

Title: Noise Assessment Summary

Date: August 2020

1.0 Introduction

- 1.1 Jubb Consulting Engineers (Jubb) have been appointed to coordinate Noise and Vibration matters for land at Roxton by Rainier Developments Ltd.
- 1.2 Cole Jarman have undertaken a Planning Noise Assessment of the potential development and this note provides a summary of the findings of that assessment.
- 1.3 The findings are based upon noise surveys undertaken in January 2020 and calculation of noise levels within the development

2.0 Summary of Noise Assessment findings

Overview

- 2.1 In order to adequately control noise ingress to habitable rooms and bedrooms throughout the development it will be necessary for the various elements of the external building fabric to provide certain minimum levels of sound insulation performance.
- 2.2 An assessment of noise intrusion has been carried out based on calculations using the measured levels on site, and the indicative Concept Masterplan.

External Building Fabric

- 2.3 At the time of writing, the construction type of the proposed dwellings is unknown. It is assumed that the dwellings will be up to two storeys, of traditional masonry construction with a tiled roof and plasterboard ceilings. Any alternative constructions should be reviewed and confirmed to ensure suitable sound insulation.
- 2.4 It is on this basis that the glazing and ventilation elements have been assessed, as discussed below.

Glazing

- 2.5 Enhanced glazing will be required for residential properties built approximately 45m from the edge of the nearest carriageway of Bedford Road within Parcel A.
- 2.6 In areas outside of this zone, standard thermal double glazing providing a sound reduction performance of at least *R*w 30dB would be sufficient throughout the site to provide the internal ambient noise levels as set out previously. This would apply to all glazed elements windows, patio and balcony doors etc.

Ventilation

- 2.7 Similarly to the glazing, if residences are proposed within 45m of Bedford Road, then acoustic trickle ventilators will be required.
- 2.8 In all other areas, if the Rw 30dB glazing performance can be achieved with standard direct path trickle vents open then the internal noise criteria should be met.

External noise levels

- 2.9 A plan showing the location of proposed gardens is currently not available. However, it is recommended that any and all proposed gardens on the development are screened from Bedford Road in order to achieve the aspirational 55 dB(A) day time target in external amenity areas.
- 2.10 It is recommended to design the layout of the proposed residences in such a way that the buildings screen the gardens from Bedford Road. If this is not possible, then we would recommend garden fencing of 1.8m in height.
- 2.11 For gardens where an acoustic screen is necessary, use of material of imperforate construction (close-boarded) and reasonable density will be suitable to mitigate noise levels accordingly.
- 2.12 The average noise level across the public open space is calculated to be $56 \, dB(A)$. This calculation does assume no screening effect. Due to the location of the space along the eastern boundary of the site it is likely that when the residences are constructed the average noise level will fall below the aspirational $55 \, dB(A)$ day time target. For this reason, noise levels in the public open space are considered acceptable.