

22-24 Sussex Road Haywards Heath

Environmental Noise Survey and Noise Impact Assessment Report

33035/NIA1 R1

20 August 2026

For:
Eamonn O'Connor



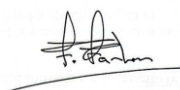
Hann Tucker Associates
Consultants in Acoustics Noise & Vibration

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



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Document Control

Rev	Date	Comment	Prepared by	Reviewed & Approved by	
1	20/08/2026	Updated assessment to consider additional receptors.			
			Sandy Wilson Consultant BSc(Hons)	Firas Farhan Associate BSc(Hons), MIOA	
0	02/06/2026	First Issue	Sandy Wilson Consultant BSc(Hons)	Kyle Donald Principal Consultant BSc(Hons), MIOA	Firas Farhan Associate BSc(Hons), MIOA



Executive Summary

Hann Tucker Associates Limited (Hann Tucker) has been commissioned by Eamonn O'Connor to undertake a noise impact assessment for a proposed children's nursery that shall be located at 22-24 Sussex Road in Hayward Heath, Sussex.

Proposals include the remodel of the existing dwelling at 22-24 Sussex Road to form designated nursery rooms per age group at ground level with operational offices and further designated nursery rooms at first floor. A new external outbuilding shall be erected within the rear external amenity area of the Site.

The following acoustic aspects have been considered in the assessment of potential noise impact.

- External noise intrusion into the proposed nursery spaces;
- noise breakout via the building envelopes to nearby existing noise sensitive receptors; and
- noise emissions from external play areas.

Data obtained from a façade sound insulation test of the existing building fabric of 22-24 Sussex Road indicated that external noise breakout shall be within acceptable limits, i.e. no enhancement to the existing building envelope elements is required.

For the new outbuilding, minimum sound reduction indices have been established to control external noise breakout.

External noise emissions were assessed via a 3D noise map created in the noise modelling package, CadnaA®. The initial assessment indicated the potential for a Moderate noise impact upon nearby existing noise sensitive receptors with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

To control noise levels from external play areas, acoustic screening has been recommended. Incorporation of this screening is shown to reduce the potential noise impact to Minor/Negligible with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

The principles of a Noise Management Plan have been provided to further minimise potential adverse noise impacts.



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Contents	Page
1.0 Introduction	1
2.0 Objectives	1
3.0 Acoustic Terminology	2
4.0 Site Description	2
5.0 Proposal Summary	3
6.0 Planning Policies, Standards & Guidance	5
7.0 Baseline Noise Survey	6
8.0 Façade Sound Insulation Test	9
9.0 External Noise Emissions	10
10.0 Conclusions	18

Attachments

Appendix A – Acoustic Terminology

Appendix B – Relevant Planning Policies and Guidance

Appendix C – Time History Graphs



1.0 Introduction

Hann Tucker Associates Limited (Hann Tucker) has been commissioned to undertake a noise impact assessment for a site in Haywards Heath in Sussex, hereby referred to as "the Site".

The Site, which is located at 22-24 Sussex Road, is being proposed for change of use from a commercial property (Use Class E) to a nursery (Class E(f)).

The proposals include minor remodelling of the existing commercial property and erection of a new external outbuilding within the rear external amenity area of the existing dwelling.

Baseline noise conditions have been established by means of a detailed noise survey, presented herein. The findings have subsequently been used to assess the suitability of the Site for the proposed use. Measures required to mitigate and manage noise impacts for the proposed development (when operational) have been discussed in context with relevant national & local planning policies, design standards and good practice guides.

2.0 Objectives

To undertake an environmental noise survey to establish the existing L_{Amax} , L_{Aeq} and L_{A90} environmental road, rail and air traffic noise levels at selected accessible positions.

To obtain data that can be used to determine the requirements for sound insulation of the external building envelope new build elements.

To undertake sound insulation tests of the existing building envelope to inform the assessment.

Based on the results of the survey, to undertake a noise assessment to assess the suitability of the Site for the proposed use in accordance with the Noise Policy Statement for England (NPSE), National Planning Policy Framework (NPPF), Planning Practice Guidance (ProPG), British Standard BS8233:2014 and Local Authority requirements.

To discuss noise mitigation and acoustic design solutions to mitigate and manage potential adverse noise impacts.



3.0 Acoustic Terminology

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

4.0 Site Description

4.1 Location

The Site is located at 22-24 Sussex Road in Haywards Heath in Sussex. The location is shown in the Location Map below.



Location Map (Map Data © 2026 Google)

The Site falls within the jurisdiction of Mid Sussex District Council and West Sussex County Council.

4.2 Description

The Site is an existing 2-storey commercial property located at 22-24 Sussex Road in Hayward Heath, Sussex which is bounded by Sussex Road to the east, Ashenground Road to the south and Gower Road to the west and north. The Site is situated on a commercial high street, with residential properties located to the rear.

The Site is presented in the Site Plan below.



Site Plan (Map data ©2026 Google)

5.0 Proposal Summary

It is proposed to marginally remodel the existing property at 22-24 Sussex Road to form a designated nursery for children between the ages of 9 months to 4 years. The age groups are to be designated as follows:

- Baby (9 months – 2 years);
- Toddler (2 – 3 years); and
- Pre-schooled (3 – 4 years).

There will be a new external outbuilding located within the rear external amenity area.

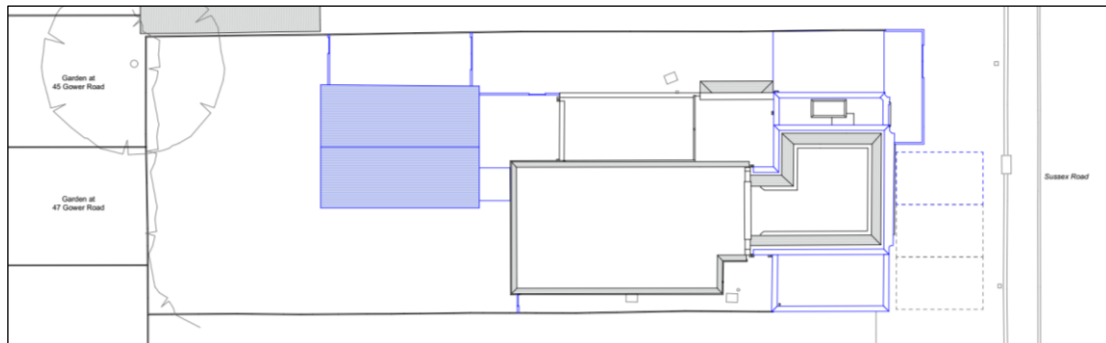
It is understood that operational hours for the nursery shall be 08:00 – 18:00 hours, Monday to Friday.

During operational hours, the nursery will operate a 'free-flow' policy for the older children (roughly 1/3rd of the total) to allow free access to the outdoor area. Access will be more structured for the remaining children, and it is unlikely there will be more than 50% of the children outside at any given time. Babies (roughly 2/5th of the total) will be taken outside, conditions permitting, twice a day for periods of about 30 minutes. No children will be outdoors during mealtimes (breakfast, lunch and dinner).

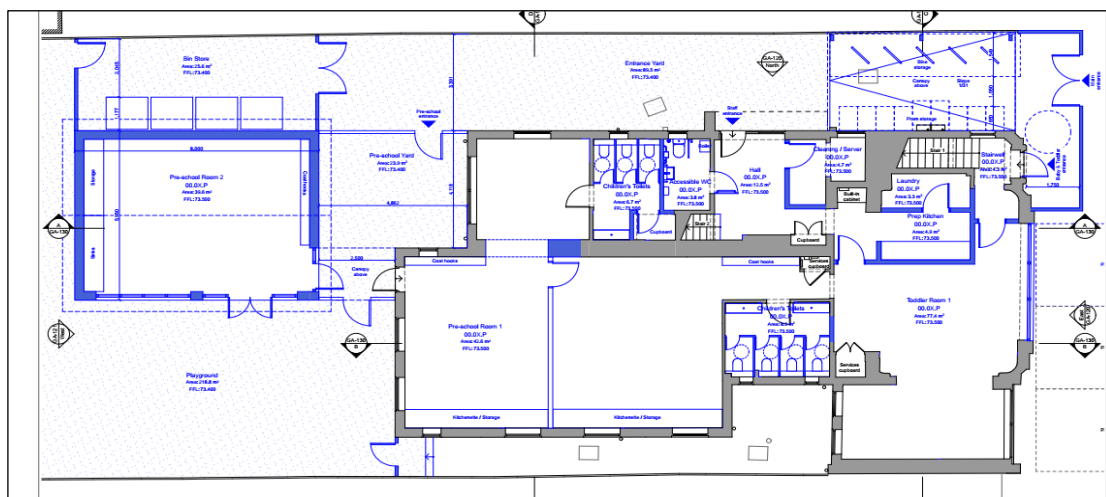


We understand the maximum capacity shall be approximately 80 children spread across each age group.

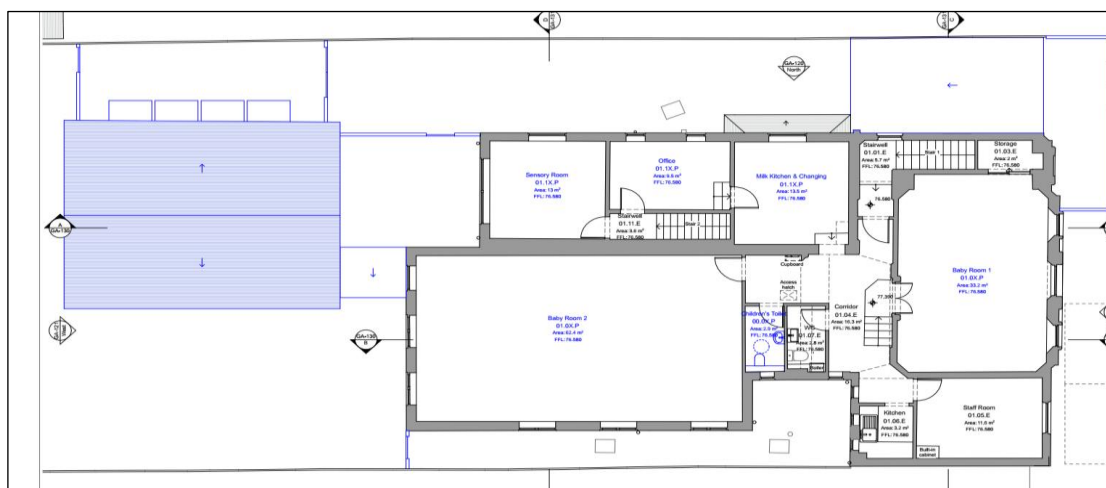
The proposals are shown in the Plan overleaf.



Plan showing Project Proposals (provided by RGP)



Plan showing Ground Floor Proposals (provided by Samuel Chisholm Studios)



Plan showing First Floor Proposals (provided by Samuel Chisholm Studios)



6.0 Planning Policies, Standards & Guidance

6.1 Policies & Guides

In order to provide a suitable assessment a number of national planning policies have been considered, including:

- The National Planning Policy Framework (NPPF) 2024 (amended February 2025)
- The Noise Policy Statement for England (NPSE), 2010
- Planning Practice Guidance – Noise (PPGN), 2019

The above documents highlight the importance of considering the potential noise effects on any new residential development and provide a qualitative approach to assessment. However, each of the above does not provide any quantitative guidance. As such, all quantitative guidance used to form a noise impact assessment is taken from various other standards, guidance, and Local Authority requirements as summarised below:

- Local Planning Policy
- World Health Organisation: 2018
- British Standard BS8233: 2014
- British Standard 4142:2014 + A1:2019
- Acoustic design of schools: performance standards: BB93

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

6.2 Specific Local Authority Criteria

The Site lies within the jurisdiction of Mid Sussex District Council. The MSD Local Plan 2014-2031 was published in March 2018. Policy DP29 'Noise, Air and Light Pollution' states:

The environment, including nationally designated environmental sites, nationally protected landscapes, areas of nature conservation or geological interest, wildlife habitats, and the quality of people's life will be protected from unacceptable levels of noise, light and air pollution by only permitting development where:



Noise pollution:

- *It is designed, located and controlled to minimise the impact of noise on health and quality of life, neighbouring properties and the surrounding area;*
- *If it is likely to generate significant levels of noise it incorporates appropriate noise attenuation measures;*

Noise sensitive development, such as residential, will not be permitted in close proximity to existing or proposed development generating high levels of noise unless adequate sound insulation measures, as supported by a noise assessment are incorporated within the development.

The policy does not state any specific numerical criteria for noise or vibration and therefore our assessment herein draws upon typical guidance and standards.

7.0 Baseline Noise Survey

7.1 Procedure

Fully automated environmental noise monitoring was undertaken by Sandy Wilson BSc(Hons) from approximately 14:00 hours on Friday 10 April 2026 to 10:00 hours on Wednesday 15 April 2026, to establish full daytime and night-time noise levels over a typical weekday and weekend period. Measurements were taken continuously of the A-weighted (dBA) L_{90} , L_{eq} , and L_{max} sound pressure levels over discrete 2 and 15-minute periods.

7.2 Measurement Positions

The noise level measurements were undertaken at 2No. positions as described in the table below.

Table 1 Measurement Positions

Position	Type	Description
1	Unattended	The sound level meter was placed inside a secure box and fixed to a lamppost overlooking Sussex Road, with the microphone also fixed to the lamppost. The microphone was approximately 3m from local ground level and >3.5m from the nearest vertical reflective surfaces. Therefore, the results are considered to be free-field.
2	Unattended	The sound level meter was installed at the rear of the property with the microphone fixed to the rear fencing. The microphone was approximately 2m from local ground level and >3.5m from the nearest vertical reflective surface. Therefore, the results are considered to be free-field.



The positions are presented on the plan below.



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

7.3 Weather Conditions

For the unattended survey between Friday 10 April 2026 and Wednesday 15 April 2026, local weather reports indicated no notable periods of prolonged and/or heavy rainfall, with temperatures ranging from 2 °C (night) to 17 °C (day) and wind speeds less than 5m/s. During our time on site, skies were largely clear, wind conditions were calm and road surfaces were dry.

7.4 Instrumentation

The instrumentation used during the survey is presented in the table below:

Table 2 Instrumentation

Position	Description	Manufacturer	Type	Serial Number	Calibration
1	Type 1 Data Logging Sound Level Meter	Svantek	971	80232	Calibration on 01/08/2024
	Type 1 ½" Condenser Microphone	ACO Pacific	7052E	67976	Calibration on 01/08/2024
	Preamplifier	Svantek	SV18	71473	Calibration on 01/08/2024
2	Type 1 Data Logging Sound Level Meter	Svantek	971	80233	Calibration on 01/08/2024
	Type 1 ½" Condenser Microphone	ACO Pacific	7052E	67983	Calibration on 01/08/2024
	Preamplifier	Svantek	SV18	71464	Calibration on 01/08/2024
All	Type 1 Calibrator	Brüel & Kjær	4230	494325	Calibration on 12/08/2025



Each sound level meter, including the extension cable, was calibrated prior to and on completion of the surveys. No significant changes were found to have occurred (no more than 0.3dB).

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

7.5 Results

The results have been plotted on Time History Graphs 33035/TH1 to 33035/TH2 enclosed presenting the 15-minute A-weighted (dBA) L_{90} , L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

In order to compare the results of our survey with the relevant guidelines it is necessary to convert the measured $L_{Aeq(15\text{-minute})}$ noise levels into single figure daytime $L_{Aeq(16\text{-hour})}$ (07:00-23:00 hours) and night-time $L_{Aeq(8\text{-hour})}$ (23:00-07:00 hours) levels.

A summary of the results, as used to inform subsequent assessments against current guidelines, is presented in the table below. The L_{A90} values presented are the 'representative' levels determined through statistical analysis of the 15-minute readings, in line with BS 4142.

Table 3 Survey Results

Position	Day/Period	Daytime (07:00 – 23:00 hrs)		Night-time (23:00 – 07:00 hrs)		
		$L_{Aeq,16hr}$	$L_{A90,15min}$ (Representative)	$L_{Aeq,8hr}$	$L_{A90,15min}$ (Representative)	$L_{AFmax,2min}$
1	10/04/2026	65*	50	60	30	79
	11/04/2026	66		65		80
	12/04/2026	65		62		80
	13/04/2026	65		62		80
	14/04/2026	65		62		79
	15/04/2026	66*		-		-
2	10/04/2026	*47	40	44	28	64
	11/04/2026	52		48		66
	12/04/2026	49		46		64
	13/04/2026	47		46		65



Position	Day/Period	Daytime (07:00 – 23:00 hrs)		Night-time (23:00 – 07:00 hrs)		
		L _{Aeq,16hr}	L _{A90,15min} (Representative)	L _{Aeq,8hr}	L _{A90,15min} (Representative)	L _{AFmax,2min}
2	14/04/2026	48	40	45	28	62
	15/04/2026	49*		-		-

*Incomplete Period

7.6 Discussion of Noise Climate

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

8.0 Façade Sound Insulation Test

We understand that the building envelope (i.e. glazing) of the existing commercial property shall be retained as part of the proposal. For consideration in the subsequent assessments, a façade sound insulation test was undertaken on Wednesday 15 April 2026. The following sections outline the testing methodology and results.

8.1 Test Methodology

The façade sound insulation test was undertaken in general accordance with ISO 16283-3:2016 '*Acoustics — Field measurement of sound insulation in buildings and of building elements - Part 3: Façade sound insulation*'.

The specific method of the standard was the 'global loudspeaker method' whereby a loudspeaker emitting pink noise was positioned approximately 5m from the façade at an angle of approximately 45°.

Measurements of background noise and reverberation were undertaken within the receive room per the requirements of the standard.

The external building fabric (external walls and glazing) are understood to be generally consistent around the ground floor of the existing commercial property. The existing rear façade was selected as the representative test specimen.



8.2 Results

The results of the façade sound insulation test are set out in Table .

Table 4 Façade Sound Insulation Test Results

Description	Measured Apparent Sound Reduction, R' (dB)						R' _w (dB)
	125	250	500	1k	2k	4k	
Existing commercial property façade	24	31	23	32	33	32	32

9.0 External Noise Emissions

9.1 Noise Sensitive Receptors

From our on-site survey, the following nearest and/or potentially worst-affected Noise Sensitive Receptors (NSRs) have been identified.

- NSR 1: 45 Gower Road
- NSR 2: 20 Sussex Road
- NSR 3: 26A Sussex Road

These receptor locations in relation to the Site location are presented in the plan below.



NSR Locations (Map data © 2026)

9.2 Design Criteria

There is no commonly adopted guidance or standard for the assessment of noise impact associated with children's nurseries and no numerical criteria has been proposed by the Local Authority.



In lieu of other appropriate guidance or standards, the impact classification criteria set out in 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014) have been adopted. Table summarises the impact classification criteria for changes in ambient noise levels.

Table 5 IEMA Noise Impact Classifications

Impact Classification	Sound Level Change, $L_{Aeq,T=10hrs}$ dB
Negligible	≤ 2.9 dB
Minor	3 dB to 4.9 dB
Moderate	5 dB to 9.9 dB
Major	≥ 10 dB

9.3 External Noise Breakout

9.3.1 Internal Noise Levels

To consider noise breakout via the external building fabric of the existing dwelling and new outbuilding, Hann Tucker has considered library data for reverberant sound pressure levels measured within an existing nursery. These sound levels are presented in Table .

Table 6 Typical Nursery Internal Noise Levels

Description	Sound Pressure Level (dB re 2×10^{-5} Pa) at Octave Band Centre Frequency (Hz)								dB $L_{Aeq,T}$
	63	125	250	500	1k	2k	4k	8k	
Typical internal nursery noise levels ^[1]	59	58	61	66	69	66	59	49	72

Notes:

[1] Approximate 15-minute measurement within an operational children's nursery with approximately 20No. children playing. The space featured primarily hard finishes.

9.3.2 New Outbuilding Sound Insulation

For the new outbuilding, calculations have been undertaken to establish the minimum required sound insulation of the external building envelope in general accordance with ISO 12354-3:2017.

Table sets out the minimum required apparent sound reduction index of the external building fabric to control noise breakout to the nearest receptor.



Table 7 Minimum Sound Reduction of New Façade

Description	Minimum Required Apparent Sound Reduction Index, R' (dB)						R' _w (dB)
	125	250	500	1k	2k	4k	
New outbuilding façade	17	20	24	25	25	24	25

The sound reduction performance above applies to the complete composite building envelope.

9.3.3 Noise Breakout

Noise breakout via the building envelopes has been calculated using the internal noise levels set out in Table , and the sound reductions set out in Table and Table respectively in general accordance with ISO 12354-4:2017. Table set out our calculations of external noise breakout toward the identified NSR.

Table 8 Noise Breakout to NSR 1

Description	Sound Level at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
Reverberant Internal L _p	59	58	61	66	69	66	59	49	72
R' of Existing Building Fabric	24	31	23	32	33	33	32	32	
Calculated Radiating External L _w	41	34	44	41	42	38	33	23	
35m Plane Distance Loss (L _w to L _p)	-39	-39	-39	-39	-39	-39	-39	-39	
Sound Pressure Level at NSR 1	3	<0	5	2	3	0	<0	<0	7
Reverberant Internal L _p	59	58	61	66	69	66	59	49	72
Min. R' of New Outbuilding	11	17	20	24	25	25	24	22	
Calculated Radiating External L _w	52	46	45	47	48	45	40	31	
30m Plane Distance Loss (L _w to L _p)	-38	-38	-38	-38	-38	-38	-38	-38	
Sound Pressure Level at NSR 1	14	8	7	9	11	8	2	<0	14
Cumulative Noise Level at NSR 1:									15

The calculated levels of external noise breakout via the existing and new outbuilding are indicative of a Negligible noise impact at nearby noise sensitive receptors based on the impact classification criteria set out in Table .



Table 9 Noise Breakout to NSR 2

Description	Sound Level at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
Reverberant Internal L_p	59	58	61	66	69	66	59	49	72
R' of Existing Building Fabric	24	31	23	32	33	33	32	32	
Calculated Radiating External L_w	41	34	44	41	42	38	33	23	
7m Plane Distance Loss (L_w to L_p)	-25	-25	-25	-25	-25	-25	-25	-25	
Sound Pressure Level at NSR 1	16	8	19	15	16	13	8	<0	20
Reverberant Internal L_p	59	58	61	66	69	66	59	49	72
Min. R' of New Outbuilding	11	17	20	24	25	25	24	22	
Calculated Radiating External L_w	52	46	45	47	48	45	40	31	
15m Plane Distance Loss (L_w to L_p)	-32	-32	-32	-32	-32	-32	-32	-32	
Sound Pressure Level at NSR 1	20	14	13	15	17	14	8	0	20
Cumulative Noise Level at NSR 2:									23

The calculated levels of external noise breakout via the existing and new outbuilding are indicative of a Negligible noise impact at nearby noise sensitive receptors based on the impact classification criteria set out in Table .

Table 9 Noise Breakout to NSR 3

Description	Sound Level at Octave Band Centre Frequency (Hz)								dBA
	63	125	250	500	1k	2k	4k	8k	
Reverberant Internal L_p	59	58	61	66	69	66	59	49	72
R' of Existing Building Fabric	24	31	23	32	33	33	32	32	
Calculated Radiating External L_w	41	34	44	41	42	38	33	23	
4m Plane Distance Loss (L_w to L_p)	-21	-21	-21	-21	-21	-21	-21	-21	
Sound Pressure Level at NSR 1	20	12	23	20	20	17	12	1	24
Reverberant Internal L_p	59	58	61	66	69	66	59	49	72
Min. R' of New Outbuilding	11	17	20	24	25	25	24	22	
Calculated Radiating External L_w	52	46	45	47	48	45	40	31	
25m Plane Distance Loss (L_w to L_p)	-36	-36	-36	-36	-36	-36	-36	-36	
Sound Pressure Level at NSR 1	16	10	9	11	12	9	4	0	16
Cumulative Noise Level at NSR 3:									25

The calculated levels of external noise breakout via the existing and new outbuilding are indicative of a Negligible noise impact at nearby noise sensitive receptors based on the impact classification criteria set out in Table .



9.3.4 Noise from External Play Areas

As stated in Section 5.0, the children may spend periods of the day in the outdoor area. To consider the potential impact from noise emissions from external play areas, a noise model has been created in the noise modelling package, CadnaA®. To establish the noise levels from the external play areas, the findings of publication ‘*Development of Noise Assessment Method for School Playground Noise*’ (Weixiong Wu, Inter-Noise, 2006) have been considered. Table 10 of this paper presents the following “worst-case values” for playground boundary noise levels.

Table 10 Worst-case Playground Noise Levels at Boundary

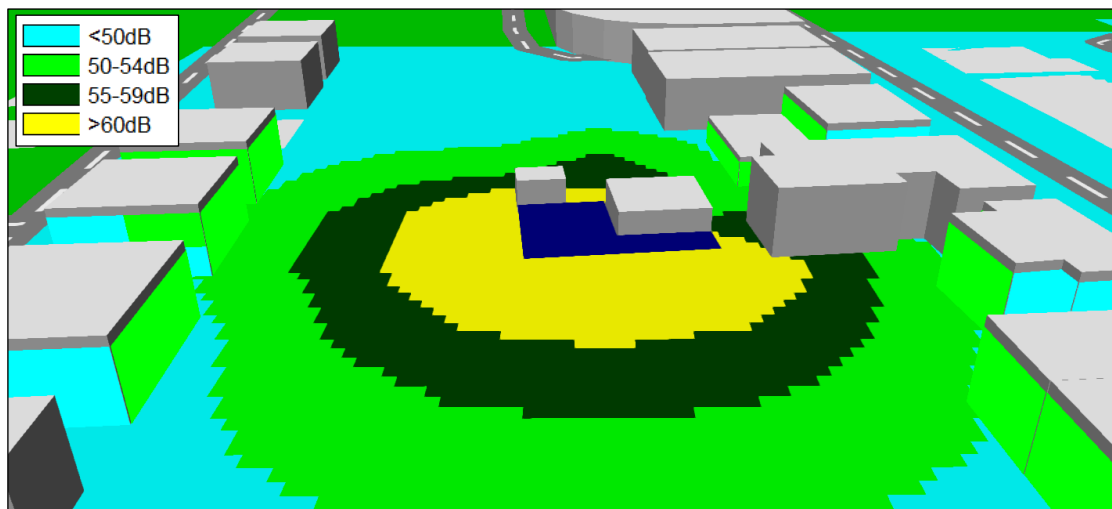
School Type	Noise Level at Playground Play Area Boundary, dB L _{Aeq,T}
Early Childhood Centre	71.5
Elementary School	71.4
Intermediate School	71.0
High School	68.2

On the basis of the above boundary level for ‘Early Childhood Centre’, the following spectra have been considered, based on historical measurements undertaken by Hann Tucker of external children’s play areas, and adjusted to the Early Childhood Centre dB L_{Aeq,T} value above in Table

Table 11 External Play Area Boundary Noise Levels

Description	Sound Pressure Level (dB re 2x10 ⁻⁵ Pa) at Octave Band Centre Frequency (Hz)								dB L _{Aeq,T}
	63	125	250	500	1k	2k	4k	8k	
Noise Levels at play area boundary	61	52	55	66	69	65	57	48	71.5

The CadnaA noise map below displays the predicted sound propagation from the external play areas.



External Play Area Noise Propagation (CadnaA Noise Map)

Based on the 3D noise modelling, Table presents the predicted noise levels within the external amenity areas of NSR 1, and the corresponding noise impact classification with reference to Table .

Table 12 External Noise Emissions Assessment

NSR	Noise Levels from External Play ^[1]	Existing Ambient Noise Level	Ambient Noise Level when External Area is Operational	Change in Ambient Noise Level	IEMA Impact Classification
NSR 1 ^[1]	54 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	56 dB L _{Aeq,8hr}	6 dB	Moderate
NSR 2	51 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	54 dB L _{Aeq,8hr}	4 dB	Minor
NSR 3	54 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	56 dB L _{Aeq,8hr}	6 dB	Moderate

Notes:

[1] At the approximate centre of the front/rear amenity area of NSR 1, at 1.5m from local ground level.

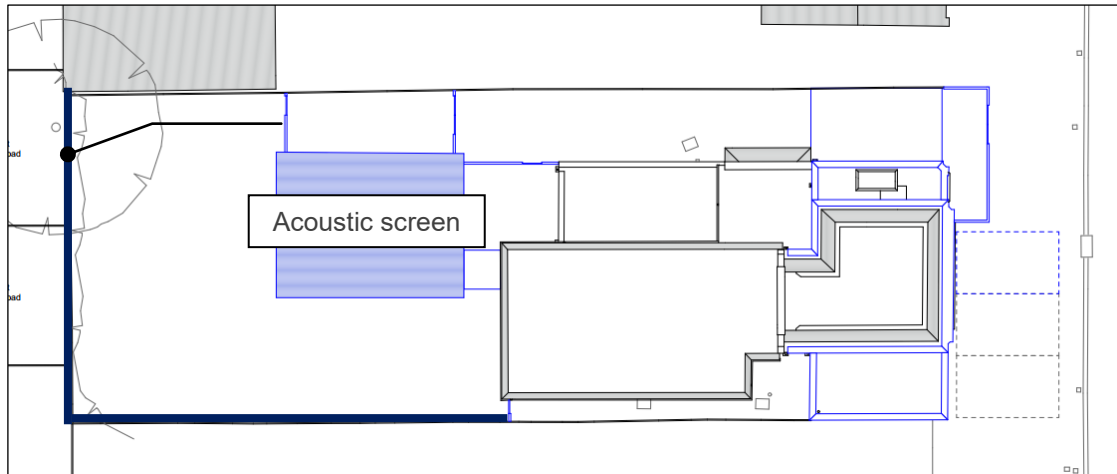
The assessment indicates that the potential noise impact at NSR 1 could be considered Moderate, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

The assessment indicates that the potential noise impact at NSR 2 could be considered Minor, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

The assessment indicates that the potential noise impact at NSR 3 could be considered Moderate, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).



To mitigate the potential noise impact from external play areas, it is recommended to introduce acoustic screening approximately where indicated on the plan below.



Recommended Acoustic Screening Plan

This screening should comply with the following requirements:

- Extend approximately as shown above;
- have a minimum height of 2m; and
- be imperforate (solid) and have a minimum mass per unit area of at least 10kg/m².

Doors shall be treated so as to maintain the acoustic performance of the assembled screen. All junctions between the screen and adjacent structures shall be made good and sealed with a heavy grout and/or dense non-hardening mastic. The complete structure shall be wind and weather resistant to standards agreed with the Client.

The CadnaA noise map below displays the predicted sound propagation with incorporation of the recommended acoustic screening.

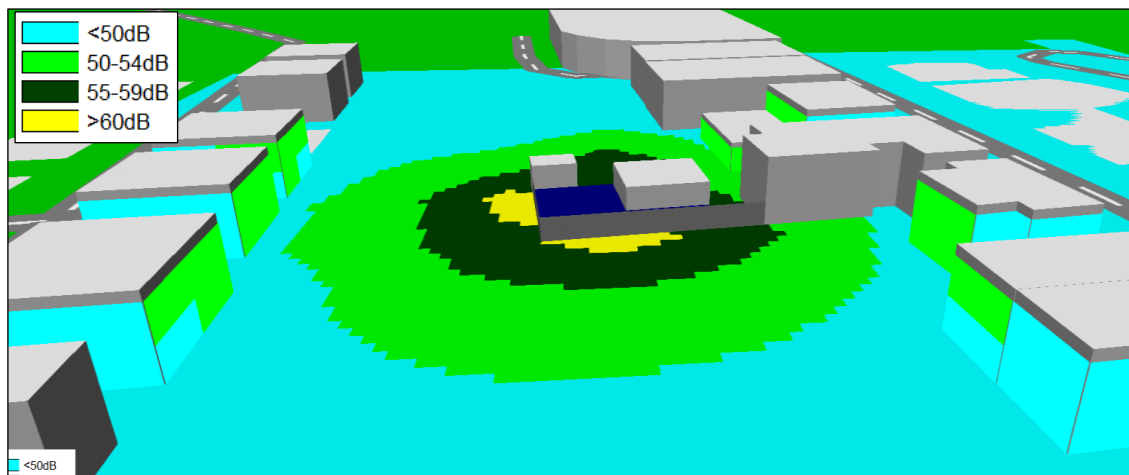


Table External Play Area Noise Propagation with Mitigation (CadnaA Noise Map)

Table presents the predicted noise levels with the recommended acoustic screening within the external amenity area of NSR 1, and the corresponding noise impact classification with reference to Table .

Table 13 External Noise Emissions Assessment (with Mitigation)

NSR	Noise Levels from External Play	Existing Ambient Noise Level	Ambient Noise Level when External Area is Operational	Change in Ambient Noise Level	IEMA Impact Classification
NSR 1 ^[1]	52 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	54 dB L _{Aeq,8hr}	4 dB	Minor
NSR 2	51 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	54 dB L _{Aeq,8hr}	4 dB	Minor
NSR 3	52 dB L _{Aeq,8hr}	50 dB L _{Aeq,8hr}	54 dB L _{Aeq,8hr}	4 dB	Minor

Notes:

[1] At the approximate centre of the front/rear amenity area of NSR, at 1.5m from local ground level.

The assessment presented in Table indicates that incorporation of the recommended acoustic screening should reduce noise emissions from the external play area in the rear external amenity area of NSR 1 such that the noise impact could be considered Minor, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

The assessment indicates that the potential noise impact at NSR 2 could be considered Minor, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

The assessment presented in Table indicates that incorporation of the recommended acoustic screening should reduce noise emissions from the external play area in the rear external



amenity area of NSR 3 such that the noise impact could be considered Minor, with reference to the impact classification criteria of 'IEMA Guidelines for Environmental Noise Impact Assessment' (November 2014).

Whilst the assessment indicates a Minor impact on receptors, the potential noise impact of external noise levels can be offset given the context that children shall only be outside from 09:00 to 17:00 hours, Monday to Friday. i.e. the noise impact during typical noise sensitive hours, such as evenings and weekends would be negligible.

Therefore, given this context, the impact on receptors overall could be considered negligible.

To further minimise the potential for adverse noise impacts, it is recommended that a Noise Management Plan is implemented for operation of the external play areas. This plan should include the following practices:

- Whilst Early Years' outdoor environments are much calmer and less noisy than primary or secondary schools, further noise mitigation will in any event be afforded by the tenant's usual modus operandi in relation to outdoor play:
- The outdoor area will only be in use Monday to Friday 9am to 5pm.
- Outdoor activity is purposeful, rather than unstructured, with themed outdoor areas (or huts) focussing on activities such as reading, role play, mud kitchen, planting and growing and den building.
- All outdoor activity takes place in small groups with one member of staff responsible for every three babies, a further member of staff responsible for each group of four two-to three-year-olds, whilst pre-schoolers (four year-olds) are supervised by a member of staff for every five children. This allows staff to manage any unduly exuberant behaviour more readily.
- Potentially louder activities, eg children's singing, dancing and music time all take place indoors.

10.0 Conclusions

A detailed environmental noise survey has been undertaken in order to establish the currently prevailing environmental noise climate around the Site.

Data obtained from a façade sound insulation test of the existing building fabric indicated that external noise breakout shall be within acceptable limits.

For the new outbuilding, our calculations indicated that external noise breakout shall be within



acceptable limits.

The initial assessment of noise from external play areas indicated the potential for a Moderate noise impact upon nearby existing noise sensitive receptors. To control noise levels from external play areas, acoustic screening has been recommended. Incorporation of this screening is shown to reduce the potential noise impact to Minor.

The principles of a Noise Management Plan have been provided to further minimise potential adverse noise impacts.

Appendix A

Acoustic Terminology

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

dB	Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).
dBA	The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The _A subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.
L _{90,T}	L ₉₀ is the noise level exceeded for 90% of the period <i>T</i> (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.
L _{eq,T}	L _{eq,T} is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, <i>T</i> .
L _{max}	L _{max} is the maximum sound pressure level recorded over the period stated. L _{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L _{eq} noise level.
L _p	Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).
L _w	Sound Power Level (SWL) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).

Appendix B

Planning Policies, Standards & Guidance

B.1 Noise Policy Statement for England

The Noise Policy Statement for England (NPSE) was published in March 2010 (i.e. before the NPPF). The NPSE is the overarching statement of noise policy for England and applies to all forms of noise other than occupational noise, setting out the long term vision of Government noise policy which is to:

“Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.”

That vision is supported by the following NPSE noise policy aims which are reflected in three of the four aims of planning policies and decisions in paragraph 123 of the NPPF (see paragraph 8.2 (b) below):

“Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life.”*

The Explanatory Note to the NPSE has three concepts for the assessment of noise in this country:

NOEL – No Observed Effect Level

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

LOAEL – Lowest Observable Adverse Effect Level

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

SOAEL – Significant Observed Adverse Effect Level

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

None of these three levels are defined numerically and for the SOAEL the NPSE makes it clear that the noise level is likely to vary depending upon the noise source, the receptor and the time of day/day of the week, etc. The need for more research to investigate what may represent an SOAEL for noise is acknowledged in the NPSE and the NPSE asserts that not stating specific SOAEL levels provides policy flexibility in the period until there is further evidence and guidance.

The NPSE concludes by explaining in a little more detail how the LOAEL and SOAEL relate to the three NPSE noise policy aims listed above. It starts with the aim of avoiding significant adverse effects on health and quality of life, then addresses the situation where the noise impact falls between the LOAEL and the SOAEL when *“all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development.”* The final aim envisages pro-active management of noise to improve health and quality of life, again taking into account the guiding principles of sustainable development which include the need to minimise travel distance between housing and employment uses in an area.

B.2 National Planning Policy Framework (NPPF)

The following paragraphs are from the NPPF (published December 2024, amended February 2025):

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; and
- c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

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 198 also references the Noise Policy Statement for England (NPSE). This document does not refer to specific noise levels but instead sets out three aims:

- “Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.”

B.3 Planning Practice Guidance on Noise

Planning Practice Guidance (PPG) under the NPPF has been published by the Government as a web based resource at <http://planningguidance.planningportal.gov.uk/blog/guidance/>. This includes specific guidance on Noise although, like the NPPF and NPSE the PPG does not provide any quantitative advice. It seeks to illustrate a range of effect levels in terms of examples of outcomes as set out in the following table:

Perception	Examples of Outcomes	Increasing effect level	Action
Not noticeable	No effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	

Perception	Examples of Outcomes	Increasing effect level	Action
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

Appendix C

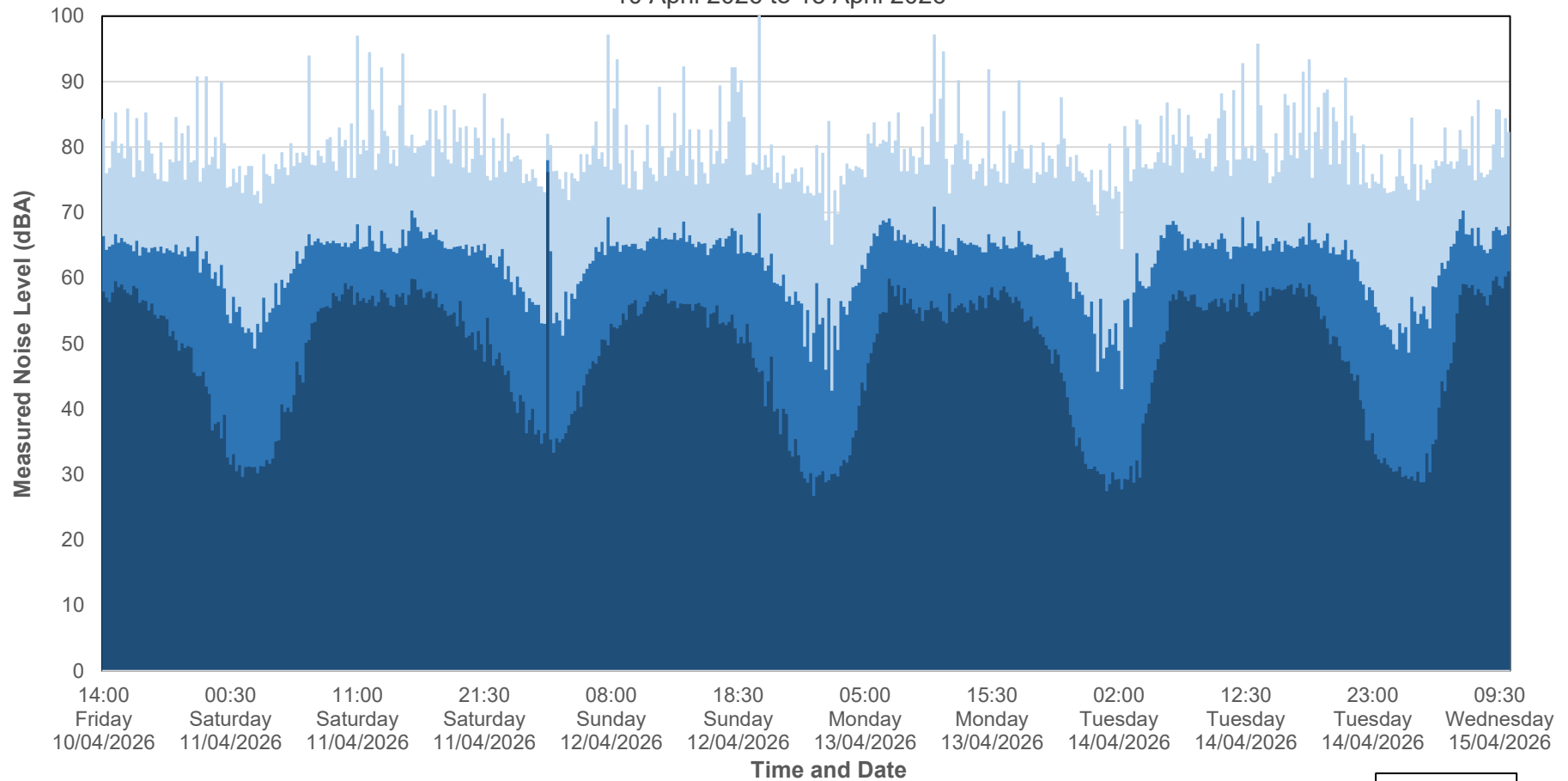
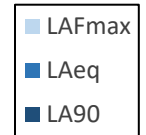
Time History Graphs

22-24 Sussex Road

Position 1

L_{eq} , L_{max} and L_{90} Noise Levels

10 April 2026 to 15 April 2026



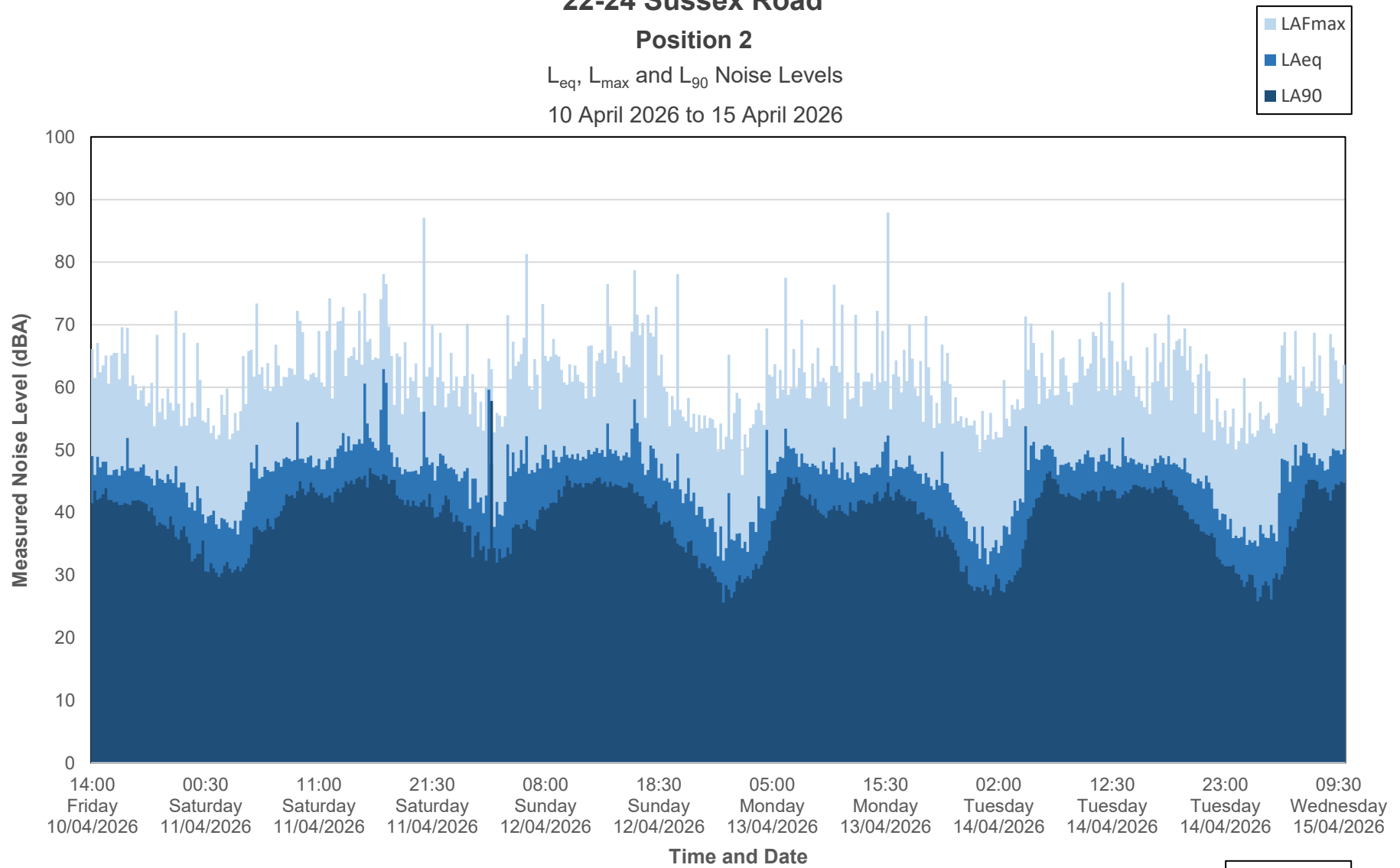
33035/TH

22-24 Sussex Road

Position 2

L_{eq} , L_{max} and L_{90} Noise Levels

10 April 2026 to 15 April 2026



33035/TH