cass allen

Architectural & Environmental Acousticians
Noise & Vibration Engineers

Holloway Park, London

Construction Monitoring Report

Client:	London Square
Ref:	CM55-22405-R0
Date:	27 November 2023
Note by:	Adam Bamford, BSc MIOA DipIOA, Principal Acoustics Consultant

1. INTRODUCTION

1.1 This Technical Note sets out results of the construction monitoring being carried out at the above between Monday 20th November and Saturday 25th November 2023. The monitoring is being carried out in accordance with the methodology set out in the Cass Allen response (reference LR03-22405-R0 dated 27 October 2023) to a S60 warning letter issued to Downwell Demolition Ltd.

2. WEEKLY ACTIVITIES

2.1 The following activities have been carried out onsite this week:

Downwell

- Removing Block 2 obstructions
- Removing Block 1 foundations with bucket attachments
- Removing Block 1 foundations with Breaker attachment within noisy periods.
- Removing Block 1 piles down to 2m with muncher attachment.
- Backfilling excavations.
- Loading skips.
- Processing concrete with hydraulic muncher.

- Crushing arisings to 6f2 with crusher.

Horizon

- Watch and brief attendance with Downwell.
- Ground remediation.
- Loading lorries
- Screening.

Careys London

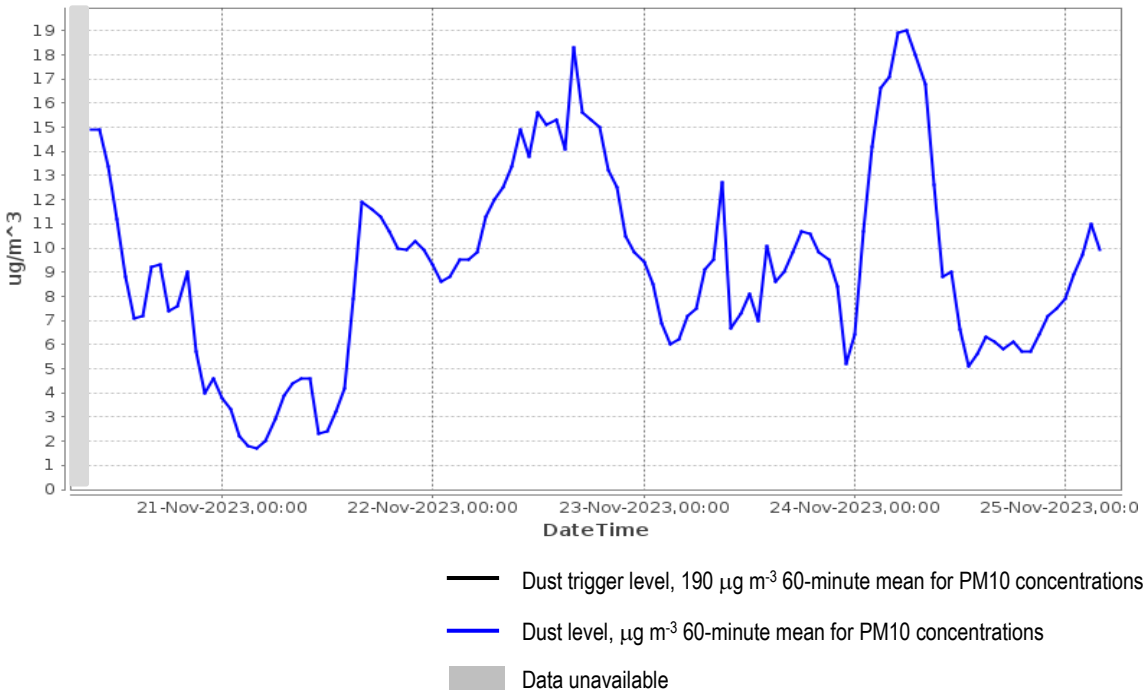
- Delivery of materials
- Attenuation tank installation

3. MONITORING DATA

3.1 This section sets out a summary of the monitoring data that has been recorded onsite and provides a discussion of any exceedances and best practicable means incorporated by the site team if exceedances were believed to be construction related.

Dust Monitoring Results

Location 1

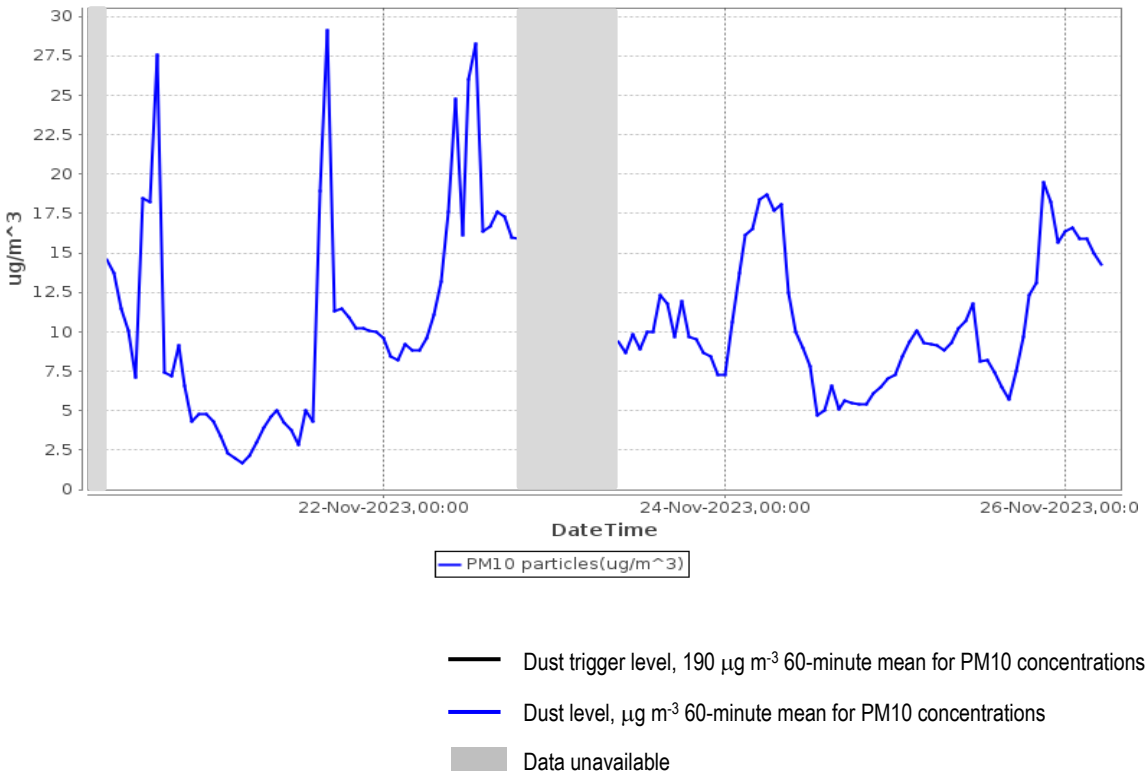


3.2 There was 89% data coverage at Location 1 for the monitoring period covered by this report. The missing data occurred during the first hour on Monday morning when the site team were swapping the depleted battery over from the weekend and no data was recorded on Saturday as the battery died early on Saturday morning. No exceedances of the project dust limit of 190 micrograms per cubic meter were recorded during the period covered by this report.

Location 2

3.3 There was 0% data coverage at Location 2 for the monitoring period covered by this report. The dust monitoring unit at Location 2 has been sent off for its biennial laboratory calibration. The monitor is due back from calibration on 24th November and will be reinstalled onsite w/c 27th November.

Location 3



Dust trigger level, 190 μg m^{-3} 60-minute mean for PM10 concentrations

Dust level, μg m^{-3} 60-minute mean for PM10 concentrations

Data unavailable

3.4 There was 96% data coverage at Location 3 for the monitoring period covered by this report. The only missing data occurred during the first hour on Monday morning and Thursday morning when the site team were swapping the depleted battery. No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

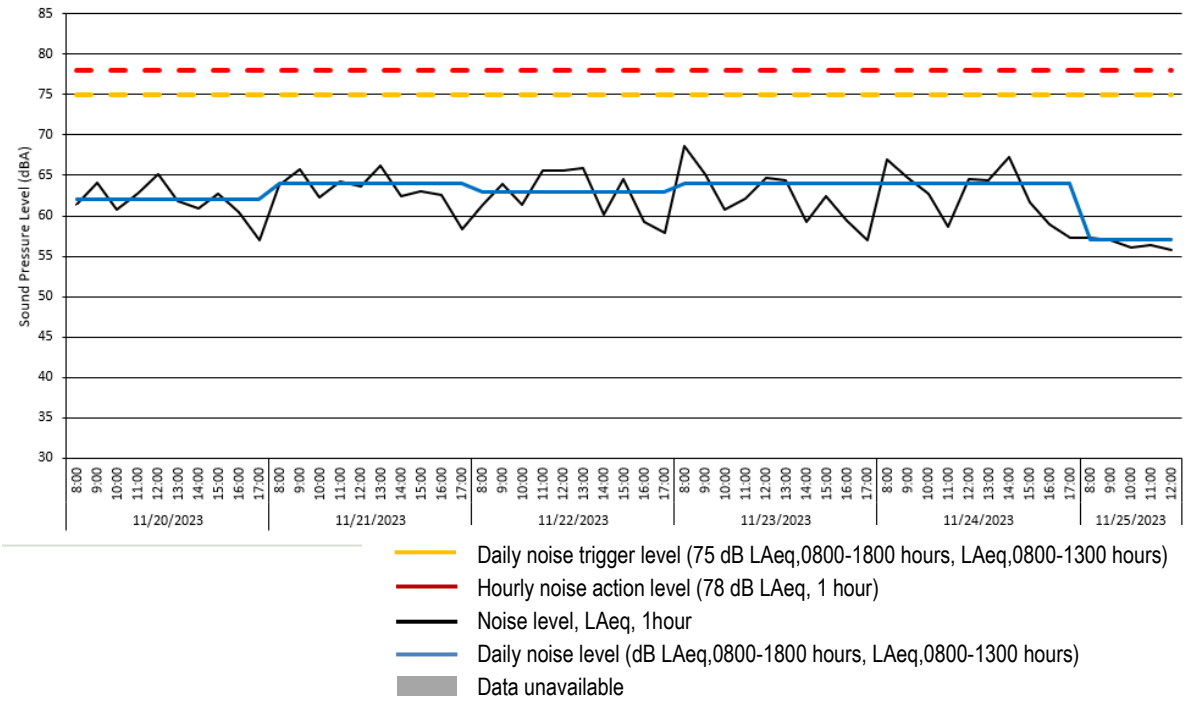
Noise Monitoring Results

Location 1 – Raw Data

Broadband Results

Date [YYYY-MM-DD]	Time [hh:mm:ss]	LAeq(60min) [dB]	LAeq(7hr) [dB]	LAeq(10hr) [dB]	LAeq(5hr) [dB]
2023-11-20	09:00:00	61.4	-.-	-.-	-.-
2023-11-20	10:00:00	64.1	-.-	-.-	-.-
2023-11-20	11:00:00	60.7	-.-	-.-	-.-
2023-11-20	12:00:00	62.8	-.-	-.-	-.-
2023-11-20	13:00:00	65.1	-.-	-.-	-.-
2023-11-20	14:00:00	61.8	-.-	-.-	-.-
2023-11-20	15:00:00	60.9	-.-	-.-	-.-
2023-11-20	16:00:00	62.7	-.-	-.-	-.-
2023-11-20	17:00:00	60.4	-.-	-.-	-.-
2023-11-20	18:00:00	57.0	-.-	62.2	-.-
2023-11-21	09:00:00	63.8	-.-	-.-	-.-
2023-11-21	10:00:00	65.7	-.-	-.-	-.-
2023-11-21	11:00:00	62.3	-.-	-.-	-.-
2023-11-21	12:00:00	64.2	-.-	-.-	-.-
2023-11-21	13:00:00	63.6	-.-	-.-	-.-
2023-11-21	14:00:00	66.2	-.-	-.-	-.-
2023-11-21	15:00:00	62.4	-.-	-.-	-.-
2023-11-21	16:00:00	63.0	-.-	-.-	-.-
2023-11-21	17:00:00	62.6	-.-	-.-	-.-
2023-11-21	18:00:00	58.3	-.-	63.6	-.-
2023-11-22	09:00:00	61.2	-.-	-.-	-.-
2023-11-22	10:00:00	64.0	-.-	-.-	-.-
2023-11-22	11:00:00	61.3	-.-	-.-	-.-
2023-11-22	12:00:00	65.6	-.-	-.-	-.-
2023-11-22	13:00:00	65.6	-.-	-.-	-.-
2023-11-22	14:00:00	65.9	-.-	-.-	-.-
2023-11-22	15:00:00	60.1	-.-	-.-	-.-
2023-11-22	16:00:00	64.6	-.-	-.-	-.-
2023-11-22	17:00:00	59.3	-.-	-.-	-.-
2023-11-22	18:00:00	57.9	-.-	63.4	-.-
2023-11-23	09:00:00	68.6	-.-	-.-	-.-
2023-11-23	10:00:00	65.2	-.-	-.-	-.-
2023-11-23	11:00:00	60.7	-.-	-.-	-.-
2023-11-23	12:00:00	62.1	-.-	-.-	-.-
2023-11-23	13:00:00	64.7	-.-	-.-	-.-
2023-11-23	14:00:00	64.4	-.-	-.-	-.-
2023-11-23	15:00:00	59.3	-.-	-.-	-.-
2023-11-23	16:00:00	62.5	-.-	-.-	-.-
2023-11-23	17:00:00	59.4	-.-	-.-	-.-
2023-11-23	18:00:00	57.0	-.-	63.6	-.-
2023-11-24	09:00:00	67.0	-.-	-.-	-.-
2023-11-24	10:00:00	64.7	-.-	-.-	-.-
2023-11-24	11:00:00	62.7	-.-	-.-	-.-
2023-11-24	12:00:00	58.6	-.-	-.-	-.-
2023-11-24	13:00:00	64.5	-.-	-.-	-.-
2023-11-24	14:00:00	64.4	-.-	-.-	-.-
2023-11-24	15:00:00	67.3	-.-	-.-	-.-
2023-11-24	16:00:00	61.6	-.-	-.-	-.-
2023-11-24	17:00:00	59.0	-.-	-.-	-.-
2023-11-24	18:00:00	57.2	-.-	63.8	-.-
2023-11-25	09:00:00	57.3	-.-	-.-	-.-
2023-11-25	10:00:00	56.9	-.-	-.-	-.-
2023-11-25	11:00:00	56.0	-.-	-.-	-.-
2023-11-25	12:00:00	56.3	-.-	-.-	-.-
2023-11-25	13:00:00	55.7	-.-	-.-	56.5

Location 1 – Time History Data



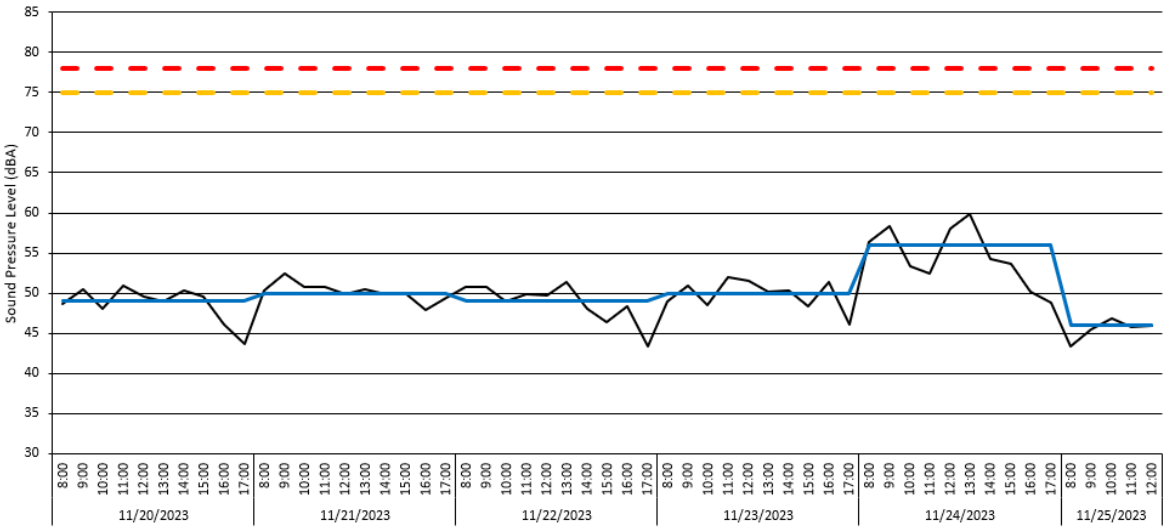
3.5 There was 100% data coverage at Location 1 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 2 – Raw Data

Broadband Results

Date [YYYY-MM-DD]	Time [hh:mm:ss]	LAeq(60min) [dB]	LAeq(10hr) [dB]	LAeq(5hr) [dB]
2023-11-20	09:00:00	48.6	-.-	-.-
2023-11-20	10:00:00	50.4	-.-	-.-
2023-11-20	11:00:00	48.1	-.-	-.-
2023-11-20	12:00:00	50.9	-.-	-.-
2023-11-20	13:00:00	49.6	-.-	-.-
2023-11-20	14:00:00	48.9	-.-	-.-
2023-11-20	15:00:00	50.3	-.-	-.-
2023-11-20	16:00:00	49.5	-.-	-.-
2023-11-20	17:00:00	46.1	-.-	-.-
2023-11-20	18:00:00	43.7	49.0	-.-
2023-11-21	09:00:00	50.3	-.-	-.-
2023-11-21	10:00:00	52.4	-.-	-.-
2023-11-21	11:00:00	50.7	-.-	-.-
2023-11-21	12:00:00	50.7	-.-	-.-
2023-11-21	13:00:00	49.9	-.-	-.-
2023-11-21	14:00:00	50.5	-.-	-.-
2023-11-21	15:00:00	49.8	-.-	-.-
2023-11-21	16:00:00	50.0	-.-	-.-
2023-11-21	17:00:00	47.9	-.-	-.-
2023-11-21	18:00:00	49.4	50.3	-.-
2023-11-22	09:00:00	50.8	-.-	-.-
2023-11-22	10:00:00	50.8	-.-	-.-
2023-11-22	11:00:00	48.9	-.-	-.-
2023-11-22	12:00:00	49.8	-.-	-.-
2023-11-22	13:00:00	49.7	-.-	-.-
2023-11-22	14:00:00	51.3	-.-	-.-
2023-11-22	15:00:00	48.1	-.-	-.-
2023-11-22	16:00:00	46.4	-.-	-.-
2023-11-22	17:00:00	48.3	-.-	-.-
2023-11-22	18:00:00	43.4	49.2	-.-
2023-11-23	09:00:00	49.0	-.-	-.-
2023-11-23	10:00:00	50.9	-.-	-.-
2023-11-23	11:00:00	48.5	-.-	-.-
2023-11-23	12:00:00	51.9	-.-	-.-
2023-11-23	13:00:00	51.5	-.-	-.-
2023-11-23	14:00:00	50.2	-.-	-.-
2023-11-23	15:00:00	50.3	-.-	-.-
2023-11-23	16:00:00	48.3	-.-	-.-
2023-11-23	17:00:00	51.3	-.-	-.-
2023-11-23	18:00:00	46.0	50.1	-.-
2023-11-24	09:00:00	56.3	-.-	-.-
2023-11-24	10:00:00	58.3	-.-	-.-
2023-11-24	11:00:00	53.4	-.-	-.-
2023-11-24	12:00:00	52.4	-.-	-.-
2023-11-24	13:00:00	58.1	-.-	-.-
2023-11-24	14:00:00	59.9	-.-	-.-
2023-11-24	15:00:00	54.3	-.-	-.-
2023-11-24	16:00:00	53.7	-.-	-.-
2023-11-24	17:00:00	50.1	-.-	-.-
2023-11-24	18:00:00	48.8	55.8	-.-
2023-11-25	09:00:00	43.4	-.-	-.-
2023-11-25	10:00:00	45.4	-.-	-.-
2023-11-25	11:00:00	46.8	-.-	-.-
2023-11-25	12:00:00	45.7	-.-	-.-
2023-11-25	13:00:00	45.9	-.-	45.6

Location 2 – Time History Data



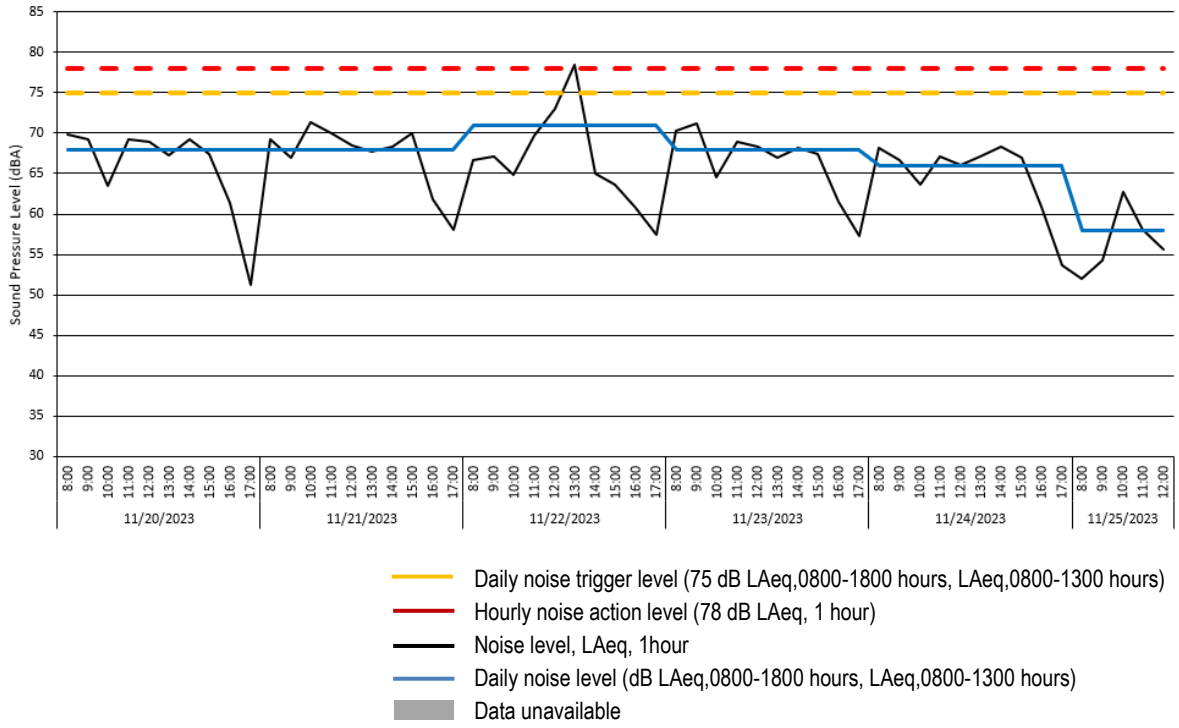
3.6 There was 100% data coverage at Location 2 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 3 – Raw Data

Broadband Results

Date	Time	LAeq(60min)	LAeq(10hr)	LAeq(5hr)
[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]
2023-11-20	09:00:00	69.9	-.-	-.-
2023-11-20	10:00:00	69.3	-.-	-.-
2023-11-20	11:00:00	63.5	-.-	-.-
2023-11-20	12:00:00	69.2	-.-	-.-
2023-11-20	13:00:00	68.9	-.-	-.-
2023-11-20	14:00:00	67.3	-.-	-.-
2023-11-20	15:00:00	69.2	-.-	-.-
2023-11-20	16:00:00	67.4	-.-	-.-
2023-11-20	17:00:00	61.4	-.-	-.-
2023-11-20	18:00:00	51.2	67.6	-.-
2023-11-21	09:00:00	69.3	-.-	-.-
2023-11-21	10:00:00	67.0	-.-	-.-
2023-11-21	11:00:00	71.3	-.-	-.-
2023-11-21	12:00:00	70.0	-.-	-.-
2023-11-21	13:00:00	68.5	-.-	-.-
2023-11-21	14:00:00	67.7	-.-	-.-
2023-11-21	15:00:00	68.4	-.-	-.-
2023-11-21	16:00:00	70.0	-.-	-.-
2023-11-21	17:00:00	61.8	-.-	-.-
2023-11-21	18:00:00	58.1	68.4	-.-
2023-11-22	09:00:00	66.7	-.-	-.-
2023-11-22	10:00:00	67.1	-.-	-.-
2023-11-22	11:00:00	64.9	-.-	-.-
2023-11-22	12:00:00	69.7	-.-	-.-
2023-11-22	13:00:00	73.1	-.-	-.-
2023-11-22	14:00:00	78.5	-.-	-.-
2023-11-22	15:00:00	65.0	-.-	-.-
2023-11-22	16:00:00	63.6	-.-	-.-
2023-11-22	17:00:00	60.8	-.-	-.-
2023-11-22	18:00:00	57.4	70.8	-.-
2023-11-23	09:00:00	70.3	-.-	-.-
2023-11-23	10:00:00	71.2	-.-	-.-
2023-11-23	11:00:00	64.5	-.-	-.-
2023-11-23	12:00:00	68.9	-.-	-.-
2023-11-23	13:00:00	68.4	-.-	-.-
2023-11-23	14:00:00	67.0	-.-	-.-
2023-11-23	15:00:00	68.2	-.-	-.-
2023-11-23	16:00:00	67.4	-.-	-.-
2023-11-23	17:00:00	61.5	-.-	-.-
2023-11-23	18:00:00	57.2	67.8	-.-
2023-11-24	09:00:00	68.2	-.-	-.-
2023-11-24	10:00:00	66.6	-.-	-.-
2023-11-24	11:00:00	63.7	-.-	-.-
2023-11-24	12:00:00	67.1	-.-	-.-
2023-11-24	13:00:00	66.0	-.-	-.-
2023-11-24	14:00:00	67.1	-.-	-.-
2023-11-24	15:00:00	68.3	-.-	-.-
2023-11-24	16:00:00	66.9	-.-	-.-
2023-11-24	17:00:00	60.9	-.-	-.-
2023-11-24	18:00:00	53.7	66.1	-.-
2023-11-25	09:00:00	52.0	-.-	-.-
2023-11-25	10:00:00	54.3	-.-	-.-
2023-11-25	11:00:00	62.7	-.-	-.-
2023-11-25	12:00:00	58.0	-.-	-.-
2023-11-25	13:00:00	55.6	-.-	58.1

Location 3 – Time-history graph



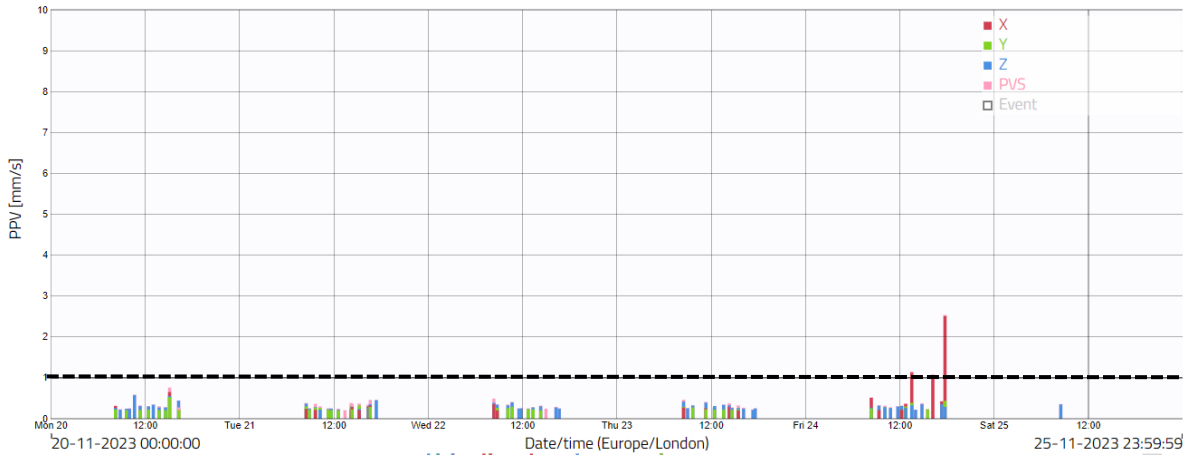
3.7 There was 100% data coverage at Location 3 for the monitoring period covered by this report. There was a single exceedance of the project hourly noise criteria of 78 dB LAeq as highlighted in the raw data above. There were no exceedances of the daily project noise limit of 75 dB LAeq (0800-1800 hours) during the monitoring period covered by this report.

Vibration Monitoring Results

Location 1 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L1	20/11/2023 to 25/11/2023	1	2.54	24/11/2023	17:44
		2	1.15	24/11/2023	13:31
Criteria mm/s PVS	Exceedances	3	1.08	24/11/2023	16:11
1	3	4	0.95	24/11/2023	16:09

Location 1 – Time-history graph



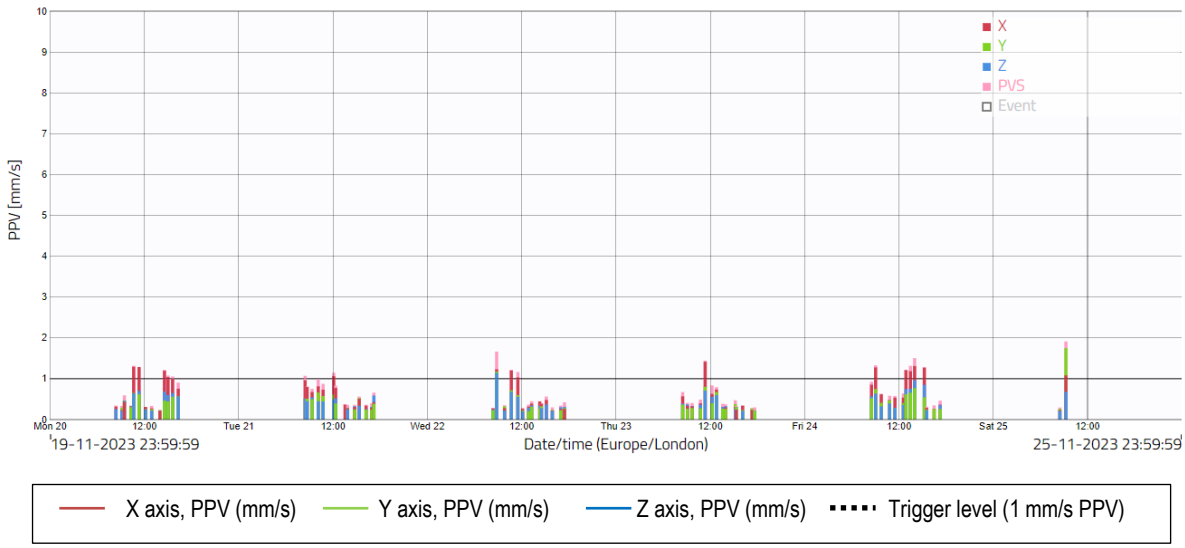
X axis, PPV (mm/s) Y axis, PPV (mm/s) Z axis, PPV (mm/s) Trigger level (1 mm/s PPV)

3.8 There was 100% data coverage at Location 1 for the monitoring period covered by this report. There were 3 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The project team that confirmed that no active demolition works have taken place in this area of the site since 24th October and therefore the exceedances are believed to be due to non-construction related activities. In this location, it is likely that the residents opened and closing the main door to the residential building will cause occasional vibration spikes, given that the monitor is located on the same facade as the doors.

Location 2 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L2	20/11/2023 to 25/11/2023	1	1.91	25/11/2023	09:14
		2	1.66	22/11/2023	08:48
Criteria mm/s PVS	Exceedances	3	1.50	24/11/2023	14:00
1	23	4	1.44	23/11/2023	11:20
		5	1.33	24/11/2023	09:01
		6	1.32	20/11/2023	10:34
		7	1.31	24/11/2023	13:28
		8	1.30	23/11/2023	11:21
		9	1.29	20/11/2023	11:18
		10	1.29	24/11/2023	15:13
		11	1.22	22/11/2023	10:41
		12	1.21	24/11/2023	12:53
		13	1.21	20/11/2023	14:33
		14	1.16	22/11/2023	11:30
		15	1.16	24/11/2023	13:38
		16	1.14	21/11/2023	12:04
		17	1.12	24/11/2023	13:08
		18	1.08	20/11/2023	14:59
		19	1.07	21/11/2023	08:27
		20	1.06	20/11/2023	10:38
		21	1.05	20/11/2023	15:22
		22	1.02	20/11/2023	11:17
		23	1.01	20/11/2023	16:00
		24	1.00	20/11/2023	15:35

Location 2 – Time-history graph

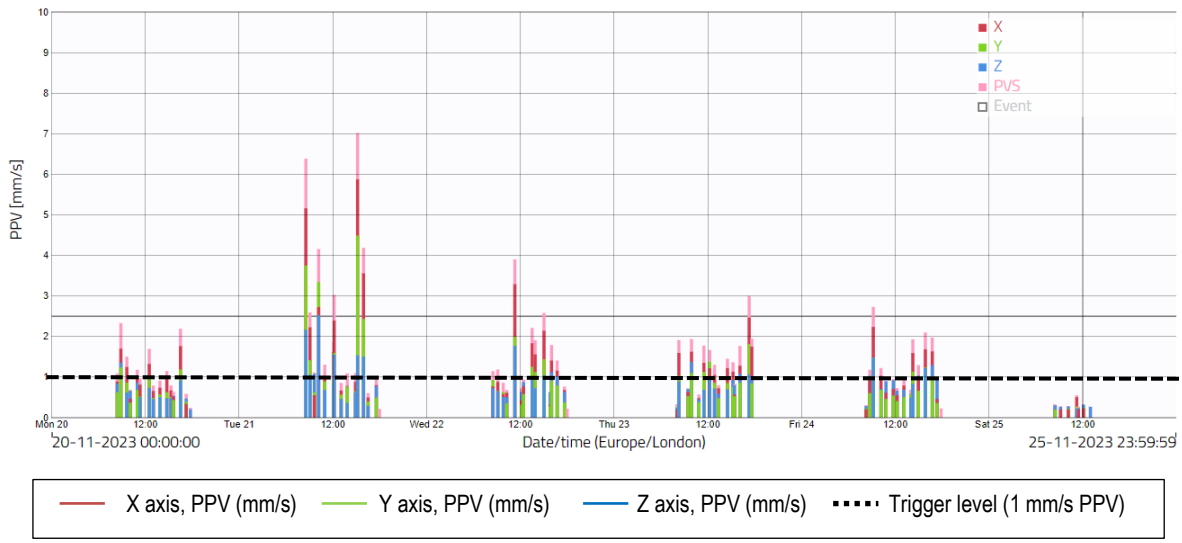


3.9 There was 100% data coverage at Location 2 for the monitoring period covered by this report. There were 23 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The project team that confirmed that no active demolition works have taken place in this area of the site since 24th October and therefore the exceedances are believed to be due to non-construction related activities. In this location, it is likely that a combination of site operatives changing batteries and weather-related events (i.e. rainfall) are responsible for the recorded exceedances. It is our understanding that one of the residents behind the monitoring location has some form of workshop with power tools at the rear of their garden. Any operation of these tools could also generate vibration alerts.

Location 3 – Raw data

Measuring point:	Period:	Order	Value	Date	Time	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L3	20/11/2023 to 25/11/2023	1	7.02	21/11/2023	15:09	56	1.67	22/11/202	11:17	111	1.18	21/11/202	16:05
		2	6.38	21/11/2023	08:33	57	1.67	23/11/202	12:14	112	1.18	20/11/202	16:28
Criteria mm/s PVS	Exceedances	3	4.19	21/11/2023	15:55	58	1.64	20/11/202	08:48	113	1.16	23/11/202	08:30
1	163	4	4.16	21/11/2023	10:05	59	1.63	21/11/202	12:00	114	1.16	23/11/202	09:39
		5	3.90	22/11/2023	11:17	60	1.61	24/11/202	16:34	115	1.16	23/11/202	16:52
		6	3.32	21/11/2023	10:19	61	1.60	24/11/202	09:19	116	1.16	24/11/202	09:07
		7	3.31	21/11/2023	10:16	62	1.59	23/11/202	09:46	117	1.15	20/11/202	14:44
		8	3.20	21/11/2023	10:34	63	1.59	21/11/202	08:20	118	1.15	20/11/202	12:06
		9	3.03	21/11/2023	12:09	64	1.58	22/11/202	15:58	119	1.15	21/11/202	15:09
		10	3.00	23/11/2023	17:17	65	1.57	24/11/202	09:06	120	1.15	22/11/202	08:30
		11	2.89	21/11/2023	10:15	66	1.57	22/11/202	14:00	121	1.14	22/11/202	14:20
		12	2.85	21/11/2023	15:56	67	1.56	21/11/202	10:36	122	1.14	24/11/202	14:24
		13	2.73	24/11/2023	09:10	68	1.52	23/11/202	12:23	123	1.13	24/11/202	14:05
		14	2.72	21/11/2023	10:28	69	1.51	21/11/202	15:58	124	1.13	24/11/202	09:20
		15	2.61	21/11/2023	10:26	70	1.50	20/11/202	09:37	125	1.13	22/11/202	16:05
		16	2.60	21/11/2023	09:03	71	1.49	24/11/202	09:04	126	1.12	20/11/202	08:47
		17	2.58	22/11/2023	15:01	72	1.49	22/11/202	15:50	127	1.12	23/11/202	09:52
		18	2.52	21/11/2023	15:58	73	1.48	22/11/202	14:59	128	1.12	20/11/202	12:29
		19	2.44	21/11/2023	15:59	74	1.47	23/11/202	08:24	129	1.12	24/11/202	16:41
		20	2.39	21/11/2023	15:49	75	1.47	24/11/202	09:07	130	1.12	21/11/202	12:09
		21	2.33	20/11/2023	08:51	76	1.46	22/11/202	11:11	131	1.11	21/11/202	09:37
		22	2.31	24/11/2023	09:09	77	1.46	22/11/202	11:02	132	1.11	21/11/202	15:27
		23	2.31	21/11/2023	15:10	78	1.45	23/11/202	14:30	133	1.10	21/11/202	14:53
		24	2.30	21/11/2023	15:50	79	1.45	21/11/202	10:35	134	1.09	21/11/202	13:51
		25	2.28	21/11/2023	15:53	80	1.43	23/11/202	14:10	135	1.09	20/11/202	08:23
		26	2.26	21/11/2023	10:29	81	1.42	21/11/202	15:39	136	1.09	23/11/202	14:30
		27	2.25	21/11/2023	12:13	82	1.41	24/11/202	15:55	137	1.09	20/11/202	16:25
		28	2.24	22/11/2023	11:20	83	1.41	22/11/202	16:42	138	1.08	22/11/202	11:20
		29	2.21	22/11/2023	13:31	84	1.41	23/11/202	09:50	139	1.08	21/11/202	11:27
		30	2.19	20/11/2023	16:29	85	1.40	20/11/202	08:44	140	1.08	22/11/202	13:34
		31	2.14	21/11/2023	15:50	86	1.40	20/11/202	12:42	141	1.08	20/11/202	12:04
		32	2.12	21/11/2023	16:00	87	1.40	21/11/202	12:49	142	1.08	20/11/202	08:41
		33	2.10	24/11/2023	15:50	88	1.39	22/11/202	16:08	143	1.07	24/11/202	16:42
		34	2.07	22/11/2023	13:32	89	1.36	23/11/202	15:13	144	1.07	23/11/202	11:48
		35	2.00	22/11/2023	15:03	90	1.35	20/11/202	12:30	145	1.06	22/11/202	16:03
		36	1.98	24/11/2023	16:44	91	1.32	22/11/202	15:55	146	1.06	20/11/202	16:25
		37	1.95	23/11/2023	17:37	92	1.31	22/11/202	16:00	147	1.06	23/11/202	12:43
		38	1.94	23/11/2023	09:55	93	1.31	21/11/202	10:57	148	1.05	23/11/202	17:34
		39	1.93	24/11/2023	14:14	94	1.31	22/11/202	11:17	149	1.05	24/11/202	09:13
		40	1.92	24/11/2023	16:02	95	1.30	21/11/202	16:09	150	1.04	21/11/202	09:07
		41	1.91	23/11/2023	08:17	96	1.30	23/11/202	12:52	151	1.04	23/11/202	09:42
		42	1.91	21/11/2023	10:25	97	1.30	22/11/202	16:08	152	1.04	23/11/202	17:38
		43	1.91	21/11/2023	09:04	98	1.29	24/11/202	14:57	153	1.04	22/11/202	16:06
		44	1.91	22/11/2023	13:54	99	1.29	24/11/202	16:48	154	1.03	24/11/202	09:19
		45	1.91	20/11/2023	08:50	100	1.29	24/11/202	14:10	155	1.03	23/11/202	08:30
		46	1.88	24/11/2023	16:47	101	1.25	22/11/202	13:28	156	1.03	23/11/202	12:22
		47	1.87	23/11/2023	09:53	102	1.23	22/11/202	11:18	157	1.03	20/11/202	16:22
		48	1.87	21/11/2023	12:06	103	1.22	21/11/202	10:31	158	1.02	21/11/202	17:33
		49	1.79	22/11/2023	15:59	104	1.22	24/11/202	10:09	159	1.02	23/11/202	09:48
		50	1.78	23/11/2023	11:30	105	1.21	23/11/202	12:50	160	1.02	24/11/202	14:44
		51	1.77	23/11/2023	16:06	106	1.20	20/11/202	16:24	161	1.01	21/11/202	16:05
		52	1.70	20/11/2023	12:29	107	1.19	20/11/202	08:38	162	1.01	20/11/202	09:36
		53	1.68	21/11/2023	10:34	108	1.19	22/11/202	09:06	163	1.01	20/11/202	08:46
		54	1.68	22/11/2023	11:12	109	1.18	20/11/202	10:57	164	1.00	24/11/202	16:45
		55	1.68	21/11/2023	10:09	110	1.18	24/11/202	08:43	165	1.00	22/11/202	09:17

Location 3 – Time-history graph

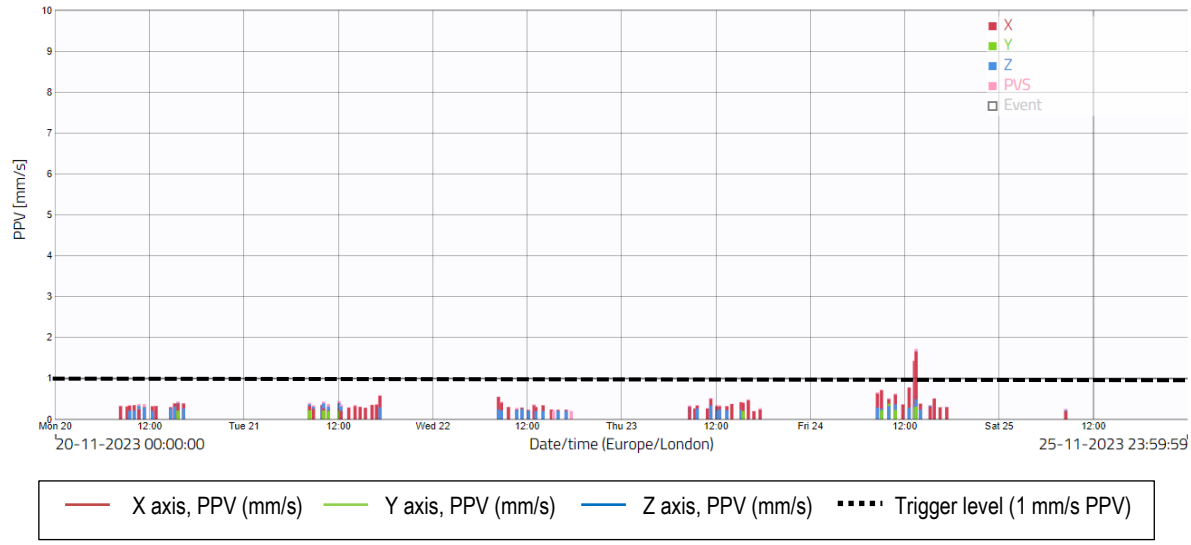


3.10 There was 100% data coverage at Location 3 for the monitoring period covered by this report. There were 163 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The vast majority of these exceedances are being caused by plant vehicles travelling along the haulage road which is directly in front of where the vibration monitor is currently located. These movements are unavoidable and there are no reasonably practicable measures that the site team can implement to reduce these emissions at this time.

Location 4 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L4	20/11/2023 to 25/11/2023	1	1.72	24/11/2023	13:26
		2	1.45	24/11/2023	13:15
Criteria mm/s PVS	Exceedances	3	1.42	24/11/2023	13:28
1	8	4	1.33	24/11/2023	13:21
		5	1.32	24/11/2023	13:18
		6	1.28	24/11/2023	13:12
		7	1.23	24/11/2023	12:58
		8	1.21	24/11/2023	13:13

Location 4 – Time-history graph



3.11 There was 100% data coverage at Location 4 for the monitoring period covered by this report. There were 8 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The project team have confirmed that there are no active works in this areas of the site currently so this exceedance was likely due to non-construction related activities (i.e. either weather related or more likely due to the residents children playing outside in the garden near to the vibration monitor).