

Air Quality and Dust Monitoring Monthly Report – February 2025

Birmingham City Council



Department for Transport

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.

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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 dust monitoring undertaken within Birmingham City Council (BCC) during February 2025.
- 1.1.2 Figure 1 to Figure 3 in Appendix A present the current worksites together with the dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly 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 worksites, as presented in Appendix A, Figure 1 to Figure 3, include:

Sublot 4

Washwood Heath

- Traffic on main site haul road, including haul road maintenance with excavator, Articulated Dump Trucks (ADTs), dozer and roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading / unloading plant / material deliveries.
- Excavators, cranes and concrete pumps working in permanent brook conducting Fibre-Reinforced Concrete (FRC) works.
- Excavators and rollers working south of the brook backfilling behind FRC wall.
- Stockpile management area including tipping and loading of ADTs and wagons, excavators and dozers.
- Tarmac batching plant operations, including delivery of aggregates, operating plant and concrete wagons.

Curzon Street

- Pier and deck construction.
- Underground drainage works.
- Tripod dismantling and installations.
- Concrete works.
- Traffic on main site haul road, including haul road maintenance with excavator and roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading / unloading plant / material deliveries.
- Excavators, cranes and concrete pumps working in permanent brook conducting FRC works.

- Plant used: Excavators, tower crane, mobile crane and rollers.

Bromford East Tunnel Portal (Sublot 1B)

- Repairs or maintenance of construction equipment, where it is not practicable to complete during core working hours. This was carried out on Saturday afternoons between 13:00 and 18:00 or on Sundays between 10:00 and 17:00.
- Operation and maintenance of 2 Tunnel Boring Machines (TBMs) and 2 Slurry Treatment Plants (STPs).
- Site Generators / Substations supporting deliveries 24 hours a day, 7 days a week.
- Delivery of equipment and segments for tunnel construction.
- Operations of a sub-station which is owned by a different company.
- Construction of a Mechanical, Electrical and Plumbing (MEP) building for Bromford Tunnel Intermediate Shaft (BTIS) and Bromford Tunnel East Portal (BTEP).
- Operation and maintenance of two grout batching plants.
- Use of gantry crane, tower crane and several crawler cranes.
- The transport of muck from Muck bin to Sublot Delta via ADTs.
- Road sweeping and dust suppression 24 hours a day, 7 days a week.

Curzon Street Station – Pre-main works

- Installation of bearing and secant piles
- Import of materials required for piling activities
- Export of excavated materials
- Earthworks required for installation of site compound.

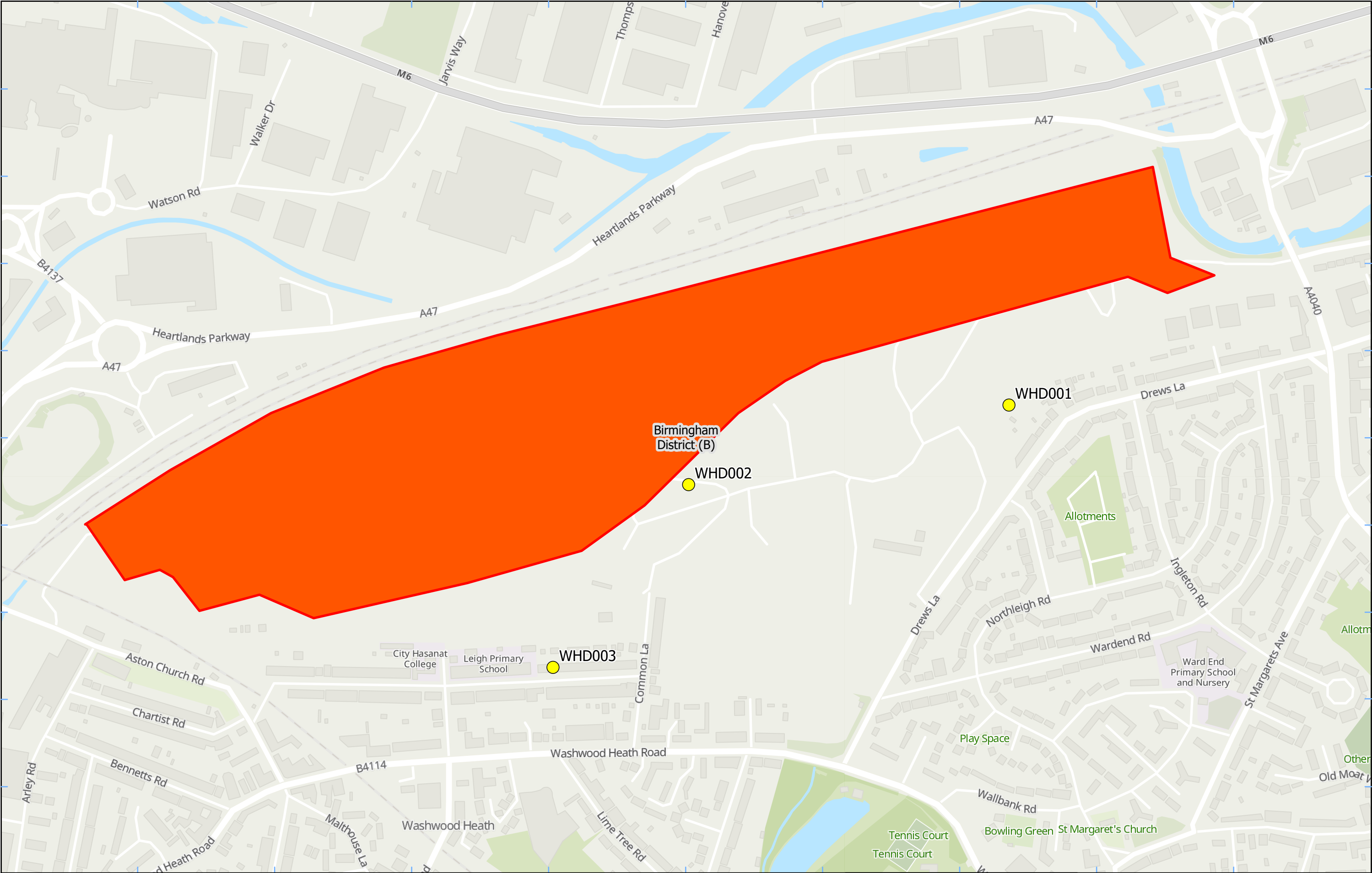
- 1.1.5 Eight (8) dust monitors are installed around these worksites, where works are underway. These sites returned a low to high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor, presented 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 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 alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for multiple monitors due to WHD002 a battery refresh was done on 18th February 2025. After the battery refresh, the power supply issues were

resolved. Dust monitor 00289 provided incorrect readings between 01/02/25 – 28/02/2025 and this data has been disregarded due to the data being inaccurate. The monitor is currently being replaced.



1.1.10 There were no (0) complaints received during the reporting period (February 2025).


Appendix A – Worksites and Monitoring Locations

Figures 1 - 3: Worksites and Monitoring Locations within BCC



Legend

 District Borough Unitary Boundaries  Worksite

 Dust Monitor

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Map Number

Map Name
**Worksite and Monitoring Locations
In BCC (Sheet 1)**

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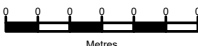
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Scale at A3: 1:5,000



Date: 22/01/24



Legend

District Borough Unitary Boundaries Worksite

Dust Monitor

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Map Number

Map Name

**Worksite and Monitoring Locations
In BCC (Sheet 2)**

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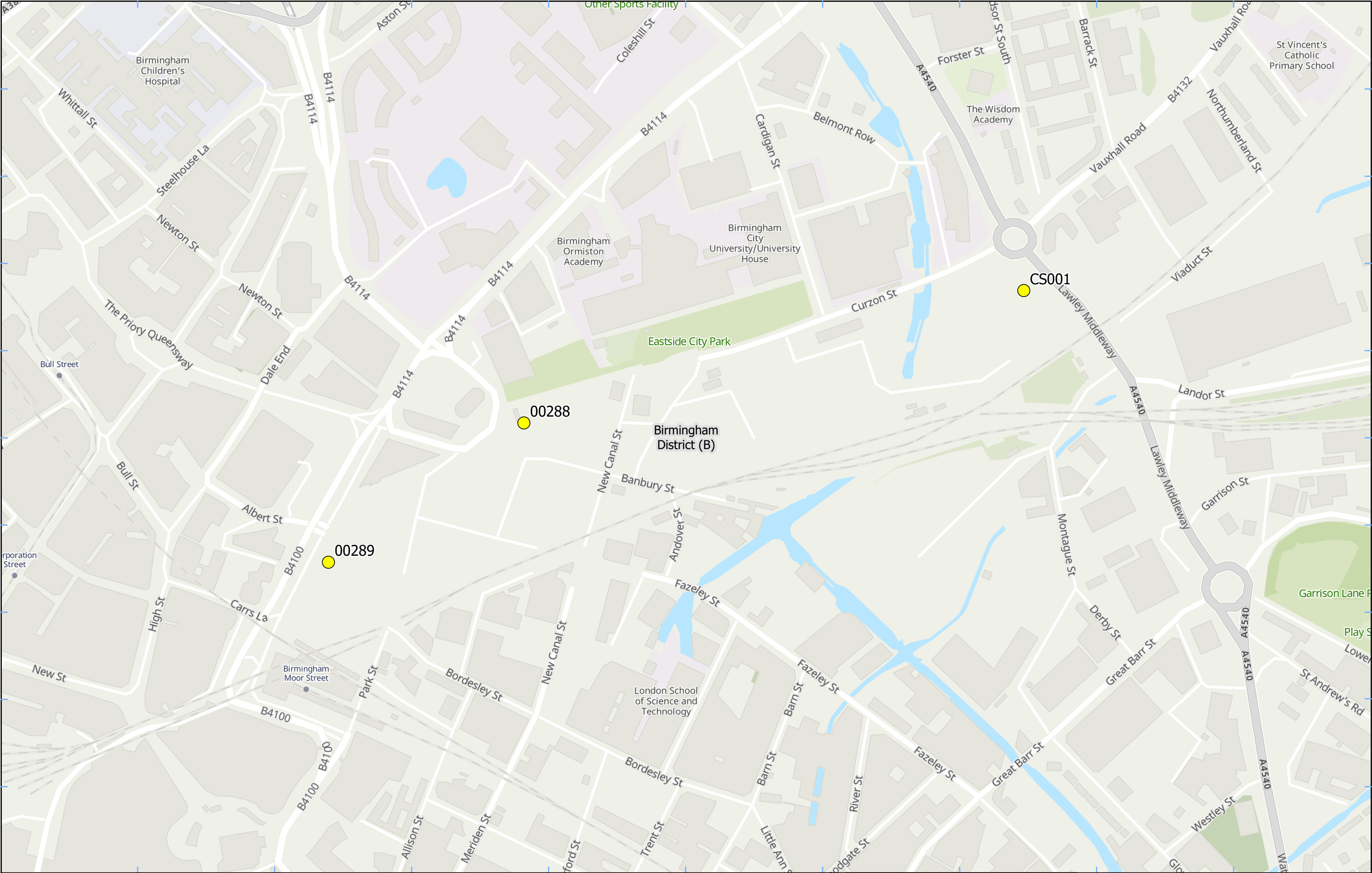
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Metres

Date: 22/01/24





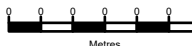
Legend

 Dust Monitor

 District Borough Unitary Boundaries

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Map Number
Map Name
Monitoring Locations In BCC (Sheet 3)
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Appendix B – Dust Monitoring Results

Table 1: 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 PM10 concentration (µg/m3)	Minimum 1-hour PM10 concentration (µg/m3)	Maximum 1-hour PM10 concentration (µg/m3)	Number of 1-hour periods exceeding trigger level of 190 µg/m3	Data capture (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	17.7	0.2	51.5	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	14.6	0.0	66.3	0	79.9
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	16.1	0.1	50.1	0	100.0
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	L	Yes	No	16.3	0.1	60.4	0	97.3
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	13.4	0.5	41.8	0	99.9
CS001	408254, 287210	University Locks, Curzon Street	M	Yes	No	20.0	0.5	235.2	1	100.0
00288	407676, 287057	Curzon St – East Side City Park	H	Yes	No	19.2	1.63	140.75	0	100.0
00289	407450, 286896	Curzon St – Moor St Queensway	H	No	N/A	-	-	-	0	-

Table 2: Summary of exceedances during period (February 2025)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
CS001	13/02/2025 17:01 – 18:00; 235 µg/m ³	There were no relevant site activities taking place near the monitor at the time of the exceedance, so the exceedance is not considered to be associated with current HS2 construction works.	N/A

Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

