



Ref: P4587/L02/NRS

27 February 2023

To:	Andy Wan	of:	BTP Architects
Cc:	As per email distribution list	of:	

Dear Andy,

1198 Stockport Road, Manchester – Review of Planning Condition

Further to AEC's site visit on Tuesday 14 and Wednesday 15 February 2023, please find the results of the daytime and night-time internal noise level measurements below.

Introduction

AEC issued a noise report, ref P4587/R1/NRS, for planning purposes for the scheme in April 2022. The following comments were received from Manchester City Council (MCC) with respect to the submitted noise report.

"The conclusions and recommendations of the submitted AEC Noise Assessment, ref. P4587/R1/NRS dated 4 April 2022, are accepted as follows:

- 1. Sound insulation performances of glazing and ventilation must meet specified criteria (Table 5.1 of the report).*
- 2. Alternative means of whole dwelling (background) ventilation are required to all habitable rooms on all elevations of the development.*
- 3. Octave band sound insulation performance data of the glazing build-ups and ventilators selected must be verified by AEC or others.*
- 4. The glazing requirements should be reviewed by AEC or others once the areas of glazing and rooms sizes have been confirmed.*

Further details are required regarding the above points before we can recommend discharge of this condition."

AEC's noise assessment and report was subsequently updated where required in order to provide clarification in relation to complying with Points 2 and 4 from the above MCC comments. The updated report, P4587/R1a/NRS, was issued dated 23 September 2022.

Considering the fact that the existing glazing and trickle ventilation has been retained, AEC recommended an internal verification measurement to be undertaken in order to comply with Points 1 and 3.

Criteria

Section 3.7.1.1 of MCC document 'Planning & Noise – Technical Guidance' - December 2022 (PNTG) states that "The Council has adopted the following noise limits for residential properties:

- Bedroom (night-time – 23.00 – 07.00) 30dB L_{Aeq} (individual noise events should not normally exceed 45dB $L_{Amax, F}$ by more than 10 times);
- Living Rooms (daytime – 07.00 – 23.00) 35dB L_{Aeq} "

Verification Test Results and Assessment

In order to demonstrate compliance with Points 1 and 3 internal noise level measurements were undertaken in general accordance with the Association of Noise Consultants "Measurement of Sound Levels in Buildings" issued in June 2020.

The main source of noise affecting the external envelope of the building was road traffic on Stockport Road (A6).

It was noted that all habitable rooms were unfurnished with no acoustically absorbent material (e.g., carpet, curtains). Once the rooms have been furnished and carpeted it is expected that the reverberation time in the spaces would be reduced by approximately half, therefore, a -3dB correction can be applied to the measurements (this equates to a standard reverberation time of approximately 0.5s).

It was also observed that whole dwelling (background) ventilation was provided using trickle vents in all habitable rooms. Therefore, the internal noise level measurements were undertaken with the trickle vents open in all rooms.

The corrected internal ambient and typical maximum noise levels measured in the test rooms are presented in Table 1, below.

Table 1 – Corrected Internal Noise Levels

Testing Room (Overlooking)	Measured Internal Noise Level, dB		
	Daytime 0700 – 2300h $L_{Aeq,15min}$	Night-Time 2300 – 0700h	
		$L_{Aeq,8h}$	$L_{Amax, F}$
Bedroom, 2 nd Floor Flat (A6)	32	30	45*
Kitchen-Diner, 2 nd Floor Flat (Rear Garden)	25	-	-
Kitchen-Diner, 1 st Floor Flat (A6)	32	-	-
Bedroom, 1 st Floor Flat (Rear Garden)	27	-	-
Kitchen-Diner, Ground Floor Flat (A6)	32	-	-
Bedroom, Ground Floor Flat (Rear Garden)	27	-	-

***10th Highest $L_{Amax, F}$ Value**

A comparison between the noise levels presented in Table 1 and the noise level limits presented in PNTG indicates that all habitable rooms in the development (facing the rear garden and the A6) comply with MCC's internal noise level criteria.

In addition, AEC also measured external noise levels of around 73dB_{L_{Aeq,15min}} due to road traffic on the A6, which is similar to the external noise levels used in the assessment of the noise report P4587/R1a/NRS.

I trust the above is clear and of assistance at this stage, however, if you have any queries please give me a call.

Yours sincerely



Naveen Simha

Checked by: 