

MEMORANDUM

Date: October 23, 2017

To: Renewable Energy Systems Americas, Inc

From: Ryan Callahan, INCE & Rob O'Neal, INCE Bd. Cert. Epsilon Associates, Inc.

Subject: **Ball Hill Wind Acoustic Modeling Results – Layout 092617 & V136-3.45**

This memorandum provides updated sound modeling results for the Ball Hill Wind Project (Layout 092617). A comprehensive sound level assessment report was provided to Renewable Energy Systems Americas Inc. on October 4, 2016.

Key changes between the October 4, 2016 report and this memo include:

- ◆ Small movements to four of the proposed turbines (T2, T4, T8, and T28).
- ◆ All turbines have been updated to Vestas model V136-3.45 with serrated trailing edge blades.
- ◆ All turbines have been updated to a hub height of 105 meters.
- ◆ The 120 MVA collector substation has been removed.

All turbines were modeled at a hub height of 105 meters. Maximum sound levels in the project area were predicted at the same set of 768 receptors used previously. A technical report from Vestas¹ documented the expected maximum sound power levels of the V136-3.45 with STE blades at 105.5 dBA. A manufacturer's uncertainty factor ("K") of 2.0 dBA was added to the sound power level for a total modeled sound level of 107.5 dBA.

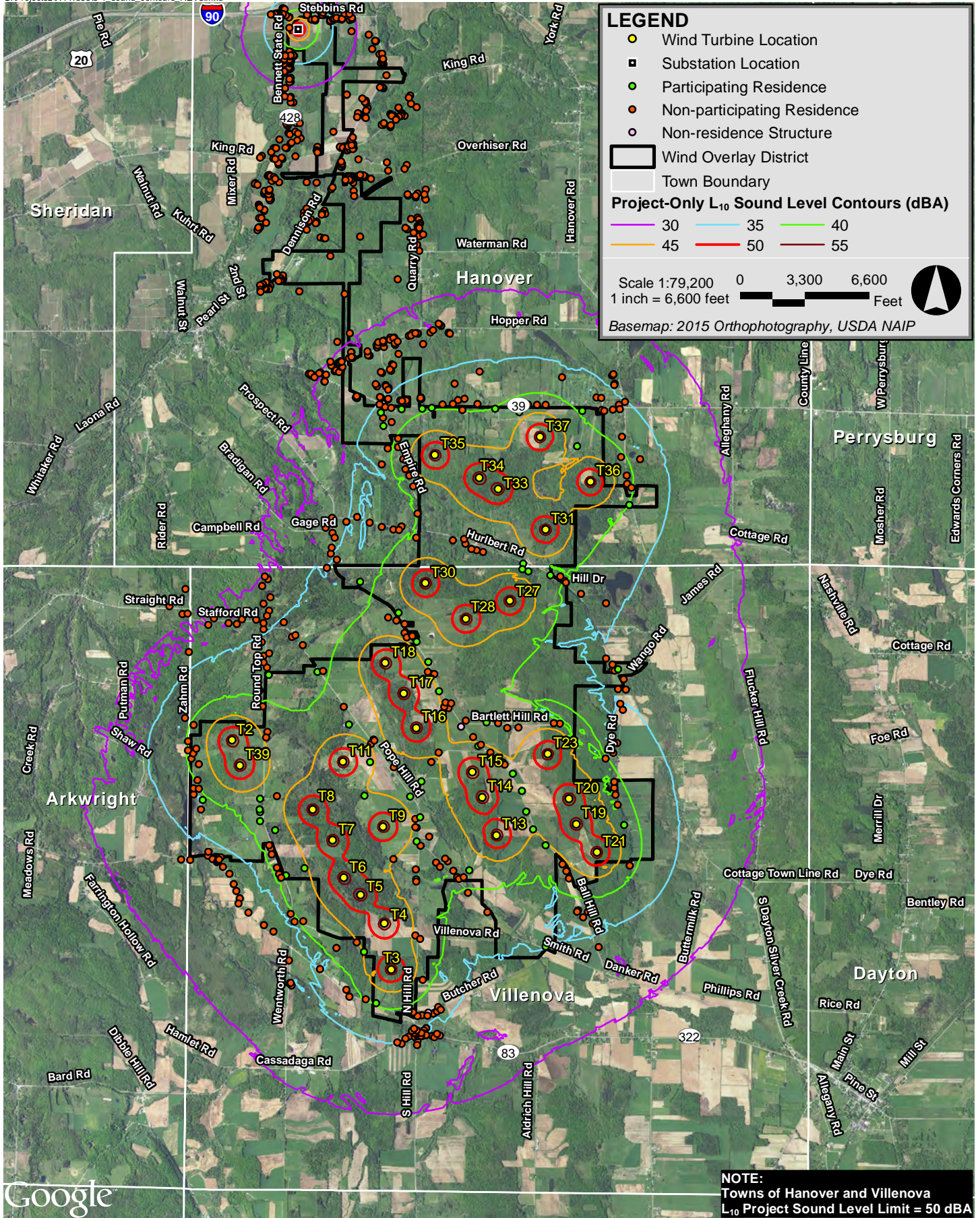
The sound levels from the proposed wind turbines were predicted using the Cadna/A noise calculation software. This software uses the ISO 9613-2 international standard for sound propagation (Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation).

¹ Vestas Wind Systems A/S, DMS 0055-9919_V03, "V136-3.45 MW Third octave noise emission" February 15, 2017.

Modeling Sound Level Results

Modeling results for the Vestas V136-3.45 turbine, representing maximum Project-only L_{10} sound levels, are shown in Figure 6-1 as sound contour lines overlaid on an aerial image of the Project area. Predicted maximum L_{10} sound levels for the Project area receptors range from 19 to 47 dBA. Predicted maximum L_{eq} levels range from 18 to 46 dBA. Complete results at all receptors are presented in Table A-1.

Maximum operational L_{10} sound levels at all of the nearest structures to the Project are predicted to be less than 50 dBA. Therefore, the Project is in compliance with local noise limits specified by the Towns of Hanover and Villenova. Additionally, the Project is expected to meet the suggested noise guidelines of a 6 dBA or less increase over background as recommended by the New York State Department of Environmental Conservation (NYSDEC) to avoid the potential for adverse noise impacts in the community.



Ball Hill Wind Project Hanover & Villenova, New York



Figure 6-1
Maximum Project-Only L₁₀ Sound Levels
Vestas V136-3.45 MW (10m/s at 105m HH)

Table A-1

Predicted Sound Level Modeling Results - Layout 092617

Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
1	302835	265921	44	43
2	302817	265099	41	40
3	305211	265779	41	40
4	303337	270719	35	34
5	306582	273125	43	42
6	306448	273126	43	42
7	306310	273130	42	41
8	306063	273131	41	40
9	305523	273141	39	38
10	304592	271431	40	39
11	304524	271857	42	41
12	304464	272023	43	42
13	304408	272125	43	42
14	304370	272276	43	42
15	304291	272464	41	40
16	304288	272601	41	40
17	304129	272449	39	38
18	304063	272798	37	36
19	304054	272920	37	36
20	304025	273005	36	35
21	304089	273088	36	35
22	304345	273055	38	37
23	304667	273065	39	38
24	304815	273077	40	39
25	305292	273044	40	39
26	305322	273216	39	38
27	305800	273064	40	39
28	306179	273013	43	42
29	307071	272480	44	43
30	306588	264701	35	34
31	307892	265960	42	41
32	307805	266595	42	41
33	307706	266908	42	41
34	307670	267064	42	41
35	307651	267168	41	40
36	307650	267265	41	40
37	307520	267624	40	39
38	307696	267868	38	37
39	307640	267712	39	38
40	307788	268380	35	34
41	307746	268479	35	34
42	307714	268704	35	34

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
43	307627	269003	35	34
44	307655	268993	35	34
45	307626	269084	35	34
46	307132	270187	38	37
47	301451	266094	34	33
48	301466	266093	34	33
49	301483	266092	34	33
50	301500	266093	34	33
51	301516	266092	34	33
52	301532	266092	34	33
53	301570	265944	34	33
54	301671	265836	34	33
55	301738	265672	33	32
56	301780	265566	33	32
57	301829	265450	33	32
58	301965	265234	33	32
59	302204	265039	33	32
60	302353	264933	33	32
61	303080	264353	36	35
62	303951	263822	40	39
63	303790	263883	40	39
64	303484	264028	38	37
65	304671	264182	42	41
66	301336	266118	34	33
67	301338	266177	34	33
68	301228	266832	38	37
69	301114	267071	38	37
70	301116	267164	39	38
71	301191	267536	42	41
72	301079	267623	41	40
73	301106	267708	41	40
74	301041	269283	33	32
75	302266	270414	32	31
76	302218	270455	32	31
77	302179	270309	32	31
78	302198	270031	34	33
79	302304	270136	34	33
80	302288	269923	34	33
81	302252	269847	34	33
82	303188	270587	35	34
83	303244	270812	35	34
84	303257	270903	35	34
85	303267	271364	34	33

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
86	303270	271133	34	33
87	303307	271057	35	34
88	306880	270386	40	39
89	305683	265239	38	37
90	305379	265538	40	39
91	304567	265903	43	42
92	304571	265747	42	41
93	302312	266233	41	40
94	302200	269222	36	35
95	306160	268107	43	42
96	303487	271309	35	34
97	303655	271379	36	35
98	303849	271296	37	36
99	304038	271224	38	37
100	304347	271236	39	38
101	304214	271187	39	38
102	304301	271181	39	38
103	304573	271057	41	40
104	305144	271018	42	41
105	305337	270967	42	41
106	305319	271039	42	41
107	306239	270659	44	43
108	306314	270535	44	43
109	306655	270474	42	41
110	305237	265757	41	40
111	305314	265779	41	40
112	305395	265887	42	41
113	304880	266010	42	41
114	304939	265943	41	40
115	305060	266030	42	41
116	305021	266071	42	41
117	304560	266685	44	43
118	304631	266714	44	43
119	304643	266268	43	42
120	304582	266553	44	43
121	304580	266336	44	43
122	304221	266066	45	44
123	304573	265716	42	41
124	304562	264878	44	43
125	304636	264824	43	42
126	303764	264620	45	44
127	302619	265214	39	38
128	302550	265807	41	40

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
129	302409	265930	41	40
130	302326	266139	41	40
131	302285	266277	41	40
132	302379	266514	43	42
133	302143	266794	42	41
134	302407	267041	44	43
135	302262	268044	44	43
136	302189	268440	41	40
137	302250	269039	37	36
138	302199	269120	37	36
139	302286	269264	36	35
140	302199	269635	35	34
141	302202	269733	35	34
142	302517	269746	35	34
143	302640	269518	36	35
144	302698	269540	36	35
145	302808	269389	37	36
146	303038	268970	39	38
147	303444	268430	42	41
148	303530	268156	43	42
149	303872	267853	45	44
150	303911	267922	45	44
151	303855	267569	46	45
152	304478	267032	44	43
153	304653	267271	43	42
154	304810	267574	45	44
155	304925	267717	45	44
156	306809	268168	43	42
157	306715	268173	43	42
158	306154	268298	41	40
159	305986	268102	42	41
160	305847	268175	42	41
161	305666	268187	42	41
162	307410	264695	34	33
163	307313	265066	36	35
164	307087	265268	38	37
165	307165	265160	37	36
166	307242	265245	38	37
167	306947	265758	43	42
168	306907	265874	44	43
169	306846	265982	44	43
170	306587	266276	45	44
171	306392	266522	45	44

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
172	306280	266803	46	45
173	306214	267120	46	45
174	306072	267387	46	45
175	305920	267565	46	45
176	305950	267530	46	45
177	305730	267653	47	46
178	305830	267632	46	45
179	305729	267720	46	45
180	305540	267818	46	45
181	305461	267962	44	43
182	305346	268213	43	42
183	305077	268412	44	43
184	305007	268430	45	44
185	305030	268499	44	43
186	305116	268483	43	42
187	304928	268671	45	44
188	304793	268945	45	44
189	304852	268940	44	43
190	304762	269125	44	43
191	304137	269816	42	41
192	304268	269771	43	42
193	304391	269573	44	43
194	304424	269508	44	43
195	304578	269443	44	43
196	304511	269528	44	43
197	304389	269720	43	42
198	304296	269893	43	42
199	303701	270372	38	37
200	304983	273128	39	38
201	305140	273136	39	38
202	305222	273197	39	38
203	307157	273030	39	38
204	307459	273045	38	37
205	307496	273029	37	36
206	307631	273047	37	36
207	307725	273122	36	35
208	307739	273054	36	35
209	307820	273167	35	34
210	307770	272626	38	37
211	308054	272278	38	37
212	307760	272313	41	40
213	307851	271897	41	40
214	307919	271835	40	39

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
215	307525	270039	36	35
216	306902	270361	40	39
217	305613	270835	42	41
218	305510	270866	42	41
219	305433	270887	42	41
220	303164	271210	34	33
221	304756	268970	45	44
222	307127	265624	42	41
223	305147	265883	41	40
224	304777	266410	43	42
225	303534	263922	38	37
226	302441	265831	41	40
227	305267	268124	44	43
228	302146	266999	43	42
229	302684	265087	39	38
230	303648	264766	45	44
231	303329	264680	42	41
232	303767	267050	45	44
233	300989	270263	28	27
234	300939	269870	27	26
235	300734	269991	29	28
236	301022	269877	27	26
237	300982	268255	38	37
238	301111	268150	41	40
239	301024	267891	40	39
240	301156	267779	42	41
241	301028	267753	40	39
242	301174	267287	41	40
243	301193	267155	40	39
244	301253	266981	39	38
245	301059	266053	34	33
246	300915	266057	34	33
247	301423	266076	34	33
248	301411	266064	34	33
249	301474	266013	34	33
250	301487	266028	34	33
251	301498	266042	34	33
252	301505	266053	34	33
253	301809	265370	32	31
254	302594	264485	33	32
255	302638	264095	35	34
256	302599	264129	35	34
257	302623	264141	35	34

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
258	302474	265774	41	40
259	302146	266655	41	40
260	302141	266834	42	41
261	302241	267952	44	43
262	302140	268685	39	38
263	302277	268929	38	37
264	302169	269437	35	34
265	302088	269783	34	33
266	301866	269792	34	33
267	301782	269714	34	33
268	301654	269728	34	33
269	301431	269805	31	30
270	301343	269705	29	28
271	303123	268986	40	39
272	303921	267910	45	44
273	304227	267491	44	43
274	304561	266556	44	43
275	304942	263321	34	33
276	304823	263316	35	34
277	304725	263437	35	34
278	304669	263313	35	34
279	304602	263271	35	34
280	304593	263236	35	34
281	304584	263172	34	33
282	304488	263322	36	35
283	304544	263298	35	34
284	304696	263398	35	34
285	304686	263355	35	34
286	304728	263326	35	34
287	304851	263295	34	33
288	304895	263345	35	34
289	304593	263315	35	34
290	304617	263316	35	34
291	304645	263313	35	34
292	304581	263360	36	35
293	304627	263358	35	34
294	304653	263358	35	34
295	304537	263360	36	35
296	304453	263302	35	34
297	304406	263272	35	34
298	304345	263191	35	34
299	304276	263213	35	34
300	304583	263402	36	35

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
301	304509	263395	36	35
302	304542	263426	36	35
303	304661	263637	37	36
304	304864	263672	37	36
305	304841	263664	37	36
306	304892	263698	37	36
307	304917	263762	37	36
308	304758	263678	37	36
309	304749	263627	37	36
310	304954	263720	36	35
311	304594	263625	38	37
312	304523	263682	39	38
313	307076	265245	38	37
314	307835	268700	35	34
315	307798	268862	34	33
316	305581	267840	45	44
317	304039	272195	38	37
318	304193	272856	38	37
319	304005	273128	35	34
320	304187	273074	37	36
321	307847	272022	41	40
322	307885	271567	40	39
323	307710	269011	34	33
324	307523	269182	34	33
325	306815	270457	41	40
326	306226	270568	44	43
327	303952	278773	27	26
328	303934	278769	27	26
329	303935	278785	27	26
330	304005	278574	27	26
331	304041	278582	26	25
332	303890	278654	27	26
333	303403	279128	33	32
334	303832	278880	28	27
335	303275	279101	35	34
336	303091	279223	37	36
337	303100	279250	36	35
338	303538	279105	31	30
339	302881	279231	40	39
340	303566	278929	31	30
341	302951	279115	41	40
342	302998	279106	40	39
343	303006	279100	40	39

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
344	302998	279118	40	39
345	303097	279223	37	36
346	303057	279270	32	31
347	303071	279258	37	36
348	303110	279185	37	36
349	303122	279219	36	35
350	303233	279088	36	35
351	303251	279094	35	34
352	303238	279099	35	34
353	303282	279118	35	34
354	303301	279125	34	33
355	303346	279129	33	32
356	303333	279140	34	33
357	303414	279115	33	32
358	303254	279332	33	32
359	303253	279352	33	32
360	303253	279279	34	33
361	303260	279244	34	33
362	303418	279128	32	31
363	303458	279204	27	26
364	303577	279117	31	30
365	303574	279138	31	30
366	303531	279202	26	25
367	302890	279200	41	40
368	302619	278608	38	37
369	302618	278611	38	37
370	302600	278617	38	37
371	302536	278563	37	36
372	302490	278574	36	35
373	302425	278783	39	38
374	302879	279189	41	40
376	302604	278985	47	46
377	302593	279152	42	41
378	302598	279152	42	41
379	302596	279146	42	41
380	302495	279286	38	37
381	302508	279284	38	37
382	302514	279263	38	37
383	302527	279271	38	37
384	302545	279181	41	40
385	302502	279197	39	38
386	302470	279144	40	39
387	302439	279096	40	39

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
388	302444	279126	39	38
389	302424	279132	39	38
390	302411	279141	38	37
391	302435	279216	38	37
392	302419	279197	38	37
393	302394	279207	37	36
394	302375	279201	37	36
395	302330	279194	36	35
396	302314	279193	36	35
397	302660	277826	28	27
398	302622	277825	28	27
399	302622	277912	29	28
400	302611	277896	29	28
401	302528	277916	29	28
402	302621	278357	34	33
403	302623	278150	31	30
404	302599	278137	31	30
405	302621	278208	32	31
406	302600	278189	31	30
407	302601	278340	33	32
408	302611	278359	34	33
409	302594	278377	34	33
410	302613	278425	35	34
411	302592	278441	35	34
412	302617	278450	35	34
413	302630	278469	36	35
414	302625	278479	36	35
415	302600	278486	36	35
416	302674	278547	37	36
417	302664	278554	37	36
418	302608	278545	37	36
419	302624	278556	37	36
420	302416	278043	29	28
421	302457	278037	29	28
422	302532	278046	30	29
423	302461	278204	31	30
424	302437	278232	31	30
425	302435	278240	31	30
426	302491	278276	32	31
427	302525	278289	32	31
428	302519	278290	32	31
429	302523	278305	33	32
430	302482	278396	34	33

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Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
431	302512	278421	34	33
432	302509	278476	35	34
433	302519	278494	35	34
434	302531	278548	36	35
435	303814	277735	25	24
436	303778	277598	25	24
437	303688	277646	26	25
438	303670	277655	26	25
439	303656	277599	25	24
440	303789	277581	23	22
441	303798	277696	25	24
442	303795	277810	26	25
443	303785	277852	26	25
444	303772	277832	26	25
445	303734	277884	26	25
446	303497	277946	27	26
447	303492	277948	27	26
448	304581	277748	22	21
449	304491	277803	23	22
450	304389	277614	21	20
451	304353	277657	22	21
452	304343	277644	22	21
453	304340	277620	22	21
454	304302	277600	22	21
455	304255	277573	23	22
456	304298	277736	24	23
457	304480	277933	24	23
458	304456	277901	24	23
459	304298	277747	24	23
460	304220	277620	19	18
461	304171	277641	23	22
462	304185	277629	22	21
463	304193	277614	24	23
464	304114	278250	25	24
465	304062	278044	25	24
466	304047	278062	26	25
467	304010	278061	26	25
468	304025	278433	26	25
469	304064	278417	26	25
470	304058	278432	26	25
471	304048	278455	26	25
472	304045	278488	26	25
473	304055	278488	26	25

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
474	304053	278499	26	25
475	303871	276634	21	20
476	304260	277555	23	22
477	304114	276890	21	20
478	304426	276850	21	20
479	304391	276793	21	20
480	304139	276763	21	20
481	304174	277440	21	20
482	304066	277477	23	22
483	304038	277478	23	22
484	304072	277506	24	23
485	304177	277467	23	22
486	303284	277367	26	25
487	302870	276586	22	21
488	303593	276574	21	20
489	303774	276667	21	20
490	303778	276677	21	20
491	303758	276693	21	20
492	303703	276700	21	20
493	303023	276577	23	22
494	303543	276674	22	21
495	303569	276654	21	20
496	303577	276637	21	20
497	303562	276614	21	20
498	303533	276627	21	20
499	303475	276619	21	20
500	303414	276817	22	21
501	303420	276831	22	21
502	303391	276833	22	21
503	303402	276867	22	21
504	303417	276872	22	21
505	303405	276903	23	22
506	303677	276940	22	21
507	303569	277166	24	23
508	303574	277167	24	23
509	303039	277134	25	24
510	303026	277080	25	24
511	303041	277068	25	24
512	303039	277049	25	24
513	303385	277133	24	23
514	303436	277123	24	23
515	303494	277078	23	22
516	303505	277077	23	22

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
517	303535	277098	24	23
518	303514	277141	24	23
519	303602	277112	23	22
520	303585	277102	23	22
521	303592	277177	24	23
522	303592	277165	24	23
523	303566	277158	24	23
524	303559	277257	24	23
525	303590	277285	24	23
526	302437	276861	23	22
527	302444	276583	24	23
528	302329	276605	24	23
529	302269	276682	24	23
530	302354	276951	23	22
531	302775	277268	25	24
532	302447	277249	23	22
533	302385	277112	25	24
534	302359	277114	25	24
535	302317	277052	25	24
536	302574	277464	26	25
537	302585	277491	26	25
538	302555	277494	26	25
539	302567	277548	26	25
540	302581	277522	26	25
541	302589	277345	24	23
542	302607	277328	23	22
543	302710	277501	26	25
544	302761	277502	26	25
545	302696	277368	26	25
546	302739	277344	26	25
547	302724	277233	25	24
548	302616	277181	20	19
549	302632	277198	20	19
550	302695	276984	25	24
551	302561	277113	20	19
552	302544	277123	20	19
553	302393	277115	23	22
554	302492	276944	21	20
555	302483	276963	21	20
556	302426	276888	23	22
557	302378	276946	23	22
558	302175	276994	24	23
559	302143	276966	24	23

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Predicted Sound Level Modeling Results - Layout 092617

Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
560	302069	276570	23	22
561	302290	276698	24	23
562	302306	276680	24	23
563	302357	276664	24	23
564	302380	276640	24	23
565	302123	275860	24	23
566	302107	275843	24	23
567	302304	276378	24	23
568	302316	276317	24	23
569	302068	276554	23	22
570	302102	276544	23	22
571	302242	275955	24	23
572	302128	276238	24	23
573	302206	276138	24	23
574	302299	276305	24	23
575	302286	276332	24	23
576	302213	276401	24	23
577	302211	276412	24	23
578	302213	276429	24	23
579	302221	276447	24	23
580	302281	276395	24	23
581	302278	276448	24	23
582	302294	276468	24	23
583	302672	275736	21	20
584	302830	276122	21	20
585	302826	276059	21	20
586	302213	276156	24	23
587	302134	276216	24	23
588	302137	276190	24	23
589	302132	276027	24	23
590	302163	276027	24	23
591	302144	275889	24	23
592	302119	275877	24	23
593	302702	275709	21	20
594	303087	275724	22	21
595	303138	275715	22	21
596	302923	276004	21	20
597	303047	276313	21	20
598	303156	275712	22	21
599	302873	275849	21	20
600	303704	275741	26	25
601	302872	276178	22	21
602	303602	276452	21	20

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Predicted Sound Level Modeling Results - Layout 092617

Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
603	303608	276369	21	20
604	303250	276479	21	20
605	303273	276502	21	20
606	303143	276144	21	20
607	303160	276093	21	20
608	303112	276107	21	20
609	303105	276084	21	20
610	303022	275973	21	20
611	303026	275955	21	20
612	303011	275949	21	20
613	302940	276007	21	20
614	302891	275962	21	20
615	302866	276041	21	20
616	302880	276073	21	20
617	302901	275980	21	20
618	304564	275585	27	26
619	304709	276334	26	25
620	304721	276467	26	25
621	304717	276314	26	25
622	304698	276396	26	25
623	304592	276412	26	25
624	304568	276352	26	25
625	304568	276378	26	25
626	304447	276374	26	25
627	304436	276397	25	24
628	304594	276036	27	26
629	304610	276009	27	26
630	304630	275944	27	26
631	304622	275922	27	26
632	304595	275900	27	26
633	304596	275886	27	26
634	304593	275781	27	26
635	304583	275785	27	26
636	304620	275871	27	26
637	304494	276013	26	25
638	304433	275853	26	25
639	304408	275874	26	25
640	304535	275796	27	26
641	304583	275611	27	26
642	304619	275749	27	26
643	304681	275775	27	26
644	304284	275074	29	28
645	304621	275515	28	27

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Predicted Sound Level Modeling Results - Layout 092617

Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
646	304543	275188	29	28
647	303460	274849	27	26
648	303237	275436	26	25
649	302229	275008	21	20
650	302756	274888	26	25
651	302500	275138	22	21
652	302463	275086	22	21
653	302459	275095	22	21
654	302473	275057	22	21
655	302469	275046	22	21
656	302432	275049	22	21
657	302408	275159	22	21
658	302260	274966	22	21
659	302309	274975	22	21
660	302277	274948	22	21
661	302289	274924	22	21
662	302237	274924	22	21
663	302218	274937	22	21
664	302241	275031	21	20
665	302192	274991	21	20
666	302185	275005	21	20
667	302162	274974	21	20
668	302148	274978	21	20
669	302150	274913	22	21
670	302154	274882	22	21
671	303589	273856	31	30
672	303084	273630	30	29
673	303539	274238	30	29
674	303344	274105	30	29
675	303566	273944	31	30
676	303563	273943	31	30
677	303143	273583	30	29
678	302979	273579	30	29
679	302935	273579	30	29
680	302903	273610	30	29
681	302937	273604	30	29
682	303062	273617	30	29
683	303174	273595	30	29
684	303252	273734	30	29
685	303240	273795	30	29
686	303309	273650	31	30
687	303323	273659	31	30
688	303372	273636	31	30

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Predicted Sound Level Modeling Results - Layout 092617

Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
689	303408	273711	31	30
690	303426	273712	31	30
691	303360	273776	30	29
692	303371	273784	31	30
693	303379	273778	31	30
694	303400	273801	31	30
695	303410	273792	31	30
696	303530	273846	31	30
697	303564	273866	31	30
698	303847	273887	31	30
699	303825	273893	31	30
700	303812	273958	31	30
701	304296	273918	33	32
702	304200	273757	33	32
703	304214	273744	33	32
704	304183	273653	33	32
705	304164	273671	33	32
706	304044	273623	33	32
707	304022	273633	33	32
708	304793	274253	32	31
709	304598	274231	32	31
710	304596	274236	32	31
711	304512	274234	32	31
712	304678	274071	33	32
713	303961	274013	31	30
714	303955	274055	31	30
715	303976	274046	31	30
716	303986	274097	31	30
717	304070	274025	32	31
718	304060	274087	31	30
719	304074	274125	31	30
720	304060	274118	31	30
721	304169	274172	31	30
722	304163	274138	31	30
723	304229	274173	31	30
724	304217	274163	31	30
725	304244	274057	32	31
726	304237	274082	32	31
727	304287	274112	32	31
728	304462	274198	32	31
729	304490	274204	32	31
730	304561	274239	32	31
731	304838	274286	32	31

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Vestas V136-3.45

Receptor ID	NAD 1983 State Plane New York West FIPS 3103		L10 Sound Level (dBA)	Leq Sound Level (dBA)
	X [Easting]	Y [Northing]		
	(m)	(m)		
732	305074	274244	32	31
733	305560	273641	36	35
734	305097	274231	33	32
735	304962	274353	32	31
736	304938	274369	32	31
737	304924	274382	32	31
738	307620	273580	34	33
739	307632	273587	34	33
740	307635	273601	34	33
741	307656	273453	35	34
742	307654	273429	35	34
743	307379	273236	37	36
744	307447	273233	37	36
745	306837	273553	37	36
746	305172	273449	37	36
747	304420	273191	37	36
748	303963	273412	34	33
749	304145	273388	35	34
750	304648	273235	38	37
751	304655	273215	38	37
752	304640	273211	38	37
753	304640	273231	38	37
754	303943	273445	34	33
755	304097	273432	34	33
756	304103	273413	34	33
757	304139	273360	35	34
758	304031	273230	35	34
759	304012	273245	35	34
760	304133	273206	36	35
761	304136	273216	35	34
762	304324	273193	37	36
763	304354	273184	37	36
764	303636	273239	33	32
765	302990	273552	30	29
766	303145	273489	30	29
767	303149	273489	30	29
768	303655	273231	33	32
769	303649	273255	33	32