A19.2 Construction Noise Results

1 Main Crossing

1.1.1 The construction noise assessment for the Main Crossing was undertaken based upon the construction assumptions presented in Appendix A4.1, for those receptors identified on Figure 16.1. The results are presented in Tables 1.1 to 1.4 and on Figures 19.2 to 19.3.

1.1.2 The methodologies for defining the Assessment Levels and calculating forecast noise levels are presented in Section 19.6 of Chapter 19 (Disruption Due to Construction). The ambient noise levels have been evaluated from the measurements reported in Appendix A16.2. Ambient levels are rounded to the nearest 5dB and the criteria provided in Table 19.10 of Chapter 19 (Disruption due to Construction) have been applied to provide the assessment level. The predicted noise impacts are represented as the highest monthly average noise level during the construction period and also the number of months where construction noise exceeds the assessment level.

Table 1.1: Predicted Daytime Noise Levels

Receptor Name	Ambient Noise Level $L_{Aeq,12hr}$ [dB]	Ambient to nearest 5 dB	Assessment level (AL) $L_{Aeq,12hr}$ [dB]	No. of months predicted levels exceed AL	Highest monthly average $L_{Aeq,12hr}$ [dB]**
Admiralty House	60	60	65	4	67
Queensferry Hotel	60	60	65	0	62
Tigh-na-grian	60	60	65	0	58
Craigdhu Cottage	60	60	65	0	33
19 Ferry Road	60	60	65	0	37
Butlaw Cottages	51	50	65	0	48
Inchgarvie House	51	50	65	3	72
89 Society Road	53	55	65	0	47
Inchgarvie Lodge / Clufflat Brae	53	55	65	0	63
4 Rose Lane	59	60	65	0	34
40 Shore Road	59	60	65	0	35
58 High Street	59	60	65	0	37
17 Ferry Barns Court	60	60	65	0	36
St Margaret's Hope Lodge	60	60	65	1	65
Butlaw Fisheries	51	50	65	0	56

** Note: proposed scheme construction noise only. Highest daily noise levels may typically exceed the average month levels by 5 dB(A).

Table 1.2: Predicted Evening Noise Levels

Receptor Name	Typical Ambient Noise Level $L_{Aeq,1hr}$ [dB]	Ambient to nearest 5 dB	Assessment level (AL) $L_{Aeq,1hr}$ [dB]	No. of months predicted levels exceed AL	Highest monthly average $L_{Aeq,1hr}$ [dB]**
Admiralty House	60	60	65	0	57
Queensferry Hotel	60	60	65	0	54
Tigh-na-grian	60	60	65	0	55
Craigdhu Cottage	60	60	65	0	32
19 Ferry Road	60	60	65	0	33
Butlaw Cottages	47	45	55	0	43
Inchgarvie House	47	45	55	0	45
89 Society Road	49	50	55	0	43
Inchgarvie Lodge / Cluffllat Brae	49	50	55	0	47
4 Rose Lane	58	60	65	0	32
40 Shore Road	58	60	65	0	32
58 High Street	58	60	65	0	35
17 Ferry Barns Court	60	60	65	0	26
St Margaret's Hope Lodge	60	60	65	0	40
Butlaw Fisheries	47	45	55	0	51

** Note: proposed scheme construction noise only. Highest daily noise levels may typically exceed the average month levels by 5 dB(A).

Table 1.3: Predicted Night-time Noise Levels

Receptor Name	Typical Ambient Noise Level $L_{Aeq,1hr}$ [dB]	Ambient to nearest 5 dB	Assessment level (AL) $L_{Aeq,1hr}$ [dB]	No. of months predicted levels exceed AL	Highest monthly average $L_{Aeq,12hr}$ [dB]**
Admiralty House	57	55	55	0	53
Queensferry Hotel	57	55	55	0	53
Tigh-na-grian	57	55	55	5	56
Craigdhu Cottage	57	55	55	0	19
19 Ferry Road	57	55	55	0	33
Butlaw Cottages	44	45	50	0	42
Inchgarvie House / Clufflat Brae	44	45	50	0	43
89 Society Road	46	45	50	0	42
Inchgarvie Lodge	46	45	50	0	44
4 Rose Lane	54	55	55	0	28
40 Shore Road	54	55	55	0	31
58 High Street	54	55	55	0	31
17 Ferry Barns Court	57	55	55	0	26
St Margaret's Hope Lodge	57	55	55	0	39
Butlaw Fisheries	44	45	50	0	49

** Note: proposed scheme construction noise only. Highest daily noise levels may typically exceed the average month levels by 5 dB(A).

1.1.3 Table 1.4 summarises the forecast noise impacts arising from the main crossing construction works.

Table 1.4: Summary of Predicted Noise Impacts (Main Crossing)

Location	Number of receptors	Day	Evening	Night	Duration
Admiralty House	1	✓			4 months
Tigh-na-grian	2			✓	5 months
Inchgarvie House	1 (10 flats)	✓			3 months
St Margaret's Hope Lodge	1	✓			1 month

2 Network Connections

2.1.1 The construction noise assessment for the network connections was undertaken based upon the construction assumptions presented in Appendix A4.1, for those receptors identified in Figure 16.1. The results are presented Tables 2.1 to 2.2 and on Figures 19.2 to 19.3.

2.1.2 The methodologies for defining the Assessment Levels and calculating forecast noise levels are presented in Section 19.6 of Chapter 19 (Disruption Due to Construction). The ambient noise levels have been evaluated from the measurements reported in Appendix A16.2. Ambient levels are rounded to the nearest 5dB and the criteria provided in Table 19.10 of Chapter 19 (Disruption due to Construction) have been applied to provide the assessment level. The predicted noise impacts are represented as the highest monthly average noise level during the construction period and also the number of months where construction noise exceeds the assessment level.

Table 2.1: Predicted Daytime Noise Impacts

Receptor Address	Ambient Noise Level $L_{Aeq,12hr}$ [dB]	Ambient to nearest 5 dB	Assessment level (AL) [dB]	No. of months predicted levels exceed AL	Highest monthly average $L_{Aeq,12hr}$ [dB]**
39 Cotlaws	72	70	75	0	69
95 King Edwards Way	72	70	75	0	72
55 King Edwards Way	72	70	75	0	62
85 Maitland Hog Lane	72	70	75	0	56
38 King Edwards Way	72	70	75	0	53
26 Cotlaws	72	70	75	0	54
15 - 17 Buie Rigg	67	65	70	0	67
26 Buie Rigg	67	65	70	0	64
8 Buie Rigg	67	65	70	0	59
43 Buie Brae	67	65	70	0	56
34 Buie Rigg	67	65	70	0	52
Kirkliston Sports Centre	67	65	70	0	58
Kirkliston Sports Centre	67	65	70	0	58
1 Glendinning Road	67	65	70	0	56
11 Glendinning Road	67	65	70	0	55
8 Kirklands Park Grove	67	65	70	0	63
11 Kirklands Park Grove	67	65	70	0	63
15 Provost Milne Grove	55	55	65	0	45
16 The Glebe	55	55	65	0	40
45 Scotstoun Park	55	55	65	0	50
124 & 125 South Scotstoun	55	55	65	0	51

Receptor Address	Ambient Noise Level $L_{Aeq,12hr}$ [dB]	Ambient to nearest 5 dB	Assessment level (AL) [dB]	No. of months predicted levels exceed AL	Highest monthly average $L_{Aeq,12hr}$ [dB]**
103 Provost Milne Grove	55	55	65	0	52
73 Provost Milne Grove	55	55	65	0	51
54 Provost Milne Grove	55	55	65	0	45
63 South Scotstoun	55	55	65	0	48
Scotstoun Cottage	55	55	65	0	56
46 Scotstoun Park	55	55	65	0	58
68 South Scotstoun	55	55	65	0	56
66 Echline Drive	55	55	65	0	56
3 - 4 Echline	55	55	65	0	51
9 Echline	55	55	65	0	51
21 Echline	55	55	65	0	47
104 Echline Drive	55	55	65	0	52
120 Echline Drive	55	55	65	0	50
48 Echline Drive	55	55	65	0	51
17 Springfield Terrace	55	55	65	0	51
17 Springfield Place	55	55	65	0	55
60 Springfield Crescent	55	55	65	0	47
25 Springfield Lea	53	55	65	0	57
22 Clufflat Brae	53	55	65	0	54
4 Clufflat Brae	53	55	65	0	58
Inchgarvie Lodge	53	55	65	0	63
Inchgarvie House	51	50	65	3	72
13 Linnmill	51	50	65	0	64
26 Linnmill	51	50	65	0	48
6 Linnmill	51	50	65	0	55
Port Edgar (free field)	56	55	65	0	43
Admiralty House	60	60	65	0	59
Queensferry Hotel E	60	60	65	0	51
Queensferry Hotel N	60	60	65	0	59
St Margaret's Hope Lodge	60	60	65	1	65
N Queensferry Community	60	60	65	0	46
2 Shamrock Terrace	61	60	65	0	59
33 Ferryhills Road	61	60	65	0	58
East Scotland Contracts	61	60	65	0	58
84 Hope Street	61	60	65	0	46
22 Whinnyhill Crescent	61	60	65	0	50
42 Whinnyhill Crescent	61	60	65	0	49
16 Whinnyhill Crescent	61	60	65	0	50
2 Glebe Terrace	61	60	65	0	44
Newbigging Lodge	55	55	65	0	53
3 Dundas Home Farm	55	55	65	0	49

** Note: proposed scheme construction noise only. Highest daily noise levels may typically exceed the average month levels by 5 dB(A).

2.1.3 Table 2.2 summarises the forecast noise impacts arising from the network connection construction works.

Table 2.2: Summary of Predicted Noise Impacts (network connections)

Location	Number of receptors	Day	Evening	Night	Duration
Inchgarvie House	3	✓			3 months
St Margaret's Hope Lodge	1	✓			1 month