

Project:
Tõrva

Licensed user:
Lemmas OÜ
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Calculated:
09/11/26 12:30/4.2.316

DECIBEL - Main Result

Calculation: Mura_Vestas_V172_103dB+2dB+alajaam

Noise calculation model:
ISO 9613-2:2024 General
Wind speed (at 10 m height):
Highest noise value
Ground attenuation:
General, Ground factor: 0.50
Meteorological coefficient, C0:
Selected option: All receptors downwind of all wind turbines (Cmet = 0)
Type of demand in calculation:
1: WTG noise is compared to demand (DK, DE, SE, NL etc.)
Noise values in calculation:
All noise values are mean values (Lwa) (Normal)
Pure tones:
Fixed penalty added to source noise of WTGs with pure tones
Model: 5.0 dB(A)
Height above ground level, when no value in NSA object:
4.0 m; Don't allow override of model height with height from NSA object
Uncertainty margin:
Added to source noise level of the WTGs in the calculation
Deviation from "official" noise demands. Negative is more restrictive,
positive is less restrictive.:
0.0 dB(A)

All coordinates are in
Estonian Lambert L-EST97-EST97 (EE)

WTGs

	East	North	Z	Row data/Description	WTG type		Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Noise data		Wind speed [m/s]	Lwa,ref [dB(A)]	Uncertainty [dB(A)]
					Valid	Manufact.				Creator	Name			
			[m]											
1	599 372	6 423 253	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
2	600 152	6 423 536	96.3	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
3	600 067	6 422 858	100.5	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
4	600 940	6 423 242	97.7	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
5	599 107	6 422 478	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
6	600 901	6 422 552	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
7	599 334	6 421 822	95.7	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
8	600 171	6 422 074	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
9	601 572	6 422 363	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
10	599 345	6 421 134	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
11	602 341	6 422 121	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
12	600 795	6 421 507	99.1	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
13	601 638	6 421 639	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
14	600 016	6 420 991	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
15	602 494	6 421 569	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
16	599 816	6 420 056	86.6	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
17	601 160	6 420 567	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
18	601 897	6 421 006	100.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
19	599 963	6 419 439	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
20	600 900	6 419 774	90.0	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0
21	601 534	6 420 033	99.3	VESTAS V172-7.2 72...	Yes	VESTAS	V172-7.2-7 200	7 200	172.0	175.0	EMD	SO3 - 2024-11	7.0	103.0

NEOs

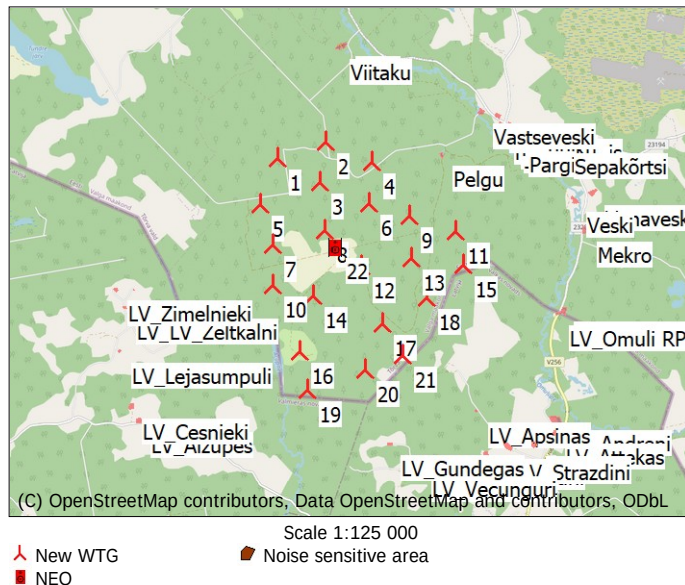
East	North	Row data/Description	Elevation above ground [m]	Noise source	Name	Noise value [dB(A)]	Uncertainty [dB(A)]
22	600 352	6 421 812	Noise Emitter Object: Noise profile: trafo (66)	0.0 Noise profile	Trafo	97.0	5.0

Calculation Results

Sound level

Noise sensitive area No.	Name	East	North	Z	Demands		Sound level			Distance to noise demand [m]	Demands fulfilled ? Noise
					Immission height	Noise	Preload	New noise sources	Sum		
					[m]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]		
Ellemäe	Noise sensitive area: User defined (75)	603 147	6 423 741	90.0	4.0	40.0	19.7	34.0	34.1	1 056	Yes
Elli	Noise sensitive area: User defined (78)	603 206	6 423 881	90.0	4.0	40.0	19.4	33.4	33.6	1 205	Yes

To be continued on next page...



DECIBEL - Main Result

Calculation: Mürä_Vestas_V172_103dB+2dB+alajaam

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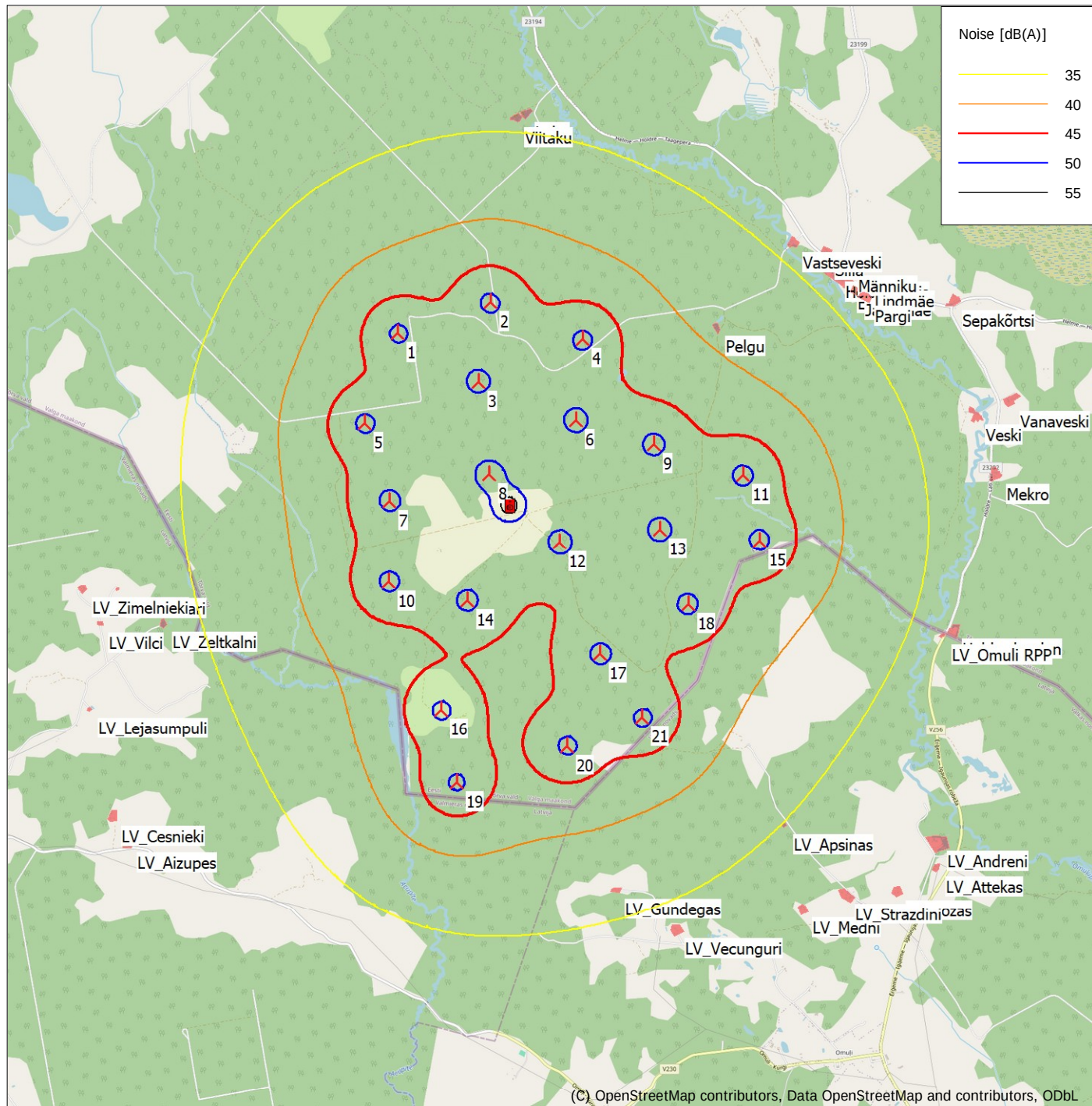
No.	Name	East	North	Z	Immission height	Demands Noise	Sound level Preload	New noise sources	Sum	Distance to noise demand	Demands fulfilled ?
					[m]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m]	Noise
Holdre kordon	Noise sensitive area: Demands defined in calculation setup. (48)	604 108	6 420 818	97.7	4.0	40.0	18.4	33.4	33.5	1 075	Yes
Holdre mõis	Noise sensitive area: User defined (74)	602 969	6 423 865	90.0	4.0	40.0	19.9	34.1	34.3	1 066	Yes
Jaanimäe	Noise sensitive area: User defined (76)	603 207	6 423 702	90.0	4.0	40.0	19.7	33.9	34.1	1 057	Yes
Lindmäe	Noise sensitive area: Demands defined in calculation setup. (53)	603 301	6 423 760	90.0	4.0	40.0	19.3	33.5	33.6	1 158	Yes
Luhe	Noise sensitive area: User defined (73)	600 408	6 425 096	90.0	4.0	40.0	20.1	34.2	34.4	876	Yes
LV_Aizupes	Noise sensitive area: User defined (88)	597 230	6 418 854	80.0	4.0	40.0	17.4	29.9	30.1	2 064	Yes
LV_Andreni	Noise sensitive area: User defined (84)	603 968	6 419 077	80.0	4.0	40.0	16.9	30.8	31.0	1 882	Yes
LV_Apsinas	Noise sensitive area: User defined (87)	602 739	6 419 152	94.3	4.0	40.0	19.2	34.9	35.0	790	Yes
LV_Attekas	Noise sensitive area: User defined (83)	604 056	6 418 852	80.0	4.0	40.0	16.5	30.1	30.3	2 062	Yes
LV_Cesnieki	Noise sensitive area: User defined (89)	597 076	6 419 130	85.5	4.0	40.0	17.6	29.9	30.2	2 118	Yes
LV_Dzintari	Noise sensitive area: User defined (92)	597 052	6 421 010	100.0	4.0	40.0	19.7	32.2	32.4	1 495	Yes
LV_Gundegas	Noise sensitive area: User defined (86)	601 339	6 418 586	90.0	4.0	40.0	19.8	36.3	36.4	521	Yes
LV_Lejasumpuli	Noise sensitive area: User defined (90)	596 841	6 419 991	90.0	4.0	40.0	18.3	30.5	30.7	1 992	Yes
LV_Medni	Noise sensitive area: User defined (81)	602 900	6 418 460	90.0	4.0	40.0	17.7	32.1	32.3	1 383	Yes
LV_Omuli RPP	Noise sensitive area: User defined (79)	604 040	6 420 788	89.7	4.0	40.0	18.6	33.6	33.8	1 025	Yes
LV_Rozas	Noise sensitive area: User defined (82)	603 714	6 421 004	90.0	4.0	40.0	16.8	30.5	30.7	1 874	Yes
LV_Strazdini	Noise sensitive area: User defined (80)	603 237	6 418 615	90.0	4.0	40.0	17.4	31.7	31.9	1 517	Yes
LV_Vecunguri	Noise sensitive area: User defined (85)	601 828	6 418 274	90.0	4.0	40.0	18.6	33.9	34.0	982	Yes
LV_Vilci	Noise sensitive area: User defined (94)	596 922	6 420 706	100.0	4.0	40.0	19.2	31.5	31.7	1 685	Yes
LV_Zeltkalni	Noise sensitive area: User defined (91)	597 464	6 420 724	100.0	4.0	40.0	20.6	33.5	33.7	1 156	Yes
LV_Zimelnieki	Noise sensitive area: User defined (93)	596 772	6 421 004	100.0	4.0	40.0	19.0	31.2	31.4	1 771	Yes
Mekro	Noise sensitive area: Demands defined in calculation setup. (49)	604 447	6 422 126	92.2	4.0	40.0	17.9	32.3	32.4	1 284	Yes
Männiku	Noise sensitive area: Demands defined in calculation setup. (52)	603 159	6 423 907	90.0	4.0	40.0	19.4	33.4	33.6	1 201	Yes
Pargi	Noise sensitive area: User defined (77)	603 278	6 423 652	90.0	4.0	40.0	19.6	33.8	34.0	1 057	Yes
Pelgu	Noise sensitive area: User defined (95)	602 091	6 423 315	90.0	4.0	40.0	23.4	39.2	39.3	117	Yes
Sepakõrtsi	Noise sensitive area: Demands defined in calculation setup. (51)	604 023	6 423 604	90.0	4.0	40.0	18.0	31.6	31.8	1 526	Yes
Silla	Noise sensitive area: Demands defined in calculation setup. (55)	602 950	6 424 034	90.0	4.0	40.0	19.7	33.6	33.8	1 199	Yes
Vanaveski	Noise sensitive area: Demands defined in calculation setup. (50)	604 535	6 422 818	90.0	4.0	40.0	17.4	31.2	31.4	1 558	Yes
Vastseveski	Noise sensitive area: Demands defined in calculation setup. (56)	602 675	6 424 067	90.0	4.0	40.0	20.2	34.3	34.5	1 069	Yes
Veski	Noise sensitive area: User defined (98)	604 268	6 422 631	90.0	4.0	40.0	18.2	32.5	32.7	1 242	Yes
Viitaku	Noise sensitive area: User defined (96)	600 344	6 425 072	93.2	4.0	40.0	20.1	34.4	34.5	845	Yes

Distances (m)

NSA	WTG / NEO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Ellemäe		3806	3001	3203	2262	4232	2541	4268	3410	2092	4609	1805	3243	2587	4166	2253	4966	3744	3000	5351	4557	4035	3395
Elli		3884	3072	3300	2353	4331	2659	4384	3531	2229	4736	1955	3382	2735	4303	2407	5109	3891	3151	5498	4705	4187	3523
Holdre kordon		5322	4791	4524	3978	5267	3642	4877	4131	2964	4772	2187	3382	2602	4094	1779	4357	2957	2218	4367	3372	2690	3883
Holdre mõis		3647	2835	3071	2122	4102	2449	4168	3321	2051	4536	1809	3206	2586	4119	2268	4943	3743	3006	5348	4557	4042	3325
Jaanimäe		3860	3059	3251	2313	4278	2577	4304	3444	2113	4637	1803	3261	2592	4186	2238	4978	3743	2995	5356	4554	4028	3423
Lindmäe		3961	3156	3357	2417	4384	2686	4414	3554	2222	4747	1899	3369	2695	4295	2334	5084	3843	3090	5459	4652	4123	3533
Luhe		2113	1580	2263	1928	2922	2590	3444	3030	2969	4101	3546	3608	3668	4122	4096	5073	4589	4351	5672	5343	5185	3283
LV_Aizupes		4876	5507	4899	5742	4066	5209	3630	4359	5581	3109	6064	4442	5212	3510	5921	2851	4286	5137	2794	3782	4461	4300
LV_Andreni		6207	5867	5430	5147	5930	4633	5384	4835	4065	5058	3450	3995	3462	4389	2894	4264	3177	2829	4019	3145	2614	4532
LV_Apsinas		5304	5088	4567	4463	4923	3862	4325	3888	3410	3928	2983	3052	2715	3284	2416	3058	2119	2032	2789	1940	1492	3572
LV_Attekas		6423	6094	5650	5380	6131	4859	5575	5044	4298	5231	3689	4202	3687	4568	3132	4400	3363	3047	4120	3281	2782	4738
LV_Cesnieki		4718	5372	4778	5641	3915	5131	3513	4270	5536	3027	6054	4413	5205	3479	5940	2892	4328	5172	2903	3877	4547	4233
LV_Dzintari		3220	3992	3532	4479	2521	4145	2422	3295	4717	2296	5403	3775	4628	2963	5469	2923	4131	4844	3307	4041	4586	3396
LV_Gundegas		5063	5089	4456	4672	4481	3989	3801	3677	3783	3227	3663	2971	3066	2741	3183	2104	1989	2476	1601	1266	1458	3373
LV_Lejasumpuli		4127	4849	4314	5229	3363	4798	3092	3926	5290	2751	5896	4233	5070	3327	5867	2974	4355	5155	3169	4063	4691	3954
LV_Medni		5949	5765	5227	5157	5524	4546	4900	4527	4110	4447	3685	3701	3410	3836	3116	3472	2732	2726	3095	2393	2083	4209
LV_Omuli RPP		5277	4760	4478	3952	5213	3600	4817	4076	2927	4706	2159	3323	2548	4028	1732	4286	2888	2153	4293	3299	2617	3826
LV_Rozas		6324	6043	5565	5361	5986	4807	5405	4924	4283	5023	3729	4081	3636	4374	3160	4141	3191	2972	3824	3028	2579	4612
LV_Strazdini		6036	5807	5295	5165	5654	4577	5051	4621	4100	4635	3618	3784	3420	4002	3046	3711	2850	2741	3376	2608	2216	4305
LV_Vecunguri		5549	5520	4909	5045	5006	4375	4335	4144	4095	3786	3868	3392	3369	3264	3344	2687	2387	2728	2198	1763	1782	3832
LV_Vilci		3519	4281	3800	4742	2801	4380	2652	3521	4933	2460	5599	3954	4806	3106	5637	2965	4239	4982	3293	4084	4659	3602
LV_Zeltkalni		3143	3871	3353	4282	2384	3890	2165	3024	4421	1924	5071	3421	4272	2565	5099	2444	3698	4440	2809	3564	4127	3086
LV_Zimelnieki		3426	4213	3775	4726	2755	4408	2688	3562	4987	2575	5678	4053	4905	3243	5748	3187	4408	5123	3553	4306	4858	3669
Mekro		5176	4487	4424	3649	5346	3561	5120	4274	2879	5195	2105	3702	2850	4572	2030	5071	3637	2784	5226	4254	3586	4105
Männiku		3841	3028	3263	2315	4295	2632	4354	3504	2213	4713	1960	3367	2730	4285	2418	5097	3891	3158	5491	4708	4194	3500
Pargi		3925	3127	3307	2373	4332	2618	4346	3484	2137	4668	1794	3280	2596	4208	2222	4990	3741	2984	5359	4547	4016	3455
Pelgu		2678	1899	2050	1117	3077	1412	3128	2284	1084	3505	1219	2223	1735	3114	1791	3973	2900	2316	4420	3734	3328	2297
Sepakõrtsi		4663	3871	4025	3103	5042	3294	5015	4144	2747	5289	2242	3848	3089	4782	2545	5502	4173	3356	5815	4940	4351	4083
Silla		3661	2841	3112	2160	4144	2528	4237	3399	2165	4625	1986	3320	2724	4225	2475	5062	3892	3185	5478	4715	4223	3417
Vanaveski		5179	4440	4466	3618	5436	3642	5293	4425	2996	5454	2301	3961	3126	4872	2387	5462	4049	3193	5675	4729	4079	4300
Vastseveski		3394	2570	2871	1919	3902	2332	4024	3199	2029	4436	1974	3175	2639	4065	2504	4924	3813	3157	5362	4644	4191	3236
Veski		4895	4166	4174	3339	5138	3343	4987	4120	2693	5143	1960	3649	2809	4555	2066	5141	3729	2873	5357	4415	3770	3992
Viitaku		2048	1547	2230	1924	2862	2580	3400	3002	2973	4061	3560	3592	3667	4093	4108	5042	4577	4351	5644	5325	5176	3259

DECIBEL - Map Highest noise value

Calculation: Mura_Vestas_V172_103dB+2dB+alajaam



Map: EMD OpenStreetMap, Print scale 1:50 000, Map center Estonian Lambert L-EST97-EST97 (EE) East: 600 801 North: 6 421 487
 (C) OpenStreetMap contributors, Data OpenStreetMap and contributors, ODbL
 0 500 1000 1500 2000 m
 New WTG Noise sensitive area NEO
 Noise calculation model: ISO 9613-2:2024 General. Wind speed: Highest noise value
 Height above sea level from active line object