

## Air Quality and Dust Monitoring Monthly Report - January 2021

London Borough of Brent



## 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

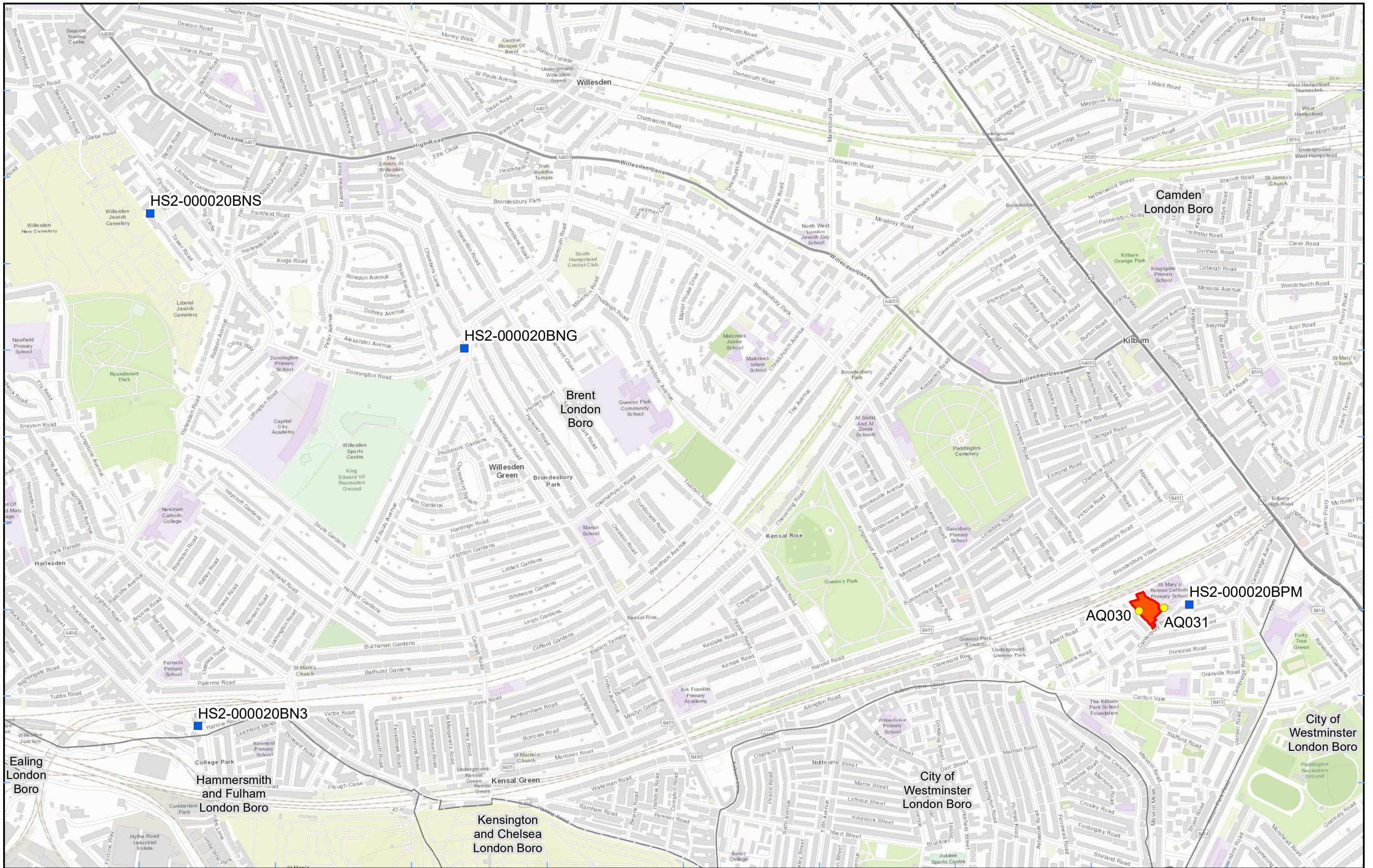
- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in the London Borough of Brent (LBB) during December 2020 and January 2021 respectively.
- 1.1.2 Figure 1 in Appendix A indicates the current worksites together with air quality and dust monitoring locations.
- 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](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 phase of works commenced within the LBB in August 2020 and is expected to be completed by the end of 2025. The current and planned worksites, include:
- Canterbury Road Vent Shaft site set up and groundworks.
- 1.1.5 Two (2) dust monitors are currently installed on the boundary of the Canterbury Road Vent Shaft worksite. This site returned a medium dust risk rating.
- 1.1.6 Dust monitoring location and results are presented in Appendix B, Table 1, together with line chart of monthly data from the dust monitor in Figure 2. The 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 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 2021).
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO<sub>2</sub>) is undertaken at four (4) locations around highways within the LBB as part of the management of air quality where significant effects may occur as a result of the scheme.

- 1.1.10 Diffusion tube monitoring results are provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.
- 1.1.11 NO<sub>2</sub> monitoring locations and results are presented in Appendix C, Table 2, together with the 2020 running mean.
- 1.1.12 There were no (0) complaints received, relating to dust or air quality, during this reporting period (January 2021).

# Appendix A – Worksites and Monitoring Locations

Figure 1: Worksites and monitoring locations within the LBB





**Legend**

- Diffusion Tube
- Worksite
- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name

**Worksite and Monitoring Locations  
In LBB**

**London Borough of Brent**

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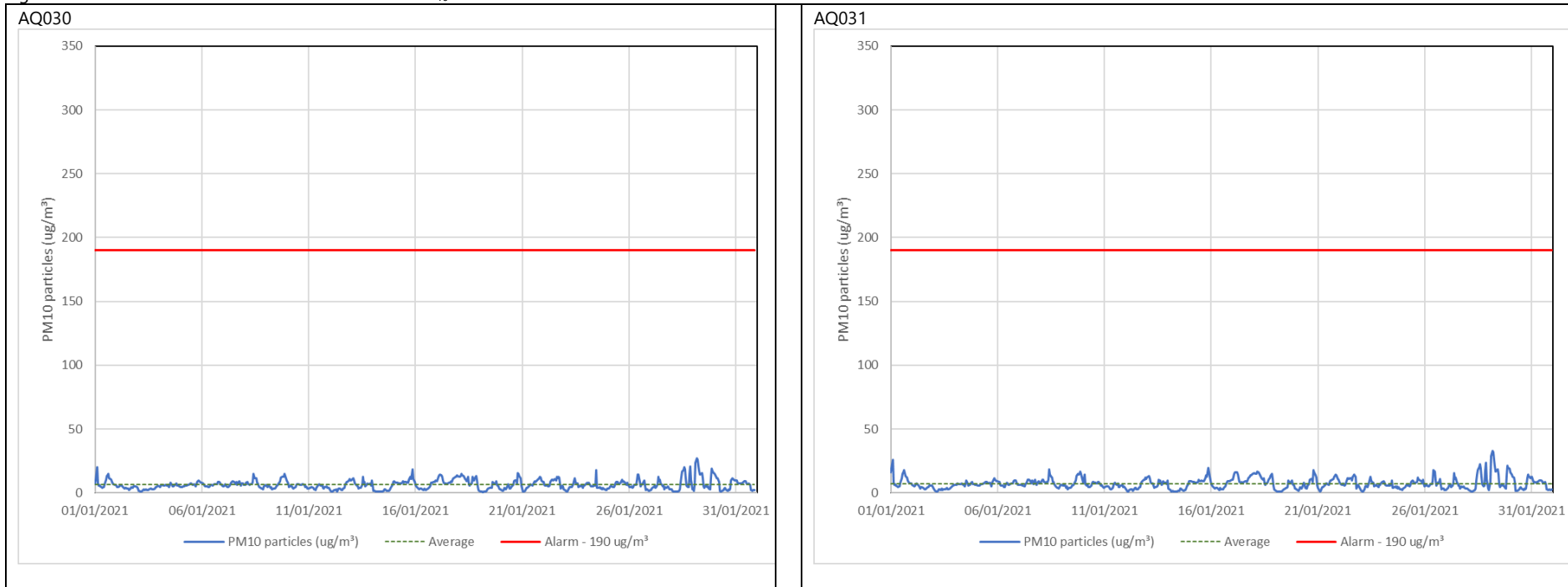
**Date: 08/12/20**

## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring location and January 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>	Data capture (%)
AQ030	525075, 183290	Western Hoarding of Canterbury Road works site	M	Yes	N	6.5	0.7	26.9	0	100.0
AQ031	525148, 183299	Eastern Hoarding of Canterbury Road works site	M	Yes	N	7.4	0.8	33.1	0	95.8

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





## Appendix C - Air Quality Monitoring Results

Table 2: NO<sub>2</sub> monitoring locations around highways, NO<sub>2</sub> concentrations and monthly monitoring results with running mean for 2020 (µg/m<sup>3</sup>)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar <sup>1</sup>	Apr <sup>1</sup>	May <sup>1</sup>	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>2</sup>
HS2-000020BN3	Signpost on High Street Harlesden	522335, 182955	62	48	No data			42	28	44	50	51	68	54	50
HS2-000020BNG	Lamp post on Donnington Road	523110, 184055	50	40	No data			29	25	29	33	35	53	41	37
HS2-000020BNS	Lamp post on Tower Road by Willesden Jewish Cemetery	522196, 184448	34	No data	No data			20	15	20	24	25	42	34	27
HS2-000020BPM	Lamp post along Gorefield Place near block of flats	525222, 183309	39	32	No data			21	Tube missing	21	25	28	42	31	30

<sup>1</sup> Note: Due to the Covid-19 pandemic and government lockdown it was not possible to conduct diffusion tube air quality monitoring during March, April and May 2020.

<sup>2</sup> Note: to aid interpretation and conform with best practice, the monthly measurements in this table are reported rounded to the nearest whole number. The annual mean presented here is calculated based on laboratory data to 4 significant figures, rounded to a whole number, and therefore may differ slightly to a mean derived from averaging the rounded monthly measurements in the table.