

9 June 2023

Waipa District Council
Private Bag 2900
Te Awamutu 3840

Attention: Anish Chand Quentin Budd

Dear Anish / Quentin

NEWCOMBE ROAD SAND QUARRY: NOISE PEER REVIEW

INTRODUCTION

Marshall Day Acoustics has been engaged by Waipa District Council in a review capacity to assist with the processing of a land use consent application (LU/0077/23) for a new sand quarry to be located near Cambridge.

This letter discusses our initial review of the Hegley Acoustic Consultants (Hegley) assessment of noise effects¹ submitted as Technical Appendix I to the Kinetic Environmental Consulting Limited assessment of environmental effects². It also sets out clarifications sought.

INITIAL REVIEW AND REQUEST FOR CLARIFICATION

Hegley correctly sets out the relevant noise performance standards for permitted activities in the rural zone of the Waipa District Plan.

Hegley describes each noise source associated with the proposed sand quarrying and states a sound power level (based on measurement) for use in noise modelling. The stated sound power levels for the identified noise sources are within the expected range. Furthermore, we generally agree with the acoustic model parameters used to set up the model.

Although included in noise contour outputs (Figures 10 to 12) the body of the report does not discuss any details or provide noise source inputs for the heavy commercial vehicles that will enter and leave the site. We note that the CKL traffic assessment³ estimates average trip generation rates of 78 trucks per weekday (156 truck movements) and eight trucks per hour (16 truck movements). **We assume noise modelling is based on the trip generation estimates noted in the CKL report. However, ask Hegley to confirm that this is the case.**

With respect to the noise contour calculations displayed in Figures 10 to 12, specifically some of the moving sources, we suspect that the lines used to define the routes of the mobile machinery do not follow the terrain 100% of the time (as indicated in Figure 1 overleaf) this can lead to underprediction of noise levels in some instances when part of the line source dips below the terrain. **Can Hegley confirm whether all modelled moving sources follow the terrain. If they do not, we ask that Hegley comment on how this will affect calculated levels at all identified receivers. The re generation of noise contours may be required.**

¹ Assessment of Noise report (Report No. 20205 dated 24 May 2022)

² Assessment of Environmental Effects report dated 17 May 2023

³ Integrated Transportation Assessment (Report No. B19041 rev 5 dated 16 May 2023)

Figure 1: Excerpt of Figure 10 from Hegley report



Hegley concludes that the effects on all assessed dwellings will be less than minor. Yet in Figure 13 and Table 1 Hegley does not state the addresses of any of the dwellings that this conclusion relates to. **For general clarity and to make it easy for any potentially affected parties who may read the assessment, we suggest that Table 1 be updated to include addresses, and Figures 10 to 12 be updated to include dwelling numbering.**

CONCLUSION

We have performed an initial review of the Hegley Acoustic Consultants noise impact assessment associated with the Application. We have requested clarifications with respect to:

- The number of truck movements used in modelling
- A suspected moving source modelling irregularity, and
- Minor updates to Table 1 and Figures 10 to 12

Upon receipt of an updated assessment reflecting the above clarifications, we will be in a position to reach a conclusion with respect to noise effects of the proposal.

Yours faithfully

MARSHALL DAY ACOUSTICS LTD

Mathew Cottle

Associate