April 202**3**



Air Quality and Dust Monitoring Monthly Report - April 2023

West Northamptonshire District Council

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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 dust monitoring undertaken in the West Northamptonshire (WNDC) during April 2023.
- 1.1.2 Figures 1 and 2 in Appendix A present 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 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:

Twyford to Greatworth

Radstone and Hall Farm

- Topsoil Stripping
- Bulk Excavation
- Site Access Road and Haul Road Use & Maintenance
- Drainage
- Stockpile creation and management
- Preparation for piling works at Radstone Road Overbridge

Greatworth Hall

- Topsoil Stripping
- Stockpile Management
- Bulk Excavation
- Site Access Road and Haul Road Use & Maintenance
- Drainage

G2S

Chipping warden - Ramac

- Chipping warden Green tunnel PPCC erection
- Green Tunnel maintenance for PCC erection
- Bulk earthworks

- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- General maintenance
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance
- Water management
- Ditch maintenance
- Plant maintenance
- · Material processing

CW Village

- Chipping warden Green tunnel PPCC erection
- Green Tunnel maintenance for PCC erection
- Bulk earthworks
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- General maintenance
- Stockpile management
- · Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance
- Water management
- Ditch maintenance
- Plant maintenance
- Material processing

Lower Boddington

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Vegetation maintenance
- Highfurlong brook viaduct
- Bulk excavation cutting
- Water management
- Ditch maintenance

<u>Fir tree nursery</u>

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Vegetation maintenance
- Site access road maintenance
- Water management
- Ditch maintenance

Greatworth Village

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds

Lower Thorpe

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Helmdon Road Utility Plant Crossing

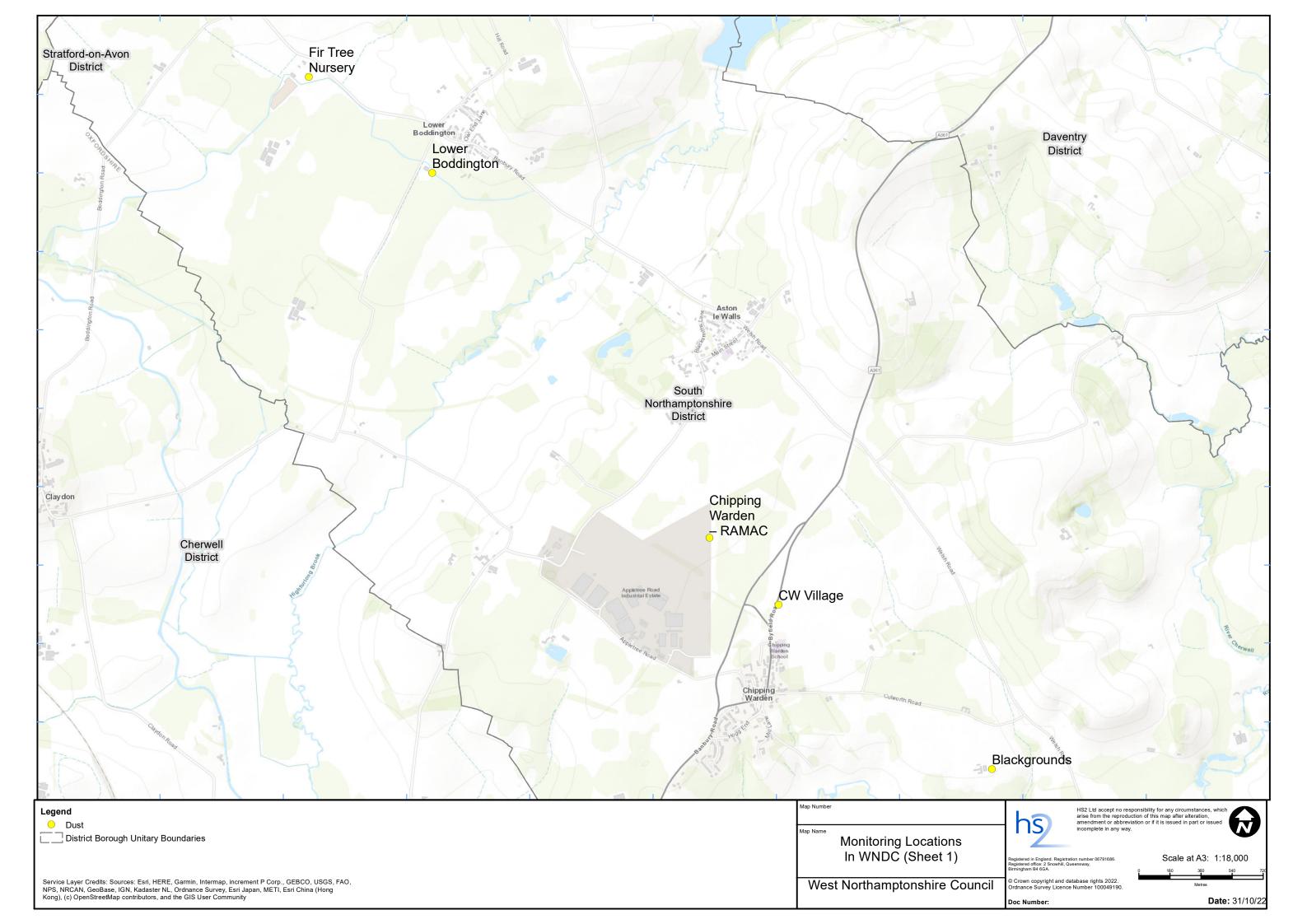
Blackgrounds

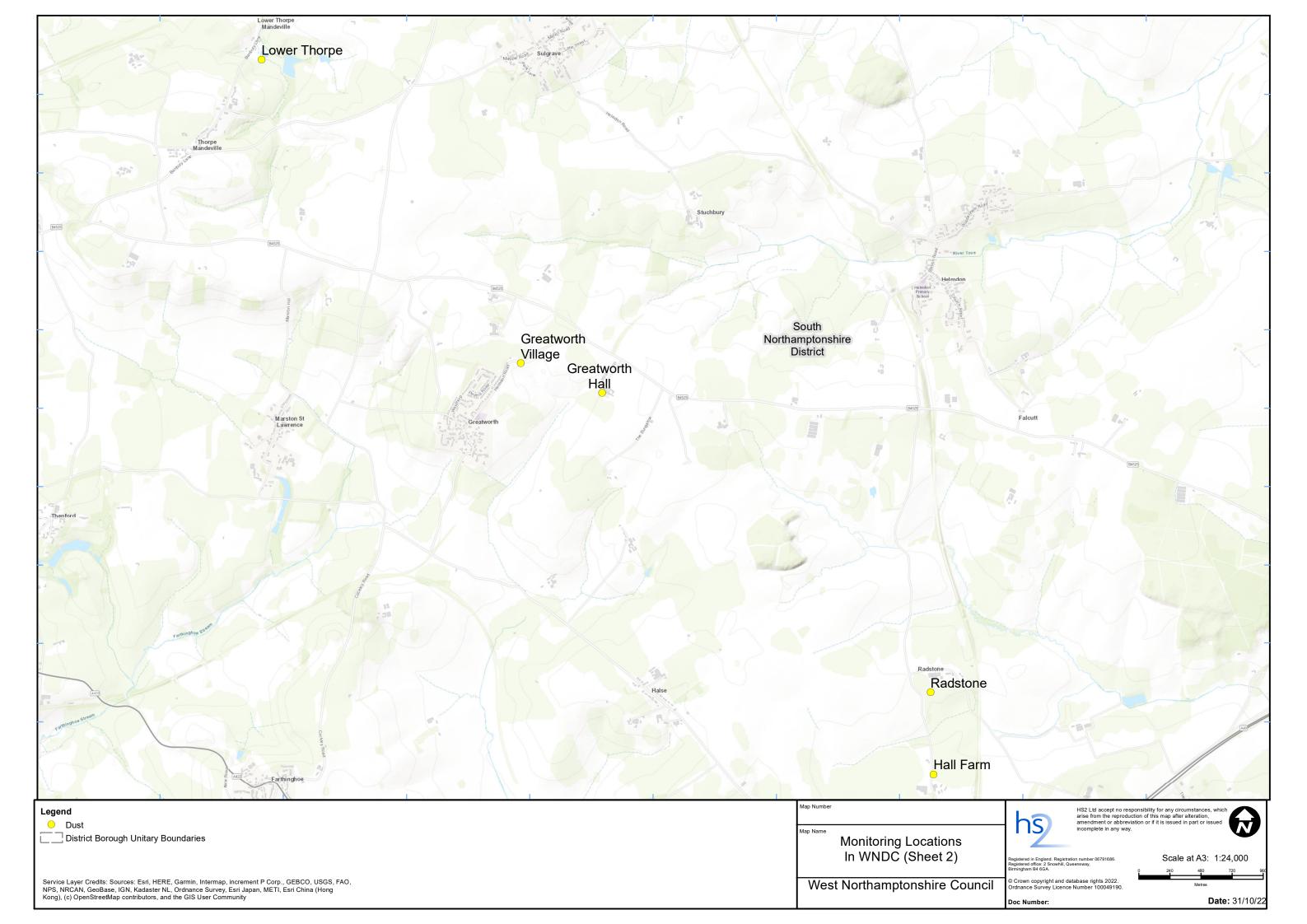
- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Vegetation maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Water management (checking pumps)
- Ditch maintenance
- 1.1.5 Dust monitoring locations and results are presented in Appendix B, Table 1, together with a line chart of monthly data from the dust monitor 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 mitigation.

- 1.1.6 The trigger level for PM_{10} concentrations of 190 μ g/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.
- 1.1.7 Ten (10) dust monitors are installed at the worksite, where works are underway. These sites returned a medium dust risk rating.
- 1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (April 2023).
- 1.1.9 Data capture was below 90% at multiple monitors due to monitor faults. The Radstone monitor was retrieved from site on the 12th April 2023.
- 1.1.10 No (0) complaints were received during the reporting period.

Appendix A - Monitoring Locations

Figures 1 and 2: Worksite and Monitoring locations during WNDC





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/m³)	Minimum 1- hour PM ₁₀ concentration (μg/m³)	Maximum 1- hour PM ₁₀ concentration (μg/m³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	М	Yes	Yes	9.4	1.0	41.0	0	100.0
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	М	Yes	Yes	9.8	1.0	41.0	0	99.6
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	М	Yes	Yes	9.4	1.0	42.0	0	99.9
Fir Tree Nursery	447283, 252421	Fir Tree Nursery, West Northamptonshire	М	Yes	Yes	9.4	1.0	43.0	0	99.9
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	М	Yes	Yes	8.8	2.0	39.0	0	10.1
Hall Farm	458734, 239823	Hall Farm, Radstone Road	М	Yes	Yes	12.8	1.0	79.0	0	68.1
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	М	Yes	Yes	9.5	1.0	43.0	0	97.6
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	М	Yes	Yes	9.4	1.0	41.0	0	99.4
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	М	Yes	Yes	9.3	1.0	41.0	0	99.6
Blackgrounds	450846, 248413	Blackgrounds, West Northamptonshire	М	Yes	Yes	8.5	1.0	44.0	0	79.0

Figure 3: Continuous dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

