Noise Assessment

INTRODUCTION

For the benefit of Manchester City Council, this assessment has been formulated to support the proposed Prior Approval Application for the above site, the application is to convert the above property, which is currently a shop at ground floor level and ancillary offices in the upper floor (Class E), into 3 self-contained flats (Class C3) as follows:

- 1No. X 1 Bed, 1 person – 39m^2
- 1No. X 1 Bed, 1 person – 44m^2
- 1No. X 1 Bed, 1 person – 37m^2

The flats will provide living accommodation in compliance with the nationally described minimum space standards.

As part of the development, the guidance relating to noise within the environment has been taken into consideration and subsequently, the following report has been set out to meet the criteria required in the assessment of such developments.

DESCRIPTION OF THE NOISE CLIMATE

Situated on Crumpsall Lane, within Centre of Crumpsall, there is a large presence of residential properties, the adjacent property has a first floor flat for separate residential use and there are more properties currently in residential use. By day the noise that comes from the traffic and services is elevated due to intense usage. However, by night it is substantially quieter due to the retail services operating during business hours only which are 9am – 5pm.

NOISE ASSESSMENT CRITERIA

The following guidance documents and standards, relevant to this development include;

- National Planning Policy Framework (NPPF) 2021
- PPG24- Planning and noise (Now withdrawn)
- World Health Organisation Guidance
- British Standard 8233:2014

In making planning decisions the Local Authority takes into account the noise level as set out in the National Planning Policy Framework 2021. In Paragraph 185 of the NPPF it states that planning policies and decisions relating to them should aim to consider the following points:

- 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.
- 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,
- Limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

Although withdrawn, the Planning Guidance Note PPG24 still provides guidance specifically related to acoustic assessment and design as a criteria for residential properties (this is not currently part of

the NPPF document). In PPG24 it sets out clearly the government guidance in relation to the planning powers by the Local Authorities in order to reduce the unfavourable effects of noise in the built-up environment. PPG determines in particular, Noise Exposure Categories that are directly applicable to new residential developments affected by traffic noise or by other noise sources in which industrial noise is not the dominate.

The World Health Organisation- It was proposed by the World Health Organisation in 1980 that consideration of noise levels at which sleep disturbance could take place an environmental health criteria should be considered. The World Health Organisation amended these guidelines in 1999. It was suggested in the guidance that *an internal LAeq below 30 dB is required to fully preserve the restorative process of sleep*.

In the code of practice for sound insulation there are a variety of building types identified as being affected by general environmental noise (British Standard 8233:2014 - BS8233). It therefore provides recommendations for the control of noise in and around those buildings and suggests that a suitable criteria be used to gauge the limits for a variety of different situations including residential properties.

Room Type	Noise Limit 07:00-23:00 LAeq, 16hr	Noise Limit 23:00-7.00 LAeq, 8hr
Living Room	35	-
Dining Room	40	-
Bedroom	35	30

RECOMMENDATIONS FOR NOISE MITIGATION

In the following section below, it sets out the proposed noise measures that are required in order to satisfy the noise assessment criteria so satisfying the noise conditions within the flats.
Potentially, the noise from traffic along Crumpsall Lane and the retails next to the property would be an issue that could be remedied.

Location	Glazing Specifications (overall to include frame)	Proposed Glazing Types
All external windows	Airborne sound insulation RW 32dB	Windows replaced with high-quality acoustic double glazing (e.g. 4/12/10mm glass) in a well-sealed frame.

CONCLUSION

It is proposed that in order to comply with the noise standards as stated in section 3 of this assessment, the following is recommended in order to be protected by the noise mitigation measures indicated above.

- Rw32dB glazing to all bedrooms and living rooms to mitigate any potential noise from the road/ bar next building.
- Enhanced background ventilation to all bedrooms/living /living rooms to preclude the need to open windows for ventilation in periods of warm weather.
- Adequate sound insulation for the facade and ceiling elements of the building.
- Acoustic sound insulation and acoustic plasterboard according to building regulations between floors to mitigate any noise between the flats.

- We have considered and addressed any potential noise in the proposal to mitigate any impact on the proposed flat. Therefore, the proposal should be acceptable.