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Surveying and Resource Management

Tasman District Council

Application for Resource Consent

Under Section 88 of the Resource Management Act 1991

To: Resource Consents Administration
Tasman District Council
Private Bag 4
Richmond

1. *Applicant:*
C J Industries Limited

2. *Proposal:*
To authorise the extraction of gravel, stockpiling of topsoil, and reinstatement of quarried land, with associated amenity planting, signage and access formation.

3. *Location:*
134 Peach Island Road, Motueka (refer Figures 1 and 2 of the application). Access to the site is also proposed by right of way over 493 Motueka West Bank Road.

4. *Legal Description:*
Lot 2 DP 2357 comprised in RT NL77/73 and Lot 2 DP 432236 comprised in RT 524970. Access is also to be provided by right of way over RTNL11A/1111. Copies of these titles are contained in Annexure B.

5. *Owner / Occupier:*
The underlying freehold titles (RT 524970 and RT NL77/73) are owned by Timothy Corrie-Johnston. C J Industries Limited has entered into an agreement with Mr Corrie-Johnston to undertake gravel extraction at the property. RT NL11A/1111 is owned by Rapid Ridge Trust Ltd, the sole director of which is Des Corrie-Johnson, who is also a director of C J Industries.

6. *Resource Consents:*
Two land use consents are sought, one for gravel extraction within Rural 1 and Flood hazard land, and the other for the establishment of signage and access requirements.

7. *Assessment of Effects on the Environment:*
An assessment of actual or potential effects on the environment (AEE) of the proposed activities, prepared in accordance with section 88 and Schedule 4 of the Resource Management Act 1991, is enclosed with the application (refer Annexure A).

8. *Other Information:*
Information required by the Tasman Resource Management Plan (TRMP), and that necessary in understanding the proposal, is enclosed and includes:

- Assessment of effects on the environment – Annexure A;
- Record of title – Annexure B;
- Hegley Acoustic Assessment of Noise – Annexure C;
- Traffic Concepts Access Assessment – Annexure D;
- Envirolink Groundwater Hydrology Report – Annexure E;
- Volunteered Conditions of Consent – Annexure F;
- Iwi Consultation – Annexure G;
- TDC River Engineer Consultation – Annexure H;
- TDC Resource Scientist – Land Consultation – Annexure I;
- Douglas Road gravel extraction images – Annexure J; and
- RM190818 Section 88 response – Annexure I.

9. *Application Fee:*
The Applicant intends to make an electronic payment of Council's fee deposit; please issue an invoice for online payment.

C J Industries Limited.
By Their Authorised Agents
PLANSCAPES (NZ) LTD

per:.....
(Hayden Taylor)

Date: 15 June 2020

Address for Service of the Applicant:
C J Industries Limited.
c/- Planscapes (NZ) Ltd
PO Box 99
(94 Selwyn Place)
NELSON

Telephone Number: (03) 539 0281
Contact Person: Hayden Taylor
Email: hayden@planscapes.co.nz

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ANNEXURE A

Assessment of Effects on the Environment

Introduction and Background

C J Industries Limited ('the Applicant') seeks resource consent from the Tasman District Council ('the consent authority') to authorise the extraction of gravel, stockpiling of topsoil, and reinstatement of quarried land as well as the establishment of amenity planting, on-site health and safety signage, and access on an unformed legal road ('the proposal') at 134 Peach Island Road, Motueka, and with access provided over 493 Motueka West Bank Road, Motueka ('the application site').

The application site is zoned Rural 1, is within Land Disturbance Area 1, and is subject to a Flood Hazard. The proposal is as a controlled activity under Rule 16.1.5.3, a restricted discretionary activity under Rules 16.2.2.6, 16.10.2.2 and 18.5.2.4, and a discretionary activity under Rule 17.5.2.9. Overall, the proposal is deemed to be a discretionary activity.

CJ Industries Ltd is an established family business (directed by Desmond Corrie-Johnston and Arne Corrie-Johnston) which is located in Motueka and specialises in manufacturing and supplying certified ready-mix concrete, aggregates, construction works and landscaping supplies for the commercial and residential sectors.

C J Industries currently holds consents RM150901 and RM150896 to extract gravel from the banks of the Motueka River at 83 Douglas Road. CJ Industries has been undertaking gravel extraction in this location since 2002 (under NN020167) and has an excellent compliance record over this time. Past aerial photographs of the site (refer Annexure H) demonstrate the staging of works and progress of excavation areas over this time, as well as identify the quality of site rehabilitation and environmental outcomes that CJ Industries has achieved. Gravel is in high demand and has a high value because of regional growth and limited supply throughout the region, however, the majority of the available gravel material from Douglas Road is near to being exhausted. Accordingly, the Applicant wishes to

apply for further resource consents in order to extract gravel material for high end use such as concrete, seal chip and roading projects in the Tasman region. An earlier application (RM190818) was returned under S88 (refer Annexure I). This new application is materially different from the original application in that it is for extraction from only one property (a separate application for 493 Motueka River West Bank Road may be applied for in the future), and there will be no transportation of gravel across the Motueka River.

The application site is considered to be a desirable location for gravel extraction to take place because of the high-quality aggregate that is available and the relatively close carting distances. In addition, due to to the reduced cost of aggregate product that comes from locally sourced material and the fact that the activity will create jobs in the region, the proposal is considered to gave positive effects on the wider community.

The following assessment has been prepared in accordance with Section 88(2) and Schedule 4 of the Resource Management Act (RMA). Clause 1 in Schedule 4 of the RMA states that the information required by the schedule, including any assessment under clause 2(1)(f) or (g), must be specified in sufficient detail to satisfy the purpose for which it is required. This assessment must also take into account the limitations imposed under Section 104B of the RMA in the determination of any application for a discretionary activity.

Application Site

The application site is located at 134 Peach Island Road, Motueka (refer Figures 1 and 2 below); valuation number 1933075400.

Figure 1: *Locality diagram, showing application site relative to Motueka*

Figure 2: *Application site and environs*

The 13.4894 hectare property is owned by Timothy George Corrie-Johnston (who is part of the extended CJ Industry family) and is legally described as Lot 2 DP 2357 comprised in RT NL77/73 and Lot 2 DP 432236 comprised in RT 524970. Copies of these titles are included as Annexure B.

The property contains a house and sheds and is accessed from Peach Island Road through the use of a Right of Way (ROPW) (refer Figure 3 below). The property is flat (refer Figure 4 below), positioned within Quaternary river gravels (refer Figure 5 below), and is currently in pasture for grazing dry stock. The formed portion of Peach Island Road terminates at the ROW entrance to the application site, but the road reserve continues south, transecting the property as a paper road (refer Figure 6 below).

Figure 3: *House, sheds and ROW at application site*

Figure 4: *Topographic relief of application site*

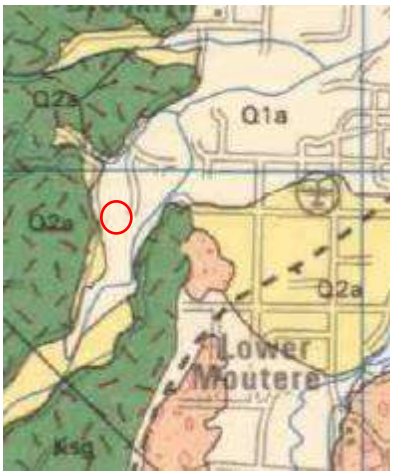


Figure 5: *GNS Q-Map of application site within Holocene (1-14 thousand years old) well sorted gravel forming modern flood plains and young fan gravels*

Figure 6: *Paper road positioning (orange) relative to the application site*

Figure 7: *Aerial photograph of application site from 1940-1949*

Figure 8: *Aerial photograph of application site from 1980-1989*

Historic aerial photographs of the site identify that the property was used for a mixture of pasture and potentially tobacco in the 1940's, and pasture only in the 1980's, so it's considered unlikely that this area would be at risk from contaminated soils (refer Figures 7 and 8 above).

Figure 9: *Soil information at application site*

The soils at the application site are classified as 'Motueka Stony Sand' and 'Riwaka Medium Sand Gravel' which have Class A productive values (refer Figure 9 above). This area is known for its shallow topsoil overlying gravels, and both the Motueka and Riwaka soils are recorded as naturally fertile and providing adequate levels of nutrients required for horticultural crops.

The Motueka River flows along the property's eastern boundary, and an unnamed third-order stream flows along the property's western boundary (refer Figure 10 below). The unnamed stream flows in the same location that the main Motueka River channel used to flow before the 'great flood' of 1877. This area is now referred to as the 'Peach Island overflow channel' due to the fact that the Motueka River flows in this direction in large flood events (refer Figure 11 below). A Council maintained stop bank transects the property and runs parallel to both the true right bank of the Peach Island overflow channel and the true left bank of the Motueka River (refer Figure 12 below). The stop bank was built in the 1950's and was designed to hold a 1-in-50-year flood with a 600mm freeboard.

Figure 10: *Topographic map of application site with river/stream locations*

Figure 11: *Photo of Peach Island overflow channel (downstream of application site) in flood*

Figure 12: *Stop bank location within application site*

The application site is identified as being subject to a flooding hazard, and areas outside of the stop bank protection are subject to flooding when the Motueka River rises above a 1-in-20 year flow event. Significant floods that have been recorded and/or observed in this area are the 1877, 1957, 1983, 1990, and 2014 floods. Flow gauging only began in 1969, so the severity of flood events before this time is not known, however, the 1957 event saw some overtopping of the stop banks in this area, so was larger than the approximately 1-in-100 year 1983 flood event. Based on the fact that the stop banks in this area did not overtop in the 1983 event, it is clear that the banks provide protection against more than the 1-in-50-year (Q_{50}) flood they were designed for, however, it is not immediately clear the level of protection they do provide, especially when considering the effect of climate change, so a minimum Q_{50} protection level is assumed within this application.

Cultural Heritage

Te Tau Ihu Statutory Acknowledgements are a type of cultural redress included in the Te Tau Ihu Treaty Settlements, and they afford legal recognition to the particular cultural, spiritual, historical and traditional associations the eight iwi of Te Tau Ihu have with an identified area. As a consent authority, Tasman District Council must have regard to any Statutory Acknowledgement when determining whether relevant Iwi may be adversely affected by a resource consent proposal. The application site

is within the Motueka, Motupiko, and their tributaries Statutory Acknowledgement Areas (SAA) (refer Figure 13 below), which are recognised under the 'Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014', the 'Ngati Toa Rangatira Claims Settlement Act 2014', and the 'Ngāti Apa ki te Rā Tō, Ngāti Kuia, and Rangitāne o Wairau Claims Settlement Act 2014'. Consideration is given to this in the assessment below.

Motueka and its surrounds has experienced extensive historic Māori occupation and use, and there are many cultural heritage sites within this area as a result (refer Figure 14 below), however, there are no known cultural heritage sites on the application site (refer Figure 15 below). The closest known site, N27/150 – Cemetery with headstones/graves dating from 1868 – 1920, is approximately 270m south west of the application site at the closest point, and the next closest sites are approximately 1.2km south west of the application site – N27/203-205 (Pa site with terraces). Consideration is given to cultural heritage sites in the assessment below.

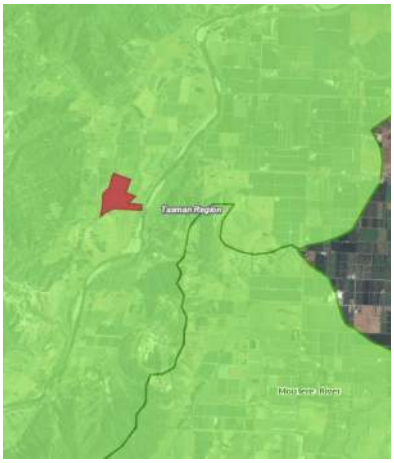


Figure 13: *Application site's positioning within statutory acknowledgement areas*

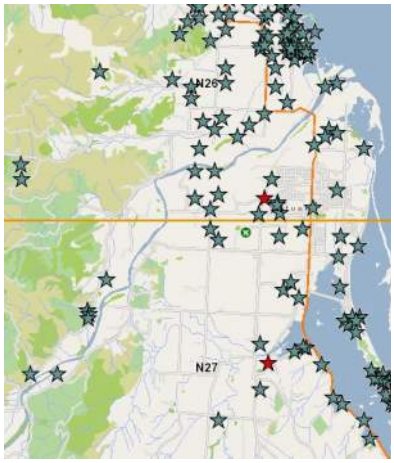


Figure 14: *Known NZAA sites within Motueka and surrounds*

Figure 15: *Closest NZAA sites to the application site*

Proposed Activity

Clause 2(1)(a) of Schedule 4 requires a description of the proposed activities subject to this application.

Clause 3 of Schedule 4 requires that if any permitted activity is part of the proposal to which the application relates, the application must include a description of the permitted activity that demonstrates that it complies with the requirements, conditions and permissions for a permitted activity for which resource consent is not required under section 87A(1) of the RMA. In this case, bridge upgrades, stormwater discharge and noise associated with the proposal can be carried out as of right, as detailed further below.

Gravel Extraction and Site Rehabilitation

The Applicant proposes to undertake gravel extraction on the property in three stages, within an area of approximately 73,500m^2, and over a 15 year period (refer Figure 16 below). No processing or crushing of gravel will occur on site. Hours of operation will be limited to 7am to 5pm Monday to Friday, with no work during weekends or on public holidays.

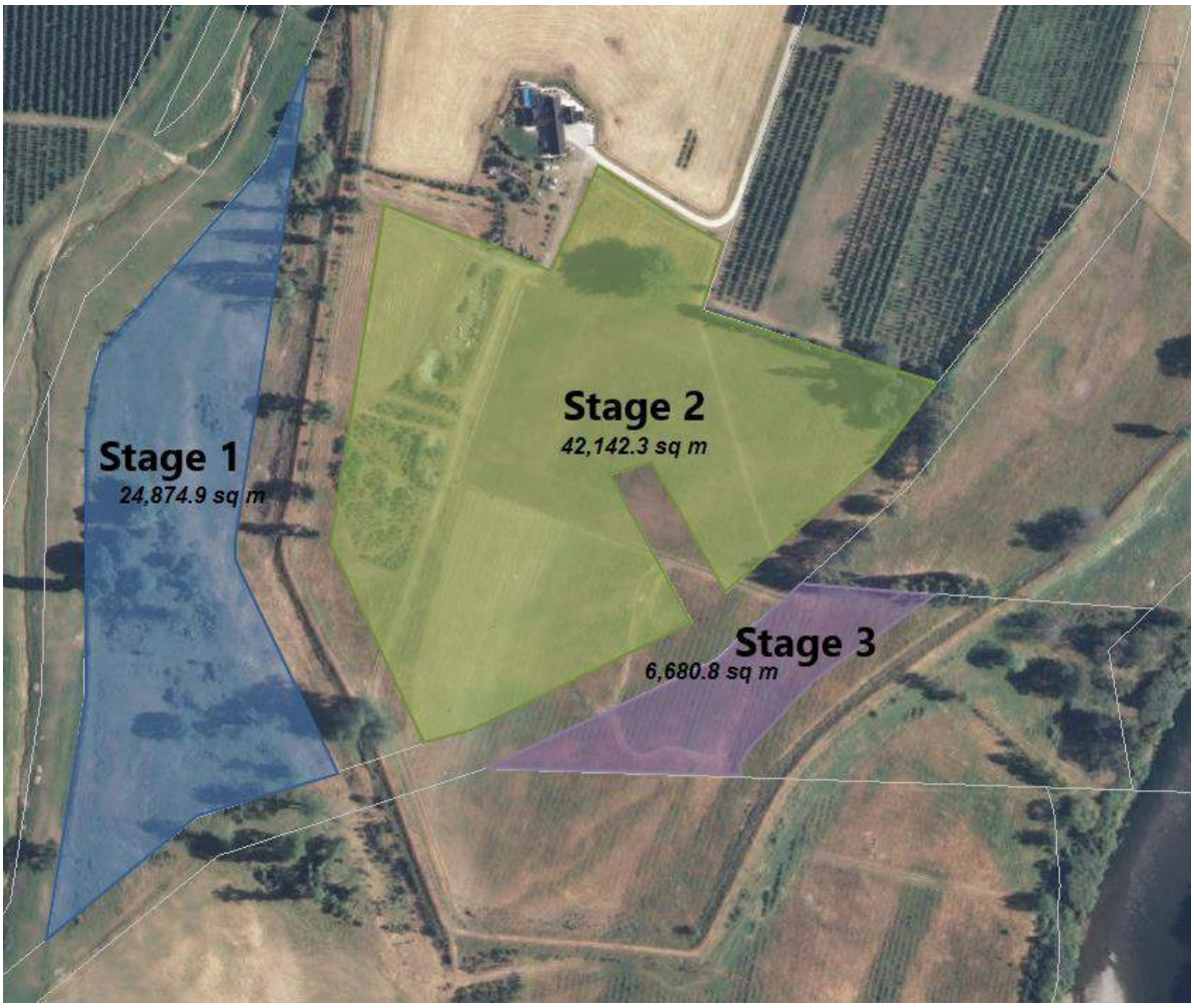


Figure 16: *Proposed extraction locations and staging*

CJ Industries has undertaken test pit excavation to evaluate the depth of gravel below the surface at different points across the property, including the thickness of over burden. On average the gravel surface is around 0.5 to 1m below ground level and up to 5m of gravel was encountered before reaching groundwater. No excavation will occur below the groundwater level at the time of extraction.

No excavation will occur within 20m of stop banks, on the Motueka River side of the stop bank within Lot 2 DP 2357, nor within the land surrounding the dwelling and sheds. Any excavation which approaches property boundaries will have a 1:1 batter of material which will remain unexcavated. Furthermore, Gravel will be extracted progressively in an upstream direction starting at the downstream end of the property, and all excavation will occur in strips (30m wide x 100m long) which are aligned parallel to the general direction of flood flow. At any one time no more than 3,000m^2 will be exposed, resulting in each excavation strip yielding up to 15,000 m^3 of gravel matrix.

Removal of topsoil and overburden will be undertaken incrementally, and these materials will be stockpiled for rehabilitation in piles which are aligned parallel to the flow of flood water. All stockpiles will be constructed and managed so as to ensure their stability and safety. With the exception of temporarily stored (awaiting placement within the excavation area) topsoil and fill material, no material will be stored on the river side of the stop banks.

Backfilling will be undertaken at every possible opportunity even when no new excavation is occurring. No excavated piece of ground will remain open for longer than 12 months on completion of excavation from any individual hole. Fill material will be clean and substantially inorganic.

The bottom quarter of the fill may comprise larger inert material such as old concrete and bricks if such material is available. The balance of the excavation to 300 mm below the finished surface level will be filled with ordinary clean hardfill such as may be obtained from road trimmings, slip clearance, site excavation, etc but may include up to 10% (by volume) of organic material provided it is thoroughly mixed with the ordinary fill. The top 300 mm of fill will comprise topsoil stripped from the site originally or brought in from elsewhere. Where material is brought in it will be inert and non-contaminated.

The ground will be reinstated to the original levels as far as practicable and the finished ground levels will not result in the obstruction or deflection of flood flows.

Transport and Access

Extracted gravel will be transported by dump-truck (truck and/or truck and trailer units) from the site to CJ Industries' processing plant at 34 Hau Road, Motueka. No processing or screening of materials will occur on the application site. It is proposed that these dump-trucks will travel south along the Peach Island paper road, then via a section of river reserve land before entering Motueka River West Bank Road via the established ROW which services 493 Motueka River West Bank Road (refer Figure 17 below), where they will continue south until they are able to cross the Motueka River at the closest bridge on the Alexander Bluff Road (refer Figure 18 below). This route has been chosen so as to avoid travelling across the busy Motueka River bridge on State Highway 60 as well as through Brooklyn and Motueka Township.

Figure 17: *Proposed access route*

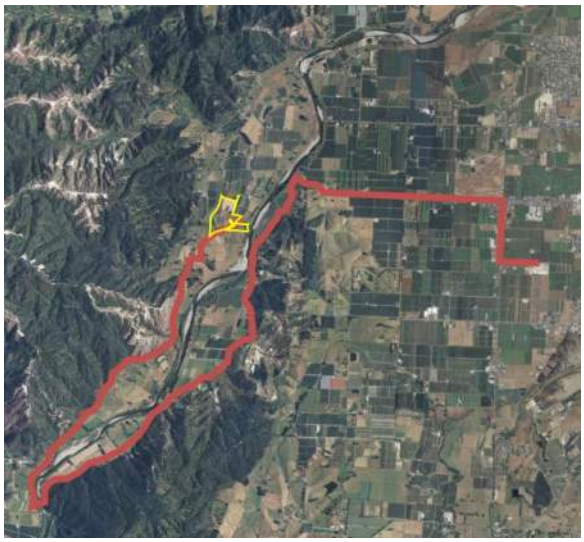


Figure 18: *Proposed transport route*

Up to 15 dump trucks will enter/exit the site each day. Trucks or truck-and-trailer units will carry up to 28 tonnes of material each, with a maximum of 420 tonnes of gravel transported each day. Trucks will return with back fill material as often as possible, in order to keep traffic down.

The existing paper road is currently in pasture and will be formed into a sealed road to meet TRMP requirements (for access, not as formed public road, e.g.: 4.5m width). Approximately 160m of the

proposed access will be along an established ROW and will be upgraded by the Applicant as necessary, including a sealed surface. The access will be adequately maintained by the Applicant.

The proposed access crosses the Peach Island overflow channel via a vehicle bridge before reaching the Motueka River West Bank Road (refer Photo 1 below). The appropriateness of this bridge will be assessed by a suitably qualified engineer and any necessary upgrades will be undertaken prior to access establishment or use under this proposal. Any upgrade can be completed as a permitted activity.

Photo 1: *Existing vehicle access bridge*

Signage

More than one on-site sign is likely to be required in order to aid in workplace health and safety. There will not be any customers to the site so no advertising or property identification signage will be established, and any signage will be limited to traffic management and H&S signage to the extent necessary in number and size. Additionally, in order to improve safety associated with the proposed Motueka River West Bank Road vehicle crossing, temporary signage within the road reserve is proposed. For this reason, approval from TDC's Engineering department is sought in accordance with Rule 16.1.2.1.

Amenity Planting

In order to limit visual effects from Stage 1 excavations which are not shielded by the stop bank, it is proposed to establish berm land amenity plantings along the south and western boundaries of Lot 2 DP 432236 (refer Figure 19 below). This western boundary is shared with a small parcel of conservation land, which the Department of Conservation has advised they do not actively manage, but that any plantings should ideally be locally native species which aid in marginal strip conservation as outlined within Section 24C of the Conservation Act . Additionally, Council's River and Coast Engineer, Giles Griffith, has been contacted to ascertain his opinion on planting in this location and the effect it will have on the flood hazard, however a response has not yet been forthcoming. This feedback (along with Council Planning feedback regarding visual/amenity mitigation requirements) will inform the size, location, and type of planting (if any) occurs in this location. The Applicant wishes to undertake planting which will limit visual effects, compliment conservation efforts, and not increase the flood hazard risk, so is happy to defer to Council's experience in this matter.

Figure 19: *Location of proposed amenity plantings (green)*

Stormwater Management

Removal of vegetation and exposure of topsoil or subsurface layers will potentially expose surfaces to erosion and sediment runoff during rain. Stockpiles of topsoil will be designed to avoid the sedimentation of waterways or contamination of groundwater. Temporary sediment traps will be dug and positioned in appropriate places as a mitigation measure to capture sediments suspended in water. Any internal access roads created for the proposal will be designed so that any sediment laden runoff will be directed to bunded sedimentation traps and not to water bodies. No permanent fixtures such as drainpipes or culverts are proposed to be installed.

The gravel extraction zone will be set back at least 20m from permanently flowing water bodies and the proposal describes progressive stripping of topsoil and removal of underlying gravel so as to limit disturbance and to avoid contact with the permanent water table. In this way any temporary suspension of sediment will settle out as the water drains through the excavation base and into the water table.

In the event of a large flood inundating the site (>Q_{20} stage 1, >Q_{50} stages 2 & 3) and causing erosion of exposed workings the resulting sediment entering the river will not be discernible relative to the naturally elevated sediment concentrations that would exist in such a flood. Stripped topsoil will be temporarily stored in such a way as to minimise erosion risk while awaiting re-spreading over the backfilled strips.

Noise

Noise expected from the proposal (in the form of truck movements, excavation noise and loading noise; no crushing or processing is proposed for this application) has been assessed by Rhys Hegley, of Hegley Acoustic Consultants, and is deemed to be able to meet the TRMP day time requirements of L_{eq} 55dBA. The Assessment of Noise report completed by Hegley Acoustic Consultants is included as Annexure C.

Volunteered Conditions

In order to ensure that environmental effects from the gravel extraction are limited, specific conditions of consent have been volunteered as outlined within attached Annexure F. These conditions are consistent with those included in similar gravel extraction consents, and cover matters such as:

- Hours of operation
- Maximum quantities to be removed
- Truck movements
- Size, location and orientation of excavations
- Topsoil Management
- Backfill material
- Site reinstatement
- Access
- Dust
- Monitoring
- Review

Tasman Resource Management Plan (TRMP)

Zoning and Area Overlays

Figure 20: *TDC Planning Map 18, showing application site within the Rural 1 Zone*

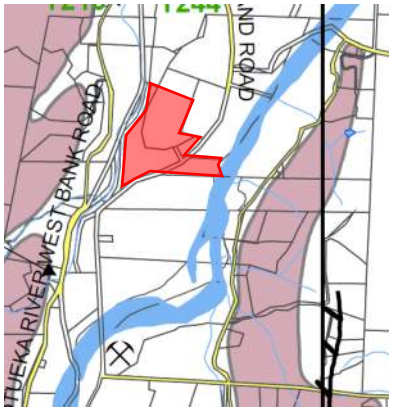


Figure 21: *TDC Planning Map 18, showing application site within LDA1*

Figure 22: *TDC Planning Map 166, showing roading hierarchy surrounding application site*

The application site is zoned Rural 1, is within Land Disturbance Area 1 and, where on berm land outside of the Motueka River stop banks (Stage 1), is subject to a flood hazard. Peach Island Road is classified as an 'Access Place', Motueka River West Bank road is classified as a 'Collector Road', and the Motueka Valley Highway is classified as an 'Arterial Road'.

Definitions

Chapter 2 (meanings of words) outlines the definitions of the words used within the TRMP.

> *Quarrying – means any land disturbance required for the extraction of any mineral including any rock, gravel or sand, and includes any on-site storage or processing of any mineral extracted on the site and any ancillary building including caretaker's accommodation, but does not include:*
> *(a) prospecting or exploration as defined in the Crown Minerals Act 1991 where no earthworks using machinery are carried out; or*
> *(b) construction or alteration of a bore.*

The extraction of gravel meets the definition of quarrying in accordance with this classification.

Berm land – means land located between the bank of a river and a stop bank on the same side of the river and includes the land between the western Peach Island stop bank and West Bank Road.

Only the land to be quarried during Stage 1 is classified as berm land in accordance with this definition. The remainder of the property is not berm land because it is protected by the stop bank, or it will not be quarried.

Bed – means:
(a) In relation to any river:
(i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks;
(ii) in all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks;

No extraction of gravel will occur within the bed of any river, in accordance with this definition.

Rural industrial activity - means the use of land and buildings for an industrial activity that depends on produce harvested from plant and animal production, or the sea, or any other land-derived product, including any sawmill, timber treatment plant, abattoir, stockyard, packhouse, cold storage, rural contractor's depot, and the processing of minerals and quarry products.

Industrial activity – means the use of land and buildings for the primary purpose of manufacturing, fabricating, processing, packing, storage, maintenance, or repair of goods, but does not include home occupations.

No processing of minerals/quarry products will occur at the application site, so the proposal is not an Industrial or Rural Industrial Activity in accordance with these definitions.

Applicable TRMP Rules

Chapter 16.1: Outdoor Signs

This section deals with outdoor signs and advertising throughout the District. Temporary off-site (road reserve) signage at the site's access necessary to warn of vehicle movements or truck crossings will meet the permitted activity requirements of Rule 16.1.5.1, and approval from TDC's Engineering department is sought in accordance with permitted activity Rule 16.1.2.1. However, due to the fact that more than one on-site sign is likely to be required in order to aid in workplace health and safety, the proposal is assessed as being a Controlled Activity in accordance with Rule 16.1.5.3.

Chapter 16.2: Transport

This section deals with access, parking and traffic effects of land uses throughout the District. The proposal is able to meet the requirements within permitted activity Rule 16.2.2.3 (Provision for Parking and Loading). The site's access and vehicle crossing will be upgraded to meet the requirements of the NTLDM (for 2-6 users in the Rural zones). With the implementation of the measures proposed in the Traffic Concepts report to improve sight distances (tree removals and bank trimming) the minimum sight distances (onto Motueka River West Bank Road) specified in the NTLDM will be met. Because access to the site will be (partly) through an unformed legal road, the requirements within

permitted activity Rule 16.2.2.2 (Traffic) cannot be met. The proposal is, therefore, assessed as being a Restricted Discretionary Activity in accordance with Rule 16.2.2.6.

Chapter 16.10: Flood Hazards

This section deals with land uses in relation to stop banks and berm lands where flood hazards may occur. The proposal is able to meet the majority of the permitted activity requirements within Rule 16.10.2.1, however, there is a possibility that >20m^3 of material will be stockpiled within berm land for more than 10 consecutive days, and that amenity plantings may be 'woody' or >0.5m in height. This will be avoided where possible, but in order to err on the side of caution, the proposal is assessed as a being a Restricted Discretionary Activity in accordance with Rule 16.10.2.2.

Chapter 17.5: Rural 1 Zone Rules

This section deals with land uses in the Rural 1 Zone, including the Rural 1 Closed and Rural 1 Coastal zones. The proposal is not able to meet the permitted activity requirements of Rule 17.5.2.1 because the activity is for quarrying, where the volume of land disturbed is greater than 50 cubic metres in any 12-month period. The proposal is, therefore, assessed as being a Discretionary Activity in accordance with Rule 17.5.2.9.

Chapter 18.5: Land Disturbance Areas

This section deals with land uses in Land Disturbance Area 1 which comprises all dry land in Tasman District outside Land Disturbance Area 2. The Land Disturbance Area 1 rules are contained within chapter 18.5.2 and the proposal is not able to meet the permitted activity requirements of Rule 18.5.2.1 because the activity is quarrying and the volume of land disturbed will be >50m^3 in 12 months. The proposal is, therefore, assessed as being a Restricted Discretionary Activity in accordance with Rule 18.5.2.4.

Chapter 28.1: (River) Bed Disturbances

The rules in this section regulate disturbances of the beds of rivers and lakes. This is the land which waters of the river cover at its fullest flow without overtopping the banks (land covered by flood flows overtopping the banks is regulated by rules in Part II of the Plan). Due to the fact that the Peach Island overflow channel bridge may require upgrading, permitted activity Rules 28.1.2.1 (General) and 28.1.5.1 (Culverts, Fords or Bridges) are relevant to the application, and it is considered that the proposal is able to meet all of the requirements of these rules. Additionally, there will be no disturbance of any riverbed as a result of this proposal and the requirements within permitted activity Rule 28.1.6 (Disturbance of the Bed, including Excavation, Drilling or Tunnelling) are not applicable to this proposal.

Chapter 28.5: Gravel Extraction

The rules in this section regulate the extraction or removal of gravel from the beds of rivers. For the same reason as above, the requirements within permitted activity Rule 28.5.2.1 (Gravel Extraction) are not applicable to this proposal.

Chapter 36.2: Discharges to Fresh Water

This section deals with discharges of contaminants to water, including fresh or coastal water. The Applicant aims to avoid the discharge of sediment or debris (or water that may contain sediment or debris) from land disturbance activities into water, and due to sediment control practices that will be in place and the design of extraction works, it is considered that the requirements within Rule 36.2.2.3

(Discharge of Sediment or Debris from Land Disturbance Activities) will be able to be met even if an accidental discharge were to occur. The proposal is, therefore, assessed as being a Permitted Activity.

Chapter 36.4: Discharges or Diversions to Land or Water

This section deals with discharges of contaminants or water to land or water as provided by section 15 of the Act and of diversions of land drainage water as provided by section 14. The (Rural 1 Zone) discharge or diversion of stormwater or drainage water into water, or onto or into land, where the stormwater or drainage water may enter water under this proposal is considered to be able to meet all the requirements within Rule 36.4.2.1 and is assessed as being a Permitted Activity.

Resource Consents Required

The Applicant seeks two Land Use Consents as follows:

A Land Use Consent for the extraction of gravel, stockpiling of topsoil, amenity plantings, and reinstatement of quarried land as a restricted discretionary activity under Rules 16.10.2.2 and 18.5.2.4, and as a discretionary activity under Rule 17.5.2.9.

A Land Use Consent for the establishment of on-site health and safety signage, a second vehicle crossing, and access on an unformed legal road as a controlled activity under Rule 16.1.5.3 and as a restricted discretionary activity under Rule 16.2.2.6.

These applications are bundled and, overall, the proposal is deemed to be a discretionary activity.

Section 104B of the Resource Management Act

In determination of a discretionary activity, Section 104B of the RMA states that:

> *After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—*
> *(a) may grant or refuse the application; and*
> *(b) if it grants the application, may impose conditions under section 108.*

Assessment Criteria in Rule 17.5.2.9 (Rural 1 Land Use)

As a discretionary activity, there are no assessment criteria specified in the TRMP, however, the principal reasons for quarrying rules within chapter 17.5 are that:
"The Rural 1 Zone is, in places, closely subdivided and settled, is often used for more intensive productive rural activities, and the land resources have high actual or potential productive and versatile qualities for present and future generations. Quarry activities have a range of potential adverse effects. In the context of the zone, the effects of new quarries and quarry expansion activities need to be evaluated on a case-by-case basis as a discretionary activity."

With the proposal to be considered overall as a discretionary activity, the matters of discretion under Rules 16.1.5.3, 16.2.2.6, 16.10.2.2, and 18.5.2.4 are more like guidelines to assist in Council's decision-making.

Assessment Criteria in Rule 16.1.5.3 (Outdoor Signs)

In relation to those matters over which Council has restricted its discretion under Rule 16.1.5.3, the following are relevant to the matters that have given rise to this application.

(1) The matters set out in rule 16.1.5.4, items (1) to (3).

(1) Location and legibility in respect to traffic safety.

Any and all signs will be suitably legible and positioned in locations which enable excavators, trucks, and any other staff to easily read them, so that traffic safety is adequately provided for.

(2) Amenity effects on the surrounding area, including cumulative effects of signs.

All signs will be interior to the site and will not be excessive in size. It is considered unlikely that any signage will have a negative effect on amenity, especially when considering their impact in relation to the proposed excavations. All signs will be removed on completion of gravel extraction and site remediation.

(3) The need for the sign to provide for ready identification of the activity, event or property to which the sign relates, including alternative means to provide for it.

All signage is required in order to meet workplace health and safety requirements, to ensure that hazards are identified, and to direct staff to specific locations and away from working areas.

Assessment Criteria in Rule 16.2.2.6 (Transport)

In relation to those matters over which Council has restricted its discretion under Rule 16.2.2.6, the following are relevant to the matters that have given rise to this application.

Access and Vehicle Crossings

(1) The location and design of on-site access and vehicle crossings, including dimensions, gradient, surface standard and any effect on the safety and efficiency of traffic on the adjoining road.

The second vehicle crossing/access has been proposed in order to prevent trucks from travelling past the application site's dwelling as well as two other neighbouring dwellings. Access is proposed along the existing paper road which is currently in pasture. A sealed access road will be formed to meet TRMP requirements of 4.5m width (etc), will be adequately maintained by the applicant. Approximately 160m of the proposed access will be along an established ROW and will be upgraded and maintained by the applicant as necessary. The proposed vehicle crossing has been assessed by Gary Clark of Traffic Concepts Ltd, and he considers the sight distances at the crossing are sufficient for vehicles to exit and enter the site safely, but recommends that the sight lines should be improved to increase the margin of safety for truck exiting the site by removing two willow trees and carrying out some bank trimming within the road reserve (refer Annexure D). This has been volunteered as a condition of consent.

(2) The need to secure registered easements for the use of an access off the site of the activity.

The ROW that will form part of the access is already secured through a registered easement to the owner (Rapid Ridge Trust Limited) of 493 Motueka River West Bank Road (valuation number 1928012005). Rapid Ridge Trust Limited is directed by Desmond Corrie-Johnston, who also directs CJ Industries Ltd.

(3) The adverse effects of an overlength access.

N/A

(4) The adverse effects of an access for more than six users.

The proposed access has been assessed by Traffic Concepts as being suitable to provide for safe and efficient access and egress. Adverse effects associated with the number of users (e.g.: damage/potholes) will be actively mitigated against by the applicant during the use of the access.

(5) Requirements set out in any current Tasman District Council Engineering Standards.

The access and vehicle crossing will be upgraded and/or formed to meet the requirements of the Nelson Tasman Land Development Manual (NTLDM) or the TRMP, whichever is preferred by Council.

Parking Areas

(6) The effects of the trip generation and demand for and supply of parking.

Due to the fact that excavation of the site will occur incrementally, there will be plenty of available space to provide on-site parking.

(7) The securing of rights to use any parking off the site of the activity.
(8) Special parking needs, such as for people with disabilities, and for cyclists.
(9) Surface standard for parking areas.

Not applicable.

(10) Any adverse effects from the scale or form of a parking area.

It is anticipated that the scale or form of parking areas will have less than minor adverse effects, especially when considering the impact from parking in relation to the proposal as a whole.

Roads

(11) The appropriateness and cost-effectiveness of the formation of any unformed legal road.

The formation of the Peach Island paper road is not required in this location, and it is not proposed that this is undertaken as a result of this application. The applicant will form a sealed access road within the road reserve to meet the appropriate standards and use.

(12) The location and design of any new road formation, including visibility between any intersection or property access and traffic on the road.
(13) Determining the road hierarchy class of any new road or newly formed road, or any required upgrading of an existing road.
(14) The need for and extent of any contributions towards the formation of any unformed legal road.
(15) The location and design of road formation, including driving visibility and any need for improvements at intersections.

Not applicable

Traffic Effects

(16) The effects of the design of the road and its traffic flows and types on the adjoining activity.

Motueka River West Bank Road is a narrow winding rural road with a sealed width of around 6.0 metres. The road is marked with a centreline with no kerb and channel or footpaths. There is a narrow-

grassed shoulder along most of its length. The posted speed limit is 80 km/h and the operating speed has been measured at 68km/h (refer Annexure D). The road's classification as a collector road indicates that the road is likely to carry traffic volumes in the 1,000 to 3,000 vehicles per day range. For this reason, it is considered that the road is able to cater for the increased traffic and type of vehicles associated with the proposal.

(17) The effects of traffic to, from, and within the site on safety and amenity (including dust and noise) for occupants or users of the site and adjoining properties.

Signage will be used where necessary to ensure the safety of adjoining properties. Dust will not be created on account of the sealed surface proposed, and noise is assessed as being able to meet the permitted activity standards within the TRMP. The only dwelling that trucks will drive past before entering the Motueka River West Bank Road is owned by one of the directors of CJ Industries Ltd. Vehicle movements will be limited to between 7am and 5pm Monday to Friday, with no movements on weekends or public holidays, so amenity effects will be low.

(18) The potential effect of the activity on the safety and efficiency of the road network.

The entry/exit of dump trucks onto the road has the potential to adversely affect safety, however, by adopting the recommendations within the Traffic Concepts Ltd report (refer Annexure D), safe sight and stopping distances are able to be achieved. Furthermore, temporary 'truck crossing' signs will be used where necessary.

Forestry harvesting traffic is similar in scale to this proposal and log trucks have been able to enter/exit this road network safely and effectively in multiple locations along the Motueka Valley, including recent harvesting only 650m south of the proposal's access.

(19) The effects of trip generation.

The proposal is expected to generate 30 truck vehicle movements per day (vpd), along with any other vehicles associated with the activity (e.g.: excavator staff arrival). A conservative estimate of total vehicle movements is 40 vpd, which is only 1.4 - 4% of the total expected volume of vehicles on this road each day. The proposal's trip generation will have less than minor effect on the road network as a result.

(20) Traffic effects beyond the site, including effects on carriageway width, alignment and intersections.

The proposal will have less than minor traffic effects beyond the site. As previously mentioned, logging trucks have been safely using this stretch of road in the past, without the need to widen or straighten the road to improve safety, so there is no reason why this proposal will require such action. The vehicle crossing will be upgraded in accordance with Figure 16.2C (Diagram 2) and is considered to be sufficient in mitigating any adverse traffic effects. Only high order roads (Arterial and Collector) will be used to transport material, Hau Road is the only minor road which will be affected by the proposal and this is already being used by heavy vehicles.

(21) The ability of the site to accommodate parking, loading, manoeuvring and access requirements.

The site is large enough to be able to easily provide adequate parking, loading, manoeuvring, and access.

(22) Effects of traffic on the pleasantness and vitality of commercial centres and on the environment, in terms of noise, generation of fumes and the safety and efficiency of the road network.

As addressed above, vehicle movements are deemed to be able to meet the noise requirements within the TRMP, dust will not be an issue, and traffic will not adversely affect the safety of the road network. There is no commercial centre close to the proposal.

Stormwater

(23) The location and design of any road, crossing, access or parking area, and associated structures, to manage stormwater quality.

The crossing, access and parking area(s) will all be designed to adequately manage stormwater runoff. Infiltration will be encouraged, and sediment traps will be established in order to ensure that stormwater does not contain high suspended sediment loads.

Duration

(24) The duration of the consent (Section 123 of the Act).

It is considered that a duration of consent is not needed– the access and crossing will be used in conjunction with and subject to the timing of any quarry/gravel extraction consent held by the applicant.

Review

(25) The purpose and timing of any review of conditions of consent (Section 128 of the Act).

A review condition is volunteered.

(26) Financial contributions, bonds and covenants in respect of the performance of conditions, and administrative charges (Section 108).

If the proposed access and crossing place construction and improvements are a condition of the quarrying consent, to be undertaken prior to any material being transported off the site, it is not considered necessary to require a financial contribution or bond as a result of the transport effects.

Assessment Criteria in Rule 16.10.2.2 (Flood Hazard)

In relation to those matters over which the Council has restricted its discretion under Rule 16.10.2.2, the following are relevant to the matters that have given rise to this application:

(1) The severity and probability of the flood hazard to which the activity is or may be subject, in the light of any available or calculated flooding information.

The small portion of berm land where extraction is proposed to occur is subject to inundation during Q_{20} flood events, whereas the balance of the land is protected by stop banks and is only at risk of inundation during Q_{50} flood events (or greater). Flood return periods of Q_{20} are similar to those which exist in other gravel extraction locations and are not immediately concerning as far as this proposal is concerned. Furthermore, Council has a flow recorder 'Motueka at Woodmans' approximately 400m downstream of the application site, and based on flow recordings at this site, it takes approximately 21.5 hours for a flood peak to travel downstream from Council's 'Motueka at Gorge' flow recorder, and approximately 2hrs to travel downstream from Council's 'Motueka at Woodstock' flow recorder. Therefore, flood-warning would be activated well in advance of an effect being felt at the application

site, and with enough time for any necessary action to be taken by the Applicant (e.g.: removing excavators etc from flood path).

(2) The effects on other property owners of the activity, including damage resulting from the damming or diversion of flood waters by structures or plantings.

There are no permanent buildings, or plantings, associated with this proposal. The design (orientation) of excavations and the fact that they will progressively backfilled will aid in mitigating any erosional effects that open pits in the flood path may have. Additionally, the groundwater level assessment completed by Tony Hewitt of Envirolink (refer Annexure E) identifies that groundwater levels at the application site are approximately 1m higher than water levels in the Motueka River. For this reason, if a flood were to affect the application site, any open excavations would also experience increased groundwater levels, and although there is a lag in the rate of groundwater level rise due to buffering from the gravels, it is still likely that groundwater levels within any pits would be high enough to limit any scour effects from overland flow. Furthermore, excavation setbacks and because excavation will not occur on either side of the stop banks at one time will ensure stop banks are adequately protected and battering near property boundaries will protect the stability of excavation. For these reasons, and because all ground levels will be returned to pre-excavation levels, it is considered that there will be less than minor adverse effects on other property owners. Council's Rivers and Coastal Engineer, Giles Griffith, was consulted in regards to this proposal and he requested that cuts are aligned parallel to flood flow and advised that the proposed buffers and cuts sizes were effective in protecting against the flood hazard. At any point where trucks cross the stop bank, a stop bank crossing will be built up so as to avoid any damage to the structure.

(3) The effects on road structures, including the need for larger culverts or bridge clearances.

(4) The effects of any structure by itself or in combination with other structures on aquatic ecosystems, plant or animal habitat, flow regime or erosion of the river.

(5) The design, location, construction and maintenance of any structure.

Not applicable.

(6) The health and safety of potential property owners.

The proposal will not alter/increase the flood risk at the property, nor impact on the health and safety of potential property owners. All current flood protection will remain in place.

(7) The effects on the community, including physical, economic and cumulative effects.

Not applicable.

(8) The extent to which future owners of the site are likely to be aware of any flood risk before they purchase a property.

A Council stop bank transects both allotments (both titles) of the property, so it is clear that the area is subject to flood risk.

(9) The need for a reference to flood risks to be recorded on the title of the land.

Title 524970 already has a notification instrument (9029327.1) which identifies that the building consent was issued with a Natural Hazard (Inundation) notice pursuant to Section 72 of the Building Act.

(10) The extent to which the productivity and versatility of the land may be affected, positively and adversely.

The land will be returned to pre-excavation levels and all topsoil will be re-spread, so the long-term productivity and versatility of the site will remain.

(11) Whether or not buildings are relocatable.

Not applicable.

(12) The duration of the consent (Section 123 of the Act) and the timing of reviews of conditions and purpose of reviews (Section 128).

A consent duration of 15 years is requested which is in line with the proposed duration of gravel extraction.

(13) Financial contributions, bonds and covenants in respect of the performance of conditions, and administrative charges (Section 108).

It is not considered necessary to require a financial contribution or bond as a result of the flood hazard effects.

Assessment Criteria in Rule 18.5.2.4 (Land Disturbance Area 1)

In relation to those matters over which the Council has restricted its discretion under Rule 16.10.2.2, the following are relevant to the matters that have given rise to this application:

(1) Matters (1) to (13) in rule 18.5.2.2.

(1) The location, timing of construction, design and density of earthworks including roads, tracks or landings.

All earthworks will be in accordance with this proposal and the volunteered conditions of consent (refer Annexure F). They have been designed to limit any land disturbance effects and are similar to other gravel extraction activities within the Tasman region.

(2) The disposal and stabilisation of waste material or fill.

Waste material or fill stockpiles will be constructed and managed so as to ensure their stability and safety. There will be no disposal of material, as anything not removed from the site will be reused as back fill.

(3) Loss of or damage to soil.

The soil underlying the application site is categorised as having Class A productive value. For this reason, the applicant will take the utmost care to ensure that all topsoil is stripped back and retained for re-spreading following excavation. It is the Applicant's intention to have as little impact on the productivity of the soil, and to return the land to productive use incrementally as works progress. The placement, spreading, levelling and cultivation of topsoil will be carried out in a manner that minimises compaction of the topsoil. Any undue compaction that may occur will be remedied before sowing. Reinstated areas will be sown down with a standard rye grass/white clover seed mix in spring or autumn (whichever season occurs first after filling of a cell has been completed) together with an initial application of fertiliser to facilitate establishment. In line with the extraction operation, revegetation will be carried out in a progressive manner so as to limit any damage or loss of soil through erosional processes. Berm land productive value is limited on account of its flood risk and

through the TRMP preventing tree crops that would impact flood flow dynamics. For this reason, the productive use of berm land is only likely to be in pasture and this will be reinstated

(4) Damage to riparian vegetation or soil.
(5) Damage to animal or plant communities or habitats in water bodies or coastal water.

Not applicable.

(6) Effects of the activity on river or stream flows.

Proposed excavations are spatially separated from nearby rivers/streams (at least 20m) and will have no effect on the flow of these features through the buffering that excavation setbacks will provide.

(7) Sedimentation effects on subsurface streams or caves in karst.
(8) Damage to any structures.

Not applicable.

(9) The visual effects of the activity.

Excavation will be limited to 3,000m^2 at any one time, so the visual impact of the activity will be constrained. Additionally, in Stages 2 & 3, the stop bank will aid in limiting visual effects outside of the property through shielding works from the majority of nearby properties and it is proposed to plant vegetation along the southern and western boundaries of Stage 1 in order to limit visual effects in this area as well. The extraction of gravel in this area is quite common and there are several downstream (Rural 1/land Disturbance Area 1) locations where large excavation pits were dug and are now wetlands, so in comparison to these activities, the visual effects from this proposal will be minimal. Furthermore, large-scale clear felling of pine plantations in the hills surrounding the application site occurs relatively frequently, with a ~500,000m^2 swathe of land currently exposed/regenerating only 1.5km from the application site.

(10) Potential damage to any cultural heritage site or area, including any archaeological site or site of significance to Māori.

There are no known cultural heritage/archaeological sites within the application site, and due to the fact that the Motueka River has avulsed over this site in the past, it is considered unlikely that any artefacts will be uncovered as a result of works. In accordance with similar gravel extraction consents in this area, accidental discovery protocol will be in place both at the application site and the screening yard, and it is considered that this will sufficiently mitigate any risk to cultural heritage from the proposal.

(11) Damage to any natural habitat or feature.

Not applicable.

(12) The duration of the consent (Section 123 of the Act) and the timing of reviews of conditions and purpose of reviews (Section 128).

A consent duration of fifteen years is requested.

(13) Financial contributions, bonds and covenants in respect of the performance of conditions, and administrative charges (Section 108).

A bond condition as outlined within the volunteered conditions (refer Annexure F) is offered.

(2) The extent, timing and duration of bare ground.

Excavation will occur in 30m wide by 100m long strips, which will be progressively backfilled. A maximum area of 3,000m^2 will be open at any one time. No excavated piece of ground will remain open for longer than 6 months on completion of excavation from any individual hole.

(3) The depth and area of excavation and effects on groundwater.

No excavation shall occur below groundwater levels as they are at the time of extraction. For this reason, and because of the limited area of excavation, there is expected to be less than minor effect on groundwater.

(4) Restoration of the site, including ground levels and planting.

The site will be restored to its original levels and grass will be sowed once topsoil is re-spread. The intention is to return the site to grazing as soon as restoration has been complete, and the site has recovered sufficiently.

(5) The machinery to be used and manner of excavation.

Hydraulic excavators and dump trucks will be used, and excavation will be undertaken as discussed above.

(6) The method of storage and replacement of topsoil, including methods to minimise compaction management and placement of stockpiles and spreading to minimise compaction.

(7) The method of storage and replacement of subsoil, including management of stockpiles.

Topsoil removed from the excavation site, or from any other location, will be placed directly onto a backfilled area, or stored in a pile aligned parallel to the flow of flood water in a location agreed to by the Tasman District Council. Topsoil will be stripped, stockpiled and re-spread in a manner that minimises compaction and soil loss. Machinery movement over stockpiled topsoil will not occur.

(8) Types and quantity of introduced fill.

Only clean and substantially inorganic material will be used for backfill. It may include gravels, soil, clay, and natural rock material such as ordinary hardfill obtained from road trimmings, slip clearance, site excavations etc. Clean concrete rubble may be used provided that it is broken down to pieces no greater than 0.50 metres across and that there is no protruding reinforcing material. The fill material may contain up to 10% by volume of organic material (ie, vegetative material, bark, sawdust, etc) provided that the organic material is thoroughly mixed with the ordinary fill and that no sawdust from treated timber is included. Only the material specified above shall be used for backfill. No refuse, cans, bottles, plastics, stumps, timber, cars, metallic objects, household appliances, toxic chemicals, or liquid wastes will be used as backfill. Backfill material will be logged for compliance monitoring purposes.

(9) Measures to ensure both surface and subsurface drainage is satisfactory for the site in question.

The site is within quaternary river gravels which have a high infiltration rate. Limited overland flow is anticipated but will be directed through soakage via purpose built settling ponds/sumps before reaching any waterways. There will be no extraction of material from below the water table and an appropriate free board will be maintained to ensure that the potential effects on groundwater are

minimised. Subsurface drainage in this location is towards the river, and although groundwater levels fluctuate over the year, hydrostatic pressure will ensure that excavations drain effectively.

(10) Establishment and management of appropriate vegetation to ensure optimal rehabilitation.

Reinstated areas will be sown down with a standard rye grass/white clover seed mix in spring or autumn (whichever season occurs first after filling of a cell has been completed) together with an initial application of fertiliser to facilitate establishment. In line with the extraction operation, revegetation will be carried out in a progressive manner.

(11) Measures to avoid or remedy damage caused by floods or inundation.

Excavation will occur in strips (30m wide x 100m long) which are aligned parallel to the general direction of flood flow. At any one time no more than 3,000 m^2 will be exposed.

(12) Measures to avoid or mitigate adverse effects on adjacent land or water uses, including limiting hours of operation and measures to control noise, dust and traffic.

All practical measures will be taken to ensure that any dust created by gravel extraction operations at the site, or transport of extracted material, will not become a nuisance or hazard to the public or adjacent property occupiers. The measures employed will include reducing vehicle speeds and the watering of traffic movement areas, roadways and stockpiles as may be required. Additionally, hours of operation will be limited to 7am to 5pm Monday to Friday, with no work during weekends or on public holidays, and no processing or crushing of gravel will occur on site.

(13) Public access.

The proposal is within private property. Access via the ROW will be limited to the applicant and any existing users. Access along the Peach Island paper road will be gated but will be maintained in accordance with the Walking Access Act 2008 as necessary, whilst ensuring public and worker safety. It is not anticipated that public access along the paper road will be requested because there are much easier access points to the Motueka River nearby. No quarrying is to occur west of the Motueka River stop bank so the proposal will not impact on any public use of and access along the banks of the Motueka River.

(14) Effects on groundwater and flood plain stability.

As addressed in the flood hazards (16.10.2.2) assessment above, it is considered that the proposal will have less than minor effect on flood plain stability. Excavations will not extend further than the groundwater level at the time of extraction, and therefore, groundwater quality will be protected against sediment ingress. Furthermore, because excavation will occur incrementally, there is no risk of groundwater drawdown because sufficient buffering will exist.

Policy Framework in the Relevant Policy Documents

Tasman Resource Management Plan

The relevant objectives and policies are found in Chapters 5 (Site Amenity Effects), 7 (Rural Environment Affects), 8 (Margins of Rivers, Lakes, Wetlands and the Coast), 9 (Landscape), 12 (Land Disturbance Effects), 13 (Natural Hazards) and 33 (Discharges to Land and Fresh Water) of the TRMP. The proposal is generally consistent with these objectives and policies.

Policy 5.1.3.1 is a general policy which addresses the management of effects of change in land use in the rural environment. In accordance with this policy, the proposed quarrying is appropriately located and designed to minimise effects on the rural, flood hazard and landscape attributes of the site and surrounds.

The District's land and freshwater bodies have a wide range of uses and values, and contamination from land disturbance, fuel, or stormwater discharges may degrade the quality of soil and water for these values and uses. Water quality contamination controls will be in place (e.g.: setback distances from surface water, limiting cut depth according to groundwater level, erosion and sediment control, stormwater management, etc.) and will be strictly adhered to so as to ensure contamination of ground or surface water is prevented (Policies 5.1.3.2, 5.1.3.8, 5.1.3.9, 5.1.3.11, 12.1.3.1, 12.1.3.2, 33.1.3.2, 33.1.3.5, 33.1.3.11, 33.3.3.4 & 33.3.3.5). In addition, machinery and fuel (etc.) will be stored away from freshwater bodies and a contingency plan will be prepared in order to avoid, remedy or mitigate any adverse effects of an accidental spill of fuel or other contaminant (Policies 5.5.3.4, 5.5.3.6 & 33.2.3.1) which will consist of planning measures which are appropriate to the nature and scale of any discharge and risk to the environment (Policy 33.2.3.2). The soil at this site is classified as highly productive, and as such the proposal has been designed to remedy and mitigate against the adverse effects of mineral extraction earthworks on the actual or potential productive values of soil (Policies 7.1.3.2, 7.1.3.3, & 12.1.3.4).

Tasman District experiences high rainfall intensities and as a result, most river valleys (including the Motueka Valley) are subject to flooding. This natural hazard has the potential to damage property, infrastructure and ecosystems, and threaten health and safety. Remedying the damage can cost individuals and the community heavily in financial terms and loss of enjoyment of life. Additionally, the flooding hazard can be aggravated by inappropriate land use management practices and activities. However, this proposal has been designed to ensure that the excavations do not increase the risk of damage associated with flooding, and all cuts will be progressively backfilled to the same ground height in order to limit any effects from flood hazards (Policy 13.1.3.1). Furthermore, any stockpiles will be designed and placed in order to limit any effect on overland flow paths (Policy 13.1.3.9).

Reinstatement of the site following works will ensure that the open space and rural amenity characteristics of the site, and natural character of the riverine environment are retained (Policies 5.3.3.2, 8.2.3.4 & 9.2.3.3) and there will be no riparian vegetation affected by the proposal (Policy 8.2.3.1). Due to the fact that the application site is surrounded by elevated residential activities on the valley's hills, there will be some adverse visual effects of the proposal on the amenity of neighbouring properties, although, the stop banks and proposed vegetation will limit these effects, and the size of open excavations along with the progressive reinstatement of land will ensure that adverse effects are minor (Policies 5.2.3.1, 5.2.3.4 & 9.2.3.4). Despite this, productive use of rural land underpins the social, economic and cultural well-being of the people of the District, and it is important to provide sufficient flexibility in standards, terms and methods for rural sites to allow for the wide range of

effects on amenities which are typically associated with rural activities (Policies 5.1.3.14 & 7.4.3.1). There is no specific definition of a rural activity, but it is considered that the site is within a working rural environment and that any adverse off-site effects (e.g.: dust, noise, visual) generated from the activity will be adequately mitigated, and that effects are not out of character or considered excessive within the Rural 1 environment, given the surrounding land uses, nor in comparison to other activities permitted in the Rural 1 Zone (Policies 7.4.3.1 & 7.4.3.2). Additionally, the traffic associated with the activity is not deemed to be significant, and the operating hours are expected to be sufficient to mitigate against any adverse traffic effects (Policies 11.1.3.2 & 11.1.3.4). Quarrying by its very nature (i.e. access to raw materials) will be found in rural areas, and the TRMP "enables" this is so far as it provides for quarrying as a discretionary activity, so it is an anticipated part of the rural environment.

Having had regard to the existing and proposed environment, it is concluded that the rural and riverine character and amenity values of the site and environs will be retained under this proposal, and any potential effects will be contained within the site (Policy 5.1.3.9).

Tasman Regional Policy Statement

The TRMP and its objectives and policies have been developed so as to be consistent with the objectives and policies in the Tasman Regional Policy Statement (TRPS). The proposal will not undermine the policy direction of the TRPS.

While the impacts of mineral extraction or quarrying on high quality soils, the rural noise environment and riparian land management are identified within the Land Resource Issues under the TRPS, Issue 6.9 specifically addresses the accessibility of mineral resources. It acknowledges that minerals "are locationally fixed and non-renewable, and if they are to be extracted or protected, they must be extracted (and often processed) or protected where they occur. Minerals do not exist in isolation from other resources: they may underlie outstanding landscapes, significant ecosystems, or land of high productive value...The principal effect of other activities on minerals is on access to them."

The TRPS seeks to achieve the sustainable management of land resources, and Objective 6.7 and Policy 6.2 stress the importance of ensuring mineral resources (including gravels by definition under the Crown Minerals Act 1991) can be accessed. This proposal acknowledges the accessibility of river gravels at the application site, both in its road access and relatively minor overburden. The extraction of the gravels in this site will occur in a manner safeguarding ground and river water quality, reinstating high quality lands, maintaining access to and buffering along the Motueka River, without impact of significant ecosystems, mitigating any adverse amenity impacts on Motueka River West Bank Road residents and landowners, and ensuring continued effectiveness in flood protection. The proposal accords with the Tasman Regional Policy Statement.

Water Conservation (Motueka River) Order 2004

The proposal is adjacent to the Motueka River, so the water conservation order is relevant to this proposal. Earthworks will be adequately setback from waterways and stormwater run-off will be adequately managed so that any contaminant discharge that enters freshwater will not affect water quality. Additionally, spill response kits and procedures will be in place in case of an accidental contaminant discharge. The proposal is able to meet Clause 11 of the Water Conservation (Motueka River) Order 2004 and will have no effect on river flow (clauses 8 & 9), or fish passage (clause 10).

National Policy Statement for Freshwater Management 2014 (amended 2017)

Excavations will occur near freshwater bodies, so the NPSFM is relevant to this proposal. All quarrying activities will be adequately setback from waterways and stormwater run-off will be adequately mitigated so that no contaminant discharge which could affect water quality will enter freshwater, additionally, spill response kits and procedures will be in place in case of an accidental contaminant discharge (Objective A1, and Policies A3 & A4). The proposal is consistent with the NPSFM.

Actual or Potential Effects on the Environment

Section 88(2)(a) of the Resource Management Act 1991 states that any application for resource consent must be accompanied by an assessment of effects on the environment prepared as required by Schedule 4 of the Act. Clause 2(3)(c) of Schedule 4 requires the AEE in such detail as corresponds with the scale and significance of the effects on the environment that may arise with the proposed activity.

Use of the words "effect", "environment" and "amenity values" in this assessment of effects on the environment should be interpreted as follows, in accordance with Sections 2 and 3 of the Resource Management Act 1991:

> "Effect" ... includes-
> (a) Any positive or adverse effect; and
> (b) Any temporary or permanent effect; and
> (c) Any past, present, or future effect; and
> (d) Any cumulative effect which arises over time or in combination with other effects- regardless of scale, intensity, duration, or frequency of the effects, and also includes-
> (e) Any potential effect of high probability; and
> (f) Any potential effect of low probability which has a high potential impact.
>
> "Environment" includes –
> (a) Ecosystems and their constituent parts, including people and communities; and
> (b) Any natural and physical resources; and
> (c) Amenity values; and
> (d) The social, economic, aesthetic and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.
>
> "Amenity values" means those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

This assessment must be guided by Section 104B of the RMA in relation to the matters over which Council has restricted its discretion in considering the activities subject to this application (as addressed above), by the specialist reports commissioned, and the volunteered conditions of consent, all of which form part of the AEE.

Groundwater Effects

Once a mining block has been completed, all stockpiled material will be replaced in an appropriate manner that takes into account the soil productivity and natural drainage of the area. The applicant will not extract material from below the water table and will maintain an appropriate free board to ensure that the potential effects on groundwater are minimised. Groundwater has been sampled as part of the exercising of RM150901 and no issues have been raised as a result of sampling, so it expected that there will be no effect on groundwater quality as a result of this proposal, which will be managed in the same way.

No contaminants, including but not limited to hydrocarbon fuels, lubricants, or hydraulic fluids will be stored on the river side of the stop banks. No refuelling or machinery maintenance will take place in locations where hydrocarbon (or other) spills may enter water, either directly or indirectly. All spills will be immediately contained and controlled by an approved product and will be removed from the site for appropriate disposal.

Loss of Productive Land

The Riwaka and Motueka soils at the application site offer high productive value. However, they have weakly developed profiles which makes them sensitive to damage from disturbances, like gravel extraction. Council's Resource Scientist – Land, Dr Bernard Simmonds, was consulted in regards to this proposal, and he advised that disturbance and removal of the topsoil disrupts the air and water flow pathways that control soil biological respiration, moisture movement and storage, and root penetration, and the structural changes to the soil profile from disturbance increase the risk of compaction which can lead to discontinuous drainage patterns across a site, affecting root growth and overall soil versatility (refer Annexure G).

It is the Applicant's intention to return the land to productive use incrementally as works progress so to have as little impact on the productivity of the site's soil as possible, and the method of extraction has been designed to achieve this goal. Topsoil and subsoil will be separately removed, followed by the gravel, with the subsoil (overburden) then being replaced on top of the new surface. The subsoil will be levelled before the topsoil/upper horizons are replaced, and all efforts to minimise the compaction of the soil will be undertaken. However, even with these controls in place, there is likely to be some loss in soil productivity and physical impairments of the soil properties as a result of gravel extraction. With this being said, however, it is considered that the potential adverse effects on soil that this proposal poses needs to be viewed in light of the region's need for high quality aggregate, as well as the existing consented environment for gravel extraction within these productive soils.

The proposed stage 1 extraction area is within berm land, so has limited productive potential due to the risk of losing crops as a result of the flood return period in this area. This lack of productive value is reflected in the lack of horticultural development of this land (or land in similar areas) and through comparable berm land gravel extraction consents (e.g.: RM180813, RM150901) downstream of the application site, where soil productivity was not listed as a potential effect on the environment within the decisions. Despite this, the excavation methods will not differ in this location, and all efforts will be made to retain productivity of the soils, regardless of the flood risk.

The proposed stage 2 and 3 extraction areas are within the stop bank protection area, so have an increased productive value for this reason. However, this land has been used for pasture since at least the 1980's despite the established flood protection, so its current productive value is limited, nonetheless. Furthermore, comparable (protected by stop banks) gravel extraction consents (e.g.: RM070949, RM031206) downstream of the application site where horticultural production was already in place prior to extraction, were granted despite the risk to the soils that the activities posed. In fact, the RM070949 consent decision – approximately 1.5km downstream of the subject site at 15 Peach Island Road – stated that "the area of the property subject to gravel extraction is stony unproductive land, so there are not considered to be any adverse effects on highly productive land", and the excavated area was turned into a 6m deep wetland rather than returning the land to some productive use. Additionally, the RM031206 consent decision – approximately 2.5km downstream of the subject site at 98 Douglas Road – stated that "the proposed excavation would not have an adverse effect on the productivity of the soil and the land affected once restoration was completed in

accordance with the conditions and therefore the effect of the loss of Rural 1 land on a temporary basis was not significant". The assessment for this extraction consent, which was renewed in 2012 (RM120738), is particularly applicable to this application because it involves extraction and reinstating in much the same way as this proposal, except with a much larger open excavation area. For this reason, it is considered that this proposal should be viewed in the same light, in that the effect on productive land will be temporary and not significant, especially when considering the positive effects associated with the sourcing of aggregate for the region as a whole.

Dust and Noise Effects

The proposal is not considered to be an Industrial or Rural Industrial activity as there will be no processing of minerals associated with the quarrying activity/gravel extraction on the site. The excavated gravel is not processed or crushed on the site. It is transported to the applicant's established crushing plant at another location.

Noise from the site associated with the activity will primarily be from the hydraulic excavator and loading of the dump truck. The Applicant's acoustic engineer states that the noise generated from this activity will be able to meet the TRMP noise restrictions, which is lower than noise conditions imposed on RM150901. It is considered that the site is within a working rural environment and the noise generated from the activity will not be out of character or considered excessive given the surrounding land uses. It is also considered that the noise generated from an excavator and dump truck is not considered out of place within the Rural 1 environment or other activities permitted in the Rural 1 Zone. The stage 2 & 3 excavation areas are also surrounded by a stop bank, which would act as further bunding and screening from the noise generated from the extraction activities.

All practical measures will be taken to ensure that any dust created by gravel extraction operations at the site will not become a nuisance or hazard to the public or adjacent property occupiers. The measures employed will include reducing vehicle speeds and the watering of traffic movement areas and stockpiles as may be required.

Heavy Vehicle and Traffic Effects

The applicant states that heavy vehicle movements from the entire site associated with the gravel extraction will be restricted to 30 truck movements per day. This increase in traffic is minor when considering that the Motueka River West Bank Road carries traffic volumes in the 1,000 to 3,000 vehicles per day range (vpd), and the Motueka Valley Highway carries >3,000vpd (based on their hierarchy classification).

Similar gravel extraction consents (e.g.: RM180813, RM150901) have been granted downstream of the application site where gravel has been transported along Douglas Road, a lower hierarchy 'Access Road', and where heavy vehicles pass directly adjacent to numerous Rural 1 residential activities at the site's entrance. Under these consents, the traffic and amenity effects associated with the gravel transportation were deemed to be less than minor, and it is considered that this proposal should be assessed in the same way because the Motueka River West Bank Road is already providing for heavy vehicle use, particularly logging trucks, and the same is true of the Motueka Valley Highway, which was previously classified and constructed as a state highway. It is considered that the traffic, safety and amenity effects from this proposal will be less than minor when considering the existing environment.

Furthermore, the proposed vehicle crossing has been assessed by Gary Clark of Traffic Concepts Ltd, who considers the sight distances at the crossing are sufficient for vehicles to exit and enter the site safely, but recommends that the sight lines should be improved to increase the margin of safety for truck exiting the site by removing two willow trees and carrying out some bank trimming (refer Annexure D). These recommendations are volunteered as conditions of consent.

Visual Amenity Effects

Excavation will be limited to 3,000m^2 at any one time, so the visual impact of the activity will be constrained. Additionally, the stop bank (stages 2 & 3) and the proposed planting (stage 1) will aid in limiting visual effects outside of the property through shielding works from nearby properties and public spaces. Properties that are located at higher topographies on the surrounding hills are all greater than 240m from works. These dwellings have presumably been placed in order to obtain sea and/or mountain views and quarrying will have no impact on this. With the restricted size of excavation and the distance to works, quarrying will form part of the overall working rural environment, and there will be no significant visual impact on neighbouring houses as there are none other than that on the application site.

The extraction of gravel in this region is quite common and there are several downstream (Rural 1 and Land Disturbance Area 1) locations where large excavation pits have been turned into wetlands, so would have had more of a visual impact during works than what is proposed within this application. Additionally, large-scale clear felling of pine plantations in the hills surrounding the application site occurs relatively frequently, with a ~500,000m^2 swathe of land currently exposed/regenerating only 1.5km from the application site. Therefore, in comparison to these nearby activities, the visual effects from this proposal will be minimal.

Flood Effects

The majority of works will be inside the stop banks, so are unlikely to be affected by flooding during the lifetime of the consent. However, for those works within the berm land (but including all other land as well), the size of and orientation of excavations and the fact that they will progressively backfilled will aid in mitigating any erosional effects that open pits in the flood path may have. Additionally, because groundwater levels at the application site are approximately 1m higher than water levels in the Motueka River, if a flood were to affect the application site, any open excavations would also experience increased groundwater levels. Although there is a lag in the rate of groundwater level rise due to buffering from the gravels, it is still likely that groundwater levels within any pits would be high enough to limit any scour effects from overland flow. Furthermore, excavation setbacks, the fact that excavation will not occur on either side of the stop banks at one time and battering near property boundaries will protect the stability of excavation, and all ground levels will be returned to pre-excavation levels, so no deflection of flood flows will occur in the future.

Conclusion

Adverse effects associated with the proposal are considered temporary or intermittent and can be effectively managed or mitigated against. There will be regional and local (Motueka) community benefits arising from the production and end uses the gravel will be put to, and once pasture is re-established the land is likely to be returned to a condition that still provides productive value.

It is considered that the proposal will have minor or less than minor adverse effect on the life-supporting capacity of the environment, and a full set of volunteered conditions is provided in Annexure F that are intended to help achieve this outcome.

Consultation and Affected Parties

The following properties have frontage to the Peach Island paper road and/or the ROW to the Motueka River West Bank Road, so are potentially affected by the proposed access:

- Lot 3 DP 1650 (1928011700) is directly adjacent (south) of the application site (refer Figure 23 below), and is owned by the proprietors of Wakatū (comprised in freehold title NL58/75) which is leased to Douglas and Stephen Allred (leasehold title 41364). This property does not contain a dwelling.
- Pt Lot 1 DP 9860 (comprised in RT NL8C/62) and Sec 1 SO 15112 (comprised in RT NL11A/111) (1928012005) (refer Figures 24 and 25 below) are both owned by Rapid Ridge Trust Limited which is directed by Desmond Corrie-Johnston (one of the CJ Industry directors).
- Lot 1 DP 10395 (1928012001) contains the historic cemetery (N27/150) (refer Figure 26 below).
- Sec 32 Blk III Motueka SD (1933069100) is part of a larger property which extends to the south and across the opposite side of the Motueka River West Bank Road (refer Figure 27 below).
- Crown land (refer Figure 28 below) which is managed by the Department of Conservation as part of their conservation estate.

Furthermore, the following properties are potentially affected by the access because their dwellings are between 80m and 130m from the Peach Island paper road:

- 458, 470, 472, and 478 Motueka River West bank Road (refer Figure 29 below).

Vehicles using this access will observe a speed limit of 30 kilometres per hour, all practical measures will be undertaken to mitigate against dust, and any damage to the ROW (e.g.: potholes) will be promptly fixed by the Applicant. There is limited vegetation in this area due to its primary use as grazing, and the Applicant isn't able to plant amenity screening in land they do not own, so there will be some visual effects associated with the access. However, through the controls listed above, the fact that the TRMP noise limits are assessed as being able to be met, and through the spatial separation that will exist, it is considered that a truck movement approximately every half-hour of the working week will not adversely affect these parties in a more than minor way especially when considering the effects from the existing road network. With this being said, however, a consultation will be undertaken with neighbouring property owners and any feedback will be provided for Council consideration..

Figure 23: *Lot 3 DP 1650*

Figure 24: *Pt Lot 1 DP 9860*

Figure 25: *Sec 1 SO 15112*

Figure 26: *Lot 1 DP 10395*

Figure 27: *Sec 32 Blk III Motueka SD*

Figure 28: *Crown land managed by DOC*

Figure 29: *Neighbouring dwellings close to the paper road*

Figure 30: *Conservation land relative to the application site*

Figure 31: *Snip of Google Earth image dated 13 Feb 2019 which shows clearance of conservation land*

Three small parcels of Crown land adjacent to the application site are zoned Conservation land under the TRMP (refer Figure 30 above). These allotments are managed under the Department of Conservation's (DOC) Conservation Management Strategy and are classified as 'Marginal Strip – Motueka River' under section 24(3) of the Conservation Act. Section 24C of the Conservation Act states the purposes for which marginal strips are to be managed, however, DOC's Senior Ranger – Community, Lionel Solly, has advised that these strips are not being actively managed and that the recent clearing of vegetation that has occurred here (refer Figure 31 above) was likely undertaken by adjacent landowners. The northern most lot is directly adjacent to proposed stage 1 excavations and will experience some adverse effects as a result, however, because this land is separate to the conservation estate, and not actively used or managed, it is considered the effects on this land are temporary and readily mitigated against. Additionally, the Applicant has volunteered that the amenity planting which is proposed along this shared property boundary be species which are complimentary to DOC's marginal strip goals, e.g.: native riparian type vegetation, which will limit adverse visual, dust, and erosion effects.

The closest neighbouring dwelling to the proposal is number 132 Peach Island Road (1933075401), which will be approximately 190m from the proposed excavations at the closest point. This house will be separated from works by unexcavated land surrounding the subject site's dwelling, will be shielded from visual effects by the established vegetation on their property, and will not be subject to vehicle movement effects. All other nearby dwellings are either protected from visual effects from the works

by the stop bank, or through horticultural plantings. Properties that are located at higher topographies on the surrounding hills, will be subject to greater visual effects from the proposal, but are all greater than 240m from works, which along with the proposed restricted size of excavation limits the effects.

Tiakina te Taiao and Ngāti Kuia were consulted following rejection of the initial gravel extraction application (RM190818) and concerns were raised primarily about the intention to cross the Motueka River with extracted material. For this reason, the proposal has been materially altered and the current access and transportation route has been proposed so as to protect the mauri and wairua of the river. Additionally, through setbacks from surface water, buffering from groundwater, and stormwater and dust management, it is considered that there will be less than minor effect on water quality (which the Statutory Acknowledgement relates to), and the restrictions on water quality effects within Section 107 of the RMA as well as within the Motueka Water Conservation Order can be met. Furthermore, there are no known cultural heritage/archaeological sites within the application site, and due to the fact that the Motueka River naturally avulsed over this site until the stop banks were formed, it is considered unlikely that any artefacts will be uncovered as a result of works. In accordance with similar gravel extraction consents in this area, accidental discovery protocol will be in place both at the application site and the screening yard. It is considered that this will sufficiently mitigate any risks to cultural heritage from the proposal, and for this reason, as well as those outlined above, Te Tau Ihu Iwi are not considered to be adversely affected by the proposal.

Part 2 of the Resource Management Act

The proposed development will achieve the purpose and principles of the Resource Management Act 1991. It will promote the sustainable and efficient use of land, compatible with the existing rural production of this locality, and without compromising the use and enjoyment of neighbouring properties. There will be no long-term loss of the life-supporting capacity of land, water or other resources and the development will not adversely impact on the wider rural and riverine environment. Stormwater disposal can be managed within the application site, while avoiding the off-site effects from the discharge of contaminants, and wastewater is reticulated. There are no matters of national importance (Section 6) or Treaty regards (Section 8) at risk from this application.

Section 95 of the Resource Management Act

As detailed above, adverse effects on the environment will be less than minor, and there will be less than minor effects on persons, including those owning or occupying adjacent land. Accordingly, it is requested that the Council consider non-notification of this application pursuant to Section 95 of the Resource Management Act 1991.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**524970**
Land Registration District	**Nelson**
Date Issued	18 October 2010

Prior References
NL6C/588 NL6C/589

Estate	Fee Simple
Area	11.5520 hectares more or less
Legal Description	Lot 2 Deposited Plan 432236

Registered Owners
Timothy George Corrie-Johnston

Interests

Appurtenant to part formerly Part Section 251A Motueka Original District is a right of way created by Transfer 323118.1 - 7.12.1992 at 9:50 am

Subject to a right to convey water, right to transmit electricity and/or other signals, impulses or electronic data over part marked E on DP 432236 created by Transfer 5497200.3 - 24.2.2003 at 9:00 am

Appurtenant hereto is a right to emit noise from hail cannons and other farming activities/equipment, odour from farming activities and drift from agricultural and horticultural sprays and a right to convey telecommunications and computer media created by Easement Instrument 8609694.3 - 18.10.2010 at 9:07 am

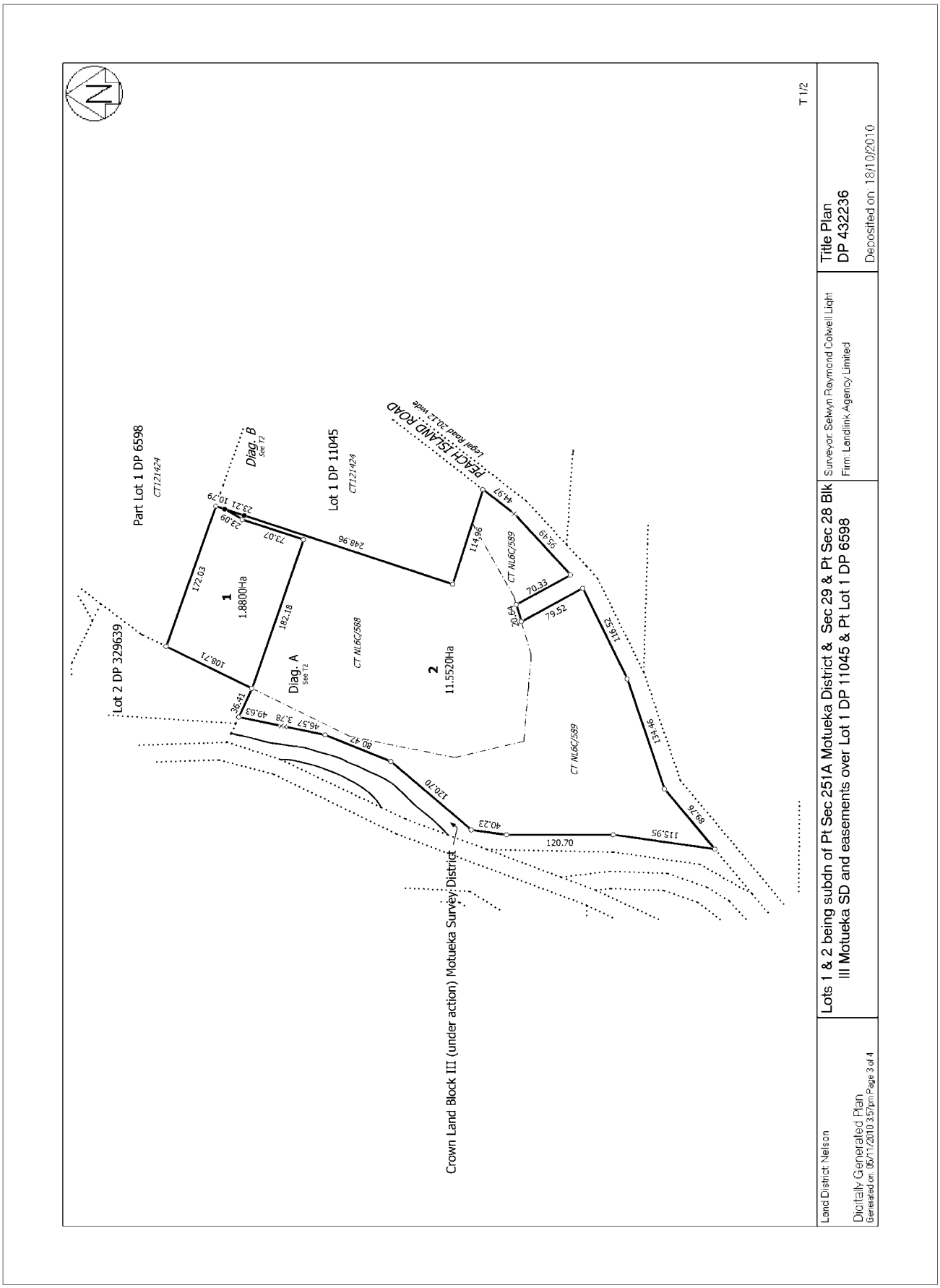
The easements created by Easement Instrument 8609694.3 are subject to Section 243 (a) Resource Management Act 1991

8609694.4 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 18.10.2010 at 9:07 am

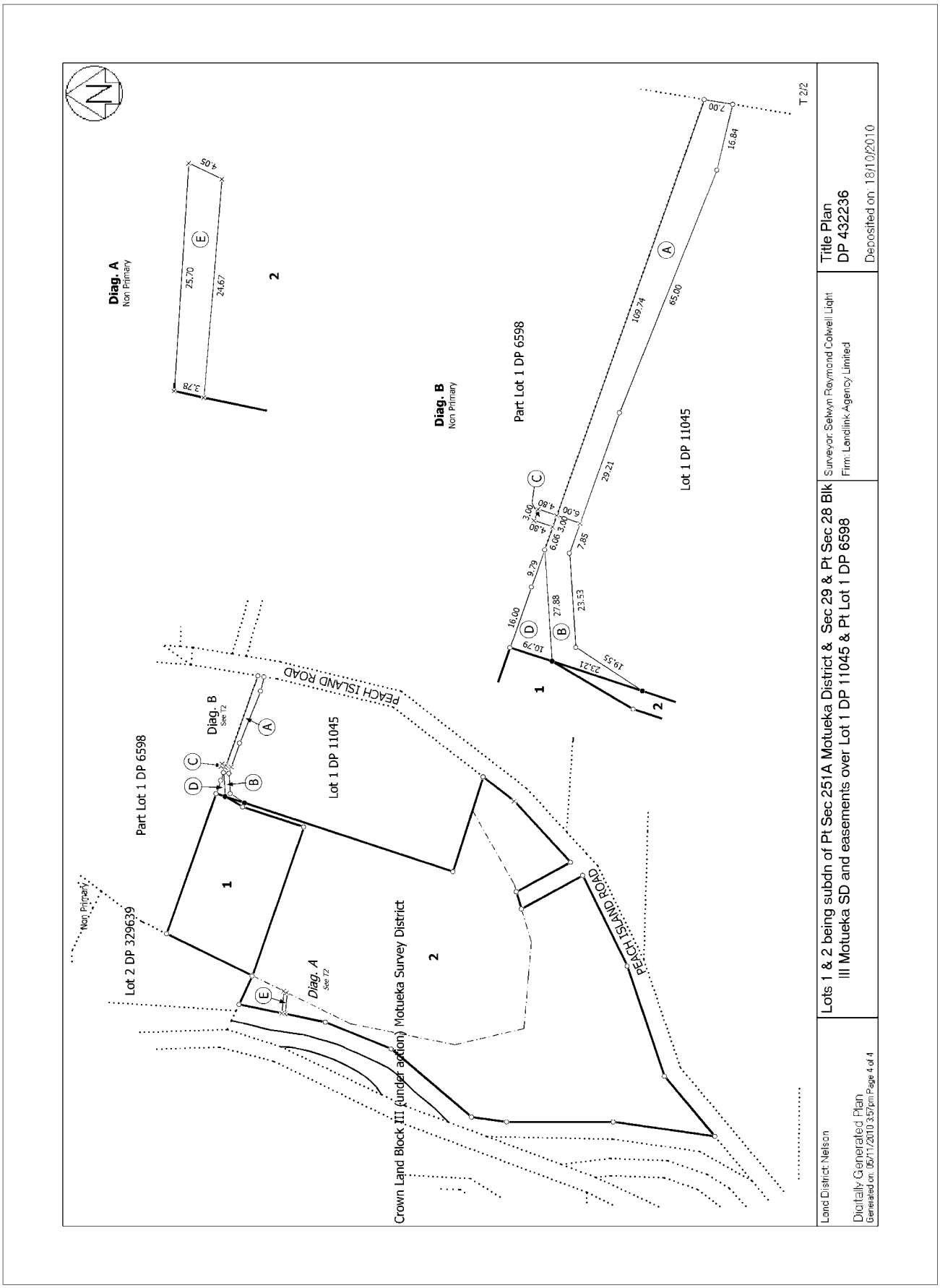
9029327.1 Notification that a building consent issued pursuant to Section 72 Building Act 2004 identifies Inundation as a natural hazard - - 3.4.2012 at 7:00 am

11367881.3 Mortgage to ANZ Bank New Zealand Limited - 1.3.2019 at 2:41 pm

Identifier 524970



Identifier 524970



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
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REGISTRAR-GENERAL OF LAND NEW ZEALAND

R.W. Muir
Registrar-General
of Land

Identifier	**NL77/73**
Land Registration District	**Nelson**
Date Issued	17 January 1936

Prior References
NL76/126

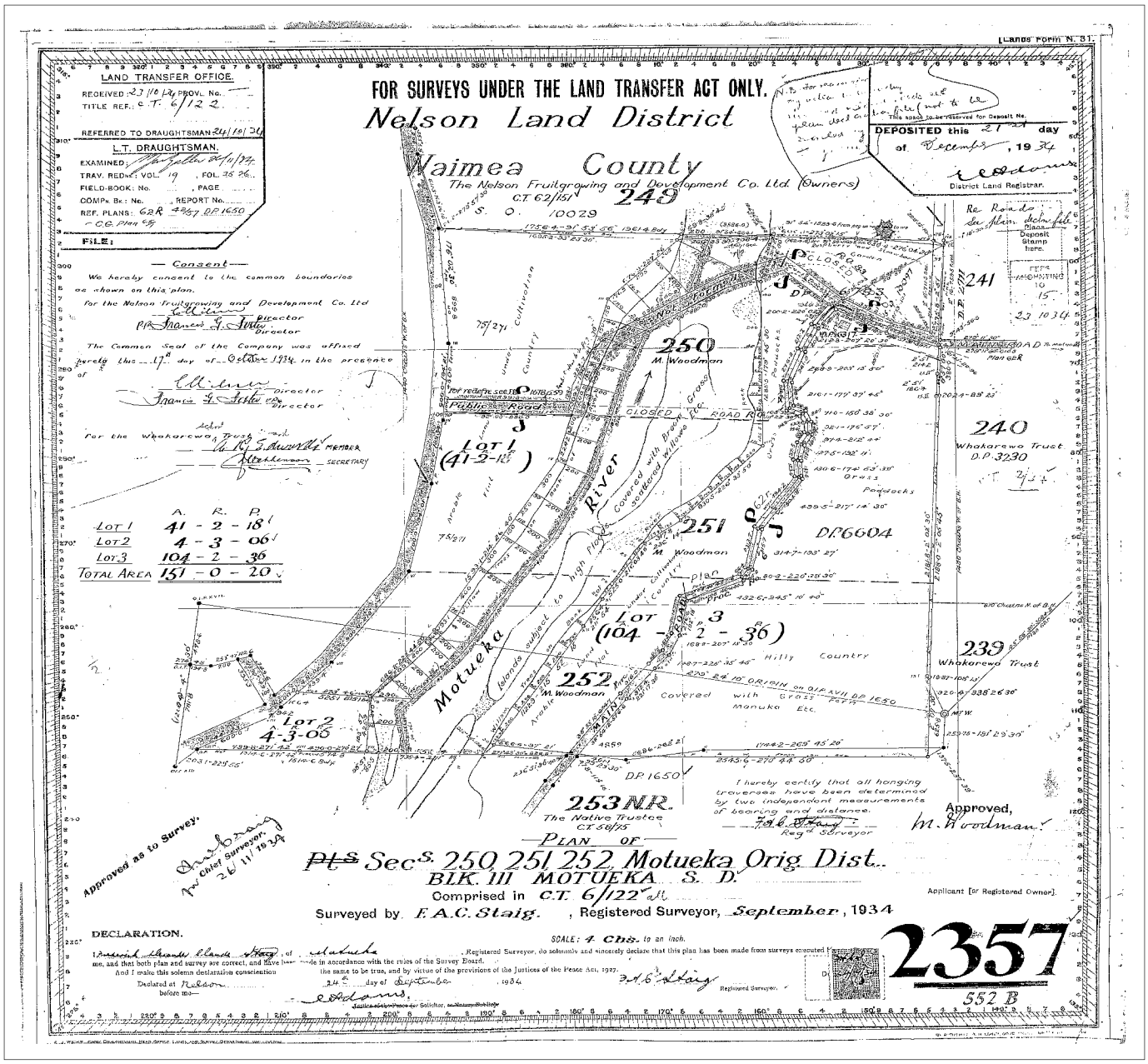
Estate	Fee Simple
Area	1.9374 hectares more or less
Legal Description	Lot 2 Deposited Plan 2357

Registered Owners
Timothy George Corrie-Johnston

Interests

11367881.3 Mortgage to ANZ Bank New Zealand Limited - 1.3.2019 at 2:41 pm

Identifier NL77/73



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NL11A/1111**
Land Registration District	**Nelson**
Date Issued	10 August 1994

Prior References
GN 340270.1

Estate	Fee Simple
Area	1.2330 hectares more or less
Legal Description	Section 1 Survey Office Plan 15112
Registered Owners	

Rapid Ridge Trust Limited

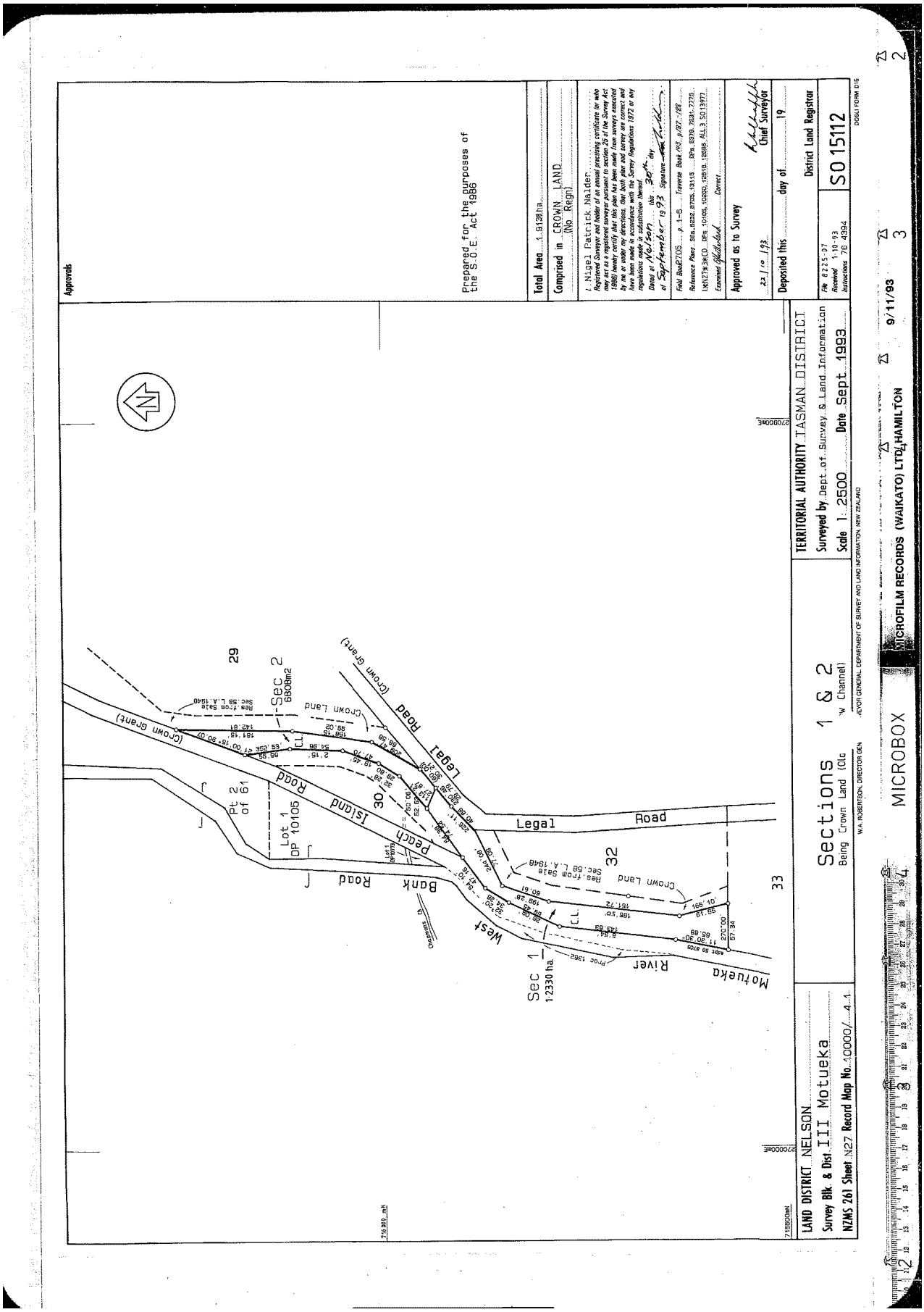
Interests

Subject to Part IV A Conservation Act 1987

Subject to Section 11 Crown Minerals Act 1991

10900338.2 Mortgage to Westpac New Zealand Limited - 13.9.2017 at 12:44 pm

Identifier **NL11A/1111**



HEGLEY ACOUSTIC CONSULTANTS

1/355 Manukau Road
Epsom, Auckland 1023
PO Box 26283
Epsom, Auckland 1344

T: 09 638 8414
E: hegley@acoustics.co.nz

EXCAVATION OF RIVER RUN

134 PEACH ISLAND ROAD MOTUEKA

ASSESSMENT OF NOISE

Report No 19213

Prepared for:

CJ Industries Ltd
Attention: Richard Deck

Prepared by: .....

Rhys Hegley

December 2019

CONTENTS

1. INTRODUCTION

It is proposed to excavate river run material from part of the site at 134 Peach Island Road in Motueka. No processing is proposed for site meaning the rock will simply be loaded onto road trucks for removal from site. This report summarises the investigation undertaken for the noise levels expected from the proposed activities and the potential effects of that noise on the surrounding community.

2. THE PROPOSAL

The excavation of river run material from part of the site will commence with the removal of topsoil and over burden. This material will be stockpiled about the perimeter of the site for use during rehabilitation at the completion of the works. While the bunding may offer some screening of activities to the neighbours, and therefore be of benefit when considering noise effects, this report ignores any such benefits. There is therefore the potential that the levels will be lower than reported.

Once the river run is exposed, it will be removed with an excavator, assumed to be a 20t machine and either loaded into waiting road trucks or stockpiled for later use. Excavation will only occur over parts of the site, as identified on Figure 1 below. The stockpiled material may be transported about within the site with dump trucks and, when required, will be loaded onto road trucks with a front-end loader.

No material will be processed on site meaning no crusher or screens.

The river run material will be removed from site in a series of stages with one stage being completed before the commencement of the next. Road trucks will enter the site from the south before travelling to the area being worked to be loaded before returning via the reciprocal path. This route is shown on Figure 1

below. It is understood that 15 road trucks per day are expected to visit the site (30 movements). However, to demonstrate that there is some flexibility in the analysis, calculations have been based on 4 return trips (8 movements) per hour.

All work on site will occur within the daytime hours as defined by the Tasman Resource Management Plan (TRMP) and which can be summarised as:

- Monday to Friday 7.00am to 9.00pm; and
- Saturday (excluding public holidays) 7.00am to 6.00pm.

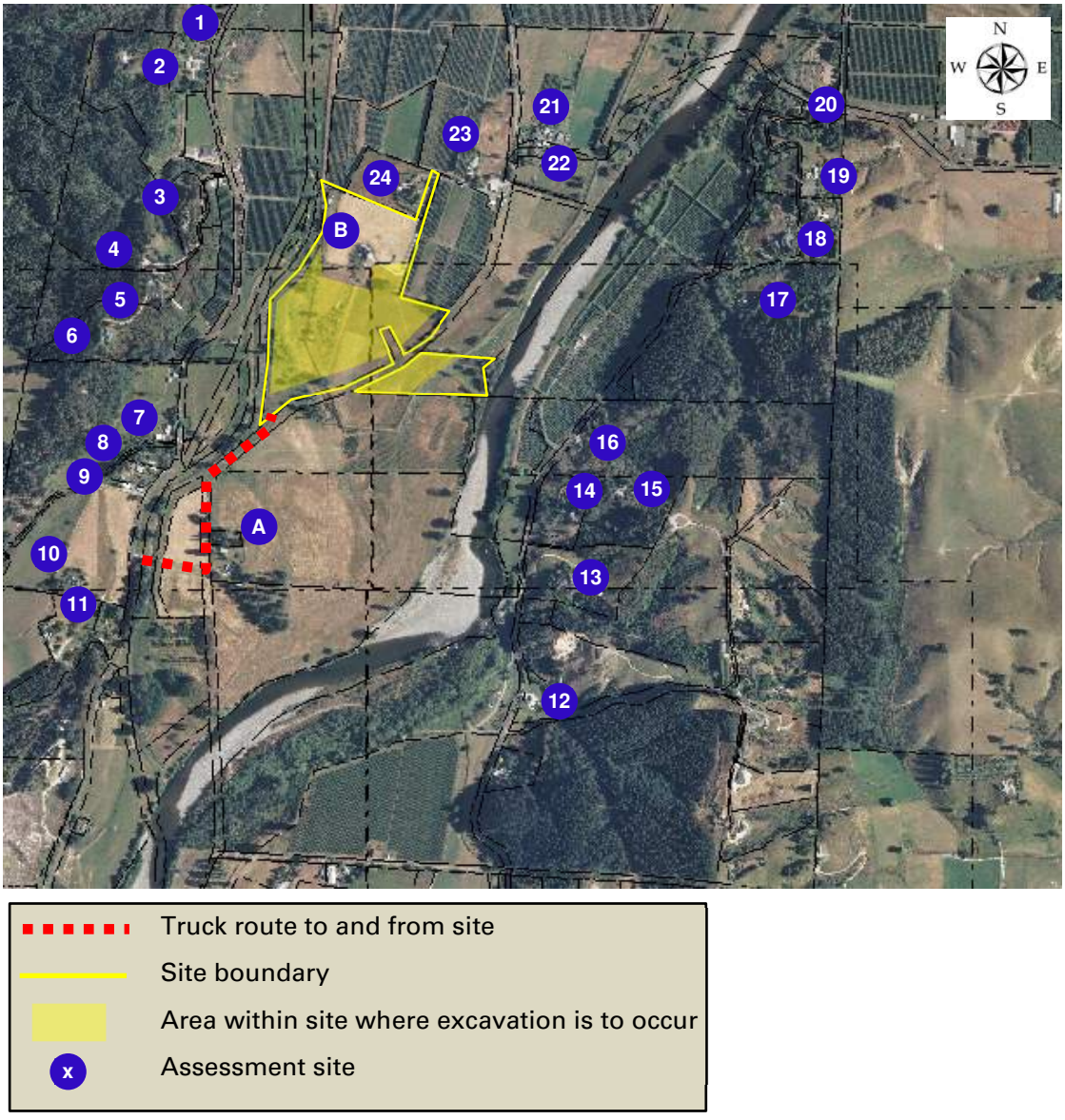


Figure 1. Aerial Photograph of Site and Surrounding Area

3. THE TASMIN RESOURCE MANAGEMENT PLAN

Within the TRMP the site, and all surrounding sites are zoned Rural 1 so noise from the proposed activities must comply with rule 17.5.2.1(c) as follows:

Except in the Richmond West Development Area, noise generated by the activity, when measured at or within the notional boundary of any dwelling in a Rural zone (other than any dwelling on the site from which the noise is being generated), Rural Residential, Papakainga or Tourist Services zone, or at or within any site within a Residential Zone, does not exceed:

	Day	***Night***
L_{eq}	*55 dBA*	*40 dBA*
L_{max}		*70 dBA*

N.B. Day = 7.00 am to 9.00 pm Monday to Friday inclusive and 7.00 am to 6.00 pm Saturday (but excluding public holidays).

Night = All other times, plus public holidays.

The measurement and assessment of noise at the notional boundary of a dwelling applies whether the measurement location is within Tasman District or in an adjacent district.

Noise must be measured and assessed in accordance with the provisions of NZS 6801:2008 Acoustics - Measurement of Environmental Sound and NZS 6802:2008 Acoustics - Environmental Noise.

4. METHOD OF NOISE PREDICTION AND ASSESSMENT

4.1. Noise Prediction

Noise from the proposed activities was calculated to the surrounding sites using the Predictor computer prediction program. Predictor is noise modelling software in which a full scale, three-dimensional model of the proposal and surrounding area can be developed from the existing ground contours, plans of the proposal and aerial photographs. Calculations are in accordance with ISO 9613 parts 1 and 2 and include all variables that affect the propagation of noise, and in particular:

Ground contours	Ground contours for the entire area within the noise model were downloaded from the Top of the South GIS system.
Surrounding dwellings	These were located from the aerial photograph of the area and are shown on Figure 1.
Ground absorption	These have been modelled as hard earth to approximate summer conditions. The river has been modelled as acoustically hard.
Weather	In accordance with NZS 6801, predictions were undertaken with slightly positive meteorological conditions.
Base noise data	The base noise data entered into Predictor for the various activities is all based on measurements of other, similar activities. Two sets of base data have been used for the road trucks, one for empty trucks

	arriving on site where noise is controlled by body rattle and a second for full trucks leaving site.
Screening	All modelling assumes that the plant is at current ground level. Any screening that becomes available from the edge of the cut (and potential bund above it) is not considered.
Plant location	Predictions have been undertaken for the plant operating in a range of locations across the site to determine the upper most level to each site over the life of the proposal. When considering this approach in combination with that taken for the screening and weather (discussed above) it can be seen that the predicted levels represent the uppermost levels from the activity and that, for the remainder of the time, noise will be less than predicted.

4.2. Noise Assessment Method

Once calculated, the predicted levels have then been adjusted in accordance with the requirements of NZS 6802, and as summarised below.

Averaging	NZS 6802 recognises that a sound that is only present for part of the time results in less effects than a continuous sound and allows the calculated noise level to be averaged over the daytime limit as described by the TRMP (section 3). While it is considered that work on site will have finished well before the 9.00pm termination of the daytime period of Monday to Fridays, there is the potential that work

	may continue to 6.00pm extending of daytime on Saturdays. For this reason, the noise levels reported below have not been averaged. Again, this results in a conservative assessment for most days.
Special Audible Characteristics (SAC)	NZS 6802 penalises sounds with special audible characteristics (SAC) that can be particularly annoying and gives tonality and impulsiveness as examples of such sounds. For the proposal, the only activity that could potentially result in a SAC is the tonal reversing alarms on the plant. Should such alarms be required on the onsite plant, they will be replaced by broadband alarms that do not contain a SAC and no adjustment has therefore been made to the analysis. As there is no control over the type of reversing alarm on road trucks visiting the site, the trucks will be managed so that they do not need to be reversed while on site.
Written consent	Two properties (A and B, Figure 1) have provided written consent to the project. As such, the effects of noise have not been considered to either property.

5. PREDICTED LEVELS

The following Table reports the noise levels to the sites shown on Figure 1 when predicted as described above. The predicted levels represent the upper level of noise expected from the proposal over its lifetime and levels will generally be lower than reported.

Table 1. Predicted Noise Level from Proposal

Site (Fig 1)	Site Address	Predicted Noise Level (dBA L_{eq})
1	352 Motueka River West Bank Road	38
2	370 Motueka River West Bank Road	40
3	392 Motueka River West Bank Road	48
4	394 Motueka River West Bank Road	38
5	396 Motueka River West Bank Road	49
6	398 Motueka River West Bank Road	45
7	458 Motueka River West Bank Road	50
8	470 Motueka River West Bank Road	50
9	472 Motueka River West Bank Road	49
10	478 Motueka River West Bank Road	44
11	506 Motueka River West Bank Road	44
12	155 Motueka Valley Highway	36
13	133 Motueka Valley Highway	41
14	119 Motueka Valley Highway	38
15	Motueka Valley Highway	42
16	85 Motueka Valley Highway	44
17	45 Motueka Valley Highway	34
18	273 College Street	37
19	269 College Street	35
20	279 College Street	28
22	121 Peach Island Road	44
23	130 Peach Island Road	46
24	132 Peach Island Road	49

6. Assessment of Noise Effects

Reviewing Table 1 it can be seen that the predicted levels of noise range from 28dBA L_{eq} (Site 20) to 50dBA L_{eq} (Sites 7 and 8). These levels, which represent the uppermost noise expected from the proposal, comfortably comply with the 55dBA L_{eq} limit of the TRMP. This being the case, it has been concluded that the resulting levels of noise from the proposal will be reasonable and that the effects, therefore, will be less than minor.

7. Conclusions

It is proposed to extract river run material from part of the site at 134 Peach Island Road in Motueka. Analysis using measurements of plant undertaking similar activities has shown that, even when the plant is operating in its most exposed location to each of the surrounding sites, the resulting noise levels will comply with the limits of the TRMP noise rule with at least a 5dB factor of safety. It has therefore been concluded that noise will be reasonable and the effects less than minor.

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Trafficconcepts LTD

PO Box 3737
Richmond 7050
Tasman District
M +64 (0) 21 243 1233
E+gary.clark@traffic-concepts.co.nz

07 June 2020 Ref: 0717

Hayden Taylor
Planscapes
PO Box 90
Nelson
Nelson 7040

Dear Hayden

Proposed Gravel Extraction – 493 Motueka River West Road - Motueka
Access Assessment Report

Following from your instructions, I have now completed my analysis of the existing access for the proposed gravel extraction operation at 493 Motueka River West Road in Motueka.

1. Introduction

A resource consent application has been prepared which sets out the proposed activity and has volunteered conditions included in the documentation. Briefly the consent application seeks to extract around 1,000,000 million tonnes of gravel over 15 years across one land separate title on the banks of the Motueka River.

The assessment considers the use of the existing access at 493 Motueka River West Bank Road for trucks. The assessment considers the sight distances, the speed environment and provides recommendations to allow the safe use of the access for trucks and other vehicles.

The analysis of the proposed site access includes site measurements, a speed survey, and the location of the existing driveway in relation to the surrounding road environment.

The assessment of the safety of the existing access considers the measured operating speed, the available sight distance and the relevant best practice guidelines around providing an access that can be used safely. The preferred best practice document of being Austroads has been used for the purpose of the analysis and assessment.

Consideration was also given to the expected increased use of the access and particularly by trucks. The gravel extraction activity will see around 30 truck movements per day using this existing site access. It is noted that due to the type of activity and how it will be managed, there will be one truck visit in any one 30-minute period.

2. Access Description and Location

Motueka River West Bank Road is a narrow winding road with a sealed width of around 6.0 metres. The road is marked with a centreline with no kerb and channel or footpaths. There is a narrow-grassed shoulder along most of its length.

The posted speed limit is 80 km/h. The operating speed has been measured in accordance with the requirements set out in Austroads. The operating speed has been measured at 68km/h. It was noted that there was a wide variance in speeds with the fastest recorded speed being 90km/h and the lowest being 41 km/r.

Figure 1 shows the location of the existing access that will be used by the gravel extraction activity.

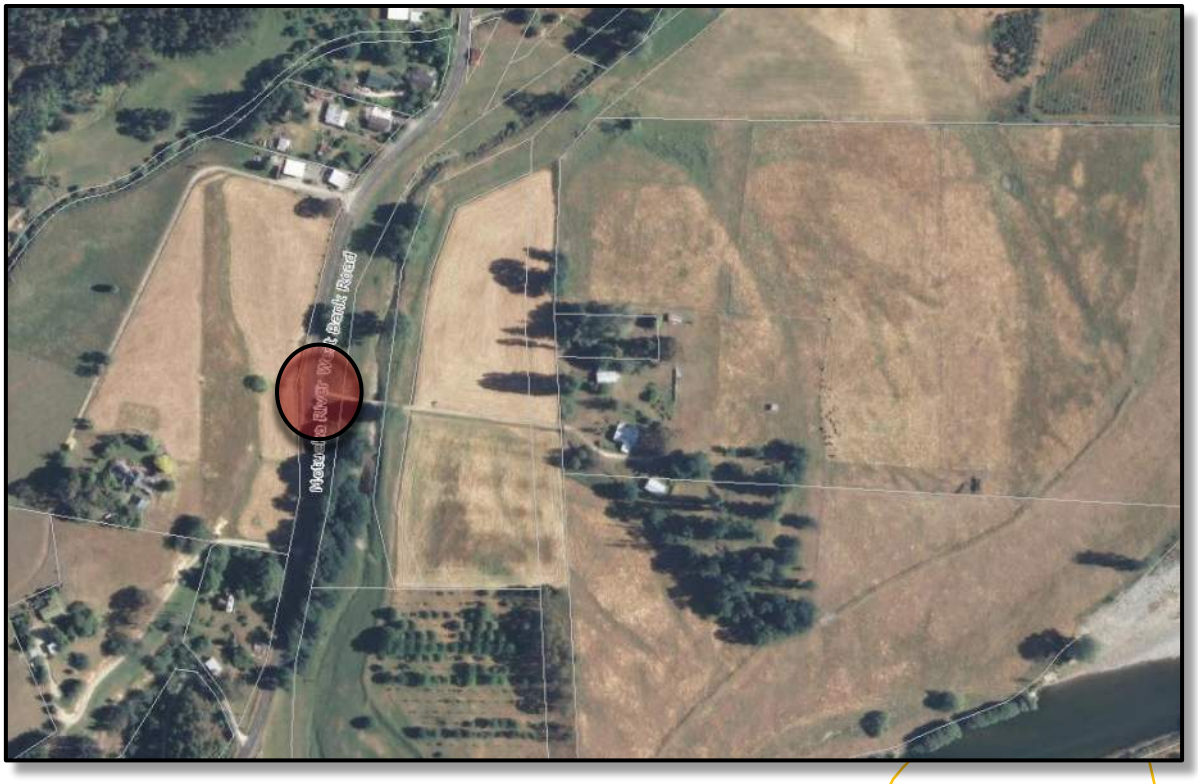


Figure 1: Access location (Source: Top of the south Maps)

As shown provides access to 493 Motueka River West Bank Road and to the Motueka River.

The road to the north of the access is on a moderate curve on a flat graded road with sight distance limited by a large willow tree. The road to the south of the access is a slight curve with sight distance obscured by a willow tree and bank on the inside of the curve.

Figure 2 shows the sight lines to the north for vehicles exiting the existing site access.

Figure 2: Sight distance to the north of the existing access.

As shown the sight distance to the north is limited by the willow tree which creates no issues in the winter but in the summer months the greenery blocks the sight lines. The measured sight distance from 2.5 metres back from the edge of the carriageway was 121 metres to the centre of the traffic lane pat the tree.

Figure 3 shows the sight distance to the south of the existing access.

Figure 3: Sight distance to the south of the existing access.

As shown, the sight distance to the south is also limited by a willow tree which creates no issues in the winter but in the summer months the greenery blocks the sight lines. There is also a bank on the western side of the road that also restricts the sight distance.

The measured sight distance from 2.5 metres back from the edge of the carriageway was 134 metres to the centre of the traffic lane.

3. Sight Distance Analysis and Assessment.

As noted above the Austroads suite of guidelines have been used to assess the appropriate sight distances and more importantly is the existing access able to operate safely for all road users with respect to the sight lines to the north and south.

Austroads Part 3, Part 4 and Part 4a set out a number of elements for the assessment of sight distances. These elements include reaction time, operating speed, road grade and coefficient of deceleration. For the purpose of the analysis the following parameters have been used to assess the available sight distance and safety of the road users.

- A reaction time of 2.0 seconds has been assumed. Even through lower reaction times can be used it is considered appropriate to use this higher value due to the environment and driver's likely to be less alert than other road environments such as winding roads. We note that 2.5 seconds was considered too high in this constrained environment.
- A coefficient of deceleration (d) of 0.36. This is a standard default. High coefficient can be used be this has been used as a conservative approach to the assessment.
- An operating speed of 68 km/h has been assumed. The posted speed limit is 80 km/h. It is assumed that drivers would be travelling closer to the operating speed due to the road environment.
- The road is flat so adjustment for grade has been made.

The key criteria is the Safe Stopping Distance (SSD) which allows motorists on the main road to see a vehicle in the middle of the lane and react and stop without colliding with the opposing vehicle.

3.1. Safe Stopping Distance (SSD)

Using Austroads Part 3 Table 5.5 for the assumptions noted above we get an SSD of 88 metres for the operating speed. Noting that at the posted speed limit (80 km/h), the SSD requirement would be 114 metres.

It is important to note that this criterion assumes a driver eye height of 1.1 metres and an object height of 0.2 metres. The drivers eye height is 1.1 metres and the object height in this situation is at least 1.25 metres (the minimum height of a car). It should be noted that trucks have a higher drivers eye height of 2.4 metres.

As noted above the available sight distance is 121 and 134 metres to the north and south respectively. The available sight distances easily meet the required SSD criteria for the operating speed and posted speed limits for a reaction time of 2.0 seconds.

A further analysis was done using the posted speed limit and the higher reaction time of 2.5 seconds. The calculated SSD requirement is 126 metres.

Based on the above drivers are able to identify, react and stop safely, if required to do so.

3.2. Truck Factors

As noted above the access is to be used by up to 15 trucks (30 vehicle movements) to remove gravel.

Heavy vehicles will be easier to see, will be slower moving across the access and entering and exiting the road. The sight distances will allow motorists to assess react and stop if required should a conflict situation arise.

Trucks are large slow-moving vehicles that require more time to cross the road and therefore any increase in the sight lines is seen as a positive effect.

As noted above, it was observed that there is a wide variety of vehicle speeds along this section of Motueka River West Bank Road. This may, at times, create some situations where approaching vehicles will need to stop more quickly, which is provided for under the Austroads calculations. These faster moving drivers are also likely to be more alert due to the higher speeds they are travelling at.

However, it is considered that some tree removal and bank trimming would be appropriate to assist trucks exiting the site and improve the SSD for motorists approaching the access.

4. Recommended Measures

As noted above there is some benefit in improving the SSD in both directions for the vehicles approaching the access. This will also assist trucks drivers when exiting the site. The measures, while not necessary, are recommended as they will provide a greater margin of safety for interacting vehicles. These measures will also account for vehicles that are travelling at higher speeds along Motueka Rive West Bank.

As shown in the photograph above (Figure 2) there is a willow tree on the northern side of the access which restricts the sight line in this direction. While it is possible to see through this willow tree in the winter, at times when there are leaves on the tree the sight distance is restricted.

The removal of this tree will increase the SSD to around 230 metres which is around 110 metres more than what is currently available.

With regard to the SSD (Figure 3) to the south, the sight line is restricted by a willow tree and a bank within road reserve on the western side of the road. It is recommended that the willow tree to be removed and some trimming of the bank be carried out.

The removal of the willow tree and bank trimming will increase the SSD to around 200 metres which is an increase of around 65 metres

Figure 4 shows the two trees to be removed and the location of the banks trimming.

Figure 4: Location of Recommended Measures. (Source: Top of the South Maps)

The trees to be removed are shown in the red circles with the bank trimming highlighted with the yellow circle.

These measures will improve the safety of the access with its proposed increased use. There are no other aspects of the existing access that requires further improve to accommodate the expected use of the access.

5. Haul Route

The haul route within the site will use river reserve and a paper road. This route could also be used during emergencies for Peach Island residents if the bridge to the north is blocked.

The haul route will use the access from Motueka west Bank Road on to the existing bridge and then on top of the bank, next to the stream for a distance of around 200 metres. From this point the haul road will follow the paper road for around 340 metres.

All the land the haul road follows is managed by the applicant with it mostly being used to graze stock. Upon completion of the gravel extraction the haul road that is on river reserve will be mediated and planted in natives.

Figure 5 shows the haul route for the removal of gravel.

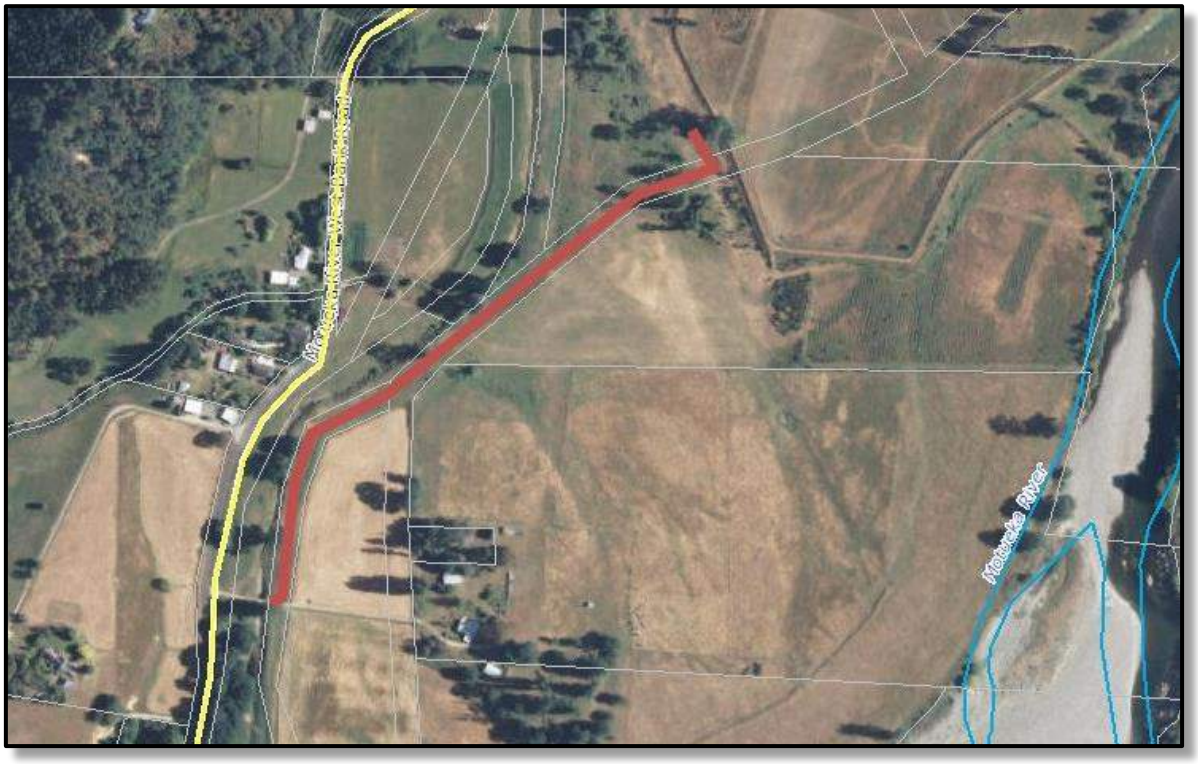


Figure 5: Haul road

As shown the haul road is around 550 metres and provides relatively easy access to the gravel extractions areas for which consent is sought.

6. Conclusion

The available sight distances at the existing access are sufficient for vehicles to exit and enter the site safely.

The sight lines should be improved to increase the margin of safety for truck exiting the site by removing two willow trees and carrying out some bank trimming. This is recommended and will assist trucks expected to use the existing access.

We are happy to provide any further clarification if required.

Regards

Gary Clark
Director
NZCE (Civil), REA, MIPENZ, CPEng

Peach Island Groundwater Assessment/Hydrology Report

Prepared for: CJ Industries Ltd

Prepared by: Envirolink Ltd

Regan Martin

Tony Hewitt

Date: 5 December 2019

79 Pomona Road, Ruby Bay, Nelson 7173
P.O. Box 25, Mapua, Nelson 7048, New Zealand
Telephone +64 3 540 2064 | email: tony@enviro.net.nz
18 Market Street, Timaru 7910, New Zealand
Telephone +64 223 198 768 | email: dion@enviro.net.nz
web: www.envirolink.co.nz

Contents

Introduction

The purpose of this report is to compare groundwater levels at Peach Island with water levels in Motueka River. A second part of the assessment involving Lucas Block will be completed at a later date.

The report is required to support a land-based gravel extraction proposed for the property, where excavations of up to 5m deep are expected.

Two private water bores have been used as monitoring locations for this assessment, **WWD4582** (Lucas Block bore) and **WWD3003** (Peach Island Block well). They are separated by a distance of 850m. Relevant information regarding these is provided in Figures 4-10.

The period of assessment covers from 15th October to 4th December 2019.

Method

Scout Water level sensors were installed in the bores to measure fluctuations in water level over time.

Water level sensors were set to record at 15-minute intervals. Recording accuracy is +/- 3mm which complies with National Environmental Standards (NEMS) for continuous water level measurement.

Lucas Block **WWD4582** (bore)- Level Scout and Baro Scout deployed 15th October 2019.

Peach Island Block **WWD3003** (well) – level scout deployed 18 October 2019.

All sensors retrieved 4th December 2019.

Manual recording taken from top of bore/well casings to groundwater level were taken on deployment and retrieval of sensors.

Motueka River water level data was supplied by Tasman District Council from their recorder at Woodman's Bend. Data is provided in Table 1.

Data from the Scout recorders was downloaded and processed using Hilltop software package.

Peach Island data has been reduced to MSL (assumed to be NVD1955) using known level at the Motueka River recorder (Figure 1).

This surveying was undertaken on the 4th December 2019. The final link between the two bores is still to be done.

Results

Table 1: Comparison of manual water level readings with Motueka River

	15/10/19	18/10/19	4/12/19
Peach Is RTS (mm)		3100	3330
Lucas RTS (mm)	2950	3100	2610
Motueka River Flow (m3/sec)	65.6	57.8	233.5
Motueka River ESG Water Level	1565	1557	2365

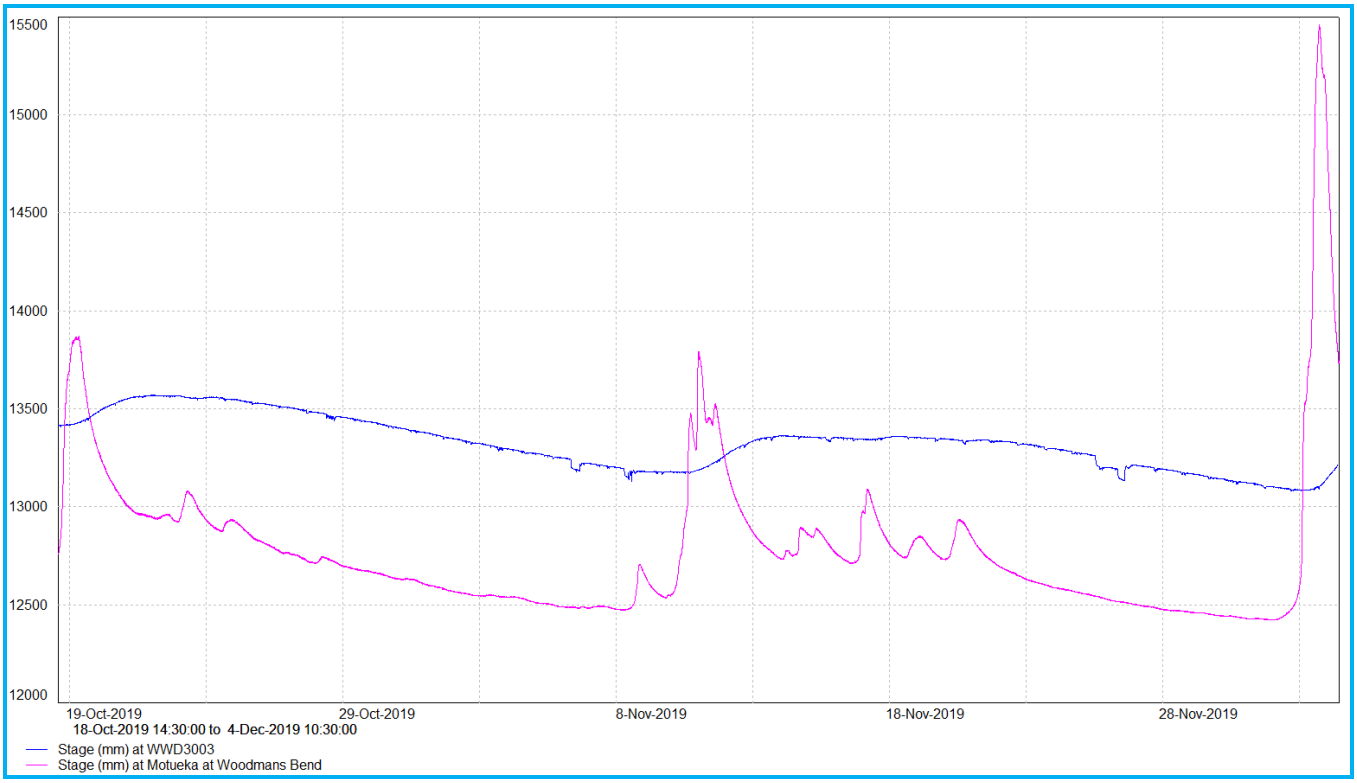


Figure 1: Relative water levels Peach Island monitoring site (WWD3003) and Motueka River at TDC recorder- Woodman's Bend

Flow [Water Level]	DATUM COMMENT: 02/10/2003 Recorder site levelled in by Mark Holyoake of Montgomery Watson. Water level was 15.716m amsl, and the top of the wooden staffBoard was 15.298m amsl (1.698m on the staff gauge). This means the datum of the zero of the staff gauge is 13.600m amsl. Datum is LINZ amsl. Level book was MWH 2 page 34, file 002223-120-25-02.

Figure 2: Information regarding survey level at Woodman's Bend

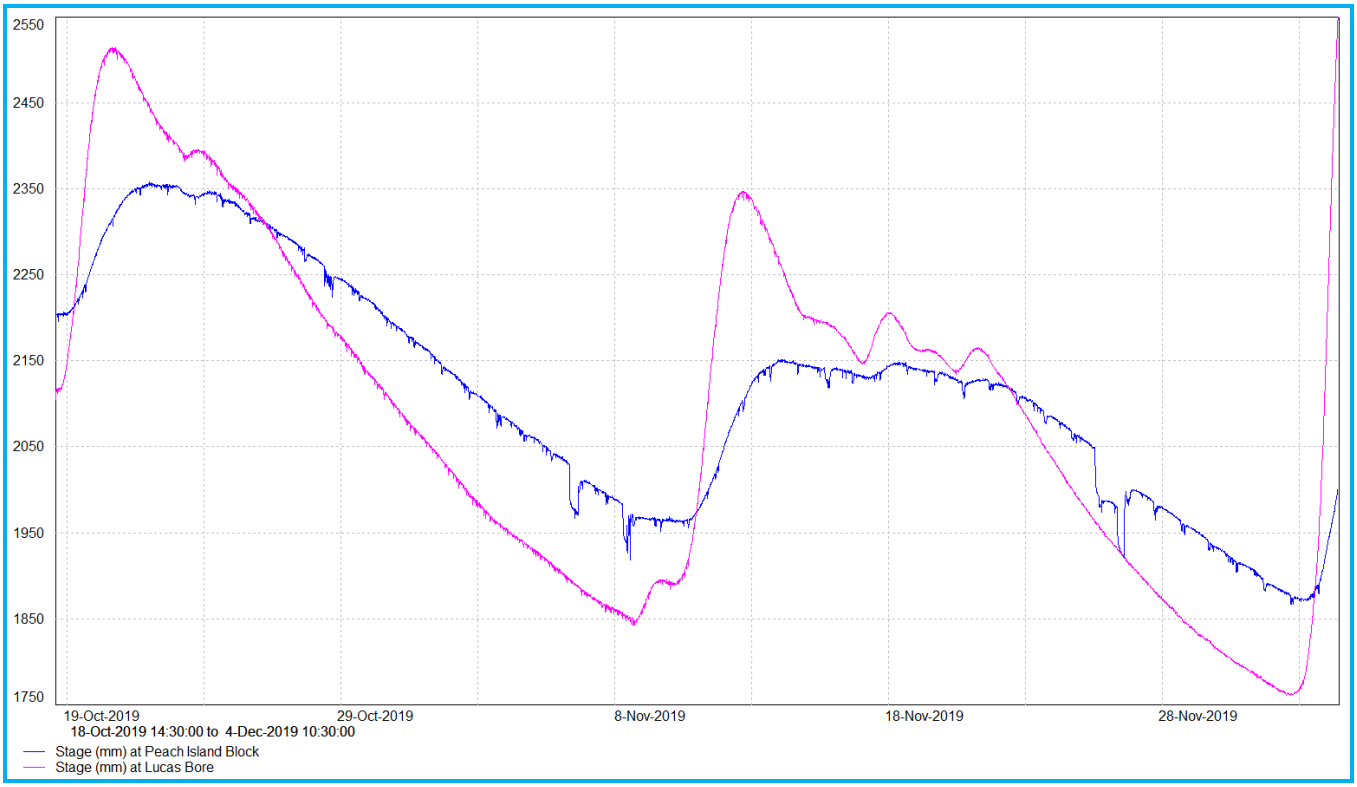


Figure 3: Comparative (raw) water levels between Peach Island and Lucas blocks

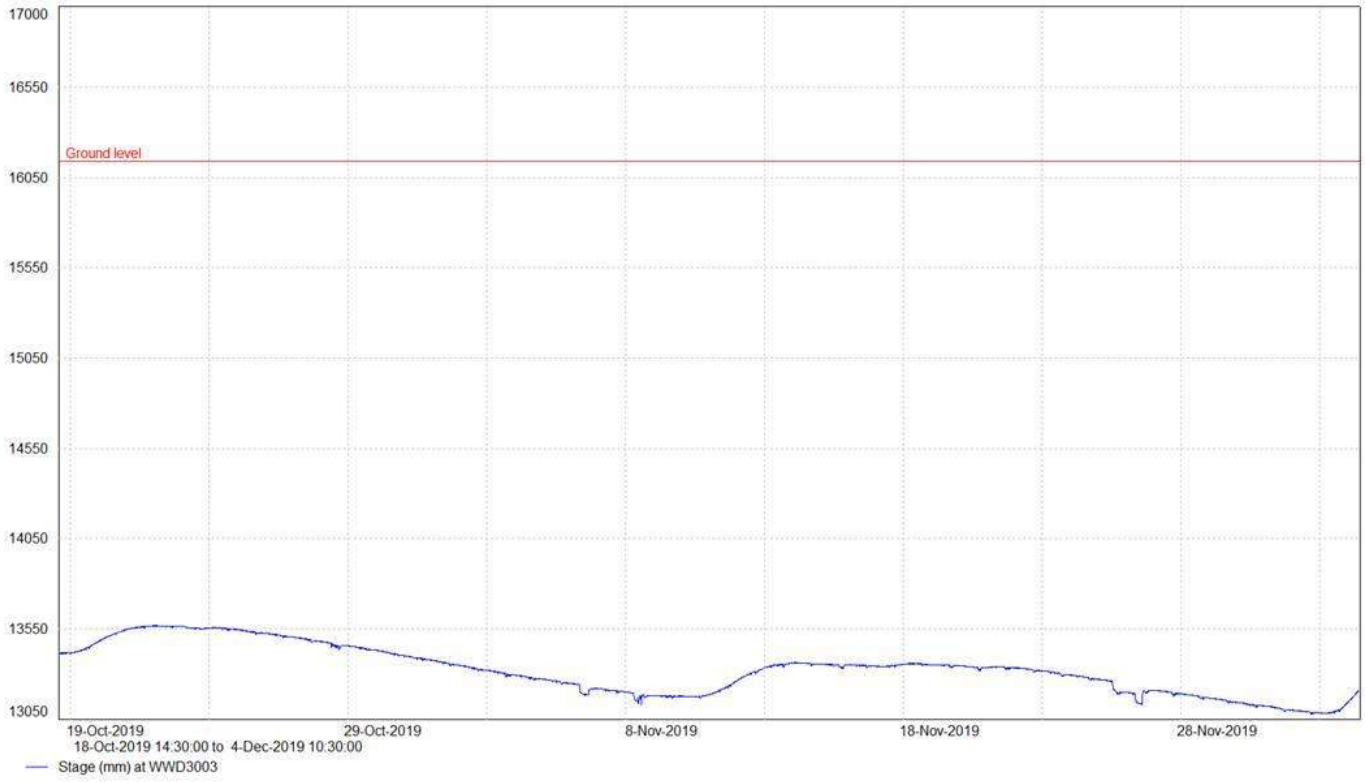


Figure 4: WWD3003 water level v ground level

Discussion & Conclusion

Figure 1 shows the relationship between the WWD3003 and Motueka River water level.

Figure 3 compares the levels between both monitoring sites. Note, not to same datum.

Peach Island groundwater level is usually about 1m above Motueka River water levels except in flood. Normal drainage would therefore be towards the river with a downstream aspect. Rises in groundwater lag considerably behind river rises and are noticeably dampened. This is likely a function of both the distance from the river and the buffering of the gravels at this location. Groundwater levels were about 3m below ground level (Figure 4) during the period but would likely be lower during summer by up to a further 1m. The period was characterised by a relatively low rainfall and associated infrequent floods. A large flood occurred the day before the end causing a 3m rise in the river with the beginning of a rise in groundwater which would have continued after the loggers were removed. An earlier flood of 1.5m resulted in a groundwater rise of only about 300mm compared with 500mm at Lucas Block. The sharper hydrograph at Peach Island indicates a lesser connectivity between the river here than at Lucas Block which is closer to the river and hence more influenced by it. There is also a likely influence from the old river channel now known as Peach Island Channel.

Both bores are subject to some intermittent pumping.

Although the monitoring period was relatively short, two key findings have resulted:

The groundwater level is normally at least 3m below ground level at Peach Island. Excavations below 4m deep are likely to encounter intermittent groundwater.

Groundwater fluctuation is probably less than previously expected.

An update will be provided when Lucas Bore is surveyed in.

Tony Hewitt

Appendix 1: Maps

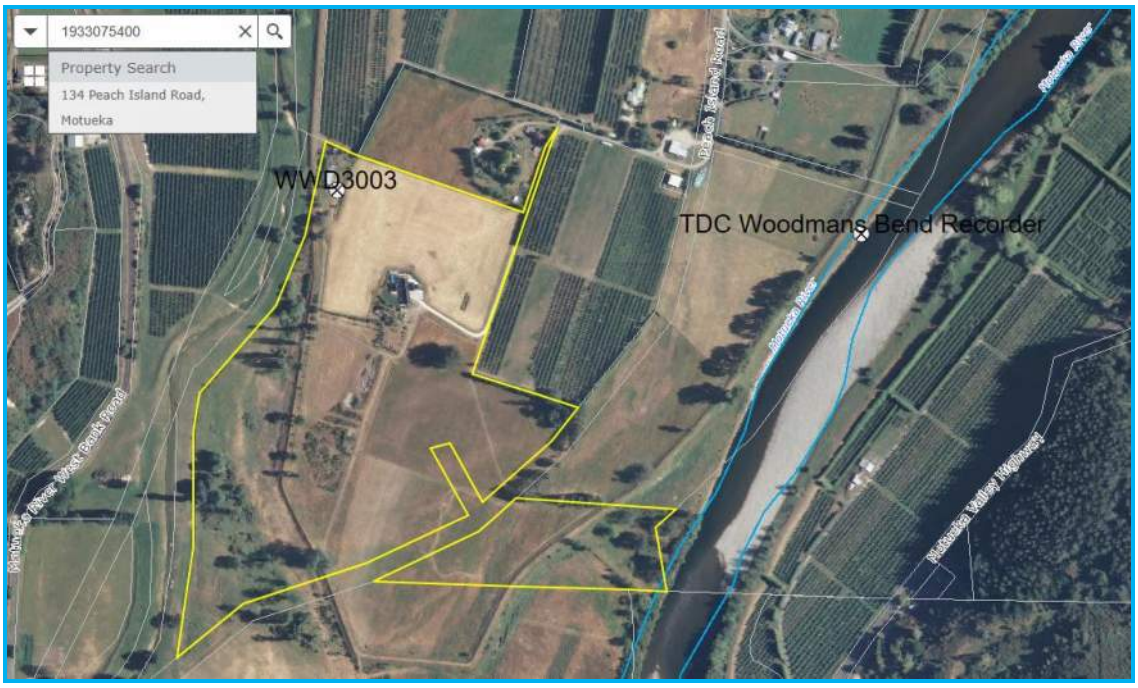


Figure 5: Location of Peach Island monitoring well (WWD3003) and TDC Woodman's Bend Recorder

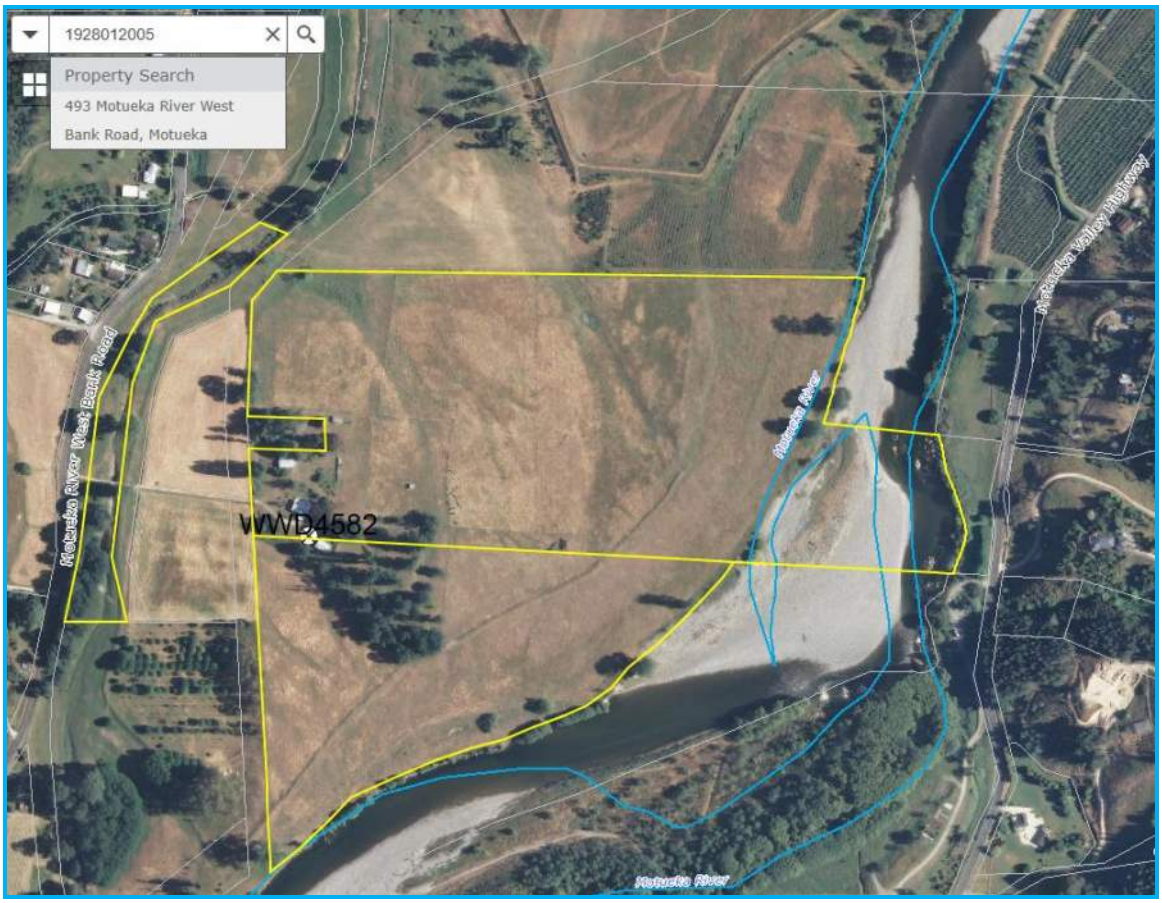


Figure 6: Location of Lucas bore (WWD4582)

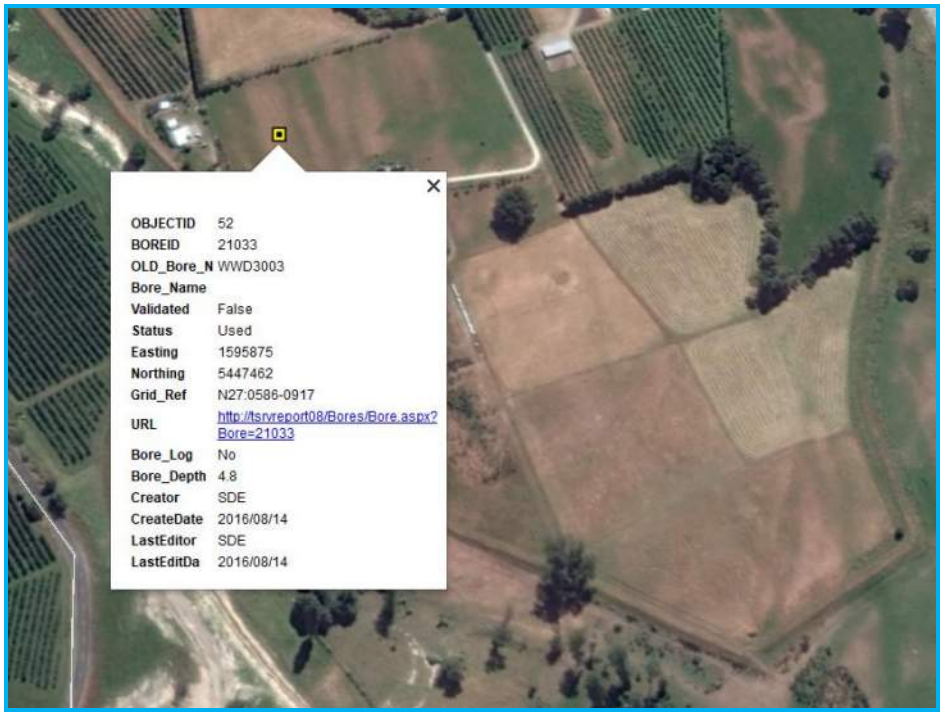


Figure 7: Summary details of WWD3003 (Peach Island well)

Figure 8: Summary details of WWD4582 (Lucas bore)

Figure 9: Estimate of distance from WWD3003 to TDC recorder

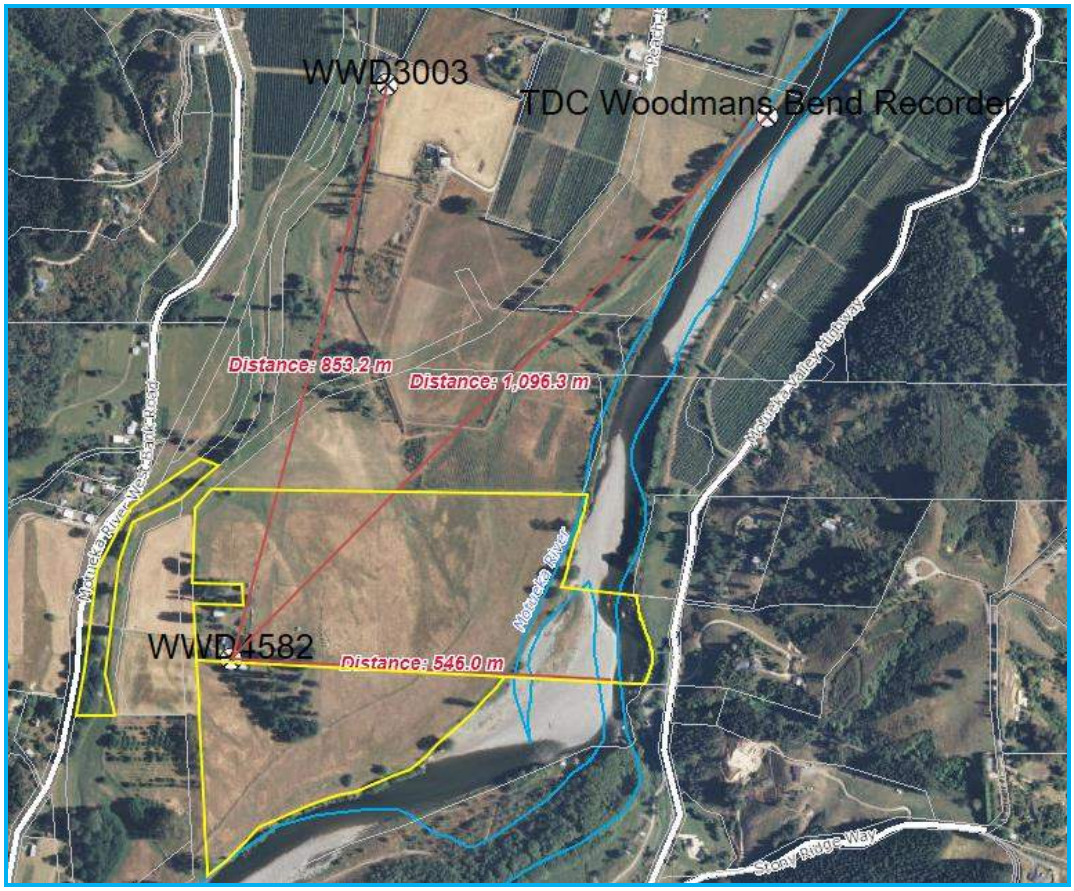


Figure 10: Relative distances from Lucas bore

Figure 11: Known bores in area

ANNEXURE F

Volunteered Conditions of Consent

Hours of Operation

- The hours of operation on site, which include the extraction of gravel and rehabilitation of the land, shall be limited to between 7.00 am and 5.00 pm Monday to Friday inclusive. No operation shall be permitted on Saturday, Sunday, public holidays or during the period 20 December to 10 January.

Truck Movements

- There shall be no more than 30 truck movements per day to and from the site (a return trip being two truck movements). A truck may include a trailer.

- All vehicles shall observe a speed limit of 30 kilometres/hour when on site. It is the Consent Holder's responsibility to inform drivers of this speed limit.

General

- No screening, crushing or other processing of gravel shall be carried out on site.

Expiry

- This consent will expire 15 years after the date on which it is given effect.

Size, Location and Orientation of Excavations

- The area and stages to be excavated shall be in accordance with Figure 16 of the application.

- The excavation shall occur in strips aligned parallel to the general direction of flood flow across the berm land. No individual strip shall be wider than 30 metres.

- The excavation is to be progressively backfilled so that the maximum size of excavation open at any one time shall not exceed 30 metres in width and 100 metres in length.

- The number of excavations open at any one time shall not exceed one except when the excavation of one strip has been completed and the excavation of a new strip is commencing, in which case two holes will be permitted (subject to the Condition above).

- The maximum depth of the excavation shall not extend further than the groundwater level as it is at the time of extraction.

- No excavation, removal of gravel or other disturbance of land shall occur within 20 metres of the stop bank.

Topsoil Management

- Topsoil removed from the excavation site, or from any other location, shall be placed directly onto a backfilled area, or stored in a pile aligned parallel to the flow of flood water.

- Topsoil shall be stripped, stockpiled and re-spread in a manner that minimises compaction and soil loss. Machinery movement over stockpiled topsoil is prohibited.

Backfill Material

- Only clean and substantially inorganic material may be used for backfill. It may include gravels, soil, clay, and natural rock material such as ordinary hardfill obtained from road trimmings, slip clearance, site excavations etc.

  Clean concrete rubble may be used provided that it is broken down to pieces no greater than 0.50 metres across and that there is no protruding reinforcing material.

  The fill material may contain up to 10% by volume of organic material (ie, vegetative material, bark, sawdust, etc) provided that the organic material is thoroughly mixed with the ordinary fill and that no sawdust from treated timber is included.

  Only the material specified above shall be used for backfill. (No refuse, cans, bottles, plastics, stumps, timber, cars, metallic objects, household appliances, toxic chemicals, or liquid wastes may be used as backfill.)

- The bottom quarter of the fill may comprise larger material such as clean concrete rubble if such material is available. The balance of the excavation up to 0.30 metres below the finished ground level shall be filled with ordinary clean hardfill. The top 0.30 metres of fill shall comprise of the topsoil stripped from the site or of similar quality topsoil brought in from elsewhere.

- The excavations are to be progressively backfilled with the removal of gravels. Under no circumstances shall any excavated piece of ground remain open for longer than 6 months.

- With the exception of the topsoil noted above, no backfill or any other material shall be stored or stockpiled on the river side of the stopbank, unless awaiting reinstatement placement.

- The Consent Holder shall maintain the site in a clean and tidy manner. Redundant machinery and equipment not required for the operation of the quarry shall be removed from the site.

- No disposal of refuse (domestic or industrial) or other undesirable material, regardless of source, shall occur at the site. Such material shall be removed by the Consent Holder and disposed of at an official landfill site.

Site Reinstatement

- The site shall be reinstated to an even contour similar to the ground level existing prior to gravel extraction. It shall be consistent with the existing berm land up and downstream of

the site and such that the passage of floodwater is not impeded or directed towards the stopbank.

- The placing, spreading, levelling and cultivation of topsoil shall be carried out in a manner that minimises compaction of the topsoil. Any undue compaction that may occur shall be remedied before sowing down occurs. Reinstated areas shall be sown down with a standard rye grass/white clover seed mix in spring or autumn (whichever season occurs first after filling of a cell has been completed) together with an initial application of fertiliser to facilitate establishment. In line with the extraction operation, revegetation shall be carried out in a progressive manner. The Consent Holder's responsibility with regard to revegetation will not be met until a complete, healthy, predominantly ryegrass/white clover sward has been achieved.

- The construction of any fence required for site control during the stage one (within berm land) exercise of this consent shall be of post and wire construction only and, if required, shall be removed on completion of excavation works.

Access to Site

- Access to the site for gravel extraction operations is to from Motueka River West Bank Road via the Peach Island paper road.

- Prior to gravel extraction commencing, the Consent Holder shall form, with a minimum width of 4.5 metres, the access lane along the Peach Island paper road.

- The Consent Holder shall form and maintain a ramp over the stopbank and in particular shall maintain the crest of the ramp at the same level as the adjacent stopbank crest immediately up and down stream to the satisfaction of the Tasman District Council's Asset Engineer - Rivers.

- The Consent Holder shall remove the willow vegetation at the entrance to the site and undertake trimming of the bank on the western side of Motueka West Bank Road as detaile din the Traffic Concepts report, to improve site access visibility along Motueka River West Bank Road. Ongoing trimming of vegetation will be undertaken by the Consent Holder to ensure that visibility if not impaired.

Noise

- Noise generated by the gravel extraction operation when measured at the notional boundary of any dwelling in the Rural Zone and not on the applicant's site, shall not exceed:

	Day	Night
Leq	55 dBA	40 dBA
Lmax		70 dBA

Noise is to be measured and assessed in accordance with the provisions of NZS 6801:1991, Measurement of Sound and NZS 6802:1991, Assessment of Environmental Sound.

Dust

- All practical measures shall be taken to ensure that any dust created by gravel extraction operations at the site shall not become a nuisance or hazard to the public or adjacent property occupiers. The measures employed shall include reducing vehicle speeds and the watering of traffic movement areas, roadways and stockpiles as may be required.

Monitoring

- Every 3 months the Consent Holder shall forward a progress report to the Co-ordinator Compliance Monitoring, Tasman District Council. The report will note the volume of material which has been excavated, the amount and type of fill which has been placed, the area of excavation which remains open, and the number of daily truck movements associated with the operation during that 3 month period. Each report will include a plan showing the area which has been worked during the previous 3 month period.

- The Tasman District Council shall undertake quarterly (every 3 months) general compliance inspections of the gravel extraction site operation.

Bond

- Pursuant to Section 108(2)(b) of the Resource Management Act 1991, the Consent Holder shall enter into a bond in favour of the Tasman District Council for an amount of $20,000.

  The sum secured by the bond will be increased by the annual increase in the consumer price index for each year that the bond required by this condition remains in force commencing with the first anniversary of the date of issue of the consent and confirmed on each subsequent anniversary. The movements in the consumer price index shall be taken from the published increases available on 31 December following the issue of the consent and on 31 December in each subsequent year.

  The bond is required to ensure the Consent Holder's performance of conditions pertaining to: the size, location and orientation of the excavation; stockpiling of topsoil; backfill material; and site reinstatement.

  The Consent Holder remains liable under the Resource Management Act 1991 for any breach of the conditions of this consent and for any adverse effect on the environment which become apparent during or after the expiry of the consent.

  The Consent Holder acknowledges that the amount secured by the bond will be required to indemnify Tasman District Council against all costs associated with remedying any breach of the conditions of this consent and/or avoiding, remedying or mitigating any adverse effects on the environment which become apparent during or after the expiry of this consent.

  The Consent Holder will ensure that the Consent Holder's trading bank will act as surety for payment of the full amount secured by the bond required by this condition.

  The Consent Holder may not exercise this consent until the bond required by this condition has been entered into to the satisfaction of the Environment & Planning Manager, Tasman District Council and the Consent Holder is in receipt of written confirmation from the

Environment & Planning Manager, Tasman District Council that this consent may be exercised.

This bond is required to be registered against the land title to which the consent relates and the provisions of Section 109(1) of the Resource Management Act 1991 shall apply.

The Consent Holder shall pay the Tasman District Council's legal costs and disbursements in respect of the preparation execution, negotiation and cancellation of this bond.

Review

- Council may for the duration of this consent, and within 3 months of the anniversary of its granting each year, review the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991, for any of the purposes stated in that section of the Act or to deal with any adverse effect on the environment which may arise from the exercise of the consent, including, but not limited to the extent of excavation, backfill material, impacts to groundwater, noise, dust nuisance, the level of bond required, and compliance monitoring requirements.

Proof of Consultation

Ngāti Kuia
Te Iwi Pakohe

12 September 2019

In the matter of: An application to extract gravels from the Motueka River flood way at an industrial scale

Applicant: CJ Industries Limited

Affected Party: Te Runanga o Ngāti Kuia Trust (TRONK)

This document serves as proof the applicant has consulted with Ngāti Kuia regarding the application and outlines the relationship of the iwi and the degree of effect. This is not to be considered as an affected party approval for the purposes of the Resource Management Act 1991.

Job Number: 19/020

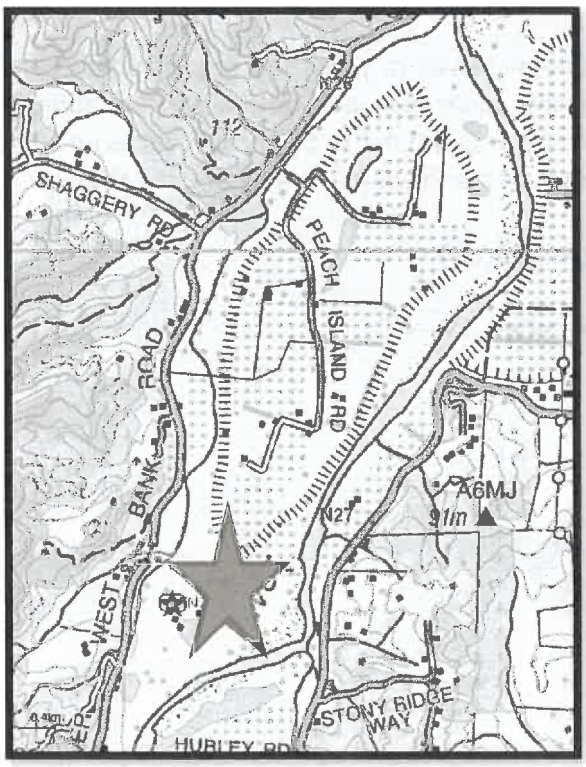
Invoice Number: INV-402

Te Rūnanga o Ngāti Kuia Trust
PO Box 1046, Blenheim, 7201 | Ph 03 579 4328 | 0800 NGATIK | tari@ngatikuia.iwi.nz | www.ngatikuia.iwi.nz

The Project: The applicant is seeking to establish a new gravel extraction operation in the floodway of the Motueka River. The key components of the proposal as understood by Ngati Kuia are

- The opening of a moving extraction pit for the removal of aggregate for construction and infrastructure maintenance plus also high end cosmetic and aesthetic products for a retail market.
- The stockpiling of material in the riverbed of the Motueka River for transport to a processing facility off site.
- Vehicle crossing of the Motueka River for the transport of the excavated material for stockpiling.
- Backfilling of the moving/rolling extraction pit with hard fill from offsite.
- The applicant plans to rehabilitate the site using existing top soil and grassing the area.

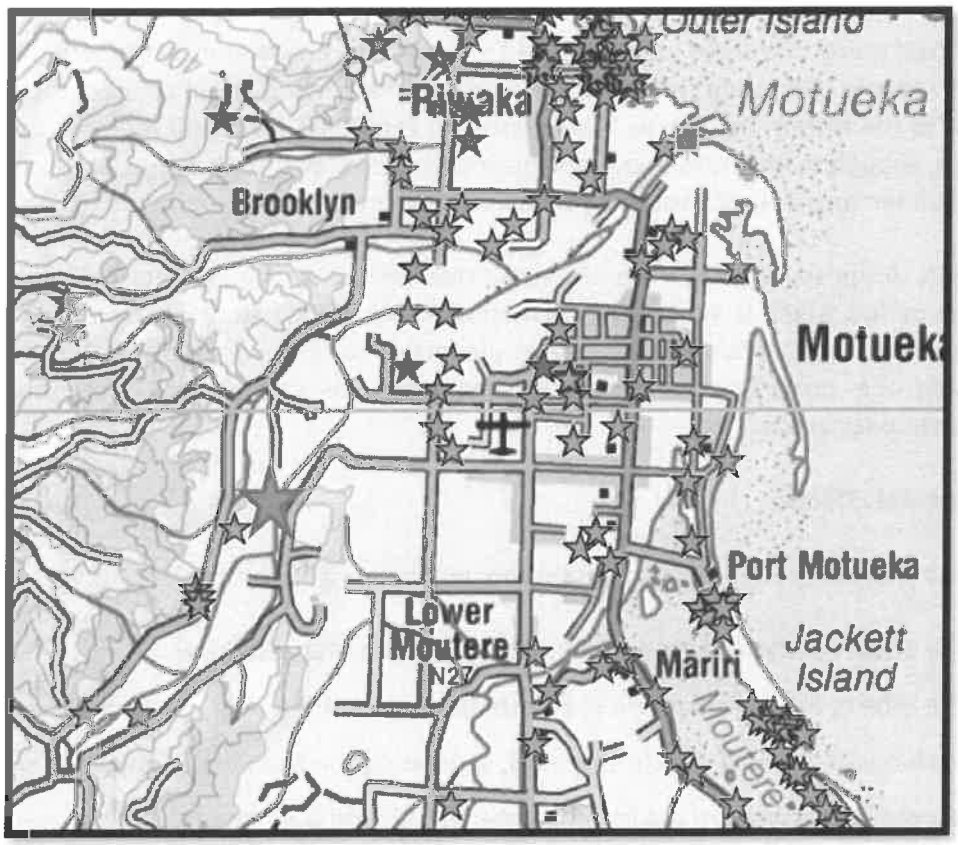
The site is currently used for pastoral farming and is prone to flooding. An old channel of the river bisects the subject site to create "Peach Island", Stop banks provide protection to the residential dwellings, farm buildings, an old grave yard and pasture.



The site is upstream of Motueka township on a river flat with substantial flood protection works. The area is semi-rural to rural being an easy driving distance to Motueka Township about 5.5 Km distant as the crow flies.

The Association: Ngati Kuia have a Statutory Acknowledgement over the river and its tributaries. The river feeds in to the Motueka Estuary, an established mahinga kai and where the iwi relationship is protected through the same settlement legislation and the New Zealand Coastal Policy Statement.

There is a significant number of recorded archaeological sites found on the river flats around Motueka and in high density along the immediate coastline. Many of these coastal sites are middens exposed by erosion while the inland sites contain high value artefacts. The area has been occupied seasonally since the first migrants arrived in Te Tau ihu around 1300. Later in in to the early 1800's the area had more permanent settlements with some establishing vast productive kumara farms along waterways, particularly noted in the Waimea but also recorded along the southside of the Motueka River.



There is a considerable number of sites containing argillite/pakohe. This mineral is found only along the Nelson Mineral Belt and has been found in the earliest burials at Pokohiwi, Wairau Bar. It has been traded around the country earlier and more widely than pounamu prior to european contact.

Rivers are used for many purposes including transport, irrigation, cleaning and drinking and as a source of mahinga kai, notably eels, freshwater crayfish and whitebait. Wetlands which form in areas like Peaches Island, are abundant in birdlife and usable plants and trees.

Cultural Effects:

There is a strong possibility for unrecorded artefacts or archaeological material to be onsite and may be disturbed by the gravel extraction. The sort of material we would expect in this area would include modified soils such as were made for kumara plantations, argillite/pakohe tools or working sites, early colonial waste, midden, potential for fishing tools and waka though these are less likely to have survived the passing of time.

Disturbing the soil to this depth and degree has a permanent affect on the mauri and integrity of the land. Its character will not be the same and it may alter the behaviour of the river and groundwater.

The area has been modified by flood control structures and agricultural land use activities which has seen the removal of planted riparian areas and the cultural resources these would have provided. Site photos contained in the draft application indicated there is very little native vegetation remaining.

The awa itself is one of the key waterways in Te Tau ihu, its headwaters are where the prized pakohe is sourced. Following the river, early semi migrant maori could connect the Tasman Bay coast to the Nelson Lakes area and connect to the Buller River and Kawatiri/the upper west coast, though many took a more northern route through the Wangapeka. Nelson Lakes was and still remains a significant tuna/eel harvesting site.

The activity proposes to cross the Motueka river at highly regular intervals during the extraction period which is limited by, recreational uses during summer, trout and salmon migration times and, suitable flows. There are other cultural concerns relating to water quality and the protection of native fish passage and habitat which are also clear environmental concerns.

Environmental Effects:

There are a short list of key environmental concerns relating to this project;

- The effects of the activity on the hydrology of the Motueka River
- The effects of the activity on the instream values of the river, particularly the risk of contamination from vehicle crossings, sedimentation from high flows and the effects of vehicle crossings on the habitat of native fish and their health.

I can understand why the applicant seeks to use the river instead of going 'the long way around' and using the bridge however, better alternatives need to be explored. This type of activity is generally discouraged to avoid cumulative adverse effects but also the change in character that these industrial activities have on public space.

Without intentionally excluding the public, these activities are un attractive and have a perceived risk to safety and therefore, the general public who 'don't want to get in the way' of operations tend to exclude themselves. I have not seen in the application an assessment of the two access alternatives and an effects assessment to determine which would be the most appropriate environmentally. It appears the preference for a river crossing is driven by time and cost benefits.

In addition, the second draft application does not effectively address the policy direction in the TRMP but generally glosses over the relevant policies which have been identified. I would imagine a fuller assessment of the policies by the applicant would better inform which access approach would be more appropriate. In general, it is encouraged in the RMA 1991 and the

local planning documents that activities that take place on private property should be contained within the perimeters of that property. In this case stockpiling and access are proposed on public land and therefore a higher level of environmental considerations should be required and notification to the public is recommended so a full appreciation of the effects can be understood by the decision maker.

I appreciate the public need for the gravel but that in itself has not been quantified in the application in order to balance the perceived public loss.

There are a few gaps in the proposal that due to its term and intensity need to be addressed. These are listed in the recommendations, I do not think there is much in the way of conditions that can be proposed to mitigate these effects at this stage however I do appreciate the water clarity monitoring and restrictions on time of year volunteered by the applicant so far.

I do have concerns relating to the risk of contamination of vehicle use including, oils and other contaminants such as grease, paint, road tar etc. The applicant should address how public access may be affected including those who wish to fish, swim, eel, gather watercress and other materials from the river side.

Sedimentation of the coastal environment along with other cumulative inputs from industrial and land use activities has had a significant impact on the life sustaining capacity of that sensitive environment. Shell fish which were collected in abundance in the nearby Moutere Inlet prior to settlement and which are found in recorded middens on Jacket Island and other sites around the estuary, are now not found there at all or in such low numbers they cannot sustain the people. The risk of an additional sediment load from the proposed activity could be devastating to the ecological systems of the coastal environment.

Recommendations:

1. That an assessment of ecological effects on the river be undertaken in order to determine the appropriateness of the river crossing.
2. That the potential risk of sedimentation due to flooding from the stock piling can be avoided. And more detail about how this can be managed is provided i.e. a risk assessment and management plan.
3. That an archaeological assessment may be appropriate or, an iwi monitor on site during top level excavations. This can mitigate the risk of archaeological material being damaged or lost. If there are modified soils present then mitigation will be harder and avoidance would be required. A copy of the Ngati Kuia accidental discovery protocol is attached.
4. That issues around public access and safety need to be addressed.
5. The carrying capacity of the area for this type of activity while protecting its amenity values and semi-rural character is important to understand. What are the potential

cumulative adverse effects?

6. Whether the road on the north of the river would provide less adverse effects on the environment. Or if a culvert would be more suitable. The River crossing remains the primary concern.
7. Would the proposal increase the risk of erosion either during a flood event or after the works have completed? Is a consent required to maintain the riverbed for access?
8. That the application be notified to the public so an assessment of recreational and intrinsic values can be made.

Accidental Discovery Protocols

Ngāti Kuia
Te Iwi Pakohe

Purpose

To provide clear procedures in the event of accidentally discovering, as the result of physical disturbance to the existing ground surface:

- Wāhi tūpuna/archaeological site,
- Kōiwi/human bones
- Taonga/ Māori artefacts
- other artefacts

This protocol involves the following parties:

- Land Owner/Consent Holder – including their lead Agent/Project Manager, Contractor and Site Supervisor and Project Archaeologist
- Heritage NZ Regional Archaeologist
- NZ Police for Kōiwi
- Te Rūnanga o Ngāti Kuia (Ngāti Kuia)

These procedures reflect the minimum requirements of Ngāti Kuia in accordance with statutory obligations under the Heritage New Zealand Pouhere Taonga Act 2014 (which replaced the Historic Places Act 1993 on 20 May 2014) and the Protected Objects Act 1975 .

Evidence of archaeological sites can take the form of burnt and fire cracked stones, charcoal, rubbish heaps including shell, bone and/or 19th century glass and crockery, ditches, banks, pits, old building foundations, artefacts of Māori or early European origin, or human burials.

General Procedures Following the Accidental Discovery of Possible Wāhi Tūpuna, Kōiwi or Taonga

1. All work in the discovery area (within 20 metres of the suspected site) must cease immediately. Any machinery/plant/equipment operator must shut down equipment and any activity, leave the site area and leave unearthed archaeological material in situ and advise the site supervisor (if there is one) or Agent/Project Manager and other relevant persons including contractors of the find immediately.
2. The Agent/Project Manager shall then notify the following people of the discovery:
    - Resource Management Unit, Te Rūnanga o Ngāti Kuia
    - Project Archaeologist (if there is one already). If a project archaeologist is not nominated the Agent and/or Land Owner?Consent Holder will appoint a qualified archaeologist to ensure all archaeological sites and Taonga Tūturu are dealt with appropriately
    - New Zealand Police if any Kōiwi are uncovered. This is a requirement of the Coroners Act 2006.
3. Any contractor or persons must secure the discovery area (20 metres from suspected site), ensuring the area (and any objects contained within) remains undisturbed and meets health and safety requirements. Work may continue outside of the site area.

4. The Agent/Project Manager must ensure that either themselves or the Contractor, as appropriate, are available to meet and guide Ngāti Kuia, the Project Archaeologist, and Police (if required) to the discovery area. The Contractor and Agent/Project Manager will assist with any reasonable requests that any of these people may make.
5. The Agent/Project Manager shall ensure that no information is released to the media except as authorised by the Land Owner/Consent Holder, in consultation with Ngāti Kuia.
6. In the event the discovery area is found to contain an archaeological site, the Regional Archaeologist and Heritage NZ must be contacted and an archaeological authority must be obtained in accordance with the Heritage New Zealand Pouhere Taonga Act 2014. Kōiwi that are part of an archaeological site can only be removed if an archaeological authority has been obtained.
7. If an archaeological authority is granted, the Agent/Project Manager must ensure any Contractors or other persons undertake all subsequent works in accordance with the conditions of this authority.
8. The Contractor must ensure that all visits to the discovery area are cleared by the Agent/Project Manager.
9. The Agent/Project Manager must ensure that work in the discovery area does not recommence until all statutory and cultural requirements have been met.

Further Procedures in the Event that Kōiwi are discovered

10. As soon as practicable after the Agent/Project Manager has given notice to Ngāti Kuia that Kōiwi have been discovered, the Agent/Project Manager shall invite Ngāti Kuia to inspect the site and undertake appropriate cultural ceremonies at the site.
11. If Ngāti Kuia wish to undertake such ceremonies, the Agent/Project Manager shall make the necessary arrangements for these ceremonies as soon as practicable.
12. Once these ceremonies are completed, the Agent/Project Manager shall arrange for the Project Archaeologist, in consultation with the New Zealand Police and Ngāti Kuia, to inspect the skeletal remains.
13. The Project Archaeologist will record details of the Kōiwi, the site of discovery, and any other relevant facts, and these records will be made available to the New Zealand Police and Ngāti Kuia.
14. If the Kōiwi are Māori, and the New Zealand Police and/or Coroner have no uncertainty or suspicion about the Kōiwi, the Agent/Project Manager shall arrange for Ngāti Kuia to remove the Kōiwi from the site, or if they decline, arrange for the New Zealand Police and/or Coroner to do so.
15. In the event that the New Zealand Police and/or Coroner have any uncertainty or suspicion about the Kōiwi, they are responsible for making any records they require and for any Kōiwi that they remove from the site.
16. If the Kōiwi are Māori and the New Zealand Police and/or Coroner remove only part of the Kōiwi, the provisions of Section 14. above will apply.
17. If the Kōiwi are non-Māori, the New Zealand Police and/or Coroner will be responsible for removing any remaining exposed Kōiwi.

Custody of Taonga (Excluding Kōiwi) or Material Found at an Archaeological Site

18. The Project Archaeologist will have initial control of, and responsibility for, all material contained in the discovery area.
19. The Agent/Project Manager shall ensure no objects are removed from the site until it has been determined, in consultation between the Project Archaeologist and Ngāti Kuia, whether it is associated with an archaeological site or the object is Taonga (be it Taonga Tūturu or otherwise).
20. If the object is of Māori origin and found in an archaeological site and/or is a Taonga Tūturu, the Project Archaeologist will record the object and notify the Ministry for Culture and Heritage of the finding as required under the Protected Objects Act 1975. The Project Archaeologist will then hand the material to the local public museum for the Maori Land Court to make a determination on

ownership. If the object is European in origin the Agent/Project Manager shall deliver any such object to the Land Owner/Consent Holder so that the legal right to ownership can be determined.

21. If the object is a Taonga and less than 50 years old, (ie not Taonga Tūturu), the Agent/Project Manager shall invite Ngāti Kuia to remove the Taonga from the site.

References

Coroners Act 2006. (n.d.). Retrieved 11 7, 2014, from http://www.legislation.govt.nz/act/public/2006/0038/latest/whole.html

CSNZ guide for Koiwi: Human Remains. (2014, 11 7). Retrieved from Coronial Services of New Zealand: http://www.justice.govt.nz/courts/coroners-court/publications/fact-sheets/koiwi-historical-remains/view

MCH guide for Taonga Tūturu. (2014, 11 7). Retrieved from Ministry for Culture and Heritage: http://www.mch.govt.nz/nz-identity-heritage/protected-objects/taongatuturu

New Zealand Heritage Pouhere Taonga Act 2014;. (n.d.). Retrieved from http://www.legislation.govt.nz/act/public/2014/0026/latest/DLM4005414.html?search=qs_act_heritage+new+zealand_resel_25_h&p=1&sr=1

NZH Tangata Koiwi guide. (2014, 11 7). Retrieved from NZ Heritage : http://www.heritage.org.nz/protecting-heritage/archaeology/archaeological-guidelines-and-templates

Protected Objects Act 1975. (n.d.). Retrieved from http://www.legislation.govt.nz/act/public/1975/0041/latest/DLM432116.html

This protocol has been based on the NZ Transport Agency Minimum Standards - Z/22 Version 1, March 2009

AGREEMENT FOR IWI MONITOR ENGAGEMENT

BETWEEN: Tiakina te Taiao Limited (TIAKINA)

AND: CJ Industries Ltd (APPLICANT)

APPLICANT CONTACT DETAILS:

Address: Hau Road, Motueka. PO Box 227 Motueka
Contact Person: Des Corrie-Johnston
Telephone: 03 528 4466 Email: des@cjindustries.co.nz

PROJECT:
Land based gravel extraction

LOCATION:
Peach Island, Motueka

SCOPE AND NATURE OF THE SERVICES:

TIAKINA will provide an Iwi Monitor for excavation work at the site.
Undertake CIA or proof of consultation report to include with resource consent application.

PROGRAMME FOR THE SERVICES:

Date From: 05/09/2019 Date To: Click or tap to enter a date.
Additional information:
Click or tap here to enter text.

FEES & TIMING OF PAYMENTS:

Iwi Liaison Project Management	$75.00 per hour plus GST, mileage and disbursements
Iwi Monitor	$65.00 per hour plus GST, mileage and disbursements

Note: Minimum charge 2 hours applies for iwi monitoring work.
Please note that if less than five (5) working days' notice is given, an additional administration charge of $120.00 plus GST will apply.

INFORMATION OR SERVICES TO BE PROVIDED BY THE APPLICANT:

If the APPLICANT is not the contractor, please state name of Contractor and contact details.
Envirolink Ltd
PO Box 25 Mapua 7048
03 540 2064
Regan Martin
regan@enviro.net.nz
021 029 03970

The APPLICANT engages TIAKINA to provide the services described above and TIAKINA agrees to perform the services for the remuneration provided above. Both parties agree to be bound by the provisions of the Conditions of

Engagement (overleaf). Once signed, this agreement, together with the conditions overleaf and any attachments, will replace all or any oral agreement previously reached between the parties.

VARIATIONS TO THE CONDITIONS OF ENGAGEMENT (OVERLEAF)

If during any site disturbance works, any suspected taonga/cultural artefacts or koiwi tangata (human remains) are discovered, all work should stop immediately. The Iwi Monitor shall follow the TIAKINA protocols and guidelines.

The APPLICANT will be required to consult with the relevant Local Authority, New Zealand Historic Places Trust and TIAKINA, so that appropriate action pursuant to the Historic Places Act 1993 and the Iwi Monitor Guidelines are followed.

APPLICANT AUTHORISED SIGNATORY(IES):	Tiakina Manager:
	
PRINT NAME: Regan Martin	Frank Hippolite
DATE: 04/09/2019	DATE: Click or tap to enter a date.

Tiakina te Taiao Limited Contact Details:

Iwi Monitor Liaison: Melanie Nelson Manager: Frank Hippolite

Alice Woodward

From: Giles Griffith <giles.griffith@tasman.govt.nz>
Sent: Wednesday, 15 January 2020 1:05 pm
To: Alice Woodward
Cc: Rick Lowe
Subject: RE: Gravel extraction application

Hi Alice,

For my 2 cents worth my preference would be to align the strips parallel to the river, this should result in less erosion in a flood and reduce the likelihood of the water being channelled in an unintended direction.

Proposed buffers and sizes sound good.

They will need to make sure that the stopbank crossing point is built up so that the crest doesn't get worn down with all the trucks crossing it.

There have been problems in the past with consent holders keeping true to their conditions, particularly around quantity and quality of backfill and size and depth of area opened up – I would like to see these applicants paying for independent supervision rather than it being left to our compliance officers who have a lot of other tasks to do, but I guess that is outside your remit?

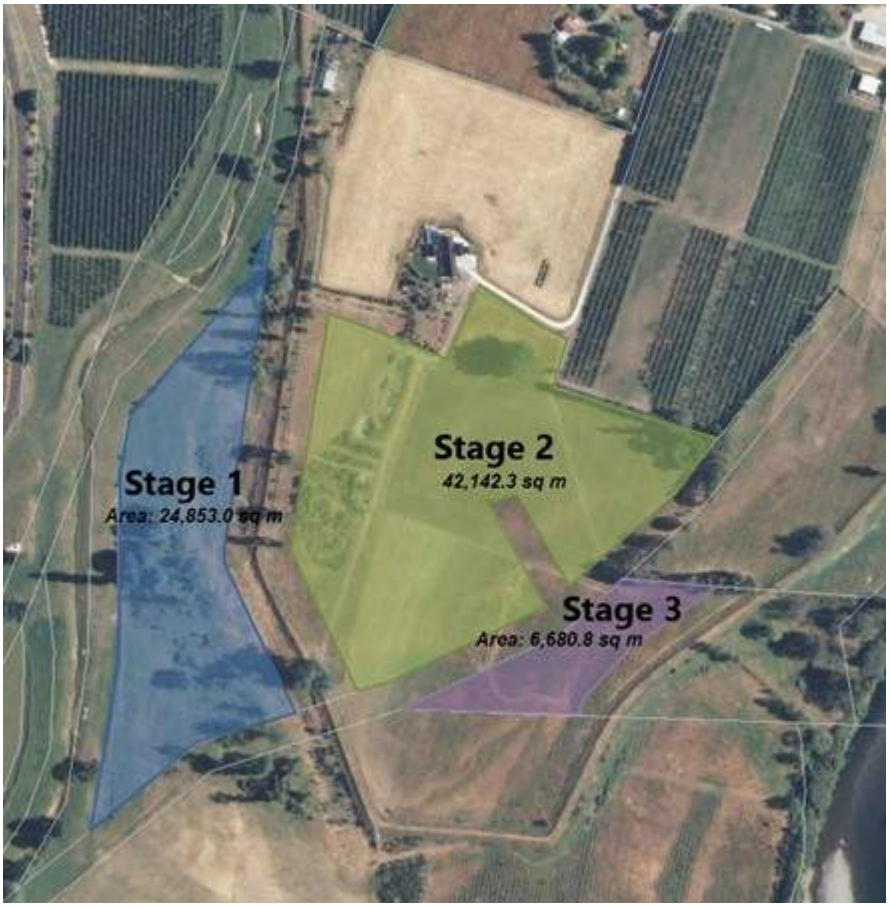
Ngā mihi,
Giles.

Giles Griffith
Rivers and Coastal Engineer
DDI 03 543 7244 | **Mobile** 027 246 6661 | giles.griffith@tasman.govt.nz
Private Bag 4, Richmond 7050, NZ

From: Alice Woodward <Alice@planscapes.co.nz>
Sent: Monday, 13 January 2020 4:26 pm
To: Giles Griffith <giles.griffith@tasman.govt.nz>; Rick Lowe <rick.lowe@tasman.govt.nz>
Subject: Gravel extraction application

Hi Giles and Rick,

I'm currently working on a gravel extraction application at 134 Peach Island Road (1933075400), in the following approximate locations:



At this stage we're proposing cuts in strips 30m wide and 100m long and not extending below the groundwater level. There will be a 20m buffer either side of the stop banks, and 1:1 batter on property boundaries. Cuts will be progressively backfilled to the original ground level height, and no more than 3,000m2 will be exposed at any one time. What excavation orientation would you prefer in these locations? I notice that nearby gravel extraction consents vary between parallel to flood flow and at right angles to it, so I imagine orientation is subject to the specific location? Are there any other controls that you'd like to see in place, or concerns you have with the proposal that need to be addressed?

I look forward to hearing from you.

Ngā mihi,

Alice Woodward
Resource Management Consultant
BSc

Planscapes (NZ) Ltd
94 Selwyn Place : PO Box 99 : Nelson
T 03 539 0281 : **E** Alice@planscapes.co.nz

planscapes (nz) ltd.
Surveying and Resource Management

Alice Woodward

From: Dr Bernard Simmonds <Bernard.Simmonds@tasman.govt.nz>
Sent: Thursday, 16 January 2020 2:47 pm
To: Alice Woodward
Cc: Regan Martin
Subject: RE: soils information request- Peach Island area

Hi Alice,

Thanks for the email. Unfortunately, for these sites there is no way of reinstating land following gravel extraction that would retain the same levels of versatility and productive potential as previously held. The disturbance and removal of the topsoil completely disrupts the gradually formed air and water flow pathways that control soil biological respiration, moisture movement and storage, and root penetration. The structural changes to the soil profile from disturbance increase the risk of compaction and can lead to discontinuous drainage patterns across a site, which affect root growth and overall soil versatility.

A gravel extraction and remediation case study was undertaken back in the 1970s on Ranzau soils on the Waimea Plains. The method of extraction was to open narrow strips of land by use of an excavator. The topsoil and subsoil were separately removed, followed by the gravel, with the subsoil then being replaced on top of the new surface. The subsoil was levelled before the topsoil/upper horizons were replaced. Excavations work was carried out from the surface above, using tracked equipment in order to minimise the compaction of the soil. Agricultural trials were carried out by MAF and found a marked loss in soil productivity as assessed through various crops over several years. Physical impairment of the soil properties was also recorded, including soil drainage.

So even under highly controlled conditions, on a mature soil (not recent) with very well structured soil properties, the above method would not retain the existing productivity or versatility of the land and soil.

The soils on which your client's activity is proposed to take place (Peach Island) are Riwaka and Motueka soils. These soils are of variable thickness, are coarser textured with weakly developed profiles. These properties make them particularly prone to damage from disturbances, like gravel extraction.

Because of the sensitivity of these soils to damage from disturbance, and the high productive values they presently offer, I do not believe gravel extraction could take place without significant adverse effects at these sites (even with the controls you have proposed).

All the best,
Dr Bernard Simmonds

From: Alice Woodward <Alice@planscapes.co.nz>
Sent: Thursday, 16 January 2020 11:45 am
To: Dr Bernard Simmonds <Bernard.Simmonds@tasman.govt.nz>; Regan Martin <regan@enviro.net.nz>
Subject: RE: soils information request- Peach Island area

Hi Bernard,

How are you?

You supplied the below information to Regan from Envirolink last year in regards to a proposed gravel extraction proposal at 134 Peach Island Road, and I'm wondering if you could give me some more information about effect on soils?

It is the applicant's intention to have as little impact of the productivity of the soil, and to return the land to productive use incrementally as works progress. We're currently proposing to remove topsoil, and stockpile it for re-

spreading on backfilled excavations. Topsoil removal/excavation and replacement would happen incrementally, and backfilling would happen at every available opportunity so no topsoil would be stored for more than 6 months. The placement, spreading, levelling and cultivation of topsoil will be carried out in a manner that minimises compaction of the topsoil and any undue compaction that may occur will be remedied before sowing. Reinstated areas will be sown down with a standard rye grass/white clover seed mix together with an initial application of fertiliser to facilitate establishment. In line with the extraction operation, revegetation shall be carried out in a progressive manner so as time limit any damage or loss of soil through erosional processes.

How do you feel about these controls, and do you feel they go far enough in protecting the productivity of the soils? Are there any additional controls that you feel should be in place for you to support the application?

Any further information you can supply would be greatly appreciated.

Ngā mihi,

Alice Woodward
Resource Management Consultant
BSc

Planscapes (NZ) Ltd
94 Selwyn Place : PO Box 99 : Nelson
T 03 539 0281 : **E** Alice@planscapes.co.nz

From: Dr Bernard Simmonds <Bernard.Simmonds@tasman.govt.nz>
Sent: Monday, 12 August 2019 2:05 pm
To: Regan Martin <regan@enviro.net.nz>
Subject: RE: soils information request- Peach Island area

Hi Regan,

First site – Rural 1 zone, class A productive values. Motueka 'stony sandy" and Riwaka 'medium sand' soils. Shallow topsoil overlying gravels. Both Motueka and Riwaka soils are recorded as naturally fertile and providing adequate levels of nutrients required for horticultural crops. Climate is favourable.

Second site – Rural 1, Class A, Riwaka 'medium' and 'fine sand', and Motueka 'stony sand' soils.

Cheers,

Bernard

Dr Bernard Simmonds
Resource Scientist - Land
DDI (03) 543 8446 | Bernard.Simmonds@tasman.govt.nz
Private Bag 4, Richmond 7050, NZ

From: Regan Martin <regan@enviro.net.nz>
Sent: Monday, 12 August 2019 11:35 AM
To: Dr Bernard Simmonds <Bernard.Simmonds@tasman.govt.nz>
Subject: soils information request- Peach Island area

Hi Bernard
Hoping you could provide soil map and some soils information required for a productive value report for the properties below.
In regard to proposed gravel extraction consent application.

Thanks
Regards

Regan Martin
Environmental Monitoring Technician

Envirolink Ltd
regan@enviro.net.nz
Mobile: +64 21 029 039 70
Phone: +64 3 5402064
79 Pomona Rd, Ruby Bay, Nelson 7173
NEW ZEALAND

ANNEXURE J

Douglas Road Gravel Extraction Images

C J Industries currently holds consents RM150901 and RM150896 to extract gravel from the banks of the Motueka River at 83 Douglas Road, and have been undertaking gravel extraction in this location since 2002 (under NN020167). They have an excellent compliance record over this time and past aerial photographs of the site (refer Figures 1 to 10 below) demonstrate the staging of works and progress of excavation areas (circled) over this time. Additionally, these photographs identify the quality of site rehabilitation and environmental outcomes that CJ Industries has achieved. Similar outcomes are expected under this proposal.

Figure 1: *Google Earth photo dated 11 August 2003*

Figure 2: *Google Earth photo dated 28 August 2006*

Figure 3: *Google Earth photo dated 19 April 2007*

Figure 4: *Google Earth photo dated 28 November 2010*

Figure 5: *Google Earth photo dated 23 February 2013*

Figure 6: *Google Earth photo dated 2 April 2014*

Figure 7: *Google Earth photo dated 27 December 2015*

Figure 8: *Google Earth photo dated 19 April 2017*

Figure 9: *Google Earth photo dated 3 September 2018*

Figure 10: *Google Earth photo dated 13 February 2019*

tasman district council

File: RM190818
Silent One ID:
@tasman.govt.nz
Phone 543 8573

17 July 2019

CJ Industries Limited
PO Box 227
Motueka 7143

Dear Tony

Resource Consent Application – Returned

Application Number:	RM190818
Applicant:	CJ Industries Limited
Address:	493 Motueka River West Bank Road, Motueka
Proposed Activity:	Land use consent to extract gravel

Thank you for your resource consent application, which we received on 8 July 2019. All resource consent applications must be assessed against criteria in Section 88 and Schedule 4 of the Resource Management Act 1991 ("the Act") to determine whether or not they are complete.

The Council has determined that your application is not complete for the following reasons:

1 Assessment against any relevant provisions of statutory documents

While you have listed a number of the Tasman Resource Management Plan (TRMP) rules and National Policy Statement (NPS) objectives and policies, (pp 24 to 35), Section 88 and Schedule 4 of the RMA requires an "assessment against any relevant provisions of a document referred to in section 104(1)(b)".

Your 'assessment' in Section 5 of your application is not fit for the purpose as an 'assessment' under Section 88 and Schedule 4 of the RMA since:

- it is limited to identifying the potential activity status under some of the relevant rules only; and
- there has been no identification nor assessment against the relevant objectives and policies of the TRMP.

Tasman District Council
Email info@tasman.govt.nz
Website www.tasman.govt.nz
24 hour assistance

Richmond
189 Queen Street
Private Bag 4
Richmond 7050
New Zealand
Phone 03 543 8400
Fax 03 543 9524

Murchison
92 Fairfax Street
Murchison 7007
New Zealand
Phone 03 523 1013
Fax 03 523 1012

Motueka
7 Hickmott Place
PO Box 123
Motueka 7143
New Zealand
Phone 03 528 2022
Fax 03 528 9751

Takaka
78 Commercial Street
PO Box 74
Takaka 7142
New Zealand
Phone 03 525 0020
Fax 03 525 9972

You have also omitted to assess the application against relevant provisions including potentially Chapter 16 - Transport, Flood Hazards, and Outdoor Signs if proposed.
While you have listed some of the rules from the following chapters, you should provide an assessment against the relevant provisions:

- Chapter 17 - Rural 1 Zone rules,
- Chapter 18 - Land disturbance rules
- Chapter 28 - Rules for activities in the beds …
- Chapter 36 - Discharges

The objectives and policies in the following chapters that should be considered for relevance and assessed include:

- Chapter 5 - Site amenity effects
- Chapter 7 - Rural environmental effects
- Chapter 8 - Margins of rivers
- Chapter 9 - Landscape
- Chapter 10 - Historic heritage
- Chapter 11 - Land transport effects
- Chapter 12 - Land disturbance effects
- Chapter 13 - Natural hazards

The requirements of Schedule 4 are “subject to the provisions of any policy statement or plan”. You have not addressed the specific relevant information requirements mandated in Chapters 19, 29 and 37 of the TRMP:

- Chapter 19, by reference to 19.2.1, 19.2.9 and 19.2.10
- Chapter 29, see 29.2.16
- Chapter 37 – discharges

2 Permitted activities / TRMP provisions

If any permitted activity is part of the proposal to which the application relates, you must provide a description of the permitted activity that ***demonstrates*** that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under Section 87A(1)). See Schedule 4, clause 3a.

It appears that your application identifies relevant permitted activity conditions and then asserts compliance, rather than demonstrating that the activity will in fact comply with the relevant permitted activity standards. This is reflected in volunteered conditions that merely restate permitted standards, in the absence of any evidence or robust reasoning to demonstrate the activities will comply. Examples include compliance with the relevant noise standards of the TRMP, and truck crossings of the river.

Please demonstrate compliance with the permitted activity statuses.

3 Provide an assessment of effects proportionate to the scale and significance of the effects that the activity may have on the environment

In the first instance for context we note:

- the potential sensitivity of the riparian receiving environment, being subject to a WCO, with identified values for preservation and protection; and

- proximity of the proposal site to a number of dwellings.

Having regard to the nature of your proposal, we consider that a proportionate response needs more than "a ***Summary*** *of the Assessment of Affects* (sic)" (p 36 of the AEE).

For instance, for the riverbed activities we note that the author has said:

"this activity poses little threat to the social, economic and cultural well-being of the area or the life supporting capacity of the surrounding air, water, soil and ecosystems", but then has gone on to state that "please refer to Appendix 1 (8.2) for a list of Volunteered Conditions (sic) that aim to mitigate the detrimental effects of this activity".

In the absence of any reasoning and a reliance on assertions in the application and AEE, to assist you we have identified fundamental assessments that we consider are likely needed, and note in most instances you will need to engage an appropriately qualified professional to undertake the relevant assessment.

A Effects from loss of Rural 1 productive land

The existing land is zoned Rural 1. Therefore you need to identify the extent of farmland that will be impacted by your proposal and the adverse effects on the loss of productive rural land. This assessment should take the form of a land productivity report - refer clauses 19.2.1.17 and 19.2.10.7 of the TRMP.

B Noise effects

We require an acoustic assessment done by an appropriately qualified professional to assess the actual and potential effects from noise emissions. See clause 19.2.1.7(b) of the TRMP. This should include consideration of all noise-generating aspects of the proposed activity, including heavy vehicles entering / exiting the subject site.

Any assessment of effects relating to noise will be relevant in assessing the adverse effects on amenity values of persons in the surrounding environment, including dwellings and users of the river and its banks.

C Cultural effects

As you have identified in the relevant part of Schedule 30A on p32, the values of the Motueka for preservation and protection include cultural values. As you have also acknowledged, the Motueka River is subject to statutory acknowledgments to Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, Ngāti Kuia, Te Ātiawa o Te Waka-a-Māui, and omitted in your consideration Ngāti Toa Rangatira (refer Table 3, Section 4 of Statutory Acknowledgments).

The application has no reasoning to support the assertion that there are no adverse cultural effects on iwi. We require a cultural impacts assessment from iwi (proportionate to the scale and significance of adverse effects on their cultural values and associations), and as needed your response to any recommendations arising from that assessment.

To help you, their contact details are as follows:

Ngāti Rārua, Ngāti Tama, and Ngāti Koata – mandate given to Tiakina te Taiao
Email: resourceconsent@tiakina.co.nz

Te Ātiawa o Te Waka-a-Māui Trust
Email: rc@teatiawatrust.co.nz

Te Runanga o Ngāti Kuia Trust
Phone: 0800 NGATIKUIA (642 845)
Email: tari@ngatikuia.iwi.nz

Ngāti Toa Rangatira Trust
Email: resourcemanagement@ngatitoa.iwi.nz

We note at their own discretion they may agree to provide a joint CIA. One iwi may not speak for the values and associations of another iwi unless mandate has been given.

D Traffic effects

Your application should assess the land transport effects from the vehicle movements associated with the proposed activity, including the operation of the roading network. This should be done by a suitably qualified traffic engineer.

E Stormwater / sediment management

Your application should provide an assessment of the potential effects on stormwater run-off and existing drainage (including infiltration) characteristics of the land. Courtesy of the removal of vegetation, changes in contours, etc there is the potential for erosion and/or discharge of sediment-laden water.

At the point of extraction we also require an assessment of the effects on groundwater where the excavation is below groundwater level.

We recommend this is done by a suitably qualified engineer.

Noting that your application does accept there will be discharges to water, Schedule 4, clause 6 requires an assessment of the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and any possible alternative methods of discharge, including discharge into any other receiving environment. We require this as part of your assessments of discharges of contaminants.

F Land disturbance effects

We refer you to the information requirements in Chapter 19 that need to be addressed. Among other things, you should provide more details of timing, staging, methodologies, and on the proposed backfill. Note the compliance against previous consents requiring backfill is

considered relevant in terms of backfill design and implementation in managing potential adverse effects.

G Flood risk assessment

You have identified that the subject site is subject to flooding. We require a flooding risk assessment of the proposed activity, including the changes to flood risk (changes in natural drainage patterns in flood events, changes in flood plain capacity, displacement by any earthworks or structures, and increased potential for effects from erosion and discharges of contaminants as a consequence of any flood event).

H Effects from bed disturbance from trucks crossing the river

The assessment of adverse effects from crossing the Motueka River has been limited to an assertion of compliance with a particular permitted activity condition, and predicated on a number of further pre-conditions to assert compliance with the 20% visual clarity. In our view you have not demonstrated compliance with the permitted activity, and while we retain an open mind, due to the complexity of operation to achieve that asserted standard, we are of the preliminary view that it is likely the vehicle crossings will not comply.

We require a full assessment of the potential effects from trucks crossing the Motueka River. Among other things, this should consider the potential for effects on water quality, effects from modification to bed morphology, bank stability, effects on habitat and ecosystems, and effects on recreational, landscape, amenity, and cultural values.

If you are able to demonstrate that the activity is in fact a permitted activity, we still require an assessment of effects so that we may consider the cumulative effects of your proposal, and an assessment of the efficacy of any suggested pre-conditions in managing the risk of managing any identified adverse effects.

I Landscape, character and visual amenity effects

With the changes to vegetation patterns and landform (including associated stockpiling of extracted gravel) and the presence of the activity in the rural and riparian context, we require an assessment of adverse effects for surrounding properties and public viewpoints. In this respect we also draw your attention to the requirements in Chapter 19 that includes any structures proposed as part of the activity.

4 Description and appropriateness of mitigation measures

In regard to any assessment required above, we also draw your attention to Schedule 4, clause 6(e) that requires a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.

The approach as part of your application has been to volunteer conditions, without assessing the actual and potential effects of the proposed activity. Due to the sensitivity of the receiving environment and uncertainty about the effectiveness of conditions, in the actual and potential effects should be assessed first, and then your AEE should how good any proposed conditions are in appropriately avoiding, managing or remedying any identified adverse effects.

To assist you, we draw your attention to the section 3 definition of 'effect':

In this Act, unless the context otherwise requires, the term effect includes—

(a) any positive or adverse effect; and
(b) any temporary or permanent effect; and
(c) any past, present, or future effect; and
(d) any cumulative effect which arises over time or in combination with other effects—regardless of the scale, intensity, duration, or frequency of the effect, and also includes—
(e) any potential effect of high probability; and
(f) any potential effect of low probability which has a high potential impact.

5 Consultation

Page 36 of your application states that you have consulted with Arthur and Derek Woodcock. As per clause 6(1)(f) of Schedule 4, please provide records of any consultation done and your response to the any issues raised.

6 Assessment against Part 2

Schedule 4, clause 2(1)(f) requires an assessment of the activity against any relevant Part 2 matters. We note the proposal appears to engage a number of Part 2 matters and so we require an assessment against the matters as relevant.

We need the information listed above before accepting your application. This means we will not do any more work on it until you lodge an amended application. However, to progress from here, you can make an appointment with me to discuss the further information required. At this stage the Council will retain the balance of the deposit you have paid, on the expectation that a new application will be lodged shortly. Please note that all costs associated with the initial lodging and checking of your application will be deducted from the deposit provided. However, if you are not proposing to lodge a new application and wish to have the balance returned, then please contact the undersigned, who will arrange for a cheque to be sent to you.

If you disagree with our decision, Section 357 of the Act provides you with the right to lodge an objection with the Council. Any such objection must be made in writing setting out the reasons for the objection and must be lodged with the Council, together with a deposit of $300.00 (GST inclusive), within 15 working days of receiving this letter.

If you have any queries, my contact details are listed at the top of this letter.

Yours sincerely

Consent Planner
Natural Resources