

## Air Quality and Dust Monitoring Monthly Report – October 2023

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.

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

Telephone: 08081 434 434

General email enquiries: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

Website: [www.gov.uk/hs2](http://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 dust monitoring undertaken within Birmingham City Council (BCC) during October 2023.

1.1.2 Figure 1 and Figure 2 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](http://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 and Figure 2, include:

## **Washwood Heath (Sublot 4)**

- Setup of the compound area and haulage routes; and
- Demolition and crushing of existing concrete foundations on site.

## **Bromford East Tunnel Portal (Sublot 1B)**

- Site Set-up (STP/TBM area).
- Site Foundations.
- STP Installation.
- Road Sweeping/Dust Suppression.
- Workshop Operation & Tunnel Storage Second Handling.
- Assembly & Commissioning of TBM Components.
- Supporting Deliveries.
- Site Generators.
- Operation of Mechanical Workshop.
- Site Offices Maintenance & Deliveries.

1.1.5 Five (5) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.

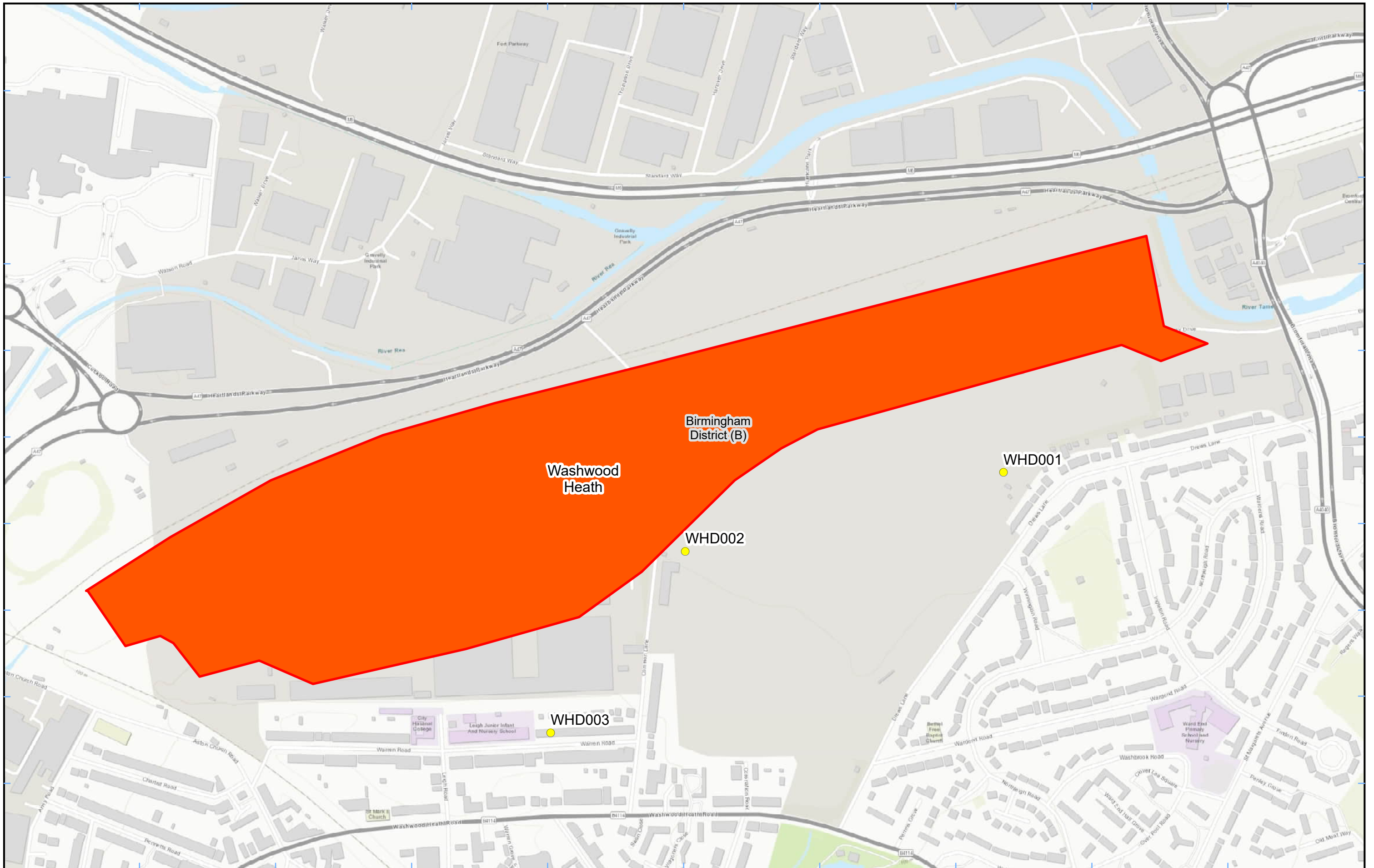
1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor, presented in Figure 3. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative 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 PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, 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 the monitoring period (October 2023).
- 1.1.9 Data capture was below 90% for WHD003 monitor due to power supply issues at the batching plant that the monitor is getting power from. This was resolved on 5<sup>th</sup> October 2023.
- 1.1.10 There were no (0) complaints received during the reporting period (October 2023).

# Appendix A – Worksites and Monitoring Locations

Figures 1 and 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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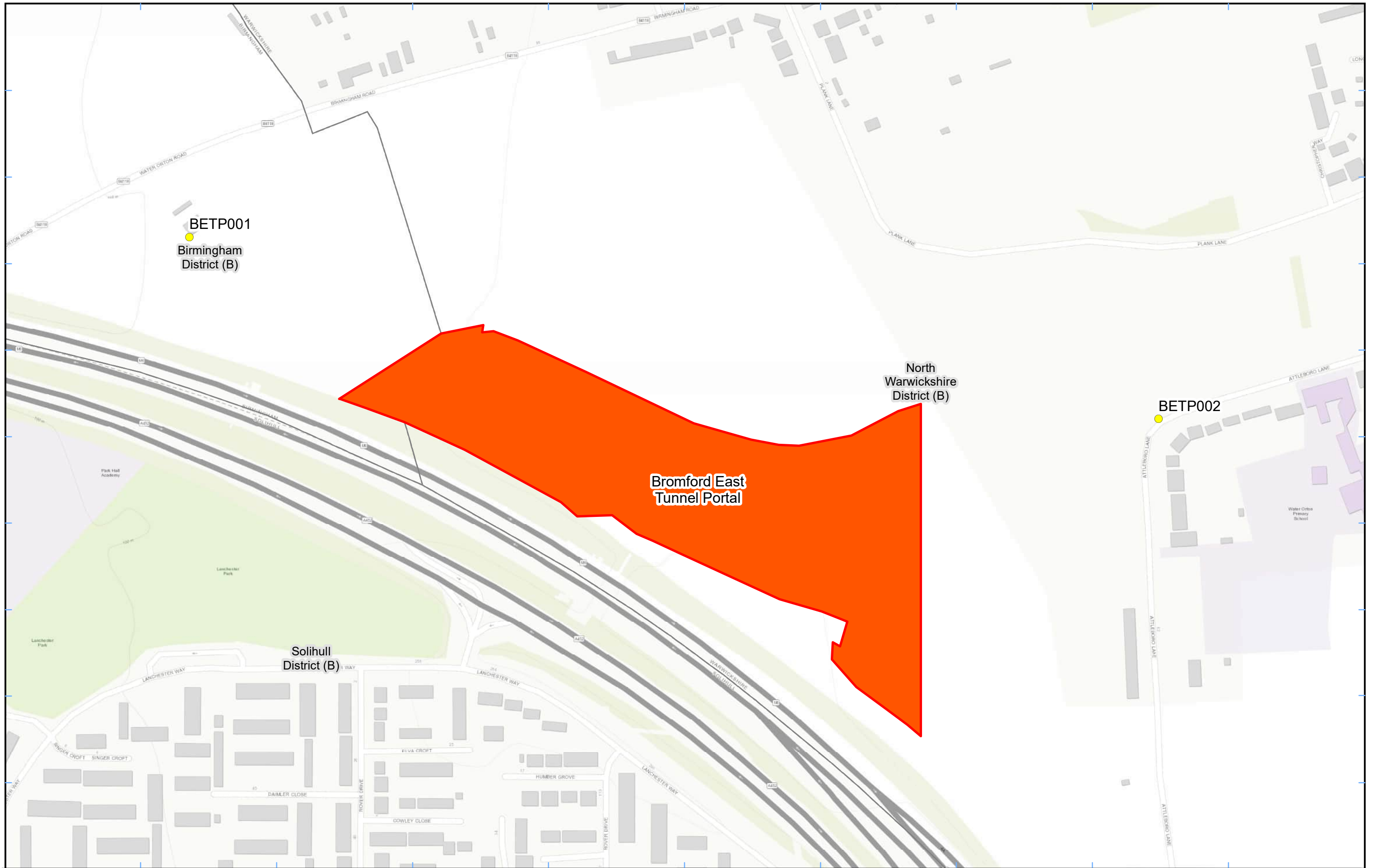
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**Legend**

- 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 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	8.2	0.3	93.0	0	99.9
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	7.7	0.1	71.0	0	99.1
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	8.0	0.4	38.7	0	85.1
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	8.7	0.3	38.1	0	99.7
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	7.2	0.5	28.4	0	99.7



Figure 3: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for all dust monitors



BETP002

