## <u>Barrytown Mineral Sands Mining Project</u> <u>SUMMARY OF POSITION – Rhys Girvan 13/2/2024</u>

#### Introduction

- 1. As set out in the Joint Witness Statement dated 29 January 2024, I generally concur with the overall findings of the landscape evidence provided by Ms Crawford to support this application.
- 2. Based on evidence, the two areas for which I maintain a slight difference in opinion relate to landform and consequent natural character effects. I discuss these differences further below, together with a recommended change in conditions through which I consider identified differences in effect could be further addressed.
- 3. At completion of the mining activity and following rehabilitation, I continue to agree the proposed mitigation has potential to result in a low positive effect in the context of ongoing agricultural activity. Overall, whilst I consider the nature of mining in this context will have some moderate adverse natural character effects during operation, I do not consider these to be significant to the extent which should be avoided.

#### **Landform Effects**

- 4. The nature of strip-mining combined with temporary bunding and stockpiles as proposed means that there will be an unavoidable change in landform apparent during the mining operation. I also note operation of the Ore Stockpile Area will have landform effects that occur in addition to the 8ha. disturbance at any one time.
- 5. Where landform change is identified, I consider that the resultant effects are reduced by the exiting level of landform modification and given the progressive nature of the project as proposed. Based on this, I concur with Ms Crawford that landform effects will not be significant and will be remedied in the long-term once the Site is rehabilitated to support the existing rural land use, albeit at a slightly lower elevation. I support the adaptive trialling of landcover to optimise this outcome.
- 6. Based on the above, I consider this difference in opinion based on landform effects are not material beyond contributing to the overall differences in natural character effects as identified below.

## **Natural Character Effects**

- 7. As recognised in NZCPS Policy 13 and current best practice, natural character is not the same as natural features and landscapes or amenity values. It relates more specifically to the natural characteristics and qualities which exist within a given coastal environment and considers the degree to which modifications to the ecosystem and landscape/seascape occur. This means the greatest naturalness occurs where there is least modification and vice versa.
- 8. In terms of adverse natural character effects, I agree that the existing modified context expressed within the Mine Disturbance Area and efforts to avoid areas with higher natural character within the Site help ensure adverse effects on natural character are not significant. Notwithstaning this, I consider the proposed mine will result in a material increase in

modification within the existing natural characteristics and qualities of the Site which will result in more than minor natural character effects and for which further opportunities and areas for restoration occur. To provide further direction, I have reviewed the landscape mitigation identified on the General Layout Plan (19/12/2023) accompanying Ms Crawford's evidence and Proposed Conditions (Dated 7/2/2024) and identify specific areas to further clarify such opportunities.

- 9. In terms of proposed Coastal Mitigation Planting and Wetland Mitigation Planting, I reiterate previous concerns that the pattern of coastal planting proposed appears linear and relatively unresponsive in terms of allowing for the dynamic nature of coastal processes which will continue. This is consistent with Ms Crawford's evidence that the linear buffer planting indicated around the lagoon is proposed within a changing coastal environment and will require the expertise of those planting it to ascertain the best location of those plants. On this matter, I respect that the plan is only indicative to work out proposed quantitates but note the consequent areas within which restoration of natural character is proposed therefore remains somewhat unclear.
- 10. Given this requirement for responsive planting and management to promote restoration of natural character, I recommend that the requirements of the Proposed Wetland Construction and Riparian Planting Plan are adapted to ensure all areas of planting, as indicated on the General Layout Plan, are managed to restore natural character during operation. This is consistent with Paragraph 89 of Ms Crawford's evidence which identifies that "from the time of planting and through the active mining period, a regular maintenance programme will occur to maintain all new and existing planting within the Site". I consider this offers an important aspect relating to improving natural character which should be ensured through appropriate conditions.
- 11. In addition to planting, I concur with Ms Crawford that limiting mining activity to daylight hours in combination with a lighting plan to avoid light spill, as proposed, will be beneficial in terms of mitigating potential effects on the natural darkness of the night sky.

## **Recommended Conditions**

### Condition 19.5

As it stands, Condition 19.5 as expressed in the Draft Wetland Construction and Riparian Planting Plan (Ecological Solutions, April 2023) only relates to the constructed wetlands and riparian mitigation planting introduced along Collins Creek and the Northern Drain. To this extent, the requirement for relevant expertise when undertaking additional areas of planting and to ensure restoration of natural character outcomes occur as intended remains unclear. To ensure this outcome, I recommend the following amendments (as highlighted) based on the circulated Proposed Conditions of Consent – dated 7 February 2024:

# <u>Wetland</u> <u>Construction</u> and Riparian <u>Planting</u> Management Plan

The wetland construction (Clean Water Facility and Future Wetland Extension), Canoe Creek coastal lagoon edge, coastal mitigation planting, existing riparian planting (Canoe Creek and Collins Creek) and Collins Creek and Northern Boundary Drain riparian planting shall be undertaken and managed in accordance with a Wetland Construction and Riparian Planting Management Plan (WRMP) prepared by a suitably qualified ecologist and landscape architect.

The approved plan shall confirm and delineate all wetland and riparian areas which will be

established and remain at the closure of the mine in accordance with the Approved General Layout Plan. This shall include the identification of fencing where necessary to limit stock access and within which existing and proposed planting will be required to be maintained during the mine operation.

The objectives of this plan are:

- To create or enhance habitat for indigenous species along the Site's existing coastal edge and within Canoe Creek Lagoon.
- Encouraging natural regeneration of indigenous species by fencing off planting areas and having effective weed and animal pest management.
- To revegetate the constructed wetland and both edges of the part of Collins Creek and the Northern Drain and the area of coastal planting with ecologically appropriate species and restore indigenous vegetation to at least 50% cover at 1 m height as demonstrated in plots across both wetland sites.
- Manage exotic pest plants (particularly woody weeds identified in this plan) over existing planting and restoration sites to a level of less than 5% cover as demonstrated in wetland monitoring plots across both wetland and riparian sites.
- Improve terrestrial and wetland habitat quality and create corridors for wildlife movement.
- Encourage natural ecosystem processes including the regeneration and dispersal of indigenous fauna and flora.
- Improve water quality and aquatic habitats in Collins Creek and the Northern Drain.

Advice Note: All Management Plans are required to adhere to the requirements of Condition 6.0.