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Residential Development
14-18 Wormwald Street, Millbridge, Liversedge, WF15 6BE

Noise Validation Testing

For:
Mr. Andy Oldroyd

29th January 2026

Ref: NVT-12484-26-12760-V1-Wormwald Street.docx
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1 Introduction

Environmental Noise Solutions Limited (ENS) has been commissioned by Mr. Andy Oldroyd to carry out a noise validation test for the residential development at 14 – 18 Wormwald Street, Millbridge, Liversedge, WF15 6BE (hereafter referred to as the subject site).

Planning Permission (ref: 2019/70/93965/E) for the development was granted by Kirklees Council in June 2020, subject to conditions. Condition 8 relates to the control of noise as follows:

'8. Following completion of any measures identified in the approved Remediation Strategy or any approved revised Remediation Strategy, a Validation Report shall be submitted to the Local Planning Authority. No part of the site shall be brought into use until such time as the remediation measures for the whole site have been completed in accordance with the approved Remediation Strategy or the approved revised Remediation Strategy and a Validation Report in respect of those remediation measures has been approved in writing by the Local Planning Authority. Reason: To identify and remove unacceptable risks to human health and the environment from coal mining features and hazards in accordance with Policy LP 53 of the Kirklees Local Plan and Chapter 15 of the National Planning Policy Framework.'

This report has been prepared to assist in the discharge of Condition 8 of Planning Permission 2019/70/93965/E. It details the methodology and results of the noise validation testing.

This report has been prepared for Mr. Andy Oldroyd for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Mr. Andy Oldroyd and ENS as to the extent to which the findings may be appropriate for their use.

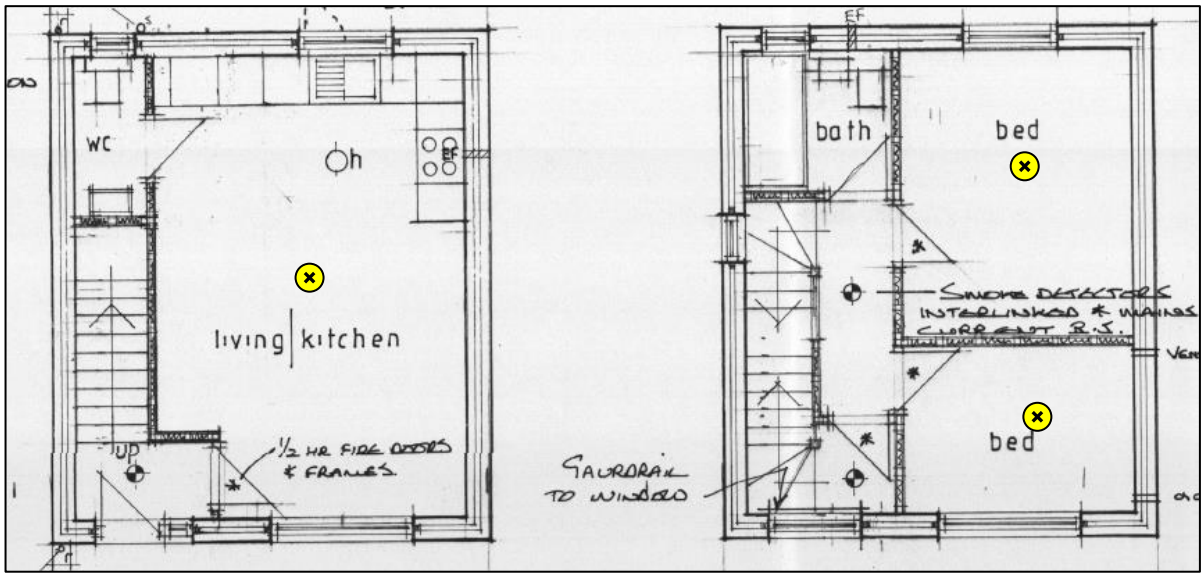
A glossary of acoustic terms used in the main body of the text is contained in Appendix 1.

2 Noise Validation Testing

In order to establish compliance with the internal criteria of the planning condition, baseline noise measurements were undertaken between approximately 0700 hours on Friday 23rd January 2026 and 1644 hours on Monday 26th January 2026.

For reference, long term noise measurements within No. 16 Wormwald Street, were undertaken within Bedroom 2 overlooking Wormwald Street and Bedroom 1 overlooking the rear of the development. Additional short-term measurements were also undertaken within the ground floor living room / kitchen (see Figure 2.1 for monitoring locations). Measurements were undertaken with windows closed and trickle ventilators open.

Figure 2.1: Locations of Monitoring Positions



Noise measurements were made in the centre of the subject rooms using NTi XL3 and Bruel & Kjaer 2250 Type 1 integrated sound level meters. The measurement system calibrations were verified immediately before the commencement of the measurement sessions and again at the end, with no drift in calibration level noted.

Testing was undertaken in unfurnished rooms with measured reverberation times of circa 0.6 seconds within the bedrooms and living room. The noise measurement data has therefore been standardised to 0.5 seconds reverberation time for a furnished room in accordance with Building Regulations Approved Document E, 2003 (and thus the noise measurements were corrected by –1 decibels (10 x log (0.5/0.6)).

The results of the noise validation test, for representative daytime and night-time periods, are contained in Tables 2.1 - 2.3 overleaf.

Table 2.1 – Bedroom 2 Overlooking Wormwald Street

Parameter	Date	Time Interval	Noise Level	Criterion
Daytime	Friday 23/01/26	0700–2300 hours	34 dB L_{Aeq}	35 dB $L_{Aeq\ (0700\text{-}2300)}$
	Saturday 24/01/26	0700–2300 hours	33 dB L_{Aeq}	
	Sunday 25/01/26	0700–2300 hours	32 dB L_{Aeq}	
	Monday 26/01/26	0700-1644 hours	35 dB L_{Aeq}	
Night-time	Friday 23-24/01/26	2300–0700 hours	25 dB L_{Aeq}	30 dB $L_{Aeq\ (2300\text{-}0700)}$
	Saturday 24-25/01/26	2300–0700 hours	26 dB L_{Aeq}	
	Sunday 25-26/01/26	2300–0700 hours	27 dB L_{Aeq}	
Night-time	Friday 23-24/01/26	2300–0700 hours	45 dB L_{AFMax} *	45 dB $L_{AFMax\ (2300\text{-}0700)}$
	Saturday 24-25/01/26	2300–0700 hours	45 dB L_{AFMax} *	
	Sunday 25-26/01/26	2300–0700 hours	44 dB L_{AFMax} *	

* 11th highest maximum noise level event in accordance with ProPG Planning and Noise: New Residential Development [1]

Table 2.2 – Bedroom 1 Overlooking the Rear of the Development

Parameter	Date	Time Interval	Noise Level	Criterion
Daytime	Friday 23/01/26	0700–2300 hours	25 dB L_{Aeq}	35 dB $L_{Aeq\ (0700\text{-}2300)}$
	Saturday 24/01/26	0700–2300 hours	25 dB L_{Aeq}	
	Sunday 25/01/26	0700–2300 hours	23 dB L_{Aeq}	
	Monday 26/01/26	0700-1648 hours	26 dB L_{Aeq}	
Night-time	Friday 23-24/01/26	2300–0700 hours	19 dB L_{Aeq}	30 dB $L_{Aeq\ (2300\text{-}0700)}$
	Saturday 24-25/01/26	2300–0700 hours	20 dB L_{Aeq}	
	Sunday 25-26/01/26	2300–0700 hours	20 dB L_{Aeq}	
Night-time	Friday 23-24/01/26	2300–0700 hours	33 dB L_{AFMax} *	45 dB $L_{AFMax\ (2300\text{-}0700)}$
	Saturday 24-25/01/26	2300–0700 hours	35 dB L_{AFMax} *	
	Sunday 25-26/01/26	2300–0700 hours	35 dB L_{AFMax} *	

Table 2.3– Ground Floor Living Room / Kitchen

Parameter	Date	Time Interval	Noise Level	Criterion
Daytime	Friday 23/01/26	1142–1442 hours	34 dB L_{Aeq}	35 dB $L_{Aeq\ (0700\text{-}2300)}$

On the basis of the above, the development readily demonstrates compliance with Condition 8 of Planning Permission ref: 2019/70/93965/E.

1 ProPG states: 'In most circumstances in noise sensitive rooms at night (e.g. bedrooms) good acoustic design can be used so that individual noise events do not normally exceed 45dB $L_{Amax,F}$ more than 10 times a night'.

Appendix 1 – Abbreviations and Definitions

Sound Pressure Level (L_p)
The basic unit of sound measurement is the sound pressure level. As the pressures to which the human ear responds can range from 20 µPa to 200 Pa, a linear measurement of sound levels would involve many orders of magnitude. Consequently, the pressures are converted to a logarithmic scale and expressed in decibels (dB) as follows:

$L_p = 20 \log_{10}(p/p_o)$

Where L_p = sound pressure level in dB; p = rms sound pressure in Pa; and p_o = reference sound pressure (20 µPa).

A-weighting
A frequency filtering system in a sound level meter, which approximates under defined conditions the frequency response of the human ear. The A-weighted sound pressure level, expressed in dB(A), has been shown to correlate well with subjective response to noise.

Equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$
The value of the A-weighted sound pressure level in decibels of continuous steady sound that within a specified time interval, T, has the same mean-square sound pressure as a sound that varies with time. $L_{Aeq, 16h}$ (07:00 to 23:00 hours) and $L_{Aeq, 8h}$ (23:00 to 07:00 hours) are used to qualify daytime and night time noise levels.

$L_{A10, T}$
The A-weighted sound pressure level in decibels exceeded for 10% of the measurement period, T. $L_{A10, 18h}$ is the arithmetic mean of the 18 hourly values from 06:00 to 24:00 hours.

$L_{A90, T}$
The A-weighted sound pressure level of the residual noise in decibels exceeded 90% of a given time interval, T. L_{A90} is typically taken as representative of background noise.

$L_{AF\ max}$
The maximum A-weighted noise level recorded during the measurement period. The subscript 'F' denotes fast time weighting, slow time weighting 'S' is also used.

Single Event Level / Sound Exposure Level (SEL or L_{AE})
The energy produced by a discrete noise event averaged over one second, regardless of the event duration. This allows for comparison between different noise events which occur over different lengths of time.

Weighted Sound Reduction Index (R_W)
Single number quantity which characterises the airborne sound insulation properties of a material or building element over a defined range of frequencies (R_W is used to characterise the insulation of a material or product that has been measured in a laboratory).