



REPORT REFERENCE:

IMP7944

ENVIRONMENTAL NOISE IMPACT ASSESSMENT

PRoPG Planning and Noise

British Standard 8233: 2014

CLIENT:

I J Murray Associates Ltd

SITE:

1 Sea Front

Hayling Island

Hampshire

PO11 0AG

SURVEY DATES:

16th – 21st August 2025

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1 EXECUTIVE SUMMARY

1.1 Instruction

Impact Acoustics Ltd has been instructed to carry out the relevant noise assessments and calculations at 1 Sea Front, Hayling Island, Hampshire, PO11 0AG. The proposal is the cease operation of the lower half of the fairground and utilise this land to develop 5 new residential accommodation units in its place. Therefore, noise levels have been recorded of the ambient noise levels as well as the operational noise levels of the rides remaining.

1.2 Scope of Report

The measurements will be undertaken in accordance with ISO 1996 – Part 2: 2017 to determine the existing background noise levels and British Standard 8233: 2014 will be used to determine the impact of existing traffic on the internal noise environment within the proposed residential dwellings. This report aims to establish the following:

- Existing background noise levels within the area;
- Assess the potential internal noise levels on the proposed rooms;
- Provide specifications for the ventilation and window glazing with the proposed rooms.
- Review any commercial surround noise and make appropriate assessments if required.

1.3 Summary of Results

A background noise survey was undertaken from 16th – 21st August 2025 at two positions on the site in order to establish the underlying background noise levels. The maximum day time levels were found to be $L_{Aeq, 16 \text{ hour}}$ 67.6 dB and the maximum night time levels were found to be $L_{Aeq, 8 \text{ hours}}$ 48.0 dB at position 1. The maximum day time levels were found to be $L_{Aeq, 16 \text{ hour}}$ 63.8 dB and the maximum night time levels were found to be $L_{Aeq, 8 \text{ hours}}$ 50.8 dB at position 2. The corresponding background noise levels was also found to be $L_{A90 \text{ 1 HOUR}}$ 56 dB for daytime and $L_{A90 \text{ 15 MINUTES}}$ 36 dB for night time.

Assessment Position	Date Start	Date Finish	Daytime LAeq	Night Time LAeq
Position 1	16/08/2025	21/08/2025	67.6	48.0
Position 2	16/08/2025	21/08/2025	63.8	50.8

Assessment Position	Date Start	Date Finish	Daytime LA90	Night Time LA90
Position 2	16/08/2025	21/08/2025	48.0	N/A

1.4 Potential Façade Noise Levels

1.4.1 Daytime (07:00-23:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 2 – Medium
Average Daytime (07:00-23:00)	$L_{Aeq, 16 \text{ HOUR}}$ 65 dB	63 – 70 dB

1.4.2 Night Time (23:00-07:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 1 – Low
Average Night Time (23:00-07:00)	$L_{Aeq, 16 \text{ HOUR}}$ 53 dB	40 – 55 dB
	Maximum (10 Times) – L_{Amax} 71.1 dB	>80 dB (10 Times in 8 Hours)

1.5 Risk Assessment

1.5.1 Daytime (07:00-23:00)

Risk Assessment Category	Risk Assessment
2 - Medium	As noise levels increase, the site is likely to be less suitable from a noise perspective and any subsequent application may be refused unless a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised, and which clearly demonstrate that a significant adverse noise impact will be avoided in the finished development.

1.5.2 Night Time (23:00-07:00)

Risk Assessment Category	Risk Assessment
1 – Low	At low noise levels, the site is likely to be acceptable from a noise perspective provided that a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised in the finished development.

The above table demonstrates this site is located within Noise Risk Category 2 for daytime which suggests a medium level of risk and Noise Risk Category 1 for Night time which suggests a low level of risk and that mitigation levels will be required at Stage 2 along with a good acoustic design process.

1.6 Glazing & Ventilation Assessment

The development should be designed with an 8mm glass / 16mm Air Gap / 6mm Glass and an MVHR System 4 ventilation system to all facades illustrated in red and a 4mm glass / 16mm Air Gap / 4mm Glass and an MVHR System 4 ventilation system to all facades illustrated in orange, grey and yellow, as detailed in section 9.20, to ensure the internal noise levels are acceptable in terms of the assessment to British Standard 8233: 2014.

1.7 WHO Guidelines for Community Noise

The development proposes external living areas and therefore an assessment to the World Health Organisation's 'Guidelines for Community Noise' has been carried out. The guideline has been considered acceptable criteria for this assessment given the sites geographical location. The calculation demonstrates the external living spaces are likely to see noise levels below the upper guideline of 55 dB for a majority of the central section with only some areas to the north and south being exceeded.

1.8 Funfair Noise Assessment

1.8.1 Assessments 11:00 – 17:00hrs

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Background Noise Level $L_{A90,1 \text{ hour}}$	48 dB
Assessment	-2 dB
Conclusion	The assessment level is 'Low Impact'

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Partially Open Window	-15 dB
Calculated Internal Noise Level	31 dB
BS8233: 2014 Criteria	35 dB
Assessment	-4 dB
Conclusion	The assessment level is 'Low Impact'

1.8.2 Assessment Conclusion

The background noise levels were measured at the equivalent position, chosen as it most represented the proposed closest noise sensitive façade to the existing funfair.

It can be seen from the above assessments that the proposed residential dwelling are likely to see noise levels associated with a 'Low Impact' and the probability of noise complaints from the funfair is Low. No other plant or activities were detected during our site visits and the noise level captured of the rides make up the overall noise levels associated and emanating from this funfair.

1.9 Conclusions

1.9.1 Ambient Noise BS 8233: 2014

The dominant noise source on the overall site is road noise. Levels have been recorded and assessments made in accordance with the relevant standards. Internal criteria's have been set and calculations made in order to determine the minimum construction details required in order to meet the desired level within the proposed residential dwellings and satisfy the local council's requirements.

1.9.2 Planning Recommendation

National Planning Policy Framework 2024 suggests that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the framework taken as a whole, or specific policies in the framework indicate the application should be restricted.

Based on the calculations and assessments made within this report it is the professional opinion of Impact Acoustics Ltd that the proposed development can demonstrate compliance with the National Planning Policy Framework 2024, NPPF & NPSE and that, with regards to sound, planning permission can be granted.

2 INTRODUCTION

Impact Acoustics Ltd has been instructed to carry out the relevant noise assessments and calculations at 1 Sea Front, Hayling Island, Hampshire, PO11 0AG. The proposal is the cease operation of the lower half of the fairground and utilise this land to develop 5 new residential accommodation units in its place. Therefore, noise levels have been recorded of the ambient noise levels as well as the operational noise levels of the rides remaining.

Ambient noise levels were measured between 16th and 21st August 2025. This report by Impact Acoustics Ltd gives the results of these measurements and an assessment in accordance with government planning guidelines and relevant standards together with mitigation measures as required.

2.1 Planning Practice Guidance and Noise

March 2014 saw the publication of the Planning Practice Guidance for Noise (PPG-Noise) and this was subsequently updated in December 2014. The Planning Practice Guidance and Noise sets out details of how potential noise impacts should be evaluated.

'Local planning authorities' plan-making and decision taking should take account of the acoustic environment and in doing so consider:

- *whether or not a significant adverse effect is occurring or likely to occur;*
- *whether or not an adverse effect is occurring or likely to occur; and*
- *whether or not a good standard of amenity can be achieved.*

In line with the Explanatory Note of the Noise Policy Statement for England, this would include identifying whether the overall effect of the noise exposure (including the impact during the construction phase wherever applicable) is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation. As noise is a complex technical issue, it may be appropriate to seek experienced specialist assistance when applying this policy.'

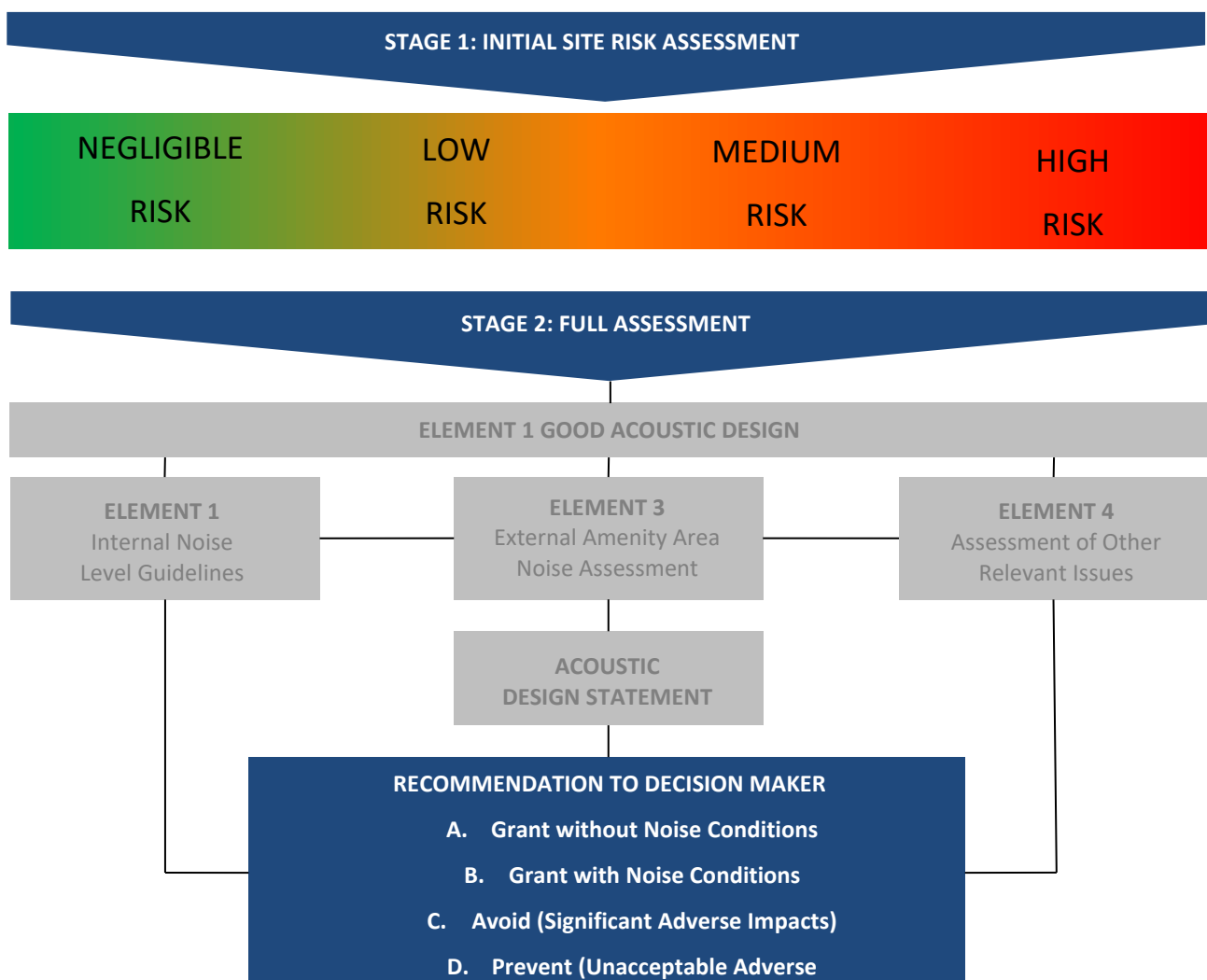
In accordance with Stage 2: Full Assessment, Other Noise Sources, detailed calculations and assessments should be carried out pertaining to these as PPG Noise does not provide advice and guidance when taking these elements into consideration.

2.1.1 Professional Practice Guidance on Planning & Noise.

The Professional Practice Guidance (PRoPG) on Planning and Noise for New Residential Development was published in May 2017 by the Association of Noise Consultants (ANC), Institute of Acoustics (IOA) and Chartered Institute of Environmental Health (CIEH). This document was developed in order to offer professional guidance on recommended strategies to the management of noise for use in the associated planning applications for specific sites. This, furthermore, provides a numerical acoustic standard in accordance with the Government's planning and noise policies.

This document has been developed to ensure the developers adopts a good acoustic design process to ensure protection for future residents from the potential harmful effects from noise. The PRoPG denotes that it *'does not constitute an official government code of practice and neither replaces nor provides an authoritative interpretation of the law or government policy on which users should take their own advice as appropriate'*.

The PRoPG adopts a twin-stage approach, firstly providing an 'Initial Noise Risk Assessment' of the proposed development site before undertaking a detailed approach of a noise impact assessment. The results from the initial noise risk assessment are an indication of the general acoustic environment of the proposed development and demonstrate how detailed the noise impact assessment will need to be in order to mitigate any acoustic issues.



2.2 BS 8233: 2014

With regards to external ambient noise, environmental noise levels are monitored at the site in accordance with British Standard 7445: 2003 'Description and measurement of environmental noise assessments and calculation made in accordance with BS 8233: 2014 Sound Insulation and Noise Reduction for Buildings Code of Practice.

BS 8233: 2014 set the following parameters as target levels that should be designed to within rooms such as Living Rooms and Bedrooms.

Indoor ambient noise levels in spaces when they are unoccupied and privacy is also important		
Objective	Typical situations	Design Range $L_{Aeq,t}$ dB
Typical noise levels for acoustic privacy in shared spaces	Living room	35 – 40
NOTE: See Noise control in building services [28] and BS EN ISO 3382.		

Indoor ambient noise levels for dwellings			
Activity	Location	07:00 – 23:00	23:00 – 07:00
Resting	Living Room	35 dB L_{Aeq} 16 HOUR	--
Dining	Dining Room / Area	40 dB L_{Aeq} 16 HOUR	--
Sleeping (daytime resting)	Bedroom	35 dB L_{Aeq} 16 HOUR	30 dB L_{Aeq} 8 HOUR

Calculations and assessments are therefore to be carried out in order to satisfy the above requirements of BS8233: 2014.

2.3 Applicability to Funfair Rides

Funfair rides produce entertainment/recreational noise (engines, hydraulics, music, PA systems, screams, etc.). Strictly speaking, this type of source is not “industrial or commercial” in the narrow sense BS 4142 is designed for. The standard itself says it should not normally be applied to noise sources such as music and entertainment, people, recreational activities etc.

For funfairs, BS 8233 (guidance on sound insulation and noise reduction for buildings), the WHO Guidelines, or local authority event noise criteria are usually considered more relevant. Sometimes Code of Practice on Environmental Noise Control at Concerts (1995) is used for music/PA aspects. However, some consultants and local authorities have applied BS 4142 in a pragmatic way to assess mechanical noise from rides (motors, generators, etc.), treating them like industrial plant. But for music and general entertainment noise, BS 4142 is not appropriate and shouldn't be used.

In summary, BS 4142:2014+A1:2019 is not generally applicable to funfair rides because it excludes entertainment / recreational noise. It may be used only in a limited way for fixed mechanical plant (e.g. generators, motors), but not for amplified music or crowd noise.

2.4 National Planning Policy Framework 2024 (NPPF) and Noise Policy Statement for England 2010 (NPSE).

References and evaluations are to be made to the National Planning Policy Framework 2024 (NPPF) and the Noise Policy Statement for England 2010 (NPSE). The purpose of this document is to include all aspects of environmental noise within assessments i.e. environmental noise, neighbour noise, and neighbourhood noise. Noise is to be considered alongside other relevant issues relating to the site and should not be considered in isolation, according to the NPSE.

There are several key phrases within the NPSE aims and these are discussed below.

2.4.1 “Significant adverse” and “adverse”

There are two established concepts from toxicology that are currently being applied to noise impacts, for example, by the World Health Organisation. They are:

2.4.2 NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

2.4.3 LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

2.4.4 SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.

It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.

Outdoor living areas are not being proposed and therefore, no assessment has been made to the World Health Organisation’s ‘Guidelines for Community Noise’, within this technical report.

Finally, assessments and references are to be made to the World Health Organisation Night Time Noise Guidance 2009.

3 SITE LOCATION

3.1 Development Location

The proposed development is shown below.



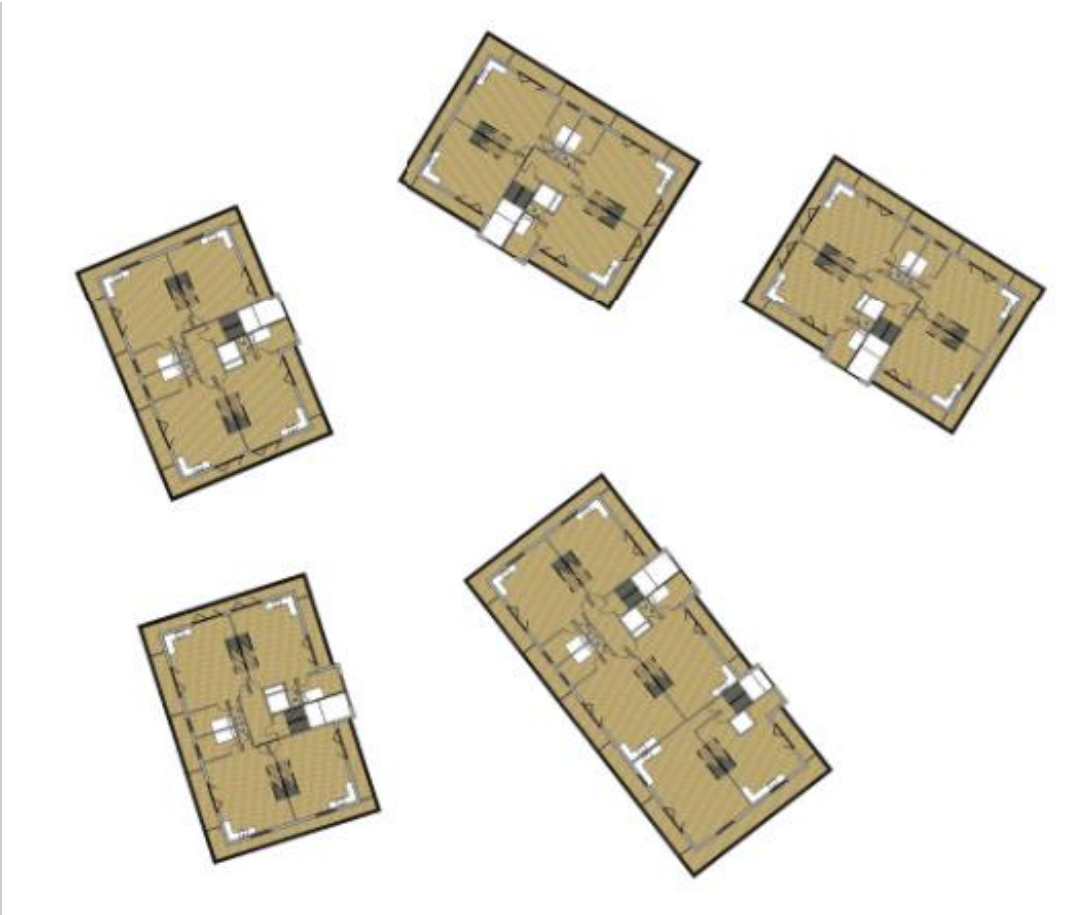
Site Plan



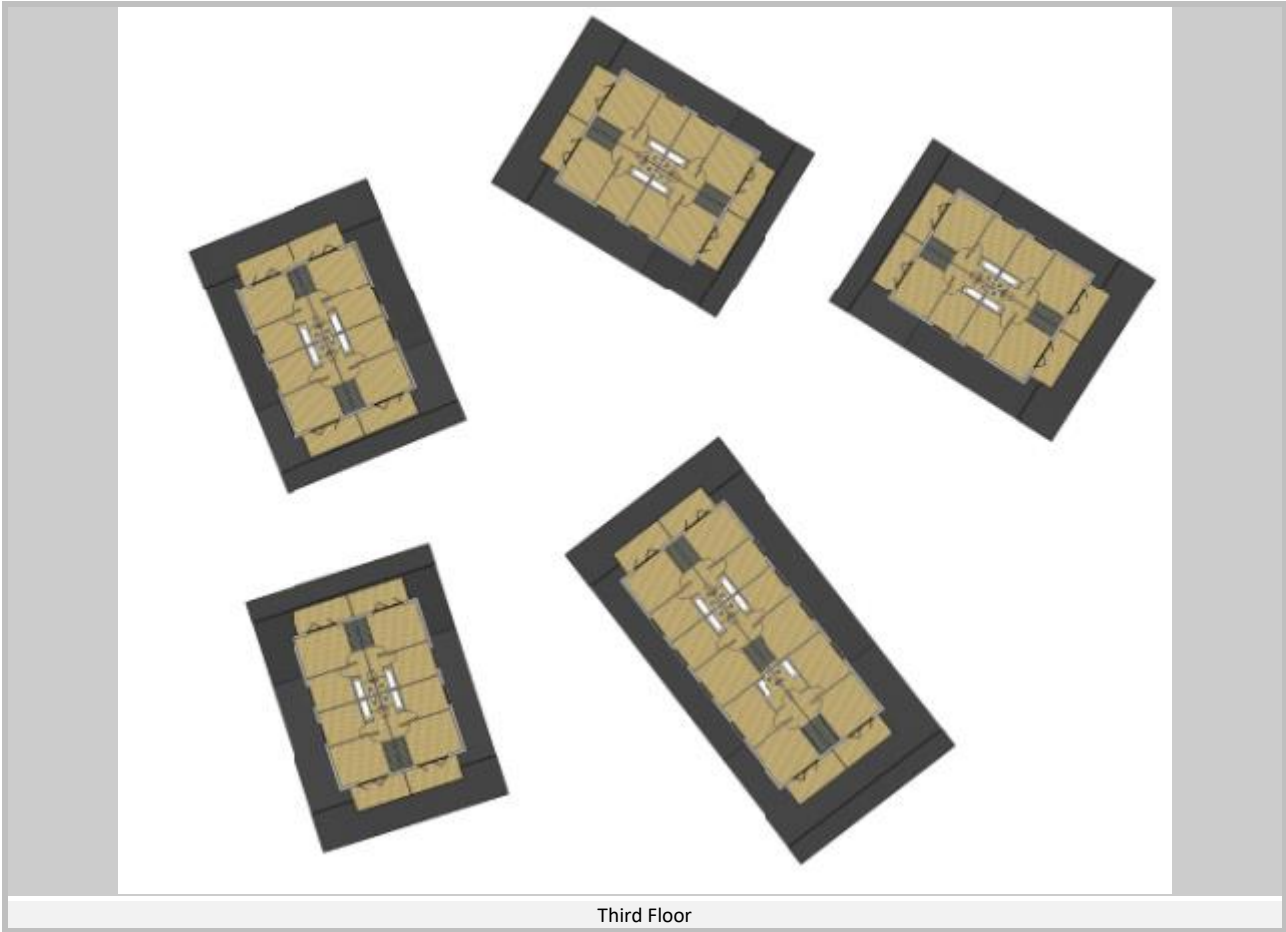
Ground Floor

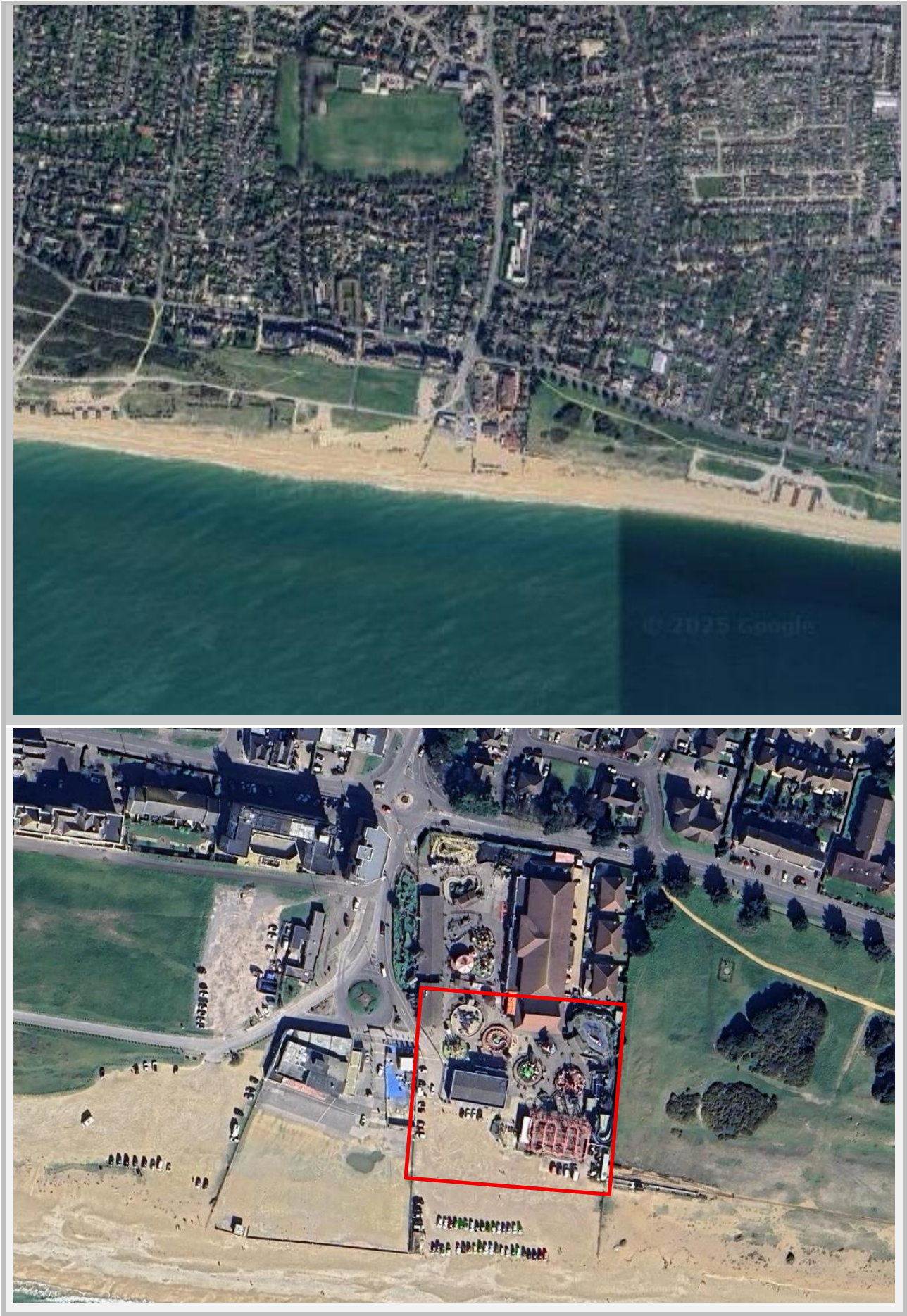


First Floor



Second Floor





4 PROCEDURE

External noise levels were recorded over a typical period and analysis data extrapolated between 07:00 hrs 16th and 07:00 hrs on 21st August 2025 at two positions as detailed on the attached plan sketch layout.

Position 1 was located at the Eastern façade of the site in order to capture the noise levels associated with the nearby Fun Fair and arcades in order to aid in the 3D model. Position 2 was located at the Western boundary in order to capture the noise levels associated with the roads. Sample measurements were recorded over continuous 1 minute samples and from this data the hourly LAeq daytime values have been evaluated. Sound Pressure Levels were recorded on the following setting along with a full octave band frequency analysis measured simultaneously and between 31.5 Hz and 16.0 kHz.

<u>Daytime 07:00 – 23:00</u>		<u>Night Time 23:00 – 07:00</u>	
LAeq 1 HOUR dB	LA10 1 HOUR dB	LAeq 15 MINUTES dB	LA10 15 MINUTES dB
LAMAX 1 HOUR dB	LA50 1 HOUR dB	LAMAX 15 MINUTES dB	LA50 15 MINUTES dB
LAMIN 1 HOUR dB	LA90 1 HOUR dB	LAMIN 15 MINUTES dB	LA90 15 MINUTES dB

Calculations have been made in accordance with BS 8233: 2014 'Sound Insulation and Reduction of Buildings - Code of Practice'. Recommendations were made for any additional acoustics measures to conform to these standards.

From the downloaded recorded results, the daytime and night time periods were assessed and used within the above calculations as LAeq 16 HOUR dB levels for daytime and LAeq 8 HOUR dB levels for night time. These are detailed within this report. All data averaged throughout the day has been done so on a logarithmic basis to give accurate LAeq 16 Hour dB daytime and LAeq 8 Hour dB night time noise levels.

Finally, it should be noted that calculations are carried out with façade levels corrected from the recorded noise levels to the calculated façade levels.

5 APPARATUS

The equipment was calibrated using a sound pressure level of 114.0 dB at an octave band centre frequency of 1000Hz with reference to $2 \times 10^{-5} \text{ Nm}^{-2}$ before and after the tests and the equipment set to have no inaccuracy greater than 0.2dB.

All the following equipment was calibrated in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS) on the following dates. Calibration schedules are implemented in accordance with UKAS directive LAB 23.

5.1 Svantek UK Sound Level Monitor environmental testing

Description	Make	Type	Serial No.	Calibration Intervals	Cert No.	Last Calibrated	Next Due Calibration
Integrated Sound Level Meter	Svantek UK	SV 307A	C157302	2 YEARS	N/A	06.08.2024	06.08.2026
Calibrator	Svantek UK	SV 33b	154757	1 YEAR	C00584	26.06.2025	26.06.2026
Microphone	Svantek UK	ST 30A (v3)	157890	2 YEARS	N/A	06.08.2024	06.08.2026

5.2 Svantek UK Sound Level Monitor environmental testing

Description	Make	Type	Serial No.	Calibration Intervals	Cert No.	Last Calibrated	Next Due Calibration
Integrated Sound Level Meter	Svantek UK	SV 307A	154471	2 YEARS	N/A	05.08.2024	05.08.2026
Calibrator	Svantek UK	SV 33b	154757	1 YEAR	C00584	26.06.2025	26.06.2026
Integrated Sound Level Meter	Svantek UK	ST 30A (v3)	157919	2 YEARS	N/A	05.08.2024	05.08.2026

Full calibration certificates are available upon request.

6 RESULTS

6.1 Position 1

6.1.1 16th – 17th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	67.6	87.2	67.0	73.1	70.8	64.3	63.9	63.3	60.2	53.3	49.5	40.7
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	43.5	71.4	36.0	52.0	48.2	44.4	40.8	38.0	33.7	27.8	26.0	30.4

6.1.2 17th – 18th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	67.1	91.2	67.0	73.0	70.6	64.1	63.1	62.6	60.3	53.4	48.0	39.1
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	47.0	87.8	36.0	50.5	45.2	42.1	41.4	41.2	40.7	38.7	33.7	31.9

6.1.3 18th – 19th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	66.9	89.4	67.0	73.7	71.9	64.5	62.8	62.4	59.5	52.2	47.9	39.4
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	46.5	85.2	36.0	51.4	45.8	42.0	41.0	41.4	40.4	37.1	31.6	30.9

6.1.4 19th -20th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	66.7	91.2	67.0	73.1	70.9	64.3	62.6	62.3	59.4	52.5	47.5	38.1
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	48.0	90.8	36.0	52.4	45.5	41.2	41.6	41.9	41.8	40.7	36.6	32.8

6.1.5 20th – 21st August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	66.2	87.3	64.0	71.8	69.0	62.8	62.4	62.0	59.0	52.0	46.0	37.2
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	47.6	91.2	35.0	51.8	47.0	41.7	42.0	41.7	40.7	39.9	35.7	32.3

6.2 Position 2

6.2.1 16th – 17th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	60.8	95.9	58.0	65.9	61.8	58.1	57.2	57.1	52.3	46.9	44.1	40.2
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	44.0	72.7	37.0	51.9	47.4	43.0	40.4	39.7	34.9	30.5	29.3	30.6

6.2.2 17th – 18th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	60.2	91.9	58.0	65.9	63.7	60.0	56.7	55.7	51.8	46.1	40.7	37.6
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	47.8	82.4	38.0	51.9	48.3	44.2	42.5	42.8	39.5	37.6	40.0	35.9

6.2.3 18th – 19th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	58.8	91.7	56.0	64.7	61.0	56.4	54.9	54.8	51.2	44.9	39.8	35.1
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	44.6	71.8	36.0	51.2	45.2	43.2	40.9	40.3	35.7	32.2	30.6	31.0

6.2.4 19th – 20th August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	59.2	91.0	56.0	64.1	60.9	57.1	55.5	55.1	51.4	45.5	40.3	38.9
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	50.8	79.7	36.0	57.9	48.9	45.7	46.5	46.0	43.9	40.2	36.8	34.3

6.2.5 20th – 21st August 2025

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 LA90 1 HOUR & Corresponding LAeq 1 HOUR	63.8	90.7	62.0	66.7	66.2	58.8	63.4	58.6	53.4	47.2	42.4	39.6
NIGHT TIME 23:00 - 07:00 A90 15 MIN & Corresponding LAeq 15 MIN	46.9	83.1	36.0	55.4	49.8	46.3	42.7	41.6	38.5	36.2	34.6	32.7

The following noise levels have been corrected for the highest recorded façade levels and used within the BS 8233: 2014 calculations

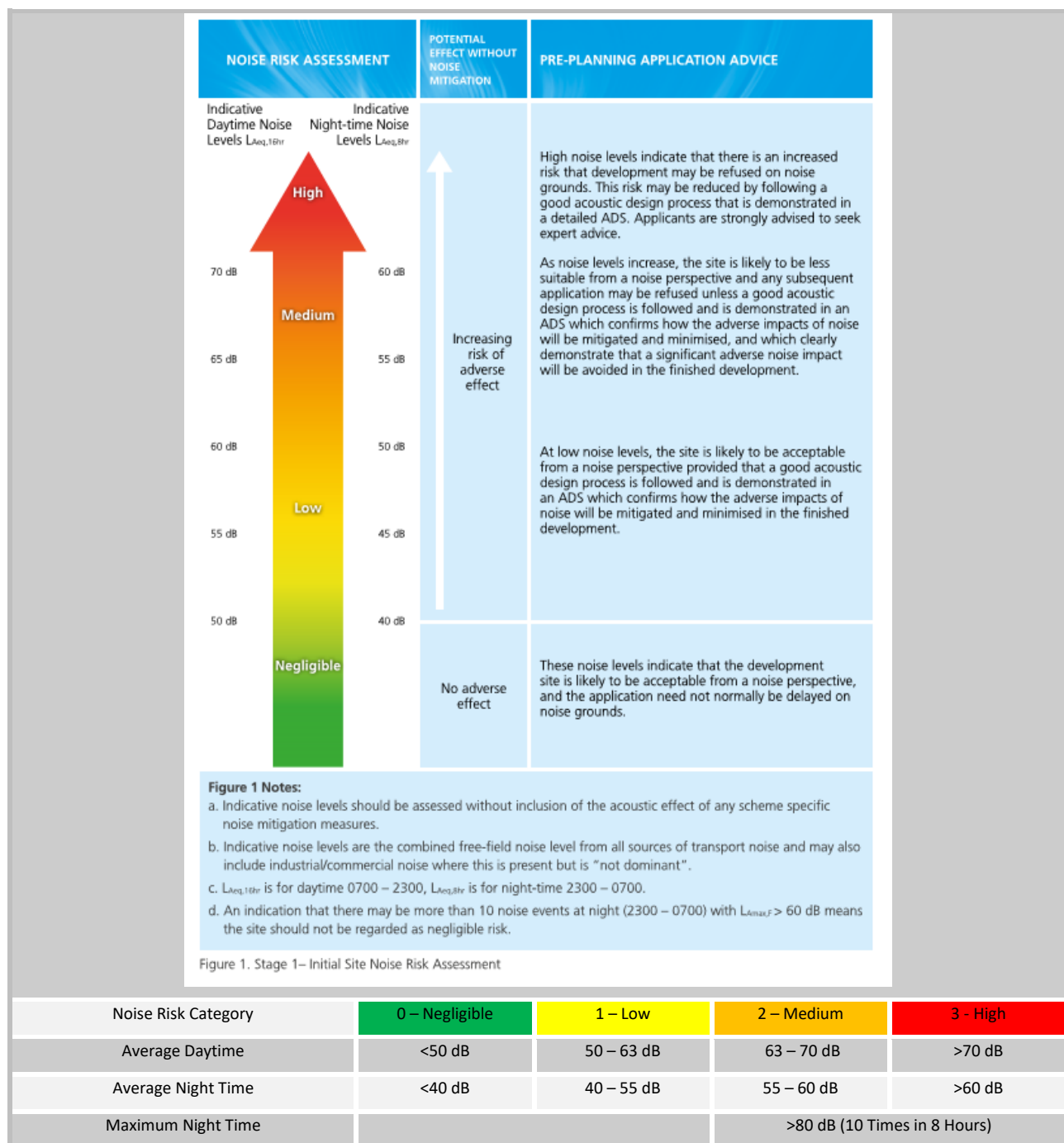
NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmx	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LA90 1 HOUR & Corresponding LAeq 1 HOUR</small>	67.6	87.2	67.0	73.1	70.8	64.3	63.9	63.3	60.2	53.3	49.5	40.7
NIGHT TIME 23:00 - 07:00 <small>A90 15 MIN & Corresponding LAeq 15 MIN</small>	48.0	90.8	36.0	52.4	45.5	41.2	41.6	41.9	41.8	40.7	36.6	32.8

7 PROPG PLANNING & NOISE STAGE 1

7.1 Stage 1: Initial Site Noise Risk Assessment

The Stage 1, Initial Noise Risk Assessment, compares the recorded ambient noise levels obtained from the acoustic survey and correlates these against the risk scale within the Pro PG Document in order to evaluate any potential adverse effects the site is currently exposed to with regards to noise.

The outcome of the Stage 1 assessment will determine the level of detail required within Stage 2 in order to demonstrate suitable mitigations can be introduced to ensure continuing compliance with the relevant standards, local planning policies and Pro PG. The following table demonstrates the Initial Risk Assessment Noise Levels as detailed within PROPG Figure.1:-



Based on the data collected from the aforementioned noise survey, the following PROPG Stage 1 assessments can be made:-

7.2 Potential Façade Noise Levels

7.2.1 Daytime (07:00-23:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 2 – Medium
Average Daytime (07:00-23:00)	$L_{Aeq, 16 \text{ HOUR}}$ 65 dB	63 – 70 dB

7.2.2 Night Time (23:00-07:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 1 – Low
Average Night Time (23:00-07:00)	$L_{Aeq, 16 \text{ HOUR}}$ 53 dB	40 – 55 dB
	Maximum (10 Times) – L_{Amax} 71.1 dB	>80 dB (10 Times in 8 Hours)

7.3 Risk Assessment

7.3.1 Daytime (07:00-23:00)

Risk Assessment Category	Risk Assessment
2 - Medium	As noise levels increase, the site is likely to be less suitable from a noise perspective and any subsequent application may be refused unless a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised, and which clearly demonstrate that a significant adverse noise impact will be avoided in the finished development.

7.3.2 Night Time (23:00-07:00)

Risk Assessment Category	Risk Assessment
1 – Low	At low noise levels, the site is likely to be acceptable from a noise perspective provided that a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised in the finished development.

The above table demonstrates this site is located within Noise Risk Category 2 for daytime which suggests a medium level of risk and Noise Risk Category 1 for Night time which suggests a low level of risk and that mitigation levels will be required at Stage 2 along with a good acoustic design process.

8 PROPG PLANNING & NOISE STAGE 2 - ELEMENT 1 – GOOD ACOUSTIC DESIGN

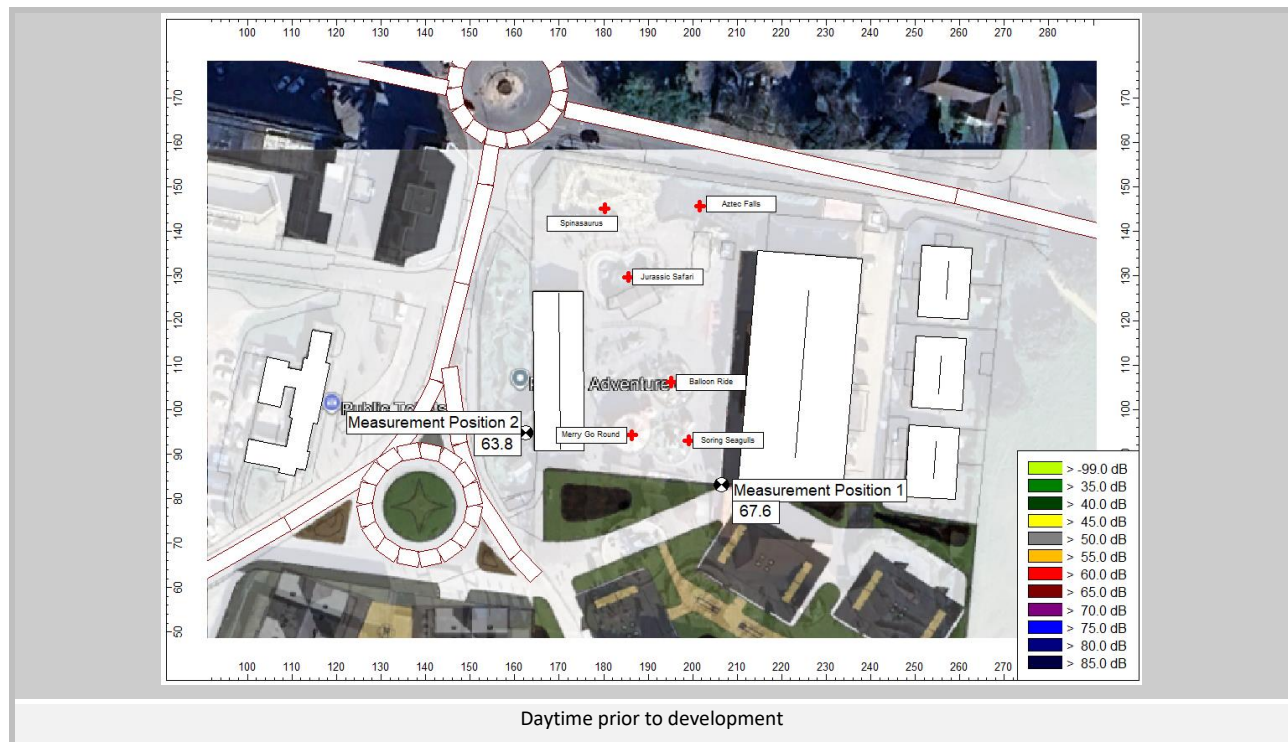
Given the size and orientation of the proposed site, it is recommended that the developer adopt, where practically possible, a good acoustic design which should include careful consideration of the positioning of the proposed properties together with thoughts being taken as to internal layouts to minimise noise sensitive rooms facing onto dominant noise sources within the local areas.

9 ELEMENT 2 – INTERNAL NOISE LEVEL GUIDELINES

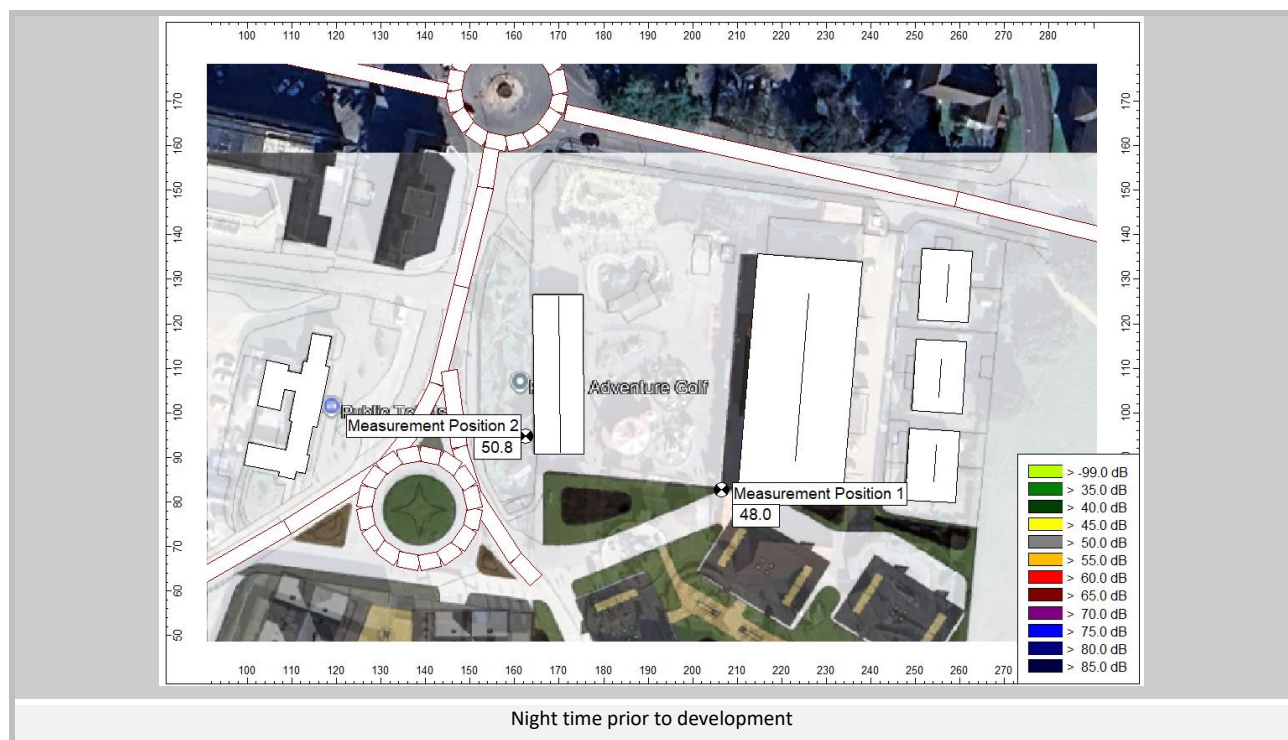
9.1 Discussion of Results

It can be seen from the attached graph and downloaded results that the external noise levels have followed the expected path and remained fairly constant throughout the day. The levels then gradually dropped off as the evening progressed and began to rise when morning traffic levels increased.

9.2 Existing Noise Levels – Daytime (07:00 – 23:00)



9.3 Existing Noise Levels – Night Time (23:00 – 07:00)



9.4 Proposed Noise levels – Daytime (07:00 – 23:00)



9.5 Proposed Noise levels – Night Time (23:00 – 07:00)



9.6 Recommendations

For the purpose of this assessment, the corresponding façade levels will be used within the BS 8233: 2014 calculations in order to evaluate the worst case scenario and select the correct window specification.

Therefore, in order to achieve the required noise levels of $L_{Aeq\ 16\ HOUR}$ 35 dB for habitable rooms daytime and $L_{Aeq\ 8\ HOUR}$ 30 dB for Bedroom at night within the proposed, the following additional acoustic measures have been calculated.

It should be noted that the calculations have been made with the proposed windows closed. Additional calculations were made for the top floor due to the influence of sound transmission into the various rooms via the roof / ceiling i.e. an increased impeding façade. Inputted levels into the calculation sheets have been corrected for distance attenuation and free field in accordance with the aforementioned British Standard.

9.7 Calculation Procedure to BS 8233: 2014

The following calculations have been carried out in order to determine the required window and ventilation specification in order to meet the requirements of BS 8233: 2014.

9.8 Ground Floor – Living Room Corrected to $L_{Aeq\ 16\ HOUR}$ 65 dB & $L_{Aeq\ 8\ HOUR}$ 53 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)						
	125	250	500	1000	2000	4000	
	Daytime Leqff	68.2	61.7	61.3	60.7	57.6	50.7
	Night time Leqff	50.5	46.2	46.6	46.9	46.8	45.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume	
Area m²	7.4	0	2.5	4.9	0	70	
Specification Summary	Site Specific Specification			Attenuation Required			
Glazing Specification	8mm / (16mm) / 6mm			Rw(C; Ctr)	35(-2,-6) dB		
Ventilation Strategy	MVHR			Dne'w	54 dB		
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB		
Roof Specification	Standard Pitched Roof			Rw	57 dB		
Calculation Results							
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	32.1	dB(A)		
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	16.2	dB(A)		
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3						
Note	The expected precision of this calculation is ±2 dB.						

9.9 Ground Floor – Bedroom Corrected to $L_{Aeq\ 16\ HOUR}$ 65 dB & $L_{Aeq\ 8\ HOUR}$ 53 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	68.2	61.7	61.3	60.7	57.6	50.7
Night time Leqff	50.5	46.2	46.6	46.9	46.8	45.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	10	0	2.5	7.5	0	34
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	8mm / (16mm) / 6mm			Rw(C; Ctr)	35(-2,-6) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	32.1	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	16.2	dB(A)	
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3					
Note	The expected precision of this calculation is ±2 dB.					

9.10 Top Floor – Living Room Corrected to L_{Aeq} 16 HOUR 65 dB & L_{Aeq} 8 HOUR 53 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	68.2	61.7	61.3	60.7	57.6	50.7
Night time Leqff	50.5	46.2	46.6	46.9	46.8	45.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	15.5	21	4.5	11	0	92
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	8mm / (16mm) / 6mm			Rw(C; Ctr)	35(-2,-6) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	34.7	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	18.8	dB(A)	
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3					
Note	The expected precision of this calculation is ±2 dB.					

9.11 Top Floor – Bedroom Corrected to L_{Aeq} 16 HOUR 65 dB & L_{Aeq} 8 HOUR 53 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	68.2	61.7	61.3	60.7	57.6	50.7
Night time Leqff	50.5	46.2	46.6	46.9	46.8	45.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	7	11	2	5	11	25
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	8mm / (16mm) / 6mm			Rw(C; Ctr)	35(-,-6) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	31.3	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	15.5	dB(A)	
Formula	$Leq2=Leqff+10\log[A0/S*10^{(-Dne/10)}+Swi/S*10^{(-Rwi/10)}+Sew/10*10^{(-Rew/10)}+Srr/S*10^{(-Rrr/10)}]+10\log(S/A)+3$					
Note	The expected precision of this calculation is ±2 dB.					

9.12 Ground Floor – Living Room Corrected to L_{Aeq} 16 HOUR 60 dB & L_{Aeq} 8 HOUR 46 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	63.2	56.7	56.3	55.7	52.6	45.7
Night time Leqff	43.5	39.2	39.6	39.9	39.8	38.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	7.4	0	2.5	4.9	0	70
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	4mm / (16mm) / 4mm			Rw(C; Ctr)	29(-1,-4) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	29.6	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	12.8	dB(A)	
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3					
Note	The expected precision of this calculation is ±2 dB.					

9.13 Ground Floor – Bedroom Corrected to L_{Aeq} 16 HOUR 60 dB & L_{Aeq} 8 HOUR 46 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	63.2	56.7	56.3	55.7	52.6	45.7
Night time Leqff	43.5	39.2	39.6	39.9	39.8	38.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	10	0	2.5	7.5	0	34
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	4mm / (16mm) / 4mm			Rw(C; Ctr)	29(-1,-4) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	29.6	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	12.8	dB(A)	
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3					
Note	The expected precision of this calculation is ±2 dB.					

9.14 Top Floor – Living Room Corrected to L_{Aeq} 16 HOUR 60 dB & L_{Aeq} 8 HOUR 46 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	63.2	56.7	56.3	55.7	52.6	45.7
Night time Leqff	43.5	39.2	39.6	39.9	39.8	38.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	15.5	21	4.5	11	0	92
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	4mm / (16mm) / 4mm			Rw(C; Ctr)	29(-1,-4) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	32.2	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	15.4	dB(A)	
Formula	Leq2=Leqff+10log[A0/S*10^(-Dne/10)+Swi/S*10^(-Rwi/10)+Sew/10*10^(-Rew/10)+Srr/S*10^(-Rrr/10)] +10log(S/A) +3					
Note	The expected precision of this calculation is ±2 dB.					

9.15 Top Floor – Bedroom Corrected to L_{Aeq} 16 HOUR 60 dB & L_{Aeq} 8 HOUR 46 dB

Recorded Site Data (Corrected for Free Field)	Octave Band Centre Frequency (Hz)					
	125	250	500	1000	2000	4000
Daytime Leqff	63.2	56.7	56.3	55.7	52.6	45.7
Night time Leqff	43.5	39.2	39.6	39.9	39.8	38.7
Room Data	Sf	Sr	Swi	Sew	Srr	Volume
Area m²	7	11	2	5	11	25
Specification Summary	Site Specific Specification			Attenuation Required		
Glazing Specification	4mm / (16mm) / 4mm			Rw(C; Ctr)	29(-1,-4) dB	
Ventilation Strategy	MVHR			Dne'w	54 dB	
Wall Specification	Brick & Block Cavity Wall			Rw	54 dB	
Roof Specification	Standard Pitched Roof			Rw	57 dB	
Calculation Results						
Daytime Hours (07:00-23:00)			L _{Aeq} 16 HOUR	28.8	dB(A)	
Night Time Hours (23:00-07:00)			L _{Aeq} 8 HOUR	12.0	dB(A)	
Formula	$Leq2=Leqff+10\log[A0/S*10^{(-Dne/10)}+Swi/S*10^{(-Rwi/10)}+Sew/10*10^{(-Rew/10)}+Srr/S*10^{(-Rrr/10)}]+10\log(S/A)+3$					
Note	The expected precision of this calculation is ±2 dB.					

9.16 Glazing (R_{wi})

Octave Band Frequency	125	250	500	1000	2000	4000	$R_w + C_{tr}$
8mm / (16mm) / 6mm	20.0	21.0	33.0	40.0	36.0	48.0	35 (-2:-6)
4mm / (16mm) / 4mm	21.0	17.0	25.0	35.0	37.0	31.0	29 (-1:-4)

9.17 Ventilation (D_{ne})

Octave Band Frequency	125	250	500	1000	2000	4000	$D_{n,e,w}$
MVHR	40.0	44.0	45.0	51.0	56.0	61.0	54.0

9.18 Walls (R_{ew})

Octave Band Frequency	125	250	500	1000	2000	4000	R_w dB
Brick and Concrete Block	40.0	44.0	45.0	51.0	56.0	61.0	54.0

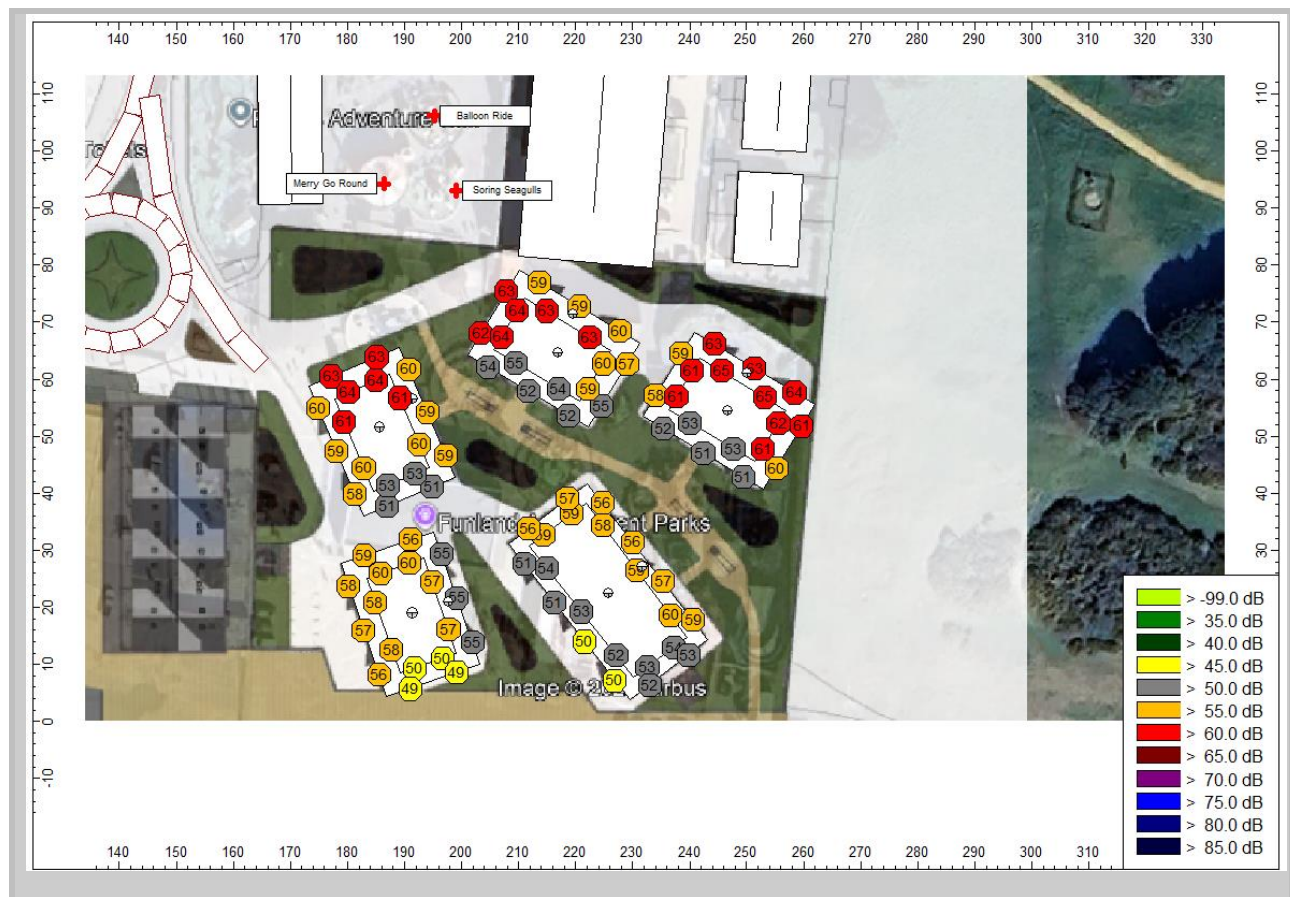
9.19 Roof (R_{rr})

Octave Band Frequency	125	250	500	1000	2000	4000	R_w dB
Minimum Value	39.0	48.0	55.0	60.0	59.0	61.0	43.0

The above are minimum construction attenuation values, and should alternative methods be selected; these should be equal to or greater than the above corresponding values. Calculations carried out have indicated the following specifications should be installed for this site.

9.20 Glazing & Ventilation Assessment

The development should be designed with an 8mm glass / 16mm Air Gap / 6mm Glass and an MVHR System 4 ventilation system to all facades illustrated in red and a 4mm glass / 16mm Air Gap / 4mm Glass and an MVHR System 4 ventilation system to all facades illustrated in orange, grey and yellow, as detailed below, to ensure the internal noise levels are acceptable in terms of the assessment to British Standard 8233: 2014.



10 APPROVED DOCUMENT O 2021 – ‘OVERHEATING’

10.1 Approved Document O – Section 3: Ensuring the Overheating Mitigation Strategy is Usable.

Building Regulations 2010 Approved Document O 2021 ‘Overheating’ states the following within Section 3: ‘Ensuring the Overheating Mitigation Strategy is Usable’:-

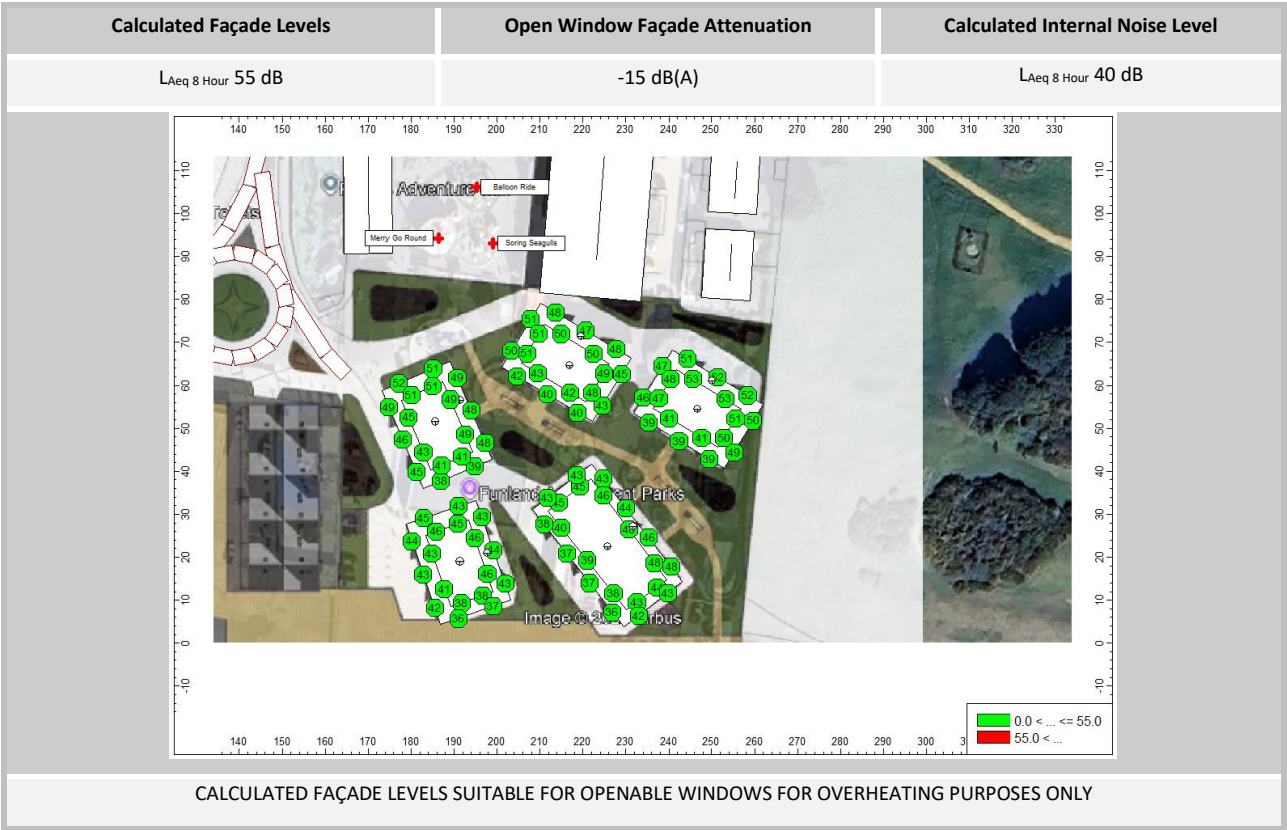
- 3.2 In locations where external noise may be an issue (for example, where the local planning authority considered external noise to be an issue at the planning stage), the overheating mitigation strategy should take account of the likelihood that windows will be closed during sleeping hours (11pm to 7am).
- 3.3 Windows are likely to be closed during sleeping hours if noise within bedrooms exceeds the following limits.
 - a. 40dB L , averaged over 8 hours (between 11pm and 7am)
 - b. 55dB L , more than 10 times a night (between 11pm and 7am).
- 3.4 Where in-situ noise measurements are used as evidence that these limits are not exceeded, measurements should be taken in accordance with the Association of Noise Consultants *Measurement of Sound Levels in Buildings with the overheating mitigation strategy in use*.

NOTE: Guidance on reducing the passage of external noise into buildings can be found in the National Model Design Code: Part 2 – Guidance Notes (MHCLG, 2021) and the Association of Noise Consultants’ Acoustics, Ventilation and Overheating: Residential Design Guide (2020)

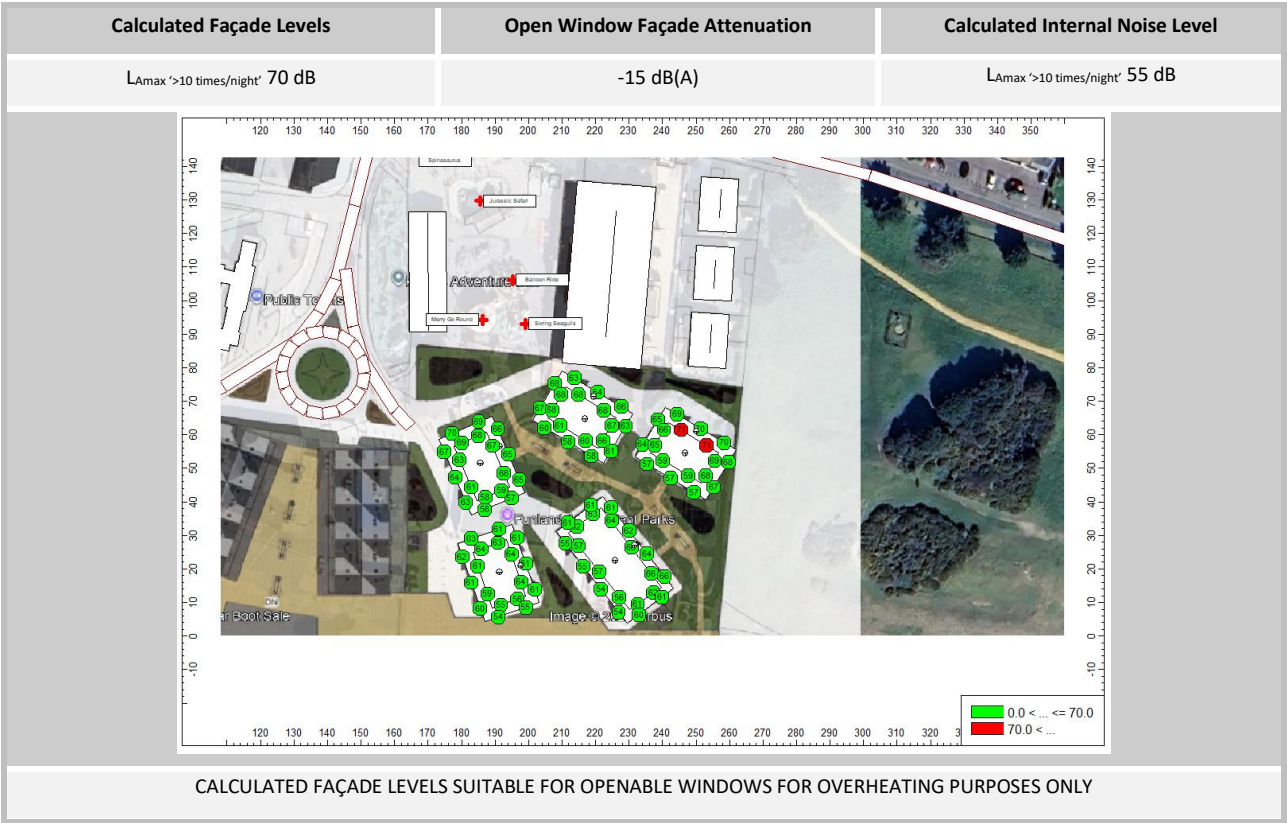
10.2 Assessment of Openable Windows

The following Table demonstrates which facades of the proposed development would be able to utilise openable windows to mitigate overheating and still achieve the above values:-

10.2.1 LAeq 8 Hour dB



10.2.2 LAmax '>10 times/night' dB



10.3 TM59 Overheating 'Assessment of Requirement for Testing'

With regards to potential overheating at the proposed development and any TM59 assessment that may be required for this site, we would like to confirm that having opening windows to dissipate excessive summer heat vs the internal acoustics is always a fine balancing act.

With regards to the internal acoustic criteria of Daytime $L_{Aeq\ 16\text{ HOUR}}$ 35 dB and Night Time $L_{Aeq\ 8\text{ HOUR}}$ 30 dB, this is a planning requirement under BS 8233: 2014 to which this report and calculations have been carried out to and is based on. This assessment has detailed the glazing and ventilation requirements required in order to achieve these criteria based on the assumption that the windows are closed.

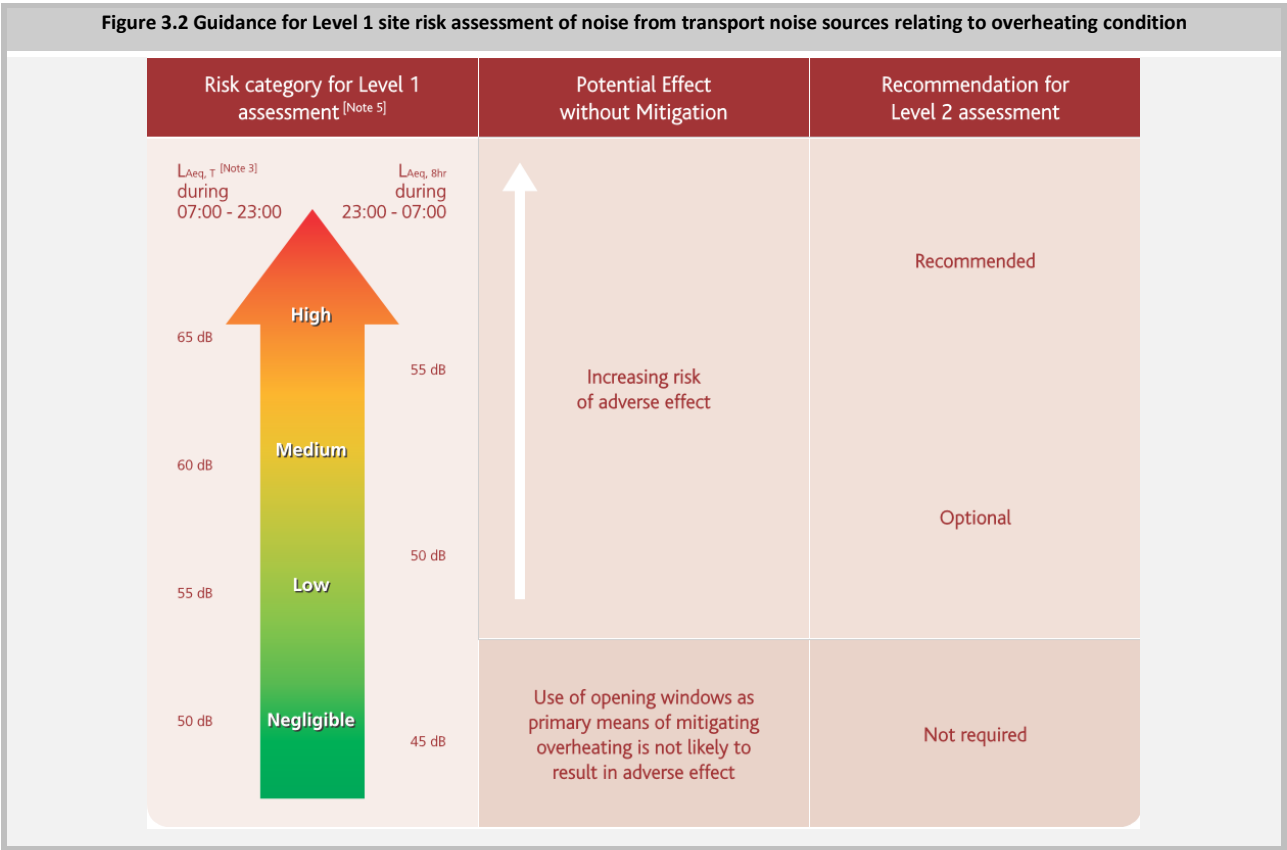
References and assessments are to be made to the Association of Noise Consultants 'Acoustic Ventilation & Overheating – Residential Design Guide' 2020. The calculations carried out within this report have identified an acoustic requirement for System 1 & 2 and therefore guidelines values from Table 4 of BS 8233: 2014 are to be adopted.

This document takes a Level 1 and Level 2 approach to an acoustic overheating assessment and depending on the outcome of Level 1, further determines the need or necessity for a Level 2 assessment.

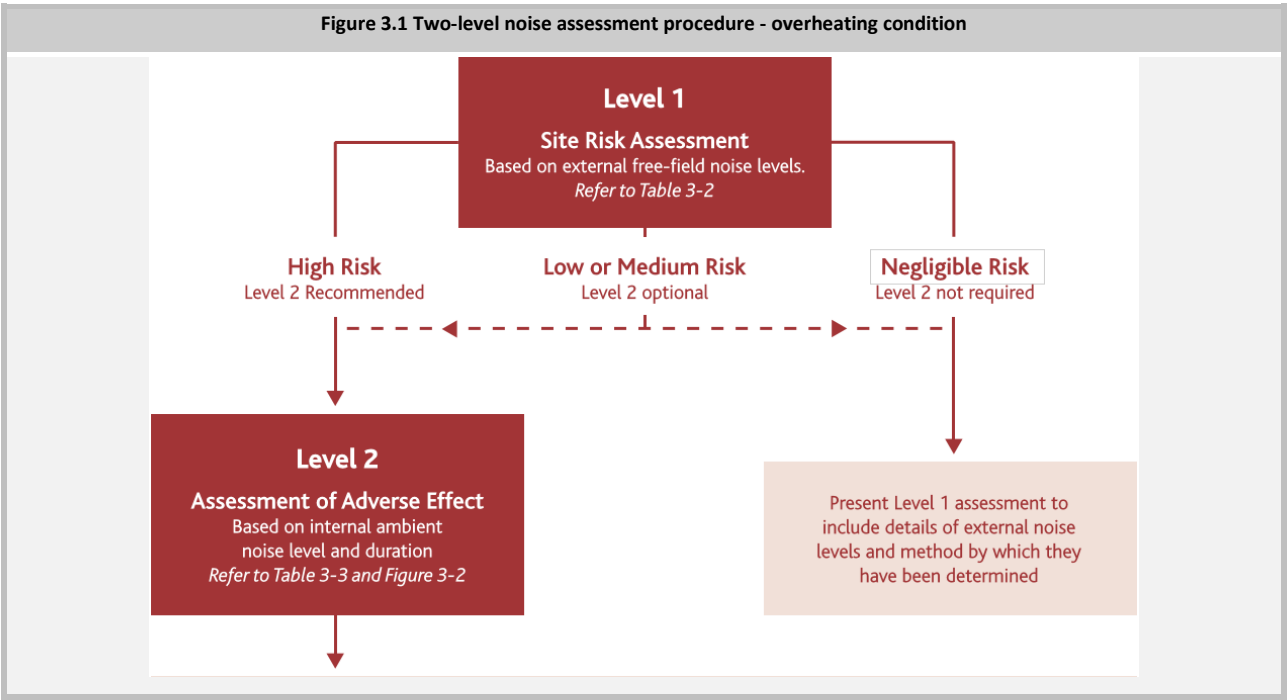
10.3.1 Table 3.1 - Indoor Ambient Noise Levels Resulting from Transport Noise Sources

Table 3.1 'Indoor ambient noise levels resulting from transport noise sources – ADF ventilation condition'		
Ventilation condition	Operational condition of System	Desirable internal ambient noise level from transport noise sources
Part F - Whole dwelling ventilation	Systems 1 & 2: Background ('trickle') ventilators open to provide whole dwelling ventilation in the winter period. Additional ventilation required at other times of the year – windows are assumed to be ajar for assessment ^[Note 2] .	Guideline values from Table 4 of BS 8233:2014.
	System 3: Continuous mechanical extract with background ('trickle') ventilators open ^[Note 2] .	
	System 4: Continuous mechanical supply and extract with heat recovery (MVHR) – no trickle vents required.	
Part F – Purge Ventilation ^[Note 1]	Option 1: Opening external window(s) meeting requirements described in Appendix B of Part F.	No specific acoustic criterion needs to be met in a room using purge ventilation for the purpose of rapidly diluting indoor pollutants.
	Option 2: Manually controlled fan extracting 4 air changes per hour.	

10.3.2 figure 3.2 - Guidance for Level 1 Site Risk Assessment of Noise from Transport Noise Sources Relating to Overheating Condition



10.3.3 Figure 3.1 Two-Level Noise Assessment Procedure



10.3.4 Requirement for Testing Conclusion

Based on the above assessments, it is the concluded that a detailed TM59 assessment is recommended for this site.

11 LA_{max} dB NOISE LEVEL ASSESSMENT

11.1 Criteria

11.1.1 Night Noise Guidelines Europe 2009

The Night Noise Guidelines 2009 make direct reference to the World Health Organisations Guidelines for Community Noise 1999 with recommended guideline criteria of L_{Aeq} 30 dB indoors for continuous noise. The document goes on to explain that sleep disturbance correlates best with L_{Amax} and effects have been observed at 45 dB or less. This is particularly true if the background noise level is low. Noise events exceeding 45 dB(A) should therefore be limited.

11.1.2 Professional Practice Guidance on Planning & Noise.

PROPG: Planning and Noise Appendix A 'Dealing with Noise Events' A.17 states that:-

Various studies have linked the L_{Amax} from individual noise events to behavioural awakenings. For example, one study found that the "Probability of sleep stage changes to wake/S1 from railway noise increased significantly from 6.5% at 35 dB(A) to 20.5% at 80 dB(A) $L_{Amax,F}$ whilst another study concluded that "noise disturbance of sleep may be expected to become significant once the outdoor L_{Aeq} exceeds 55 dB provided peak noise levels do not exceed 75 to 80 dB. Higher L_{Aeq} values up to 60 dB may be allowed providing the peak levels do not exceed 85 dB, and the number of such events is less than about 20 per night". Based on these studies it can be concluded that at night (2300 - 0700 hrs) a significant effect on sleep disturbance e.g. behavioural awakening, is likely to occur where the maximum sound level at the façade of a building with partially open windows is above:

85 dB $L_{Amax,F}$ (where the number of events exceeding this value is ≤ 20); or

80 dB $L_{Amax,F}$ (where the number of events exceeding this value is > 20).

Pro PG: Planning and Noise Appendix A 'Dealing with Noise Events' A.18 goes on to explain that the main body of sleep research is consistent with a careful interpretation of the viewpoint set out in the World Health Organisation Guidelines which for the ordinary population is that:

- ✓ *Impacts on sleep can be detected from relatively low level maximum noise events, however the degree of resulting harm may not be significant.*
- ✓ *'Effects' on sleep (such as EEG awakenings and sleep stage changes) occur spontaneously in the general population many times per night regardless of any impacts due to noise.*
- ✓ *The smaller the number of noise events, the louder the maximum noise level that can be tolerated without adverse effects upon sleep; subject to an upper limit.*
- ✓ *At relatively low levels e.g. around 45 dB $L_{Amax,F}$ when sufficient number of such events take place during the night the adverse effects of individual noise events are likely to be limited to sleep disturbance in the form of changes in sleep state or perhaps some EEG awakenings.*
- ✓ *It normally requires noise levels higher than 45 dB $L_{Amax,F}$ before significant adverse effects such as behavioural awakenings, difficulty getting to sleep, premature awakening or difficulty getting back to sleep generally occur and the latest field research on and aircraft noise suggest that it requires internal L_{Amax} noise levels of around 65 dB before noise induced awakenings become distinguishable from spontaneous awakenings).*

11.1.3 World Health Organisations 'Guidelines for Community Noise'.

The WHO Guideline for Community Noise suggests that levels of L_{AFmax} 45 dB should not exceed more than 10 events within any one night time period 23:00 – 07:00. Therefore, calculations and assessments are to be made against these criteria to ascertain if the proposed glazing and ventilation specification will be suitable to achieve that of the assessed 11th highest recorded L_{AFmax} dB level.

LAFmax dB Noise Levels >80 dB						LAFmax dB Noise Levels >85 dB					
LAFmax dB	72.7	82.4	71.8	79.7	83.1	LAFmax dB	72.7	82.4	71.8	79.7	83.1
Time	Fig 1	Fig 2	Fig 3	Fig 4	Fig 5	Time	Fig 1	Fig 2	Fig 3	Fig 4	Fig 5
	0	2	0	0	3		0	0	0	0	0

11.1.4 LAFmax dB Noise Levels – Night Time 23:00 – 07:00 (1 Minute Data)

1 Minute Event No.	Recorded L_{AFmax} dB Noise Levels	Façade Corrected L_{AFmax} dB Noise Levels
1	83.1	83.1
2	83.1	83.1
3	81.8	81.8
4	75.5	75.5
5	75.5	75.5
6	74.5	74.5
7	74.5	74.5
8	72.4	72.4
9	71.8	71.8
10	71.8	71.8
11	71.1	71.1

The following table demonstrate the results and the evaluated 11th highest L_{Amax} dB level. With the proposed glazing and ventilation strategies implemented on this site, the following calculated internal levels have been evaluated accordingly:-

Item		Night Time (23:00-07:00)	Description
1	Recorded External Noise Level	48.0	Recorded Noise Level at the Monitoring Position
2	Calculated Highest Façade Level	53.0	Highest recorded façade level of the proposed development closest to the above associated monitoring position.
3	Façade Correction	5.0	Difference between Recorded and Calculated (Item 1 and 2)
4	Calculated Façade Attenuation	34.2	Calculated façade attenuation taken from the highest recorded LAeq 8 HOUR dB night time noise level, minus the highest calculated internal noise level taken from the BS 8233 calculations.
5	L_{Amax} 45 dB Criteria	45.0	L_{Amax} 45 dB Criteria taken from WHO Guidelines. BS 8233 does not reference L_{Amax} dB noise level criteria.
6	Calculated Façade Level Outside	79.2	Addition of Items 4 and 5 to give a resultant target level for the 11th Recorded L_{Amax}
7	11 th Recorded L_{Amax}	71.1	11th Recorded L_{Amax}
8	L_{Amax} Criteria Achieved	Yes	If Item 7 is less than 6, then the site is likely to be compliant. If not, further calculations are required

The above table demonstrates that the upgraded glazing and ventilation will result in the internal L_{Amax} 45 dB criteria being achieved.

12 ELEMENT 3 – EXTERNAL AMENITY AREA NOISE ASSESSMENT

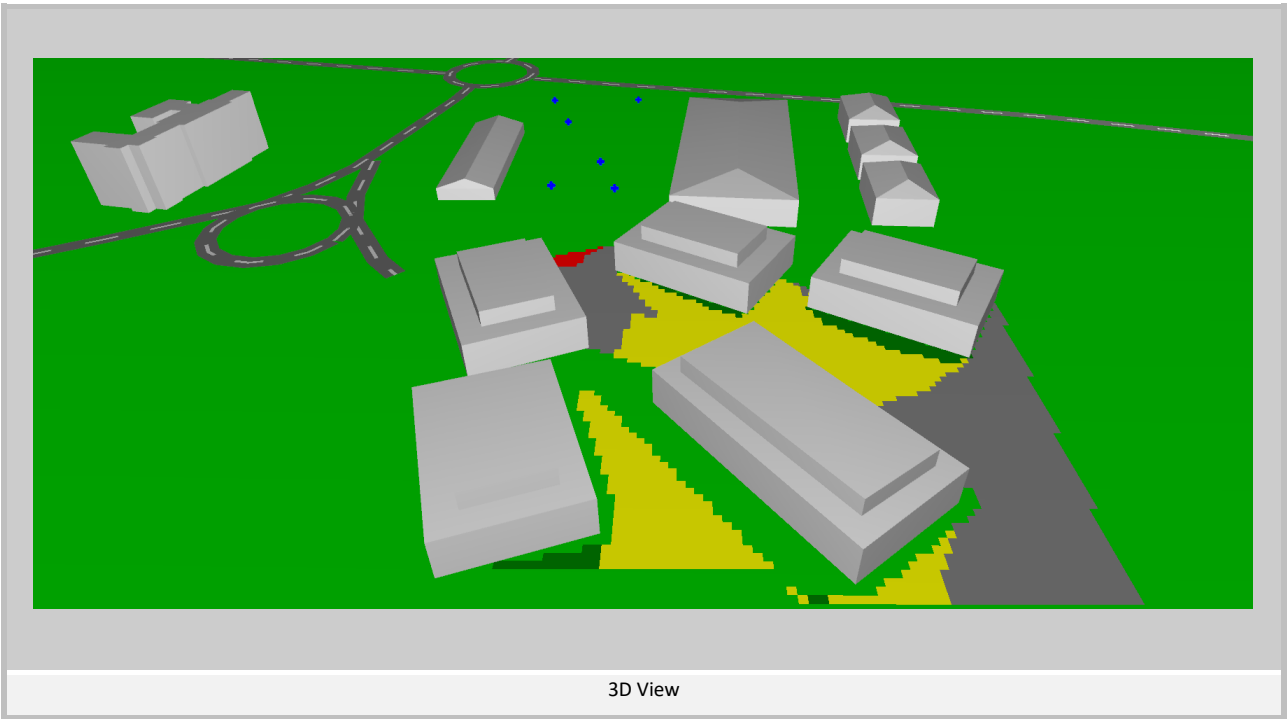
The World Health Organisation ‘Guidelines for Community Noise gives guidance as to desirable noise levels that should be achieved within outdoor living areas such as gardens, patios and verandas etc.

Table 1: Guideline values for community noise in specific environments, details the desirable target noise levels within various areas.

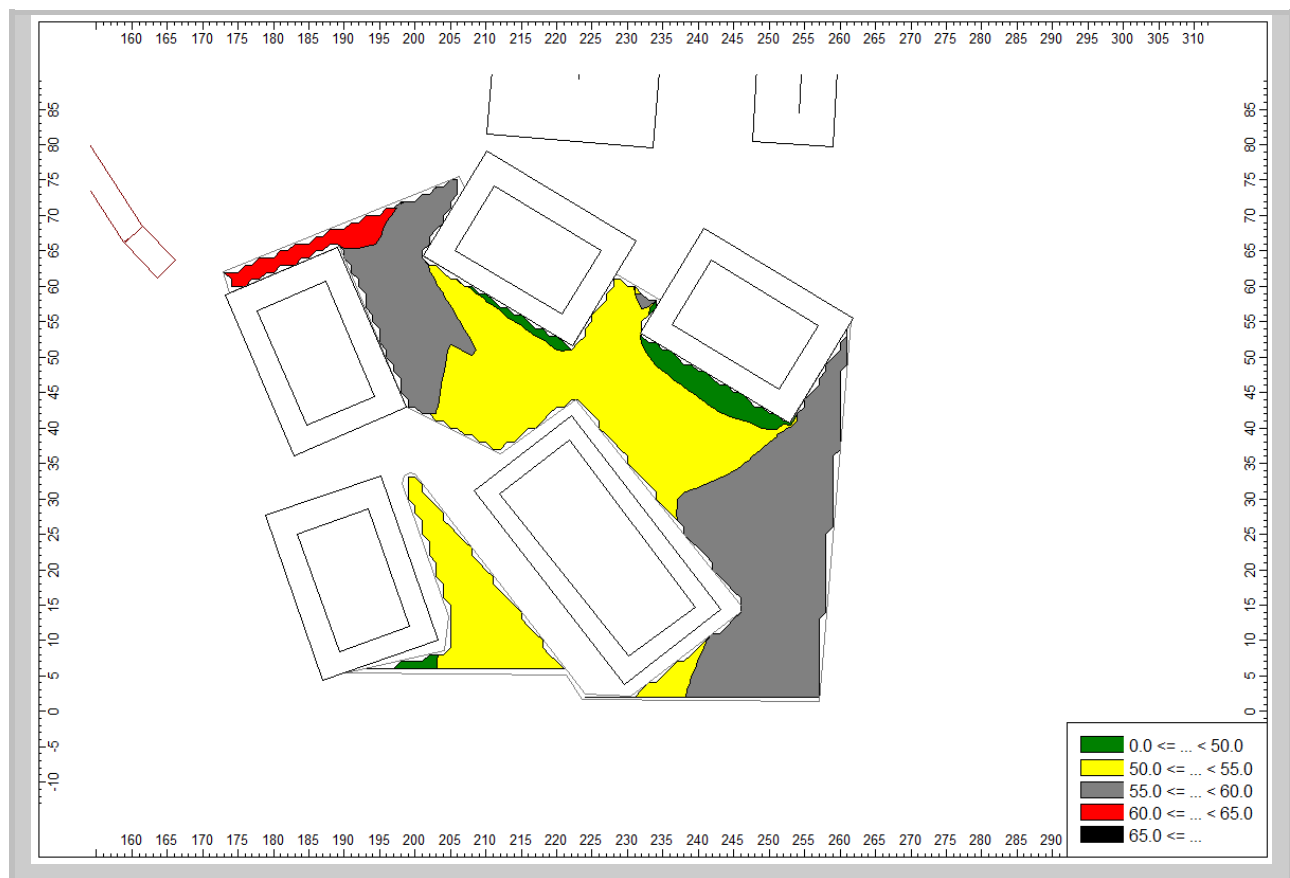
Outdoor Living Area	
Serious Annoyance, daytime and evening	L _{Aeq} 16 HOUR 55 dB
Moderate Annoyance, daytime and evening	L _{Aeq} 16 HOUR 50 dB

In order to evaluate the external noise levels within the proposed development, and to correctly and accurately select the precise required minimum screen heights, the 3D modelling software CADNA A is to be used. Initially, the site plan is to be overlaid onto Google Earth and then imported directly into CADNA A using the geometric co-ordinates.

From this, the monitoring positions and noise sources such as roads are added. The output noise levels from the roads are then increased until the monitored noise levels are achieved at the monitoring position. This model is then saved and used as a working 3D acoustic model of the site. The proposed buildings are then constructed on a 3D bases and receptors placed within the terrace garden areas. The calculation software is then run to evaluate the garden levels within sample plots across the development. The following CADNA A screen shots demonstrate the existing sites working 3D model. The levels at the measurement position correlate with the measured daytime average levels detailed within this report.



The development has external living areas on the development and therefore this criteria / guideline would be appropriately considered within the proposed rear residential garden areas.



BS 8233 recognises that some areas where developments are desirable, these guideline values may not always be achievable. This is correct for areas with higher noise levels such as city centre developments and where urban areas are nearby to major and strategic road and rail networks. In these scenarios, a compromise could be considered between elevated noise levels and other factors. These include:-

- The convenience of living in these locations
- Making efficient use of the land resources to ensure the developments needs can be met.

With this in mind, developments are to be designed to ensure noise levels within the external living spaces are reduced as much as is reasonably practicable and should not be prohibited.

The development proposes external living areas and therefore an assessment to the World Health Organisation's 'Guidelines for Community Noise' has been carried out. The guideline has been considered acceptable criteria for this assessment given the sites geographical location. The calculation demonstrates the external living spaces are likely to see noise levels below the upper guideline of 55 dB for a majority of the central section with only some areas to the north and south being exceeded.

BS8233: 2014 states the following:

'For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB LAeq,T, with an upper guideline value of 55 dB LAeq,T which would be acceptable in noisier environments. However, it is also recognized that these guideline values are not achievable in all circumstances where development might be desirable. In higher noise areas, such as city centres or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources to ensure development needs can be met, might be warranted. In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces, but should not be prohibited'.

PRoPG: Planning and Noise goes on to state the following with regards to external amenity space:-

Paragraph 2.47

PPG- Noise states: "If amenity spaces are an intrinsic part of the overall design, the acoustic environment of these spaces should be considered so that they can be enjoyed as intended".

Paragraph 2.48

It is noted that both documents require a decision to be made regarding whether or not an external amenity area (or amenity space) is intrinsic to the required design for acoustic, or for other reasons. However, the advice in BS 8233: 2014 states that the resulting noise levels outside are never a reason for refusal as long as levels are designed to be as low as practicable. Whereas, to comply with policy guidance any amenity space must have an acoustic environment so that it can be enjoyed as intended.

Element 3 – External Amenity Space

Paragraph 3 (iii)

These guideline values may not be achievable in all circumstance where development might be desirable. In such situations, development should be designed to achieve the lowest practicable noise levels in these external amenity spaces.

The Noise Policy Statement for England (NPSE) also states that:-

Paragraph 2.3

Furthermore, the broad aim of noise management has been to separate noise sources from sensitive noise receptors and to minimise noise. Of course, taken in isolation and to a literal extreme, noise minimisation would mean no noise at all. In reality, although it has not always been stated, the aim has tended to be to minimise noise 'as far as reasonably practical'. The concept can be found in the Environmental Protection Act 1990, where, in some circumstances, there is a defence of 'best practicable means' in summary statutory nuisance proceedings.

Paragraph 2.7

In addition, the application of the NPSE should enable noise to be considered alongside other relevant issues and not to be considered in isolation. In the past, the wider benefits of a practical policy, development or other activity may not have been given adequate weight when assessing the noise implications.

Paragraph 2.22

It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having a specific SOAEL value in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.

In summary, the external living spaces have been reduced by the location of the proposed bund with screen on top to as low as is reasonably practicable and therefore in accordance with the guidance set out above, planning permission should not be refused and external noise should not be considered in isolation.

13 HAYLING ISLAND FUNFAIR

13.1 Criteria

BS 4142:2014+A1:2019 is the British Standard titled: “Methods for rating and assessing industrial and commercial sound.”. It is primarily intended for assessing the impact of sound from industrial and commercial sources (factories, warehouses, fixed plant, mechanical services, etc.) at residential or other noise-sensitive locations.

13.2 Background Noise Levels

The following tables demonstrate the existing background noise levels when the funfair is not in operation. The hour before and hour after having also been discounted as it contained noise levels similar to that of the funfair and it's assumed this is attributed to opening and closing operational noise levels. This have therefore been assessed against lower, more realistic background noise levels.

13.2.1 Recorded $L_{A90\ 1\text{ HOUR}}$ dB Noise Levels

Time	Dates				
	16.08.25	17.08.25	18.08.25	19.08.25	20.08.25
07:00 - 08:00	44.3	42.5	45.1	44.0	46.2
08:00 - 09:00	47.6	45.5	44.3	47.3	49.7
09:00 - 10:00	49.6	49.3	47.8	48.5	51.8
10:00 - 11:00	51.4	52.0	52.4	50.6	53.2
11:00 - 12:00	57.5	56.4	54.9	56.2	59.2
12:00 - 13:00	57.6	57.0	56.0	56.4	61.8
13:00 - 14:00	57.9	57.9	56.9	57.3	61.8
14:00 - 15:00	58.1	57.9	57.1	56.8	62.2
15:00 - 16:00	58.2	57.8	56.5	57.5	61.9
16:00 - 17:00	58.2	57.8	56.4	57.6	62.0
17:00 - 18:00	57.7	58.1	56.2	56.8	55.9
18:00 - 19:00	56.4	57.6	55.6	56.3	54.2
19:00 - 20:00	50.5	50.5	47.5	48.5	49.2
20:00 - 21:00	46.2	44.6	45.8	45.4	47.0
21:00 - 22:00	42.4	41.8	40.3	41.9	43.4
22:00 - 23:00	41.3	40.7	38.8	41.3	40.9

13.2.2 Rounded L_{A90} 1 HOUR dB Noise Levels with Funfair Operations Excluded

Time	Dates				
	16.08.25	17.08.25	18.08.25	19.08.25	20.08.25
07:00 - 08:00	44.0	42.0	45.0	44.0	46.0
08:00 - 09:00	48.0	46.0	44.0	47.0	50.0
09:00 - 10:00	50.0	49.0	48.0	48.0	52.0
10:00 - 11:00	Funfair Operational				
11:00 - 12:00					
12:00 - 13:00					
13:00 - 14:00					
14:00 - 15:00					
15:00 - 16:00					
16:00 - 17:00					
17:00 - 18:00					
18:00 - 19:00					
19:00 - 20:00	51.0	50.0	47.0	48.0	49.0
20:00 - 21:00	46.0	45.0	46.0	45.0	47.0
21:00 - 22:00	42.0	42.0	40.0	42.0	43.0
22:00 - 23:00	41.0	41.0	39.0	41.0	41.0

The modal background noise level of L_{A90} 1 HOUR 48 dB has been evaluated from the hour before and hour after the funfair operational noise levels were captured.

13.3 Applicability to Funfair Rides

Funfair rides produce entertainment/recreational noise (engines, hydraulics, music, PA systems, screams, etc.). Strictly speaking, this type of source is not “industrial or commercial” in the narrow sense BS 4142 is designed for. The standard itself says it should not normally be applied to noise sources such as music and entertainment, people, recreational activities etc.

For funfairs, BS 8233 (guidance on sound insulation and noise reduction for buildings), the WHO Guidelines, or local authority event noise criteria are usually considered more relevant. Sometimes Code of Practice on Environmental Noise Control at Concerts (1995) is used for music/PA aspects. However, some consultants and local authorities have applied BS 4142 in a pragmatic way to assess mechanical noise from rides (motors, generators, etc.), treating them like industrial plant. But for music and general entertainment noise, BS 4142 is not appropriate and shouldn't be used.

In summary, BS 4142:2014+A1:2019 is not generally applicable to funfair rides because it excludes entertainment / recreational noise. It may be used only in a limited way for fixed mechanical plant (e.g. generators, motors), but not for amplified music or crowd noise.

13.4 Operational Noise Levels

The following noise levels have been recorded 1.0m from each of the rides and the assumption made that all rides will run continuously. These noise levels also included noise from patron and any associated background music.

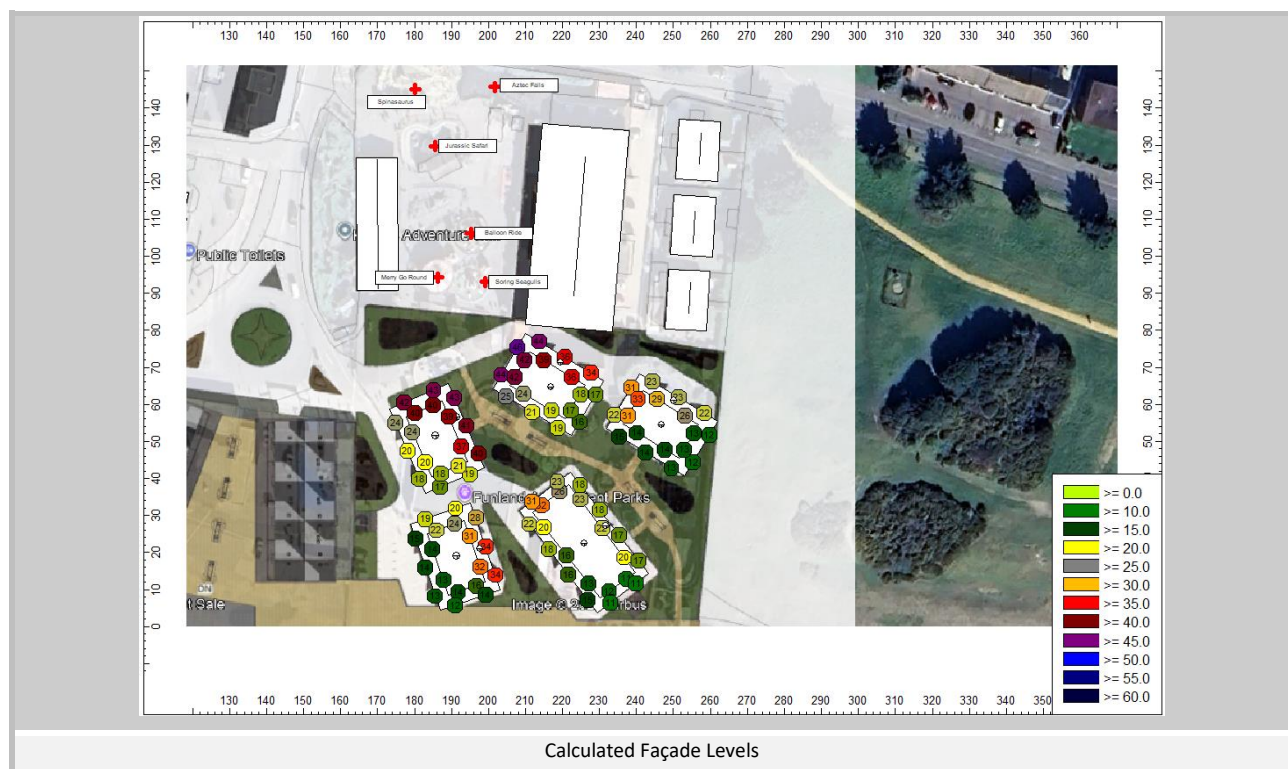
Ride Description	LAeq	Octave Band Centre Frequency (Hz)							
		63 Hz	125 Hz	250 Hz	500 Hz	1.0 kHz	2.0 kHz	4.0 kHz	8.0 kHz
The Soring Seagulls	70.2	71.9	68.4	67.6	67.4	64.8	63.1	56.0	52.2
Balloon Ride	62.0	70.0	67.8	61.9	57.8	57.9	52.6	48.1	41.5
Merry Go Round	65.1	70.0	68.4	61.0	60.0	61.4	57.6	53.1	45.6
Jurassic Safari	68.2	71.7	68.2	62.4	66.0	64.8	59.1	53.5	51.1
Aztec Falls	67.4	67.8	68.5	70.8	66.7	59.5	53.6	48.1	42.2
Spinosaurus	73.9	71.1	73.5	69.0	66.4	68.7	67.4	65.3	59.5

The above noise levels have been converted into sound power levels and inputted into the CADNA A 3D modelling software.

Ride Description	LAeq	Octave Band Centre Frequency (Hz)							
		63 Hz	125 Hz	250 Hz	500 Hz	1.0 kHz	2.0 kHz	4.0 kHz	8.0 kHz
The Soring Seagulls	81.2	82.9	79.4	78.6	78.4	75.8	74.1	67.0	63.2
Balloon Ride	73.0	81.0	78.8	72.9	68.8	68.9	63.6	59.1	52.5
Merry Go Round	76.1	81.0	79.4	72.0	71.0	72.4	68.6	64.1	56.6
Jurassic Safari	79.2	82.7	79.2	73.4	77.0	75.8	70.1	64.5	62.1
Aztec Falls	78.4	78.8	79.5	81.8	77.7	70.5	64.6	59.1	53.2
Spinosaurus	84.9	82.1	84.5	80.0	77.4	79.7	78.4	76.3	70.5

13.5 Calculated Façade Levels

The above inputted noise levels have calculated the following façade levels at the proposed residential development.



14 NOISE ASSESSMENT

14.1 Assessment Position

The assessment position 1 was established as the proposed residential accommodation premises.

14.2 Assessment Criterion

The significance of the resulting noise on the residential property depends on the margin by which it exceeds the background noise levels. I therefore consider the following.

Difference	Assessment of Impact
+10 dB	Indication of a significant adverse impact
+5 dB	Indication of an adverse impact
+0 dB	Indication of low impact

14.3 Assessments 11:00 – 17:00hrs

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Background Noise Level $L_{A90,1 \text{ hour}}$	48 dB
Assessment	-2 dB
Conclusion	The assessment level is 'Low Impact'

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Partially Open Window	-15 dB
Calculated Internal Noise Level	31 dB
BS8233: 2014 Criteria	35 dB
Assessment	-4 dB
Conclusion	The assessment level is 'Low Impact'

14.4 Assessment Conclusion

The background noise levels were measured at the equivalent position, chosen as it most represented the proposed closest noise sensitive façade to the existing funfair.

It can be seen from the above assessments that the proposed residential dwelling are likely to see noise levels associated with a 'Low Impact' and the probability of noise complaints from the funfair is Low. No other plant or activities were detected during our site visits and the noise level captured of the rides make up the overall noise levels associated and emanating from this funfair.

15 NPPF & NPSE

The National Planning Policy Framework 2024 (NPPF) and assessments to the Noise Policy Statement for England 2010 (NPSE) should be made in conjunction with each other. Paragraphs 198 - 201 of the National Planning Policy Framework 2024 (NPPF) states the following:

Paragraph 198 Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

- 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 life.
- 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.

Paragraph 199 Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications.

Paragraph 200 Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.

Paragraph 201 The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

The Noise Policy Statement for England gives various levels of effect as detailed within this report.

With the glazing / ventilation specifications achieved within this report, the development can be implemented within the guidelines of the aforementioned documents and ensure a conclusion of **NOEL – No Observed Effect Level**. This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

16 ACOUSTIC DESIGN STATEMENT

Good Acoustic Design	Given the size and orientation of the proposed site, it is recommended that the developer adopted, where practically possible, a good acoustic design which should include careful consideration of the positioning of the proposed properties together with thoughts being taken as to internal layouts to minimise noise sensitive rooms facing onto dominant noise sources within the local areas. Given the size of this development, every effort has already been made to minimise the acoustic impact from the surrounding areas.
Internal Noise Levels	Calculations have been carried out and assessments made to BS 8233: 2014 together with design specifications supplied for the required glazing and ventilation specifications required across the development to ensure compliance.
L _{Amax} dB Noise Levels	Assessments and calculations demonstrate that the L _{Amax} dB Levels are in excess of the recommended criteria set out within PRoPG and therefore further mitigation measures of MVHR on this site has been proposed and adopted in order to mitigate the need to open the windows.
External Living Areas	None
Commercial Noise	Noise assessments from the existing Funfair have indicated 'Low Impact' and that the complaints regarding noise are unlikely with a conclusion of 'Low Impact' on the proposed development.
NPPF & NPSE	With the glazing / ventilation specifications achieved within this report, the development can be implemented within the guidelines of the aforementioned documents and ensure a conclusion of NOEL – No Observed Effect Level. This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.
OVERALL OUTCOME	NOEL – No Observed Effect Level

17 RECOMMENDATION TO DECISION MAKER

Levels have been recorded and assessments made in accordance with the relevant standards. Internal criteria's have been set and calculations made in order to determine the minimum construction details required in order to meet the desired level within the proposed residential dwellings and satisfy the local council's requirements.

National Planning Policy Framework 2024 suggests that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the framework taken as a whole, or specific policies in the framework indicate the application should be restricted.

Based on the calculations and assessments made within this report it is the professional opinion of Impact Acoustics Ltd that the proposed development can demonstrate compliance with the National Planning Policy Framework 2024, NPPF & NPSE and that, with regards to sound, planning permission can be granted using the following parameters.

As indicated in Section 2 of PRoPG, following the PRoPG approach will lead to the choice of one of four possible recommendations from the noise practitioner to the decision maker:

- A. Planning consent may be granted without any need for noise conditions;
- B. Planning consent may be granted subject to the inclusion of suitable noise conditions;
- C. Planning consent should be refused on noise grounds in order to avoid significant adverse effects ("avoid"); or
- D. Planning consent should be refused on noise grounds in order to prevent unacceptable adverse effects ("prevent").

RECOMMENDATION TO DECISION MAKER

Grant with Noise Conditions

18 CONCLUSION

18.1 Summary of Results

A background noise survey was undertaken from 16th – 21st August 2025 at two positions on the site in order to establish the underlying background noise levels. The maximum day time levels were found to be $L_{Aeq, 16 \text{ hour}}$ 67.6 dB and the maximum night time levels were found to be $L_{Aeq, 8 \text{ hours}}$ 48.0 dB at position 1. The maximum day time levels were found to be $L_{Aeq, 16 \text{ hour}}$ 63.8 dB and the maximum night time levels were found to be $L_{Aeq, 8 \text{ hours}}$ 50.8 dB at position 2. The corresponding background noise levels was also found to be $L_{A90 \text{ 1 HOUR}}$ 56 dB for daytime and $L_{A90 \text{ 15 MINUTES}}$ 36 dB for night time.

Assessment Position	Date Start	Date Finish	Daytime LAeq	Night Time LAeq
Position 1	16/08/2025	21/08/2025	67.6	48.0
Position 2	16/08/2025	21/08/2025	63.8	50.8

Assessment Position	Date Start	Date Finish	Daytime LA90	Night Time LA90
Position 2	16/08/2025	21/08/2025	56.0	36.0

18.2 Potential Façade Noise Levels

18.2.1 Daytime (07:00-23:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 2 – Medium
Average Daytime (07:00-23:00)	$L_{Aeq, 16 \text{ HOUR}}$ 65 dB	63 – 70 dB

18.2.2 Night Time (23:00-07:00)

Time Period	Highest Potential Façade Noise Level	Noise Risk Category 1 – Low
Average Night Time (23:00-07:00)	$L_{Aeq, 16 \text{ HOUR}}$ 53 dB	40 – 55 dB
	Maximum (10 Times) – L_{Amax} 71.1 dB	>80 dB (10 Times in 8 Hours)

18.3 Risk Assessment

18.3.1 Daytime (07:00-23:00)

Risk Assessment Category	Risk Assessment
2 - Medium	As noise levels increase, the site is likely to be less suitable from a noise perspective and any subsequent application may be refused unless a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised, and which clearly demonstrate that a significant adverse noise impact will be avoided in the finished development.

18.3.2 Night Time (23:00-07:00)

Risk Assessment Category	Risk Assessment
1 – Low	At low noise levels, the site is likely to be acceptable from a noise perspective provided that a good acoustic design process is followed and is demonstrated in an ADS which confirms how the adverse impacts of noise will be mitigated and minimised in the finished development.

The above table demonstrates this site is located within Noise Risk Category 2 for daytime which suggests a medium level of risk and Noise Risk Category 1 for Night time which suggests a low level of risk and that mitigation levels will be required at Stage 2 along with a good acoustic design process.

18.4 Glazing & Ventilation Assessment

The development should be designed with an 8mm glass / 16mm Air Gap / 6mm Glass and an MVHR System 4 ventilation system to all facades illustrated in red and a 4mm glass / 16mm Air Gap / 4mm Glass and an MVHR System 4 ventilation system to all facades illustrated in orange, grey and yellow, as detailed in section 9.20, to ensure the internal noise levels are acceptable in terms of the assessment to British Standard 8233: 2014.

18.5 WHO Guidelines for Community Noise

The development proposes external living areas and therefore an assessment to the World Health Organisation's 'Guidelines for Community Noise' has been carried out. The guideline has been considered acceptable criteria for this assessment given the sites geographical location. The calculation demonstrates the external living spaces are likely to see noise levels below the upper guideline of 55 dB for a majority of the central section with only some areas to the north and south being exceeded.

18.6 Unfair Noise Assessment

18.6.1 Assessments 11:00 – 17:00hrs

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Background Noise Level $L_{A90,1 \text{ hour}}$	48 dB
Assessment	-2 dB
Conclusion	The assessment level is 'Low Impact'

Item	Calculation dB(A)
Calculated Façade Noise Level	46 dB
Partially Open Window	-15 dB
Calculated Internal Noise Level	31 dB
BS8233: 2014 Criteria	35 dB
Assessment	-4 dB
Conclusion	The assessment level is 'Low Impact'

18.6.2 Assessment Conclusion

The background noise levels were measured at the equivalent position, chosen as it most represented the proposed closest noise sensitive façade to the existing funfair.

It can be seen from the above assessments that the proposed residential dwelling are likely to see noise levels associated with a 'Low Impact' and the probability of noise complaints from the funfair is Low. No other plant or activities were detected during our site visits and the noise level captured of the rides make up the overall noise levels associated and emanating from this funfair.

18.7 Conclusions

18.7.1 Ambient Noise BS 8233: 2014

The dominant noise source on the overall site is road noise. Levels have been recorded and assessments made in accordance with the relevant standards. Internal criteria's have been set and calculations made in order to determine the minimum construction details required in order to meet the desired level within the proposed residential dwellings and satisfy the local council's requirements.

18.7.2 Planning Recommendation

National Planning Policy Framework 2024 suggests that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the framework taken as a whole, or specific policies in the framework indicate the application should be restricted.

Based on the calculations and assessments made within this report it is the professional opinion of Impact Acoustics Ltd that the proposed development can demonstrate compliance with the National Planning Policy Framework 2024, NPPF & NPSE and that, with regards to sound, planning permission can be granted.

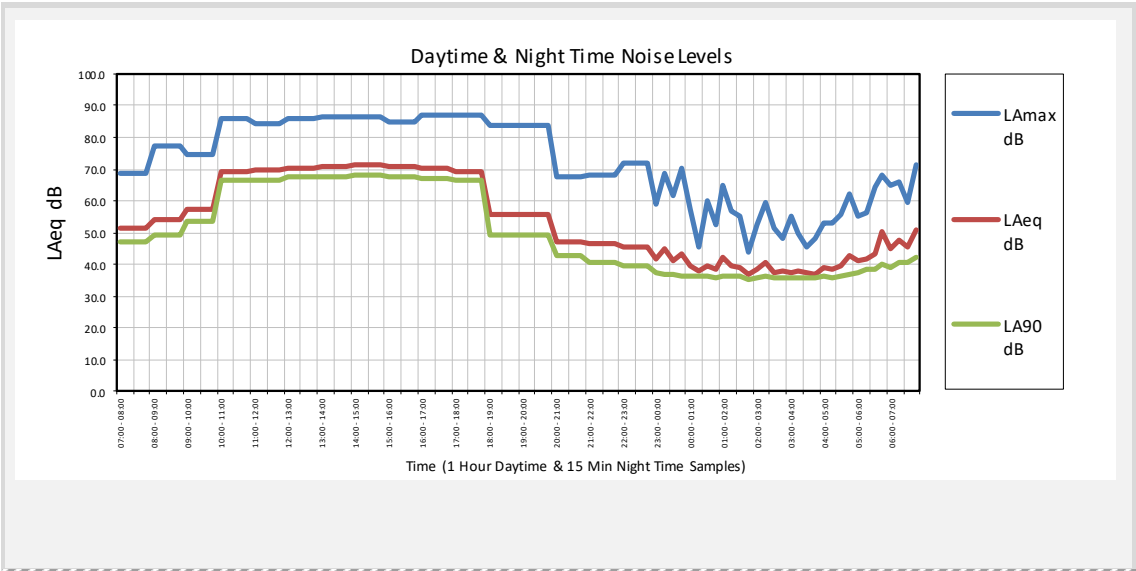
19 APPENDIX A - DOWNLOADED RESULTS

19.1 16th – 17th August 2025 Position 1

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	L _{Aeq}	L _{Amax}	L _{A90}	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>L_{Aeq} 16 HOUR & Cor r esponding L_{Amax} 16 HOUR</small>	67.6	87.2	67.0	73.1	70.8	64.3	63.9	63.3	60.2	53.3	49.5	40.7
NIGHT TIME 23:00 - 07:00 <small>L_{Aeq} 8 HOUR & Cor r esponding L_{Amax} 8 HOUR</small>	43.5	71.4	36.0	52.0	48.2	44.4	40.8	38.0	33.7	27.8	26.0	30.4

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	L _{Aeq}	L _{Amax}	L _{A90}	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	51.6	48.8	47.3	60.6	59.1	52.6	48.5	46.9	41.0	34.6	32.9	33.6
08:00 - 09:00	54.1	77.4	49.4	59.4	54.3	52.1	52.1	49.8	44.9	40.4	36.0	34.0
09:00 - 10:00	57.6	74.7	53.5	64.1	60.8	55.8	54.7	53.3	49.6	42.7	37.9	33.5
10:00 - 11:00	69.4	86.0	66.4	75.6	73.5	67.1	66.2	65.0	61.7	54.8	51.1	42.2
11:00 - 12:00	69.7	84.2	66.6	75.8	73.4	66.9	66.3	65.6	62.0	55.2	51.8	43.1
12:00 - 13:00	70.5	85.8	67.4	76.6	74.0	67.1	66.9	66.3	63.3	56.2	52.7	43.9
13:00 - 14:00	70.7	86.6	67.6	77.0	74.0	66.6	67.0	66.8	63.5	56.7	51.1	41.9
14:00 - 15:00	71.5	86.3	68.4	76.4	74.1	67.2	67.5	67.5	64.7	57.7	52.8	43.6
15:00 - 16:00	71.0	84.6	67.8	76.3	73.5	67.0	67.2	67.0	64.1	56.9	52.9	43.6
16:00 - 17:00	70.4	87.0	67.2	75.5	73.9	68.1	67.0	65.8	63.1	56.2	53.3	43.8
17:00 - 18:00	69.4	87.2	66.3	75.0	73.7	67.7	66.3	65.0	61.4	55.2	53.0	44.5
18:00 - 19:00	55.9	84.0	49.0	58.4	55.2	51.3	52.7	52.2	48.3	42.4	36.6	32.2
19:00 - 20:00	46.9	67.4	42.9	54.0	50.3	45.7	43.4	43.5	37.7	28.8	26.2	30.5
20:00 - 21:00	46.5	67.9	40.7	52.7	49.1	46.1	44.7	42.4	36.6	28.9	25.9	30.5
21:00 - 22:00	45.5	71.7	39.7	51.0	47.7	45.6	44.2	41.1	34.8	27.0	25.5	30.4
22:00 - 23:00	40.2	60.4	36.8	49.2	43.8	38.8	37.0	36.8	31.2	25.8	25.5	30.5

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	L _{Aeq}	L _{Amax}	L _{A90}	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	41.7	58.7	37.2	51.1	44.7	40.7	38.7	38.2	32.5	26.0	25.5	30.4
23:15 - 23:30	44.7	68.5	36.8	52.3	51.1	46.4	44.1	38.8	32.0	25.7	25.4	30.4
23:30 - 23:45	41.4	61.6	36.6	50.1	45.0	40.2	38.9	37.8	31.6	25.4	25.3	30.4
23:45 - 00:00	43.4	70.3	36.5	52.4	49.7	44.5	41.8	38.4	31.9	25.6	25.3	30.4
00:00 - 00:15	39.3	57.5	36.3	52.2	45.5	39.8	37.2	34.4	29.1	25.1	25.3	30.4
00:15 - 00:30	37.8	45.6	36.4	50.8	43.6	38.0	35.2	32.9	28.5	25.1	25.2	30.4
00:30 - 00:45	39.7	60.0	36.4	51.9	45.0	39.6	36.9	35.4	30.2	25.2	25.2	30.4
00:45 - 01:00	38.5	52.6	35.7	48.3	41.8	37.5	35.7	34.5	29.9	25.3	25.2	30.4
01:00 - 01:15	42.4	65.0	36.4	50.6	46.9	45.9	41.3	34.0	29.9	25.6	25.3	30.4
01:15 - 01:30	39.5	56.8	36.1	48.1	41.5	37.9	36.6	36.2	30.4	25.4	25.2	30.4
01:30 - 01:45	39.0	55.0	36.4	48.5	41.3	38.1	36.0	35.2	30.7	25.2	25.2	30.4
01:45 - 02:00	36.6	43.7	35.4	48.3	40.9	36.8	34.7	31.5	27.5	25.0	25.2	30.4
02:00 - 02:15	38.7	52.3	36.0	50.6	41.8	37.7	36.0	34.7	29.9	25.5	25.2	30.4
02:15 - 02:30	40.8	59.5	36.3	51.6	43.5	43.9	39.6	33.5	29.2	25.3	25.2	30.4
02:30 - 02:45	37.3	51.4	35.6	50.7	40.5	37.4	35.6	32.1	27.8	25.0	25.2	30.4
02:45 - 03:00	37.7	48.0	35.8	48.5	40.3	37.6	35.7	32.9	29.0	25.3	25.2	30.4
03:00 - 03:15	37.5	54.9	35.8	48.9	40.7	37.5	35.8	32.6	28.3	25.1	25.2	30.4
03:15 - 03:30	38.0	50.0	35.8	48.4	40.5	37.5	35.7	33.8	29.0	25.0	25.2	30.4
03:30 - 03:45	37.3	45.5	35.7	49.0	40.8	37.9	35.1	32.6	27.8	24.8	25.2	30.4
03:45 - 04:00	37.0	47.9	35.6	48.6	40.5	37.2	35.2	32.0	27.6	24.8	25.2	30.4
04:00 - 04:15	38.8	53.0	36.1	49.1	40.7	37.2	36.0	35.0	30.4	25.5	25.3	30.4
04:15 - 04:30	38.6	53.2	35.6	49.3	41.0	37.6	35.3	33.8	32.0	25.5	25.3	30.4
04:30 - 04:45	39.4	55.5	36.2	48.8	40.8	37.5	35.9	35.4	31.9	26.4	25.3	30.4
04:45 - 05:00	42.8	62.3	36.8	49.3	42.5	37.7	37.2	37.1	38.8	27.7	26.4	30.4
05:00 - 05:15	41.2	55.2	37.2	52.5	47.5	42.5	37.9	36.4	32.2	26.0	25.5	30.4
05:15 - 05:30	41.9	56.2	38.3	50.2	42.9	38.5	38.1	38.4	34.3	28.2	27.0	30.4
05:30 - 05:45	43.2	64.5	38.3	51.8	48.2	43.5	38.1	38.0	36.2	31.5	28.2	30.5
05:45 - 06:00	50.1	67.9	40.3	59.0	57.3	54.3	49.2	42.3	37.2	28.0	26.7	30.4
06:00 - 06:15	45.1	64.7	39.3	51.3	43.5	39.7	39.2	41.2	39.4	31.2	28.5	30.4
06:15 - 06:30	47.5	66.0	40.7	56.6	53.8	49.4	45.4	41.3	38.2	32.1	28.5	30.4
06:30 - 06:45	45.4	59.7	40.8	54.7	53.3	43.5	40.5	41.6	37.0	30.6	25.9	30.4
06:45 - 07:00	51.1	71.4	42.0	56.6	55.2	52.4	49.1	46.8	40.1	35.7	28.2	30.4

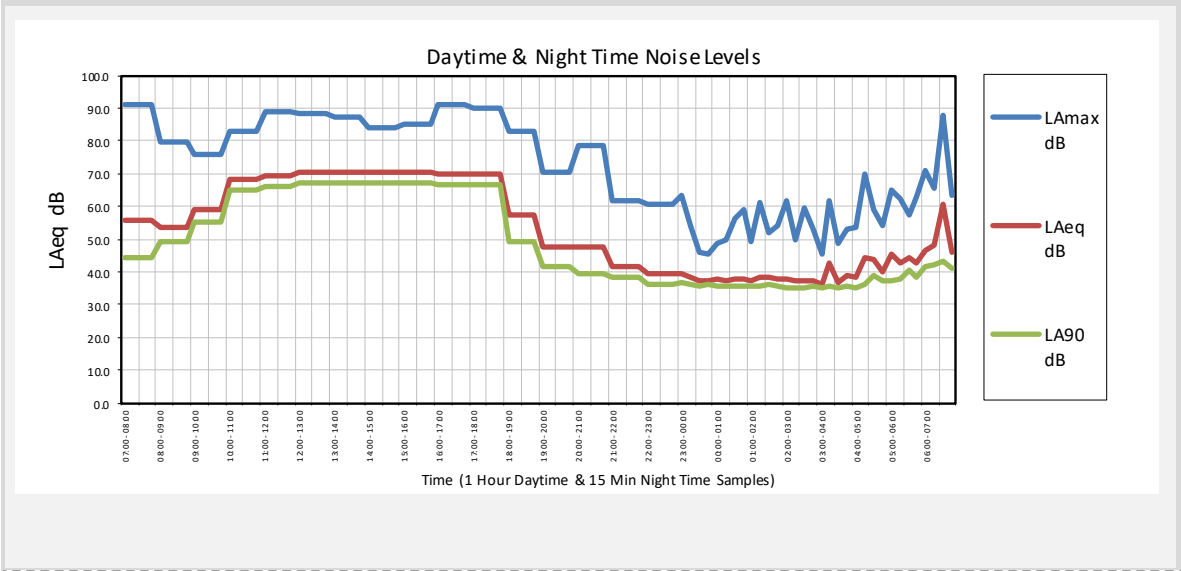


19.2 17th – 18th August 2025 Position 1

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Corresponding LAmaz 16 HOUR</small>	67.1	91.2	67.0	73.0	70.6	64.1	63.1	62.6	60.3	53.4	48.0	39.1
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Corresponding LAmaz 8 HOUR</small>	47.0	87.8	36.0	50.5	45.2	42.1	41.4	41.2	40.7	38.7	33.7	31.9

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	55.9	91.2	44.6	60.9	60.3	55.3	51.5	49.2	48.7	47.1	43.1	36.8
08:00 - 09:00	53.6	80.0	49.3	58.7	56.0	51.8	51.4	50.2	42.2	38.2	34.1	31.7
09:00 - 10:00	58.9	76.1	55.4	68.9	65.5	58.8	55.1	53.8	51.0	42.5	38.2	33.5
10:00 - 11:00	68.5	82.7	65.3	76.1	73.4	66.3	64.8	63.9	61.6	53.8	48.4	39.4
11:00 - 12:00	69.1	88.9	65.9	76.4	73.9	66.8	65.4	64.7	62.0	54.8	49.4	40.4
12:00 - 13:00	70.5	88.2	67.0	76.6	74.9	67.1	66.1	65.7	64.4	57.1	50.9	41.3
13:00 - 14:00	70.5	87.5	67.5	75.0	72.8	67.2	66.5	66.0	63.9	57.0	51.7	42.1
14:00 - 15:00	70.2	84.0	67.0	74.2	72.0	66.4	66.3	66.1	63.3	56.5	51.3	41.9
15:00 - 16:00	70.6	85.1	67.4	75.7	72.8	67.4	66.3	66.1	64.1	57.8	51.6	42.1
16:00 - 17:00	69.9	90.9	66.9	76.0	73.6	66.7	65.6	65.8	62.8	55.9	51.0	42.2
17:00 - 18:00	69.9	89.9	66.5	76.2	73.9	67.2	66.2	65.6	62.7	55.6	51.5	42.2
18:00 - 19:00	57.6	82.8	49.5	58.1	55.6	52.3	52.9	52.8	52.0	45.4	40.5	33.5
19:00 - 20:00	47.7	70.7	41.5	54.7	52.0	48.3	46.0	43.1	37.1	29.9	26.6	30.6
20:00 - 21:00	47.6	78.8	39.3	51.3	46.0	46.0	46.5	44.0	35.2	27.9	25.7	30.5
21:00 - 22:00	41.7	61.8	38.4	50.2	44.9	40.2	38.4	38.3	32.8	27.5	26.4	30.5
22:00 - 23:00	39.4	60.8	36.4	49.3	44.3	39.2	36.8	35.0	30.0	26.2	26.1	30.5

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	39.4	63.3	36.8	49.6	42.0	38.8	36.5	34.8	30.4	27.9	26.8	30.6
23:15 - 23:30	38.4	54.2	36.4	48.5	42.2	38.6	36.0	33.7	29.3	26.6	26.1	30.5
23:30 - 23:45	37.3	46.2	35.7	48.4	40.9	37.3	35.1	32.7	27.9	25.2	25.5	30.5
23:45 - 00:00	37.4	45.5	36.0	49.8	43.4	38.1	35.2	32.3	27.3	25.0	25.3	30.5
00:00 - 00:15	37.8	49.0	35.9	50.6	43.2	38.3	35.3	32.8	28.0	25.2	25.4	30.5
00:15 - 00:30	37.4	50.0	35.5	48.8	41.9	37.6	35.0	32.7	28.1	25.2	25.5	30.5
00:30 - 00:45	37.9	56.6	35.8	47.9	41.2	37.2	35.5	33.3	29.0	26.5	26.1	30.5
00:45 - 01:00	37.8	59.1	35.6	48.0	40.9	37.6	35.3	33.2	28.7	26.3	25.9	30.5
01:00 - 01:15	37.5	49.2	35.6	49.0	41.1	37.6	35.0	32.5	28.4	26.3	25.9	30.5
01:15 - 01:30	38.2	61.1	35.7	48.4	41.1	37.4	35.6	33.4	29.8	27.5	26.4	30.5
01:30 - 01:45	38.4	52.2	36.2	48.9	41.0	37.8	35.7	33.4	30.0	27.6	26.5	30.5
01:45 - 02:00	37.7	54.1	35.7	47.7	40.5	37.7	35.2	33.3	28.6	25.7	25.7	30.5
02:00 - 02:15	37.9	61.8	35.3	47.4	40.5	38.0	35.7	32.7	29.5	26.5	25.9	30.5
02:15 - 02:30	37.1	49.9	35.2	46.8	39.8	37.3	34.7	32.7	27.8	25.5	25.6	30.5
02:30 - 02:45	37.2	59.8	35.3	47.5	40.3	37.5	34.9	32.6	28.0	26.0	25.8	30.5
02:45 - 03:00	37.4	53.3	35.5	47.4	40.3	37.1	35.1	32.6	28.3	26.2	25.9	30.5
03:00 - 03:15	36.4	45.5	35.0	46.6	39.9	37.5	34.3	31.3	26.9	25.3	25.6	30.5
03:15 - 03:30	42.7	61.7	35.5	53.2	51.7	47.5	41.2	33.8	27.8	25.2	25.5	30.5
03:30 - 03:45	36.9	48.7	35.2	47.9	40.0	37.2	34.5	32.3	28.1	25.5	25.6	30.5
03:45 - 04:00	39.0	52.8	35.8	48.0	42.8	41.2	37.2	34.0	28.1	25.0	25.4	30.5
04:00 - 04:15	38.3	53.9	35.4	49.4	46.2	40.3	35.4	32.8	28.2	25.2	25.4	30.5
04:15 - 04:30	44.5	70.0	36.2	48.4	40.4	37.7	35.9	39.3	40.6	30.9	28.6	30.5
04:30 - 04:45	43.6	59.0	39.0	51.9	47.4	44.5	40.6	39.1	34.7	29.6	27.8	30.5
04:45 - 05:00	40.2	54.1	37.2	51.9	44.6	39.2	36.7	36.5	31.3	26.1	25.8	30.5
05:00 - 05:15	45.6	65.1	37.5	51.1	44.0	41.1	37.4	39.6	37.5	40.5	31.2	30.5
05:15 - 05:30	42.8	62.4	37.8	50.2	45.3	40.8	37.0	38.0	35.3	34.4	27.2	30.5
05:30 - 05:45	44.4	57.5	40.4	53.8	49.5	46.4	42.3	39.4	34.0	28.1	27.0	30.5
05:45 - 06:00	42.5	63.1	38.6	50.1	43.5	39.7	38.1	39.2	34.9	28.4	27.3	30.5
06:00 - 06:15	46.8	70.8	41.4	54.9	48.5	44.6	43.7	42.3	38.3	35.4	33.2	31.8
06:15 - 06:30	48.0	65.6	42.0	52.8	47.4	45.8	44.2	43.1	39.9	39.7	33.4	31.2
06:30 - 06:45	60.4	87.8	43.4	55.5	52.5	50.8	53.9	54.4	54.9	52.9	47.6	41.5
06:45 - 07:00	45.9	63.4	41.0	52.9	45.2	42.7	41.6	42.4	38.4	34.1	28.0	30.5

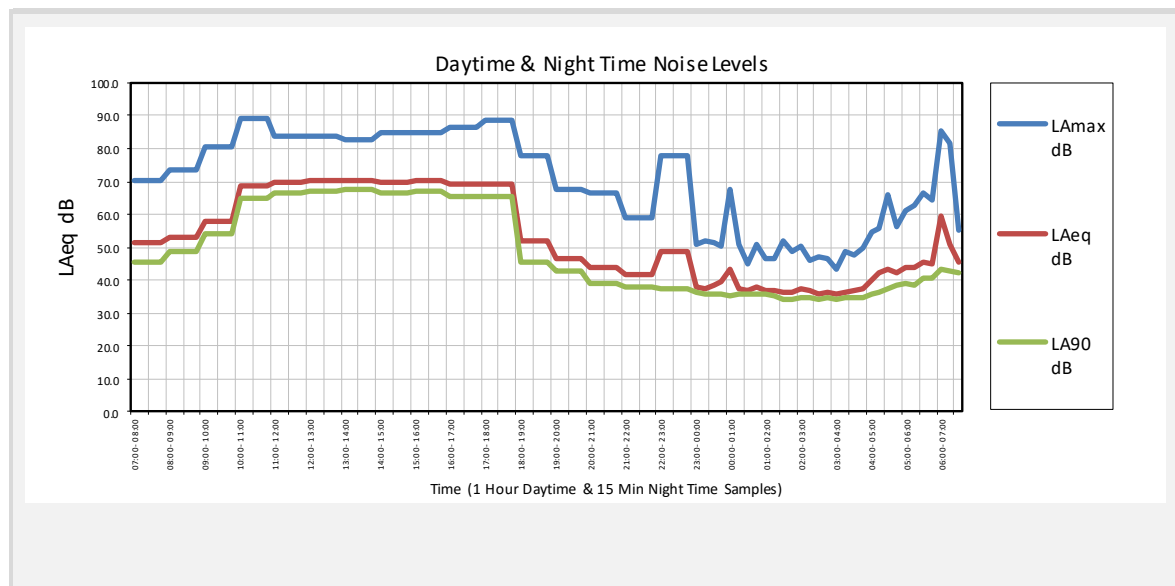


19.3 18th – 19th August 2025 Position 1

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Corresponding LAmaz 16 HOUR</small>	66.9	89.4	67.0	73.7	71.9	64.5	62.8	62.4	59.5	52.2	47.9	39.4
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Corresponding LAmaz 8 HOUR</small>	46.5	85.2	36.0	51.4	45.8	42.0	41.0	41.4	40.4	37.1	31.6	30.9

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	51.3	70.5	45.3	60.2	59.1	52.6	48.6	46.2	40.6	35.9	33.8	32.2
08:00 - 09:00	52.8	73.6	48.9	57.6	53.0	50.7	51.3	48.8	42.5	38.1	35.2	33.2
09:00 - 10:00	57.9	80.4	54.3	66.5	64.6	58.4	54.8	52.7	48.8	42.6	40.8	34.5
10:00 - 11:00	68.5	89.4	65.1	76.4	74.6	66.3	64.9	63.8	61.4	54.0	48.9	40.3
11:00 - 12:00	69.7	84.0	66.5	76.2	75.1	67.2	65.5	65.2	62.8	55.2	51.5	41.7
12:00 - 13:00	70.3	84.0	67.0	76.8	75.6	67.3	66.0	66.0	63.5	55.3	51.0	42.0
13:00 - 14:00	70.4	82.7	67.3	77.9	75.8	67.1	66.3	66.3	62.9	55.8	50.3	41.4
14:00 - 15:00	69.9	84.8	66.6	76.6	74.2	67.1	65.9	66.1	62.3	55.2	51.1	42.8
15:00 - 16:00	70.1	84.6	67.0	77.1	74.6	68.4	66.3	66.1	62.2	55.3	52.0	43.7
16:00 - 17:00	69.2	86.3	65.7	76.5	74.7	68.1	65.2	64.4	62.2	55.0	49.7	40.5
17:00 - 18:00	69.2	88.7	65.6	75.2	73.3	67.6	65.2	64.4	62.3	55.1	51.4	42.2
18:00 - 19:00	51.9	77.6	45.3	56.0	52.5	50.3	48.9	47.3	43.8	40.3	36.4	32.3
19:00 - 20:00	46.7	67.5	42.7	52.9	48.1	45.6	42.6	43.3	38.7	30.9	26.7	30.5
20:00 - 21:00	43.7	66.7	39.2	50.6	45.3	43.3	41.7	40.0	34.4	26.6	25.5	30.5
21:00 - 22:00	41.9	59.2	37.8	49.7	44.4	41.2	37.7	38.6	33.4	26.1	25.4	30.4
22:00 - 23:00	48.5	77.8	37.2	48.9	43.7	48.1	47.9	44.4	34.3	26.9	25.5	30.4

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	38.1	50.6	36.3	48.5	42.4	39.5	34.9	33.6	28.8	25.3	25.4	30.4
23:15 - 23:30	37.6	52.2	35.7	50.0	42.8	39.0	34.4	33.2	27.8	24.6	25.3	30.4
23:30 - 23:45	38.6	51.6	36.0	49.5	42.7	39.0	35.2	34.7	29.1	25.1	25.3	30.4
23:45 - 00:00	39.5	50.5	35.9	49.2	45.1	42.8	36.7	34.1	28.6	24.8	25.3	30.4
00:00 - 00:15	43.2	67.4	35.3	48.2	45.0	39.7	40.0	40.4	34.1	25.6	25.3	30.4
00:15 - 00:30	37.5	50.8	35.6	50.1	44.8	38.5	34.6	32.5	27.9	24.7	25.2	30.4
00:30 - 00:45	36.9	45.0	35.6	50.1	43.9	39.0	33.6	31.4	27.2	24.6	25.2	30.4
00:45 - 01:00	38.1	50.8	35.6	50.4	44.2	38.6	35.0	33.3	29.0	25.4	25.3	30.4
01:00 - 01:15	37.1	46.7	35.7	53.1	44.5	38.4	33.8	31.2	27.4	24.9	25.3	30.4
01:15 - 01:30	36.7	46.3	35.4	52.3	43.4	37.8	33.7	31.1	27.2	24.8	25.3	30.4
01:30 - 01:45	36.3	51.8	34.4	52.2	42.0	36.8	33.4	31.2	26.8	25.0	25.4	30.4
01:45 - 02:00	36.2	48.7	34.3	51.4	41.8	36.7	33.4	31.2	26.9	25.0	25.4	30.4
02:00 - 02:15	37.6	50.6	34.8	50.0	41.1	37.7	34.8	32.9	29.0	25.5	25.5	30.4
02:15 - 02:30	36.8	45.9	34.8	49.6	41.2	37.7	33.5	32.2	27.8	25.0	25.4	30.4
02:30 - 02:45	36.0	47.4	34.3	49.9	40.9	37.6	33.3	30.9	26.3	24.7	25.3	30.4
02:45 - 03:00	36.2	46.6	34.6	51.5	41.8	37.7	33.3	30.6	26.6	25.1	25.5	30.4
03:00 - 03:15	35.5	43.6	34.3	49.3	40.6	37.5	33.1	29.9	26.1	24.9	25.4	30.4
03:15 - 03:30	36.5	48.7	34.5	48.2	40.3	37.2	33.8	32.0	27.3	24.7	25.3	30.4
03:30 - 03:45	36.6	47.4	34.6	48.5	41.1	37.6	33.6	32.0	27.9	24.8	25.3	30.4
03:45 - 04:00	37.2	49.6	34.8	47.7	40.5	38.1	33.7	33.2	28.5	24.8	25.3	30.4
04:00 - 04:15	39.9	54.5	35.7	53.6	50.6	44.2	35.4	31.5	28.5	24.9	25.3	30.4
04:15 - 04:30	42.0	55.8	36.6	50.1	42.1	38.9	37.0	39.3	34.1	26.5	25.6	30.4
04:30 - 04:45	43.2	66.1	37.1	50.4	44.4	41.4	37.9	37.1	38.3	31.6	27.0	30.4
04:45 - 05:00	42.5	56.4	38.4	50.0	44.2	41.2	39.1	38.8	34.3	27.1	25.5	30.4
05:00 - 05:15	43.7	61.2	38.9	50.5	46.4	43.7	40.6	38.7	34.7	34.2	27.5	30.4
05:15 - 05:30	43.8	62.7	38.4	50.3	46.1	45.0	40.0	38.7	33.8	35.6	28.6	30.5
05:30 - 05:45	45.4	66.4	40.8	52.2	50.9	43.7	41.5	41.7	37.1	29.1	26.9	30.4
05:45 - 06:00	45.2	64.3	40.6	50.4	44.4	41.1	40.2	41.9	37.5	32.4	31.2	31.3
06:00 - 06:15	59.5	85.2	43.1	57.2	53.5	50.3	53.2	54.0	54.0	51.1	44.9	37.0
06:15 - 06:30	50.9	81.5	42.6	52.9	47.0	45.6	44.2	45.0	45.9	41.9	34.4	30.9
06:30 - 06:45	45.6	54.9	42.3	53.1	47.4	43.4	41.0	42.6	37.5	28.3	26.0	30.4
06:45 - 07:00	47.6	63.7	44.0	55.3	50.0	46.1	43.8	44.5	39.2	29.0	26.3	30.5

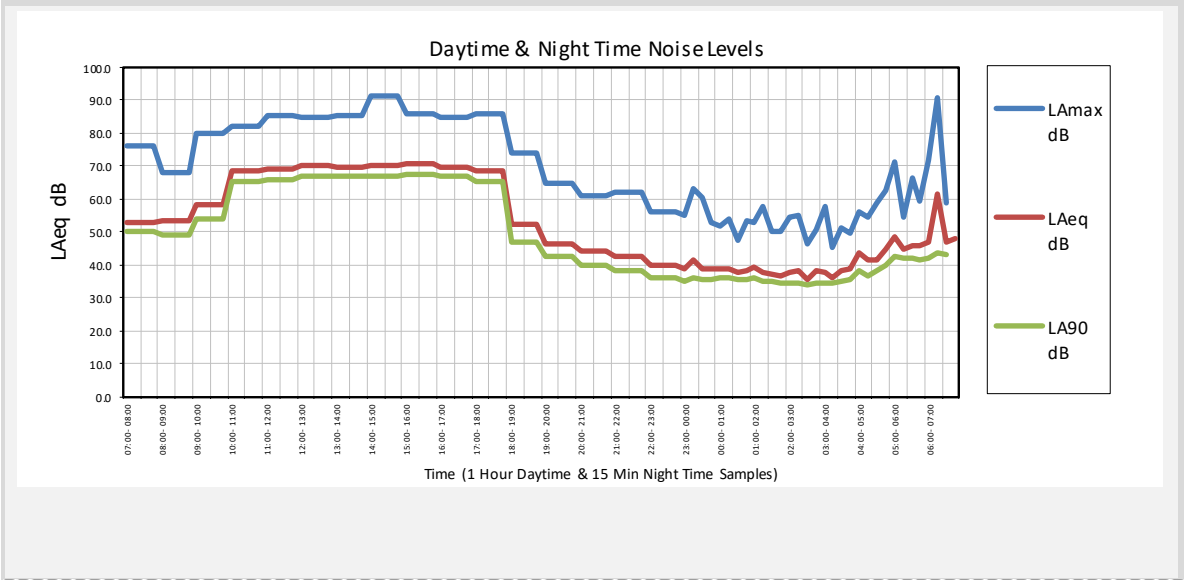


19.4 19th – 20th August 2025 Position 1

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Corresponding LAmaz 16 HOUR</small>	66.7	91.2	67.0	73.1	70.9	64.3	62.6	62.3	59.4	52.5	47.5	38.1
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Corresponding LAmaz 8 HOUR</small>	48.0	90.8	36.0	52.4	45.5	41.2	41.6	41.9	41.8	40.7	36.6	32.8

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	53.0	76.2	49.9	56.4	51.7	48.2	51.9	49.3	41.9	36.5	33.9	31.5
08:00 - 09:00	53.4	67.8	49.1	61.8	59.9	54.2	51.2	48.6	42.5	37.9	35.0	31.9
09:00 - 10:00	58.4	79.9	53.9	66.5	64.0	56.5	55.1	54.3	50.0	43.9	37.8	34.5
10:00 - 11:00	68.5	82.2	65.4	76.2	73.1	66.1	64.8	64.0	61.6	54.1	47.9	38.7
11:00 - 12:00	69.0	85.5	65.9	75.0	73.0	66.9	64.8	64.8	61.9	54.4	48.8	39.8
12:00 - 13:00	69.9	84.9	66.8	76.1	73.9	66.8	65.8	65.7	62.8	55.8	50.4	40.8
13:00 - 14:00	69.7	85.2	66.6	76.6	74.2	66.8	65.8	65.5	62.4	55.4	49.6	40.8
14:00 - 15:00	69.9	91.2	66.7	75.5	73.5	67.5	65.9	65.9	62.6	55.4	51.0	41.2
15:00 - 16:00	70.5	85.9	67.2	76.0	74.1	68.2	66.5	66.4	63.4	56.4	50.8	40.9
16:00 - 17:00	69.8	84.9	66.8	76.8	74.5	67.9	65.8	65.2	62.6	56.5	52.4	41.8
17:00 - 18:00	68.5	85.8	65.3	75.5	73.7	67.0	64.6	64.0	61.0	54.6	50.7	40.4
18:00 - 19:00	52.3	73.8	46.6	55.2	52.5	49.1	49.1	48.6	44.1	39.2	33.9	31.4
19:00 - 20:00	46.4	64.9	42.5	54.0	49.5	44.4	42.8	43.3	37.5	28.9	26.3	30.6
20:00 - 21:00	44.4	61.0	40.0	52.8	46.9	43.3	40.6	41.1	35.8	28.3	26.3	30.6
21:00 - 22:00	42.4	61.9	38.3	51.6	46.7	40.5	38.4	39.1	33.7	27.3	26.1	30.5
22:00 - 23:00	39.6	56.2	36.2	50.3	43.9	38.7	35.7	36.0	31.1	26.5	25.8	30.5

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	38.8	54.9	35.1	49.0	42.6	37.7	35.6	35.0	29.9	25.7	25.4	30.4
23:15 - 23:30	41.3	63.0	36.2	53.7	46.2	40.4	38.5	37.4	31.2	26.0	25.6	30.4
23:30 - 23:45	38.5	60.1	35.6	52.2	44.7	38.8	35.0	33.0	29.6	27.6	26.5	30.5
23:45 - 00:00	38.9	52.9	35.5	52.4	43.4	38.0	35.2	34.7	30.6	26.8	25.9	30.5
00:00 - 00:15	38.6	51.9	35.9	51.5	44.7	38.5	35.3	34.1	29.2	26.0	25.6	30.4
00:15 - 00:30	38.8	53.8	35.8	51.5	44.6	40.0	36.2	33.9	28.9	25.5	25.4	30.4
00:30 - 00:45	37.5	47.5	35.4	50.1	42.6	37.5	34.5	32.9	28.7	25.4	25.4	30.4
00:45 - 01:00	38.2	53.6	35.7	52.9	44.3	37.5	34.8	32.9	29.7	27.4	26.2	30.4
01:00 - 01:15	39.3	52.9	35.9	53.3	43.4	38.0	35.8	34.9	30.9	27.2	26.1	30.5
01:15 - 01:30	37.4	57.8	34.9	52.4	45.0	37.8	34.2	31.5	28.0	26.5	26.0	30.5
01:30 - 01:45	37.1	49.9	35.0	50.7	41.8	37.3	34.2	32.0	28.0	26.0	25.7	30.4
01:45 - 02:00	36.6	50.2	34.4	50.0	42.1	36.6	33.7	31.5	27.9	25.6	25.5	30.4
02:00 - 02:15	37.6	54.4	34.3	48.7	40.8	36.9	34.9	33.1	29.2	25.7	25.4	30.4
02:15 - 02:30	38.0	54.9	34.5	50.4	41.0	36.8	34.8	34.1	29.2	26.0	25.6	30.4
02:30 - 02:45	35.7	46.3	33.9	47.4	40.1	35.9	33.3	31.0	26.7	24.7	25.2	30.4
02:45 - 03:00	38.0	50.5	34.6	48.9	41.1	37.5	34.4	34.1	29.5	25.4	25.4	30.4
03:00 - 03:15	37.8	57.7	34.6	49.4	44.7	37.7	35.9	32.7	27.6	25.5	25.4	30.4
03:15 - 03:30	35.9	45.2	34.3	47.3	40.1	36.1	33.7	31.2	26.6	25.0	25.2	30.4
03:30 - 03:45	38.0	51.3	34.8	48.5	41.6	36.9	35.1	34.1	29.4	25.6	25.3	30.4
03:45 - 04:00	38.8	49.4	35.6	48.8	41.0	37.2	35.0	35.2	30.9	25.7	25.2	30.4
04:00 - 04:15	43.5	55.9	38.2	52.6	45.0	41.3	39.9	39.9	35.3	30.8	27.8	30.4
04:15 - 04:30	41.2	54.3	36.5	49.5	41.9	37.9	36.8	38.3	33.4	26.5	25.4	30.4
04:30 - 04:45	41.5	58.6	38.4	52.1	45.0	40.4	37.7	37.4	33.5	28.3	25.8	30.4
04:45 - 05:00	44.4	62.5	39.6	53.2	45.2	40.9	39.2	41.0	37.5	31.1	26.8	30.4
05:00 - 05:15	48.5	71.4	42.5	55.3	47.8	43.0	41.0	44.2	41.7	40.3	30.7	30.5
05:15 - 05:30	44.4	54.5	42.0	56.7	47.0	41.6	40.2	40.7	36.1	33.1	27.3	30.4
05:30 - 05:45	45.6	66.1	41.9	53.7	48.3	43.5	41.0	42.0	38.5	29.9	26.8	30.5
05:45 - 06:00	45.9	59.5	41.5	53.3	48.6	43.1	41.8	42.8	37.6	29.5	26.5	30.4
06:00 - 06:15	47.1	72.0	42.0	54.2	48.2	44.7	42.3	43.2	39.4	35.9	31.8	31.0
06:15 - 06:30	61.7	90.8	43.4	55.1	51.2	49.3	54.0	54.2	55.9	55.3	51.1	44.2
06:30 - 06:45	46.9	58.6	43.1	53.5	48.9	44.6	43.0	43.5	38.6	32.1	29.8	30.4
06:45 - 07:00	47.9	62.7	44.3	55.8	49.3	45.3	44.0	44.7	39.5	32.0	29.1	30.4

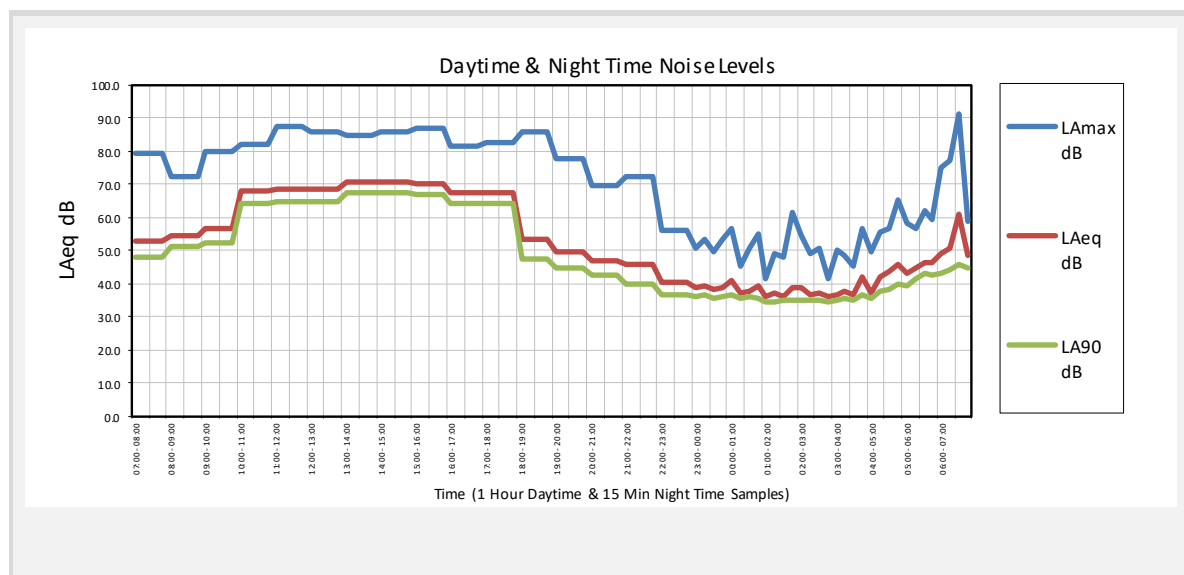


19.5 20th – 21st August 2025 Position 1

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Cor r esponding LAmaz 16 HOUR</small>	66.2	87.3	64.0	71.8	69.0	62.8	62.4	62.0	59.0	52.0	46.0	37.2
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Cor r esponding LAmaz 8 HOUR</small>	47.6	91.2	35.0	51.8	47.0	41.7	42.0	41.7	40.7	39.9	35.7	32.3

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	52.6	79.1	47.9	61.0	58.8	53.3	49.9	47.9	42.9	37.1	33.1	31.5
08:00 - 09:00	54.6	72.4	51.4	60.0	55.4	51.6	53.4	50.5	44.2	38.1	34.0	31.9
09:00 - 10:00	56.6	79.7	52.5	62.8	59.8	53.9	53.0	52.9	48.4	42.2	37.4	33.6
10:00 - 11:00	67.8	82.1	64.0	74.0	71.8	64.8	64.3	63.7	60.3	53.7	46.2	38.1
11:00 - 12:00	68.5	87.3	64.7	74.2	72.0	64.7	65.0	64.3	61.2	54.3	46.8	38.8
12:00 - 13:00	68.7	85.7	65.0	74.6	71.9	64.9	64.9	64.5	62.0	54.1	46.7	38.6
13:00 - 14:00	70.7	84.8	67.3	76.1	73.1	66.1	66.6	66.9	63.9	56.5	49.2	39.9
14:00 - 15:00	70.5	86.0	67.2	76.4	72.7	66.0	66.4	66.4	63.8	56.4	50.0	40.8
15:00 - 16:00	69.9	87.1	67.0	74.6	71.9	66.3	66.0	65.9	62.9	56.2	50.5	40.9
16:00 - 17:00	67.3	81.7	64.2	73.1	70.8	65.7	63.9	62.9	59.9	53.3	49.1	39.1
17:00 - 18:00	67.5	82.5	64.1	73.1	70.9	66.4	64.6	62.9	59.6	53.6	49.9	39.8
18:00 - 19:00	53.1	86.0	47.5	55.7	51.4	48.4	49.2	49.1	45.3	42.0	38.7	33.4
19:00 - 20:00	49.7	77.8	44.6	56.3	54.1	47.4	46.5	46.5	40.4	30.9	26.4	30.5
20:00 - 21:00	46.9	69.5	42.3	53.3	48.1	45.3	44.7	43.3	37.7	28.2	25.6	30.4
21:00 - 22:00	45.7	72.1	39.9	51.2	47.5	44.3	44.0	41.9	35.8	27.0	25.6	30.4
22:00 - 23:00	40.6	56.3	36.7	48.5	43.0	39.2	37.2	37.2	32.0	25.7	25.2	30.4

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	38.6	50.6	35.8	49.2	43.9	38.7	35.6	34.2	29.3	25.5	25.2	30.4
23:15 - 23:30	39.5	53.2	36.3	49.9	43.5	38.1	35.5	35.8	31.4	25.6	25.2	30.4
23:30 - 23:45	38.2	49.6	35.6	47.7	42.4	37.8	35.1	34.3	29.3	25.3	25.2	30.4
23:45 - 00:00	39.0	53.5	35.8	47.5	42.8	37.7	35.2	35.6	30.2	25.2	25.2	30.4
00:00 - 00:15	41.0	56.4	36.4	50.4	44.9	38.6	37.0	37.9	32.1	25.9	25.2	30.4
00:15 - 00:30	37.0	45.0	35.6	49.9	43.6	37.9	34.5	31.4	27.5	25.2	25.2	30.4
00:30 - 00:45	37.7	50.8	35.9	50.2	43.3	38.2	34.7	32.9	28.5	25.3	25.2	30.4
00:45 - 01:00	39.1	55.0	35.4	49.6	42.5	37.8	35.6	35.5	30.5	25.7	25.2	30.4
01:00 - 01:15	36.0	41.2	34.5	47.4	40.9	36.8	34.1	30.3	26.7	25.0	25.1	30.4
01:15 - 01:30	37.1	49.0	34.6	48.1	40.5	36.8	34.3	32.6	28.5	25.1	25.2	30.4
01:30 - 01:45	36.3	47.8	34.7	50.0	41.2	36.8	34.4	30.3	27.0	25.3	25.3	30.4
01:45 - 02:00	38.9	61.5	35.0	47.9	41.2	37.0	34.7	35.9	30.2	25.6	25.4	30.4
02:00 - 02:15	38.9	54.3	35.1	48.4	41.3	38.1	36.4	34.4	30.5	26.1	25.3	30.4
02:15 - 02:30	36.4	48.8	34.7	48.7	40.9	36.8	34.0	31.5	27.2	25.2	25.2	30.4
02:30 - 02:45	37.2	50.6	34.8	50.5	42.4	37.0	34.4	32.4	28.1	25.4	25.3	30.4
02:45 - 03:00	35.9	41.6	34.6	48.2	40.3	36.6	34.1	30.3	26.8	25.1	25.2	30.4
03:00 - 03:15	36.8	49.8	34.8	48.2	41.0	36.6	34.7	31.4	28.3	25.8	25.3	30.4
03:15 - 03:30	37.5	48.2	35.3	49.3	41.5	37.1	35.0	32.9	28.6	26.0	25.4	30.4
03:30 - 03:45	36.6	45.1	35.1	47.9	41.0	37.5	34.6	31.1	27.2	25.6	25.3	30.4
03:45 - 04:00	42.2	56.8	36.7	48.7	42.6	39.3	38.6	38.8	34.2	27.2	25.4	30.4
04:00 - 04:15	37.3	49.5	35.5	49.4	42.4	37.2	34.8	32.5	27.9	25.5	25.3	30.4
04:15 - 04:30	42.2	55.6	37.8	49.5	42.3	38.3	37.2	39.4	34.7	26.5	25.3	30.4
04:30 - 04:45	43.7	56.5	38.4	52.5	46.5	40.0	38.5	40.0	37.3	28.2	25.8	30.4
04:45 - 05:00	46.0	65.0	40.0	52.9	45.7	40.0	39.0	41.8	41.1	31.6	27.9	30.4
05:00 - 05:15	42.9	58.2	39.3	54.3	47.9	42.6	39.1	38.5	34.9	27.5	26.0	30.4
05:15 - 05:30	44.6	56.5	41.2	53.7	46.9	43.6	40.4	41.1	36.7	28.9	26.2	30.4
05:30 - 05:45	46.2	61.8	43.3	55.9	50.3	46.9	42.0	42.1	37.8	30.9	27.5	30.4
05:45 - 06:00	46.4	59.1	42.3	54.2	49.0	43.4	42.0	43.3	38.4	29.8	26.6	30.4
06:00 - 06:15	48.9	75.0	43.3	54.2	54.0	46.3	44.5	45.5	40.7	33.9	30.5	30.7
06:15 - 06:30	50.8	77.2	44.0	55.9	53.9	46.7	48.8	46.4	42.5	36.8	32.3	31.1
06:30 - 06:45	60.7	91.2	45.6	58.0	54.0	50.1	53.9	53.3	54.4	54.7	50.2	43.1
06:45 - 07:00	48.3	58.6	44.6	55.0	49.5	44.0	43.1	45.5	40.8	30.4	26.5	30.4

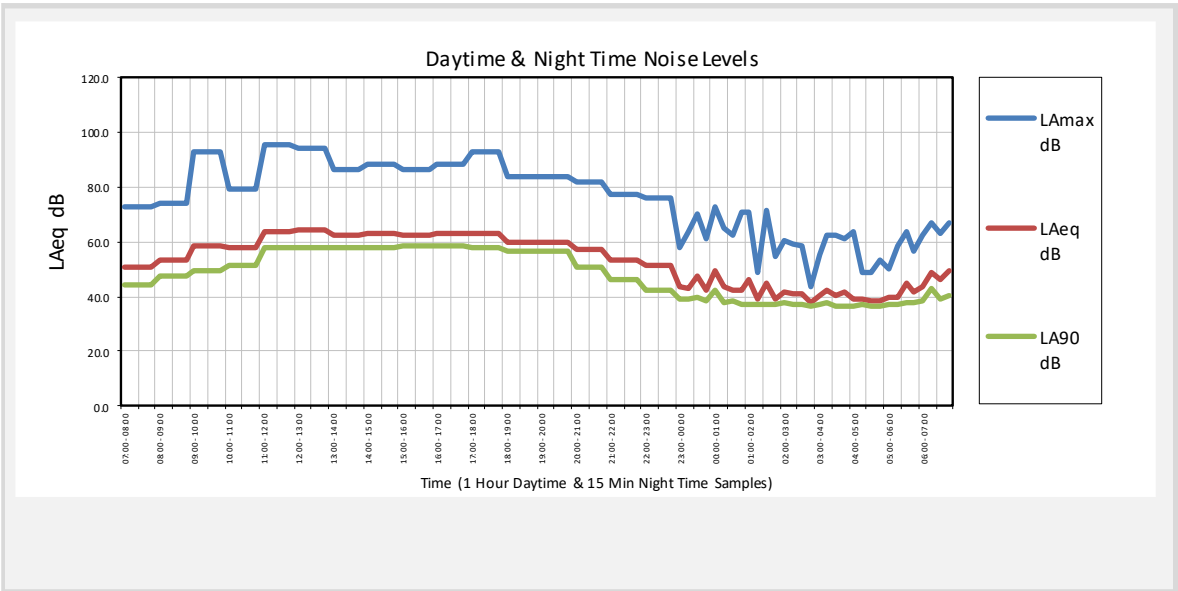


19.6 16th – 17th August 2025 Position 2

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Cor responding LAmaz 16 HOUR</small>	60.8	95.9	58.0	65.9	61.8	58.1	57.2	57.1	52.3	46.9	44.1	40.2
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Cor responding LAmaz 8 HOUR</small>	44.0	72.7	37.0	51.9	47.4	43.0	40.4	39.7	34.9	30.5	29.3	30.6

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	50.7	50.5	44.3	57.0	50.7	48.6	46.1	46.8	42.5	39.1	38.2	36.1
08:00 - 09:00	53.5	74.1	47.6	61.9	56.9	52.9	49.2	49.4	44.7	40.5	39.4	36.8
09:00 - 10:00	58.3	93.0	49.6	63.6	60.2	56.5	52.2	56.0	47.6	42.1	39.1	39.3
10:00 - 11:00	57.5	79.3	51.4	64.1	59.7	57.7	54.8	53.1	48.6	43.6	40.1	36.4
11:00 - 12:00	63.6	95.4	57.5	68.1	62.7	59.7	60.4	59.3	55.5	51.8	52.0	46.2
12:00 - 13:00	64.6	94.0	57.6	68.7	65.5	62.4	61.0	61.3	55.9	50.0	44.1	41.2
13:00 - 14:00	62.3	86.6	57.9	68.4	65.0	59.9	59.3	58.2	54.0	48.6	44.8	41.7
14:00 - 15:00	63.2	88.4	58.1	68.3	65.3	59.5	60.2	59.8	54.6	48.7	42.4	36.9
15:00 - 16:00	62.2	86.4	58.2	67.7	62.4	59.1	59.0	58.4	54.5	48.3	43.3	38.6
16:00 - 17:00	63.1	88.2	58.2	68.3	62.8	59.5	59.6	59.2	55.7	49.6	43.9	39.1
17:00 - 18:00	63.0	93.1	57.7	67.6	63.9	59.9	59.4	59.5	55.1	48.9	44.4	39.0
18:00 - 19:00	59.9	83.5	56.4	66.0	61.6	58.3	56.3	55.8	51.6	46.1	47.6	39.7
19:00 - 20:00	56.9	81.9	50.5	63.6	59.2	55.6	54.0	52.8	48.2	43.0	40.5	37.3
20:00 - 21:00	53.3	77.5	46.2	61.4	58.0	54.9	48.7	48.6	44.3	39.2	37.1	44.7
21:00 - 22:00	51.5	75.6	42.4	57.9	56.6	52.1	48.6	47.0	42.3	36.4	31.7	30.5
22:00 - 23:00	58.0	95.9	41.3	58.5	56.6	52.2	48.3	56.7	47.5	38.2	32.6	30.9

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	43.3	58.1	39.1	47.9	41.9	39.3	39.0	39.6	35.1	32.4	32.4	32.2
23:15 - 23:30	43.1	63.9	39.0	50.7	44.3	39.5	38.9	39.3	34.1	31.8	33.0	32.8
23:30 - 23:45	47.5	70.1	39.7	50.6	47.0	43.1	43.3	43.6	40.3	35.1	34.0	33.1
23:45 - 00:00	42.2	61.1	38.3	46.2	41.4	38.5	38.0	38.2	33.6	32.0	32.8	32.6
00:00 - 00:15	49.3	72.7	42.4	55.6	49.8	45.9	44.3	45.6	42.1	37.0	34.8	33.5
00:15 - 00:30	43.6	64.9	37.5	49.8	46.4	44.4	42.3	38.6	32.8	29.2	29.6	30.9
00:30 - 00:45	42.2	62.3	38.1	50.4	44.5	40.7	38.4	38.7	32.9	29.2	29.5	30.9
00:45 - 01:00	42.5	71.1	37.2	51.1	47.2	43.2	40.7	37.9	31.4	27.0	26.9	29.9
01:00 - 01:15	46.3	71.1	37.2	60.0	54.6	47.8	41.1	42.2	34.9	28.8	27.0	29.8
01:15 - 01:30	38.8	48.9	37.1	48.0	40.5	37.1	36.2	35.4	28.8	26.0	26.2	29.7
01:30 - 01:45	45.0	71.4	37.0	55.8	51.0	45.8	40.4	41.5	34.8	27.3	26.2	29.7
01:45 - 02:00	39.3	54.3	37.0	48.2	40.9	37.4	36.7	35.9	30.0	26.1	25.9	29.7
02:00 - 02:15	41.9	60.3	37.5	49.6	44.9	41.5	39.8	37.7	32.3	27.3	26.2	29.7
02:15 - 02:30	40.8	59.0	37.3	48.3	40.1	37.9	37.9	37.6	31.8	26.9	26.0	29.7
02:30 - 02:45	40.8	58.8	37.2	49.5	40.6	37.7	37.5	37.6	32.2	26.9	26.1	29.7
02:45 - 03:00	37.9	43.9	36.6	48.3	39.2	35.2	36.3	34.1	27.5	25.6	25.8	29.7
03:00 - 03:15	40.3	55.4	37.2	51.1	42.8	36.9	37.6	36.8	31.5	26.8	25.9	29.7
03:15 - 03:30	42.5	62.6	37.4	52.2	45.5	42.1	40.4	37.7	33.6	28.9	26.5	29.7
03:30 - 03:45	40.5	62.3	36.5	50.5	39.6	37.5	39.1	36.3	30.5	27.3	26.3	29.7
03:45 - 04:00	41.7	61.4	36.7	49.4	40.5	38.1	38.2	38.2	33.8	28.6	27.0	29.8
04:00 - 04:15	38.9	63.5	36.7	49.1	40.0	36.6	37.7	34.6	28.6	26.3	26.2	29.7
04:15 - 04:30	38.9	48.8	36.9	48.3	39.8	36.1	37.2	34.9	29.1	26.3	26.4	29.8
04:30 - 04:45	38.4	48.9	36.6	48.6	39.6	36.0	36.6	34.6	28.2	26.3	26.8	29.9
04:45 - 05:00	38.6	53.5	36.7	48.9	39.9	36.0	36.9	34.7	28.6	26.0	25.9	29.7
05:00 - 05:15	39.8	50.2	37.0	48.8	39.6	35.7	37.4	36.2	30.6	27.4	27.3	30.0
05:15 - 05:30	39.5	58.7	36.9	48.0	40.4	35.9	36.8	35.1	31.9	27.7	27.9	30.2
05:30 - 05:45	45.0	63.6	37.8	49.0	43.0	40.8	40.6	41.6	37.5	32.3	29.4	30.4
05:45 - 06:00	41.6	56.7	37.8	47.8	41.1	36.8	37.7	37.0	35.7	29.0	28.9	30.5
06:00 - 06:15	43.3	62.3	38.3	49.1	46.3	41.4	39.2	40.2	34.6	28.3	27.1	29.9
06:15 - 06:30	48.4	67.0	42.6	56.4	50.8	44.6	44.4	45.0	39.6	37.6	31.7	30.2
06:30 - 06:45	45.8	62.9	39.3	51.3	48.9	44.4	40.8	42.1	38.6	31.9	29.2	30.1
06:45 - 07:00	49.5	66.8	40.1	55.9	57.1	53.1	48.0	42.1	36.1	30.7	30.8	31.2

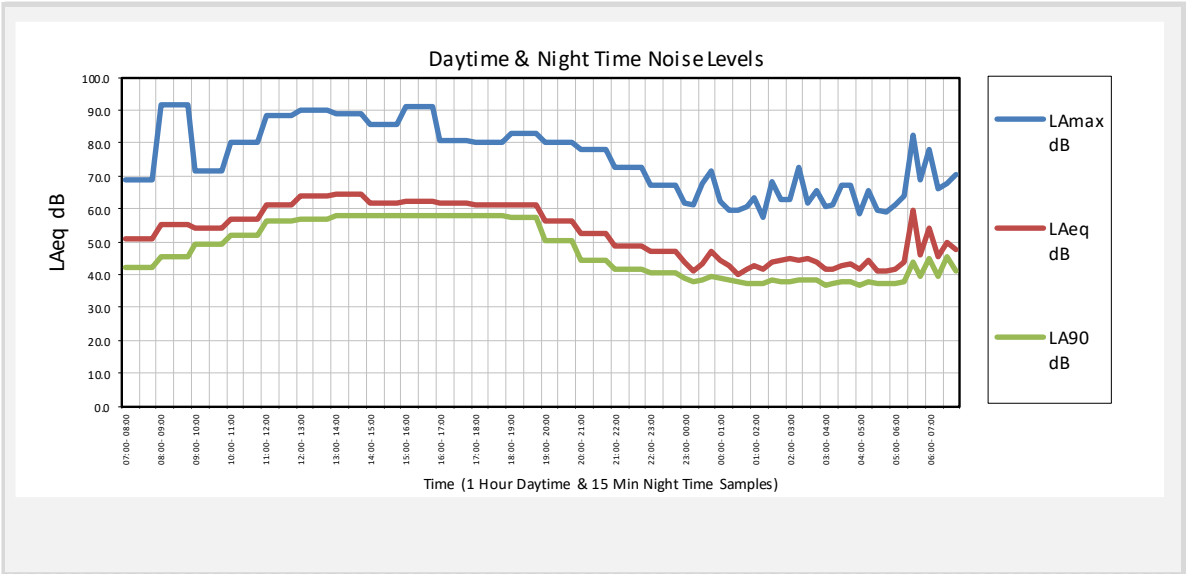


19.7 17th – 18th August 2025 Position 2

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Corr responding LAmaz 16 HOUR</small>	60.2	91.9	58.0	65.9	63.7	60.0	56.7	55.7	51.8	46.1	40.7	37.6
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Corr responding LAmaz 8 HOUR</small>	47.8	82.4	38.0	51.9	48.3	44.2	42.5	42.8	39.5	37.6	40.0	35.9

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	51.0	69.0	42.5	57.9	53.9	49.4	46.9	47.4	42.7	37.2	33.3	31.6
08:00 - 09:00	55.1	91.9	45.5	61.3	60.7	55.4	49.6	50.7	47.9	41.1	38.2	35.4
09:00 - 10:00	54.2	71.8	49.3	61.9	56.3	52.9	50.6	50.1	45.4	42.0	39.1	39.5
10:00 - 11:00	57.2	80.0	52.0	64.7	63.3	57.5	53.4	52.5	48.2	43.7	40.6	38.9
11:00 - 12:00	61.3	88.7	56.4	67.1	62.8	59.4	58.4	57.5	52.4	47.1	42.7	39.5
12:00 - 13:00	64.2	90.2	57.0	70.6	70.8	67.9	60.7	58.5	54.6	49.0	43.1	37.6
13:00 - 14:00	64.5	89.1	57.9	68.8	66.6	61.8	60.8	61.0	56.5	50.1	42.9	36.9
14:00 - 15:00	62.0	85.9	57.9	67.6	62.7	59.2	58.7	58.0	54.3	48.5	42.0	43.0
15:00 - 16:00	62.2	91.3	57.8	67.9	65.8	61.8	59.3	57.4	54.0	48.0	42.4	36.2
16:00 - 17:00	61.7	80.6	57.8	67.6	64.1	61.2	58.7	57.2	53.8	47.9	41.4	34.9
17:00 - 18:00	61.5	80.3	58.1	67.6	64.8	60.4	58.6	57.0	53.5	47.5	41.6	37.6
18:00 - 19:00	61.4	82.7	57.6	66.8	64.0	59.7	57.6	57.2	53.9	48.2	42.7	36.4
19:00 - 20:00	56.6	80.2	50.5	63.0	59.3	55.9	53.7	52.5	47.7	42.9	37.5	32.9
20:00 - 21:00	52.7	78.1	44.6	59.3	57.8	52.4	49.0	48.5	43.9	38.7	35.2	31.9
21:00 - 22:00	48.6	72.5	41.8	53.5	49.1	46.8	45.1	45.1	40.3	34.7	32.1	31.4
22:00 - 23:00	47.1	67.3	40.7	51.3	47.4	42.8	41.3	41.2	38.3	38.8	40.6	38.8

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	Octave Band Centre Frequency (Hz)								
				63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	43.8	61.9	38.9	48.8	46.8	40.5	38.8	39.0	35.1	34.2	35.3	34.2
23:15 - 23:30	41.1	61.0	37.9	46.6	41.2	37.7	37.2	37.1	32.3	31.1	31.8	31.9
23:30 - 23:45	43.1	68.0	38.3	46.9	41.0	38.0	37.8	37.4	34.3	35.2	36.6	35.2
23:45 - 00:00	47.3	71.5	39.6	59.2	57.8	45.4	40.6	40.7	37.2	37.4	38.5	37.0
00:00 - 00:15	44.5	62.3	38.8	46.4	41.1	38.2	38.5	37.8	35.7	37.2	38.9	37.2
00:15 - 00:30	42.9	59.9	38.4	45.9	41.2	38.2	37.4	36.8	33.9	35.3	36.9	35.5
00:30 - 00:45	40.0	59.5	37.7	47.1	39.8	36.3	36.5	35.9	30.7	30.4	31.2	31.6
00:45 - 01:00	41.7	60.7	37.2	46.5	40.6	38.7	37.6	38.3	32.9	30.8	30.0	31.0
01:00 - 01:15	42.8	63.5	37.1	49.4	42.5	39.3	38.4	38.9	34.5	32.1	32.3	32.2
01:15 - 01:30	41.7	57.3	37.4	51.0	45.4	37.3	36.5	36.1	32.5	33.3	35.0	34.0
01:30 - 01:45	43.8	68.5	38.3	46.6	41.1	38.1	38.1	37.7	35.0	36.2	37.7	36.1
01:45 - 02:00	44.4	62.8	38.1	52.3	41.6	38.9	38.7	39.2	36.0	35.9	37.2	35.7
02:00 - 02:15	44.7	62.8	37.9	47.3	41.3	38.8	38.7	38.9	35.6	37.0	38.8	37.2
02:15 - 02:30	44.3	72.7	38.2	47.6	41.3	38.4	38.8	38.3	35.5	36.6	38.1	36.4
02:30 - 02:45	45.2	62.0	38.6	47.0	42.3	39.1	38.7	38.6	36.4	37.8	39.6	37.8
02:45 - 03:00	43.6	65.3	38.3	46.1	40.9	37.9	37.8	37.3	34.8	36.1	37.9	36.3
03:00 - 03:15	41.5	60.5	37.0	45.5	39.7	36.9	37.1	35.6	32.5	33.5	35.2	34.2
03:15 - 03:30	41.6	61.3	37.5	45.4	39.3	36.6	36.5	35.7	32.6	33.9	35.4	34.3
03:30 - 03:45	42.7	67.4	37.6	45.4	39.7	37.1	37.0	36.7	33.8	35.1	36.8	35.4
03:45 - 04:00	43.2	67.4	37.8	46.1	40.2	37.5	38.0	37.5	34.7	35.2	36.7	35.4
04:00 - 04:15	41.8	58.6	37.0	45.8	39.5	36.6	36.5	35.6	32.7	34.3	36.1	34.8
04:15 - 04:30	44.2	65.9	37.7	50.8	50.0	45.9	41.2	36.6	32.8	34.1	35.9	34.5
04:30 - 04:45	41.2	59.4	37.1	45.7	39.5	36.5	36.6	35.5	31.9	33.1	34.8	33.8
04:45 - 05:00	41.2	59.1	37.4	46.1	42.2	40.3	38.2	35.9	31.0	31.6	32.9	32.5
05:00 - 05:15	41.9	61.3	37.4	49.0	43.6	38.6	36.9	35.9	32.6	33.9	35.6	34.5
05:15 - 05:30	43.8	63.9	38.0	49.8	41.9	40.1	39.4	40.6	35.8	31.5	30.7	31.2
05:30 - 05:45	59.4	82.4	43.6	59.8	55.5	54.3	54.4	54.1	51.1	48.7	52.8	45.2
05:45 - 06:00	46.0	69.0	39.6	53.2	50.4	41.3	41.2	42.1	37.7	34.7	35.7	34.3
06:00 - 06:15	54.0	77.9	45.0	58.6	54.6	52.2	45.9	50.2	47.1	42.0	37.3	33.9
06:15 - 06:30	45.7	66.3	39.4	48.6	43.7	42.0	40.2	41.9	38.1	36.5	32.4	31.9
06:30 - 06:45	49.9	67.9	45.3	57.0	54.0	50.5	46.5	44.6	41.6	37.4	34.2	32.1
06:45 - 07:00	47.9	70.3	40.9	51.8	47.4	43.7	43.0	44.3	40.1	35.9	35.3	33.5

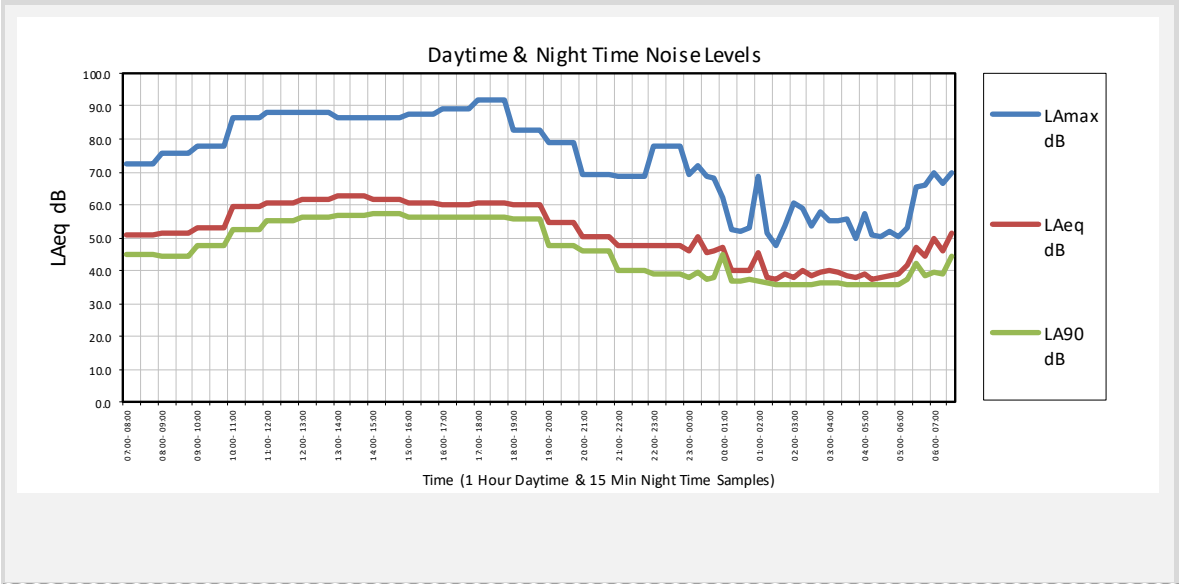


19.8 18th – 19th August 2025 Position 2

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Corresponding LAmaz 16 HOUR</small>	58.8	91.7	56.0	64.7	61.0	56.4	54.9	54.8	51.2	44.9	39.8	35.1
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Corresponding LAmaz 8 HOUR</small>	44.6	71.8	36.0	51.2	45.2	43.2	40.9	40.3	35.7	32.2	30.6	31.0

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	50.6	72.4	45.1	57.0	52.1	50.1	46.0	46.2	43.1	38.9	35.1	32.4
08:00 - 09:00	51.2	75.7	44.3	59.4	54.9	50.3	47.0	47.2	42.9	37.9	34.5	32.4
09:00 - 10:00	53.0	78.0	47.8	58.4	53.1	50.4	49.1	49.1	45.4	40.0	36.1	32.9
10:00 - 11:00	59.3	86.7	52.4	64.8	59.9	58.3	55.5	55.6	50.9	46.9	41.7	37.8
11:00 - 12:00	60.3	88.1	54.9	67.9	61.9	57.4	56.2	56.7	52.8	46.7	40.5	36.5
12:00 - 13:00	61.6	87.9	56.0	67.8	63.0	60.1	57.6	57.1	55.0	47.4	42.8	37.0
13:00 - 14:00	62.5	86.4	56.9	67.3	63.9	58.2	58.4	59.1	55.0	48.7	43.1	38.7
14:00 - 15:00	61.5	86.5	57.1	68.4	65.3	57.8	57.6	57.8	53.9	47.3	40.9	36.5
15:00 - 16:00	60.8	87.5	56.5	66.9	63.8	58.0	57.1	57.2	52.8	46.3	42.0	37.4
16:00 - 17:00	60.1	89.1	56.4	66.5	63.2	57.5	56.1	56.5	52.1	46.0	41.5	34.3
17:00 - 18:00	60.6	91.7	56.2	66.0	63.2	58.0	56.5	56.3	53.8	46.8	40.4	32.1
18:00 - 19:00	60.0	82.5	55.6	64.5	62.1	59.4	57.2	55.2	52.1	46.4	40.6	35.3
19:00 - 20:00	54.4	78.8	47.5	59.7	56.3	53.9	52.2	50.2	45.1	40.3	35.7	32.2
20:00 - 21:00	50.5	69.3	45.8	56.4	52.0	50.0	47.0	46.8	41.8	36.1	32.5	31.1
21:00 - 22:00	47.7	68.9	40.3	53.7	50.0	47.3	43.9	43.7	39.3	33.7	31.0	31.2
22:00 - 23:00	47.7	77.9	38.8	53.7	48.8	47.9	42.5	43.2	39.3	34.1	38.8	31.5

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	46.2	69.5	37.8	49.8	44.9	44.0	43.0	42.5	37.4	33.1	31.3	31.3
23:15 - 23:30	50.3	71.8	39.8	50.8	43.7	51.1	49.4	45.8	36.2	32.2	33.2	32.8
23:30 - 23:45	45.7	68.6	37.4	54.1	45.1	41.6	41.1	42.9	36.5	32.3	33.0	32.6
23:45 - 00:00	45.9	68.2	38.1	50.8	47.6	44.9	41.5	39.8	38.2	37.2	34.8	33.4
00:00 - 00:15	47.1	62.3	45.1	48.1	42.6	43.2	44.2	41.1	39.9	38.3	33.4	32.6
00:15 - 00:30	40.0	52.6	37.0	52.4	39.5	36.0	36.2	35.5	30.6	30.3	31.8	31.9
00:30 - 00:45	40.0	52.1	36.8	49.0	40.6	37.1	36.8	36.4	30.4	28.7	29.6	30.9
00:45 - 01:00	40.3	52.9	37.2	47.5	42.8	43.2	37.6	35.4	29.1	27.2	27.9	30.2
01:00 - 01:15	45.7	68.9	36.6	47.9	43.7	39.1	41.4	43.4	37.2	28.2	27.5	30.1
01:15 - 01:30	37.9	51.3	36.1	46.2	39.6	37.0	36.1	34.2	27.2	25.6	26.1	29.7
01:30 - 01:45	37.5	47.7	35.9	46.1	37.8	35.2	35.7	33.8	27.4	26.0	26.5	29.9
01:45 - 02:00	38.9	53.6	36.0	47.4	39.6	36.4	36.3	35.0	29.7	27.3	27.6	30.1
02:00 - 02:15	38.0	60.4	35.9	50.8	42.0	35.2	35.5	33.6	27.8	27.4	28.0	30.2
02:15 - 02:30	40.2	58.8	35.9	50.5	41.9	40.5	36.4	35.9	30.8	28.9	29.8	30.9
02:30 - 02:45	38.6	53.6	35.9	51.6	41.1	35.1	35.2	33.6	28.9	29.5	30.5	31.2
02:45 - 03:00	39.6	58.1	36.0	50.2	40.7	36.3	36.3	35.5	30.5	29.0	29.6	30.8
03:00 - 03:15	40.0	55.4	36.1	51.0	40.5	36.2	36.5	35.2	31.6	30.2	31.2	31.5
03:15 - 03:30	39.5	55.4	36.3	50.6	39.8	35.7	36.0	35.4	30.7	29.0	30.0	31.0
03:30 - 03:45	38.5	55.9	35.8	51.0	40.1	35.3	35.2	33.6	28.7	29.2	30.6	31.2
03:45 - 04:00	37.8	49.6	35.7	50.5	40.6	35.0	35.0	33.0	27.9	28.1	29.3	30.7
04:00 - 04:15	39.0	57.5	35.6	49.6	40.7	35.3	35.2	33.2	29.4	30.7	32.3	32.2
04:15 - 04:30	37.5	50.9	35.5	48.7	40.1	34.9	35.1	33.6	27.6	26.3	27.0	29.9
04:30 - 04:45	37.8	50.2	35.7	48.3	39.6	35.3	35.1	33.9	28.4	26.9	27.6	30.1
04:45 - 05:00	38.5	51.8	35.9	48.2	39.4	35.3	35.4	34.2	29.1	28.4	29.5	30.7
05:00 - 05:15	39.2	50.1	35.9	54.7	46.2	40.2	36.0	33.5	28.3	27.5	28.3	30.3
05:15 - 05:30	41.5	52.9	37.3	50.9	40.4	37.1	37.1	38.3	33.5	29.2	29.8	30.9
05:30 - 05:45	47.2	65.6	42.3	52.1	51.0	46.6	43.3	41.5	40.4	35.8	31.4	30.4
05:45 - 06:00	44.6	65.9	38.6	50.1	45.0	42.2	41.0	40.9	36.4	32.8	29.3	30.1
06:00 - 06:15	50.0	69.7	39.3	56.1	53.4	51.4	45.8	44.8	41.6	37.6	34.3	30.5
06:15 - 06:30	45.9	66.4	39.1	52.4	47.0	45.0	42.1	42.4	37.4	30.5	27.6	29.8
06:30 - 06:45	51.5	69.9	44.6	55.3	51.7	49.0	46.0	48.6	43.5	38.1	32.3	30.5
06:45 - 07:00	46.0	61.6	40.3	52.1	47.3	43.3	41.7	42.6	37.9	32.6	29.7	30.0

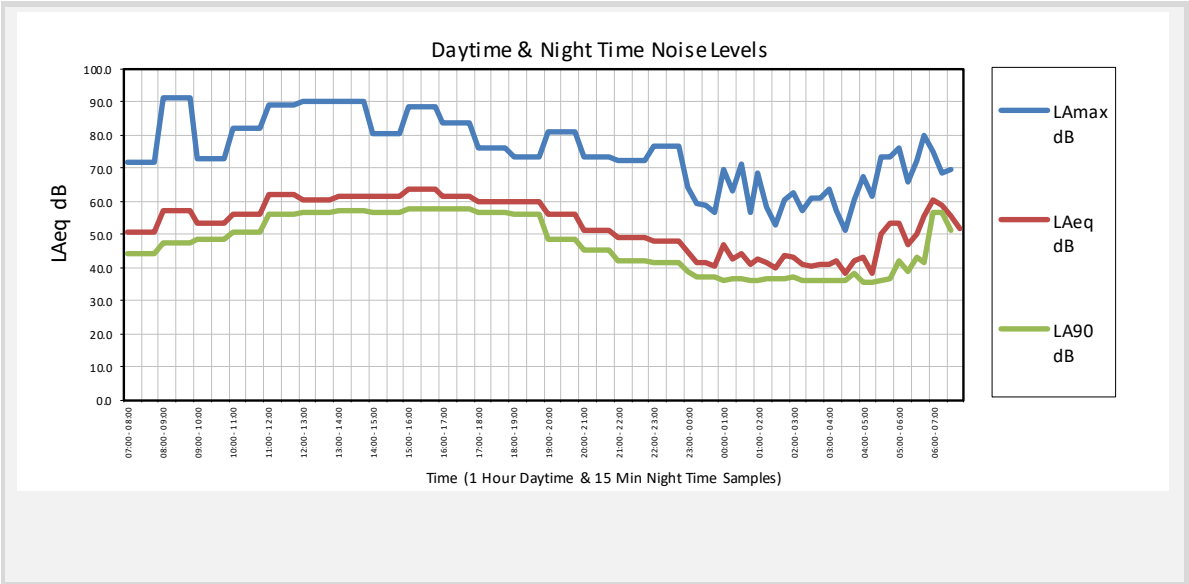


19.9 19th – 20th August 2025 Position 2

NOISE LEVEL SUMMARY ASSESSMENT				Octave Band Centre Frequency (Hz)								
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Cor r esponding LAmaz 16 HOUR</small>	59.2	91.0	56.0	64.1	60.9	57.1	55.5	55.1	51.4	45.5	40.3	38.9
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Cor r esponding LAmaz 8 HOUR</small>	50.8	79.7	36.0	57.9	48.9	45.7	46.5	46.0	43.9	40.2	36.8	34.3

DAYTIME NOISE LEVELS 07:00 - 23:00 1 HOUR SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	50.6	71.8	44.0	59.2	54.8	50.2	46.1	46.4	42.3	37.4	34.9	32.9
08:00 - 09:00	57.3	91.0	47.3	59.6	62.6	61.1	55.4	50.7	45.8	41.7	38.8	35.1
09:00 - 10:00	53.6	72.6	48.5	59.5	54.6	52.0	49.8	49.6	45.3	41.1	38.5	35.3
10:00 - 11:00	56.2	81.9	50.6	63.3	57.4	54.5	52.6	52.3	47.5	42.7	42.8	43.8
11:00 - 12:00	61.8	88.8	56.2	66.8	62.2	58.4	58.0	58.0	54.3	48.2	41.0	45.5
12:00 - 13:00	60.2	90.3	56.4	65.6	61.4	58.0	56.5	55.8	52.9	47.5	41.6	42.4
13:00 - 14:00	61.5	90.3	57.3	66.3	63.1	58.4	57.6	57.5	54.3	48.3	42.1	39.3
14:00 - 15:00	61.6	80.6	56.8	67.1	63.4	58.6	58.1	57.7	54.0	48.0	42.3	37.4
15:00 - 16:00	63.7	88.4	57.5	65.5	62.2	59.0	59.7	60.4	56.5	49.4	41.6	33.8
16:00 - 17:00	61.5	83.7	57.6	66.2	62.4	59.1	57.9	57.7	53.8	48.0	41.9	34.4
17:00 - 18:00	60.0	76.3	56.8	66.1	62.6	58.7	56.5	55.6	52.4	46.3	40.8	33.7
18:00 - 19:00	59.6	73.2	56.3	65.4	62.2	58.1	56.3	55.3	51.7	45.4	40.8	35.1
19:00 - 20:00	55.9	80.7	48.5	62.4	62.6	57.1	53.1	50.6	45.8	41.2	38.2	36.3
20:00 - 21:00	51.3	73.3	45.4	58.3	58.3	50.3	47.1	46.8	42.1	38.3	37.7	36.0
21:00 - 22:00	49.0	72.3	41.9	54.6	49.6	47.5	45.5	44.4	40.9	38.1	36.1	34.2
22:00 - 23:00	48.1	76.5	41.3	54.7	47.6	43.5	43.2	43.9	40.1	37.8	37.3	35.6

NIGHT TIME NOISE LEVELS 23:00 - 07:00 15 MINUTE SAMPLES												
Date / Time	LAeq	LAmaz	LA90	63	125	250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	44.5	63.9	38.5	48.3	43.1	40.1	38.5	39.0	35.9	36.2	38.0	36.5
23:15 - 23:30	41.2	59.4	36.9	46.3	38.9	36.7	36.1	36.0	32.4	32.7	34.2	33.4
23:30 - 23:45	41.6	58.8	37.0	46.6	39.6	36.9	36.6	36.2	32.8	33.4	34.8	34.0
23:45 - 00:00	40.5	56.6	37.1	46.2	40.2	37.5	36.4	36.2	31.6	30.8	32.2	32.1
00:00 - 00:15	46.6	69.3	36.1	53.0	46.3	41.4	42.5	42.0	39.6	37.0	31.9	30.4
00:15 - 00:30	42.6	62.8	36.7	49.3	42.4	38.8	38.2	37.4	33.5	33.5	35.2	34.1
00:30 - 00:45	44.3	71.1	36.6	47.6	41.9	38.9	38.2	37.6	35.6	37.2	38.4	36.9
00:45 - 01:00	41.1	56.6	36.2	47.2	39.3	36.7	36.5	36.1	32.7	32.3	33.8	33.1
01:00 - 01:15	42.5	68.3	35.8	46.8	40.0	37.1	36.9	36.2	33.7	35.1	36.6	35.4
01:15 - 01:30	41.5	58.0	36.3	48.5	42.3	39.7	37.6	37.1	32.2	31.4	31.7	31.9
01:30 - 01:45	39.7	52.6	36.7	46.8	40.1	36.7	36.3	35.2	30.6	30.0	31.2	31.5
01:45 - 02:00	43.7	60.6	36.7	46.8	40.4	37.1	36.7	35.8	35.1	37.0	38.6	37.0
02:00 - 02:15	43.2	62.6	37.0	48.9	41.4	37.5	37.1	36.9	34.6	35.5	37.2	35.9
02:15 - 02:30	40.8	57.4	35.8	46.1	38.0	35.4	35.7	34.1	31.9	33.5	34.9	34.1
02:30 - 02:45	40.5	60.9	35.8	45.7	39.0	35.7	35.7	34.3	31.4	32.9	34.3	33.6
02:45 - 03:00	40.7	60.7	36.3	46.1	38.4	35.6	36.0	34.6	31.7	33.1	34.7	33.9
03:00 - 03:15	41.0	63.8	36.0	45.8	38.8	35.7	36.3	34.9	32.1	33.1	34.7	33.9
03:15 - 03:30	41.7	57.2	36.2	46.7	38.9	36.4	37.4	36.9	33.2	32.6	34.3	33.6
03:30 - 03:45	37.9	51.4	35.8	45.1	36.5	34.5	35.4	34.0	28.0	27.8	28.8	30.6
03:45 - 04:00	41.8	60.3	38.3	47.6	39.9	36.9	38.2	37.9	33.6	31.0	30.7	31.3
04:00 - 04:15	42.9	67.2	35.6	44.7	38.4	37.5	42.9	38.3	31.2	29.4	29.6	30.9
04:15 - 04:30	38.3	61.5	35.4	44.2	36.9	35.5	36.1	34.3	28.7	27.8	28.4	30.4
04:30 - 04:45	50.3	73.4	35.9	54.0	41.6	39.6	42.6	44.7	45.4	41.8	35.7	32.6
04:45 - 05:00	53.5	73.5	36.7	60.1	45.6	44.1	45.6	48.5	48.8	43.2	37.2	31.3
05:00 - 05:15	53.1	76.0	41.9	57.9	51.3	48.3	50.4	49.1	45.1	41.1	37.2	35.5
05:15 - 05:30	46.6	65.5	38.6	52.4	41.5	40.7	45.3	41.8	37.4	34.3	34.7	33.8
05:30 - 05:45	50.2	72.2	43.2	53.8	48.4	46.2	49.6	44.9	40.5	36.5	35.2	34.1
05:45 - 06:00	55.7	79.7	41.2	57.0	47.9	47.9	53.5	51.8	47.7	42.5	38.6	37.3
06:00 - 06:15	60.3	75.0	56.6	65.0	55.3	53.6	54.2	55.2	55.0	50.4	44.1	38.7
06:15 - 06:30	58.7	68.6	56.6	69.9	59.9	54.8	54.6	53.9	51.1	48.6	43.2	36.7
06:30 - 06:45	55.7	69.6	51.4	63.3	56.5	54.0	52.3	51.5	47.6	43.7	39.5	33.5
06:45 - 07:00	51.4	72.4	42.4	55.1	50.4	47.4	47.4	48.5	43.1	37.0	33.9	32.7

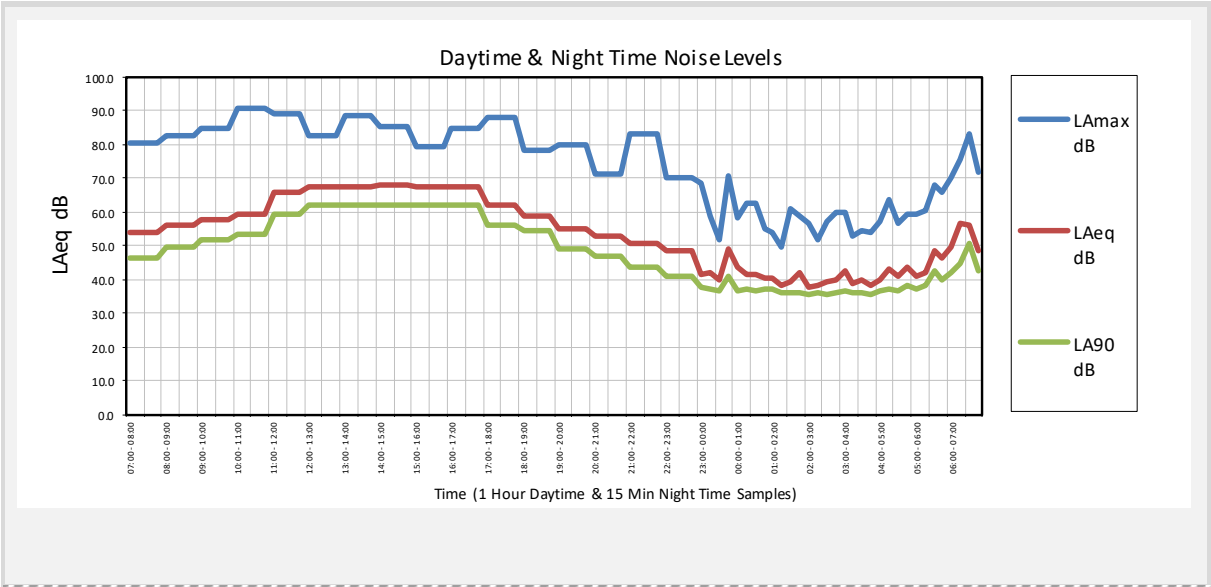


19.10 20th – 21st August 2025 Position 2

Date / Time	LAeq	LAmax	LA90	63	125	250	500	1.0k	2.0k	4.0k	8.0k	16.0k
DAYTIME 07:00 - 23:00 <small>LAeq 16 HOUR & Cor r esponding LAmax 16 HOUR</small>	63.8	90.7	62.0	66.7	66.2	58.8	63.4	58.6	53.4	47.2	42.4	39.6
NIGHT TIME 23:00 - 07:00 <small>LAeq 8 HOUR & Cor r esponding LAmax 8 HOUR</small>	46.9	83.1	36.0	55.4	49.8	46.3	42.7	41.6	38.5	36.2	34.6	32.7

Date / Time	LAeq	LAmax	LA90	63	125	Octave Band Centre Frequency (Hz)						
						250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
07:00 - 08:00	53.6	80.3	46.2	59.8	54.1	51.6	49.3	49.9	45.7	41.0	36.5	32.5
08:00 - 09:00	56.0	82.7	49.7	63.7	57.3	53.8	51.5	52.3	48.2	42.9	39.6	37.0
09:00 - 10:00	57.4	84.6	51.8	64.8	58.7	54.6	54.0	53.4	49.4	44.6	42.1	40.3
10:00 - 11:00	59.0	90.7	53.2	66.8	60.0	55.8	55.0	54.6	50.9	48.9	44.7	46.3
11:00 - 12:00	65.6	89.0	59.2	68.6	66.9	60.5	63.6	60.1	59.3	51.2	44.7	41.9
12:00 - 13:00	67.7	82.6	61.8	69.5	70.3	62.2	68.0	62.5	55.3	49.5	45.0	42.6
13:00 - 14:00	67.7	88.3	61.8	69.3	70.2	62.0	67.8	62.8	56.1	49.7	44.3	39.8
14:00 - 15:00	67.7	85.5	62.2	70.3	70.8	62.3	67.7	62.7	56.4	50.3	44.9	40.1
15:00 - 16:00	67.4	79.4	61.9	69.5	69.6	62.2	67.9	62.0	55.2	49.4	45.6	39.5
16:00 - 17:00	67.3	84.6	62.0	70.3	70.9	62.5	67.6	61.9	55.2	49.0	44.3	39.2
17:00 - 18:00	62.0	88.1	55.9	64.2	61.8	57.5	59.8	57.4	54.8	47.1	39.9	34.5
18:00 - 19:00	58.6	78.2	54.2	63.8	59.1	56.9	55.2	54.4	51.0	45.1	39.6	32.3
19:00 - 20:00	55.1	79.9	49.2	61.6	59.3	54.6	52.0	51.1	46.1	40.7	36.9	36.0
20:00 - 21:00	52.9	71.4	47.0	60.8	56.8	51.5	48.7	49.0	44.8	39.2	36.7	34.5
21:00 - 22:00	50.8	83.0	43.4	58.0	52.7	48.2	47.2	46.9	42.8	38.6	34.9	32.6
22:00 - 23:00	48.3	70.3	40.9	56.3	52.0	46.9	44.6	44.1	40.6	34.6	33.2	30.9

Date / Time	LAeq	LAmax	LA90	63	125	Octave Band Centre Frequency (Hz)						
						250	500	1.0 k	2.0 k	4.0 k	8.0 k	16.0 k
23:00 - 23:15	41.2	68.3	37.6	46.2	40.1	38.4	39.1	37.4	32.3	28.5	27.9	30.2
23:15 - 23:30	42.0	58.6	37.3	47.1	42.6	37.7	39.6	38.7	32.9	27.1	26.9	30.0
23:30 - 23:45	39.8	51.5	36.7	45.8	38.9	35.2	37.0	36.3	31.0	28.2	28.5	30.5
23:45 - 00:00	48.9	70.6	40.7	53.0	52.1	47.5	45.3	44.1	41.6	36.5	33.2	32.0
00:00 - 00:15	43.8	58.0	36.8	49.0	45.9	44.3	42.0	38.0	34.1	32.1	30.0	30.7
00:15 - 00:30	41.7	62.3	36.8	47.6	39.9	37.1	37.5	38.2	33.5	30.4	30.5	31.3
00:30 - 00:45	41.4	62.3	36.3	46.7	38.7	36.8	37.8	38.4	32.7	28.6	28.5	30.5
00:45 - 01:00	40.1	55.1	37.0	45.1	37.3	35.3	37.0	36.4	30.9	29.4	30.0	31.1
01:00 - 01:15	40.2	53.8	36.9	47.0	37.3	35.3	37.4	36.8	31.3	28.3	28.5	30.4
01:15 - 01:30	38.1	49.7	35.8	46.0	36.0	34.0	36.0	33.7	28.8	27.9	28.2	30.3
01:30 - 01:45	39.4	60.7	36.1	46.2	36.3	34.4	36.3	34.4	30.2	30.5	31.9	32.2
01:45 - 02:00	41.7	58.6	36.1	47.2	38.0	36.5	38.0	38.6	33.2	29.4	29.4	30.8
02:00 - 02:15	37.8	56.5	35.5	45.0	37.4	33.9	35.8	32.8	28.2	28.3	29.2	30.9
02:15 - 02:30	38.4	51.6	35.8	45.9	36.2	33.7	36.2	34.0	29.2	28.2	28.8	30.5
02:30 - 02:45	39.5	57.1	35.7	47.3	37.3	34.5	36.0	33.1	30.3	31.6	32.9	32.8
02:45 - 03:00	39.6	59.7	36.0	46.3	37.5	34.7	36.2	34.1	30.4	31.2	32.5	32.5
03:00 - 03:15	42.5	60.0	36.4	47.6	40.7	37.9	39.2	38.1	34.7	32.1	31.9	31.7
03:15 - 03:30	38.5	52.9	35.9	46.4	36.9	33.7	36.1	33.8	29.2	29.1	30.0	31.0
03:30 - 03:45	39.5	54.5	36.1	47.0	37.2	34.5	36.3	34.4	30.4	30.7	32.0	32.1
03:45 - 04:00	38.0	53.6	35.6	46.8	36.0	34.3	35.8	32.8	28.7	28.6	29.5	30.8
04:00 - 04:15	39.6	57.4	36.3	47.9	40.1	35.1	36.5	33.8	30.6	31.0	32.1	32.2
04:15 - 04:30	42.9	63.4	37.1	49.6	39.9	38.4	39.1	38.9	34.1	32.6	33.1	32.6
04:30 - 04:45	40.8	56.5	36.8	47.5	38.5	36.7	36.5	34.0	31.7	33.2	34.7	33.8
04:45 - 05:00	43.5	59.2	38.3	48.1	41.6	38.1	39.4	38.8	35.4	33.8	34.8	33.8
05:00 - 05:15	40.7	59.2	37.0	46.5	39.0	36.0	36.8	34.8	31.6	32.6	33.9	33.4
05:15 - 05:30	42.2	60.6	38.2	46.6	39.0	36.3	38.1	38.9	33.9	30.1	31.0	31.6
05:30 - 05:45	48.3	68.0	42.7	53.5	52.8	47.3	44.1	43.0	40.6	37.2	36.2	34.0
05:45 - 06:00	46.2	66.0	39.8	48.3	43.6	41.1	40.9	41.9	39.4	35.7	35.1	33.8
06:00 - 06:15	49.6	69.9	41.7	56.2	54.4	51.1	44.7	43.6	41.6	38.6	36.8	33.4
06:15 - 06:30	56.8	75.5	44.7	66.8	61.1	57.9	52.8	51.4	47.6	45.2	43.1	38.8
06:30 - 06:45	56.0	83.1	50.6	66.1	59.2	55.1	51.3	50.0	48.5	46.8	43.0	36.3
06:45 - 07:00	48.5	71.8	42.7	51.0	47.8	46.5	43.7	44.7	40.8	36.5	35.8	34.1





21 APPENDIX C –INFORMATION

The following information is provided.

21.1 Site Status

Site Attended By	Mr Brian Scrivener MIOA
Baseline Measurements Conducted by	Mr Brian Scrivener MIOA
Site Source Measurements Conducted By	Mr Brian Scrivener MIOA

21.2 Measurement Information – Location 1

Details & Justification	Measurement position 1 was located at the rear of the existing premises, representative of the Nearest Noise Sensitive Premises
Height from Ground	1.5m
Reflective Surfaces	None (Free Field)
Distance to NSP	Various
Distance to Source	1m
Topographical Change (m)	None
Ground between Source and Receiver	Hard Landscaping
Windshield Information	Norsonic Outdoor Microphone Protection Kit Model No: 1212
Distance from Source to Receiver	Various
NSP* - Noise Sensitive Premises	

22 APPENDIX D – UNCERTAINTY BUDGET

Sources of Uncertainty	Uncertainty Notes	Commentary	Value (half Width)	Convert to Same Units (dB)	Distribution Divisor			Standard Uncertainty (u) dB
					Normal	Rectangular	Other	
Measurement Position	Choice of position, ,	1m in 20m		0.2		rect($\sqrt{3}$)		0.13
	microphone orientation	Type 1 0 - 30deg	0.4		Normal			0.50
Instrumentation	Calibration	Calibration Drift	0.1		Normal			0.10
	Accuracy and precision (type 1)	Type 1 practical	1.9			rect($\sqrt{3}$)		0.50
Background Noise Level	Timing of Measurement							
Background Noise Level	Modal Analysis Day	Calculated Standard Deviation	3.7				s/ $\sqrt{n}$	0.39
Background Noise Level	Modal Analysis Night	Calculated Standard Deviation	2.2				s/ $\sqrt{n}$	0.16
Combined Uncertainty (root sum of squares)								1.05
Expanded Uncertainty U = Kuc (95% Confidence K =2)								2.1
Final Answer Expressed as Value +/- U dB with a confidence Level of 95%								
REFERENCE: Uncertainty Budget Calculated in line with M3003: The Expression of Uncertainty and Confidence in Measurement Edition 3, November 2012 and A Good Practice Guide on the Sources and Magnitude of Uncertainty Arising in the Practical Measurement of Environmental Noise N J Craven, G Kerry Edition 1a – May 2007.								

#END OF REPORT#