

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

**Appendix 14.32 – Traffic Noise Assessment  
(CRTN)**

**February 2025**



## TECHNICAL APPENDIX 14: NOISE IMPACT ASSESSMENT

### 14.32 Traffic Noise Assessment (CRTN)

**Table 1: Predicted Peak Average 18-hr Daily Traffic – Phase 1 (Pre-Black Bridge)**

Traffic Count Location/Link ID	Total Vehicle Movements			HGV Movements Only		
	2026 Baseline	Baseline + Development	Increase (%)	2026 Baseline	Baseline + Development	Increase (%)
Link 1: A832 between the A9 and Muir of Ord	4042	4431	9.6	291	443	52.0
Link 2: B9169 between A832 and A862	692	1081	56.1	50	201	303.5
Link 3: A862 between the B9169 and A831	6261	6649	6.2	370	522	40.9
Link 4: A831 between the A862 and the C1106	2224	2224	0	34	34	0
Link 5 (North): C1106 between the A831 and the U1604	641	641	0	10	10	0
Link 5 (Site Access): C1106 at the Site Access	236	912	286	2	204	12492.2
Link 6: A862 between A833 and A831	5029	5417	7.7	153	305	98.9
Link 7: A862 between A833 and Drumchardine	4083	4370	7.0	106	156	47.8
Link 8: A862 between Drumchardine and the A82	5140	5428	5.6	87	138	58.0

Traffic Count Location/Link ID	Total Vehicle Movements			HGV Movements Only		
	2026 Baseline	Baseline + Development	Increase (%)	2026 Baseline	Baseline + Development	Increase (%)
Link 9: A833 between C1108 and A862	3027	3703	22.3	61	263	333.1
Link 10: C1108 between U1604 and A833	436	1112	155.0	8	210	2379.5
Link 11: U1604 between C1106 and C1109	299	975	226.1	11	213	1921.9

**Table 2: Predicted Peak Average 18-hr Daily Traffic – Phase 2 (post-Black Bridge)**

Traffic Count Location/Link ID	Total Vehicle Movements			HGV Movements Only		
	2026 Baseline	Baseline + Development	Increase (%)	2026 Baseline	Baseline + Development	Increase (%)
Link 1: A832 between the A9 and Muir of Ord	4062.0	4446.0	9%	292.9	439.9	50
Link 2: B9169 between A832 and A862	695.8	1079.8	55%	50.2	197.2	293
Link 3: A862 between the B9169 and A831	6291.5	6675.5	6%	372.2	519.2	39
Link 4: A831 between the A862 and the C1106	2235.0	2856.0	28%	33.7	180.7	436
Link 5 (North): C1106 between the A831 and the U1604	644.5	1265.5	96%	10.0	157.0	1477
Link 5 (Site Access): C1106 at the Site Access	237.5	858.5	261%	1.6	148.6	9047
Link 6: A862 between A833 and A831	5053.5	5339.5	6%	154.0	203.0	32
Link 7: A862 between A833 and Drumchardine	4102.5	4388.5	7%	106.2	155.2	46
Link 8: A862 between Drumchardine and the A82	5165.6	5451.6	6%	87.5	136.5	56
Link 9: A833 between C1108 and A862	3042.2	3042.2	0%	60.9	60.9	0

Traffic Count Location/Link ID	Total Vehicle Movements			HGV Movements Only		
	2026 Baseline	Baseline + Development	Increase (%)	2026 Baseline	Baseline + Development	Increase (%)
Link 10: C1108 between U1604 and A833	438.3	438.3	0%	8.5	8.5	0
Link 11: U1604 between C1106 and C1109	300.5	300.5	0%	10.6	10.6	0

**Table 3: Predicted Peak L10 18-hour noise level dB(A) Phase 1 and 2**

Traffic Count Location/Link ID	L10 18-hour noise level dB(A)							
	Noise Level 2026 Baseline	Baseline + Development	Increase	Magnitude of Impact	Noise Level 2026 Baseline	Baseline + Development	Increase	Magnitude of Impact
Link 1: A832 between the A9 and Muir of Ord	65.4	66.5	1.1	Low	65.4	66.6	1.2	Low
Link 2: B9169 between A832 and A862	57.8	62.1	4.3	Medium	57.8	61.9	4.1	Medium
Link 3: A862 between the B9169 and A831	67	67.8	0.8	Negligible	67.1	67.8	0.7	Negligible
Link 4: A831 between the A862 and the C1106	61.3	61.3	0	Negligible	61.3	63.6	2.3	Low
Link 5 (North): C1106 between the A831 and the U1604	55.9	55.9	0	Negligible	55.9	61.5	5.6	High

Traffic Count Location/Link ID	L10 18-hour noise level dB(A)							
	Noise Level 2026 Baseline	Baseline + Development	Increase	Magnitude of Impact	Noise Level 2026 Baseline	Baseline + Development	Increase	Magnitude of Impact
Link 5 (Site Access): C1106 at the Site Access	51.1	61.7	10.6	High	51.2	60.7	9.5	High
Link 6: A862 between A833 and A831	65.2	66.4	1.2	Low	65.2	65.8	0.6	Negligible
Link 7: A862 between A833 and Drumchardine	64.3	64.9	0.6	Negligible	64.3	64.9	0.6	Negligible
Link 8: A862 between Drumchardine and the A82	64.9	65.5	0.6	Negligible	64.9	65.5	0.6	Negligible
Link 9: A833 between C1108 and A862	62.6	65	2.4	Low	62.6	62.6	0	Negligible
Link 10: C1108 between U1604 and A833	54.2	62.2	8	High	54.2	54.2	0	Negligible
Link 11: U1604 between C1106 and C1109	53.2	62	8.8	High	53.3	53.3	0	Negligible