



Technical Note

Title:	HORIBA MIRA Plot 8 Baseline Noise Survey		
Client:	Nature Positive on behalf of Swanvale Development Ltd		
Reference:	2063062-RSKA-TN-001-(01)		
Date:	09 March 2026		
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1 Introduction

1.1 Instruction

RSK Acoustics (RSKA) has been instructed by Nature Positive (an RSK company) to provide a baseline noise survey to support BREEAM assessments required of a new commercial development within the MIRA Technology Park in Nuneaton.

This technical note provides a brief summary of the baseline noise surveys conducted in order to derive background levels at the site and nearest sensitive dwellings. Surveys were carried out in January 2023 and December 2025.

1.2 Site Location

The MIRA Technology Park is bounded by Watling Street (A5) to the south, Wood Lane to the east, the A444 to the west and Fenn Lanes to the north/north-east. It is situated approximately 3km north of Nuneaton and 5.5km west of Hinckley.

MIRA Technology Park comprises mainly of vacant fields, and scattered industrial developments along the centre, southern and south-western perimeter, and vehicle testing tracks and testing facilities occupying the majority of its north and north-eastern area.

The proposed development (Plot 8) is situated towards the western part of the MIRA Technology Park, approximately 370m north of Watling Street (A5) and 750m west of Wood Lane. Nearest existing buildings to this development are located approximately 75m east and 275m south of Plot 8.

The building proposed within the plot is split into two identically mirrored halves, Unit 8a located along the west of the building and Unit 8b located along the east side of the building.

Indicative plans provided by the client indicate the development comprises large workshop areas along the northern facade and open plan office and meeting rooms (ground and first-floor) along the southern façade of the plot. Reception areas for both units are located on the corners of the building.

The nearest noise sensitive receptors to the development site have been identified as the houses in Rowden Lodge (R1) and Lindley House (R2) north of the plot. R1 and R2 are approximately 360m and 375m from the proposed development building.

2 Baseline Noise Survey

2.1 Monitoring Location

A baseline noise survey was undertaken on 19 December 2025 at the site to obtain ambient and background noise levels representative of the development's facades.

The assessment is also supplemented by surveys undertaken for the BREEAM assessment of other plots in the wider site. These surveys were undertaken in January 2023 at various positions around the wider site.

These locations are considered to be 'representative of the acoustic climate' at the nearest receptors by considering surrounding noise sources, such as the contribution from distant road traffic and agricultural activity.

Table 2.1 below details the nearest noise sensitive receptors considered in the assessment, and Figure 2.1 depicts their location in the context of the proposed site. The figure also includes the baseline measurement locations adopted during the survey.

Measurement positions AP1 to AP3 are representative of the ambient levels at the facades of the proposed development.

Reference	Receptor Name	Approximate Distance from Site	Representative monitoring location
R1	Rowden Lodge	385m	MP1
R2	Lindley House	420m	

Table 2.1 References for NSRs

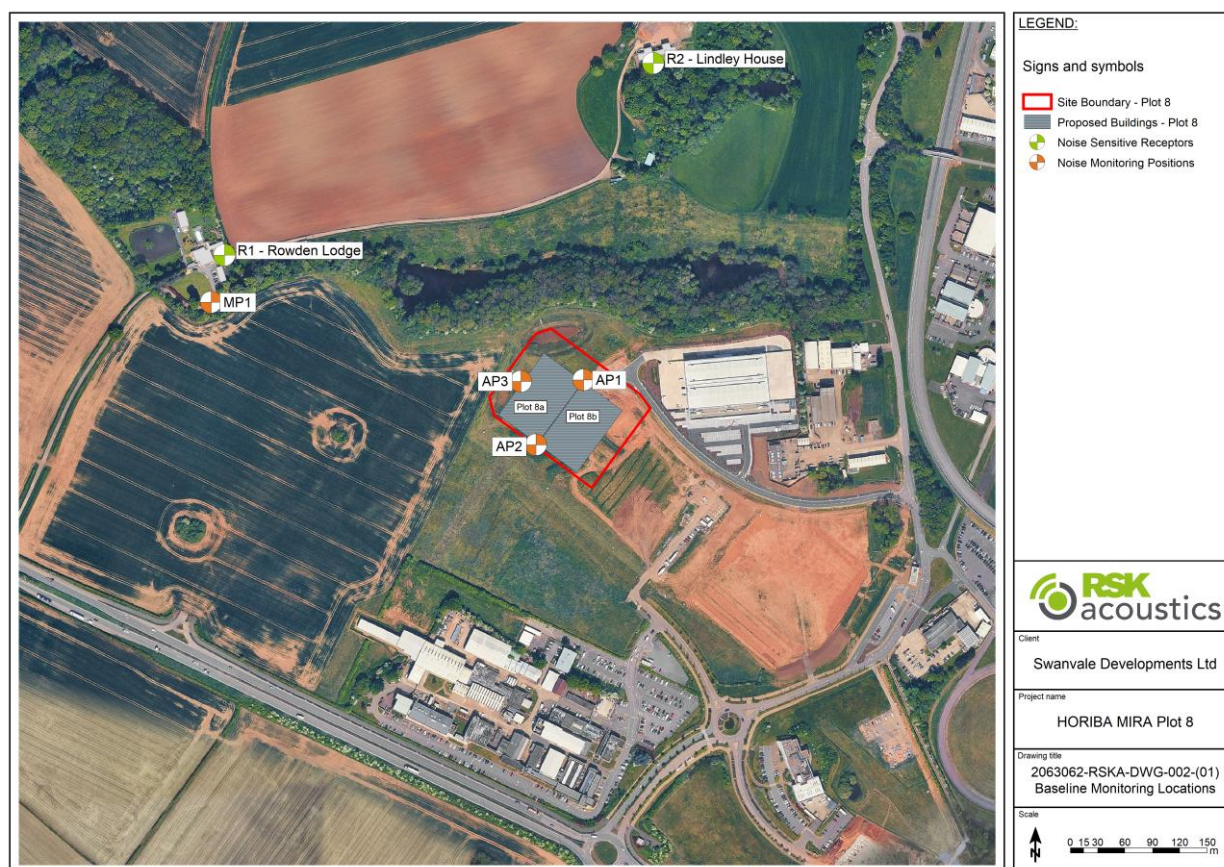


Figure 2.1 Baseline measurement locations and noise sensitive receptors

The location of the measurement locations and their representative receptors is provided in Table 2.2 below.

Measurement location	Survey Period	Type of Measurement	WhatThreeWords (approx.)
MP1	January 2023	Unattended	///ladders.evaporate.consoles
AP1	December 2025	Attended	///sculpting.apart.chef
AP2			///machinery.quits.processor
AP3			///trembles.infinite.tender

Table 2.2 Measurement location details

2.2 Survey Equipment

The noise measurements were undertaken using the following equipment:

Location	Equipment	Make/Model	Serial number	Calibration date
AP1 – AP3	Sound level meter	Rion/NL-52	00453833	28/10/2024
			00976175	14/03/2024
			00453835	27/08/2025
	Acoustic calibrator	Rion/NC-74	35270126	26/08/2025
MP1	Sound level meter	Rion/NL-52	976250	In calibration during 2023 survey
	Acoustic calibrator	Rion/NC-75	34291338	

Table 2.3 Monitoring equipment

The sound level meters conform to the Class 1 requirements of BS EN 61672-1:2013. The calibrator used conforms to the Class 1 requirements of BS EN IEC 60942:2018. The equipment used has a calibration history that is traceable to a certified calibration institution. Calibration certificates are available upon request. The calibration of the sound level meters was field-checked prior to commencing measurements and prior to removing the equipment from site upon completion; no significant calibration drift was observed i.e., within a +/- 0.5dB tolerance.

All measurements were undertaken in free field conditions with the microphone positioned greater than 3.5m away from reflecting surfaces and at 1.5 metres above ground height, complying with the requirements of BS 7445.

Measurements were logged in continuous 15-minute integration periods (with supplementary 100 millisecond data) and obtained using a combination of broadband indices (L_{Aeq} , L_{A10} , L_{A90} and L_{Amax}) and one-third octave frequency bands.

2.3 Weather Conditions

Weather conditions during the attended monitoring period were obtained from Wunderground (www.wunderground.com), using the weather station closest to the measuring location (with available historical data). This was judged to be Bresser (INUNEA47), approximately 1.8km from site.

This weather data is summarised in Table 2.4.

Date	Temperature range (°C)	Total precipitation (mm)	Wind speed range ^[1] (m/s)	Max gust speed (m/s)	Prevailing wind direction
19/12/2025 (11:00 -14:00)	8-10	0	1-3 (2)	3	SW
Notes ^[1] Average speed given in brackets.					

Table 2.4 Summary of weather data during the monitoring period

Subjective notes of the attending consultant agree with the above weather data, therefore, weather conditions are generally considered suitable for the survey, in accordance with BS 7445.

Weather conditions during the 2023 survey (report ref: 2061391-RSKA-RP-001-(02) - *Swanvale Plots 6, 8 & 9 BREEAM HEA05&POL05 Acoustic Design Review*, dated: 01/03/26) was found to be generally suitable for the derivation of background noise levels. Periods of rain were noted, these periods were investigated and found to be not affecting the measurements to any significant level.

2.4 Noise Environment

Observations of the acoustic environment were made at the monitoring location during the installation and removal of the noise monitoring equipment.

2.4.1 AP1 to AP3

During the measurement, these locations was noted to be dominated by road traffic noise from the A5. Other audible noise present included those from aircrafts, industrial activity within the technology park, and wind gusts.

The influence of the gust has been investigated from the time history data, and found to have minimal influence on the overall L_{A90} levels, therefore these periods have not been excluded from the dataset.

2.4.2 MP1

At the time of this measurement, it was noted to be dominated by road traffic on the A5, with some contribution from vegetation noise. Agricultural noise was not noted during the 2023 survey. It is not expected that the noise climate would have changed since the initial survey.

3 Baseline Survey Results

3.1 Derivation of Ambient Noise Levels

A review of the existing commercial properties on the wider industrial estate show that operational hours range between 08:00 hours up till 18:00 hours.

Ambient levels measured during the survey were noted to be dominated by the A5, with L_{Aeq} levels generally steady with minimal fluctuations.

Therefore, for the purposes of this assessment, it is considered appropriate to quantify the representative ambient noise level incident upon the proposed office areas via analyses of the measured 15-minute ambient levels (dB $L_{Aeq, 15min}$) at AP1-AP3 between the hours of 08:00 and 18:00 daily.

To assess based on a worst-case scenario, it is considered appropriate to assess the internal ambient level of the proposed offices based on the highest L_{Aeq} level measured from the baseline survey.

Measured ambient sound levels from the attended measurement positions (AP1-AP3) are summarised in the below.

Measurement Position	Measurement Period	Ambient Level Range, dB $L_{Aeq, 15min}$
AP1 (along northern façade)	11:55-14:05	52 – 53 ¹
AP2 (along southern façade)	11:35-14:00	55 – 56
AP3 (along western façade)	11:50-14:00	53 – 54
Notes: ¹ It is likely that once the development is complete, ambient noise levels along the northern façade will be lower due to screening provided from the A5 by the built form of the development.		

Table 3.1 Ambient levels during typical office hours

At this stage, floor layouts of the proposed development are unknown, therefore it is unclear which facades will have habitable rooms (offices, lobbies).

3.2 Derivation of Background Noise Levels at Receptors

Background noise levels have been analysed for both daytime and night-time periods from the dataset at MP1, in order to inform the assessment according to the guideline of BS 4142: 2014+A1: 2019.

The methodology detailed in BS 4142: 2014+A1: 2019 provides an example of statistical analysis to determine the representative background noise level during the daytime and night-time (L_{A90}).

Statistical analysis has been conducted for the noise levels obtained in order to determine the representative background levels at MP1; detailed L_{A90} statistical analysis is shown graphically in Figure 3.1 to Figure 3.2 below.

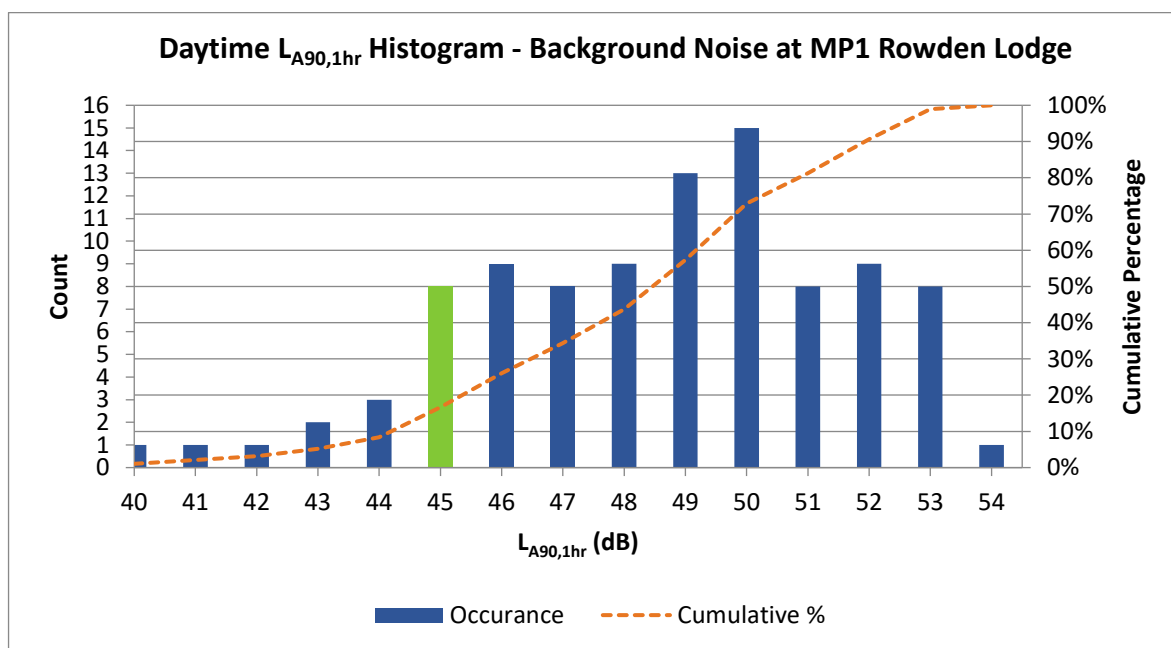


Figure 3.1 Statistical analysis of daytime background noise levels for MP1(05/01/23 to 11/01/23)

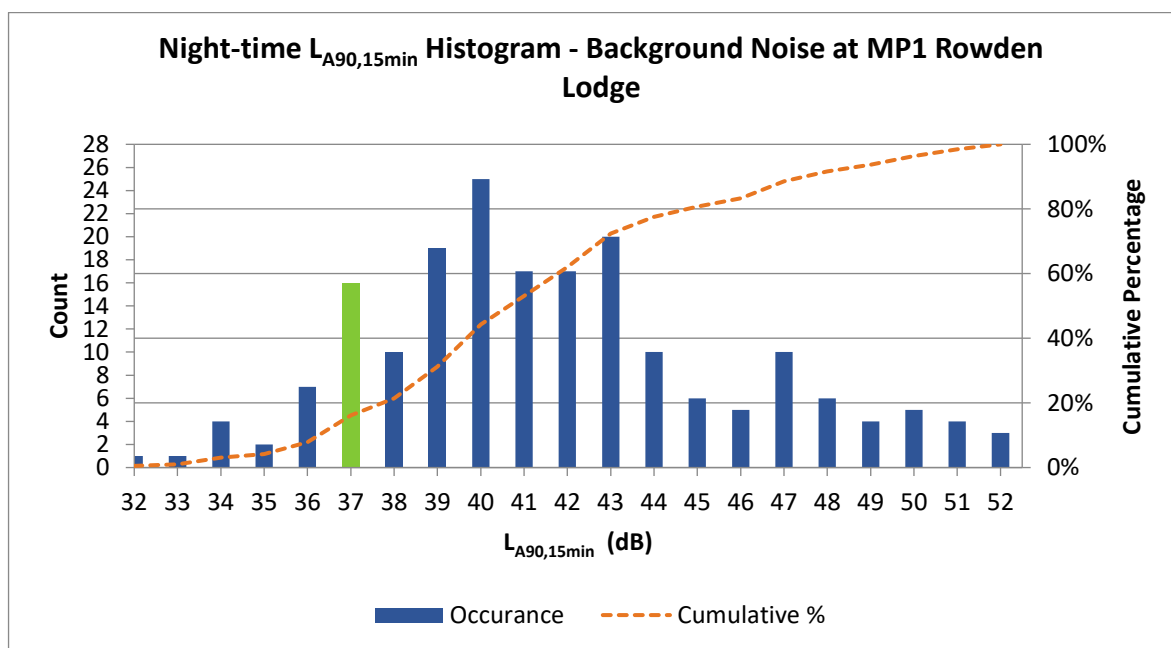


Figure 3.2 Statistical analysis of night-time background noise levels for MP1 (05/01/23 to 11/01/23)

The selected representative background noise levels are considered appropriate for the assessment of noise from the fixed plant at the nearest receptors based on the analysed levels are summarised in the table below.

Receptors	Representative measurement location	Representative background noise level, L _{90,T} dB(A)	
		Daytime	Night-time
R1 – Rowden Lodge	MP1	45	37
R2 – Lindley Lodge			

Table 3.2 Representative background noise levels at the nearest noise sensitive receptors

3.3 Time History Graphs

Time history graphs for the monitoring period is shown graphically in Figure 3.3 below.

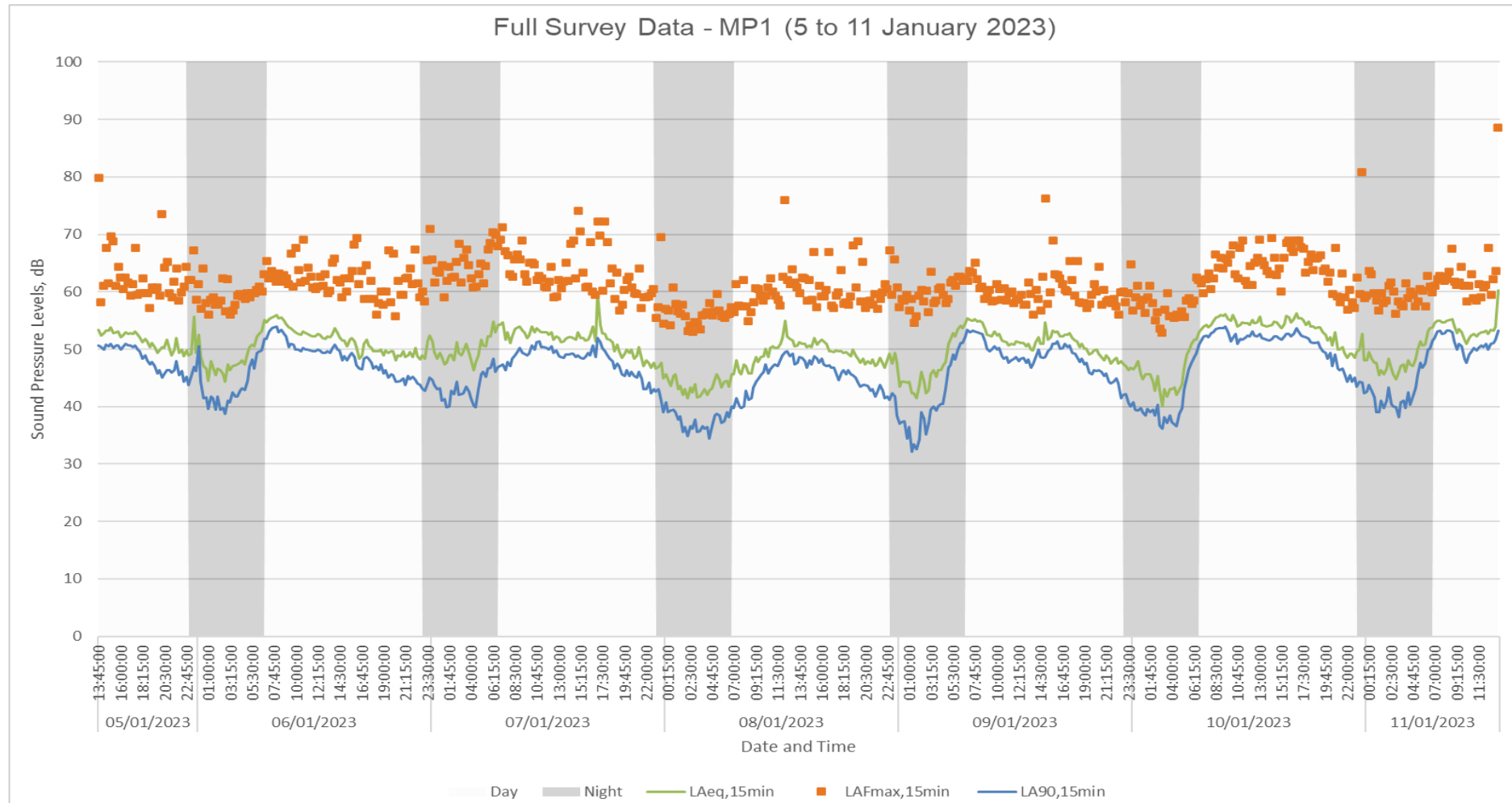


Figure 3.3 Time History Graph for MP1

