

August 2023

Air Quality and Dust Monitoring Monthly Report – August 2023 London Borough of Camden

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

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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 July 2023 and August 2023 respectively.
- 1.1.2 Figure 1 to Figure 5 in Appendix A indicate the current worksites together with air quality and dust monitoring locations for August 2023.
- 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 phase of works commenced within the LBC in December 2017 and is expected to be completed by 2025. The current worksites, as presented in Figure 1 to Figure 5, include:

Skanska Costain Strabag Joint Venture (SCSjv)

- Adelaide Road Vent Shaft piling operations and groundworks;
- Euston Scissor Cut groundworks, piling operations and materials management;
- Euston Throat Retained Cut groundworks, piling operations and materials management;
- Hampstead Road Bridge –Utilities diversion works; and
- Euston Cavern groundworks and materials management.

Mace Dragados Joint Venture (MDjv)

<u>Utilities (Barhale)</u>

- Completed MH10A; commenced construction of Caisson MH11 and re-excavation MH10 at TSS site. Main site compound was extended; and
- UKPN/Cadent services identification and tap/cap works at the Main site.

<u>ITR</u>

- Ongoing canopies roof trim soffit install;
- Snagging works on the rain screens;
- CCTV/wayfinding signage fixing and commissioning;
- Euston Road signal install; and
- Euston Grove bus stop kerb & pavement improvement works.

<u>TSS</u>

- Installation of liner wall brackets on B1,B2,B3;
- Installation of comms and lighting trunking in cable tunnel;
- Installation of hydrant pipe in B3-07 and B3-01;
- LU meter room (Gf-05) full containment install;
- UKPN pulled cable into same room;
- Transfer of control to NGB for that room;
- Ductwork install in B1-01/B1-02;
- Brackets and CMS install in the cable adit (BoH);
- All internal blockwork completed;
- Flexible walls installed at GF and LU Meter Room BIU with permanent fire door;
- Screed GF, L1, L2 75% Complete;
- Lifting beam installed B2, GF;
- Lifting scheme extended to whole box; and
- Back of House demolition commenced.

<u> Maria Fidelis - CSC</u>

- MEP 2nd fix;
- Start installing internal doors;
- Continue plasterboard install;
- Start ceiling grid install;
- Cladding panel install; and
- Start carpet & vinyl flooring install.

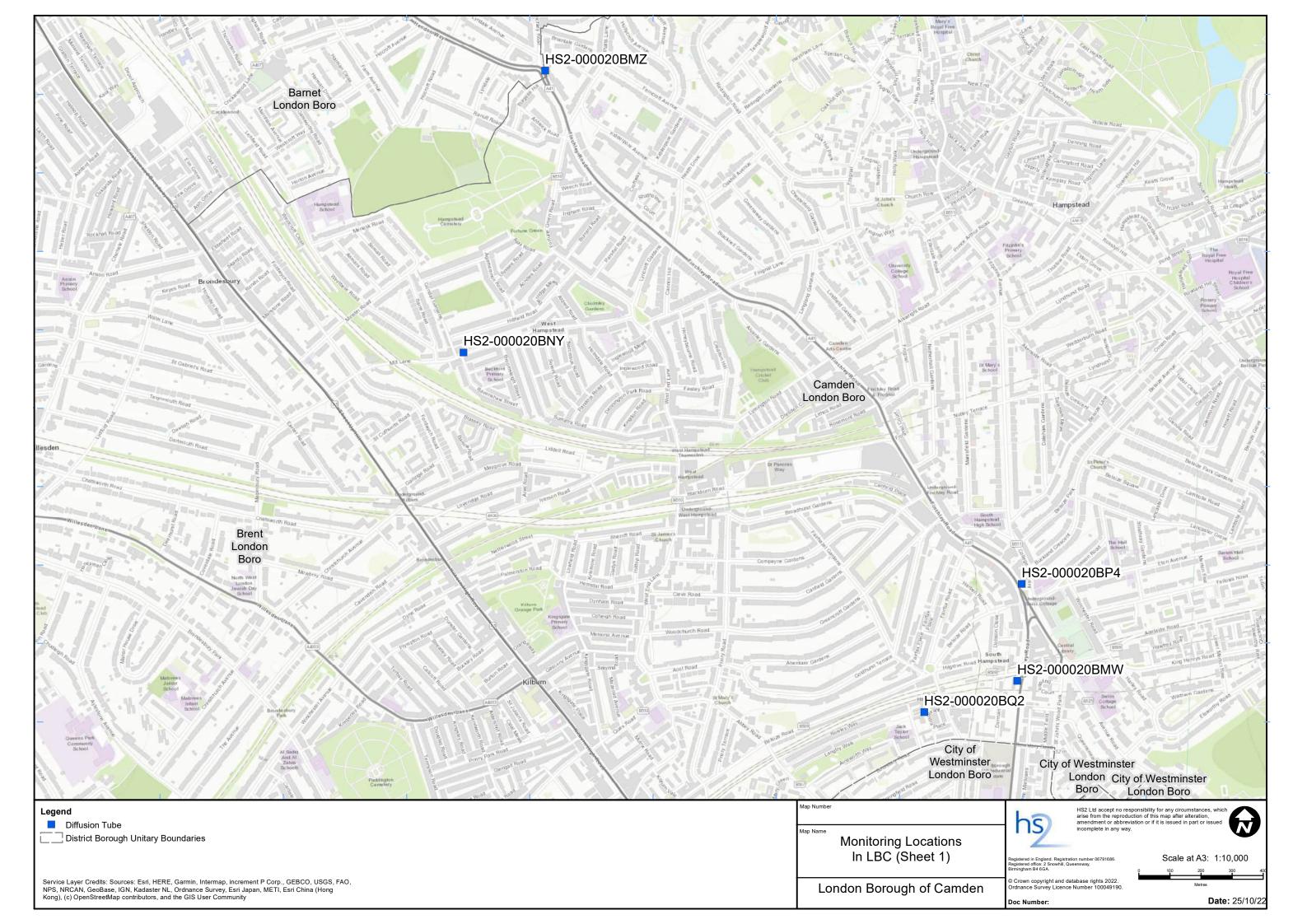
Maria Fidelis - Welfare Accommodation

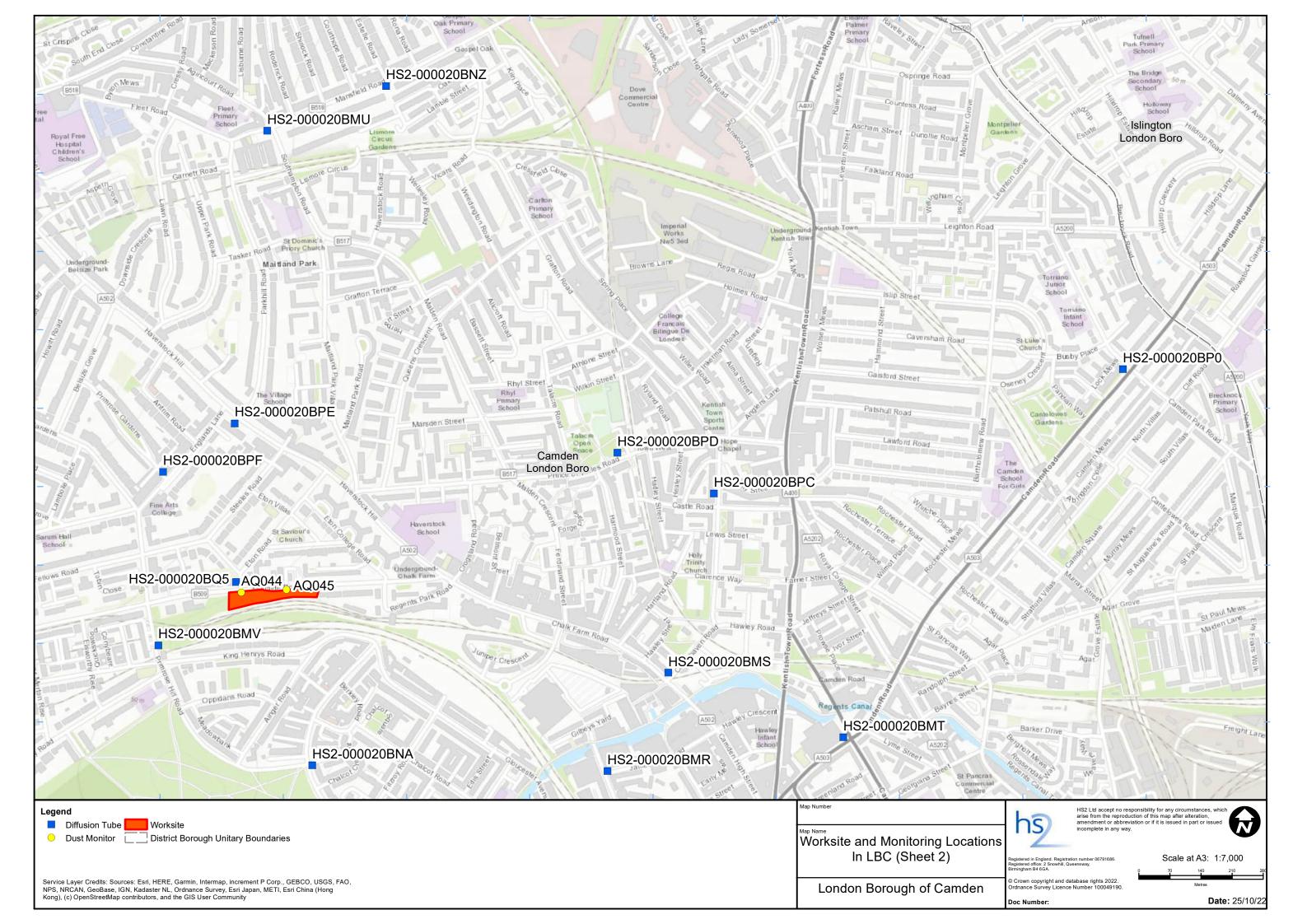
- Continue MEP install L1-L4;
- Continue plasterboard install L1-L5;
- Complete bigfoot install on roof; and
- Start carpet & vinyl flooring install L1 & L2.
- 1.1.5 Twenty- Four (24) dust monitors are installed around worksites, where works are underway. These sites returned a medium or high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, 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.

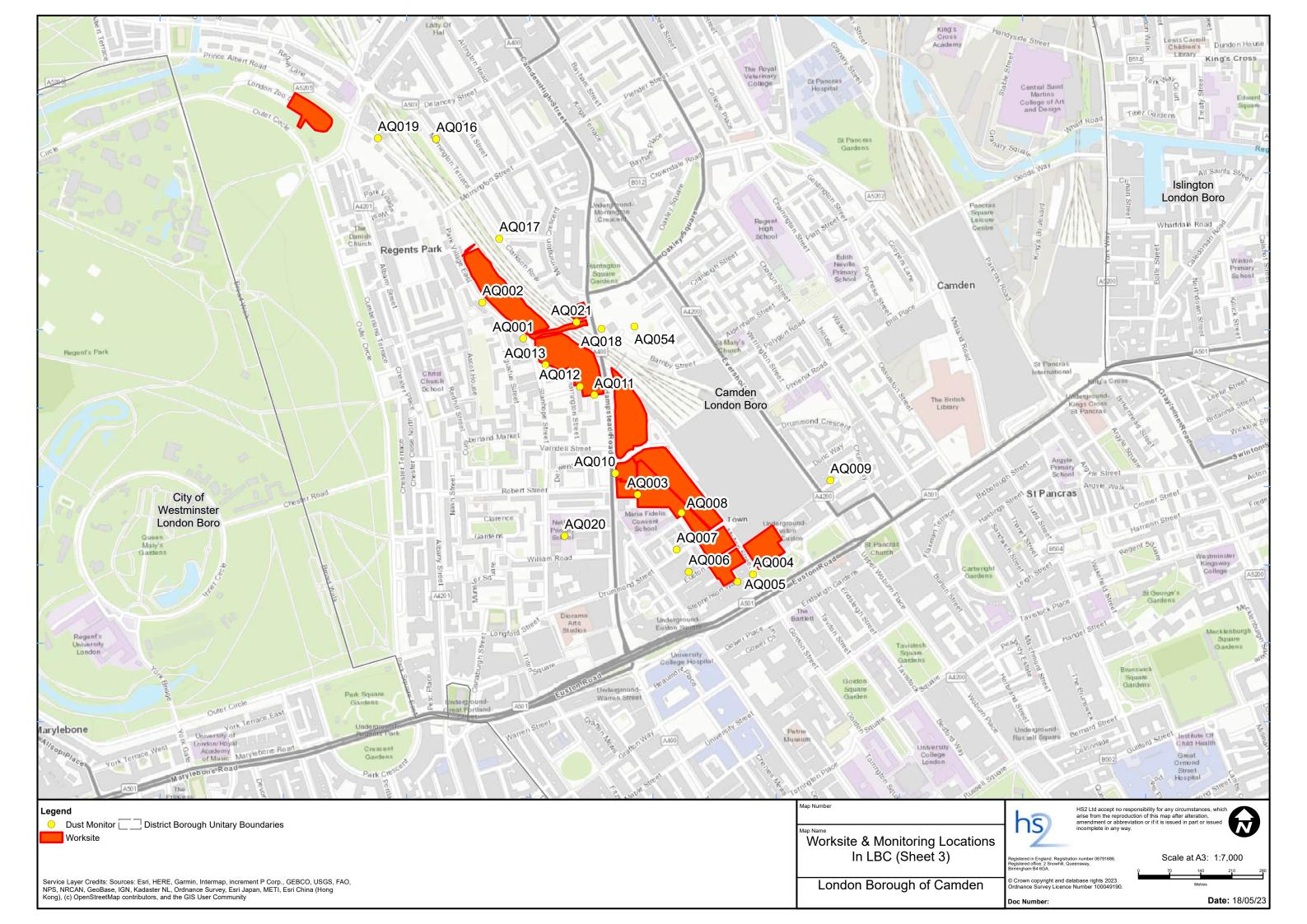
- 1.1.7 The trigger level for PM₁₀ concentrations of 190 μg/m³, over a 1-hour period, in accordance with the updated guidance document 'Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (October 2018)' has been applied.
- 1.1.8 Dust trigger alerts were recorded during the monitoring period (August 2023) and are reported in Appendix B, Table 2.
- 1.1.9 Data capture for monitor AQ054 was below 90% due to power loss to the CCTV column on which the monitor is mounted, currently under investigation. Data capture for monitor AQ002 was below 90% due to power loss form the street lighting column on which it is mounted, currently under investigation. Data capture for monitor AQ021 was below 90% due to power loss which was restored followed by a fault to the monitor which was subsequently repaired. Data capture for monitor AQ013 was below 90% due to a fault with the monitor which was subsequently repaired.
- 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 August 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 3, together with the 2023 running mean.
- 1.1.13 There were no (0) complaints received during this reporting period (August 2023).

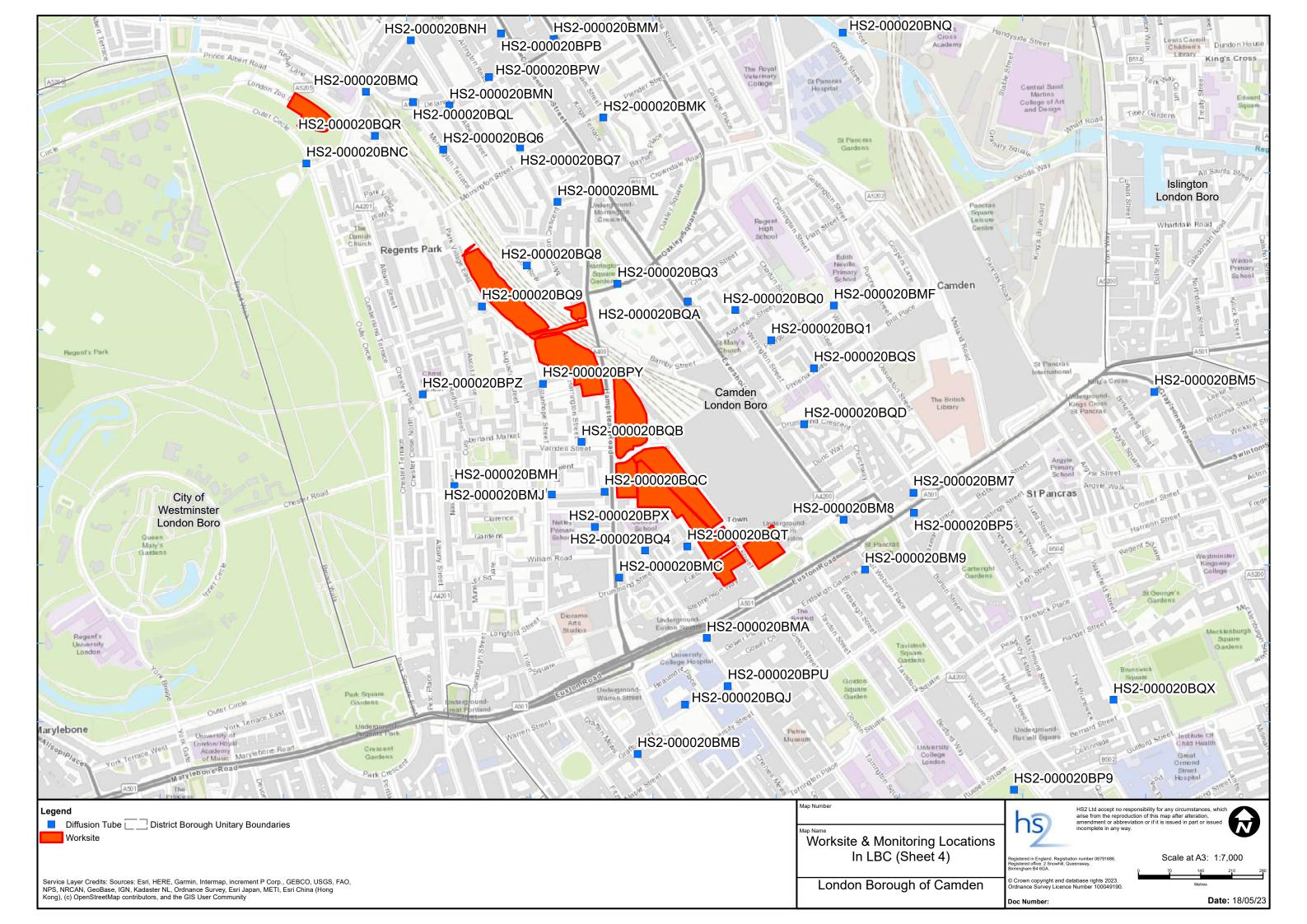
Appendix A – Worksites and Monitoring Locations

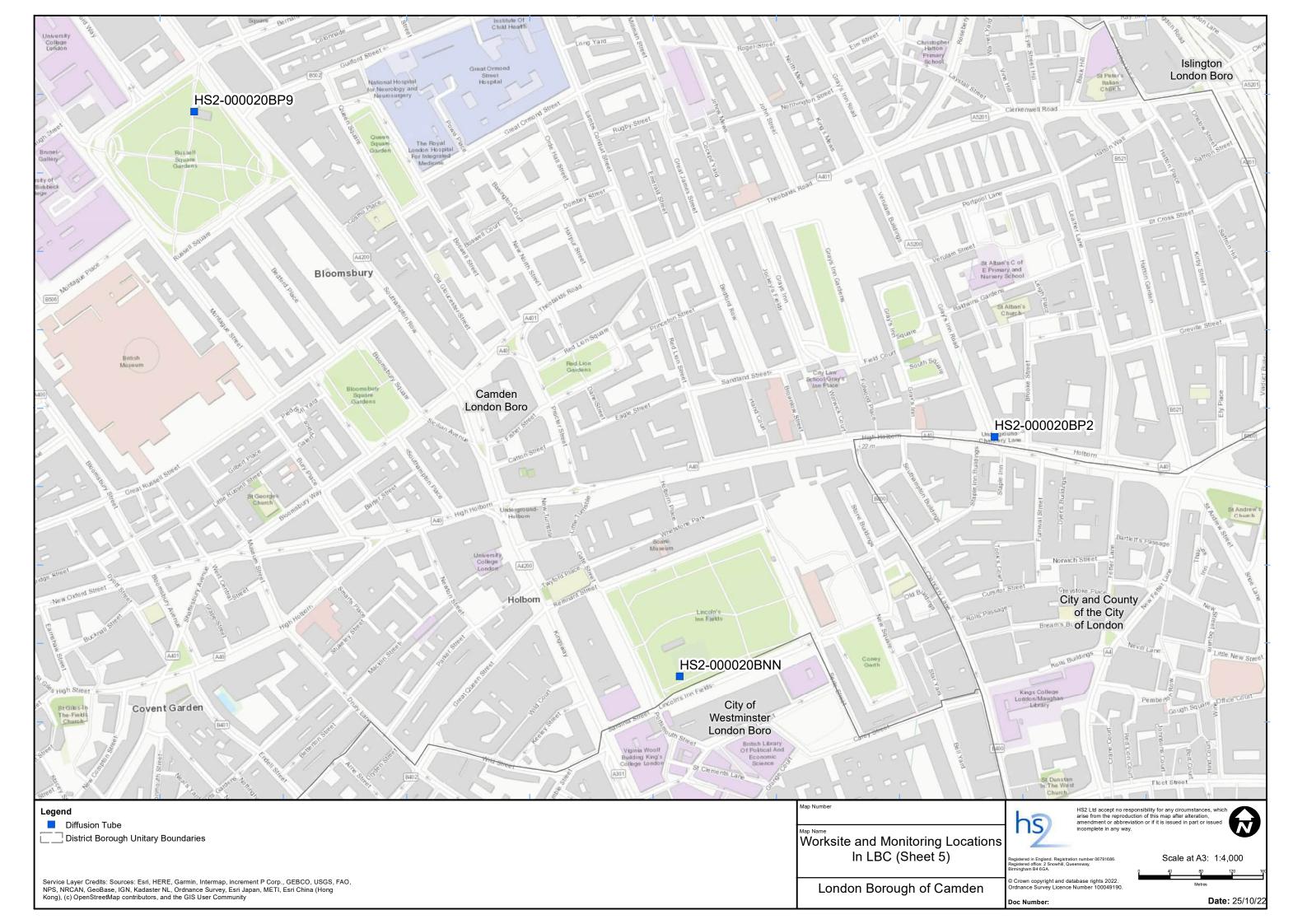
Figure 1 to Figure 5: Worksites and monitoring locations within the LBC











Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and August 2023 Results

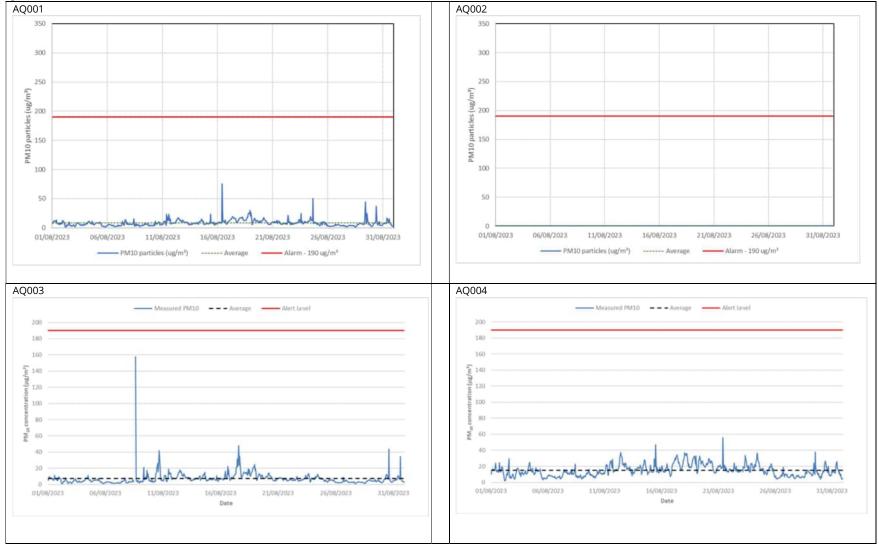
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m³)	Minimum 1- hour PM ₁₀ concentration (µg/m³)	Maximum 1- hour PM ₁₀ concentration (µg/m ³)	Number 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	8.3	1.4	75.5	0	100.0
AQ002	528924, 183130	Park Village East	М	Yes	N	No data	No data	No data	No data	No data
AQ003	529273, 182698	St James' Gardens	М	Yes	N/A	7.2	1.0	158.2	0	99.6
AQ004	529533, 182519	Melton Street	н	Yes	N/A	15.0	2.3	56.0	0	100.0
AQ005	529498, 182502	Stephenson Way	н	Yes	N/A	9.4	1.2	119.0	0	100.0
AQ006	529388, 182524	Euston Street	н	Yes	N/A	13.5	2.3	125.5	0	100.0
AQ007	529361, 182574	Drummond Street	н	Yes	N/A	3.6	0.5	10.2	0	100.0
AQ008	529372, 182657	Cobourg Street	н	Yes	N/A	4.2	0.3	17.4	0	99.7
AQ009	529707, 182730	Eversholt Street	н	Yes	N/A	10.4	1.7	394.0	2	99.7
AQ010	529223, 182746	Hampstead Road South	м	Yes	N/A	10.1	1.7	37.4	0	99.6
AQ011	529176, 182922	Hampstead Road	М	Yes	N	13.3	1.7	62.0	0	100.0

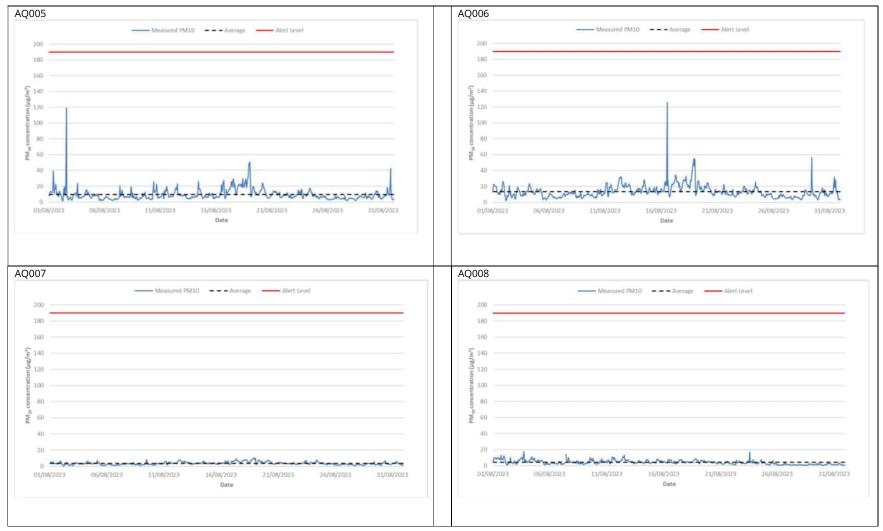
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m³)	Minimum 1- hour PM ₁₀ concentration (µg/m ³)	Maximum 1- hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
AQ012	529144, 182941	Rear of Coniston House	м	Yes	N	9.3	1.7	32.5	0	100.0
AQ013	529066, 182990	Regents Park Estate	м	Yes	N	7.4	1.3	53.4	0	80.2
AQ016	528820, 183498	Mornington Terrace North	м	Yes	N	5.1	0.8	17.2	0	100.0
AQ017	528962, 183274	Mornington Terrace South	м	Yes	N	6.5	1.5	26.2	0	100.0
AQ018	529192, 183071	Hampstead Road North	м	Yes	N	7.3	1.3	28.2	0	100.0
AQ019	528689 , 183500	Park Village East (North)	м	Yes	N	7.8	1.5	36.6	0	100.0
AQ020	529109, 182605	Netley School	n/a	Yes	N/A	2.6	0.1	23.7	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge	М	Yes	Ν	7.7	1.9	34.8	0	76.3
AQ044	527725 , 184369	Adelaide Road 1	М	Yes	N	17.6	2.4	231.5	2	100.0
AQ045	527826 , 184375	Adelaide Road 2	м	Yes	N	9.4	1.4	40.8	0	100.0
AQ054	529266, 183076	Ampthill Estate, Hampstead Road	М	Yes	Ν	No data	No data	No data	No data	No data

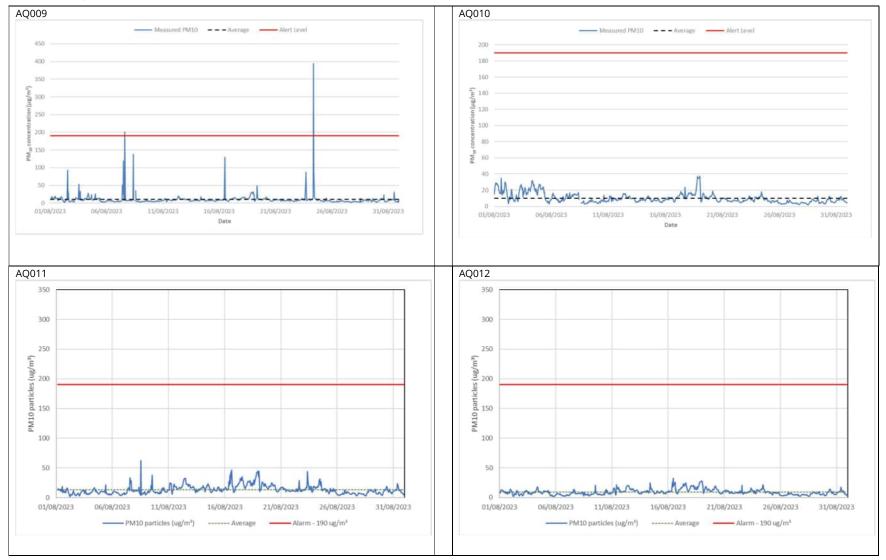
Table 3: Summary of exceedances of trigger level in August 2023

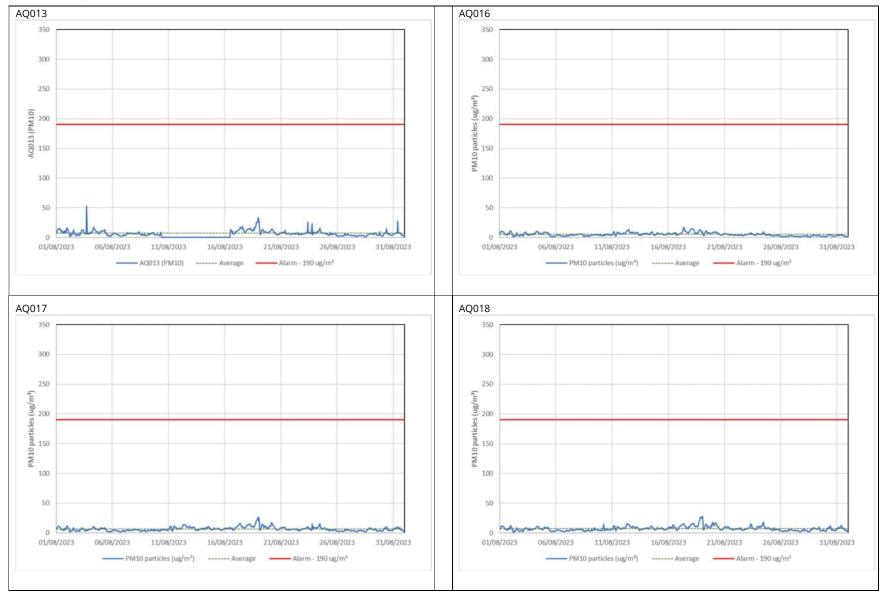
Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
AQ009	07/08/2023 14:01 – 15:00; 201.0 μg/m ³ 24/08/2023 08:01 – 09:00; 394.0 μg/m ³	The exceedances are thought to be the result of demolition/ refurbishment works being undertaken at Euston House, which is located adjacent to the monitor. The works at Euston House are 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. MDjv has also spoken with the contractor at Euston House.
AQ044	10/08/2023 15:01 – 16:00; 231.5 μg/m³ 17:01 – 18:00; 210.5 μg/m³	At the time of trigger alert from dust monitor (AQ044), which is located on the site hoarding towards the west end of the Adelaide Road Vent Shaft site, delivery of aggregate and subsequent backfilling of an excavation was being carried out. Whilst a jet wash was deployed for dust suppression and being used at the time, it was considered insufficient to prevent all the dust emissions. The other monitor (AQ045) towards the central/eastern end of the site measured no elevated levels over the same period and it is thought the elevated dust levels were limited to the immediate area of work	Further delivery and backfilling of aggregate is anticipated over the coming weeks. Additional dust suppression will be made available and the activity will be closely managed and monitored.

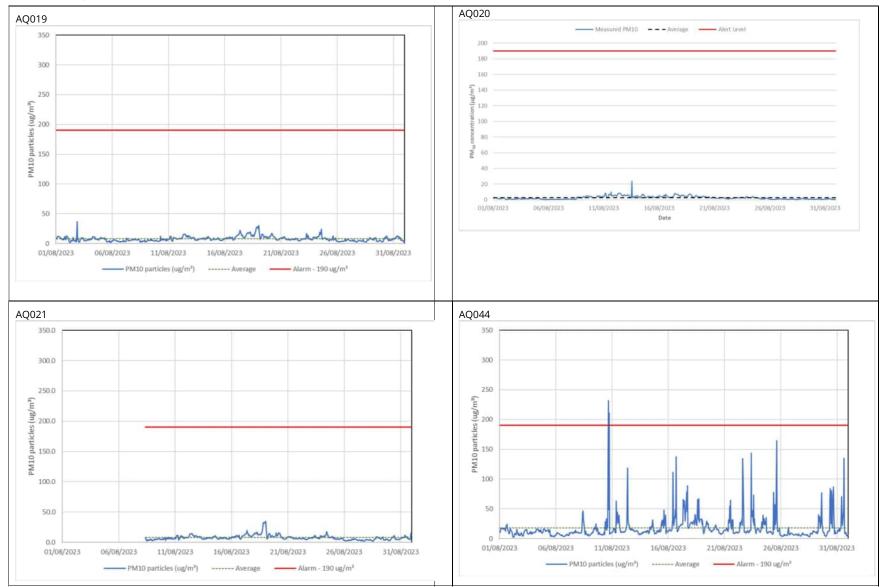
Figure 4: Construction duct	1 hour moon indicative DM	concentration for dust monitors
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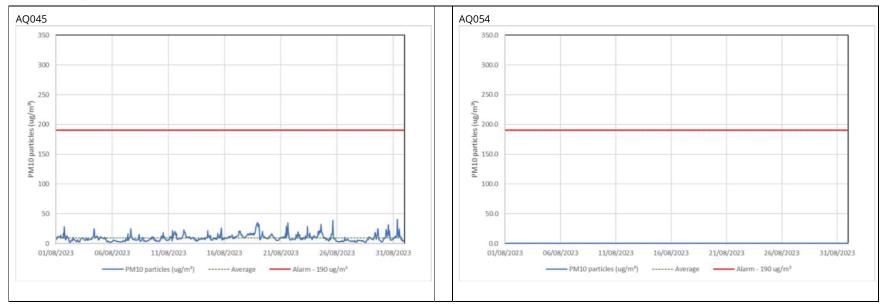












Appendix C – Air Quality Monitoring Results

Table 3: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2023 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2- 000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	45	46	37	40	36	36	30						39
HS2- 000020BM7	Chalton Street	529894, 182702	50	53	48	41	36	30	33						42
HS2- 000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	48	62	41	Tube Missing	42	43	38						45
HS2- 000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	43	50	25	47	49	46	31						42
HS2- 000020BMA	Junction of Euston Road and Gower Street	529429, 182375	51	59	37	Tube Missing	37	34	34						42
HS2- 000020BMB	Whitfield Street	529273, 182114	38	43	33	33	29	30	21						32
HS2- 000020BMC	Hampstead Road	529232, 182511	56	69	63	52	52	53	47						56
HS2- 000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	36	34	24	28	30	Tube Missing	18						28
HS2- 000020BMH	Nash Street	528861, 182717	37	30	24	24	21	20	21						25

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.

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2- 000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	37	37	14	29	25	25	20						27
HS2- 000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	47	52	38	40	38	38	34						41
HS2- 000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	35	37	Tube Missing	26	25	25	18						28
HS2- 000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	57	59	35	39	32	48	38						44
HS2- 000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	41	46	23	24	21	24	25						29
HS2- 000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	42	42	30	Tube Missing	35	34	26						35
HS2- 000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	32	38	27	28	25	24	18						27
HS2- 000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	43	45	36	35	38	35	30						38
HS2- 000020BMT	Junction of Camden Road and Camden Street	529079, 184043	48	50	31	38	40	34	28						39
HS2- 000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	44	45	38	36	33	35	27						37
HS2- 000020BMV	Primrose Hill Road	527538, 184250	35	44	29	25	25	25	17						28

Monitoring	Location	Coordinates	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
Site ID	description	(X, Y)	-				-	-	-	Ŭ					
HS2- 000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	Tube Missing	50	33	41	42	43	34						40
HS2- 000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	71	67	53	62	53	60	40						58
HS2- 000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	36	37	25	25	19	19	16						25
HS2- 000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	27	27	21	21	21	21	Tube Missing						23
HS2- 000020BNH	Junction of Parkway and Albert Street	528763, 183720	32	40	30	29	27	Tube Missing	20						30
HS2- 000020BNN	Lincoln's Inn Fields	530744, 181308	36	36	24	Tube Missing	21	20	23						27
HS2- 000020BNQ	Camley Street	529735, 183737	25	41	26	29	24	23	21						27
HS2- 000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	35	32	Tube Missing	32	Tube Missing	Tube Missing	25						31
HS2- 000020BNZ	Mansfield Road	528050, 185508	40	44	27	23	19	25	28						29
HS2- 000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	46	56	42	43	40	40	36						43
HS2- 000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	41	40	32	30	27	25	25						31
HS2- 000020BPB	Camden High Street	528966, 183735	60	65	40	49	50	47	47						51
HS2- 000020BPC	Castlehaven Road	528788, 184591	39	39	30	26	21	Tube Missing	Tube Missing						31

Monitoring	Location	Coordinates	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
Site ID	description	(X, Y)	Juli	100	Widi	Дрі	inay	Jun	Jui	Aug	Sch	000	Nov		mean
HS2- 000020BPD	Prince of Wales Road	528571, 184683	31	35	16	27	19	17	14						23
HS2- 000020BPE	Haverstock Hill	527710, 184749	36	39	27	24	22	Tube Missing	24						29
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	42	42	33	27	25	27	22						31
HS2- 000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	51	47	36	Tube Missing	34	30	29						38
HS2- 000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	40	45	30	28	26	28	23						31
HS2- 000020BPX	Netley Street	529177, 182625	32	Tube Missing	21	31	30	27	18						27
HS2- 000020BPY	Stanhope Street	529060, 182947	31	37	19	25	19	19	Tube Missing						25
HS2- 000020BPZ	Albany Street	528790, 182923	27	40	25	27	25	22	18						26
HS2- 000020BQ0	Werrington Street	529493, 183113	34	35	19	24	20	19	16						24
HS2- 000020BQ1	Polygon Road	529574, 183045	30	36	22	25	23	19	17						25
HS2- 000020BQ2	Alexandra Place	526320, 183980	32	35	23	24	20	22	16						25
HS2- 000020BQ3	Harrington Square	529228, 183172	42	38	26	33	41	31	24						34
HS2- 000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	43	41	28	26	27	23	21						30
HS2- 000020BQ5	Adelaide Road	527713, 184392	35	41	17	Tube Missing	25	23	24						27
HS2- 000020BQ6	Mornington Terrace	528836, 183474	34	34	26	25	22	21	18						26

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2- 000020BQ7	Arlington Road	529009, 183479	33	35	24	25	Tube Missing	Tube Missing	16						26
HS2- 000020BQ8	Clarkson Row	529024, 183213	39	39	25	25	Tube Missing	20	17						28
HS2- 000020BQ9	Park Village East	528923, 183121	30	33	17	22	20	18	17						22
HS2- 000020BQA	Eversholt Street	529386, 183132	52	45	34	38	35	37	35						39
HS2- 000020BQB	Junction of Harrington Street and Varndell Street	529147, 182816	30	34	27	24	21	21	16						25
HS2- 000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	40	40	33	25	34	27	21						31
HS2- 000020BQD	Drummond Crescent	529648, 182856	38	33	Tube Missing	Tube Missing	31	30	24						31
HS2-000020BQJ	Grafton Way	529380, 182225	56	56	38	34	36	33	36						41
HS2- 000020BQL	Delancey Street	528768, 183581	46	50	Tube Missing	34	31	39	22						37
HS2- 000020BQR	Lamp post on Park Village East	528682, 183505	36	40	26	29	Tube Missing	Tube Missing	Tube Missing						33
HS2- 000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	37	36	25	26	23	23	17						27
HS2- 000020BQT	Drummond Street	529385, 182581	42	46	29	31	28	25	19						31
HS2- 000020BQX	Lamp post on Brunswick Square	530344, 182236	44	46	32	30	24	21	23						31
HS2- 000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	51	54	45	42	47	40	32						44

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2- 000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	46	64	59	Tubes Missing	59	59	53						57
HS2- 000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	39	40	30	30	27	21	16						29