

Air Quality and Dust Monitoring Monthly Report – March 2020

Oxfordshire County 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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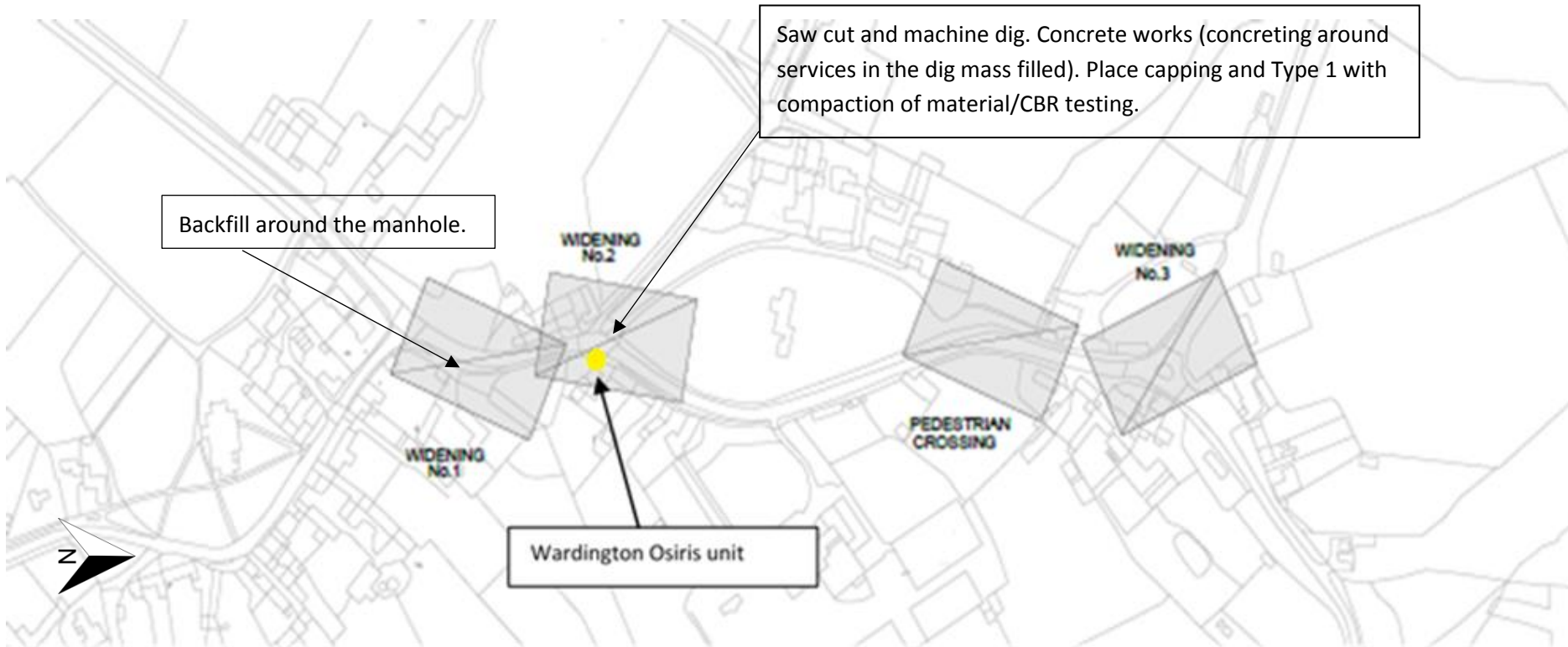
Monthly Summary

- 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 dust monitoring undertaken in Oxfordshire County Council (OCC) during March 2020.
- 1.1.2 Figure 1 in Appendix A indicates the current worksites together with the dust monitoring location for March 2020.
- 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 out 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 phase of works commenced during November 2019 and are expected to be completed by July 2020. The current works form part of Wardington road-widening item of the DC3A Work Package and, as presented in Appendix A, Figure 1, include:
- Saw cut and machine dig at Widening 2;
 - Marking out of underground services;
 - Concrete works at Wardington Widening 2 (concreting around services in the dig mass filled);
 - Placing capping and Type 1 at Widening 2 with compaction of material/CBR testing; and
 - Backfill around the manhole at widening 1.
- 1.1.5 One (1) dust monitor is installed around the worksites, where earthworks, construction and trackout activities are underway. These worksites returned a medium dust risk rating (for works currently active on site).
- 1.1.6 Dust monitoring location and results are presented in Appendix B, Table 1, together with a line chart of monthly data from this dust monitor presented in Figure 2. 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 There were no (0) dust trigger alerts recorded during the monitoring period (March 2020).
- 1.1.9 Data capture for dust monitor AQ002 was below 90% for the month of March 2020 due to improper battery changeover causing equipment failure. As a result, the monitor was offline and no data was captured between 01/03/2020 - 12/03/2020 (12:00 p.m.). A replacement monitor was installed on 12/03/2020, albeit there were seven (7) additional occasions over the monitoring period where the batteries used for this monitor had run out and were unable provide the minimum required power causing further data loss. In the absence of monitoring, visual records were undertaken on days when works were underway. New batteries and chargers have now been replaced and the power supply issues seem to be resolved.
- 1.1.10 There were no (0) complaints, relating to dust or air quality, received during this monitoring period (March 2020).

Appendix A – Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring location during March 2020 within Oxfordshire County Council



Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and Results (1st March – 31st March 2020)

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 (%)
AQ002	449064, 246552	Secured to a lamppost opposite the entrance to Wardington House (outside of house number 3 on the A361)	M	Yes	No	16.1	1.1	124.0	0	53.3

Figure 2: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitor AQ002

