



Environmental Monitoring Data

Project:	Sydney Metro City & Southwest– TSE Works
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01	11/01/19	R. Williams	R. Batch	R. Muir	For publication

Project Summary

The Sydney Metro City and Southwest is the second portion of the new standalone rail network known as the Sydney Metro which is Australia’s largest public transport infrastructure project and a priority rail project for the NSW Government. John Holland CPB Ghella (JHCPBG) have been contracted by Transport for New South Wales to design and construct the Tunnel and Stations Excavation Works Project (TSE Works) of the Sydney Metro City & Southwest between Chatswood and Sydenham. Figure 1 provides an overview of the Project.



Figure 1: Project Overview

Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 20971) from the NSW Environment Protection Authority for the Tunnel and Station Excavation (TSE) Works on behalf of the John Holland CPB Ghella (JHCPBG) Joint Venture. The licence is for construction works relating to Rail Systems Activities and Concrete Works as defined under Schedule 1 of the *Protection of the Environment Operations Act, 1997* (POEO Act).

The licence describes monitoring and reporting requirements for the TSE Works, and specifically provides discharge criteria for water treatment plant and sediment basin water quality. The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA’s website:

<https://apps.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=153426&SYSUID=1&LICID=20971>

Discharge Water Monitoring

Testing and discharge was undertaken during this reporting period. Table 1 contains the discharge monitoring results.

Noise and Vibration Monitoring

Noise and vibration monitoring was undertaken during this reporting period. Table 2 contains the vibration monitoring results, and Table 3 contains the noise monitoring results.

Real-Time Noise and Vibration Monitoring

Real-time noise and vibration monitors were operating at Barangaroo, Crows Nest, Martin Place, Pitt Street, and Victoria Cross during the December reporting period. Table 4.1 and 4.2 contains summarised real-time noise monitoring results and real-time vibration data is displayed in Table 5.

Table 1: Discharge Water Monitoring Data.

Monitoring Point	Identifier ¹	Date Sampled	Event Based Monitoring (Y/N)	Parameter/ Criteria/ Measured Value			Comments
				pH (6.5 - 8.5)	Turbidity (<35 NTU)	Oil & Grease (None Visible)	
2	CD_02	01/12/2018	Y	7.5	15	Nil	Water Treatment Plant
1	MD_01	01/12/2018	Y	7.4	14.96	Nil	Water Treatment Plant
1	MD_01	02/12/2018	Y	7.4	16.17	Nil	Water Treatment Plant
2	BL_02	03/12/2018	Y	7.5	1.4	Nil	Water Treatment Plant
1	MD_01	03/12/2018	Y	7.4	12.3	Nil	Water Treatment Plant
2	CD_02	04/12/2018	Y	7.5	3.5	Nil	Water Treatment Plant
1	MD_01	04/12/2018	Y	7.4	13.72	Nil	Water Treatment Plant
3	VC_03	05/12/2018	Y	7.7	4	Nil	Water Treatment Plant
3	CD_03	05/12/2018	Y	7.5	2.5	Nil	Water Treatment Plant
1	MD_01	05/12/2018	Y	7.2	16.56	Nil	Water Treatment Plant
2	CD_02	06/12/2018	Y	8.2	9.5	Nil	Water Treatment Plant
1	MD_01	06/12/2018	Y	7.2	15.02	Nil	Water Treatment Plant
3	VC_03	07/12/2018	Y	7.1	3.2	Nil	Water Treatment Plant
2	CD_02	07/12/2018	Y	7.7	11.2	Nil	Water Treatment Plant
1	MD_01	07/12/2018	Y	7.9	25.2	Nil	Water Treatment Plant
2	CD_02	08/12/2018	Y	7.6	2.8	Nil	Water Treatment Plant
1	MD_01	08/12/2018	Y	7.8	25.86	Nil	Water Treatment Plant
1	MD_01	09/12/2018	Y	7.8	8.9	Nil	Water Treatment Plant
2	CD_02	10/12/2018	Y	7.7	2	Nil	Water Treatment Plant
2	CD_02	10/12/2018	Y	7.7	2	Nil	Water Treatment Plant
2	CD_02	11/12/2018	Y	8.1	2	Nil	Water Treatment Plant

Monitoring Point	Identifier ¹	Date Sampled	Event Based Monitoring (Y/N)	Parameter/ Criteria/ Measured Value			Comments
				pH (6.5 - 8.5)	Turbidity (<35 NTU)	Oil & Grease (None Visible)	
1	MD_01	11/12/2018	Y	7.5	13.46	Nil	Water Treatment Plant
1	WL_01	11/12/2018	Y	6.86	7	Nil	Water Treatment Plant
2	CN_02	11/12/2018	Y	7.7	1	Nil	Water Treatment Plant
3	VC_03	12/12/2018	Y	7.9	1	Nil	Water Treatment Plant
2	CD_02	12/12/2018	Y	7.9	4	Nil	Water Treatment Plant
1	MD_01	12/12/2018	Y	7.3	9.29	Nil	Water Treatment Plant
2	CD_02	13/12/2018	Y	7.4	7.1	Nil	Water Treatment Plant
1	MD_01	13/12/2018	Y	7.2	23.37	Nil	Water Treatment Plant
3	PS_03	13/12/2018	Y	7.56	9.8	Nil	Water Treatment Plant
2	CD_02	14/12/2018	Y	7.8	3.6	Nil	Water Treatment Plant
1	MD_01	14/12/2018	Y	7.4	20.2	Nil	Water Treatment Plant
3	VC_03	14/12/2018	Y	7.5	4	Nil	Water Treatment Plant
3	PS_03	14/12/2018	Y	7.46	12.53	Nil	Water Treatment Plant
2	CD_02	15/12/2018	Y	7.6	4.3	Nil	Water Treatment Plant
1	MD_01	15/12/2018	Y	7.4	27.2	Nil	Water Treatment Plant
3	PS_03	15/12/2018	Y	7.7	3.11	Nil	Water Treatment Plant
1	MD_01	16/12/2018	Y	7.9	8.1	Nil	Water Treatment Plant
2	BN_02	16/12/2018	Y	7.8	1.7	nil	Water Treatment Plant
3	PS_03	16/12/2018	Y	7.62	1.8	Nil	Water Treatment Plant
1	MD_01	17/12/2018	Y	7.3	22.65	Nil	Water Treatment Plant
2	CD_02	17/12/2018	Y	7.7	2.3	Nil	Water Treatment Plant
3	VC_03	17/12/2018	Y	7.7	5	Nil	Water Treatment Plant
3	PS_03	17/12/2018	Y	7.55	1.06	Nil	Water Treatment Plant
1	MD_01	18/12/2018	Y	7.4	18.63	Nil	Water Treatment Plant

Monitoring Point	Identifier ¹	Date Sampled	Event Based Monitoring (Y/N)	Parameter/ Criteria/ Measured Value			Comments
				pH (6.5 - 8.5)	Turbidity (<35 NTU)	Oil & Grease (None Visible)	
2	CD_02	18/12/2018	Y	7.4	3	Nil	Water Treatment Plant
3	PS_03	18/12/2018	Y	7.62	1.5	Nil	Water Treatment Plant
1	MD_01	19/12/2018	Y	7.4	16.04	Nil	Water Treatment Plant
2	CD_02	19/12/2018	Y	7.9	4	Nil	Water Treatment Plant
3	PS_03	19/12/2018	Y	6.66	13.91	Nil	Water Treatment Plant
2	CD_02	20/12/2018	Y	6.8	13	Nil	Water Treatment Plant
1	MD_01	20/12/2018	Y	7.6	34.22	Nil	Water Treatment Plant
3	PS_03	20/12/2018	Y	8.05	3.3	Nil	Water Treatment Plant
3	VC_03	21/12/2018	Y	7.8	8	Nil	Water Treatment Plant
2	CD_02	21/12/2018	Y	7.8	3	Nil	Water Treatment Plant
1	MD_01	21/12/2018	Y	7.8	13.35	Nil	Water Treatment Plant
3	PS_03	21/12/2018	Y	8.37	1.49	Nil	Water Treatment Plant
1	MD_01	22/12/2018	Y	7.8	1.93	Nil	Water Treatment Plant
3	PS_03	22/12/2018	Y	8.31	3.96	Nil	Water Treatment Plant
1	MD_01	23/12/2018	Y	7.3	1.93	Nil	Water Treatment Plant
1	MD_01	24/12/2018	Y	7.1	2.74	Nil	Water Treatment Plant
1	MD_01	25/12/2018	Y	7.2	6.86	Nil	Water Treatment Plant
1	MD_01	26/12/2018	Y	7.1	5.5	Nil	Water Treatment Plant
1	MD_01	27/12/2018	Y	7.1	11.11	Nil	Water Treatment Plant
3	PS_03	27/12/2018	Y	7.05	0.8	Nil	Water Treatment Plant
1	MD_01	28/12/2018	Y	7.1	14.19	Nil	Water Treatment Plant
3	PS_03	28/12/2018	Y	7.03	1.83	Nil	Water Treatment Plant
1	MD_01	29/12/2018	Y	7.1	2.17	Nil	Water Treatment Plant
1	MD_01	30/12/2018	Y	7.1	2.18	Nil	Water Treatment Plant

Monitoring Point	Identifier ¹	Date Sampled	Event Based Monitoring (Y/N)	Parameter/ Criteria/ Measured Value			Comments
				pH (6.5 - 8.5)	Turbidity (<35 NTU)	Oil & Grease (None Visible)	
1	MD_01	31/12/2018	Y	7.1	5.27	Nil	Water Treatment Plant
3	PS_03	31/12/2018	Y	7.08	0.8	Nil	Water Treatment Plant

¹ As per discharge point identified in Sydney Metro City and Southwest Temporary Basin and Water Treatment Discharge Point Schedule

Table 2: Vibration Monitoring Data.

Monitoring location	Monitoring Date	Attended or Continuous Monitoring	Event Based Monitoring (Y/N)	Measured VDV (m/s ^{1.75})	VDV Target (m/s ^{1.75})	VDV Compliant	Measured PPV (mm/s)	PPV Target (mm/s)	PPV Compliant
7-11 Nelson Street, Chatswood	05/12/2018 09:45	Attended	Yes	0.04	0.4	Yes	-	-	-
243 Miller Street, North Sydney	05/12/2018 15:17	Attended	Yes	0.37	0.4	Yes	0.93	7.5	Yes
243 Miller Street, North Sydney	05/12/2018 16:04	Attended	Yes	0.22	0.4	Yes	0.56	7.5	Yes
237 Miller Street, North Sydney	06/12/2018 14:58	Attended	Yes	0.06	0.8	Yes	0.13	25	Yes
237 Miller Street, North Sydney	07/12/2018 14:37	Attended	Yes	0.06	0.8	Yes	0.16	25	Yes
201 Miller Street, North Sydney	12/12/2018 10:25	Attended	Yes	0.09	0.8	Yes	0.18	25	Yes

Table 3: Noise Monitoring Data

Monitoring Location (Noise-Catchment Area, Street, Suburb)	Monitoring Date	Attended or Continuous Monitoring	Event Based Monitoring (Y/N)	Parameter	Measured Value dB(A)	Goals / Targets dB(A)	Comments
CN_04, 376 Pacific Highway, Crows Nest	03/12/2018	Attended	Y	LAeq 15 min	63.5	97	TSE works compliant. Traffic dominant noise source.
BN_03, 21A Hickson Road, Barangaroo	03/12/2018	Attended	Y	LAeq 15 min	63.5	55	TSE works compliant. Traffic dominant noise source.
CDS_03, 15 Nelson Street, Chatswood	03/12/2018	Attended	Y	LAeq 15 min	47.2	44	TSE works compliant.
CDS_06, 552 Pacific Highway, Chatswood	03/12/2018	Attended	Y	LAeq 15 min	67.6	47	TSE works compliant.
CN_04, 376 Pacific Highway, Crows Nest	03/12/2018	Attended	Y	LAeq 15 min	62.0	82	TSE works compliant. Traffic dominant noise source.
CN_04, 376 Pacific Highway, Crows Nest	03/12/2018	Attended	Y	LAeq 15 min	71.6	60	TSE works compliant. Traffic dominant noise source.
CDS_06, 344 Mowbray Road, Chatswood	04/12/2018	Attended	Y	LAeq 15 min	61.2	74	TSE works compliant.
CN_04, 376 Pacific Highway, Crows Nest	04/12/2018	Attended	Y	LAeq 15 min	62.8	45	TSE works compliant. Traffic dominant noise source.
CDS_06, 344 Mowbray Road, Chatswood	04/12/2018	Attended	Y	LAeq 15 min	69.5	89	TSE works compliant.
CDS_06, 344 Mowbray Road, Chatswood	04/12/2018	Attended	Y	LAeq 15 min	67.2	89	TSE works compliant.
CN_04, 376 Pacific Highway, Crows Nest	04/12/2018	Attended	Y	LAeq 15 min	62.8	53	TSE works compliant. Traffic dominant noise source.
CDS_03, 7-11 Nelson Street, Chatswood	05/12/2018	Attended	Y	LAeq 15 min	73.7	95	TSE works compliant.
AS_02, 113 Reserve Road, Artarmon	05/12/2018	Attended	Y	LAeq 15 min	76.8	94	TSE works compliant.
PS_03, 331 Pitt Street, Sydney	05/12/2018	Attended	Y	LAeq 15 min	72.5	74	TSE works compliant.

Monitoring Location (Noise-Catchment Area, Street, Suburb)	Monitoring Date	Attended or Continuous Monitoring	Event Based Monitoring (Y/N)	Parameter	Measured Value dB(A)	Goals / Targets dB(A)	Comments
CDS_06, 344 Mowbray Road, Chatswood	05/12/2018	Attended	Y	LAeq 15 min	62.8	89	TSE works compliant.
PS_03, 331 Pitt Street, Sydney	05/12/2018	Attended	Y	LAeq 15 min	73.1	74	TSE works compliant.
VC_05, 243 Miller street, Sydney (Internal)	05/12/2018	Attended	Y	LAeq 15 min	47.8	55	TSE works compliant.
VC_05, 243 Miller street, Sydney (Internal)	05/12/2018	Attended	Y	LAeq 15 min	39.8	55	TSE works compliant.
CDS_03, 7-11 Nelson Street, Chatswood	07/12/2018	Attended	Y	LAeq 15 min	63.0	81	TSE works compliant.
VC_05, 237 Miller Street, North Sydney (Internal)	07/12/2018	Attended	Y	LAeq 15 min	41.2	55	TSE works compliant.
MP_01, 27-39 Castlereagh Street, Sydney	10/12/2018	Attended	Y	LAeq 15 min	74.5	82	TSE works compliant.
MP_02, 1-5 Hosking Place, Sydney	10/12/2018	Attended	Y	LAeq 15 min	67.7	74	TSE works compliant.
MP_02, 1-5 Hoskins Place, Sydney	11/12/2018	Attended	Y	LAeq 15 min	66.4	74	TSE works compliant.
MP_02, 1-5 Hosking Place, Sydney	11/12/2018	Attended	Y	LAeq 15 min	42.4	45	TSE works compliant.
BN_03, 30 High Street, Barangaroo	11/12/2018	Attended	Y	LAeq 15 min	53.7	55	TSE works compliant. Traffic dominant noise source.
VC_07, 201 Miller Street, North Sydney (Internal)	12/12/2018	Attended	Y	LAeq 15 min	58.5	55	TSE works inaudible - nearby café was the dominant noise source.
BN_03, 31 High Street, Barangaroo	12/12/2018	Attended	Y	LAeq 15 min	56.0	55	TSE works compliant. Traffic dominant noise source.
CDS_03, 7-11 Nelson Street, Chatswood	12/12/2018	Attended	Y	LAeq 15 min	52.6	52	TSE works compliant. Traffic dominant noise source.
CDS_03, 7-11 Nelson Street, Chatswood	12/12/2018	Attended	Y	LAeq 15 min	50.0	44	TSE works compliant. Traffic dominant noise source.

Monitoring Location (Noise-Catchment Area, Street, Suburb)	Monitoring Date	Attended or Continuous Monitoring	Event Based Monitoring (Y/N)	Parameter	Measured Value dB(A)	Goals / Targets dB(A)	Comments
PS_05, 343 Pitt Street, Sydney	13/12/2018	Attended	Y	LAeq 15 min	69.5	69	TSE works compliant. Traffic dominant noise source.
PS_05, 308 Pitt Street, Sydney	13/12/2018	Attended	Y	LAeq 15 min	69.9	94	TSE works compliant.
CDS_06, 344 Mowbray Road, Chatswood	13/12/2018	Attended	Y	LAeq 15 min	72.3	89	TSE works compliant.
CDS_06, 344 Mowbray Road, Chatswood	14/12/2018	Attended	Y	LAeq 15 min	65.7	74	TSE works compliant.
MP_01, 165 Phillip Street, Sydney	14/12/2018	Attended	Y	LAeq 15 min	63.0	60	TSE works compliant. Traffic dominant noise source.
CDS_03, 15 Nelson Street, Chatswood	14/12/2018	Attended	Y	LAeq 15 min	55.8	52	TSE works compliant. Traffic dominant noise source.
CDS_03, 15 Nelson Street, Chatswood	14/12/2018	Attended	Y	LAeq 15 min	49.6	44	TSE works compliant. Traffic dominant noise source.
CDS_06, 344 Mowbray Road, Chatswood	14/12/2018	Attended	Y	LAeq 15 min	71.7	44	TSE works compliant. Traffic dominant noise source.
MP_02, 5 Hosking Place, Sydney	17/12/2018	Attended	Y	LAeq 15 min	63.6	74	TSE works compliant.
MP_01, 165 Phillip Street, Sydney (Footpath of Elizabeth)	17/12/2018	Attended	Y	LAeq 15 min	67.4	68	TSE works compliant. Traffic dominant noise source.
MP_01, 165 Phillip Street, Sydney (Footpath of Elizabeth)	18/12/2018	Attended	Y	LAeq 15 min	66.7	60	TSE works compliant. Traffic dominant noise source.
MP_02, 5 Hosking Place, Sydney	18/12/2018	Attended	Y	LAeq 15 min	61.8	65	TSE works compliant. Traffic dominant noise source.
BN_02, 30 High Street, Barangaroo	18/12/2018	Attended	Y	LAeq 15 min	55.5	50	TSE works compliant. Traffic dominant noise source.
MP_01, 165 Phillip Street, Sydney	18/12/2018	Attended	Y	LAeq 15 min	69.1	69.1	TSE works compliant. Traffic dominant noise source.

Monitoring Location (Noise-Catchment Area, Street, Suburb)	Monitoring Date	Attended or Continuous Monitoring	Event Based Monitoring (Y/N)	Parameter	Measured Value dB(A)	Goals / Targets dB(A)	Comments
MP_01, 165 Phillip Street, Sydney	19/12/2018	Attended	Y	LAeq 15 min	68.9	60	TSE works compliant. Traffic dominant noise source.

Table 4-1 Summary Table of Real Time Noise Data Compared Against EPL Condition E1.1.

Date	Location & Noise Goal																			
	545 Pacific Hwy		10 to 12 Clarke Street		65 Berry Street		Castlereagh Boutique Hotel		Edinburgh Castle Hotel		50 Martin Place		25A Hickson Road		243 Miller Street		60 Castlereagh Street (Level 6)		60 Castlereagh Street (Level 8)	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
01/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
02/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
03/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
04/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
05/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
06/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
07/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
08/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
09/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes
10/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
12/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
13/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
14/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
15/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-

Date	Location & Noise Goal																			
	545 Pacific Hwy		10 to 12 Clarke Street		65 Berry Street		Castlereagh Boutique Hotel		Edinburgh Castle Hotel		50 Martin Place		25A Hickson Road		243 Miller Street		60 Castlereagh Street (Level 8 Internal)		60 Castlereagh Street (Level 8 Internal)	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
16/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
17/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
18/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
19/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
20/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
21/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
22/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
23/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
24/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
25/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
26/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
27/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
28/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
29/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
30/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
31/12/2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-

Table 4-2: Real-Time Noise Monitoring Data

Report for Condition E1.1 on 01/12/2018				
Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	2	Yes
	Lower	39	3	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	0	Yes
	Lower	39	0	Yes
Report for Condition E1.1 on 02/12/2018				
Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper		0	Yes
	Lower		0	Yes

Report for Condition E1.1 on 03/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	1	Yes
	Lower	39	4	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	2	Yes
	Lower	39	29	Yes

Report for Condition E1.1 on 04/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	2	Yes
	Lower	39	10	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	15	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	4	Yes
	Lower	39	27	Yes

Report for Condition E1.1 on 05/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	6	Yes
	Lower	39	14	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	1	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	18	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	1	Yes
	Lower	39	17	Yes

Report for Condition E1.1 on 06/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	1	Yes
	Lower	39	18	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	23	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	5	Yes
60 Castlereagh St (Level 8)	Upper	26	5	Yes
	Lower	39	23	Yes

Report for Condition E1.1 on 07/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	1	Yes
	Lower	39	17	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	2	Yes
	Lower	39	39	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	2	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	2	Yes
60 Castlereagh St (Level 8)	Upper	26	5	Yes
	Lower	39	29	Yes

Report for Condition E1.1 on 08/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	2	Yes
	Lower	39	15	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	2	Yes
	Lower	39	15	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 09/12/2018				
Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 8)	Upper	26	0	Yes
	Lower	39	0	Yes
Report for Condition E1.1 on 10/12/2018				
Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	13	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	1	Yes
	Lower	39	3	Yes
Edinburgh Castle Hotel	Upper	26	4	Yes
	Lower	39	24	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	11	Yes
60 Castlereagh St (Level 8)	Upper	26	2	Yes
	Lower	39	20	Yes
60 Castlereagh St (Level 6)	Upper	26	3	Yes
	Lower	39	3	Yes

Report for Condition E1.1 on 11/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	10	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	1	Yes
	Lower	39	24	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	1	Yes
	Lower	39	5	Yes
60 Castlereagh St (Level 6)	Upper	26	7	Yes
	Lower	39	7	Yes

Report for Condition E1.1 on 12/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	18	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	3	Yes
	Lower	39	31	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	12	Yes
	Lower	39	12	Yes

Report for Condition E1.1 on 13/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	10	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	2	Yes
	Lower	39	20	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	5	Yes
	Lower	39	5	Yes

Report for Condition E1.1 on 14/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	13	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	2	Yes
	Lower	39	14	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	1	Yes
	Lower	39	1	Yes
60 Castlereagh St (Level 6)	Upper	26	10	Yes
	Lower	39	10	Yes

Report for Condition E1.1 on 15/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	1	Yes
	Lower	39	7	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	4	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	3	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	1	Yes
60 Castlereagh St (Level 6)	Upper	26	2	Yes
	Lower	39	2	Yes

Report for Condition E1.1 on 16/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	1	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 17/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	15	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	5	Yes
	Lower	39	27	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	2	Yes
60 Castlereagh St (Level 6)	Upper	26	4	Yes
	Lower	39	4	Yes

Report for Condition E1.1 on 18/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	1	Yes
	Lower	39	23	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	4	Yes
	Lower	39	27	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	1	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	11	Yes
	Lower	39	11	Yes

Report for Condition E1.1 on 19/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	15	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	1	Yes
	Lower	39	33	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	7	Yes
	Lower	39	7	Yes

Report for Condition E1.1 on 20/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	2	Yes
	Lower	39	26	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	1	Yes
	Lower	39	1	Yes
Edinburgh Castle Hotel	Upper	26	4	Yes
	Lower	39	27	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	2	Yes
	Lower	39	3	Yes
60 Castlereagh St (Level 6)	Upper	26	6	Yes
	Lower	39	6	Yes

Report for Condition E1.1 on 21/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	3	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	1	Yes
	Lower	39	12	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	10	Yes
	Lower	39	10	Yes

Report for Condition E1.1 on 22/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	4	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 23/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 24/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	8	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 25/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 26/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	3	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 27/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	5	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 28/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	7	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 29/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	1	Yes
	Lower	39	3	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 30/12/2018

Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	5	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	0	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Report for Condition E1.1 on 31/12/2018				
Location	Noise Goal	15 minute periods in exceedance		Has condition been met?
		Permitted	Exceeded	
545 Pacific Highway	Upper	26	0	Yes
	Lower	39	0	Yes
10 to 12 Clarke Street	Upper	26	0	Yes
	Lower	39	0	Yes
65 Berry St	Upper	26	0	Yes
	Lower	39	0	Yes
Castlereagh Boutique Hotel	Upper	26	0	Yes
	Lower	39	0	Yes
Edinburgh Castle Hotel	Upper	26	0	Yes
	Lower	39	1	Yes
50 Martin Place	Upper	26	0	Yes
	Lower	39	0	Yes
25A Hickson Road	Upper	26	0	Yes
	Lower	39	0	Yes
243 Miller St	Upper	26	0	Yes
	Lower	39	1	Yes
60 Castlereagh St (Level 6)	Upper	26	0	Yes
	Lower	39	0	Yes

Real Time Noise Analysis Results Comments:

All real-time noise monitoring results were compliant with condition E1.1.

Table 5: Real-Time Vibration Monitoring Data (Maximum recorded value per day)

Day	22 Clarke Street, Crows Nest	10 to 12 Clarke Street, Crows Nest	65 Berry Street, North Sydney	243 Miller Street, North Sydney	25A Hickson Road, Millers Point	50 Martin Place, Sydney	60 Castlereagh Street (Basement), Sydney	60 Castlereagh Street (Level 6), Sydney	60 Castlereagh Street (level 8), Sydney	Castlereagh Boutique Hotel	211-217 Castlereagh Street, Sydney
Criteria	25	25	25	7.5	25	7.5	25	25	25	7.5	7.5
01/12/2018	0.43	0.23	0.33	2.39	0.11	0.24	0.21	-	0.22	1.46	0.09
02/12/2018	0.24	0.24	0.14	2.07	0.13	0.22	0.18	-	0.38	1.54	0.07
03/12/2018	0.46	0.22	0.32	1.34	0.1	0.22	0.21	-	56.25	0.79	0.09
04/12/2018	0.32	0.24	0.8	2.04	1.53	0.22	0.28	-	56.25	3.24	0.35
05/12/2018	0.6	0.27	0.51	2.11	0.1	0.35	0.59	-	5.25	1.85	1.4
06/12/2018	0.57	0.46	0.27	1.47	0.11	0.58	1.77	-	56.25	4.72	1.62
07/12/2018	0.78	0.66	0.72	1.71	0.11	0.32	1.72	-	7.32	1.73	1.38
08/12/2018	1.61	0.41	0.56	2.45	0.18	0.48	2.62	-	8.09	2.68	1.1
09/12/2018	0	0.14	0.36	1.18	0.3	0.56	3.06	-	0.85	2.15	0.1
10/12/2018	0	0.33	0.62	1.18	0.13	4.97	2.26	27.13	9.95	1.83	0.67
11/12/2018	0	0.33	1.1	1.45	0.16	1.59	2.91	2.16	-	1.33	2.08
12/12/2018	0	0.19	0.63	1.34	0.25	0.67	2.49	29.27	-	3.79	0.73
13/12/2018	0.54	0.43	0.55	2.48	0.18	0.96	0.93	2.95	-	2.39	1.56
14/12/2018	0.73	0.43	0.48	1.31	0.2	1.46	1.67	3.17	-	2.42	1.29
15/12/2018	2.29	0.26	1.15	2.53	0.08	1.54	1.47	6.86	-	1.68	0.77
16/12/2018	1.68	0.22	0.21	2.15	0.11	1.25	0.62	0.41	-	2.66	0.08
17/12/2018	1.07	0.24	1.18	1.61	0.08	1.14	1.65	6.15	-	1.89	2.6
18/12/2018	1.21	0.26	0.96	2.07	0.25	1.62	1.18	4.56	-	1.42	1.93
19/12/2018	0.66	0.23	1.2	1.32	0.08	2.36	2.37	3.63	-	3.16	1.26
20/12/2018	0.81	0.56	0.78	1.13	0.08	1.81	1.57	2.24	-	2.14	2.14
21/12/2018	0.7	0.52	0.24	1.88	0.13	0.45	3.7	0.55	-	1.88	0.25
22/12/2018	0.87	0.31	0.13	2.2	0.11	0.35	0.36	0.19	-	0.12	0.06
23/12/2018	0.58	0.22	0.13	1.03	0.13	0.25	0.21	0.11	-	0.12	0.08
24/12/2018	0.69	0.24	0.21	2.34	0.18	0.22	0.21	0.49	-	0.14	0.09
25/12/2018	1.15	0.16	0.13	2.16	0.08	0.24	0.28	0.11	-	0.14	0.08
26/12/2018	1.05	0.14	0.08	2.26	0.08	0.22	0.26	0.14	-	0.11	0.09
27/12/2018	1.12	0.26	0.6	0.55	0.11	1.81	0.36	0.52	-	0.16	1.33
28/12/2018	0.62	0.22	0.71	0.66	0.08	1.49	0.62	0.36	-	0.23	1.54
29/12/2018	0.91	0.19	0.11	0.16	0.08	1.04	0.54	0.16	-	0.09	0.07
30/12/2018	0.54	0.14	0.11	0.35	0.08	0.37	0.39	0.16	-	0.23	0.08
31/12/2018	1.47	0.2	0.21	1.18	0.11	0.36	0.18	0.44	-	0.22	0.09

Real-Time Vibration Results Comments:

Level 8, 60 Castlereagh Street, Sydney

Vibration Alerts - Level 8, 60 Castlereagh Street were received for the following dates.

56.25mm/s - 03/12/2018 12:33

56.25mm/s - 04/12/2018 09:18

56.25mm/s - 06/12/2018 10:51

Vibration data was reviewed and compared against site activities, in all instances vibration exceedances were determined to be unrelated to TSE works. The likely cause of the alerts is believed to be occupants of the office building coming into contact with the geophone. The monitor was moved to level 6 on the 10th of December.

Level 6, 60 Castlereagh Street, Sydney

Vibration Alerts - Level 8, 60 Castlereagh Street were received for the following dates.

27.13mm/s – 10/12/2018 16:35

29.27mm/s – 12/12/2018 13:44

The recorded exceedance on the 10 December 2018 was reviewed and has been attributed to the installation of the monitor and not TSE activities. After reviewing the nature of the works occurring during these exceedances and contacting tenants from 60 Castlereagh Street, it has been concluded that the vibration alert on the 12 December 2018 was a result of interference from a non-TSE source.