

## Air Quality and Dust Monitoring Monthly Report – November 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.

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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 November 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](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, Figures 1 to 3, include:

## **Sublot 2A2**

### Fosse Way Main

- Welsh Road Underbridge concrete pour to abutment Wall 1 and strip shutters.
- Veg clearance to south side of canal.
- Topsoil strip to south of canal.
- Trial holes to south of canal.
- Offchurch Cutting topsoiling and drainage blanket.
- Bulk excavation and construction of secondary piling platforms and access roads to Fosse Way Overbridge.
- Trim piles at Fosse Way Overbridge.
- Steel and concrete to abutments and pier bases at Hunn Road Overbridge.
- Install vibration monitoring to Canal at Longhole Viaduct.

### Stoneleigh Park

- Operational haul road
- Bored piling works
- Site maintenance
- Pump test
- North accommodation overbridge wing wall construction including steel fixing.
- Shuttering and concreting
- Sheet piling at River Avon

### Cubbington Compound Worksite

- Piling works.
- Site set-up arrangements.
- Excavation and backfilling.
- Concrete pour.
- Soil stripping.
- Strimming.

### **Burton Green Tunnel (Sublot 2B2)**

- Concrete pours by Galldris/Utility diversion works at Cromwell Lane.
- Temporary road diversion / Galldris installing curves.
- Galldris Installing lightening columns.
- Trial holes by Morrisons.
- Hydro demolition.
- Digging out tunnel in Area 4.
- Generator powering traffic lights.

### **Welsh Road Underbridge Satellite Compound (Sublot 2AS)**

- Welsh Road UB concrete pour to abutment Wall 1 and strip shutters.
- Veg clearance to south side of canal.
- Topsoil strip to south of canal.
- Trial holes to south of canal.
- Offchurch Cutting topsoiling and drainage blanket.
- Bulk excavation and construction of secondary piling platforms and access roads to Fosse Way Overbridge.
- Trim piles at Fosse Way Overbridge.
- Steel and concrete to abutments and pier bases at Hunn Road Overbridge.
- Install vibration monitoring to Canal at Longhole Viaduct.
- Severn Trent - trenching works and pipe install for water main diversion including concrete slabs over water main.
- Scaffold, formwork, and reinforcement to Pier P2 at Hunn Road Overbridge.
- Drainage pipe repairs to temp drainage system at Hunn Road.
- 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)**

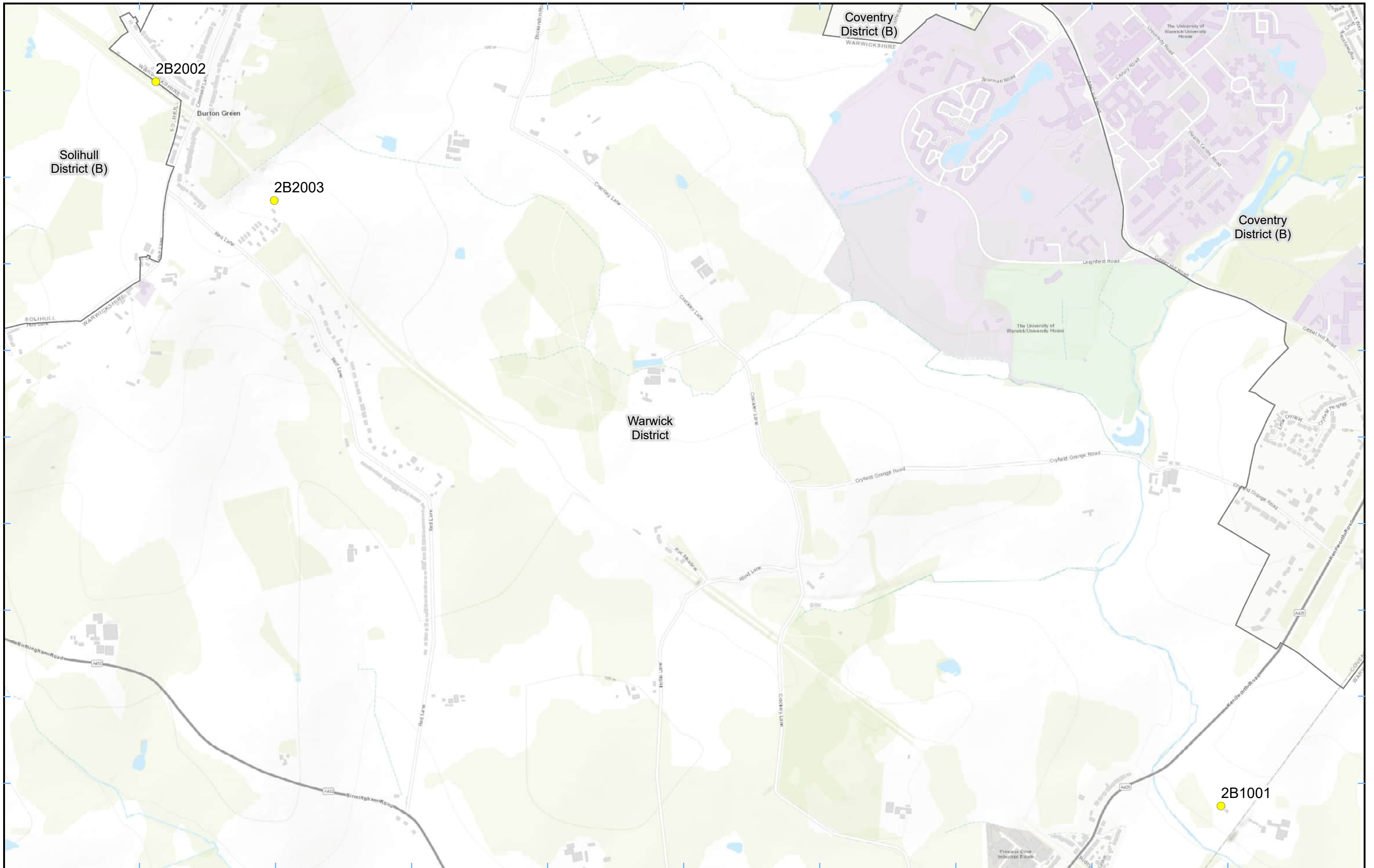
- Mas haul for material.
- Haul Road Movement.
- Temporary Drainage.
- Earthworks.
- Haul Road Movement/Articulated Dump Trucks (ADTs).

- Dumpers.
- Milling machine taking off asphalt Tarmac.

- 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 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 multiple monitors. Battery refreshes were carried out on monitor 2B2003 on 3<sup>rd</sup> November 2023 and 24<sup>th</sup> November 2023. Maintenance and power investigation visits were carried out on monitor 2B1001 on 7<sup>th</sup> November 2023 and 23<sup>rd</sup> November 2023. A full maintenance work up and monitor relocation was completed on monitor 2AS001 on 15<sup>th</sup> November 2023. A battery refresh was carried out on monitor 2B2002 on 17<sup>th</sup> November 2023. A field calibration and battery refresh were completed out on monitor CUB001 on 27<sup>th</sup> November 2023. A full maintenance work up was carried out on monitor FOS002. A full maintenance work up and battery refresh were completed on monitor FOS001 on 27<sup>th</sup> November 2023. A maintenance power investigation visit and battery refresh was done on monitor 2A2001 on 30<sup>th</sup> November 2023.
- 1.1.10 There were no (0) complaints received during the reporting period (November 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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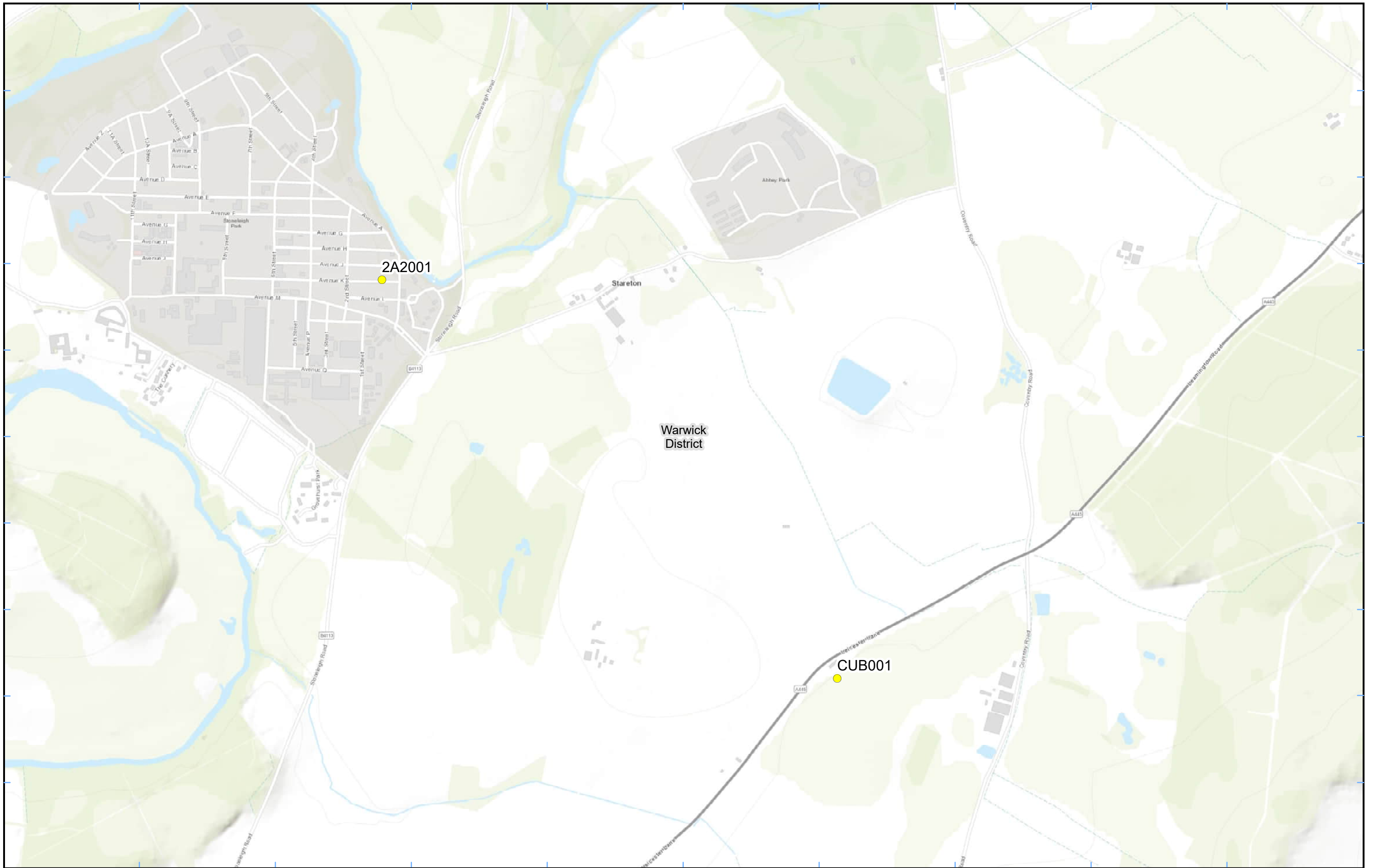
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 In WDC (Sheet 2)**  
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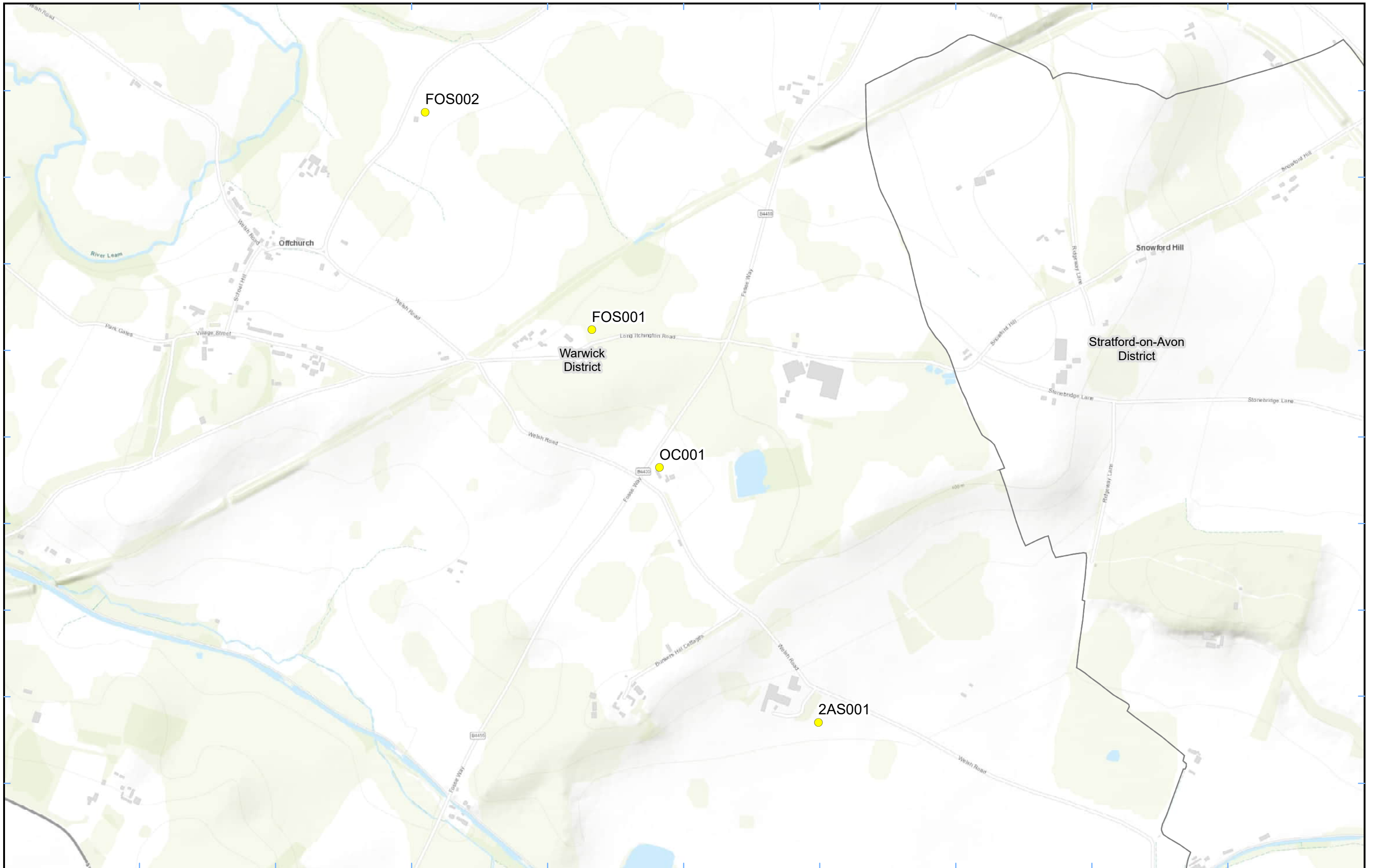
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Map Number  
 Map Name  
**Monitoring Locations  
 In WDC (Sheet 3)**  
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## Appendix B – Dust Monitoring Results

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 <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 (%)
2A2001	432798, 271434	East Lodge, Stoneleigh Park	M	Yes	No	5.7	0.1	52.9	0	95.4
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	7.0	0.1	37.0	0	54.3
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	12.6	0.7	298.9	2	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	5.2	0.1	57.0	0	58.1
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	1.6	0.1	144.2	0	73.1
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	11.8	0.1	87.3	0	100.0
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	6.6	0.1	44.7	0	93.6
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	L	Yes	No	5.7	0.1	45.6	0	83.2
FOS002	436429, 266276	Valley Fields, Fosse Way Main	L	Yes	No	5.9	0.1	38.0	0	99.9

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

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B2003	04/11/23: 21:00 - 21:59; 299 $\mu\text{g m}^{-3}$ 22:00 - 22:59; 192 $\mu\text{g m}^{-3}$	Outside of BBV construction hours. Exceedances not associated with HS2 construction works.	N/A

Figure 4: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for all dust monitors



