

# Holloway Park, London

## Construction Monitoring Report

Client: London Square  
Ref: CM84-22405-R0  
Date: 28 June 2024  
Note by: Anthony Coraci, MSc DipIOA MIOA, Senior Acoustics Consultant

### 1. INTRODUCTION

1.1 This Technical Note sets out results of the construction monitoring being carried out at the above site between Monday 10<sup>th</sup> & Saturday 22<sup>nd</sup> June 2024. The monitoring is being carried out in general agreement with the methodology in the current Section 61 Consent between the London Borough of Islington and OHOB.

### 2. WEEKLY ACTIVITIES

2.1 The following activities have been carried during the period covered by this report, in addition to the usual use of the Haul Road with site vehicles:

#### OHOB

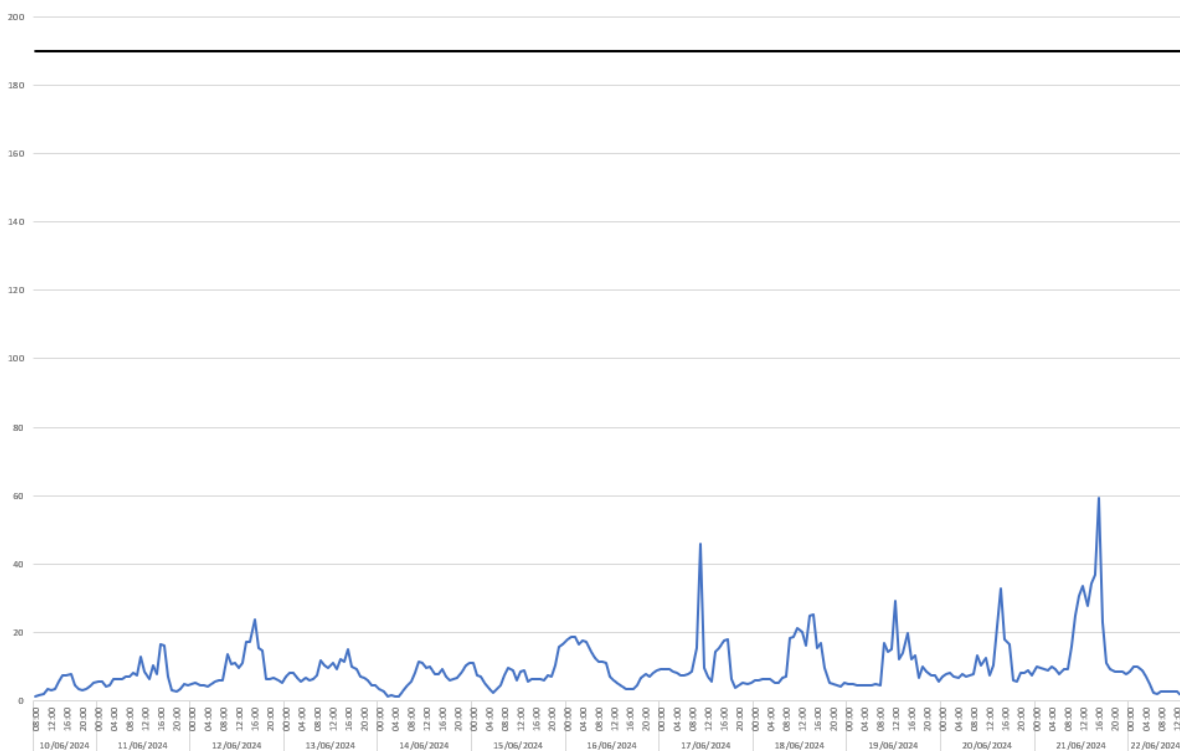
- Working on drainage at Gate 2 and near welfare and further into the site
- Installation of drainage adjacent to Block D
- Excavation of pilecaps in Block C
- Installation of drainage under temp haul road, adjacent to site welfare accommodation.
- Muck away works (i.e. the process of removing waste material, debris, and soil)
- Concrete tower crane base for TC1
- Mobile plant used around the site where required

### 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

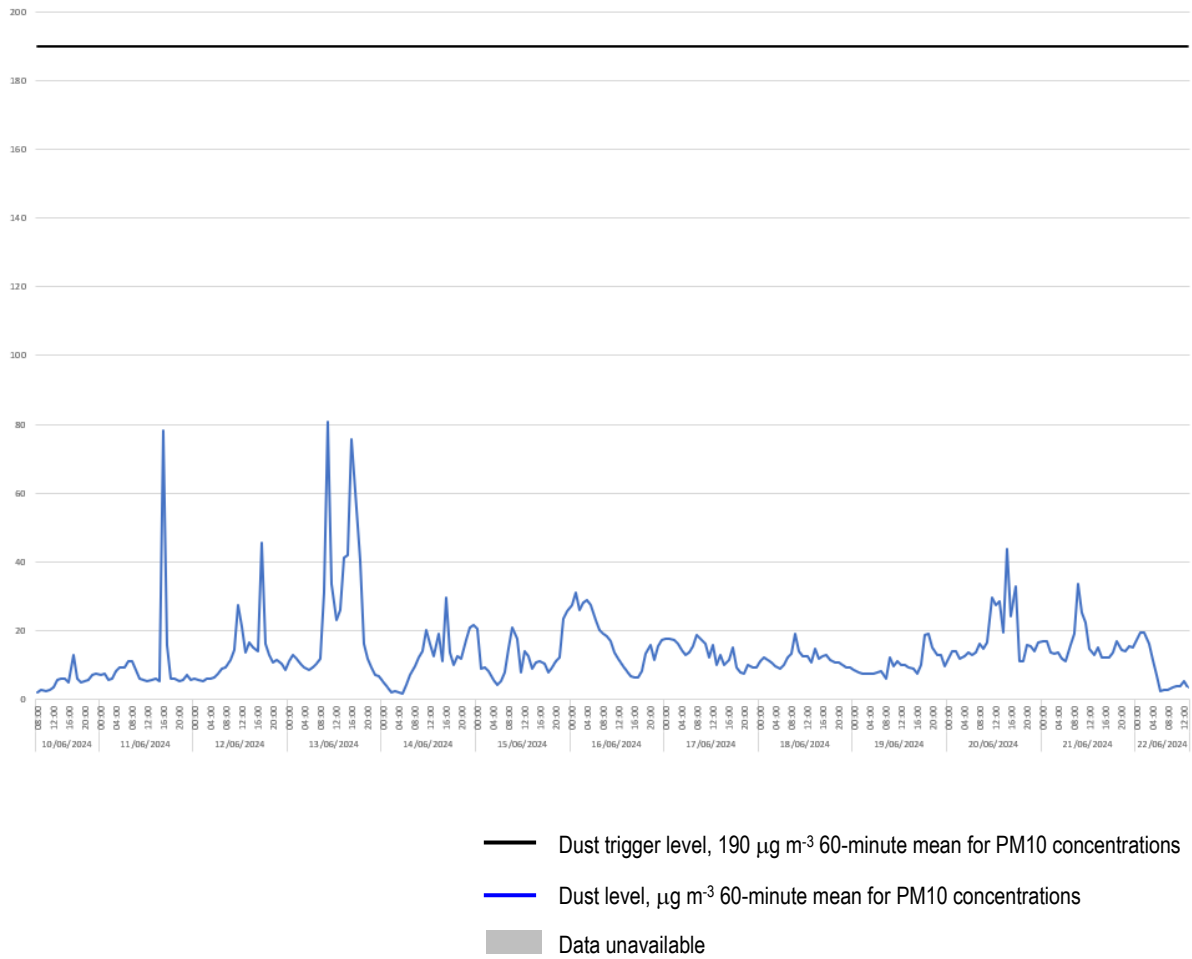


- Dust trigger level, 190  $\mu\text{g m}^{-3}$  60-minute mean for PM10 concentrations
- Dust level,  $\mu\text{g m}^{-3}$  60-minute mean for PM10 concentrations
- Data unavailable

3.2 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report.

3.3 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

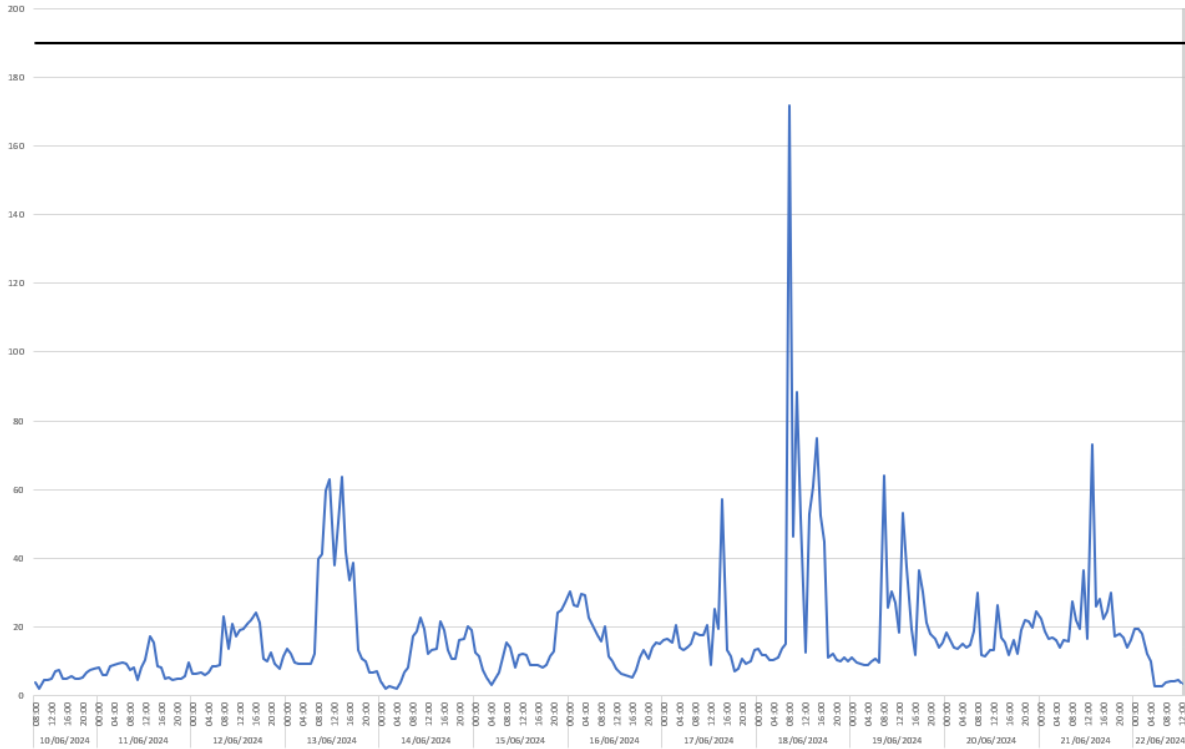
Location 2



3.4 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.

3.5 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

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

- 3.6 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report.
- 3.7 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

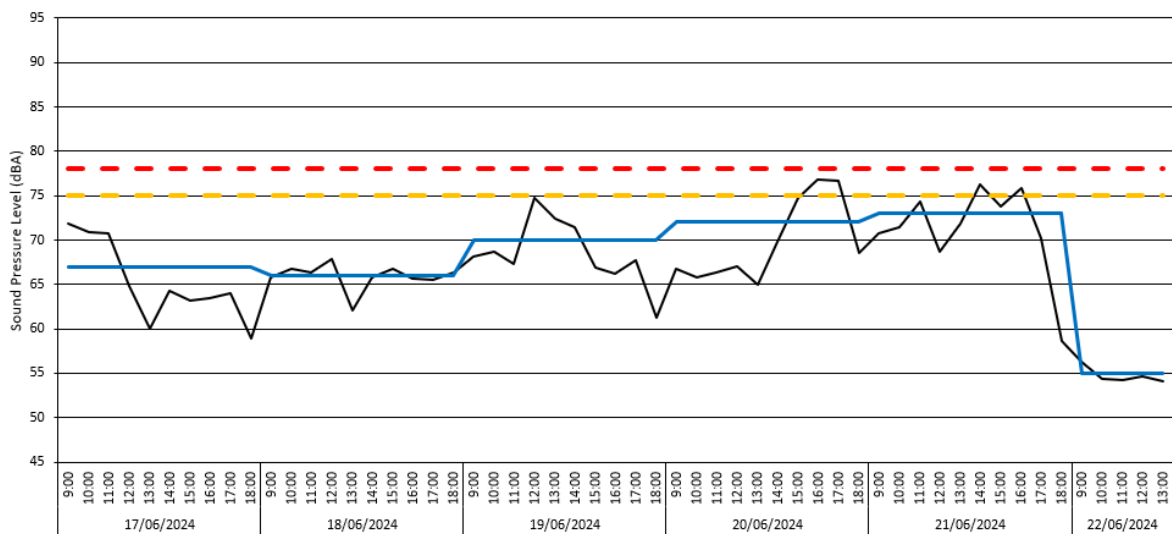
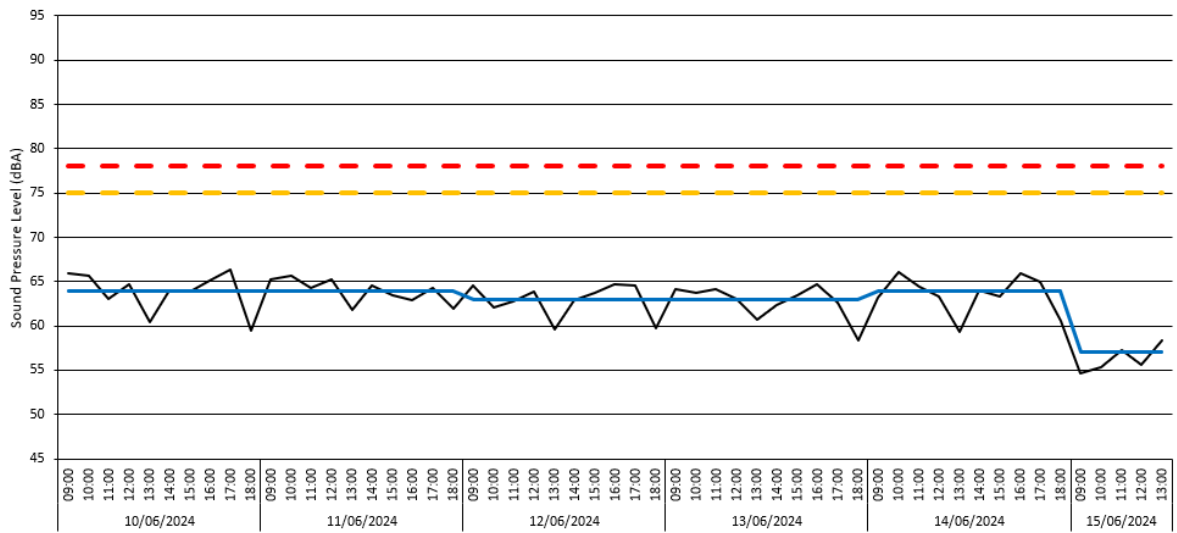


## Noise Monitoring Results

### Location 1 – Raw Data

# Broadband Results	Date	Time	LAeq(60min)	LAeq(7hr)	LAeq(10hr)	LAeq(5hr)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]	[dB]
	2024-06-10	09:00:00	65.9	--	--	--
	2024-06-10	10:00:00	65.6	--	--	--
	2024-06-10	11:00:00	63.0	--	--	--
	2024-06-10	12:00:00	64.7	--	--	--
	2024-06-10	13:00:00	60.4	--	--	--
	2024-06-10	14:00:00	64.0	--	--	--
	2024-06-10	15:00:00	63.9	--	--	--
	2024-06-10	16:00:00	65.1	--	--	--
	2024-06-10	17:00:00	66.3	--	--	--
	2024-06-10	18:00:00	59.5	--	64.3	--
	2024-06-11	09:00:00	65.3	--	--	--
	2024-06-11	10:00:00	65.7	--	--	--
	2024-06-11	11:00:00	64.3	--	--	--
	2024-06-11	12:00:00	65.3	--	--	--
	2024-06-11	13:00:00	61.8	--	--	--
	2024-06-11	14:00:00	64.6	--	--	--
	2024-06-11	15:00:00	63.5	--	--	--
	2024-06-11	16:00:00	62.9	--	--	--
	2024-06-11	17:00:00	64.3	--	--	--
	2024-06-11	18:00:00	62.0	--	64.1	--
	2024-06-12	09:00:00	64.5	--	--	--
	2024-06-12	10:00:00	62.1	--	--	--
	2024-06-12	11:00:00	62.8	--	--	--
	2024-06-12	12:00:00	63.9	--	--	--
	2024-06-12	13:00:00	59.6	--	--	--
	2024-06-12	14:00:00	62.9	--	--	--
	2024-06-12	15:00:00	63.8	--	--	--
	2024-06-12	16:00:00	64.7	--	--	--
	2024-06-12	17:00:00	64.6	--	--	--
	2024-06-12	18:00:00	59.8	--	63.2	--
	2024-06-13	09:00:00	64.2	--	--	--
	2024-06-13	10:00:00	63.8	--	--	--
	2024-06-13	11:00:00	64.1	--	--	--
	2024-06-13	12:00:00	63.1	--	--	--
	2024-06-13	13:00:00	60.7	--	--	--
	2024-06-13	14:00:00	62.4	--	--	--
	2024-06-13	15:00:00	63.5	--	--	--
	2024-06-13	16:00:00	64.7	--	--	--
	2024-06-13	17:00:00	62.7	--	--	--
	2024-06-13	18:00:00	58.3	--	63.1	--
	2024-06-14	09:00:00	63.2	--	--	--
	2024-06-14	10:00:00	66.1	--	--	--
	2024-06-14	11:00:00	64.4	--	--	--
	2024-06-14	12:00:00	63.3	--	--	--
	2024-06-14	13:00:00	59.3	--	--	--
	2024-06-14	14:00:00	64.0	--	--	--
	2024-06-14	15:00:00	63.3	--	--	--
	2024-06-14	16:00:00	66.0	--	--	--
	2024-06-14	17:00:00	65.0	--	--	--
	2024-06-14	18:00:00	60.5	--	64.0	--
	2024-06-15	09:00:00	54.6	--	--	--
	2024-06-15	10:00:00	55.4	--	--	--
	2024-06-15	11:00:00	57.3	--	--	--
	2024-06-15	12:00:00	55.6	--	--	--
	2024-06-15	13:00:00	58.3	--	--	56.5
	2024-06-16	18:00:00	--	--	55.3	--
	2024-06-17	09:00:00	71.8	--	--	--
	2024-06-17	10:00:00	70.9	--	--	--
	2024-06-17	11:00:00	70.8	--	--	--
	2024-06-17	12:00:00	64.8	--	--	--
	2024-06-17	13:00:00	60.0	--	--	--
	2024-06-17	14:00:00	64.3	--	--	--
	2024-06-17	15:00:00	63.2	--	--	--
	2024-06-17	16:00:00	63.5	--	--	--
	2024-06-17	17:00:00	64.0	--	--	--
	2024-06-17	18:00:00	58.9	--	67.3	--
	2024-06-18	09:00:00	65.8	--	--	--
	2024-06-18	10:00:00	66.7	--	--	--
	2024-06-18	11:00:00	66.4	--	--	--
	2024-06-18	12:00:00	67.9	--	--	--
	2024-06-18	13:00:00	62.1	--	--	--
	2024-06-18	14:00:00	65.8	--	--	--
	2024-06-18	15:00:00	66.7	--	--	--
	2024-06-18	16:00:00	65.6	--	--	--
	2024-06-18	17:00:00	65.5	--	--	--
	2024-06-18	18:00:00	66.3	--	66.1	--
	2024-06-19	09:00:00	68.2	--	--	--
	2024-06-19	10:00:00	68.7	--	--	--
	2024-06-19	11:00:00	67.3	--	--	--
	2024-06-19	12:00:00	74.7	--	--	--
	2024-06-19	13:00:00	72.4	--	--	--
	2024-06-19	14:00:00	71.4	--	--	--
	2024-06-19	15:00:00	66.9	--	--	--
	2024-06-19	16:00:00	66.2	--	--	--
	2024-06-19	17:00:00	67.7	--	--	--
	2024-06-19	18:00:00	61.2	--	69.8	--
	2024-06-20	09:00:00	66.7	--	--	--
	2024-06-20	10:00:00	65.8	--	--	--
	2024-06-20	11:00:00	66.4	--	--	--
	2024-06-20	12:00:00	67.0	--	--	--
	2024-06-20	13:00:00	65.0	--	--	--
	2024-06-20	14:00:00	69.8	--	--	--
	2024-06-20	15:00:00	74.8	--	--	--
	2024-06-20	16:00:00	76.8	--	--	--
	2024-06-20	17:00:00	76.7	--	--	--
	2024-06-20	18:00:00	68.6	--	72.1	--
	2024-06-21	09:00:00	70.8	--	--	--
	2024-06-21	10:00:00	71.4	--	--	--
	2024-06-21	11:00:00	74.4	--	--	--
	2024-06-21	12:00:00	68.7	--	--	--
	2024-06-21	13:00:00	71.8	--	--	--
	2024-06-21	14:00:00	76.2	--	--	--
	2024-06-21	15:00:00	73.8	--	--	--
	2024-06-21	16:00:00	75.9	--	--	--
	2024-06-21	17:00:00	70.2	--	--	--
	2024-06-21	18:00:00	58.7	--	72.8	--
	2024-06-22	09:00:00	56.3	--	--	--
	2024-06-22	10:00:00	54.4	--	--	--
	2024-06-22	11:00:00	54.2	--	--	--
	2024-06-22	12:00:00	54.7	--	--	--
	2024-06-22	13:00:00	54.1	--	--	54.8

### Location 1 – Time History Data



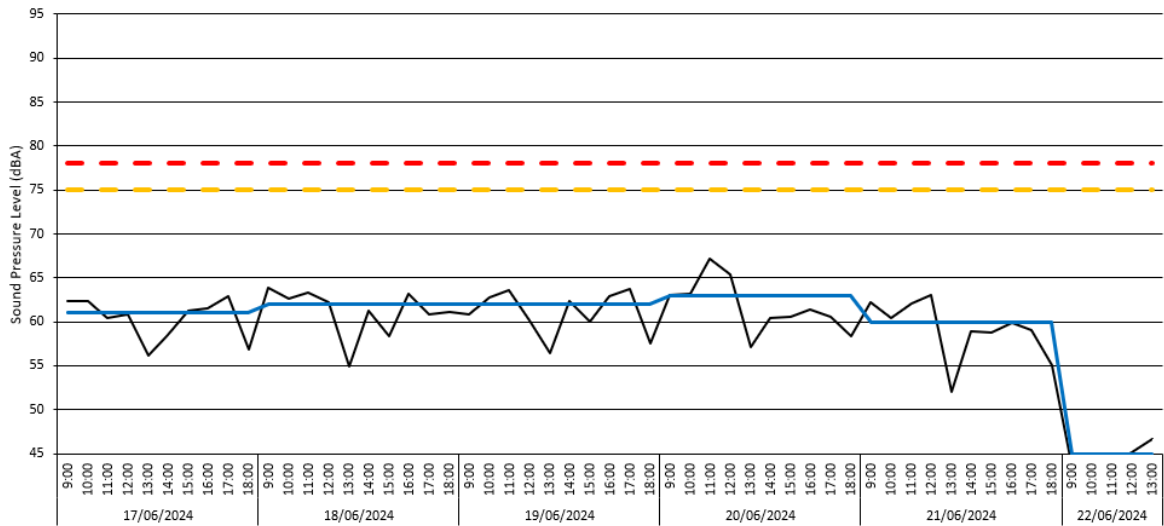
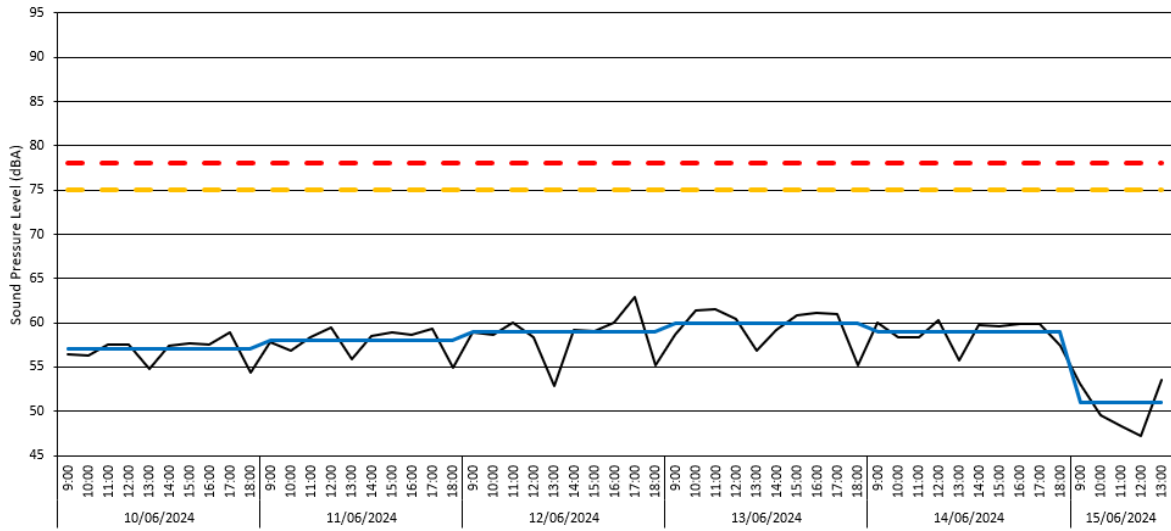
- Daily noise trigger level (75 dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1hour
- Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Data unavailable

- 3.8 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. The monitor was offline between:
- 3.9 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]
	2024-06-10	09:00:00	56.5	--	--
	2024-06-10	10:00:00	56.3	--	--
	2024-06-10	11:00:00	57.5	--	--
	2024-06-10	12:00:00	57.5	--	--
	2024-06-10	13:00:00	54.8	--	--
	2024-06-10	14:00:00	57.4	--	--
	2024-06-10	15:00:00	57.7	--	--
	2024-06-10	16:00:00	57.5	--	--
	2024-06-10	17:00:00	58.9	--	--
	2024-06-10	18:00:00	54.4	57.0	--
	2024-06-11	09:00:00	57.8	--	--
	2024-06-11	10:00:00	56.9	--	--
	2024-06-11	11:00:00	58.4	--	--
	2024-06-11	12:00:00	59.4	--	--
	2024-06-11	13:00:00	55.9	--	--
	2024-06-11	14:00:00	58.5	--	--
	2024-06-11	15:00:00	58.9	--	--
	2024-06-11	16:00:00	58.6	--	--
	2024-06-11	17:00:00	59.3	--	--
	2024-06-11	18:00:00	54.9	58.1	--
	2024-06-12	09:00:00	58.9	--	--
	2024-06-12	10:00:00	58.6	--	--
	2024-06-12	11:00:00	60.0	--	--
	2024-06-12	12:00:00	58.3	--	--
	2024-06-12	13:00:00	52.9	--	--
	2024-06-12	14:00:00	59.2	--	--
	2024-06-12	15:00:00	59.0	--	--
	2024-06-12	16:00:00	60.0	--	--
	2024-06-12	17:00:00	62.9	--	--
	2024-06-12	18:00:00	55.2	59.2	--
	2024-06-13	09:00:00	58.7	--	--
	2024-06-13	10:00:00	61.4	--	--
	2024-06-13	11:00:00	61.6	--	--
	2024-06-13	12:00:00	60.4	--	--
	2024-06-13	13:00:00	56.8	--	--
	2024-06-13	14:00:00	59.2	--	--
	2024-06-13	15:00:00	60.8	--	--
	2024-06-13	16:00:00	61.1	--	--
	2024-06-13	17:00:00	61.0	--	--
	2024-06-13	18:00:00	55.2	60.0	--
	2024-06-14	09:00:00	60.0	--	--
	2024-06-14	10:00:00	58.4	--	--
	2024-06-14	11:00:00	58.4	--	--
	2024-06-14	12:00:00	60.3	--	--
	2024-06-14	13:00:00	55.8	--	--
	2024-06-14	14:00:00	59.8	--	--
	2024-06-14	15:00:00	59.6	--	--
	2024-06-14	16:00:00	59.9	--	--
	2024-06-14	17:00:00	59.9	--	--
	2024-06-14	18:00:00	57.4	59.1	--
	2024-06-15	09:00:00	53.1	--	--
	2024-06-15	10:00:00	49.6	--	--
	2024-06-15	11:00:00	48.3	--	--
	2024-06-15	12:00:00	47.2	--	--
	2024-06-15	13:00:00	53.6	--	51.1
	2024-06-16	18:00:00	--	48.0	--
	2024-06-17	09:00:00	62.3	--	--
	2024-06-17	10:00:00	62.4	--	--
	2024-06-17	11:00:00	60.4	--	--
	2024-06-17	12:00:00	60.9	--	--
	2024-06-17	13:00:00	56.1	--	--
	2024-06-17	14:00:00	58.5	--	--
	2024-06-17	15:00:00	61.3	--	--
	2024-06-17	16:00:00	61.5	--	--
	2024-06-17	17:00:00	62.9	--	--
	2024-06-17	18:00:00	56.8	60.8	--
	2024-06-18	09:00:00	63.9	--	--
	2024-06-18	10:00:00	62.7	--	--
	2024-06-18	11:00:00	63.3	--	--
	2024-06-18	12:00:00	62.2	--	--
	2024-06-18	13:00:00	54.9	--	--
	2024-06-18	14:00:00	61.3	--	--
	2024-06-18	15:00:00	58.3	--	--
	2024-06-18	16:00:00	63.2	--	--
	2024-06-18	17:00:00	60.8	--	--
	2024-06-18	18:00:00	61.1	61.8	--
	2024-06-19	09:00:00	60.9	--	--
	2024-06-19	10:00:00	62.8	--	--
	2024-06-19	11:00:00	63.6	--	--
	2024-06-19	12:00:00	60.1	--	--
	2024-06-19	13:00:00	56.5	--	--
	2024-06-19	14:00:00	62.3	--	--
	2024-06-19	15:00:00	60.0	--	--
	2024-06-19	16:00:00	62.9	--	--
	2024-06-19	17:00:00	63.8	--	--
	2024-06-19	18:00:00	57.5	61.6	--
	2024-06-20	09:00:00	63.1	--	--
	2024-06-20	10:00:00	63.2	--	--
	2024-06-20	11:00:00	67.2	--	--
	2024-06-20	12:00:00	65.4	--	--
	2024-06-20	13:00:00	57.1	--	--
	2024-06-20	14:00:00	60.4	--	--
	2024-06-20	15:00:00	60.5	--	--
	2024-06-20	16:00:00	61.4	--	--
	2024-06-20	17:00:00	60.6	--	--
	2024-06-20	18:00:00	58.3	62.7	--
	2024-06-21	09:00:00	62.2	--	--
	2024-06-21	10:00:00	60.4	--	--
	2024-06-21	11:00:00	62.1	--	--
	2024-06-21	12:00:00	63.1	--	--
	2024-06-21	13:00:00	52.1	--	--
	2024-06-21	14:00:00	58.9	--	--
	2024-06-21	15:00:00	58.8	--	--
	2024-06-21	16:00:00	59.9	--	--
	2024-06-21	17:00:00	59.0	--	--
	2024-06-21	18:00:00	55.1	60.1	--
	2024-06-22	09:00:00	43.9	--	--
	2024-06-22	10:00:00	44.1	--	--
	2024-06-22	11:00:00	43.9	--	--
	2024-06-22	12:00:00	45.1	--	--
	2024-06-22	13:00:00	46.7	--	44.9

**Location 2 – Time History Data**



- Daily noise trigger level (75 dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1 hour
- Daily noise level (dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- Data unavailable

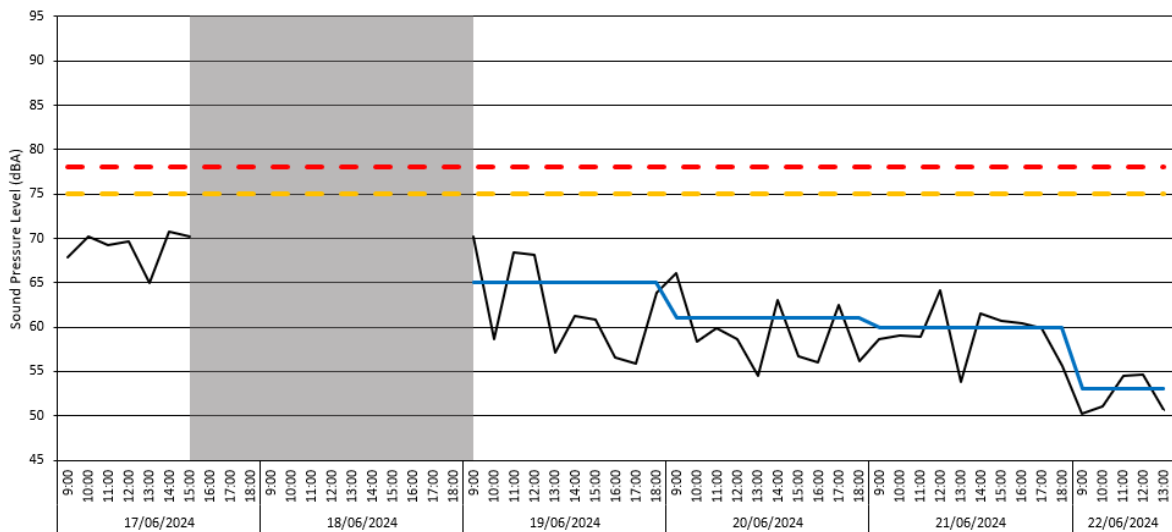
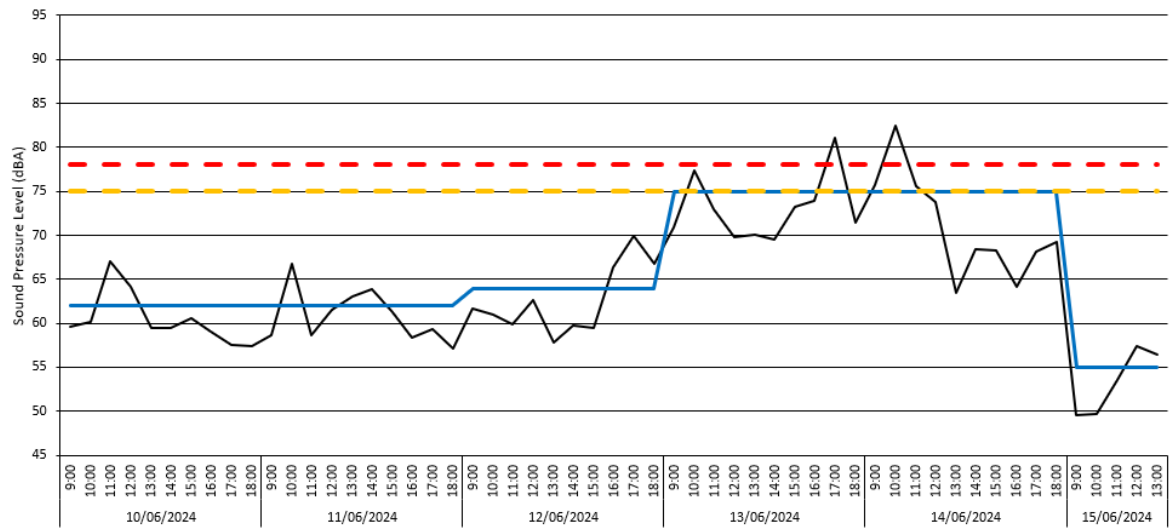
- 3.10 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.
- 3.11 No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring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

**Location 3 – Raw Data**



# Broadband Results	Time	LAeq(60min)	LAeq(10hr)	LAeq(5hr)
Date	[hh:mm:ss]	[dB]	[dB]	[dB]
[YYYY-MM-DD]				
2024-06-10	09:00:00	59.6	--	--
2024-06-10	10:00:00	60.1	--	--
2024-06-10	11:00:00	67.0	--	--
2024-06-10	12:00:00	64.1	--	--
2024-06-10	13:00:00	59.5	--	--
2024-06-10	14:00:00	59.4	--	--
2024-06-10	15:00:00	60.6	--	--
2024-06-10	16:00:00	59.1	--	--
2024-06-10	17:00:00	57.5	--	--
2024-06-10	18:00:00	57.4	61.5	--
2024-06-11	09:00:00	58.6	--	--
2024-06-11	10:00:00	66.8	--	--
2024-06-11	11:00:00	58.6	--	--
2024-06-11	12:00:00	61.6	--	--
2024-06-11	13:00:00	63.0	--	--
2024-06-11	14:00:00	63.9	--	--
2024-06-11	15:00:00	61.3	--	--
2024-06-11	16:00:00	58.3	--	--
2024-06-11	17:00:00	59.3	--	--
2024-06-11	18:00:00	57.1	61.9	--
2024-06-12	09:00:00	61.7	--	--
2024-06-12	10:00:00	61.0	--	--
2024-06-12	11:00:00	59.9	--	--
2024-06-12	12:00:00	62.6	--	--
2024-06-12	13:00:00	57.8	--	--
2024-06-12	14:00:00	59.8	--	--
2024-06-12	15:00:00	59.4	--	--
2024-06-12	16:00:00	66.3	--	--
2024-06-12	17:00:00	69.9	--	--
2024-06-12	18:00:00	66.8	64.3	--
2024-06-13	09:00:00	70.9	--	--
2024-06-13	10:00:00	77.4	--	--
2024-06-13	11:00:00	73.0	--	--
2024-06-13	12:00:00	69.8	--	--
2024-06-13	13:00:00	70.1	--	--
2024-06-13	14:00:00	69.5	--	--
2024-06-13	15:00:00	73.3	--	--
2024-06-13	16:00:00	73.9	--	--
2024-06-13	17:00:00	61.1	--	--
2024-06-13	18:00:00	71.5	74.8	--
2024-06-14	09:00:00	75.7	--	--
2024-06-14	10:00:00	82.5	--	--
2024-06-14	11:00:00	75.6	--	--
2024-06-14	12:00:00	73.8	--	--
2024-06-14	13:00:00	63.5	--	--
2024-06-14	14:00:00	68.4	--	--
2024-06-14	15:00:00	68.3	--	--
2024-06-14	16:00:00	64.1	--	--
2024-06-14	17:00:00	68.1	--	--
2024-06-14	18:00:00	69.2	74.9	--
2024-06-15	09:00:00	49.5	--	--
2024-06-15	10:00:00	49.7	--	--
2024-06-15	11:00:00	53.5	--	--
2024-06-15	12:00:00	57.4	--	--
2024-06-15	13:00:00	56.5	--	54.5
2024-06-16	18:00:00	--	55.7	--
2024-06-17	09:00:00	67.8	--	--
2024-06-17	10:00:00	70.2	--	--
2024-06-17	11:00:00	69.2	--	--
2024-06-17	12:00:00	69.6	--	--
2024-06-17	13:00:00	65.0	--	--
2024-06-17	14:00:00	70.8	--	--
2024-06-17	15:00:00	70.2	--	--
2024-06-19	09:00:00	70.2	--	--
2024-06-19	10:00:00	58.7	--	--
2024-06-19	11:00:00	68.4	--	--
2024-06-19	12:00:00	68.2	--	--
2024-06-19	13:00:00	57.1	--	--
2024-06-19	14:00:00	61.3	--	--
2024-06-19	15:00:00	60.9	--	--
2024-06-19	16:00:00	56.6	--	--
2024-06-19	17:00:00	55.9	--	--
2024-06-19	18:00:00	63.9	64.9	--
2024-06-20	09:00:00	66.1	--	--
2024-06-20	10:00:00	58.4	--	--
2024-06-20	11:00:00	59.9	--	--
2024-06-20	12:00:00	58.6	--	--
2024-06-20	13:00:00	54.5	--	--
2024-06-20	14:00:00	63.1	--	--
2024-06-20	15:00:00	56.7	--	--
2024-06-20	16:00:00	56.0	--	--
2024-06-20	17:00:00	62.5	--	--
2024-06-20	18:00:00	56.1	60.7	--
2024-06-21	09:00:00	58.7	--	--
2024-06-21	10:00:00	59.0	--	--
2024-06-21	11:00:00	58.9	--	--
2024-06-21	12:00:00	64.2	--	--
2024-06-21	13:00:00	53.8	--	--
2024-06-21	14:00:00	61.6	--	--
2024-06-21	15:00:00	60.7	--	--
2024-06-21	16:00:00	60.4	--	--
2024-06-21	17:00:00	59.9	--	--
2024-06-21	18:00:00	55.6	60.1	--
2024-06-22	09:00:00	50.2	--	--
2024-06-22	10:00:00	51.1	--	--
2024-06-22	11:00:00	54.5	--	--
2024-06-22	12:00:00	54.7	--	--
2024-06-22	13:00:00	50.7	--	52.7

**Location 3 – Time-history graph**



- Daily noise trigger level (75 dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1hour
- Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Data unavailable

- 3.12 There was 86% data coverage at Location 3 during construction hours for the monitoring period covered by this report. The monitor was offline between 15:00 on Monday 17<sup>th</sup> & 09:00 on Wednesday 19<sup>th</sup> June. This was due to a temporary power outage, which has since been resolved.
- 3.13 Two exceedances of the project hourly noise criteria of 78 dB LAeq were recorded during the monitoring period covered by this report. Additionally, there were two occasions when the daily project noise limit of 75 dB LAeq (0800-1800 hours) was equalled.

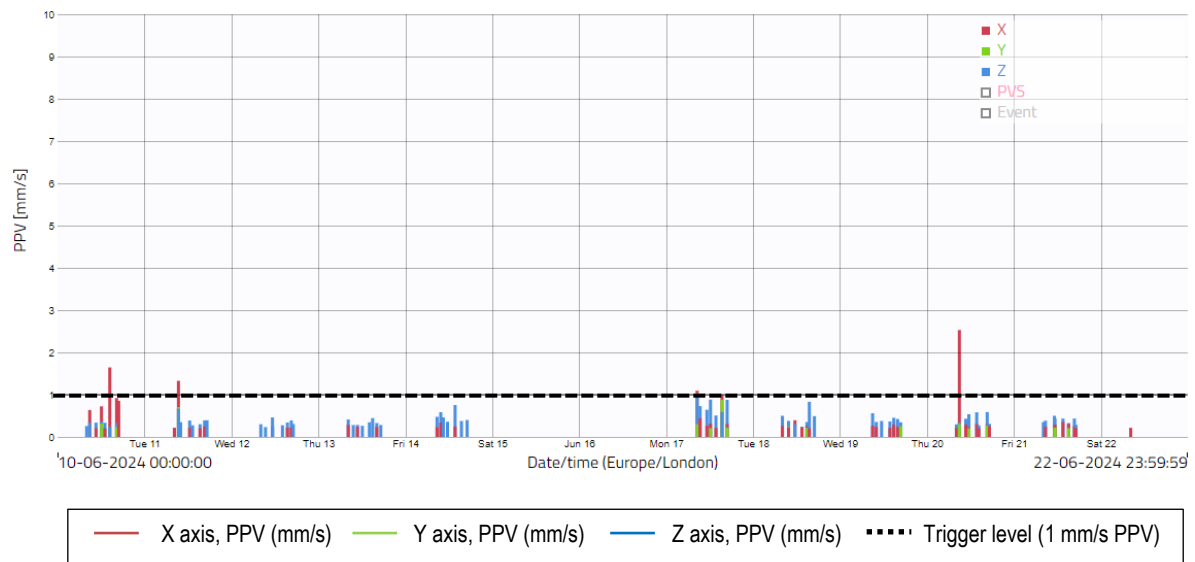
3.14 Email correspondence with the Site Manager confirmed that excavation was taking place within the vicinity of the monitor, to remove the existing foundations. Furthermore, a road roller was later used within close proximity to the monitor, to compact loose ground. The activity taking place at this location will continue to be monitored; however, it is our understanding that no vibration complaints were received due to the work described above.

### Vibration Monitoring Results

#### Location 1 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L1	10/06/2024 to 22/06/2024	1	2.53	20/06/2024	08:57
		2	1.66	10/06/2024	14:26
Criteria mm/s PVS	Exceedances	3	1.56	11/06/2024	09:23
1.0	6	4	1.10	17/06/2024	08:34
		5	1.04	17/06/2024	15:26
		6	1.03	17/06/2024	09:09
		7	0.93	10/06/2024	16:19
		8	0.89	17/06/2024	16:51
		9	0.89	17/06/2024	12:15
		10	0.88	17/06/2024	16:56

#### Location 1 – Time-history graph



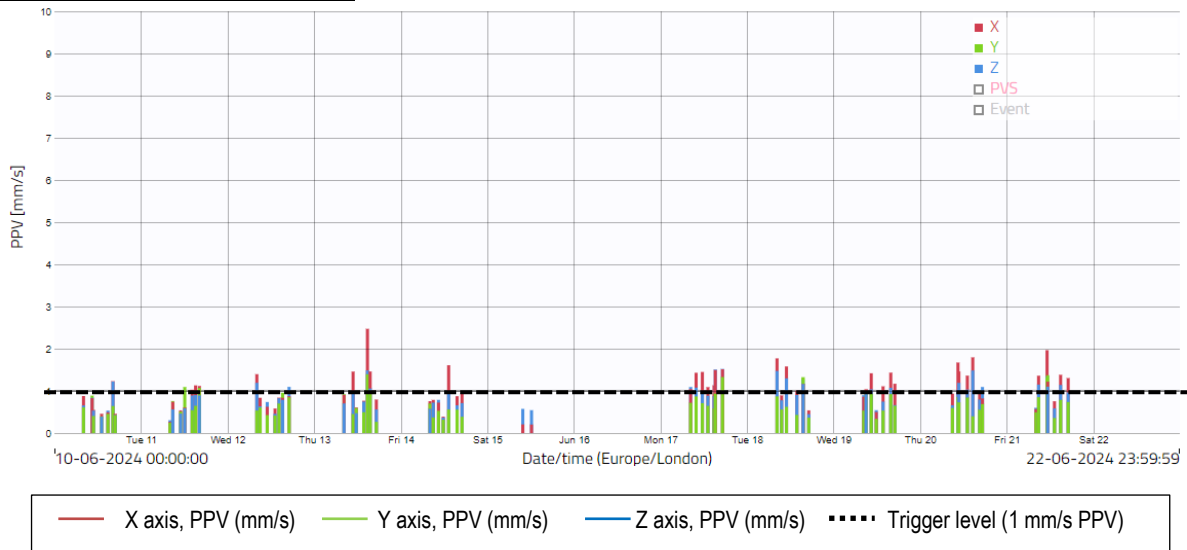
3.15 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. There were six exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Thursday 20<sup>th</sup> June at 08:57, with a recorded level of 2.5 mm/s PPV. It is worth noting from the raw data above that the exceedances were caused by individual, short-lived events, rather than continuous activity at this location. This will continue to be monitored.

3.16 In this location, it is likely that the residents opening 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	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L2	10/06/2024 to 22/06/2024	1	2.87	13/06/2024	14:47	31	1.55	17/06/2024	16:51	61	1.36	11/06/2024	16:11
		2	2.26	21/06/2024	11:12	32	1.52	21/06/2024	14:57	62	1.36	21/06/2024	11:11
		3	2.20	20/06/2024	14:36	33	1.52	20/06/2024	09:27	63	1.35	21/06/2024	09:08
Criteria mm/s PVS	Exceedances	4	2.13	21/06/2024	11:13	34	1.50	18/06/2024	15:51	64	1.35	21/06/2024	16:45
1.0	183	5	2.09	13/06/2024	15:16	35	1.50	20/06/2024	10:25	65	1.34	12/06/2024	08:20
		6	2.03	17/06/2024	17:13	36	1.49	18/06/2024	15:07	66	1.34	20/06/2024	10:27
		7	2.02	18/06/2024	08:20	37	1.47	19/06/2024	15:18	67	1.34	11/06/2024	15:08
		8	1.99	18/06/2024	08:35	38	1.47	20/06/2024	13:06	68	1.34	11/06/2024	15:22
		9	1.98	17/06/2024	15:13	39	1.47	20/06/2024	10:33	69	1.33	18/06/2024	09:12
		10	1.95	18/06/2024	10:57	40	1.46	21/06/2024	09:13	70	1.33	20/06/2024	10:41
		11	1.83	21/06/2024	11:02	41	1.46	21/06/2024	09:04	71	1.33	18/06/2024	15:31
		12	1.79	13/06/2024	15:32	42	1.46	20/06/2024	10:20	72	1.33	20/06/2024	10:42
		13	1.78	20/06/2024	10:30	43	1.44	21/06/2024	09:02	73	1.32	20/06/2024	10:19
		14	1.76	12/06/2024	08:07	44	1.43	20/06/2024	09:21	74	1.31	21/06/2024	14:48
		15	1.75	14/06/2024	13:18	45	1.43	17/06/2024	15:14	75	1.31	19/06/2024	09:01
		16	1.74	19/06/2024	10:27	46	1.42	21/06/2024	17:03	76	1.31	21/06/2024	08:34
		17	1.74	17/06/2024	15:49	47	1.42	17/06/2024	13:10	77	1.30	12/06/2024	17:04
		18	1.73	10/06/2024	16:14	48	1.41	21/06/2024	16:44	78	1.30	11/06/2024	14:12
		19	1.72	20/06/2024	10:45	49	1.41	17/06/2024	16:14	79	1.30	11/06/2024	14:28
		20	1.71	17/06/2024	09:54	50	1.41	21/06/2024	11:22	80	1.29	17/06/2024	16:28
		21	1.70	17/06/2024	11:38	51	1.40	18/06/2024	15:35	81	1.29	17/06/2024	14:52
		22	1.68	17/06/2024	17:06	52	1.40	13/06/2024	15:06	82	1.27	20/06/2024	11:06
		23	1.66	19/06/2024	15:52	53	1.38	20/06/2024	10:46	83	1.26	21/06/2024	08:59
		24	1.66	20/06/2024	10:43	54	1.38	20/06/2024	09:40	84	1.26	20/06/2024	17:17
		25	1.63	18/06/2024	15:32	55	1.37	21/06/2024	11:10	85	1.25	21/06/2024	11:14
		26	1.63	17/06/2024	17:12	56	1.37	21/06/2024	09:14	86	1.25	20/06/2024	10:44
		27	1.59	13/06/2024	10:48	57	1.37	21/06/2024	09:06	87	1.25	17/06/2024	09:06
		28	1.58	21/06/2024	11:23	58	1.37	20/06/2024	10:24	88	1.24	21/06/2024	09:15
		29	1.58	21/06/2024	08:51	59	1.36	21/06/2024	09:10	89	1.22	18/06/2024	14:59
		30	1.56	18/06/2024	15:34	60	1.36	20/06/2024	11:01	90	1.21	18/06/2024	13:50

**Location 2 – Time-history graph**



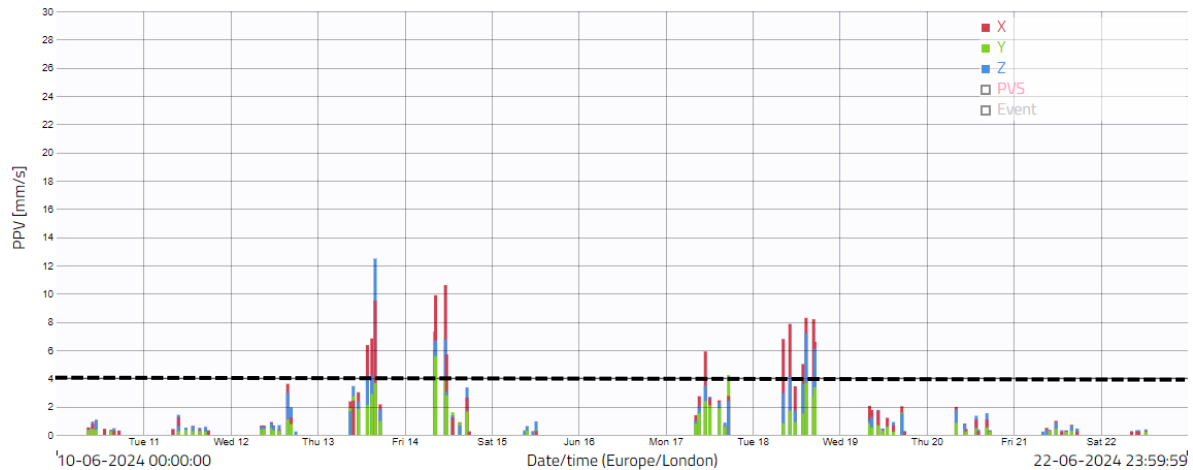
3.17 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report. There were 183 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Thursday 13<sup>th</sup> June at 14:47, with a recorded level of 2.9 mm/s PPV. It is worth noting that all exceedances were only relatively low, and are comparable to the levels of vibration generated by nearby passes from vehicles on site (as previously experienced at Location 3, particularly during the earlier months of 2024). It is understood that no complaints have been received in relation to vibration at this location – this will continue to be monitored.

3.18 In addition, 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	10/06/2024 to 22/06/2024	1	13.20	13/06/2024	15:53	31	5.46	18/06/2024	14:42	61	4.08	13/06/2024	16:41
		2	11.57	14/06/2024	11:17	32	5.29	14/06/2024	10:02	62	4.01	14/06/2024	08:42
Criteria mm/s PVS	Exceedances	3	10.98	14/06/2024	08:33	33	5.26	14/06/2024	08:50	63	4.00	14/06/2024	11:24
4.0	63	4	10.42	14/06/2024	11:22	34	5.14	18/06/2024	14:45	64	3.99	14/06/2024	17:13
		5	10.19	18/06/2024	14:44	35	5.14	14/06/2024	08:46	65	3.99	14/06/2024	11:26
		6	10.02	14/06/2024	11:23	36	5.12	14/06/2024	09:07	66	3.95	14/06/2024	08:58
		7	9.76	18/06/2024	14:30	37	5.10	13/06/2024	14:35	67	3.94	14/06/2024	09:40
		8	9.20	18/06/2024	17:10	38	5.02	13/06/2024	16:31	68	3.91	13/06/2024	15:27
		9	9.10	13/06/2024	15:54	39	4.90	18/06/2024	16:30	69	3.87	14/06/2024	11:30
		10	9.00	14/06/2024	11:19	40	4.84	13/06/2024	16:35	70	3.80	14/06/2024	10:53
		11	8.86	14/06/2024	11:20	41	4.83	13/06/2024	16:40	71	3.74	14/06/2024	11:31
		12	8.63	18/06/2024	16:49	42	4.82	14/06/2024	09:14	72	3.74	17/06/2024	12:12
		13	8.57	18/06/2024	10:17	43	4.79	14/06/2024	09:13	73	3.74	14/06/2024	09:05
		14	8.52	13/06/2024	15:41	44	4.77	14/06/2024	09:19	74	3.70	17/06/2024	12:13
		15	8.43	13/06/2024	16:36	45	4.71	13/06/2024	16:33	75	3.69	14/06/2024	09:17
		16	8.32	14/06/2024	08:21	46	4.69	13/06/2024	16:34	76	3.68	14/06/2024	09:06
		17	7.94	13/06/2024	16:37	47	4.66	14/06/2024	09:10	77	3.66	14/06/2024	09:41
		18	7.58	13/06/2024	14:59	48	4.60	13/06/2024	16:32	78	3.63	13/06/2024	11:15
		19	7.34	18/06/2024	08:26	49	4.51	18/06/2024	14:35	79	3.63	18/06/2024	11:43
		20	7.16	17/06/2024	10:58	50	4.51	18/06/2024	16:52	80	3.61	13/06/2024	16:30
		21	6.86	14/06/2024	08:51	51	4.51	17/06/2024	17:21	81	3.60	13/06/2024	16:42
		22	6.78	14/06/2024	09:08	52	4.50	14/06/2024	10:40	82	3.60	14/06/2024	11:25
		23	6.76	13/06/2024	13:44	53	4.49	18/06/2024	14:27	83	3.58	13/06/2024	15:50
		24	6.22	14/06/2024	08:45	54	4.47	14/06/2024	09:09	84	3.57	14/06/2024	09:12
		25	6.19	18/06/2024	14:31	55	4.25	13/06/2024	14:42	85	3.55	17/06/2024	09:16
		26	6.05	18/06/2024	13:53	56	4.24	13/06/2024	09:51	86	3.50	14/06/2024	08:53
		27	5.96	14/06/2024	10:10	57	4.20	12/06/2024	15:46	87	3.49	14/06/2024	11:27
		28	5.84	14/06/2024	11:36	58	4.19	13/06/2024	16:27	88	3.48	13/06/2024	14:45
		29	5.73	18/06/2024	16:41	59	4.14	13/06/2024	15:18	89	3.48	13/06/2024	16:59
		30	5.64	14/06/2024	09:11	60	4.11	14/06/2024	08:22	90	3.47	13/06/2024	15:00

### Location 3 – Time-history graph

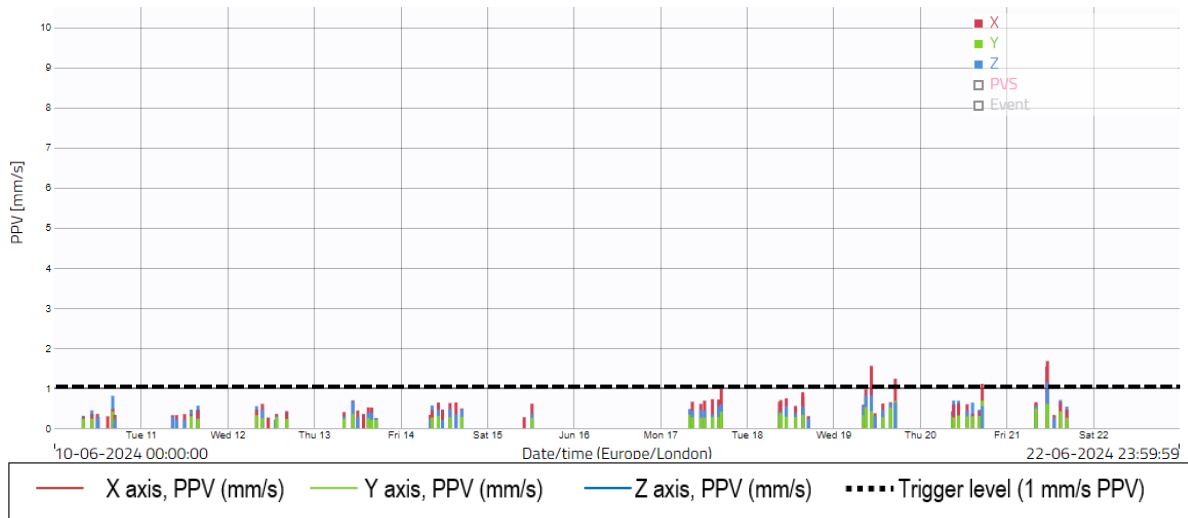


- 3.19 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report. There were 63 exceedances of the project vibration trigger level of 4.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Thursday 13<sup>th</sup> June at 15:53, with a recorded level of 13.2 mm/s PPV.
- 3.20 Email correspondence with the Site Manager confirmed that excavation was taking place within the vicinity of the monitor, to remove the existing foundations. Furthermore, a road roller was later used within close proximity to the monitor, to compact loose ground. The activity taking place at this location will continue to be monitored; however, it is our understanding that no vibration complaints were received due to the work described above.
- 3.21 Furthermore, it is understood several of the recorded exceedances were likely to have been caused onsite vehicles moving material within the vicinity of the monitor. It is possible that any of the higher vibration levels recorded over this period were also caused by vehicle movements (i.e. when a lorry drives over an uneven part of ground near the monitor, a high vibration level can be recorded).
- 3.22 However, due to the proximity between the vibration sensor and the nearest sensitive receptor, it follows that the vibration levels at this position would have been lower than shown at the sensor location.
- 3.23 Cass Allen will continue to review noise and vibration emissions and advise on any further practicable measures to minimise vibration.

Location 4 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L4	10/06/2024 to 22/06/2024	1	1.93	21/06/2024	11:22
		2	1.78	21/06/2024	11:10
Criteria mm/s PVS	Exceedances	3	1.66	19/06/2024	10:33
1.0	14	4	1.63	19/06/2024	10:39
		5	1.56	21/06/2024	11:11
		6	1.54	19/06/2024	10:38
		7	1.27	19/06/2024	17:11
		8	1.23	20/06/2024	17:17
		9	1.23	19/06/2024	09:01
		10	1.12	21/06/2024	11:13

Location 4 – Time-history graph



3.24 There was 100% data coverage at Location 4 during construction hours for the monitoring period covered by this report. There were 14 exceedances of the project vibration trigger level of 1.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Friday 21<sup>st</sup> June at 11:22, with a recorded level of 1.9 mm/s PPV. It is worth noting that the recorded exceedances at this location were relatively low (i.e. below 2.0 mm/s). This will continue to be monitored.