

## Air Quality and Dust Monitoring Monthly Report – March 2024

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 March 2024.

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](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 to Figure 3, include:

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

- Traffic on the main site haul road, including haul road maintenance with an excavator, Articulated Dump Trucks (ADTs), dozer and roller to compact;
- Vehicle delivery check area, including reversing vehicles and loading/unloading plant/material deliveries;
- Stockpile management area including tipping and loading of ADTs and wagons, excavators and dozers; and
- Tarmac batching plant operations, including delivery of aggregates, operating plant and concrete wagons.

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

- Lift 2nd roof cage on traveller formwork - Steel fixing on D-wall side Segment feeder pulled back so that multi-service vehicles (MSV) ramp can be welded;
- Finish installation of internal sidekickers;
- Continue installation of door box out and door frame;
- Continue in situ steel fixing for sump side - Rock anchors installation completed;
- 4/5 External shutters installed on sump side; and
- Steel fixing on the roof complete - Installing vibrators in sump side ongoing.

## **Curzon Street Station – Pre-main works**

- Stripping of weathering layer;
- Pile matt construction; and
- Installation of temporary haul road.

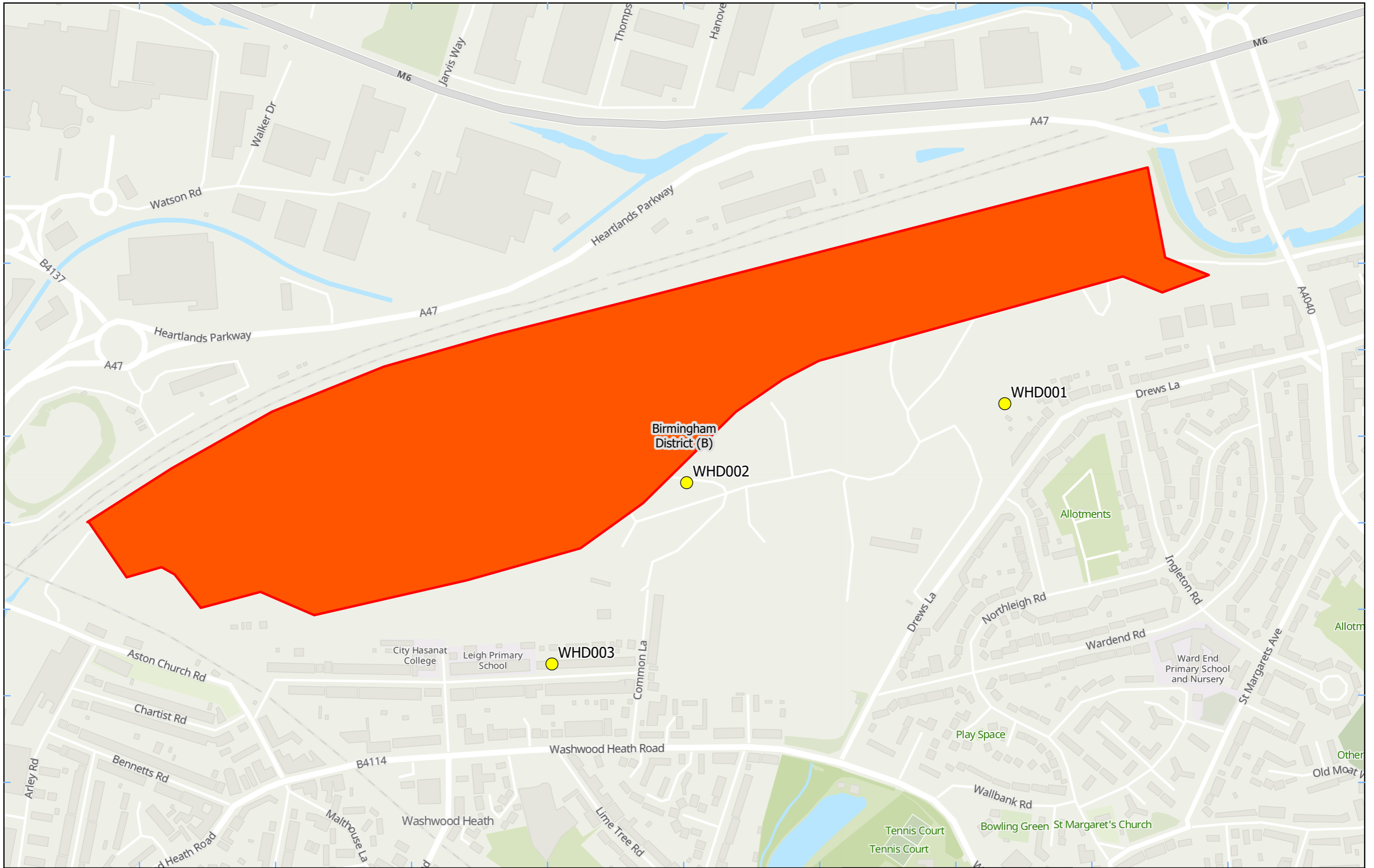
- 1.1.5 Seven (7) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from each dust monitor, presented 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 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 Details of the trigger alert investigations and remediation are presented in Appendix B, Table 3.
- 1.1.9 Data capture was below 90% for monitor WHD001 due to the removal of unrealistically low PM10 concentrations from 20th March 2024 onwards. It was suspected that airborne material drawn into the monitor caused an obstruction within the inlet. The monitor is being swapped out on 4th April 2024.
- 1.1.10 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during March 2024

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-24-107614-E-C	n/a	Dust - Air quality near property	Dust monitors have been checked, no exceedances were found. Car washing vouchers have been provided to resident as a good will gesture.

# Appendix A – Worksites and Monitoring Locations

Figures 1 - 3: Worksites and Monitoring Locations within BCC



**Legend**  
 [Red outline] District Borough Unitary Boundaries [Red fill] Worksite  
 [Yellow dot] Dust Monitor

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

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**Legend**  
 [---] District Borough Unitary Boundaries [Red Box] Worksite  
 [Yellow Dot] Dust Monitor

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Map Number  
 Map Name  
**Worksite and Monitoring Locations  
 In BCC (Sheet 2)**  
 Birmingham City Council

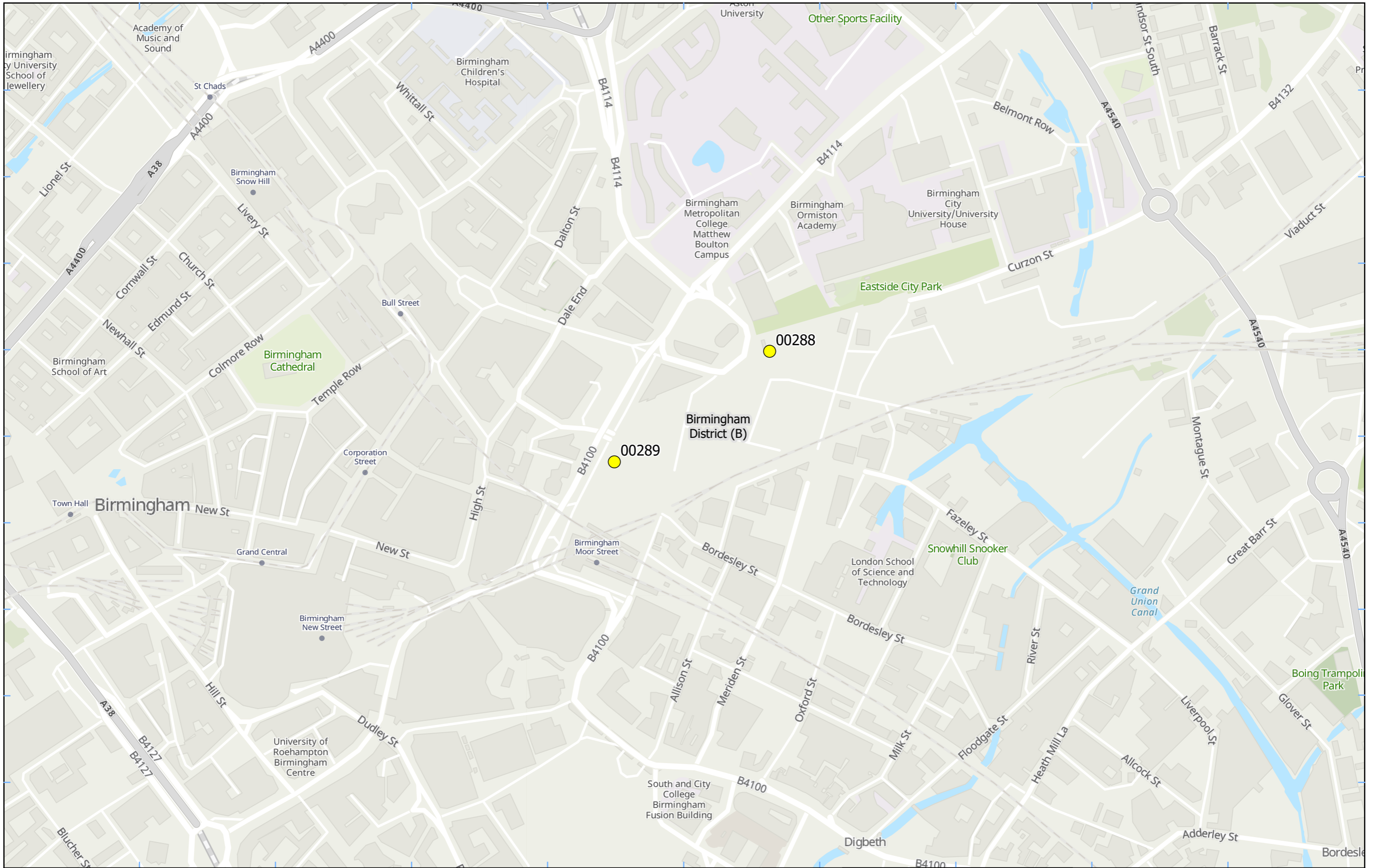
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- Legend**
- District Borough Unitary Boundaries
  - Dust Monitor

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Map Number	
Map Name	<b>Monitoring Locations In BCC (Sheet 3)</b>
<b>Birmingham City Council</b>	




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## Appendix B – Dust Monitoring Results

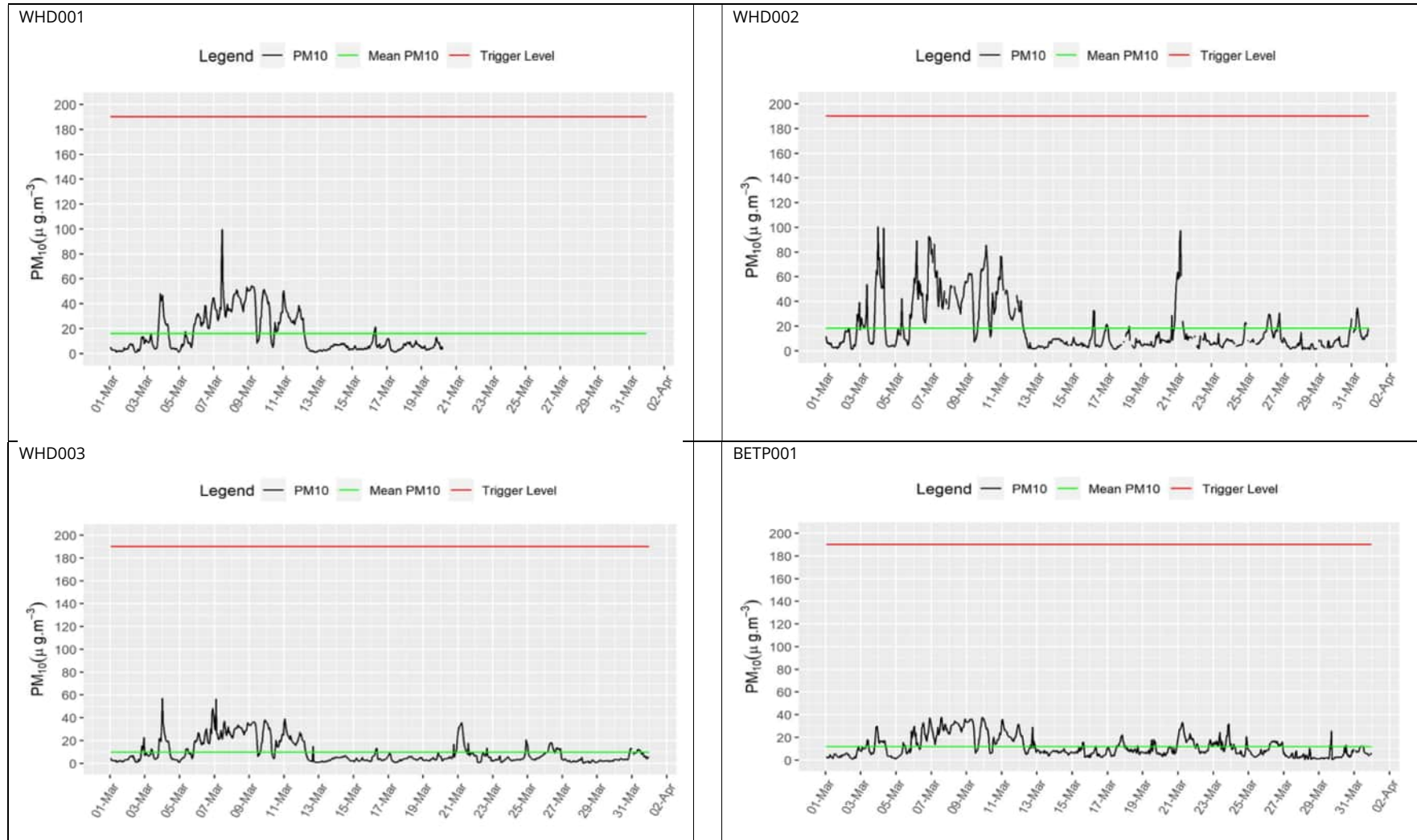
Table 2: Dust Monitoring Locations and Results

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	16.0	1.1	99.6	0	62.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	18.2	1.0	100.4	0	96.8
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	9.8	0.2	56.8	0	99.7
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	L	Yes	No	11.6	0.5	37.8	0	99.6
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	12.7	0.2	49.1	0	98.4
00288	407676, 287057	Curzon St – East Side City Park	M	Yes	N	9.2	0.68	150	0	98.79
00289	407450, 286896	Curzon St – Moor St Queensway	M	Yes	N	8.96	0.74	201	1	99.46

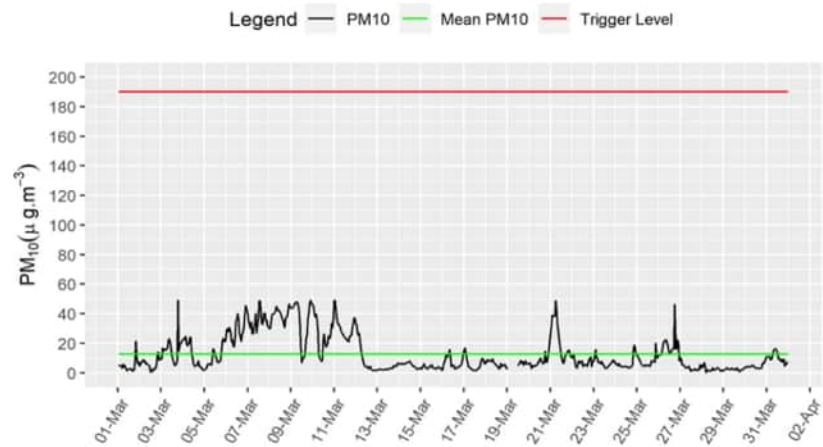
Table 2: Summary of exceedances during period (March 2024)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
00289	06/03/2024 04:01 – 05:00; 201.76 µg/m <sup>3</sup>	<p>At the time of the trigger there were no works associated with the HS2 site as the site was not doing any out-of-hours works.</p> <p>It is considered the trigger was due to the weather conditions at this time (low fog) as a similar peak was also experienced at monitor #288.</p>	Not applicable.

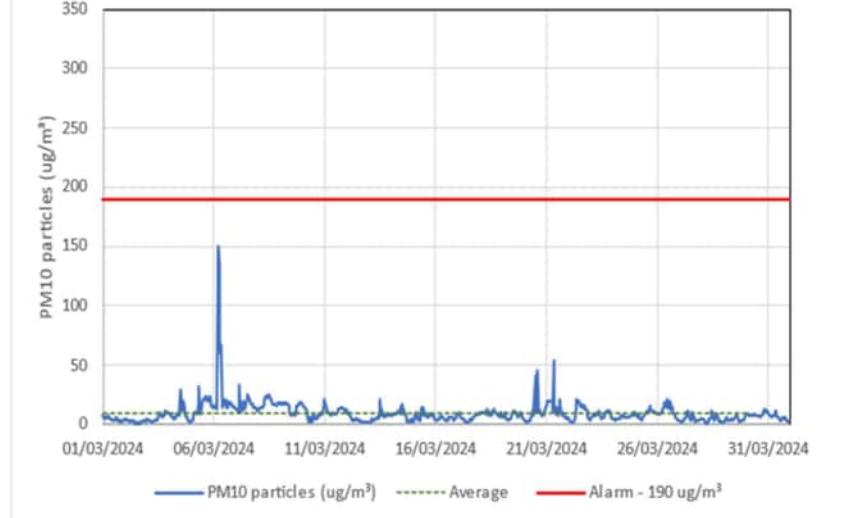
Figure 4: Construction dust 1-hour mean indicative PM10 concentration for all dust monitors



BETP002



00288



00289

