

# Tor View School Haslingden

## Environmental Noise Survey and Noise Impact Assessment Report

30683/NIA1

20 June 2023

For:  
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# Environmental Noise Survey and Noise Impact Assessment Report 30683/NIA1

## Document Control

Rev	Date	Comment	Prepared by	Authorised by
0	20/06/2023	-		
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# Environmental Noise Survey and Noise Impact Assessment Report 30683/NIA1

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## 1.0 Introduction

Hann Tucker Associates Limited (Hann Tucker) has been commissioned by AHR Building Consultancy to undertake a baseline noise assessment for Tor View School in Haslingden, Lancashire.

A new build sports hall is proposed within the existing school grounds.

Baseline noise conditions have been established by means of a detailed noise survey. The findings have been used to assess the suitability of the proposed development with respect to 'Building Bulletin 93 (BB93): Acoustic Design of Schools', and Local Authority requirements.

## 2.0 Objectives

To undertake an environmental noise survey to establish the existing  $L_{Amax}$ ,  $L_{Aeq}$ ,  $L_{A90}$  and  $L_{A1}$  environmental road, rail and air traffic noise levels at selected accessible positions.

To calculate and present plant noise emission limits in line with the requirements of the Local Authority.

To obtain data that can be used to determine the requirements for sound insulation of the external facades at a later date.

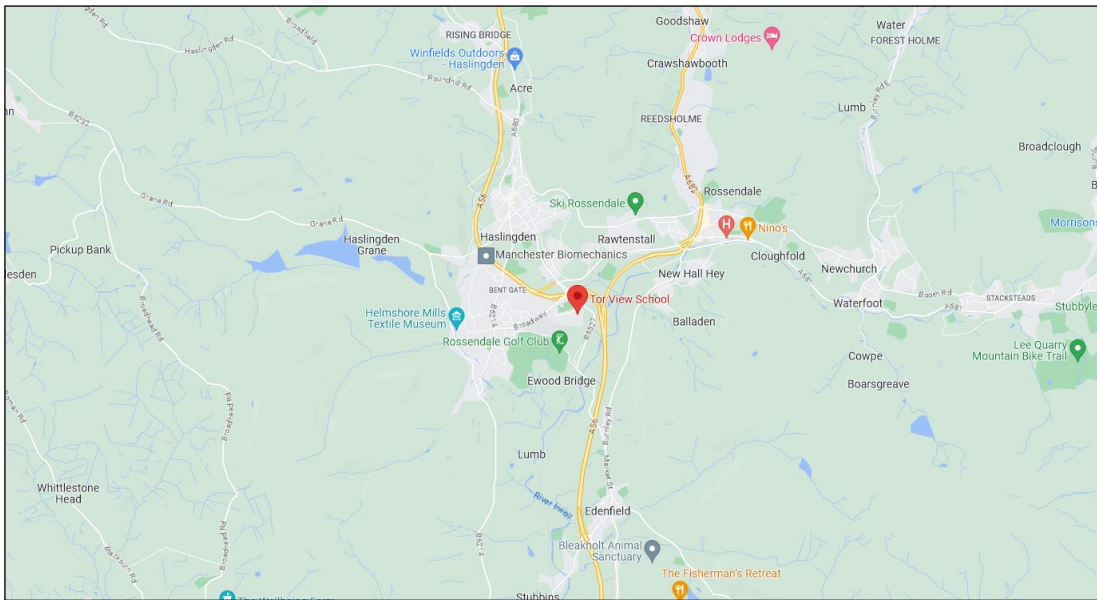
## 3.0 Acoustic Terminology

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 in Haslingden, Lancashire. The location is shown in the Location Map below.



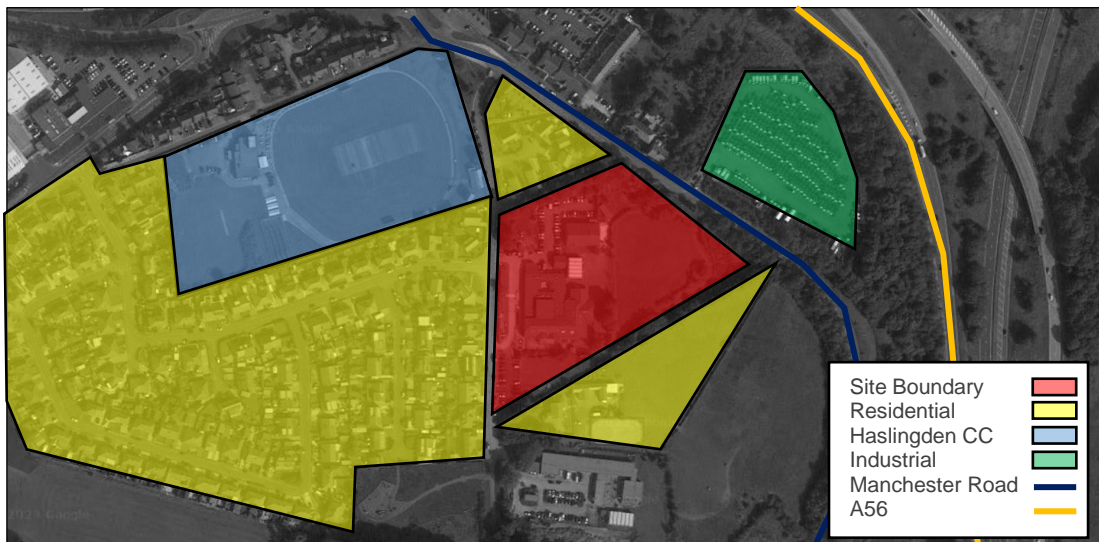
Location Map (Map data © 2023 Google)

The site falls within the jurisdiction of Rossendale Borough Council.

#### 4.2 Description

Tor View School is bounded by a residential estate to the west, north and south. To the east is Manchester Road and an unidentified industrial compound storing a number of HGV's. Haslingden Cricket Club is within close proximity to the north west and the A56 is approximately 135m from the east of site.

The site is shown in the Site Plan below.



Site Plan (Imagery ©2023 Infoterra Ltd & Bluesky, Maxar Technologies, The GeoInformation Group, Map data © 2023 Google)



## 5.0 Planning Policies, Standards & Guidance

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

- The National Planning Policy Framework (NPPF), 2021
- 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:

- Rossendale Borough Council – Environmental Health Guidance on Noise Surveys<sup>[1]</sup>
- Building Bulletin 93 (BB93): Acoustic Design of Schools
- BREEAM 2018

[1] – Supplied upon request via email dated 01/06/2023 and received 02/06/2023.

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

## 6.0 Survey Methodology

### 6.1 Procedure

Fully automated environmental noise monitoring was undertaken by J.W. Hardacre B.Eng (Hons) AMIOA from approximately 08:30 hours on Wednesday 24 May 2023 to 08:30 hours on Friday 26 May 2023, to establish full daytime and night-time noise levels over a typical weekday. Measurements were taken continuously of the A-weighted (dBA)  $L_{90}$ ,  $L_{eq}$ , and  $L_{01}$  sound pressure levels over discrete 2 and 15-minute periods.

Additional attended measurements were performed between 08:30 hours and 10:00 hours on Wednesday 24 May 2023 with the purpose of establishing typical noise levels at the locations of the proposed sports hall facades.



## 6.2 Measurement Positions

The noise level measurements were undertaken at 4 positions as described in the table below.

Position	Type	Description
1	Unattended	The sound level meter was located within a waterproof case with the microphone and preamplifier extruding on an extension cable. The microphone was attached to a pole approximately 2.5m above ground level and position such that it was overlooking the car park and road network to the west of site. The levels measured at this position can be considered to be in the free field
2	Unattended	The sound level meter was located within a waterproof case with the microphone and preamplifier extruding on an extension cable. The microphone was attached to a pole approximately 2.5m above ground level and position such that it was overlooking Manchester Road and the industrial compound to the east of site. The levels measured at this position can be considered to be in the free field
3	Attended	The sound level meter was approximately 1.5m above ground level and situated at the approximate location of the north east elevation of the proposed sports hall. The levels measured at this position can be considered to be in the free field
4	Attended	The sound level meter was approximately 1.5m above ground level and situated at the approximate location of the south west elevation of the proposed sports hall. The levels measured at this position can be considered to be in the free field

The positions are shown on the plan below.



Plan Showing Measurement Positions (Imagery ©2023 Infoterra Ltd & Bluesky, Maxar Technologies, The GeoInformation Group, Map data © 2023 Google)



### 6.3 Weather Conditions

For the unattended survey between Wednesday 24 May 2023 and Friday 26 May 2023, local weather reports indicated no notable periods of prolonged or heavy rainfall, with temperatures ranging from 8 °C (night) to 16 °C (day) and wind speeds less than 5 m/s. During our time on site, skies were clear, wind conditions were light and from a north westerly direction and road surfaces were dry.

During the attended survey on Wednesday 24 May 2023, the weather was generally clear and dry with no periods of rainfall and light wind conditions.

### 6.4 Instrumentation

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

Position	Description	Manufacturer	Type	Serial Number	Calibration
1	Type 1 Data Logging Sound Level Meter	Larson Davis	LXT	4086	Calibration on 10/06/2022
2	Type 1 Data Logging Sound Level Meter	Larson Davis	LXT	4569	Calibration on 10/06/2022
3	Type 1 Data Logging Sound Level Meter	Larson Davis	LXT	6490	Calibration on 10/06/2022
4					

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 0.1 dB).

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

## 7.0 Results

The results have been plotted on Time History Graphs 30683/TH1 to 30683/TH2 enclosed presenting the 15 minute A-weighted (dBA)  $L_{90}$ ,  $L_{eq}$  and  $L_{01}$  levels at each measurement position throughout the duration of the survey.

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.





LA<sub>01</sub> values are the '10<sup>th</sup> highest' 2-minute value.

Position	Day	School Hours (09:00 – 15:30 hrs)			Night-time (23:00 – 07:00 hrs)
		L <sub>Aeq,30min</sub>	L <sub>A90</sub>	L <sub>A01</sub>	L <sub>A90</sub>
1	Wednesday	57	49	70	32
	Thursday	57	44	71	39
2	Wednesday	66	53	75	34
	Thursday	66	48	75	39

The above levels are as measured at the measurement positions and include local reflections.

The following table summarises noise levels recorded at each of the attended measurement positions.

Position	Date	Period	Sound Pressure Level (dB)		
			L <sub>Aeq,T</sub>	L <sub>A90,T</sub>	L <sub>A01,T</sub>
3	24/05/2023	08:35 – 08:50	53	50	57
		09:10 – 09:20	54	50	62
		09:30 – 09:40	54	50	61
4	24/05/2023	08:50 – 09:05	52	48	61
		09:20 – 09:30	51	46	61
		09:45 – 09:55	51	46	59

## 8.0 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 noise from Manchester Road and the A56.

During the attended survey the dominant noise sources were noted to be as follows.

Position	Description
3, 5, 7	Distant road traffic noise, bird song, wind rustling in trees at approx. 56 dBA
4, 6, 8	Distant road traffic noise, bird song, animal noises in distance



It is worth noting that during all attended measurements members of school staff and students were arriving. Periods during which noise associated with these movements was dominant were excluded from the measurements where possible.

## 9.0 Plant Noise Emission Criteria

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

We have been provided with the following policy via email by Rossendale Borough Council regarding. While plant noise is not technically characterised as ‘industrial’ this is the closest applicable guidance within the provided document.

### ***“b) Industrial noise that may affect existing residential property under BS4142:2014***

*Due to its variable character industrial noise is difficult to assess. However, BS 4142 Method for rating industrial noise affecting mixed residential and industrial areas promotes a method for assessing whether industrial noise is likely to give rise to complaints from people living nearby. Where possible the noise from the industrial source should not exceed the existing background level of noise. Where this is not possible, the Environmental Health Service may accept an exceedance above the background level of noise of 3 dB(A), although full justification will be needed of why the lower noise level can not be achieved. Noise sources that have a tonal or low frequency element should be assessed carefully to ensure they are not prominent above the existing background level of noise.”*

On the basis of the above and the results of the environmental noise survey, we propose that the following plant noise emission limits be achieved at 1 metre from the nearest noise sensitive residential window.

Position	Noise Emission Limit (dBA)	
	Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
1 <sup>[1]</sup>	47	35
2 <sup>[1]</sup>	51	37

[1] – Limits includes +3dB correction for façade reflection.

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

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



## 10.0 Plant Noise Emission Limits

At the time of writing there are no plant selections, as such, plant noise emission limits have been set.

The following tables summarise the calculations of atmospheric plant noise emission limits.

	Clod Lane Receptor Sound Pressure Level (dBA)	
	Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
Maximum Noise Level at 1m From Receptor	48	35
Façade Reflection	-3	-3
Distance Correction (27m)	+26	+26
Cumulative Plant Noise Emission Limit at 1m	71	58

	Manchester Road Receptor Sound Pressure Level (dBA)	
	Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
Maximum Noise Level at 1m From Receptor	51	39
Façade Reflection	-3	-3
Distance Correction (100m)	+37	+37
Cumulative Plant Noise Emission Limit at 1m	85	73

The above calculations are on the basis of the following assumptions:

- Plant area no bigger than 2m x 1.5m x 1.8m
- Rathe Method distance correction

## 11.0 Conclusions

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

Plant noise emission criteria have been set in line with the requirements of Rossendale Borough Council.

## Appendix A

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

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

**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 <sub>A</sub> 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<sub>90,T</sub>** L<sub>90</sub> is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

**L<sub>eq,T</sub>** L<sub>eq,T</sub> is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

**L<sub>max</sub>** L<sub>max</sub> is the maximum sound pressure level recorded over the period stated. L<sub>max</sub> is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L<sub>eq</sub> noise level.

**L<sub>p</sub>** Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of  $2 \times 10^{-5}$  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<sub>w</sub>** 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

### 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 July 2021):

185. 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.

187. 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 185 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	
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

Perception	Examples of Outcomes	Increasing effect level	Action
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 hard, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

## B.4 Local Planning Policy

**Guidance document on noise surveys required for planning applications.**

### When is a noise survey required?

The Environmental Health Service usually requires a noise survey for a planning application where:

- an application is submitted for a development of an industrial or commercial development where there are already existing noise- sensitive premises.
- a large development has been proposed within noise- sensitive premises.
- where the proposed application involves the fixing of noise- generating machineries.
- where a proposed development will be affected by the surrounding transport system
- where there is a change of use to a more noise- sensitive end use

A noise survey can be requested for, and at any phase of a planning proposal i.e. at the demolition, construction or operational/ habitable phase. Hence, a noise survey may be required to provide more information for what may seem to be short activity. Normally where an applicant or a developer knows that a proposal could generate some noise concerns, they should submit a noise survey with the planning application. A prime advantage of doing this is time. As the planning department consults with other departments when considering a planning application, for instance, the Environmental Health Service, there is a statutory obligation for these statutory consultee departments to respond within a certain time period. Hence incomplete information only leads to a delay in providing a recommendation. Even where certain conditions are required by these departments, the development cannot be commenced until these have been satisfied.

### Who is approved by the council to provide a noise survey?



Noise surveys are carried out by qualified noise consultants. The choice of a qualified noise consultant is left to the applicant's choice. The council is unable to recommend any consultants to the applicants. A decision is made based on submitted information for a particular planning application only. Information on noise consultants can be obtained from various websites such as the Association of Noise Consultants [www.associationof-noise-consultants.co.uk](http://www.associationof-noise-consultants.co.uk) , and the institute of acoustics <http://www.ioa.org.uk/>. Again, the council cannot accept responsibility for the use of any of these websites.

### **Where can I get some information on noise control?**

Information on noise assessment and control can be found in many advisory documents. The National Planning Policy Framework (NPPF) states that the impact of noise needs to be controlled. National Planning Policy Guidance (NPPG) – Noise. The NPPG contains useful and pragmatic guidance that is primarily aimed at acousticians. <http://planningguidance.planningportal.gov.uk/blog/guidance/noise/noiseguidance/> Commonly, the following methods will be accepted provided they are suitable for the development site, although this is not an exhaustive list:

- **PPG24** for the assessment of noise affecting noise sensitive developments near to existing sources of noise, mainly relating to traffic sources. A full 24- hour survey is normally required although the shortened measurement procedure in the Calculation of Road Noise (CRTN) can be used if appropriate. PPG24 was withdrawn from official use in 2012 and replaced with the National Planning Policy Framework (NPPF) and Noise Policy Statement for England (NPSE). However, many Local authorities in England still refer to the content of PPG24 when determining planning applications for developments – in terms of noise generated or exposure to existing noise sources.
- **BS4142:2014** for the assessment of industrial noise that may affect existing residential property, mainly used for fixed industrial plant such as fans. BS4142 suggests that the greater the difference in dB the greater the magnitude of the impact. A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on context. A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context, Tonal or impulsive characteristics are likely to increase the likelihood of complaints and this is taken into account by the 'rating level' defined in BS 4142. This 'rating level' should be used when setting the level of noise that can be permitted. Since background noise levels vary throughout a 24 hour period it will usually be necessary to assess the acceptability of noise levels for separate periods (e.g. day, evening, night and weekend) chosen to suit the hours of operation of the proposed development. Whilst a useful guide, BS4142 should not be solely relied upon to accurately establish the impact of industrial development in terms of noise.

□ BS8233:2014 for the assessment of sound insulation and noise reduction for buildings. For instance noise insulation against external noise for residential bedrooms should achieve a level of 30dB LAeq, internally at night.

What information needs to be included in the noise survey report?

Please note the list below isn't exhaustive:

- Reason for/scope of report
- Proposed development to which survey relates
- Location plan of proposed development
- Methodology used including location of noise monitoring locations, equipment used, weather conditions
- Deviations from methodology/standard
- Full table of results
- Assessment of results according to standards used
- Recommendations for noise control measures
- Full calculations of the noise reductions expected to support any suggested noise control measures

#### **Does the Council have any set noise levels for developments?**

Limits on noise levels are dependent on the development proposed:

#### **a) Noise affecting noise sensitive developments near to existing sources of noise, mainly relating to traffic sources under PPG24**

Housing, hospitals, educational establishments, offices and some livestock farms should generally be regarded as noise-sensitive land uses. Authorities may also wish to include other developments or uses (such as places of recreation) within this definition, depending on local circumstances and priorities. The juxtaposition of incompatible uses can cause problems for the occupiers of both the new and existing development. For example, where a residential development is proposed in the vicinity of existing industrial uses, the expectations of new residents may exceed the standards applied by the planning authority and which may give rise to local pressure to curtail the existing use. Planning authorities should, therefore, try as a matter of good practice to keep a suitable distance between noise sensitive development and established businesses that generate noise.

The use of Noise Exposure Categories (NECs) help planning authorities determine applications for residential development on sites subjected to noise from road, rail, air, and "mixed"

transportation noise. The noise category method does not take industrial noise into account. When assessing a proposal for residential development, planning authorities can determine into which category the proposed site falls, taking account of average day and night-time noise levels, as well as a maximum upper night time value. The categories identify the need for development proposals to address noise issues and put forward recommended standards for noise exposure to which new housing development must comply through, for example, the introduction of noise mitigation measures. For category A sites noise is unlikely to be a determining factor, while for Category D sites refusal of planning permission is likely to be the most appropriate solution. Categories B and C deal with situations where noise mitigation measures may make development acceptable.

Where the noise levels are shown as NEC category B and above, we will look for noise reduction measures to be put in place that will achieve the "good" internal noise level criteria in bedrooms and living rooms set out in BS8233:2014. For outdoor garden areas, noise levels should be less than or equal to 55 dB(A) as recommended in the World Health Organisation Guidelines on Community Noise. Where the noise levels are shown as NEC category D, we would recommend that planning consent be refused although this decision ultimately rests with the Planning Control team of the Council.

*It is important to note that the Noise Exposure Categories apply only where consideration is being given to introducing new housing development into an area with an existing transport noise source and not in the reverse situation.*

#### **b) Industrial noise that may affect existing residential property under BS4142:2014**

Due to its variable character industrial noise is difficult to assess. However, BS 4142 Method for rating industrial noise affecting mixed residential and industrial areas promotes a method for assessing whether industrial noise is likely to give rise to complaints from people living nearby. Where possible the noise from the industrial source should not exceed the existing background level of noise. Where this is not possible, the Environmental Health Service may accept an exceedance above the background level of noise of 3 dB(A), although full justification will be needed of why the lower noise level can not be achieved. Noise sources that have a tonal or low frequency element should be assessed carefully to ensure they are not prominent above the existing background level of noise.

#### **c) Noise between residential properties**

This is determined through the Building Control Regulations process rather than by the Environmental Health Service. Residential accommodation should be designed and constructed/converted so as to achieve the insulation requirements set out in Building

Regulations Approved Document E.

We will look for noise reduction measures to be put in place that will achieve the "good" internal noise levels in bedrooms and living rooms set out in BS8233:2014. In addition, particular attention should be given to noise sources that have a tonal or low frequency element such as loud music that can travel readily through building structures and cause significant disturbance.

#### **d) Noise between residential and commercial properties**

Commercial developments such as restaurants, hot food take-aways, night-clubs, pubs and cinemas pose particular difficulties, not least because associated activities are often at their peak in the evening and late at night. For this type of development, vocal noise and noise resulting from amplified music can create noise disturbance when heard by the residents of adjacent properties; even at low levels. Authorities may wish to consider attaching conditions to any consent for such development in order to safeguard residential amenity.

Planning authorities should not only consider the noise that is generated within the premises but also the attendant problems of noise that may be made by customers and related vehicles in the vicinity; particularly in residential areas.

Traffic noise resulting from deliveries to major retail developments and changes between shifts are particularly significant. Where noise of this nature is likely to cause disturbance during unsociable hours authorities may wish to consider attaching conditions to regulate it.

For applications involving change of use to restaurants or food take away shops located within residential premises, detailed reports of the fumes extraction unit and odour control must be provided.

#### **e) Construction Site Noise**

Whilst planning conditions can be used to limit noise from temporary construction sites it is most effectively controlled by means of the Control of Pollution Act 1974. Notice can be served in advance of works and site conditions set to control activities. . Detailed guidance on noise issues relating to construction sites can be found in BS 5228 Noise control on construction and open sites. In particular, Part 1, "Code of Practice for basic information and procedures for noise control" will be useful because as well as giving general advice, it describes a method for predicting noise from construction sites.

## **B.5 Statutory Noise Nuisance**

There is no quantitative definition of statutory noise nuisance. It is generally accepted however, that if the plant noise level is at least 5dB (or 10dB if tonal) below the minimum background  $L_{90(15\text{minutes})}$  at 1m from the nearest noise sensitive residential window, then the risk of a statutory noise nuisance is avoided. By adopting this as a design criterion the guidance contained in BS 4142:2014 should also be complied with.

# Tor View School

## Position 1

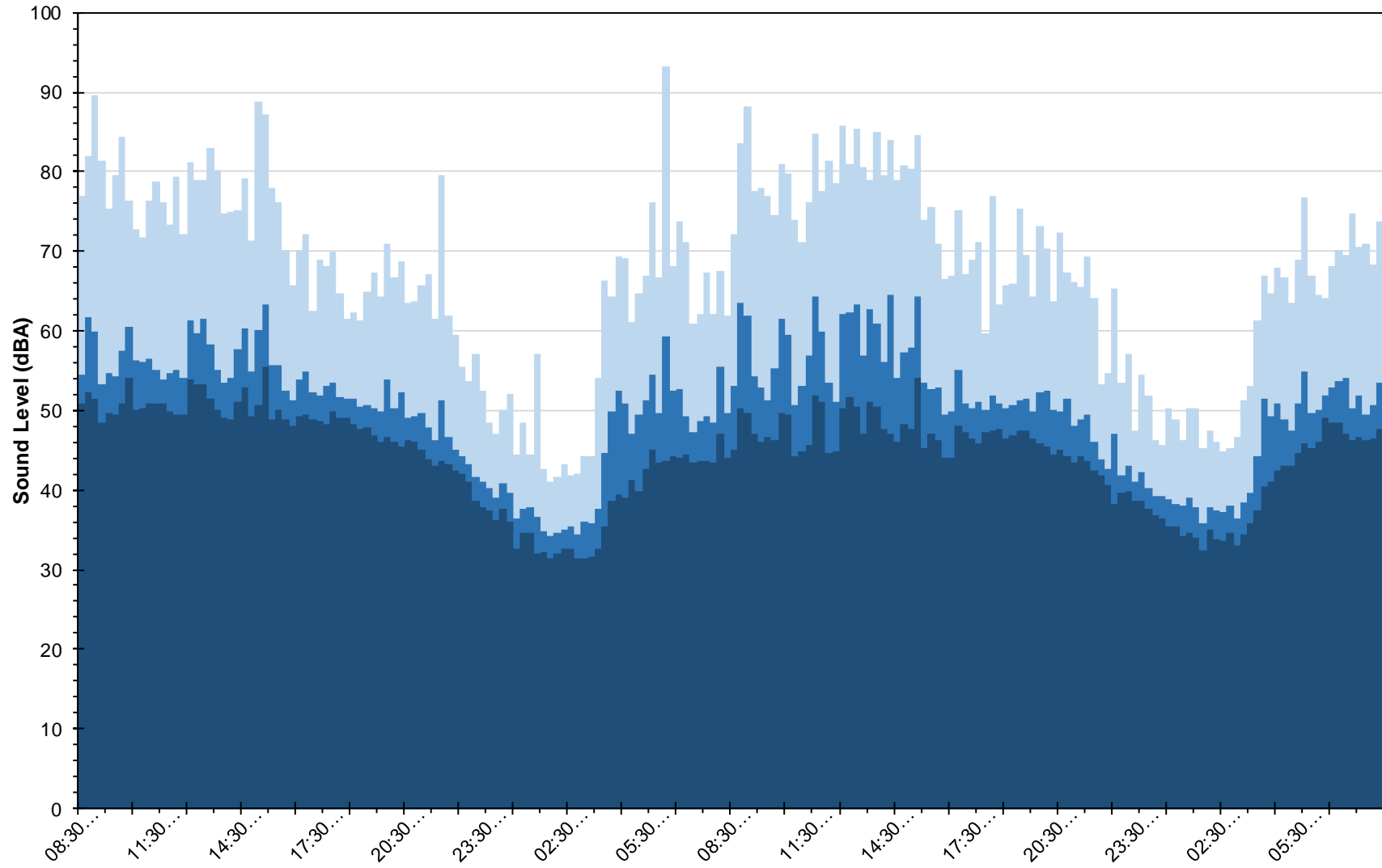
$L_{eq}$ ,  $L_{max}$  and  $L_{90}$  Noise Levels

Wednesday 24 May 2023 to Friday 26 May 2023

■  $L_{Amax}$

■  $L_{Aeq}$

■  $L_{A90}$



Date and Time

30683/TH1

# Tor View School

## Position 2

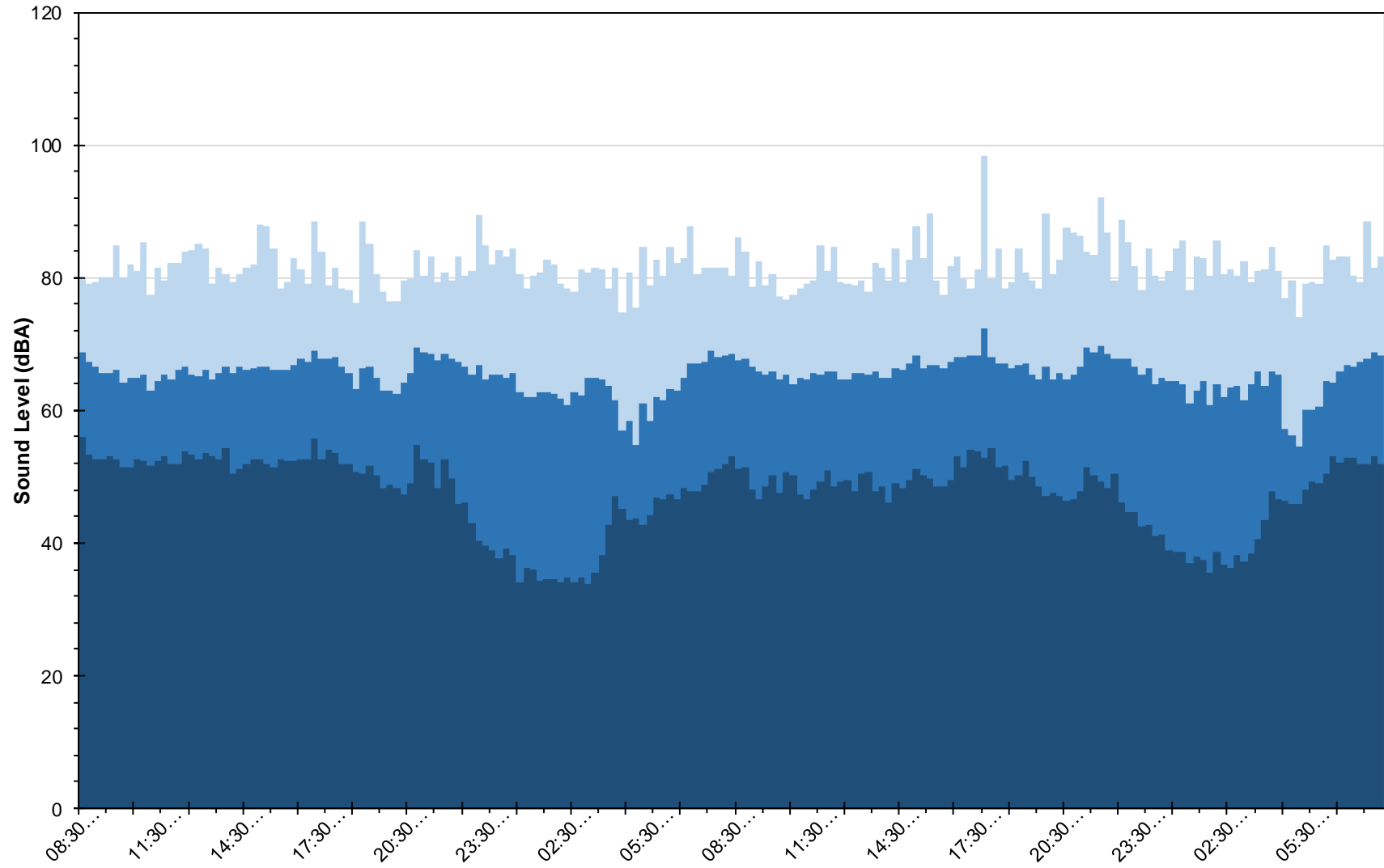
$L_{eq}$ ,  $L_{max}$  and  $L_{90}$  Noise Levels

Wednesday 24 May 2023 to Friday 26 May 2023

LAmax

LAeq

LA90



Date and Time

30683/TH2