Manchester College
Openshaw Campus

Environmental Noise Survey and Plant Noise Impact Assessment Report

32965/PNA

27 October 2026

For:
10architect
12 Hilton Street
Manchester
M1 1JF

Hann Tucker Associates
Consultants in Acoustics Noise & Vibration

Head Office: Duke House, 1-2 Duke Street, Woking, Surrey, GU21 5BA (t) +44 (0) 1483 770 595
Manchester Office: First Floor, 346 Deansgate, Manchester, M3 4LY (t) +44 (0) 161 832 7041
(w) hanntucker.co.uk (e) enquiries@hanntucker.co.uk

Hann Tucker Associates

Environmental Noise Survey and Plant Noise Impact Assessment Report
32965/PNA

Document Control

Rev	Date	Comment	Prepared by	Reviewed by	Approved by
0	27/10/2026	Amended typo Inclusion of detailed calculations in Appendix D	[redacted] Nick Mitchell Principal Consultant BSc (Hons), AMIOA	[redacted] Kyungmin Kim Senior Consultant PGDip, BMus(Hons), MIOA	[redacted] Firas Farhan Associate BSc (Hons), MIOA
0	29/07/2026	-	Nick Mitchell Principal Consultant BSc (Hons), AMIOA	Kyungmin Kim Senior Consultant PGDip, BMus(Hons), MIOA	Firas Farhan Associate BSc (Hons), MIOA

This report has been prepared by Hann Tucker Associates Limited (HTA) with all reasonable skill, care and diligence in accordance with generally accepted acoustic consultancy principles and the purposes and terms agreed between HTA and our Client. Any information provided by third parties and referred to herein may not have been checked or verified by HTA unless expressly stated otherwise. This document contains confidential and commercially sensitive information and shall not be disclosed to third parties. Any third party relies upon this document at their own risk.

Executive Summary

Hann Tucker Associates Limited has undertaken an environmental noise survey and plant noise assessment in relation to the proposed installation of 3no. external condenser units serving the proposed new college engineering workshop at the Openshaw Campus site off Ashton Old Road, Greater Manchester.

The environmental noise survey established representative background sound levels at the nearest noise sensitive residential receptors. Based on the survey results and the requirements of Manchester City Council's Planning and Noise Technical Guidance (October 2022), plant noise emission criteria have been proposed for the nearest residential receivers to the north and south of the site.

A noise impact assessment has subsequently been undertaken based on the manufacturer's stated noise data for the proposed condenser units, with all 3no. units assumed to operate simultaneously. The assessment has considered both daytime and night-time periods for robustness, although it is understood that the plant is expected to operate in accordance with the typical operational hours of the college and teaching facilities and is therefore not anticipated to operate during the night-time period.

The assessment indicates that the cumulative rating level from the proposed plant at both identified noise sensitive residential receptors is significantly below the representative background sound levels and the proposed plant noise emission limits. The predicted rating levels are therefore considered to satisfy the requirements of Manchester City Council's Planning and Noise Technical Guidance and the principles of BS 4142:2014 + A1:2019.

On the basis of the information and plant noise data available at the time of assessment, it is therefore considered that the proposed external condenser plant can be installed without giving rise to a significant adverse noise impact at the nearest noise sensitive residential properties, subject to the final approval of Manchester City Council and the plant being installed and operated in accordance with the assumptions and details considered within this assessment.

This report has been prepared by Hann Tucker Associates Limited (HTA) with all reasonable skill, care and diligence in accordance with generally accepted acoustic consultancy principles and the purposes and terms agreed between HTA and our Client. Any information provided by third parties and referred to herein may not have been checked or verified by HTA unless expressly stated otherwise. This document contains confidential and commercially sensitive information and shall not be disclosed to third parties. Any third party relies upon this document at their own risk.

Hann Tucker Associates

Environmental Noise Survey and Plant Noise Impact Assessment Report
32965/PNA

Contents

		Page
Executive Summary		
1.0	Introduction	1
2.0	Acoustic Terminology	1
3.0	Site Description	1
4.0	Planning Policies, Standards & Guidance	2
5.0	Baseline Noise Survey	3
6.0	Plant Noise Emission Criteria	8
7.0	Plant Noise Assessment	9
8.0	Conclusions	12

Attachments

Appendix A – Acoustic Terminology

Appendix B – Relevant Planning Policies and Guidance

Appendix C – Time History Graphs

Appendix D – Detailed Calculations

1.0 Introduction

Hann Tucker Associates Limited (Hann Tucker) has been commissioned to undertake a plant noise assessment for a site in Openshaw, Greater Manchester.

The site, which is located off Ashton Old Road, is proposing to install new external condenser building services plant to serve a new college engineering workshop.

Hann Tucker Associates have therefore been instructed to undertake an environmental noise survey to establish the existing L_{Amax}, L_{Aeq} and L_{A90} environmental road, rail and air traffic noise levels at selected accessible positions.

The survey will enable noise emission limits from the development to be identified with reference to the requirements of the Local Authority and/or the application of BS 4142: 2014 + A1:2019 and to minimise the possibility of noise nuisance to neighbours.

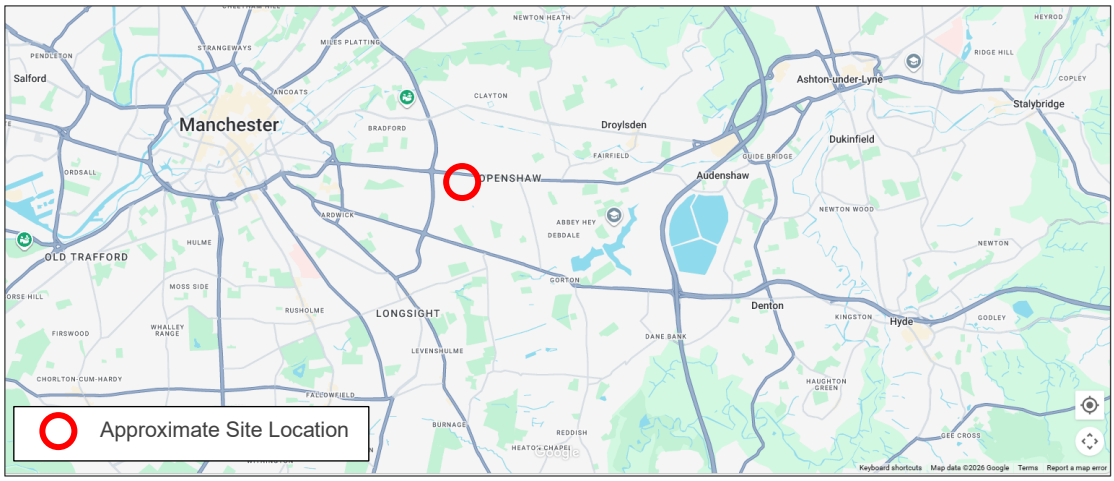
2.0 Acoustic Terminology

For an explanation of the acoustic terminology used in this report please refer to Appendix A enclosed.

3.0 Site Description

3.1 Location

The site is located off Ashton Old Road, Greater Manchester. The location is shown in the Location Map below.



Location Map (Map Data ©2026 Google)

The site falls within the jurisdiction of Manchester City Council.

3.2 Description

The site is bounded by Ashton, Old Road to the North, a railway line to the south, and commercial units to the east and west. The predominant noise source is traffic noise from the surrounding roads. The nearest residential receptor is located approximately 27 meters to the north of the site on Ashton Old Road, and 184 meters to the south of the site on Textile Street.

The site is shown in the Site Plan below.



Site Plan (©2026 Google, © 2026 Airbus, Maxar Technologies, Map Data ©2026)

4.0 Planning Policies, Standards & Guidance

4.1 Policies & Guides

In order to provide a suitable assessment a number of national planning policies have been considered.

All guidance used to form a noise impact assessment is taken from various standards, guidance, and Local Authority requirements as summarised below:

- Local Planning Policy
- British Standard 4142:2014 + A1:2019
- Statutory Noise Nuisance

Detailed information for relevant planning policies and guidance can be found within Appendix B.

4.2 Specific Local Authority Criteria

Manchester City Council's (MCC) Planning and Noise Technical Guidance document (October 2022) states the following:

> *"The development should be designed so as to achieve a rating level of 5dB (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location".*

And

> *"Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location".*

5.0 Baseline Noise Survey

5.1 Procedure

Fully automated environmental noise monitoring was undertaken by Christopher Fisk BSc (Hons) AMIOA, MIET from approximately 12:00 hours on Tuesday 24th February 2026 to 10:00 hours on Thursday 26th February 2026, to establish existing baseline noise levels. Measurements were taken continuously of the A-weighted (dBA) L_{90}, L_{eq}, and L_{max} sound pressure levels over discrete 15-minute periods.

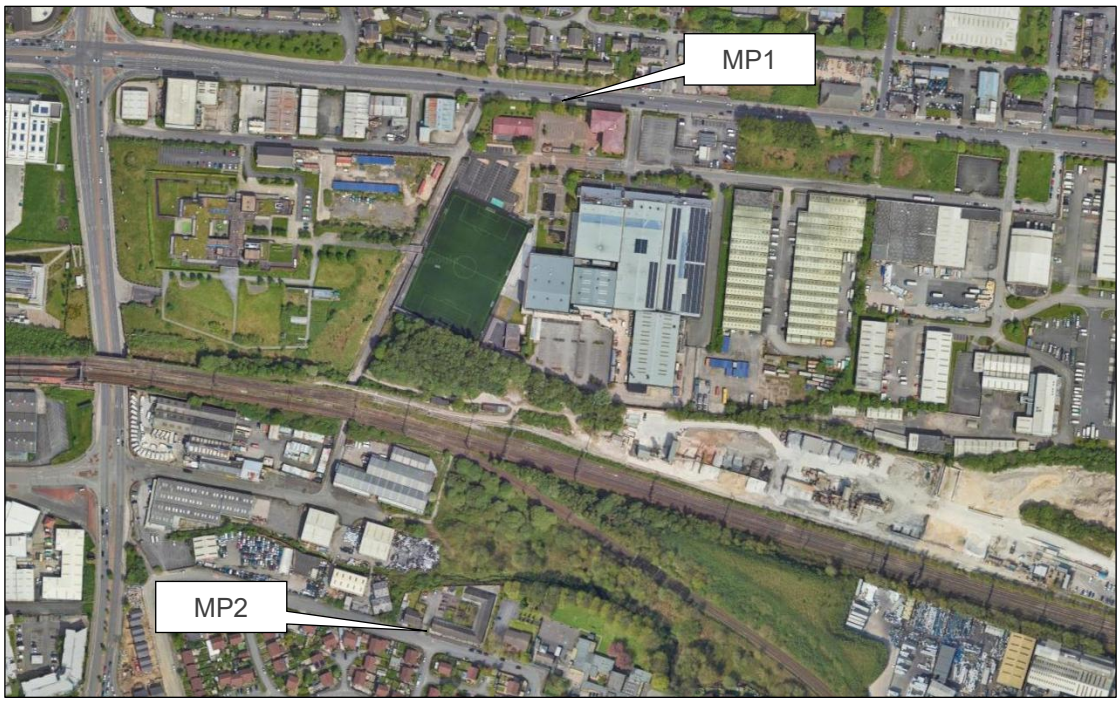
5.2 Measurement Positions

The noise level measurements were undertaken at 2no. positions as described in Table 1.

Table 1 Noise Monitoring Location Details

Position	Type	Description
1	Unattended	To the north of the site, approx. 1 m from the nearside edge of Ashton Old Road. Microphone in free-field conditions approx. 3 m above ground.
2	Unattended	To the South of the site, approx. 1 m from the nearside edge of Textile Street. Microphone in free-field conditions approx. 3 m above ground.

The positions are shown on the plan below.



Measurement Positions (©2026 Google, © 2026 Airbus, Maxar Technologies, Map Data ©2026)

5.3 Weather Conditions

For the unattended survey between Tuesday 24th February 2026 and Thursday 26th February 2026, local weather reports indicated no notable periods of or heavy rainfall, with temperatures ranging from 6 °C (night) to 15 °C (day) and wind speeds less than 5 m/s. During our time on site, skies were overcast, wind conditions were light and from a Southerly direction and road surfaces were dry.

5.4 Instrumentation

The instrumentation used during the survey is presented in Table 2.

Table 2 Equipment Details & Calibration Information

Position	Description	Manufacturer	Type	Serial Number	Calibration
1	Type 1 Data Logging Sound Level Meter	Larson Davis	LxT	4086	Calibration on 05/01/2026
1	Type 1 ½" Condenser Microphone	PCB	377B02	42843	Calibration on 05/01/2026
1	Pre-amp	PCB	PRML x TL1	174436	Calibration on 05/01/2026
2	Type 1 Data Logging Sound Level Meter	Larson Davis	LxT	6490	Calibration on 05/01/2026
2	Type 1 ½" Condenser Microphone	PCB	377B02	070074	Calibration on 05/01/2026
2	Pre-amp	PCB	PRML x TL1	347391	Calibration on 05/01/2026
All Positions	Type 1 Calibrator	Larson Davis	Cal200	3083	Calibration on 28/02/2026

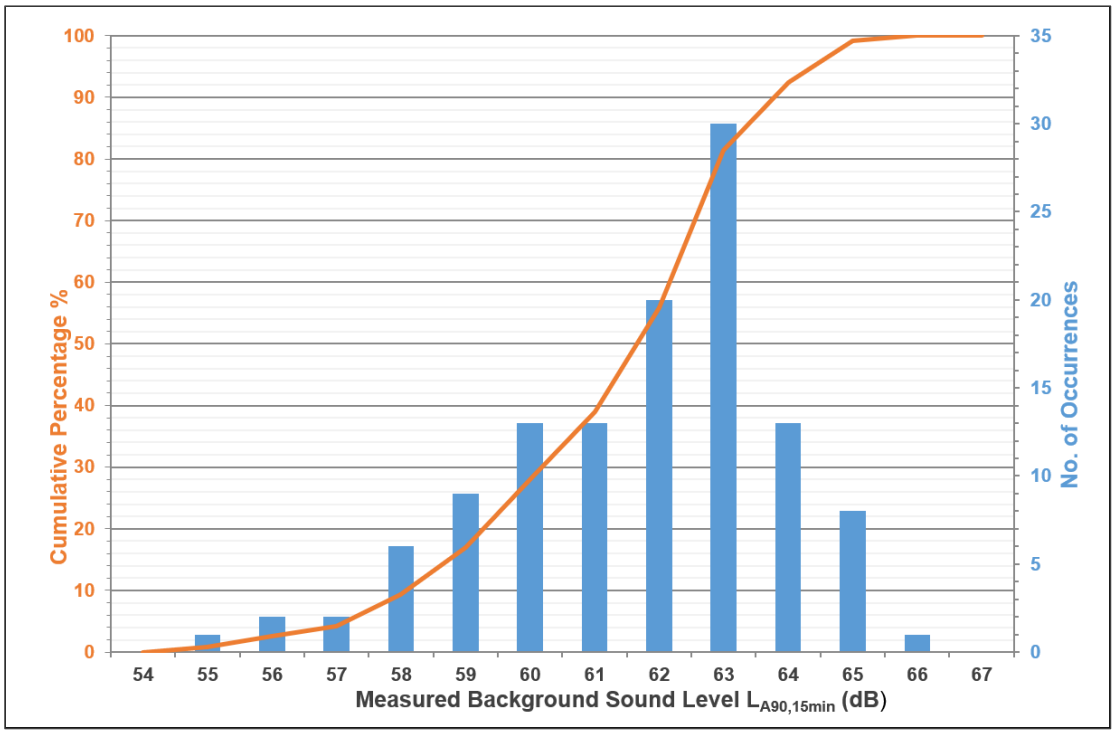
Each sound level meter, including the extension cable, was calibrated prior to and on completion of the surveys. No significant changes were found to have occurred (no more than 0.2 dB).

Each sound level meter was located in an environmental case with the microphone connected to the sound level meter via an extension cable. Each microphone was fitted with a windshield.

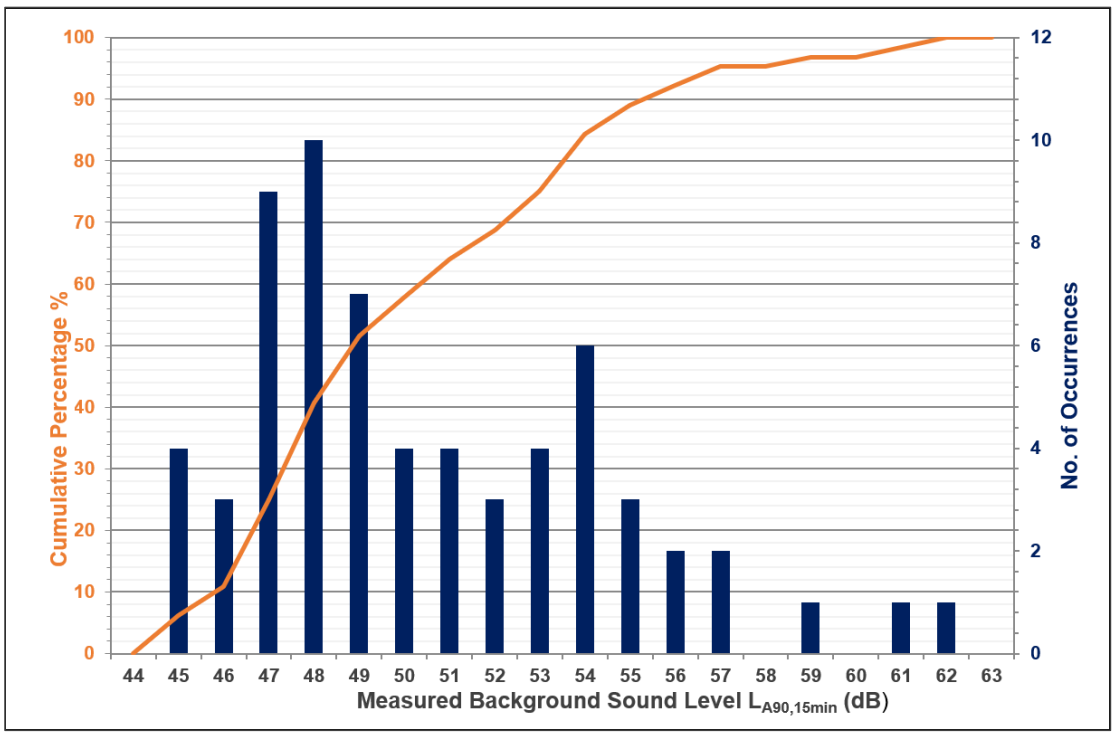
5.5 Results

The results have been plotted on Time History Graphs 32965/TH1 to 32965/TH2 enclosed presenting the 15-minute A-weighted (dBA) L_{90}, L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

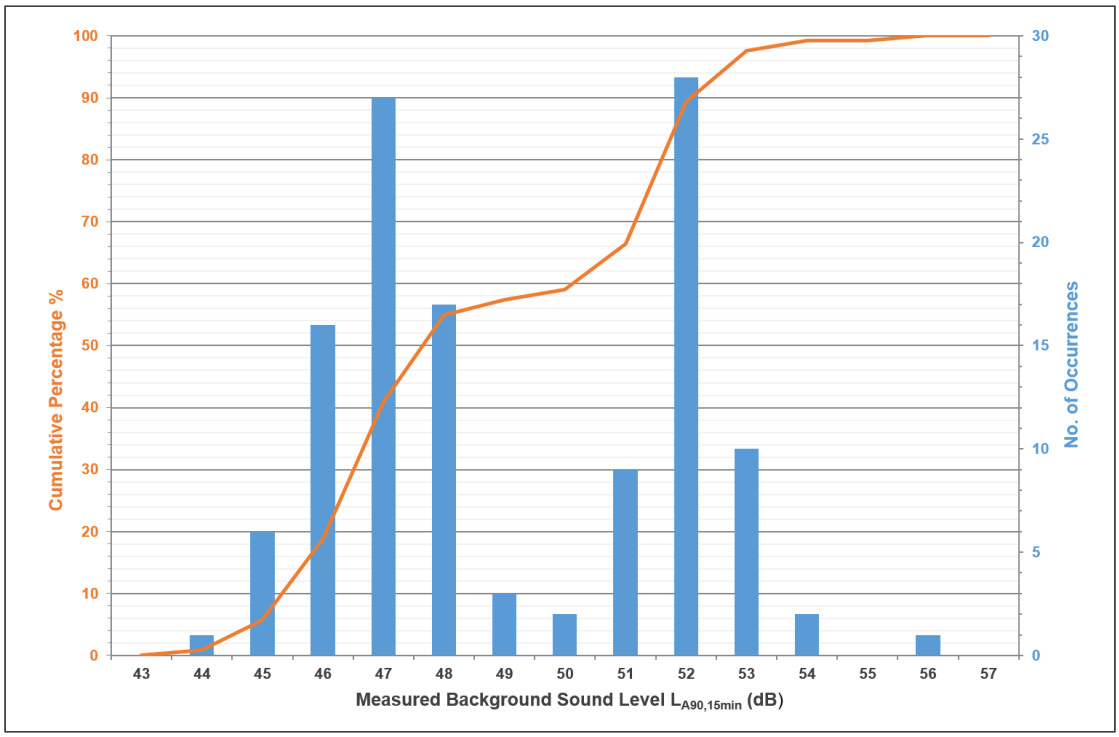
BS 4142 states that "*the background sound level must be reliable and suitably represent he particular circumstances and periods of interest. For this purpose, the objective is not simply to ascertain a lowest measured background sound level, but rather to quantify what is typical during particular time periods.*" Taking this into account, the following histograms have been created which display the occurrence of each sound level (L_{A90}) for the day and night-time periods.



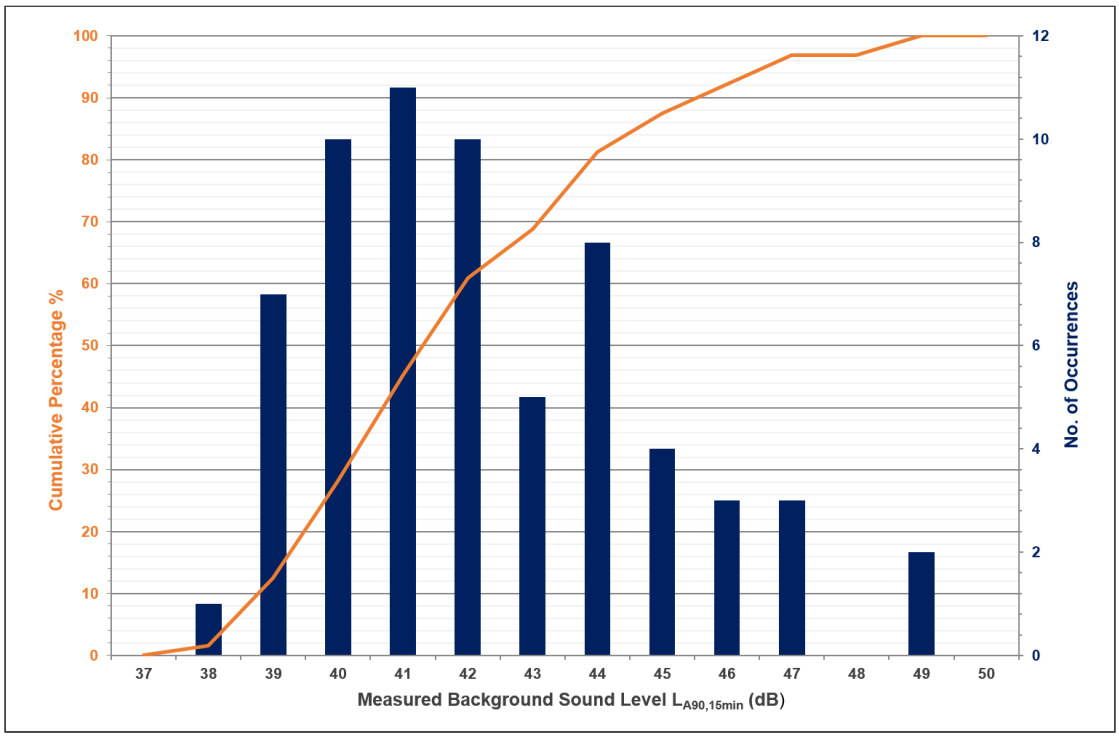
Daytime Histogram of background noise for measurement position 1 (07:00-23:00)



Night-time Histogram of background noise for measurement position 1 (23:00-07:00)



Daytime Histogram of background noise for measurement position 2 (07:00-22:59)



Night-time Histogram of background noise for measurement position 2 (23:00-06:59)

Based on our interpretation of the above histograms, in-line with the methodologies contained within BS4142, the L_{A90} values presented in Table 3 are considered to be the 'representative' background sound levels determined through statistical analysis of the 15-minute readings.

Table 3 Measured Background Noise Levels in Unattended Survey Locations

Position	Representative Measured $L_{A90(15min)}$ Background Sound Level (dB re 2 x 10^{-5} Pa)	
	Daytime (07:00 – 23:00) Hours	Night-Time (23:00 – 07:00) Hours
1	58	47
2	46	40

5.6 Discussion Of Noise Climate

Due to the nature of the survey, i.e. unattended, it is not possible to accurately describe the dominant noise sources, or specific noise events throughout the entire survey period. However, at the beginning and end of the survey period the noise climate was noted to be dominated by vehicle traffic noise from surrounding roads.

6.0 Plant Noise Emission Criteria

Building services plant external noise emission levels will need to comply with local planning/environmental authority requirements and statutory noise nuisance legislation.

Based on the results of the noise survey and the requirements of the Local Authority (as outlined in Section 4.2), we propose that the following plant noise emission criteria be achieved incident at the nearest noise sensitive residential windows, in free-field conditions, with all plant operating simultaneously.

Table 4 Proposed Plant Noise Egress Limits

NSR Ref.	Location	Plant Noise Emission Criteria ($L_{Ar,Tr}$, dB)	
		Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
1	Nearest residential receiver to the North of the site on Ashton Old Road	53	42
2	Nearest residential receiver to the South of the site on Textile Street	41	35

The above criteria are to be achieved with all of the proposed plant operating simultaneously.

Noise shall be assessed in accordance with BS 4142:2014 with corrections applied for any plant emitting noise of a tonal or irregular quality.

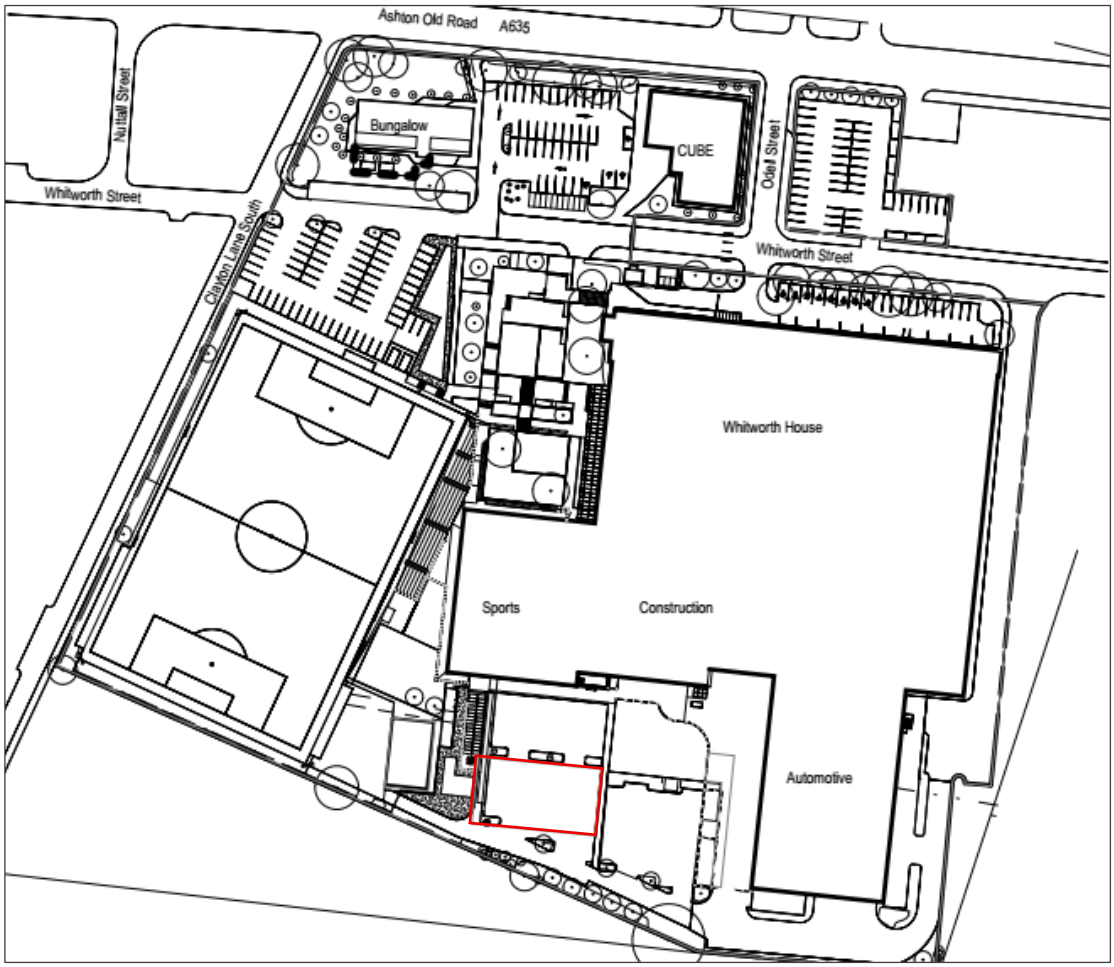
It should be noted that the above are subject to the final approval of the Local Authority.

7.0 Plant Noise Assessment

7.1 Proposed Plant

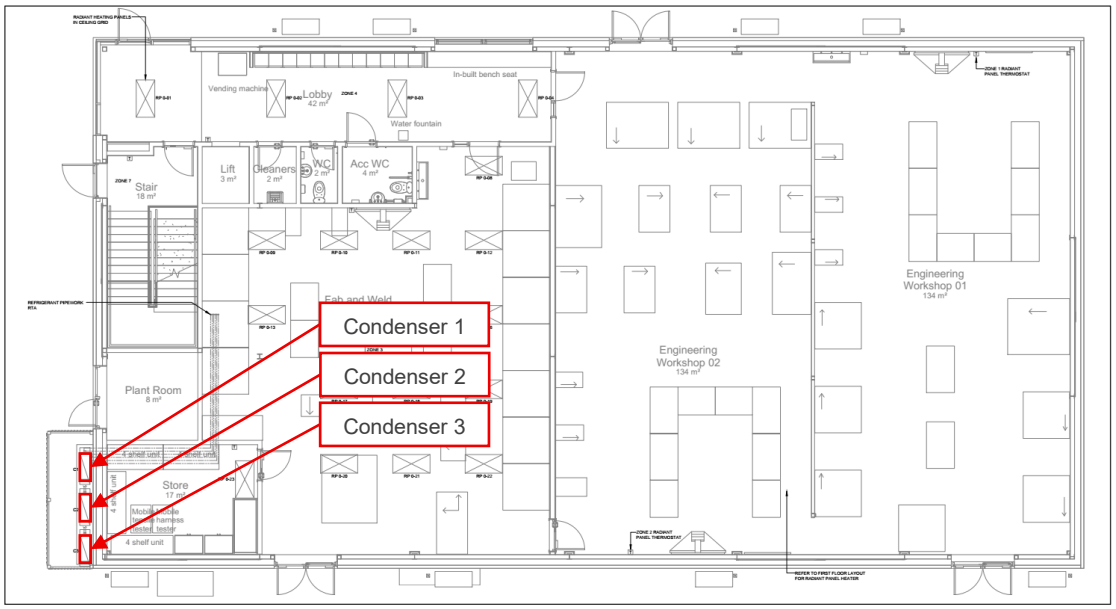
7.1.1 Plant Location

The approximate new building footprint is to be located in the area marked below.



Location Plan (OPEB-10A-V1-ZZ-DR-A-0001-T1)

It is understood that 3no. external condenser units are to be installed on the western side of the new building. These units are illustrated in the below plan.



Ground Floor Proposed Heating and Cooling Services (3671-004_P03, dated 17/03/2026)

7.1.2 Plant Operation

It is not currently known whether the units will operate during the daytime and night-time periods. However, for robustness, the assessment considers both periods.

7.1.3 Plant Noise Data

We understand the manufacturer's noise data for the equipment to be as follows:

Table 5 Plant Noise Information

Plant Description	Sound Pressure Level (dB re $2x10^{-5}$ Pa) at 1 metre at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1000	2000	4000	8000	
PUZ-ZM35	58	51	45	44	40	37	32	31	46
PUZ-M125	62	61	58	55	53	48	43	35	56
PUZ-M140	66	64	58	55	54	49	43	36	57

7.2 Plant Noise Impact Assessment

The following tables summarise our predictions of atmospheric noise emissions from the proposed plant to the nearest noise sensitive residential window.

The cumulative noise level of all 3no. units have been logarithmically summed at the receptor locations, accounting for any screening and distance between source and receiver points.

7.2.1 Results at NSR 1

The cumulative noise impact at NSR 1 is detailed below.

Table 6 Summary of calculations at NSR 1

Plant Item	Calculated Noise Level at Receptor, dBA
PUZ-ZM35 - Condenser 1	-16
PUZ-M125 - Condenser 2	-6
PUZ-M140 - Condenser 3	-4
Cumulative Noise Level at Receptor	**-2**
BS 4142 Penalties	0 [1]
Cumulative Rating Level at NSR 1 $L_{Ar,Tr}$ dB	-2
Plant Noise Emission Limit $L_{Ar,Tr}$ dB daytime/night-time	53 / 42
Rating Level vs Background Sound Level daytime/night-time	**-55** / **-44**

Notes:

[1] Due to the specific sound level falling well below the daytime and night-time background sound level, and even below 0 dB it is considered that any noise characteristics from the units would be imperceptible at the receptor location. Therefore, no BS 4142 penalties have been applied. Furthermore, it is understood that plant will not operate at night in line with the typical operational periods of office and teaching hours (07:00 – 19:00).

7.2.2 Results of NSR 2

The cumulative noise impact at NSR 2 is detailed below.

Table 7 Summary of calculations at NSR2

Plant Item	Calculated Noise Level at Receptor, dBA
PUZ-ZM35 - Condenser 1	-2
PUZ-M125 - Condenser 2	10
PUZ-M140 - Condenser 3	11
Cumulative Noise Level at Receptor	**13**
BS 4142 Penalties	0 [1]
Cumulative Rating Level at NSR 2 $L_{Ar,Tr}$ dB	13
Plant Noise Emission Limit $L_{Ar,Tr}$ dB daytime/night-time	41 / 35
Rating Level vs Background Sound Level daytime/night-time	**-28** / **-22**

Plant Item	Calculated Noise Level at Receptor, dBA
Notes: [1] Due to the specific sound level falling well below the daytime and night-time background sound level, and even below 0 dB it is considered that any noise characteristics from the units would be imperceptible at the receptor location. Therefore, no BS 4142 penalties have been applied. Furthermore, it is understood that plant will not operate at night in line with the typical operational periods of office and teaching hours (07:00 – 19:00).	

7.2.3 Discussion of Results

Our calculations indicate that the proposed plant is capable of achieving plant noise limit requirements of the Local Authority outlined in Section 6.0 at both NSR locations.

8.0 Conclusions

Hann Tucker Associates Limited has undertaken an environmental noise survey and plant noise assessment for 3no. new external condensing units at the Openshaw Campus in Greater Manchester.

An environmental noise survey was undertaken to enable plant noise limits to be established in regard to Manchester City Council's Planning and Noise Technical Guidance and the principles of BS 4142:2014 + A1:2019.

The assessment indicates that the cumulative rating level from the proposed plant at both identified noise sensitive residential receptors is significantly below the representative background sound levels and the proposed plant noise emission limits. The predicted rating levels are therefore considered to satisfy the requirements of MCC and BS 4142.

Based on the results of the assessment, it is considered that noise need not be a determining factor in granting planning permission for the proposed scheme.

Appendix A

The acoustic terms used in this report are defined as follows:

dB — Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).

dBA — The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The $_A$ subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted

It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.

$L_{90,T}$ — L_{90} is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

$L_{eq,T}$ — $L_{eq,T}$ is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

L_{max} — L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

Sound Pressure Level (L_p) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).

Sound Power Level (SWL or L_w) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).

Appendix B

Planning Policies, Standards & Guidance

B.1 BS 4142:2014 + A1:2019

When setting plant noise emission criteria reference is commonly made to BS 4142:2014 "*Methods for rating and assessing industrial and commercial sound".*

The procedure contained in BS 4142:2014 provides an assessment of the likely effects of sound on people when comparing the specific noise levels from the source with representative background noise levels. Where the noise contains "a tone, impulse or other characteristic" then various corrections can be added to the specific (source) noise level to obtain the "rating level".

BS 4142 states that: *"The significance of sound of an industrial and/or commercial nature depends upon both the margin by which the rating level of the specific sound source exceeds the background sound level and the context in which the sound occurs". An estimation of the impact of the specific noise can be obtained by the difference of the rating noise level and the background noise level and considering the following:*

• *"Typically, the greater this difference, the greater the magnitude of the impact."*

• *"A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context."*

• *"A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context."*

• *"The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."*

The determination of the "rating level" and the "background level" are both open to interpretation, depending on the context.

B.2 Statutory Noise Nuisance

S79(1)(g) of the Environmental Protection Act 1990 defines a statutory nuisance as *"noise emitted from a premises so as to be prejudicial to health or a nuisance".* A duty is placed on the Local Authority to serve an abatement notice under S80 if it becomes satisfied that a statutory nuisance exists.

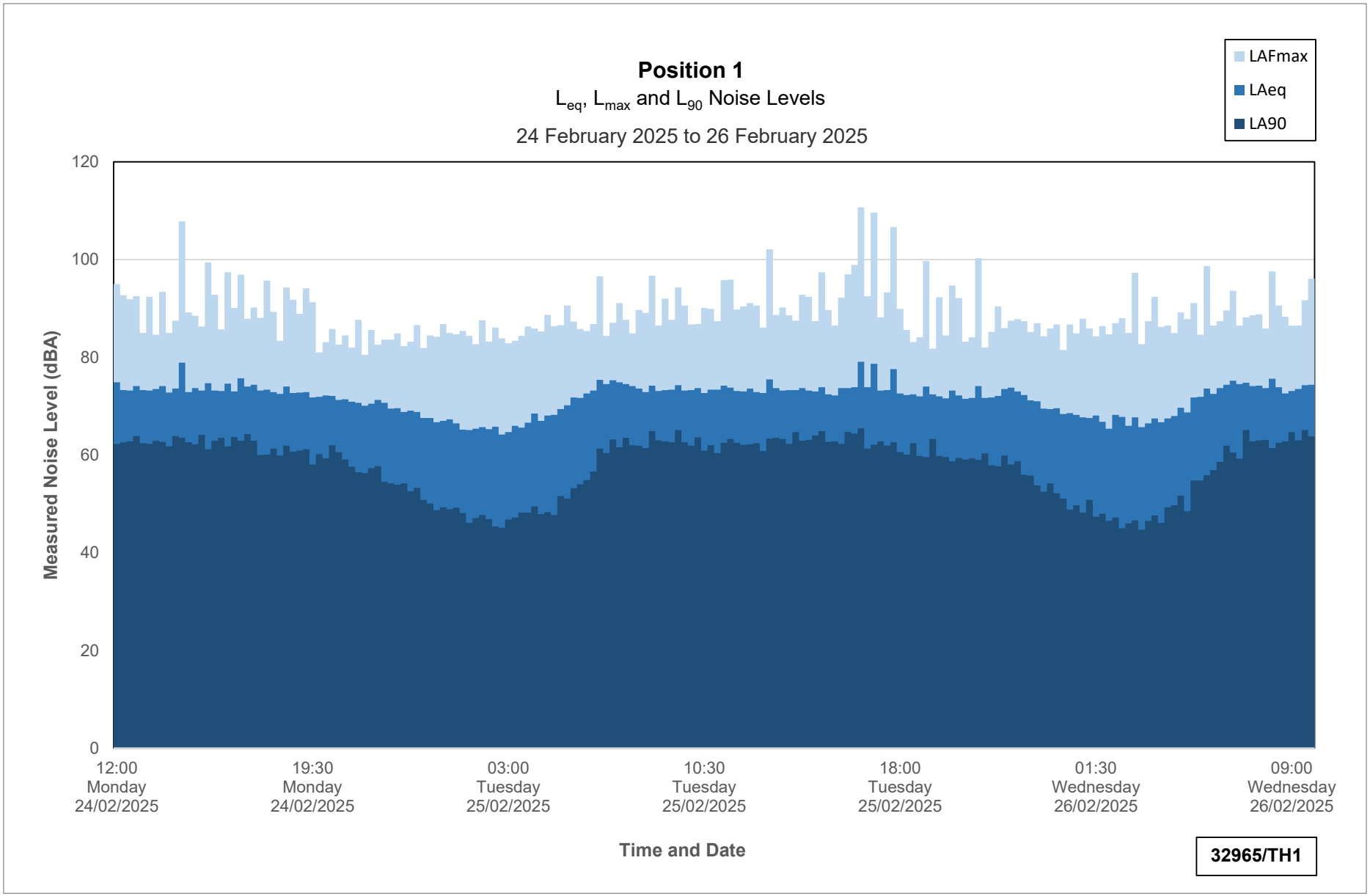
There is however no quantitative definition/objective method in determining statutory noise nuisance, and as such we are not able to definitively advise or determine on such matters. Noise nuisance is subjective and requires multiple factors to be considered, including but not limited to:

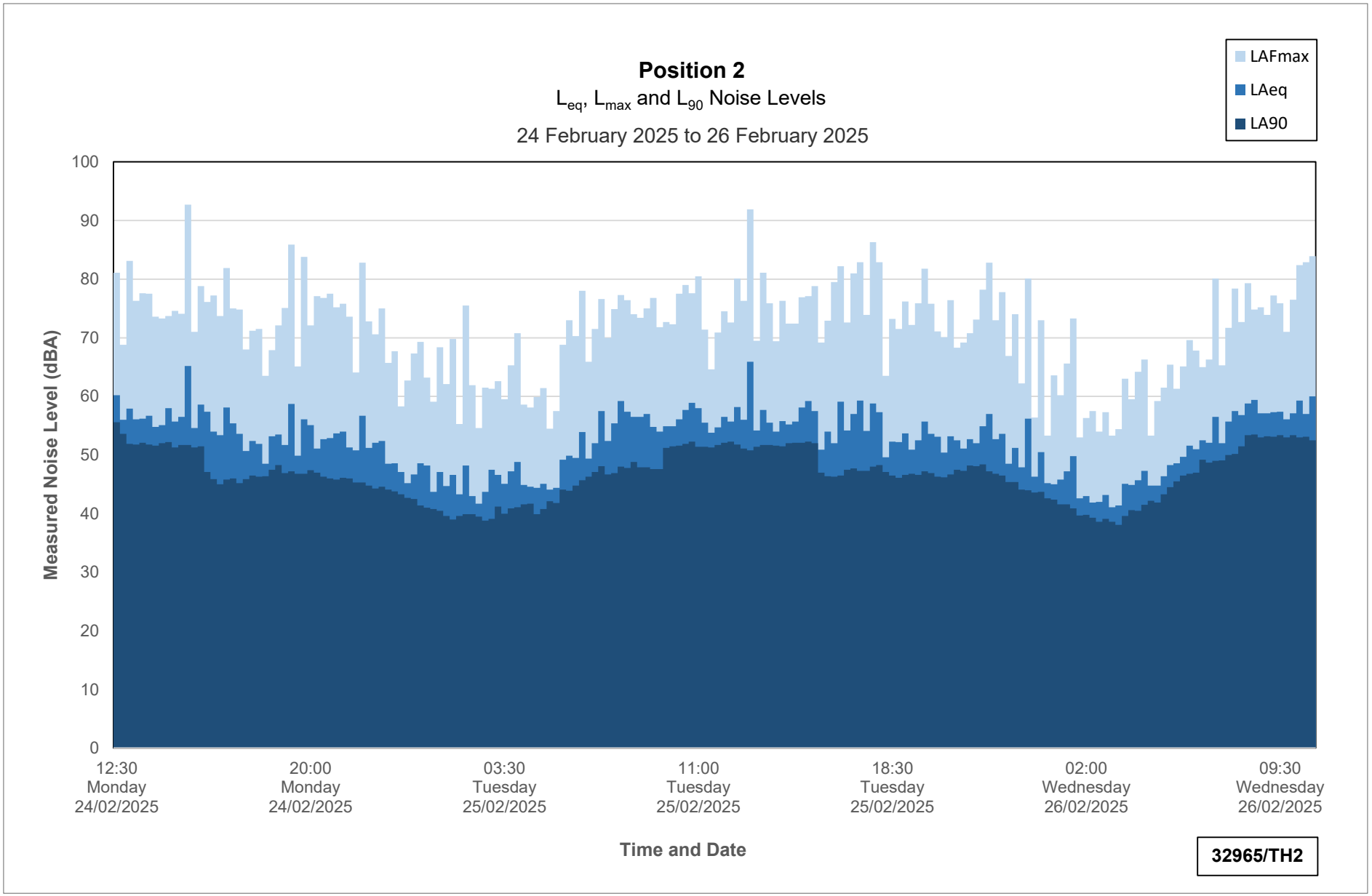
- Straining to hear something is *generally* considered not a nuisance, however,
- Noise level (of source and relative to background), timing, duration, type of noise, frequency, location, continuous or repetitive, all factor into judging nuisance.

To mitigate against, though not remove entirely, the risk of a statutory noise nuisance, a noise assessment should be undertaken by a Suitably Qualified Acoustician. Adoption of appropriate and relevant industry standards/guides can provide a structured framework for such assessments, improving the credibility of mitigation efforts. It is also important to also recognise that ongoing management (both active and passive) may also be necessary depending on the context of the situation.

Appendix C

Time History Graphs


Position 1
L_{eq}, L_{max} and L_{90} Noise Levels
24 February 2025 to 26 February 2025
LAFmax
LAeq
LA90
Measured Noise Level (dBA)
120
100
80
60
40
20
0
12:00 Monday 24/02/2025
19:30 Monday 24/02/2025
03:00 Tuesday 25/02/2025
10:30 Tuesday 25/02/2025
18:00 Tuesday 25/02/2025
01:30 Wednesday 26/02/2025
09:00 Wednesday 26/02/2025
Time and Date
32965/TH1


Position 2
L_{eq}, L_{max} and L_{90} Noise Levels
24 February 2025 to 26 February 2025
LAFmax
LAeq
LA90
Measured Noise Level (dBA)
100
90
80
70
60
50
40
30
20
10
0
12:30 Monday 24/02/2025
20:00 Monday 24/02/2025
03:30 Tuesday 25/02/2025
11:00 Tuesday 25/02/2025
18:30 Tuesday 25/02/2025
02:00 Wednesday 26/02/2025
09:30 Wednesday 26/02/2025
Time and Date
32965/TH2

Appendix D

Detailed Calculations

Receiver	Calculation	Description	Sound Level at Octave Band Centre Frequency (Hz)								dBA
			63	125	250	500	1000	2000	4000	8000	
Ashton Old Road	C1 to NSR1	PUZ-ZM35 - Condernser 1 SPL at 1m	58	51	45	44	40	37	32	31	46
Ashton Old Road	C1 to NSR1	Barrier Loss (ISO 9613-2)	-13	-17	-20	-23	-25	-25	-25	-25	
Ashton Old Road	C1 to NSR1	Distance Loss (1m to 225m)	-44	-44	-44	-44	-44	-44	-44	-44	
Ashton Old Road	C1 to NSR1	Sound Pressure Level at Receiver	1	-10	-19	-23	-29	-32	-37	-38	-19
Ashton Old Road	C2 to NSR1	PUZ-M125 - Condernser 2 SPL at 1m	62	61	58	55	53	48	43	35	58
Ashton Old Road	C2 to NSR1	Barrier Loss (ISO 9613-2)	-13	-17	-20	-23	-25	-25	-25	-25	
Ashton Old Road	C2 to NSR1	Distance Loss (1m to 225m)	-44	-44	-44	-44	-44	-44	-44	-44	
Ashton Old Road	C2 to NSR1	Sound Pressure Level at Receiver	5	0	-6	-12	-16	-21	-26	-34	-9
Ashton Old Road	C3 to NSR1	PUZ-M140 - Condernser 3 SPL at 1m	66	64	58	55	54	49	43	36	58
Ashton Old Road	C3 to NSR1	Barrier Loss (ISO 9613-2)	-13	-17	-20	-23	-25	-25	-25	-25	
Ashton Old Road	C3 to NSR1	Distance Loss (1m to 225m)	-44	-44	-44	-44	-44	-44	-44	-44	
Ashton Old Road	C3 to NSR1	Sound Pressure Level at Receiver	9	3	-6	-12	-15	-20	-26	-33	-7
Textile Street	C1 to NSR2	PUZ-ZM35 - Condernser 1 SPL at 1m	58	51	45	44	40	37	32	31	46
Textile Street	C1 to NSR2	Barrier Loss (ISO 9613-2)	-5	-5	-5	-6	-6	-7	-9	-11	
Textile Street	C1 to NSR2	Distance Loss (1m to 195m)	-42	-42	-42	-42	-42	-42	-42	-42	
Textile Street	C1 to NSR2	Sound Pressure Level at Receiver	11	4	-2	-4	-8	-12	-19	-22	-2
Textile Street	C2 to NSR2	PUZ-M125 - Condernser 2 SPL at 1m	62	61	58	55	53	48	43	35	58
Textile Street	C2 to NSR2	Barrier Loss (ISO 9613-2)	-5	-5	-5	-6	-6	-7	-9	-11	
Textile Street	C2 to NSR2	Distance Loss (1m to 195m)	-42	-42	-42	-42	-42	-42	-42	-42	
Textile Street	C2 to NSR2	Sound Pressure Level at Receiver	15	14	11	8	5	-1	-8	-18	10
Textile Street	C3 to NSR2	PUZ-M140 - Condernser 3 SPL at 1m	66	64	58	55	54	49	43	36	58
Textile Street	C3 to NSR2	Barrier Loss (ISO 9613-2)	-5	-5	-5	-6	-6	-7	-9	-11	
Textile Street	C3 to NSR2	Distance Loss (1m to 195m)	-42	-42	-42	-42	-42	-42	-42	-42	
Textile Street	C3 to NSR2	Sound Pressure Level at Receiver	19	17	11	8	6	0	-8	-17	10