Aldi

Victoria Avenue East
Manchester
M9 7HW

Planning Noise Survey

On behalf of

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For and on behalf of Noise Solutions Ltd				

Revision	Date	Description	Prepared	Reviewed/ Approved

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1.0 Introduction

1.1. Noise Solutions Ltd (NSL) has been appointed to undertake a noise survey of existing plant and noise breakout at the Aldi store on Victoria Avenue East, Manchester, to verify compliance with the requirements of Planning Conditions.

1.2. NSL has attended site to undertake plant noise measurements in order to measure the in-situ noise levels of all external plant, and the noise breakout from inside the store.

1.3. To assist with the understanding of this report a glossary of acoustic terms can be found in **Appendix A**. An in-depth glossary of acoustic terms can be viewed online at www.acoustic-glossary.co.uk.

2.0 Site layout

2.1. The store occupies a dedicated retail unit on Victoria Avenue East.

2.2. Newly installed external plant serving the store is located within a dedicated plant area to the north of the store, and along the northern façade. A wooden and chain fence surrounds the plant area. The combination of building geometry and the screen provide minimal amounts of screening between the plant and the nearest residential receptor.

2.3. The plant located in the external plant area to the north of the store comprises:

- 1No. LT/IT1 Gas Cooler
- 1No. LT/IT1 Refrigeration Pack
- 2No. Refrigeration Condensing Units (CU)
  - Chiller Condensing Unit (IT2-U)
  - Freezer Condensing Unit (LT2-C)
- 2No. Air Source Heat Pumps (AHU) Intake (AHU01)

2.4. It is understood that the ASHPs do not operate during the night-time period, however, the refrigeration units may operate at any time to satisfy the refrigeration requirements of the store.

2.5. A site plan showing the site and surrounding area and the noise monitoring location used in this assessment is presented in **Appendix B**.

3.0 Existing noise climate

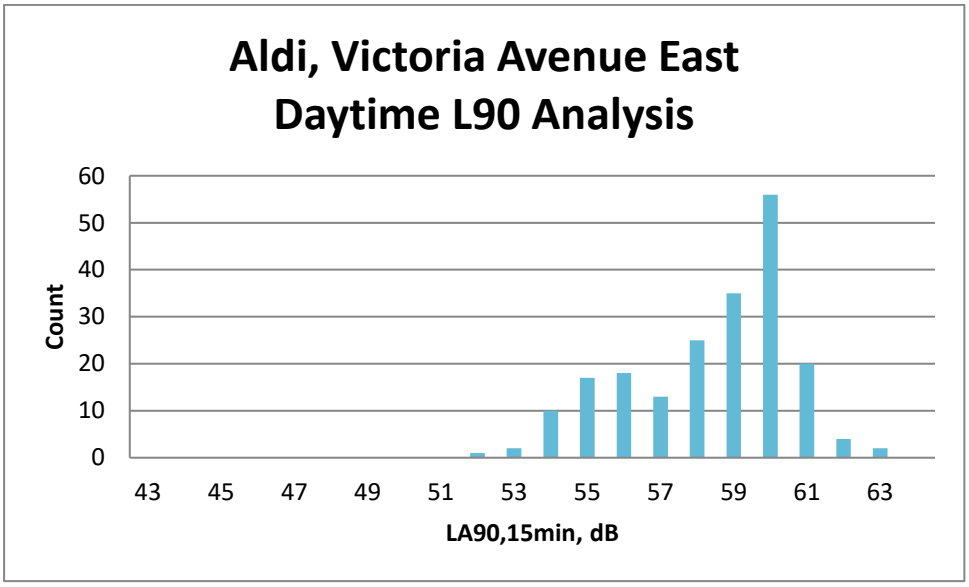
3.1. An environmental noise survey was undertaken in June 2022, to inform the building and plant design. This established the typical background sound levels at a location representative of the noise climate outside the façades of the nearest noise sensitive receptors to the proposed plant area during the quietest times at which the plant will operate.

3.2. The results of the environmental sound survey are summarised in Table 1 below. The full set of measurement results and details of the survey methodology are presented in **Appendix C**.

Table 1 Summary of survey results

Measurement period	Range of recorded sound pressure levels (dB)			
	$L_{Aeq(15mins)}$	$L_{Amax(15mins)}$	$L_{A10(15mins)}$	$L_{A90(15mins)}$
Daytime (07.00 – 23.00 hours)	56-65	61-89	58-68	52-63
Night-time (23.00 – 07.00 hours)	51-63	58-85	53-64	44-61

Figure 1 Histogram of daytime L_{A90} background sound pressure levels



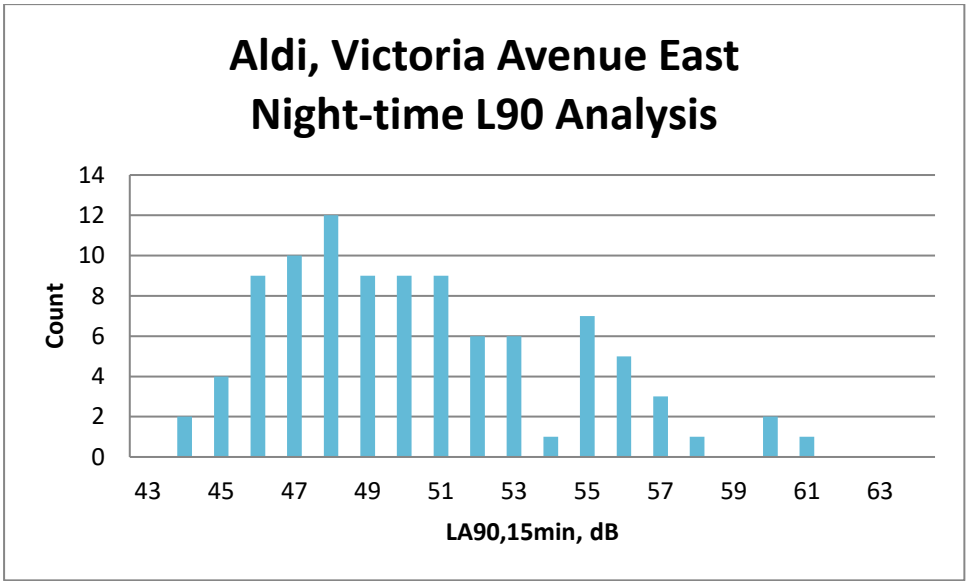
3.3. Further statistical analysis has been carried out on the data; the mean, modal and median values are shown in Table 2 below.

Table 2 Statistical analysis of $L_{A90,15min}$ levels during the daytime period

dB, L_{A90} daytime period	
mean	58
modal	60
median	59

3.4. From the histogram analysis, 55dB has been selected to be a robust representation of the background noise level during the daytime period.

Figure 2 Histogram of night-time L_{A90} background sound pressure levels



3.5. Further statistical analysis has been carried out on the data; the mean, modal and median values are shown in Table 3 below.

Table 3 Statistical analysis of $L_{A90,15min}$ levels during the night-time period

dB, L_{A90} night-time period	
mean	50
modal	48
median	50

3.6. Again, from the histogram analysis, 45dB has been selected to be a robust representation of the background sound level during the night-time period.

3.7. Therefore, the following values are considered to be the lowest existing background sound pressure levels at nearby noise sensitive premises:

- 55dB L_{A90} during the daytime period; and
- 45dB L_{A90} during the night-time period.

4.0 Nearest noise sensitive receptors

4.1. The site lies between Victoria Avenue East and the M60 motorway.

4.2. The nearest residential premises are apartments at 261 Victoria Avenue East (Receptor R1), immediately to the northwest of the store. The nearest residential windows are approximately

28m from the closest plant item. All plant items are partially screened from the closest windows by the store envelope and plant area fence.

4.3. All other residential properties in the area are at a significantly greater distance from the plant and are screened from it by the store building.

4.4. An aerial photograph showing the site and surrounding area, the nearest noise sensitive properties and the noise monitoring location used in this assessment is presented in **Appendix B**.

5.0 Plant noise criteria

Manchester City Council

5.1. Manchester City Council has granted permission for the development, subject to Conditions. Conditions 24 and 25 in the Decision Notice 133148/FO/2022 states:

> *24 a) Any externally mounted ancillary plant, equipment and servicing to be installed shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to its installation, the scheme shall be submitted to and approved in writing by the City Council as Local Planning Authority in order to secure a reduction in the level of noise emanating from the site.*
>
> *b) Prior to any externally mounted ancillary plant, equipment and servicing to be installed becoming operational, and approved verification report shall be submitted to and approved in writing by the City Council as Local Planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.*
>
> *Reason – To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site, pursuant to saved policy DC26 of the Unitary Development Plan for the City of Manchester and policies DM1 and SP1 Of the Manchester Core Strategy.*
>
> *25) The building hereby approved shall be acoustically insulated and treated to limit the break out of noise in accordance with a noise study of the premises and a scheme of acoustic*

treatment that has been submitted to and approved in writing by the City Council as Local Planning Authority. The scheme shall be implemented in full before the use commences.

b) Prior to occupation of the building hereby approved a verification report will be required to validate that the work undertaken throughout the development confirms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason – To safeguard the amenity of nearby residential properties, pursuant to saved policy DC26 of the Unitary Development Plan for the City of Manchester and Policies DM! and SP1 of the Manchester Core Strategy.

BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound

5.1. BS 4142:2014+A1:2019 is intended to be used to assess the likely effects of sound on people residing in nearby dwellings. The scope of BS 4142:2014 includes "sound from fixed plant installations which comprise mechanical and electrical plant and equipment".

5.2. The procedure contained in BS 4142:2014 is to quantify the "specific sound level", which is the measured or predicted level of sound from the source in question over a one hour period for the daytime and a 15 minute period for the night-time. Daytime is defined in the standard as 07:00 to 23:00 hours, and night-time as 23:00 to 07:00 hours.

5.3. The specific sound level is converted to a rating level by adding penalties on a sliding scale to account for either potentially tonal or impulsive elements. The standard sets out objective methods for determining the presence of tones or impulsive elements, but notes that it is acceptable to subjectively determine these effects.

5.4. The penalty for tonal elements is between 0dB and 6dB, and the standard notes: "Subjectively, this can be converted to a penalty of 2 dB for a tone which is just perceptible at the noise receptor, 4 dB where it is clearly perceptible, and 6 dB where it is highly perceptible."

5.5. The penalty for impulsive elements is between 0dB and 9dB, and the standard notes: "Subjectively, this can be converted to a penalty of 3 dB for impulsivity which is just perceptible at the noise receptor, 6 dB where it is clearly perceptible, and 9 dB where it is highly perceptible."

5.6. The assessment outcome results from a comparison of the rating level with the background sound level. The standard states:

- *Typically, the greater this difference, the greater the magnitude of the impact.*
- *A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;*
- *A difference of around +5 dB 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.*

5.7. The standard does state that "adverse impacts include, but are not limited to, annoyance and sleep disturbance. Not all adverse impacts will lead to complaints and not every complaint is proof of an adverse impact."

5.8. The standard goes on to note that: "Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night."

5.9. In addition to the margin by which the Rating Level of the specific sound source exceeds the Background Sound Level, the 2014 edition places emphasis upon an appreciation of the context, as follows:

> *"An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context."*

5.10. BS 4142:2014 requires uncertainties in the assessment to be considered, and where the uncertainty is likely to affect the outcome of the assessment, steps should be taken to reduce the uncertainty.

Summary of requirements

5.11. The local authority's usual requirement is that the plant noise level at the nearest noise-sensitive windows should be no higher than the existing representative background sound level.

5.12. The cumulative noise level for the plant at the nearest receptors considered should therefore not exceed the limits shown in the table below:

Table 4 Typical background sound pressure levels at nearby noise sensitive receptors

Period	Cumulative plant rating level, dB(A)
Daytime (07.00 - 23.00 hours)	55
Night-time (23.00 - 07.00 hours)	45

6.0 External plant measurements

Site visit 26th January 2026

6.1. Noise Solutions Ltd attended site between 17.50 and 20.00 hours on 28th January 2026 to measure noise emissions from the installed plant.

6.2. Measurements were undertaken to establish the sound level emissions from the external plant installed at the store. Plant was induced to run at its maximum commissioned duty. The gas cooler and refrigeration pack ran in tandem. The ASHPs could not be operated by the engineer, however they were inaudible both within the plant area and near the receptor.

6.3. It should be noted that all plant items were inaudible from the measurement position in close proximity to the receptor, with noise from the nearby M60 being the dominant noise source. The noise within the plant area was also dominated by road traffic noise, however the plant was audible at the measurement position within the plant area, with the pack being the most noticeable.

6.4. Both broadband and one-third octave band frequency data were measured. The measured L_{A90} noise measurements have been used in this assessment since noise from the plant was constant during operation and this minimised influence from extraneous sources.

6.5. All plant was switched off in order to measure the residual sound level near the receptors and in the plant area. All plant items were then switched on to measure the specific sound level in isolation. Measurements of plant noise emissions were undertaken over short durations (30 seconds) to minimise the influence of extraneous sources (e.g. car pass-bys, passing aircraft, etc.).

6.6. Details of the noise monitoring equipment used during the survey are given in the following table.

Table 5 Details of noise monitoring equipment

Description	Model / serial no.	Calibration date	Calibration certificate no.
Class 1 Sound level meter	Svantek 977/ 69747	05/08/2024	1509433-1
Condenser microphone	ACO Pacific 7052E / 70829		
Preamplifier	Svantek SV12L / 73687		
Calibrator	Svantek SV30A / 10843	01/11/2024	1510142-2

6.7. Weather conditions during the survey were clear skies with a temperature of 3°C, and no noted precipitation. Road surfaces in the surrounding area were damp. There was a wind measuring 3m/s from the east-south-east. Weather conditions were unlikely to have affected the results of the plant noise survey.

6.8. Measurements were taken at a point in close proximity of each item of plant, and in close proximity to the most affected noise-sensitive receptor. The initial octave band residual and ambient measurements are shown in **Appendix D**, alongside the calculated specific noise levels of each plant item. The broadband values and measurement distances are shown in Table 6.

6.9. It should be noted that the ASHP were inaudible when observed from the measurement positions. A BS 4142:2014 feature correction of 3dB has been applied to all plant for the possible presence of *"…characteristics that are neither tonal nor impulsive, though otherwise are readily distinctive against the residual acoustic environment…"* has been applied to all other plant sound levels.

Table 6 External plant sound pressure level and measurement position

Measurement Location	Sound Pressure Levels (dB)		
	Residual Level	Ambient Level	Specific Level
Plant Area	66	64	61
Near Receptor R1	63	63	<53

6.10. Table 7 shows the measured specific levels corrected to the rating level at the façade of Receptors R1. Calculations are shown in **Appendix D**. It should be noted that due to minimal screening between the receptors and plant item, no screening has been considered, to ensure a robust assessment.

Table 7 Plant noise measurement corrected to Receptor R1

Receptor	Sound Pressure Level (dB)	Distance Correction (dB)	BS 4142 Correction (dB)	Rating Level (dB)
R1	61	-28	3	36
			Cumulative:	36

6.11. In Table 8 below, the plant noise rating level has been compared with the plant noise criteria present in Table 4.

Table 8 Plant noise rating level assessed to plant noise criteria

Receptor	Period	Cumulative sound pressure level (dB)	Plant Noise Criteria (dB)	Excess (dB)
R1	Daytime (07.00 – 23.00 hours)	36	55	-19
	Night-time (23.00 – 07.00 hours)	36	45	-9

6.12. Table 8 shows that the plant complies with Condition 24 a) at receptors R1 during both the day- and night-time periods and would not result in an adverse effect on the nearest noise-sensitive receptors.

Context and uncertainties

6.13. As BS 4142:2014+A1:2019 advises, the impact must be considered within the context of the site and the surrounding acoustic environment. The following must, therefore, also be taken into consideration when determining the potential impact that may be experienced:

- The assessment is undertaken at close proximity to plant items. The impact on all other nearby residential windows will be lower due to screening and distance attenuation.

6.14. Where possible uncertainty in the above assessments has been minimised by taking the following steps:

- The meter and calibrator used have a traceable laboratory calibration and the meter was field calibrated before and after the measurements.
- Uncertainty in the calculated impacts has been reduced by the use of a well-established calculation method.

- Care was taken to ensure that the measurement positions were representative of the noise climate outside the nearby residential dwellings and not in positions where higher noise levels were present.

7.0 Sound Insulation Assessment

Test methodology

7.1. NSL attended the site between 21.45 hours and 22.45 hours on Monday 26th January 2026 to undertake sound insulation testing of the store façade.

Table 9 Details of noise monitoring equipment

Description	Model / serial no.	Calibration date	Calibration certificate no.
Class 1 Sound level meter	Svantek 977/ 69747	05/08/2024	1509433-1
Condenser microphone	ACO Pacific 7052E / 70829		
Preamplifier	Svantek SV12L / 73687		
Calibrator	Svantek SV30A / 10843	01/11/2024	1510142-2

7.2. On the day of testing the sound level meter in use was calibrated before and after testing using a Svantek Class 1L Acoustical Calibrator with a level of 114dB at 1000Hz applied to the measurement equipment.

7.3. Measurements of airborne sound insulation between rooms were undertaken in accordance with BS EN ISO 16283-1:2014 *'Acoustics: Field measurement of sound insulation in buildings and of building elements. Part 1: Airborne sound insulation',* with the exception of the averaging procedure which follows the guidance advocated in Annex B (Paragraph B2.6) in Approved Document E of the Building Regulations 2000.

7.4. For each test undertaken, Pink noise was generated within the Aldi during testing using a loudspeaker. One-third octave band sound pressure levels were measured in the source room and externally at three different positions at 1m, 3m, and 5m from the external façade of the Aldi using a moving microphone. The measurement time with each individual microphone position was at least 30 seconds. A measurement of background sound pressure levels lasting at least 30 seconds was undertaken in externally using a moving microphone.

7.5. The following separation distances were respected during the testing:

- 0.5 m between any microphone position and the room boundaries.
- 1.0 m between any microphone position and the loudspeaker.

Sound insulation test results

7.6. Table 10 provides details of the sound insulation tests performed.

Table 10 Details of sound insulation testing

Partition type	Test type	Source room	Receive room	Composition
Wall	Airborne	Front of House, Aldi	External façade	Glass wall construction

7.7. The results of the sound insulation test are provided in **Appendix D**. Table 11 summarises the assessment of the test results against the design criteria detailed in Section 5.0.

Table 11 Summary of airborne sound insulation test results

Test	Source Room	Receiver Room	Measured Sound Level Difference dB(A)
	Description	Description	
Airborne	Front of House, Aldi	External façade	36

Discussion of results

7.8. It should be noted that while noise levels within the Aldi store will be variable depending on the level of activity taking place, they are not expected to be high. Aldi stores do not have high levels of background music in the sales area, for example, and noise levels in the back of house areas are not expected to exceed 70dB $L_{Aeq,T}$ at any time, and will generally be significantly lower.

7.9. The testing of the existing construction indicates that the airborne sound insulation would result in noise levels at the external façade due to noise break are not expected to be exceed 34dB $L_{Aeq,T}$ at any time, and will generally be significantly lower. This resultant is significantly lower than the lowest recorded background $L_{Aeq,T}$ shown in Table 1. Therefore, noise breakout from the Aldi store will not give rise to excessive levels of sound at the nearest residential windows.

8.0 Discussion of results

8.1. It is demonstrated above that the noise emissions from plant at the receptors R1 meet the local authority's typical criteria and would not result in an adverse effect on the nearest noise-sensitive receptors.

8.2. It is demonstrated above that the noise breakout from activity from within the Aldi store would not result in an adverse effect on the nearest noise-sensitive receptors.

9.0 Conclusions

9.1. Noise Solutions Ltd (NSL) has been appointed to undertake a noise survey of existing plant and noise breakout at the Aldi store on Victoria Avenue East, Manchester.

9.2. The measured plant rating noise levels at receptors R1 meet the local authority plant noise criteria. Plant noise would not result in an adverse effect on the nearest noise-sensitive receptors.

9.3. The measured noise breakout levels would not result in an adverse effect on the nearest noise-sensitive receptors.

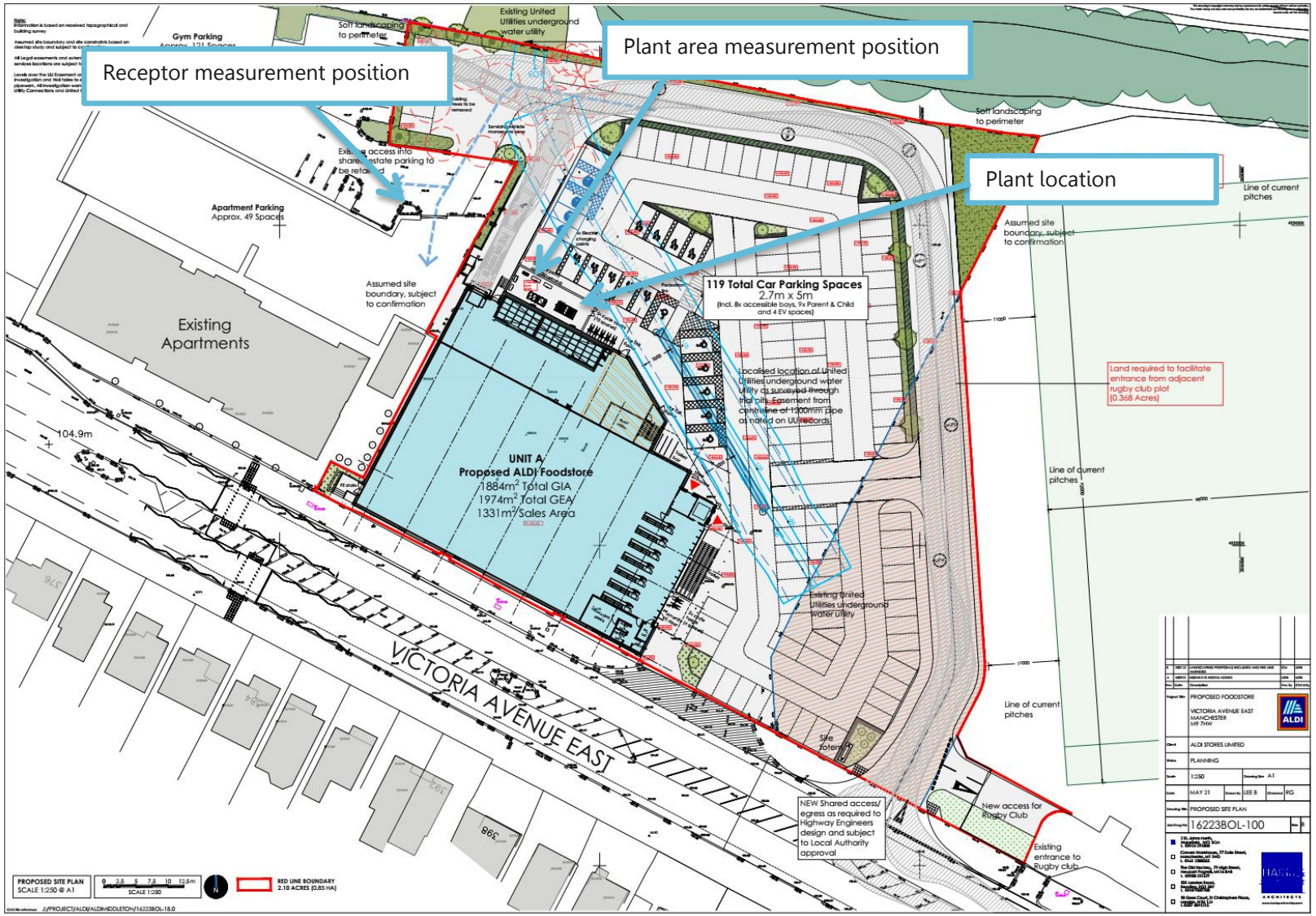
9.4. Conditions 24 and 25 in the Decision Notice 133148/FO/2022 may therefore be discharged.

Appendix A Acoustic terminology

Parameter	Description
Ambient Noise Level	The totally encompassing sound in a given situation at a given time, usually composed of a sound from many sources both distant and near ($L_{Aeq,T}$).
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s1 and s2 is given by 20 log10 (s1/s2). The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20µPa. The threshold of normal hearing is in the region of 0 dB and 140 dB is the threshold of pain. A change of 1 dB is only perceptible under controlled conditions.
dB(A), L_{Ax}	Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds roughly to halving or doubling the loudness of a sound. The background noise in a living room may be about 30 dB(A); normal conversation about 60 dB(A) at 1 metre; heavy road traffic about 80 dB(A) at 10 metres; the level near a pneumatic drill about 100 dB(A).
Fast Time Weighting	Setting on sound level meter, denoted by a subscript F, that determines the speed at which the instrument responds to changes in the amplitude of any measured signal. The fast time weighting can lead to higher values than the slow time weighting when rapidly changing signals are measured. The average time constant for the fast response setting is 0.125 (1/8) seconds.
Free-field	Sound pressure level measured outside, far away from reflecting surfaces (except the ground), usually taken to mean at least 3.5 metres
Façade	Sound pressure level measured at a distance of 1 metre in front of a large sound reflecting object such as a building façade.
$L_{Aeq,T}$	A noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{max,T}$	A noise level index defined as the maximum noise level recorded during a noise event with a period T. L_{max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall Leq noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
$L_{10,T}$	A noise level index. The noise level exceeded for 10% of the time over the period T. L_{10} can be considered to be the "average maximum" noise level. Generally used to describe road traffic noise. $L_{A10,18h}$ is the A –weighted arithmetic average of the 18 hourly $L_{A10,1h}$ values from 06:00-24:00.
$L_{90,T}$	A noise level index. The noise level that is exceeded for 90% of the measurement time interval, T. It gives an indication of the lower levels of fluctuating noise. It is often used to describe the background noise level and can be considered to be the "average minimum" noise level and is a term used to describe the level to which non-specific noise falls during quiet spells, when there is lull in passing traffic for example.

Appendix B Aerial photograph of site showing areas of interest

Store plan


Receptor measurement position
Plant area measurement position
Plant location
Gym Parking
Approx. 121 Spaces
Soft landscaping to perimeter
Existing United Utilities underground water utility
Apartment Parking
Approx. 49 Spaces
Existing Apartments
Assumed site boundary, subject to confirmation
119 Total Car Parking Spaces
2.7m x 5m
(Incl. 8x accessible bays, 9x Parent & Child and 4 EV spaces)
Localised location of United Utilities underground water utility as surveyed through trial pits. Easement from centreline of 1200mm pipe as noted on UU records
UNIT A
Proposed ALDI Foodstore
1884m² Total GIA
1974m² Total GEA
1331m² Sales Area
104.9m
VICTORIA AVENUE EAST
Line of current pitches
Land required to facilitate entrance from adjacent rugby club plot (0.368 Acres)
NEW Shared access/ egress as required to Highway Engineers design and subject to Local Authority approval
New access for Rugby Club
Existing entrance to Rugby club
PROPOSED FOODSTORE
VICTORIA AVENUE EAST
MANCHESTER
M9 7HW
ALDI STORES LIMITED
PLANNING
1:250
A1
MAY 21
LEE B
RG
PROPOSED SITE PLAN
16223BOL-100
PROPOSED SITE PLAN
SCALE 1:250 @ A1
SCALE 1:250
RED LINE BOUNDARY
2.10 ACRES (0.85 HA)

Appendix C Environmental sound survey

Details of environmental sound survey

C.1 Measurements of the existing background sound levels were undertaken between 12.45 hours on Friday 10 June and 15.30 hours on Monday 13 June 2022.

C.2 The sound level meter was programmed to record the A-weighted L_{eq}, L_{90}, L_{10} and L_{max} noise indices for consecutive fifteen-minute sample periods for the duration of the survey.

Measurement position

C.3 The representative measurement position was located on a lamp-post in the car park of the existing premises, at the same distance from the M60 motorway as the adjacent apartment building (location indicated on the site plan in **Appendix B**). In accordance with BS 7445-2:1991 *'Description and measurement of environmental noise – Part 2: Guide to the acquisition of data pertinent to land use'*, the measurements were undertaken under free-field conditions. This location is approximately representative of the levels of road traffic noise at the closest noise sensitive receptors.

Equipment

C.4 Details of the equipment used during the survey are provided in the table below. The sound level meter was calibrated before and after the survey; no significant change (+/-0.2 dB) in the calibration level was noted.

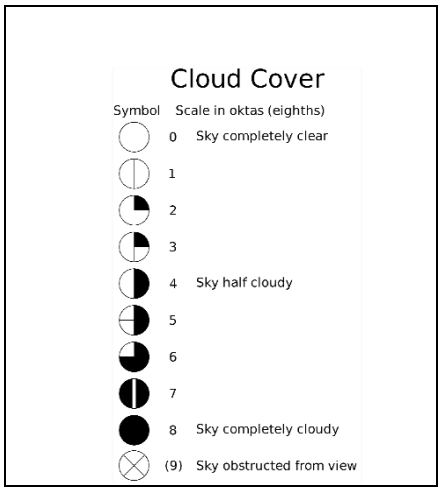
Environmental noise survey

Description	Model / serial no.	Calibration date	Calibration certificate no.
Class 1 Sound level meter	Svantek 971 / 111624	18/06/2021	Factory conformation certificate
Condenser microphone	ACO Pacific 7052E / 80036		
Preamplifier	Svantek SV 18 / 112639		
Calibrator	Svantek SV 33B / 83850	20/10/2021	1501134-1

Weather conditions

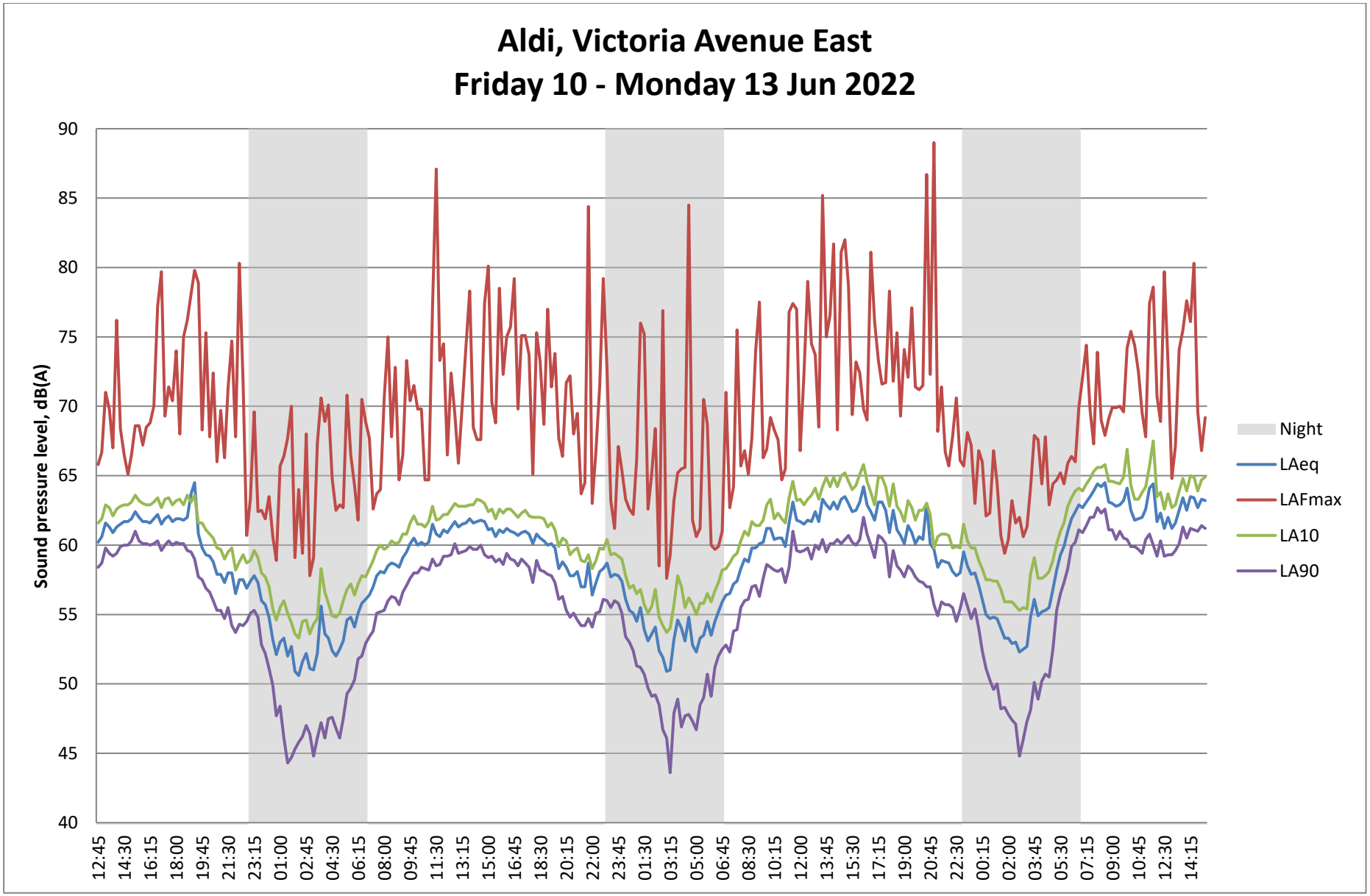
C.5 Weather conditions were determined both at the start and on completion of the survey. It is considered that the meteorological conditions were appropriate for environmental noise measurements. The table below presents the weather conditions recorded on site at the beginning and end of the survey.

Weather Conditions				
Measurement Location	**Date/Time**	**Description**	**Beginning of Survey**	**End of Survey**
As indicated on Appendix B	15.00 3 Jul - 12.00 9 Jul 2025	Temperature (°C)	19	17
		Precipitation:	No	No
		Cloud cover (oktas - see guide)	6	7
		Presence of fog/snow/ice	No	No
		Presence of damp roads/wet ground	No	No
		Wind Speed (m/s)	3	3
		Wind Direction	NW	NW
		Conditions that may cause temperature inversion (i.e. calm nights with no cloud)	No	No



Results

C.6 The results of the environmental survey are considered to be representative of the background sound pressure levels at the façades of the nearest noise sensitive receptors during the quietest times at which deliveries will be made. During the installation and removal of the sound level meter the noise climate was dominated by traffic on the M60 motorway. The results of the survey are presented in a time history graph overleaf.


Aldi, Victoria Avenue East
Friday 10 - Monday 13 Jun 2022
Sound pressure level, dB(A)
90
85
80
75
70
65
60
55
50
45
40
12:45
14:30
16:15
18:00
19:45
21:30
23:15
01:00
02:45
04:30
06:15
08:00
09:45
11:30
13:15
15:00
16:45
18:30
20:15
22:00
23:45
01:30
03:15
05:00
06:45
08:30
10:15
12:00
13:45
15:30
17:15
19:00
20:45
22:30
00:15
02:00
03:45
05:30
07:15
09:00
10:45
12:30
14:15
Night
LAeq
LAFmax
LA10
LA90

Appendix D Attended measured sound pressure levels and assessment

External plant sound pressure levels

Plant item	Location	Ambient sound level (dBA)	Residual sound level (dBA)	Specific sound level (dBA)
All Plant	Plant Area	66	64	61
	Boundary of nearest noise-sensitive receptor R1	63	63	<53*

**Plant not audible at measurement position*

Receptor R1

Plant Item	Residual sound pressure level (dBA)	Ambient sound pressure level (dBA)	Specific sound pressure level (dBA)	Distance from Plant (m)	Distance from Plant to Receptor (m)	Distance Correction (dBA)	BS 4142 Correction (dBA)	Cumulative Noise Rating Level at Receptor (dBA)
All Plant	64	66	61	1	25	-28	3	36
						CUMULATIVE:	**Daytime:**	**36**
							Night-time:	**36**

Noise Breakout noise levels

Average source sound level (dBA)	Average ambient sound level (dBA)	Average residual sound level (dBA)	Average specific sound level (dBA)	Average sound level difference (dBA)
110	85*	62*	85	36

**Measurements taken at 1m from external façade*

Full Data (Plant Noise Survey)

File Number	Date & time	Location	Measurement Type	Notes	Sound pressure level, dB L_{Aeq}
R10742	26/01/2026 19:00	1m From Pack	Ambient	GC not running	68
R10743	26/01/2026 19:01	1m From Pack	Ambient	-	68
R10744	26/01/2026 19:02	1m From Pack	Ambient	-	69
R10745	26/01/2026 19:03	1m from Condensing Unit	Ambient	-	63
R10746	26/01/2026 19:03	1m from Condensing Unit	Ambient	-	64
R10747	26/01/2026 19:04	1m from Condensing Unit	Ambient	-	63
R10748	26/01/2026 19:06	At R1 boundary	Ambient	Cars + Line of Sight	68
R10749	26/01/2026 19:06	At R1 boundary	Ambient	Line of Sight	65
R10750	26/01/2026 19:07	At R1 boundary	Ambient	Line of Sight	66

File Number	Date & time	Location	Measurement Type	Notes	Sound pressure level, dB L_{Aeq}
R10751	26/01/2026 19:19	1m From Pack	Residual	-	66
R10752	26/01/2026 19:20	1m From Pack	Residual	-	66
R10753	26/01/2026 19:21	1m From Pack	Residual	-	65
R10755	26/01/2026 19:22	1m from Condensing Unit	Residual	-	64
R10756	26/01/2026 19:23	1m from Condensing Unit	Residual	-	64
R10757	26/01/2026 19:23	1m from Condensing Unit	Residual	-	63
R10758	26/01/2026 19:24	1m from Gas Cooler	Residual	-	64
R10760	26/01/2026 19:25	1m from Gas Cooler	Residual	-	63
R10761	26/01/2026 19:27	At R1 boundary	Residual	Cars + Line of Sight	69
R10762	26/01/2026 19:28	At R1 boundary	Residual	Line of Sight	67
R10763	26/01/2026 19:28	At R1 boundary	Residual	Line of Sight	69
R10764	26/01/2026 19:35	1m from Gas Cooler	Ambient	-	64
R10765	26/01/2026 19:35	1m from Gas Cooler	Ambient	-	65
R10766	26/01/2026 19:36	1m from Gas Cooler	Ambient	-	64

Full Data (Noise Breakout)

File Number	Date & time	Position	Measurement	Sound Pressure Level (dB) at octave band centre frequencies (Hz)															
				100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k
R10769	27/11/2025 18:52	Source Room	Source	54	52	52	53	48	44	42	34	29	84	114	89	69	59	30	37
R10770	27/11/2025 18:52	Source Room	Source	94	99	99	100	99	99	99	96	97	94	92	92	89	91	93	93
R10771	27/11/2025 18:53	Source Room	Source	94	97	98	98	98	100	98	95	96	95	91	92	88	91	92	93
R10772	27/11/2025 18:53	Source Room	Source	102	104	104	104	105	106	105	102	103	102	99	99	96	98	99	99
R10775	27/11/2025 18:55	Source Room	Source	102	103	103	104	104	105	105	101	103	102	99	99	96	98	99	99
R10774	27/11/2025 18:55	Source Room	Source	102	103	102	103	104	105	104	101	103	101	98	98	95	97	98	98
R10775	27/11/2025 18:56	External Façade (1m)	Residual	100	103	103	104	104	105	105	101	103	102	99	99	96	98	99	99
R10776	27/11/2025 19:00	External Façade (1m)	Residual	52	48	49	49	49	44	45	48	51	55	55	55	51	45	40	36
R10777	27/11/2025 19:01	External Façade (3m)	Residual	52	47	48	51	53	46	45	49	50	56	57	56	52	46	40	34
R10778	27/11/2025 19:01	External Façade (3m)	Residual	56	55	52	52	50	47	46	48	49	53	56	53	49	46	45	45

File Number	Date & time	Position	Measurement	Sound Pressure Level (dB) at octave band centre frequencies (Hz)															
				100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k
R10779	27/11/2025 19:02	External Façade (5m)	Residual	57	53	55	53	50	47	47	48	49	54	57	54	50	45	40	36
R10780	27/11/2025 19:03	External Façade (5m)	Residual	57	54	55	55	52	49	49	49	50	54	54	53	49	45	40	37
R10781	27/11/2025 19:04	External Façade (moving)	Residual	54	54	55	55	52	49	47	47	48	52	53	51	49	44	39	36
R10782	27/11/2025 19:05	External Façade (moving)	Residual	57	55	54	53	52	50	48	50	52	55	56	53	50	47	43	40
R10783	27/11/2025 19:06	External Façade (1m)	Ambient	55	54	52	51	51	50	47	48	51	55	57	54	50	46	42	38
R10784	27/11/2025 19:06	External Façade (1m)	Ambient	85	86	92	86	81	80	80	77	77	79	76	76	74	75	73	72
R10785	27/11/2025 19:07	External Façade (3m)	Ambient	86	86	92	85	81	80	79	77	77	78	76	76	74	74	73	72
R10786	27/11/2025 19:12	External Façade (3m)	Ambient	87	82	87	81	76	76	77	74	74	73	72	71	68	69	69	69
R10787	27/11/2025 19:13	External Façade (5m)	Ambient	88	82	86	81	76	76	77	74	73	72	72	72	68	69	69	68

File Number	Date & time	Position	Measurement	Sound Pressure Level (dB) at octave band centre frequencies (Hz)															
				100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k
R10788	27/11/2025 19:13	External Façade (5m)	Ambient	75	76	79	74	72	71	72	69	69	70	68	67	64	67	66	63
R10789	27/11/2025 19:14	External Façade (5m)	Ambient	75	75	79	75	72	71	72	69	68	70	68	68	65	67	66	64
R10790	27/11/2025 19:14	External Façade (moving)	Ambient	74	75	79	75	71	71	71	69	67	71	68	68	64	66	66	64
R10791	27/11/2025 19:16	External Façade (moving)	Ambient	84	80	82	77	77	75	72	69	71	70	68	68	65	66	65	64
R10792	27/11/2025 19:17	External Façade (moving)	Ambient	83	80	81	76	76	75	73	69	70	70	68	68	65	66	65	64