

**Fanellan Hub 400 kV Substation and
Converter Station
Environmental Impact Assessment Report
Volume 4 | Technical Appendices**

**Appendix 14.31 – Cumulative Construction Noise
Assessment of Black Bridge**

February 2025



TECHNICAL APPENDIX 14: NOISE IMPACT ASSESSMENT

14.31 Cumulative Construction Noise Assessment of Black Bridge

NSR	Shortest distance to Black Bridge Works (m)	SPL at Receptor due to Black Bridge Site Establishment (dB)	SPL at Receptor due to worst-case HVDC Hub AC Earthworks (dB)	Cumulative SPL at Receptor (dB)	Construction Noise Limit Exceedance
1	1109	68	62	60	6
2	2313	59	61	60	-4
3	2826	68	59	58	-3
4	2105	47	53	51	-15
5	2529	67	59	58	5
6	1513	62	66	65	-3
7	1330	62	64	63	-1
8	2627	50	54	53	-13
9	1344	62	64	63	-2
10	2394	58	60	59	-5
11	2807	61	61	60	-3
12	2842	60	60	59	-4
13	2866	61	60	60	-4
14	3000	65	56	55	-7
15	2958	59	58	57	-6
16	2705	60	60	60	-4
17	2924	62	62	62	-3
18	3138	59	58	57	-7
19	2373	57	59	59	-7
20	3191	62	61	61	-4

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21	3256	57	54	53	-10
22	3223	61	60	60	-4
23	296	60	59	61	-6
24	2248	61	62	62	-4
25	280	59	57	61	-8
26	396	61	60	61	-5
27	3255	58	58	58	-7
28	3326	56	55	54	-10
29	338	60	60	62	-5
30	3304	61	61	61	-4
31	3418	55	53	51	-12
32	3421	55	53	52	-12
33	2958	60	60	60	-5
34	3313	62	62	62	-3
35	3461	53	52	51	-13
36	2919	61	62	62	-3
37	2865	59	59	59	-6
38	2113	60	62	61	-4
39	2114	60	62	61	-5
40	336	54	53	58	-13
41	2408	52	56	55	-12
42	3409	50	52	50	-14

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43	3579	52	51	50	-14
44	2347	53	57	56	-11
45	522	52	52	55	-14
46	2305	55	57	57	-10
47	3457	51	51	50	-14
48	3470	51	51	50	-14
49	2970	54	56	55	-10
50	2516	51	55	54	-12
51	3474	50	51	50	-14
52	2265	59	60	60	-6
53	3059	53	55	54	-11
54	476	52	52	56	-14
55	3585	56	55	55	-10
56	3492	50	51	50	-14
57	663	52	52	54	-14
58	3505	50	51	50	-14
59	3497	52	53	53	-12
60	1053	52	54	54	-12
61	3603	52	52	51	-13
62	3432	51	53	52	-13
63	187	54	54	63	-11
64	2333	56	58	57	-9

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65	1175	49	51	51	-15
66	1257	48	52	51	-15
67	1859	59	60	60	-6
68	2562	53	56	55	-11
69	1173	50	53	53	-14
70	2349	60	60	60	-5
71	1172	48	51	51	-16
72	2062	53	55	55	-12
73	1087	49	52	52	-15