

PLOT C – ID MANCHESTER

BASELINE NOISE SURVEY MEMO

P2335-MEM01-JLS P01



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Plot C
ID Manchester

Baseline Noise Survey Memorandum

20 August 2024

1 INTRODUCTION

Sol Acoustics Ltd (“Sol”) has been commissioned by Bruntwood Limited (“Bruntwood”) to undertake an environmental noise survey as part of an Environmental Impact Assessment (“EIA”) for the ID Manchester Plot C development in Manchester to establish the prevailing acoustic conditions at the closest noise sensitive receptors.

Appropriate daytime and nighttime environmental noise limits for M&E plant (and associated louvres, cowls etc.) have also been set herein, all as based on the results obtained from the environmental noise surveys undertaken, and as discussed within this report.

This report provides details of the acoustic survey and assessment of the prevailing acoustic environment. Please refer to the main report and appendices for further information.

2 SITE DESCRIPTION

2.1 ID Manchester Plot C

The ID Manchester Plot C site is located on Altrincham Street in Manchester. The surrounding buildings to Plot C are mainly of use that form part of the wider ID Manchester masterplan use with exception to the Elizabeth Raybould Centre to the north which is of similar use.

The site is shown in Figure 1 below (with the site boundary highlighted):

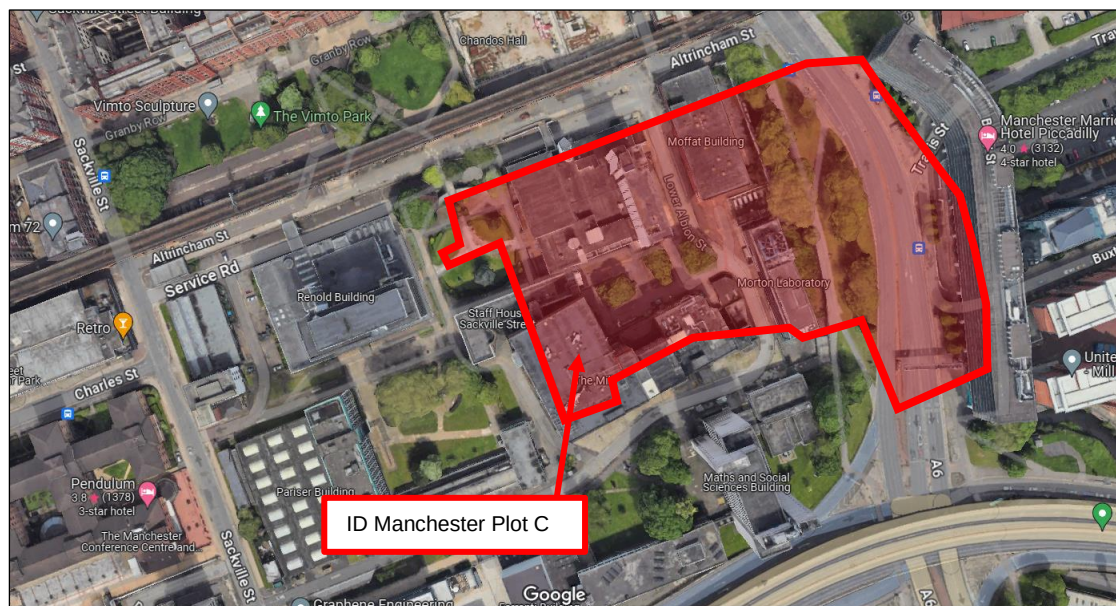


Figure 1: Site location and surrounding area (Google Earth 2024)

2.2 Closest Noise Sensitive Receptors

The closest noise sensitive receptors (“NSRs”) to IDM Plot C, are Chandos House, Capcis House, Brian Bridge House, Lamber & Fairfield House are located approximately 10 metres, and Manchester Marriot Hotel Piccadilly is located approximately 30 metres to the east of the site, as indicated in Figure 2. To the southwest of the site past the IDM masterplan boundary is the Graphene Engineering Innovation Centre approximately 120 metres away.

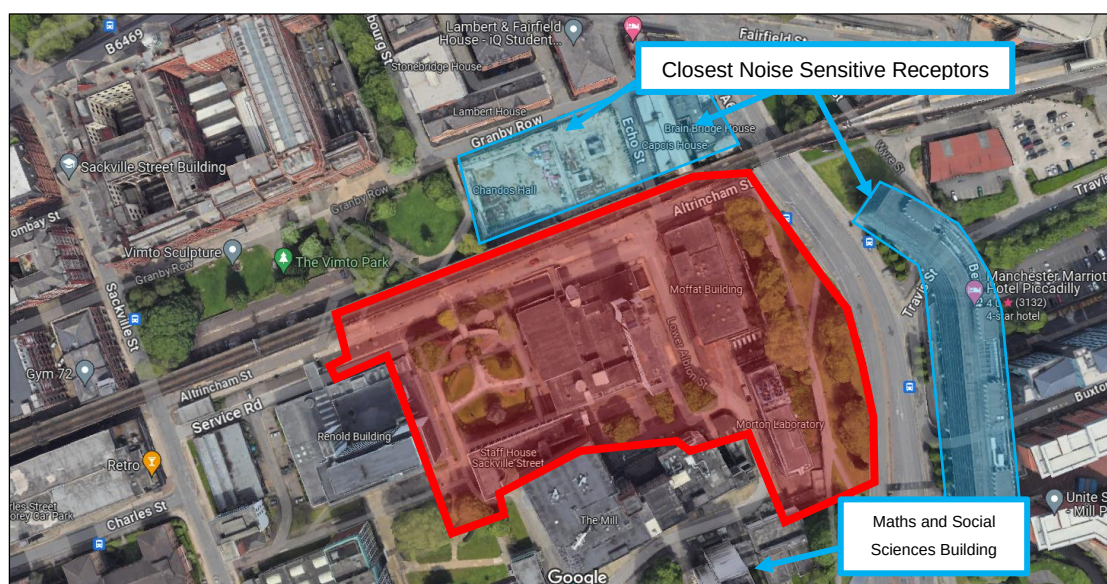


Figure 2: Location of closest noise sensitive receptors to IDM Plot C outside of the masterplan (Google Earth 2024)

3 BASELINE NOISE SURVEY

3.1 Basis of Assessment

In order to establish the prevailing noise climate at the site, primarily for the setting of plant noise limits in line with the Local Planning Authority guidance, a noise survey has been undertaken.

It should be noted that environmental noise intrusion or operational noise egress (excluding fixed building services plant) are beyond the scope of this memo and as such the survey results will only be used to set plant noise limits at this time.

3.2 Noise Survey Methodology

3.2.1 Procedure

Unattended noise level measurements were undertaken at 1no. location at the site from approximately 13:00 hours on Thursday 27 June 2024 to 13:00 hours on Friday 28 June 2024 to establish typical incident noise levels across the extent of the site.

All measurements were taken of the A-weighted (dBA) L_{10} , L_{90} , L_{eq} and L_{Fmax} sound pressure levels over discrete 15 minute periods. Measurements were undertaken in general accordance with BS 7445-1:2003 Description and Measurement of Environmental Noise.

3.2.2 Measurement Positions

The unattended and attended measurement positions at the development site as shown on Figure 3 and described in Table 1:

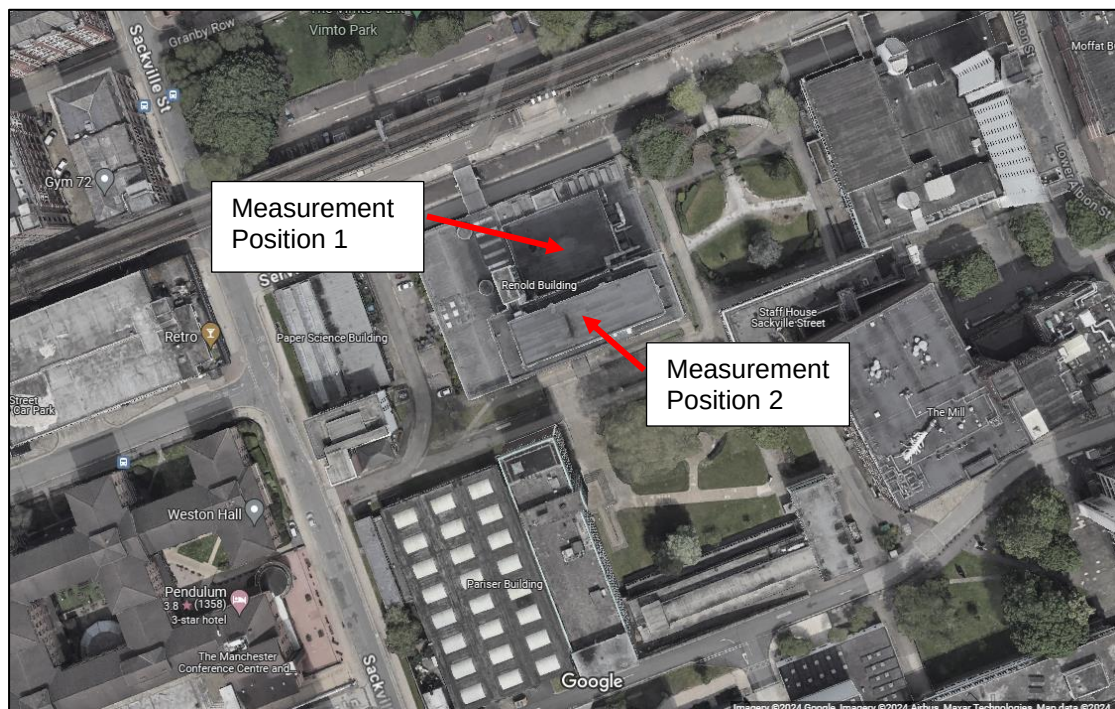


Figure 3 : Noise monitoring measurement position locations

Measurement Position	Description
MP1 (Unattended)	Microphone attached to a pole and protruding from a fourth floor window, approximately 1m from the northern tower facade. The soundscape at this position was dominated by rail and road traffic noise from the local road network.
MP2 (Attended)	Microphone attached to a pole and protruding from a fourth floor window, approximately 1m from the southern tower facade. The soundscape at this position was dominated by road traffic noise from the A57(M) to the south.

Table 1: Noise monitoring measurement positions summary

The prevailing weather conditions were generally suitable for the purposes of environmental noise measurements throughout the noise survey. Average rainfall remained below 1mm/h for the entirety of the survey period and for the majority of the survey wind speeds did not exceed 5m/s. Where some exceedances did occur on Thursday 27 June 2024, measured noise levels during these periods have been excluded from further analysis.

Notwithstanding the weather conditions, the microphone systems were entirely weatherproofed and fitted with all-weather environmental windshields, each with a bird spike.

Type 1 Precision Grade sound measuring instrumentation was exclusively used for all surveys. Full details of all the instrumentation used, and corresponding traceable calibration records, are retained on file by Sol and available for inspection if required.

3.3 Environmental Noise Survey Results

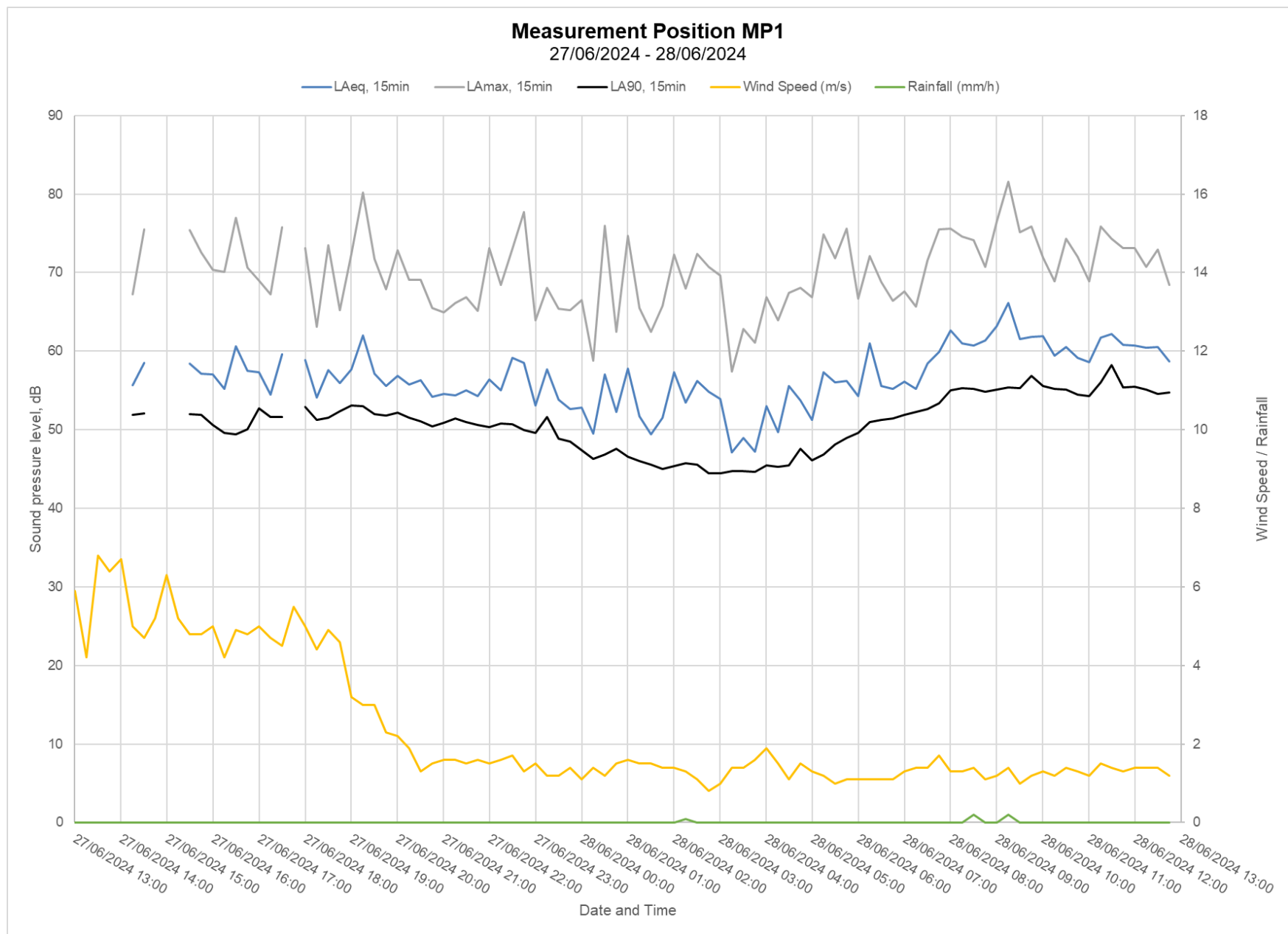
Appendix A provides full detailed time history for the environmental noise levels as recorded at Measurement Positions 1 and 2 for the duration of the environmental noise survey.

Table 2 provides a basic summary of the typical overall, A-weighted noise levels measured at the various noise monitoring locations, in $L_{Aeq,T}$ and $L_{A90,15min}$ terms. The specific, measured noise levels pertinent to the required BS4142 environmental noise assessment are highlighted in ***bold, italic*** text:

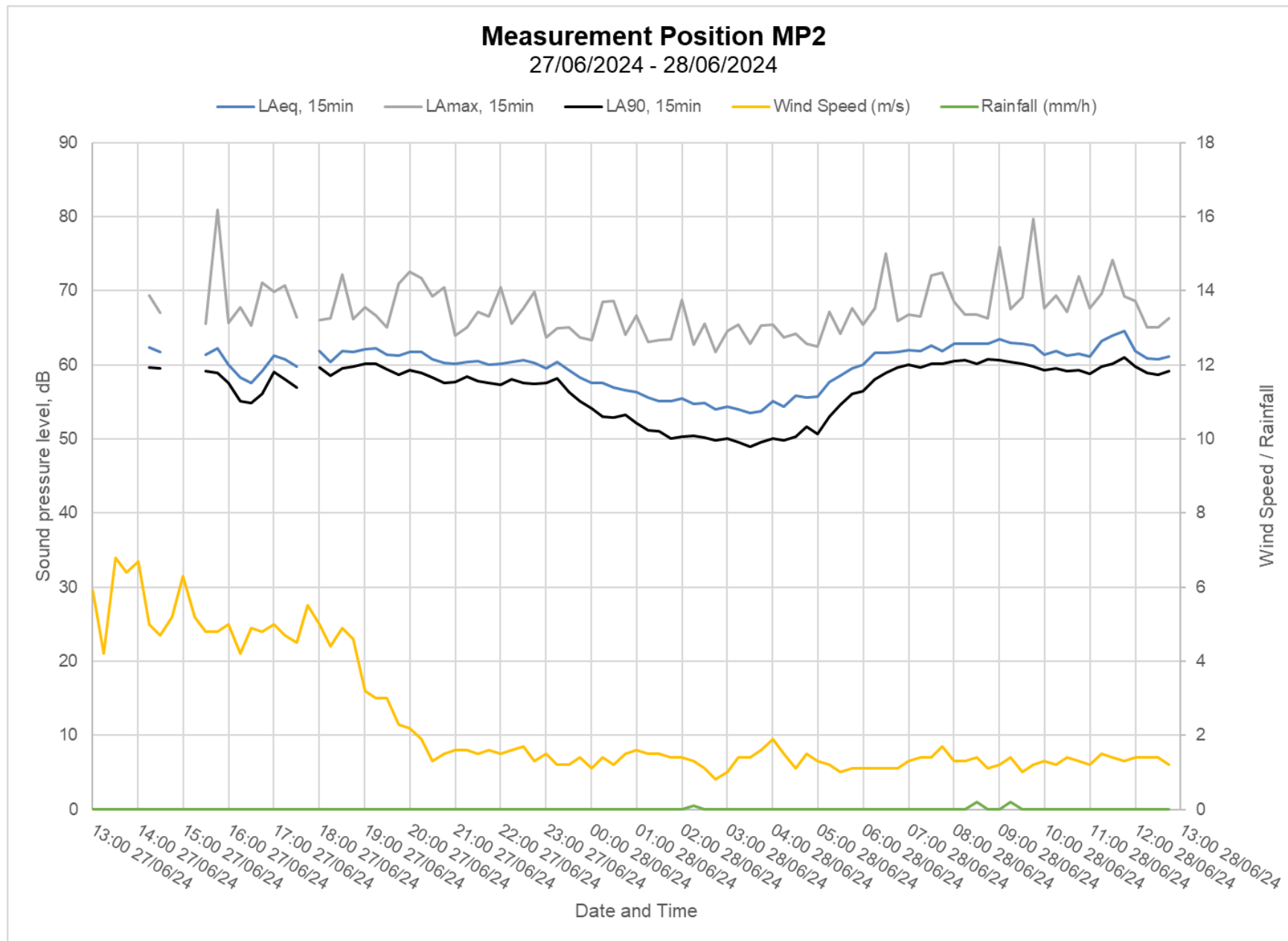
Date	Measurement Position	Daytime (07:00 – 23:00 Hours)		Night Time (23:00 – 07:00 Hours)	
		dB $L_{Aeq,T}$	dB $L_{A90,15min}$ (Typical)	dB $L_{Aeq,T}$	dB $L_{A90,15min}$ (Typical)
Thursday 25 April 2024	1	56*	50	55	46
	2	60*	57	58	50
Friday 26 April 2024	1	61*	55	-	-
	2	62	59	-	-
* Measurement not conducted for the full assessment period					

Table 2: Summary of the typical overall, A-weighted noise levels as measured at Positions 1 & 2

APPENDIX A. NOISE SURVEY SUMMARY RESULTS



Graph A1: **Graph showing measured environmental noise levels as measured at Measurement Position MP1**



Graph A2: Graph showing measured environmental noise levels as measured at Measurement Position MP2