

19 June 2023

Kinetic Environmental Consulting Limited
PO Box 9413
Waikato Mail Centre
Hamilton 3240

Digitally Delivered

Via Email: Michael@kineticenv.co.nz

Dear Michael,

Resource Consent Application – Further information request

Application number: LU/0077/23
Applicant: Rs Sand Limited
Address: 77 Newcombe Road RD 4 Cambridge 3496
Proposed activity(s): Establish and operate a mineral extraction activity (sand quarry)

This letter sets out a series of information requests and process steps associated with the proposed sand quarry application. Information requests are in accordance with section 92 of the Resource Management Act 1991 (RMA) and have been prepared in conjunction with the Waipā District Council processing team.

1. General Matters

1.1 Respective Processing Matters between Waipa DC and Waikato Regional Council

As discussed, Waipā District Council and the Waikato Regional Council (WRC) have been liaising on the respective processing matters to ensure that there is an effective and efficient approach to the joint processing of the application. Matters associated with riparian and wetland areas, water takes and discharges and any air discharge matters will primarily be addressed by WRC.

Waipā DC will be responsible for terrestrial ecology including bat habitat, landscape, traffic, and noise. There will be some overlap of assessment remaining between both consent authorities in relation to cultural matters, productive land and the policy instruments.

1.2 Scale of Activities and Operational Management

I have some general questions in relation to how the operational capacity of quarry operations will be managed, and this is also a matter which is further raised in the transportation review attached.

Section 92 Requests

- (1) Please confirm how any average truck movement restrictions will be applied and monitored including over what period the averaging threshold is to apply.
- (2) The Draft Management Plan refers to an average of 71 trucks per day (142 truck movements) with a peak of 200 trucks per day (400 truck movements). The AEE refers to the busiest days occurring 'once every couple of months). If a significant contract to supply sand is secured, it does not seem realistic to assess the peak truck movement as an irregular occurrence equating to only 6 times a year. Can you please elaborate on the basis for proposing this frequency?
- (3) We note that the noise assessment appears to be based on single excavator and dump truck working on the site. Is this correct and can 'maximum plant operating' in Section 4 be described in more detail. Again, if significant contracts are secured, will this potentially lead to multiple heavy machinery vehicles and will this affect the overall noise emissions?
- (4) Please clarify the hours of operation for the proposed quarry. The Draft Quarry Management Plan provided specified hours of operation Monday to Friday 7am – 7pm but as part of Kinetic's Rule Assessment this was specified as Monday to Friday 7am – 5pm.
- (5) Erosion and Sediment Control Plan provided by Southern Skies Environmental Ltd did not include the erosion and sediment control drawings in Appendix A. There is a table with the drawing numbers and titles, but the actual drawings were not provided. Please provide.

2. Noise

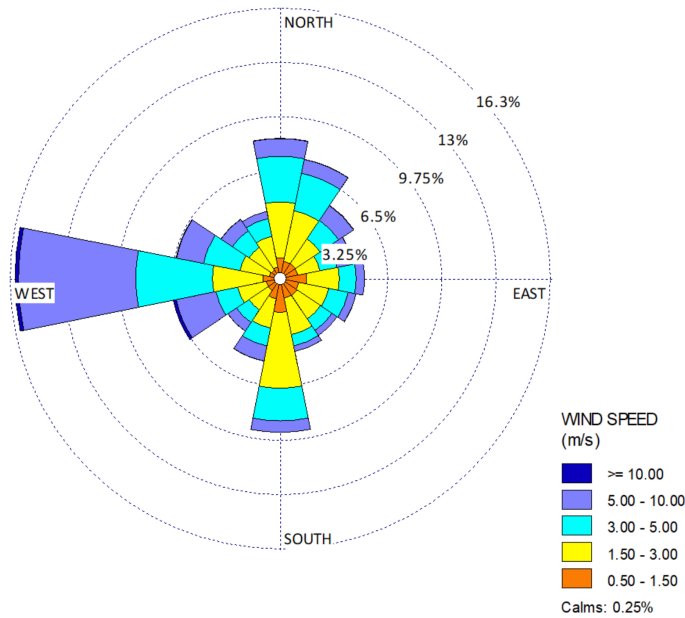
Waipa DC has engaged Marshall Day Acoustics to assist with the processing of the application. A letter from Marshall day Acoustics is attached which sets out a number of technical matters which require some further clarification/assessment.

I have also identified some general queries on noise effects which are also set out below.

Section 92 Requests

- (6) Please provide a response to the peer review comments and specific questions set out in the attached Marshal Day letter dated 9 June 2023.

- (7) The PDP Air Quality report provides a wind rose (see Figure 1) which shows the prevailing wind to the west and which is towards the sensitive noise receivers located adjacent to the western boundary of the site. Has the wind direction been assessed as part of the noise assessment and is likely to influence the noise modelling?



3. Cultural Values and Assessment

We acknowledge the Cultural Impact Assessment (CIA) and consultation with Ngaati Koroki-Kahukura and Ngaati Hauā. We have the following matters that we are seeking clarification on.

Section 92 Requests

- (8) The executive summary includes a text box which appears incomplete and refers to the final position of hapu as *'supports/opposes the application'*. This compares to the 'neutral position' discussed in the Decision text box on. Would it be possible to have the report updated to clarify the position of hapu in the executive summary?
- (9) We note that the CIA refers to operational aspects of the proposed quarry including provision for ecological mitigation and compensation. Can you please confirm whether the final and full set of application material have been presented to hapu including the reports on terrestrial ecological and the modifications and discharges to wetlands and riparian margins.

- (10) The CIA refers to their position being subject to the acceptance of conditions and recommendations. Can these agreements and conditions be clarified in terms of what is intended or proposed to be included as part of agreed mitigation for the purpose of consent conditions? We also acknowledge the CIA commentary on betterment and other agreements which sit outside the resource consent process and confirm that this approach is endorsed insofar as it does need to involve the consent authorities.

4. Landscape Values and Assessment

Waipa DC has engaged Boffa Miskell to assist with the processing of the application. A letter from Boffa Miskell is attached which sets out a number of matters which require further clarification/assessment.

Section 92 Requests

- (11) Please provide a response to the peer review comments and specific questions set out in the attached Boffa Miskell letter dated 9 June 2023.

5. Transportation Assessment

Waipa DC has engaged BBO to work alongside the Roding Team and to assist with the processing of the application. A letter from BBO is attached which sets out several matters which require further clarification/assessment. This includes some high-level matters associated with the nature of the assessment and assumption as well as more detailed matters to clarify.

In our view there would be merit in arranging a meeting with the applicant's team, Waipa DC and Waka Kotahi to discuss the transportation modelling and assessment of mitigation measures before the applicant provide a formal response.

Section 92 Requests

- (12) Please provide a response to the peer review comments and specific questions set out in the attached BBO letter dated 14 June 2023.

6. Terrestrial Ecological

Waipa DC has engaged Boffa Miskell to assist with the processing of the application. A memo from Boffa Miskell is attached which sets out several matters which require further clarification/assessment.

Boffa Miskell has raised some matters with the delineation of the wetland and biodiversity model. As discussed above, wetland and riparian ecology will be primarily addressed by WRC. However, we consider it appropriate for these matters to be addressed as these may also help inform the WRC assessment. It should also be anticipated that WRC will identify additional matters for the applicant to address as part of their S.92 review.

We note that Boffa Miskell has recommended a meeting between the ecologists to discuss the S.92 matters and we support this approach.

Section 92 Requests

(13) Please provide a response to the peer review comments and specific questions set out in the attached memo dated 13 June 2023.

7. NPS- Highly Productive Land (NPS-HPL)

We refer to the assessment of the NPS-HPL in section 11.2 of the AEE.

The NPS-HPL represents a significant national policy directive and is having far reaching consequences for many land use and policy projects around New Zealand. There will need to be careful consideration of the NPS-HPL as part of the further reporting and assessment of the application and this is likely to be a matter that both Waipa DC and WRC will address.

We note that the NPS-HPL specifically provides clauses affecting mineral extraction as an exemption under Clause 3.9. The two relevant sub-clauses are 3.9(2)(j) iii and iv, which are as follows;

- | |
|---|
| <p>(j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:</p> <ul style="list-style-type: none">(i) the maintenance, operation, upgrade, or expansion of specified infrastructure:(ii) the maintenance, operation, upgrade, or expansion of defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990:(iii) mineral extraction that provides significant national public benefit that could not otherwise be achieved using resources within New Zealand:(iv) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand. |
|---|

It is our interpretation that at least one of these subclauses must be satisfied if the proposed quarry is not to be classed as an inappropriate activity. If an exemption criterion is satisfied, then subclause 3.9(3) must be applied.

Section 92 Requests

14. We assume based on the assessment in 11.2.1 of the AEE that the proposed quarry is only considered to satisfy the exemption sub-clause 3.9(2)(j) iv and that the quarry has not been assessed as providing a national benefit under sub-clause 3.9(2)(j) iii. Please discuss/confirm.
15. The wording of sub-clause 3.9(2)(j) iv is potentially problematic in terms of how this should be implemented. Taken literally, it would essentially mean that any quarry activity would only satisfy the exemption criteria if the same material could not otherwise be supplied from around New Zealand. This would appear to be a fanciful proposition which fails to take into account any economic, logistical and market factors involved with the supply and transportation of sand or other aggregate. In our opinion, the interpretation of this sub-clause will need to take into account the practical issues of supply. However, that said, we note your AEE refers to other local quarries and that these are also located on high class land. Can you please provide further assessment and commentary on how the same resource could be supplied from around New Zealand in accordance with sub-clause 3.9(2)(j) iv and any commentary on how this sub-clause should be implemented?
16. The opportunity to return the land to a productive use would appear to align the proposal with subclause 3.9(3). However, further discussion on how this would be achieved is practice including the methodology proposed and any negative impacts on the final soil profile and composition is requested including the rehabilitation of access roads and processing area. Can you please provide further detail and assessment on this matter including the total area of high-class land that will be affected by works and the extent/proportion of land to be rehabilitated back to productive land?

Next Steps

Within 15 working days from the date of this request you must either:

1. Provide the information requested, or
2. Advise Council in writing of the alternative date that you will provide the information by, or
3. Advise council in writing that you refuse to provide the information requested.

A response is due from you no later than: 10 July 2023.

Please be advised that the statutory timeframes for processing your application have been put on hold until the further information requested has been received.

If you do not provide, or refuse to provide the information, council is required to notify your application under section 95(C) RMA. If this happens, you will be required to pay the notification fee in full before we proceed with the notification of your application.

My initial assessment is that there are potential effects in terms of traffic, landscape effects and also terrestrial ecology where the underlying assumptions and reliance on mitigation measures are such it will be difficult to reach a clear assessment that the actual and potential effects are less than minor. While no final assessment and recommendation will be made until all additional information requests have been satisfied, it is likely in my view, that a public notification process may be warranted. I will discuss the process options with you further once we have received the additional information.

Please call or email me on 021 676 377 or todd@planningworks.co.nz if you would like to discuss this letter. As discussed above, we also recommend a meeting Waka Kotahi on transportation matters.

Yours Sincerely



Todd Whittaker
Consultant Planner

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

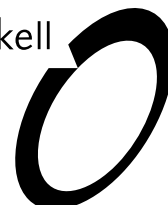
Mathew Cottle

Associate

9 June 2023

Quentin Budd
Consents Team Leader
Waipa District Council
Private Bag 2402
Te Awamutu 3840

Boffa Miskell



Dear Quentin

Newcombe Road Sand Quarry Application Landscape and Visual Assessment Report Peer Review Response

Waipa District Council has engaged Boffa Miskell Limited to undertake a peer review of the landscape and visual assessment report (LVA) prepared by Mansergh Graham Landscape Architects (MGLA) for a proposed sand quarry at 77 Newcombe Road.

The following provides a request for further information to understand the proposal and the extent of affected properties.

1.0 Introduction

- 1.1 This review provides an analysis of the adequacy of the assessment method and its reporting, alongside a consideration of the outcomes of the assessment against the provisions of the Waipa District Plan.
- 1.2 The purpose of this peer review is to confirm whether the assessment can be relied upon and identify issues that require further consideration or are in disagreement with. Where issues or disagreement arise the peer review identifies additional considerations to be taken into account.
- 1.3 This peer review does not provide direction on notification other than providing guidance on the level of landscape and visual effect anticipated by the proposal and the extent of residential properties potentially affected. This Peer Review Report has considered the following:
 1. *Whether the methodology used represents best practice as well as identifying any 'gaps'.*
 2. *That the description of the existing environment, natural character, landscape and visual amenity values is adequately described.*
 3. *That the proposal is adequately described, and the components of the project are accurately and clearly articulated in a way that enables others to visualise the project and judge the significance of the effects.*

4. *That the illustrative material supporting the proposal and accompanying text are appropriate and clear to understand.*
5. *That the identification, nature of any natural character, landscape and visual amenity effects have all been considered and their significance interpreted correctly.*
6. *That all relevant statutory matters and relevant documents have been identified and considered.*
7. *That appropriate mitigation measures, options and recommendations are clear.*
8. *That any cumulative effects are covered.*
9. *That the conclusions and recommendations reflect the findings of the assessment.*

1.5 The documents reviewed comprised:

- *Newcombe Road Sand Quarry Landscape and Visual Assessment Report – January 2023*
- *Resource Consent Application & Assessment of Environmental Effects*
- *Operational Waipa District Plan*

2.0 Review of Report Content

Overall Assessment

2.1 The Landscape and Visual Effects Assessment (LVEA) uses NZILA best practice assessment techniques as outlined in the Te Tangi a te Manu landscape methodology. I broadly agree with the findings of the assessment however, there are some matter which require further clarification as outlined below.

3.0 Assessment of Visual Effects

3.1 It is understood that the quarry operations will operate for 10 hours a day Monday to Friday for 50 weeks of the year. Lighting is briefly mentioned in the “Relevant Planning Matters” section of the assessment. Further information should be provided on the lighting requirements and proposed mitigation for the proposal, in particular during the winter months. Following this update, the landscape and visual effects assessment should be updated to assess the potential effects related to lighting.

3.2 The ZTV analysis methodology and limitations are clearly described and align with existing best practice. It is understood that a site visit was undertaken in October 2020, to confirm the findings of the ZTV and visual audiences. Effects on the residential property at 37 Lovells Road have not been considered in the assessment.

4.0 Relevant Planning Matters

4.1 The assessment assumes that there will be no direct effects on the Karapiro Stream. However, we considered that a natural character assessment is appropriate due to the following project factors, the:

- proximity of the proposal to the watercourse
- scale of the proposal
- intensity and change proposed to the landscape
- quarries impact on the Cultural Landscape Area Alert

The MGLA report should be updated to include analysis and assessment of effects on the natural character of the Karapiro stream.

5.0 Recommended Mitigation Measure

5.1 It is accepted that the time frame for the proposal is of a long duration and that a lot can change over 25 years. However, considering the reliance on the eventual rehabilitation of in the quarry to mitigate adverse landscape and visual effects, a greater level of accuracy and detail is required regarding how the landscape will be “fully mitigated”. Further analysis should also be provided within the assessment on how the large areas of tree and shrub vegetation removed to enable extraction will be mitigated after the closure of the quarry, from a landscape and visual effects perspective.

5.2

5.3 The applicant should provide a mitigation plan which provides details of the following:

- the treatment and shape of the finished slopes and landform to tie back into the existing natural contours
- details of the proposed replacement grassing and planting to finished slopes and how this will mitigate landscape and visual effects

6.0 Plans and Graphics analysis

6.1 Overall the plans and graphical analysis is useful for representing project and assessment information. The link to the 3D GIS model is particularly helpful in understanding the proposal and its staging.

6.2 It is unclear as to whether the ZTV maps include the processing area at each mapped stage or only the processing area plan. As the processing area will be a permanent fixture until the quarry is closed, it should be included within the ZTV mapping as a visible feature at each stage.

7.0 Recommendations

7.1 Further information is sought for the following matters.

- Further information on the proposed lighting, operational hours for should be provided. Where necessary the landscape and visual effects assessment

should be updated to assess the potential effects related to the lighting proposals.

- Provide an assessment of visual effects for the property at 37 Lovells Road
- A comprehensive assessment of the effects of the proposal on natural character should be included in the report to address the potential natural character effects on the Karapiro Stream.
- The applicant should provide a detailed mitigation plan, which details mitigation measures and rehabilitation proposals for the extraction area. In particular details should be supplied regarding the:
 - treatment and shaping of the finished slopes and how they will integrate with the retained landform, and
 - typical planting or conceptual landscape planting or grassing.
- Further analysis should be provided in the assessment on the landscape and visual effects related to the removal of the large area of tree and shrub vegetation to enable extraction. will be sufficiently mitigated, from a landscape and visual effects perspective.

8.0 Conclusion

8.1 It is considered that the applicant's LVA to date is well considered and commensurate to the proposal. However, as detailed above, further information is required before a final determination can be made on the overall effects rating.

If you require any further clarification on the above, please do not hesitate to contact the undersigned.

Yours faithfully

BOFFA MISKELL LTD



Oliver May
Associate Principal Landscape Architect



Jo Soanes
Principal Landscape Architect

14 June 2023

Job No. 138630.186

Todd Whitaker
Consultant Planner
Waipa District Council

Dear Todd,

Transportation Peer Review: 77 Newcombe Road Quarry Consent Application

As requested by Waipa DC, I have carried out a peer review of CKL's Integrated Transport Assessment (ITA) for the proposed sand quarry at 77 Newcombe Road, Cambridge.

In my opinion, the applicant's transport consultant needs to provide a more comprehensive assessment of the likely transport effects on the network to conclude that the effects are likely to be less than minor.

This letter sets out the items that I recommend Waipa DC requests further information on for transport.

1. Simple v Broad ITA

A simple ITA has been provided based on the average daily trip generation being determined at around 800cem. It is unclear how the 800cem was calculated. Paragraph 6.2.2 identifies 78 trucks per day on average, which is 156 truck movements and equivalent to 1560cem on average. Paragraph 6.2.5 also states that on busy days 4,000cem per day may be generated.

The last column of the District Plan table in section 16.4.2.22, headed "All Roads >1500vpd" identifies a Broad ITA is required.

It is noted that the ITA in current form addresses wider network effects as required by a Broad ITA although our review finds it is light on assessment of effects concerning the roads/streets in Cambridge most likely to experience the large increase in heavy truck movements associated with the extraction and transport of 7.7M tonnes of sand over the quarry's anticipated 25-year life. This request for further information essentially seeks a more comprehensive assessment of the wider network effects.

2. Key Assumptions

The ITA adopts numerous assumptions with little to no information offered in support to demonstrate the reasonableness of the assumptions. The assumptions fundamentally influence the findings of the assessment including the assessed pavement impact levy of 4c per tonne.

It appears that it would be equally possible to adopt a different set of assumptions with similarly little to no supporting data and arrive at an entirely different conclusion about the likely transport effects of the proposed sand quarry.

Therefore, justification/support is requested for the basis of the key assumptions as follows:

a) Trip Generation

ITA ref	ITA Assumption	Query
6.1.1	Up to 400,000 tonnes/year sand extraction	AEE Table 2 identifies approximately 300,000 total sand tonnes extracted per year on average. What is the basis for 400,00 as an upper limit? le, is this operationally constrained or unconstrained?
6.2.1	Truck and Trailer units (28 T) “will be adopted for the purpose of assessing traffic volumes”	Why? Significant residential growth in Cambridge is identified as major market for the sand. House pads are typically delivered by single truck units. Typically, only large road construction or industrial building pads involve truck and trailer loads.
6.2.2	“On an annual basis, it is expected that up to 11,188 (56%) of trucks will be the larger units and 8,674 (44%) will be the smaller units, 19,862 units in total”	Appears to contradict 6.2.1. Provide basis behind this “expected” split please.
6.2.3	The extraction rate and demand for the products of the quarry are likely to vary throughout the year. It is therefore assessed that up to 200 trucks [400 return trips] could frequent the site on its busiest day.	Basis for determining 200 truckloads per day as the maximum?
6.2.4	On busier days, this could increase to 20 trucks per hour (equivalent to 40 truck movements). Busy days of this magnitude are only expected to only occur once every couple of months.	Basis for these two assumptions?

Where information/data is not available to support an assumption, the applicant should provide sensitivity assessments to “stress test” the assumption/s to identify where and when network limitations are potentially met. Following that, the likelihood of achieving that critical level of truck movement given any known operational practicalities/constraints of the site.

b) Trip Distribution

ITA ref	ITA Assumption	Query
7.1.1	<p>The ITA states “Figure 5 illustrates the distribution of trucks to the wider area from the proposed sand quarry”.</p> <p>Table 1 then adopts those percentage splits and shows the calculated number of truck trips per destination, by applying the assumed trip generation figures discussed above.</p> <p>No information is provided to identify how the Figure 5 distribution splits were derived and what testing was done to determine that the distribution is reasonable and likely to represent reality.</p>	<p>A) Please explain the basis for deriving the distributional split shown in Figure 5. le: Cambridge North 26% of trips Cambridge South 22% SH1 South is 25% Te Awamutu 10% etc</p> <p>B) Please provide sensitivity assessments for the assumed distributional split to stress test the urban network constraints within Cambridge (capacity, safety, amenity) and then provide an assessment of the likelihood of the various scenarios (and associated effects) occurring.</p>

3. Safety effects for Cyclists and Pedestrians within the urban environs of Cambridge

No assessment is provided on the potential impacts to pedestrian and cyclist safety on the assessed routes within Cambridge. Victoria Street, Albert Street and Queen Street within Cambridge have been modified by Council since SH1 was revoked to improve safety for pedestrians and cyclists, and to enhance the amenity of the urban environment for the Cambridge community.



With respect to the above requested sensitivity testing, please provide an assessment of the potential risks and likelihood of impacts to safety and amenity for walking, cycling and other active modes both within Queen Street, Albert Street, Victoria Street and through Leamington via Shakespeare Street (south of Cook Street).

4. Cambridge Southern Interchange

Paragraph 7.3.1 in the ITA claims there would be insufficient travel demand for north-facing ramps at the Cambridge south interchange. “Based on the expected distribution of trucks as discussed in section 7.1 above, only a small number of trucks would be expected to head north out of Cambridge, approximately an average of seven per day or one per hour”.

However, the ITA (Figure 5) identifies 43% of trips generated by the quarry will be destined for the planned growth areas in the north and northwest of Cambridge (C1, C2, C7, C8, C9 and C10 growth areas).

Notwithstanding the identified lack of supporting information for the assumed trip distribution splits, it appears that a northbound on-ramp from Newcombe Road to the Waikato expressway would in fact be very beneficial for removing a potentially significant volume of loaded trucks from having to travel through the urban commercial area of Cambridge CBD (Queen Street, Albert Street and Victoria Street). The loaded trucks would instead be distributed more efficiently with less potential safety and amenity effects on the Cambridge community and less impact on local road pavements, by using the expressway to access the respective Cambridge growth cells either side of the expressway via Victoria Road interchange.

Therefore,

- a) Please provide further assessment for a northbound on-ramp scenario and the consultation had with Waka Kotahi to explore this potential solution from Newcombe Road to the expressway (without a southbound off-ramp or need for new grade-separation). Council seeks supporting detail if the applicant, after consulting with Waka Kotahi still considers this option to be unfeasible.

Further in relation to exploring expressway options, is the applicant aware of the soon to be provided turnaround bays on SH1 south of the Tirau Road interchange? Loaded trucks leaving the quarry could turn left out of Newcombe Road and travel south to the turn around facility to then travel north on the expressway. Similarly, empty truck and trailer units would travel south on the expressway and use the turn around facility to travel north to take the off-ramp to Tirau Road, then right turn into Newcombe Road. This would remove a potentially significant number of truck movements from the centre of Cambridge and save on district road pavement impact costs.

- b) Please explore the option of using these turn-around facilities to keep the majority of quarry related heavy traffic on SH1.

5. Accelerated pavement / surface deterioration at Newcombe Road - Tirau Road Intersection

Given the approach geometry and the swept path analysis shown in the ITA (Figures 7 and 8) it appears likely that the chip-sealed surface of Newcombe Road / Tirau road intersection will experience accelerated wear from the high turning stresses of loaded truck and trailer units (including HPMVs), particularly in summer. Potholes are then likely to form with the addition of rain to heavy load/high stress zones.

- a) Please consider and provide the applicants proposal for treating this intersection area to make sure it is robust to withstand high turning stresses while also meeting texture requirements for an intersection with a state highway. Note: The solution should minimise maintenance requirements over the 25 year quarry life to minimise disruption to road users and avoid additional cost to Council.



6. Heavy Vehicle Pavement Impact Fee (HVIF)

The HVIF calculations in Section 7.4, 7.5 and Appendix A of the ITA report have been reviewed.

The cost applied for pavement rehabilitation (\$350,000/km) has a direct impact on the HVIF calculation. Council's Transportation Engineering Manager (Mr Hudson) advises that the recent cost of rural road rehabilitation per km (where they were able to minimise traffic management by closing the road to all but residents) was equivalent to \$835,000/km (8m seal width). Noting traffic management was able to be minimised in that case but is not always possible. Therefore, the cost with standard traffic management is likely to be at least \$100,000 more per km assuming \$25000 per week and a 4-week duration per km.

Furthermore, a recent rehabilitation of 10.7m wide urban collector costed the equivalent of \$1,580,000/km. This extra cost over rural roads reflects the more complex traffic management, greater pavement area and high value pavement materials involved.

- a) Accordingly, please update the HVIF calculations reflecting these actual costs for the various road environments represented in the distribution assessment.

It is noted that sensitivity testing was done by the applicant concerning changes of 5% in the trip distribution splits, however the resulted HVIF figure is subject to and likely to be sensitive also to the assumptions around trip generation for which further information is requested from the applicant.

- b) Please provide a sensitivity test of the HVIF calculation as part of the testing of trip generation assumptions
- c) Please provide the calculated HVIF to three decimal places as every \$0.005 represents a significant sum when multiplied by 7M tonnes of resource.

For the avoidance of doubt please note that any final agreed HVIF:

- Will be exclusive of the cost of the requested preventative maintenance work to the Newcombe Road / Tirau Road intersection surfacing proposed in Item 5, and
- Will be subject to a standard consent condition requiring adjustment to the construction price index to base year 2023 to ensure inflationary costs for pavement rehabilitation are captured over the life of the quarry.

Yours sincerely,

Bloxam Burnett & Olliver



Cameron Inder
Transportation Engineering Manager
021715377
cinder@bbo.co.nz

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Memorandum

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Attention: Quentin Budd & Todd Whittaker
 Company: Waipa District Council & Planning Works
 Date: 13-06-2023
 From: Andrew Blayney – Principal Ecologist
 Message Ref: LU/0077/23 – s92 - Ecological matters
 Project No: BM230332

This memo outlines the matters requiring further information for the assessment of ecological effects for the consent application LU/0077/23 for a Sand Quarry on Newcombe Road.

Ecological values and the effects on the are described in three documents:

- Alliance Ecology (2022) Newcombe Road Sand Quarry: Ecology Report.
- Bluewattle Ecology (2021) RS Sands Ltd, DRAFT Baseline long-tailed bat survey & preliminary effects assessment on bats of the proposed sand mine at Newcombe Road, Cambridge.
- Alliance Ecology (2021) Qualitative Biodiversity Modelling Report.

I have attended a site visit on 25 May 2023 to understand the site and assist with my review of the assessment provided.

The following matters outlined below are matters I consider require further information is required to understand the ecological effects and how they may be managed for the proposed activity. I have structured these points aligned with the report numbering and prefaced each comment/request with the section it refers to hopefully assist the applicant in understanding the request.

I consider there would be benefit in meeting with the applicants' ecologists to go over this assessment and ensure there is a mutual understanding of the gaps and required works and information to fill them.

Alliance Ecology (2022) Newcombe Road Sand Quarry: Ecology Report.

2 Method:

The methods note the field investigations involving "habitat assessments" that were used to characterise fauna habitats. Please provide further detail on how avifauna and herpetofauna habitats were classified and how it was determined which species are included within this assessment.

Section 2.2.1 notes "general field investigations" were carried out in 13 and 14 January 2021. Were any further investigations, other than for bats, undertaken to understand the values of the site? If so, please provide the results of these investigations.

Section 2.2.2 details the methods for delimiting wetlands which appear to be based on guidance and methods developed shortly after the gazetting of the National Policy Statement for Freshwater Management. More recently formal guidance from the Ministry for the Environment has been developed for identifying wetland hydrology, hydric soils identification, and areas which meet the pasture exclusion. Please confirm whether any of these more recently developed protocols impact the assessment. Note: during the site visit, in Gully E I noted patches of *Carex* sp. (appeared to be *Carex geminata* from the distance observed) on the east facing scarp. These appeared to be in a different location to the small area of seepage wetland

identified in/or near Gully E in Appendix A - Figure 1. Please confirm this area was surveyed in terms of potential wetlands.

Section 2.3.1 please clarify how fauna habitat values have been assessed within the method specified and how this value then fits into the subsequent assessment of ecosystem and habitat types.

3 Ecological Characteristics and Values

In general, I found the detail provided in this section to be very low and much more detail is required to understand the site and the potential effects upon it by the proposed quarry. I have attempted to capture some key points of this detail below and through this memo.

Section 3.4 notes that the presence of fauna “was assessed based on a combination of field observations and assessments of habitat suitability for a range of species”. Please provide further information on both the methods and results of the assessment of habitats including the habitat parameters assessed to determine the “presence, possible occasional use, possible presence” terms described with Table 3.4. Please also provide information on the habitat values/quality for fauna within the site and provide a map of these features or clarify the relationship between the identified vegetation types and habitat value/quality for the fauna identified.

Table 3.4; this table appears to be incomplete particularly with regards to avifauna. For example, morepork, silver eye, fantail, stream and river associated shag species, pukeko, swamp harrier, grey warbler, paradise shelduck, and sacred kingfisher¹. These species are all legally protected species which are likely resident or utilise the site on a regular basis. There is also no information provided on how or why only copper skink are the only lizard species included. It is unclear what criteria have been used for inclusion in this effect assessment. Please either clarify how the species chosen were included and provide justification on the exclusion of the other species or update the assessment to capture a fulsome assessment of the avifauna and herpetofauna values of the site.

Table 3.4; please clarify the sources for the information presented within the threat status column. I noted that copper skink are now classified as At-Risk – Declining (Hitchmough et al., 2021). Please also confirm the source of information for Regionally Uncommon species – *Peripatus novaezealandiae* I am not aware of being regionally uncommon. *Peripatoides suteri* is listed within Overdyck (2020). Updates to the conservation status of individual species may have flow on effects to the impact assessment please review and update in light of these changes.

4 Assessment of ecological effects

Section 4.1; Please confirm and check the areal extent of habitat loss listed within this section. I have not reviewed GIS layers however, visually, it appears that there is more “Exotic dominated scrub” impacted than “Exotic pine plantation forest” in Appendix A – Figure 1.

Section 4.2; Please provide more detail on the “Further refinement of the project footprint....” and whether this changes the areal extent outlined in Section 4.1 above.

Section 4.2; “These measures to avoid, remedy or mitigate potential adverse effects will be detailed in the respective ecological management plans as mandated through proposed consent conditions set out in the AEE.” There have been no proposed consent conditions provided in the AEE. Please provide further detail on the proposed management plans and what must be included in these management plans.

Section 4.2; Please also provide any information on the required effects management strategies that may not form part of a management plan but limit or inform on activities that may have been intended to be captured by the proposed consent conditions.

Section 4.3; Table 4.3.1 describes the value of the terrestrial vegetation and wetland habitat types and Table 4.3.2 described the values for species. It is unclear how the value of fauna habitats has been captured. The assessment within Table 4.3.1 appears to be solely focused on vegetation composition and vegetation

¹ I note that some but not all of these species are subsequently listed in the tables of Section 4

condition with no account for habitat values, despite the terms ecosystem type and habitat type being used interchangeably. The assessment within Table 4.3.2 aligns with the EIANZ guideline for species. Table 4.3.2, later in the assessment, provides some further commentary on the habitats lost and some quantum for different species. However, the habitat values are not described nor mapped anywhere in the assessment beyond this brief description. Please clarify the assessment with regards to the habitat values of fauna and thereafter how the proposal impacts on these values.

Table 4.3.2.1, related to the above request. Please provide detail on the fauna habitats being described as “*variable quality habitat*” with regards to multiple fauna species to provide an understanding of the habitat values present and the impacts on these species.

Table 4.3.2.1; related to an above request. Please clarify the statements regarding “*Further refinement of project footprint*”.

Table 4.3.2.1; the project effects column provides assessment in general alignment with the EIANZ guidance with regards to assessing the proportion of the element/feature being impacted. However, captured in brief are some of the nuances of these effects (for example the connectivity of habitats with regards to bats). Please provide more information of the effects on habitats and species with regards to the baseline condition and characteristics of the habitats available.

Table 4.3.2.1; please provide additional information and explanation on the following strategy to manage for effects with regards to bats: “*Avoidance of clearance during bat breeding season when detection of roost sites is less likely*”.

Table 4.3.2.1; Please provide information on how the magnitude of effect on bats detailed as “Moderate” within this table is reconciled with the effects assessment provided within the Bluewattle Ecology (2021) report in section 4.2.

5 Residual effects management

Within this section I largely defer any detail to the comments/requests directly relating to the Qualitative Biodiversity Modelling Report.

While I acknowledge this is not Government policy this section refers to the Draft National Policy Statement for Indigenous Biodiversity (Ministry for the Environment, 2019). Please provide comment whether there are any changes to this section in light of the more recently released exposure draft (Ministry for the Environment & Department of Conservation, 2022).

Section 5.2; Please clarify and provide specific and targeted objectives with regard the compensating for the loss of long-tailed bat habitats including roosting, foraging, and commuting habitats.

Section 5.5; Please provide more detail on the proposed compensation package, particularly with regards to the recommendations provided within the recommendations with Section 5 of the Bluewattle Ecology (2021) report. I acknowledge that a discount rate has been used to ensure the time lag for habitat creation to be effective has been used. However, please also detail how the time lag for habitat replacement will be managed with regards to fauna.

Section 5.5; The restoration proposed, based on the description here, and within the QBM model is restricted solely to the riparian planting around the floodplain wetlands present. The report provides no information on the composition or health of these wetlands, and I am uncertain what the impact of simply planting around the wetlands will achieve. I would also assume that restoration of the wetlands themselves would be more aligned with the principles of compensation than simply buffer planting. Why has no restoration been proposed within the wetlands within the compensation area?

Section 5.6; I understand the concept of trade-up with regards to the floristic composition of the proposed compensation. I am concerned the trade up in the vegetative composition of the compensation proposal does not adequately manage for effects on long-tailed bats and there are values, more important than vegetative values, lost in the trade up. Please provide information/comment on the concept of ‘trade-up’ and

how the proposal is a trade up with regards to long-tailed bat habitats and to confirm that no values that are lost in this trade-up are to Threatened or At-Risk species.

Bluewattle Ecology (2021) RS Sands Ltd, DRAFT Baseline long-tailed bat survey & preliminary effects assessment on bats of the proposed sand mine at Newcombe Road, Cambridge.

2 Methodology; This section notes a “*preliminary effects assessment and management recommendations*” please confirm whether there are any updates or refinements to this preliminary works to inform the overall effects assessment.

Please provide the method used to identify potential roost trees and assess their value and/or likely use by long-tailed bats.

3 Results; Please provide a map of the potential roost trees or groups of potential roost trees and the results of the assessment for potential roost features as well as a quantum of the trees onsite and to be removed. I acknowledge this is proposed as a recommendation for managing effects. However, I consider this information necessary to understand and assess the potential effects of the application.

4 Preliminary effects assessment on bats & recommendations; This section notes: “*At this point in time there is a small risk of finding an occupied communal roost tree within the sand mine footprint, particularly if intrusion into the gullies and mature shelterbelt trees are limited to as minimal an extent as possible.*” I note that this report was drafted in 2021 and does not include a map indicating the sand mine footprint this comment may relate to. Please provide comment on the risk of occupied roosts being impacted by the sand mine footprint as proposed within the consent application or confirm this has not changed since this assessment.

Alliance Ecology (2021) Qualitative Biodiversity Modelling Report.

The intention of the QBM used within this report is to increase the transparency and rigour of the process of calculating predicted likely net gain or no net loss. Aligned with the comments and requests above I have identified several areas where there is a lack of detail in the assessment of ecological value. To fully understand and assess the adequacy of the QBM models used this detail will need to be provided. Below I have identified specific items of information needed where it is not directly related to requests above.

3 Long-tailed bat QBM

Benchmark: This model is intended to be solely for bats, I am unsure the specific relevance with regards to “mature native forest” with regards to long-tailed bat habitat. Please provide further detail on the hypothetical benchmark in regard to the functional habitat features and resources for long-tailed bats relevant to this population and landscape.

Impact model: Please provide further detail and justification of the value scores prior to impacts with regards to bat habitat.

Compensation model inputs; Compensation contingency (confidence) – the explanation provided here appears to be focused on the ability to implement planting and vegetation establishment, rather than the confidence with which this creates additional bat habitat and subsequent value to the long-tailed bat habitat. Please provide information on how the ‘High Confidence’ selected here relates to the certainty of efficacy with regards to creating long-tailed bat habitats and providing value to long-tailed bats as a species.

Value score prior to compensation; The compensation site is located in an incised valley, along a waterway, with individual large trees, near large vegetation, and contains several wetlands. These are habitat characteristics preferred by long-tailed bats and can be productive for foraging and utilised for commuting. Please provide more information and justification of the values score used here with regards to the value of the habitat for long-tailed bats. It would also be useful to understand the current use of the proposed compensation area by long-tailed bats.

Value score after compensation measure; The scoring here appears to put a high weighting on the composition of the vegetation proposed to be planted. This weighting means there is an assessment of a Δ of 2 between pre and post compensation. I am unclear what, in terms of specific value to long-tailed bats,

compared to the baseline is being provided within the timeframe proposed. Please provide further information and justification of the scoring provided with particular regard to the additional habitat resources such as foraging, commuting, and roosting provided by the compensation actions proposed.

It appears that the net gain outcome is much lower than the target of 20% and I am uncertain based on the information provided there is justification for several inputs to the model. Please provide a sensitivity analysis to demonstrate the risk on not achieving a likely no net loss or net gain outcome with changes to the inputs of the model.

4 - Wetland Qualitative Biodiversity Model

As above for the bat model, please provide further information with regards to the benchmark being used to assess scores against.

Compensation actions: Ref comment made regarding Section 5.5 of the main report - it is unclear why compensation actions are restricted to revegetation around the wetlands present. Please provide context to this approach. Note the explanation of the value score after compensation for both compensation actions refers to "*wetland revegetation post compensation score*".

Value scores pre and post compensation actions; I am not aware of any survey or assessment of the condition of the wetlands present within the compensation site. This is necessary to score these features within this model. Please provide further information to inform and justify the value scores presented within this model.

5 Indigenous fauna assemblage

As above for the other two components of the compensation package. Please provide further information on the explanation and assessment that justifies the scoring used within this model.

I consider that this model may need to be reviewed in light of the requests for information with regards to avifauna and herpetofauna in the above sections of this request.

References

- Hitchmough, R. A., Barr, B., Knox, C., Lettink, M., Monks, J. M., Patterson, G. B., Reardon, J. T., Van Winkel, D., Rolfe, J., & Michel, P. (2021). *Conservation status of New Zealand reptiles, 2021* (New Zealand Threat Classification Series No. 35). Department of Conservation.
- Ministry for the Environment. (2019). *Draft national policy statement for indigenous biodiversity*. Ministry for the Environment.
- Ministry for the Environment & Department of Conservation. (2022). *National Policy Statement for Indigenous Biodiversity—Exposure Draft*. Ministry for the Environment.
<https://environment.govt.nz/assets/publications/NPSIB-exposure-draft.pdf>
- Overdyck, E. (2020). *Nationally threatened and regionally uncommon species of the Waikato Region* (Waikato Regional Council Technical Report No. 2019/28). Waikato Regional Council.