Table 7-6.1b_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Non-Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
23	Residence	Non-Participating	340406.47	4757709.18	11	13	19	20	14	11	1	0	0	0
24	Residence	Non-Participating	340402.69	4757735.36	11	13	19	20	14	11	1	0	0	0
25	Residence	Non-Participating	340358.76	4757734.29	11	13	19	20	13	11	1	0	0	0
26	Residence	Non-Participating	340343.14	4757736.96	11	13	19	20	13	11	1	0	0	0
27	Residence	Non-Participating	340333.94	4757739.98	11	13	19	20	13	11	1	0	0	0
28	Residence	Non-Participating	340348.74	4757756.79	11	13	19	20	13	11	1	0	0	0
29	Residence	Non-Participating	340335.17	4757754.68	11	13	19	20	13	11	1	0	0	0
30	Residence	Non-Participating	340316.69	4757693.55	11	13	19	20	13	11	1	0	0	0
31	Residence	Non-Participating	340327.13	4757705.69	11	13	19	20	13	11	1	0	0	0
32	Residence	Non-Participating	340337.92	4757699.32	11	13	19	20	13	11	1	0	0	0
33	Residence	Non-Participating	340369.33	4757703.00	11	13	19	20	14	11	1	0	0	0
34	Residence	Non-Participating	340351.98	4757702.14	11	13	19	20	13	11	1	0	0	0
35	Residence	Non-Participating	340376.25	4757679.84	11	13	19	20	14	11	1	0	0	0
36	Residence	Non-Participating	340362.59	4757673.22	11	13	19	20	14	11	1	0	0	0
42	Residence	Non-Participating	340311.86	4757613.40	11	13	19	20	14	11	1	0	0	0
43	Residence	Non-Participating	340328.24	4757613.81	11	13	19	20	14	11	1	0	0	0
44	Residence	Non-Participating	340346.55	4757615.12	11	13	19	20	14	11	1	0	0	0
85	Residence	Non-Participating	340444.57	4757866.55	11	13	19	20	13	11	1	0	0	0
88	Residence	Non-Participating	340452.78	4757899.39	11	13	19	20	13	11	1	0	0	0
89	Residence	Non-Participating	340473.15	4757909.45	11	13	19	20	13	11	1	0	0	0
90	Residence	Non-Participating	340496.73	4757900.94	11	13	19	20	14	11	1	0	0	0
91	Residence	Non-Participating	340536.12	4757913.02	11	13	19	20	14	11	1	0	0	0
752	Residence	Non-Participating	340475.37	4757879.87	11	13	19	20	14	11	1	0	0	0
3	Residence	Non-Participating	340379.40	4757860.89	11	13	19	20	13	11	0	0	0	0
5	Residence	Non-Participating	340393.75	4757848.01	11	13	19	20	13	11	1	0	0	0
6	Residence	Non-Participating	340383.78	4757826.93	11	13	19	20	13	11	1	0	0	0
590	Residence	Non-Participating	342058.63	4753764.04	10	13	18	19	13	10	0	0	0	0
591	Residence	Non-Participating	342071.04	4753733.31	10	12	18	19	13	10	0	0	0	0
780	Residence	Non-Participating	341995.29	4753754.84	10	12	18	19	13	10	0	0	0	0
781	Residence	Non-Participating	341915.36	4753696.61	10	12	18	19	12	10	0	0	0	0
582	Residence	Non-Participating	342445.78	4753561.33	10	12	18	19	12	10	0	0	0	0
583	Residence	Non-Participating	342399.55	4753578.94	10	12	18	19	12	10	0	0	0	0
846	Residence	Non-Participating	341816.71	4753682.42	10	12	18	19	12	10	0	0	0	0
563	Residence	Non-Participating	343140.65	4753791.71	10	13	18	20	13	10	0	0	0	0
555	Residence	Non-Participating	343297.72	4753758.19	10	12	18	19	13	10	0	0	0	0
562	Residence	Non-Participating	343098.49	4753657.80	10	12	18	19	12	10	0	0	0	0
560	Residence	Non-Participating	343275.30	4753653.05	10	12	18	19	12	10	0	0	0	0
575	Residence	Non-Participating	342754.14	4753500.13	9	12	18	19	12	9	0	0	0	0
576	Residence	Non-Participating	342682.28	4753482.31	9	12	18	19	12	9	0	0	0	0
577	Residence	Non-Participating	342609.58	4753500.42	9	12	18	19	12	9	0	0	0	0
581	Residence	Non-Participating	342502.20	4753486.62	9	12	18	19	12	9	0	0	0	0
311	Residence	Non-Participating	344777.42	4754209.65	9	11	17	18	11	8	0	0	0	0
312	Residence	Non-Participating	344793.06	4754267.19	9	11	17	18	11	8	0	0	0	0
592	Residence	Non-Participating	341356.23	4753705.45	9	12	17	19	12	9	0	0	0	0
594	Residence	Non-Participating	341439.04	4753643.03	9	12	17	18	12	9	0	0	0	0
595	Residence	Non-Participating	341399.75	4753636.22	9	12	17	18	11	9	0	0	0	0

Table 7-6.1b_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Non-Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
598	Residence	Non-Participating	341470.67	4753649.79	9	12	17	19	12	9	0	0	0	0
574	Residence	Non-Participating	342820.57	4753504.67	9	12	18	19	12	9	0	0	0	0
593	Residence	Non-Participating	341309.23	4753739.84	9	12	17	19	12	9	0	0	0	0
317	Residence	Non-Participating	344551.25	4754171.02	9	12	17	18	12	9	0	0	0	0
561	Residence	Non-Participating	343310.55	4753606.26	9	12	18	19	12	9	0	0	0	0
570	Residence	Non-Participating	343124.05	4753523.91	9	12	17	19	12	9	0	0	0	0
571	Residence	Non-Participating	343063.67	4753517.74	9	12	17	19	12	9	0	0	0	0
315	Residence	Non-Participating	344696.60	4754138.38	9	11	17	18	11	8	0	0	0	0
316	Residence	Non-Participating	344604.51	4754158.21	9	11	17	18	11	9	0	0	0	0
610	Residence	Non-Participating	341257.60	4753624.21	9	11	17	18	11	8	0	0	0	0
611	Residence	Non-Participating	341194.60	4753614.22	9	11	17	18	11	8	0	0	0	0
616	Residence	Non-Participating	341302.01	4753641.19	9	11	17	18	11	9	0	0	0	0
612	Residence	Non-Participating	341196.00	4753672.48	9	11	17	18	11	9	0	0	0	0
334	Residence	Non-Participating	345067.43	4754185.46	8	11	16	17	10	7	0	0	0	0
314	Residence	Non-Participating	344933.89	4754203.16	8	11	17	18	11	8	0	0	0	0
333	Residence	Non-Participating	344965.25	4754161.95	8	11	16	18	10	8	0	0	0	0
335	Residence	Non-Participating	345005.86	4754085.14	8	11	16	17	10	7	0	0	0	0
313	Residence	Non-Participating	344860.89	4754191.95	8	11	17	18	11	8	0	0	0	0
323	Residence	Non-Participating	344676.10	4754061.41	8	11	17	18	11	8	0	0	0	0
586	Residence	Non-Participating	342514.18	4753209.47	8	11	17	18	11	8	0	0	0	0
601	Residence	Non-Participating	341438.06	4753473.45	8	11	17	18	11	8	0	0	0	0
599	Residence	Non-Participating	341337.30	4753510.68	8	11	17	18	11	8	0	0	0	0
600	Residence	Non-Participating	341338.75	4753459.32	8	11	17	18	11	8	0	0	0	0
602	Residence	Non-Participating	341444.86	4753401.76	8	11	17	18	11	8	0	0	0	0
603	Residence	Non-Participating	341442.14	4753337.49	8	11	17	18	10	8	0	0	0	0
604	Residence	Non-Participating	341351.81	4753334.96	8	11	16	17	10	7	0	0	0	0
609	Residence	Non-Participating	341379.72	4753277.97	8	11	16	17	10	7	0	0	0	0
324	Residence	Non-Participating	344573.74	4753714.59	8	11	16	17	10	7	0	0	0	0
250	Residence	Non-Participating	345628.03	4757439.09	8	11	17	18	11	8	0	0	0	0
249	Residence	Non-Participating	345585.17	4757516.19	8	11	17	18	11	8	0	0	0	0
435	Residence	Non-Participating	346019.10	4755476.78	7	10	16	17	9	6	0	0	0	0
337	Residence	Non-Participating	345207.01	4754096.21	7	10	16	17	10	7	0	0	0	0
336	Residence	Non-Participating	345113.64	4754045.34	7	10	16	17	10	7	0	0	0	0
440	Residence	Non-Participating	346128.92	4756573.04	7	10	16	17	10	6	0	0	0	0
441	Residence	Non-Participating	346137.14	4756621.88	7	10	16	17	9	6	0	0	0	0
442	Residence	Non-Participating	346143.75	4756649.45	7	10	16	17	9	6	0	0	0	0
443	Residence	Non-Participating	346150.78	4756683.40	7	10	16	17	9	6	0	0	0	0
444	Residence	Non-Participating	346171.67	4756774.61	7	10	16	17	9	6	0	0	0	0
445	Residence	Non-Participating	346166.51	4756807.58	7	10	16	17	9	6	0	0	0	0
449	Residence	Non-Participating	346144.95	4756971.71	7	10	16	17	9	6	0	0	0	0
327	Residence	Non-Participating	344605.69	4753468.08	7	10	16	17	9	6	0	0	0	0
237	Residence	Non-Participating	345902.13	4757314.03	7	10	16	17	10	7	0	0	0	0
243	Residence	Non-Participating	345816.59	4757514.34	7	10	16	17	10	7	0	0	0	0
422	Residence	Non-Participating	345984.67	4754908.94	6	10	15	16	9	6	0	0	0	0
419	Residence	Non-Participating	346078.13	4754765.05	6	9	15	16	8	5	0	0	0	0
429	Residence	Non-Participating	346035.86	4755267.69	6	10	16	17	9	6	0	0	0	0

Table 7-6.1b_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Non-Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
427	Residence	Non-Participating	346121.39	4754993.70	6	9	15	16	9	5	0	0	0	0
428	Residence	Non-Participating	346115.88	4755104.89	6	10	15	16	9	5	0	0	0	0
430	Residence	Non-Participating	346097.46	4755306.40	6	10	15	16	9	6	0	0	0	0
434	Residence	Non-Participating	346048.83	4755180.71	6	10	15	16	9	6	0	0	0	0
795	Residence	Non-Participating	346048.12	4755138.23	6	10	15	16	9	6	0	0	0	0
426	Residence	Non-Participating	346155.68	4754875.28	6	9	15	16	8	5	0	0	0	0
347	Residence	Non-Participating	345451.90	4754063.15	6	10	15	16	9	6	0	0	0	0
343	Residence	Non-Participating	345309.01	4753990.29	6	10	16	16	9	6	0	0	0	0
344	Residence	Non-Participating	345350.76	4753974.15	6	10	15	16	9	6	0	0	0	0
345	Residence	Non-Participating	345389.85	4753977.44	6	10	15	16	9	6	0	0	0	0
446	Residence	Non-Participating	346206.66	4756854.91	6	10	16	16	9	6	0	0	0	0
241	Residence	Non-Participating	346128.12	4757318.87	6	10	16	16	9	6	0	0	0	0
232	Residence	Non-Participating	346229.07	4757623.62	6	9	15	16	9	5	0	0	0	0
418	Residence	Non-Participating	346147.04	4754771.67	5	9	15	16	8	5	0	0	0	0
358	Residence	Non-Participating	345740.37	4753990.99	5	9	15	16	8	5	0	0	0	0
410	Residence	Non-Participating	346181.23	4754292.62	5	9	14	15	7	4	0	0	0	0
359	Residence	Non-Participating	345810.43	4753913.62	5	9	15	15	8	4	0	0	0	0
411	Residence	Non-Participating	346174.30	4754344.48	5	9	14	15	8	4	0	0	0	0
357	Residence	Non-Participating	345730.74	4753832.88	5	9	15	15	8	4	0	0	0	0
360	Residence	Non-Participating	345887.62	4753894.04	5	9	14	15	7	4	0	0	0	0
417	Residence	Non-Participating	346150.78	4754695.82	5	9	15	16	8	5	0	0	0	0
414	Residence	Non-Participating	346164.13	4754547.97	5	9	15	15	8	4	0	0	0	0
415	Residence	Non-Participating	346156.92	4754601.67	5	9	15	16	8	4	0	0	0	0
416	Residence	Non-Participating	346151.83	4754654.71	5	9	15	16	8	5	0	0	0	0
413	Residence	Non-Participating	346166.22	4754449.02	5	9	14	15	8	4	0	0	0	0
412	Residence	Non-Participating	346169.26	4754400.57	5	9	14	15	8	4	0	0	0	0
199	Residence	Non-Participating	346604.31	4757506.82	5	9	14	15	8	4	0	0	0	0
201	Residence	Non-Participating	346636.74	4757517.54	5	9	14	15	7	4	0	0	0	0
213	Residence	Non-Participating	346642.27	4757409.91	5	9	14	15	7	4	0	0	0	0
196	Residence	Non-Participating	346437.22	4757552.77	5	9	15	16	8	4	0	0	0	0
197	Residence	Non-Participating	346519.34	4757567.84	5	9	14	15	8	4	0	0	0	0
198	Residence	Non-Participating	346521.74	4757494.77	5	9	15	15	8	4	0	0	0	0
200	Residence	Non-Participating	346589.69	4757452.70	5	9	14	15	8	4	0	0	0	0
242	Residence	Non-Participating	346349.71	4757519.65	5	9	15	16	8	5	0	0	0	0
190	Residence	Non-Participating	346525.09	4757819.54	5	9	14	15	7	4	0	0	0	0
194	Residence	Non-Participating	346433.37	4757642.74	5	9	15	15	8	4	0	0	0	0
195	Residence	Non-Participating	346378.15	4757625.40	5	9	15	16	8	5	0	0	0	0
192	Residence	Non-Participating	346472.72	4757739.95	5	9	14	15	8	4	0	0	0	0
409	Residence	Non-Participating	346184.44	4754252.69	4	9	14	15	7	4	0	0	0	0
405	Residence	Non-Participating	346186.16	4754150.10	4	9	14	15	7	3	0	0	0	0
408	Residence	Non-Participating	346181.88	4754197.96	4	9	14	15	7	4	0	0	0	0
402	Residence	Non-Participating	346191.02	4754004.53	4	8	14	15	7	3	0	0	0	0
403	Residence	Non-Participating	346196.64	4754044.30	4	8	14	15	7	3	0	0	0	0
404	Residence	Non-Participating	346196.70	4754095.73	4	8	14	15	7	3	0	0	0	0
361	Residence	Non-Participating	345954.47	4753874.15	4	9	14	15	7	4	0	0	0	0
400	Residence	Non-Participating	346198.84	4753902.44	4	8	14	15	7	3	0	0	0	0

Table 7-6.1b_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Non-Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
401	Residence	Non-Participating	346195.19	4753951.20	4	8	14	15	7	3	0	0	0	0
365	Residence	Non-Participating	346020.19	4753784.54	4	8	14	15	7	3	0	0	0	0
382	Residence	Non-Participating	346180.56	4753805.18	4	8	14	14	7	3	0	0	0	0
366	Residence	Non-Participating	346081.11	4753760.18	4	8	14	15	7	3	0	0	0	0
485	Residence	Non-Participating	347016.30	4756228.89	4	8	14	14	7	3	0	0	0	0
476	Residence	Non-Participating	347005.28	4756377.71	4	8	14	15	7	3	0	0	0	0
477	Residence	Non-Participating	347073.65	4756357.53	4	8	14	14	6	3	0	0	0	0
481	Residence	Non-Participating	347019.94	4756308.48	4	8	14	14	7	3	0	0	0	0
450	Residence	Non-Participating	346929.93	4757155.66	4	8	14	15	7	3	0	0	0	0
452	Residence	Non-Participating	346981.93	4757153.16	4	8	14	14	7	3	0	0	0	0
462	Residence	Non-Participating	346958.22	4756799.36	4	8	14	15	7	3	0	0	0	0
468	Residence	Non-Participating	346961.55	4756701.61	4	8	14	15	7	3	0	0	0	0
469	Residence	Non-Participating	346920.15	4756765.69	4	8	14	15	7	3	0	0	0	0
470	Residence	Non-Participating	347014.45	4756650.09	4	8	14	14	7	3	0	0	0	0
471	Residence	Non-Participating	346970.46	4756641.49	4	8	14	15	7	3	0	0	0	0
474	Residence	Non-Participating	347015.82	4756529.25	4	8	14	14	7	3	0	0	0	0
803	Residence	Non-Participating	346999.39	4756624.60	4	8	14	15	7	3	0	0	0	0
214	Residence	Non-Participating	346726.74	4757362.99	4	9	14	15	7	3	0	0	0	0
451	Residence	Non-Participating	346993.73	4757085.07	4	8	14	14	7	3	0	0	0	0
455	Residence	Non-Participating	347013.28	4757024.14	4	8	14	14	7	3	0	0	0	0
456	Residence	Non-Participating	346935.24	4757033.22	4	8	14	15	7	3	0	0	0	0
457	Residence	Non-Participating	346952.92	4756970.50	4	8	14	15	7	3	0	0	0	0
460	Residence	Non-Participating	346951.26	4756882.27	4	8	14	15	7	3	0	0	0	0
461	Residence	Non-Participating	347009.07	4756833.10	4	8	14	14	7	3	0	0	0	0
463	Residence	Non-Participating	347013.15	4756775.20	4	8	14	14	7	3	0	0	0	0
467	Residence	Non-Participating	346957.23	4756843.81	4	8	14	15	7	3	0	0	0	0
191	Residence	Non-Participating	346621.38	4757704.92	4	9	14	15	7	4	0	0	0	0
169	Residence	Non-Participating	346566.60	4757897.83	4	9	14	15	7	3	0	0	0	0
215	Residence	Non-Participating	346812.26	4757344.51	4	8	14	15	7	3	0	0	0	0
161	Residence	Non-Participating	346606.73	4758103.30	4	8	14	15	7	3	0	0	0	0
162	Residence	Non-Participating	346565.18	4758049.69	4	8	14	15	7	3	0	0	0	0
163	Residence	Non-Participating	346607.46	4758008.61	4	8	14	15	7	3	0	0	0	0
168	Residence	Non-Participating	346602.85	4757937.68	4	8	14	15	7	3	0	0	0	0
170	Residence	Non-Participating	346559.53	4757870.26	4	9	14	15	7	4	0	0	0	0
172	Residence	Non-Participating	346671.41	4758021.25	4	8	14	15	7	3	0	0	0	0
174	Residence	Non-Participating	346756.52	4757994.72	4	8	14	14	7	3	0	0	0	0
216	Residence	Non-Participating	346842.78	4757427.28	4	8	14	15	7	3	0	0	0	0
156	Residence	Non-Participating	346539.42	4758332.47	4	8	14	15	7	3	0	0	0	0
173	Residence	Non-Participating	346755.53	4758062.22	4	8	14	14	7	3	0	0	0	0
212	Residence	Non-Participating	346730.86	4757474.72	4	8	14	15	7	3	0	0	0	0
223	Residence	Non-Participating	346998.38	4757214.50	4	8	14	14	7	3	0	0	0	0
157	Residence	Non-Participating	346592.41	4758325.57	4	8	14	14	7	3	0	0	0	0
160	Residence	Non-Participating	346591.16	4758172.59	4	8	14	15	7	3	0	0	0	0
367	Residence	Non-Participating	346197.66	4753724.02	3	8	14	14	6	2	0	0	0	0
368	Residence	Non-Participating	346243.77	4753712.08	3	8	14	14	6	2	0	0	0	0
369	Residence	Non-Participating	346285.96	4753772.97	3	8	14	14	6	2	0	0	0	0

Table 7-6.1b_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Non-Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
370	Residence	Non-Participating	346281.32	4753700.04	3	8	13	14	6	2	0	0	0	0
383	Residence	Non-Participating	346328.56	4753679.96	3	8	13	14	6	2	0	0	0	0
398	Residence	Non-Participating	346371.98	4753739.71	3	8	13	14	6	2	0	0	0	0
399	Residence	Non-Participating	346348.39	4753747.46	3	8	13	14	6	2	0	0	0	0
388	Residence	Non-Participating	346367.60	4753668.58	3	8	13	14	6	2	0	0	0	0
389	Residence	Non-Participating	346406.24	4753651.72	3	8	13	14	6	2	0	0	0	0
390	Residence	Non-Participating	346442.80	4753637.95	3	8	13	14	6	1	0	0	0	0
397	Residence	Non-Participating	346396.41	4753727.99	3	8	13	14	6	2	0	0	0	0
507	Residence	Non-Participating	347084.71	4755083.13	3	8	13	14	6	2	0	0	0	0
391	Residence	Non-Participating	346483.75	4753630.78	3	7	13	14	6	1	0	0	0	0
500	Residence	Non-Participating	347162.32	4755274.48	3	8	13	14	6	2	0	0	0	0
501	Residence	Non-Participating	347164.81	4755229.39	3	8	13	14	6	2	0	0	0	0
502	Residence	Non-Participating	347163.47	4755174.03	3	8	13	14	6	2	0	0	0	0
503	Residence	Non-Participating	347201.38	4755070.15	3	7	13	14	6	1	0	0	0	0
488	Residence	Non-Participating	347176.15	4755976.91	3	8	13	14	6	2	0	0	0	0
489	Residence	Non-Participating	347241.36	4755981.47	3	8	13	14	6	2	0	0	0	0
482	Residence	Non-Participating	347169.18	4756279.77	3	8	13	14	6	2	0	0	0	0
486	Residence	Non-Participating	347088.40	4756084.47	3	8	14	14	6	2	0	0	0	0
494	Residence	Non-Participating	347176.25	4756030.78	3	8	13	14	6	2	0	0	0	0
497	Residence	Non-Participating	347146.49	4755581.55	3	8	13	14	6	2	0	0	0	0
496	Residence	Non-Participating	347156.25	4755634.15	3	8	13	14	6	2	0	0	0	0
490	Residence	Non-Participating	347235.44	4756070.75	3	8	13	14	6	2	0	0	0	0
487	Residence	Non-Participating	347160.04	4756091.04	3	8	13	14	6	2	0	0	0	0
797	Residence	Non-Participating	347128.91	4756626.62	3	8	14	14	6	2	0	0	0	0
222	Residence	Non-Participating	347230.31	4757183.57	3	8	13	14	6	2	0	0	0	0
228	Residence	Non-Participating	347312.15	4757094.81	3	8	13	14	6	1	0	0	0	0
217	Residence	Non-Participating	347041.60	4757337.03	3	8	14	14	6	2	0	0	0	0
182	Residence	Non-Participating	346979.66	4758080.24	3	8	13	14	6	2	0	0	0	0
183	Residence	Non-Participating	346989.91	4758144.18	3	8	13	14	6	2	0	0	0	0
218	Residence	Non-Participating	347074.58	4757270.70	3	8	13	14	6	2	0	0	0	0
179	Residence	Non-Participating	346891.87	4757934.76	3	8	14	14	6	2	0	0	0	0
153	Residence	Non-Participating	346504.64	4758783.62	3	8	13	14	6	2	0	0	0	0
181	Residence	Non-Participating	346872.09	4758113.74	3	8	13	14	6	2	0	0	0	0
152	Residence	Non-Participating	346557.28	4758716.53	3	8	13	14	6	2	0	0	0	0
151	Residence	Non-Participating	346521.98	4759098.27	3	8	13	14	6	2	0	0	0	0
508	Residence	Non-Participating	347347.94	4754602.15	2	7	12	13	5	0	0	0	0	0
230	Residence	Non-Participating	347439.34	4756895.69	2	7	13	13	5	1	0	0	0	0
229	Residence	Non-Participating	347459.96	4757043.46	2	7	13	13	5	1	0	0	0	0
186	Residence	Non-Participating	347183.04	4758019.17	2	7	13	14	5	1	0	0	0	0
231	Residence	Non-Participating	347660.99	4756880.45	2	7	12	13	5	0	0	0	0	0
Summary of Maximum and Minimum Sound Levels for Non-Participating Residential Receptors														
142	**Residence**	**Non-Participating**	**342716.49**	**4756882.62**	**35**	**38**	**43**	**40**	**33**	**35**	**30**	**23**	**7**	**0**
231	**Residence**	**Non-Participating**	**347660.99**	**4756880.45**	**2**	**7**	**12**	**13**	**5**	**0**	**0**	**0**	**0**	**0**

Table 7-6.1c_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Receptor ID [Residential and Participating Receptors]

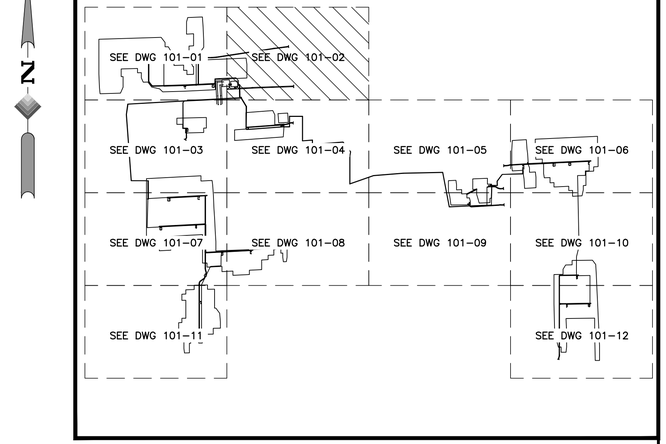
Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
294	Residence	Participating	344815.17	4755686.20	12	14	19	21	14	12	2	0	0	0
673	Residence	Participating	343714.10	4755880.53	25	30	35	30	24	25	19	6	0	0
Summary of Maximum and Minimum Sound Levels for Participating Residential Receptors														
673	**Residence**	**Participating**	**343714.10**	**4755880.53**	**25**	**30**	**35**	**30**	**24**	**25**	**19**	**6**	**0**	**0**
294	**Residence**	**Participating**	**344815.17**	**4755686.20**	**12**	**14**	**19**	**21**	**14**	**12**	**2**	**0**	**0**	**0**

Table 7-6.1d_Revised: Unmitigated Substation Only Sound Level Modeling Results (Leq (8-Hour)) at Discrete Points - Sorted by Sound Level [Residential and Participating Receptors]

Modeling Receptor ID	Receptor Type	Participation Status	Coordinates UTM NAD83 Zone 18N (meters)		Project Only Maximum 8-hr Leq [dBA]	Leq (dB) per Octave Band Center Frequency (Hz) - Acoustic Modeling Results								
			X (m)	Y (m)		31.5	63	125	250	500	1000	2000	4000	8000
673	Residence	Participating	343714.10	4755880.53	25	30	35	30	24	25	19	6	0	0
294	Residence	Participating	344815.17	4755686.20	12	14	19	21	14	12	2	0	0	0
Summary of Maximum and Minimum Sound Levels for Participating Residential Receptors														
673	**Residence**	**Participating**	**343714.10**	**4755880.53**	**25**	**30**	**35**	**30**	**24**	**25**	**19**	**6**	**0**	**0**
294	**Residence**	**Participating**	**344815.17**	**4755686.20**	**12**	**14**	**19**	**21**	**14**	**12**	**2**	**0**	**0**	**0**

Appendix 7-7

Collector Substation Layout



NORTH SENECA SOLAR – KEY PLAN

LEGEND

- UGE — UNDERGROUND CABLES, FIBER OPTIC AND GROUNDING CONDUCTOR TRENCH – FEEDER 11A
- UGE — UNDERGROUND CABLES, FIBER OPTIC AND GROUNDING CONDUCTOR TRENCH – FEEDER 11B
- UGE — UNDERGROUND CABLES, FIBER OPTIC AND GROUNDING CONDUCTOR TRENCH – FEEDER 12A
- UGE — UNDERGROUND CABLES, FIBER OPTIC AND GROUNDING CONDUCTOR TRENCH – FEEDER 12B
- EXIST. UTILITY POLE
- EXIST. WATER WELL
- EXIST. GAS WELL
- EXIST. NYSDEC OIL AND GAS WELL
- R/W — EXIST. RIGHT-OF-WAY
- EXIST. UTILITY OVERHEAD LINE
- FOC — EXIST. UNDERGROUND FIBER OPTIC
- EXIST. PROPERTY LINE
- G — G — G — EXIST. GAS LINE
- DIRECTIONAL DRILL LOCATIONS
- EXISTING WETLANDS
- INVxx — INVERTER ID
- INVERTER
- SPLICE/JUNCTION BOX LOCATIONS
- PV SITE FENCE
- ACCESS ROADS
- PROJECT BOUNDARIES

PRELIMINARY DRAWING
NOT FOR CONSTRUCTION

PROPRIETARY INFORMATION

AHV CLAIMS PROPRIETARY RIGHTS TO THE INFORMATION, DESIGN, AND LAYOUT DISCLOSED HEREIN. THIS DRAWING IS ISSUED FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE REPRODUCED, DISCLOSED TO OTHERS OR USED TO DESIGN OR CONSTRUCT ANY OF THE ITEMS SHOWN HEREIN WITHOUT THE EXPRESSED WRITTEN CONSENT OF AHV.

COPYRIGHT 2023 – ALBANY, NY

REV.	DATE	DESCRIPTIONS	BY	CHK'D	APRV'D
C	10/24/24	ISSUED FOR REVIEW	SDD	DS	DS
B	02/22/24	ISSUED FOR REVIEW	SDD	DS	DS
A	01/12/24	ISSUED FOR REVIEW	SDD	DS	DS

APPLIED HIGH VOLTAGE

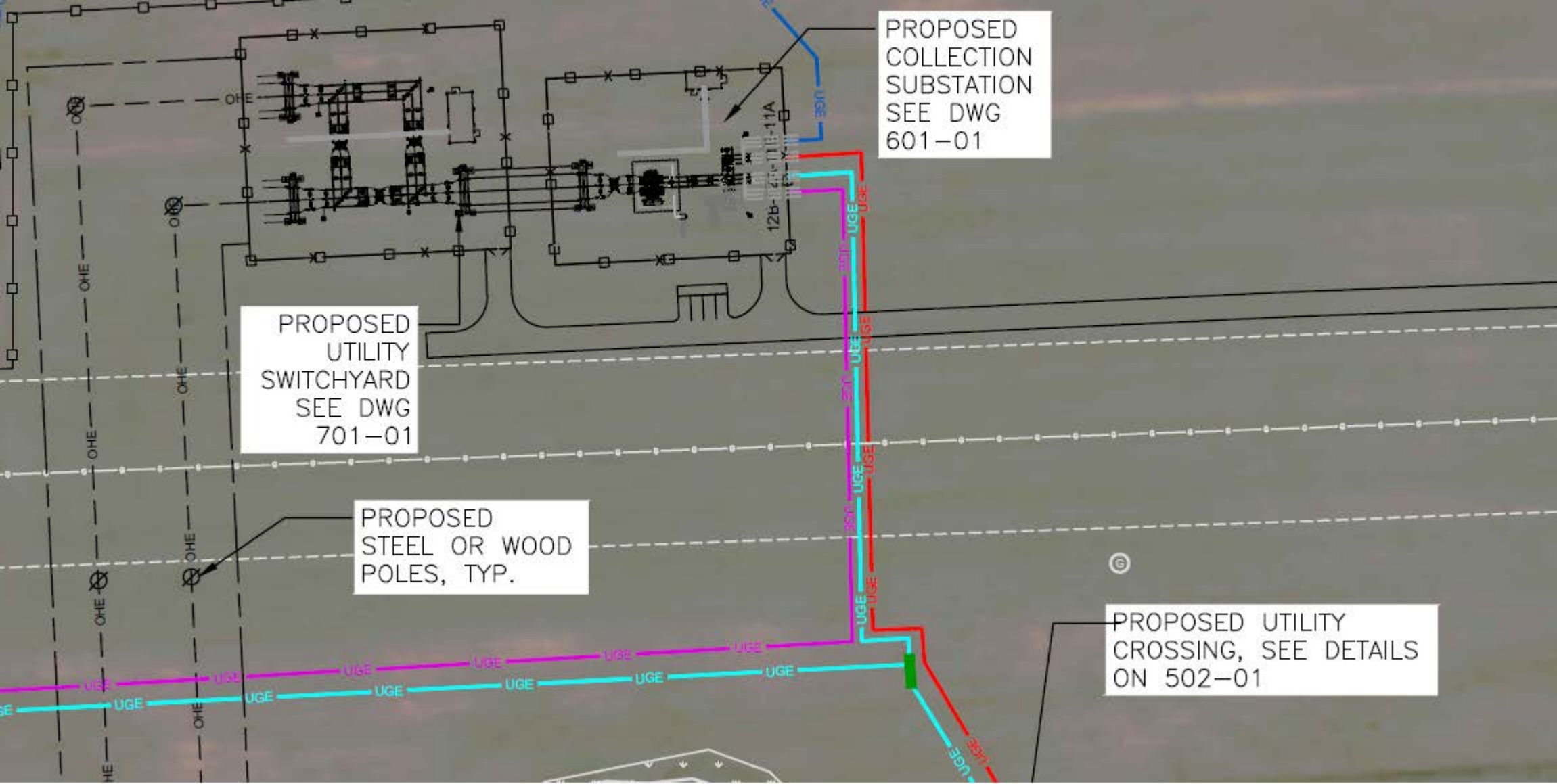
NORTH SENECA SOLAR PROJECT
SAVION

34.5kV COLLECTION SYSTEM
ELECTRICAL COLLECTION UNDERGROUND ROUTING
AREA 2 – DETAILS

PLOT SCALE: ARCH 0 1 2 / ENGRG 0 1 2

PROJ. NO.: 19349 | SCALE: 1"=150'

DWG. NO.: 101 | SHEET: 02 | REV.: C


PROPOSED COLLECTION SUBSTATION SEE DWG 601–01
PROPOSED UTILITY SWITCHYARD SEE DWG 701–01
PROPOSED STEEL OR WOOD POLES, TYP.
PROPOSED UTILITY CROSSING, SEE DETAILS ON 502–01
OHE
UGE

Appendix 7-8

Manufacturer Sound Level Data Sheets

1. INTRODUCTION

Testing was conducted to determine the sound levels of a Solar Inverter Skid with Model No. SG4400UD and Serial No. A2371823266 operating close to nominal power or >90% loading. The measurements and calculations were performed according to the ISO 3746:2010 standard.

Information on the test condition and test environment is presented in Section 2. The sound instrumentation is described in Section 3. The sound measurement data is presented in Section 4. Section 5 summarizes the results of the test. The appendix presents sound power-level calculations relevant data.

2. TEST CONDITION AND TEST ENVIRONMENT

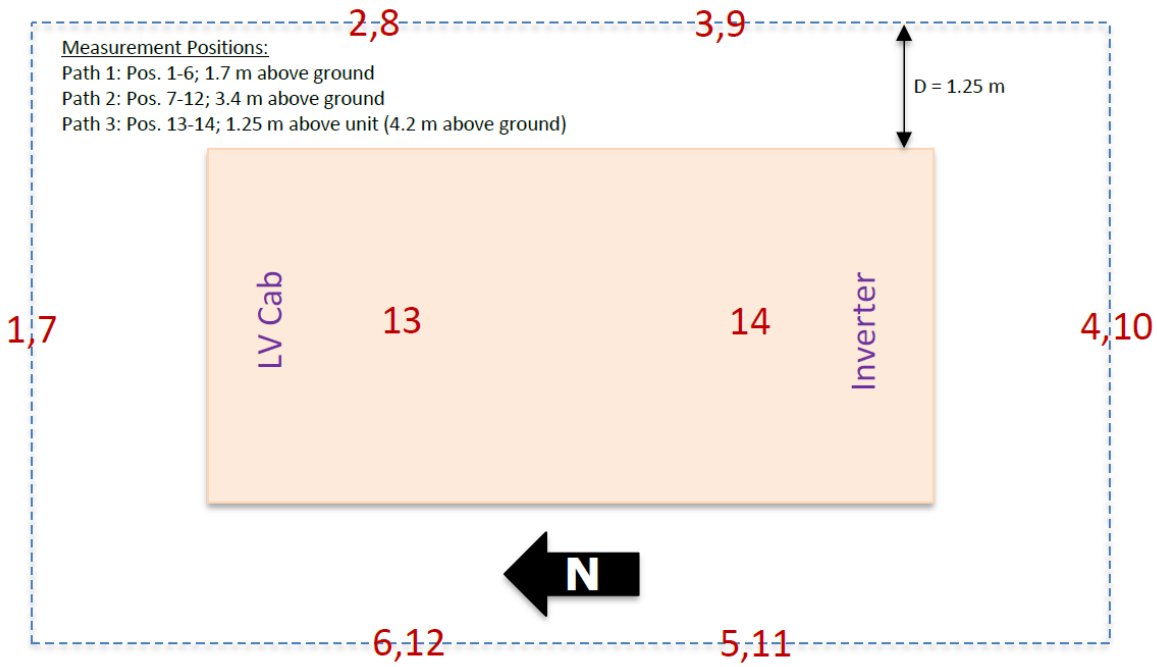
Sound measurements were made around the field-installed Solar Inverter Skid while operating close to nominal power or >90% loading between 11:30 and 12:30 AM on 17 November 2023.

The Solar Inverter Skid was about 20 ft (6.1 m) long by 8 ft (2.4 m) wide by 9.5 ft (2.9 m) tall.

The outdoor test environment was free of significant reflecting surfaces.

Figure 1 shows a drawing of an overhead view with the measurement positions marked. Sound measurements were made at 1.25m from the equipment skid which is roughly the width of the worker access platform. Three measurement "paths" were made: one at a height of 5.5 ft. (1.7 m) above the ground, one at a height of 11 ft. (3.4 m) above the ground, and one at 1.25 m above the top of the unit (4.2 m above the ground).

Figure 1. Measurement Positions, Overhead View



3. INSTRUMENTATION

Noise measurements were made using the following equipment:

Multi-function Sound Level Meter (Noise Analyzer) AWA6228+
Calibration Date: 2023-09-22; Expire Date: 2024-09-22

The sound level meter meets the requirements for a Type 1 sound level meter per ANSI S1.4, American National Standard Specification for Sound Level Meters.

4. SOUND DATA

The test lasts 60 seconds per position. Octave band, noise sound pressure levels in each frequency band, A-weighted(dBA), and unweighted (dBZ) data for each measurement position are presented in Table 1. Average sound pressure levels and sound power levels (L_W) are also presented. Sound power level calculations and relevant data are presented in the Appendix.

Table 1. Sound Measurement Data, dB

Position	Octave Band Center Frequency, Hz									dBA	dBZ
	31.5	63	125	250	500	1000	2000	4000	8000		
1	68	72	62	54	49	49	52	44	17	56.5	95.7
2	66	58	55	51	56	56	56	49	21	61.1	90.7
3	68	60	55	55	63	59	64	56	34	67.6	92.2
4	71	57	56	52	55	55	62	55	29	64.7	97.0
5	70	64	67	65	71	71	79	69	41	81.6	87.1
6	68	63	60	56	63	61	66	56	29	68.9	102.0
7	61	71	63	55	54	50	51	41	17	57.2	91.6
8	65	63	61	52	55	54	57	49	23	61.2	90.3
9	67	64	68	63	67	62	66	59	32	70.5	88.2
10	70	65	62	58	58	55	62	54	28	65.0	97.9
11	67	61	62	61	67	67	72	63	35	74.9	88.2
12	67	66	68	75	74	71	67	58	30	75.4	89.5
13	65	73	73	69	69	66	65	57	29	71.3	91.2
14	68	87	83	79	81	78	86	80	51	89.1	105.9
Average	67	66	64	60	63	61	65	56	30	68.9	93.4
LW	**89.1**	**87.7**	**85.9**	**82.3**	**84.8**	**83.1**	**86.0**	**76.3**	**54.3**	**90.9**	**97.1**

The maximum A-weighted sound pressure level measured was 89.1 dBA, at position 14. The maximum A-weighted sound pressure level measured at 1.7 m (ear height) above the ground was 81.6 dBA, at position 5 (also near the Inverter.) The average of all fourteen measurements was 68.9 dBA. The A-weighted sound power level (Lw) for the package is 90.9 dBA.

5. SUMMARY

The sound levels from a Solar Inverter Skid with Model No. SG4400UD and Serial No. A2371823266 were measured.

The maximum A-weighted sound pressure level measured was 89.1 dBA, at position 14. The

maximum A-weighted sound pressure level measured at 1.7 m (ear height) above the ground was 81.6 dBA, at position 5 (also near the Inverter.) The average of all fourteen measurements was 68.9 dBA. The A-weighted sound power level (Lw) for the package is 90.9 dBA.

APPENDIX: DATA AND CALCULATIONS

Unit Dimensions	in	m
l1	240	6.1
l2	96	2.4
l3	150	2.9

Meas. Distance, m		1.25
Measurement Surface Area		
a	4.3	m
b	2.45	m
c	4.15	m
S	154.19	m^2

Appendix 7-9
Glossary of Terms

This section includes some of the terms used throughout the report which may require a more detailed explanation.

ANS-weighted	A high-frequency natural sound (HFNS) filter applied to the measured one-third octave-band data to remove seasonal noise like insects. This technique removes all sound energy above the 1,250 Hertz frequency band. The methodology for the filtration process is specified in ANSI/ASA S12.100-2014 and the sound pressure levels presented using this methodology are indicated as ANS-weighted levels (presented in dBA).
G	The portion of ground that is considered porous as defined under ISO 9613-2. This is used as part of the ground attenuation calculation between the source and receiver. For example, a G-factor of 0.5 corresponds to "mixed ground" consisting of half hard and half porous ground cover. A G-factor of zero (0) corresponds to "hard ground" consisting of surfaces with low porosity including water, and a G of 1 represents all porous ground.
Intensity (Loudness)	Sound intensity is a measure of how much energy or power is transmitted. Humans do not perceive increases in sound level (loudness) in a linear manner. For this reason, sound levels are quantified in terms of a logarithmic ratio between the sound pressure of a given noise and the minimum sound pressure discernable by the human ear. This ratio is called the sound pressure level (L_p) and is always reported on a decibel (dB) scale. The logarithmic dB scale accommodates the wide range of sound intensities found in the environment. For example, 0 dB is the minimum discernable sound pressure at 2.9×10^{-9} lbs/in^2, while 140 dB is the threshold of pain at 0.029 psi. The ratio of the two sound pressures is 10,000,000, but there is only a 140-dB difference when using the logarithmic scale.
Infrasound	Sound in the frequencies below 20 Hz.

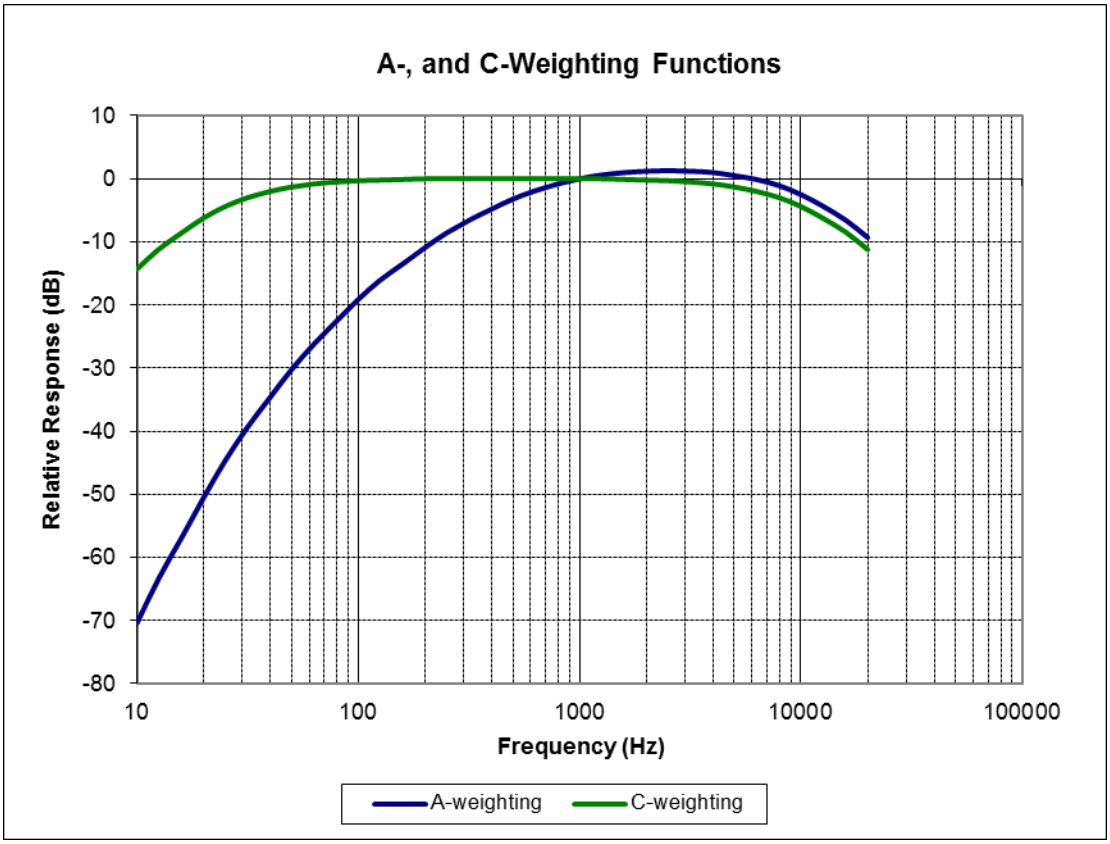
ISO 9613-2	An international standard which specifies an engineering method for calculating the attenuation of sound during outdoor propagation in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound level under meteorological conditions favorable to propagation from sources of known sound emission, and is used throughout the United States and the world.
L_{eq}	The equivalent sound level, is the level of a hypothetical steady sound that would have the same energy (*i.e.,* the same time-averaged mean square sound pressure) as the actual fluctuating sound observed. The equivalent level is designated L_{eq} and is also A-weighted. The equivalent level represents the time average of the fluctuating sound pressure, but because sound is represented on a logarithmic scale and the averaging is done with linear mean square sound pressure values, the L_{eq} is mostly determined by occasional loud noises.
L_n	Or nth percentile, is the sound level exceeded "n" percent of the time during a measurement period. For example, if 100 sound levels were measured over a 10-minute period, and were sorted from highest to lowest, the L_{90} would be the 90^{th} lowest of the 100 values. The L_{90} is close to the lowest sound level observed. It is essentially the same as the residual sound level, which is the sound level observed when there are no obvious nearby intermittent noise sources. The L_{10} is the sound level exceeded only 10 percent of the time. It is the 10^{th} lowest of the 100 samples described above. It is close to the maximum level observed during the measurement period.
L_{max}	The maximum sound level over a given time period. The L_{max} is typically due to discrete, identifiable events such as an airplane overflight, car or truck pass by, or a dog bark for example.
Low frequency	Sound contained in the frequencies from 20 Hz to 200 Hz.
Octave bands	The International Standards Organization (ISO) has agreed upon "preferred" frequency bands for sound measurement and by agreement the octave band is the widest band for frequency

analysis. The upper frequency limit of the octave band is approximately twice the lower frequency limit and each band is identified by its geometric mean called the band center frequency. The octave band center frequencies typically used for sound level analyses are 31.5, 63, 125, 250, 500, 1000, 2000, 4000, and 8000 Hz. When more detailed information about a noise is required, standardized one-third octave band analysis may be used.

Weighting

The sound level meter used to measure noise is a standardized instrument.[1] It contains "weighting networks" to adjust the frequency response of the instrument to approximate that of the human ear under various conditions. One network is the A-weighting network, which most closely approximates how the human ear responds to sound as a function of frequency, and is the accepted scale used for community sound level measurements. Sounds are frequently reported as detected with the A-weighting network of the sound level meter in dBA. A-weighted sound levels emphasize middle frequencies (i.e., middle pitched—around 1,000 Hertz sounds), and de-emphasize lower and higher frequencies. The C-weighting network has a nearly flat response for frequencies between 63 Hz and 4000 Hz and is noted as dBC. These are shown graphically below.

[1] *American National Standard Specification for Sound Level Meters*, ANSI S1.4-1983, published by the Standards Secretariat of the Acoustical Society of America, Melville, NY.


A-, and C-Weighting Functions
Relative Response (dB)
10
0
-10
-20
-30
-40
-50
-60
-70
-80
10
100
1000
10000
100000
Frequency (Hz)
A-weighting
C-weighting