



Heywood SEN(D) Noise Impact Assessment

For Tilbury Douglas

Date: 16 December 2021

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1. INTRODUCTION

Hydrock have been appointed by Tilbury Douglas to carry out a noise assessment in support of an outline planning application for the Heywood SEN(D) School, in Heywood, Rochdale. This report provides the following:

- A summary of the existing noise climate;
- An assessment of external sound levels affecting the school building in terms of BB93;
- Recommended mitigation in terms of glazing and the ventilation strategy; and,
- Fixed Services Plant and Equipment noise rating level limits in line with BS 4142 and typical Local Policy guidance.

This report is necessarily technical in nature. A glossary of technical terminology is therefore included in **Appendix A** to assist in interpreting the technical terminology used herein.

2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The development site is located on the northern side of Heywood town, which consists of a mixture of commercial and residential properties.

To the north of the site is an open field as part of Heywood Sports Village, with residential properties beyond.

Immediately east of the site is Heywood Sports Village which comprises of a 2-storey building, 5 sports pitches and a large carpark. Beyond is Bamford Road with a mixture of residential and commercial properties approximately 315m away.

To the south the site is bordered by West Starkey Street and more residential and commercial properties. The A58 (York Street) is also located to the south of the proposed site approximately 230m away. Bordering the west of the site is residential properties.

The proposed building comprises of a 2-storey specialist teaching facility alongside outdoor sports, teaching areas, and associated car parking.

The proposed site layout provided to Hydrock for this assessment can be found in **Appendix B**.

3. RELEVANT POLICY AND GUIDANCE

To assist in establishing an appropriate noise survey and assessment methodology, a detailed review of local and national policy and guidance has been undertaken. This is outlined in **Appendix C**.

The following national policy and guidance documents have been considered:

- National Planning Policy Framework (NPPF);
- Noise Policy Statement for England (NPSE);
- BB93 - Building Bulletin 93: Acoustic Design of Schools - Performance Standards; and,
- BS 4142:2014 + A1 2019 - Methods for rating and assessing commercial and industrial sound (BS4142).

4. BASELINE NOISE ENVIRONMENT

4.1 Previous Noise Survey

4.1.1 Survey Overview

A noise survey was carried out on the site by Sandy Brown Acoustics on 4th December 2019 at 3 locations around the site over 15minute periods. The full assessment can be found in the document provided to Hydrock by Icen, reference 19499-R02-A Environmental Noise Survey Report - BB93.

4.1.2 Summary of Results

A summary of measured noise levels is provided in Table 1.

Table 1: Average Measured Noise Levels

Monitoring Location	Start Time	Measured Average Ambient Noise Level, $L_{Aeq,T}$ dB	Measured Typical Background Noise Level, $L_{A90,T}$ dB
ML1 – Adjacent to West Starkey Street	11:20	72	55
	12:20	72	57
ML2 – Western Site Boundary, adjacent to Cedar Avenue	11:40	53	49
	12:40	53	48
ML3 – To the north of the site adjacent to Heywood Sports Village	12:00	53	49
	13:00	52	47

4.2 Hydrock Noise Survey

An additional short-term noise survey was carried out to verify the previous Sandy Brown noise survey.

4.2.1 Survey Overview

Noise measurements were made using Class 1, integrating sound level meters. The sound level meters were calibrated to a reference level of 94 dB at 1kHz both prior to, and on completion of, the noise survey. No significant drift in calibration was noted during the survey (≤ 0.5 dB).

All noise monitoring will take place during conducive conditions, with wind speeds less than 5ms⁻¹ and no significant precipitation

4.2.2 Survey Procedure

Short term noise monitoring was undertaken on 14th December 2021 at 2 monitoring locations (MLs). The monitoring locations are summarised as follows:

Monitoring Location 1

ML1 was located to the south of the site, adjacent to West Starkey Street. This location was chosen to be representative of the noise from West Starkey Street and the surrounding road network. The sound level meter was positioned vertically on a tripod approximately 1.5m above the ground, and at least 3.5m from any other reflecting surfaces. Attended Measurements were carried out from 13:35 to 14:35 on 14th December.

Monitoring Location 2

ML2 was located to the western site boundary. This location was chosen to be representative of the noise experienced by the nearest noise sensitive premises on Cedar Avenue. The sound level meter was positioned vertically on a tripod approximately 1.5m above the ground, and at least 3.5m from any other reflecting surfaces. Attended Measurements were carried out from 13:30 to 14:30 on 14th December.

4.2.3 Summary of Existing Noise Environment

Observations made during the survey and a review of audio recordings made during unattended measurements identified the following significant noise sources contributing to the noise climate at the site.

Road Traffic: Road traffic could be heard at monitoring locations across the site. This was dominating for most of the time, especially noise from West Starkey Street.

Other Sources: Bird noise and noise from the sports village was also audible across the site throughout the survey.

4.2.3.1 Summary of Results

A summary of measured noise levels is provided in Table 12.

Table 2: Average Measured Noise Levels

Monitoring Location	Start Time	Measured Average Ambient Noise Level, $L_{Aeq,T}$ dB	Measured Typical Background Noise Level, $L_{A90,T}$ dB
ML1	13:35	60	48
ML2	13:30	47	45

The levels shown in Table 2 are lower than the levels report from the previous noise survey, shown in Table 1. To ensure the assessment is robust, noise levels presented in Table 1 have been used for this assessment.

5. EXTERNAL BUILDING FABRIC

5.1 Ventilation Strategy

The building is to be ventilated by a centralised air handling unit. Openable windows will be provided to assist with thermal comfort during the hottest part of the year.

5.2 Glazing Strategy

To accommodate for the target internal levels of 35dBA as outlined in BB93, two façade zones have been specified. The preliminary sound reduction performances for glazing to each façade zone and example configurations are outlined in Table 3.

Table 3: Glazing Strategy

Site Area	Preliminary minimum sound reduction performance (dB) Glazing ($R_w + C_{tr}$)	Example configuration
Southern, western and eastern Façades	36	Medium specification double glazing (10mm /12mm /4mm)
Northern Façade	31	Standard thermal double glazing (6mm, 12mm, 4mm)

6. NOISE FROM PROPOSED FIXED PLANT

Table 4 outlines the atmospheric plant noise emission limits for the proposed development considering the background noise levels measured on site.

With reference to BS4142, the atmospheric noise emissions limits have been determined for any proposed fixed building services plant (with the exception of emergency plant i.e. back-up generators).

Noise associated with the development shall be controlled to the guideline levels outlined in Table 4 where possible, when assessed in accordance with BS4142, at the nearest noise sensitive receptor. The noise levels are derived from the measured background noise levels at ML2.

Table 4: Atmospheric Plant Noise Emission Limits

Period	Atmospheric Plant Noise Emission Plant Limits, dB $L_{A,T}$
Daytime (07:00 to 23:00hrs)	48

Details of proposed plant are not known at this stage. It is therefore recommended that provision be made for low-noise plant, and attenuation measures (screening/enclosures/duct-mounted attenuators etc.) as appropriate.

The above recommended criteria are subject to the final approval of RBC.

7. NOISE FROM MULTI-USE GAMES AREAS (MUGAS)

7.1 Assessment Criteria

The Sports England Design Guidance highlights that with no specific noise criteria for an AGP, the World Health Organisation 'Guidelines for Community Noise' (WHO) is considered the most relevant and the most commonly applied guidance for the assessment of sports pitch noise.

WHO gives the following description of community noise:

"Community noise [...] is defined as noise emitted from all sources except noise at the industrial workplace. Main sources of community noise include road, rail and air traffic, industries, construction and public work, and the neighbourhood noise. Typical neighbourhood noise comes from premises and installations related to the catering trade (restaurant, cafeterias, discotheques etc.); from live or recorded music; sport events including motor sports; playgrounds; car parks; and domestic animals such as barking dogs."

For noise levels internally and externally to dwellings WHO states:

"To enable casual conversation indoors during daytime, the sound level of interfering noise should not exceed 35 dB $L_{Aeq,T}$."

This is consistent with the guidance outlined in BS 8233:2014. Based on a 15 dB sound reduction from a partially open window, the incident external noise level should not exceed an 'absolute' noise level of $L_{Aeq,T}$ 50 dB. WHO also states that to avoid 'moderate annoyance' during the daytime and evening, noise levels should not exceed $L_{Aeq,T}$ 50 dB in outdoor spaces.

However, it should be noted that the above criteria were reviewed in a report by the National Physical Laboratory which states:

“Exceedance of the WHO guideline values does not necessarily imply significant noise impact and indeed, it may be that significant impacts do not occur until much higher levels of noise exposure are reached.”

In some circumstances, an alternative assessment methodology may therefore be appropriate, whereby the predicted noise levels are compared with the existing noise climate. A ‘slight’ impact is considered for an increase of less than 3 decibels, as this is the minimum level that can normally be perceived. This equates to an incident $L_{Aeq,T}$ noise level that is equal to the prevailing ambient $L_{Aeq,T}$ noise level.

Sports England guidance also notes that in some instances, it may be beneficial to use both comparative and absolute assessment methods.

7.2 Assessment in Context to the Site

The noise levels measured on site can be observed in Table 1. Predicted levels using a 3D model of the MUGA on a SoundPLAN model have been compared with existing background noise levels to assess the impact on the nearby sensitive receptors.

The results of the acoustic modelling and the measured results from site can be seen in Table 5.

7.3 Results

Table 5: Measured Background Levels and Predicted Noise Levels from the Proposed MUGA

Receptor	Measured Background Daytime Noise Levels L_{A90} , dB	SoundPLAN Predicted Daytime Noise Levels, L_{Aeq} , dB
Properties on Cedar Avenue	48	45

7.4 Discussion

The levels outlined in Table 5 show that the noise levels do not exceed the measured background noise level from site.

In context with the existing site and its existing noise climate, with the adjacent Heywood Sports Village, the impact of the MUGA is lessened.

Considering the site plans provided to Hydrock as shown in **Appendix C** and following guidance from Sports England and WHO, it is not considered that the MUGA will impact the existing noise sensitive receptors.

8. CONCLUSION

Hydrock have been appointed by Tilbury Douglas to carry out a noise assessment in support of a planning application for the Heywood SEN(D) School, in Heywood, Rochdale.

A noise survey has previously been undertaken by Sandy Brown Associates in December 2019. An additional noise survey has been undertaken to verify the measurements by Hydrock in December 2021.

As assessment of external sound levels affecting the school buildings has been undertaken, in accordance with the guidance set out in BB93. Mitigation in terms of glazing strategies has been recommend.

Fixed services plant noise rating level limits have been recommended, in line with BS 4142:2014 and typical Local Policy guidance.

Appendix A Acoustic Terminology

Term	Description
dB (decibel)	The scale on which sound pressure level is expressed. Sound pressure level is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure ($2 \times 10^{-5} \text{Pa}$).
dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' - weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
$L_{Aeq,T}$	L_{Aeq} is defined as the notional steady sound level which, over a stated period of time (T), would contain the same amount of acoustical energy as the A - weighted fluctuating sound measured over that period.
L_{Amax}	L_{Amax} is the maximum A - weighted sound pressure level recorded over the period stated. L_{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
L_{10} and L_{90}	If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The L_n indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence L_{10} is the level exceeded for 10% of the time, and the L_{90} is the level exceeded for 90% of the time.
R_w	R_w is the single-number quantity which characterizes the sound insulating properties of a given material over a range of frequencies. This is typically measured in a laboratory in accordance with BS EN ISO 717-1.
$D_{n,e,w}$	$D_{n,e,w}$ is the single number quantity which characterizes the airborne sound insulation performance across a given 'element' and is typically used to describe the acoustic performance of trickle ventilators etc.
C_{tr}	C_{tr} is a correction term applied to single-number sound insulation values (R_w , $D_{n,e,w}$ etc.) to afford additional weighting against low frequency performance.
Free-field Level	A sound field determined at a point away from reflective surfaces other than the ground with no significant contributions due to sound from other reflective surfaces. Generally, as measured outside and at least 3m from buildings.

Appendix B Policy and Guidance

National Planning Policy Framework (NPPF)

Published in February 2019, this document sets out the Government's planning policies for England and supersedes the previous version of the NPPF published in 2012. It makes the following reference to noise in the section entitled Conserving and enhancing the natural environment:

"170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

[...]

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans."

It also makes the following references to noise in the Section entitled Ground conditions and pollution:

"180. 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 life⁶⁰;

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.

⁶⁰ See Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food & Rural Affairs, 2010)."

And

"182. 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."

Noise Policy Statement for England (NPSE)

Published in March 2010, the Noise Policy Statement for England (NPSE) sets out the long-term vision of Government noise policy as follows:

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

The NPSE identifies three observed effect levels, names “No Observed Effect Level” (NOEL), “Lowest Observed Adverse Effect Level” (LOAEL) and “Significant Observed Adverse Effect Level” (SOAEL).

The NPSE contains little detail on assessment methodologies and specific parameters at which the varying observed effect levels would occur in the context of a residential development.

BS 8233:2014 - Guidance on sound insulation and noise reduction for buildings

As discussed above, there is no specific guidance contained within the Planning Condition and the NPSE. In lieu of this, the approach that is generally adopted when assessing environmental noise sources on residential developments is to undertake an assessment in accordance with BS 8233: 2014.

BS 8233 provides guidance for the control of noise in and around buildings. The guidance provided within the document is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, but does not provide guidance on assessing the effects of changes in the external noise levels to occupants of an existing building. The guidance provided includes appropriate internal and external noise level criteria which are applicable to dwellings for steady external noise sources. It is stated that it is desirable that the internal ambient noise level does not exceed the following criteria set out in the table below:

Activity	Location	Period	
		Daytime (07:00 to 23:00 hrs)	Night-time (23:00 to 07:00 hrs)
Resting	Living room	L _{Aeq,16hrs} 35 dB	-
Dining	Dining room/area	L _{Aeq,16hrs} 40 dB	-
Sleeping (daytime resting)	Bedroom	L _{Aeq,16hrs} 35 dB	L _{Aeq,8hrs} 30 dB

Whilst BS 8233:2014 recognises that a guideline value may be set in terms of SEL or L_{AFmax} for the assessment of regular individual noise events that can cause sleep disturbance during the night-time, a specific criterion is not stipulated. Accordingly, reference has been made in this assessment to the World Health Organisation (WHO) 1999: Guidelines for Community Noise below.

With respect to external amenity space such as gardens and patios it is stated that it is desirable that the noise level does not exceed 50 dB L_{Aeq,T}, with an upper guideline value of 55 dB L_{Aeq,T} which would be acceptable in noisier environments. It is then confirmed that higher external noise criteria may be appropriate under certain circumstances such as within city centres urban areas, and locations adjoining the strategic transportation network, where it may be necessary to compromise between elevated noise levels and other factors such as convenience of living, and efficient use of land resource.

World Health Organisation (WHO) 1999: Guidelines for Community Noise

As with the 'good' and 'reasonable' criteria in BS 8233, the LAFmax criterion in BS8233 is largely concordant with the World Health Organisation (WHO) guidance 1999: Guidelines for community noise. This document draws upon guidance from Vallet and Vernay, which states:

"For good sleep, it is believed that indoor sound pressure levels should not exceed approximately 45 dB LAFmax more than 10-15 times per night"

BS 4142:2014 - Methods for rating and assessing commercial and industrial sound

BS 4142 describes methods for rating and assessing sound from industrial and manufacturing processes, fixed installations which comprise mechanical and electrical plant and equipment, the loading and unloading of goods and materials at industrial and/or commercial premises and mobile plant and vehicles that are an intrinsic part of the overall sound emanating from premises or processes.

The methods use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident.

If appropriate, the specific sound level of the source ($L_{Aeq,T}$) is corrected, by the application of one or more corrections for acoustic features to give a 'rating' level ($L_{Ar,Tr}$). The Standard effectively compares and rates the difference between the rating level of the sound and the prevailing background sound level ($L_{A90,T}$). Comparing the rating level with the background sound level, BS 4142 states:

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

A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context."

The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."

Building Bulletin: Acoustic Design of Schools: Performance Standards, 2015 (BB93)

The acoustic conditions of schools are controlled by Building Regulations 2010 (as amended by Statutory Instrument, SI 2002/2871) states:

"Each room or other space in a school building shall be designed and constructed in such a way that it has the acoustic conditions and insulation against disturbance by noise appropriate to its intended use".

The Regulatory Requirement E4 of the Building Regulations, the School Premises Regulations and the Independent School Standards, are generally achieved via the implementation of appropriate guideline criteria outlined in Section 1 of BB93.

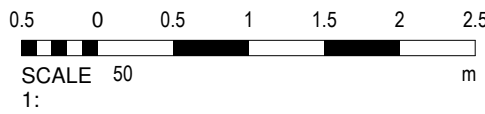
BB93 seeks to:

- Facilitate clear communication of speech between teacher and student, and between students; and,
- Ensure activities associated with study are not inhibited.

BB93 provided comprehensive guidance on appropriate acoustic conditions, for various categories of educational spaces, to be achieved internally and externally. Together with guidance on appropriate airborne and impact sound insulation criteria for internal partitions, and recommended reverberation values for each space.

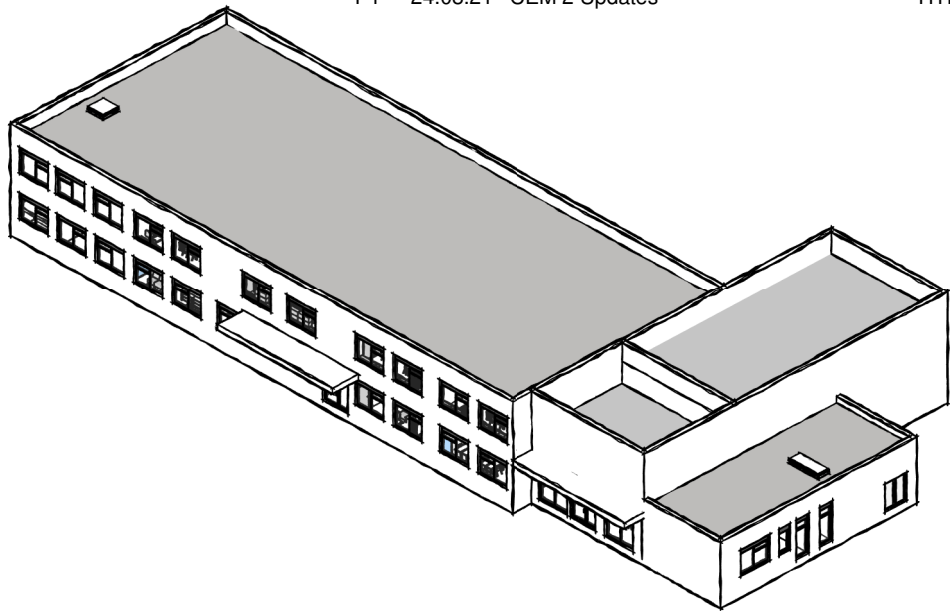
Table 1.1 of BB93 provides upper guideline limits for internal ambient noise levels $L_{Aeq, 30min}$ for a range of educational rooms, where classrooms require an internal ambient level of 35dB(A).

Appendix C Site Plans



NOTES
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Rev | Date | Notes | By | Che
P1 24.08.21 CEM 2 Updates HTP ME



GIFA - 11.08.21

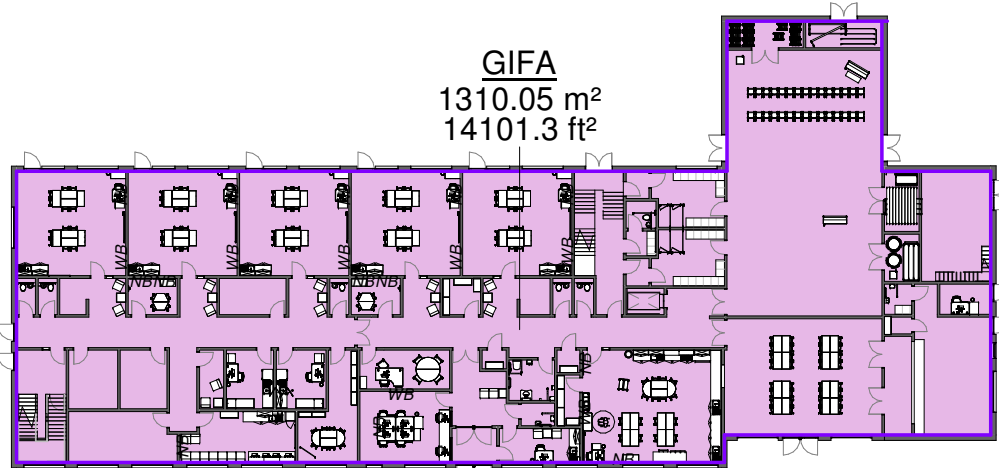
TARGET GIFA = c2,224m2

LEVEL 00 c1,311m2

LEVEL 01 c913m2

Department Title

- Basic Teaching
- Circulation
- Halls & Dining
- Learning Resource
- Non-net
- Staff & Admin
- Storage



GIFA
1310.05 m²
14101.3 ft²

(04) Room Schedule - Net Area Totals	
Level	Area
Level 00	1233 m ²
Level 01	850 m ²
Grand total: 133	2083 m ²

Level 00 - GIFA Plan



(04) Room Schedule - SOA- Level 00			
Name	Area	Level	Department
Active Learning	2 m ²	Level 00	Basic Teaching
Active Learning	2 m ²	Level 00	Basic Teaching
Active Learning	2 m ²	Level 00	Basic Teaching
Active Learning	2 m ²	Level 00	Basic Teaching
Active Learning	2 m ²	Level 00	Basic Teaching
Classroom 01	47 m ²	Level 00	Basic Teaching
Classroom 02	47 m ²	Level 00	Basic Teaching
Classroom 03	47 m ²	Level 00	Basic Teaching
Classroom 04	47 m ²	Level 00	Basic Teaching
Classroom 05	47 m ²	Level 00	Basic Teaching
Food Science	62 m ²	Level 00	Basic Teaching
Servery	6 m ²	Level 00	Basic Teaching
Circulation	13 m ²	Level 00	Circulation
Circulation	67 m ²	Level 00	Circulation
Circulation	64 m ²	Level 00	Circulation
Circulation	3 m ²	Level 00	Circulation
Circulation	3 m ²	Level 00	Circulation
Entrance Lobby	7 m ²	Level 00	Circulation
Lift	4 m ²	Level 00	Circulation
Stair	27 m ²	Level 00	Circulation
Stair	15 m ²	Level 00	Circulation
Dining	80 m ²	Level 00	Halls & Dining
Main Hall	180 m ²	Level 00	Halls & Dining
Calming Room	6 m ²	Level 00	Learning Resource
De-Esc Rm 01	4 m ²	Level 00	Learning Resource
De-Esc Rm 02	5 m ²	Level 00	Learning Resource
Immersive Sensory Room	13 m ²	Level 00	Learning Resource
Life Skills	23 m ²	Level 00	Learning Resource
SEN Therapy / MI	13 m ²	Level 00	Learning Resource
Sensory Room	12 m ²	Level 00	Learning Resource
Small GroupRm 01	8 m ²	Level 00	Learning Resource
Small GroupRm 02	8 m ²	Level 00	Learning Resource
Therapy Room	12 m ²	Level 00	Learning Resource
AWC/Staff Change	4 m ²	Level 00	Non-net
F. Pupil Changing	17 m ²	Level 00	Non-net
Hygiene Room	8 m ²	Level 00	Non-net
Kitchen	43 m ²	Level 00	Non-net
M. Pupil Changing	17 m ²	Level 00	Non-net
Plant	33 m ²	Level 00	Non-net
Server Room	11 m ²	Level 00	Non-net
Staff /AWC 01	3 m ²	Level 00	Non-net
Staff Change	3 m ²	Level 00	Non-net
Staff WC 02	3 m ²	Level 00	Non-net
Staff WC/ Sh	4 m ²	Level 00	Non-net
WC 01	3 m ²	Level 00	Non-net
WC 02	3 m ²	Level 00	Non-net
WC 03	3 m ²	Level 00	Non-net
WC 04	3 m ²	Level 00	Non-net
Conference	21 m ²	Level 00	Staff & Admin
General Office	28 m ²	Level 00	Staff & Admin
Head's Office	15 m ²	Level 00	Staff & Admin
MFD Bay	1 m ²	Level 00	Staff & Admin
Office (Premises)	7 m ²	Level 00	Staff & Admin
Parents Rm / Nurses Base	12 m ²	Level 00	Staff & Admin
Staff Room (Prep & Social)	24 m ²	Level 00	Staff & Admin
Waiting	2 m ²	Level 00	Staff & Admin
Cl. St.	2 m ²	Level 00	Storage
Cloaks	1 m ²	Level 00	Storage
Cloaks	1 m ²	Level 00	Storage
Cloaks	1 m ²	Level 00	Storage
Cloaks	1 m ²	Level 00	Storage
Cloaks	1 m ²	Level 00	Storage
Dining St. / Servery	12 m ²	Level 00	Storage
Drama Store	7 m ²	Level 00	Storage
Dry St.	2 m ²	Level 00	Storage
Ext. PE St.	9 m ²	Level 00	Storage
Food St.	5 m ²	Level 00	Storage
Gen Maintenance St.	8 m ²	Level 00	Storage
Gen. St.(Central St)	6 m ²	Level 00	Storage
Gen. St.(Central St)	2 m ²	Level 00	Storage
Mobility Equipment Bay	2 m ²	Level 00	Storage
PE Store	9 m ²	Level 00	Storage
Store	9 m ²	Level 00	Storage
Teaching St.	2 m ²	Level 00	Storage
Teaching St.	2 m ²	Level 00	Storage
Teaching St.	2 m ²	Level 00	Storage
Teaching St.	2 m ²	Level 00	Storage
Level 00: 78	1233 m ²		
Grand total: 78	1233 m ²		

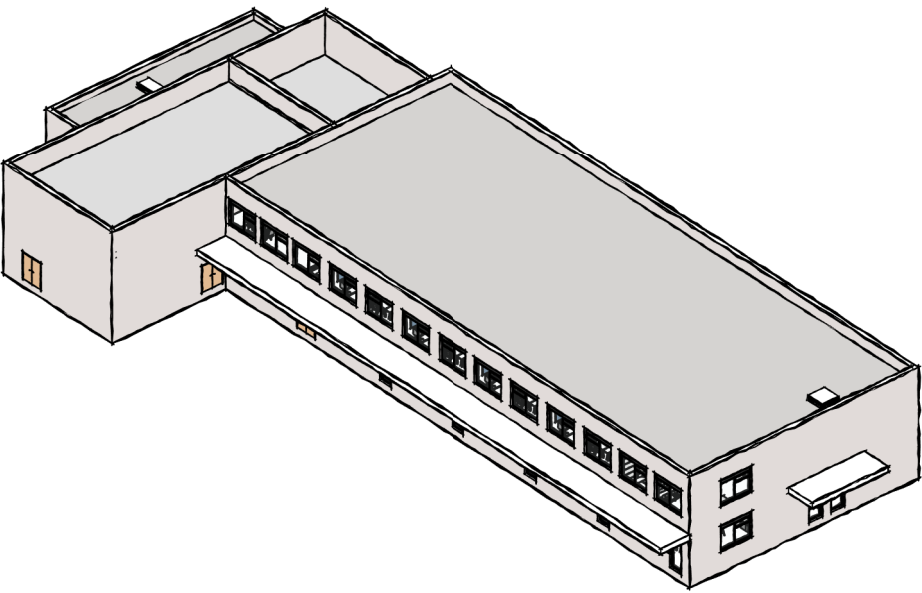
1 | Level 00
1 : 100

elliswilliams

Project Number: 2718
Project Name: ROCHDALE SEN

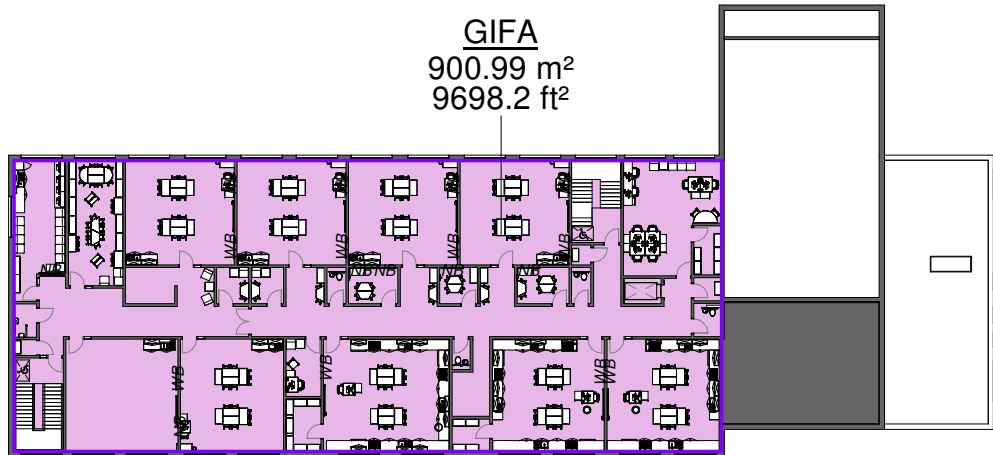
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Drawing Number: RSC-EWA-22100-DB-A-10400
Drawing Name: Level 00 - GA
Date: 13.08.21
Drawn By: HTP
Rev: P1
Scale: As indicated

Wellfield Chester Road Preston Brook WA7 3BA
T: 01928 752200 E: info@ewa.co.uk W: ewa.co.uk



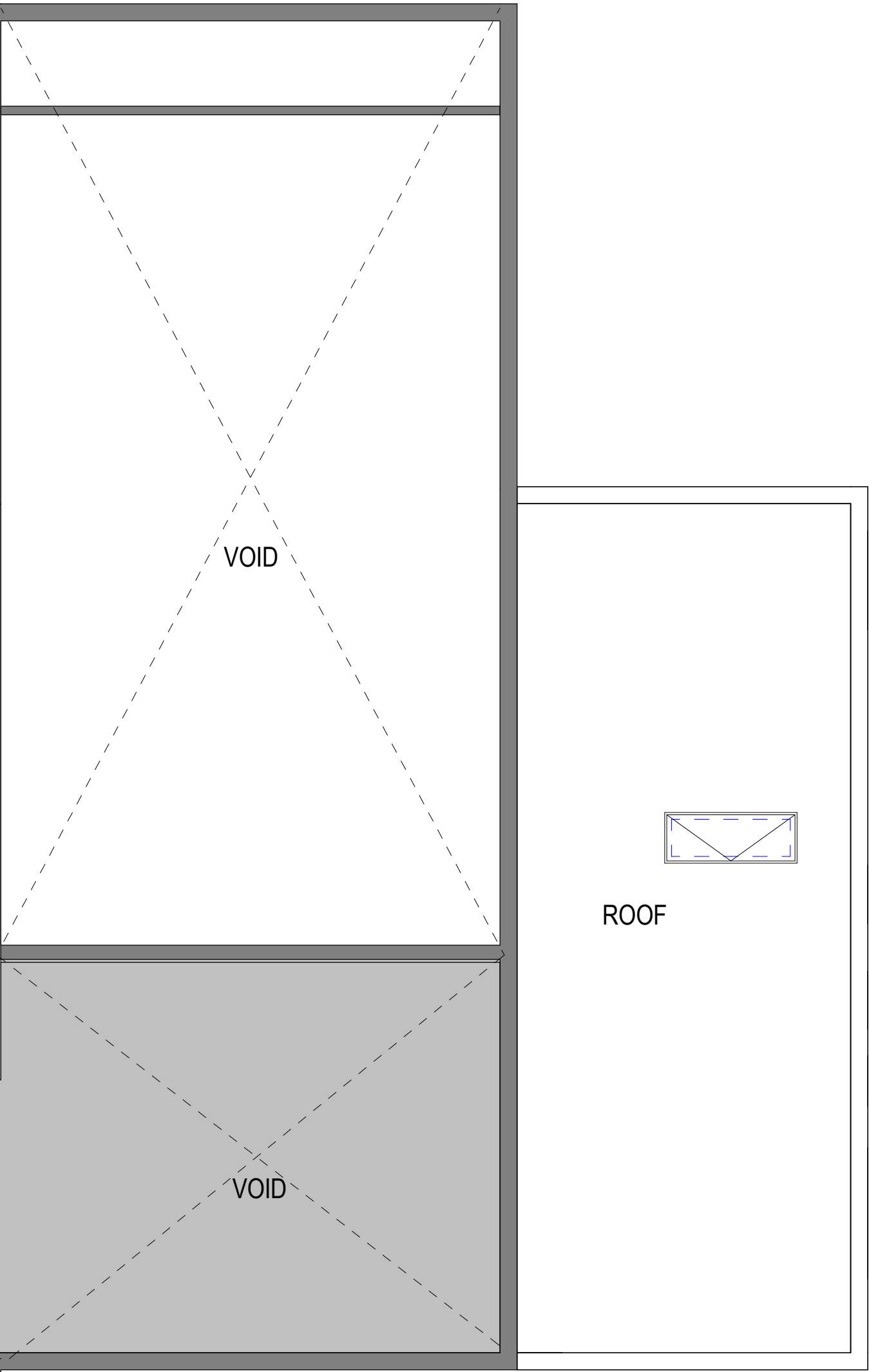
Department Title

- Basic Teaching
- Circulation
- Halls & Dining
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- Staff & Admin
- Storage



(04). Room Schedule - Net Area Totals	
Level	Area
Level 00	1233 m ²
Level 01	850 m ²
Grand total: 133	2083 m ²

Level 01 - GIFA Plan



GIFA - 11.08.21

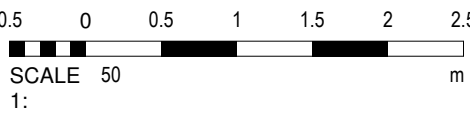
TARGET GIFA = c2,224m2

LEVEL 00 c1,311m2

LEVEL 01 c913m2

(04). Room Schedule - SOA- Level 01			
Name	Area	Level	Department
Active Learning	2 m ²	Level 01	Basic Teaching
Active Learning	2 m ²	Level 01	Basic Teaching
Active Learning	2 m ²	Level 01	Basic Teaching
Active Learning	2 m ²	Level 01	Basic Teaching
Art	62 m ²	Level 01	Basic Teaching
Classroom 06	47 m ²	Level 01	Basic Teaching
Classroom 07	47 m ²	Level 01	Basic Teaching
Classroom Post 16 01	47 m ²	Level 01	Basic Teaching
Classroom Post 16 02	47 m ²	Level 01	Basic Teaching
ICT Classroom	55 m ²	Level 01	Basic Teaching
Post 16 Classroom 03	47 m ²	Level 01	Basic Teaching
Science	55 m ²	Level 01	Basic Teaching
Circulation	38 m ²	Level 01	Circulation
Circulation	81 m ²	Level 01	Circulation
Lift	4 m ²	Level 01	Circulation
Stair	20 m ²	Level 01	Circulation
Stair	18 m ²	Level 01	Circulation
Post 16 Common Room	55 m ²	Level 01	Halls & Dining
De-Esc Rm 03	8 m ²	Level 01	Learning Resource
De-Esc Rm 04	10 m ²	Level 01	Learning Resource
Secondary Library	30 m ²	Level 01	Learning Resource
Small group room 04	5 m ²	Level 01	Learning Resource
Small group room 05	8 m ²	Level 01	Learning Resource
Small GroupRm 03	5 m ²	Level 01	Learning Resource
Small GroupRm 06	6 m ²	Level 01	Learning Resource
Small GroupRm 07	8 m ²	Level 01	Learning Resource
AWC 07	4 m ²	Level 01	Non-net
Staff AWC 03	3 m ²	Level 01	Non-net
StaffAWC 04	2 m ²	Level 01	Non-net
WC 05	3 m ²	Level 01	Non-net
WC 06	3 m ²	Level 01	Non-net
MFD Bay	1 m ²	Level 01	Staff & Admin
Office (2 Person)	9 m ²	Level 01	Staff & Admin
Office (2 Person)	11 m ²	Level 01	Staff & Admin
Office (Visiting Professionals)	12 m ²	Level 01	Staff & Admin
Office / Pastoral	9 m ²	Level 01	Staff & Admin
Staff Room (Prep & Social)	28 m ²	Level 01	Staff & Admin
Cl. St.	2 m ²	Level 01	Storage
Cinrs St	2 m ²	Level 01	Storage
Cloaks	1 m ²	Level 01	Storage
Cloaks	1 m ²	Level 01	Storage
Cloaks	1 m ²	Level 01	Storage
Cloaks	1 m ²	Level 01	Storage
Cloaks	1 m ²	Level 01	Storage
Exam Store	6 m ²	Level 01	Storage
Med Store	3 m ²	Level 01	Storage
Mobility Equipment Bay	2 m ²	Level 01	Storage
Multi Met St	8 m ²	Level 01	Storage
Specialist Store	5 m ²	Level 01	Storage
Teaching St.	2 m ²	Level 01	Storage
Teaching St.	2 m ²	Level 01	Storage
Teaching St.	2 m ²	Level 01	Storage
Teaching St.	2 m ²	Level 01	Storage
Level 01: 55	850 m ²		
Grand total: 55	850 m ²		

1 Level 01
1 : 100



elliswilliams

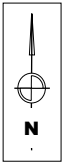
Project Number: 2718
Project Name: ROCHDALE SEN

Drawing Status: CEM 02
Drawing Number: RSC-EWA-22-01-DB-A-10401
Drawing Name: Level 01 - GA

Date: 13.08.21
Drawn By: HTP
Rev: P1
Scale: As indicated

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Appendix D Noise Monitoring Locations



Project Title FS911 Heywood SEN(D)	Drawing Title Measurement Locations	Job Number 19522	By SE	Rev	Description	Date	By	Drawing No. Figure 1 Issue 01
		Date 16.12.21	Checked LS	-	-	-	-	
		Scale NTS	Status A1	-	-	-	-	
				-	-	-	-	