



ABERDEEN HARBOUR
EXPANSION PROJECT
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Appendices*

APPENDIX 20-E ROAD TRAFFIC NOISE ASSESSMENT



20-E ROAD TRAFFIC NOISE ASSESSMENT

The significance criteria for short-term (opening year (2019) with and without development) assessment are presented in Table 20E.1. For information purpose the significance criteria for the assessment are also presented although assessment of this has not been undertaken, on the basis that the short-term assessment is more onerous. The significance criteria have been derived from advice contained within Design Manual for Road and Bridges (DMRB), Volume 11, Part 3, long-term Section 7, Noise (2011).

DMRB details that a change in road traffic noise of 1dB $L_{A10,18h}$ in the short term (e.g. when a project is opened) is the smallest that is considered perceptible. In the long-term (typically 15 years after project opening), a 3dB $L_{A10,18h}$ change is considered perceptible. For assessment purpose, only the short-term effects have been considered as these are considered to be the more onerous.

Table 20E.1: Change in noise level and significance of effect

Change in Noise Level Short Term Assessment	Change in Noise Level Long Term Assessment	Significance of Effect
0.0	0.0	Neutral
0.0 – <1.0	0.0 – <3.0	Insignificant
1.0 – 3.0	3.0 – 5.0	Minor
>3.0 – <5.0	>5.0 – <10.0	Moderate
≥5	≥10	Major

It should be noted that the road traffic noise assessment for both the with and without development scenarios includes the forecast changes due to the Aberdeen Western Peripheral Route (AWPR) which is scheduled for completion in 2017.

Table 20E.2 presents the results of the road traffic noise assessment.

The road traffic noise assessment, based on forecast traffic data supplied by transport engineers Fairhurst, indicate neutral insignificant adverse/beneficial effects on all road links assessed with the exception of the Coast Road north of Hareness Road, where permanent, local effects of **minor adverse** significance are predicted. It should be noted that there is only one noise sensitive receptor, Doonies Farm, adjacent to this road link.

Table 20E.2: Operational development traffic noise assessment 2031 (short-term assessment)

Aberdeen Harbour		Assessment of L _{A10} 18-hour Basic Noise Levels at 10 m from Road										
		2019 No Development + AWPR			2019 with Development + AWPR			% Flow Change				
		% HGV	Speed kph	Flow	% HGV	Speed kph	Flow			DM	DS	Change
1	Great Southern Road - North (1)	11	48	22578	11	48	22645	0.3		71.9	71.9	0.0
2	Great Southern Road - West (2)	10	64	24355	10	64	24414	0.2		73.3	73.3	0.0
3	West Tullos Road North (3)	11	64	22692	12	64	22817	0.6		73.2	73.3	0.1
4	Provost Watt Drive (4)	0	48	11262	0	48	11262	0.0		65.6	65.6	0.0
5	West Tullos Road South (Redmoss Road) (5)	10	64	15404	10	64	15529	0.8		71.3	71.4	0.0
6	Riverside Drive (6)	4	48	15680	4	48	15680	0.0		68.7	68.6	-0.1
7	Wellington Road 1 (7)	9	48	25846	10	48	26026	0.7		72.1	72.3	0.2
8	Wellington Road 2 (8)	19	48	22538	20	48	22718	0.8		73.4	73.5	0.1
9	Wellington Road 3 (9)	18	64	22085	19	64	20245	-8.3		74.2	74.0	-0.2
10	Wellington Road 4 (10)	14	64	27048	15	64	27629	2.1		74.5	74.7	0.2
11	Wellington Road 5 (11)	9	64	25307	10	64	25912	2.4		73.3	73.7	0.4
12	Market Street (12)	10	48	32848	11	48	33463	1.9		73.4	73.6	0.2
13	Victoria Road 1 (13)	18	48	4118	16	48	4553	10.6		65.8	66.0	0.2
14	St Fittick's Rd 1 (14)	0	48	5132	0	48	5567	8.5		62.2	62.6	0.4
15	St Fittick's Rd 2 (15)	0	48	5139	0	48	5574	8.5		62.2	62.6	0.4
16	Coast Road North Hareness Rd (16)	16	48	5035	21	48	5924	17.7		66.3	67.9	1.5
17	Coast Road (17)	0	48	2922	0	48	2922	0.0		59.8	59.8	0.0
18	Hareness Road (18)	0	48	4139	0	48	4978	20.3		61.3	62.1	0.8
19	St Fittick's Road North of Victoria Rd (19)	0	48	1292	0	48	1292	0.0		56.2	56.2	0.0