



Azymuth Acoustics UK

Professional Acoustic Services

Noise Impact Assessment

Ref: AA0658

Proposed Padel Courts

Cheetham Hill,
Manchester,
M3 1NH

On behalf of

SILVERLINE PROPERTIES (NW) LIMITED

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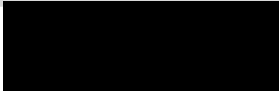


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1.0 Introduction

Azymuth Acoustics UK (henceforth AAUK) has been contracted by SILVERLINE PROPERTIES(NW) LIMITED to perform a Noise Impact Assessment (NIA) in relation to a proposed Padel Court development located at Mary St, Cheetham Hill, Manchester M3 1NH.

This NIA is intended to provide information relating to noise levels originating from the proposed Padel Court development that may affect nearby existing residential properties. In particular, the report sets out the following details:

- The results of a baseline noise survey undertaken in the vicinity of site in 2026.
- The appropriate assessment criteria and guidance relating to noise in the environment as associated with this kind of development.
- Recommendations to meet the targets as set out by the assessment criteria.

2.0 Proposed Development

The proposed Padel Court development will house six indoor padel courts within a refurbished composite brick and metal frame building, and two outdoor padel courts within a newbuild composite wire netting and translucent PVS canopy. The indoor padel operational hours are from 06:00hrs to 2:00hrs, and the outdoor operational hours are from 9:00hrs to 21:00 hrs, 7 days a week. Figure 1 below shows the proposed development plan.

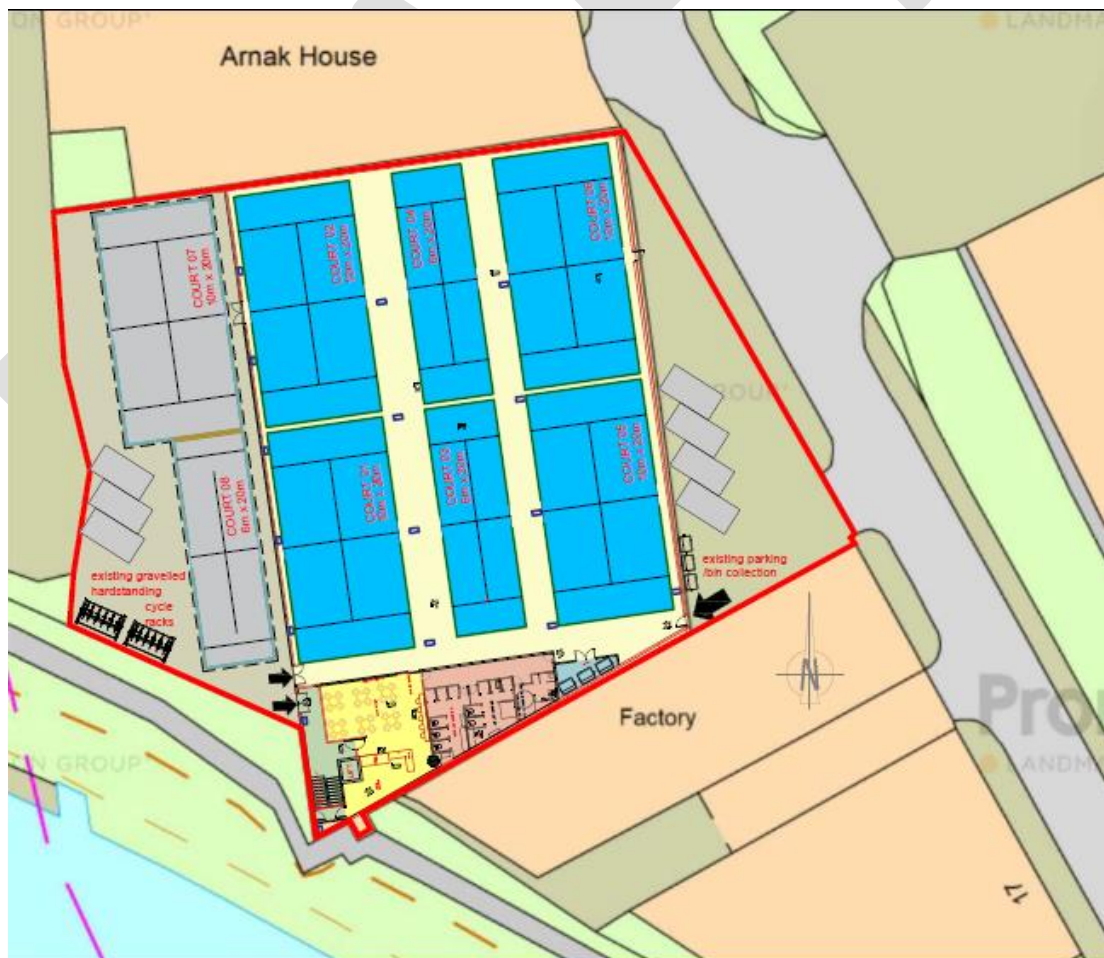


Figure 1 - Proposed Development

3.0 Baseline Noise Survey

3.1 Measurement Procedures

The instrumentation used for the NIA consisted of a SvanTek 977 type 1 precision sound level meter. The equipment was calibrated before and after measurements. The sound level meter measured A-weighted (fast response) noise levels as well as octave bands noise levels for all measurement record.

Table 2 shows a summary of the long term and short-term measurements. The long-term daytime and nighttime noise level measurements were undertaken between 15:25hrs on Friday afternoon 17th April 2026 to 05:35hrs on Sunday morning 19th April 2026. The short-term daytime measurements were undertaken between 13:11hrs on Monday afternoon 13:06hrs.

These measurements of the survey captured the background sound levels in the area prior to any proposed site operation.

Noise measurements were undertaken using the sound level meter at the position shown in Figure 2 below:

- Long Term Position 1: At the back of the former Mega Wholesale Manchester building.
- Short Term Position 2: At the end of SandyWell Ln (31 Sandwell Ln) close to the riverside.



Figure 2 - Site Location and noise measurement position



Full results of the noise levels recorded during the survey are included in Appendix B of this report.

The following table summarises the results of the noise measurements undertaken at the proposed site in terms of the average daytime and evening noise levels.

Location	Period	L _{AFmax}	L _{Aeq}	L _{A10}	L _{A50}	L _{A90}
1) Long Term Position 1 (unmanned)	Day 07:00-21:00	62.3	51.3	51.9	48.1	46.1
	Evening 21:00-23:00	56.1	48.2	49.5	47.3	45.7
	Night 23:00-7:00	57.5	53.4	51.1	47.3	45.0
2) Short Term Position 2 (manned)	Day 13:11-13:31	61.9	51.8	53.6	50.9	48.0

Table 1 - Summary of noise measurements - 2026

3.2 Description of Background Noise Environment

The weather during the measurement procedure was wet on Friday 17th April and dry on Saturday, 18th April - Monday 20th April, with wind speeds less than 5m/s during both unmanned and manned surveys.

The daytime environment around the site is dominated by general road traffic, along with light industrial and commercial activities originating from Mary Street and Sherborne Street.

The nighttime noise environments are likely dominated by noise from Hidden Night Club, located at 16-18 Mary street, Cheetham Hill, Manchester M3 1NH. Azymuth undertook octave band analysis (63Hz to 16000Hz) of the full noise survey data. The results indicated that the 63 Hz band has the highest levels between midnight and 07:00hrs, which is typically associated with amplified music sources.



4.0 Assessment Criteria

In order to assess the extent of any measures required in order to comply with suitable conditions relating to potential noise sources, AAUK has reviewed various guidance documents and standards, these include:

- National Planning Policy Framework (NPPF 2021)
- British Standard 8233:2014
- World Health Organisation Guidelines on Community Noise
- British Standard 4142:2014
- Manchester City Council Planning Noise Technical Guidance 2022

4.1 National Planning Policy Framework (NPPF) 2024

The NPPF provides guidance to local authorities taking into account noise in making planning decisions. Paragraph 198 of the National Planning Policy Framework (NPPF) states that planning policies and decisions should aim to:

- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development - and avoid noise giving rise to significant adverse impacts on health and the quality of life⁷²;
- b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
- c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

The National Planning Policy Framework states that the planning system should 'preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.

4.2 British Standard 8233: 2014

BS 8233 provides a code of practice for the sound insulation of a variety of building types affected by general environmental noise. It provides recommendations for control of noise in and around buildings and suggests appropriate internal ambient noise level criteria / limits for a variety of different situations including residential properties.

The following table summarises the noise limits suggested by BS 8233 applying to residential properties:

Activity	Room	Good Design Range $L_{Aeq, T}$ dB	
		07:00-23:00hrs	23:00-07:00hrs
Resting	Living Room	35	-
Dining	Dining Room / Area	40	-



Activity	Room	Good Design Range $L_{Aeq, T}$ dB	
		07:00-23:00hrs	23:00-07:00hrs
Sleeping (daytime resting)	Bedroom (at night)	35	30

Table 2 - Noise Limits for Residential Properties Suggested in BS 8233

4.3 World Health Organisation Environmental Noise Guidelines (ENG) 2018

The main purpose of the 2018 WHO guidelines is to provide recommendations for protecting human health from exposure to environmental noise originating from the following sources: transportation (road traffic, railway and aircraft), wind turbines and leisure activities.

The guidelines set out to define recommended exposure levels for environmental noise in order to protect population health. Exposure limits are average levels defined over a period of one year, measured outdoors in free field at the most exposed façade. It should be noted that the document does not provide guideline limit values for multiple noise sources in combination.

The 2018 guidelines supersede the Community Noise Guidelines from 1999. Nevertheless, the document recommends that all CNG indoor guideline values and any values not covered by the current guidelines should remain valid. As such, the following guidance would remain appropriate:

For protection against sleep disturbance inside dwellings, night-time noise levels should not exceed 30dB L_{Aeq} for continuous noise and 45dB L_{Amax} for typical single sound events (which are exceeded 15 times or more per night - see ProPG Appendix A.12 for more details). To protect the majority of people from being seriously annoyed during the daytime, the outdoor sound level from steady, continuous noise (interpreted as noise from all sources combined) should not exceed 55dB L_{Aeq} on balconies, terraces and in outdoor living areas.

It should be noted that exposure levels defined in ENG and CNG are for guidance purposes as it relates potential adverse health impacts and should not be interpreted as absolute limits or regulations.

4.4 British Standard 4142:2014

British Standard 4142: 2014 "Methods for assessing and rating industrial sound" describes methods for rating and assessing sound of an industrial and/or commercial nature. The methods described in this British Standard use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident.

- Typically, the greater the difference between background sound and industrial/commercial noise, the greater the magnitude of the impact.
- 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.



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

BS 4142 notes 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."

4.5 Design Manual for Roads and Bridges (DMRB) LA 111: Noise and Vibration 2020

The DMRB sets out the requirements for assessing and reporting the effects of highways noise and vibration from construction, operation and maintenance projects.

The following table summarises the impact of short-term traffic noise change, found in Paragraph 3.54, alongside the corresponding criteria as stated in NPSE:

Effect Level (NPSE)	Magnitude (DMRB)	Short term noise change L _{A10,18hr} or L _{night} dB (DMRB)
SOAL - Significant Observed	Major	Greater than or equal to 5.0
LOAEL - Lowest Observed	Moderate	3.0 - 4.9
LOAEL - Significant Observed	Minor	1.0 to 2.9
NOAEL - Significant Observed	Negligible	Less than 1.0

Table 3 - The impact of short-term traffic noise change as per NPSE & DMRB

4.6 Recommended Noise Assessment Criteria

Based on the guidance as set out in the above documents (and primarily based on the Manchester city council guidance together with BS4142), it is recommended that the criteria detailed below is met in order to reduce the impact of noise on the surrounding environment.

BS4142 States that:

"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."

Therefore, AAUK believe that achieving a rating level no greater than the background noise level is appropriate for the assessment given the context of the wider site and existing noise sources already affecting the existing noise sensitive receptors.

4.7 Acoustic design of schools: performance standards (Building bulletin 93)

Based on the guidance as set out in the above documents, it is recommended that the criteria detailed below is met the maximum mid-frequency reverberation time requirements.



Type of room	T _{mf} seconds	
	New build	Refurbishment
Indoor sports hall, swimming pool	≤ (1.5 - 2.0) dependant on size of space.	≤ 2.0

Table 4 - BB93 Reverberation time target for Indoor sports hall / swimming pool

4.8 Noise Limits for Fixed Plant or Atmosphere Connections

Information to any proposed plant was not available at the time of this assessment. We assume that there may be external plant proposed for the development such as condensers and air handling units which may be proposed at ground level and/or roof level.

We have therefore provided fixed plant noise limits for external condensers, air handling units and any other fixed plant.

The lowest average background noise level was measured to average 51dB L_{A90,T} measured during the daytime period and therefore provides a benchmark for the plant noise limit. The limit set appropriate for the development for all plant items are as follows:

- locations respectively should not exceed 70dB at 1m.

These limits will ensure that noise levels at on and off-site locations from the plant does not exceed the background sound level.

4.9 Manchester City Council Planning Noise Technical Guidance 2022

The Manchester City Council (MCC) Planning Noise Technical Guidance document provides developers with information related to MCC policy on discharging planning conditions imposed by the City Wide Environmental and Public Protection Team. The document has specific sections covering policy on noise from industrial/commercial developments, entertainment venues, fixed plant and equipment etc.

In relation to entertainment noise the document states:

"Music noise levels in the 63Hz and 125Hz octave centre frequency bands (Leq) should be controlled so as not to exceed (in habitable rooms) 47dB and 41dB (Leq,5min), respectively."

"Entertainment noise (LAeq,5min) should be controlled to 5dB below the typical background noise level (LA90) in each octave band at the nearest noise sensitive location."

In relation to commercial noise the document states:

"The development should be designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location."

In relation to fixed plant noise the document states:

"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 (LAeq) below the typical background (LA90) level at the nearest noise sensitive location."



5.0 Assessment of Results

5.1 SoundPLAN Model and Model Setup

AAUK has undertaken acoustic modelling within the SoundPLAN v9.1 noise modelling software to predict and visualise the impact of noise on the surrounding environment from the operational noise of the proposed development. Table 5 below shows the parameters of the noise model setup for the site.

Item	Setting
Algorithms	ISO 9613-2:1996 "Attenuation of sound during propagation outdoors Part 2"
Reflection Order	2
Ground Absorption	Acoustically soft (assumed 1.0 absorption coefficient) - grass or vegetated areas. 0 absorption coefficient for hard areas. Road modelled surface modelled as hot rolled asphalt
Met Conditions	10 degrees Celsius 70% humidity Wind from source to receiver
Receptor Height	Ground Floor 1.5m and 2.5m above ground
Source Modelling	- Proposed metal frame composite building (i.e., composite masonry wall cladding and light weight roof) has been modelled as an industrial radiating building. - Sky lights modelled are areas sources on the roof - Internal reverberant noise spectrum of padel court noise is used modelled as internal noise sources. - Moving point sources are used to model onsite vehicle movements at 5mph Appendix C shows the proposed building fabric of the development.
Terrain and screening	Ariel imagery was obtained from Google. Terrain is modelled as flat land. No screening I used between source and receptor.

Table 5 - Noise modelling parameters

5.2 Operational Noise

5.2.2 Operational Scenario

The modelling scenario is based on information provided by the client and plans of the site to quantify the potential noise impact upon the closest sensitive receptors. The modelling assumptions are detailed below:

- 4 of the proposed padel courts will be in use for a full 1 hour, within a 1 hour period
- All noise sources operate cumulatively for a full 1 hour, within a 1 hour period.



Noise source	Sound Pressure Level, dB (Linear)								Sound Level dB(A)
	in Octave Band Centre Frequency, Hz								
	63	125	250	500	1k	2k	4k	8k	
Padel Court Internal Noise	55.4	55.2	57.2	58.6	59.7	54.5	48.5	39.8	63*

*Averaged reverberant sound pressure level. Corrected level which assumes all 4 courts are active at any one time.

Table 6 - Modelled noise source spectrums

5.3 BS 4142 Assessment

For the purposes of the assessment the most representative background day (i.e., 09:00hrs-19:00hrs) noise levels were established to be 46 dB $L_{A90,T}$ respectively, and background evening (22:00hrs-19:00hrs) noise level was established to be 45 dB $L_{A90,T}$ respectively.

5.3.3 Predicted Results - Proposed Site Operation

The following table identifies the worst-case predicted receptor levels as modelled using the SoundPLAN model parameters and compares these levels against the worst-case background sound levels.

A total penalty of +6dB has been applied to the predicted level to account for the impulsivity and intermittency from the operational noise of the padel courts.

Receiver	Time	Predicted Specific Noise Level (dBA)	Acoustics Feature Corection (dB)	Noise Rating Level (dB)	Background Sound Level at Noise Sensitive Receptor (dBA)	BS4142 rating level relative to BSL
1) 31 Sandwell Ln	09:00 - 19:00 (Indoor and Outdoor)	23	+6	29	46	-17
2) 42 Senior Ln		32	+6	38		-8
3) 54 Senior Ln		33	+6	39		-7
1) 31 Sandwell Ln (indoor)	22:00- 23:00 (Indoor only)	20	+6	26	45	-19
2) 42 Senior Ln (indoor)		23	+6	29		-16
3) 54 Senior Ln (indoor)		23	+6	29		-16

Table 7 - BS 41412 assessment of Padel Court Development

For the purposes of the assessment, the time periods were defined as follows: daytime (07:00hrs - 21:00hrs), evening (21:00hrs-23:00hrs), and nighttime (23:00hrs-07:00hrs). The indoor padel would operate from 6:00hrs - 2:00hrs, and the outdoor padel court would operate from 9:00hrs - 21:00hrs.

The 9:00hrs-19:00hrs prediction represent daytime to evening operations, whereas the 22:00hrs-23:00hrs prediction is representative of operations between 21:00hrs-02:00 hrs (Evening - Nighttime).

It can be seen in the above table that the predicted rated level of noise from the site is shown to not exceed the background noise levels at receptors location. This indicates no adverse noise impact during the proposed operational hours of the development and therefore no mitigation will be required for the site. Hence, the development will not present any adverse effects to the existing noise environment already experienced by residents.

5.3.4 Grid Noise Map - Proposed site operations

Figure 3 below shows the effect of noise emanating from the proposed development on the surrounding environment.

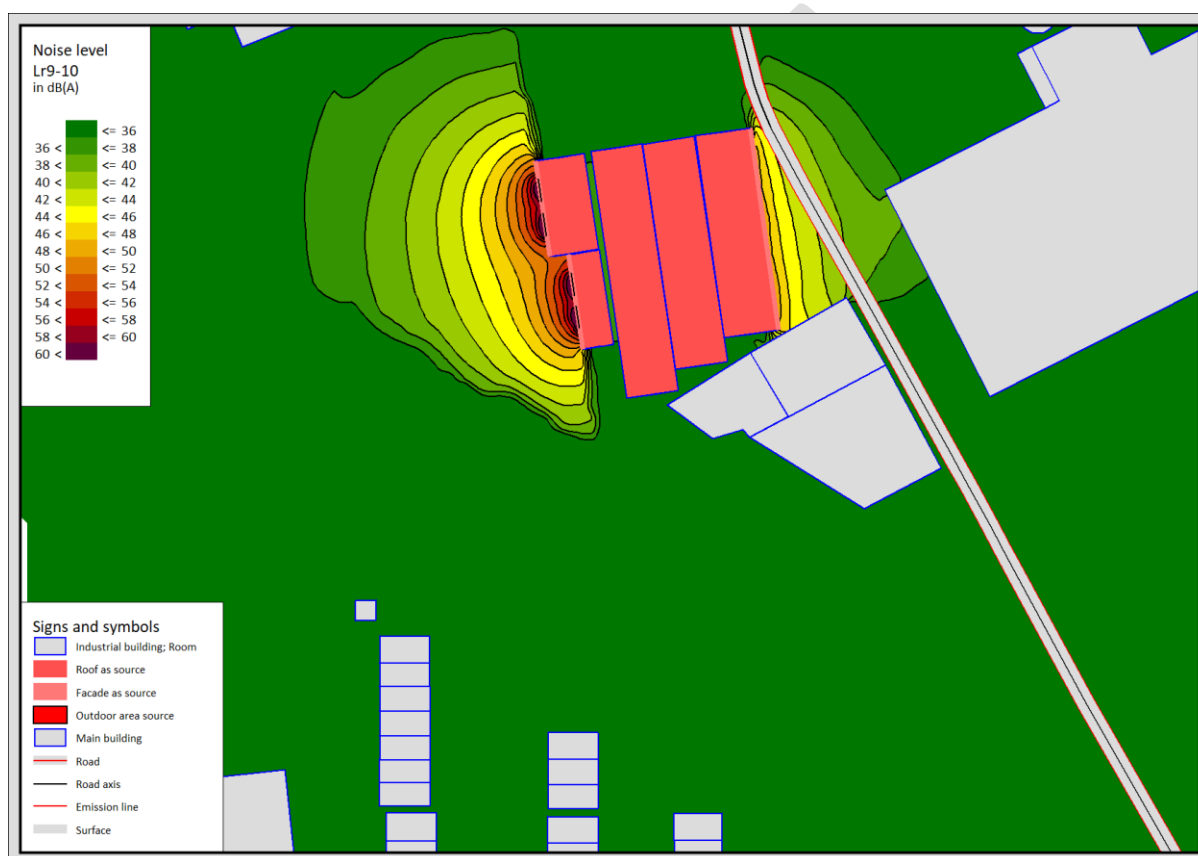


Figure 3 - SoundPLAN grid noise map for noise originating from proposed development

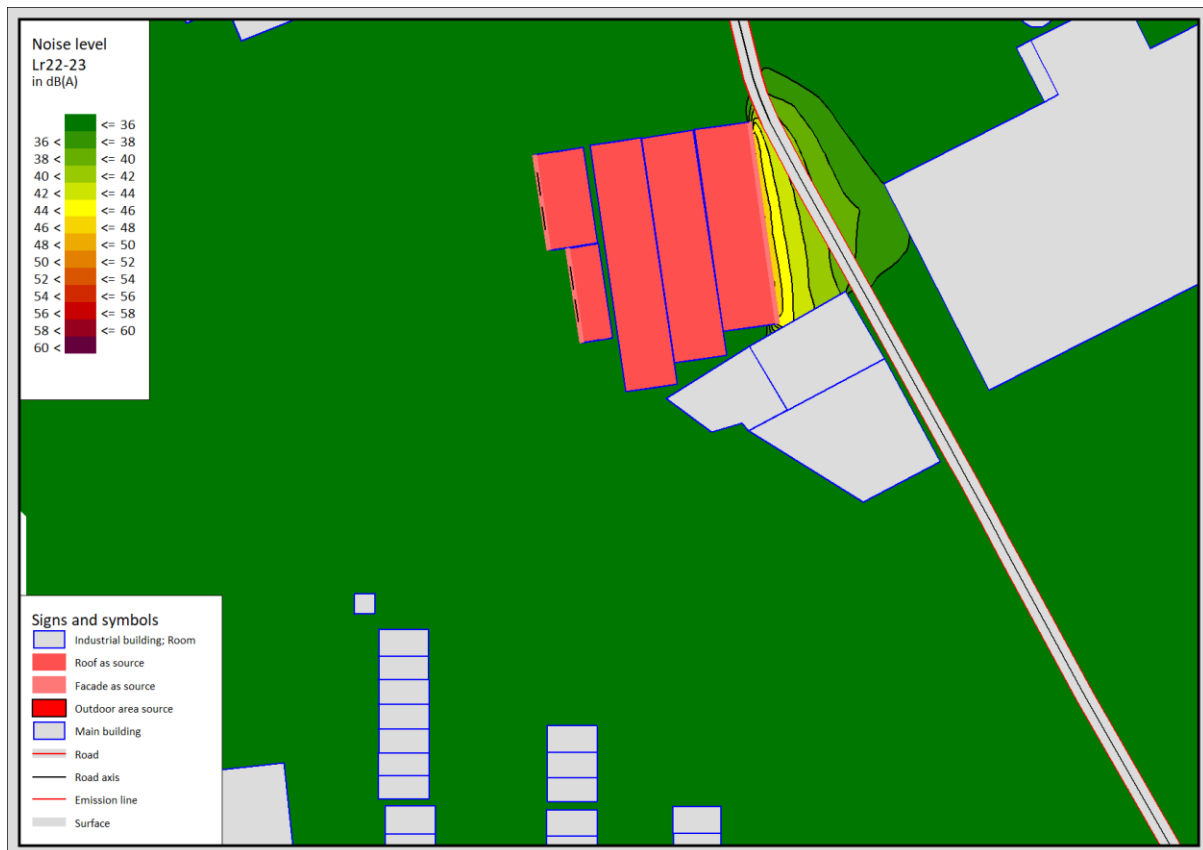


Figure 3 - SoundPLAN grid noise map for noise originating from proposed level



6.0 Summary

Azymuth Acoustics UK (henceforth AAUK) has been contracted by SILVERLINE PROPERTIES (NW) LIMITED. to perform a Noise Impact Assessment (NIA) in relation to a proposed Padel Court development located at Mary St, Cheetham Hill, Manchester M3 1NH.

AAUK have conducted a baseline noise survey in the vicinity of the proposed development in 2026. AAUK has produced a noise prediction model in SoundPLAN v9.1. This model helps to visualize the impact of noise on the surrounding environment and furthermore to calculate the predicted noise levels at the nearest residential receptors.

The proposed padel court development presents a negligible impact at the nearest worst-case residential receptor and is shown to achieve the 5 dB below background noise required by Manchester City Council (MCC) planning Noise Technical Guidance 2022 without the use of mitigation and therefore is considered compliant.

The proposed padel courts will not include amplified music facilities, therefore, the relevant MCC music noise criteria are not applicable in this instance.

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Appendix A - Glossary of Acoustic Terms

Decibel (dB)

This is the unit used to measure sound. The human ear has an approximately logarithmic response to acoustic pressure over a very large dynamic range (typically 20 micro Pascal to 100 Pascal).

dB (A)

This is a measure of the overall noise level of sound across the audible spectrum with a frequency weighting (i.e. A-weighting) to compensate for the sensitivity of the human ear to sound of different frequencies. The A-weighting curve is implemented in sound level meters using an electronic filter that approximately corresponds to the frequency response of the ear.

Octave Band Noise Level

The human ear is sensitive to sound over a range of frequencies between approximately 20Hz to 20kHz. The ear is also generally more sensitive to medium and high frequencies than to low frequencies. In order to define the frequency content of a noise, the spectrum can be divided into frequency bands. The most commonly used frequency bands are octave bands, in which the mid-frequency of each band is twice that of the band below it.

L_{Aeq}

This is the equivalent steady sound level in dB (A) containing the same acoustic energy as the actual fluctuating sound level over a given time period.

Reverberation Time (RT or sometimes T_{30} or T_{60})

This is the time taken for the reverberant sound energy in an enclosure to decay one millionth of its equilibrium value, i.e. by 60dB, after the source has been switched off, is known as the reverberation time. The reverberation time is frequency dependent and it is customary to measure its value in octave or one-third octave bands. Reverberation occurs when sound waves are repeatedly reflected from each surface of the room.

Sound Reduction Index (SRI)

Difference measured between the amount of energy flowing towards the wall in the source room and the total amount of energy entering the receiving room (usual range 100 - 3150Hz for one third octave band values). The SRI varies with frequency and is measured in a laboratory in either octave or one-third octave bands.

$SRI = L1 - L2 + 10 \log (S/A)$, where:

L1 = Noise level in the source room

L2 = Noise levels in the receiving room

S = Surface area of test specimen

A = Equivalent acoustic absorption area in the receiving room

Weighted Sound Reduction Index (R_w)

This is a weighted single figure descriptor of the sound insulation performance of a partition measured under laboratory conditions. The procedure used to quantify the R_w is to compare the sound reduction index (SRI) in each of the one-third octave bands from 100Hz to 3150Hz against a set of standard reference curves.



Appendix B - Noise Survey Data

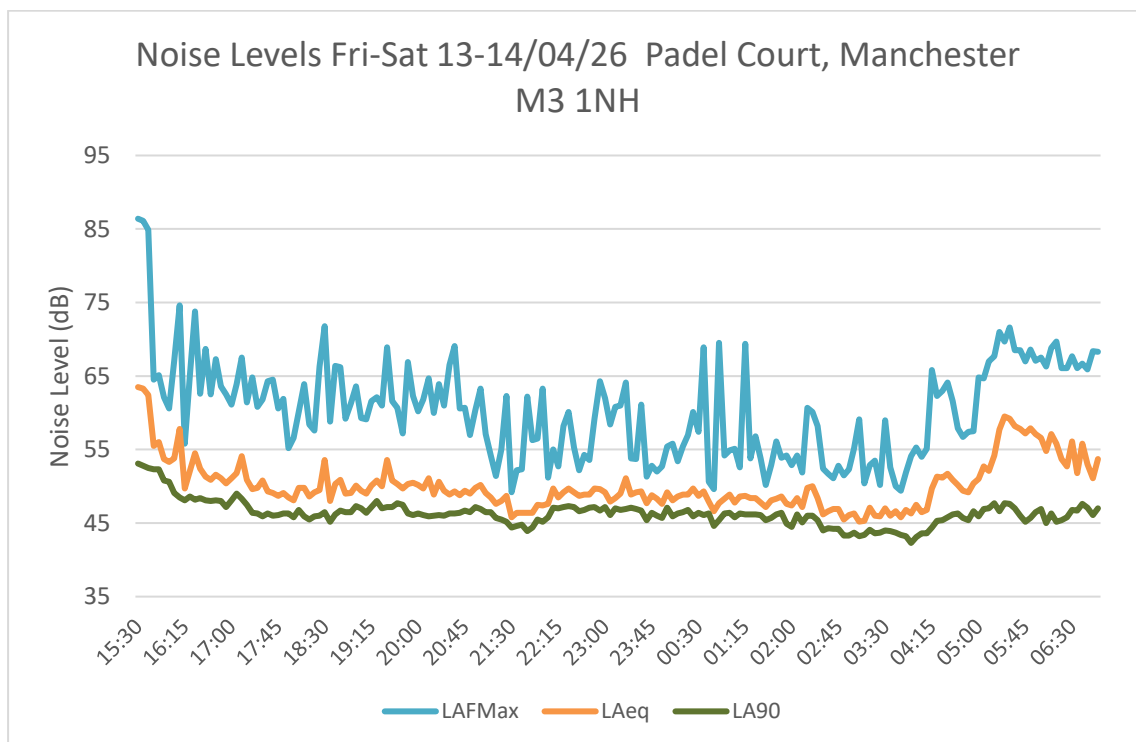


Figure B1 - Friday afternoon to Saturday morning unmanned long-term noise measurement results

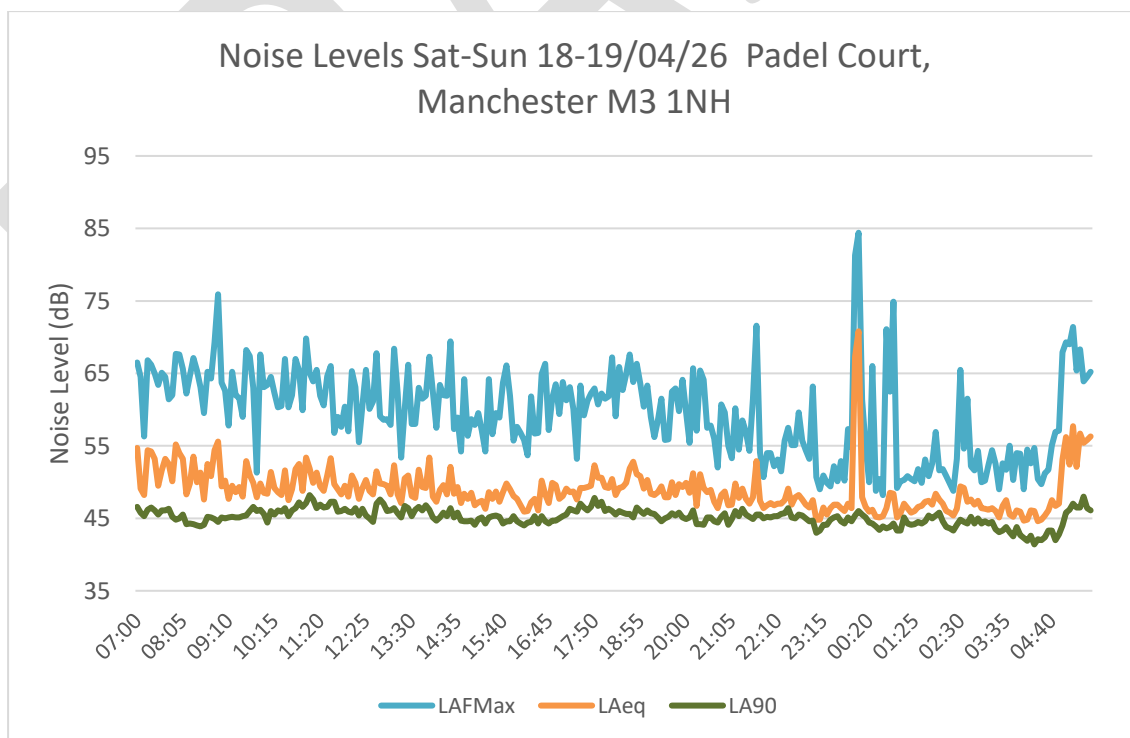


Figure B2 - Saturday morning to Sunday morning unmanned long-term noise measurement results



Start	Position	Time	L _{Amax}	L _{Aeq}	L _{A10}	L _{A50}	L _{A90}
Monday 20 th April 2026							
13:11:00	2	00:05:00	60.1	52.8	54.7	52.1	49.8
13:16:00	2	00:05:00	66.4	52.6	53.9	51.3	49.0
13:21:00	2	00:05:00	61.8	51.2	53	50.6	47.9
13:26:00	2	00:05:00	61.9	51.6	53.5	50.7	47.4
13:31:00	2	00:05:00	59.2	50.6	52.8	50	46.1

Table B1 - Monday manned short-term noise measurement results

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