

Holloway Park, London

Construction Monitoring Report

Client: London Square
Ref: CM62-22405-R0
Date: 11 December 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 4th December and Saturday 9th December 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

- Levelling off site.
- Backfilling excavations.
- Loading skips.
- Processing concrete with hydraulic muncher.
- Crushing arisings to 6f2 with crusher.

Horizon

- Ground remediation.
- Loading lorries

- Screening.

Careys London

- Delivery of materials
- Drainage

Pure logistics

- Installation of site welfare cabins

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

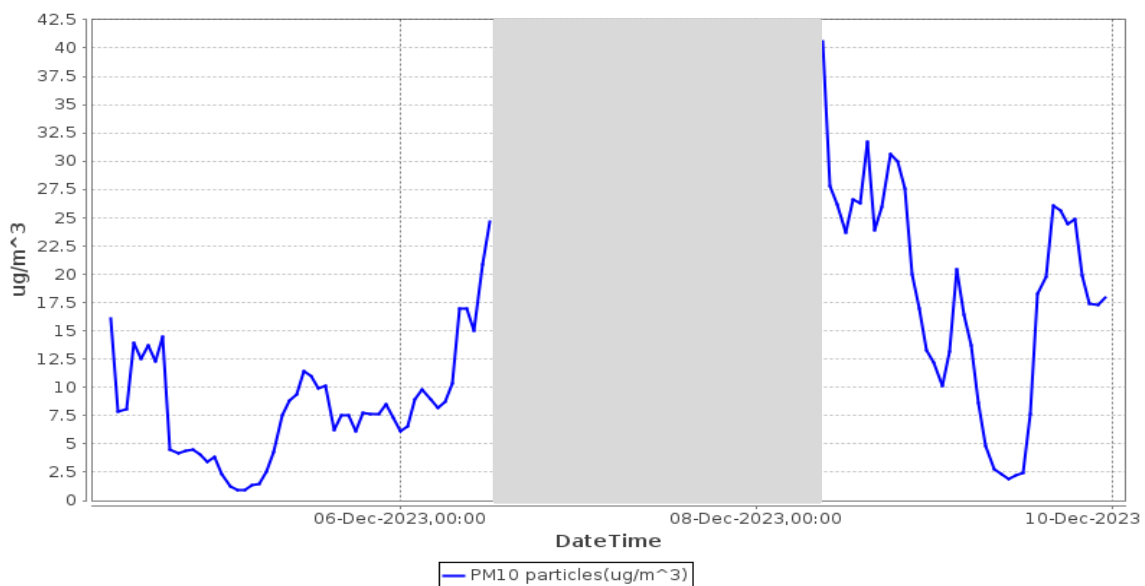
Location 1




3.2 There was 0% data coverage at Location 1 for the monitoring period covered by this report. The dust monitoring unit at Location 1 has been sent off for its biennial laboratory calibration. It is expected to be away for approximately two working weeks. 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 monitor was reinstalled on 30th November, but it has temporarily been positioned at Location 3 whilst that unit is sent off for its biennial calibration.

Location 3



-  Dust trigger level, 190 $\mu\text{g m}^{-3}$ 60-minute mean for PM10 concentrations
-  Dust level, $\mu\text{g m}^{-3}$ 60-minute mean for PM10 concentrations
-  Data unavailable

3.4 There was 69% data coverage at Location 3 for the monitoring period covered by this report. The missing data occurred from 13:00 hours on 6th December until 0800 hours on 8th December. It is believed that this was caused either by a signal/cell issue as site personnel confirmed that there was power to the unit. No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

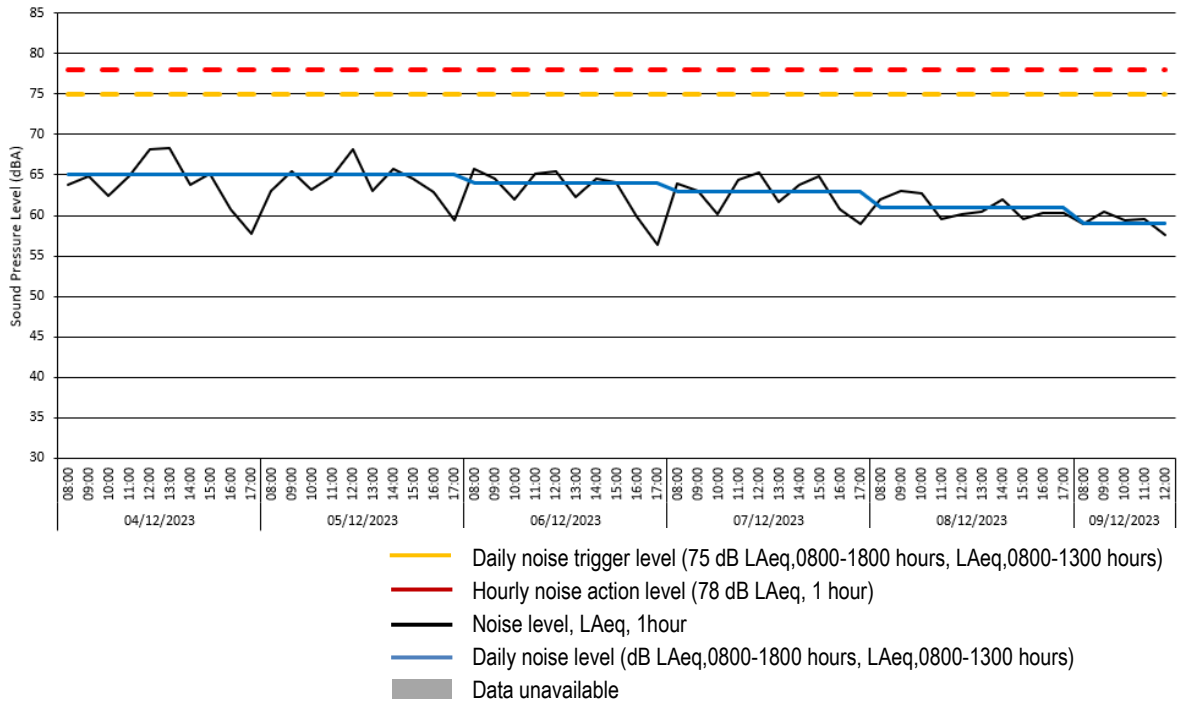
Noise Monitoring Results

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]
2023-12-04	09:00:00	63.8	--	--	--
2023-12-04	10:00:00	64.8	--	--	--
2023-12-04	11:00:00	62.4	--	--	--
2023-12-04	12:00:00	64.9	--	--	--
2023-12-04	13:00:00	68.2	--	--	--
2023-12-04	14:00:00	68.4	--	--	--
2023-12-04	15:00:00	63.8	--	--	--
2023-12-04	16:00:00	65.1	--	--	--
2023-12-04	17:00:00	60.7	--	--	--
2023-12-04	18:00:00	57.8	--	64.9	--
2023-12-05	09:00:00	63.0	--	--	--
2023-12-05	10:00:00	65.5	--	--	--
2023-12-05	11:00:00	63.2	--	--	--
2023-12-05	12:00:00	64.9	--	--	--
2023-12-05	13:00:00	68.2	--	--	--
2023-12-05	14:00:00	63.0	--	--	--
2023-12-05	15:00:00	65.7	--	--	--
2023-12-05	16:00:00	64.5	--	--	--
2023-12-05	17:00:00	62.9	--	--	--
2023-12-05	18:00:00	59.4	--	64.6	--
2023-12-06	09:00:00	65.7	--	--	--
2023-12-06	10:00:00	64.5	--	--	--
2023-12-06	11:00:00	62.0	--	--	--
2023-12-06	12:00:00	65.1	--	--	--
2023-12-06	13:00:00	65.5	--	--	--
2023-12-06	14:00:00	62.3	--	--	--
2023-12-06	15:00:00	64.5	--	--	--
2023-12-06	16:00:00	64.1	--	--	--
2023-12-06	17:00:00	59.8	--	--	--
2023-12-06	18:00:00	56.4	--	63.7	--
2023-12-07	09:00:00	64.0	--	--	--
2023-12-07	10:00:00	63.0	--	--	--
2023-12-07	11:00:00	60.2	--	--	--
2023-12-07	12:00:00	64.4	--	--	--
2023-12-07	13:00:00	65.3	--	--	--
2023-12-07	14:00:00	61.6	--	--	--
2023-12-07	15:00:00	63.8	--	--	--
2023-12-07	16:00:00	64.9	--	--	--
2023-12-07	17:00:00	60.8	--	--	--
2023-12-07	18:00:00	59.0	--	63.1	--
2023-12-08	09:00:00	62.0	--	--	--
2023-12-08	10:00:00	63.1	--	--	--
2023-12-08	11:00:00	62.8	--	--	--
2023-12-08	12:00:00	59.5	--	--	--
2023-12-08	13:00:00	60.1	--	--	--
2023-12-08	14:00:00	60.5	--	--	--
2023-12-08	15:00:00	62.0	--	--	--
2023-12-08	16:00:00	59.6	--	--	--
2023-12-08	17:00:00	60.3	--	--	--
2023-12-08	18:00:00	60.3	--	61.2	--
2023-12-09	09:00:00	58.9	--	--	--
2023-12-09	10:00:00	60.4	--	--	--
2023-12-09	11:00:00	59.4	--	--	--
2023-12-09	12:00:00	59.5	--	--	--
2023-12-09	13:00:00	57.6	--	--	59.3

Location 1 – Time History Data

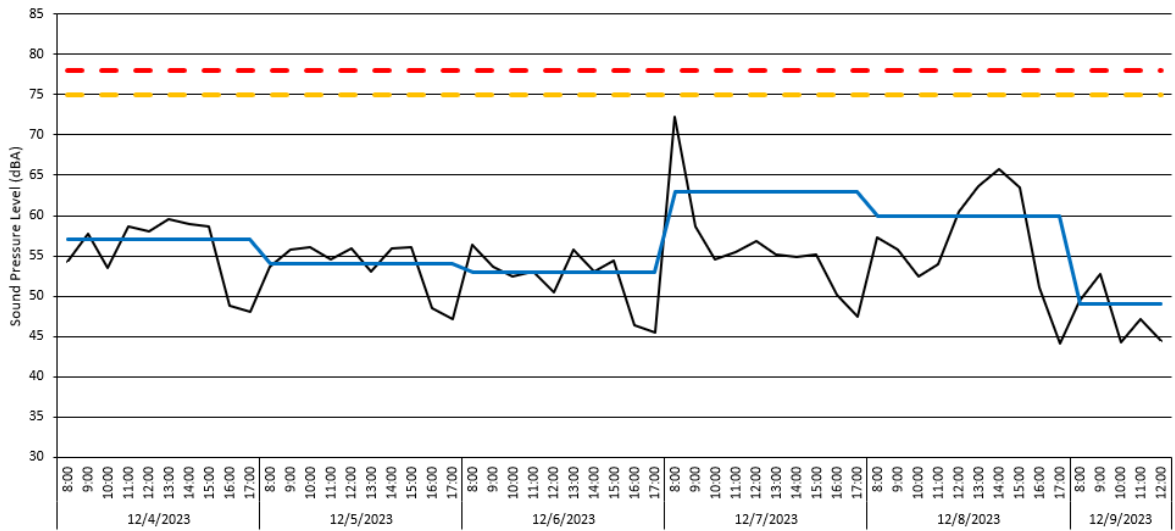


3.5 There was 100% data coverage at Location 1 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 2 – Raw Data

# Broadband Results	Date	Time	LAeq(60min)	LAeq(10hr)	LAeq(5hr)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]
	2023-12-04	09:00:00	54.2	--	--
	2023-12-04	10:00:00	57.7	--	--
	2023-12-04	11:00:00	53.5	--	--
	2023-12-04	12:00:00	58.7	--	--
	2023-12-04	13:00:00	58.1	--	--
	2023-12-04	14:00:00	59.6	--	--
	2023-12-04	15:00:00	58.9	--	--
	2023-12-04	16:00:00	58.7	--	--
	2023-12-04	17:00:00	48.8	--	--
	2023-12-04	18:00:00	48.1	57.0	--
	2023-12-05	09:00:00	53.7	--	--
	2023-12-05	10:00:00	55.7	--	--
	2023-12-05	11:00:00	56.0	--	--
	2023-12-05	12:00:00	54.5	--	--
	2023-12-05	13:00:00	55.9	--	--
	2023-12-05	14:00:00	53.0	--	--
	2023-12-05	15:00:00	55.9	--	--
	2023-12-05	16:00:00	56.1	--	--
	2023-12-05	17:00:00	48.5	--	--
	2023-12-05	18:00:00	47.1	54.4	--
	2023-12-06	09:00:00	56.4	--	--
	2023-12-06	10:00:00	53.6	--	--
	2023-12-06	11:00:00	52.4	--	--
	2023-12-06	12:00:00	53.0	--	--
	2023-12-06	13:00:00	50.5	--	--
	2023-12-06	14:00:00	55.8	--	--
	2023-12-06	15:00:00	53.1	--	--
	2023-12-06	16:00:00	54.4	--	--
	2023-12-06	17:00:00	46.3	--	--
	2023-12-06	18:00:00	45.4	53.2	--
	2023-12-07	09:00:00	72.3	--	--
	2023-12-07	10:00:00	58.7	--	--
	2023-12-07	11:00:00	54.5	--	--
	2023-12-07	12:00:00	55.4	--	--
	2023-12-07	13:00:00	56.8	--	--
	2023-12-07	14:00:00	55.2	--	--
	2023-12-07	15:00:00	54.8	--	--
	2023-12-07	16:00:00	55.1	--	--
	2023-12-07	17:00:00	50.2	--	--
	2023-12-07	18:00:00	47.5	63.0	--
	2023-12-08	09:00:00	57.3	--	--
	2023-12-08	10:00:00	55.8	--	--
	2023-12-08	11:00:00	52.5	--	--
	2023-12-08	12:00:00	54.0	--	--
	2023-12-08	13:00:00	60.5	--	--
	2023-12-08	14:00:00	63.6	--	--
	2023-12-08	15:00:00	65.7	--	--
	2023-12-08	16:00:00	63.5	--	--
	2023-12-08	17:00:00	51.1	--	--
	2023-12-08	18:00:00	44.1	60.4	--
	2023-12-09	09:00:00	49.4	--	--
	2023-12-09	10:00:00	52.7	--	--
	2023-12-09	11:00:00	44.3	--	--
	2023-12-09	12:00:00	47.1	--	--
	2023-12-09	13:00:00	44.4	--	48.8

Location 2 – Time History Data



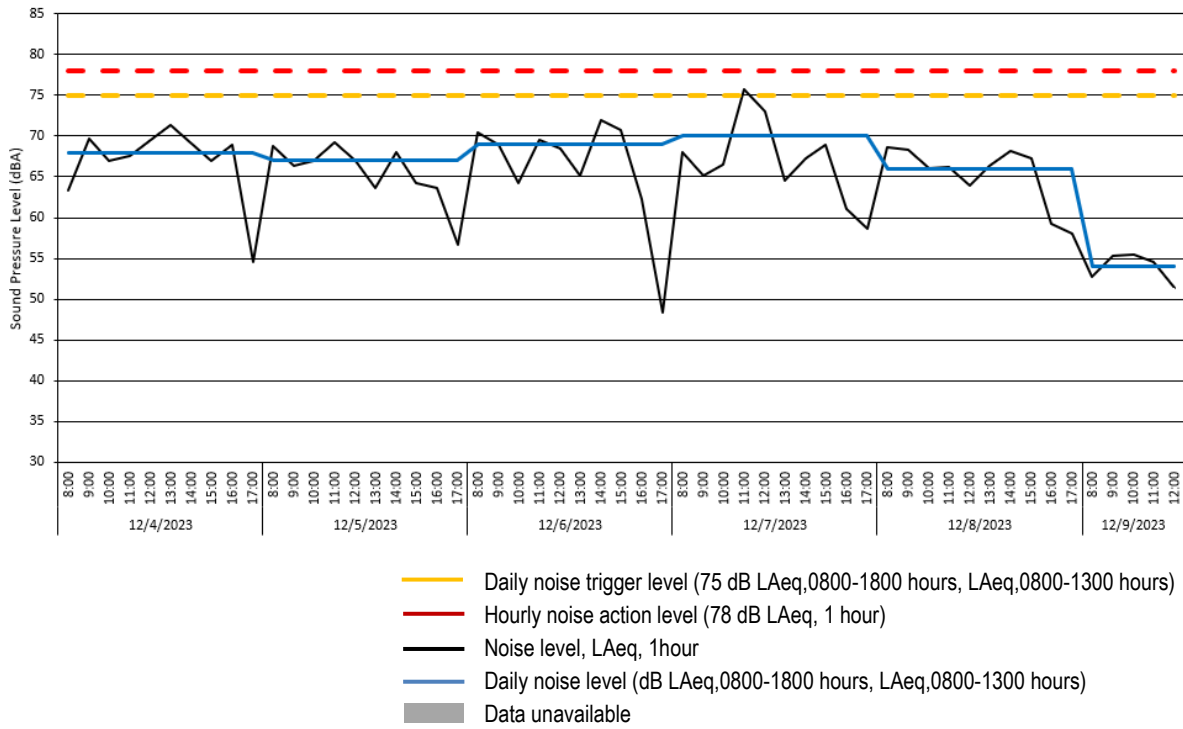
3.6 There was 100% data coverage at Location 2 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 3 – Raw Data

Broadband Results

Date [YYYY-MM-DD]	Time [hh:mm:ss]	LAeq(60min) [dB]	LAeq(10hr) [dB]	LAeq(5hr) [dB]
2023-12-04	09:00:00	63.4	--	--
2023-12-04	10:00:00	69.7	--	--
2023-12-04	11:00:00	66.9	--	--
2023-12-04	12:00:00	67.6	--	--
2023-12-04	13:00:00	69.6	--	--
2023-12-04	14:00:00	71.3	--	--
2023-12-04	15:00:00	69.1	--	--
2023-12-04	16:00:00	67.0	--	--
2023-12-04	17:00:00	68.9	--	--
2023-12-04	18:00:00	54.6	68.2	--
2023-12-05	09:00:00	68.8	--	--
2023-12-05	10:00:00	66.3	--	--
2023-12-05	11:00:00	67.0	--	--
2023-12-05	12:00:00	69.3	--	--
2023-12-05	13:00:00	67.0	--	--
2023-12-05	14:00:00	63.7	--	--
2023-12-05	15:00:00	68.1	--	--
2023-12-05	16:00:00	64.3	--	--
2023-12-05	17:00:00	63.6	--	--
2023-12-05	18:00:00	56.6	66.5	--
2023-12-06	09:00:00	70.5	--	--
2023-12-06	10:00:00	69.0	--	--
2023-12-06	11:00:00	64.2	--	--
2023-12-06	12:00:00	69.5	--	--
2023-12-06	13:00:00	68.5	--	--
2023-12-06	14:00:00	65.2	--	--
2023-12-06	15:00:00	71.9	--	--
2023-12-06	16:00:00	70.7	--	--
2023-12-06	17:00:00	62.2	--	--
2023-12-06	18:00:00	48.3	68.5	--
2023-12-07	09:00:00	68.1	--	--
2023-12-07	10:00:00	65.1	--	--
2023-12-07	11:00:00	66.5	--	--
2023-12-07	12:00:00	75.7	--	--
2023-12-07	13:00:00	73.1	--	--
2023-12-07	14:00:00	64.5	--	--
2023-12-07	15:00:00	67.2	--	--
2023-12-07	16:00:00	69.0	--	--
2023-12-07	17:00:00	61.0	--	--
2023-12-07	18:00:00	58.7	69.5	--
2023-12-08	09:00:00	68.6	--	--
2023-12-08	10:00:00	68.4	--	--
2023-12-08	11:00:00	66.1	--	--
2023-12-08	12:00:00	66.2	--	--
2023-12-08	13:00:00	63.9	--	--
2023-12-08	14:00:00	66.4	--	--
2023-12-08	15:00:00	68.2	--	--
2023-12-08	16:00:00	67.3	--	--
2023-12-08	17:00:00	59.3	--	--
2023-12-08	18:00:00	58.1	66.3	--
2023-12-09	09:00:00	52.8	--	--
2023-12-09	10:00:00	55.3	--	--
2023-12-09	11:00:00	55.5	--	--
2023-12-09	12:00:00	54.6	--	--
2023-12-09	13:00:00	51.3	--	54.1

Location 3 – Time-history graph



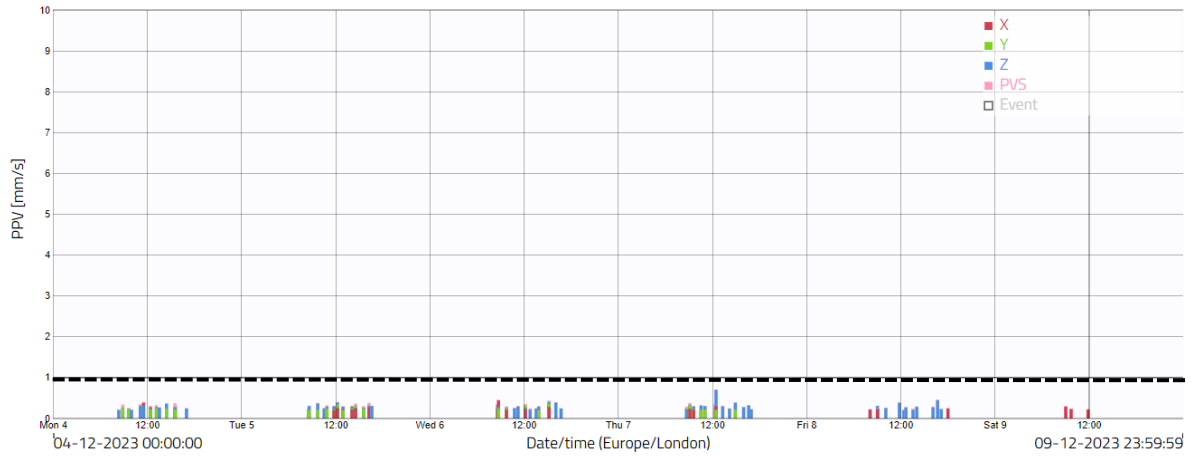
3.7 There was 100% data coverage at Location 3 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Vibration Monitoring Results

Location 1 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L1	04/12/2023 to 09/12/2023	1	0.71	07/12/2023	12:26
		2	0.51	07/12/2023	12:29
Criteria mm/s PVS	Exceedances	3	0.46	08/12/2023	16:41
		4	0.45	06/12/2023	08:43
		5	0.44	07/12/2023	12:27
1	0				

Location 1 – Time-history graph

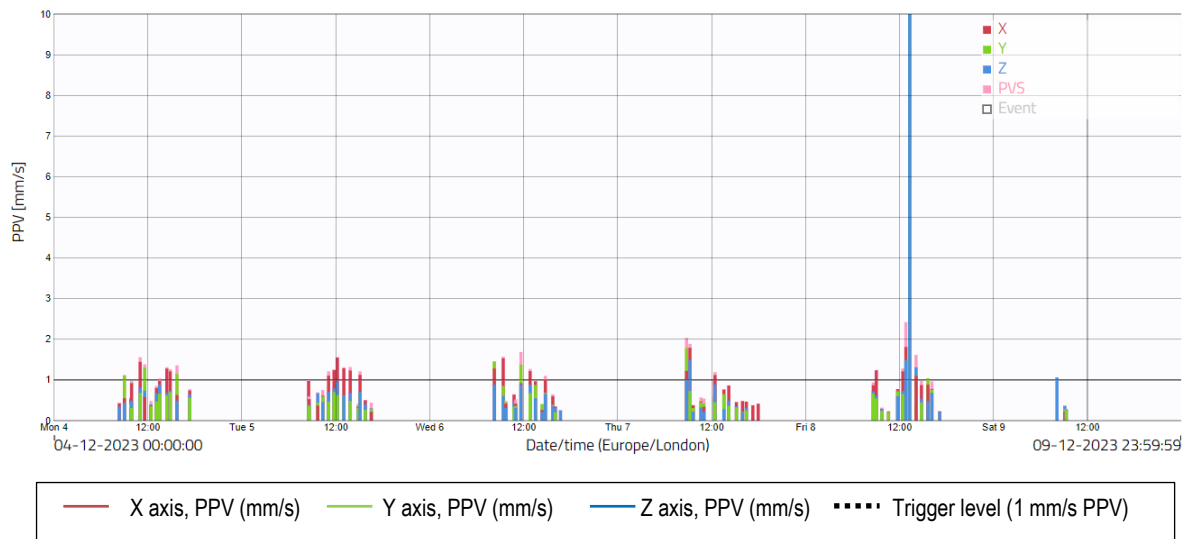


3.8 There was 100% data coverage at Location 1 for the monitoring period covered by this report. There were no exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above.

Location 2 – Raw data

Measuring point:	Period:	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L2	04/12/2023 to 09/12/2023	1	192.47	08/12/2023	13:18	32	1.21	05/12/20	15:06
		2	2.42	08/12/2023	12:49	33	1.19	07/12/20	12:14
Criteria mm/s PVS	Exceedances	3	2.04	08/12/2023	13:51	34	1.19	08/12/20	13:52
		4	2.03	07/12/2023	08:47	35	1.18	07/12/20	08:41
1	62	5	1.89	07/12/2023	09:13	36	1.18	08/12/20	13:25
		6	1.69	06/12/2023	11:38	37	1.16	08/12/20	14:00
		7	1.62	08/12/2023	14:07	38	1.16	05/12/20	13:09
		8	1.60	08/12/2023	13:57	39	1.16	05/12/20	11:47
		9	1.57	06/12/2023	09:22	40	1.15	05/12/20	15:04
		10	1.56	04/12/2023	11:01	41	1.15	06/12/20	08:53
		11	1.56	05/12/2023	12:12	42	1.14	07/12/20	12:29
		12	1.51	05/12/2023	12:22	43	1.12	04/12/20	08:59
		13	1.46	07/12/2023	08:50	44	1.11	06/12/20	08:27
		14	1.46	06/12/2023	08:14	45	1.10	06/12/20	14:46
		15	1.46	07/12/2023	08:43	46	1.10	08/12/20	12:55
		16	1.38	04/12/2023	11:36	47	1.08	05/12/20	12:22
		17	1.36	04/12/2023	15:42	48	1.07	05/12/20	13:08
		18	1.32	05/12/2023	13:51	49	1.07	08/12/20	13:54
		19	1.31	04/12/2023	14:24	50	1.06	08/12/20	13:55
		20	1.31	05/12/2023	12:58	51	1.06	09/12/20	08:07
		21	1.31	06/12/2023	08:28	52	1.05	07/12/20	08:43
		22	1.29	07/12/2023	08:46	53	1.05	04/12/20	11:11
		23	1.28	08/12/2023	12:14	54	1.04	08/12/20	09:03
		24	1.27	06/12/2023	12:49	55	1.04	08/12/20	15:37
		25	1.26	04/12/2023	14:50	56	1.04	04/12/20	13:29
		26	1.25	05/12/2023	11:46	57	1.03	05/12/20	12:10
		27	1.24	08/12/2023	09:01	58	1.02	08/12/20	13:21
		28	1.24	06/12/2023	09:23	59	1.01	04/12/20	11:04
		29	1.21	04/12/2023	14:51	60	1.01	08/12/20	13:55
		30	1.21	08/12/2023	12:46	61	1.00	08/12/20	14:02
		31	1.21	05/12/2023	11:02	62	1.00	06/12/20	09:07

Location 2 – Time-history graph

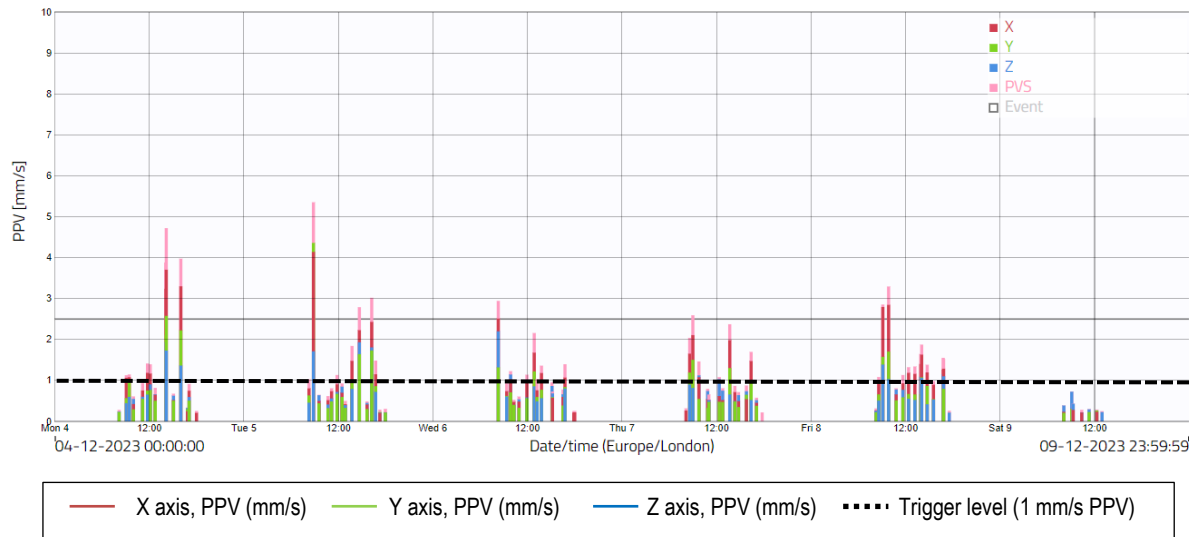


3.9 There was 100% data coverage at Location 2 for the monitoring period covered by this report. There were 62 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The very high exceedance of 192 mm/s recorded on the 8th December at 13:18 hours was caused by site operatives (Careys) working on the king posts in close proximity to the monitoring units. The trigger was caused by footfall from the operatives rather than the operation of any machinery that they were using.

Location 3 – Raw data

Measuring point:	Period:	Order	Value	Date	Time	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L3	04/12/2023 to 09/12/2023	1	5.35	05/12/2023	08:38	33	1.68	08/12/20	14:01	65	1.23	08/12/20	13:58
		2	4.72	04/12/2023	14:08	34	1.64	08/12/20	13:55	66	1.22	08/12/20	16:42
Criteria mm/s PVS	Exceedances	3	3.98	04/12/2023	15:59	35	1.63	08/12/20	09:49	67	1.20	06/12/20	09:35
1	94	4	3.88	04/12/2023	13:55	36	1.55	08/12/20	16:34	68	1.19	07/12/20	08:43
		5	3.74	04/12/2023	14:01	37	1.55	07/12/20	08:37	69	1.19	06/12/20	12:29
		6	3.72	04/12/2023	14:07	38	1.55	08/12/20	16:44	70	1.17	04/12/20	14:10
		7	3.58	04/12/2023	14:07	39	1.52	08/12/20	16:49	71	1.15	04/12/20	09:26
		8	3.32	05/12/2023	08:48	40	1.49	05/12/20	16:44	72	1.15	06/12/20	08:38
		9	3.29	08/12/2023	09:50	41	1.46	07/12/20	09:45	73	1.14	06/12/20	11:56
		10	3.29	04/12/2023	14:10	42	1.41	04/12/20	11:46	74	1.13	07/12/20	08:33
		11	3.04	04/12/2023	14:02	43	1.41	05/12/20	16:19	75	1.13	05/12/20	11:46
		12	3.02	05/12/2023	16:13	44	1.40	06/12/20	16:45	76	1.13	08/12/20	11:40
		13	2.94	06/12/2023	08:17	45	1.40	04/12/20	12:06	77	1.13	04/12/20	09:04
		14	2.90	04/12/2023	14:04	46	1.38	08/12/20	14:44	78	1.08	08/12/20	08:36
		15	2.85	08/12/2023	09:06	47	1.38	08/12/20	09:48	79	1.08	07/12/20	12:20
		16	2.79	05/12/2023	14:40	48	1.38	08/12/20	16:18	80	1.08	05/12/20	16:21
		17	2.59	07/12/2023	08:59	49	1.38	04/12/20	14:20	81	1.07	04/12/20	14:12
		18	2.37	07/12/2023	13:41	50	1.37	07/12/20	08:37	82	1.06	06/12/20	08:15
		19	2.34	04/12/2023	14:10	51	1.36	08/12/20	09:49	83	1.06	07/12/20	13:44
		20	2.19	05/12/2023	16:18	52	1.36	06/12/20	13:41	84	1.06	07/12/20	08:44
		21	2.16	06/12/2023	12:52	53	1.36	07/12/20	08:41	85	1.04	04/12/20	14:17
		22	2.07	04/12/2023	14:01	54	1.36	07/12/20	09:46	86	1.04	04/12/20	12:00
		23	2.04	07/12/2023	08:36	55	1.34	08/12/20	12:58	87	1.04	05/12/20	12:06
		24	2.04	04/12/2023	14:46	56	1.33	07/12/20	13:42	88	1.03	06/12/20	13:12
		25	2.00	04/12/2023	14:05	57	1.33	08/12/20	16:51	89	1.03	05/12/20	08:15
		26	1.94	06/12/2023	08:17	58	1.32	08/12/20	12:22	90	1.02	05/12/20	16:05
		27	1.88	08/12/2023	14:02	59	1.31	04/12/20	14:00	91	1.02	07/12/20	12:14
		28	1.84	05/12/2023	13:44	60	1.31	07/12/20	13:44	92	1.02	06/12/20	11:40
		29	1.75	05/12/2023	16:21	61	1.28	06/12/20	16:44	93	1.01	06/12/20	08:30
		30	1.73	07/12/2023	08:38	62	1.26	08/12/20	14:33	94	1.00	04/12/20	12:04
		31	1.72	07/12/2023	13:41	63	1.24	08/12/20	16:48				
		32	1.70	07/12/2023	16:24	64	1.23	06/12/20	09:52				

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 94 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	04/12/2023 to 09/12/2023	1	0.93	05/12/2023	09:42
		2	0.69	06/12/2023	08:27
Criteria mm/s PVS	Exceedances	3	0.67	05/12/2023	11:46
		4	0.66	08/12/2023	14:07
		5	0.61	07/12/2023	12:26

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 no exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above.