

## **Air Quality and Dust Monitoring Monthly Report – December 2022**

**Solihull Metropolitan Borough Council**



## Department for Transport

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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 air quality and dust monitoring undertaken in Solihull Metropolitan Borough (SMBC) during December 2022.
- 1.1.2 Figures 1 and 2 in Appendix A indicate the current worksites together with the dust monitoring locations for December 2022.
- 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 Construction works within Sublot 2B3 began in September 2020 and are expected to be completed in the year 2026. The current worksites, as presented in Appendix A, Figures 1 and 2, include:

## **Sublot 2B3**

- Earthworks consisting of soil stripping for haul road construction;
- Drainage pond construction; and
- Stockpiling.

## **Sublot 5S**

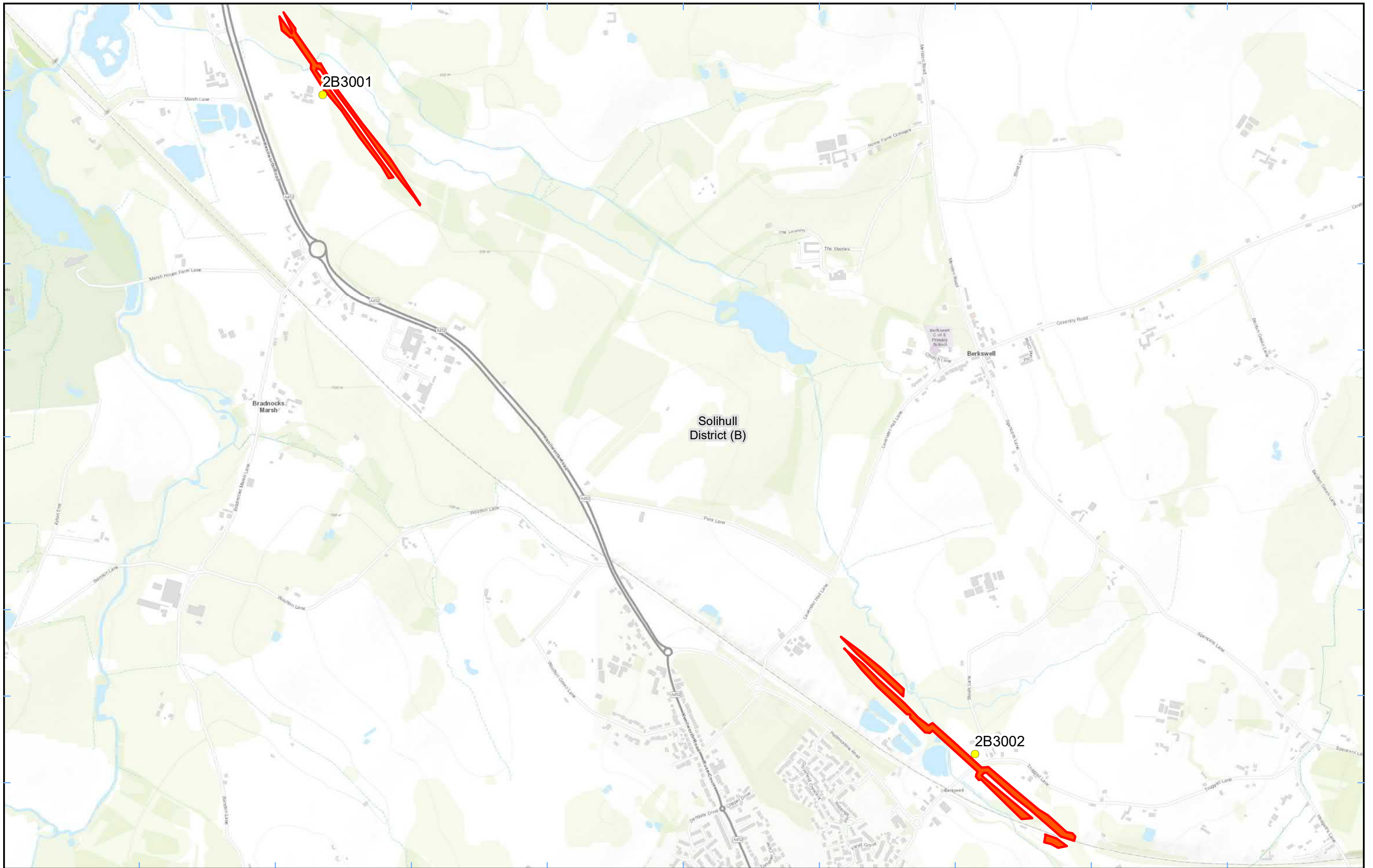
- Rigid inclusion installations;
- Topsoil removal for haul road;
- Widening the platform for M42 test piling platform;
- Backfilling;
- Vegetation works- low veg and tree clearance;
- Digging V-ditches;
- Asbestos investigations;

- Excavation of piling platform;
- Stockpiling.

- 1.1.5 Three (3) dust monitors are installed at 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 mitigations.
- 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 remediations are presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for both monitors due to power issues. Both monitors batteries were swapped out for new ones. CHR001's solar panels were stolen so no data has been recorded for this monitor.
- 1.1.10 No (0) complaints were received during the reporting period (December 2022).

# Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within the SMBC



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

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Map Number
Map Name <b>Worksite and Monitoring Locations In SMBC (Sheet 1)</b>
<b>Solihull Metropolitan Borough</b>



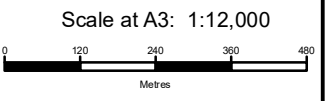
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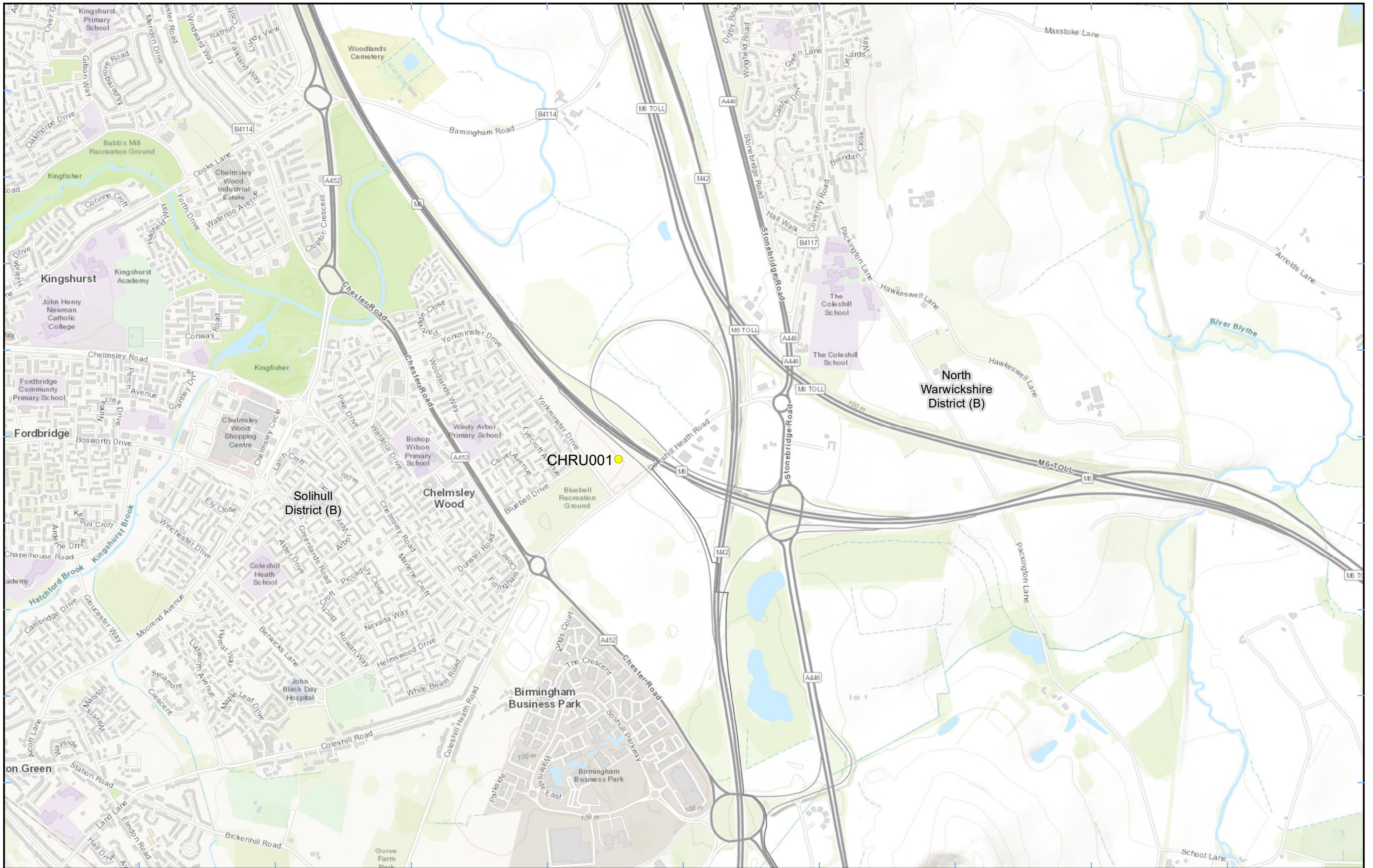
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**Legend**  
 Dust  
 District Borough Unitary Boundaries

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Map Number  
 Map Name  
**Monitoring Locations  
 In SMBC (Sheet 2)**  
 Solihull Metropolitan Borough

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## Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and December 2022 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 <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1-hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture Month (%)
2B3001	422322, 280034	Sublot 2B3, at Marsh Farm	M	Yes	No	8.9	0.1	43.9	0	80.1
2B3002	424601, 277729	Sublot 2B3, at Cherry Tree Cottage	M	Yes	No	13.3	0.1	232.0	3	80.4
CHRU001	419300, 286793	Bluebell Drive, Coleshill Heath Road Underbridge	M	Yes	No	0	0	0	0	0

Table 2: Summary of exceedances during period (December 2022)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B3002	13/12/2022: 21:00 – 21:59; 232.0 µg/m <sup>3</sup> 22:00 – 22:59; 203.2 µg/m <sup>3</sup> 15/12/2022: 04:00 – 04:59; 196.1 µg/m <sup>3</sup>	These times are outside the normal working hours for the worksites which means that the cause of these dust trigger alerts was an external source unrelated to the works.	N/A



Figure 2: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for all dust monitors

