

June 2024

Air Quality and Dust Monitoring Monthly Report – June 2024 London Borough of Camden

gov.uk/hs2



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited, Two Snowhill Snow Hill Queensway Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS₂ Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2024, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-governmentlicence/version/2 **OCL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in the London Borough of Camden (LBC) during May 2024 and June 2024 respectively.
- 1.1.2 Figure 1 to Figure 5 in Appendix A present the current worksites together with air quality and dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from <u>www.gov.uk/government/collections/monitoring-the-environmental-</u> <u>effects-of-hs2</u>, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current worksites, as presented in Appendix A, Figure 1 to Figure 5, include:

Skanska Costain Strabag Joint Venture (SCSjv)

Adelaide Road Vent Shaft

• Limited groundworks.

Euston Scissor Cut

- Limited groundworks;
- Concrete works; and
- Materials management.

Euston Throat Retained Cut

- Limited groundworks;
- Concrete works; and
- Materials management.

Hampstead Road Bridge

• Utilities diversion works.

Euston Cavern

- Limited concrete;
- Groundworks; and
- Materials management

Mace Dragados Joint Venture (MDjv)

NTH De-mobilisation

• Building was dismantled and all cabins transported out of site.

<u>TSS</u>

- Blockwork in the back of house area.
- Gantry and handrails installation.
- Various kemwell works CMS enclosures.
- Fire stopping of doors and around various services.
- Installation of Fall Arrest System in the Tunnel Vent Rooms.
- Installation of fire doors.

Maria Fidelis building

- Completed final works at Roofing/L5 balcony levels
- Internal snagging works.

Maria Fidelis Old School

- Continue window install, all floors.
- Demolition of TEP entrance area wall and roof removal.
- Continue fire protection soffit boarding and penetrations.
- Complete roof waterproofing works.
- Continue riser works, installing lintels and pad stones.
- Erect scaffold loading bay.

<u>Utilities</u>

- TSS duct trench excavation progressing to link into both chambers with a new TSS building.
- TSS Gas & Water Main DI1000 combined trench excavation in progress MH11 to MH9.
- External Sites Hampstead Road EZ Valve excavation backfilled and ongoing X connection works; ongoing Ph1b (re)commissioning at Robert St & Cumberland Market.
- Maria Fidelis MH04 excavation, OSD and water mains install, and backfill.
- Cobourg Street MH5 1000mm and 250mm pipes install and backfill
- Thrust block in Melton St on hold now, works to start on 10th of June.

<u> ITR</u>

- Install bog mats & steel plates for crane access & lifting positioning to remove NTH cabins.
- Remove bog mats & steel sheets after crane demobilisation from site.
- Two Towers install soffit safety lighting.
- Western gardens set up for removal of kerb to be adjusted for swept path design.
- Set up HARAS fencing to cycle stands for cycle removal.

- Label & remove cycles then transport to NR storage unit location as agreed with NR.
- Site delivery of slot barriers for security fencing to be set up.
- Excavate path sections on both island areas for VCB setup as per swept path design.
- Cut out railings for pedestrian access & bypass lane to be switched when required.
- Night works road markings & hydro blasting in western gardens.
- 1.1.5 Twenty-Two (22) dust monitors are installed around these worksites, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from each dust monitor in Figure 6. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.
- 1.1.7 The trigger level for PM₁₀ concentrations of 190 μg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (October 2018)*' has been applied.
- 1.1.8 Details of the trigger alerts investigations and remediations are presented in Appendix B, Table 3.
- 1.1.9 Data capture was below 90% for multiple monitors:
 - AQ008 Experiencing intermittent air flow issues. These issues persisted following an initial site visit to fix the monitors on 11/06/2024 but were subsequently resolved during a follow up visit on 02/07/2024.
 - AQ009 Experiencing intermittent air flow issues. These issues persisted following an initial site visit to fix the monitors on 11/06/2024 but were subsequently resolved during a follow up visit on 02/07/2024.
 - AQ010 Experiencing air flow issues. The air flow error occurred on 16/06/2024 and was subsequently resolved on-site on 02/07/2024.
 - AQ012 Fault with the monitor. Subsequently repaired, followed by a service and calibration.
 - AQ021 monitor being removed for service and calibration and then reinstalled.
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) is undertaken at sixty-four (64) locations around highways within the LBC as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.11 Diffusion tube monitoring results are as provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected

results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.

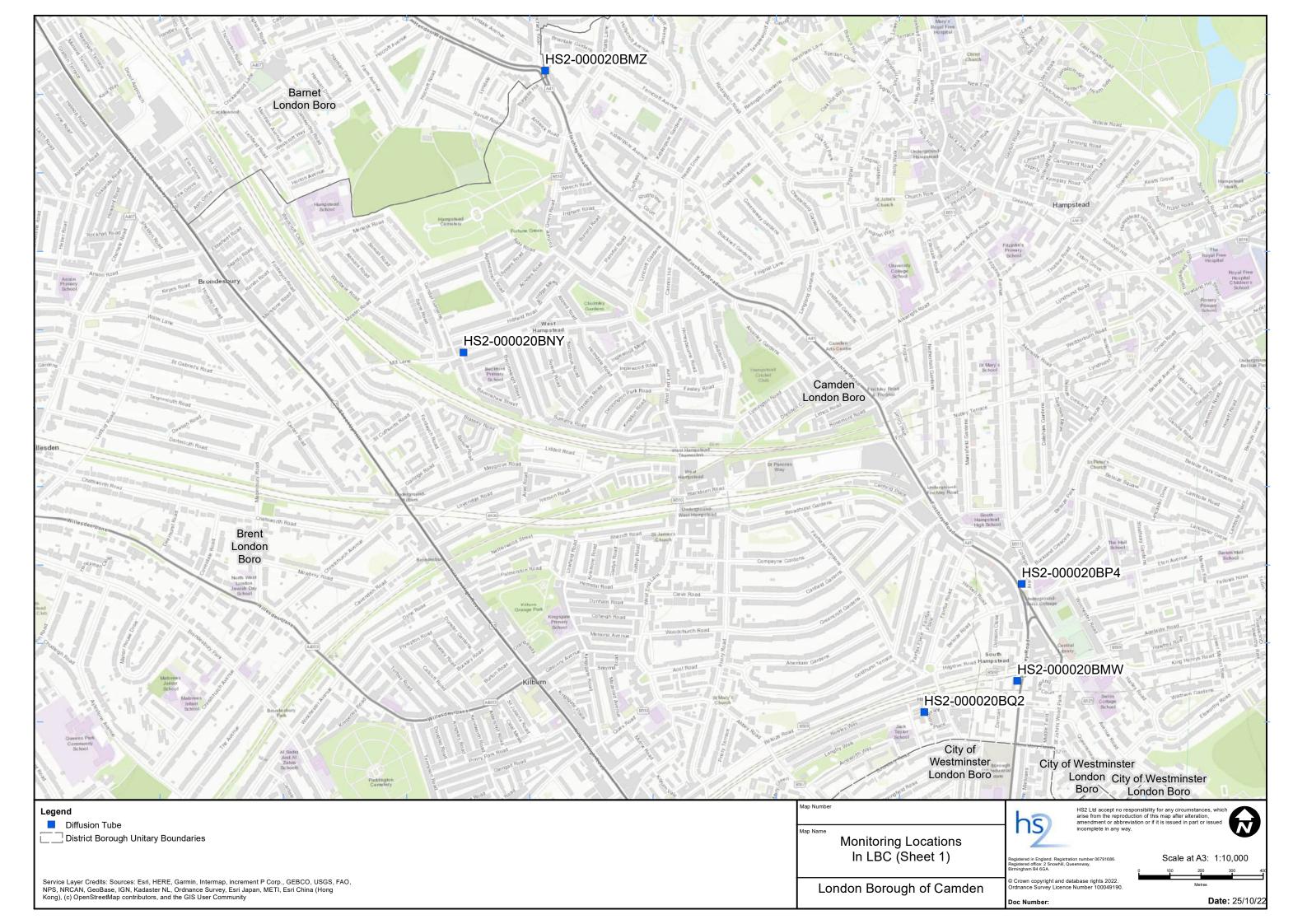
- 1.1.12 NO₂ monitoring locations and results are presented in Appendix C, Table 4, together with the 2024 running mean.
- 1.1.13 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

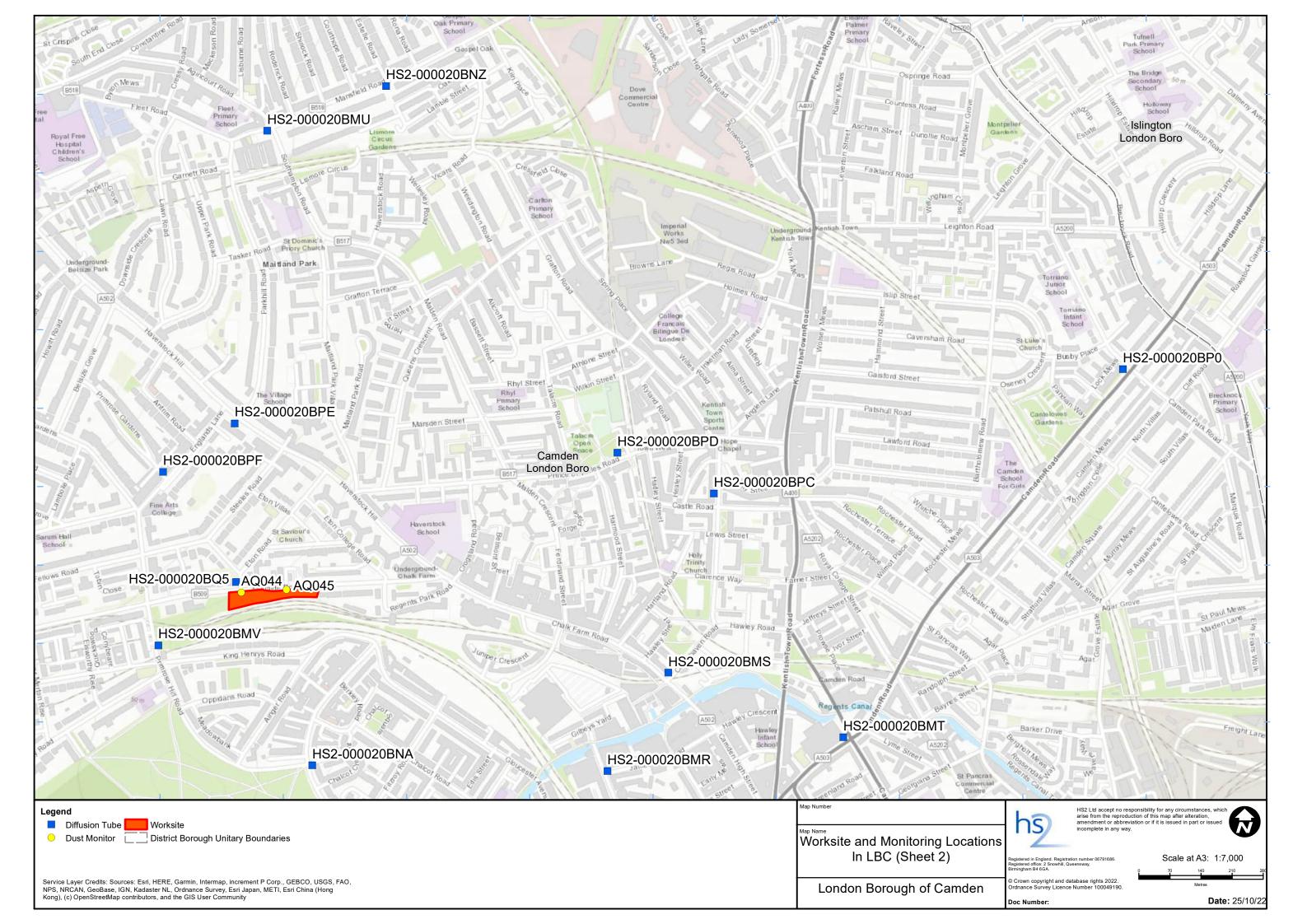
Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-24-45495-C	N/A	Contact from local authority on behalf of resident regarding dust in property via the balcony.	Dust suppression sheets in place and damping down measures also carried out. Details of the contractor's community engagement team passed to local authority to pass to resident should they wish to contact directly.
HS2-24-45500-C	N/A	Dust on windows of properties. Received from local authority.	Dust suppression sheets in place and damping down measures also carried out. Details of the contractor's community engagement team passed to local authority to pass to resident should they wish to contact directly.

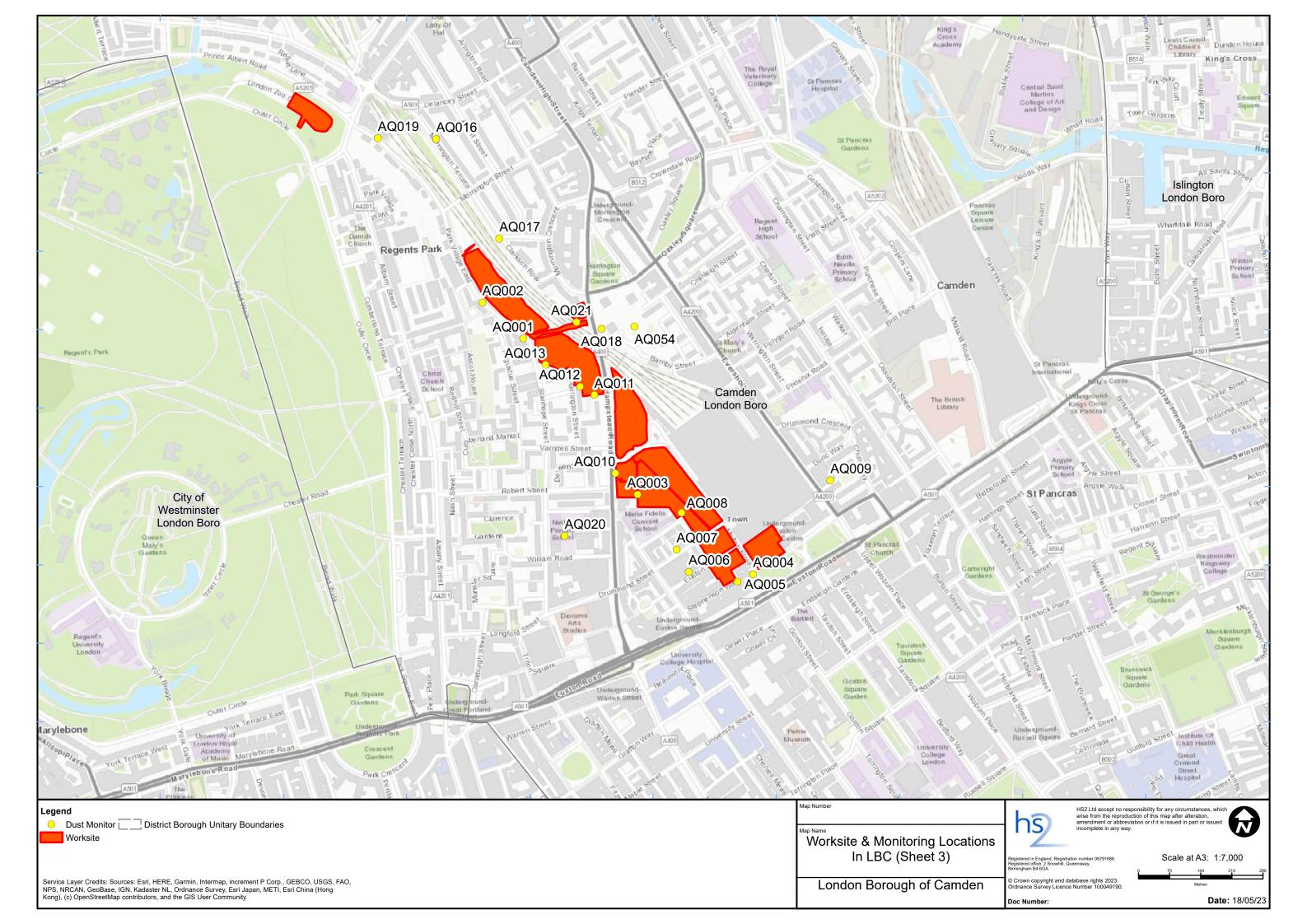
Table 1: Summary of complaints received during June 2024

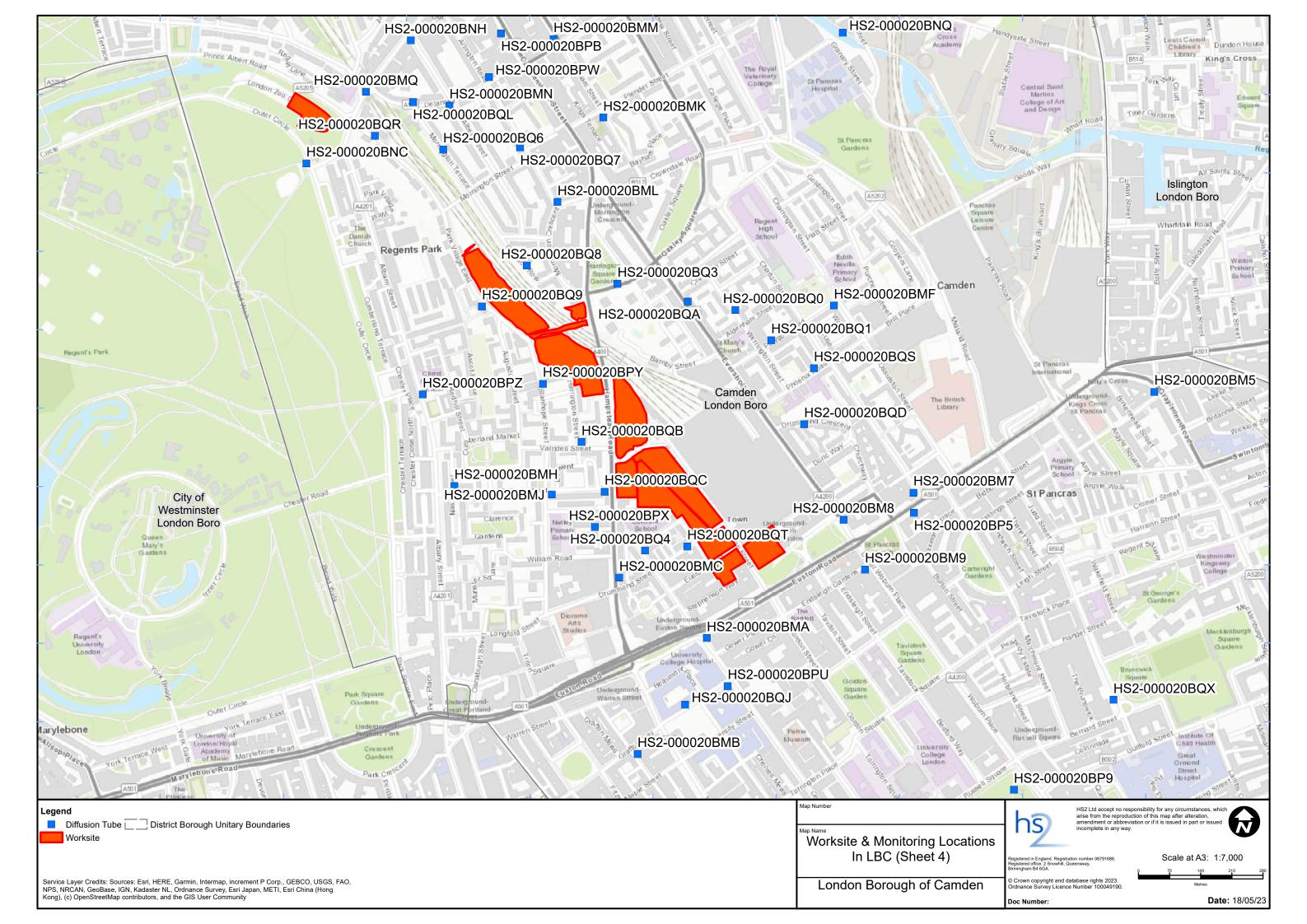
Appendix A – Worksites and Monitoring Locations

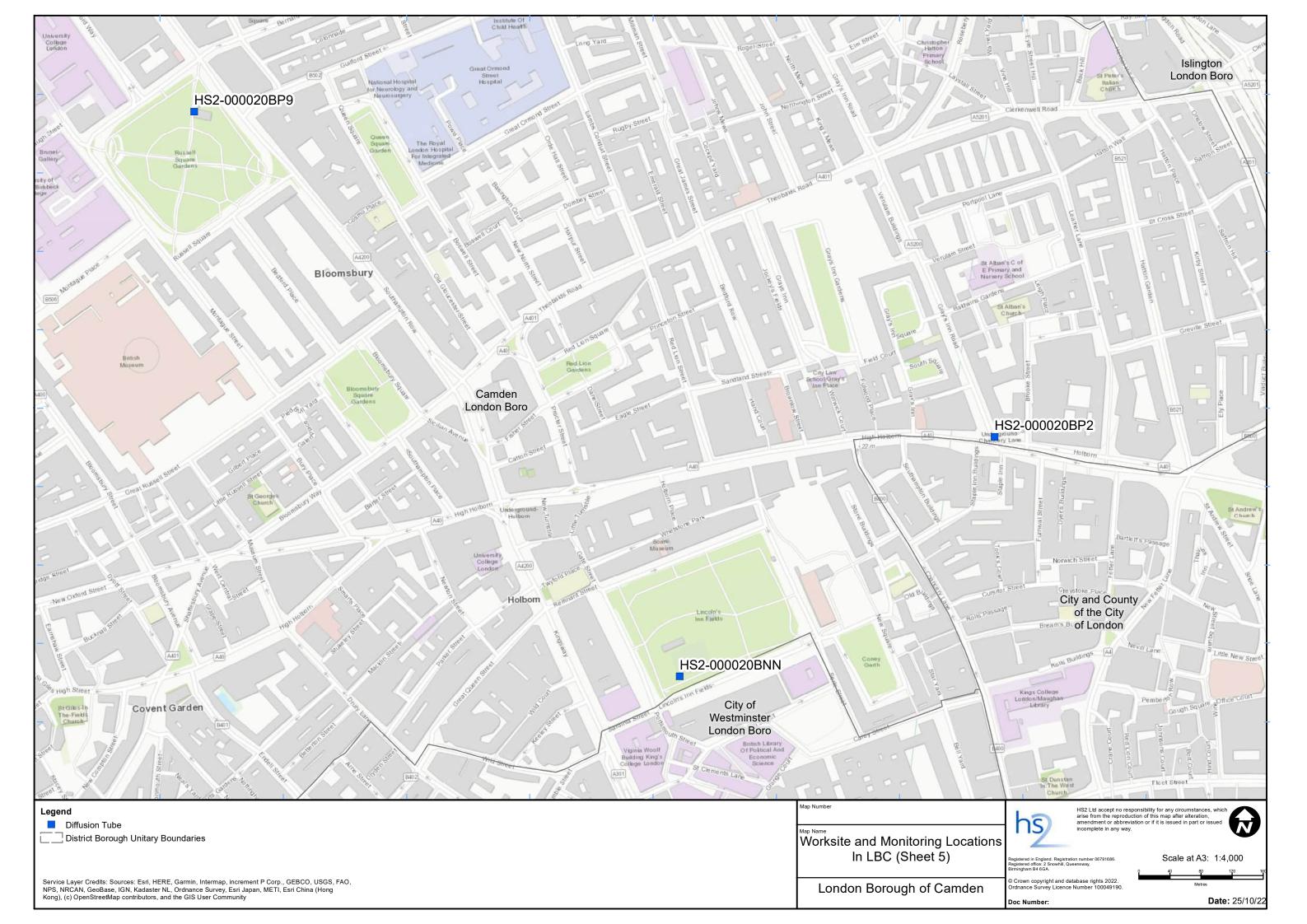
Figure 1 to Figure 5: Worksites and monitoring locations within the LBC











Appendix B – Dust Monitoring Results

Table 2: Dust Monitoring Locations and Results

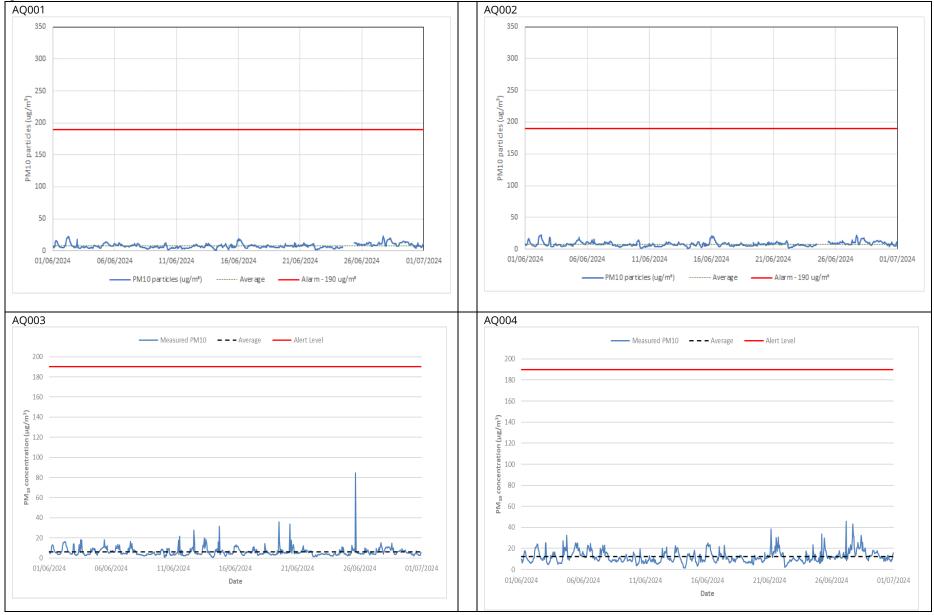
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m³)	Minimum 1- hour PM ₁₀ concentration (µg/m³)	Maximum 1- hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ001	529016, 183049	Junction of Park Village East, Stanhope Street and Granby Terrace	М	Yes	N	7.9	1.1	22.9	0	96.9
AQ002	528924, 183130	Park Village East	м	Yes	N	8.1	1.2	22.5	0	96.9
AQ003	529273, 182698	St James' Gardens	М	Yes	N/A	6.2	0.6	84.6	0	100.0
AQ004	529533, 182519	Melton Street	Н	Yes	N/A	12.2	1.5	45.9	0	100.0
AQ005	529498, 182502	Stephenson Way	Н	Yes	N/A	3.5	0.2	17.6	0	100.0
AQ006	529388, 182524	Euston Street	Н	Yes	N/A	8.7	1.2	25.4	0	100.0
AQ007	529361, 182574	Drummond Street	Н	Yes	N/A	5.2	0.6	270.0	1	99.9
AQ008	529372, 182657	Cobourg Street	Н	Yes	N/A	10.5	3.4	48.5	0	8.8
AQ009	529707, 182730	Eversholt Street	Н	Yes	N/A	9.6	2.4	33.7	0	13.1
AQ010	529223, 182746	Hampstead Road South	М	Yes	N/A	10.4	1.1	36.3	0	52.1
AQ011	529176, 182922	Hampstead Road	М	Yes	Ν	6.2	0.6	36.0	0	96.4

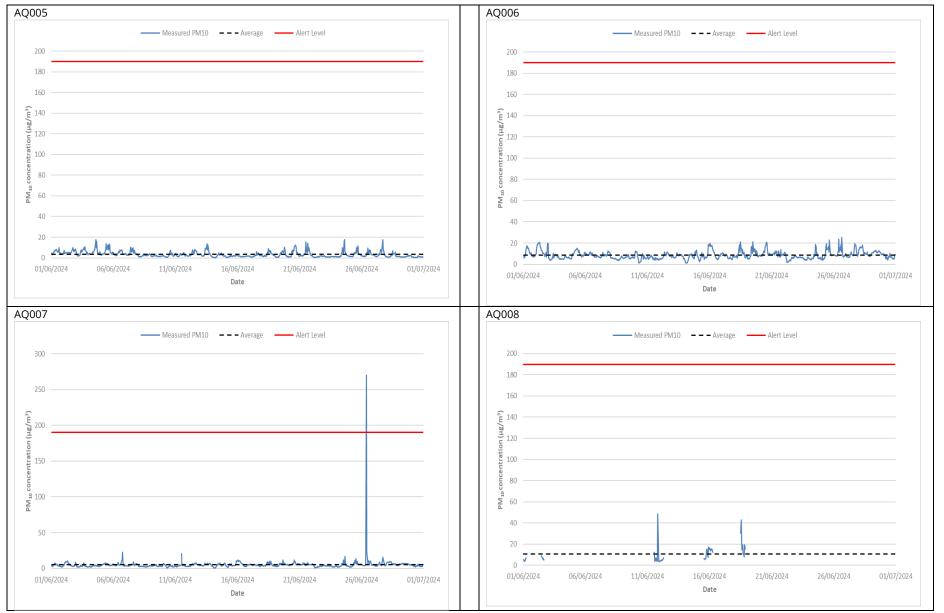
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m³)	Minimum 1- hour PM ₁₀ concentration (µg/m³)	Maximum 1- hour PM ₁₀ concentration (μg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ012	529144, 182941	Rear of Coniston House	М	Yes	Ν	10.3	1.9	128.6	0	51.9
AQ013	529066, 182990	Regents Park Estate	М	Yes	N	7.2	1.0	39.7	0	96.4
AQ016	528820, 183498	Mornington Terrace North	М	Yes	N	5.5	0.4	18.8	0	96.9
AQ017	528962, 183274	Mornington Terrace South	М	Yes	N	11.1	1.3	198.3	1	96.9
AQ018	529192, 183071	Hampstead Road North	М	Yes	Ν	9.5	1.5	32.2	0	96.9
AQ019	528689, 183500	Park Village East (North)	М	Yes	N	10.4	1.4	173.8	0	90.1
AQ020	529109, 182605	Netley School	n/a	Yes	N/A	9.5	1.4	147.9	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge	Μ	Yes	Ν	10.6	1.2	282.2	3	89.7
AQ044	527725, 184369	Adelaide Road 1	М	Yes	N	2.6	0.1	11.0	0	90.8
AQ045	527826, 184375	Adelaide Road 2	М	Yes	Ν	6.0	1.0	21.9	0	100.0
AQ054	529266, 183076	Ampthill Estate, Hampstead Road	М	Yes	Ν	8.1	1.0	22.5	0	96.7

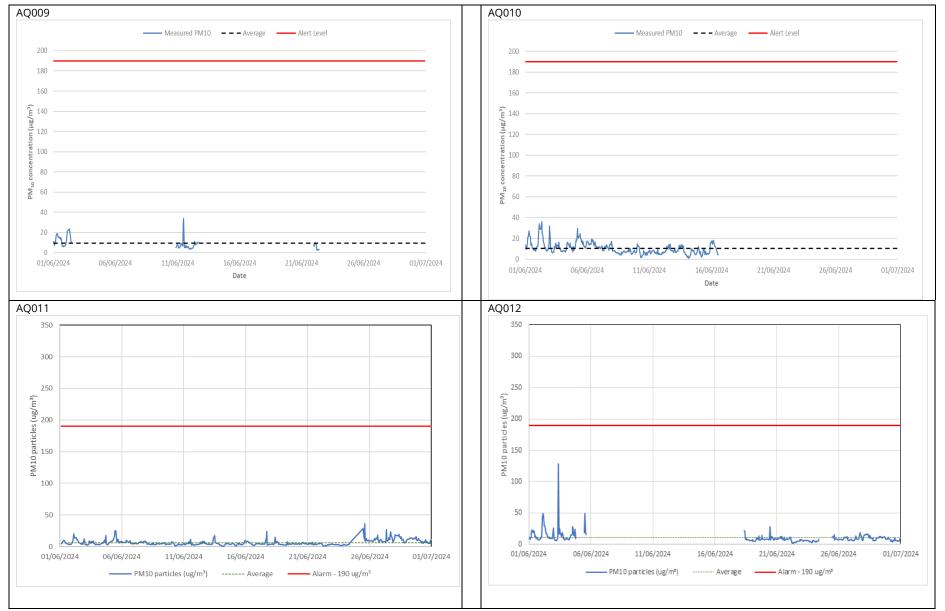
Table 3: Summary of exceedances during period (June 2024)

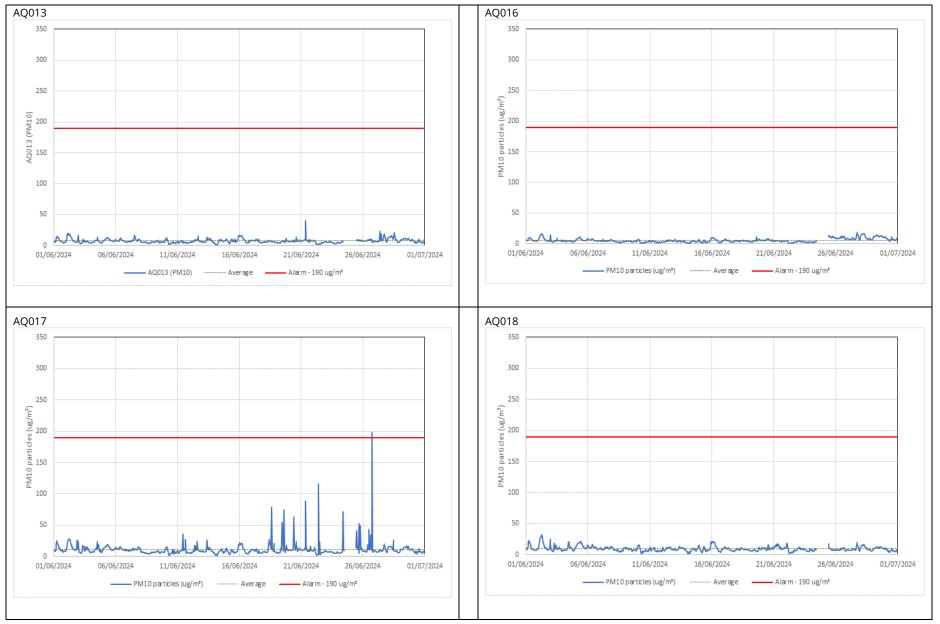
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ007	26/06/2024 08:01 – 09:00; 270.0 μg/m ³	This exceedance is thought to be a result of TfL works which were being undertaken on a nearby substation. These works were unrelated to HS2.	MDJV will continue to ensure all the activities being undertaken have appropriate mitigation measures applied (in line with the CoCP). Any further exceedances at this monitor will continue to be investigated to confirm whether the exceedance is caused by HS2 activities.
AQ017	26/06/2024 17:01 – 18:00; 198.3 μg/m ³	At the time of the exceedance the site was shut and there were no dusty site works taking place near the monitoring location. This trigger was the day after the monitor had been reinstalled following service and calibration (as part calibration of all the network over 2 weeks). No notable HS2 works, or Network Rail works on the Mornington Crescent side of the tracks were taking place at that time of the morning. It is considered trigger was false due to a piece of loose debris in the inlet following cleaning.	N/A
AQ021	02/06/2024 01:01 – 02:00; 254.8 μg/m ³ 02:01 – 03:00; 282.2 μg/m ³ 03:01 – 04:00; 224.7 μg/m ³	At the time (early hours of the morning) of the exceedance the site was shut and there were no site works taking place near the monitoring location. The triggers (x3) from AQ021 at the junction GTB/HRB were on Sunday early hours between 01:00-04:00am and not associated with HS2 works - no out hours of works. Works were carried out in the area during the normal working hours during the weeks before and after but nothing extensive or dusty. The dry hot weather started that weekend (after weeks of wet and damp) so it is considered the triggers may have been loose debris in the inlet being measured. No other elevated levels were recorded during the working week with the subsequent dry hot weather.	The monitor was serviced and calibrated late June.

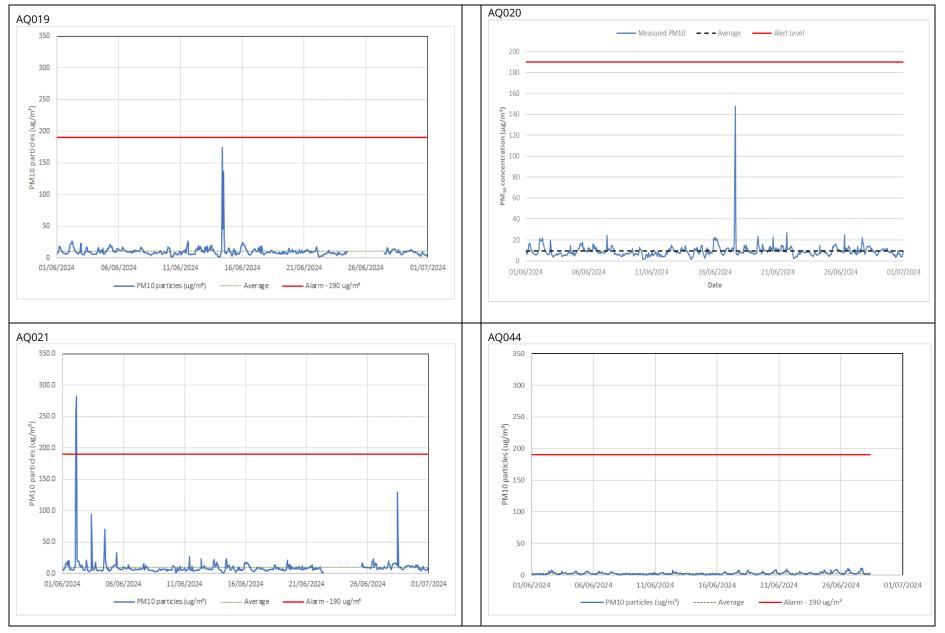
Figure 6: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

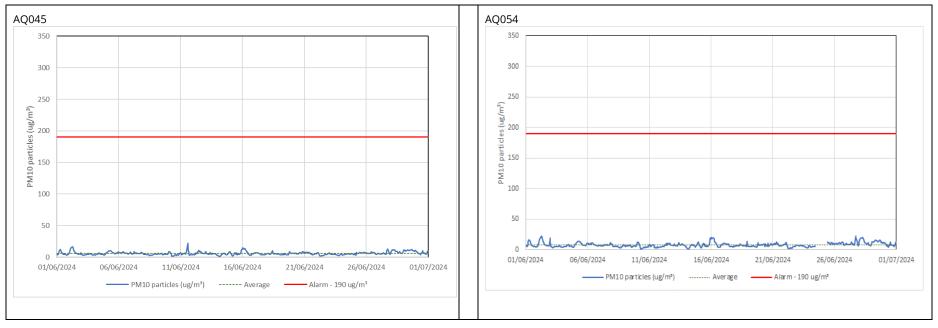












Appendix C – Air Quality Monitoring Results

Table 4: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2024 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	44	43	Tube Missing	Tube Missing	26								38
HS2- 000020BM7	Chalton Street	529894, 182702	Tube Missing	45	42	31	38								39
HS2- 000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	Tube Missing	39	35	31	46								38
HS2- 000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	44	Tube Missing	Tube Missing	Tube Missing	44								44
HS2- 000020BMA	Junction of Euston Road and Gower Street	529429, 182375	56	50	37	Tube Missing	Tube Missing								48
HS2- 000020BMB	Whitfield Street	529273, 182114	39	35	23	23	30								30
HS2- 000020BMC	Hampstead Road	529232, 182511	55	62	57	48	54								55
HS2- 000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	32	27	29	Tube Missing	24								28
HS2- 000020BMH	Nash Street	528861, 182717	34	27	18	18	Tube Missing								24

¹ Note: to aid interpretation and conform with best practice, the monthly measurements in this table are reported rounded to the nearest whole number. The annual mean presented here is calculated based on laboratory data to 4 significant figures, rounded to a whole number, and therefore may differ slightly to a mean derived from averaging the rounded monthly measurements in the table.

² The annual mean for diffusion tubes presented in the table above still require various analysis and adjustments to be undertaken before comparison to the Air Quality Objectives. The final corrected annual mean will be presented in the HS2 Annual Air Quality Report.

Monitoring	Location	Coordinates	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
Site ID	description	(X, Y)	,					,	,						
HS2- 000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	31	31	27	19	25								26
HS2- 000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	45	42	37	32	38								39
HS2- 000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	36	30	25	20	23								27
HS2- 000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	39	Tube Missing	Tube Missing	Tube Missing	41								40
HS2- 000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	34	32	29	23	Tube Missing								29
HS2- 000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	38	36	39	20	33								33
HS2- 000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	30	28	21	22	23								25
HS2- 000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	43	41	Tube Missing	Tube Missing	40								41
HS2- 000020BMT	Junction of Camden Road and Camden Street	529079, 184043	46	41	37	31	37								39
HS2- 000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	40	30	34	27	32								32
HS2- 000020BMV	Primrose Hill Road	527538, 184250	Tube Missing	31	28	21	24								26

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	43	45	39	28	41								39
HS2- 000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	54	54	53	42	57								52
HS2- 000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	29	29	22	18	20								24
HS2- 000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	29	22	19	14	20								21
HS2- 000020BNH	Junction of Parkway and Albert Street	528763, 183720	33	30	24	23	27								27
HS2- 000020BNN	Lincoln's Inn Fields	530744, 181308	23	33	30	21	24								26
HS2- 000020BNQ	Camley Street	529735, 183737	38	36	21	23	Tube Missing								29
HS2- 000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	42	39	29	29	Tube Missing								35
HS2- 000020BNZ	Mansfield Road	528050, 185508	35	31	23	23	Tube Missing								28
HS2- 000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	45	51	40	35	40								42
HS2- 000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	36	35	32	25	36								33
HS2- 000020BPB	Camden High Street	528966, 183735	59	52	48	Tube Missing	58								54
HS2- 000020BPC	Castlehaven Road	528788, 184591	29	27	23	Tube Missing	22								25

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BPD	Prince of Wales Road	528571, 184683	26	26	21	16	20								22
HS2- 000020BPE	Haverstock Hill	527710, 184749	40	39	29	23	28								32
HS2- 000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	41	37	21	22	27								30
HS2- 000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	43	42	38	Tube Missing	35								39
HS2- 000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	27	28	30	23	29								27
HS2- 000020BPX	Netley Street	529177, 182625	36	30	31	22	20								28
HS2- 000020BPY	Stanhope Street	529060, 182947	Tube Missing	26	22	14	20								21
HS2- 000020BPZ	Albany Street	528790, 182923	34	25	26	18	26								26
HS2- 000020BQ0	Werrington Street	529493, 183113	35	26	27	18	22								26
HS2- 000020BQ1	Polygon Road	529574, 183045	27	33	Tube Missing	Tube Missing	Tube Missing								30
HS2- 000020BQ2	Alexandra Place	526320, 183980	29	29	Tube Missing	15	20								23
HS2- 000020BQ3	Harrington Square	529228, 183172	43	37	34	28	32								35
HS2- 000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	33	33	28	21	17								26
HS2- 000020BQ5	Adelaide Road	527713, 184392	32	34	25	19	25								27
HS2- 000020BQ6	Mornington Terrace	528836, 183474	30	26	23	8	21								21

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BQ7	Arlington Road	529009, 183479	27	26	26	14	20								23
HS2- 000020BQ8	Clarkson Row	529024, 183213	32	26	28	Tube Missing	20								27
HS2- 000020BQ9	Park Village East	528923, 183121	30	24	23	15	19								22
HS2- 000020BQA	Eversholt Street	529386, 183132	43	28	33	26	Tube Missing								32
HS2- 000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	32	28	24	17	21								24
HS2- 000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	40	35	30	23	32								32
HS2- 000020BQD	Drummond Crescent	529648, 182856	39	36	38	22	28								33
HS2- 000020BQJ	Grafton Way	529380, 182225	40	47	32	30	24								35
HS2- 000020BQL	Delancey Street	528768, 183581	36	29	35	Tube Missing	32								33
HS2- 000020BQR	Lamp post on Park Village East	528682, 183505	33	22	23	17	Tube Missing								23
HS2- 000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	34	32	26	26	21								28
HS2- 000020BQT	Drummond Street	529385, 182581	27	33	Tube Missing	Tube Missing	22								27
HS2- 000020BQX	Lamp post on Brunswick Square	530344, 182236	36	39	31	31	28								33
HS2- 000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	49	40	41	37	45								42

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹²
HS2- 000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	57	Tube Missing	Tube Missing	Tube Missing	58								58
HS2- 000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	34	30	Tube Missing	24	26								28