

Air Quality and Dust Monitoring Monthly Report – December 2023

Warwick District 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.

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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 within Warwick District Council (WDC) during December 2023.
- 1.1.2 Figures 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, 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 to 3, include:

Sublot 2A2

Fosse Way Main

- Operation of Roadhead at Fosse Way Compound.
- Bulk excavation for Fosse Way overbridge.
- Pile breakdown at Fosse Way overbridge.

Stoneleigh Park

- Piling.
- Operational haul road.
- Excavation works.
- Environmental monitoring.
- Installation of precast parapets.

Cubbington Compound Worksite

- Piling.
- Working platform construction.
- Haul road maintenance.
- Stockpile arrangements.

Burton Green Tunnel (Sublot 2B2)

- Trial holes by Morrisons.
- Generator powering traffic lights.

- Piling platform for bridge demolition (SB3 D- Wall pole).

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

- Welsh Road Underbridge concrete pour to abutment Wall 2 and strip shutters.
- Install steel reinforcement and scaffold to Wing Wall 1a.
- Stone platform construction north and south of canal.
- Trial holes to south of canal.
- Offchurch Cutting topsoiling and drainage blanket.
- Severn Trent - trenching works and pipe install for water main diversion including concrete slabs over water main.
- Scaffold, formwork and reinforcement to wingwalls and construction and concreting of Pier P2 at Hunn Road Overbridge.
- Remedial works and cleaning out of drainage v-ditches.
- Bulk Earthworks to River Leam Embankment area.
- Install permanent drainage pipes and manholes at River Leam Embankment.

A429 Kenilworth Road Overbridge (Sublot 2B1)

- Earthworks.
- Haul Road Movement / Articulated Dump Trucks (ADTs).
- Dumpers.

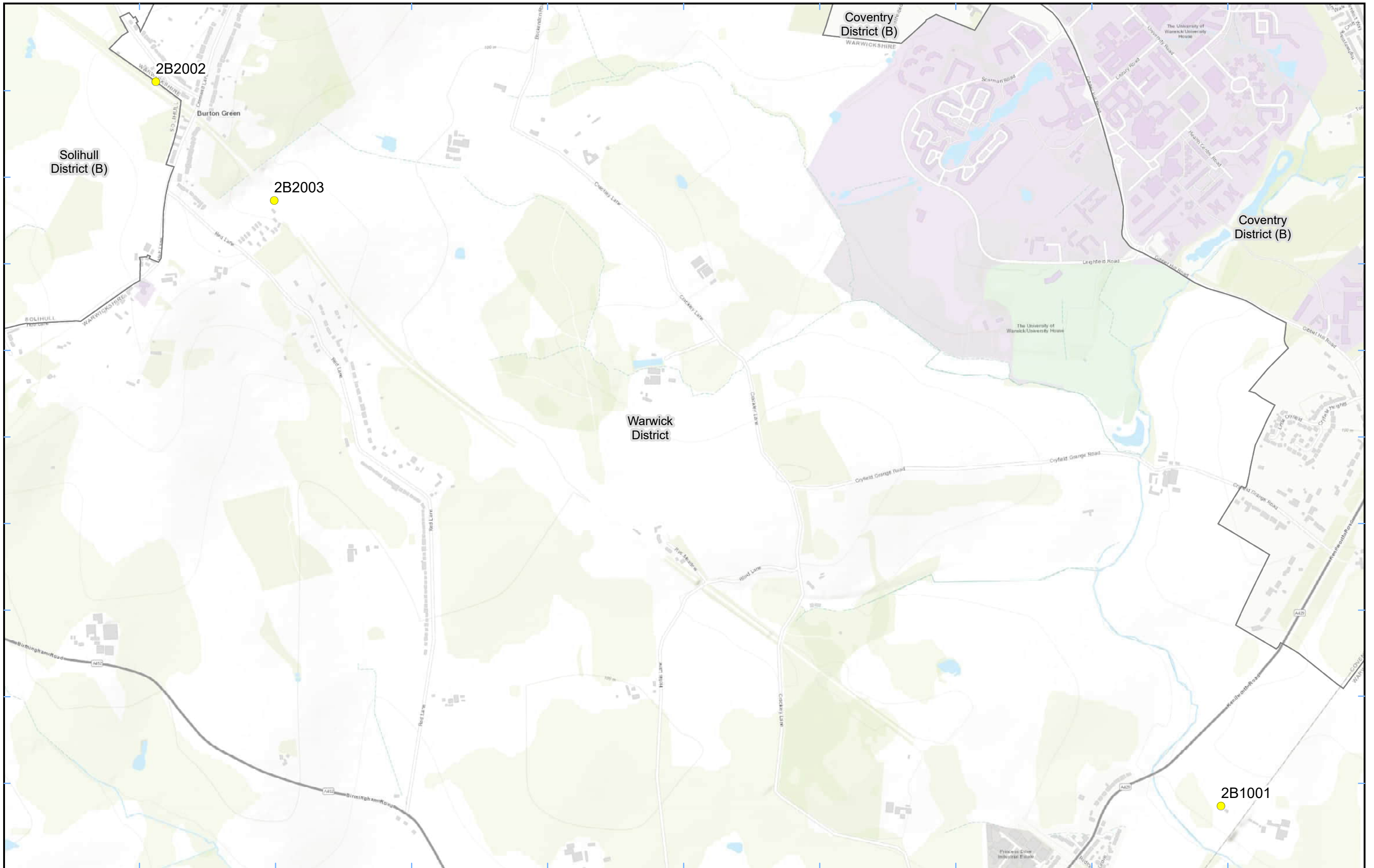
- 1.1.5 Nine (9) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor, presented in Figure 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 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 No (0) dust trigger alerts were recorded during the monitoring period (December 2023).
- 1.1.9 Data capture was below 90% for multiple monitors due to lower amounts of sunlight due to the weather being more overcast than we would normally expect for the month of December which has meant that the batteries were not able to be charged sufficiently which led to the monitors being offline overnight which has led to more battery failures

than we would normally expect for December which has led to more site visits for battery refreshes needing to be conducted than we would normally expect.

1.1.10 There were no (0) complaints received during the reporting period (December 2023).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within WDC



Legend
 Dust
 District Borough Unitary Boundaries

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

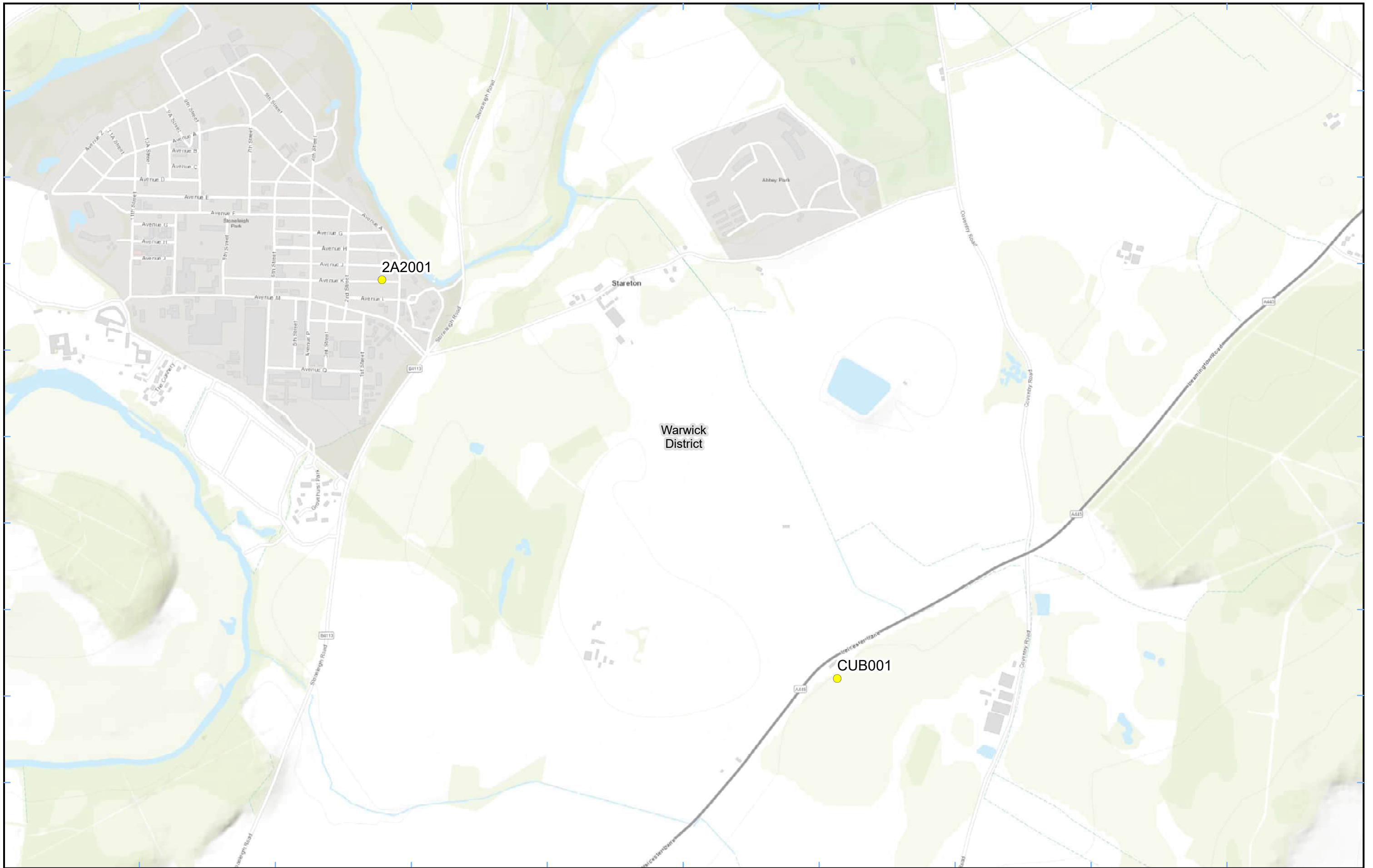
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Legend
 ● Dust
 - - - District Borough Unitary Boundaries

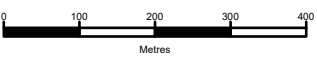
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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 2)**
 Warwick District Council

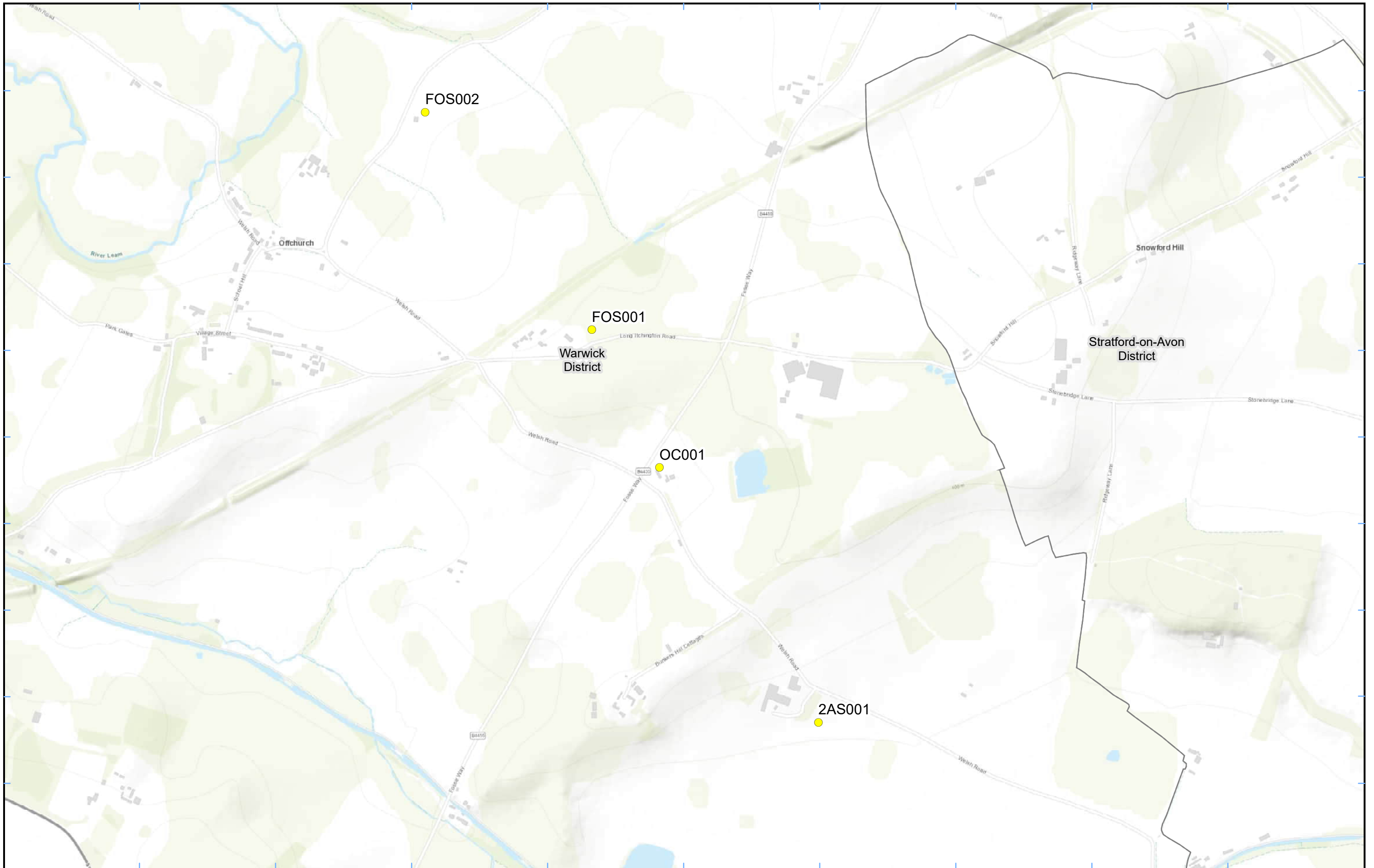

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Legend
 Dust
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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 3)**
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Appendix B – Dust Monitoring Results

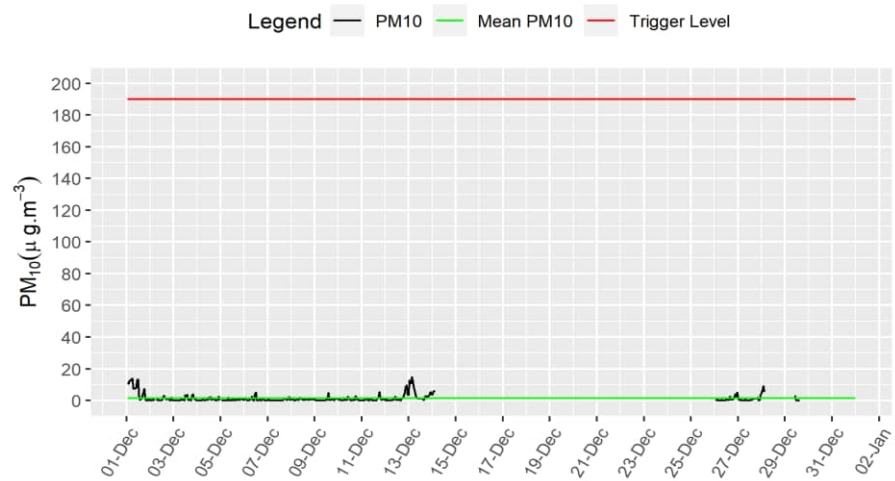
Table 1: Dust Monitoring Locations and Results

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 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	5.7	0.1	43.6	0	56.9
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	5.2	0.2	27.7	0	39.0
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	18.1	1.2	102.8	0	37.2
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	1.5	0.1	14.7	0	42.9
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	4.1	0.1	15.8	0	37.9
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	11.4	0.1	124.3	0	78.4
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	8.1	0.1	28.2	0	39.4
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	L	Yes	No	7.1	0.1	21.2	0	42.1
FOS002	436429, 266276	Valley Fields, Fosse Way Main	L	Yes	No	9.7	1.0	21.3	0	21.2

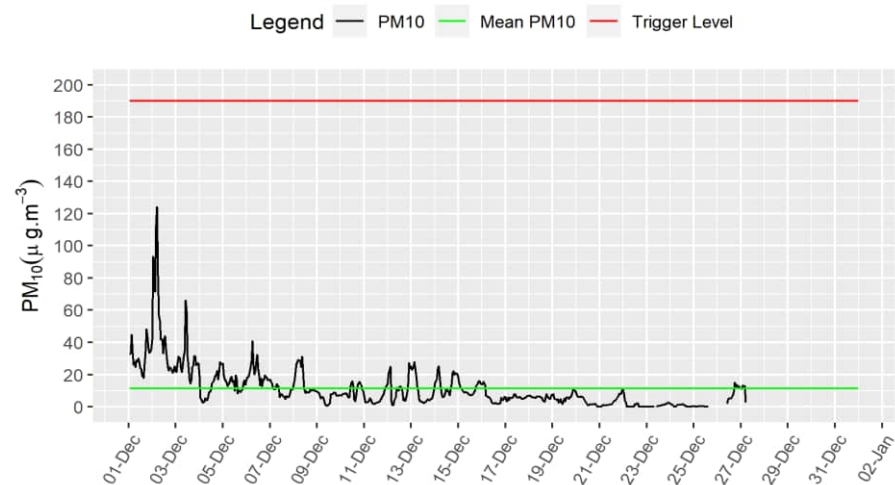
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



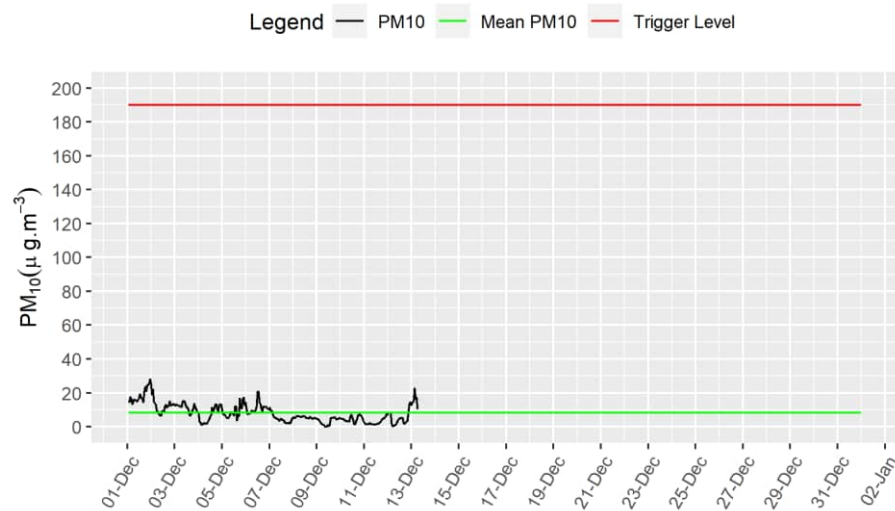
2B1001



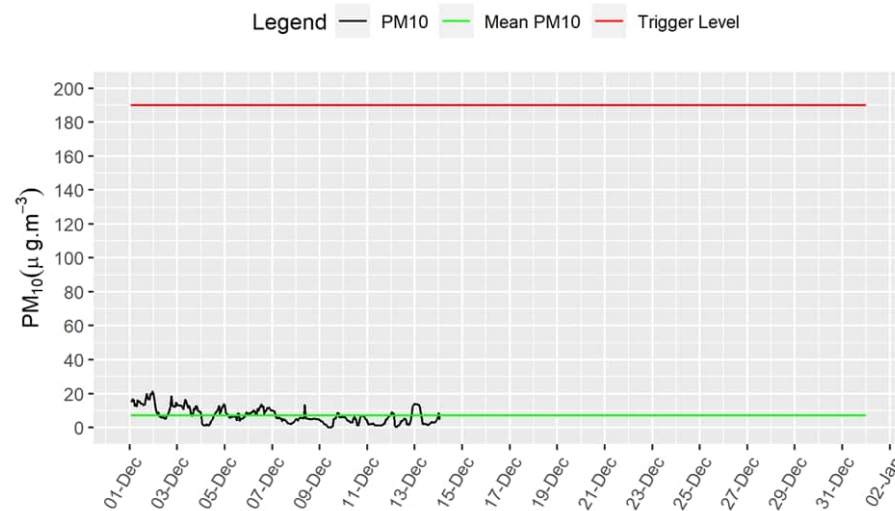
OC001



CUB001



FOS001



FOS002

