

Air Quality and Dust Monitoring Monthly Report – July 2023 Birmingham City Council



Department for Transport

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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.

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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 within Birmingham City Council (BCC) during July 2023.
- 1.1.2 Figure 1 and Figure 2 in Appendix A indicate the current worksites together with the 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 worksites, as presented in Appendix A, Figures 1 and Figure 2, include:

Washwood Heath (Sublot 4)

- Traffic on main site haul road, including haul road maintenance with excavator, ADTs, dozer, and roller to compact;
- Stockpile management area including tipping and loading of ADTs and wagons, excavators, and dozers;
- Crushing concrete to 6F5; and
- Tarmac batching plant operations, including delivery of aggregates, operating plant, and concrete wagons.

Bromford East Tunnel Portal (BETP) (Sublot 1B)

- Continue installation of STP2 desanding unit building.
- General housekeeping and snagging.
- Strike shutters in filter press third wall.
- Re-erect shutters in filter press fourth wall.
- Steel fixing in filter press fourth wall.
- Excavating for buffer slab L-walls.
- Concrete pour in troughs area in access road.
- Segment yard: continue grading out 6F5 to slab and blinding, strike and re-erect falsework to capping beam, drilling to edge of bentonite slab, fixing mesh to slab and moving materials.
- Fuel tank: Vac-ex for grading out for access road.
- Continue asset protection fencing.

- Continue grading out 6F5 to slab, strike and re-erect falsework to fixing mesh to slab and screed rails, moving materials.
- Scabbling of bentonite slab.
- Silt fence Installation on location 1,2 of ditch.
- Continue placing stone for MSV ramp at pit top.

1.1.5 Five (5) dust monitors are installed around worksites, where works are underway. These sites returned a medium 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 the dust monitors presented in Figure 3. 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.

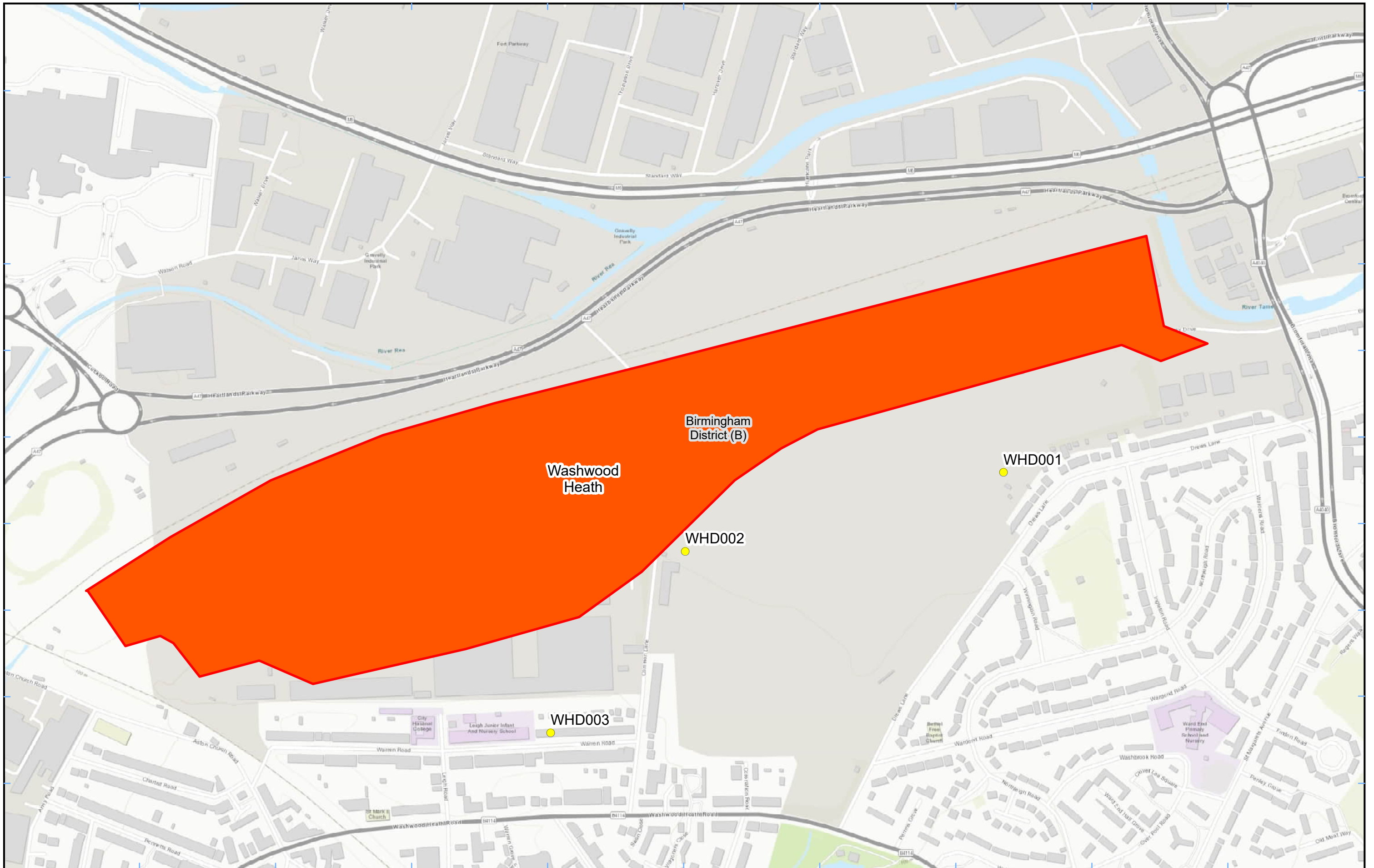
1.1.8 No (0) dust trigger alerts were recorded during this monitoring period (July 2023).

1.1.9 Data capture was below 90% for monitor WHD002 in July 2023 due to ongoing maintenance issues, and for monitor WHD003 as it was installed on 27th July.

1.1.10 There were no (0) complaints received during this reporting period.

Appendix A – Worksites and Monitoring Locations

Figure 1 and Figure 2: Worksites and Monitoring Locations within BCC



Legend
 Dust Monitor
 Worksite
 District Borough Unitary Boundaries

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 1)**
 Birmingham City Council

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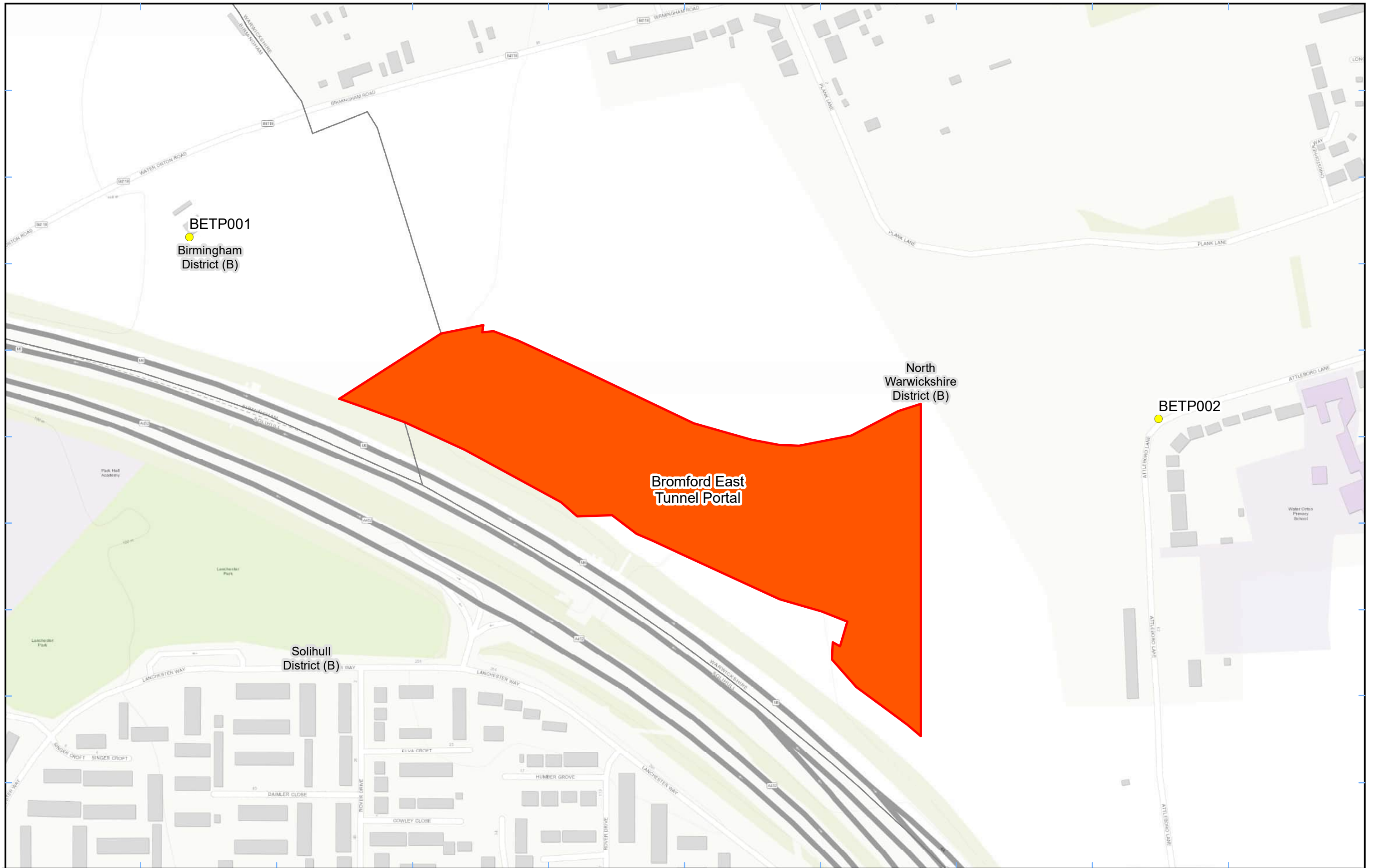
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0 50 100 150 200
 Metres

Doc Number: Date: 10/08/23



Legend

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Map Number

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

Birmingham City Council

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0 30 60 90 120
 Metres

Doc Number: Date: 23/06/22

Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and June 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/m ³)	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 (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	7.2	0.6	137.8	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	0.6	0.0	7.1	0	99.2
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	n/a	2.9	1.3	4.5	0	5.7
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	1.6	0.0	70.1	0	100.0
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	5.2	0.5	36.0	0	100.0

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

