

## Air Quality and Dust Monitoring Monthly Report – January 2023 Lichfield District Council



## Department for Transport

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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 Lichfield District (LDC) during January 2023.
- 1.1.2 Figure 1 in Appendix A indicate the current worksites together with the dust monitoring locations at Sublots 8.2 and 8.3 for January 2023.
- 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, Figure 1, include:

## **Shaw Lane Embankment and Underbridge (Sublot 8.2)**

- Raw water diversion – adjacent A515 road.
- Shaw Lane Closure – veg clearance and trial holes.
- Prepare site gate installation + Install current stock of gates.
- Maintenance activities – Fencing, moving materials, etc.
- Installation of Silt Netting across site.
- Remove Topsoil bund from Phase 2a compound area.

## **Streethay Cutting Retaining Structure (Sublot 8.3)**

Piling:

- Boring of piles using auger.

General site setup:

- V-ditches.
- Haul road construction including strip, lay and compaction of stone.
- Installation of site fencing.
- Plant: excavator, dozer, roller and dumper.
- Some strip and fill for haul roads.
- Placing of TVCBs on piling mat.
- Pile mat maintenance.

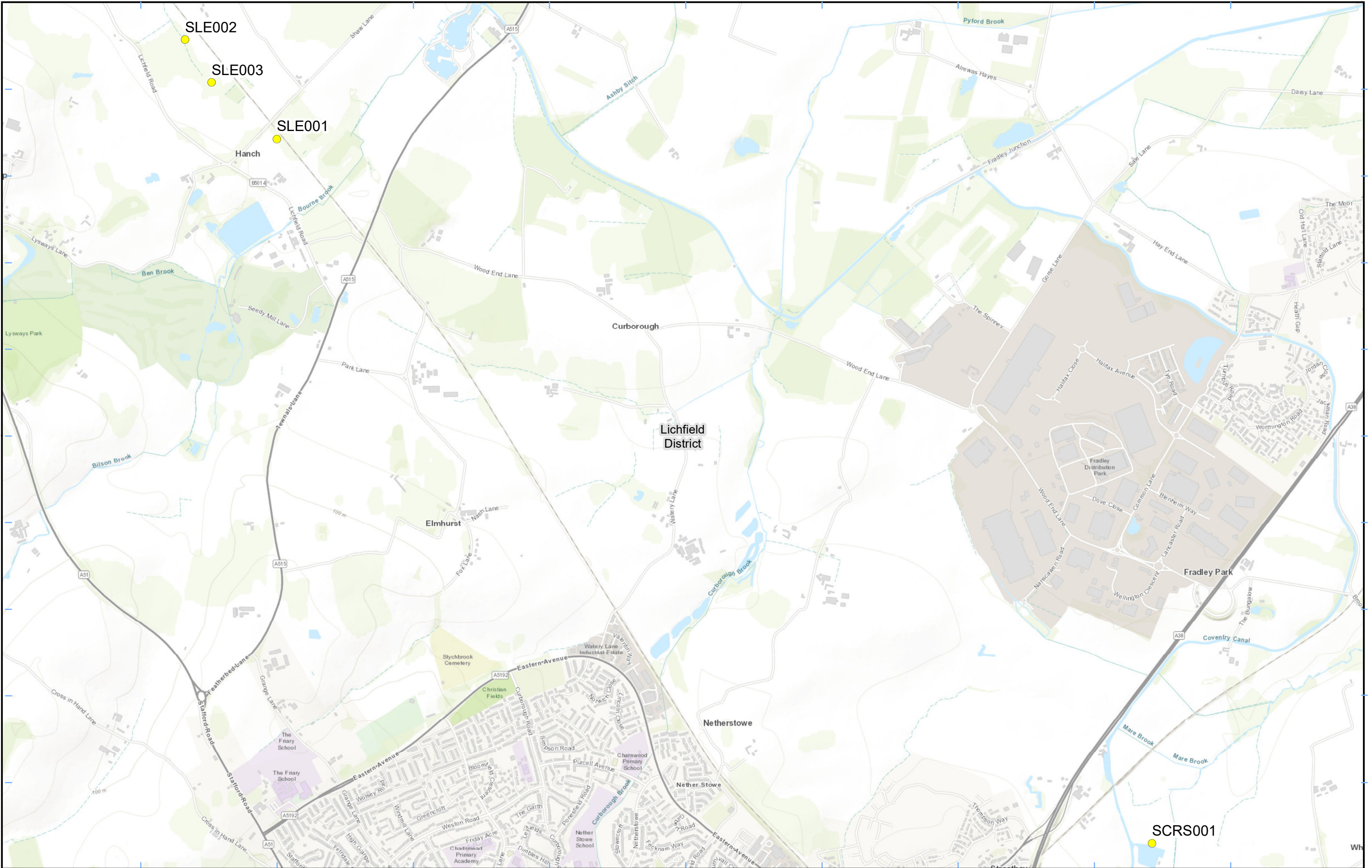
- 1.1.5 Four (4) dust monitors are installed at the worksites, where works are underway. These sites returned a low dust risk rating.

- 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 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 mitigations.
- 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 There were no (0) dust trigger alerts recorded during the monitoring period (January 2023).
- 1.1.9 Data capture was below 90% for SLE001 due to power supply issues. Also, at SLE002 due to unusual data being recorded. An investigation was carried out and spider eggs were found in the inlet.
- 1.1.10 No (0) complaints were received during the reporting period.

# Appendix A – Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within the LDC





**Legend**  
 Dust Monitor  
 District Borough Unitary Boundaries

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Map Number  
 Map Name  
**Monitoring Locations  
 In LDC (Sheet 1)**  
 Lichfield District

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## Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and January 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 <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 for Month (%)
SLE001	410383, 314185	Spinney Nurseries, Shaw Lane Embankment	L	Yes	No	15.0	0.1	99.8	0	74.3
SLE002	409903, 314705	New Farm Produce 1, Shaw Lane Embankment	L	Yes	No	1.7	0.1	20.2	0	86.8
SLE003	410041, 314481	New Lane Produce 2, Shaw Lane Embankment	L	Yes	No	6.9	0.1	48.9	0	98.3
SCRS001	414913, 310498	Streethay Cutting Retaining Structure, King's Orchard Marina	L	Yes	No	7.9	0.1	141.4	0	99.5

Figure 2: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for all dust monitors

