STRADEGY
Urban, Environmental & Strategic Planning

Planning report in support of application for referral for Maraekakaho Quarry

State Highway 50, Maraekakaho

Russell Aggregates Limited

22088 REFAP1
22 December 2022

APPLICATION DETAILS

Consent Authority: Ministry for the Environment

The Applicant: Russell Aggregates Limited

Site Details:

Street Address: .....State Highway 50, Maraekakaho
Legal Description:.....Lot 4 DP 463659 (Existing Processing site)
Lot 1 DP 540720; Lot 3 DP 473957; Part Lot 1 DP 357840 (proposed extraction site)
Area: .....24 Ha
Zoning: .....Rural Zone (Hastings District Plan)

Activity which is the subject of this memorandum:

To enable the extraction of aggregate from land, and ancillary activities, at Maraekakaho, Hawke's Bay.

Prepared by:

Andrew Dooney MNZPI
Senior Planner

Reviewed and Approved for Release by:

Cam Drury BRP(Hons) MNZPI
Principal Planner I Director

TABLE OF CONTENTS

Appendices:

1. Regional Resource Management Plan and Hastings District Plan Policy Assessment
2. Hastings District Plan Assessment Criteria

1. INTRODUCTION

This report has been prepared by Stradegy Planning Limited in relation to an application by Russell Aggregates Limited (RAL) for referral under the Covid-19 Recovery (Fast-track Consenting) Act 2020 to enable the extraction of aggregate from land, and ancillary activities, at Maraekakaho, Hawke's Bay. This assessment will review the relevant planning instruments that relate to the proposal, identify resource consents required and provide a preliminary assessment of effects.

RAL currently operate an existing aggregate processing facility located on Kereru Rd, Maraekakaho within the Rural Zone of the Hastings District Plan as shown in Figures 1 and 2 below. The site is approximately 3.1 ha, located 1.4 km east of Maraekakaho Village and bounds the Ngaruroro River.

Processing activities are undertaken in line with land use consent RMA20180258 (land use consent) granted by Hastings District Council (HDC) in 2019, with aggregate sourced from the Ngaruroro River under short-duration resource consents granted by Hawkes Bay Regional Council (HBRC) in accordance with a gravel allocation policy set out in the Hawke's Bay Regional Resource Management Plan (RRMP). Aggregate is also sourced and transported from the Waipawa River in Central Hawke's Bay. Aggregate is processed (washed, screened, crushed, mixed and sorted into stockpiles) prior to being transported from the site by truck.

While the aggregate processing activity itself and associated effects are not anticipated to change in any substantial way, a variation to RMA20180258 is required to integrate the proposed extraction area with the processing area and will be sought separately (in future).

The client's growing requirement for gravel coupled with a decline in the volume of gravel allocated by HBRC for extraction from the Ngaruroro River means a land-based source of aggregate needs to be secured. It is for these reasons that extraction of aggregate alongside the existing processing area is sought.

Figure 1: Location of existing site

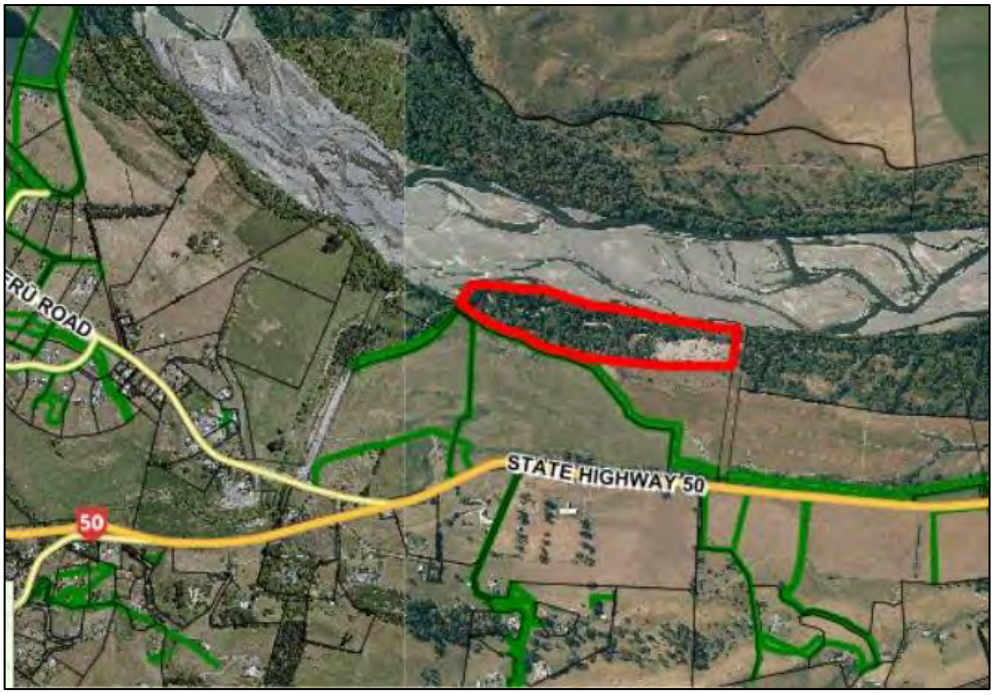
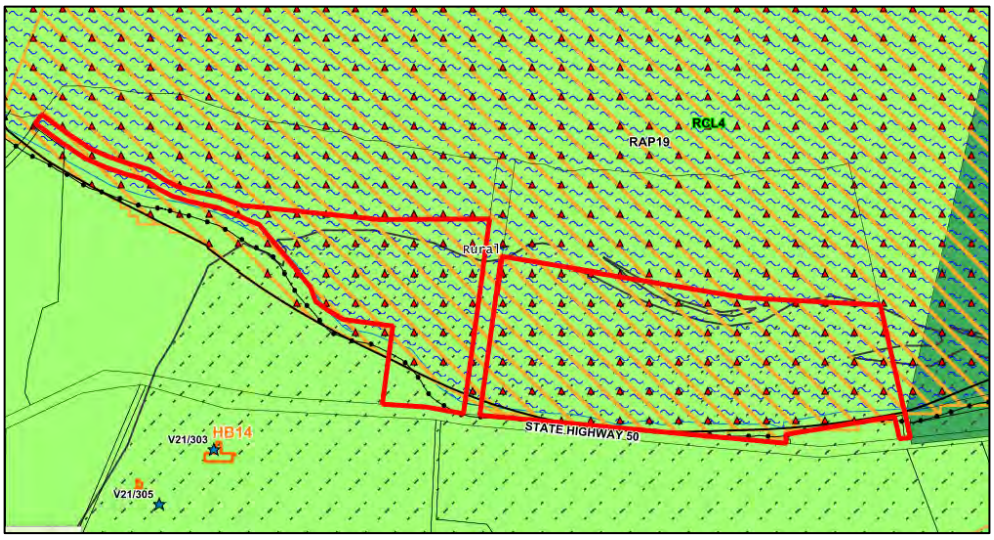


Figure 2: Site District Plan Zoning



2. SITE DESCRIPTION

The proposed site is a 24-ha area located on Kereru Road approximately 1.4 km east of Maraekakaho Village, which is bounded by the Ngaruroro River to the north and State Highway 50 to the south as shown in Figure 3 below.

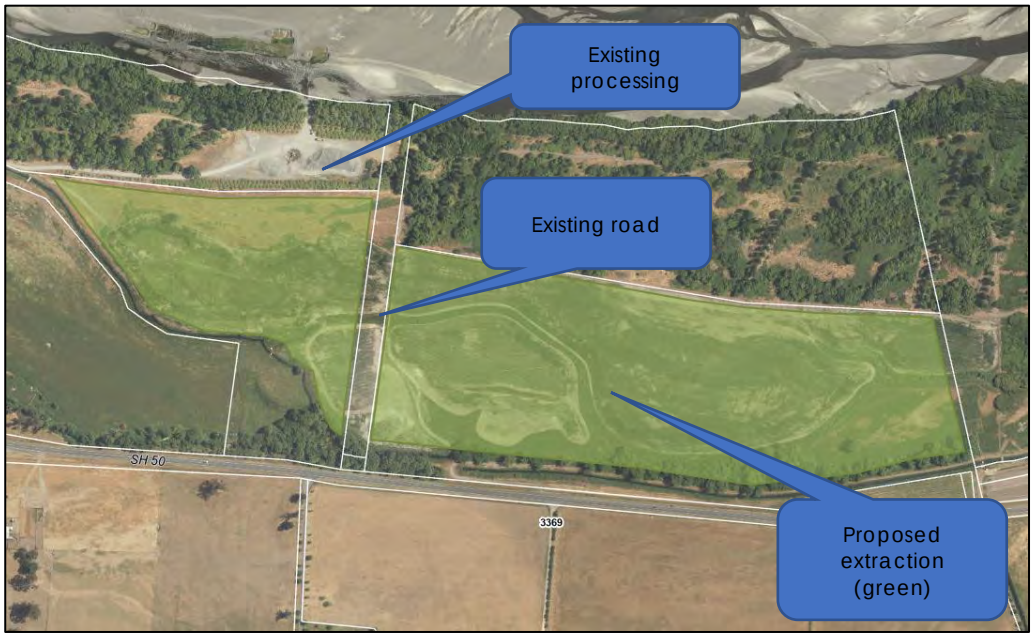
The surrounding land is rural in nature consisting of a mix of pasture and horticultural land use. The site and agricultural land to the south is primarily flat but rises to a river terrace where SH50 (Roys Rd) is situated. Roys Hill Road runs east to west south of the subject site and provides vehicle access via a newly formed road.

A water race is located between the site and SH50 which runs in an east/southeast direction from a confluence just west of the subject site. Approximately 650m west of the site is the confluence of the Maraekakaho Stream and the Ngaruroro River. Both east and west of the site is vegetated with a combination of trees and pasture, with some of the tree's present having been planted for flood protection purposes.

There are residential properties on the southern side of SH50 which are flat for approximately the first few hundred metres before rising steeply to a ridge which overlooks the Ngaruroro River and the subject site. The closest dwellings are around 400 metres from the edge of the subject site.

The site is located over the Heretaunga Unconfined Aquifer.

Figure 3: Subject Site including existing processing area



The existing environment is described in more detail within in the expert reports included with this referral application. These are:

Report	Author	Attachment to referral application
Economic Impact Assessment	Property Economics	Attachment M
Geotechnical Preliminary Assessment Report (hereafter referred to as the Geotech Report)	LDE	Attachment H
Ministry for the Environment Hazardous Activities and Industries List assessment	LDE	Attachment I
Hydrogeological Memorandum	Aqualinc	Attachment J
Transportation Memo	Abley	Attachment E
Assessment of Environmental Noise	Styles Group	Attachment F
Assessment of Ecological Effects	Boffa Miskell	Attachment L
Preliminary Flood Assessment	Riley	Attachment K
A Preliminary Review of Potential Landscape and Visual Effects (hereafter referred to as the Landscape and Visual Assessment)	Wayfinder	Attachment G

Existing Resource Consents

RAL hold the following resource consents for the existing processing site:

- Land use consent RMA20180258 for processing aggregate granted by HDC. This consent includes permission to undertake quarrying related activities, construct two accessory buildings and a new vehicle access road which runs north from Roys Hill Road to the subject site. This resource consent has also been amended by two separate variations (RMA20200268 and RMA20210119).
- Land use consent RMA 20190184 for earthworks associated with the proposed vehicle access including a driveway and culvert structures. This resource consent is related to RMA20180258.
- A non-consumptive water take AUTH-127331-01 granted by HBRC. This take is used to supply water to an aggregate wash plant before being discharged back to the aquifer under a discharge permit (AUTH-127334-01).

3. DESCRIPTION OF PROPOSAL

A description of the proposed activity is contained in the Activity Description attached in Attachment B of the application. An indicative site plan is included in Attachment D to the application.

Activities that the proposal may include are:

- The removal of existing vegetation from the Site;
- The land-based excavation of aggregate using an excavator with 30m boom and bucket;
- The extraction of up to approximately 6.42 million m3 of gravel aggregate across a maximum land area of approximately 22.1ha (comprising two separate extraction areas);
- Extraction of gravel aggregate to a maximum depth of 30m below the surface, within the groundwater table;
- The stockpiling of unprocessed and processed gravel aggregate in a land area of approximately 9,000m;
- The development of earth bunds (or other landforms) around the extraction areas;
- The creation of two lakes or surface water bodies which will be filled by latent groundwater as the extraction areas are enlarged over time;
- Landscaping, including land contouring, in and around the extraction areas in connection with Site remediation;
- The planting of new vegetation, around the extraction areas, in connection with Site remediation;
- The creation of vehicle accessways to/from the two extraction areas, from an existing public accessway off Stage Highway 50;
- The construction of an internal road within the western extraction area to facilitate vehicle movements and enable integration with Russell Aggregate's existing processing site;
- The construction of structures associated with the above activities, including portacoms, a storage container and toilet block for staff;
- The storage of diesel for refuelling of vehicles;
- Any other works or activities that are associated with the activities described above.

Stormwater runoff will be absorbed into the river gravels on the site and not collected and discharged.

The proposal will involve the discharge of sediment to surface and groundwater within the excavated areas which will become lakes following completion of extraction activities. The source of sediment is the disturbance of material within the excavation during extraction. Sediments within the aggregate resource will become entrained in the surface water body and also potentially enter groundwater. Full consent requirements and a preliminary assessment of effects is contained in Section 5 below.

The processing of extracted aggregate will take place within the existing processing area with no proposed increase in processing volume.

4. PLANNING FRAMEWORK

The following planning documents were identified for consideration:

- National Policy Statement for Freshwater Management 2020,
- National Policy Statement for Highly Productive Land,
- Draft National Policy Statement for Indigenous Biodiversity,
- National Environmental Standard for Freshwater,
- National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health,
- National Environmental Standard for Sources of Human Drinking Water,
- Regional Policy Statement,
- Regional Resource Management Plan, and
- Hastings District Plan.

Each is covered below. The proposed Water Conservation (Ngaruroro River) Order 2021 is also covered below.

4.1 National Policy Statement for Freshwater Management 2020

The Freshwater National Policy Statement 2020 (NPSFM2020) came into force on 3 September 2020 and was amended on 8 December 2022 (with the amendments coming into effect from 5 January 2023). It relates to all freshwater management including quantity and quality matters, but also contains a suite of further provisions relating to other matters such as tangata whenua involvement, integrated management, setting objectives/outcomes/actions and monitoring.

The NPSFM2020 requires Te Mana o te Wai (TMOTW) to be given effect to through various means. It represents a change in freshwater policy direction as it prioritises the wellbeing of water bodies, then the essential needs of people, followed by other uses including social, economic, and cultural well-being provisions.

Section 1.3(5) of the NPSFM2020: Fundamental Concept Te Mana o te Wai provides the hierarchy of obligations that must be met. Below the 'first priority' or health and well-being of water bodies and freshwater ecosystems sits the second priority; the health needs of people. This is followed by the third priority which is the ability of people to provide for their social, economic and cultural well being.

The provisions of the NPSFM2020 are generally high level and designed to inform Plan development processes, with a limited number of provisions applicable to the consideration of resource consent applications of this nature and scale. Examples of provisions that relate to resource consents are the avoidance of river loss and the protection of indigenous freshwater habitats and species, these are:

- Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.
- Policy 7: The loss of river extent and values is avoided to the extent practicable.
- Policy 8: The significant values of outstanding water bodies are protected.
- Policy 9: The habitats of indigenous freshwater species are protected.
- Policy 10: The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.

The proposal, while falling within the third category under TMOTW, is primarily a land-based activity and is not anticipated to create effects that the NPSFM2020 seeks to avoid. As detailed in the Boffa Miskell Assessment of Ecological Effects, no watercourses, including wetlands, are within the extraction areas or areas where ancillary activities will be undertaken, and this minimises effects on freshwater habitat. The groundwater resource will be directly impacted during extraction but effects are not anticipated to be inconsistent with policy direction. Overall, the proposal is expected to be consistent with the Objectives and Policies of the NPSFM2020.

4.2 National Policy Statement for Highly Productive Land

The National Policy Statement for Highly Productive Land 2022 (NPS-HPL) came into effect on 17 October 2022. It is a prescriptive policy statement and due to its recent introduction, and limited guidance from MfE, interpretation and application is still being determined by Councils.

Overall, the NPS-HPL seeks to enhance protection for highly productive land. This is to be achieved by requiring Councils to identify, map and manage subdivision, use and development of highly productive land.

Highly Productive Land is defined in the NPS-HPL as Land Use Capability Classes (LUC) 1-3 as mapped by the New Zealand Land Resource Inventory or by any more detailed mapping that uses the Land Use Capability classification.

A review of HBRC mapping has shown approximately 4,100m^2 of land classed LUC 3 is present on the southern extent of the property (refer Figure 4 below). This area is likely to be avoided due to the proposed buffer zone between the extraction site and the irrigation canal. Because the NPS requirements relate only to highly productive land, which the project will avoid, it is considered that the proposal is consistent with the policy direction set by the NPS-HPL.

Figure 4: High Productive Land Map

4.2 Draft National Policy Statement for Indigenous Biodiversity

An exposure draft National Policy Statement for Indigenous Biodiversity (NPSIB) was released in June 2022. As a draft policy statement, it does not yet have legal effect. The objective of the NPSIB is to protect, maintain and restore indigenous biodiversity in a way that:

- recognises tangata whenua as kaitiaki, and people and communities as stewards, of indigenous biodiversity; and
- provides for the social, economic and cultural wellbeing of people and communities, now and into the future.

In summary, the draft NPSIB proposes provisions that will require:

- The identification of and improved management of Significant Natural Areas (SNA),
- A management approach for managing effects of new use, subdivision and development on SNAs,
- Establishment of consent pathways for new uses which impact SNAs.
- Councils to work together with tangata whenua to identify and protect taonga species to the extent that tangata whenua would like this to occur.

As confirmed in the Assessment of Ecological Effects in Attachment L there are no SNAs on the proposed site or areas of significant indigenous vegetation. On this basis the proposal is anticipated to be consistent with the draft NPSIB.

4.3 National Environmental Standards for Freshwater

The National Environmental Standards for Freshwater (NES-F) came into force on 3 September 2020. Amendments to the NES-F (Resource Management (National Environmental Standards for Freshwater) Amendment Regulations (No 2) 2022 are proposed under the Notice Under the Legislation Act 2019. Those relevant to the proposal are:

- Section 45A which provides for certain earthworks, land disturbance, vegetation clearance, diversion of water or discharge of water can be Discretionary Activities if they are for quarrying activities; and
- Section 45D which provides for certain earthworks, land disturbance, vegetation clearance, diversion of water or discharge of water for the purpose of minerals and ancillary activities.

However, an assessment of the proposal has been undertaken against the provisions of the NES-F and it is not considered that the Regulations apply. This is because:

- There is no farming component to the proposal,
- There are no river or stream works required that relate to fish passage requirements, and
- There are no natural wetlands on the site or within buffer areas impacted by the proposal (as confirmed in Section 3.2 of the Boffa Miskell Assessment of Ecological Effects contained in Attachment L).

4.4 National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health

The "National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health" (NESCS) applies to the following activities where they are undertaken on land on which an activity or industry included on the "Hazardous Activities or Industries List" (HAIL) has been, is or is more likely than not to have been undertaken:

- The removal of underground fuel storage system and associated soil.
- Soil sampling.
- Soil disturbance.
- Subdivision of land.
- Change in land use.

In this instance, the application represents a 'change in use' as the area proposed for the quarrying has been in pasture and will now provide for a more industrial type of use.

Therefore, it is necessary to determine whether the site is a 'piece of land' to which the NESCS applies.

In this instance, Method (2) as detailed in Regulation 6 has been used. Specifically, after review of the property by LDE in their report *Historic Aerials Check* contained in Attachment I, there is no evidence of any HAIL activity having been, or likely to have been, undertaken on the site. There is no record of any dangerous goods being held on the site, nor is there any evidence of orchard or market gardening activity occurring within the area proposed to accommodate the new activity.

On this basis, the site is not considered to be a 'piece of land' to which the NESCS applies and is not an applicable consideration to the current application.

4.5 National Environmental Standard for Sources of Human Drinking Water

The National Environmental Standards (NES)for Sources of Human Drinking Water is relevant when considering discharge permits. As noted above, the proposal will involve the discharge of sediment to water within the excavated areas which will become lakes following completion of extraction activities. The source of sediment is the disturbance of material within the excavation during extraction. Sediments within the aggregate resource will become entrained in the surface water body and also potentially enter groundwater.

In regard to sources of human drinking water the nearest registered supply is the Maraekakaho School, located approximately 1,600m west of the proposed discharge. The Stoney Ranch bore is located approximately 5,632m northwest of the proposed discharge.

Neither of these supplies are considered to be down gradient of the proposed discharge, nor are there any other registered supplies downgradient of the proposed discharge.

On that basis, the proposed activity is unlikely to increase the concentration of any of the determinants at any registered drinking water abstraction points, nor is it likely to introduce, or increase, the concentration of any aesthetic determinants in the drinking water to levels exceeding the drinking water guideline values.

On this basis, it is not considered that any provisions of the NES (including Regulations 11 and 12) apply.

4.6 Regional Policy Statement

The RPS is contained in Chapter 3 of the RRMP. Below is commentary on the sections of this document that are relevant to the proposal together with how project is considered to align with these.

- 3.1A Integrated Land Use and Freshwater Management

  Objectives OBJ LW 1, 2 and 3 set out a number of mechanisms to achieve the integrated management of the effects of land use and freshwater development and are directed at regional policy and plan development – to provide clear priorities for the protection and use of freshwater resources.

  Policies LW 1, 1A, 2, are directive problem solving approaches that build a platform for catchment based integrated management - one of which is the Greater Heretaunga Catchment.

  Policy POL LW2(1A) directs that resource consents are to be assessed against POL LW2.1 (priority of land uses set in Table 1 for the three main catchments) where there is no catchment-based regional plan. In this case Plan Change 9 provides this and the activity is assessed against this its provisions in Section 4.7 below.

- 3.3 Loss and Degradation of Soil

  This chapter of the RPS is not considered relevant because the site is not situated on hill country that is susceptible to erosion, nor are the proposed activities involving the removal of vegetation that may worsen erosion on the site.

- 3.5 Effect of Conflicting Land Use Activities

  Objectives in this section of the RPS set aims for existing activities and new future activities that have the potential to generate off-site impacts or nuisance effects due to the type of activity and the location in which it operates.

  Only Objective 16 is relevant to the proposed activity as it relates to new 'future' activities and states:

  > "For future activities, the avoidance or mitigation of offsite impacts or nuisance effects arising from the location of conflicting land use activities".

  The proposal is expected to meet the requirements of these objectives and policies as:

  - There are no immediate neighbours, and
  - The applicant proposes to mitigate offsite or nuisance effects to avoid conflicts with existing land use.

- 3.8 Groundwater Quality

  Objectives 21 and 22 seek to protect the existing groundwater quality of the Heretaunga Plains and Ruataniwha Plains aquifer systems. Objective 21 seeks no degradation of water quality in these aquifers and Objective 22 refers to the outcomes sought for the Heretaunga Plains aquifer system including irrigation and consumption without treatment.

Policies 15 and 16 refer to both non-regulation and regulation methods for avoiding adverse effects on groundwater quality from discharges. Policy 17 relates to understanding the effects on groundwater quality and ensuring effects are managed appropriately.

The Hydrogeological Memorandum prepared by Aqualinc included in Attachment J describes the groundwater resource and potential environmental effects, including effects on the Heretaunga Plains aquifer. Specifically, Aqualinc note that it is unlikely that nearby wells will be affected by turbidity resulting from the quarrying activity, and that any risk to groundwater from spillage of fuel on-site associated with quarrying machinery can be mitigated with appropriate on-site management procedures. Ensuring fuel storage is elevated above assessed flood risk levels will also assist in managing the risk of spills during a flood event (see Riley Flood Risk Assessment at Attachment K and Riley's Indicative Quarry Site Plan at Attachment D). Aqualinc also identify that there is a risk of puncturing a confined aquifer. The location of a confined aquifer will be ascertained through further testing in support of any application for resource consent, which will inform final site design and specifications of the extraction areas to ensure that the risk of puncturing any confined aquifer will be avoided. A preliminary assessment of effects on water quality is contained in Section 6.3 of this report.

- 3.10 Surface Water Resources

  Objective 26 recognises the surface water resources in Hawke's Bay and significant adverse effects of water takes, uses, damming or diversion in surface water bodies are to be avoided.

  Objectives 27 and 27A are about water quality, linking back to priorities set in Policy LW2, and riparian vegetation.

  The proposal is not expected to have direct impacts on surface waterbodies. The Ngaruroro River is situated approximately 130m from the nearest extent of the excavation area.

  The Hydrogeological Memorandum prepared by Aqualinc included in Attachment J assesses that adverse effects on the Ngaruroro River as a result of turbidity resulting from the quarrying activity are unlikely, and that minimising effects of turbidity can be achieved by ensuring there is no direct outflow to the river. Aqualinc also identify that adverse effects on the Ngaruroro River as a result of the end of life remediation plan are also unlikely.

  Policy 47 requires the management of activities in relation to water quality in relation to wetlands, lakes and rivers, in accordance with guidelines in Chapter 5 of the Regional Resource Management Plan (Regional Plan Objectives and Policies). For the Ngaruroro River a suspended solids guideline is stipulated after reasonable mixing. As discussed above the proposal is not anticipated to result in a discharge

to the river therefore guidelines will be met. This is supported by the preliminary assessment of environmental effects in Section 6.3 of this report.

- 3.14 Recognition of Matters of Significance to Iwi/Hapū

  Objective 34 recognises tikanga Māori values and contribution to sustainable development. POL 57 relates to policy development, whereas POL 58 refers to sharing information on matters of resource management significance to Māori. This objective and policies are related to in-house council considerations.

  Objective 35 states; *to consult with Māori in a manner that creates effective resource management outcomes.*

  Policy 59, Policy 62 and Policy 63 set out principles that underpin appropriate consultation and are relevant to the application. POL 60 encourages hapū to development resource management plans. Policy 61 directs that resource management decisions made subsequent to consultation shall show regard for that consultation.

  Objective 36 protects and aids the preservation of waahi tapu and Tauranga waka.

  Objective 37 protects and where necessary aids the preservation of:

  - mahinga kai (food cultivation areas),
  - mahinga mataitai (sea-food gathering places),
  - taonga raranga (plants used for weaving and resources used for traditional crafts) and
  - taonga rongoa (medicinal plants, herbs and resource).

  Policies 64 – 66 direct that activities should not have any significant adverse effects on the matters referred to in the objectives.

  The site does not have any recorded sites described in the objectives. The direction provided on consultation and the principles that underpin appropriate engagement are discussed in the consultation section of the application.

4.7 Regional Resource Management Plan

An assessment of the activity against the relevant objectives and policies of the above chapters of the RRMP is Included in Appendix 1 to this report. The assessment relies on preliminary assessments provided to inform the Referral Application. Policies that are not relevant or are directive of Council as opposed to decision making on a resource application have been excluded.

The policy assessment in Appendix 1 finds:

- The proposal is expected to be consistent with Section 5.1A, Policy 66C which relates to provisions inserted by national direction. This is because discharges to surface water and groundwater are not anticipated to affect the life supporting capacity of the adjacent Ngaruroro River or groundwater.
- Policy 67 requires best practice in relation to land use and water quality. The proposal is anticipated to be consistent with this due to the implementation of an end of life plan.
- The activity is primarily land based and is not anticipated to discharge contaminants to the Ngaruroro Rover. Therefore, it is anticipated to be consistent with surface water quality objectives and policies in Section 5.4 of the RRMP.
- The proposal is not anticipated reduce groundwater quality for human consumption and irrigation and therefore considered consistent with Policy 75 ion Section 5.6 of the RRMP.
- With regards to PC9:
  - The proposal is anticipated to be consistent with PC9 objectives. In particular the Hydrogeological Memo prepared by Aqualinc in Attachment J describes anticipates issues in relation to water quality and concludes that adverse effects on water quality such as from turbidity or microbial contamination are unlikely as a result of the quarrying activity.
  - The proposal is anticipated to be consistent with Policies TANK 1, 2 and 5 as the land based location extraction areas are is set back from the Ngaruroro River and appropriate proposed mitigation will be implemented to allow effects on water quality to be isolated from the receiving environment.

Overall, the proposal is anticipated to be consistent with the objectives and policies of the RRMP and PC9 as assessed using preliminary assessments detailed in Section 2 above.

4.8 Hastings District Plan

As show in Figure 2 above the site is included in the following overlays under the Hastings District Plan:

- River Hazard Overlay
- Recommended Are for Protection 19
- Rural Landscape Character Area 4

The following chapters of the District Plan are relevant:

- Chapter 15 Natural Hazards
- Chapter 17 Natural Features and Landscapes
- Chapter 20 Indigenous Vegetation and Habitats of Indigenous Flora

Additionally District Wide Activities Chapter 27.1 (Earthworks, Mineral Aggregate and Hydrocarbon Extraction) and Chapter 25.1 (Noise) also apply.

The proposal falls within the definition of 'Mining' in the District Plan. In the past there has been some confusion as to whether a mining activity is to be assessed only under Chapter 27 (District Wide Rule pertaining to Earthworks Mineral Aggregation and Hydrocarbon Extraction Mining) or whether consideration is also required in the rules pertaining to the specific Strategic Management Area/Zone. We understand a precedent has been set by Hastings District Council who have determined that mining activities are to be considered solely under Chapter 27 and any other applicable District Wide Activity Rules but not the rules pertaining to the specific Strategic Management Area/Zone.

An assessment of the activity against the relevant objectives and policies of the above chapters of the District Plan is included in Appendix 1 to this report. The assessment relies on preliminary assessments provided to inform the referral application. Policies that are not relevant or are directive of Council as opposed to decision making on a resource application have been excluded.

The policy assessment in Appendix 1 finds:

Chapter 15.1: Natural Hazards:

- The proposed structures in the River Hazard Overlay do not attract or accommodate large numbers of people therefore placing them at risk of flooding, so the activity is therefore consistent with Policy NHP5,
- A preliminary Flood Assessment has been undertaken in respect of the potential of the activity to increase effects arising from flooding (in terms of its physical effects on the land).
- The Flood Assessment identifies proposed methods to reduce flood risk which is anticipated to allow consistency with the objectives and policies in Chapter 15.1.

Chapter 17.1: Natural Features and Landscape:

- Management Issues for Rural Character Landscape 4 (Appendix 45 of the District Plan) have been identified and considered in the Landscape and Visual Assessment (contained in Attachment G).
- Remediation undertaken as part of an 'end of life' plan will assist in mitigating long term effects, which is consistent with Policy LSP12.

Chapter 20.1: Indigenous Vegetation and Habitats of Indigenous Flora

- As identified in the Ecological Assessment of Effects (contained in Attachment L) there is no significant indigenous vegetation or wetlands on the site or along the boundary with the Ngaruroro River.
- The proposal is anticipated to align with the objectives and policies in Chapter 20.1 via the implementation of an end of use plan at the cessation of extraction. This plan will provide for the introduction of indigenous species that will likely complement the constructed lakes and location near the Ngaruroro River.

Chapter 27.1: Earthworks, Mineral, Aggregate and Hydrocarbon Extraction

- Policies EMP1, EMP5 and EMP8 are the most applicable provisions.
- The end of use life proposal for the site (creation of two surface water bodies and associated landscaping and planting) is considered to be consistent with the policy framework, in particular Policies EMP1, EMP5 and EMP8. However, it is the effects during the activity prior to re-establishment that require consideration. Expert input on mitigation of visual effects, noise and traffic during excavation has been sought and will be provided as part of the resource consent application development process.

Chapter 25.1: Noise

- The proposed gravel extraction activity will generate noise emissions relating to the use of an excavator and trucks on-site. The submitted Assessment of Environmental Noise contained in Attachment F expects the predicted noise levels to comply with the acceptable standards for the Rural Zone.
- The proposed activity is not a noise sensitive activity, therefore the requirements of Policies NSP7 – NSP11 are not relevant to the application.

Overall, the proposal is anticipated to be consistent with the objectives and policies of the RRMP and PC9 as assessed using preliminary assessments detailed in Section 2 above.

4.9 Water Conversation (Ngaruroro River) Order 2021

The Water Conservation (Ngaruroro River) Order 2021(WCO) is currently in draft form and has not yet been Gazetted. The WCO relates to activities which involve the use, damming, diversion and discharge to water within Upper and Lower Ngaruroro River and its tributaries as identified within the order. The WCO will direct the Regional Council to include rules in its regional plan to achieve certain outcomes.

It is noted that the Site falls within the definition of the Lower Ngaruroro River waters under the WCO. However, the primary focus of the WCO is on waters falling with the Upper Ngaruroro River waters.

The WCO is not anticipated to affect the application as the proposed activity does not directly impact the Ngaruroro River or its tributaries e.g. via stream works.

The WCO will be assessed in the full assessment of environmental effects supporting a resource consent, by which time it is anticipated that the WCO will have been Gazetted and taken effect.

5. CONSENTS REQUIRED

An assessment of the proposed activity has been undertaken against the:

- NES-F,
- NESCS,
- Hastings District Plan, and
- Regional Resource Management Plan (including PC9).

As outlined above the proposal does not trigger any resource consent requirements under the NES-F or NESCS.
Resource consents are required under both the Hastings District Plan and Regional Plan, with the most restrictive activity status from all plans is Non Complying (being Rule NH12 of the Hastings District Plan relating to the provision of permanent buildings and structures). The reasons for consent are outlined below, noting that that this may be refined once the detailed assessments and reporting are completed for the substantive consent application.

The activity is not prohibited and therefore meets the section 18(3)(a) requirements of the Covid-19 Recovery (Fast-track Consenting) Act 2020.

5.1 Hastings District Plan

With reference to the proposed activity, the following resource consents are required under the Hastings District Plan:

Chapter 15.1 Natural Hazards

- The proposal is located within the River Hazard Overlay Area. Permanent Buildings, structures and habitable buildings are classified as Non-Complying Activities pursuant to Rule NH12. As the proposal includes 'permanent' structures within the River Hazard, the proposal is therefore a Non-Complying Activity under this rule. The proposed 'permanent' structures include the portacoms and toilet block, which are shown to be located together in the north-western corner of the western extraction area on the indicative Quarry Site Plan (Attachment D).

Chapter 27.1 Earthworks Mineral Aggregation and Hydrocarbon Extraction

- The proposed gravel extraction is defined as a 'mining' activity, and as such, requires resource consent for a Discretionary Activity pursuant to Rule EM9.

5.2 Regional Resource Management Plan

The proposed activity involves the following activities regulated under the RRMP and PC9:

- Soil Disturbance;
- Stormwater Discharges;

- Discharges of sediment to surface and ground water; and
- Diversion of groundwater.

The need for resource consent in respect to each is considered below. Resource consent is only required in respect of discharges of sediment to surface water and the diversion of groundwater.

Vegetation Clearance and Soil Disturbance

Permitted Activity Rule 7 does not apply to the proposal as the definition of Vegetation Clearance and Soil Disturbance excludes these activities where they are undertaken as part of a legally established quarrying or mining operation.

Stormwater Discharge

The proposed discharge is subject to stormwater rules in both the RRMP and PC9 as an industrial or trade premise. These are defined in the RRMP (which also applies to PC9) as:

> **Industrial or trade premise***
> Means:
> (a) any premises used for any industrial or trade purposes, or
> (b) any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purposes, or used for composting organic materials, or
> (c) any other premises from which a contaminant is discharged in connection with any industrial or trade process
> but does not include any production land.

In terms of (c), an 'industrial or trade process' is defined in the RRMP as meaning:

> **Industrial or trade process**
> Includes every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material, and any intervening storage of the raw material, partly processed matter, or product.

The proposal falls within this definition as it involves the storage (stockpiling) of raw materials.

Stormwater is defined under RRMP as runoff of water that is not absorbed by land and includes testing water used by network utility operators. The subject site will not contain any impermeable surface associated with the quarrying activity to collect stormwater. Any runoff will be absorbed by the gravel ground surface, and therefore will be absorbed by land.

The only impermeable surfaces on site are portacoms and toilet facilities. However, in isolation they are not considered to trigger consent because any stormwater runoff will be absorbed and will not be from surfaces associated with the industrial activity. This is consistent with HBRC decision making for the existing processing area which contains these structures.

Therefore, the rules regulating a stormwater discharge under the RRMP (including PC9) are not applicable to this application, and there are no triggers for consent for the proposed activity.

Discharges to surface and ground water

As the excavation expands in size it will fill with groundwater and become a surface water body (lake) and therefore subject to rules in the RRMP.

Permitted Activity Rule 47 of the RRMP (discharges to water) is considered to apply on this basis. Permitted Activity Rule 47 provides for the discharge of contaminants to surface water as a permitted activity subject to compliance with conditions. The contaminant anticipated to be discharged is sediment associated with disturbance from the excavation of material.

Sediment that does not settle within the surface water body may travel horizontally into the adjacent unconfined aquifer. This is also considered a discharge to groundwater and covered by Rule 47.

This assessment is based on the RRMP definition of water which includes both surface and groundwater and is included below:

(a) Means water in all its physical forms whether flowing or not and whether over or under the ground.
(b) Includes fresh water, coastal water, and geothermal water.
(c) Does not include water in any form while in any pipe, tank, or cistern.

An assessment against the conditions is shown in Table 1 below:

Table 1: Compliance Assessment - Rule 47

Conditions	Compliance of the Proposed Activity
a. The rate of discharge shall be no greater than 50 m^3/s	Complies
b. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the discharge activity.	Complies
c. There shall be no scouring or erosion of any land or any water course beyond the point of discharge.	Complies
d. The discharge shall not cause the natural temperature[121] of any receiving water to be changed by more than 3oC from normal seasonal water temperature fluctuations, after reasonable mixing or cause an exceedance of the temperature limit in Table 5.9.1A (Tukituki River catchment).	Complies
e. The discharge shall not cause the pH to change by more than 0.2 units, or to extend outside the range 6.5 to 9.0 units, after reasonable mixing	Complies
f. There shall be no production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials, or any emission of objectionable odour, in any receiving water after reasonable mixing[122]	Non-compliance - 15m mixing zone in lakes may not be met

g. There shall be no conspicuous change in the colour or visual clarity of any receiving water after reasonable mixing or cause an exceedance of the water clarity limits in Policy TT3(1) (Tukituki River catchment).	Complies
h. The discharge shall not cause the biochemical oxygen demand to increase by more than 2 g/m3 in any receiving water body after reasonable mixing or cause an exceedance of the biochemical oxygen demand limit in Policy TT3(1) (Tukituki River catchment).	Complies
i. The discharge shall not cause any increase in the concentration of pathogenic organisms or cause an exceedance of the E.coli limits in Table 5.9.1A (Tukituki River catchment).	Complies
j. The discharge shall not cause the concentration of dissolved oxygen in any river or lake to drop below 80% after reasonable mixing or cause an exceedance of the dissolved oxygen limit in Table 5.9.1A (Tukituki River catchment).	Complies

Footnote 122 relates to after reasonable mixing which is defined as:

a. In relation to flowing surface water bodies, for the purposes of rules in this Plan, means the mixing of contaminants in surface water at whichever of the following is the least:
    (i) a distance 200 metres downstream of the point of discharge, or
    (ii) a distance equal to seven times the bed width of the surface water body, but which shall not be less than 50 metres, or
    (iii) the distance downstream at which mixing of contaminants has occurred across the full width of the surface water body, but which shall not be less than 50 metres.
b. In relation to lakes, for the purposes of rules in this Plan, means the mixing of contaminants in lake water at a distance 15 metres from the point of discharge.
c. In relation to groundwater bodies, for the purposes of rules in this Plan, means the mixing of contaminants in groundwater at whichever of the following is the least:
    (i) a distance 100 metres from the point of discharge, or
    (ii) the boundary of the subject property.

Alternatively, for activities that are subject to resource consents, "reasonable mixing" may be determined on a case by case basis through the resource consent process.

As the activity may not comply with Condition (f), it is anticipated resource consent may required as a Discretionary Activity under Rule 52 of the RRMP.

Diversion of Water

Part of the suite of mitigation measures in respect to visual effects is an end of use design that may require the use of bunding or other landforms developed using overburden. This has the potential to divert the surface water flow of the Ngaruroro River during flood events. Permitted Activity Rule 56 provides for minor diversions as a permitted activity subject to

conditions. However as shown in Table 3 below, the potential diversion of surface water associated with bunds or other landforms is unlikely to meet the conditions of this rule.

The Geotechnical Assessment prepared by LDE (Attachment H) considers the use sheet piling may be feasible to support the wall of the extraction area allowing a greater excavation depth. This sheet piling has the potential to divert groundwater where it forms a barrier within the unconfined aquifer, depending on the direction of flow. An assessment of the conditions of Permitted Activity Rule 56 suggests an additional diversion of water consent for this activity may be required as it is not clear if the diversion would meet Condition a)(i)-(iii), but that this will be confirmed once excavation methodology has been confirmed.

Table 3: Compliance Assessment Rule 56

Conditions	Compliance of the Proposed Activity
a. Either:	
i. The catchment area above the diversion shall not exceed 50 hectares, or	Non-compliance - The catchment size exceeded.
ii. The diversion shall remain within the bed of the affected water body, or	Complies
iii. The diversion shall divert no more than 10% of the flow of the affected water body, and the diverted water shall be returned to the affected water body no more than 100 m downstream of the point at which the water is diverted	Complies
b. The activity shall not adversely affect any wetland.	Complies
c. The diversion shall not be from one catchment to another.	Complies
d. The diversion shall not cause any scouring or erosion of any land or any water course beyond the point of discharge.	Complies
e. The diversion shall not adversely affect any lawfully established take, which existed at the time that the diversion commenced.	Complies
f. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the diversion.	Complies
g. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the diversion activity.	Complies

As the activity cannot meet Condition (a)(i,) resource consent to divert surface water is required as a Discretionary Activity under Rule 59 of the RRMP.

Plan Change 9 to the RRMP

There are no consent requirements under PC9. There are specific rules relating to stormwater but as detailed above these are not considered to apply as rainfall runoff is anticipated to be absorbed into river gravels.

5.3 Summary

An assessment of the applicable planning documents has been undertaken to identify resource consent requirements. The following triggers for resource consent have been identified:

Hastings District Plan:

- Structures within the River Hazard Overlay Rule NH12 as a Non-Complying Activity (Section 15.1), and
- Mining under Rule EM9 as a Discretionary Activity (Section 27.1).

RRMP:

- Discharges to water Rule 52 as a Discretionary Activity,
- Diversion of surface water Rule 59 as a Discretionary Activity, and
- Diversion of groundwater Rule 59 as a Discretionary Activity.

Overall, the activity status of this application is Non-Complying. This application does not include any activity that is classified as a Prohibited Activity under any applicable planning instrument.

6. PRELIMINARY ASSESSMENT OF ENVIRONMENTAL EFFECTS

The following provides a preliminary assessment of the environmental effects associated with the various activities requiring resource consent, including identification of key positive effects.

6.1 Positive Effects

Positive effects of the proposal include:

- The proposal seeks to provide for the extraction of a valuable resource (gravel) which is currently in short supply within the Hawke's Bay region due to a number of restrictions on extraction from within the riverbeds, and the closure of coastal gravel extraction facilities; in combination with a busy construction sector.
- The economic benefits of this are detailed in the Economic Impact Assessment by Property Economics contained in Attachment M. Property Economics' key conclusions are that:

- The provision of aggregate from a local source to the local market is significant positive effect including on construction costs,
- Transportation efficiencies will have positive effects in the form of lower transport and environmental costs, and
- It is anticipated that the proposal will have demonstrable economic benefits and 'far reaching' economic impacts on the regional construction sector.

- The site will be rehabilitated upon completion of the proposed works to provide two surface water bodies and riparian planting. This is anticipated to provide the specific positive effects of:
  - A potentially positive natural character outcome,
  - Longer term wildlife habitat and biodiversity outcomes
- As detailed above in relation to the Economic Impact Assessment, locally sourced aggregate will reduce vehicle movements on the road network from transportation from more distant quarries. There will likely be a reduction in emissions from transporting aggregate to the site for processing from an external source.

6.2 Hastings District Plan Assessment Criteria

A preliminary assessment of the effects of the proposal in the context of the relevant Hastings District Plan assessment criteria is included in Appendix 2 of this report.

A summary of findings from this assessment is set out below:

Chapter 15.1: Natural Hazards:

- The ancillary buildings are small and will be removed at the end of the life of the extraction activities.
- The structures will not provide accommodation or attract people to the area,
- Significant adverse effects are not anticipated due to the location of the structures in the hazard overlay.
- The proposed structures are not anticipated to exacerbate flood risk. A flood assessment will be undertaken to quantify flood risk to assist in appropriate mitigation design.
- Overall, the proposal is anticipated to meet the criteria of the District Plan once mitigation is implemented.

Chapter 27.1: Earthworks, Mineral, Aggregate and Hydrocarbon Extraction:

27.1.7A Land Disturbance and Vegetation Clearance

- The soil resource is not considered to be highly productive. As shown in the LDE report Maraekakaho Quarry Expansion – Historic Aerials Check contained in Attachment I the site was riverbed as late as 1978.
- As detailed in the Flood Assessment Report in Attachment K the site is location within the 1-100-year flood plain. The site will be designed to ensure flood flows are able to be managed to avoid significant effects.

- With regard to any proposed erosion and sediment control measures, the largest risk is the proximity of the Ngaruroro River to the proposed extraction area. However, the permeable nature of the soils and separation distance means it is highly unlikely sedimentation effects will occur.
- Rehabilitation of the site is to include creation of surface water bodes within the footprint of the excavation areas with planting elsewhere on the site as appropriate. This is discussed further in Wayfinder's Landscape Assessment Report contained in Attachment G.
- The existing access road to the site is proposed to be maintained in its current location. Internal haul roads will be required to transport aggregate from the site of extraction to the existing processing area. Additional vehicle crossings will be provided to the existing access road. These movements are unlikely to generate any increase in traffic on SH50 or associated traffic effects.

27.1.7B Visual Impact

- The site is located within the Rural Landscape Character Area – RLC4 overlay Ngaruroro Valley and is overlooked by lifestyle blocks situated to the south. The site is not located within an Outstanding or Significant Landscape Areas.
- A landscape responsive 'end of life' plan is to be established for the site. Given the relatively short life of the proposed activity, the focus of this plan is to be on end-of-use.
- The Landscape and Visual Assessment contained in Attachment G finds that effects during construction may be moderate to high but with the implementation of an end of life plan these effects could be reduced to low.

27.1.7C Effects on Other Land Uses and Adjoining Properties

- Site management and the design of the project is anticipated to mitigate any effects on other land uses and adjacent properties.

27.1.7D Noise

- The Assessment of Environmental Noise contained in Attachment F states that the District Plan permitted limits for noise in the Rural Zone and construction noise will be complied with by a considerable margin.

27.1.7E Effects on Specific District Wide Activities and Locations

- The proposal does not seek to alter the Ngaruroro River; therefore, recreation and conservation values will be maintained.

Section 27.1.7G Additional Specific Assessment Criteria for Mining and Exploration Activities only

- Vibration: no discernible vibration is expected to result from the proposed activities.

- Roading and Transportation: Overall traffic effects associated with the proposed extraction project are expected to be limited in scale and nature as confirmed in the Transportation Memo attached in Attachment E.
- Fire Hazard Mitigation: the activity is not expected to result in any additional fire hazard on the site. Diesel is stored on site but in an appropriate manner and will be relocated as part of the proposal.
- Heretaunga Plains Unconfined Aquifer: The site is proposed to be rehabilitated into two surface water bodies with other measures such as planting and landscaping proposed. The site is not considered to be productive due to the land use classification of the soil type.

Overall, the preliminary assessment against the relevant Criteria of the District Plan outlines how the proposal, with implementation of appropriate mitigation, are likely to be less than minor.

6.3 Regional Resource Management Plan

The actual or potential effects that could occur as a result of the proposed discharge that warrant consideration include:

- Effects on the groundwater resources;
- Effects on surface water quality; and
- Effects on ecology.

Effects on the Groundwater Resource

The Geotechnical Report identifies groundwater conditions on site including a groundwater minimum depth of 1.3m below ground level (bgl) within the central areas of the site.

As the proposal involves the gradual excavation of aggregate below the water table (as described in the Activity Description contained in Attachment B) it is anticipated that turbid groundwater will enter the unconfined aquifer adjacent to the extraction area. This is discussed in Section 6.2 of the Hydrogeological Memorandum. As noted above, the assessment concluded that:

- Previous research has shown that the smallest clay particles only travel 40m into the aquifer before they are filtered out,
- The closest well is 70m from the site and therefore unlikely to be contaminated by turbid groundwater, and
- The edge of the Ngaruroro River channel is approximately 130 from the site and therefore unlikely to be experience a plume or discharge from groundwater to surface water via subsurface flows.

Preliminary investigations using existing well logs are not conclusive in relation to the presence of confined or semi-confined aquifer layers within the extraction area. Should a confining layer be present there is a risk of puncturing it during extraction causing potential water loss from the aquifer below. Further investigations are proposed to confirm the nature of the aquifer within the extraction area e.g. to confirm the absence of semi confining/confining

layers. Should these layers be identified mitigation to prevent effects would be implemented in the form of a suitable buffer above these layers should they be present.

Effects on Surface Water Quality

The proposal is to extract aggregate and to gradually create two surface water bodies or lakes by doing so. As described above, the use of an excavator to extract gravel from the base of the lake below the water level is anticipated to disturb sediments contained in the gravels. It is likely that sediment will become entrained in the water column forming a plume within the lake while extraction occurs. The plume is anticipated to settle when extraction is not occurring.

In terms of effects, because the lake will be created artificially as part of the proposed extraction methodology, it is not initially anticipated to have ecological value that may be impacted by the discharge of sediment. Mitigation measures to reduce the size of the plume are likely to be challenging to effectively implement.

The Hydrogeological Report notes it is important that the excavation areas are not directly connected to the Ngaruroro River as this would provide a path for turbid water to enter surface water there. The proposal is to retain a 130m set back from the river and to minimise the risk of a discharge occurring.

Ecological Effects

As described in Section 2 of this report the extraction area is highly modified having been previously active river channel and then cropping land, primarily for maize and grazing.

Boffa Miskell have completed an Assessment of Ecological Effects. Key findings include:

- Given the low ecological value of the vegetation to be removed and that vegetation communities are very common in the wider area, the effects of vegetation removal will be negligible,
- Overall terrestrial ecological values are low to moderate,
- There is some potential for geckos to be present and a lizard survey is recommended,
- Avifauna values are considered to be low to moderate and there will be a negligible effect from the proposal. However, checks for nesting should be done before works commence and vegetation clearance should be undertaken outside bird breeding season, and
- There is a very low likelihood of bats being present and effects will be negligible with no mitigation recommended.

With regards to freshwater ecology the assessment concludes:

- Freshwater ecology value within the proposed site is considered to be low,
- No wetlands or minor river channels are considered to be present in the site,
- As outlined above in respect to groundwater effects there is unlikely to be an effect on the aquifer or Ngaruroro River, and

- A setback of at least 10 metres from the water race should be in place.

Overall, it is considered the potential ecological impacts from the proposal are limited and mitigation can be implemented to reduce effects.

6.4 Section 140D Assessment

The activity status of the project has been assessed as non-complying (addressed in section 5.3 above). In accordance with section 104D of the RMA, a consent authority may only grant an application for a non-complying activity if the activity passes through one of the two limbs of section 104D (known as the gateway test) and either;

1. The adverse effects of the activity on the environment will be no more than minor; or
2. The activity will not be contrary to the objectives and policies of any plan or proposed plan in respect of that activity.

Only one of these s104D tests needs to be met to enable the application to be considered under section 104, and to be ultimately granted under section 104B.

An assessment of section 104D has been undertaken on a preliminary basis using the reports detailed in Section 2 of this report.

An assessment of the potential effects of the proposed activity are considered in Section 6.1-6.3 above, assessing the potential adverse effects. Overall, it is assessed that the scale of effects of the project are likely to be less than minor. It is acknowledged that the primary potential adverse effect created by the activity during the actual excavation works is anticipated to be visual and landscape effects, given the alteration to the landform and the location of residences being elevated above the site. The landscape and visual effects during the extraction activity have been assessed as being moderate-high. However, it is anticipated that once mitigation is in place at the conclusion of the excavation works and following the implementation of an end of life remediation plan, there is an opportunity to reduce these adverse effects from moderate-high to low.

An assessment of the project's consistency with the applicable planning framework and relevant planning documents is provided in Section 4 of this report. In assessing the project against relevant objectives and policies, it is considered that the proposal is not contrary to the relevant objectives and policies of the Hastings District Plan and the RRMP including PC9 at this stage.

Overall, it is considered that the project can satisfy both limbs of the section 104D test at the conclusion of the excavation activity and following implementation of an end of life plan. However, in light of the assessment that visual and landscape effects are likely to be moderate-high during the excavation activity, it is considered that the proposal can pass through the section 104D gateway test by satisfying section 104D(1)(b) of the RMA as it has been assessed as being consistent with relevant objectives and policies of the HDP and RRMP.

7. CONCLUSION

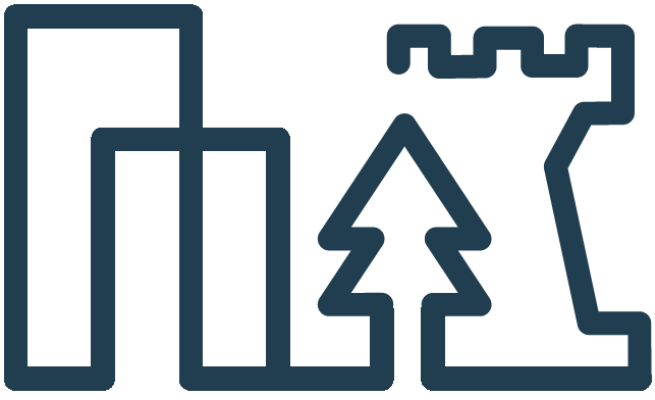
In summary:

- While careful consideration will be required in regard to some provisions, it is not expected that the proposal, overall, will be contrary to the relevant Objectives and Policies of the District Plan, RPS or RRMP, including PC9, or be at odds with what is contemplated for a rural environment.
- Expert input has been received in regard to a range of matters. Based on these assessments, the effects associated with the activity are expected to be manageable, with mitigation available where required.

A full planning assessment and assessment of environmental effects will be undertaken to support the application for resource consent to the expert consenting panel in the event the Project is successful in being referred.

Appendix 1

REGIONAL RESOURCE MANAGEMENT PLAN AND HASTINGS DISTRICT PLAN POLICY ASSESSMENT



APPENDIX 1: REGIONAL RESOURCE MANAGEMENT PLAN AND HASTINGS DISTRICT PLAN POLICY ASSESSMENT

1.1 Regional Resource Management Plan

The Regional Plan objectives and policies are contained in Chapter 5 of the RRMP. The objectives and policies relevant to the proposal are outlined below. Plan Change 9 (PC9) to the RRMP gives effect in part to the NPSFM2020 and the proposal's consistency to this is outlined below.

- 5.1A Consolidated regional plan provisions inserted by various national direction

  Policy 66C relates to new discharge permits and directs the consent authority to have regard to:

  - How the discharge will avoid adverse effects on life supporting capacity of freshwater ecosystems and health of people and community in contact with freshwater.
  - To avoid effects that are more than minor on freshwater ecosystems and health of people and community in contact with freshwater.

  The proposal is expected to be consistent with this policy as discharges to surface water and groundwater are not anticipated to affect the life supporting capacity of the adjacent Ngaruroro River or groundwater, as per the preliminary conclusions reached in the Hydrogeological Memorandum prepared by Aqualinc in Attachment J and detailed in the assessment of effects in Section 6.3 of the planning report.

- 5.2 Land

  Objective 38 seeks that landowners manage the land resource to avoid compromising future use and water quality.

  Policy 67 applies in respect to point 6 in Table 5 in that best practice should be adopted in line with the guidelines in Section 5.4 of the RRMP. Tow.

  The proposal is to provide an end of life remediation plan on completion of quarrying activities on site. This will provide opportunities for future recreational use or commercial opportunities e.g. fish farming.

  Further, the ecological assessment prepared by Boffa Miskell comments that the end of life remediation plan, if it incorporates proposed elements such as terraced banks and riparian planting, will enhance the terrestrial and wetland features of the site through provision of habitat and proximity to the river corridor.

- 5.4 Surface Water Quality

  Objective 40 covers the water quality of specific rivers to sustain existing species and natural character and provides for availability of water for various purposes including groundwater recharge.

  Policy 71 seeks to manage the effects of activities affecting the quality of water in rivers, lakes and wetlands in accordance with the environmental guidelines set out in Tables 7 and 8 of the Plan. Standard region-wide guidelines apply for water temperature, dissolved oxygen, ammoniacal nitrogen, soluble reactive phosphorus and, of water clarity. Specific to the Ngaruroro River, which is adjacent to the proposal, are controls on faecal coliform counts and suspended solids.

  Policy 72 provides guidance as to how the guidelines in Policy 71 should be implemented.

  The proposal is expected to be consistent with this policy as it is a primarily land-based activity that will be able to manage discharges to ensure guidelines are met. A description of effects on water quality is contained in Section 6.3 of the planning report.

- 5.6 Groundwater Quality

  Objective 42 seeks that no degradation of groundwater quality occurs in the Heretaunga Plain Aquifer system. Objective 43 relates to the maintenance and enhancement of semi or unconfined aquifers.

  Policy 75 relates to the management of activities affecting groundwater quality within the area shown in Schedule IV of the RRMP which, for the subject site, is unconfined. The criteria that are relevant to water quality are human consumption and irrigation as detailed in Table 10 of the RRMP.

  As discussed above, the activity is expected to be consistent with Objective 42 and 43 and Policy 75 as the nature of discharge (to groundwater) is not anticipated to impact human consumption and irrigation. A description of effects on water quality is contained in Section 6.3 of the planning report.

- Plan Change 9

  Objectives and Policies within Plan Change 9 (PC9) associated with the Ngaruroro River catchment are directive of HBRC to achieve water quality outcomes. Once PC9 is operative its objectives and policies will replace those in the Operative RRMP. At present a weighting exercise is required between existing RRMP objectives and policies and those contained in PC9. A decision has been issued on PC9 and it has come into effect, giving greater effect to the NPSFM2020 than the existing RRMP. Therefore, the proposal needs to be consistent with PC9 provisions.

  The relevant provisions of PC9 are therefore provided below.

- Objective TANK 4: The quality of the TANK freshwater bodies is maintained where objectives are currently being met, or is improved in degraded waterbodies so that they meet target attribute states in Schedule 26 by 2040 provided that:

    a) for any specific water body where the attribute state is found to be higher than the target attribute state given in Schedule 26, the higher state is to be maintained
    b) progress is made over the life of this Plan towards the long term target attribute states by the mixture of regulatory and non-regulatory provisions in this Plan.

- Objective TANK 5: Riparian margins are protected or improved where necessary to provide for aquatic ecosystem health and mauri of water bodies in the TANK catchment and to:

    a) reduce effects of contaminant loss from land use activities
    b) improve aquatic habitat and protect indigenous species including fish spawning habitat
    c) reduce stream bank erosion
    d) enhance natural character and amenity e) improve indigenous biodiversity.

- Objective TANK 8: In combination with meeting the target attribute states specified in Schedule 26, the mauri, water quality and water quantity in the Ngaruroro River catchment are maintained in the mainstem above the Whanawhana Cableway and in the Taruarau River, and are improved in the tributaries and lower reaches where necessary to enable:

    a. healthy ecosystems
    b. healthy and diverse indigenous aquatic plant, animal and bird populations especially whitebait, torrent fish, macroinvertebrate communities, bird habitat on braided river reaches and a healthy trout fishery
    c. people to safely carry out a wide range of social, cultural and recreational activities especially swimming and cultural practices of Uu and boating, including jet-boating in the braided reaches of the Ngaruroro
    d. protection of the natural character, instream values and hydrological functioning of the Ngaruroro mainstem and Taruarau and Omahaki tributaries
    e. collection of mahinga kai to provide for social and cultural well-being
    f. people and communities to safely meet their domestic water needs
    g. primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being

    and provide for:

    h. contribution to water flows and water quality in the connected Heretaunga Plains Aquifers
    i. contribution to the healthy functioning of Waitangi Estuary ecosystem and to enable people to safely carry out a wide range of social, cultural

and recreational activities and the collection of mahinga kai in the estuary.

- Objective TANK 11: In combination with meeting the target attribute states specified in Schedule 26, the mauri, water quality, water quantity and groundwater levels are maintained in the Groundwater connected to the Ngaruroro, Tūtaekurī and Karamū rivers and their tributaries is managed to enable:

    a. people and communities to safely meet their domestic water needs and to enable the provision of safe and secure supplies of water for municipal use
    b. primary production, industrial and commercial water needs and water required for associated processing and other urban activities to provide for community social and economic well-being and provide for:
    c. the maintenance of groundwater levels at an equilibrium that accounts for annual variation in climate and prevents long term decline or seawater intrusion
    d. contribution to water flows and water quality in connected surface waterbodies.

The proposal is anticipated to be consistent with PC9 objectives. In particular the Hydrogeological Memo prepared by Aqualinc in Attachment J anticipates issues in relation to water quality and concludes that adverse effects on water quality such as from turbidity or microbial contamination are unlikely as a result of the quarrying activity. Future design of the proposal will consider these issues and therefore it is not anticipated to lead to a degradation of surface or groundwater quality within the receiving environment, particularly the unconfined aquifer and Ngaruroro River.

- Policy TANK 1: Freshwater management in the Tūtaekurī, Ahuriri, Ngaruroro and Karamū catchments will be achieved by the Council, tangata whenua and the urban and rural community working together in a way that:

    a) recognises tangata whenua as kaitiaki and other resource users as stewards and the responsibilities they each have in freshwater management
    b) recognises the importance of monitoring, resource investigations and the use of mātauranga Māori to inform decision making and limit setting for sustainable management
    c) ensures good land and water management practices are followed and where necessary, mitigation or restoration measures adopted
    d) supports good decision making by resource users.

- Policy TANK 2: The Council will regulate land use activities and will work with tangata whenua, landowners, local authorities, industry and community groups, and other stakeholders to manage land use activities so that existing water quality is maintained in its current state or improved to meet target attribute states shown in Schedule 26 by focusing on:

    a) water quality improvement in priority catchments (as described in Schedule 27) where water quality is not meeting specified freshwater quality targets

b) sediment management as a key contaminant pathway to also address phosphorus and bacteria losses
c) the significant environmental stressors of excessive sedimentation and macrophyte growth in lowland rivers and nutrient loads entering Te Whanganui ā Orotū (Ahuriri) and Waitangi estuaries
d) the management of riparian margins
e) the management of urban stormwater networks and the reduction of contaminants in urban stormwater
f) the protection of water quality for domestic use and registered drinking water supplies.

Policy TANK 5: In the lower Ngaruroro and Tūtaekurī Rivers and their tributaries, in addition to POL TANK 2 the Council will work with landowners to:

a) improve water clarity and reduce deposited sediment by reducing the amount of sediment being lost from land
b) reduce risk of proliferation of algae by reducing nutrient losses from land, including by reducing phosphorous loss associated with sediment
c) improve ecosystem health and water quality by excluding stock from surface water bodies and improving riparian management.

The proposal is anticipated to be consistent with Policies TANK 1, 2 and 5 as the l extraction areas are set back from the Ngaruroro River and proposed mitigation will be implemented to allow effects on water quality to be isolated from the receiving environment. This is consistent with Aqualinc's memorandum where they state that to manage adverse effects on the Ngaruroro River as a result of effects to groundwater such as turbidity and microbial contamination, there should be no direct outflow to the Ngaruroro River. On this basis it is considered effects on water quality will be avoided or appropriately managed, as discussed further in Section 6.3 of the planning report.

Policy TANK 17: The Council will achieve or maintain the 2040 target attribute states in Schedule 26 with landowners, industry groups, and other stakeholders and will implement the following measures:

a) establish programmes and processes through Freshwater Farm Plans, Catchment Collectives and Industry Programmes to ensure land managers:
    i. adopt good management practice
    ii. identify critical source areas of contaminants at both property and catchment scale
    iii. adopt effective measures to mitigate or reduce contaminant loss
b) include contaminant management provisions in Freshwater Farm Plans, Catchment Collective Plans or Industry Programmes according to the priority order for specific contaminants listed in Schedule 27 and portrayed in Schedule 27 Maps 1 – 4.

Policy 17 is anticipated to be met as the applicant will work for Industry Programmes to implement best practice (as required).

Overall the proposal is anticipated to be consistent with the objectives and policies of the RRMP and PC9 as assessed using preliminary assessments detailed in Section 2 of the planning report.

1.2 Hastings District Plan

As of 12 March 2020 the Proposed District Plan has been declared Operative in Part (with the exception of Section 16.1 Wāhi Taonga District Wide Activity), and as such, the provisions of the (former) Operative District Plan have not been considered.

The proposal falls within the definition of 'Mining' in the District Plan. That definition reads as follows:

> ***Mining:*** *means to take, win or extract, by whatever means, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance; and includes gravel extraction, quarrying, and the processing of minerals, but does not include prospecting or exploration, or any of the foregoing where the material is for use on the same site (for example for the establishment or maintenance of tracks on a farm); and to 'mine' has a corresponding meaning.*

In the past there has been some confusion as to whether a mining activity is to be assessed only under Chapter 27 (District Wide Rule pertaining to Earthworks Mineral Aggregation and Hydrocarbon Extraction Mining) or whether consideration is also required in the rules pertaining to the specific Strategic Management Area/Zone.

We understand a precedent has been set by Hastings District Council who have determined that mining activities are to be considered solely under Chapter 27 and any other applicable District Wide Activity Rules but not the rules pertaining to the specific Strategic Management Area/Zone.

The below provisions of the Hastings District Plan are considered to be relevant.

As show in Figure 2 above the site is included in the following overlays:

- River Hazard Overlay
- Recommended Are for Protection 19
- Rural Landscape Character Area 4

The following chapters of the District Plan are relevant:

- Chapter 15 Natural Hazards
- Chapter 17 Natural Features and Landscapes
- Chapter 20 Indigenous Vegetation and Habitats of Indigenous Flora

Additionally District Wide Activities Chapter 27.1 (Earthworks, Mineral Aggregate and Hydrocarbon Extraction) and Chapter 25.1 (Noise) also apply.

An assessment of the activity against the relevant objectives and policies of the above chapters of the District Plan is Included below. The assessment below relies on preliminary assessments provided to inform the Referral Application. Policies that are not relevant or are

directive of Council as opposed to decision making on a resource application have been excluded.

15.1 – Natural Hazards

OBJECTIVE NH02	To avoid increasing the risk to people, property, infrastructure and the environment from the effects of natural hazards.
POLICY NHP2	Manage land use activities in identified natural hazard areas where communities and resources are potentially at risk.
POLICY NHP3	Adopt and promote the best practicable options (including mitigation or the 'do nothing' option) in the management of areas of existing development actually or potentially at risk from natural hazards.
POLICY NHP4	Adopt and promote an avoidance approach to development located within areas of significant natural hazard risk, rather than mitigation or remedial measures.
POLICY NHP5	Restrict the establishment of activities which have the potential to increase the extent to which natural hazards have, or may have, an effect on human life or the natural and built environment.
POLICY NHP6	Ensure that subdivision, land use activities or other new development is located and designed so as to avoid the need for further natural hazard mitigation activities.
POLICY NH10	In considering Plan Change Requests and applications for Resource Consent on sites that may be subject to natural hazards, consideration will be given to the provisions of the Hawke's Bay Civil Defence Emergency Management Group Plan to ensure a comprehensive assessment of the risks to individuals and the community occurs.

In principle, the proposal is expected to be consistent with the Natural Hazard objectives and policies as it does not involve development in the hazard overlay that would attract or accommodate large numbers of people therefore placing them at risk of flooding. Staff will be on site extracting gravel using machinery during working hours only and will be able to respond to flood risk in a timely manner.

Regard to Policy NHP5, expert input has been sought in respect to the potential of the activity, in terms of its physical effects on the land, to increase the extent of effects arising from flooding. As detailed in the Flood Assessment Report in Attachment K the site is location within the 1-100-year flood plain. This assessment identifies design and mitigation features that will flood flows are able to be managed to avoid significant effects. These include:

- That a post development flood assessment be undertaken to quantify effects within adjacent properties,
- That existing vegetation on-site is maintained as much as possible to assist with erosion protection during flood events,
- The preferred option is potentially to accept the risk of flood waters entering the site and deal with these and that a site management plan is developed to take this risk into account, and

- That any bunding is parallel and not perpendicular to the river to minimise hydraulic capacity effects on the floodplain.

17.1 – Natural Features and Landscapes

OBJECTIVE LSO1

The factors, values and associations that define the District's Outstanding Natural Features and Landscapes are identified, and are protected from inappropriate subdivision, use, and development.

POLICY LSP1

To identify and recognise the Districts Outstanding Natural Features and Landscapes by the following criteria, factors, values and associations:

Natural Science Factors

(i) Representativeness

Natural features and landscapes are clearly and recognisably characteristic of the area, district or region. The key components of the landscape will be present in a way that more generally defines the character of the place, but which distils this character exceptionally and in essence. Natural features in a good state of preservation are representative and characteristic of the natural geological processes and diversity of the region.

(ii) Research and Education

Natural features and landscapes are valued for the contribution they make to research and education.

(iii) Rarity

Natural features are unique or rare in the district, region or nationally, and few comparable examples exist.

Aesthetic Value

(iv) Coherence

The patterns of land cover and land use are largely in harmony with the underlying natural pattern of the landform of the area and there are no significant discordant elements of land cover or land use.

(v) Vividness

Natural features and landscapes are widely recognised across the community and beyond the local area and remain clearly in the memory; striking landscapes are symbolic of an area due to their recognisable and memorable qualities.

(vi) Naturalness

Natural features and landscapes appear largely uncompromised by modification and appear to comprise natural systems that are functional and healthy.

(vii) Intactness

Natural systems are intact and aesthetically coherent and do not display significant visual signs of human influence, modification, intervention or manipulation.

Expressiveness (Legibility)
Natural features and landscapes clearly demonstrate the natural processes that formed them. Exceptional examples of natural process in landscape exemplify the particular processes that formed that landscape.

Transient Values
The consistent occurrence of transient features (for example the seasonal flowering of pohutukawa) contributes exceptionally to the character, qualities and values of the landscape. Landscapes are widely recognised for their transient features and the contribution these make to the landscape.

Shared and Recognised Values
Natural features and landscapes are widely known and exceptionally valued by the immediate and wider community for their contribution to a sense of place leading to a strong community association with or high public esteem for the place.

Mana Whenua Values
Natural features and landscapes are clearly special or widely known and exceptionally influenced by their connection to the Māori values inherent in the place.

Historical Associations
Natural features and landscapes are clearly and widely known and exceptionally influenced by their connection to the historical values inherent in the place.

POLICY LSP5	All subdivision land development activities will be encouraged to have regard to the landscape features and character of the site and locality.

Policy LSP1 is directive of Council to identify Outstanding Natural Features and Landscapes. The proposal is not located within either.

OBJECTIVE LSO3	The values that define the District's Rural and Coastal Landscape Character Areas are identified and maintained.
Policy LSP12	To identify, recognise, and maintain the District's Rural and Coastal Landscape Character Areas, where broad areas are highly valued for their cultural patterns of land use, including rural patterns, rather than their natural landscape values.

The proposal is within Rural Character Landscape 4 - values for which are identified in Appendix 45 of the District Plan. These include:

- Maintenance of the rolling landforms that envelope the Heretaunga Plains as a distinctively rural landscape.
- Land use change, in particular forestry or other vegetation cover, can disrupt the legibility of the landforms. Management of new forestry or plantings is needed to ensure the natural landscape patterns are maintained.
- Integration of built form with landform to retain open rural landscape values.
- Placement of built form on the lower slopes, avoiding the mid to upper slopes.
- Avoidance of earthworks, particularly large scale or along steep faces that create scars or exposed soil that detracts from the natural landform.
- The proposal is consistent with LSP5 and LSP12 as the impacts to be avoided in Appendix 45 will likely not occur in the long term. Effects identified during extraction are anticipated to be mitigated via site remediation at completion.

Remediation will seek to integrate the site into the existing landscape by recognising patterns of riparian vegetation and adjacent land use as discussed in the Landscape and Visual Assessment included in Attachment G. The details of an end of life remediation plan will be further developed and detailed in support of any application for resource consent.

20.1 – Indigenous Vegetation and Habitats of Indigenous Flora

OBJECTIVE INO1	To protect and encourage the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.
Policy INP1	Encourage the voluntary protection of areas of indigenous vegetation, habitats of indigenous fauna (including wetlands) by providing a range of incentives for their protection.
Policy INP2	Maintain and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (including wetlands) from being significantly adversely affected by indigenous vegetation modification activities.
OBJECTIVE INO2	To maintain and enhance the biodiversity of indigenous species and the natural habitats and ecosystems that support them.
Policy INP3	Include rules to maintain and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (including wetlands) not identified in Appendix 56 from being adversely affected by indigenous vegetation modification activities.
Policy INP4	Control the adverse effects of feral and introduced species of fauna on the indigenous vegetation and fauna within the District.
Policy INP5	To maintain or enhance the biodiversity of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

The Ecological Assessment of Effects provided in Attachment L does not identify any significant indigenous vegetation within the site or along the Ngaruroro River adjacent to the site. On this basis the proposal is anticipated to align with the above objectives and policies via the implementation of an end of life plan at the cessation of extraction. This plan will provide for the introduction of indigenous species that will likely complement the constructed lakes and location near the Ngaruroro River. The ecological assessment also identifies that the end of life remediation plan presents an opportunity to enhance ecological features.

OBJECTIVE INO3	Recognise that the economic, social and cultural wellbeing of people, and in particular the rural community, depends on, amongst other things, making reasonable use of land.
Policy INP6	Provide for activities which have a minimal effect on indigenous biodiversity and promote land owner assistance programmes for the retention and enhancement of natural areas.

The proposal is anticipated to be aligned with this policy direction by providing for a reasonable use of the resource available in the land, which provides for the social and economic wellbeing of people. As concluded in the Ecological Assessment of Effects the proposal does not impact on any areas of significant indigenous biodiversity and presents an opportunity to enhance the area on completion of works by implementing an end of life remediation plan.

27.1 – Earthworks, Mineral, Aggregate and Hydrocarbon Extraction

OBJECTIVE EMO1	To enable earthworks within the Hastings District while ensuring that the life-supporting capacity of soils and ecosystems are safeguarded and adverse effects on landscapes and human health and safety are avoided, remedied or mitigated.
OBJECTIVE EMO2	To ensure that investigations into the Hastings District's mineral resources, and their utilization, occur in such a manner that the life-supporting capacity of air, water, soil and ecosystems is safeguarded and that adverse effects on the environment are avoided, remedied or mitigated.

Noting that the area of extraction is not characterized by any LUC 1 ,2 or 3 soil, the proposal is considered to be consistent with the direction of Objective EMO1's to safeguard the life supporting capacity of soil, while effects on ecological value, landscape and human health have been considered in the Assessment of Ecological Effects and are considered to be low. Landscape values are considered within the Landscape and Visual Assessment and effects considered low upon implementation of the end of life design. On balance, there is direction in the Plan to enable earthworks and effects are proposed to be mitigated in the final end of life design that will be developed and designed in support of an application for resource consent.

POLICY EMP1	Require the re-pasture or revegetation of land where vegetation is cleared in association with earthworks, prospecting and extraction of aggregates or other minerals.
POLICY EMP2	To avoid duplication in regulation by District Plan Rules and Standards where earthworks activities are already subject to regulatory assessment.
POLICY EMP3	Protection of productive soils within the District from large-scale stripping, stockpiling, alteration and removal to ensure the land can still support a range of productive land uses.
POLICY EMP4	Allow earthworks and the prospecting of minerals where the adverse effects on the environment will be minor.
POLICY EMP5	Control earthworks, exploration and mining activities to ensure that any adverse effects on the natural and physical environment, and the amenity of the community, adjoining land uses and culturally sensitive sites are avoided, remedied or mitigated.

POLICY EMP6	Allow for specific activities such as forestry to be exempt from the rules and standards for earthworks and mining, where large scale earthworks are known to be essential to the continued operation of the activity, and the effects on the environment are likely to be minor.
POLICY EMP7	Recognise the importance of river-based gravel extraction for river and flood management purposes and the concurrent need to gravel supplies to be conveniently located and be of appropriate quality.
POLICY EMP8	Prevent exploration or mining activities in areas where adverse effects on the environment cannot be avoided, remedied, or mitigated

Policies EMP1, EMP5 and EMP8 are the most applicable policies.

The end of life remediation plan for the site (which at this stage envisages creation of two surface water bodies and associated planting and potential terracing) is considered to be consistent with the policy framework. However, it is the effects during the activity prior to re-establishment that require consideration. Expert input in regard to visual effects, noise and traffic has been sought. Policy EMP4 guides council to allow mineral extraction where effects are minor. Alignment with Policy EMP5 has been preliminarily assessed as follows:

- The Landscape and Visual Assessment provides preliminary conclusions that while landscape and visual effects during extraction activities are potentially moderate to high, effects on landscape character effects are low,
- A proposed end of life remediation plan will be developed and designed to reduce landscape and visual effects to low. The opportunity to remediate the site at the conclusion of the quarrying activity presents an opportunity to potentially achieve positive natural character outcomes at the end of the life of the quarry,
- An acoustic assessment has been undertaken which demonstrates that the operational and construction noise emissions from the proposed activities will comply with the permitted noise limits for the zone,
- A Transportation Memo has been prepared which concludes the proposal is in accordance with the District Plan's requirements for the Rural Zone including access from Roys Hill Rd, and
- The Geotechnical Assessment provides a preliminary assessment of ground conditions and anticipates a suitable setback from the excavation site, (the extent of which will be refined through further detailed investigations), are likely to be sufficient to ensure no additional effects are anticipated on other parties.

Key findings are also outlined in the assessment of effects below which gives regard to these policies.

OBJECTIVE EMO3	The water quality and life supporting capacity of the Heretaunga Plains Unconfined Aquifer Water Resource is not compromised by the effects of land use activities occurring over it, including activities associated with the extraction of oil and gas.
POLICY EMP9	Prohibit oil and gas extraction activities, including all associated structures and substances, whose effects have the potential to cause irrevocable damage to the Heretaunga Plains Unconfined Aquifer. Contaminants from any accident could potentially leach through the soil and into the aquifer system.

POLICY EMP10	Control exploration and mining activities (excluding oil and gas extraction) on land located over the Heretaunga Plains unconfined aquifer, to ensure the protection of the potability of the underlying water resource.

The proposal is not anticipated to impact the water quality or life supporting capacity of the Heretaunga Plains unconfined aquifer as the extraction activities will be managed in a way to prevent this occurring. The current application is not seeking the extraction of either oil or gas.

OBJECTIVE EMO4	To enable the efficient and economic use and extraction of the District's mineral resources to be protected from reverse sensitivity effects of potentially conflicting future land use development, in order to contribute to the social and economic wellbeing of Hastings District.
POLICY EMP11	Ensure future settlement strategies and proposals take into account the location of known mineral resources.
POLICY EMP12	Provide for the needs of landowners to extract small quantities of aggregates or minerals for use on their sites.

This objective and policy recognize the importance of efficient and economic use and extraction of mineral resources (such as the proposed activities) and their protection from reverse sensitivity effects.

OBJECTIVE EMO5	To ensure that earthworks and mineral extraction do not compromise outstanding natural features, historic heritage and cultural heritage features (including archaeological sites).
POLICY EMP13	Permanent visual scars resulting from earthworks and mineral extraction will be restricted on identified Outstanding Natural Landscape throughout the District.
POLICY EMP14	Historic Heritage features will be protected from the effects of earthworks and mining activities.

Whilst the site is not located within any Outstanding Natural Landscapes, it is considered that remediation of the site will mitigate permanent effects. In particular the implementation of an end of life remediation plan will likely reduce landscape effects to low, as detailed in the Landscape and Visual Assessment (Attachment G). There are no known archaeological sites within the boundaries of the subject site.

25.1 – Noise

OBJECTIVE NSO1	To manage the emission and mitigate the adverse effects of noise so as to maintain or enhance the acoustic environment.
OBJECTIVE NSO2	To ensure the adverse effects of noise do not unreasonably affect people's health.
POLICY NSP1	Control the emission levels of noise throughout the District, based on existing ambient noise and accepted standards for noise generation and receipt.
POLICY NSP2	Manage the interface of different land use zones to protect the aural environment of residential and other less noisy areas of the District.

POLICY NSP3	Provide for areas where activities which generate higher levels of noise can operate effectively.
POLICY NSP4	Manage the emission of noise associated with agricultural, viticultural and horticultural activities so that the operation of noise equipment, and in particular crop protection equipment, is provided for while avoiding the generation of unnecessary or unreasonably high noise levels.
POLICY NSP5	Noisy construction and demolition activities will be allowed subject to restrictions to ensure the protection of the community from unreasonable noise.
POLICY NSP6	Provide for noisy activities of limited duration and frequency which are of importance to the community, subject to appropriate controls.

The proposed gravel extraction activity will generate noise emissions relating to the use of a ~90 ton EC950E large crawler excavator and trucks on-site. The Assessment of Environmental Noise contained in Attachment F expects the predicted noise levels to comply with the acceptable standards for the Rural Zone. In particular:

- Noise from the proposed activity will be very similar to the noise from the neighbouring site in terms of level, character, timing, and frequency,
- Cumulative noise levels that are greater than the consented noise limits for the existing activity on the neighbouring site or the permitted noise limits for the zone are not anticipated, and
- Noise emissions will also be similar or lower in level than noise generated by traffic on State Highway 50.

Overall, it is considered that the aural environment surrounding the site will be maintained, particularly due to separation distances to sensitive receptors and through limiting the hours of works on-site and.

OBJECTIVE NSO3	To avoid noise sensitive activities where they will be located in existing high noise environments and the adverse effects of that noise cannot reasonably be mitigated.
POLICY NSP7	Manage noise from the road network to ensure the community is not exposed to unacceptable levels of road traffic noise.
POLICY NSP8	Have regard to the design and provision of effective noise mitigation on all new Regional and District Arterials, and Collector Roads constructed in the District.
POLICY NSP9	Manage aircraft noise generated by the use of Bridge Pa Aerodrome and associated activities to ensure that residents are not subjected to unacceptable levels of noise, while recognizing the need for the aerodrome to operate safely and efficiently.
POLICY NSP10	Ensure that noise sensitive activities and the addition of a habitable space to existing noise sensitive activities in Commercial and Industrial Zones are acoustically designed and constructed in a way that avoids or mitigates any adverse reverse sensitivity effects. This requirement will not apply to the Suburban Commercial Zone as these zones are located in a predominately residential environment where reverse sensitivity issues are unlikely to arise.

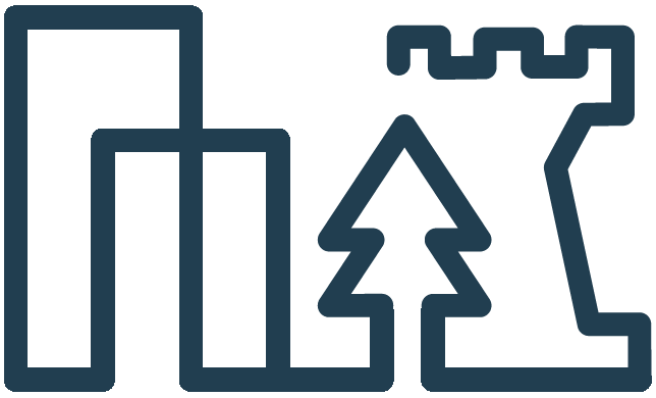
POLICY NSP11	Require acoustic insulation of new noise sensitive activities and the addition of a habitable space to existing noise sensitive activities where they are located in Urban Development Areas adjacent to the major arterial routes.

The proposed activity is not a noise sensitive activity, therefore the requirements of Policies NSP7 – NSP11 are not relevant to the application.

Overall, the proposal is anticipated to be consistent with the objectives and policies of the Hastings District Plan as assessed using preliminary assessments detailed in Section 2 of this report.

Appendix 2

HASTINGS DISTRICT PLAN ASSESSMENT CRITERIA



APPENDIX 2: HASTINGS DISTRICT PLAN ASSESSMENT CRITERIA

The following Appendix provides a high-level assessment of the proposal against the Assessment Criteria in the Hastings District Plan pertaining to:

- Structures within the River Hazard Overlay, and
- Gravel extraction.

Structures in the River Hazard Overlay

An assessment of the Criteria in Section 15.1 of the District Plan has been undertaken which demonstrates that the proposal is likely to pass a Section 104D gateway test:

15.1.6.1A Availability of Alternative Sites for the Activity

Where there are expected to be significant adverse effects on the environment, or to a proposed activity, the availability of alternative sites which are not identified as being at risk from the effects of natural hazards, will be taken into consideration. The functional need of an activity or building to locate within a site identified as being at risk will also be considered.

- The ancillary buildings are small and will be removed at the end of the life of the extraction activities.
- Significant adverse effects are not anticipated due to the location of the structures in the hazard overlay.
- The buildings are associated with (and required for) the quarry proposal which is functionally located to access the aggregate resource. They cannot be located elsewhere.

15.1.6.1B Mitigation

The extent to which mitigation measures will ensure adverse effects arising from the activity during a natural hazard occurrence are either avoided or mitigated.

- The structures are proposed to be located on a mound design to a height where flooding is avoided.

15.1.6.1C Financial Considerations

a) The effects of the activity will be assessed in terms of its potential effect on:
   i. The cost to the community of any upgrading that will have to be undertaken to existing hazard mitigation techniques.
   ii. Any new or further hazard mitigation techniques that will have to be undertaken in the present or future.

b) Financial contributions may be required where an activity causes the need to upgrade or provide new natural hazard mitigation methods. The amount of any contribution taken will be equal to the applicant's fair and reasonable share of the cost of upgrading the natural hazard mitigation measures to accommodate the activity.

- Further hazard mitigations beyond what will be provided by the applicant are not anticipated for the proposal.

15.1.6.1D Natural Hazards

The effects of the occurrence of the identified natural hazard and the consequences of the natural hazard on the proposed activity will need to be assessed. In making this risk assessment the following factors will need to be considered:

a) The extent to which public safety can be achieved. In assessing the proposal, regard will be had to methods of ensuring public safety such as early warning systems, emergency management contingency plans, escape routes and any other mitigation techniques.
b) Assessment of the probability, magnitude and consequences of the cumulative natural hazards that affect the proposal.
c) The type, scale and distribution of any potential effects from the cumulative natural hazards that affect the proposal.
d) The extent to which verifiable new information from a suitably qualified professional demonstrates that any land within an area identified on the District Planning Maps or held within Council databases (i.e. GIS or web based portal) as potentially subject to a natural hazard is not under threat from the hazard concerned or that the hazard is negligible.
e) The potential life safety, economic and built environment risk associated with the proposed activity.
f) The health and safety of potential property owners and/or occupants of the building(s).
g) The effects on the community including physical, economic and cumulative effects.
h) The nature and type of land use activity proposed and its potential maximum occupancy.
i) Whether the proposal will result in consequences to other properties or infrastructure as a result of the natural hazard occurring.
j) The overall assessment of whether the risk is significant or not.

- The proposal will not create a public safety issue as the structures will be occupied by quarry staff only. The buildings will not be used for accommodation purposes.
- The primary natural hazard of concern is flooding. A preliminary flood risk assessment has been undertaken by Riley (Attachment K) which confirms that the extraction areas are within a 1 in 100 year flood plain. Various mitigation measures have been considered, including appropriate bunds; and it has been identified that the most appropriate approach is to accept the risk of flood waters through the site. A detailed flood risk assessment will be undertaken for the resource consent application, and will address the most appropriate location for the proposed structures such as the portacom, as well as other measures such as whether bunds are appropriate and their location if so, and will include preparation of a quarry management plan.
- The location of buildings within the overlay is not expected to create consequences to other properties.

15.1.6.1E Public Works and Network Utilities

The activity will be assessed in terms of its potential effects on public works and network utilities. Regard will be had to the proximity of the activity to stop banks, high voltage lines, telecommunication facilities and other network utilities and public works, and the extent to which the activity may interfere with the safe and efficient operation or maintenance of those works and utilities.

- The structures are not anticipated to interfere with public works and network utilities.

15.1.6.1F Effects on Other Land Uses and Adjoining Properties

The extent to which the activity may cause the effects of the natural hazard to affect other properties that were previously not at risk from the effects of natural hazards or exacerbate the effects of an existing natural hazard.

- The proposed structures are not anticipated to exacerbate flood risk. A detailed flood assessment will be undertaken to quantify flood risk to assist in appropriate mitigation design in support of any application for resource consent.

Gravel extraction

An assessment of the relevant criteria has been completed below. These criteria are those listed in the District Plan for Restricted Discretionary and Discretionary Activities. This activity has a Discretionary Activity status. While the consent authority's discretion in considering the effects of a discretionary activity is unlimited, the Restricted Discretionary criteria are used as a guide.

27.1.7A Land Disturbance and Vegetation Clearance

(a) The effects of land disturbance and vegetation clearance will be assessed in terms of their effects on:

(i) The life supporting capacity of soils
(ii) Soil erosion and stability
(iii) Soil Run-off and Sedimentation
(iv) Natural Landforms and Contours.
(v) Flora and fauna
(vi) Significant cultural, ecological and historic heritage sites (including archaeological sites)
(vii) Composition and characteristics of any fill used.

(b) In making an assessment, regard will be had to the following:

(i) The extent of removal of vegetation, topsoil and subsoils at any one time.
(ii) Methods to separate soil horizons during stripping.
(iii) Measures to safeguard the life supporting capacity of stockpiled soils.
(iv) The potential or increased risk of hazards from the activity, including potential risk to people or the community.
(v) Sediment control measures, including measures to prevent sediment run-off into Council's reticulated network.
(vi) Rehabilitation of the site (including backfilling, re-spreading of subsoil and topsoil, contouring, re-pasturing and revegetation).
(vii) Land capability and potential end uses of the site.
(viii) Information on any relocation of fill on or offsite.
(ix) Siting, construction and maintenance of internal access roads.
(x) Effect on flow paths and flood-ways.
(xi) Measures to avoid the disturbance of archaeological sites (noting that any disturbance of an archaeological site will require separate approval under the Heritage New Zealand Pouhere Taonga Act 2014.).

- The preliminary approach of the proposal is to retain soil on site for reuse in bunds and rehabilitation. However, the approach will be determined through further flood risk modelling, landscape assessment and end of life planning. The proposal will not

involve reinstatement of topsoil once the operation is complete as the excavation areas are to become surface water bodies.

- Where topsoil is retained on site it will likely be stored in an appropriate location.
- The soil resource is not considered to be highly productive. As shown in the LDE report *Maraekakaho Quarry Expansion - Historic Aerials Check* contained in Attachment I the site was riverbed as late as 1978. The LDE Geotechnical Assessment report in Attachment H confirms the soil resource to be:
    - A relatively thin surface layer of organic silt sand (Topsoil) encountered down to 0.1m,
    - Underlying the topsoil layer, the Test Pits encountered Silty sand deposits expected to have been deposited during overbank flood events from the Ngaruroro River.
- As detailed in the Flood Assessment Report in Attachment K the site is location within the 1-100-year flood plain. The site will be designed to ensure flood flows are able to be managed to avoid significant effects. The diversion of flood water is covered further in Section 6.3 of the planning report.
- With regard to any proposed erosion and sediment control measures, the largest risk is the proximity of the Ngaruroro River to the proposed extraction area. However, the permeable nature of the soils and separation distance means it is highly unlikely sedimentation effects will occur. An assessment of effects on groundwater is covered separately in Section 6.3 of the planning report.
- Stockpiles are to be located near the northern boundary of the site, and various other locations for the duration of works and potentially as part of site remediation. Topsoil stockpiles are able to be controlled in terms of dust and sediment with a battered slope and re-vegetation. These actions will be confirmed in a Quarry Management Plan which will be prepared to support an application for resource consent.
- There are no connections to HDC's reticulated stormwater network, therefore there is no potential risk of run-off from the proposal into this infrastructure.
- The rehabilitation of the site is to include creation of surface water bodes within the footprint of the excavation areas with planting elsewhere on the site as appropriate. This is discussed further in the Wayfinder Landscape Assessment and Visual Effects Report contained in Attachment G.
- The existing access road to the site is proposed to be maintained in its current location. Internal haul roads will be required to transport aggregate from the site of extraction to the existing processing area.
- There are no known archaeological features and/or sites located within the boundaries of the subject property.

27.1.7B Visual Impact

(a) The visual effects of the activity will be assessed in terms of its potential effect on:

(i) The residential or recreational (including tourism) use of land in the vicinity of the activity.

(ii) The existing character of the locality and amenity values.

(iii) Whether the land is covered by Outstanding or Significant Landscape Areas will be assessed under the Assessment Criteria 27.1.7F.

(b) In making that assessment regard shall be had to:

(i) Planting, screening and other amenity treatment to minimise visual impact.

(ii) Site location including locality, topography, geographical features, adjoining land uses.

(iii) Height of soil stockpiles and cuttings.

(iv) Rehabilitation of the site, including contouring, landscaping and re-vegetation

(v) Duration, rate and extent of extraction.

(vi) Lighting – intensity, direction and positioning of lighting in relation to the effects of glare on the surrounding environment and adjacent land uses.

As outlined in the Wayfinder Landscape and Visual Assessment:

- The site is located within the Rural Character Landscape Area – RCL4 overlay Ngaruroro Valley and is overlooked by lifestyle blocks situated to the south. The site is not located within an Outstanding or Significant Landscape Areas.
- The proposed activity will require the removal of all vegetation within the excavation areas, stripping of any topsoil or river silt, and then removal of the source material. Such activity will result in permanent modifications to the site.
- The site is already highly modified and has been subject to various land management regimes (including riparian management by the HBRC and grazing). As identified, vegetation is sparse and mostly exotic.
- Gravel extraction is also an activity that has taken place in this area for many decades. Historically this has been extraction of surface gravels from the river area.
- The Wayfinder Preliminary Review of Potential Landscape and Visual Effects considers:
    - The proposal will have effects by permanently altering the landform but natural character effects are considered to be low.
    - Landscape effects during excavation are considered to be moderate to high but short term (10-25 years). Once the end of use plan is implemented effects are capable of being reduced to low.
    - Visual effects are considered to be moderate to high during extraction dependant on the viewpoint of the operation. Visual effects on the establishment of planting as part of the end of use will reduce effects to very low.
- . Given the relatively short life of the proposed activity, the focus of the proposed end of life remediation plan is to be on end-of-use following completion of the excavation activity.
- With the proposed end of life remediation plan, the level of landscape effects is expected to be confined to the excavation activity period, with the opportunity for positive outcomes for the site longer-term.
- Lighting is not proposed.

27.1.7C Effects on Other Land Uses and Adjoining Properties

The extent to which the activity will interfere with, or adversely affect, the current use of the land in which the activity is sited, or adjoining land uses. Consideration will be given to any potential effects of the proposed activity on adjoining properties and land uses, such as effects on surface drainage patters, dust nuisance, or adverse effects on adjoining buildings. Permanent effects will be given more width than temporary effects. Consideration will also be given to methods to avoid adverse effect on land use activities which are allowed in the Zone where the activity is located, such as the distance of activities from boundaries, and methods to avoid disturbance to adjoining properties,

including livestock, particularly during birthing, and dust on fruit, particularly during harvesting season.

- The current use of the land on which the activity is sited is limited by the poor-quality soils that underlie the site.
- As detailed in the Flood Assessment Report in Attachment K the proposed extraction activities will not affect surface drainage patterns per se. The site design will include consideration of performance during flood events. Changes in surface drainage is not expected to impact neighbouring properties
- The applicant will implement dust control measures on the site so as to ensure that the proposed activities do not generate a dust nuisance – such as re-vegetation of stockpiles and dust suppression.
- The activity is to occur over the entire site, but in a gradual fashion. Whilst this will at times necessitate activity near the property boundaries, a setback of between 10-30m is proposed and will be finalised following further detailed investigations. Given the proposed dust mitigation measures, this is not expected to interfere with adjacent food growing and cropping activities.
- A Site Management Plan including the management of dust will be prepared in support of an application for resource consent.

27.1.7D Noise

In assessing the impact of noise, regard shall be had to the noise sensitivity of the receiving environment, including adjacent land uses, where it is proposed to undertake the activity. Consideration will also be given to hours of operation of the activity.

- The nearest and most exposed receiver to noise emissions from the proposed activity is 3365 State Highway 50 whose notional boundary is 430m from the nearest edge of the extraction area.
- The Assessment of Environmental Noise is attached as Attachment F has identified and assessed the level of noise arising from key noise sources.
- The assessment states that the District Plan permitted limits for noise in the Rural Zone and construction noise will be complied with by a considerable margin.

27.1.7E Effects on Specific District Wide Activities and Locations

The extent to which the activity will interfere with, or adversely affect:

(a) Access to and along watercourses and waterbodies

(b) Recreation, Conservation or Natural Areas

- The proposal will not affect access to or along the Ngaruroro River to a greater extent than that which is already afforded by the location at present.
- The proposal does not seek to alter the Ngaruroro River; therefore, recreation and conservation values will be maintained.

Section 27.1.7G Additional Specific Assessment Criteria for Mining and Exploration Activities only:

1) Vibration

The extent of the effects of vibration from the activity, particularly in respect of the use of explosives.

- The proposal requires the use of an excavator and trucks to transport aggregate internally.
- The separation distances between the activity and sensitive receptors i.e. residential properties are expected to be large enough that no discernible vibration is expected to result from the proposed activities.

2) Roading and Transportation

(a) The effects of transportation related to the activity will be assessed in terms of its potential effect on the sustainable management of the roading network including:

(i) Disruption to traffic in the area;

(ii) Traffic Safety

(iii) Impact on the District roading network

(b) In making the assessment, regard shall be had to:

(i) Design of access

(ii) On-site parking and turning

(iii) The siting and construction standards of on-site roads and tracks

(iv) Maintenance or upgrading of roads or intersections in the vicinity of the activity

(v) Use of speed limits

(vi) Timing of work shifts.

- The site will be accessed via the existing vehicle accessway from State Highway 50 (SH50) known as Roys Hill Road.
- Abley have undertaken an assessment contained in their Transportation Memo attached in Attachment E. The assessment considers the intersection to meet AustRoad Safe Intersection Sight Distance requirements. No alteration to the existing intersection is considered necessary.
- The Transportation Memo also considers that:
  - There will be no additional impact on State Highway 50 as traffic volume is not anticipated to increase,
  - the proposed internal ring route will appropriately manage heath and safety, and
  - Overall traffic effects associated with the proposed extraction project to be limited in scale and nature.
- Detailed design of loading spaces is not required at this stage. All vehicles will be able to enter and exit the site in a forward direction, without requiring any reverse manoeuvring on the Access Road.
- The site will be designed to accommodate the needs for the largest heavy vehicle anticipated to use the site, and all reverse manoeuvring will occur outside of the loading/stockpile area to minimise risk for on-site employees.

3) Fire Hazard Mitigation

The ability of the activity to meet fire safety requirements including the possession of public liability insurance to cover the risk of fire

- The storage of fuel on the western extraction area on site is the only component of the proposal that is anticipated to comprise a fire hazard. However, it is intended to store fuel securely, elevated above the ground (primarily to mitigate flood risks) and is stored separately from other permanent structures. It is noted that the conditions

of the site can become very dry over summer; however it is not intended there will be any proximate vegetation that could trigger any fire hazard, and elevation above ground level will reduce this risk.

- Overall, the activity is not expected to result in any additional fire hazard on the site.

4) Heretaunga Plains Unconfined Aquifer

The following criteria relates to land located over the Heretaunga Plains Unconfined Aquifer, but excludes activities related to oil and gas exploration, extraction and production

a) The depth of any excavation in order to achieve a maximum height for the water table below the surface of the land of 5 metres. The maximum height of the water table will be identified as the highest recorded at the site, or at the closest point to the site.

b) The ability of the site to be rehabilitated to enable the land to continue to support a range of productive land use activities after the exploration or mining activity has ceased.

- The LDE Geotechnical report in Attachment H identifies the height of the water table. It is recognised that extraction will occur from below this level.
- The site is proposed to be rehabilitated into two surface water bodies with other measures such as planting proposed. The site is not considered to be productive due to the land use classification of the soil type (addressed above under Rule 27.1.7A), and the majority of the extraction areas have not been classified as highly productive land. It is considered that the sites cannot support a range of productive uses. Rehabilitating into lakes is considered a suitable outcome for end of life uses.