August 2019

HS2

Air Quality and Dust Monitoring Monthly Report – August 2019

London Borough of Camden



SKANSKA



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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 2019 and August 2019 respectively.
- 1.1.2 Figure 1 to Figure 3 in Appendix A indicate 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 www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, 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 during December 2017 and are expected to be completed by December 2019. The current, completed and planned worksites, include:

Current & Planned -

- Site office and welfare on the adjacent former Addison Lee compound on Granby Terrace, worksite ref. S001-WS01.
- Archaeological dig at St James' Gardens and deconstruction of an enclosure over the entire works site; worksite ref. S003-WS01.
- Demolition at:
 - The IBIS Hotel, 3 Cardington Street, worksite ref. S003-WS05;
 - Thistle Hotel, Cardington Street, worksite ref. S003-WS04;
 - A number of sites in Euston Street, worksite ref. S003-WS07;
 - Regents Park Estate worksite ref. S001-WS07; and
 - o Walkden House, 67-75 & 77-79 Euston Street, worksite ref. S003-WS03.
 - One Euston Square, 40 Melton Street and Grant Thornton House, 22 Melton Street, worksite ref. S003-WS09.
- National Temperance Hospital, Site Office and Welfare 110-122 Hampstead Road and community garden, worksite ref. S003-WS06.
- Thames Water Compound, worksite ref. S001-WS05.
- Vehicle Holding Area, worksite ref. S001-WS04 (yet to be established).

Complete -

- Demolition of former accommodation block and train maintenance shed, at the DB Cargo shed, the site is currently being used for storage of spoil.
- Demolition at:

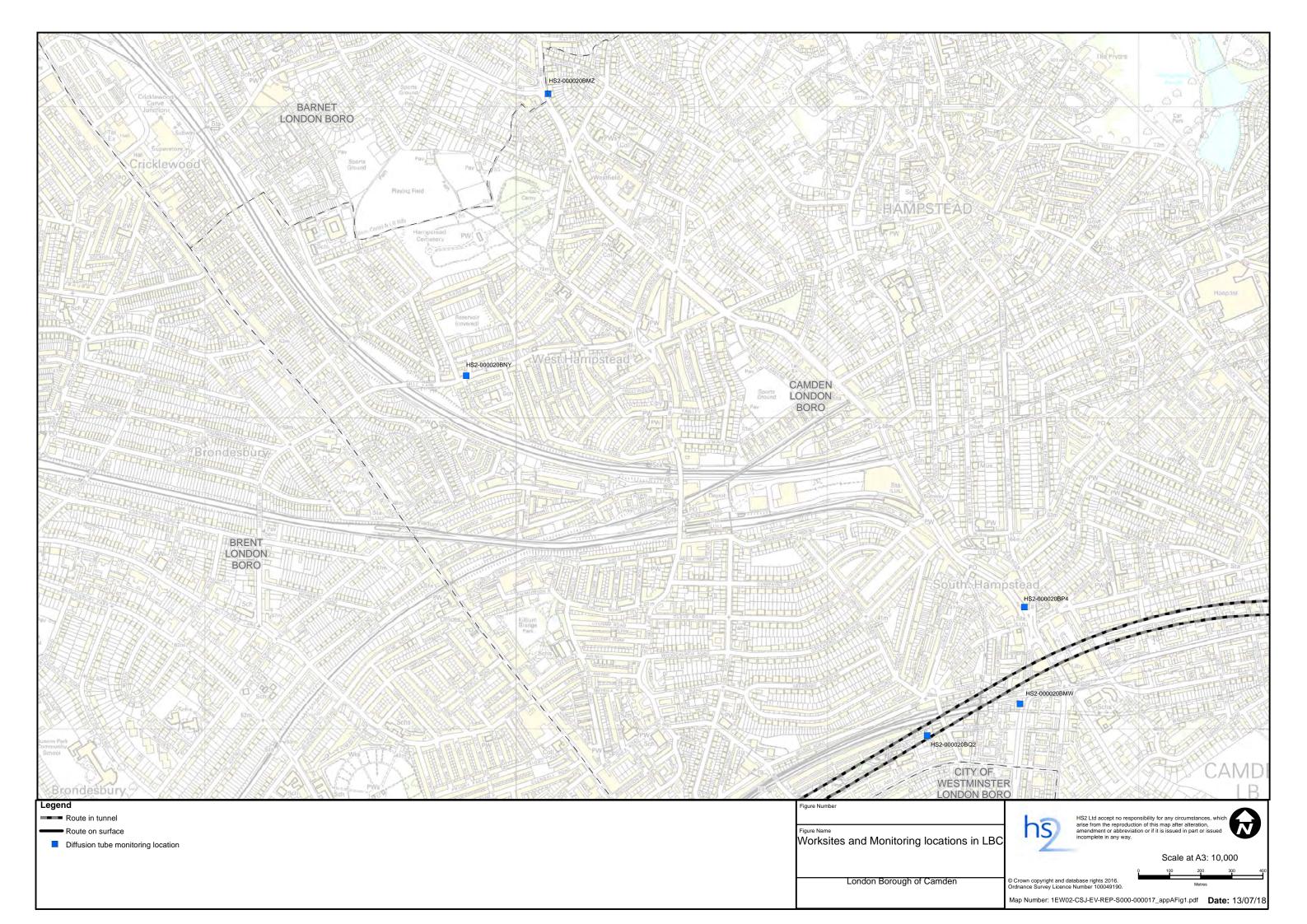
- National Temperance Hospital, Insull Wing, worksite ref. S003-WS02;
- o 1-3 Cobourg Street, worksite ref. S003-WS05; and
- 132 140 Hampstead Road and Petrol Station, worksite ref. S001-WS02.
- Taxi rank in Euston Square Gardens, worksite ref. S003-WS08.
- 1.1.5 Twenty (20) dust monitors are installed around worksites, where demolition and predemolition 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 2, together with line charts of monthly data from each dust monitor in Figure 4. 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 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 There were no (0) dust trigger alerts recorded during the monitoring period (August 2019). All results were in line with expected ranges.
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at sixty-five (65) locations in July 2019, around highways within the LBC as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.10 Diffusion tube monitoring results are 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.
- 1.1.11 NO₂ monitoring locations and results are presented in Appendix C, Table 3, together with the 2019 running mean.
- 1.1.12 Table 1 provides a summary of the complaint information related to dust or air quality received during the reporting period (August 2019), together with the findings of any related investigations.

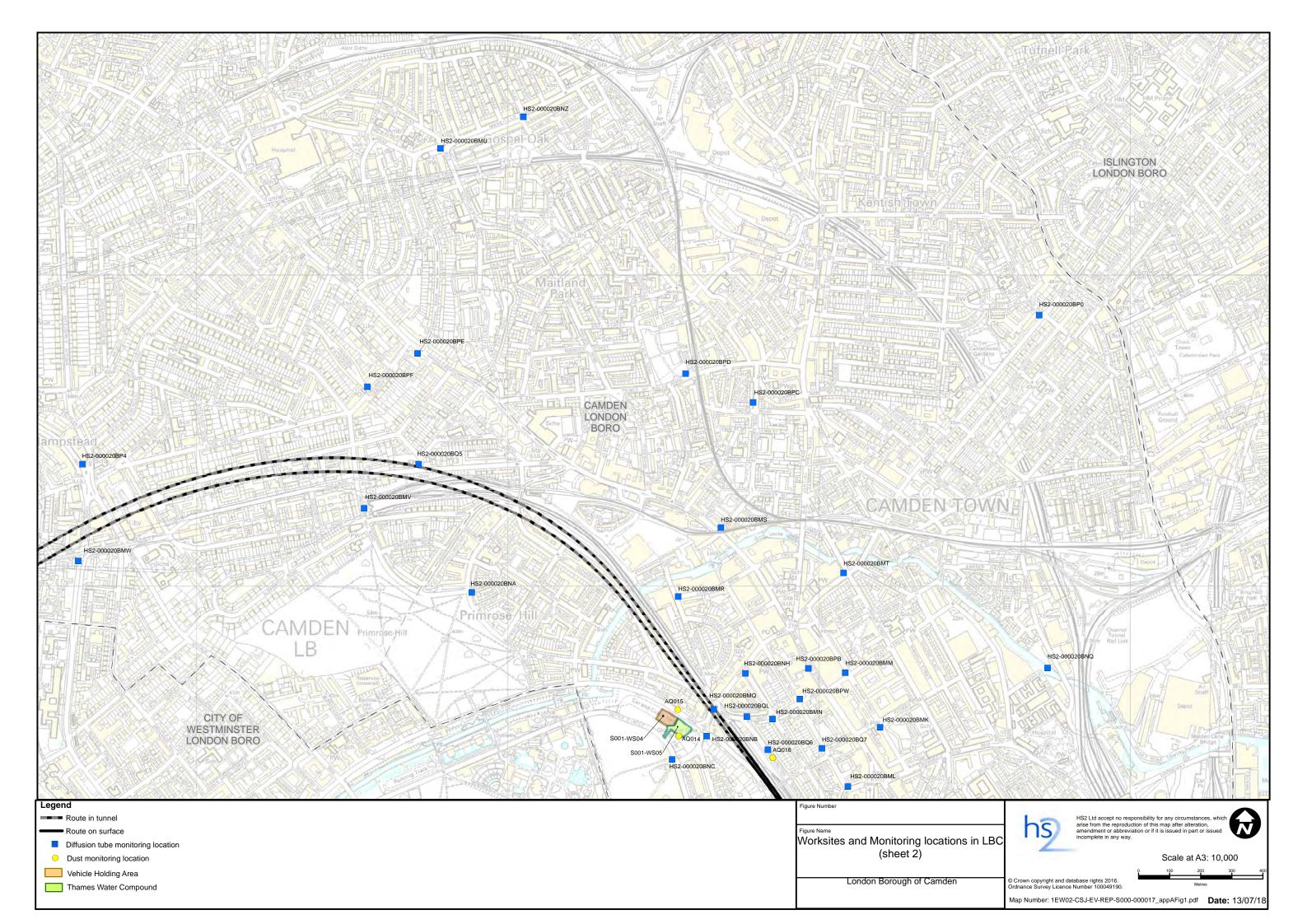
Table 1: Summary of complaints received during August 2019 in LBC

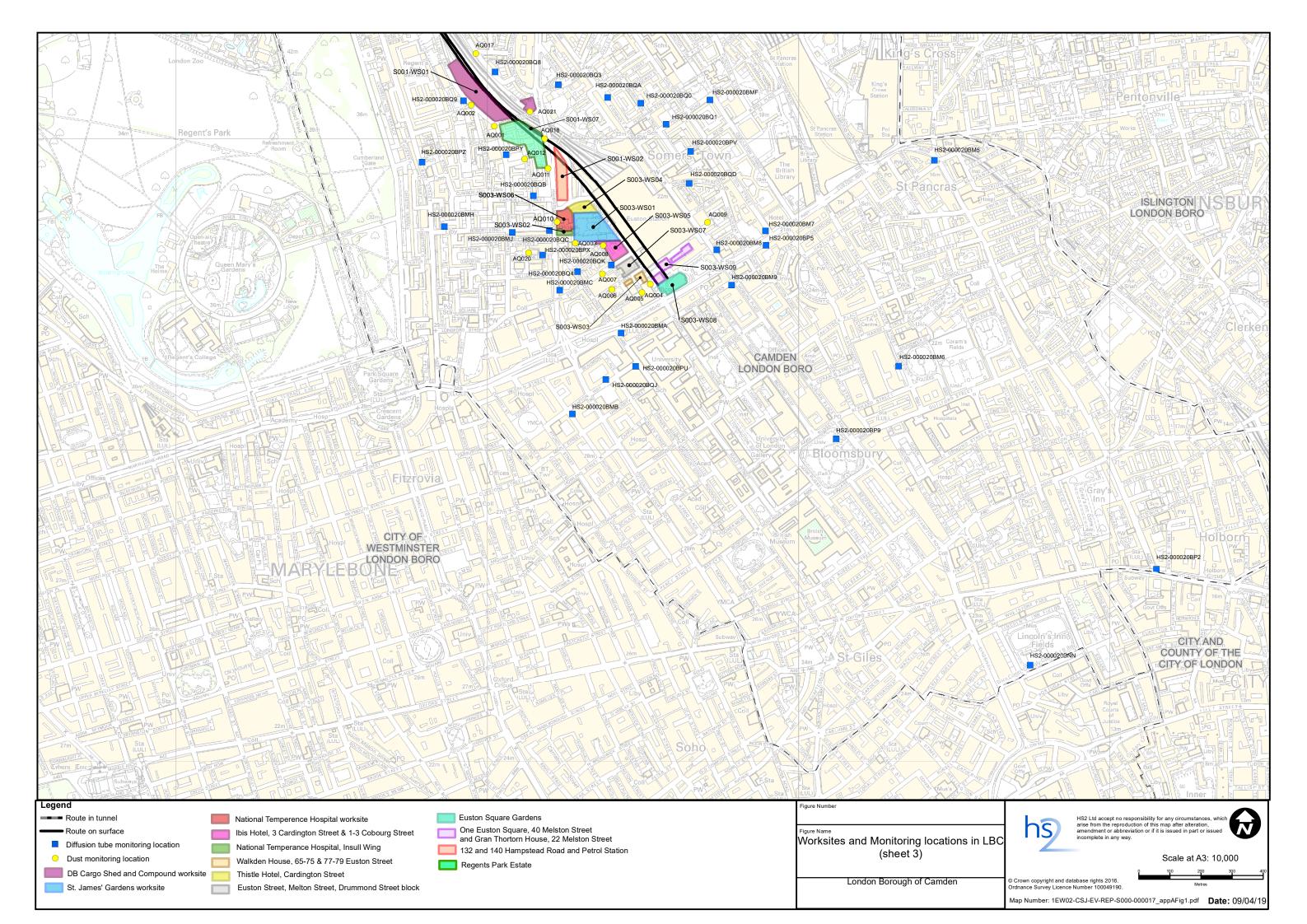
| Complaint Reference No. | Worksite Reference | Description of complaint | Results of investigation |
|-------------------------|-----------------------|--|---|
| HS2-19-06977-C | S001-WS07 | A complaint was received in relation to dust generation from the Ainsdale Building demolition. | A response email detailing the measures that the project are doing to minimise its impact of dust. The response detailed that no dust trigger alerts were recorded for this site during this monitoring period, and that an on-site review of dust suppression techniques was also undertaken and additional dust mitigation was implemented. |

Appendix A – Worksites and Monitoring Locations

Figure 1 to Figure 3: Worksites and monitoring locations within the LBC





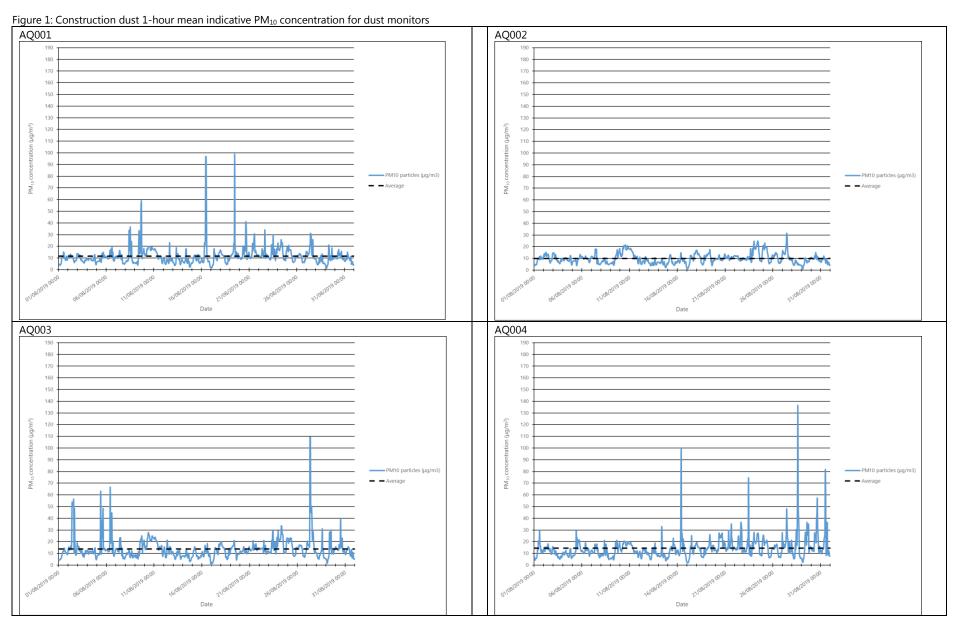


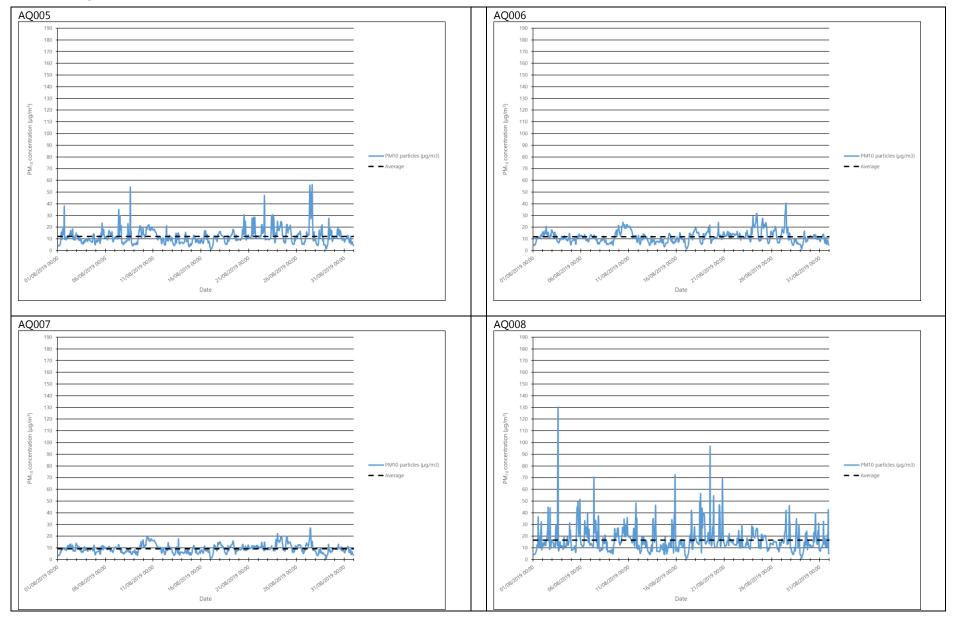
Appendix B – Dust Monitoring Results

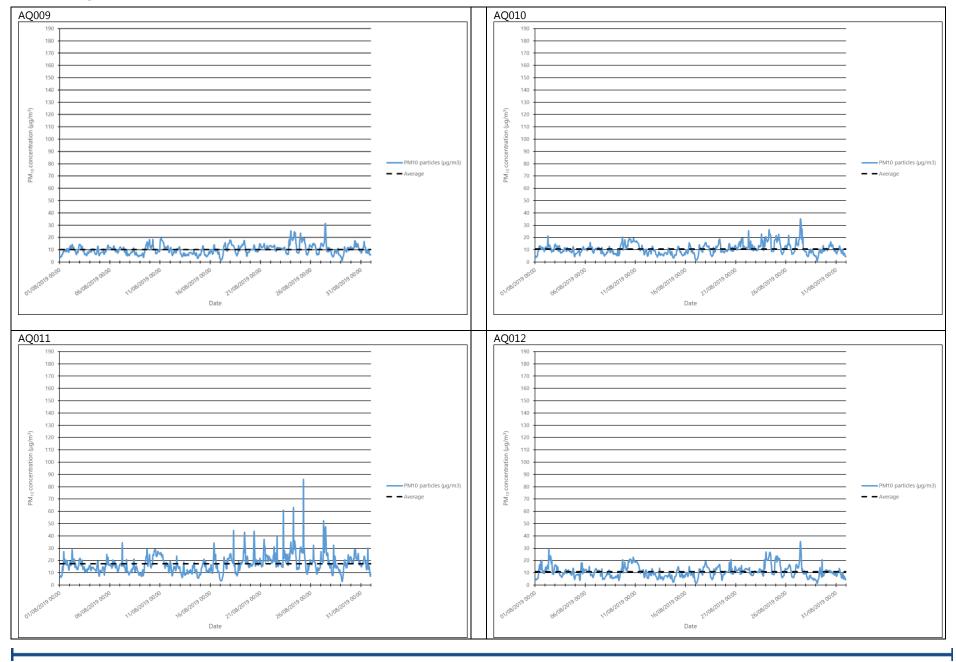
Table 2: Dust monitoring locations and August 2019 Results

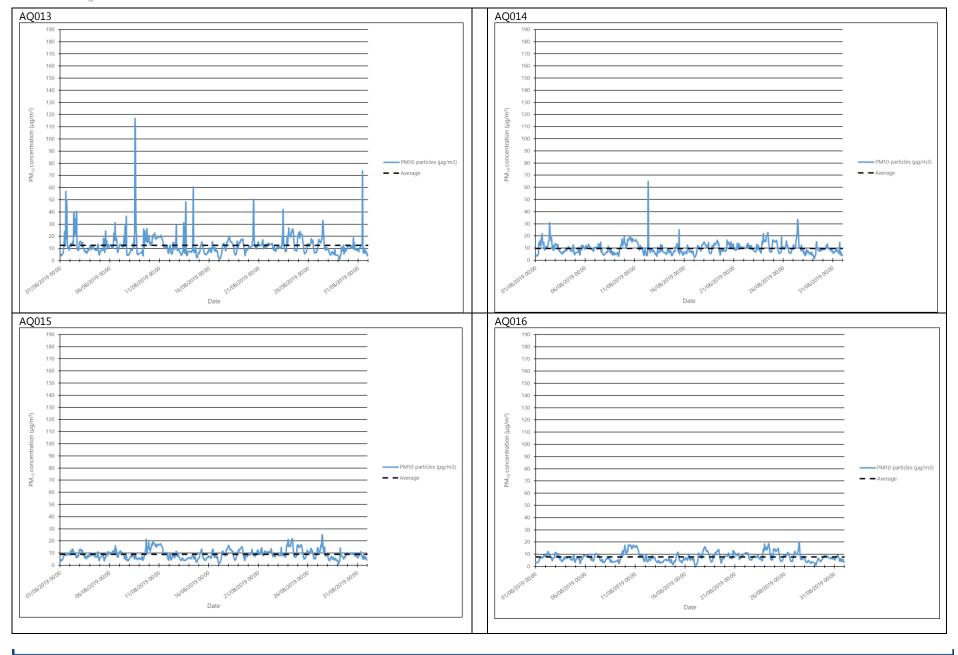
| Monitoring site ID | Coordinates (X,Y) | Location description | Dust risk rating for site | Monitoring site active during period | Change to site since previous period report | Mean 1-hour PM ₁₀ concentration (μg/m³) | Minimum 1- hour PM ₁₀ concentration (μg/m³) | Maximum 1- hour PM ₁₀ concentration (μg/m³) | Number of 1- hour periods exceeding trigger level of 190 µg/m³ | Data capture (%) |
|--------------------|----------------------|---|------------------------------------|---|---|--|---|---|---|---------------------|
| AQ001 | 529022, 183040 | Junction of Park Village East, Stanhope Street and Granby Terrace | Н | Yes | N | 11.6 | 1.1 | 99.0 | 0 | 100.0 |
| AQ002 | 528947, 183107 | Park Village East | Н | Yes | N | 9.9 | 1.0 | 31.4 | 0 | 100.0 |
| AQ003 | 529282, 182663 | St James Gardens | М | Yes | N | 13.8 | 1.3 | 109.2 | 0 | 99.9 |
| AQ004 | 529523, 182533 | Melton Street | Н | Yes | N | 14.4 | 1.8 | 136.4 | 0 | 100.0 |
| AQ005 | 529496, 182505 | Stephenson Way | Н | Yes | N | 12.1 | 1.4 | 56.5 | 0 | 100.0 |
| AQ006 | 529399, 182514 | Euston Street | Н | Yes | N | 11.7 | 1.4 | 40.5 | 0 | 100.0 |
| AQ007 | 529369, 182564 | Drummond Street | Н | Yes | N | 9.2 | 0.8 | 27.0 | 0 | 100.0 |
| AQ008 | 529369, 182648 | Cobourg Street | Н | Yes | N | 16.7 | 1.2 | 128.2 | 0 | 100.0 |
| AQ009 | 529707, 182730 | Lancing Street | Н | Yes | N | 10.1 | 1.1 | 31.4 | 0 | 100.0 |
| AQ010 | 529223, 182732 | Hampstead Road South | Н | Yes | N | 10.7 | 1.0 | 35.1 | 0 | 100.0 |
| AQ011 | 529195, 182904 | Hampstead Road | Н | Yes | Υ | 17.3 | 3.0 | 86.0 | 0 | 100.0 |
| AQ012 | 529119, 182934 | Mackworth Street | Н | Yes | Υ | 11.0 | 1.5 | 35.4 | 0 | 100.0 |

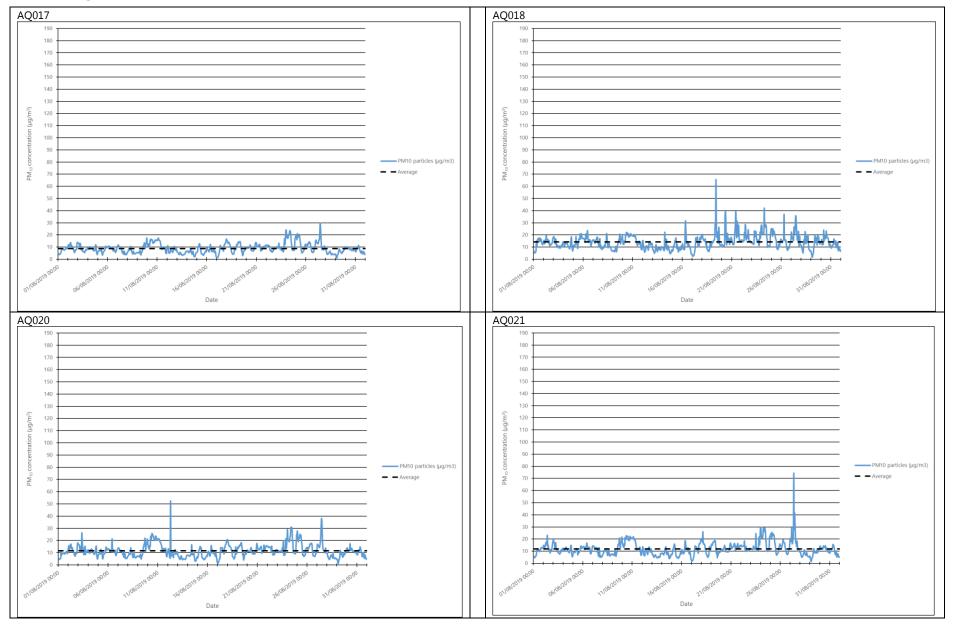
| Monitoring site ID | Coordinates (X,Y) | Location description | Dust risk rating for site | Monitoring site active during period | Change to site since previous period report | Mean 1-hour PM ₁₀ concentration (μg/m³) | Minimum 1- hour PM ₁₀ concentration (μg/m³) | Maximum 1- hour PM ₁₀ concentration (μg/m³) | Number of 1- hour periods exceeding trigger level of 190 µg/m³ | Data capture (%) |
|--------------------|----------------------|--|------------------------------------|---|---|--|---|---|---|---------------------|
| AQ013 | 529066, 182990 | Regents Park Estate | Н | Yes | Υ | 12.6 | 1.0 | 115.8 | 0 | 100.0 |
| AQ014 | 528550, 183518 | Thames Water Compound | L | Yes | N | 9.8 | 1.3 | 65.0 | 0 | 100.0 |
| AQ015 | 528546, 183604 | Prince Albert Road | L | Yes | N | 9.0 | 1.0 | 25.0 | 0 | 100.0 |
| AQ016 | 528851, 183448 | Mornington Terrace North | Н | Yes | N | 7.8 | 0.7 | 19.9 | 0 | 100.0 |
| AQ017 | 528963, 183274 | Mornington Terrace South | Н | Yes | N | 8.7 | 0.8 | 29.4 | 0 | 100.0 |
| AQ018 | 529184, 182999 | Hampstead Road North | Н | Yes | Υ | 14.2 | 1.7 | 65.7 | 0 | 100.0 |
| AQ020 | 529132, 182633 | Netley School | n/a | Yes | N | 11.6 | 1.2 | 52.4 | 0 | 100.0 |
| AQ021 | 529127, 183116 | Site compound at the Junction of Hampstead Road & Granby Terrace Bridge. | Н | Yes | N | 11.9 | 1.3 | 74.4 | 0 | 100.0 |











Appendix C – Air Quality Monitoring Results

Table 3: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2019 (µg/m³)

| Monitoring Site ID | Location description | Coordinates (X, Y) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Mean ¹ |
|--------------------|--|-----------------------|-----|-----|-----------------|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-------------------|
| HS2-000020BM5 | Junction of St Chad's Street and Grays Inn Road | 530436, 182929 | 58 | 64 | 46 | 53 | 49 | 43 | 46 | | | | | | 52 |
| HS2-000020BM6 | Brunswick Square | 530321, 182268 | 51 | 63 | 49 | 42 | 35 | 36 | 39 | | | | | | 45 |
| HS2-000020BM7 | Chalton Street | 529894, 182702 | 63 | 83 | 66 | 72 | Tube miss | ing | | | | | | | 71 |
| HS2-000020BM8 | Junction of Euston Square and Grafton Place | 529737, 182641 | 63 | 72 | 66 | 75 | 61 | 53 | 52 | | | | | | 63 |
| HS2-000020BM9 | Junction of Endsleigh Gardens and Upper Woburn Place | 529785, 182529 | 47 | 63 | 56 | 59 | 56 | 48 | 49 | | | | | | 54 |
| HS2-000020BMA | Junction of Euston Road and Gower Street | 529429, 182375 | 51 | 76 | 63 | 56 | 46 | 52 | 50 | | | | | | 56 |
| HS2-000020BMB | Whitfield Street | 529273, 182114 | 49 | 58 | 43 | 48 | 33 | 33 | 33 | | | | | | 43 |
| HS2-000020BMC | Hampstead Road | 529232, 182511 | 53 | 84 | 71 | 74 | 62 | 61 | 61 | | | | | | 67 |
| HS2-000020BMF | Junction of Polygon Road and Ossulston Street | 529715, 183123 | 39 | 47 | Tube missing | 40 | 27 | 29 | 26 | | | | | | 35 |
| HS2-000020BMH | Nash Street | 528861, 182717 | 43 | 51 | 35 | 37 | 30 | 28 | 29 | | | | | | 36 |
| HS2-000020BMJ | Junction on Robert Street and Stanhope Street | 529080, 182698 | 39 | 43 | 37 | 30 | 28 | 31 | 27 | | | | | | 34 |

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 | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Mean ¹ |
|--------------------|--|-----------------------|-----|-----|-----|---------|-----------|-----------------|-----------------|-----|-----|-----|-----|-----|-------------------|
| HS2-000020BMK | Junction of Plender Street and Bayham Street | 529196, 183546 | 66 | 68 | 55 | 50 | 39 | 40 | 44 | | | | | | 52 |
| HS2-000020BML | Junction of Arlington Road and Mornington Crescent | 529093, 183356 | 47 | 44 | 38 | 41 | 26 | 27 | 29 | | | | | | 36 |
| HS2-000020BMM | Junction of Bayham Street and Pratt Street | 529084, 183722 | 52 | 75 | 62 | 47 | 49 | 47 | 52 | | | | | | 55 |
| HS2-000020BMN | Junction of Delancey Street and Albert Street | 528850, 183573 | 43 | 53 | 43 | 40 | 36 | 33 | 34 | | | | | | 40 |
| HS2-000020BMQ | Junction of Parkway and Delancey Street | 528662, 183604 | 50 | 57 | 43 | 58 | 45 | 46 | 44 | | | | | | 49 |
| HS2-000020BMR | Junction of Oval Road and Jamestown Road | 528548, 183967 | 44 | 49 | 41 | 41 | 30 | Tube missing | 28 | | | | | | 39 |
| HS2-000020BMS | Junction of Chalk Farm Road and Castlehaven Road | 528685, 184188 | 59 | 52 | 50 | 52 | 47 | 45 | 50 | | | | | | 51 |
| HS2-000020BMT | Junction of Camden Road and Camden Street | 529079, 184043 | 57 | 57 | 55 | 55 | 46 | 43 | 45 | | | | | | 51 |
| HS2-000020BMU | Junction of Southampton Road and Fleet Road | 527783, 185407 | 47 | 51 | 39 | 43 | 28 | Tube missing | 34 | | | | | | 40 |
| HS2-000020BMV | Primrose Hill Road | 527538, 184250 | 46 | 45 | 38 | No data | 29 | 22 | 30 | | | | | | 35 |
| HS2-000020BMW | Junction of Finchley Road and Hilgrove Road | 526619, 184081 | 61 | 59 | 55 | 60 | 47 | 50 | Tube missing | | | | | | 55 |
| HS2-000020BMZ | Junction of Finchley Road and Hendon Way | 525102, 186042 | 87 | 92 | 87 | 90 | 73 | 74 | 75 | | | | | | 83 |
| HS2-000020BNA | Junction of Regent's Park Road and Rothwell Street | 527884, 183980 | 45 | 48 | 30 | 27 | 25 | 28 | 27 | | | | | | 33 |
| HS2-000020BNB | Junction of Gloucester Gate Bridge and Park Village East | 528639, 183518 | 53 | 45 | 41 | 37 | Tube miss | sing | | | | | | | 44 |

| Monitoring Site ID | Location description | Coordinates (X, Y) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Mean ¹ |
|--------------------|---|-----------------------|-----|-------------|-----------|-----|-----------------|-----------------|-----------------|-----|-----|-----|-----|-----|-------------------|
| HS2-000020BNC | Junction of Outer Circle and Gloucester Gate | 528528, 183443 | 35 | 36 | 24 | 33 | 21 | 25 | Tube missing | | | | | | 29 |
| HS2-000020BNH | Junction of Parkway and Albert Street | 528763, 183720 | 43 | 53 | 37 | 41 | 30 | 34 | 33 | | | | | | 39 |
| HS2-000020BNN | Lincoln's Inn Fields | 530744, 181308 | 50 | Tube missir | ng | 35 | 29 | Tube missing | 27 | | | | | | 36 |
| HS2-000020BNQ | Camley Street | 529735, 183737 | 50 | 49 | Tube miss | ing | 19 | 29 | 27 | | | | | | 35 |
| HS2-000020BNY | Junction of Mill Lane and Hillfield Road | 524839, 185136 | 53 | 50 | 44 | 38 | 34 | 36 | 33 | | | | | | 41 |
| HS2-000020BNZ | Mansfield Road | 528050, 185508 | 24 | 44 | 34 | 30 | Tube missing | 29 | 27 | | | | | | 31 |
| HS2-000020BP0 | Junction of Camden Road and Torriano Avenue | 529708, 184871 | 52 | 70 | 56 | 54 | 46 | 54 | 45 | | | | | | 54 |
| HS2-000020BP2 | Junction of Grays Inn Road and Holborn | 531149, 181616 | 65 | 52 | 49 | 48 | 43 | 43 | 41 | | | | | | 49 |
| HS2-000020BPB | Camden High Street | 528966, 183735 | 65 | 81 | 75 | 58 | 63 | 61 | 57 | | | | | | 66 |
| HS2-000020BPC | Castlehaven Road | 528788, 184591 | 45 | 47 | 40 | 33 | 31 | 32 | 28 | | | | | | 37 |
| HS2-000020BPD | Prince of Wales Road | 528571, 184683 | 35 | 43 | 37 | 28 | 28 | 25 | 23 | | | | | | 31 |
| HS2-000020BPE | Haverstock Hill | 527710, 184749 | 54 | 62 | 53 | 37 | Tube missing | 37 | 36 | | | | | | 46 |
| HS2-000020BPF | Junction of Primrose Gardens and England's Lane | 527549, 184640 | 44 | 52 | 41 | 35 | 32 | 31 | 29 | | | | | | 38 |
| HS2-000020BPU | Junction of Gower Street and Grafton Way | 529476, 182267 | 54 | 60 | 56 | 50 | Tube missing | 42 | 51 | | | | | | 52 |
| HS2-000020BPW | Junction of Delancey Street and Arlington Road | 528939, 183637 | 48 | 51 | 44 | 44 | 40 | 39 | 38 | | | | | | 43 |
| HS2-000020BPX | Netley Street | 529177, 182625 | 43 | 50 | 40 | 48 | 32 | 36 | 29 | | | | | | 40 |

| Monitoring Site ID | Location description | Coordinates (X, Y) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Mean ¹ |
|--------------------|---|-----------------------|-----|-----------------|------------|-----|-----------------|-----------------|-----------------|-----|-----|-----|-----|-----|-------------------|
| HS2-000020BPY | Stanhope Street | 529060, 182947 | 34 | 46 | 32 | 36 | 24 | 24 | Tube missing | | | | | | 33 |
| HS2-000020BPZ | Albany Street | 528790, 182923 | 44 | 57 | 42 | 43 | 34 | 34 | 32 | | | | | | 41 |
| HS2-000020BQ0 | Werrington Street | 529493, 183113 | 43 | Tube missing | 39 | 39 | 26 | 28 | 25 | | | | | | 33 |
| HS2-000020BQ1 | Polygon Road | 529574, 183045 | 41 | 46 | 37 | 34 | Tube missing | 28 | Tube missing | | | | | | 37 |
| HS2-000020BQ2 | Alexandra Place | 526320, 183980 | 42 | Tube missing | 30 | 39 | 25 | Tube missing | 24 | | | | | | 32 |
| HS2-000020BQ3 | Harrington Square | 529228, 183172 | 46 | 60 | 45 | 48 | 40 | 42 | 40 | | | | | | 46 |
| HS2-000020BQ4 | Junction of North Gower Street and Starcross Street | 529290, 182572 | 51 | 54 | 41 | 44 | 23 | 33 | 30 | | | | | | 40 |
| HS2-000020BQ5 | Adelaide Road | 527713, 184392 | 50 | 54 | 43 | 41 | 32 | 30 | 35 | | | | | | 41 |
| HS2-000020BQ6 | Mornington Terrace | 528836, 183474 | 45 | 46 | 35 | 34 | 28 | 27 | 25 | | | | | | 34 |
| HS2-000020BQ7 | Arlington Road | 529009, 183479 | 43 | 40 | 37 | 33 | 28 | 24 | 26 | | | | | | 33 |
| HS2-000020BQ8 | Clarkson Row | 529024, 183213 | 42 | 45 | 34 | 36 | 26 | 27 | 24 | | | | | | 33 |
| HS2-000020BQ9 | Park Village East | 528923, 183121 | 40 | 44 | Tube missi | ng | 24 | 24 | 22 | | | | | | 31 |
| HS2-000020BQA | Eversholt Street | 529386, 183132 | 57 | 67 | 56 | 49 | 46 | Tube missing | 44 | | | | | | 53 |
| HS2-000020BQB | Junction of Harrington Street and Varndell Street | 529147, 182816 | 42 | 43 | 32 | 40 | 26 | 26 | 24 | | | | | | 33 |
| HS2-000020BQC | Junction of Robert Street and Hampstead Road | 529199, 182704 | 49 | 48 | 42 | 56 | 33 | 37 | 34 | | | | | | 43 |
| HS2-000020BQD | Drummond Crescent | 529648, 182856 | 50 | 51 | 45 | 44 | 33 | 34 | 33 | | | | _ | | 41 |
| HS2-000020BQJ | Grafton Way | 529380, 182225 | 64 | 70 | 59 | 56 | 51 | 62 | 57 | | | | | | 60 |

| Monitoring Site ID | Location description | Coordinates (X, Y) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Mean ¹ |
|--------------------|--|-----------------------|----------------------|-------------|-----|-----|-----------------|-----------------|-----|-----|-----|-----|-----|-----|-------------------|
| HS2-000020BQL | Delancey Street | 528768, 183581 | 58 | 57 | 47 | 51 | 45 | 39 | 43 | | | | | | 49 |
| HS2-000020BQR | Lamp post on Park Village East | 528682, 183505 | 46 | 42 | 36 | 34 | 26 | Tube missing | 25 | | | | | | 35 |
| HS2-000020BQS | Opposite Maria fidelis school on Phoenix Road | 529670, 182982 | 43 | 43 | 37 | 41 | Tube missing | 34 | 26 | | | | | | 37 |
| HS2-000020BQT | Drummond Street | 529385, 182581 | 52 | 51 | 43 | 47 | 31 | 37 | 31 | | | | | | 42 |
| HS2-000020BP4 | Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station | 526633, 184392 | 64 | Tubes missi | ng | | 46 | 53 | 45 | | | | | | 52 |
| HS2-000020BP5 | Triplicate site next to the Euston Road roadside automatic monitoring stations | 529895, 182657 | Tubes missin g | 81 | 69 | 78 | 63 | 77 | 61 | | | | | | 71 |
| HS2-000020BP9 | Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station | 530120, 182034 | 55 | 47 | 38 | 38 | 36 | 32 | 30 | | | | | | 39 |