

Air Quality and Dust Monitoring Monthly Report – September 2024

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.

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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 Council (SMBC) during September 2024.

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, Figure 1 to Figure 3, include:

Sublot 2B2

Waste Lane Overbridge Satellite

- Digging and replacement works.
- Excavation works.

Carol Green Rail Underbridge

- Demolition works.

Sublot 2B3

Balsall Common Viaduct

- Excavation works for cofferdam construction.

Park Lane

- Material stockpile and reload.
- Digging and replace.
- Embankment works.

Sublot 5S

Coleshill Heath Road

- Removal of class 1 to landscape fill (dig and replace).

- Joint venture between Bachy Soletanche and Balfour Beatty Ground Engineering (SB3) removal.
- Relocation of SB3 stockpile onto landscape.
- Landscaper fill.
- Backfill.
- SB3 test pile + demobilisation.
- Excavation.
- Cut of dig and replace .
- Fill of dig and replace .
- Devegetation.
- East piling platform upgrade.
- Wall reinforcement.
- Formwork.
- Installation narrow lanes – traffic management.
- Ongoing material transport throughout the month during core working hours (Monday to Friday, 08:00 – 18:00).

Coleshill Heath Road Underbridge

- SB3 piling.
- Dig and replace.
- Reload from stockpile to south access ramp fill.
- Class 2 import.
- Piling platform construction.
- Lower embankment fill.
- Landscape embankment fill.
- Fence installation.
- Ongoing material transport throughout the month during core working hours (Monday to Friday, 08:00 – 18:00).

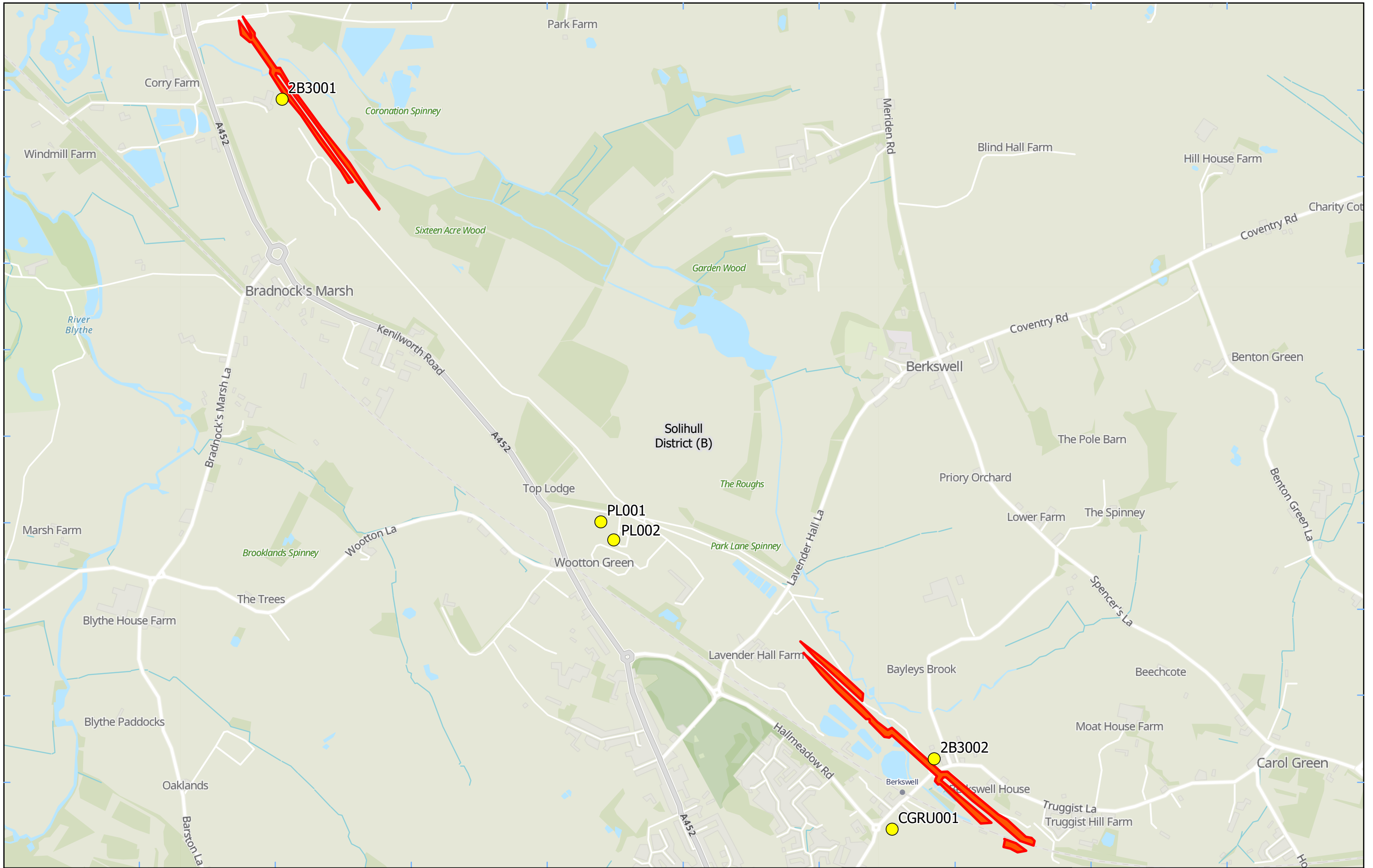
- 1.1.5 Ten (10) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented 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 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 (September 2024).

1.1.9 There were no (0) complaints received during this reporting period (September 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within SMBC



Legend

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Map Number

Map Name
**Worksite and Monitoring Locations
In SMBC (Sheet 1)**

Solihull Metropolitan Borough

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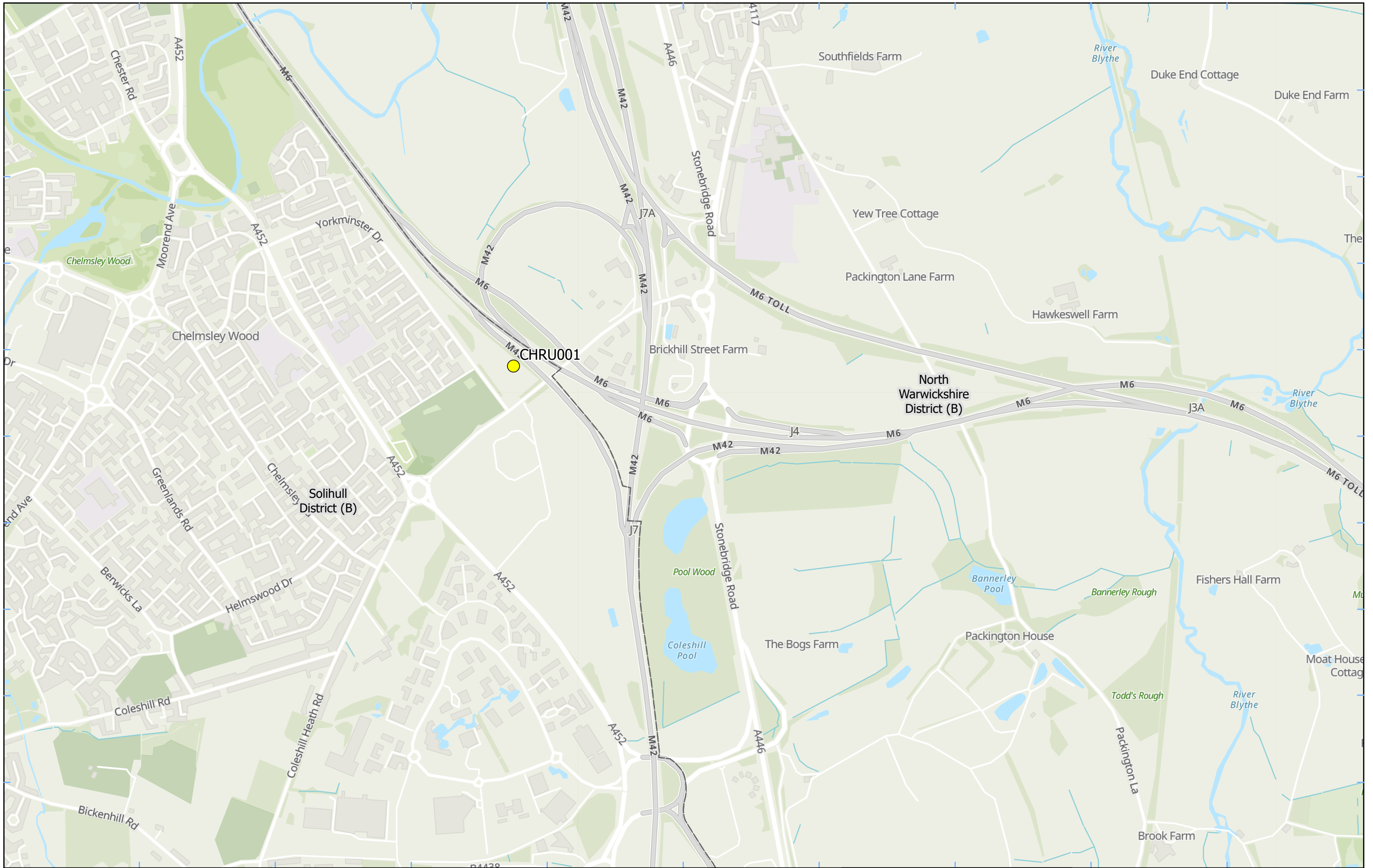
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Legend
 Dust Monitor
 District Borough Unitary Boundaries

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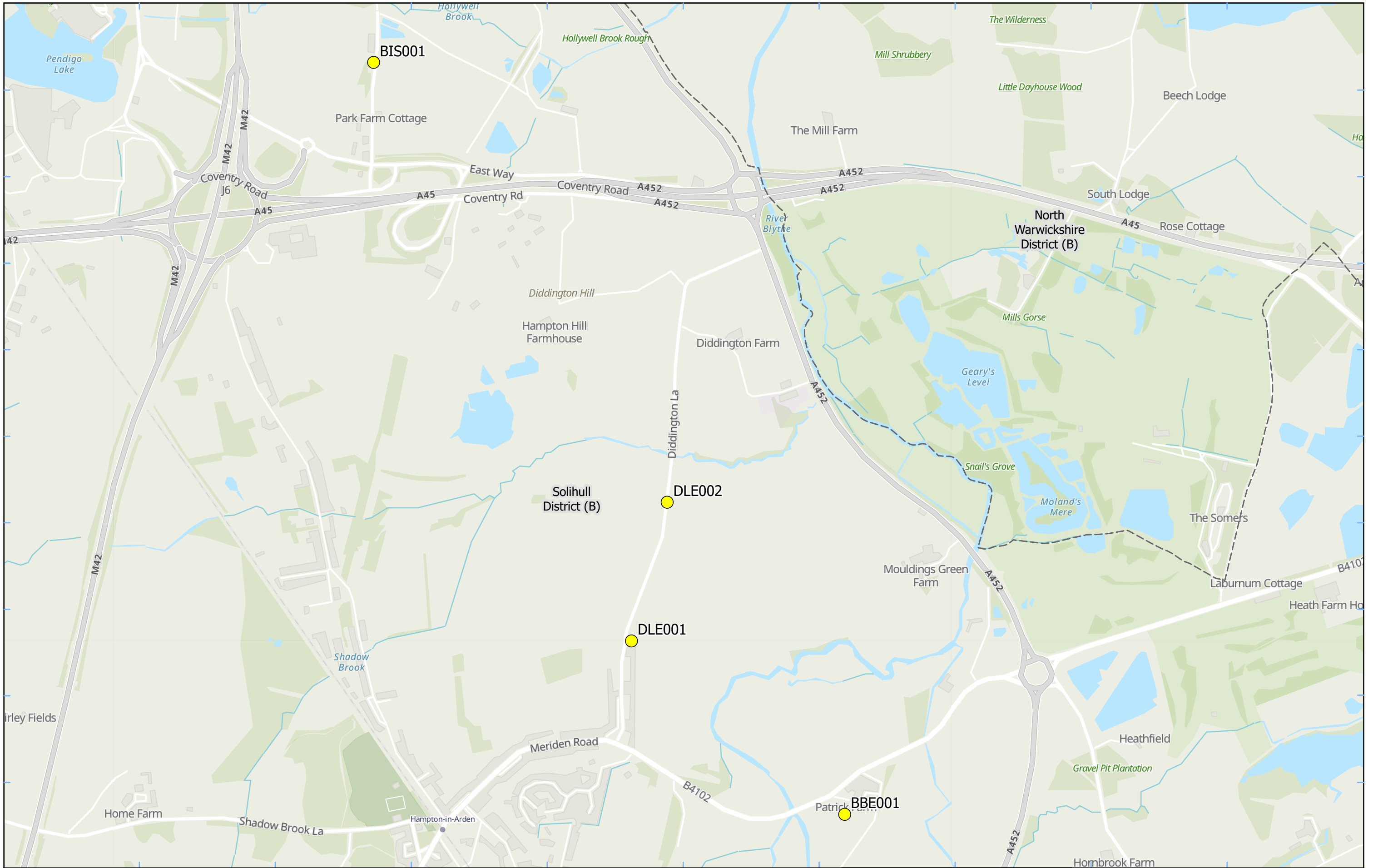
Map Number
 Map Name
**Monitoring Locations
 In SMBC (Sheet 2)**
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 Metres
 Date: 26/03/24



Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

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

Solihull Metropolitan Borough

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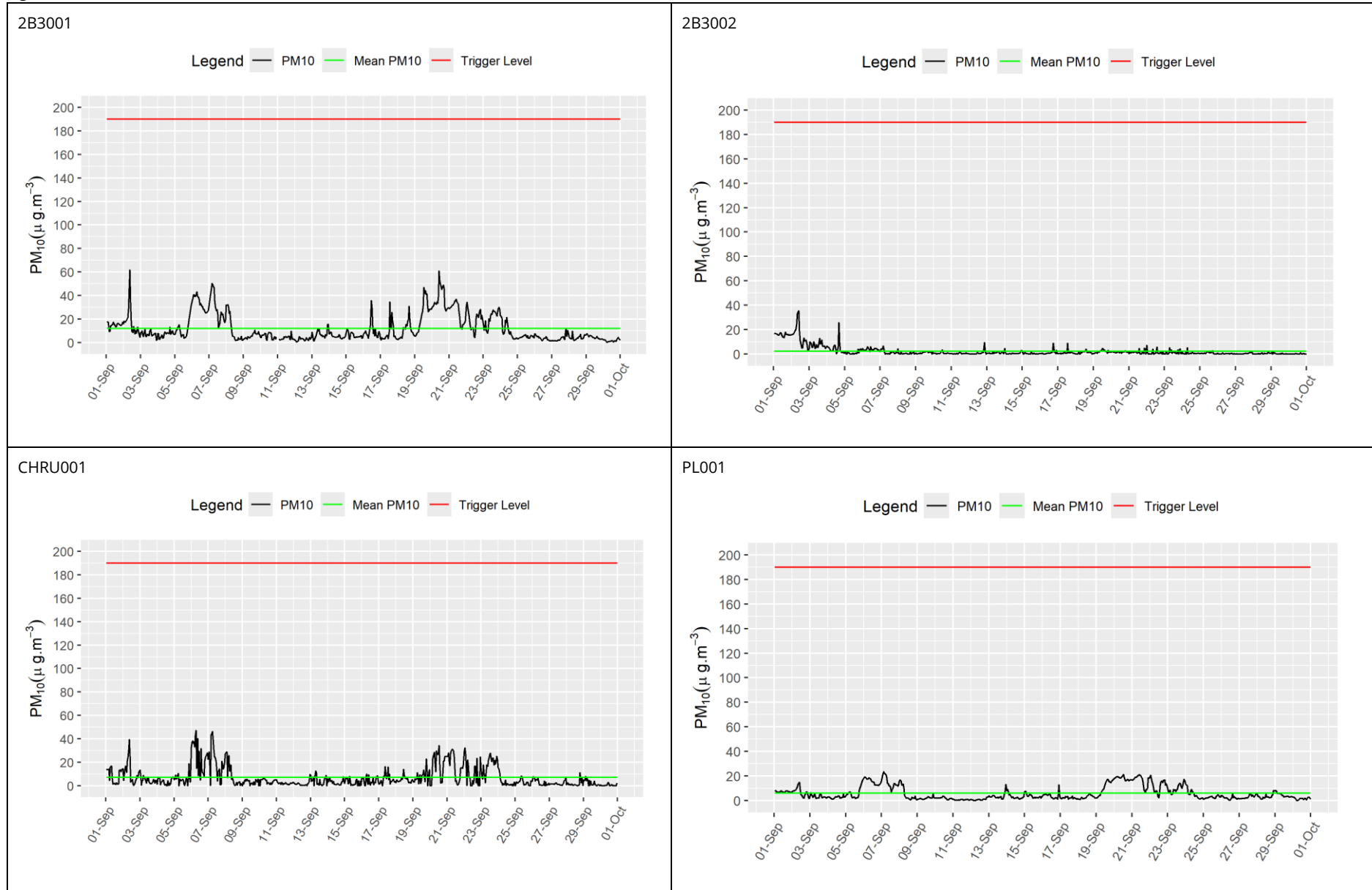
Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and Results

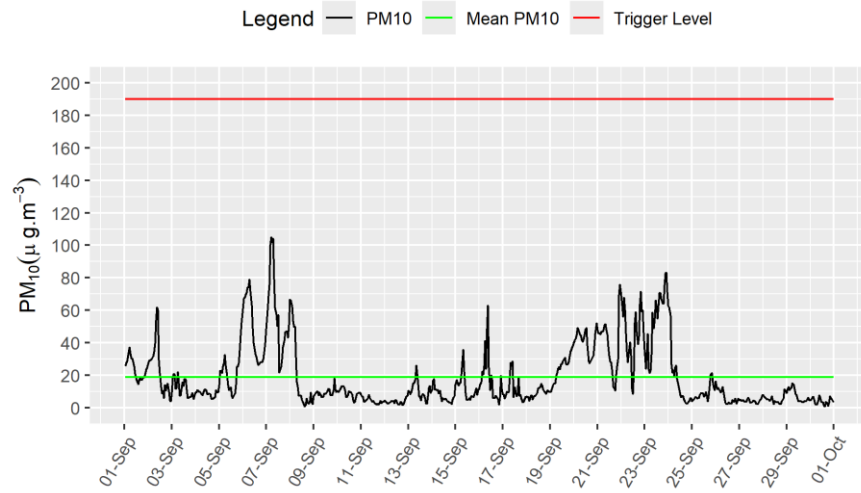
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture Month (%)
2B3001	422322, 280034	Sublot 2B3, at Marsh Farm	M	Yes	No	12.1	0.0	61.8	0	99.7
2B3002	424601, 277729	Sublot 2B3, at Cherry Tree Cottage	M	Yes	No	2.5	0.0	35.4	0	100.0
CHRU001	419300, 286793	Bluebell Drive, Coleshill Heath Road Underbridge	L	Yes	No	7.2	0.0	47.2	0	100.0
PL001	423436, 278557	Park Lane	M	Yes	No	6.0	0.1	23.5	0	100.0
PL002	423481, 278494	Final Home, Park Lane	M	Yes	No	19.1	0.8	104.9	0	100.0
DLE001	421035, 281818	Diddington Lane	M	Yes	No	11.5	0.2	173.0	0	100.0
DLE002	421139, 282222	Hampton Hill Farmhouse	M	Yes	No	8.6	0.3	37.2	0	100.0
BIS001	420284, 283503	Hollywell Brook	M	Yes	No	10.8	0.2	47.6	0	100.0
CGRU001	424454, 277483	Annora House	M	Yes	No	5.3	0.0	72.2	0	100.0

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 (%)
BBE001	421656, 281313	Patrick Farmhouse	M	Yes	No	9.6	0.5	42.7	0	100.0

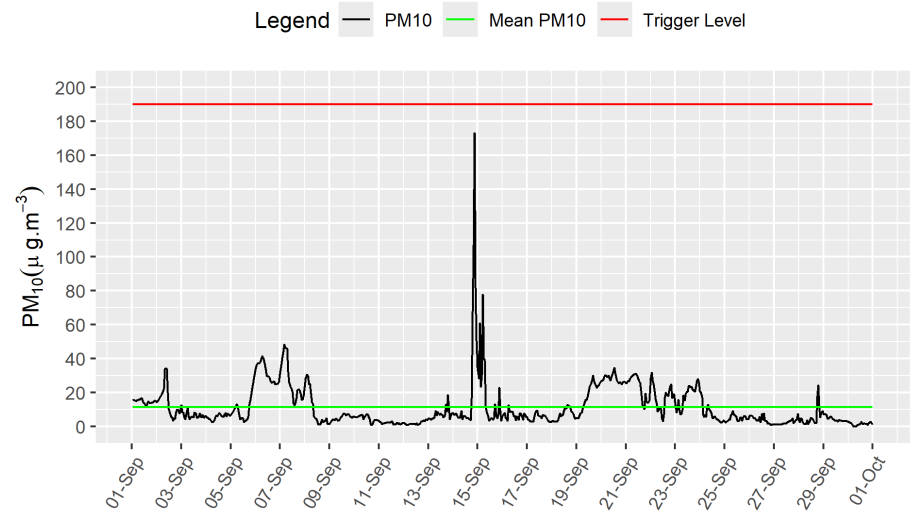
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



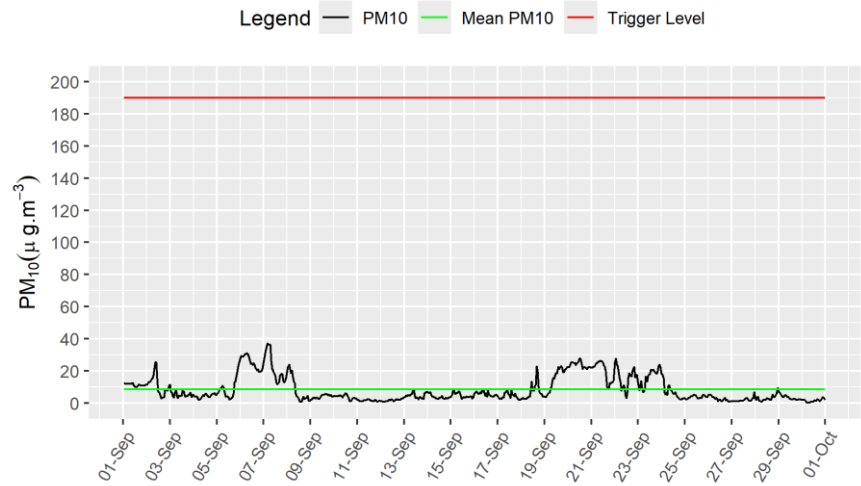
PL002



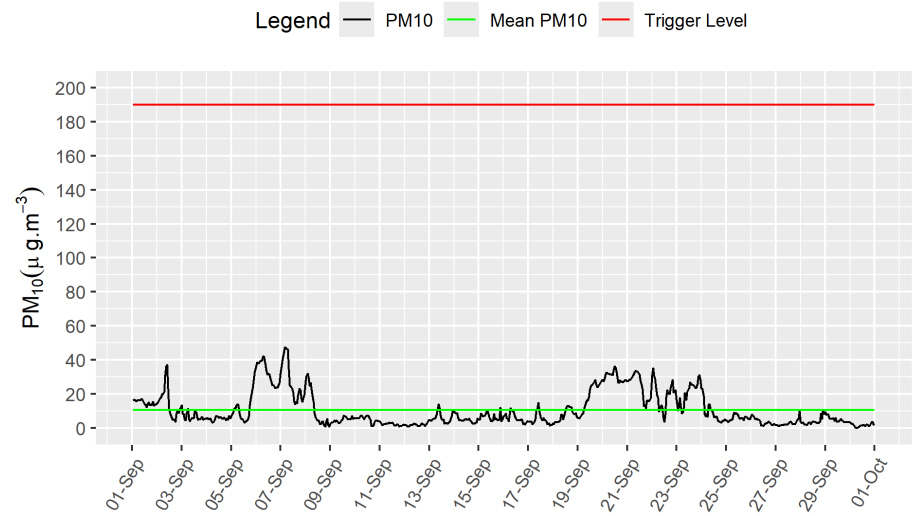
DLE001



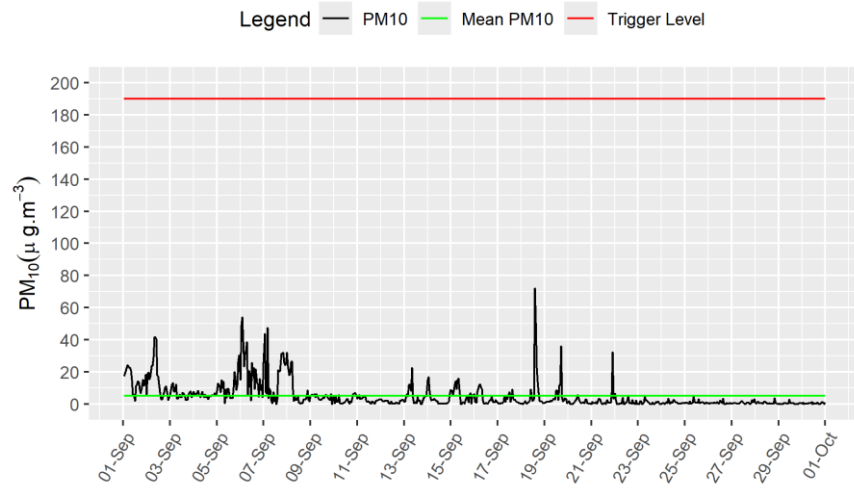
DLE002



BIS001



CGRU001



BBE001

