

Air Quality and Dust Monitoring Monthly Report – January 2023 **Solihull Metropolitan Borough 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

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2021, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

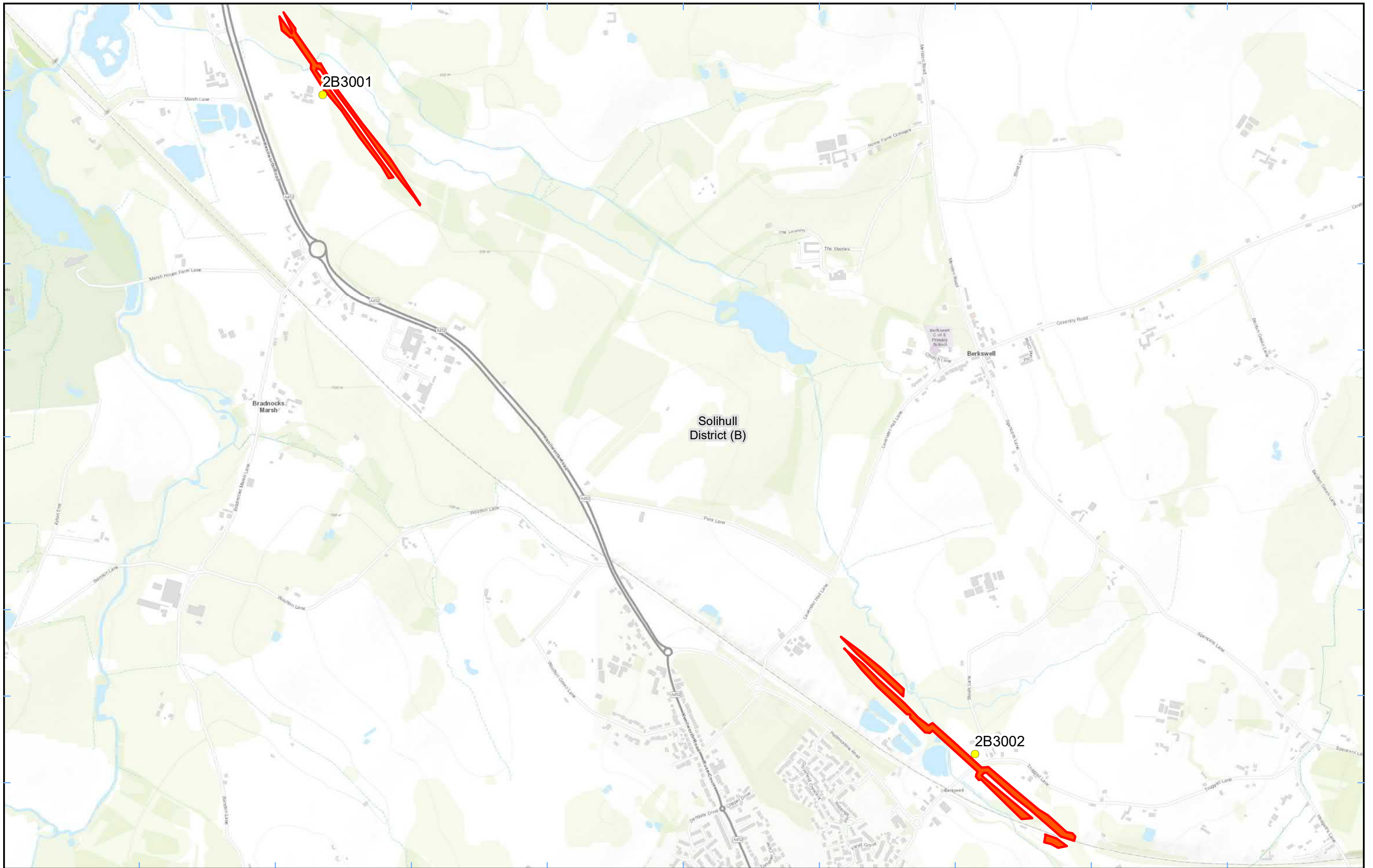
Monthly Summary

- 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 Council (SMBC) during January 2023.
- 1.1.2 Figures 1-2 in Appendix A indicate the current worksites together with the dust monitoring locations at Sublots 2B3 and 5S for January 2023.
- 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, Figures 1 and 2, include:
- Sublot 2B3**
- Balsall Common Viaduct:
- V-ditch installation and Marsh Farm piling platform.
- 1.1.5 Two (2) dust monitors are installed at the worksite, 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 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 One (1) dust trigger alert was recorded during the monitoring period. Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for all monitors due to power supply issues.

1.1.10 No (0) complaints were received during the reporting period.

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

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 SMBC (Sheet 1)
Solihull Metropolitan Borough



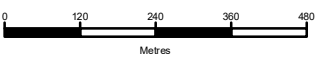
Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2021.
Ordnance Survey Licence Number 100049190.

Doc Number:

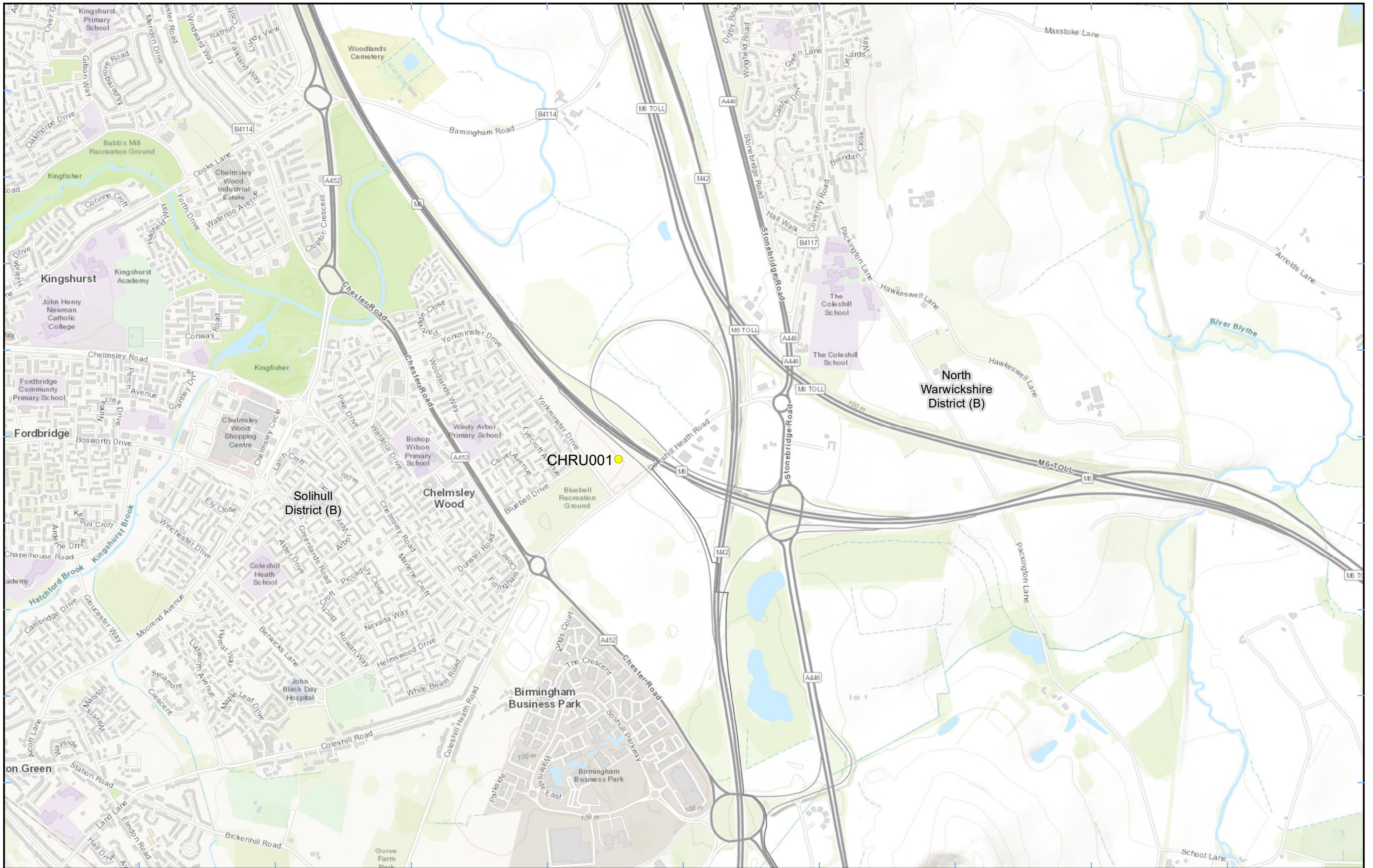


Scale at A3: 1:12,000



Metres

Date: 30/11/21



Legend
 Dust
 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
**Monitoring Locations
 In SMBC (Sheet 2)**
 Solihull Metropolitan Borough

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway, Birmingham B4 6GA.

© Crown copyright and database rights 2022.
 Ordnance Survey Licence Number 100049190.

Scale at A3: 1:14,000

Doc Number: **Date: 19/08/22**

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and January 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 Month (%)
2B3001	422322, 280034	Sublot 2B3, at Marsh Farm	M	Yes	No	9.8	0.1	117.2	0	75.5
2B3002	424601, 277729	Sublot 2B3, at Cherry Tree Cottage	M	Yes	No	11.2	0.1	281.8	1	65.1
CHRU001	419300, 286793	Bluebell Drive, Coleshill Heath Road Underbridge	M	No	No	-	-	-	-	0

Table 2: Summary of exceedances during period (January 2023)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B3002	27/01/2023 15:00 – 15:59; 281.8 µg/m ³	Excavating and backfilling of the platform which occurred only 2/3 metres away from the monitor, so the dust alert was caused by the proximity of the works to the monitor. No dust controls are currently in place.	The only exceedance was when the works were close to the monitor. The works didn't go near any sensitive receptors. We therefore consider the exceedance due to the proximity of the works to the monitor, and the works themselves did not present a high risk to offsite receptors. Because of this, no control measures were used.

Figure 2: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

