

29 August 2025

Adam Vincent – Planning Officer Consents
Central Otago District Council
PO Box 122
Alexandra 9340

By email: Adam.Vincent@codc.govt.nz

Dear Adam

RE: FURTHER INFORMATION REQUIRED FOR RC 250077

Following up on our conversation this morning please find below a response to your questions.

1. Information about how the proposal might affect the ability of the land to be used for residential purposes on the building platforms established under RC 230236 in the event that this consent is given effect to. At a minimum, this should include consideration of how changes in ground level might impact flood risks, the geotechnical stability of remediated land on and around building platforms, and the location of fuel or other chemical tanks.

As the mining proposal is limited to a maximum period of three years from the commencement date to the completion of all site remediation and removal of equipment it is unlikely the site will experience a flood event on the site during the mining works given the interval frequency of flooding events is low. The site is not subject to a hazard overlay in the District Plan but is subject to flood hazard identified in the Otago Natural Hazards Database (this is illustrated in Fig.3 of RC230236). As part of the subdivision application, Geosolve was commissioned to prepare a Geotechnical Report, Flood Hazard Assessment and Addendum.

The s42A report for RC230236 comments that

The Flooding Addendum confirms that the original GeoSolve flood hazard modelling was performed based on a design flow of 2062 m³/s, representing the 1878 flood (~650 year ARI), which equates to the 100-year ARI flow of 1,685 m³/s increased by a factor of 22.4% for future climate change allowance (noting that if an event of this magnitude was to occur today, the peak flow would be partially attenuated by the Lake Hawea dam controlled outlet and increased lake surface area). The Flooding Addendum considers this to be a conservative estimate for the climate-adjusted 100-year ARI flood.

The calculations and model are conservative and indicate a low interval frequency of flood risk which would be considered an extreme event. Should an extreme flood event occur within the 3-year mining period, the applicant will have sufficient forewarning to extract equipment from any likely flood area.

Figure 6 of the application sets out the approximate area to be mined, the direction of the mining activity and the location of each storage depot. Figure 12 of the application then sets out the building platforms for the 8-

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lot lifestyle development approved under resource consent RC230386. Approved building platforms 1, 3-8 to will be located on the terrace outside of the proposed mining area. Approved building platform 2 is sited towards the river margin and is within the area identified as having an economic gold deposit. We propose that no mining can occur within 5m of the approved building platform for Lot 2 to ensure the ground stability has not been compromised by the mining, remediation and compaction works. This will ensure the building foundations are not at risk of failure.

With respect to the final ground levels and flood risk the mining activity will be carried out and then rehabilitated. This will be carried out in three stages

- Gravels will be directed to the rear of the active mine pit and progressively compacted,
- Any overburden from the soil profile will then be reinstated and compacted,
- Topsoil will then be reinstated and compacted, and then sown in seed of grass cultivars typical of the area. Newly planted seed will be managed to ensure a good strike occurs completing the restoration works.

Given the limited depth of the overall soil profile, it is considered any 'swell' will be limited given the three-phase compaction process for restoration. The ground profile will effectively be as it was at the time of approving RC230236 and therefore any flood risk as a result of the mining activity will be as it is presently and is assessed as less than minor.

With respect to the location of fuel or other chemical tanks, I can advise there will be fuels stored at one of the two depot sites shown in Fig 6. These are on the elevated terrace and will not be at risk of flood inundation. The southern depot will be the location of the offices and fuel storage at the commencement of mining and this will be relocated to the second location approximately 18-months into the mining activity. There will be no storage of hazardous materials beyond fuel and lubricants which will be stored outside the modelled flood zone.

2. On Page 36 of the assessment of effects, it is argued that there will be no loss of productive capacity. Please provide information explaining how the productive capacity of the land will be maintained or restored after the mining activity is completed.

Resource consent RC230236 was assessed by Agronomist Ben Trotter. He noted the site currently supports a very low stock unit capacity and noted this is largely due to the limitations associated with access to water for irrigation and a poor soil type which is low in organic matter and very drought prone. Prior to subdivision or this application there is little productive capacity, and following mining the site will be converted to eight residential sites, where arguably productive capacity may increase; although in a lifestyle context.

With respect to the NPS-HPL, the subject site is identified in RC230236 as comprising Land Use Capability 4 and 6 on the Maanaki Whenua Landcare Research soils maps, "with a very small area of land is shown as LUC3". The land identified for mining is predominantly LUC6 soils and the sliver of LUC3 soil is on the upper terrace toward the State Highway outside of the proposed mining area. While Mr Trotter recognises the LUC4 and LUC6 classifications for this soil, he observes that soils across the site are more akin to a LUC6 because they are weakly developed and hold very little agricultural value. He also concluded financial costs to irrigate the site would be financially prohibitive.

The figure below from the CODC GIS mapping clarifies the extent of LUC3 (in dark green against the State Highway) and the LUC 6 soils (in brown).



On that basis, it is my opinion the site is not subject to the NPSHPL, has little productive capacity and the productive potential will not be impacted by the proposed mining activity.

3. Benje Pattersons' economic assessment is based on the entire crown minerals permit area being mined over a 10 year period. This includes land that the applicant has stated will not be mined, for example the Autaia Scenic reserve. The duration sought by the resource consent is three years. In order to ensure Council is considering accurate expert assessment and is able to accurately consider the economic effects of the proposal, please provide updated economic assessment based on the correct area proposed to be mined and the proposed duration of the consent.

The Benje Patterson report has been amended to reflect a maximum three year term and is appended to this letter. That report concludes that the mining project is expected to directly add an average of \$2.57 million of GDP a year to the local economy once the mine is operational and employ an average of 4 staff. In addition to these direct effects, there could also be up to another \$0.53 million of GDP a year and up to 3.3 further jobs supported by the multiplier effects of the mine's procurement and providing goods and services to meet the needs of workers.

No mining will occur in the Autaia Scenic Reserve.

4. An assessment of the proposal against the National Policy Statement for Indigenous Biodiversity 2022. Assessment against this policy statement (Or consideration of its relevance) is missing from the application.

The objective of the National Policy Statement for Indigenous Biodiversity 2022 is:

- (a) to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date; and
- (b) to achieve this:

- (i) through recognising the mana of tangata whenua as kaitiaki of indigenous biodiversity; and
- (ii) by recognising people and communities, including landowners, as stewards of indigenous biodiversity; and
- (iii) by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity; and
- (iv) while providing for the social, economic, and cultural wellbeing of people and communities now and in the future.

The NPSIB applies a strong focus on Councils to protect SNAs by requiring new subdivision, use, and development to avoid adverse effects on them. This includes effects like loss of ecosystem extent, fragmentation, and disruption to ecosystem function. For most new activities, these adverse effects must be "avoided". In May 2025, the government proposed further targeted amendments to several national policy statements, including the NPSIB, to make the consenting pathways for quarrying and mining more consistent and enabling. Policy 8 of the NPSIB identifies the importance of maintaining indigenous biodiversity outside SNAs is recognised and is provided for.

In this case, the proposed mining area comprises exotic vegetation on predominantly LUC6 soils. Along the upper extent of the proposed mining area is a series of indigenous plants comprised mostly in kanuka. The application notes this area is excluded from the mining activity as it occupies much of the marginal strip or the broader setback to ensure no effects on the historic heritage occur. Vegetation disturbance will be limited to exotic vascular species and grasses, with the exception of the occasional outlier.



The proposed mining area comprises exotic pasture, is grazed with low stocking numbers and includes irrigation from a centre pivot. Once mining is complete, the site will be an 8-lot residential lifestyle property.

It is my opinion the proposed mining will have a less than minor effect on indigenous biodiversity.

5. Page 7 of the application states that 6 staff will be employed. Elsewhere in the application it states four staff. Please confirm which is correct and update any assessment that used the incorrect number as necessary.

The proposed mining venture is anticipated to employ 4 additional staff beyond the mine manager. This is of course subject to change and may increase. For the purpose of this application the minimum staff on the site will be four.

6. An updated map showing where mining is intended to occur relative to the boundaries of the site. Figures 6 and 15 of the assessment of effects and Figure 7 of Mr Moore's assessment are not considered certain enough to allow Council to determine the physical extent of the proposed activity.

The figure below offers additional detail as to the proposed setbacks. From the Autaia Scenic Reserve, a 10m setback will be applied. Against the north-eastern (the upper) extent of the permit shown in the image below, a setback will be applied to limit effects on the existing kanuka vegetation and provide a generous setback from the DoC Marginal Strip and the recorded heritage sites to ensure no risk of interaction. As shown below these setbacks vary in distance from the river margin, bring 40m, 75m and 145m in the measurements detailed below. For the balance of the site comprising exotic vascular species or grasses, a setback of 5m from the DoC Marginal Strip will be adopted.



Yours Faithfully,

Terramark Ltd

Darryl Sycamore
Resource Management Planner