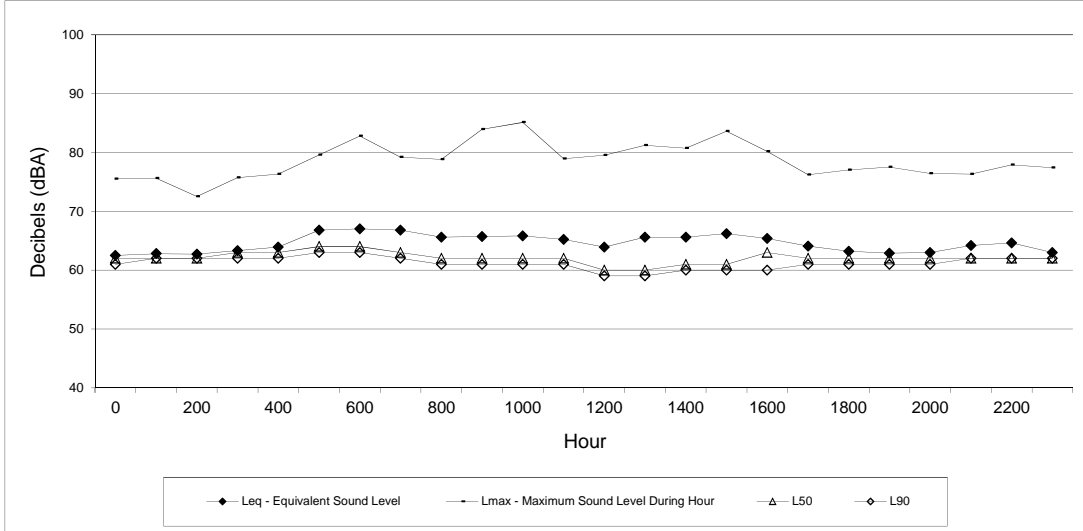
Site 1 Across from Power Plant 24-Hour Noise Plots (3 pages)

Site 2 Landfill Entrance 24-Hour Noise Plots (3 pages)

Site 3 South of S Curve 24-Hour Noise Plots (3 pages)

Site 4 Austin Rd at Lynch Rd 24-Hour Noise Plots (3 pages)

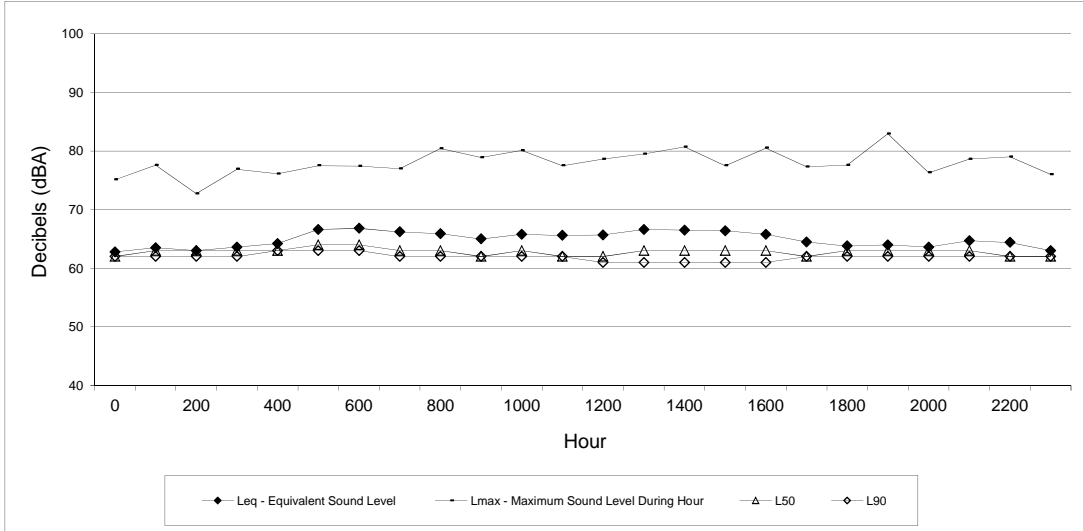
Traffic Noise Level Model Output (1 page)



Site 1: Austin Rd, across from power plant. 80 ft east of centerline.
 Tuesday June 5, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	63	76	62	61
100	63	76	62	62
200	63	73	62	62
300	63	76	63	62
400	64	76	63	62
500	67	80	64	63
600	67	83	64	63
700	67	79	63	62
800	66	79	62	61
900	66	84	62	61
1000	66	85	62	61
1100	65	79	62	61
1200	64	80	60	59
1300	66	81	60	59
1400	66	81	61	60
1500	66	84	61	60
1600	65	80	63	60
1700	64	76	62	61
1800	63	77	62	61
1900	63	78	62	61
2000	63	76	62	61
2100	64	76	62	62
2200	65	78	62	62
2300	63	77	62	62

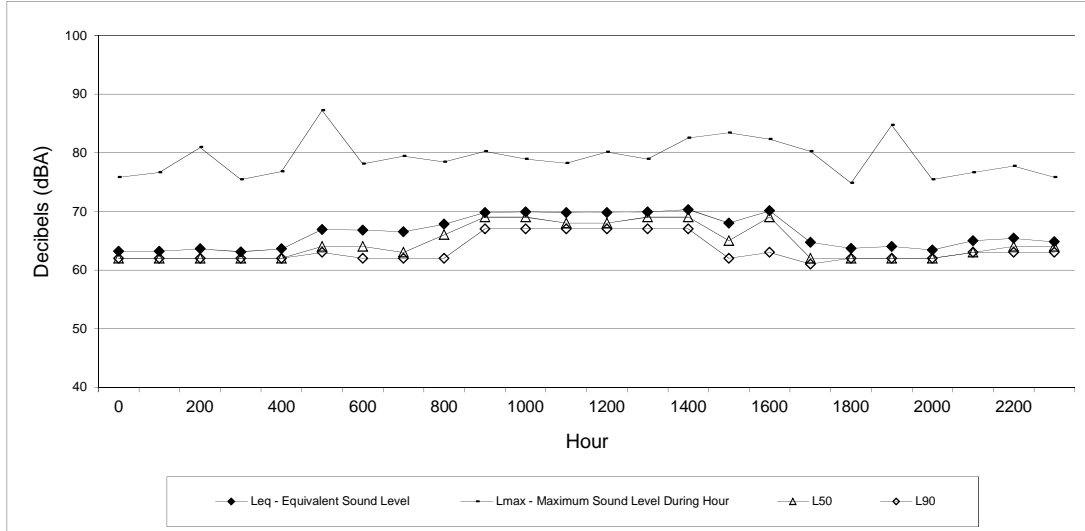
CNEL 71



Site 1: Austin Rd, across from power plant. 80 ft east of centerline.
Wednesday June 6, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	63	75	62	62
100	64	78	63	62
200	63	73	63	62
300	64	77	63	62
400	64	76	63	63
500	67	78	64	63
600	67	77	64	63
700	66	77	63	62
800	66	80	63	62
900	65	79	62	62
1000	66	80	63	62
1100	66	78	62	62
1200	66	79	62	61
1300	67	80	63	61
1400	67	81	63	61
1500	66	78	63	61
1600	66	81	63	61
1700	65	77	62	62
1800	64	78	63	62
1900	64	83	63	62
2000	64	76	63	62
2100	65	79	63	62
2200	64	79	62	62
2300	63	76	62	62

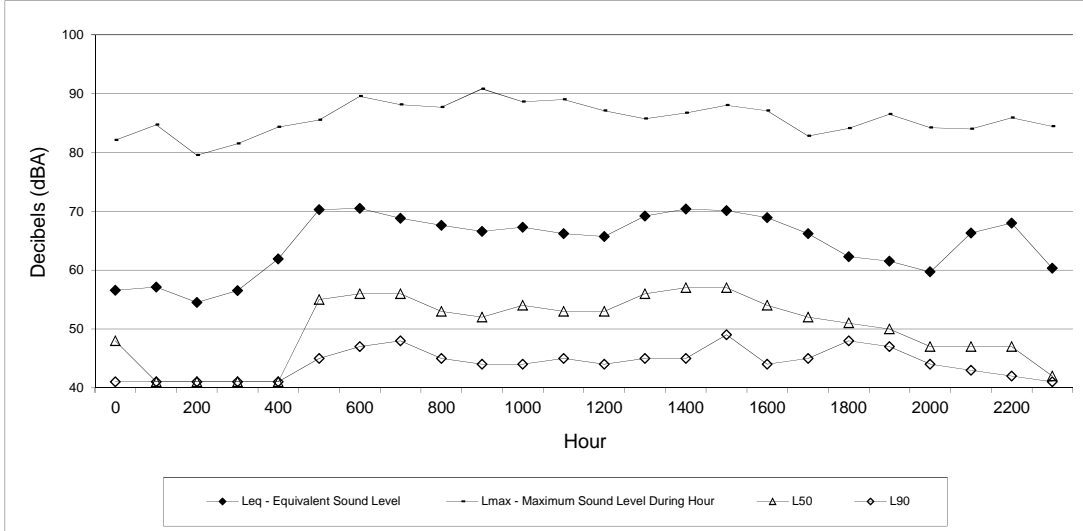
CNEL: 71



Site 1: Austin Rd, across from power plant. 80 ft east of centerline.
Thursday June 7, 2018

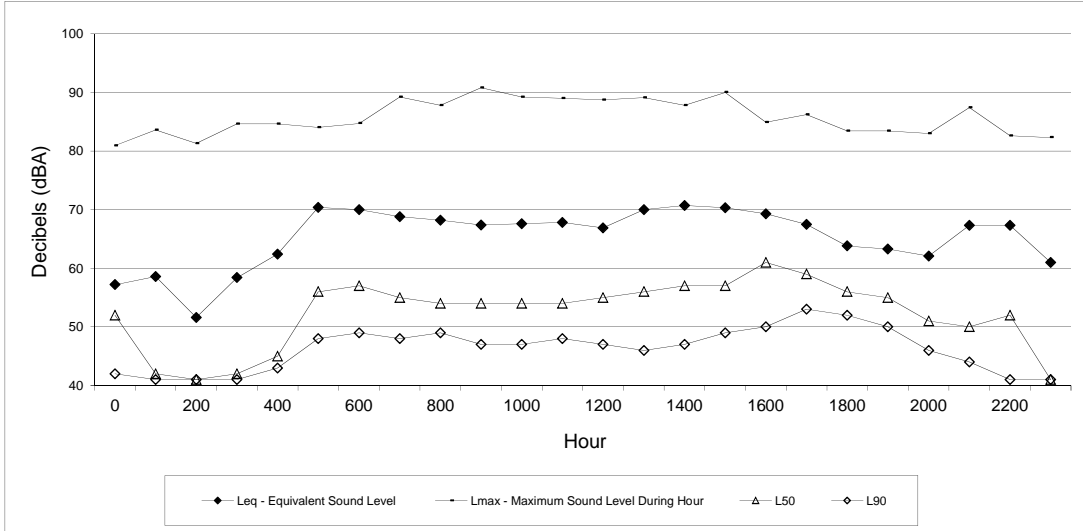
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	63	76	62	62
100	63	77	62	62
200	64	81	62	62
300	63	75	62	62
400	64	77	62	62
500	67	87	64	63
600	67	78	64	62
700	67	79	63	62
800	68	78	66	62
900	70	80	69	67
1000	70	79	69	67
1100	70	78	68	67
1200	70	80	68	67
1300	70	79	69	67
1400	70	83	69	67
1500	68	83	65	62
1600	70	82	69	63
1700	65	80	62	61
1800	64	75	62	62
1900	64	85	62	62
2000	63	75	62	62
2100	65	77	63	63
2200	65	78	64	63
2300	65	76	64	63

CNEL: 72



Site 2: Austin Rd at landfill entrance. 40 ft west of centerline.
Tuesday June 5, 2018

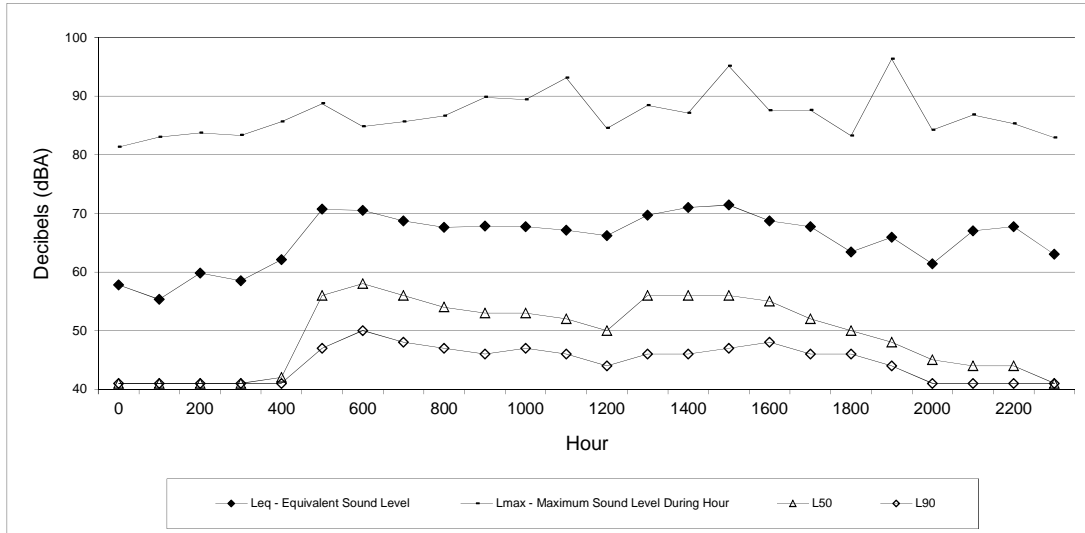
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	57	82	48	41
100	57	85	41	41
200	55	80	41	41
300	57	82	41	41
400	62	84	41	41
500	70	86	55	45
600	71	90	56	47
700	69	88	56	48
800	68	88	53	45
900	67	91	52	44
1000	67	89	54	44
1100	66	89	53	45
1200	66	87	53	44
1300	69	86	56	45
1400	70	87	57	45
1500	70	88	57	49
1600	69	87	54	44
1700	66	83	52	45
1800	62	84	51	48
1900	62	87	50	47
2000	60	84	47	44
2100	66	84	47	43
2200	68	86	47	42
2300	60	84	42	41



Site 2: Austin Rd at landfill entrance. 40 ft west of centerline.
 Wednesday June 6, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	57	81	52	42
100	59	84	42	41
200	52	81	41	41
300	58	85	42	41
400	62	85	45	43
500	70	84	56	48
600	70	85	57	49
700	69	89	55	48
800	68	88	54	49
900	67	91	54	47
1000	68	89	54	47
1100	68	89	54	48
1200	67	89	55	47
1300	70	89	56	46
1400	71	88	57	47
1500	70	90	57	49
1600	69	85	61	50
1700	68	86	59	53
1800	64	83	56	52
1900	63	83	55	50
2000	62	83	51	46
2100	67	87	50	44
2200	67	83	52	41
2300	61	82	41	41

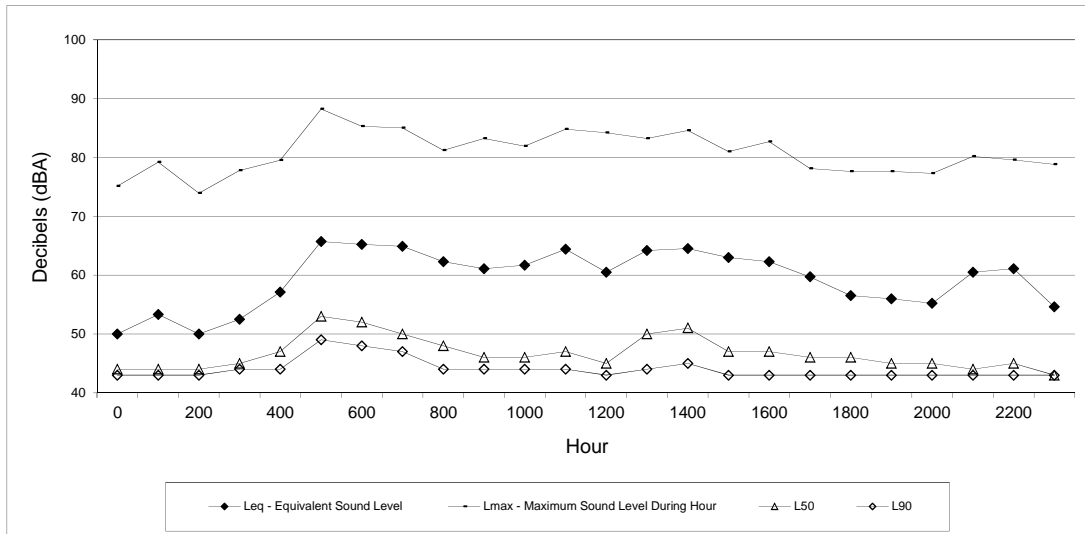
CNEL: 73



Site 2: Austin Rd at landfill entrance. 40 ft west of centerline.
Thursday June 7, 2018

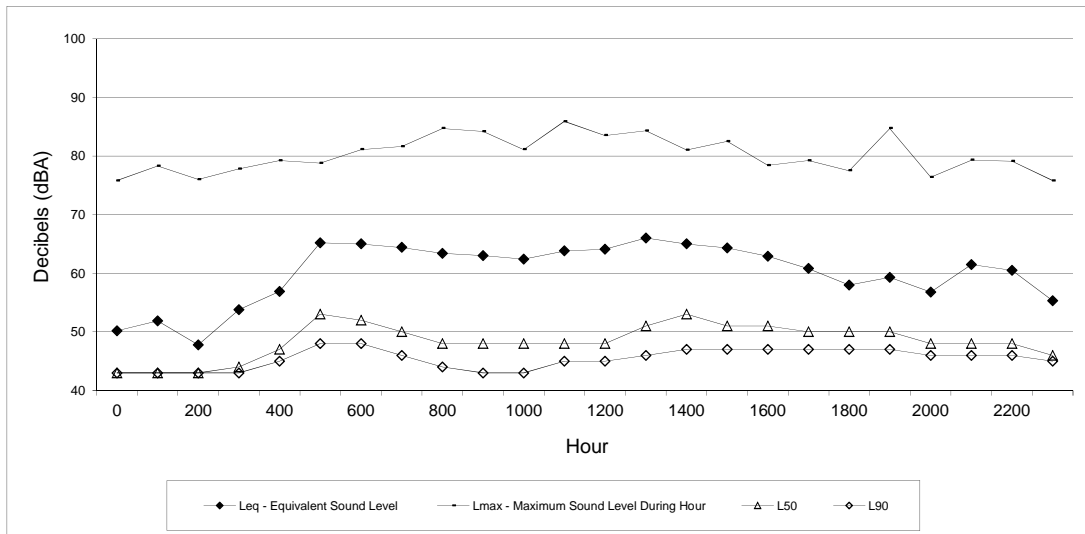
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	58	81	41	41
100	55	83	41	41
200	60	84	41	41
300	59	83	41	41
400	62	86	42	41
500	71	89	56	47
600	71	85	58	50
700	69	86	56	48
800	68	87	54	47
900	68	90	53	46
1000	68	89	53	47
1100	67	93	52	46
1200	66	85	50	44
1300	70	88	56	46
1400	71	87	56	46
1500	71	95	56	47
1600	69	88	55	48
1700	68	88	52	46
1800	63	83	50	46
1900	66	96	48	44
2000	61	84	45	41
2100	67	87	44	41
2200	68	85	44	41
2300	63	83	41	41

CNEL: 73



Site 3: Austin Rd, south of S curve. 56 ft east of centerline.
Tuesday June 5, 2018

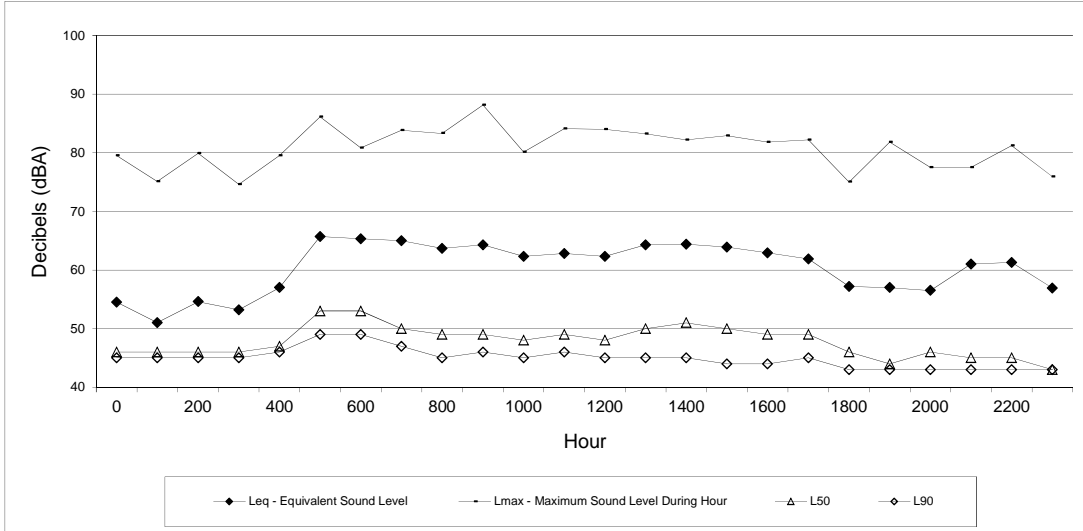
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	50	75	44	43
100	53	79	44	43
200	50	74	44	43
300	53	78	45	44
400	57	80	47	44
500	66	88	53	49
600	65	85	52	48
700	65	85	50	47
800	62	81	48	44
900	61	83	46	44
1000	62	82	46	44
1100	64	85	47	44
1200	61	84	45	43
1300	64	83	50	44
1400	65	85	51	45
1500	63	81	47	43
1600	62	83	47	43
1700	60	78	46	43
1800	57	78	46	43
1900	56	78	45	43
2000	55	77	45	43
2100	61	80	44	43
2200	61	80	45	43
2300	55	79	43	43



Site 3: Austin Rd, south of S curve. 56 ft east of centerline.
Wednesday June 6, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During	L50	L90
0	50	76	43	43
100	52	78	43	43
200	48	76	43	43
300	54	78	44	43
400	57	79	47	45
500	65	79	48	48
600	65	81	52	48
700	64	82	50	46
800	63	85	48	44
900	63	84	48	43
1000	62	81	48	43
1100	64	86	48	45
1200	64	84	48	45
1300	66	84	51	46
1400	65	81	53	47
1500	64	83	51	47
1600	63	78	51	47
1700	61	79	50	47
1800	58	78	50	47
1900	59	85	50	47
2000	57	76	48	46
2100	62	79	48	46
2200	61	79	48	46
2300	55	76	46	45

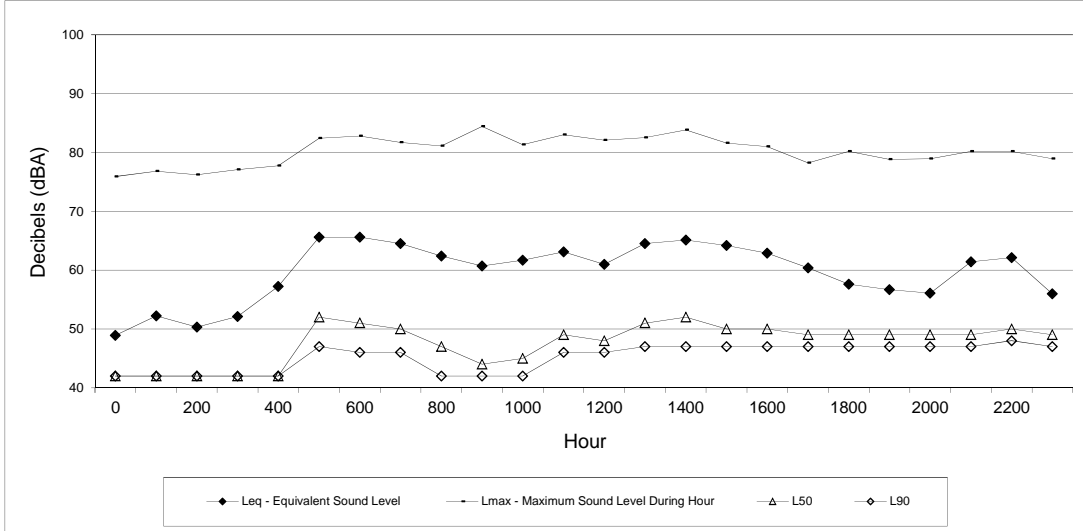
CNEL: 67



Site 3: Austin Rd, south of S curve. 56 ft east of centerline.
Thursday June 7, 2018

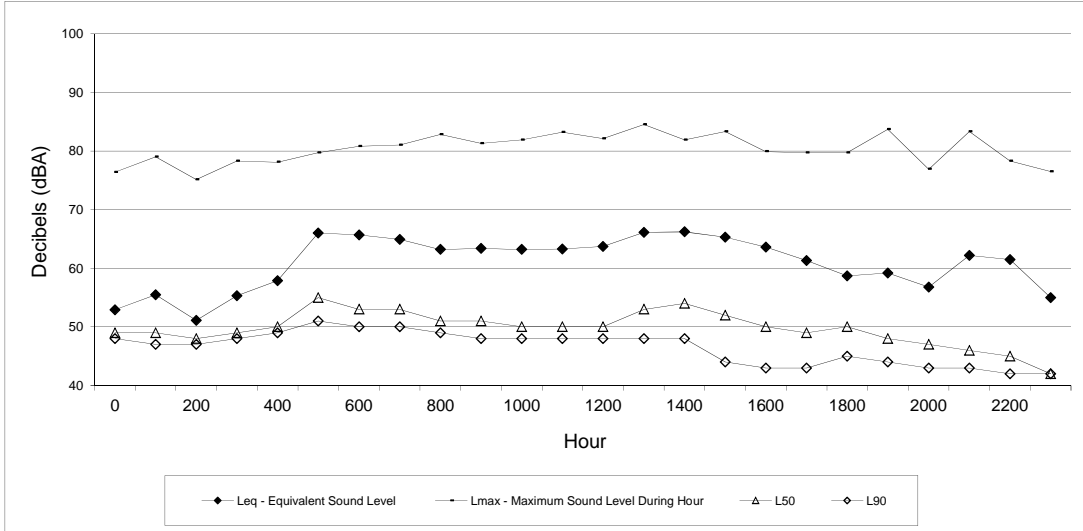
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During	L50	L90
0	55	80	46	45
100	51	75	46	45
200	55	80	46	45
300	53	75	46	45
400	57	80	47	46
500	66	86	53	49
600	65	81	53	49
700	65	84	50	47
800	64	83	49	45
900	64	88	49	46
1000	62	80	48	45
1100	63	84	49	46
1200	62	84	48	45
1300	64	83	50	45
1400	64	82	51	45
1500	64	83	50	44
1600	63	82	49	44
1700	62	82	49	45
1800	57	75	46	43
1900	57	82	44	43
2000	57	78	46	43
2100	61	78	45	43
2200	61	81	45	43
2300	57	76	43	43

CNEL: 68



Site 4: Austin Rd at Lynch Rd. 59 ft east from centerline.
Tuesday June 5, 2018

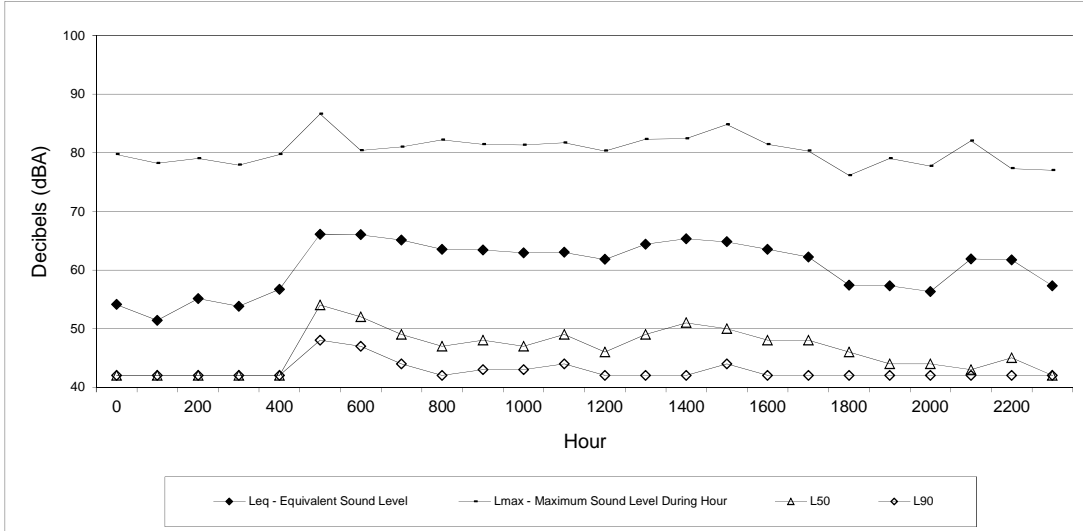
Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	49	76	42	42
100	52	77	42	42
200	50	76	42	42
300	52	77	42	42
400	57	78	42	42
500	66	82	52	47
600	66	83	51	46
700	65	82	50	46
800	62	81	47	42
900	61	84	44	42
1000	62	81	45	42
1100	63	83	49	46
1200	61	82	48	46
1300	65	83	51	47
1400	65	84	52	47
1500	64	82	50	47
1600	63	81	50	47
1700	60	78	49	47
1800	58	80	49	47
1900	57	79	49	47
2000	56	79	49	47
2100	61	80	49	47
2200	62	80	50	48
2300	56	79	49	47



Site 4: Austin Rd at Lynch Rd. 59 ft east from centerline.
Wednesday June 6, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	53	76	49	48
100	56	79	49	47
200	51	75	48	47
300	55	78	49	48
400	58	78	50	49
500	66	80	55	51
600	66	81	53	50
700	65	81	53	50
800	63	83	51	49
900	63	81	51	48
1000	63	82	50	48
1100	63	83	50	48
1200	64	82	50	48
1300	66	85	53	48
1400	66	82	54	48
1500	65	83	52	44
1600	64	80	50	43
1700	61	80	49	43
1800	59	80	50	45
1900	59	84	48	44
2000	57	77	47	43
2100	62	83	46	43
2200	62	78	45	42
2300	55	77	42	42

CNEL: 68



Site 4: Austin Rd at Lynch Rd. 59 ft east from centerline.
Thursday June 7, 2018

Hour	Leq - Equivalent Sound Level	Lmax - Maximum Sound Level During Hour	L50	L90
0	54	80	42	42
100	51	78	42	42
200	55	79	42	42
300	54	78	42	42
400	57	80	42	42
500	66	87	54	48
600	66	80	52	47
700	65	81	49	44
800	64	82	47	42
900	63	81	48	43
1000	63	81	47	43
1100	63	82	49	44
1200	62	80	46	42
1300	64	82	49	42
1400	65	82	51	42
1500	65	85	50	44
1600	64	81	48	42
1700	62	80	48	42
1800	57	76	46	42
1900	57	79	44	42
2000	56	78	44	42
2100	62	82	43	42
2200	62	77	45	42
2300	57	77	42	42

CNEL: 68

Noise Appendix

Table Noise-1

Traffic Noise Level Estimates

15m= 49 FEET

ROAD SEGMENT:		TOTAL # VEHICLES	VEHICLE TYPE %			VEHICLE SPEED			Attenuation (3.0 or 4.5)			Distance to Receptor (m)	Barrier Height (m)	calveno factors			Calculated dBA (15 meters from roadway center)				
			Auto	Medium Truck	Heavy Truck	Auto	k/h	MT	k/h	HT	k/h			Auto	MT	HT					
			%	%	%	%	%	%	%	%	%			%	%	%					
Austin Road, south of Arch Road																					
Existing		356	85	303	2	6	13	46	50	80	50	80	50	80	15	3.0	0	63.6	54.4	68.8	70.1
Existing + Proposed Project		490	75	303	2	8	23	113	50	80	50	80	50	80	15	3.0	0	63.6	55.2	72.7	73.3
Existing + Proposed Project (proof)		500	74	303	2	8	24	118	50	80	50	80	50	80	15	3.0	0	63.6	55.3	72.9	73.4
Existing + Approved Projects		389	86	335	2	7	12	46	50	80	50	80	50	80	15	3.0	0	64.0	54.8	68.8	70.2
Existing + Approved Projects + Proposed Project		533	76	335	2	8	22	118	50	80	50	80	50	80	15	3.0	0	64.0	55.6	72.9	73.5
2035 No Project		1,173	93	1,092	2	22	5	57	50	80	50	80	50	80	15	3.0	0	69.2	59.9	69.8	72.7
2035 + Proposed Project		1,317	88	1,161	2	24	10	130	50	80	50	80	50	80	15	3.0	0	69.4	60.2	73.3	74.9
Arch Road, west of Austin Road																					
Existing		341	88	299	2	6	10	35	45	72	45	72	45	72	15	3.0	0	62.2	53.6	67.2	68.6
Existing + Proposed Project		449	78	299	2	7	20	89	45	72	45	72	45	72	15	3.0	0	62.2	54.3	71.3	71.8
Existing + Proposed Project (proof)		449	78	299	2	7	20	89	45	72	45	72	45	72	15	3.0	0	62.2	54.3	71.3	71.8
Existing + Approved Projects		364	88	321	2	7	10	36	45	72	45	72	45	72	15	3.0	0	62.5	53.9	67.3	68.7
Existing + Approved Projects + Proposed Project		472	79	321	2	8	19	90	45	72	45	72	45	72	15	3.0	0	62.5	54.6	71.3	71.9
2035 No Project		1,789	95	1,700	2	35	3	53	45	72	45	72	45	72	15	3.0	0	69.8	61.1	69.0	72.7
2035 + Proposed Project		1,897	92	1,752	2	36	6	107	45	72	45	72	45	72	15	3.0	0	69.9	61.3	72.1	74.3
Austin Rd, north of project driveway																					
Existing		158	70	111	2	2	28	44	50	80	50	80	50	80	15	3.0	0	59.2	50.0	68.6	69.1
Existing + Proposed Project		302	60	111	2	4	38	116	50	80	50	80	50	80	15	3.0	0	59.2	52.2	72.8	73.0
Existing + Proposed Project (proof)		302	60	111	2	4	38	116	50	80	50	80	50	80	15	3.0	0	59.2	52.2	72.8	73.0
Existing + Approved Projects		181	74	133	2	3	24	44	50	80	50	80	50	80	15	3.0	0	60.0	50.8	68.6	69.3
Existing + Approved Projects + Proposed Project		325	62	133	2	4	36	116	50	80	50	80	50	80	15	3.0	0	60.0	52.7	72.8	73.1
2035 No Project		281	81	229	2	5	17	46	50	80	50	80	50	80	15	3.0	0	62.4	53.2	68.8	69.8
2035 + Proposed Project		425	70	297	2	6	28	119	50	80	50	80	50	80	15	3.0	0	63.5	54.3	72.9	73.5
Austin Rd, south of project driveway																					
Existing		145	77	112	2	2	21	30	50	80	50	80	50	80	15	3.0	0	59.3	50.1	66.9	67.7
Existing + Proposed Project		241	66	112	2	3	32	78	50	80	50	80	50	80	15	3.0	0	59.3	51.6	71.1	71.4
Existing + Proposed Project (proof)		241	66	112	2	3	32	78	50	80	50	80	50	80	15	3.0	0	59.3	51.6	71.1	71.4
Existing + Approved Projects		168	80	135	2	3	18	30	50	80	50	80	50	80	15	3.0	0	60.1	50.9	66.9	67.8
Existing + Approved Projects + Proposed Project		264	68	135	2	4	30	78	50	80	50	80	50	80	15	3.0	0	60.1	52.2	71.1	71.5
2035 No Project		268	86	230	2	5	12	32	50	80	50	80	50	80	15	3.0	0	62.4	53.2	67.2	68.6
2035 + Proposed Project		364	76	230	2	6	22	81	50	80	50	80	50	80	15	3.0	0	62.4	54.0	71.2	71.8
French Camp, west of Austin Road																					
Existing		467	92	432	2	9	6	26	55	88	55	88	55	88	15	3.0	0	66.3	56.8	66.7	69.7
Existing + Proposed Project		499	90	432	2	10	8	42	55	88	55	88	55	88	15	3.0	0	66.3	57.1	68.8	70.9
Existing + Proposed Project (proof)		539	87	432	2	11	11	62	55	88	55	88	55	88	15	3.0	0	66.3	57.4	70.5	72.0
Existing + Approved Projects		534	93	497	2	11	5	27	55	88	55	88	55	88	15	3.0	0	66.9	57.4	66.8	70.1
Existing + Approved Projects + Proposed Project		606	88	497	2	12	10	63	55	88	55	88	55	88	15	3.0	0	66.9	57.9	70.5	72.3
2035 No Project		981	94	926	2	20	4	35	55	88	55	88	55	88	15	3.0	0	69.6	60.0	68.0	72.2
2035 + Proposed Project		1,053	91	960	2	21	7	72	55	88	55	88	55	88	15	3.0	0	69.8	60.3	71.1	73.7