

**APPENDIX 10.2
BASELINE CONDITIONS**

Appendix 10.2: Baseline Conditions

A baseline noise survey was undertaken over a typical weekday between 1st and 3rd February 2022 to establish and quantify the existing noise environment present at the Proposed Development Site. The survey consisted of three long-term (LT) noise loggers measuring the daytime and night-time noise levels throughout the Site.

The monitoring locations are illustrated as **Figure 1** and described as **Table 1**

Figure 1 Noise Monitoring Locations

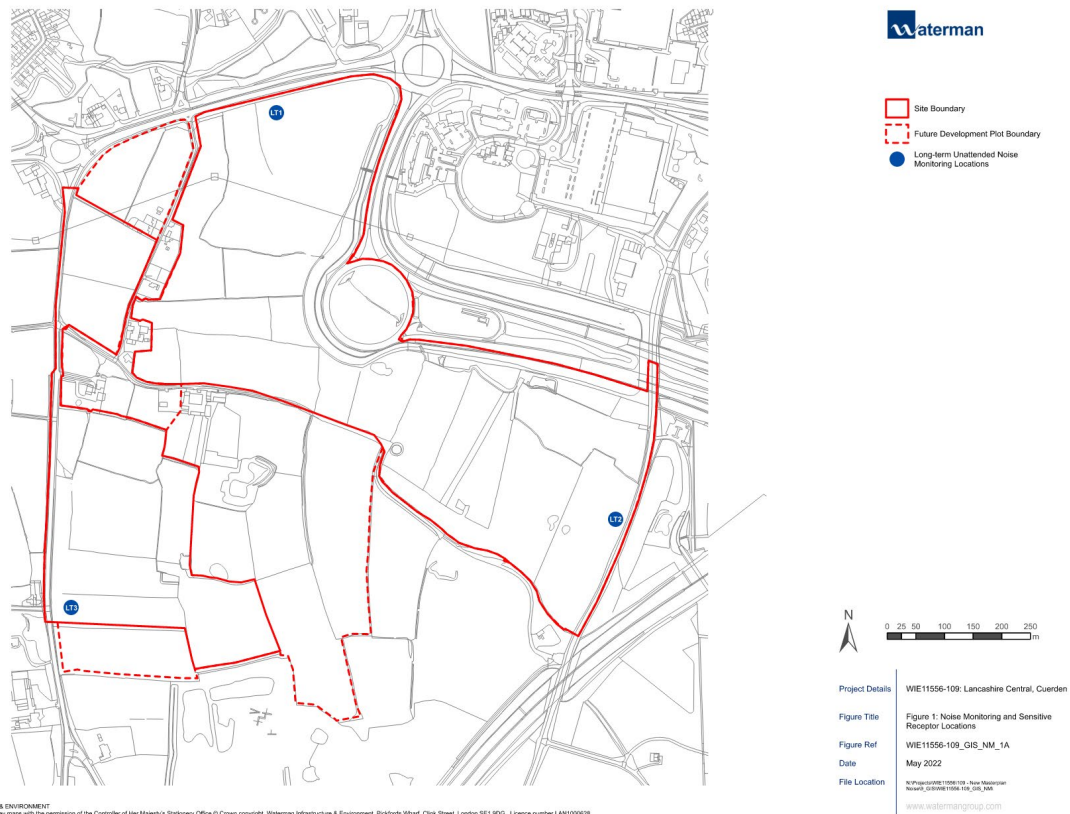


Table 1: Noise Monitoring Locations

Monitoring Location (Figure 3)	Description	Observations
LT1	Free-field noise measurement at in the northern extents of the Site adjacent A582. Microphone situated approx. ~1.5m above ground level (AGL)	Road traffic passing along the A582 was the dominant noise source at this region of the site. Traffic was continuous.
LT2	Free-field noise measurement at in the eastern extents of the Site adjacent Wigan Road. Microphone situated approx. ~1.5m above ground level	Road traffic passing along Wigan Road was the dominant noise source at this region of the site. Traffic was continuous.
LT3	Free-field noise measurement at in the eastern extents of the Site adjacent Stanifield Lane.	Road traffic passing along Stanifield Lane was the dominant noise source at this region of the site. Traffic was continuous.

Monitoring Location (Figure 3)	Description	Observations
	Microphone situated approx. ~1.5m above ground level	

Table 2 presents a summary of the measured noise levels.

Table 2: Summary of Baseline Noise Survey Measurements

Monitoring Location	Period (Duration)	LAeq,T dB	LA10,T dB	LA90,T dB		LAFmax,5min dB	
		Average ¹	Average ²	Range	Average ³	Range	90 th %ile
LT1	Day (16hr)	71	73	48 – 70	68	73 – 90	80
	Night (8hr)	65	66	40 – 69	44	69 – 92	78
LT2	Day (16hr)	74	77	51 – 66	63	62 – 98	88
	Night (8hr)	65	61	47 – 64	50	59 – 90	87
LT3	Day (16hr)	59	61	42 – 58	55	59 – 93	73
	Night (8hr)	53	64	37 – 55	42	49 – 80	42

Note 1: Logarithmic average

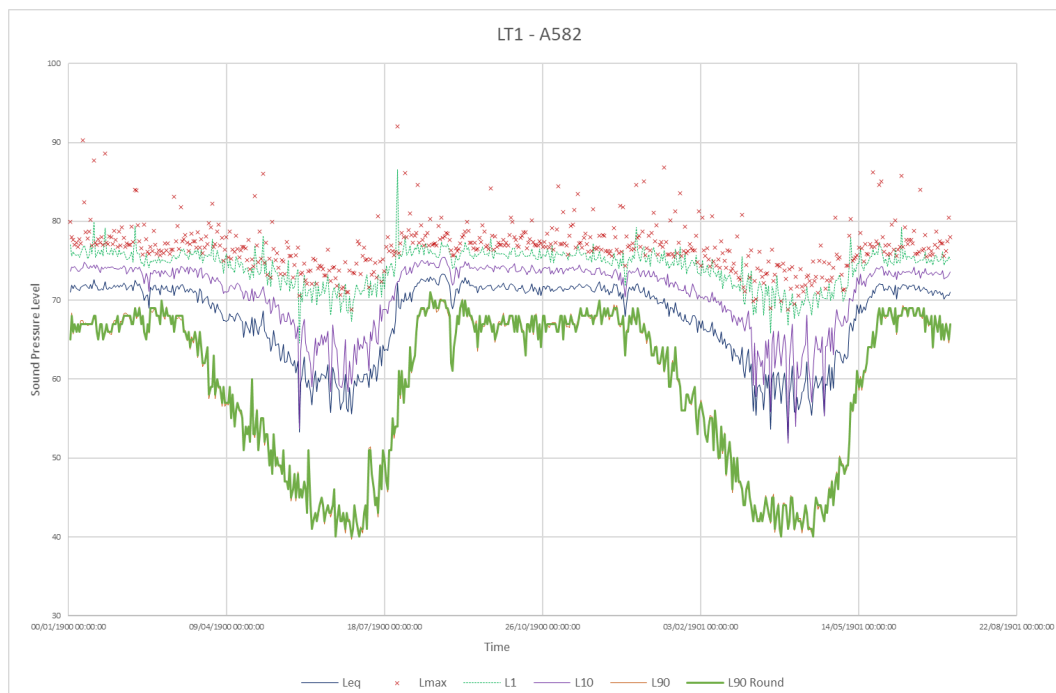
Note 2: Arithmetic average

Note 3: Modal average

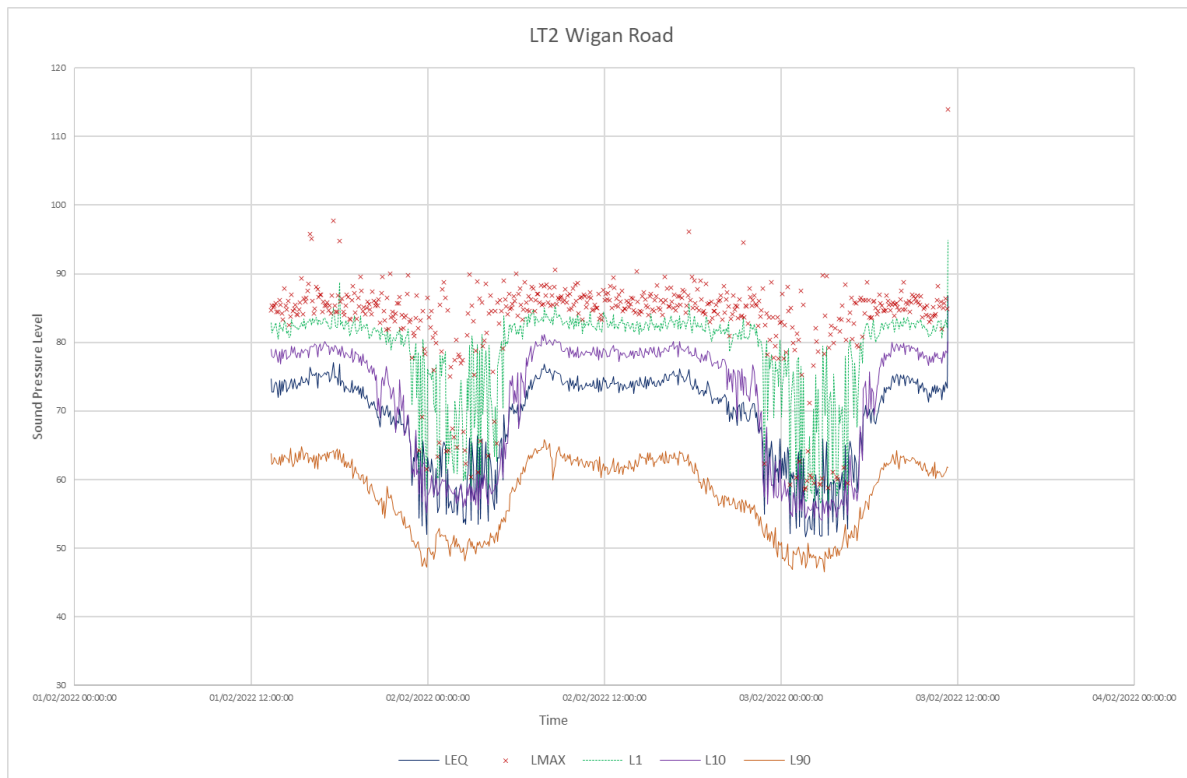
The graphs below present the time history plots of the measured noise levels at the monitoring locations. The noise levels at exhibit typical diurnal variation with lower noise levels during the night-time period due to reduced road traffic and human activity.

.For assessment purpose the range of measured ambient (dB LAeq) and modal background (dB LA90) noise levels have been used.

Graph 1: Time History Plot LT1 A582



Graph 2: Time History Plot LT2 Wigan Road



Weather conditions, whilst not actively monitored during the survey period were reviewed after completion of the survey. Historical weather data from a nearby weather station (ILEYLA21, approx. 0.7km southwest of Site boundary) was sourced via Weather Underground (wunderground.com). Weather conditions were generally suitable for noise measurement with conditions being dry and wind speeds $<5\text{ms}^{-1}$,

The sound level meters were calibrated both before and after each monitoring period; no drift from the reference level of 94 dB was recorded. Full details on monitoring details can be provided upon request.