

## TECHNICAL NOTE

## Revised Noise Predictions

**Crow Trees Farm, Crow Trees Brow, Chatburn, Clitheroe BB7 4AA**

Date 27<sup>th</sup> November 2025  
Site Visited N/A  
Ref. 20251127 9215 Chatburn-TN  
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## 1.0 Introduction

Martec carried out an assessment of noise and vibration impacts on a residential development site [Ref. 2022913 925 Chatburn-3]. This Technical Note details additional calculations of the noise impact across the site based on the latest site layout plan [LMP Drawing P01-21-139-PO1F] plus additional acoustic fencing and makes recommendations for noise control as appropriate.

## 2.0 Noise Criteria

From ProPG “Planning and Noise” and BS8233, the target internal noise levels for habitable rooms are 35 LAeq,16hr [day] and 30 LAeq,8hr [night]; if the attenuation of an open window is 15dBA, as explained in the original report,

then the target internal levels equate to external levels of 50 LAeq,16hr [day] [35+15=50] and 45 LAeq,8hr [night].

### 3.0 Noise Modelling Methodology

To assist with the design of the development, a 3D model of the site and surrounding area was created using SoundPLANv6.0, based the information and assumptions shown in Table 1 below.

Parameter	Source	Details
Horizontal distances	--	Ordnance Survey & Google Earth
Ground levels – around site	Bluesky	LIDAR terrain data
Rail Traffic data	Martec	As set out in Martec report 2022913 925
Road Traffic Source Data	Martec	Chatburn-3
Building heights	Martec Observations	6m height for two storey residential properties. 4m for single/garage
Barrier heights	Martec	1m for existing walls, acoustic barriers as stated
Rail, road and buildings	Open Street Map & Martec	Digitised from Architects Plans LMP P01-21-139-PO1F
Absorbent Ground	--	As Calculation of Rail Noise and Calculation of Road Traffic noise from DTP
Plans	--	Proposed Site Plan

**Table 1: Modelling Parameters Sources and Assumptions**

To validate the model, the source levels of road noise used in the calculations were adjusted such that the predicted levels at the monitoring position matched the derived road traffic noise levels; rail noise was then 'added' to the model so that the overall noise levels matched the measured levels.

## 4.0 Results

Noise levels across the site have been predicted using the model and the external daytime 50 LAeq,16hr contour [Figure 1] and nighttime 45 LAeq,8hr contour [Figure 2] have been plotted as green areas in the respective figures towards the end of this Technical Note.

For a given dwelling to be able to rely upon open glazing for ventilation, i.e. such that powered ventilation would not be required, the dwelling would have to be within the green area for both daytime and nighttime.

## 5.0 Conclusion

Based on the latest layout and the 2m acoustic fence being constructed as shown in the figures, only Plots 1 to 8, Plot 25 and the converted dwelling would now require powered ventilation of the type described in our earlier report, so that windows could remain closed.



