

## Air Quality and Dust Monitoring Monthly Report – December 2021

West Northamptonshire 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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A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

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# Monthly Summary

1.1.0 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 District Council (WNDC) area during December 2021.

1.1.1 Figure 1 and 2 in Appendix A indicate the current worksites together with dust monitoring locations.

1.1.2 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](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.

1.1.3 The current phase of works commenced in May 2021 and is expected to be completed by 2025. The current worksites, as presented in Appendix A, Figure 1 and 2, include:

## **Twyford to Greatworth**

- Stone deliveries;
- Drainage and culvert construction; and
- A43 compound development.

## **Greatworth to Southam (G25)**

- Excavation for chipping warden green tunnel;
- Drainage and ponds construction;
- Topsoil stripping and material movement; and
- Establishment of the site access road.

## **Chipping Warden Village worksite**

- Trial holes for Break from Highway; and
- De-vegetation works.

## **Lower Boddington worksite**

- De-vegetation works; and
- Establishment of the site access road

1.1.4 Four (4) dust monitors are installed around worksites, where works are underway. These sites returned a medium dust risk rating.

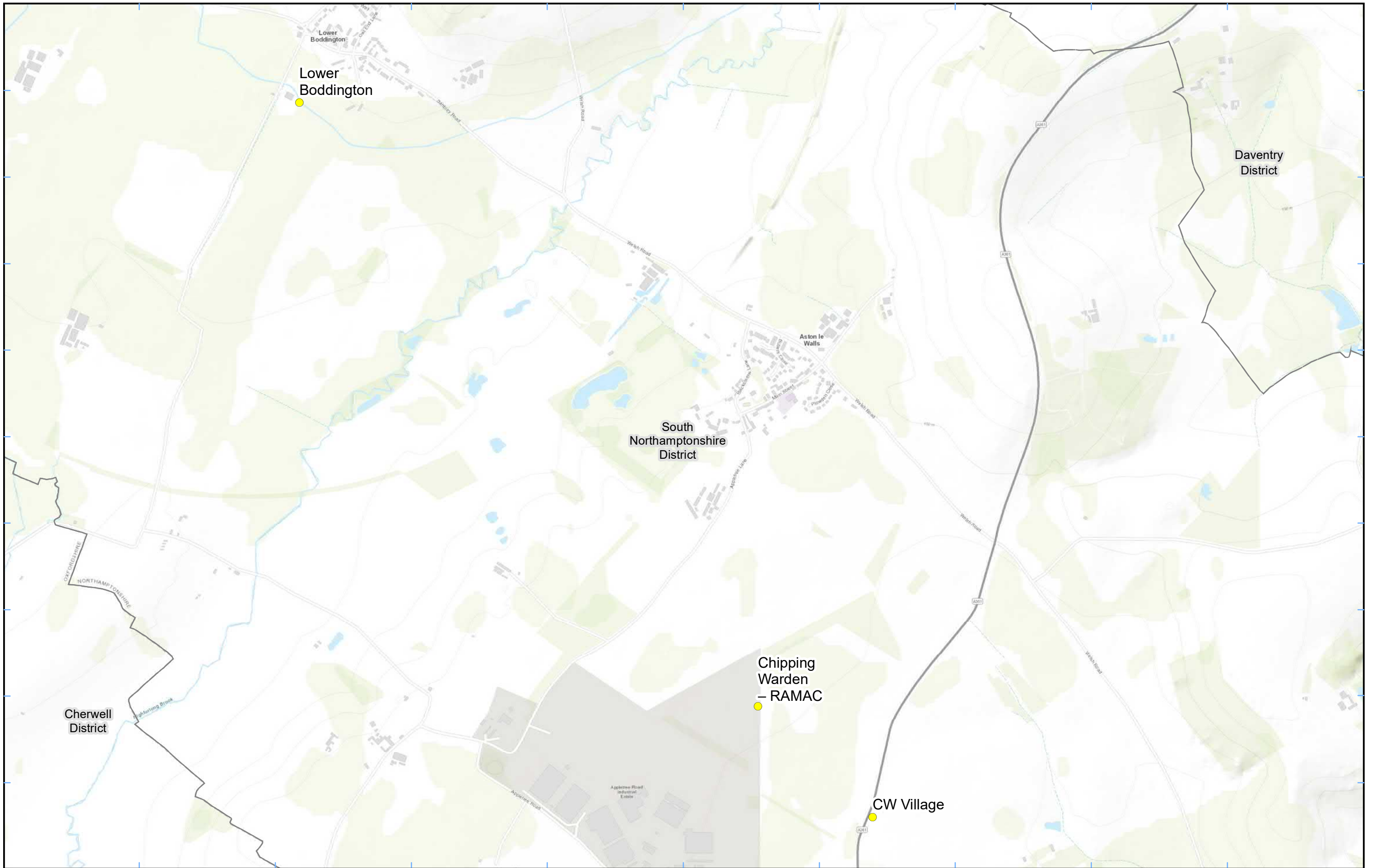
1.1.5 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor presented in Figure 3. All continuous

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<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.
- 1.1.7 No (0) dust trigger alerts were recorded during the monitoring period (December 2021).
- 1.1.8 Data capture was below below 90% for multiple monitors in December 2021 due to power supply issues.
- 1.1.9 No (0) complaints were received during this reporting period.

# Appendix A –Monitoring Locations


Figure 1 and 2: Worksite and monitoring locations within the WNDC



**Legend**  
 ● Dust Monitor  
 □ District Borough Unitary Boundaries

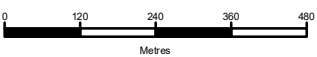
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Map Number  
 Map Name  
**Worksite and Monitoring Locations  
 In WNDC (Sheet 1)**  
 West Northamptonshire Council


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South  
Northamptonshire  
District

A43

**Legend**

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number
Map Name <b>Worksite and Monitoring Locations In WNDC (Sheet 2)</b>
<b>West Northamptonshire Council</b>

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## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and December 2021 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>	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.5	1.0	34.0	0	58.1
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.3	1.0	35.0	0	41.9
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	5.3	1.0	32.0	0	34.9
A43	459609, 238944	A43, Brackley, West Northamptonshire	M	Yes	Yes	6.4	1.0	41.0	0	39.5



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Figure 3: Continuous dust 1-hour mean indicative PM<sub>10</sub> concentration for all monitors

