

Air Quality and Dust Monitoring Monthly Report – April 2023

Warwick District 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 Warwick District (WDC) during April 2023.
- 1.1.2 Figures 1 to 3 in Appendix A indicate the current worksites together with the dust monitoring locations for April 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 – 3, include:

The East Lodge Stoneleigh Park site (Sublot 2A2)

Stoneleigh Park:

- Operational haul road
- Borehole installation
- Stockpiling of material
- Operational plant crossing
- Variable head testing within boreholes
- Monitoring of boreholes
- Piling works
- Excavation around piles

Cubbington:

- Haul road construction.
- Concrete works (backwall of temporary bridge + other minor works, footpaths, blocks etc).
- Installation of signage.
- Utility works.
- Fencing.
- Stockpile maintenance.
- Lime stabilisation.
- Construction of earthworks embankments.
- Drainage blanket.

Burton Green Tunnel (Sublot 2B2)

- Earthworks
- Monitor 2B2001 temporarily decommissioned on 06/04 (Will be relocated to 402 Cromwell Lane next month).

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

Offchurch Cutting:

- Welsh Rd UB Installation of reinforcement to base installation and complete concrete pour.
- Placement of fill from Conveyor belt (from SL1) to form Grand Union Canail (GUC) embankment.
- Offchurch Cutting topsoiling and drainage blanket.
- Offchurch cutting Lime stabilisation works.
- Replace damaged signpost at Fosse Way south Roundabout.
- Stone platform and Drainage and ducting to Fosse Way Road head.
- Formwork to wall test panel at Fosse Way Compound.
- Construct Fosse Way Plant crossing transition slab.
- Severn Trent - move stockpiles and construct concrete slabs for water main diversion
- River Leam Install Temporary bridge.
- Hunningham Road embankment construction and piling/crane platform construction.
- Trial holes to Rising Main sewer at Hunningham Rd and start sewer diversion (directional drilling and trenching works).
- move stockpiles for STW diversion works.
- Temp drainage remedials and V ditch construction.
- Bulk Earthworks to River Leam Embankment area.
- Replace boundary fencing at Hunningham Road (south).

A429 Kenilworth Road Overbridge (Sublot 2B1)

- Haul route diversion
- Utility diversion
- Haul road usage
- A429 roadhead install and material deliveries

1.1.5 Eight (8) dust monitors have been installed at worksites, where are underway. These sites returned a medium dust risk rating.

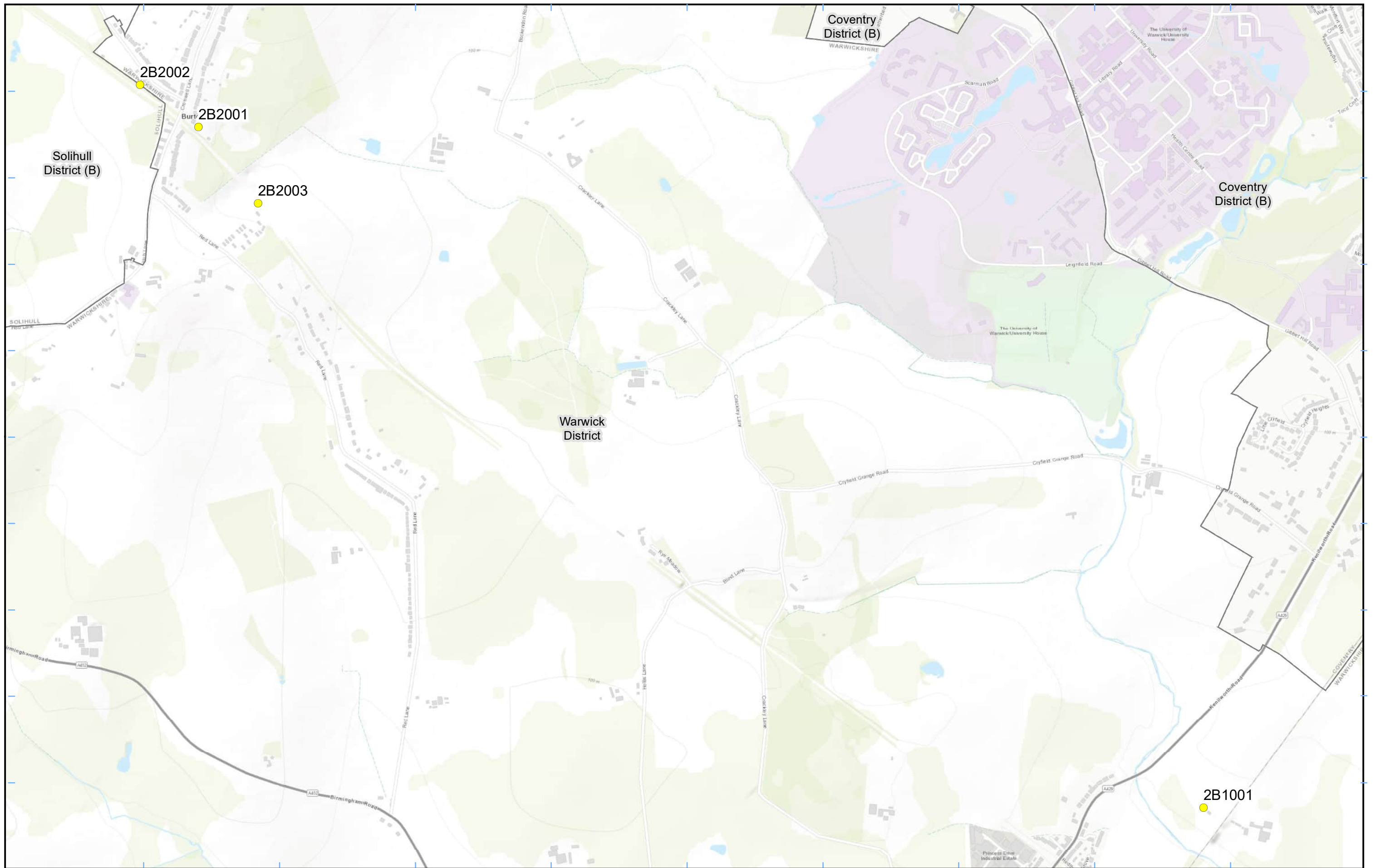
1.1.6 Dust monitoring location and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 4. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative 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 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 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 3. All other results were in line with expected ranges.
- 1.1.9 There were no (0) complaints received during this reporting period (April 2023).
- 1.1.10 Monitors CUB001 and 2B2001 have recorded unusually low readings during the monitoring period (April 2023). It is recommended that a site visit is planned to investigate, to establish if these monitors are operating correctly.
- 1.1.11 Monitor 2B2001 was decommissioned on 6th April 2023 in preparation for a relocation to 402 Cromwell Lane as there are currently no works occurring on the side of Cromwell Lane that the monitor is currently located.

Appendix A – Worksites and Monitoring Locations


Figures 1-3: Worksites and Monitoring Locations within WDC



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

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Map Number	
Map Name	Monitoring Locations In WDC (Sheet 1)
	Warwick District Council



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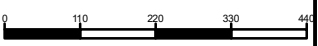
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Date: 25/10/22



Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 2)**
 Warwick District Council

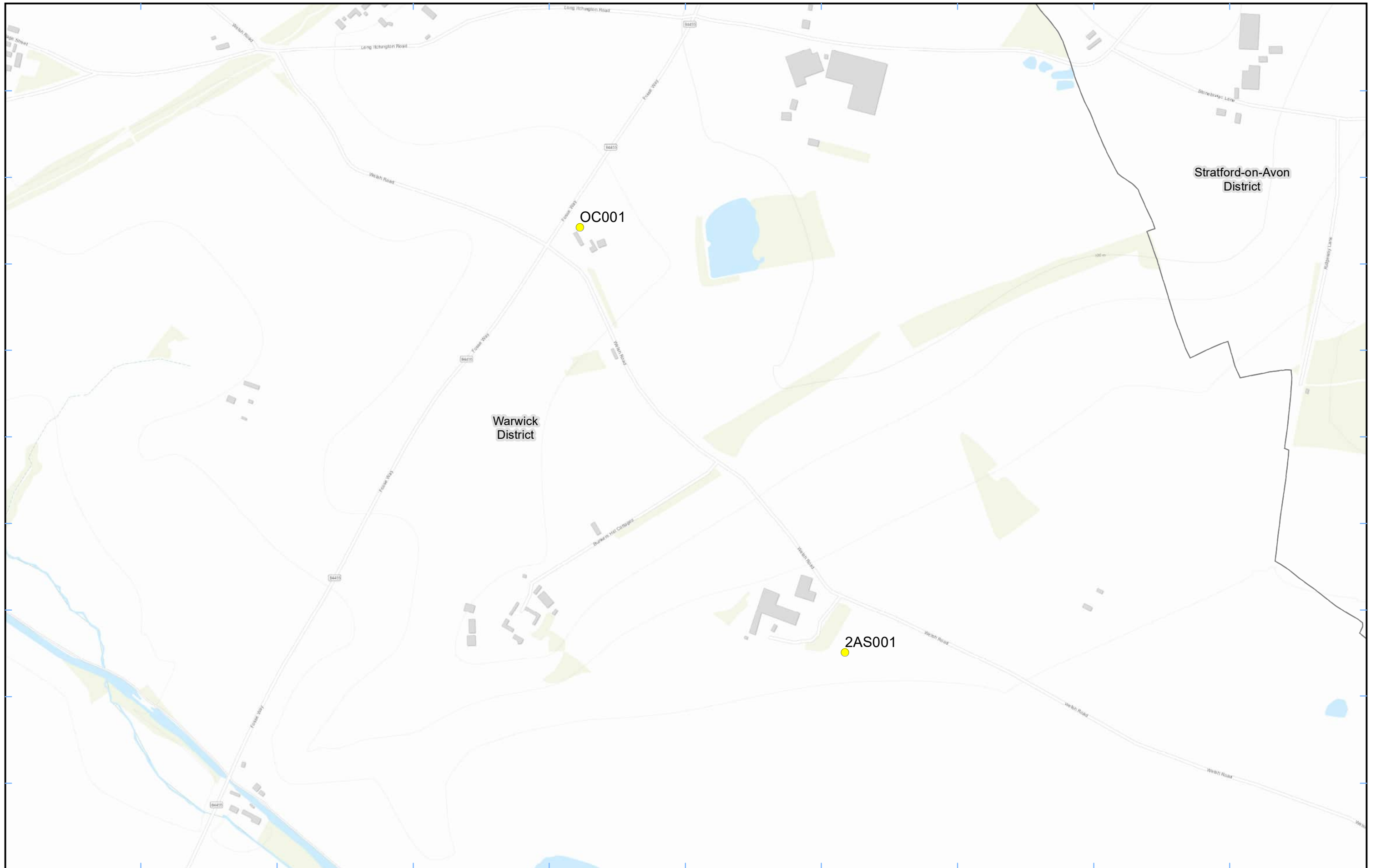
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Legend

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Map Number

Map Name
**Monitoring Locations
In WDC (Sheet 3)**

Warwick District Council

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Appendix B – Dust Monitoring Results

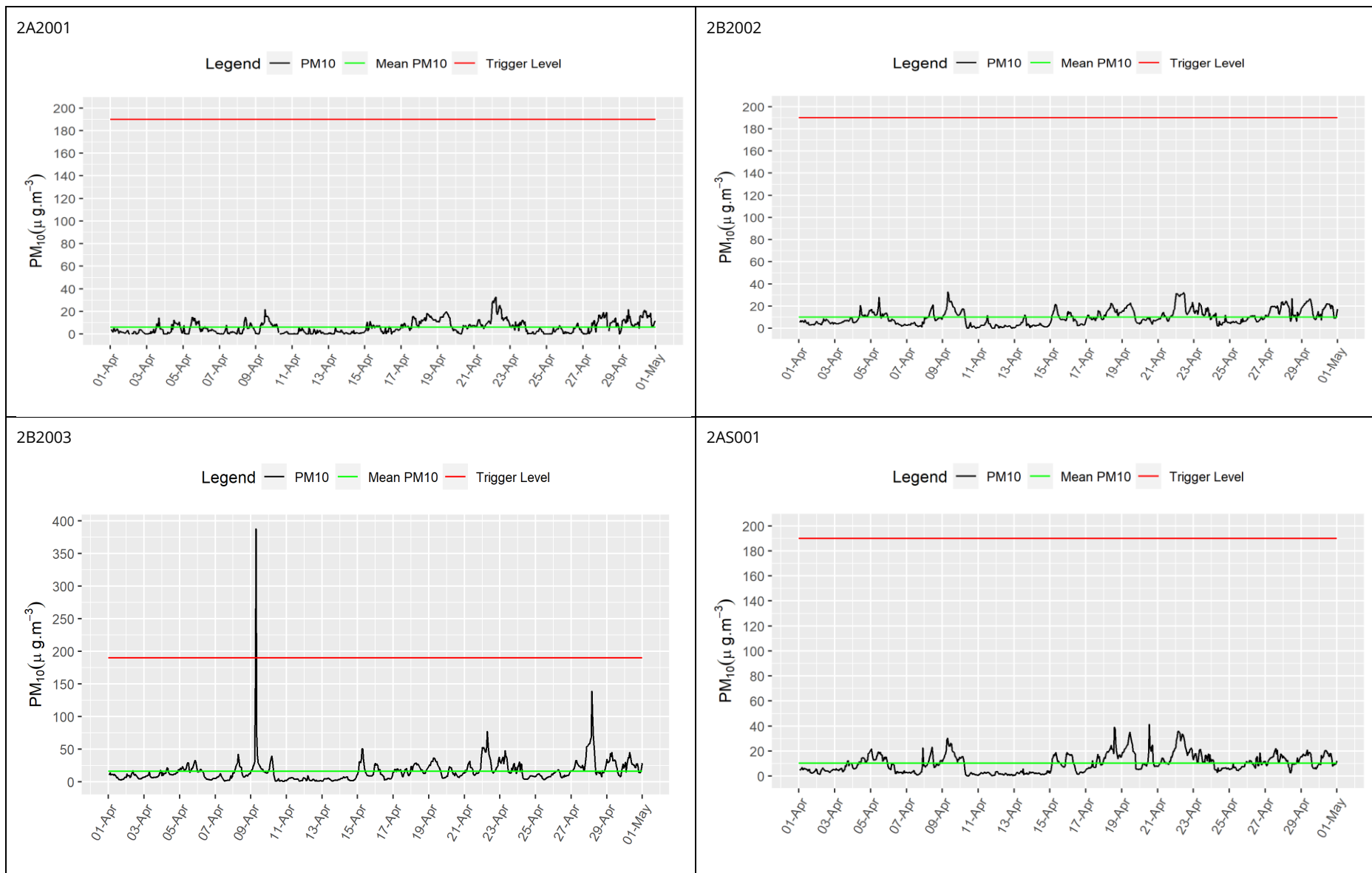
Table 1: Dust Monitoring Locations and April 2023 Results

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 (%)
2A2001	432798, 271434	East Lodge, Stoneleigh Park	M	Yes	No	6.0	0.1	32.7	0	94.6
2B2001	426960, 275882	Sublot 2B2, at nearest sensitive receptor on Cromwell Lane	M	Yes	No	-	-	-	-	0
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	10.0	0.1	32.8	0	99.9
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	16.5	0.9	387.7	1	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	11.3	0.2	45.2	0	100.0
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	10.2	0.3	41.5	0	99.9
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	14.3	0.3	310.4	1	100.0
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	1.0	0.1	26.6	0	83.5

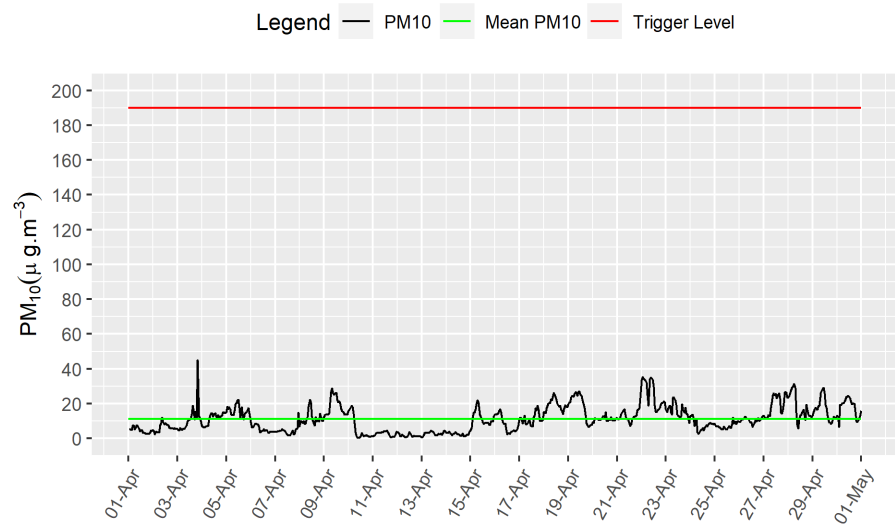
Table 3: Summary of exceedances during period (April 2023)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B2003	09/04/2023 06:00 – 06:59; 387.7 µg/m ³	The alert occurred on a Sunday where there were no works taking place at the time so this exceedance was not connected to HS2 activities.	N/A
OC001	19/04/2023 16:00 – 16:59; 310.4 µg/m ³	The alert was caused by unusual earthworks activities occurring in close proximity to the monitor, and unusually high vehicle movements on the nearby haul road.	N/A

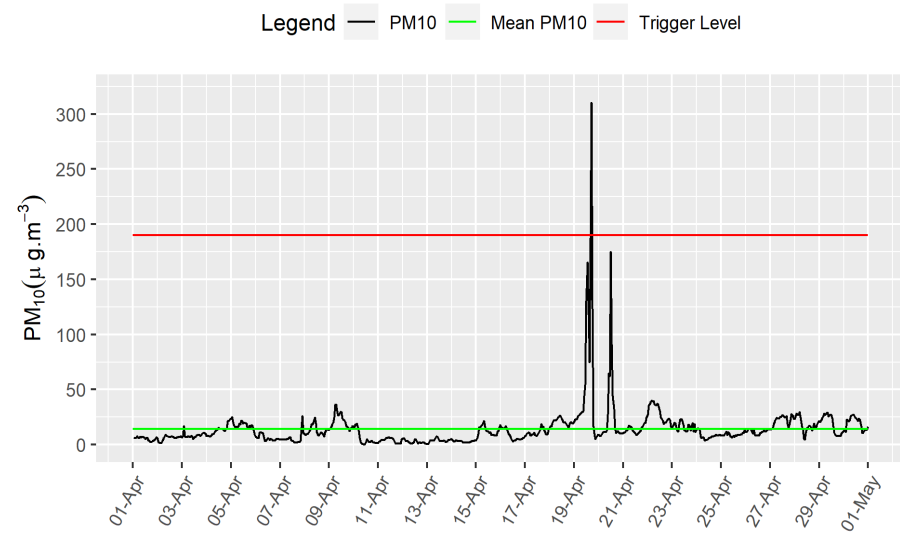
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



2B1001



OC001



CUB001

