Te Kaunihera o Te Hiku o te Ika
Far North District Council

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Schedule 4). Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement? ◯ **Yes** ◯ **No**

2. Type of Consent being applied for

(more than one circle can be ticked):

- ✓ **Land Use**
- ◯ **Fast Track Land Use***
- ✓ **Subdivision**
- ✓ **Consent under National Environmental Standard** (e.g. Assessing and Managing Contaminants in Soil)
- ◯ **Discharge**
- ✓ **Change of Consent Notice (s.221(3))**
- ◯ **Extension of time (s.125)**
- ✓ **Other (please specify)** Creation of ROW easement under s348 of LGA.

** The fast track is for simple land use consents and is restricted to consents with a controlled activity status.*

3. Would you like to opt out of the Fast Track Process?

◯ **Yes** ◯ **No**

4. Consultation

Have you consulted with Iwi/Hapū? ◯ **Yes** ✓ **No**

If yes, which groups have you consulted with?	
Who else have you consulted with?	HNZPT, Top Energy, Chorus, NZTA

For any questions or information regarding iwi/hapū consultation, please contact Te Hono at Far North District Council tehonosupport@fndc.govt.nz

5. Applicant Details

Name/s: Troy and Billie Denison

Email: [redacted]

Phone number: Work [redacted] Home

Postal address:
(or alternative method of service under section 352 of the act)

80 Waterfront Rd, Pukenui
Northland

Postcode 0484

6. Address for Correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s: Northland Planning and Development Ltd 2020

Email: [redacted]

Phone number: Work [redacted] Home

Postal address:
(or alternative method of service under section 352 of the act)

112 Commerce Street
Kaitaia

Postcode 0441.

** All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.*

7. Details of Property Owner/s and Occupier/s

Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: Bradleys R & S Limited

Property Address/ Location: 80 Waterfront Road, Pukenui

Postcode 0484

8. Application Site Details

Location and/or property street address of the proposed activity:

Name/s: Tray & Billie Denison

Site Address/ Location: 80 Waterfront Road
Pukenui

Postcode 0484.

Legal Description: Lot 1 DP 350647 **Val Number:**

Certificate of title: 207206.

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ◯ **Yes** ✓ **No**

Is there a dog on the property? ✓ **Yes** ◯ **No**

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. This is important to avoid a wasted trip and having to re-arrange a second visit.

Please contact applicant to arrange site visit.

9. Description of the Proposal:

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

Proposal to create one additional allotment in the Coastal Residential Zone which also infringes the permitted standards for stormwater management as well as rules under Section 15.1.6C Access. The combined subdivision and land use application has been assessed as a Discretionary Activity.
Cancellation of existing consent notice conditions is also sought.
Consent under the NESCS is also sought as a Restricted Discretionary Activity.

If this is an application for a Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

10. Would you like to request Public Notification?

◯ **Yes** ✓ **No**

11. Other Consent required/being applied for under different legislation

(more than one circle can be ticked):

- ◯ **Building Consent** Enter BC ref # here (if known)
- ◯ **Regional Council Consent (ref # if known)** Ref # here (if known)
- ◯ **National Environmental Standard consent** Consent here (if known)
- ◯ **Other (please specify)** Specify 'other' here

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) ✓ **Yes** ◯ **No** ◯ **Don't know**

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result. ✓ **Yes** ◯ **No** ◯ **Don't know**

- ✓ **Subdividing land**
- ◯ **Changing the use of a piece of land**
- ◯ **Disturbing, removing or sampling soil**
- ◯ **Removing or replacing a fuel storage system**

13. Assessment of Environmental Effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties.

Your AEE is attached to this application ✓ **Yes**

13. Draft Conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? ✓ **Yes** ◯ **No**

If yes, do you agree to extend the processing timeframe pursuant to Section 37 of the Resource Management Act by 5 working days? ✓ **Yes** ◯ **No**

14. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full) Troy and Billie Denison

Email: [redacted]

Phone number: Work [redacted] Home

Postal address:
(or alternative method of service under section 352 of the act)

80 Waterfront Rd, Pukenui

Postcode 0484

Fees Information

An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full) Troy Denison

Signature: [redacted] Date 18-9-25

(signature of bill payer

MANDATORY

15. Important Information:

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement. A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:

Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

15. Important information continued...

Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name: (please write in full) Troy Denison

Signature: [redacted] Date 18-9-25

A signature is not required if the application is made by electronic means

Checklist (please tick if information is provided)

- [x] Payment (cheques payable to Far North District Council)
- [x] A current Certificate of Title (Search Copy not more than 6 months old)
- [ ] Details of your consultation with Iwi and hapū
- [x] Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- [x] Applicant / Agent / Property Owner / Bill Payer details provided
- [x] Location of property and description of proposal
- [x] Assessment of Environmental Effects
- [x] Written Approvals / correspondence from consulted parties
- [x] Reports from technical experts (if required)
- [x] Copies of other relevant consents associated with this application
- [ ] Location and Site plans (land use) AND/OR
- [x] Location and Scheme Plan (subdivision)
- [ ] Elevations / Floor plans
- [ ] Topographical / contour plans

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

Combined Land Use and Subdivision Resource Consent Proposal

Billie and Troy Denison

80 Waterfront Road, Pukenui

Date: 16 October 2025

Please find attached:

- an application form for a Combined Land-use and Subdivision Resource Consent in the ***Coastal Residential Zone*** to create one additional allotment and;
- an application to cancel consent notice conditions under s221(3) and;
- an application under the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 and;
- an application for right of way easement under Section 348 of the Local Government Act 1974;
- an Assessment of Environmental Effects indicating the potential and actual effects of the proposal on the environment.

The subdivision and land use application has been assessed as a **Discretionary Activity** under the Operative District Plan and a **Permitted Activity** under the Proposed Far North District Plan.

The cancellation of consent notice conditions has been assessed as a **Discretionary Activity** in accordance with s221(3) of the Act.

The application under the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 has been assessed as a **Restricted Discretionary Activity**.

If you require further information, please do not hesitate to contact me.

Regards,

Alex Billot

Resource Planner

Reviewed by:

Rochelle Jacobs

Director/Senior Planner

NORTHLAND PLANNING & DEVELOPMENT 2020 LIMITED

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1. **Far North District Council Application Form**
2. **Certificate of Title–** *LINZ*
3. **Consent Notice 6624741.1 -** *LINZ*
4. **Subdivision Scheme Plan –** *Von Sturmers*
5. **Site Suitability Report –** *Haigh Workman*
6. **Combined PSI and DSI –** *Haigh Workman*
7. **Archaeological Assessment –** *ASL Archaeology Solutions Ltd*
8. **Correspondence –** *Heritage NZ*
9. **Correspondence –** *Te Hono Support*
10. **Correspondence –** *Top Energy*
11. **Correspondence –** *Chorus*
12. **Correspondence -** *NZTA*

Assessment of Environment Effects Report

1. DESCRIPTION OF THE PROPOSED ACTIVITY

Subdivision

1.1. The proposal is to undertake a subdivision of Lot 1 DP350647 to create one additional allotment. The site is zoned Coastal Residential under the Operative District Plan (ODP). Proposed Lots 1 & 2 will each contain existing dwellings. Easement A will be created for rights of access over Lot 1 to Lot 2. Easements B and C will be created over adjoining Lot 2 DP350647 to apply rights over the existing internal driveway to the dwelling on Proposed Lot 2.

1.2. The proposed lots are as follows:

- Proposed Lot 1 = 8156m^2
- Proposed Lot 2 = 4.0789ha

Areas and measurements are subject to final survey.

1.3. The proposed subdivision can comply with the Controlled Activity provisions under 13.7.2.1(x) of the ODP as the lot sizes are larger than 3000m^2 within the Coastal Residential Zone.

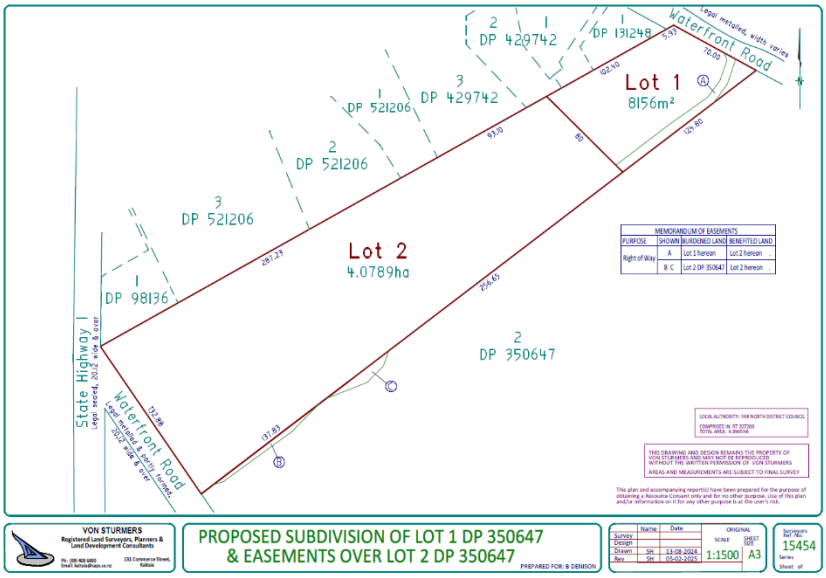


Figure 1: Proposed Scheme Plan.

Land Use

1.4. The proposal results in a breach of the permitted threshold under *10.8.5.1.6 Stormwater Management* as the existing impermeable surfaces within each lot will exceed the maximum allowance of 1000m^2. The proposal also results in breaches of *15.1.6C.1.1 Private Accessways, 15.1.6C.1.3 Passing Bays, 15.1.6C.1.5 Vehicle Crossings in Coastal zones and 15.1.6C.1.8 Frontage to Existing Roads.* Dispensation is sought as part of this application process to enable the existing vehicle crossing places and accessways to remain as is, with no upgrading of the

paper road that provides access to Lot 2. This will be discussed in more detail within this report.

Cancellation of Consent Notice

1.5. The Title for the subject site records one consent notice under Document 6624741.1. Application is sought to cancel the consent notice conditions within this registered document as they affect the land within Lot 1 DP350647 on Record of Title 207206 pursuant to s221(3).

1.6. The consent notice conditions require updated wording to reflect the current standards and to ensure there are no repetitions between current and past consent notice documents. Further detail will be provided in this application.

1.7. The cancellation is to be completed under Section 221(3) of the RMA and is requested to be included as a separate resolution within the decision document.

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

1.8. Haigh Workman have completed a desktop assessment and field investigation of the site as well as a Combined Preliminary and Detailed Site Investigation Report (DSI), which is included within **Appendix 6** of this application. It was found that the site has had activities within the site which are listed on the HAIL.

1.9. As the combined PSI and DSI did not conclude that the soil contamination at location TP14 does not exceed the applicable standard in regulation 7, the proposal cannot be assessed as a Permitted or Controlled activity in regard to Regulations 8 & 9 of the NESCS and further assessment must be undertaken.

1.10. The proposal can comply with the rules within Regulation 10 of the NESCS and as such will be assessed as a **Restricted Discretionary Activity** under the NESCS for the proposed subdivision. It is requested that this be included as a separate resolution within the decision document.

Creation of Easement under s348 of the Local Government Act 1974

1.11. It is requested that a separate resolution is provided for the creation of Easements B & C as shown on the attached scheme plan. These proposed easements will cover the existing internal accessway to the two dwellings on the site, which slightly encroaches over the subject site boundary into Lot 2 DP350647. The purpose of these easements will be for right of way. The proposal will see Lot 2 DP350647 (also owned by the subject site owner) being the burdened land and Proposed Lot 2 being the benefited land. It is requested that this be included as a separate resolution within the decision document as the adjoining land does not form part of the subdivision. It is requested that this is considered under Section 348 of the Local Government Act 1974 (LGA).

2. THE SITE AND SURROUNDING ENVIRONMENT

2.1. The subject site is zoned Coastal Residential under the Operative District Plan and Settlement within the Proposed District Plan as well as being within the Coastal Environment and Treaty Settlement Area of Interest Overlays.

2.2. The subject site currently contains three dwellings, with two of the dwellings also having a detached workshop/garage in close proximity. The previous consent history has seen multiple building consents and resource consents issued for the site. The most recent building consent EBC-2022-761 and resource consent RC2200318, included the provision of construction of a new shed and dwelling which breached the permitted threshold for impermeable surfaces. Resource consent was also issued retrospectively for earthworks as well as accounting for the impermeable surface coverage of the dwelling located nearest to Waterfront Road. Due to the large area of the site (in excess of 4ha), resource consent was not triggered for a breach of the permitted residential intensity rules.

2.3. There are existing open drains/overland flow paths within the site which manage stormwater runoff. The dwelling located in the north-eastern portion of the site, nearest to Waterfront Road, has access directly from Waterfront Road. Waterfront Road is a partially sealed road. The road is sealed from the State Highway for approximately 700m, where it then becomes metalled. The subject site access is located approximately 150 metres along the metalled portion of Waterfront Road.

2.4. The two other dwellings on the site (which will be contained within Proposed Lot 2) are accessed via a metalled paper road, along the western portion of the site. NZTA have been consulted as part of this application and did not raise any concerns. The site will be accessed from the paper road rather than directly from the State Highway. It is noted that the access to the subject site along the paper road is located slightly in excess of 90m from the intersection with the State Highway. The two dwellings within this portion of the site are then accessed via an internal metalled accessway.

2.5. The topography within the site sees the two dwellings to be contained within Proposed Lot 2 located atop of a flattened hill, which provides views across Houhora Harbour. The land around this area falls away on either side. The dwelling which is located within Proposed Lot 1 is located within the eastern most portion of the site. The site is not within an area which benefits from reticulated services such as wastewater, stormwater and water, with these services being provided for onsite.

2.6. The site is located approximately 2 kilometres from the Pukenui Village and is in walking distance to Pukenui School, daycares, health services and the local four square. Houhora Harbour is located directly opposite Waterfront Road, with the site encapsulating views of the Harbour. The site sits on the outskirts of the Pukenui Village and is located in an area which is

close to smaller more intensely developed areas along Waterfront Road. The opposite side of the State Highway sees larger lots zoned Coastal Living and Rural Production.

2.7. Allotments down Waterfront Road range in size from 800m^2 to 1 hectare, most of which contain a residential dwelling.

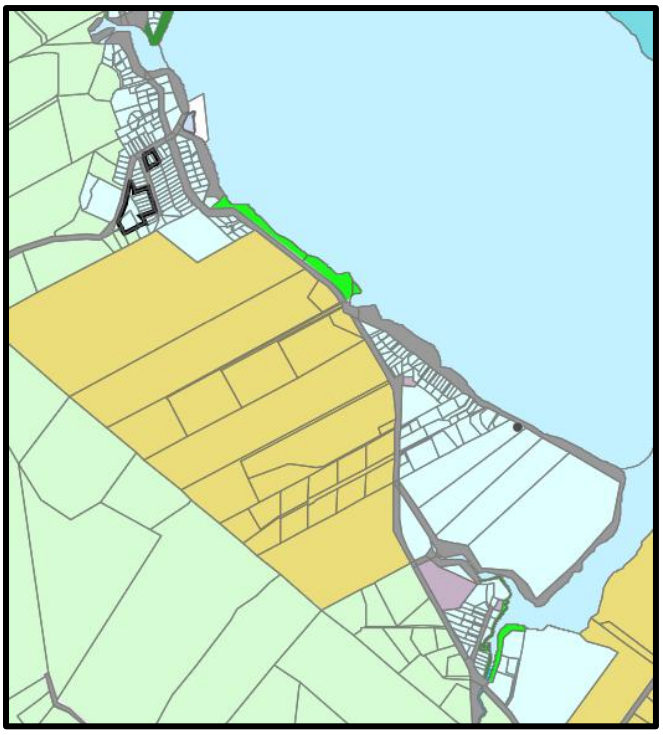


Figure 3: FNDC ODP Zoning Maps.

Figure 2: Aerial view of the site and adjoining allotments.

Figure 4: Wider aerial image of the surrounding environment.

Site Photos

2.8. A site visit was undertaken in December 2024 as well as January 2025, with a compilation of the photos taken below.

Figure 8: Existing paper road which provides access to the existing dwellings on Proposed Lot 2.

Figure 7: Intersection of the paper road with the State Highway.

Figure 5: Internal drive to the existing dwellings on Lot 2.

Figure 6: Existing access to Lot 1 from Waterfront Road.

Figure 9: Existing internal drive to the dwelling on Lot 1 which will form proposed Easement A.

Figure 10: Existing metalled drive to the dwelling on Lot 1 which will form part of proposed Easement A.

Figure 11: View of internal drive to dwelling on Lot 1 taken from near the dwelling, looking towards Waterfront Road and Houhora Harbour.

Figure 12: View of existing dwellings on Lot 2, taken from near the dwelling on Lot 1.

Figure 13: Existing dwelling and shed on Lot 1.

Figure 14: Portion of ROW and dividing boundary between Lots 1 & 2. Looking towards dwelling on Lot 2.

3. BACKGROUND

Title

3.1. The subject site is legally described as Lot 1 DP350647 with a land area of 4.8945ha. The allotment is contained within Record of Title 207206 which is dated 27 October 2005. There is one consent notice registered on the title under Document 6624741.1.

CN 6624741.1

3.2. CN6624741.1 was registered on the title on 21st September 2005 as part of RC2031096 which created the subject site and the two adjoining allotments Lots 2 & 3 DP350647. The subdivision was assessed as a Discretionary Activity under the TDP and a Controlled Activity under the PDP at the time.

3.3. It is requested as part of this application to cancel the consent notice conditions within 6624741.1 in so far as they affect the subject lot, with new consent notice conditions being offered on a fresh new consent notice document. This will ensure future owners can easily comprehend what is required for the site and refer to the correct reports.

3.4. CN6624741.1 contains three conditions which are outlined below:

(i) Provide, at the time of lodging a building consent application for any of the allotments on the subdivision plan, a specific design for stormwater management and effluent disposal (which is to comply with TP58) by a suitably qualified Chartered Professional

Engineer which addresses those issues in terms of the building being proposed in the application.

(ii) Provide a report from a Chartered Professional Engineer, at the time of lodging a building consent application for a dwelling on Lot 1 or Lot 2 or a new or relocated dwelling on Lot 3, which assesses the risk of erosion of the Houhora Harbour Cliff face to the site proposed for the dwelling. In particular, the report will need to clarify that any house site proposed is landward of any potential erosion risk.

(iii) Pursuant to the attached letter from Transit NZ dated 9 August 2004, the use of the gates indicated as (A) and (B) on the attached plan is to be limited to the movement of cattle and farm machinery and to the storage and movement of mussel farm equipment at an intensity equivalent to the existing farms' activities.

3.4.1. In terms of Conditions (i) and (ii), no new buildings or dwellings are proposed as part of this application. It will be requested to cancel these two consent notice conditions.

3.4.2. In terms of Condition (iii), Figure 15 below shows the location of the gates identified as (A) and (B) in the letter from Transit NZ dated 9 August 2004. As can be seen in Figure 15 below, the gates affect Lot 3 DP350647 and therefore do not affect the subject proposal. As this condition does not affect the subject site, it is requested that this consent notice condition is cancelled for the subject site.

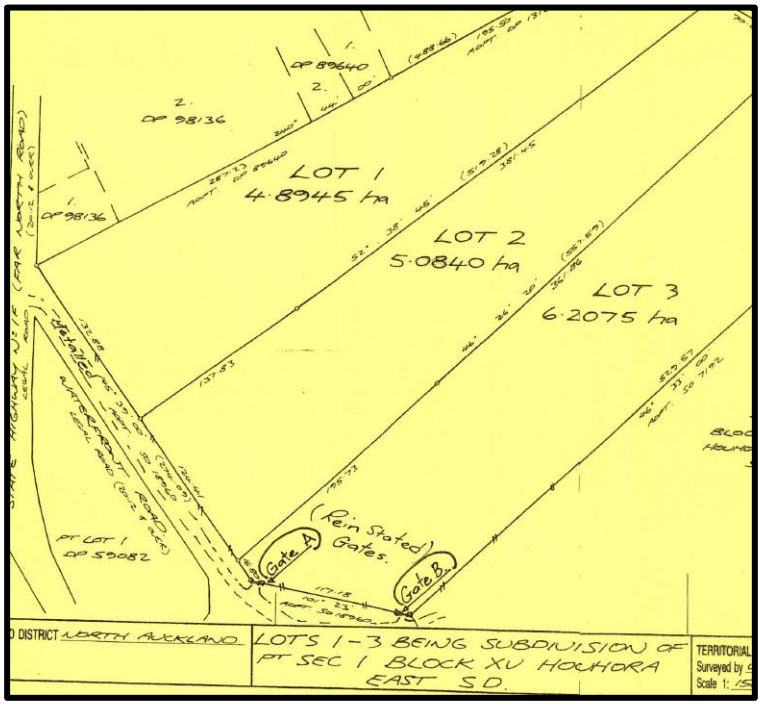


Figure 15: Diagram identifying Gates 'A' and 'B'

Site Features

3.5. The site is located within the Coastal Residential Zone under the Operative District Plan and zoned Settlement within the Proposed District Plan as well as being within the Coastal Environment and Treaty Settlements Area Overlays.

Figure 17: FNDC ODP Zoning Maps.

Figure 16: PDP Zoning Maps.

3.6. The site is partially located within the Coastal Environment but is not within any areas identified as Outstanding Natural Landscapes or Features under the Regional Policy Statement for Northland. Houhora Harbour is noted of being of High Natural Character which is located on the opposite side of Waterfront Road.

Figure 18: RPS Maps showing site being partially within Coastal Environment.

3.7. The subject site is not shown to be susceptible to coastal hazards or river flood hazards under the NRC Hazard Maps. The site and surrounding environment are shown to be erosion prone land under the NRC Hazard Maps as well as being within the orange and yellow zone for Tsunami Evacuation.

3.8. Under the FNDC Flood Modelling 2007 maps, the site is shown to contain two low lying areas which may be susceptible to the 5 year, 10 year and 100 year ARI Floodplain.

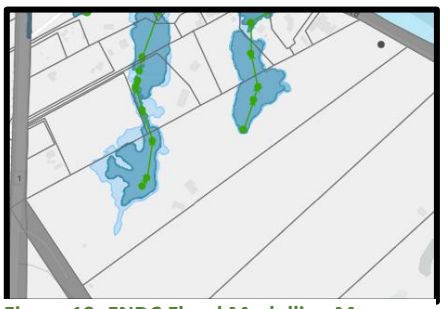


Figure 19: FNDC Flood Modelling Maps.

3.9. Reticulated services are not available to this site. The existing dwellings have existing provisions for water

supply, wastewater disposal and stormwater attenuation as will be discussed further in this report.

3.10. Haigh Workman determined that there are areas of the site which have had activities listed on the HAIL. A combined Preliminary and Detailed Site Investigation Report was prepared for the site. Further assessment of the NESCS will be undertaken within this report.

3.11. The NZAA Maps indicate the site contains some archaeological sites. ASL Archaeology Solutions LTD have completed a site visit and survey of the property in 2020, as part of RC2200318. Three archaeological features were recorded on the property, with two of them not being able to be relocated and the third being located but was found to not actually be on the subject site. This will be discussed further in this report. Heritage NZ Pouhere Taonga have been contacted as part of this application process and have advised that the application is to proceed under the guidance of an ADP.

3.12. The site does not contain any areas of significant indigenous vegetation or fauna nor does it contain any reserves or PNA. The site is not located within an area which is shown to have kiwi present.

3.13. The site is shown to contain soils of LUC 4s5, which are not classified as being highly versatile soils. As such, it is considered that consent under the National Policy Statement for Highly Productive Land (NPS for HPL) is not triggered and no further assessment will be undertaken within this report.

3.14. The site is not known to be located within a Statutory Acknowledgement Area. The site is within the Deed of Settlement Area for Te Hiku o Te Ika iwi and Area of Interest for Te Aupōuri.

4. WEIGHTING OF PLANS

4.1. The site is zoned as Settlement under the Proposed District Plan and is subject to the Coastal Environment and Treaty Settlement Area of Interest Overlays.

4.2. The Council notified its' PDP on 27 July 2022. The period for public submissions closed on the 21 October 2022. A summary of submissions was notified on the 4 August 2023. The further submission period closed on the 5 September 2023. It is apparent from the summary of submissions relating to the applicable zone that a large number relate to the application of these provisions. Based on the volume and comprehensive nature of these submissions, the Council has confirmed that no other rules will have legal effect until such time as a decision is made on those provisions.

4.3. District Plan hearings on submissions are currently underway and are scheduled to conclude in October 2025. No decision on the PDP has been issued. For this reason, little weight is given to the PDP provisions.

5. ACTIVITY STATUS OF THE PROPOSAL

Operative District Plan

5.1. The subject site is located within the Coastal Residential Zone. An assessment of the relevant subdivision, zone and district wide rules of the District Plan is set out in the tables below.

Subdivision

Assessment of the applicable Subdivision Rules for the Coastal Residential Zone:		
PERFORMANCE STANDARDS		
Plan Reference	**Rule**	**Performance of Proposal**
13.7.2.1 (x)	**MINIMUM LOT SIZES**	**Controlled** Lot 1 will have an area of 8156m^2 and Lot 2 will have an area of 4.0789ha. Each lot has the provision for stormwater and wastewater disposal. The proposal can therefore meet the Controlled provisions for the zone, which requires a minimum lot size of 3,000m^2.
13.7.2.2	**ALLOTMENT DIMENSIONS**	**Permitted** Both lots will contain existing built development.
13.7.2.3 – 9	**Not Applicable for this application.**	

5.2. The proposal is able to meet the lot size provided for as a **Controlled Activity** as per Table 13.7.2.1 above.

Coastal Residential Zone Standards

5.3. Both Lots 1 & 2 will contain existing built development and impermeable surfaces. As such, an assessment of Section 10.8.5.1 of the Operative District Plan will be undertaken below.

Assessment of the permitted COASTAL RESIDENTIAL ZONE RULES:		
PERFORMANCE STANDARDS		
Plan Reference	**Rule**	**Performance of Proposal**
10.8.5.1.1	**RELOCATED BUILDINGS**	**Not applicable.** No relocated buildings are proposed as part of this proposal.
10.8.5.1.2	**RESIDENTIAL INTENSITY**	**Permitted.**

		The permitted threshold for residential development is one unit per 3,000m^2 of land on an unsewered site. Lot 1 will contain only one residential dwelling with Lot 2 containing two residential dwellings. As such, Lot 2 is able to comply with the permitted threshold as the area of Lot 2 is 4.07ha.
10.8.5.1.3	**SCALE OF ACTIVITIES**	**Not applicable.** No such activities are proposed as part of this application.
10.8.5.1.4	**BUILDING HEIGHT**	**Not applicable.** No new buildings are proposed as part of this proposal.
10.8.5.1.5	**SUNLIGHT**	**Permitted** The new dividing boundaries are located a sufficient distance from existing structures, such that the proposal complies with this rule.
10.8.5.1.6	**STORMWATER MANAGEMENT**	**Discretionary** The permitted threshold for impermeable surfaces within the Coastal Residential zone is 50% or 1000m^2, whichever is the lesser. Lot 1 will have an impermeable surface coverage of 1230m^2 or 17.5% of the total site area. Lot 2 will have an impermeable surface coverage of 1964m^2 or 4.8% of the total site area. As above, the percentage of the impermeable areas will be far less than 50% of the total site area, however the impermeable surface coverage exceeds 1000m^2, which is the lesser amount in this instance. As per the Site Suitability Report from Haigh Workman, this is considered to be a technical breach due to the large lot sizes and a fixed maximum threshold of 1000m^2.
10.8.5.1.7	**SETBACK FROM BOUNDARIES**	**Permitted.** The minimum setback from road boundaries shall be 3 metres and the minimum setback from any boundary apart from a road boundary is 1.2m except that no setback is required for a maximum total length of 10m along any one such boundary. All structures are considered to be in excess of this from the new dividing boundary.

10.8.5.1.8	**SCREENING FOR NEIGHBOURS NON-RESIDENTIAL ACTIVITIES**	**Not applicable** as no non-residential activities are proposed.
10.8.5.1.9	**OUTDOOR ACTIVITIES**	**Not applicable.**
10.8.5.1.10	**TRANSPORTATION**	A full assessment has been completed in the table below.
10.8.5.1.11	**SITE INTENISTY – NON RESIDNETIAL ACTIVITIES.**	**Not applicable.**
10.8.5.1.12	**HOURS OF OPERATION NON-RESIDENTIAL ACTIVITIES**	**Not applicable** as no non-residential activities are proposed.
10.8.5.1.13	**KEEPING OF ANIMALS**	**Not applicable** as no commercial keeping of animals are proposed.
10.8.5.1.14	**NOISE**	**Permitted** The proposal complies with the permitted standard.
10.8.5.1.15	**HELICOPTER LANDING AREA**	**Not applicable** as no helicopter landing is required.

District Wide Matters

DISTRICT WIDE MATTERS		
Plan Reference	**Rule**	**Performance of Proposal**
15.1.6A	**TRAFFIC**	**Permitted Activity** The permitted one-way daily traffic movements within the Coastal Residential Zone is 20. The first residential unit is exempt from this rule. Lot 1 will include one residential dwelling, which is exempt. Lot 2 will include two residential dwellings, with the first being exempt. This brings the daily TIF to 10, which complies with the permitted threshold.
15.1.6B	**PARKING**	**Permitted Activity** The proposed lots have existing vehicle parking and manoeuvring areas which will remain unchanged as part of this proposal.
15.1.6C.1.1	**PRIVATE ACCESSWAY IN ALL ZONES**	**Discretionary** (a) As part of this proposal, Easement A will be created which will include a private accessway. Easement A will service Lots 1 & 2. Lot 1 will contain one Household Equivalent (HE) and Lot 2 will contain two HE's.

		Appendix 3B-1 states that a private accessway servicing 3-4 HE in the CR zone, requires a 7.5m legal width and 3m carriageway width with passing bays. The access within Easement A is metalled and fenced on both sides. The metalled carriageway width varies from 3.5m to 5m for the main part of the access and then where it descends from the main access to the boundary of Lot 2 (westernmost end of the access), the carriageway width decreases to approximately 3m in width. The legal width of the accessway (measured from fence to fence) varies from 5.9m to 7.9m. As the fenced width does not meet the required legal width in some areas, **dispensation is sought to allow the legal width to follow the existing fence line.** As will be discussed in more detail within this report, the accessway will be used as a secondary access for Lot 2. The ROW is unobstructed and provides good sight lines, such that oncoming traffic is visible. The existing formation is considered to be of adequate width & formation for the intended use. Within Lot 2, there is also an internal access which services the two dwellings within Proposed Lot 2. Easements B & C will be created over Lot 2 DP350647, to enable access rights over the existing internal driveway which encroaches into the boundaries of Lot 2 DP350647. As this internal access will service two HEs (the two dwellings on Proposed Lot 2), Appendix 3B-1 requires a legal width of 5m and a carriageway width of 3m. The legal width is not applicable in this instance as there are no defined boundaries. The carriageway width meets the 3m requirement. A separate resolution is requested to create these easements under s348 of the LGA. (b) Permitted – the private accessway will service less than 8 HE. (c) Permitted – the subdivision does not service more than 9 sites. (d) Permitted – consultation has been had with NZTA who raised no concerns. Access will not be made on to the State Highway and NZTA confirmed the proposal is at the discretion of Council rather than NZTA.
15.1.6C.1.2	**PRIVATE ACCESSWAYS IN URBAN ZONES**	**Not applicable.**
15.1.6C.1.3	**PASSING BAYS ON PRIVATE ACCESSWAYS IN ALL ZONES**	**Discretionary Activity.** (a) & (b) In rural and coastal zones, passing bays are required at spacings not exceeding 100m. Where passing bays are required, they are to be at least 15m long and have a usable access width of 5.5 metres.

		As shown on the scheme plan, Easement A is longer than 100 metres. The driveway veers to the north at approximately the 100 metre mark from Waterfront Road, where it turns to the dwelling on Lot 1. In lieu of a passing bay, this turn off area is considered suitable for a passing bay, as this is where traffic from Lot 1 will be entering or exiting the ROW. **The use of this as a passing bay results in a technical breach of this rule as the required dimensions are not met.** (c) There is ample area for passing bays and vehicle queuing space at the vehicle crossing to Waterfront Road.
15.1.6C.1.4	**ACCESS OVER FOOTPATHS**	**Not applicable.**
15.1.6C.1.5	**VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES**	**Discretionary** (a) Haigh Workman have completed an assessment of the vehicle crossing places to the subject sites. Lot 1 is accessed via the formed portion of Waterfront Road. Haigh Workman have advised that the crossing does not meet the Type 1A standards as the splay on the southern side is not formed. It is requested that dispensation is applied to enable the crossing to Lot 1 to remain in its current condition. As will be discussed further in this report, the southern portion of Waterfront Road is a low volume road, with only two dwellings located further south of the subject site. The main use of the subject crossing is for vehicles turning north. The crossing place can meet the required sight distances. **Technical breach to enable crossing to Lot 1 to remain at the current standard**. The crossing to Lot 2 is via the unformed paper road. As the access is from a road which is not maintained by Council, it is requested that the crossing place remain in its current standard with no condition to upgrade. **Technical breach to enable crossings to Lot 2 to remain at the current standard.** (b) Not applicable as the access to either lot is not from a sealed road. (c) The crossing to Lot 1 is in excess of 6m wide. This is not considered to be applicable to Lot 2 considering that access is via a paper road which is not maintained by Council.
15.1.6C.1.6	**VEHICLE CROSSING STANDARDS IN URBAN ZONES**	**Not applicable.**

15.1.6C.1.7	**GENERAL ACCESS STANDARDS**	**Permitted.** (a) There is no need for vehicles to reverse off site. (b) Complies. (c) The sides of the driveway will remain in grass. (d) Stormwater will be managed on site.
15.1.6C.1.8	**FRONTAGE TO EXISTING ROADS**	**Discretionary** (a) Waterfront Road is considered to meet the legal road width standards. (b) The unformed portion of Waterfront Road, which provides access to Lot 2, is not considered to meet the required Engineering Standards. As the proposal will not increase the number of users along this portion of the road, it is requested that no upgrading shall apply. Instead, a consent notice condition will be imposed advising that Council assumes no responsibility of the road or its formation. **Technical Breach.** (c) Lot 2 has existing access from the unformed portion of Waterfront Road. Access via an easement is also provided from the formed portion of Waterfront Road. Although access is provided via easement A, the preferred access will be from the unformed portion of Waterfront Road, as this is what is currently utilised and where the internal access to the dwelling leads. Due to the number of users of the unformed portion of Waterfront Road being those only of Proposed Lot 2, it is considered this unformed road carries the lesser volume of traffic and as such, the proposal can comply with this rule. Lot 1 will be accessed via Easement A. (d) There are no known carriageway encroachments.
15.1.6C.1.9 – 11	Not applicable to this development.	

Operative District Plan Overall Status

Subdivision

5.6 The proposal can comply with the **Controlled** provisions for the Coastal Residential zone as the proposed lot sizes exceed 3000m^2 in area.

Land Use

5.7 A breach of *10.8.5.1.6 Stormwater Management* is created within Proposed Lots 1 & 2, as the impermeable surfaces will exceed the 1,000m^2 maximum coverage for each site, within the Coastal Residential zone. Lot 1 will contain 1230m^2 of impermeable surface coverage (17.5% of the total site area) and Lot 2 will contain 1964m^2 of impermeable surface coverage (4.8% of the total site area).

5.8 In regard to the access rules contained within Chapter 15, the proposal results in a breach of *15.1.6C.1.1 Private Accessways in all zones, 15.1.6C.1.3 Passing bays on private accessways in all zones, 15.1.6C.1.5 Vehicle Crossing Standards in Rural and Coastal zones and 15.1.6C.1.8 Frontage to Existing Roads*. Although the private accessway within Easement 'A' can meet the required carriageway width under Appendix 3B-1, dispensation is requested to enable the legal width to follow the existing fence line, which in parts is less than the required 7.5m width. Dispensation is also sought to enable existing areas to be utilised in lieu of formal passing bays, as well as enabling the existing crossing places to remain in their current condition. Due to Lot 2 being accessed via a paper road which is not maintained by Council, dispensation is also sought to enable this paper road to remain in the current standard with a consent notice condition being issued on the title advising that Council assumes no responsibility for the upkeep of this portion of Waterfront Road. This results in a Discretionary Activity.

Overall Combined Status for Subdivision and Land-use

5.9 As per Rules 10.8.5.3, 15.1.6C.2 and 13.9 Discretionary Activities, the combined subdivision and land use application will be assessed as a Discretionary Activity. The relevant sections of Chapter 11, 13 and 15 of the ODP will be assessed as part of this application.

Proposed Far North District Plan

5.10 Assessment of the matters relating to the Proposed District Plan that have immediate legal effect, are detailed below:

Chapter	Rule Reference	Compliance of Proposal
Hazardous Substances	The following rules have immediate legal effect: Rule HS-R2 has immediate legal effect but only for a new significant hazardous facility located within a scheduled site and area of significance to Māori, significant natural area or a scheduled heritage resource Rules HS-R5, HS-R6, HS-R9	**Not applicable.** The proposal does not include the establishment of a new significant hazardous facility or a significant hazardous facility within a scheduled site or area of significance to Māori, within a SNA or within a scheduled heritage resource.
Heritage Area Overlays	All rules have immediate legal effect (HA-R1 to HA-R14) All standards have immediate legal effect (HA-S1 to HA-S3)	**Not applicable.** The site is not located within a Heritage Area Overlay.
Historic Heritage	All rules have immediate legal effect (HH-R1 to HH-R10)	**Not applicable.**

		The site is not located within an area noted as being of Historic Heritage.
Notable Trees	All rules have immediate legal effect (NT-R1 to NT-R9) All standards have legal effect (NT-S1 to NT-S2) Schedule 1 has immediate legal effect	**Not applicable.** The site does not contain any notable trees.
Sites and Areas of Significance to Maori	All rules have immediate legal effect.	**Not applicable.** The site does not contain any scheduled sites and areas of significance to Māori.
Ecosystems and Indigenous Biodiversity	All rules have immediate legal effect (IB-R1 to IB-R5)	**Not applicable.** The site does not contain any ecosystems or indigenous biodiversity to which these rules would apply.
Subdivision	The following rules have immediate legal effect: **SUB-R6** - Environmental Benefit Subdivision. **SUB-R13**- Subdivision of a site within a heritage area overlay. **SUB-R14** - Subdivision of a site that contains a scheduled heritage resource. **SUB-R15** - Subdivision of a site containing a scheduled site and area of significance to Māori. **SUB-R17** - Subdivision of a site containing a scheduled SNA	**Permitted.** The site is not an environmental benefit subdivision; the site does not contain any heritage overlays; scheduled heritage resources; a scheduled site and area of significance to Māori or; any SNA's.
Activities on the Surface of Water	All rules have immediate legal effect (ASW-R1 to ASW-R4)	**Not applicable.** The proposal does not involve activities on the surface of water.
Earthworks	The following rules have immediate legal effect: EW-R12, EW-R13 The following standards have immediate legal effect:	**Permitted.** Any earthworks will comply with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the

	EW-S3, EW-S5	Auckland Region 2016 (Auckland Council Guideline Document GD2016/005).
Signs	The following rules have immediate legal effect: SIGN-R9, SIGN-R10 All standards have immediate legal effect but only for signs on or attached to a scheduled heritage resource or heritage area	**Not applicable.** No signs are proposed as part of this application.
Orongo Bay Zone	Rule OBZ-R14 has partial immediate legal effect because RD-1(5) relates to water	**Not applicable.** The site is not located in the Orongo Bay Zone.

5.11 The assessment above indicates the proposal is able to comply with the Proposed District Plan rules that have immediate legal effect. Under the Proposed District Plan, this activity will be assessed as a **Permitted Activity.**

Cancellation of Consent Notice Conditions

5.12 As mentioned, it is proposed to cancel the existing consent notice conditions contained within CN6624741.1 insofar as they affect the subject site. New consent notice conditions will be offered and are anticipated as part of this application process which will be registered on the new lots. This will ensure transparency as well as enable future lot owners to assess the relevant information with ease.

5.13 Section 221(3) of the Act allows for variation or cancellation of a condition specified in a consent notice by a territorial authority. Section 221(3A) states that sections 88 to 121, and 127 (40 to 132 of the Act) will apply in relation to such applications. Applications seeking to vary or cancel consent notice condition/s are assessed as if the application were for resource consent for a discretionary activity. The references to the consent notice condition and to the activity relate only to the change of the consent notice condition and the effects of the change.

5.14 The cancellation of the consent notice conditions will be assessed as a **Discretionary Activity**.

National Environmental Standards

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS)

5.15 Haigh Workman have completed a desktop assessment and field investigation of the site as well as a Combined Preliminary and Detailed Site Investigation Report (DSI), which is included

within **Appendix 6** of this application. Below is a summary of the findings from the DSI Report and application of the NESCS. Please refer to the DSI report for more detailed information.

5.16 The following hazardous activities were found to have or potentially have occurred within the site:

- HAIL Cat. E.1 – Asbestos products manufacture or disposal, including sites with buildings containing asbestos products known to be in a deteriorated condition,
  - The northernmost dwelling on the property was clad with asbestos containing material,
- HAIL Cat F.8 – Transport depots or yards, including areas used for refuelling or the bulk storage of hazardous substances,
  - Machinery was being stored in an area in the centre of the site,
- HAIL Cat. G.4 – Scrap yards including automotive dismantling, wrecking or scrap metal yards,
  - The scrap yard on the neighbouring site briefly spread onto the subject site,
  - A small portion of a paddock racing track extended onto the site,
- HAIL Cat I – Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity it could be a risk to human health or the environment,
  - Two burn piles were present towards the southern end of the site

Figure 20: Haigh Workman Piece of Land Plan showing location of items listed above.

5.17 Haigh Workman collected soil samples from across the site which were analysed for contaminants of concern. The soils sample sites are indicated in Figure 21 below. The laboratory analytical results reported that:

- Total Petroleum Hydrocarbons concentrations in one soil sample exceeded applicable Human Health criteria,
- Metals concentrations were above Background Soil Concentrations in some of the soil samples analysed,
- Polycyclic Aromatic Hydrocarbon concentrations were above laboratory Method Detection Limits in some soil samples,
- Building cladding material sampled from the northernmost dwelling contained amosite and chrysotile Asbestos, and
- Asbestos was not detected in any soil samples analysed.

Figure 21: Haigh Workman Site Investigation Plan.

5.18 Haigh Workman provided an assessment in Section 10 of the DSI which expanded on the potential sources of contamination identified and exposure pathways. Table 8 of the Haigh Workman report summarises the findings and is shown below for reference:

Table 8 – Conceptual Site Model

Potential Source	Potential Receptors	Potential Pathways	Assessment
CoC in location of TP14	Construction, maintenance / excavation workers	Inhalation of dust / ingestion / dermal contact with exposed soils.	Complete Pathway: Contaminant concentrations are above applicable Human Health criteria.
	Site users	Inhalation of dust / ingestion / dermal contact with exposed soils.	Complete Pathway: Contaminant concentrations are above applicable Human Health criteria.
Remainder of the site	Construction, maintenance / excavation workers	Inhalation of dust / ingestion / dermal contact with exposed soils.	Incomplete Pathway: Contaminant concentrations are below applicable Human Health criteria.
	Site users	Inhalation of dust / ingestion / dermal contact with exposed soils.	Incomplete Pathway: Contaminant concentrations are below applicable Human Health criteria.

Figure 22: Snip of Table 8 from DIS report.

5.19 As can be seen in the table above, the samples taken within location TP14 are shown to have contaminant concentrations above applicable Human Health Criteria.

5.20 Based on the findings, Haigh Workman determined that:

- Prior to earthworks or subdivision, a Site Management Plan and / or Remedial Action Plan must be prepared for the site,
- The Site Management Plan may include re-sampling of the area in exceedance of the adopted criteria as natural attenuation / natural bioremediation may have reduced concentrations below the adopted criteria,
- Soil / fill material with Metals concentrations above Background Levels and / or Polycyclic Aromatic Hydrocarbon or Total Petroleum Hydrocarbon concentrations above laboratory Method Detection Limits are not considered as 'Cleanfill' for disposal purposes,
    - If soil / fill material exceeding Background Level criteria must be removed from site it is to be disposed of at a facility licensed to accept such materials,
- Soil / fill material exceeding Background Level criteria can be retained and re-used on-site as a sustainable option and to reduce disposal costs if suitable, and
- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a SQEP prior to disposal.

5.21 Assessment of the proposal against the NESCS has been undertaken below to determine the activity status of the proposal.

Rule	Assessment Criteria	Compliance of Proposal
Subdividing or Changing Land Use		
8 – Permitted Activities	(4) Subdividing or changing use Subdividing land or changing the use of the piece of land is a permitted activity while the following requirements are met: (a) a preliminary site investigation of the land or piece of land must exist: (b) the report on the preliminary site investigation must state that it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land: (c) the report must be accompanied by a relevant site plan to which the report is referenced (d) the consent authority must have the report and the plan.	(a) A PSI does exist for the piece of land (b) The report prepared by Haigh Workman determined that the concentration levels in location TP14 (refer to Figure 21 above) are above applicable Human Health Criteria. As such, it can be concluded that (b) cannot be met. (c) The report does include a site plan. (d) The consent authority will have a copy of the report and plan as part of this application process. As the combined PSI and DSI report from Haigh Workman determined that the concentration levels at location TP14 are above applicable Human Health Criteria, the proposal cannot meet the Permitted provisions and further assessment must be completed. **Does not meet Permitted Threshold.**
9 – Controlled Activities	Subdividing or changing use (3)If a requirement described in regulation 8(4) is not met, the activity is a controlled activity while the following requirements are met: (a) a detailed site investigation of the piece of land must exist: (b) the report on the detailed site investigation must state that the soil contamination does not exceed the applicable standard in regulation 7: (c) the consent authority must have the report:	3(a) A DSI has been completed for the piece of land. 3(b) the report **does not** conclude that the soil contamination at location TP14, does not exceed the applicable standard in regulation 7 3(c) the consent authority will have the report as part of this application process. 3(d) not applicable as proposal cannot be assessed as a Controlled Activity. As the combined PSI and DSI did not conclude that the soil contamination at location TP14 does not exceed the applicable standard in regulation 7, the

	(d) conditions arising from the application of subclause (4), if there are any, must be complied with. (4) The matter over which control is reserved is the adequacy of the detailed site investigation, including— (a) site sampling: (b) laboratory analysis: (c) risk assessment	proposal cannot be assessed as a Controlled activity and further assessment must be undertaken. **Does not meet the Controlled Threshold.**
10 – Restricted Discretionary Activities	(1)This regulation applies to an activity described in any of regulation 5(2) to (6) on a piece of land described in regulation 5(7) or (8) that is not a permitted activity or a controlled activity. (2)The activity is a restricted discretionary activity while the following requirements are met: (a) a detailed site investigation of the piece of land must exist: (b) the report on the detailed site investigation must state that the soil contamination exceeds the applicable standard in regulation 7: (c) the consent authority must have the report: (d) conditions arising from the application of subclause (3), if there are any, must be complied with	2(a) A DSI has been completed for the piece of land. 2(b) the report in the DSI states that the soil contamination exceeds the applicable standard in regulation 7. 2(c) the consent authority will have the report as part of this application. 2(d) Conditions of this rule will be complied with. The proposal can comply with the rules within Regulation 10 and as such will be assessed as a **Restricted Discretionary Activity** under the NESCS for the proposed subdivision.
Disturbing Soil		
3 – Permitted Activities	Disturbing soil (3) Disturbing the soil of the piece of land is a permitted activity while the following requirements are met:	No excavations are proposed as part of this resource consent application as all development and access is existing. Nonetheless, assessment is made for future reference for each of the 'pieces of land'

	(a)controls to minimise the exposure of humans to mobilised contaminants must— (i) be in place when the activity begins: (ii) be effective while the activity is done: (iii) be effective until the soil is reinstated to an erosion-resistant state: (b)the soil must be reinstated to an erosion-resistant state within 1 month after the serving of the purpose for which the activity was done: (c)the volume of the disturbance of the soil of the piece of land must be no more than 25 m3 per 500 m2: (d)soil must not be taken away in the course of the activity, except that,— (i) for the purpose of laboratory analysis, any amount of soil may be taken away as samples: (ii) for all other purposes combined, a maximum of 5 m3 per 500 m2 of soil may be taken away per year: (e)soil taken away in the course of the activity must be disposed of at a facility authorised to receive soil of that kind: (f)the duration of the activity must be no longer than 2 months: (g)the integrity of a structure designed to contain contaminated soil or other contaminated materials must not be compromised.	identified within the Haigh Workman DSI report. Haigh Workman completed a table (Table 10 of the DSI Report) which stated the allowable soil disturbance and soil removal per year. Please refer to this table for the findings which is also shown below for ease of reference: As the areas referenced by Haigh Workman are located across the two proposed allotments, it is anticipated that a consent notice condition will be issued on the two titles for the new allotments advising that there are areas within the allotments which are subject to the NESCS and have restrictions on soil disturbance and soil removal, with reference being made to the combined PSI and DSI completed by Haigh Workman to ensure the recommendations within the report are adhered to.

Area Reference	Locations	Area	Allowable soil disturbance (per year)	Allowable soil removal (m^3 per year)	Notes
1	Relocated house in north of site.	124m^2	6	1.2	-
2	Machinery storage area in centre of site	504m^2	25	5	-
3	Small area in northern half of site.	911m^2	45.5	9.1	-
4	Former paddock racing loop.	863m^2	43	8.6	-
5	Two burn piles in south of site.	531m^2	26.5	5.3	-
6	Northern dwelling and middle dwelling. Lead based paint.	Northern dwelling 124m^2, and Middle dwelling 162m^2	N/A	N/A	Not considered to be a piece of land as chemical analysis showed lead below background levels.

5.22 As per the above assessment, the proposed subdivision is considered to be a **Restricted Discretionary** activity under the NESCS. As per the recommendations within the combined PSI and DSI report prepared by Haigh Workman, it is anticipated that it will be a condition of consent prior to the issuing of s223 that a SMP and/or RMP is prepared for the site, which may include resampling of the area in exceedance of the adopted criteria, as it is noted that natural attenuation or natural bioremediation may have reduced concentrations below the adopted criteria. It may be that at the time of resampling; the exceedance does not exceed the Human Health criteria and therefore no further remedial works are required. Assessment of the matters of discretion within Regulation 10 of the NESCS will be undertaken in further sections of this report.

Other National Environmental Standards

5.23 No other National Environmental Standards are considered applicable to this development.

6. STATUTORY ASSESSMENT

Section 104B of the Act

6.1. Section 104B governs the determination of applications for Discretionary and Non-Complying Activities. This covers the subdivision and land use application. With respect to both Discretionary and Non-Complying Activities, a consent authority may grant or refuse an application, and impose conditions under section 108.

Section 104C of the Act

6.2. Section 104C governs the determination of applications for Restricted Discretionary Activities. This covers the application under the NESCS. When considering an application for resource consent, a consent authority must consider only those matters over which a discretion is restricted in national environmental standards or other regulations, or it has restricted the exercise of its discretion in its plan or proposed plan. The consent authority can grant or refuse the application. If the application is granted, the consent authority may impose conditions under Section 108 only for those matters listed above.

Section 104(1) of the Act

6.3. Section 104(1) of the Act states that when considering an application for resource consent-

"the consent authority must, subject to Part II, have regard to –

(a) Any actual and potential effects on the environment for allowing the activity; and
(ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment that will or may result from allowing the activity; and

(b) Any relevant provisions of –
- *(i) A national environmental standard*
- *(ii) Other regulations*

(iii) A national policy statement
(iv) A New Zealand Coastal Policy Statement
(v) A regional policy statement or proposed regional policy statement
(vi) A plan or proposed plan; and

(c) Any other matter the consent authority considers relevant and reasonable necessary to determine the application.'

6.4. Actual and potential effects arising from a development as described in 104(1)(a) can be both positive and adverse (as described in section 3 of the Act). As will be discussed below, the proposal will have actual and potential effects that are acceptable. In addition, the proposal will also have positive effects on the environment as the proposal will create one additional allotment which is consistent with what is anticipated in this zone. Both allotments will contain existing built development, such that no additional built development is proposed. The proposal will allow intergenerational use of the site to continue with both allotments being owned by members of the same family. Adverse effects are in relation to stormwater and traffic effects.

6.5. Section 104(1)(ab) requires that the consent authority consider 'any measure proposed or agreed to by the applicant for the purposes of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity'. It is considered the proposal is not of a scale or nature that would require specific offsetting or environmental compensation measures to ensure positive effects on the environment. As noted above, the proposed development itself will generate positive effects that are consistent with the intent of the Coastal Residential zone and surrounding environment.

6.6. Section 104(1)(b) requires the consent authority to consider the relevant provisions of the above listed documents. An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that the activity may have on the environment has been provided below.

6.7. Section 104(1)(c) states that consideration must be given to 'any other matters that the consent authority considers relevant and reasonable, necessary to determine the application.' There are no other matters relevant to this application.

7. ENVIRONMENTAL EFFECTS ASSESSMENT

7.1. Having reviewed the relevant plan provisions and taking into account the matters that must be addressed by an assessment of environmental effects as outlined in Clause 7 of Schedule 4 of the Act, the following environmental effects warrant consideration as part of this application.

Subdivision

7.2. This proposal is considered to be a **Discretionary Activity** as per *Section 13.9 of the ODP*. In considering whether to impose conditions on applications for discretionary subdivision activities, the Council has full discretion. An assessment has been provided based on the following matters listed in *13.10 Assessment Criteria.*

ALLOTMENT SIZES AND DIMENSIONS

7.2.1. Proposed Lot 1 will be 8156m^2 in area and will contain one existing residential dwelling and associated detached shed. Proposed Lot 2 will be the balance lot, with an area of over 4ha and will contain the remaining two dwellings and associated sheds. The purpose of the subdivision is to enable the applicants to have an independent title for their dwelling which is contained within Proposed Lot 1. Proposed Lot 2 will contain the remainder of the land which is utilised by the applicant's parents and siblings. The subdivision proposal will enable intergenerational use of the land whilst enabling independent titles for use of the areas of the site. The proposal results in a breach of permitted rules for stormwater management and traffic rules within the Coastal Residential zone. However, given the large areas of the site and the maximum allowable limit of 1000m^2 of impermeable surfaces for the Coastal Residential zone, it is considered that effects of stormwater management will be less than minor. Traffic effects arise due to the existing condition of the paper road to Lot 2 as well as technical breaches to allow for a reduced legal width of the private accessway within Lot 1 (with the required carriageway width being met) as well as enabling the current standard for the crossing places to remain as is. It is considered that the proposed lot sizes are of sufficient area and dimensions to provide for the intended purpose and land use of the lots. There is sufficient area within the lots for operational and maintenance requirements.

7.2.2. The site and adjoining allotments are zoned Coastal Residential. Lots located along Waterfront Road range in size from 800m^2 to 1 hectare, most of which contain a residential dwelling. The site is located approximately 2 kilometres from the Pukenui Village and is within walking distance to Pukenui School, daycares, health services and the local four square. Houhora Harbour is located directly opposite Waterfront Road, with the site encapsulating views of the Harbour. The site sits on the outskirts of the Pukenui Village and is located in an area which is close to smaller more intensely developed areas along Waterfront Road. The opposite side of the State Highway sees larger lots zoned Coastal Living and Rural Production. As the proposed lot sizes will be within the existing range in the surrounding environment as well as meeting the Controlled provisions for lot sizes within the Coastal Residential zone, it is considered that the proposal is compatible with the existing subdivision patterns and land use activities in the area. No reverse sensitivity or incompatible land use effects are anticipated as the intended use of the proposed allotments will be consistent with the surrounding environment.

7.2.3. Access to the proposed lots is existing and the proposal will not see any additional users of the access points, given the three dwellings are existing. Lot 1 will be accessed via the metalled formed portion of Waterfront Road, with Lot 2 being accessed via the existing paper road,

which is not maintained by Council. A Consent Notice condition will be offered which will state that Council assumes no responsibility for the maintenance of the paper road and this will be at the discretion of the users of the road. As mentioned, dispensation is also sought to allow the existing crossing places to remain in their current standard as well as a dispensation to allow existing areas to be utilised in lieu of formal passing bays and a reduced legal width for the proposed private accessway within Easement A. This will be discussed in further detail within this report. Overall, given there will be no increase in traffic movements compared to what is already in existence, effects on access are considered to be less than minor.

7.2.4. The proposal is considered to create less than minor effects in terms of cumulative and long term implications. The proposal will see one additional allotment created, with all built development being existing. The proposed lot sizes are well within the controlled threshold for the zone and are not objectionable with the surrounding environment. Each lot has sufficient area for the existing dwellings as well as associated onsite servicing and outdoor areas. All effects can be managed within the site boundaries. In terms of preservation of the coastal environment, the lot sizes proposed are larger than allotments located along Waterfront Road and will ultimately not change how the site is perceived from the surrounding environment, given built development is existing. The coastal environments will be preserved by providing lots which are of low density and have ample area for productive activities associated with residential living.

7.2.5. Overall, it is considered that the proposal provides allotments which are suitable and consistent within the surrounding environment. The cumulative and long-term implications of the proposal are considered to be less than minor, with the preservation of the coastal environment remaining intact.

NATURAL AND OTHER HAZARDS

7.2.6. Haigh Workman have completed an assessment of Natural Hazards within the SSR attached with this application. It was concluded within Section 3.2 of the SSR that:

- The site is not susceptible to erosion, subject to maintaining vegetation cover.
- The site is not within a coastal erosion zone
- The site is not subject to falling debris
- The site is possibly susceptible to subsidence, with further geotechnical investigation required for any future building works
- The existing building sites are not shown to be susceptible to inundation. Lower lying ground is shown to be susceptible to flooding however these areas are away from the existing building platforms
- The site is not susceptible to slippage however excavations greater than 1.5m in height are to be confirmed by site specific geotechnical investigations and reporting.

7.2.7. The areas which are shown to be susceptible to flood hazard are not shown on the NRC Hazard Maps but are shown within the 2007 GHD Mapping. This is indicated below in Figure 23.

Figure 23: FNDC Flood Modelling Maps.

7.2.8. Given that development is existing and is located outside of the areas identified as being susceptible to flood hazards, no adverse effects in terms of inundation and flooding are considered applicable to this proposal. It is noted that the sites are potentially susceptible to subsidence and as per Haigh's recommendations, a consent notice condition is anticipated to be registered on the new titles advising future owners that a geotechnical report will be required to accompany a building consent application for any new habitable building established on the lots. Given any excavations greater than 1.5m in height would trigger the requirement for resource consent, and the fact that no excavations are proposed as part of this application, it is considered that no consent notice condition will be applied requiring geotechnical investigations as this can be assessed at the time of any requirement for resource consent for excavations exceeding 1.5m in height.

7.2.9. As assessed earlier in this report, consent under the NESCS is being applied for as part of this application and will be discussed in further detail within the following sections of this report.

7.2.10. In regard to s106 of the Act, it is considered that there is no significant risk from natural hazards applicable, which would allow Council to refuse subdivision consent. The proposal is not considered to accelerate, worsen or result in material damage of any kind.

WATER SUPPLY

7.2.11. As Proposed Lots 1 & 2 contain existing built development, provisions for onsite water supply are existing and the subdivision will not result in any changes to this. The existing provisions are via rainwater harvesting to tanks onsite. The site is not in an area which benefits from reticulated water supply.

STORMWATER DISPOSAL

7.2.12. Councils' infrastructure is not available to this site. Therefore, stormwater must be managed on site.

7.2.13. The permitted threshold for impermeable surfaces within the Coastal Residential zone is 50% or 1000m^2, whichever is the lesser. As part of this proposal, Proposed Lot 1 will have an impermeable surface coverage of 1230m^2 (17.5% of the total site area) and Proposed Lot 2 will have an impermeable surface coverage of 1964m^2 (4.8% of the total site area). Given 1000m^2 is the lesser in this instance, both lots cannot comply with the permitted threshold for the zone.

7.2.14. Haigh Workman have completed an assessment of stormwater management within the lots. It is noted that there is existing site drainage within the site. Attenuation was not considered to be required for the proposal as it is in the lower half of the catchment and adjacent to the coast. In addition, no further impermeable surfaces are proposed in relation to the subdivision. Haigh Workman have recommended that the stormwater runoff from the dwellings on Lot 2 and associated driveway areas are directed towards the southeastern catchment. Within Lot 1, it is recommended that stormwater from the dwelling and shed as well as the driveway area is directed to the northeast of the dwelling. These areas are shown below for ease of reference. Haigh Workman determined that this proposed method will ensure the scale of flooding is not increased.

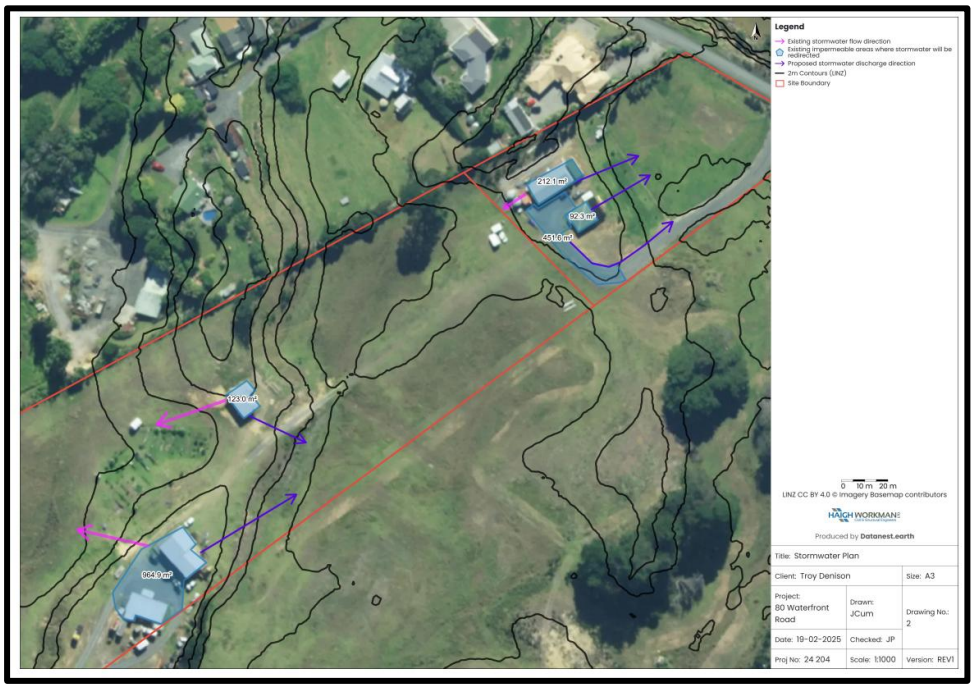


Figure 24: Haigh Workman Stormwater Plan.

7.2.15. It is considered that with the recommendation of redirecting runoff as per Haigh Workman's report, effects of stormwater disposal will be less than minor. A condition of consent is anticipated to be imposed on the decision document requiring stormwater runoff to be managed in accordance with the SSR from Haigh Workman.

SANITARY SEWAGE DISPOSAL

7.2.16. Councils' infrastructure is not available to the sites.

7.2.17. Proposed Lot 1 and 2 contain existing onsite wastewater infrastructure within the proposed allotment boundaries, as determined by Haigh Workman; no changes to these are proposed as part of this subdivision. Haigh Workman have stated within the SSR that no ponding or other evidence of failure was observed at each of the existing onsite wastewater systems within the site. The below image indicates the location of the existing onsite wastewater systems.

Figure 25: Haigh Workman Wastewater Plan.

7.2.18. It is therefore considered that the proposal will not create any adverse or cumulative effects in relation to wastewater disposal.

ENERGY SUPPLY, TOP ENERGY TRANSMISSION LINES, & TELECOMMUNICATIONS

7.2.19. Top Energy were contacted as part of this application process and advised that their requirements for the proposal are nil. Top Energy's response is contained within **Appendix 10** of this application. Energy supply is existing to the dwellings on the site and will remain unchanged as part of this proposal.

7.2.20. Chorus were also contacted as part of the application process. Chorus advised that fibre could be provided to the site with an indicative cost to extend the fibre network being $85,000 including GST. This is considered excessive and due to the fact that the dwellings are existing and have existing provisions for internet and phone by other means, it is not considered

necessary to provide the installation of fibre. The existing connections are considered to meet the provision of providing the ability to connect to telecommunications. The existing supply provisions do not create potential adverse effects on amenity values.

7.2.21. The site is not located within 20 metres of an electrical transmission line designed to operate at or above 50kV. The existing power lines are located in the road reserve along the State Highway, with another line located parallel to Waterfront Road, just within the proposed site boundary for Lot 1. No works are anticipated within proximity to these lines. The provision of energy supply and telecommunications is not anticipated to be a condition of consent for this proposal, given the above.

EASEMENTS FOR ANY PURPOSE

7.2.22. Easement A is proposed for the purpose of right of way, with Lot 1 being the burdened land and Lot 2 being the benefited land. This is to provide Lot 2 the rights to utilise the existing accessway within Lot 1. This easement will also enable ease of access for the occupiers of Lot 2 to access the harbour with ease.

7.2.23. Easements B & C will be created over an existing internal access and is requested to be completed as a separate resolution under s348 of the LGA. The adjoining Lot 2 DP350647 will be the burdened land, with Proposed Lot 2 being the benefited land. This will cover an existing situation and will ensure that access to Lot 2 is legally provided. The adjoining land (Lot 2 DP350647) is owned by the same owner as the subject site and therefore approval is evident.

PROVISION OF ACCESS

<u>Proposed Lot 1</u>

7.2.24. Access to Proposed Lot 1 will be via the existing crossing place to the dwelling and shed on Lot 1. This is accessed via the northern portion of Waterfront Road. As has been discussed, a portion of Waterfront Road is sealed from the State Highway 1 intersection to approximately 150 metres before the subject site, where the road is then metalled. No upgrading of the road carriageway is anticpated nor considered necessary as part of this application.

<u>Vehicle crossing</u>

7.2.25. The crossing to Lot 1 has been assessed within the SSR prepared by Haigh Workman and it was found to meet the sight distance requirements in both directions with no obstructions. The vehicle crossing formation does not meet the Type 1A standards due to the splay along the southern edge of the crossing not being formed to the correct standards. The remainder of the crossing, including the width and northern splay are considered to meet the required standards. There is no culvert due to the lack of water table/roadside drains along the Waterfront Road carriageway and therefore no culvert is considered necessary in this instance.

7.2.26. Due to the lack of formation of the southern splay, the crossing to Lot 1 does not meet the required Type 1A standard and therefore results in a breach of 15.1.6C.1.5 Vehicle crossings

in Coastal zones. It is requested that no upgrading of the crossing place is imposed as it is considered that the current formation is adequate for the existing and proposed use. Most vehicle traffic movements entering and exiting the crossing will be from the north, with only limited vehicle traffic movements anticipated from the south. This is due to the fact that this is a no exit road. The road formation stops at the waters edge, approximately 300 metres from Lot 1 crossing place, with only two other dwellings being located along this portion of the road. Therefore, there is very little need for the applicant's or visitors to the applicant's site, needing to head in the southern direction. Most, if not all, daily traffic movements entering and exiting the site will be from the north, as this provides further access to schools, public facilities, and main roads.

7.2.27. The current crossing formation is considered adequate for the proposed and existing use and considering the minimal traffic use from the southern side of the crossing place as well as the width of the crossing place and good sight lines, it is considered that the crossing place is of adequate formation to remain in its current formation. As such, dispensation of Rule 15.1.6C.1.5 is requested in this instance to allow the crossing to Lot 1 to remain in its current condition.

Private Accessway

7.2.28. As part of this application process, Easement A will be created over the existing internal access within Lot 1. Easement A will contain the existing metalled carriageway which leads to the dwelling and shed on Lot 1 and also to the eastern portion of Lot 2. Access rights will be provided to Lot 2 which will enable the occupiers of Lot 2 to have ease of access to Houhora Harbour. Therefore, it will be utilised as a secondary access for Lot 2, with the primary access being from the existing crossing to Lot 2 as will be discussed further in this section.

7.2.29. In terms of Appendix 3B-1, the private accessway within Easement A will technically provide access to three household equivalents (HE) – one dwelling within Lot 1 and two dwellings within Lot 2. Appendix 3B-1 requires a legal width of 7.5m and a carriageway width of 3m with passing bays, for a private access servicing 3-4 HE in the Coastal Residential zone. The existing carriageway within Easement A varies from 3.5m to 5m for the main part of the access and then where it descends from the main access to the boundary of Lot 2 (westernmost end of the access), the carriageway width decreases to approximately a 3m width. The legal width of the accessway (measured from fence to fence) varies from 5.9m to 7.9m. As the fenced width does not meet the required legal width in some areas, **dispensation is sought under Rule *15.1.6C.1.1 Private Accessways in All zones,* to allow the legal width to follow the existing fence line.** The existing situation is shown in Figures 26-29 below.

Figure 27: Existing metalled access to be contained within Easement A. Fenceline which is proposed legal width is evident.

Figure 26: Image of existing metalled access.

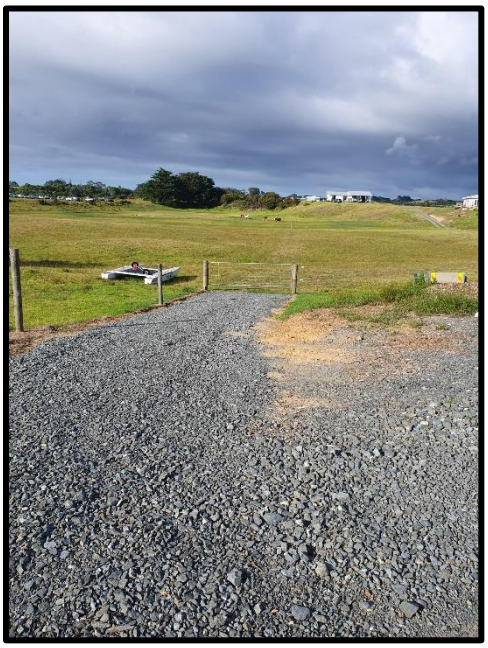


Figure 29: Western portion of Easement A, where it adjoins Lot 2.

Figure 28: Drive to existing dwelling on Lot 1.

7.2.30. As can be seen in the above images, the carriageway provided is of adequate width to meet the required 3m carriageway, however it falls short for the legal width. As the carriageway is already fenced, it is requested that a dispensation for the legal width is provided in this instance. The sides of the carriageway are a mulch/chip, which is not clearly visible in the images above, but will be apparent upon a site visit.

Passing Bays

7.2.31. As stated above, Appendix 3B-1 requires a passing bay with Rule 15.1.6C.1.3 requiring rural and coastal zones to have passing bays at spacings not exceeding 100m. Where passing bays are required, they are to be at least 15m long and have a usable access width of 5.5 metres.

7.2.32. As shown on the scheme plan, Easement A is longer than 100 metres. The driveway veers to the north at approximately the 100 metre mark from Waterfront Road, where it turns to the dwelling on Lot 1. In lieu of a passing bay, this turn off area is considered suitable for a passing bay, as this is where traffic from Lot 1 will be entering or exiting the ROW. The use of this as a passing bay results in a technical breach of this rule as the required dimensions are not met.

Proposed Lot 2

7.2.33. Access to Lot 2 will be from the existing crossing via the unformed portion of Waterfront Road, which services the two dwellings within Lot 2. The internal access to the dwellings runs along the southern boundary, with easements proposed over adjoining Lot 2 DP350647 to provide rights of access to Lot 2 over the existing internal driveway which encroaches over the adjoining boundary. As mentioned, it is requested these easements are created as a separate resolution under s348 of the LGA.

Frontage to Existing Roads

7.2.34. As access to Lot 2 is via an unmaintained paper road, dispensation is requested to enable the paper road to remain in its current condition, with no upgrading to Council's Engineering standards being required. The paper road is currently metalled, which to the best of our knowledge, is maintained by the owner of the subject site. In lieu of upgrading the paper road, it is requested that a Consent notice condition is imposed on the title of Lot 2 which states the following:

'Council does not maintain the portion of Waterfront Road which provides access to Lot 2 along the western boundary. The Council assumes no responsibility toward the formation and any future maintenance of this portion of Waterfront Road which provides access to the lot and until such time as the Council of its own volition decides to assume responsibility, the owner or occupier will not request Council to undertake such formation or maintenance. The existing road formation does not meet Council's Engineering Standards and care should be taken by vehicle operators when accessing the site.'

7.2.35. NZTA were contacted as part of the pre-application process and did not determine themselves to be an affected party, given access to the site is via the unformed portion of Waterfront Road. NZTA's correspondence is included with Appendix 12 of this application.

7.2.36. Given that the proposal will not see any additional users of this portion of Waterfront Road and the situation is existing, it is considered appropriate to provide a dispensation under Rule 15.1.6C.1.8 Frontage to Existing Roads, to enable this portion of Waterfront Road to remain in its current condition.

Figure 30: Existing formation of paper road.

Vehicle Crossing

7.2.37. The crossing to Lot 2 is via the paper road. As the access is from a road which is not maintained by Council, it is requested that the crossing place remain in its current standard with no condition to upgrade. As mentioned, the proposal will not increase the number of users of the existing crossing place and therefore will not change the status quo. Dispensation under Rule *15.1.6C.1.5 Vehicle crossings in rural and coastal zones*, is therefore sought.

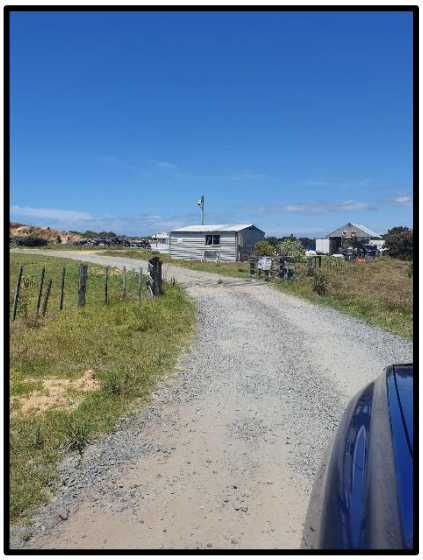


Figure 31: Access to Proposed Lot 2 from the paper road.

Conclusion

7.2.38. Overall, dispensation is sought under Transportation Rules (Access) *15.1.6C.1.1 Private Accessways in all one, 15.1.6C.1.3 Passing Bays, 15.1.6C.1.5 Vehicle Crossings in Rural and Coastal zones and 15.1.6C.1.8 Frontage to Existing Roads,* to ultimately enable the existing situation to remain. Access is currently existing and no change to the number of users is proposed, as all built development on the lots is existing. The current situation is considered more than adequate to service the lots and the appropriate consent notice condition has been offered to make future occupiers aware that the western portion of Waterfront Road is not maintained by Council.

7.2.39. The proposal is not considered to create effects that would be more than minor in regard to access and given the nature of the proposal, the provisions provided are considered reasonable for the surrounding environment.

EFFECT OF EARTHWORKS AND UTILITIES

7.2.40. No earthworks are proposed as part of this subdivision.

BUILDING LOCATIONS

7.2.41. Proposed Lot 1 and 2 contain existing built development with no additional dwellings proposed as part of this application.

PRESERVATION AND ENHANCEMENT OF HERITAGE RESOURCES, VEGETATION, FAUNA AND LANDSCAPE, AND LAND SET ASIDE FOR CONSERVATION PURPOSES

7.2.42. The site does not contain any areas of indigenous flora or fauna. The site is not shown to be within an area of Outstanding Natural Landscape or features. The site is not shown to have kiwi present, nor does it contain any known areas which would benefit from enhancement of biodiversity values (such as wetlands).

7.2.43. As previously mentioned, ASL Archaeology Solutions Ltd have completed a site visit and survey of the property in 2020 as part of RC2200318 which was for the construction of a new shed and future dwelling (which are located within Proposed Lot 1) as well as retrospective earthworks.

7.2.44. ASL surveyed the earthworks on the building site and no archaeological features were found. Three archaeological features had been recorded on the property, with two of them not able to be located and the third being located but was found to not actually be on the subject site. See the attached ASL report within **Appendix 7** for further detail.

7.2.45. As all built development is existing and no further built development is proposed, it is considered that the proposal will not have any adverse effects on heritage resources. A site survey has been completed for the site which did not indicate that there were any such resources within the site. Heritage NZ Pouhere Taonga have been contacted as part of the pre-application process and have advised that the proposal is to proceed under the guidance of an ADP. It is considered appropriate for the subdivision to proceed under the guidance of an ADP.

SOIL

7.2.46. The subdivision will create one additional lifestyle allotment, with both lots containing existing built development. The soils have a land use classification of 4s5 which is not considered to be highly versatile under the RPS and NPS for HPL. The site is also zoned as Coastal Residential, with the intended purpose being for Coastal Residential use.

7.2.47. The proposed lot sizes are of ample area to ensure the life supporting capacity of soils are not jeopardized.

ACCESS TO WATERBODIES

7.2.48. The site does not adjoin the CMA or any rivers or lakes.

LAND USE INCOMPATIBILITY

7.2.49. The proposed allotments are being created in an area where there is already a number of rural/coastal residential and rural/coastal lifestyle allotments. These proposed allotments are generally consistent with other allotments in the vicinity. No reverse sensitivity effects are anticipated as the proposed allotments are of sufficient size to accommodate the existing activities which include a residential dwelling as well as small scale productive activities, similar to what is already in existence in the surrounding environment. The proposal will not alter the built development on the site as this is existing. As has been discussed within this report, the proposed allotments are considered to be consistent with existing subdivision patterns and land use activities in the area.

PROXIMITY TO AIRPORTS

7.2.50. Not applicable as the subject site is not located in close proximity to an airport.

NATURAL CHARACTER OF THE COASTAL ENVIRONMENT

7.2.51. The site is zoned Coastal Residential and is located within the Coastal Environment under the RPS. The proposed subdivision will not result in any noticeable effects on the natural character of the Coastal Environment, due to the existing development within the site remaining unchanged. The surrounding environment consists of more intense development, and as such, the proposal is considered to be consistent with the surrounding environment.

7.2.52. The proposed subdivision is not considered to be objectional within the surrounding environment and is not considered to result in adverse effects on the character of the Coastal Environment.

ENERGY EFFICIENCY AND RENEWABLE ENERGY DEVELOPMENT/USE

7.2.53. The proposal promotes energy efficiency and renewable energy, which can be accommodated on the sites. This is at the discretion of the owners.

NATIONAL GRID CORRIDOR

7.2.54. The site is not located within the national grid corridor.

Land Use

7.3. The proposal is to be assessed as a Discretionary Activity as per District Plan Rule 10.8.5.3 and 15.1.6C.4 **Discretionary Activities**. The relevant criteria within Chapter 11 and 15 of the District Plan are utilised in assessing the environmental impacts of this development. An assessment that corresponds with the scale and significance of the effects on the environment is provided below:

Stormwater Management

7.3.1. Stormwater Management has been assessed within Sections 7.2.12-7.2.15 of this report as well as within the SSR prepared by Haigh Workman. As such, it is not considered necessary to revisit comments previously covered.

7.3.2. It is considered that with the recommendation of managing runoff as per Haigh Workman's report, effects of stormwater disposal will be less than minor. A condition of consent is anticipated to be imposed on the decision document requiring stormwater runoff to be managed in accordance with the SSR from Haigh Workman.

Property Access

7.3.3. Property Access has been detailed earlier within this report as well as within the SSR prepared by Haigh Workman. It is not considered necessary to revisit the previous comments made. As previously determined, the dispensations required are not considered to create more than minor effects on the surrounding environment.

Summary

7.3.4. The development is not considered out of the ordinary within the surrounding environment or within the Coastal Residential zone in general. Stormwater runoff from the existing development will be adequately controlled. No cumulative effects or effects on adjoining properties are anticipated, as all effects will be managed within the site boundaries.

7.3.5. It is therefore considered that the proposal will not create any effects that are more than minor.

Cancellation of Consent Notice

7.4. CN6624741.1 was registered on the title on 21st September 2005 as part of RC2031096 which created the subject site and the two adjoining allotments Lots 2 & 3 DP350647. The subdivision was assessed as a Discretionary Activity under the TDP and a Controlled Activity under the PDP at the time.

7.5. It is requested as part of this application to cancel the consent notice conditions within 6624741.1 in so far as they affect the subject lot, with new consent notice conditions being offered. This will ensure future owners can easily comprehend what is required for the site and refer to the correct reports.

7.6. CN6624741.1 contains three conditions which are outlined below:

(i) Provide, at the time of lodging a building consent application for any of the allotments on the subdivision plan, a specific design for stormwater management and effluent disposal (which is to comply with TP58) by a suitably qualified Chartered Professional Engineer which addresses those issues in terms of the building being proposed in the application.

(ii) Provide a report from a Chartered Professional Engineer, at the time of lodging a building consent application for a dwelling on Lot 1 or Lot 2 or a new or relocated dwelling on Lot 3, which assesses the risk of erosion of the Houhora Harbour Cliff face to the site proposed for the dwelling. In particular, the report will need to clarify that any house site proposed is landward of any potential erosion risk.

(iii) Pursuant to the attached letter from Transit NZ dated 9 August 2004, the use of the gates indicated as (A) and (B) on the attached plan is to be limited to the movement of cattle and farm machinery and to the storage and movement of mussel far equipment at an intensity equivalent to the existing farms' activities.

7.6.1. In terms of Conditions (i), given there is existing built development on the properties, it is considered that this condition is now redundant. If a future dwelling is to be built on the property, then a TP58 will be triggered at the time of Building Consent for any such dwelling or building. As such, it is not considered necessary for a consent notice condition to cover off wastewater. In regard to stormwater, resource consent would be triggered under the ODP for any additional impermeable surfaces, given that the current existing impermeable surfaces already exceed the permitted threshold. Therefore, at the time of any future building on the site, resource consent for an infringement of the permitted rules for stormwater management would be required and effects can be addressed through the RC process. Therefore making Condition (i) redundant.

7.6.2. In terms of Condition (ii) Haigh Workman determined within their Engineering Report that the site was not mapped within the coastal erosion zone and no erosion was anticipated within the site subject to maintaining vegetation cover. The Houhora Harbour cliff face is located on

the opposite side of Waterfront Road, and is therefore separated from the subject site by the road reserve. It is therefore considered that given there has now been more accurate mapping for coastal erosion, when this consent notice document was imposed, this condition is now not applicable to the subject site given it is not identified within the FNDC ODP and PDP or the NRC Maps as being susceptible to coastal erosion.

7.6.3. In terms of Condition (iii), Figure 15 below shows the location of the gates identified as (A) and (B) in the letter from Transit NZ dated 9 August 2004. As can be seen in Figure 32 below, the gates affect Lot 3 DP350647 and therefore do not affect the subject site. As this condition does not affect the subject site, it is requested that this consent notice condition is cancelled.

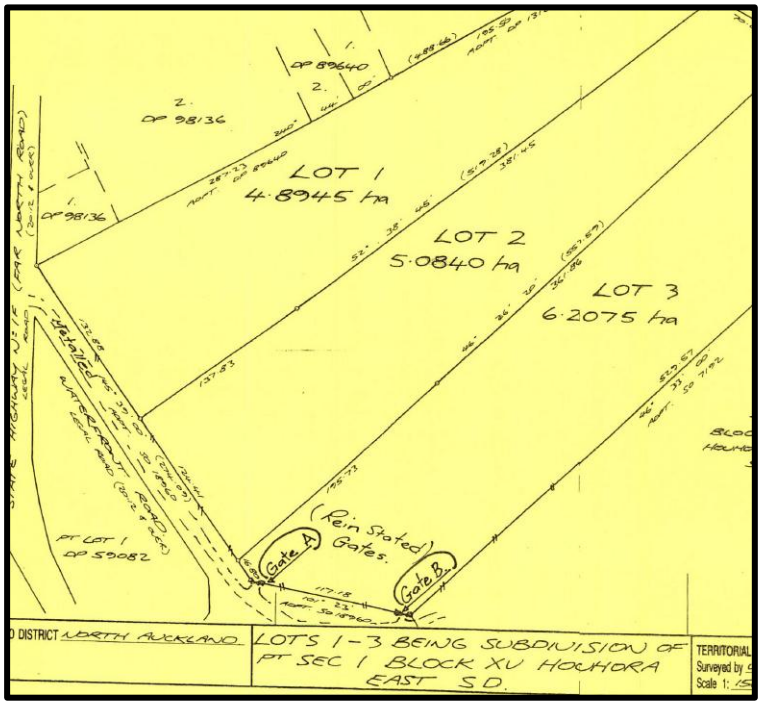


Figure 32: Diagram identifying Gates 'A' and 'B'

7.7. It is therefore considered that to ensure consistency and updated report/mapping for the site, that the consent notice conditions within CN66244741.1 are deleted in so far as they affect the subject site. Appropriate consent notice conditions will be imposed as a result of the subject subdivision, which will be issued on a fresh consent notice document.

Creation of Easement under s348

7.8. It is requested that a separate resolution is provided for the creation of Easements B & C as shown on the attached scheme plan. These proposed easements will cover the existing internal accessway to the two dwellings on the site, which slightly encroaches over the subject site boundary into Lot 2 DP350647. The purpose of these easements will be for right of way. The

proposal will see Lot 2 DP350647 (also owned by the subject site owner) being the burdened land and Proposed Lot 2 being the benefited land. It is requested that this be included as a separate resolution within the decision document as the adjoining land does not form part of the subdivision. It is requested that this is considered under Section 348 of the Local Government Act 1974 (LGA).

8. POLICY DOCUMENTS

8.1. In accordance with section 104(1)(b) of the Act the following documents are considered relevant to this application.

National Environmental Standards

National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011

8.2. As per the assessment made earlier in this report, the proposed subdivision is considered to be a Restricted Discretionary activity under the NESCS. As per the recommendations within the combined PSI and DSI report prepared by Haigh Workman, it is anticipated a condition of consent will be imposed prior to s223 that a SMP and/or RMP is prepared for the site.

8.3. Assessment of the matters of discretion within Regulation 10 of the NESCS will be undertaken below.

The matters over which discretion is restricted are as follows:

(a)the adequacy of the detailed site investigation, including—

- *(i)site sampling:*
- *(ii)laboratory analysis:*
- *(iii)risk assessment:*

(b)the suitability of the piece of land for the proposed activity, given the amount and kind of soil contamination:

(c)the approach to the remediation or ongoing management of the piece of land, including—

- *(i)the remediation or management methods to address the risk posed by the contaminants to human health:*
- *(ii)the timing of the remediation:*
- *(iii)the standard of the remediation on completion:*
- *(iv)the mitigation methods to address the risk posed by the contaminants to human health:*
- *(v)the mitigation measures for the piece of land, including the frequency and location of monitoring of specified contaminants:*

(d)the adequacy of the site management plan or the site validation report or both, as applicable:

(e)the transport, disposal, and tracking of soil and other materials taken away in the course of the activity:

(f)the requirement for and conditions of a financial bond:

(g)the timing and nature of the review of the conditions in the resource consent:

(h)the duration of the resource consent

8.4. Site sampling has been detailed within the combined PSI and DSI report prepared by Haigh Workman. Haigh Workman have recommended that a SMP and/or RAP must be prepared for the site, which may include resampling if the area in exceedance of the adopted criteria as natural attenuation/natural bioremediation may have reduced concentrations below the adopted criteria. It is anticipated that a condition of consent will be imposed requiring a SMP and/or RAP to be prepared. If resampling determines that the concentration levels have reduced below the adopted criteria, due to natural processes, then it is considered that further remediation would not be required. If the resampling determines that the concentration levels exceed the adopted criteria, then the SMP can detail remediation works and mitigation methods.

8.5. In terms of transport, disposal and tracking of soils, Haigh Workman have advised that any soil/fill material which exceeds background levels must be disposed of at a facility licensed to accept such materials, if it is to be removed from site. However, this soil can be retained on site and re-used onsite as a sustainable option and to reduce disposal costs.

8.6. The timing and duration of consent is anticipated to be the standard provisions.

Other National Environmental Standards

8.7. No other National Environmental Standards are considered applicable to this development. The proposal is permitted in terms of the above-mentioned documents.

National Policy Statements

8.8. There are currently 8 National Policy Statements in place. These are as follows:

- National Policy Statement on Urban Development
- National Policy Statement for Freshwater Management
- National Policy Statement for Renewable Electricity Generation
- National Policy on Electricity Transmission
- New Zealand Coastal Policy Statement
- National Policy Statement for Highly Productive Land
- National Policy Statement for Indigenous Biodiversity.
- National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat 2023

New Zealand Coastal Policy Statement 2010

8.9. The New Zealand Coastal Policy Statement 2010 is considered to be relevant to the application as the application site is partially located within the coastal environment under the NRC Regional Policy Statement.

8.10. The subject site is not known to contain any areas of outstanding landscape or features. It is considered the proposal will not adversely affect the natural aspects within the coastal environment nor will the proposal create any adverse effects on the natural character and amenity values within the area.

Objectives

8.11. The proposal is considered to achieve the objectives of the NZCPS as the proposal does not adversely impact on the integrity, form, functioning or resilience of the coastal environment. The proposal is not considered to affect the natural landscapes and character of the coastal environment. The application is not known to create any cultural issues as the proposal will result in one additional allotment being created with both lots containing existing built development. The proposal will not impact any archaeological features within the site. The proposal is considered to result in positive economic effects by providing employment through the subdivision process, while creating less than minor effects on the residential/coastal character of the locality.

Policies

8.12. The proposal is also considered to achieve the policies of the NZCPS. The character of the existing built environment will be maintained as the site and surrounding environment is urban in nature, meaning that the area is intensively developed. The natural character of the surrounding environment is considered to remain unaffected due to the nature of the proposal.

8.13. Overall, the proposed activity is considered to be consistent with the objectives and policies of the NZCPS as the proposal is in keeping with the existing development in the surrounding area.

Regional Policy Statement

8.14. The role of The Regional Policy Statement is to promote sustainable management of Northland's natural and physical resources by providing an overview of the regions resource management issues and setting out policies and methods to achieve integrated management of Northlands natural and physical resources.

8.15. The relevant objectives and policies have been assessed below.

Objective 3.5 – Enabling Economic Wellbeing
Northland's natural and physical resources are sustainably managed in a way that is attractive for business and investment that will improve the economic wellbeing of Northland and its communities.

8.16. The proposed allotment sizes are in high demand in this location in the current economic climate. The proposal will result in one additional allotment which will contain an existing dwelling, with the balance lot containing the remaining two dwellings. The proposal will enable an independent title to provide intergenerational living on the site. This will in turn provide

employment for local businesses and professionals not only as part of the subdivision process, but also any future building work on the lot, improving economic wellbeing.

Objective 3.6 – Economic Activities – Reverse Sensitivity and Sterilisation
The viability of land and activities important for Northland's economy is protected from the negative impacts of new subdivision, use and development, with particular emphasis on either:
(a) Reverse sensitivity for existing:
(i) Primary production activities;
(ii) Industrial and commercial activities;
(iii) Mining*; or
(iv) Existing and planned regionally significant infrastructure; or
(b) Sterilisation of:
(i) Land with regionally significant mineral resources; or
(ii) Land which is likely to be used for regionally significant infrastructure. *Includes aggregates and other minerals.

8.17. No reverse sensitivity effects are anticipated. The proposal will be consistent with existing subdivision patterns and land use activities within the surrounding environment. No sterilisation of land is anticipated. All built development is existing such that the public perception of the site will remain unchanged.

8.18. Due to the above, it is considered that there will be no reverse sensitivity effects as the proposal will create allotments which are not objectionable to the surrounding environment and maintain the amenity of the area and the Coastal Residential zone.

Far North Operative District Plan

Relevant objectives and policies

8.19. The relevant objectives and policies of the Plan are those related to Subdivision, Coastal Environment and the Coastal Residential Zone. The proposal is considered to create no more than minor adverse effects on the surrounding environment. The proposal is considered to be consistent with the character of the surrounding area and is considered to have negligible effects on the amenity value of the area, as the lot sizes in the locality already reflect the size of the lot proposed. The proposal is considered to be consistent with the objectives and policies of the Plan.

Assessment of the objectives and policies within the Subdivision Chapter

8.20. The following assessment is based upon the objectives and policies contained within Sections 13.3 and 13.4 of the District Plan.

Objectives

13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities.

13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

13.3.3 To ensure that the subdivision of land does not jeopardise the protection of outstanding landscapes or natural features in the coastal environment.

13.3.4 To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.

13.3.5 To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round.

13.3.6 To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features which have particular value or may have been compromised by past land management practices.

13.3.7 To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.

13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.

13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).

13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.

13.3.11 To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities.

8.20.1. The subdivision will be consistent with the purpose of the Coastal Residential zone which is essentially *applied in areas where an urban residential style and scale of development exists now and enables the further development of these areas in a way which retains, as far as possible, the natural character of the coastal environment.* It is worth reiterating that the

proposed lot sizes can comply with the Controlled lot size provisions for the zone, however the land use component results in a Discretionary Activity. Social, cultural and economic well-being will be provided for as discussed throughout this report. Life supporting capacity of soils will not be jeopardized, and no reverse sensitivity effects are anticipated. The proposal is not anticipated to create or accelerate natural hazards. The proposal is not considered to jeopardise the protection of outstanding landscapes or natural features in the coastal environment as the proposal will see the subdivision of a site which contains existing built development, such that visually, the site will remain unchanged, with all other effects being managed within the site boundaries. The proposal will not result in alienation of any heritage resources from its immediate setting/context. Onsite water storage is existing and will remain unchanged. Stormwater will be managed on site. Superior outcomes are not considered necessary, given the proposal will result in only one additional allotment which can comply with the controlled activity thresholds for lot size in the zone. The proposal is not considered to affect the relationship of Māori and their ancestral lands or other features. Electricity supply is existing to the lots. The built development on both lots is existing such that energy efficient design is not a consideration of this proposal. The site is not located within the National Grid.

Policies

13.4.1 That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:

(a) natural character, particularly of the coastal environment;

(b) ecological values;

(c) landscape values;

(d) amenity values;

(e) cultural values;

(f) heritage values; and

(g) existing land uses.

13.4.2 That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties.

13.4.3 That natural and other hazards be taken into account in the design and location of any subdivision.

13.4.4 That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.

13.4.5 That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads (including State Highways), and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.

13.4.6 That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.

13.4.7 That the need for a financial contribution be considered only where the subdivision would:

> ***(a) result in increased demands on car parking associated with non-residential activities; or***
>
> ***(b) result in increased demand for esplanade areas; or***
>
> ***(c) involve adverse effects on riparian areas; or***
>
> ***(d) depend on the assimilative capacity of the environment external to the site.***

13.4.8 That the provision of water storage be taken into account in the design of any subdivision.

13.4.9 That bonus development donor and recipient areas be provided for so as to minimise the adverse effects of subdivision on Outstanding Landscapes and areas of significant indigenous flora and significant habitats of fauna.

13.4.10 The Council will recognise that subdivision within the Conservation Zone that results in a net conservation gain is generally appropriate.

13.4.11 That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.

13.4.12 That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.

13.4.13 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to s6 matters. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including:

> ***(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;***
>
> ***(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;***
>
> ***(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;***

(d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer Chapter 2 and in particular Section 2.5 and Council's "Tangata Whenua Values and Perspectives" (2004);

(e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;

(f) protecting historic heritage through the siting of buildings and development and design of subdivisions.

(g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development.

13.4.14 That the objectives and policies of the applicable environment and zone and relevant parts of Part 3 of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.

13.4.15 That conditions be imposed upon the design of subdivision of land to require that the layout and orientation of all new lots and building platforms created include, as appropriate, provisions for achieving the following:

(a) development of energy efficient buildings and structures;

(b) reduced travel distances and private car usage;

(c) encouragement of pedestrian and cycle use;

(d) access to alternative transport facilities;

(e) domestic or community renewable electricity generation and renewable energy use.

13.4.16 When considering proposals for subdivision and development within an existing National Grid Corridor the following will be taken into account:

(a) the extent to which the proposal may restrict or inhibit the operation, access, maintenance, upgrading of transmission lines or support structures;

(b) any potential cumulative effects that may restrict the operation, access, maintenance, upgrade of transmission lines or support structures; and

(c) whether the proposal involves the establishment or intensification of a sensitive activity in the vicinity of an existing National Grid line.

8.20.2. There will be no adverse impacts on any of the items listed within Policy 13.4.1. Vehicular access has been discussed in detail throughout this report. Natural and other hazards have also been discussed in detail within this report. The dwellings have existing electricity supply connections, and existing telecommunication services being used within the site. Access to

and within the sites are existing; no adverse effects are anticipated. The site does not contain any indigenous flora or fauna. Heritage resources will not be affected by the proposal as has been discussed. The natural character of the coastal environment is considered to remain unchanged as the built development on the site is existing and will remain unchanged. All other effects can be managed within the site boundaries. Financial contribution is not considered applicable to this proposal. Water storage is existing and will remain unchanged. Bonus development donor and recipient areas are not considered applicable to the proposal. The site is not located within the Conservation zone. This application has taken into consideration the relationship of Māori and their culture and traditions as well as the principles of the Treaty of Waitangi, with no adverse effects arising. A Management Plan is not considered applicable to the proposal. In regard to s6 matters, the proposal is not considered to impact natural character. The buildings are existing such that visual impact is considered to be less than minor. No vegetation clearance or earthworks are proposed. No planting is proposed nor considered necessary. Historic heritage is considered to remain unaffected. Natural hazards will not be exacerbated.

8.20.3. Objectives and policies of the Coastal Environment and Coastal Residential zone will be undertaken below. All buildings are existing on site, with existing access being utilised. The site is not within the National Grid Corridor.

Assessment of the objectives and policies within the Coastal Environment

8.21. The following assessment is based upon the objectives and policies contained within Sections 10.3 and 10.4.

Objectives

10.3.1 To manage coastal areas in a manner that avoids adverse effects from subdivision, use and development. Where it is not practicable to avoid adverse effects from subdivision use or development, but it is appropriate for the development to proceed, adverse effects of subdivision use or development should be remedied or mitigated.

10.3.2 To preserve and, where appropriate in relation to other objectives, to restore, rehabilitate protect, or enhance:

- ***(a) the natural character of the coastline and coastal environment;***
- ***(b) areas of significant indigenous vegetation and significant habitats of indigenous fauna;***
- ***(c) outstanding landscapes and natural features;***
- ***(d) the open space and amenity values of the coastal environment;***
- ***(e) water quality and soil conservation (insofar as it is within the jurisdiction of the Council).***

10.3.3 To engage effectively with Maori to ensure that their relationship with their culture and traditions and taonga is identified, recognised, and provided for.

10.3.4 To maintain and enhance public access to and along the coast whilst ensuring that such access does not adversely affect the natural and physical resources of the coastal environment, including Maori cultural values, and public health and safety.

10.3.5 To secure future public access to and along the coast, lakes and rivers (including access for Maori) through the development process and specifically in accordance with the Esplanade Priority Areas mapped in the District Plan.
10.3.6 To minimise adverse effects from activities in the coastal environment that cross the coastal marine area boundary.
10.3.7 To avoid, remedy or mitigate adverse effects on the environment through the provision of adequate land-based services for mooring areas, boat ramps and other marine facilities.
10.3.8 To ensure provision of sufficient water storage to meet the needs of coastal communities all year round.
10.3.9 To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development.

8.21.1. The proposal is not considered to create any adverse effects. All effects can be managed within the site boundaries. Natural character of the coastal environment is not considered to be adversely affected, given the built development is existing and visually, the proposal will not change what is currently in existence. The site does not contain any areas of significant vegetation or fauna nor any outstanding landscapes and natural features. Open space and amenity values of the coastal environment will remain unchanged as well as water quality and soil conservation. The relationship of Māori and their culture and traditions will remain unchanged. Public access will not be affected. There are no activities proposed which cross the CMA boundary. Water storage is existing and will remain unchanged. Natural and physical resources will not be adversely affected.

Policies

10.4.1 That the Council only allows appropriate subdivision, use and development in the coastal environment. Appropriate subdivision, use and development is that where the activity generally:

(a) recognises and provides for those features and elements that contribute to the natural character of an area that may require preservation, restoration or enhancement; and
(b) is in a location and of a scale and design that minimises adverse effects on the natural character of the coastal environment; and
(c) has adequate services provided in a manner that minimises adverse effects on the coastal environment and does not adversely affect the safety and efficiency of the roading network; and
(d) avoids, as far as is practicable, adverse effects which are more than minor on heritage features, outstanding landscapes, cultural values, significant indigenous vegetation and significant habitats of indigenous fauna, amenity values of public land and waters and the natural functions and systems of the coastal environment; and

(e) promotes the protection, and where appropriate restoration and enhancement, of areas of significant indigenous vegetation and significant habitats of indigenous fauna; and

(f) recognises and provides for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; and

(g) where appropriate, provides for and, where possible, enhances public access to and along the coastal marine area; and

(h) gives effect to the New Zealand Coastal Policy Statement and the Regional Policy Statement for Northland.

10.4.2 That sprawling or sporadic subdivision and development in the coastal environment be avoided through the consolidation of subdivision and development as far as practicable, within or adjoining built up areas, to the extent that this is consistent with the other objectives and policies of the Plan.

10.4.3 That the ecological values of significant coastal indigenous vegetation and significant habitats are maintained in any subdivision, use or development in the coastal environment.

10.4.4 That public access to and along the coast be provided, where it is compatible with the preservation of the natural character and amenity, cultural, heritage and spiritual values of the coastal environment, and avoids adverse effects in erosion prone areas.

10.4.5 That access by tangata whenua to ancestral lands, sites of significance to Maori, maahinga mataitai, taiapure and kaimoana areas in the coastal marine area be provided for in the development and ongoing management of subdivision and land use proposals and in the development and administration of the rules of the Plan and by non-regulatory methods. Refer Chapter 2, and in particular Section 2.5, and Council's "Tangata Whenua Values and Perspectives (2004)".

10.4.6 That activities and innovative development including subdivision, which provide superior outcomes and which permanently protect, rehabilitate and/or enhance the natural character of the coastal environment, particularly through the establishment and ongoing management of indigenous coastal vegetation and habitats, will be encouraged by the Council.

10.4.7 To ensure the adverse effects of land-based activities associated with maritime facilities including mooring areas and boat ramps are avoided, remedied or mitigated through the provision of adequate services, including where appropriate:

(a) parking;

(b) rubbish disposal;

(c) waste disposal;

(d) dinghy racks.

10.4.8 That development avoids, remedies or mitigates adverse effects on the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.

10.4.9 That development avoids, where practicable, areas where natural hazards could adversely affect that development and/or could pose a risk to the health and safety of people.

10.4.10 To take into account the need for a year-round water supply, whether this involves reticulation or on-site storage, when considering applications for subdivision, use and development.

10.4.11 To promote land use practices that minimise erosion and sediment run-off, and storm water and waste water from catchments that have the potential to enter the coastal marine area.

10.4.12 That the adverse effects of development on the natural character and amenity values of the coastal environment will be minimised through:

(a) the siting of buildings relative to the skyline, ridges, headlands and natural features;

(b) the number of buildings and intensity of development;

(c) the colour and reflectivity of buildings;

(d) the landscaping (including planting) of the site;

(e) the location and design of vehicle access, manoeuvring and parking areas.

8.21.2. As has been discussed throughout this report, the site and surrounding environment are zoned Coastal Residential and therefore are more intensely developed than the neighbouring Coastal Living zone. The proposal will result in one additional allotment which is considered to be of low density, preserving the rural/coastal nature of the site and surrounding environment. The proposal is not considered to affect the safety and efficiency of the roading network as the existing crossing places and accesses will be utilised. No effects on heritage features, outstanding landscapes, cultural values, significant indigenous vegetation, fauna, public land and waters or the natural function of the coastal environment, are anticipated. Public access is not a consideration of this proposal. Consideration of the NZCPS has been undertaken within this report. The proposal is not considered to result in sprawling or sporadic subdivision, as only one additional lot will be created. Ecological values of significant coastal indigenous vegetation and significant habitats are not anticipated to be affected, due to the fact that all effects will be managed onsite. Public access is not applicable to this proposal. The site is not located within the CMA. The site does not contain any indigenous coastal vegetation or habitats that would require protection. The proposal does not include maritime facilities. The proposal is not considered to create any effects to Māori and their culture and traditions. The proposal will not result in adverse effects from natural hazards. Water supply is existing. Stormwater and wastewater will be contained within the site boundaries, such that no downstream effects are anticipated. As discussed throughout this report, no adverse effects on the natural character and amenity values of the coastal environment as the site already contains the existing built development and all effects can be managed within the site boundaries. The proposal is considered to be of low density compared to other allotments within the Coastal Residential zone.

Assessment of the objectives and policies within the Coastal Residential Zone

8.22. The following assessment is based upon the objectives and policies contained within Sections 10.8.3 and 10.8.4.

<u>Objectives</u>

10.8.3.1 To enable the development of residential activity in and around existing coastal settlements.

10.8.3.2 To protect the coastline from inappropriate subdivision, use and development.

10.8.3.3 To enable the development of coastal settlements where urban amenity and coastal environmental values are compatible.

8.22.1. The site is located on the peripheral of the coastal residential zone and the proposal will enable the development of the site. The proposal is not considered to result in inappropriate subdivision use or development, given only one additional allotment will be created around the existing built development. Urban amenity and coastal environmental values are considered to remain unchanged given the large size of the lots as well as the existing built development on the site.

Policies

10.8.4.1 That standards in the zone enable a range of housing types and forms of accommodation to be provided, recognising the diverse needs of the community and the coastal location of the zone.
10.8.4.2 Non-residential activities within the Coastal Residential Zone shall be designed, built, and located so that any effects that are more than minor on the existing character of the residential environment or the scale and intensity of residential activities, are avoided, remedied or mitigated.
10.8.4.3 That residential activities have sufficient land associated with each household unit to provide for outdoor space and sewage disposal.
10.8.4.4 That the portion of a site covered in buildings and other impermeable surfaces be limited to enable open space and landscaping around buildings and avoid or mitigate the effects of stormwater runoff on receiving environments
10.8.4.5 That provision be made for ensuring sites have adequate access to sunlight and daylight.
10.8.4.6 That activities with net effects greater than a single residential unit could be expected to have, be required to minimise adverse effects on the amenity values and general peaceful enjoyment of any adjacent residential activities.
10.8.4.7 That provision be made to ensure a reasonable level of privacy and amenity for inhabitants of buildings.

8.22.2. The proposal will result in Lot 1 containing one existing residential dwelling and Lot 2 containing two existing residential dwellings. No non-residential activities form part of this application. There is ample area on each site for outdoor space and sewage disposal. Although the proposal results in an impermeable surfaces breach, there is ample area on site for open space and stormwater runoff. Access to sunlight and daylight will remain unchanged. Amenity values will be maintained. Privacy will be maintained on these large sites.

Assessment of the objectives and policies within the Transportation Chapter

8.23. The following assessment is based upon the objectives and policies contained within Sections 15.1.3 and 15.1.4.

Objectives

15.1.3.1 To minimise the adverse effects of traffic on the natural and physical environment.
15.1.3.2 To provide sufficient parking spaces to meet seasonal demand in tourist destinations.
15.1.3.3 To ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access and use of the site. 15.1.3.4 To ensure that appropriate and efficient provision is made for loading and access for activities.
15.1.3.5 To promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities.

8.23.1. The proposal will create one additional allotment, however, as the built development is existing, there will not be an increase in the TIF. The proposal will result in the existing access remaining, with no change proposed. The proposal creates breaches in terms of the Access Rules based on technicalities and the fact that the existing provisions are considered adequate and no upgrading is requested. Overall, it is considered that the proposal does not create any adverse effects in regard to traffic. Seasonal demand is not considered applicable. Onsite carparking for residential activities is existing and will remain unchanged. There is ample area within the proposed allotments for safe and efficient movement of vehicles.

Policies
15.1.4.1 That the traffic effects of activities be evaluated in making decisions on resource consent applications.
15.1.4.2 That the need to protect features of the natural and built environment be recognised in the provision of parking spaces.
15.1.4.3 That parking spaces be provided at a location and scale which enables the efficient use of parking spaces and handling of traffic generation by the adjacent roading network.
15.1.4.4 That existing parking spaces are retained or replaced with equal or better capacity where appropriate, so as to ensure the orderly movement and control of traffic.
15.1.4.5 That appropriate loading spaces be provided for commercial and industrial activities to assist with the pick-up and delivery of goods.
15.1.4.6 That the number, size, gradient and placement of vehicle access points be regulated to assist traffic safety and control, taking into consideration the requirements of both the New Zealand Transport Agency and the Far North District Council.
15.1.4.7 That the needs and effects of cycle and pedestrian traffic be taken into account in assessing development proposals.
15.1.4.8 That alternative options be considered to meeting parking requirements where this is deemed appropriate by the Far North District Council.

8.23.2. Traffic effects have been discussed throughout this report and have been found to be less than minor. Parking spaces are existing. Loading spaces are not applicable. The site does not have direct access from a State Highway. The proposal will utilise the existing access points. Cycle and pedestrian access are not considered applicable to this subdivision, however provision is existing and will remain unchanged.

Proposed District Plan

8.24. Under the Proposed District Plan, the site is zoned Settlement and therefore an assessment of the objectives and policies within this chapter has been included below. The proposal is considered to create no more than minor adverse effects on the surrounding environment and is consistent with the intent of the surrounding environment and the zone. The proposal is considered to be consistent with the objectives and policies of the Proposed District Plan.

Objectives and Policies within the Subdivision Chapter

Objectives

SUB-O1 - Subdivision results in the efficient use of land, which:

- ***a) achieves the objectives of each relevant zone, overlays and district wide provisions;***
- ***b) contributes to the local character and sense of place;***
- ***c) avoids reverse sensitivity issues that would prevent or adversely affect activities already establiproposed building on land from continuing to operate;***
- ***d) avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located;***
- ***e) does not increase risk from natural hazards or risks are mitigates and existing risks reduced; and***
- ***f) manages adverse effects on the environment.***

SUB-O2 - Subdivision provides for the:

- ***a) Protection of highly productive land; and***
- ***b) Protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, Areas of High Natural Character, Outstanding Natural Character, wetland, lake and river margins, Significant Natural Areas, Sites and Areas of Significance to Māori, and Historic Heritage.***

SUB-O3 - Infrastructure is planned to service the proposed subdivision and development where:

- ***a) there is existing infrastructure connection, infrastructure should provided in an integrated, efficient, coordinated and future-proofed manner at the time of subdivision; and***
- ***b) where no existing connection is available infrastructure should be planned and consideration be given to connections with the wider infrastructure network.***

SUB-O4 - Subdivision is accessible, connected, and integrated with the surrounding environment and provides for:

- ***a. public open spaces;***
- ***b. esplanade where land adjoins the coastal marine area; and***
- ***c. esplanade where land adjoins other qualifying waterbodies.***

8.24.1. The proposal is considered to achieve the objectives of the zone, as will be discussed below. The proposal will contribute to the local character by providing an additional lot which is not objectionable to those in the surrounding environment. No reverse sensitivity effects are anticipated. The proposal is not impacted by natural hazards. The site is not considered to be highly productive land as discussed throughout this report. There are no areas of Significance to Māori located on the site. Provision for wastewater infrastructure has been discussed within this report. SUB-04 is not considered applicable as the site does not adjoin any of the areas listed in the objective.

Policies

SUB-P1 - Enable boundary adjustments that:

a) do not alter:
b) are in accordance with the minimum lot sizes of the zone and comply with access, infrastructure and esplanade provisions.

SUB-P2 - Enable subdivision for the purpose of public works, infrastructure, reserves or access.

SUB-P3 - Provide for subdivision where it results in allotments that:

a. are consistent with the purpose, characteristics and qualities of the zone;
b. comply with the minimum allotment sizes for each zone;
c. have an adequate size and appropriate shape to contain a building platform; and
d. have legal and physical access.

SUB-P4 - Manage subdivision of land as detailed in the district wide, natural environment values, historical and cultural values and hazard and risks sections of the plan

SUB-P5 - Manage subdivision design and layout in the General Residential, Mixed Use and Settlement zone to provide for safe, connected and accessible environments by:

a. minimising vehicle crossings that could affect the safety and efficiency of the current and future transport network;
b. avoid cul-de-sac development unless the site or the topography prevents future public access and connections;
c. providing for development that encourages social interaction, neighbourhood cohesion, a sense of place and is well connected to public spaces;
d. contributing to a well connected transport network that safeguards future roading connections; and
e. maximising accessibility, connectivity by creating walkways, cycleways and an interconnected transport network.

SUB-P6 - Require infrastructure to be provided in an integrated and comprehensive manner by:

a. ***demonstrating that the subdivision will be appropriately serviced and integrated with existing and planned infrastructure if available; and***
b. ***ensuring that the infrastructure is provided is in accordance the purpose, characteristics and qualities of the zone.***

SUB- P7 - Require the vesting of esplanade reserves when subdividing land adjoining the coast or other qualifying waterbodies.

SUB-P8 - Avoid rural lifestyle subdivision in the Rural Production zone unless the subdivision:

a. ***will protect a qualifying SNA in perpetuity and result in the SNA being added to the District Plan SNA schedule; and***
b. ***will not result in the loss of versatile soils for primary production activities.***

SUB-P9 - Avoid subdivision rural lifestyle subdivision in the Rural Production zone and Rural residential subdivision in the Rural Lifestyle zone unless the development achieves the environmental outcomes required in the management plan subdivision rule.

SUB-P10 - To protect amenity and character by avoiding the subdivision of minor residential units from principal residential units where resultant allotments do not comply with minimum allotment size and residential density.

SUB-P11 - Manage subdivision to address the effects of the activity requiring resource consent including (but not limited to) consideration of the following matters where relevant to the application:

a. ***consistency with the scale, density, design and character of the environment and purpose of the zone;***
b. ***the location, scale and design of buildings and structures;***
c. ***the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity;***
d. ***managing natural hazards;***
e. ***Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and***
f. ***any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.***

8.24.2. The proposal does not include a boundary adjustment. The proposal is not for the purpose of public works, infrastructure, reserves or access. The proposed lot sizes are consistent with the purpose, characteristics and qualities of the zone, as will be discussed below. The proposal can comply with the Controlled provisions for the zone under the ODP, in regard to subdivision. The allotment sizes for subdivision under the PDP do not have legal weighting at present. Lots 1 & 2 will contain existing built development and associated onsite infrastructure. Access will be via the existing crossing places. The proposal is not anticipated to create any adverse effects regarding natural values, cultural or historical values nor hazards. In terms of SUB-P5, no additional vehicle crossings will be required as the existing crossings

will be utilised. No cul-de-sacs are proposed. As the built development is existing, the sense of place is considered to remain unchanged. The transport network is existing. Walkways and cycleways are not a consideration of this proposal. Onsite infrastructure will be utilised. Vesting of esplanade reserves is not considered applicable to the proposal. The proposal will not result in rural lifestyle subdivision in the rural production zone or rural-residential subdivision of a rural lifestyle zone. The proposal does not result in subdivision of a minor residential unit from the principal unit. The proposal is considered to be consistent with the scale, density and character of the surrounding environment as has been discussed throughout this report. Both lots 1 & 2 will have existing built development and onsite infrastructure. The proposal will not accelerate or exacerbate natural hazards. No effects on historic heritage, cultural values, natural features and landscapes and indigenous biodiversity values are anticipated. The site is not known to hold any historical, spiritual or cultural association with Tangata Whenua.

Objectives and Policies for the Settlement Zone

Objectives

RSZ-O1 - Rural and coastal settlements are used predominantly for residential activities and are sustained by a range of compatible activities and services.

RSZ-O2 - Land use and subdivision is of a scale and intensity that is in keeping with the rural or coastal character and amenity of each settlement.

RSZ-O3 - Landuse and subdivision in the Settlement zone is appropriate for the physical and environmental attributes of the site and any infrastructure constraints.

RSZ-O4 - Landuse and subdivision in the Settlement zone is managed to control any reverse sensitivity issues that may occur within the zone or at the zone interface

8.24.3. The proposal will result in one additional allotment being created which will be utilised for residential purposes. The scale and intensity is considered compatible with the surrounding environment. Infrastructure is existing. No reverse sensitivity effects are anticipated.

Policies

RSZ-P1 Enable residential and complementary non-residential activities that support the role and function of the Settlement zone.

RSZ-P2 Require land use and subdivision in the Settlement zone associated with non-residential activities to demonstrate the ability to provide for onsite infrastructure unless a reticulated service is available.

RSZ-P3 Enable non-residential activities in the Settlement zone that:

a. *are of a scale, intensity, character and amenity that compliments the residential activities in the settlement;*
b. *support the social and economic well-being of the community;*
c. *do not adversely affect the viability and vitality of nearby urban centers; and*
d. *demonstrate the ability to provide for onsite infrastructure.*

***RSZ-P4** Avoid land use and development in the Settlement zone that results in reverse sensitivity effects either within the zone or on activities adjacent zones.*

***RSZ-P5** Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:*

a. *the scale, character and amenity of the settlement, in particular impacts on existing residential activities;*
b. *siting and design;*
c. *cultural and social well-being, including health and safety;*
d. *potential reverse sensitivity effects both within the settlement and on adjacent zones;*
e. *its location within or adjoining to the settlement; and*
f. *the vitality and viability of nearby urban environments.*
g. *the capacity of the site to cater for on-site infrastructure associated with the proposed activity;*
h. *the adequacy of roading infrastructure to service the proposed activity;*
i. *managing natural hazards;*
j. *any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and*
k. *any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6*

8.24.4. The proposal will result in an independent title around an existing residential dwelling, with the balance lot containing the two remaining residential units. No non-residential activities are proposed. No reverse sensitivity effects are anticipated. Effects will be managed on site as discussed throughout this report.

Summary

8.25. The above assessment of the relevant policy documents demonstrates that the proposal will be consistent with the relevant objectives and policies of those statutory documents.

9. SECTION 125 – LAPSING OF CONSENT

9.1. The Act prescribes a standard consent period of five years in which all works must be undertaken, but this may be amended as determined by the Council. It is requested that the standard provisions be applied in this instance.

10. NOTIFICATION ASSESSMENT – SECTIONS 95A TO 95G OF THE ACT

Public Notification Assessment

10.1. Section 95A requires a council to follow specific steps to determine whether to publicly notify an application. The following is an assessment of the application against these steps:

Step 1 Mandatory public notification in certain circumstances

(2) Determine whether the application meets any of the criteria set out in subsection (3) and,—
(a)if the answer is yes, publicly notify the application; and
(b) if the answer is no, go to step 2.
(3)The criteria for step 1 are as follows:
(a)the applicant has requested that the application be publicly notified:
(b)public notification is required under section 95C:
(c)the application is made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977.

10.1.1. It is not requested the application be publicly notified and the application is not made jointly with an application to exchange reserve land. Therefore Step 1 does not apply and Step 2 must be considered.

Step 2: Public Notification precluded in certain circumstances.

(4) Determine whether the application meets either of the criteria set out in subsection (5) and,—
(a) if the answer is yes, go to step 4 (step 3 does not apply); and
(b)if the answer is no, go to step 3.
(5) The criteria for step 2 are as follows:
(a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification:
(b)the application is for a resource consent for 1 or more of the following, but no other, activities:
(i)a controlled activity:
(ii)[Repealed]
(iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity.
(iv)[Repealed]
(6)[Repealed]

10.1.2. The application is a combined Discretionary activity subdivision and land-use consent. No preclusions apply in this instance.

Step 3: If not precluded by Step 2, public notification required in certain circumstances

(7) Determine whether the application meets either of the criteria set out in subsection (8) and,—
(a)if the answer is yes, publicly notify the application; and
(b)if the answer is no, go to step 4.
(8)The criteria for step 3 are as follows:

(a)the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:
(b)the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.

10.1.3. No applicable rules require public notification of the application. The activity will not have a more than minor effect on the environment.

Step 4; Public notification in special circumstances
(9) Determine whether special circumstances exist in relation to the application that warrant the application being publicly notified and,—
(a) if the answer is yes, publicly notify the application; and
(b)if the answer is no, do not publicly notify the application, but determine whether to give limited notification of the application under section 95B.

10.1.4. There are no special circumstances that exist to justify public notification of the application because the proposal is for a subdivision where one additional allotment will be created which meets the controlled lot size provisions for the zone. There are many allotments in the immediate vicinity which are of similar size or smaller to the proposed allotments and hence the proposal is not considered to be exceptional or unusual. The development on the site is existing, with no additional built development proposed.

Public Notification Summary

10.2. From the assessment above it is considered that the application does not need to be publicly notified, but assessment of limited notification is required.

Limited Notification Assessment

10.3. If the application is not publicly notified, a consent authority must follow the steps of section 95B to determine whether to give limited notification of an application.

11.2.1 Step 1: Certain affected groups and affected persons must be notified.
(2) Determine whether there are any—
(a) affected protected customary rights groups; or
(b)affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).
(3) Determine—
(a)whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11; and
(b)whether the person to whom the statutory acknowledgement is made is an affected person under section 95E.
(4) Notify the application to each affected group identified under subsection (2) and each affected person identified under subsection (3).

10.3.1. No customary rights groups or marine titles groups are considered to be affected. The proposal is not known to be subject to a statutory acknowledgement area. As such, it is considered that no notification is required. Therefore, Step 2 must be considered.

Step 2: Limited notification precluded in certain circumstances.

(5) Determine whether the application meets either of the criteria set out in subsection (6) and,—
(a)if the answer is yes, go to step 4 (step 3 does not apply); and
(b)if the answer is no, go to step 3.
(6) The criteria for step 2 are as follows:
(a)the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification:
(b) the application is for a controlled activity (but no other activities) that requires a resource consent under a district plan (other than a subdivision of land).

10.3.2. There is no rule in the plan or national environmental standard that precludes notification. The application is not for a prescribed activity but is for a subdivision proposal. Therefore Step 2 does not apply and Step 3 must be considered.

Step 3: Certain other affected persons must be notified.

(7) In the case of a boundary activity, determine in accordance with section 95E whether an owner of an allotment with an infringed boundary is an affected person.
(8) In the case of any other activity, determine whether a person is an affected person in accordance with section 95E.
(9) Notify each affected person identified under subsections (7) and (8) of the application.
The proposal is not for a boundary activity nor is it a prescribed activity.

10.3.3. The proposal is not for a boundary activity.

10.3.4. In deciding who is an affected person under section 95E, a council under section 95E(2):

(2) The consent authority, in assessing an activity's adverse effects on a person for the purpose of this section,—

(a) may disregard an adverse effect of the activity on the person if a rule or a national environmental standard permits an activity with that effect; and

(b) must, if the activity is a controlled activity or a restricted discretionary activity, disregard an adverse effect of the activity on the person if the effect does not relate to a matter for which a rule or a national environmental standard reserves control or restricts discretion; and

(c) must have regard to every relevant statutory acknowledgement made in accordance with an Act specified in Schedule 11.

10.3.5. A Council must not consider that a person is affected if they have given their written approval, or it is unreasonable in the circumstances to seek that person's approval.

10.3.6. With respect to section 95B(8) and section 95E, the permitted baseline was considered as part of the assessment of environmental effects undertaken in Section 7 of this report, which found that the potential adverse effects on the environment will be minor. In regard to effects on persons, the assessment provided within this report is also relied on and the following comments made:

- The size of the proposed allotments is consistent with the character of the allotments in the locality and can comply with the controlled provisions for lot size within the zone. Therefore, the proposed allotment sizes are not objectionable with the surrounding environment.
- The development is not considered to be contrary to the objectives and policies under the District Plan.
- The proposed lots contain existing built development and associated infrastructure which will continue to operate with no change.
- All stormwater will be managed within the site boundaries, such that there will be no downstream effects created.
- The proposal will not see an increase in traffic movements compared to what is currently in existence. Both lots will utilise existing crossing places, with dispensation being requested as part of this application process for breaches of the transportation rules. NZTA have been consulted but did not deem themselves to be an affected party given that access to the sites is existing from local roads.
- All other persons are sufficiently separated from the proposed development and works, such that there will be no effects on these people.

10.3.7. Therefore, no persons will be affected to a minor or more than minor degree.

10.3.8. Overall, the adverse effects on any persons are considered to be less than minor. Therefore Step 3 does not apply and Step 4 must be considered.

Step 4: Further notification in special circumstances

(10) whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected persons),

10.3.9. The proposal is to subdivide the site to create one additional allotment. It is considered that no special circumstances exist in relation to the application.

Limited Notification Assessment Summary

10.4. Overall, from the assessment undertaken Steps 1 to 4 do not apply and there are no affected persons.

Notification Assessment Conclusion

10.5. Pursuant to sections 95A to 95G it is recommended that the Council determine the application be non-notified for the above-mentioned reasons.

11. PART 2 ASSESSMENT

11.1. The application must be considered in relation to the purpose and principles of the Resource Management Act 1991 which are contained in Section 5 to 8 of the Act inclusive.

11.2. The proposal will meet Section 5 of the RMA as the proposal will sustain the potential of natural and physical resources whilst meeting the foreseeable needs of future generations. It is considered that the proposal will safeguard the life-supporting capacity of air, water, soil and ecosystems. In addition, the proposal will avoid adverse effects on the environment and will maintain the character of the site and surrounding environment.

11.3. Section 6 of the Act sets out a number of matters of national importance. The subject site is not located near any lakes, rivers or wetlands. The subject site is partially located within the coastal environment under the RPS, however no adverse effects are anticipated due to the fact that visual amenity and character will be maintained. There are no outstanding natural features or landscapes which are considered to be affected, nor any areas of significant indigenous vegetation or habitats of fauna. Public access is not considered relevant in this case. The site does not contain any areas identified as being a Site of Cultural Significance to Māori. The relationship of Māori and their culture is considered to remain unaffected by the proposal. Historic heritage and protected customary rights will not be affected by the proposal. The proposal is not anticipated to exacerbate natural hazards. It is considered that the effects of this proposal on Section 6 of the Act are considered to be less than minor.

11.4. Section 7 identifies a number of “other matters” to be given particular regard by a Council in the consideration of any assessment for resource consent, including the maintenance and enhancement of amenity values. The proposal maintains amenity values in the area as the proposal is in keeping with the existing character of the surrounding environment.

11.5. Section 8 requires Council to take into account the principals of the Treaty of Waitangi. It is considered that the proposal raises no Treaty issues. The proposal has taken into account the principals of the Treaty of Waitangi and is not considered to be contrary to these principals.

11.6. Overall, the application is considered to be consistent with the relevant provisions of Part 2 of the Act, as expressed through the objectives, policies and rules reviewed in earlier sections of this application. Given that consistency, we conclude that the proposal achieves the purposes of sustainable management set out by Sections 5-8 of the Act.

12. CONCLUSION

12.1. The proposal is to undertake a subdivision to create one additional allotment where the lot sizes are able to comply with the Controlled activity provisions for the zone. The proposal will result in land use breaches due to the amount of impermeable areas within each lot and retaining the existing access provisions. Consent to cancel existing irrelevant consent notice conditions has also been applied for as well as application under the NESCS. Haigh Workman

have provided a combined PSI and DSI as well as a Site Suitability Report, both of which contained recommendations, which have been discussed within this application. Given these recommendations are adhered to, all effects of the proposal are considered to be less than minor. Proposal to create easements under s348 of the LGA is also requested as a separate resolution.

12.2. Due to the existing pattern of development in the area it is not considered that there are any adverse cumulative effects, and the proposal does not result in degradation of the character of the surrounding environment.

12.3. In terms of section 104(1)(b) of the Act, the actual and potential effects of the proposal will be less than minor.

12.4. It is also considered that the proposal will have less than minor adverse effects on the wider environment; no persons will be adversely affected by the proposal and there are no special circumstances.

12.5. The relevant provisions within Part 2 of the Act have been addressed as part of this application. The overall conclusion from the assessment of the statutory considerations is that the proposal is considered to be consistent with the sustainable management purpose of the Resource Management Act 1991.

12.6. As a Discretionary Activity, the proposal has been assessed against the specific matters and limitations imposed by the District Plan. In accordance with sections 104, 104B, 105 and 106 of the Act in relation to discretionary activities, it is considered appropriate for consent to be granted on a non-notified basis.

13. LIMITATIONS

13.1. This report has been commissioned solely for the benefit of our client, in relation to the project as described above, and to the limits of our engagement, with the exception that the Far North District Council or Northland Regional Council may rely on it to the extent of its appropriateness, conditions and limitations, when issuing their subject consent.

13.2. Copyright of Intellectual Property remains with Northland Planning and Development 2020 Limited, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants or agents, in respect of any information contained within this report.

13.3. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.

13.4. Although this report may be submitted to a local authority in connection with an application for a consent, permission, approval, or pursuant to any other requirement of law, this disclaimer shall still apply and require all other parties to use due diligence where necessary.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Guaranteed Search Copy issued under Section 60 of the Land Transfer Act 2017

R.W. Muir
Registrar-General
of Land

Identifier **207206**

Land Registration District **North Auckland**

Date Issued 27 October 2005

Prior References
NA320/30

Estate Fee Simple

Area 4.8945 hectares more or less

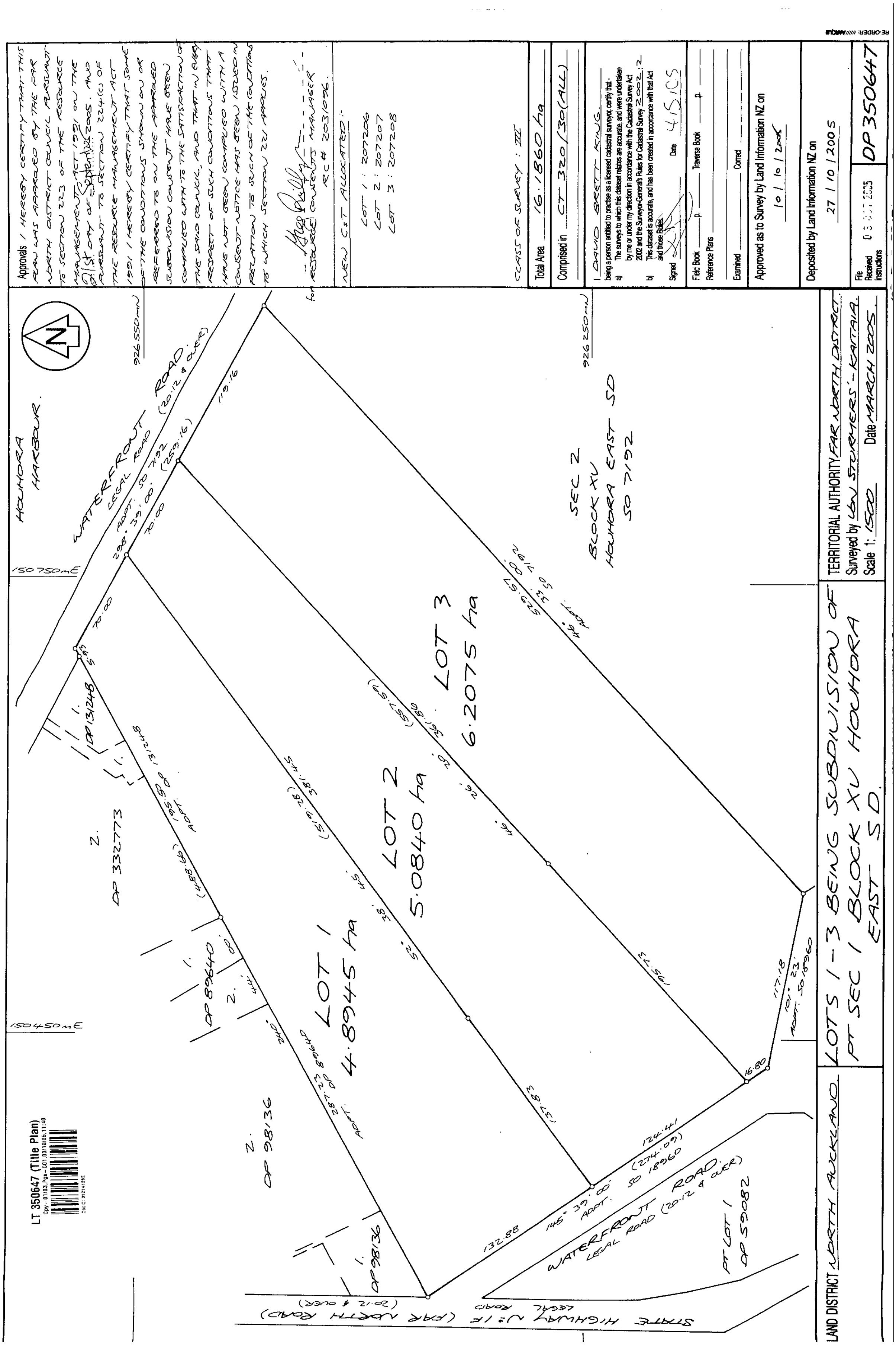
Legal Description Lot 1 Deposited Plan 350647

Registered Owners
Bradleys R & S Limited

Interests

6624741.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 27.10.2005 at 9:00 am

7128534.2 Mortgage to Thomas Graham Bradley - 23.11.2006 at 9:00 am


LOTS 1-3 BEING SUBDIVISION OF PT SEC 1 BLOCK XV HOUHORA EAST SD.
LAND DISTRICT NORTH AUCKLAND
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by LEN STURMERS - KAITAIA
Scale 1: 1500
Date MARCH 2005
DP 350647
Deposited by Land Information NZ on 27/10/2005
Approved as to Survey by Land Information NZ on 10/10/2005
Total Area 16.1860 ha
Comprised in CT 320/30 (ALL)
CLASS OF SURVEY : III
NEW CsT ALLOCATED:
LOT 1 : 207206
LOT 2 : 207207
LOT 3 : 207208
LOT 1 4.8945 ha
LOT 2 5.0840 ha
LOT 3 6.2075 ha
HOUHORA HARBOUR
WATERFRONT ROAD LEGAL ROAD (20.12 & OVER)
STATE HIGHWAY No 1F (FAR NORTH ROAD) LEGAL ROAD (20.12 & OVER)
SEC 2 BLOCK XV HOUHORA EAST SD SO 7192
DP 332773
DP 98136
DP 89640
DP 131248
PT LOT 1 DP 59082
LT 350647 (Title Plan)

Far North District Council

Private Bag 752, Memorial Ave
Kaikohe 0400, New Zealand
Freephone: 0800 920 029
Phone: (09) 405 2750
Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz
Website: www.fndc.govt.nz

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING RC 2031096
the Subdivision of Sec 1 BLK XV
Houhora East SD
North Auckland Registry

PURSUANT to Section 221 for the purpose of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and is to be registered on the title of the affected allotments.

SCHEDULE

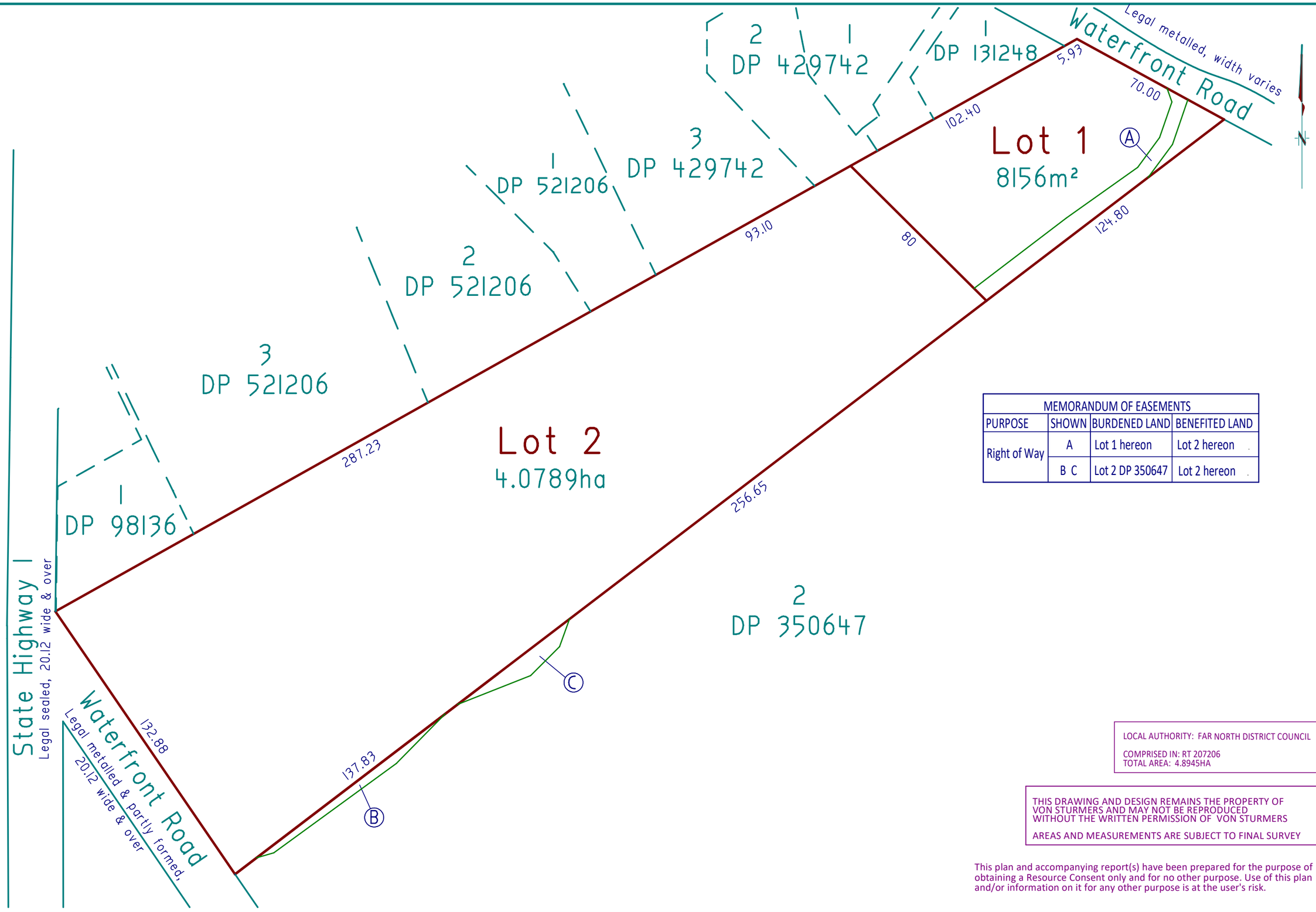
(i) Provide, at the time of lodging a building consent application for any of the allotments on the subdivision plan, a specific design for stormwater management and effluent disposal (which is to comply with TP58) by a suitably qualified Chartered Professional Engineer which addresses those issues in terms of the building being proposed in the application.

(ii) Provide a report from a Chartered Professional Engineer, at the time of lodging a building consent application for a dwelling on Lot 1 or Lot 2 or a new or relocated dwelling on Lot 3, which assesses the risk of erosion of the Houhora Harbour cliff face to the site proposed for the dwelling. In particular, the report will need to certify that any house site proposed is landward of any potential erosion risk area.

(iii) Pursuant to the attached letter from Transit NZ dated 9 August 2004, the use of the gates indicated as (A) and (B) on the attached plan is to be limited to the movement of cattle and farm machinery and to the storage and movement of mussel farm equipment at an intensity equivalent to the existing farms' activities.

SIGNED: pp _____ Pat Killalea
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
RESOURCE CONSENTS MANAGER

DATED at **KAIKOHE** this 21st day of September 2005



MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	A	Lot 1 hereon	Lot 2 hereon
	B C	Lot 2 DP 350647	Lot 2 hereon

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

COMPRISED IN: RT 207206
TOTAL AREA: 4.8945HA

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

VON STURMERS
Registered Land Surveyors, Planners & Land Development Consultants

Ph: (09) 408 6000
Email: kaitaia@saps.co.nz

131 Commerce Street, Kaitaia

PROPOSED SUBDIVISION OF LOT 1 DP 350647 & EASEMENTS OVER LOT 2 DP 350647

PREPARED FOR: B DENISON

	Name	Date	ORIGINAL	
			SCALE	SHEET SIZE
Survey				
Design				
Drawn	SH	13-08-2024	1:1500	A3
Rev	SH	05-02-2025		

Surveyors Ref. No: 15454
Series
Sheet of

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AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

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Sheet of

Engineering Report for Proposed Subdivision

80 Waterfront Road, Pukenui

Lot 1 DP 350647

for

Troy and Billie Denison

Supporting report for RC Applications to Far North District Council

Haigh Workman reference 24 204

March 2025

Phone: 0800 424 447 • info@haighworkman.co.nz • www.haighworkman.co.nz

Kerikeri • Whangarei • Warkworth

Revision History

Revision Nº	Issued By	Description	Date
A	Joshua Cuming	For Resource Consent	21 February 2025

Prepared by	Reviewed by	Approved by
Josh Cuming	**Tom Adcock**	**John Papesch**
Environmental Geologist	Senior Civil Engineer	Senior Civil Engineer
BSc Geol, Env Stu, CEnvP	BEng Civil, MEngNZ	BE (Civil Engineering), CPEng, CMEngNZ

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Executive Summary

Haigh Workman Ltd (Haigh Workman) was commissioned by Billie and Troy Denison (the client) to undertake an engineering assessment of land at 80 Waterfront Road, Pukenui (the site), for a proposed two lot subdivision.

The site is zoned 'Coastal Residential' under the Operative Far North District Plan. The property is irregular in shape. The topography of the property consists of gentle to moderately rolling dunes.

This report assesses access, natural hazards, earthworks, stormwater, water supply and wastewater with specific regard to the local authority plans and subdivision rules contained. Below is a synopsis of the key sections covered:

Natural Hazards
The site is not mapped as being within a NRC flood hazard zone. It is however mapped as being within the 5, 10 and 100 year floodplain in the 2007 GHD mapping. Existing dwellings are well elevated from the mapped flood hazard.

Based on site observations and published soil and geology maps the site is a very low stability risk.

Vehicle Crossings

Lot 1

Haigh Workman have assessed the operating speed for the existing northern crossing onto Waterfront Road and appropriate sight stopping distances are present. The lot 1 vehicle crossing is formed without a culvert as there are no formed watertables. The crossing does not meet FNDC Engineering Type 1A standard. The vehicle crossing will need to be upgraded to meet Type 1a standard.

Lot 2

The existing crossing onto the partly formed paper road Waterfront Road to the south is in effect a straight continuation.

Minimum SSDs of 60m for an associated operating speed of 50kph can be achieved in both directions, should the road become fully formed at a later date.

Access & Parking
All sites have suitable land for driveway access plus parking and manoeuvring space for a minimum two cars.

Earthworks
No earthworks are proposed at subdivision stage. The coastal residential zone allows for a maximum of 200m^3 earthworks in any 12 month period as a permitted activity.
Further earthwork volume restrictions for the site apply under the NES-CS. Details of these limits are included in the Combined Preliminary and Detailed Site Investigation, Haigh Workman, November 2024.

Stormwater Management
Land use consent is sought for breach of the impervious surface rule with lot 1 and 2 being 1230m^2 and 1964m^2 respectively. Both lots are well above the 1000m^2 threshold, but well below the 50% threshold. No further impermeable surfaces are proposed in relation to subdivision.

Runoff from roofed areas is directed into storage tanks for potable use.

It is proposed that as a consent condition stormwater from the dwellings on lot 2 and associated accessways are directed towards the southeastern catchment on site in a controlled, dispersive manner which will not cause erosion. To the north of site, a mapped flood zone exists with dwellings present within it. Directing stormwater to the southeast will ensure that the scale of this flooding is not increased. No mapped flood hazard is present to the southeast of site.

It is proposed that stormwater from the dwelling, shed and associated driveway on proposed lot 1 is directed to the northeast of the dwelling. Subject to appropriate direction and discharge of stormwater, stormwater neutrality is not required to address downstream effects.

Wastewater

No ponding or other evidence of failure was observed in the operation of the wastewater system in proposed Lot 1.

No ponding or other evidence of failure was observed in the operation of the wastewater systems for the two dwellings in proposed Lot 2.

Adequate disposal and 100% reserve areas exit on the proposed new lots.

Water Supply

Domestic water supply will be roof runoff collected in storage tanks.

Fire Fighting

Far North District Council Engineering Standards 2004 (2009 Rev.) require a water supply that is adequate for firefighting purposes. There is no reticulated water supply, so each lot will be responsible for providing an on-site firefighting supply.

1. Introduction

1.1 Project Brief and Scope

Haigh Workman Ltd (Haigh Workman) was commissioned by Billie and Troy Denison (the client) to undertake an engineering assessment of land 80 Waterfront Road, Pukenui (the site), for a proposed two lot subdivision.

The scope of the report includes the following assessment items:

- General site assessment
- Natural hazards
- Vehicle access, parking and manoeuvring
- Earthworks
- Stormwater and wastewater
- Water supply and firefighting

Geotechnical investigations and reporting did not form part of our scope.

A proposed subdivision plan prepared by Von Sturmers Reference 15454 dated August 2024 was made available at the time of writing this report. Refer copy appended.

The site is zoned 'Coastal Residential' under the Operative Far North District Plan.

The subdivision is a discretionary activity under the Far North District Plan.

1.1 Limitations

This report has been prepared for our client Troy and Billie Denison with respect to the brief outlined to us. This report is to be used by our Client and Consultants and may be relied upon by the Far North District Council (FNDC) when considering the application for the proposed subdivision and development. The information and opinions contained within this report shall not be used in any other context for any other purpose without prior review and agreement by Haigh Workman Ltd.

It has been assumed in the production of this report that the site is to be subdivided and subsequently developed. At the time of writing there was no information available for proposed future developments on either lot following subdivision. If any of these assumptions are incorrect, then amendments to the recommendations made in this report may be required.

The comments and opinions presented in this report are based on the findings of the desk study and ground conditions encountered during an intrusive site visit performed by Haigh Workman. There may be other conditions prevailing on the site which have not been revealed by this investigation and which have not been taken into account by this report. Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of strata or other spatially variable features between or beyond investigation positions is conjectural and given for guidance only.

2 Site Description and Proposed Development

2.1 Site Identification

Site Address:	80 Waterfront Road, Pukenui
Legal Description:	Lot 1 DP 350647
Area:	4.8945 ha
Operative Far North District Plan Zone:	Coastal Residential

2.2 Site Description

The property is irregular in shape. The topography of the property consists of gentle to moderately rolling dunes. The property fronts onto the formed Waterfront Road at the northeastern end, and also too onto the partly formed portion of the same Waterfront Road at the southwestern end. Three dwellings are currently present on site with the balance laid in pasture at the time of our investigations. Refer Figure 1 for site location.

Figure 1 Site Location

2.3 Proposed Subdivision

A scheme plan has been provided, which identifies the intent to subdivide the property into two lots of 0.8156 and 4.0789 hectares in area.

Proposed lots are described in Table 1 below:

Table 1 Lot descriptions

Lots	Proposed Area (ha)	End-use
Lot 1	0.8156	Coastal residential
Lot 2	4.0789	Coastal residential
Total	**4.8945**	

Land use consent for the setback from the boundary for the existing dwellings will be sought. Easements over the neighbouring property also owned by the owners of the subject lot are included in the subdivision scheme plan.

3 Environmental Setting

3.1 Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences 1:250,000 Geological Map 1, 2009: "*Geology of the Kaitaia area*".
- NZMS 290 Sheet N 02/03, 1: 100,000 scale, 1980: *"Soil map of the North Cape-Houhora area".*

The site is within the bounds of the GNS Geological Map 1 "Geology of the Kaitaia area", 1:250,000 scale. The published geology shows the site to be underlain by the Karioitahi Group. An exert of the geological map is shown in Figure 2 below, with geological units presented in Table 2.

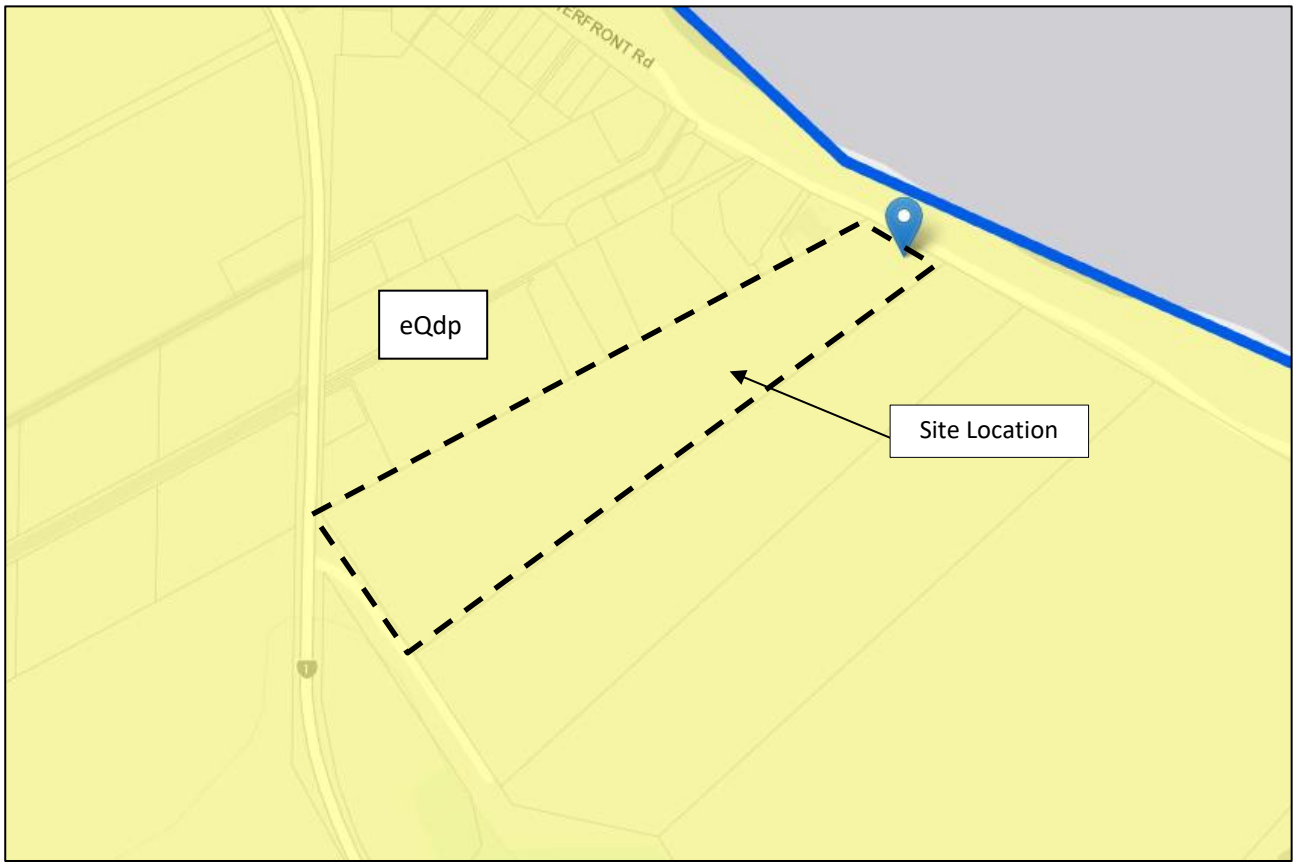


Figure 2 - Geological Map

Table 2 - Geological Legend

Symbol	Unit Name	Description
eQdp	Karioitahi Group	Weakly cemented and partly consolidated sand in parabolic dunes. Interdune lake and swamp deposits.

Further reference to the published New Zealand land inventory maps (Whangaroa-Kaikohe 1980), indicates the site is underlain by *'soils of the coastal sand dune complex, well to moderately well drained Houhora Sand and Tangitiki sandy loam and sand.'*

3.2 Natural Hazards

Under Section 2 of the Resource management Act 1991, **natural hazard** means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Natural hazards listed in Section 71(3) of the Building Act 2004 include: erosion, falling debris, subsidence, inundation and slippage. We assess the susceptibility of this site to these potential hazards in Table 3 below.

Table 3 - Natural Hazards

Natural Hazard	Risk
Erosion (including coastal erosion, bank erosion, and sheet erosion)	No, subject to maintaining vegetation cover. The site is not within a mapped coastal erosion zone.
Falling debris (including soil, rock, snow, and ice)	No
Subsidence (vertical settlement)	Possible, geotechnical investigation required with any building works.
Inundation (including flooding, overland flow, storm surge, tidal effects, and ponding)	No, for the building sites. Mapped hazards and low lying ground susceptible to flooding has been identified away from the building platforms.
Slippage	No, based on surface observations and soil and geology mapping. Earthworks greater than 1.5 m high to be confirmed by site specific geotechnical investigations and reporting.

In respect of Section 71(2) of the Building Act 2004, adequate provision can be made to protect the land and buildings from natural hazards. Subject to the conditions recommended in this report, there is no significant risk from natural hazards that would cause Section 106 of the Resource Management Act to apply.

3.2.1 Flood Mapping

The site is not mapped as being within a NRC flood hazard zone. It is however mapped as being within the 5, 10 and 100 year floodplain in the 2007 GHD mapping. This is shown below. Existing buildings onsite are well elevated from the mapped hazard.

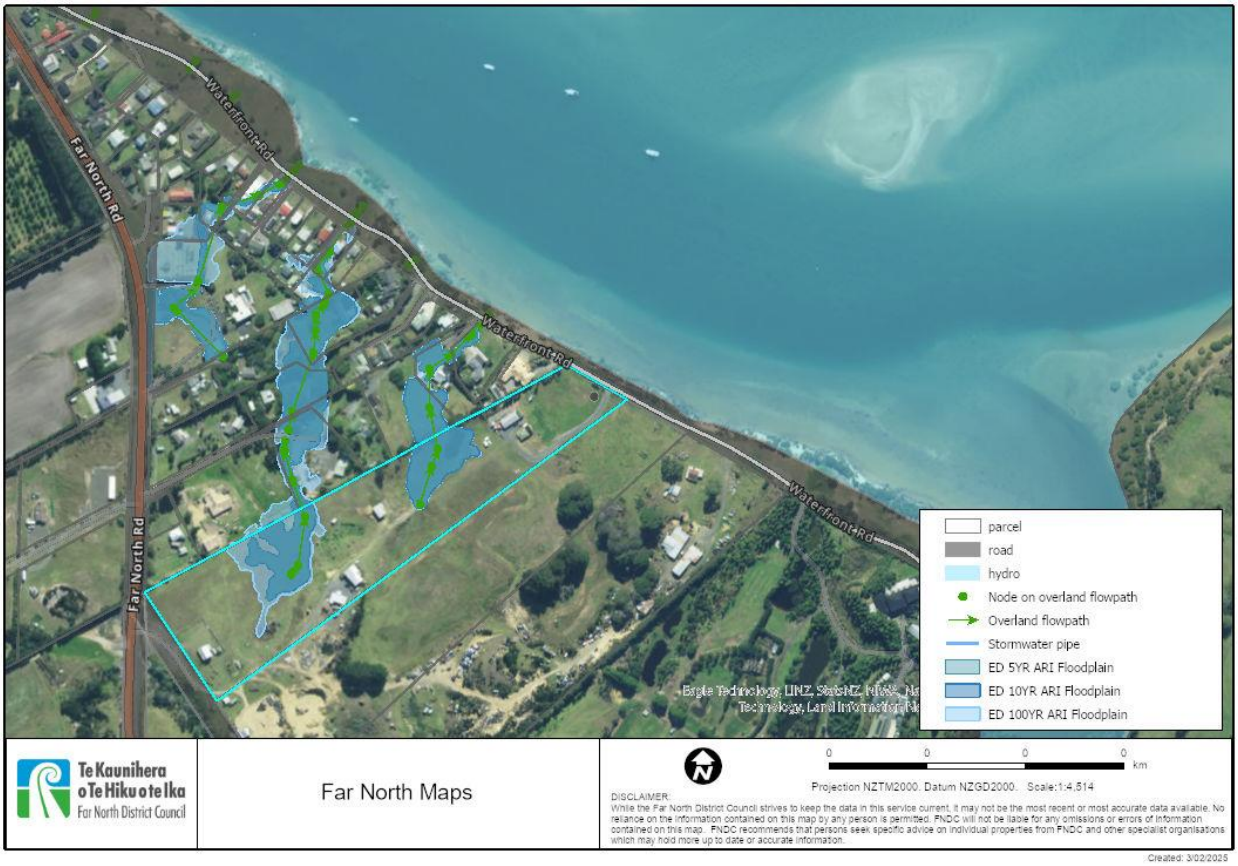


Figure 3 - Mapped Flood Hazard (2007, GHD)

4 Site Access

4.1 Waterfront Road

Lot 1 is accessed via the formed Waterfront Road at the northeastern end of the site.

The primary access for Lot 2 is via the partly formed Waterfront Road to the south of site. This paper road intersects with State Highway 1. An existing crossing off the state highway and provides access to the site and neighbouring property.

Lot 2 DP 350647 does not have legal rights for access over the subject lot and no such rights will be provided as part of this application.

The paper road is currently unsealed with a width of at least 3m, sufficient crossfall and drainage are present. Passing bays are effectively provided by the large unsealed surface present.

Figure 4 - Waterfront Road (Partly Formed)

4.2 Vehicle Crossings

4.2.1 **Lot 1**

Minimum sight distances from vehicle crossings are specified in the Far North District Council Engineering Standards and Guidelines 2023 Drawing Sheet 4.

Waterfront Road to the north of site is classified as an access road with a 50 km/h speed limit and an estimated vpd of 102[1].

The Standards require a minimum sight distance of 60m for an access road with a 50km/hr posted speed limit. Haigh Workman have assessed the operating speed for the existing northern crossing onto Waterfront Road as per Table 4 below. As allowed by Drawing Sheet 4 Note 2 of the 2023 Engineering Standards.

The lot 1 vehicle crossing is formed without a culvert as there are no formed watertables. The crossing does not meet FNDC Engineering Type 1A standard as the required radius is not meet on both sides.

Table 4 Sight Stopping Distances

Crossing	Approach direction	Posted Speed	FNDC Sight Dist. (Drawing Sheet 4) (m)	Sight Distance Achieved
Northern Crossing onto Waterfront Road	Northwest	50 km/h	60m	110m
	Southeast	50 km/h	60m	180m

[1] Estimate provided by Mobile Road website, July 2024.

The required sight stopping distances are achieved.

Sight distance to northwest of lot 1 crossing

Sight distance to southeast of lot 1 crossing

Existing vehicle crossing

Figure 5 - Lot 1 vehicle crossing photographs

4.2.2 **Lot 2**

The existing crossing onto the partly formed paper road Waterfront Road to the south is in effect a straight continuation.

Minimum SSDs of 60m for an associated operating speed of 50kph can be achieved in both directions, should the road become fully formed at a later date.

NZTA / Waka Kotahi have confirmed that they are not an affected party to the proposed subdivision.

Figure 6 - Lot 2 vehicle crossing photograph

4.3 Right of Way

A right of way easement is proposed over Lot 1 in favour of Lot 2. This will not be used as the primary access and will likely be used on occasion for quicker access to the public boat ramp. The household equivalents that will use this ROW is less than 2 therefore the carriageway width should be at least 3m. This ROW is at least 3m in width.

A right of way easement is proposed over the neighbouring lot 2 DP 350647 in favour of lot 2 herein. The accessway is 3m wide, has good visibility and is approximately 120m long before reaching the existing turning circle.

4.4 Parking and Manoeuvring

Parking in accordance with District Plan Rule 15.1.6B and associated manoeuvring can be accommodated within the proposed lots for a minimum of two vehicles.

5 Earthworks

5.1 Proposed Earthworks

No earthworks are proposed at subdivision stage.

The coastal residential zone allows for a maximum of 200m^3 earthworks in any 12 month period as a permitted activity.

The Proposed Far North District Plan was notified on 27 July 2022 and defines earthworks as:

The alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.

The following Proposed Plan rules and standards have legal effect and will be complied with:

- Earthworks Rule EW-R12 (Earthworks and the discovery of suspected sensitive material)
- Earthworks Rule EW-R13 (Earthworks and erosion and sediment control
- Standard EW-S3 Accidental Discovery Protocol
- Standard EW-S5 Erosion and sediment control

Further earthwork volume restrictions for the site apply under the NES-CS. Details of these limits are included in the Combined Preliminary and Detailed Site Investigation, Haigh Workman, November 2024.

6 Stormwater Management

6.1 Regulatory Framework

6.2 Far North District Plan Provisions

The Site is zoned as Coastal Residential. The relevant permitted activity rule for stormwater is as follows:

10.8.5.1.6 STORMWATER MANAGEMENT
The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 50% or 1,000m², whichever is the lesser.
Note: It is recommended that the Low Impact Design principles are used where appropriate to promote the on-site percolation of stormwater to reduce runoff volumes and to protect receiving environments from the adverse effects of stormwater discharges.

The relevant restricted discretionary activity rule for stormwater is as follows:

10.8.5.2.8 STORMWATER MANAGEMENT
The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 60%, unless Low Impact Design has been used to reduce site impermeability and consent has been obtained from the Northland Regional Council for any stormwater discharge from any area of more than 1,000m².

Subdivision Rule relating to stormwater disposal is 13.7.3.4. The pertinent sections relating to this site are:

13.7.3.4 STORMWATER DISPOSAL
(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).

(d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.

(d) Where flow rate control is required to protect downstream properties and/or the receiving environment then the stormwater disposal system shall be designed in accordance with the onsite control practices as contained in "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003).

6.3 Regional Plan for Northland

Rule C.6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions); the diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10 percent annual exceedance probability, or flooding of buildings on another property in a storm event of up to and including a one percent annual exceedance probability.

6.4 Council Engineering Standards 2023

The FNDC Engineering Standards have recently been updated and Council is encouraging their use. The pertinent sections relating to stormwater management are:

Chapter 4: Stormwater and Drainage

4.1.3 Performance Standards

e. The primary stormwater system shall be capable of conveying 10% AEP design storm events without surcharge (see Section 4.3.9 Hydrological Design Criteria).

4.1.6. Managing Effects of Land Use on Receiving Environments

Hydrological balance can be partly maintained by limiting the maximum rate of discharge and peak flood levels for post-development to that at pre-development levels and enabling infiltration to minimise impacts on base flow and ground water recharge.

Peak flow management can be achieved using detention storage, utilising extended duration, for the duration of a limited peak flow event. Therefore, in the absence of more detailed assessment of stream stability, the discharges from detention devices into a stormwater network shall be constrained to 80% of pre-development peak flow rate. These constraints may be relaxed, subject to detailed assessments and hydrological/hydraulic modelling of the catchment being provided.

4.2.1. Discharge into a Stream or Watercourse

All new and existing discharges to an existing FNDC owned and / or maintained watercourse(s) located within approximately 500m require specific approval from the Stormwater Manager before proceeding with design details and, if approved, FNDC shall apply appropriate conditions to the discharge.

4.3.8. System Design

Table 4-1: Minimum Design Summary

Current rainfall (i.e. not climate change adjusted) shall be used for the following:

• Determining pre-development stormwater runoff flows and volumes for use in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for the following:

• Determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

Flood Control (1% AEP event). Detention required, limiting the post-development 1% AEP event flow rates to 80% of the pre-development 1% AEP event flow rates.

Flow attenuation (Attenuation of the 50% and 20% AEP events). Limit the post-development 50% and 20% AEP event flow rates to 80% of the pre-development flows through controlled attenuation and release. Typically, always required in the upper catchment and sometimes not required where development site is located in proximity to the catchment outlet, discharging to a watercourse with sufficient network capacity, and where flow attenuation may worsen flooding hazards due to relative timing of peak flows. This is subject to assessment demonstrating no negative impacts would occur. If the proposed stormwater discharge is into a tidal zone, then no attenuation is required.

6.5 Discussion

No further impermeable surfaces are proposed as part of the subdivision. It is considered that the breach of the permitted activity is a technical breach due to the large lot sizes and fixed maximum of 1,000m2.

The land use of proposed lot 1 fits with the Coastal Residential Zoning. However the land use of proposed lot 2 is more in fitting with a rural property.

The dwelling and shed on proposed lot 1 has received land use consent for development, ref: 220318-RMALUC.

It is proposed that as a consent condition stormwater from the dwellings on lot 2 and associated accessways are directed towards the southeastern catchment on site in a controlled, dispersive manner which will not cause erosion. To the north of site, a mapped flood zone exists with dwellings present within it. Directing stormwater to the southeast will ensure that the scale of this flooding is not increased. No mapped flood hazard is present to the southeast of site.

It is proposed that stormwater from the dwelling, shed and associated driveway on proposed lot 1 is directed to the northeast of the dwelling.

Drawing 2 included in Appendix A shows the proposed direction of stormwater discharge and the approximate impermeable area being redirected. Existing stormwater flows follow the continues shown in this drawing.

6.6 Existing and Proposed Development

Impermeable surfaces on the proposed lots once subdivided are estimated, as follows:

Table 5 - Impermeable Surfaces

Lot	Existing Buildings (m^2)	Existing On Lot Gravel Driveway, Hardstanding and Parking Areas (m^2)	Total Impermeable surfaces (m^2)	Proposed lot area (m^2)	Cover (%)	Activity Status
Lot 1	316	914	1230	8156	17.5	Restricted Discretionary
Lot 2	564	1200	1964	40,789	4.8	Restricted Discretionary

No additional impermeable surfaces are foreseen for the proposed subdivision.

6.7 Existing Site Drainage

A stream is present to the south of the site.

The majority of the site drains to the north into two mapped flow paths that are within the 5, 10 and 100 year floodplains in the 2007 GHD flood mapping shown below. This flooding is considered to effectively be temporary ponding.

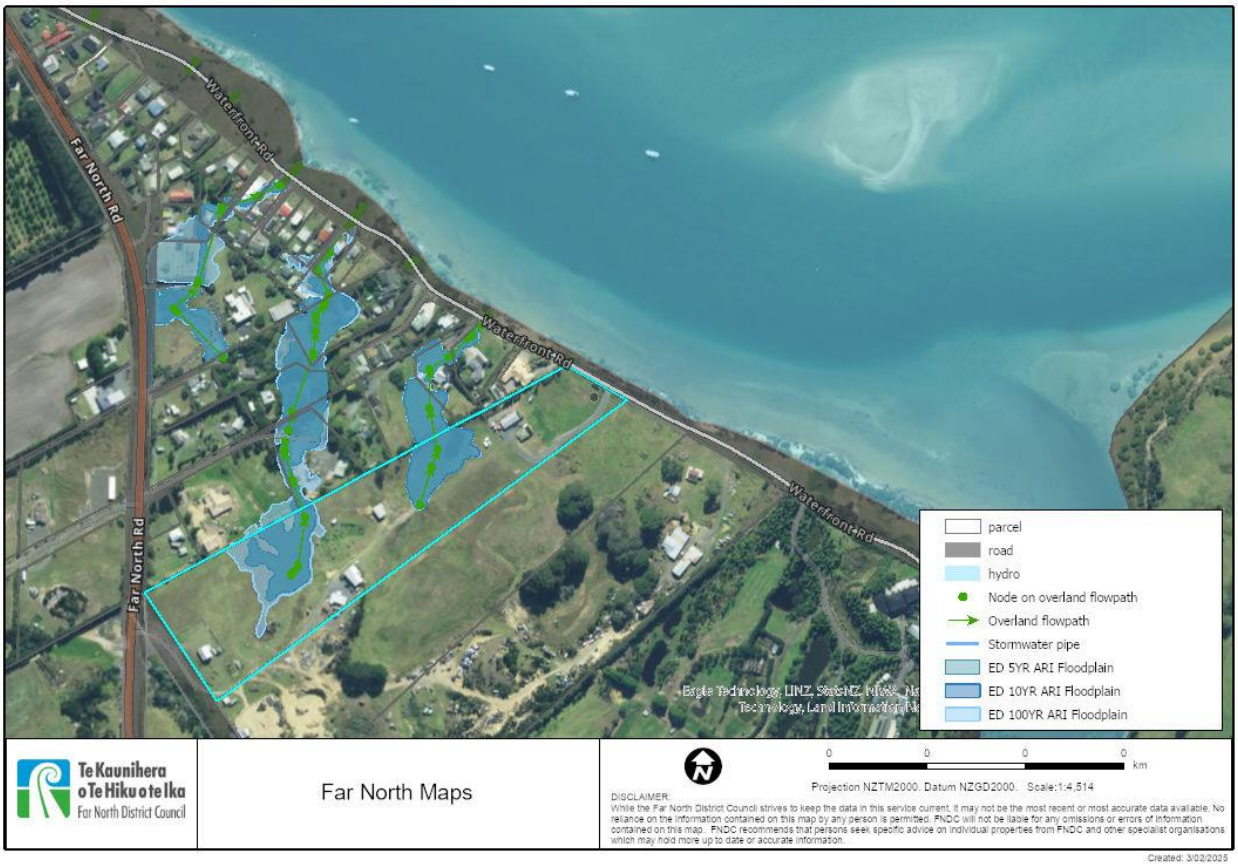


Figure 7 - Mapped Flood Hazard and Flow Paths (2007, GHD)

Proposed lot 1 drains towards Waterfront Road to the northeast.

6.8 Proposed Stormwater Management

Attenuation is not required for the site as it is in the lower half of the catchment and is adjacent to the coast. In addition, no further impermeable surfaces are proposed in relation to subdivision.

It is recommended that as a consent condition, stormwater from the dwellings on lot 2 and associated accessways are directed towards the southeastern catchment on site in a controlled, dispersive manner which will not cause erosion. To the north of site, a mapped flood zone exists with dwellings present within it. Directing stormwater to the southeast will ensure that the scale of this flooding is not increased. No mapped flood hazard is present to the southeast of site.

It is proposed that stormwater from the dwelling, shed and associated driveway on proposed lot 1 is directed to the northeast of the dwelling.

6.8.1 **Assessment Criteria**

In assessing an application under rule 10.8.5.2.8 the Council will exercise discretion on the following:

Table 6 Far North District Plan Section 13.10.4 matters of discretion

Stormwater Disposal Assessment Criteria	Comment
(a) the extent to which building site coverage and Impermeable Surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment.	The impermeable surfaces for the proposed lots are 4.8% and 17.5%. This is below the 50% coverage permitted in this zone, however the total permitted area for each lot is 1000m^2 which we consider to be a technical breach. If the lot was subdivided further significantly more impermeable surfaces could be present as a permitted activity. No further buildings are proposed as a consequence of the subdivision, therefore no additional effect on catchment impermeability will be created.
(b) the extent to which Low Impact Design principles have been used to reduce site impermeability.	Overflow from storage tanks is disposed of to land in a dispersive manner to avoid erosion and nuisance. The soils present onsite are well to moderately well drained. It is proposed that stormwater from the impermeable areas are directed away from the catchment that contains the mapped flood hazard.
(c) any cumulative effects on total catchment impermeability.	Only a very small additional impermeable surface, related to the right of way over proposed lot 1 of approximately 20m^2 is proposed. Therefore the cumulative effects of the subdivision are low.
(d) the extent to which building site coverage and Impermeable Surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water.	No further buildings are proposed as a consequence of the subdivision. Development has not affected existing drainage patterns.
(e) the physical qualities of the soil type.	The soils present onsite are well to moderately well drained.
(f) any adverse effects on the life supporting capacity of soils.	None
(g) the availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.	There is sufficient suitable land available for the disposal of effluent including reserve areas
(h) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity.	The impermeable surfaces present onsite are considered in keeping with surrounding landuse. No further surfaces are proposed for the subdivision.
(i) the extent to which landscaping and vegetation may reduce adverse effects of run-off.	The site is currently in pasture. The soils are well to moderately well drained.

(j) any recognised standards promulgated by industry groups.	The stormwater management for the proposed development is considered in line with recognised standards.
(k) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.	Stormwater attenuation is not considered to be effective in mitigating the effects of stormwater runoff due to the proximity of the site to the coast.
(l) the extent to which the proposal has considered and provided for climate change.	The soil present onsite is mapped as being well to moderately well drained, drainage patterns will not be altered by the proposed subdivision. The site is elevated and outside the mapped river and coastal flood areas. Increased runoff resulting from climate change is not expected to effect the existing stormwater patterns and management.

7 Potable Water

7.1 Potable Water Supply

There is no public water supply available at the site. Domestic water supply for the dwellings present is provided via roof runoff collected in storage tanks.

8 Fire Fighting

Council Engineering Standards require a water supply that is adequate for firefighting purposes. Where there is no reticulated water supply, then each residential lot will be responsible for providing adequate on-site firefighting supply.

For a single-family home without a sprinkler system in a non-reticulated supply area, the New Zealand Fire Service (NZFS) Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 recommends a minimum firefighting water storage capacity of 45 m^3 within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank. If the water bore is desired for use as a firefighting supply, it would generally need to provide 750 Litres of water per minute (in line with a reticulated water supply), along with the appropriate fittings under discussion with the NZFS National Commander's representative.

8.1 Alternative to Fire Fighting Supply

The Code (SNZ PAS 4509:2008) specifically allows for alternative methods to be used in meeting the Code requirements, as long as there is approval from an appropriate person nominated by the NZFS National Commander. Clause 4.4 of the Code states that:

- Fire engineers or similar competent persons may use alternative methods to determine firefighting water supplies. To comply with this code of practice, such alternatives must be submitted for approval to the person(s) nominated by the National Commander. The person(s) so nominated will approve these cases on confirmation that the method and calculations used are correctly applied.

- Alternative methods will need to show that the calculated firefighting water supply makes allowances for tactical flow rates (that is, the amount needed above a theoretical amount to absorb the released heat for operational effectiveness).

The procedure to be followed in the case of an alternative fire-fighting supply is as follows:

- The competent person should submit a firefighting facilities checklist (FFFC), with a scale site map showing contours and proposed alternatives to Table 2 with rationale for assessment to NZFS.

If the proposed supply is approved by a nominated NZFS person, Council will accept the FFFC and compliance with the Code will be achieved.

NZFS considers that a 'one size fits all' volume is not appropriate in all circumstances. There are alternatives to firefighting couplings but firefighters are not expected to lift pumps or hoses onto the top of water tanks.

9 On-site Effluent Disposal

9.1 Regulatory Framework

9.1.1 Regional Plan

The discharge of wastewater effluent to land is regulated by the permitted activity Rule C.6.1.3 of the Regional Plan for Northland. Table 9 of the plan specifies exclusion areas and set-back distances as follows:

Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater
Exclusion areas			
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Additional requirements under the Rule also state:

1) The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012), and

2) The volume of wastewater discharged does not exceed two cubic metres per day, and

5) For wastewater that has received secondary treatment or tertiary treatment, it is discharged via:

a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of AS/NZS 1547:2012; or

b) an irrigation line system that is dose loaded and covered by a minimum of 50mm of topsoil, mulch, or bark, and

9) The following reserve disposal areas are available at all times:

a) one hundred percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or

b) thirty percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment

9.1.2 **Operative District Plan**

The Far North District Plan contains an additional rule relating to wastewater discharges to land:

District Plan Rule 12.7.6.1.4 specifies that effluent fields shall be located no closer than 30 m from any river, lake, wetland or the Coastal Marine Area.

9.2 Existing Wastewater Management

9.2.1 **Proposed Lot 1.**

No ponding or other evidence of failure was observed in the operation of the wastewater system in proposed Lot 1. No changes to the wastewater system for lot 1 are proposed. A building consent approval ref. EBC-2022-761/0 for a wastewater system is included in the FNDC property file. The soakage trenches and treatment system are well clear of the proposed boundaries.

The NZMS soils map indicates the site is underlain by *'soils of the coastal sand dune complex, well to moderately well drained Houhora Sand and Tangitiki sandy loam and sand.'*

For assessment purposes we conservatively categorise the soils as AS/NZS1547 Category 2. These soils are categorised as sandy loam, with a daily irrigation rate (DIR) of 5 mm/day.

One 2 bedroom dwelling is present on site.

Buried dripper lines are recommended for secondary treated effluent.

The total length of the trickle irrigation system required (UniBioline or similar) is calculated as follows;

$$Total\ area\ of\ dripper\ irrigation\ field = \frac{Total\ daily\ wastewater\ generation}{Design\ irrigation\ rate}$$

$$= \frac{640}{5}$$

$$\underline{= \mathbf{128\ m^2}}$$

The Wastewater Plan appended indicates there is space available for dripper fields a 100% reserve area on lot 1

Figure 8 - Disposal area on proposed lot 1.

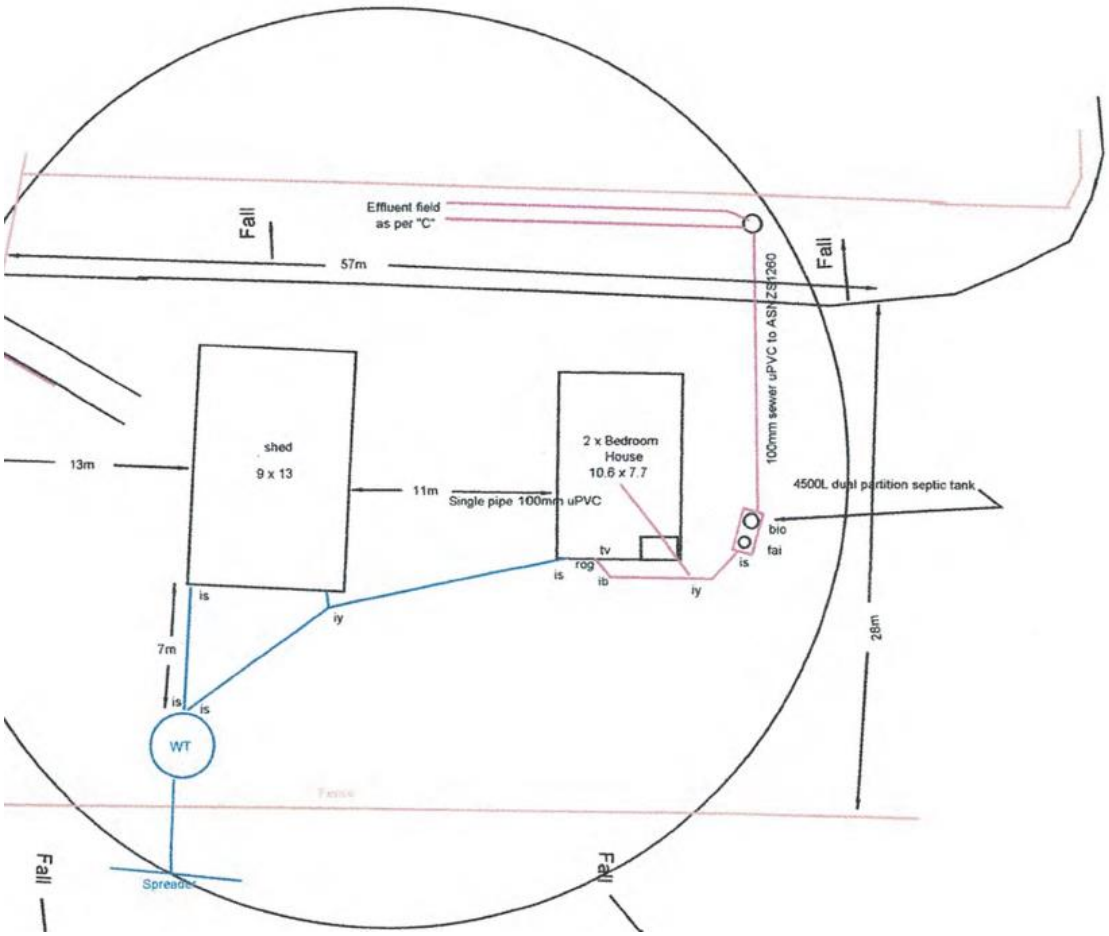


Figure 9 - Location of treatment system and disposal area on proposed lot 1 from EBC-2022-0761

9.2.2 **Proposed Lot 2.**

The wastewater treatment system and disposal area for the two dwellings are located well away from the proposed boundaries.

The wastewater disposal system for the southwestern dwelling on proposed lot 2 consists of a septic tank and soakage rings. No ponding or other evidence of failure was observed in the operation of the wastewater system.

The wastewater disposal system for the northern dwelling on lot 2 consists of a septic tank. No ponding or other evidence of failure was observed in the operation of the wastewater systems.

The NZMS soils map indicates the site is underlain by *'soils of the coastal sand dune complex, well to moderately well drained Houhora Sand and Tangitiki sandy loam and sand.'*

For assessment purposes we conservatively categorise the soils as AS/NZS1547 Category 2. These soils are categorised as sandy loam, with a daily irrigation rate (DIR) of 5 mm/day.

Two three-bedroom dwellings are present onsite.

Buried dripper lines are recommended for secondary treated effluent.

The total length of the trickle irrigation system required (UniBioline or similar) is calculated as follows;

$$Total\ area\ of\ dripper\ irrigation\ field = \frac{Total\ daily\ wastewater\ generation}{Design\ irrigation\ rate}$$

$$= \frac{1600}{5}$$

$$\underline{= \mathbf{320\ m^2}}$$

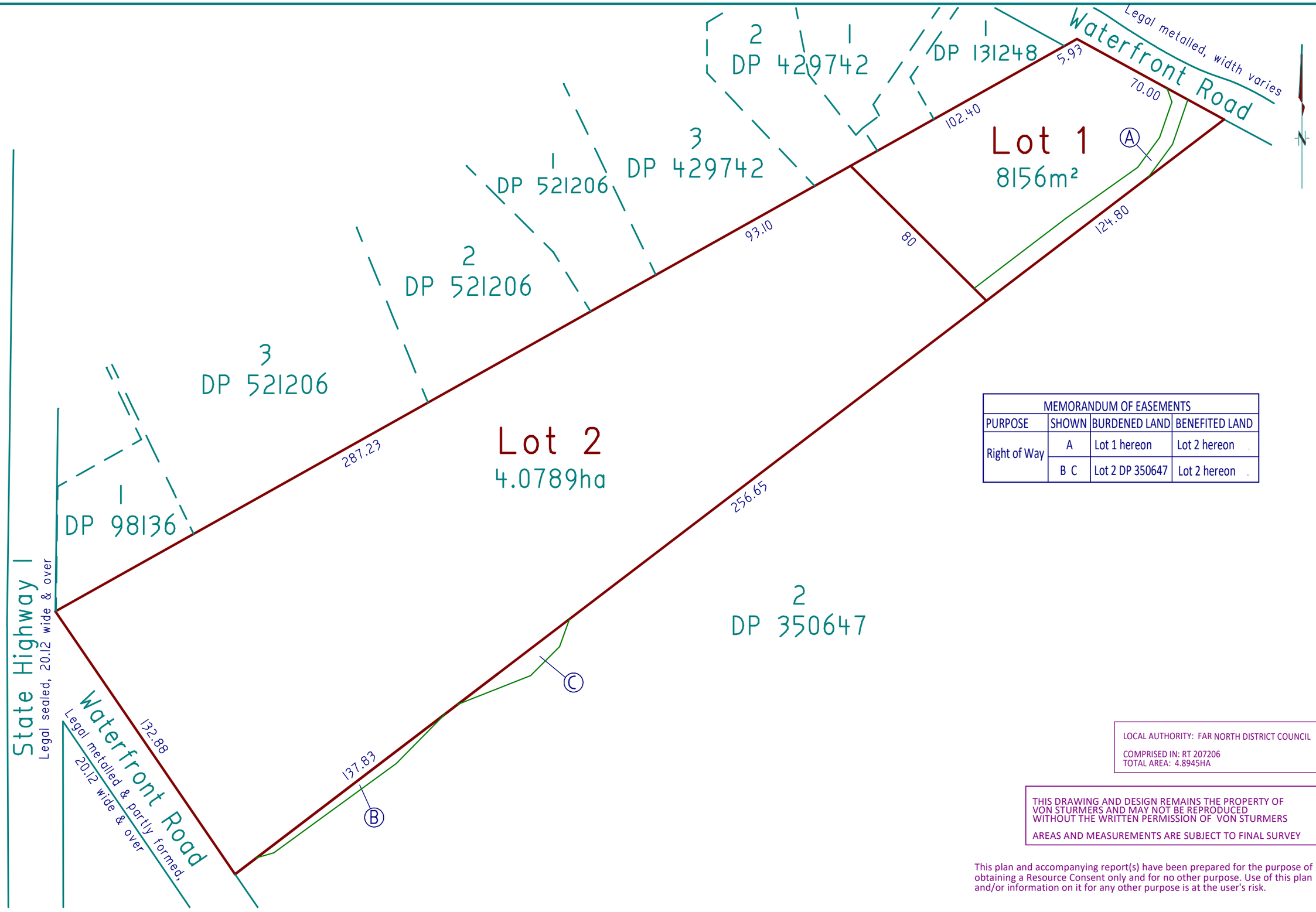
The Wastewater Plan appended indicates there is space available for dripper fields a 100% reserve area on lot 1

Figure 10 Wastewater treatment system and disposal area for southwestern dwelling on proposed lot 2

Figure 11 - Wastewater treatment system and disposal area for northern dwelling on proposed lot 2

Appendix A – Drawings

Drawing No.	Title	Scale
23361	Proposed subdivision of Lot 1 DP 350647, Von Sturmers, ref. 15454	1: 1500 @ A3
1	Wastewater Plan, Haigh Workman.	1: 2000 @ A3
2	Stormwater Plan, Haigh Workman.	1: 1000 @ A3



MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	A	Lot 1 hereon	Lot 2 hereon
	B C	Lot 2 DP 350647	Lot 2 hereon

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

COMPRISED IN: RT 207206
TOTAL AREA: 4.8945HA

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

VON STURMERS
Registered Land Surveyors, Planners & Land Development Consultants

Ph: (09) 408 6000
Email: kaitaia@saps.co.nz

131 Commerce Street, Kaitaia

PROPOSED SUBDIVISION OF LOT 1 DP 350647 & EASEMENTS OVER LOT 2 DP 350647

PREPARED FOR: B DENISON

	Name	Date	ORIGINAL	
			SCALE	SHEET SIZE
Survey				
Design				
Drawn	SH	13-08-2024	1:1500	A3
Rev	SH	05-02-2025		

Surveyors Ref. No: 15454
Series
Sheet of

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	A	Lot 1 hereon	Lot 2 hereon
	B C	Lot 2 DP 350647	Lot 2 hereon

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

COMPRISED IN: RT 207206
TOTAL AREA: 4.8945HA

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

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VON STURMERS
Registered Land Surveyors, Planners & Land Development Consultants
Ph: (09) 408 6000
Email: kaitaia@saps.co.nz
131 Commerce Street, Kaitaia

PROPOSED SUBDIVISION OF LOT 1 DP 350647 & EASEMENTS OVER LOT 2 DP 350647

PREPARED FOR: B DENISON

	Name	Date
Survey		
Design		
Drawn	SH	13-08-2024
Rev	SH	05-02-2025

ORIGINAL
SCALE 1:1500
SHEET SIZE A3

Surveyors Ref. No: 15454
Series
Sheet of

Legend

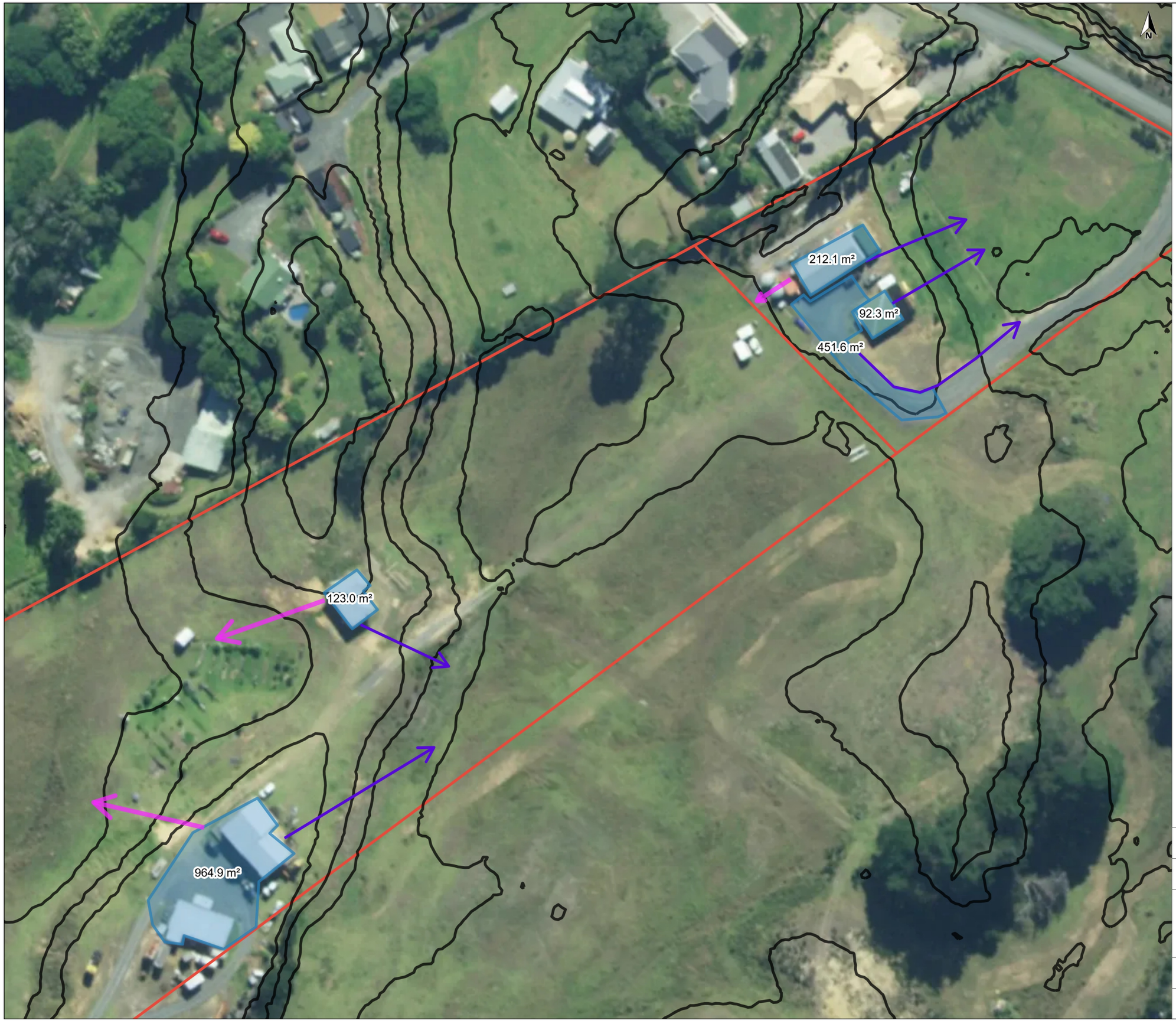
- Site Boundary
- Lot 2 Reserve area 320m²
- Lot 1 Reserve area 126m²

0 25 m 50 m

HAIGH WORKMAN Ltd Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Wastewater Plan		
Client: Troy Denison		Size: A3
Project: 80 Waterfront Road	Drawn: JCum	Drawing No.: 1
Date: 20-02-2025	Checked: JP	
Proj No: 24 204	Scale: 1:2000	Version: REV1



Legend

- Existing stormwater flow direction
- Existing impermeable areas where stormwater will be redirected
- Proposed stormwater discharge direction
- 2m Contours (LINZ)
- Site Boundary

0 10 m 20 m

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Stormwater Plan		
Client: Troy Denison		Size: A3
Project: 80 Waterfront Road	Drawn: JCum	Drawing No.: 2
Date: 19-02-2025	Checked: JP	
Proj No: 24 204	Scale: 1:1000	Version: REV1

Preliminary and Detailed Site Investigation for Proposed Subdivision at

80 Waterfront Road, Pukenui
Lot 1 DP 350647

Billie and Troy Denison

Haigh Workman reference 24 204

Rev A

18 November 2024

Document History and Status

Revision Nº	Date	Description	Issued By
A	18 November 2024	Preliminary and Detailed Site Investigation (PSI/DSI)	Joshua Cuming

Prepared / Certified by	Reviewed by	Approved by
Joshua Cuming **Environmental Geologist** BSc (Env. Stu., Geol) MEIANZ, CEnvP	Aaron Thorburn **Senior Environmental Advisor** BAppSc (Env), CEnvP	John Papesch **Senior Civil Engineer** BE (Civil Engineering), CMEngNZ CPEng

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Executive Summary

Haigh Workman Limited completed a desktop assessment and field investigation for the preparation of a Preliminary and Detailed Site Investigation for the proposed subdivision at 80 Waterfront Road, Pukenui.

The assessment of available information and observations from our site walkover indicate that the following Hazardous Activities and Industries List activities have, or potentially have, occurred at the site:

- HAIL Cat. E.1 – Asbestos products manufacture or disposal, including sites with buildings containing asbestos products known to be in a deteriorated condition,
    - The northern most dwelling on the property was clad with asbestos containing material,
- HAIL Cat F.8 – Transport depots or yards, including areas used for refueling or the bulk storage of hazardous substances,
    - Machinery was being stored in an area in the centre of the site,
- HAIL Cat. G.4 – Scrap yards including automotive dismantling, wrecking or scrap metal yards,
    - The scrap yard on the neighbouring site briefly spread onto the subject site,
    - A small portion of a paddock racing track extended onto the site,
- HAIL Cat I – Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity it could be a risk to human health or the environment,
    - Two burn piles were present in the south of the site.

Soil samples were collected from across the site and analysed for contaminants of concern, including Metals, Total Petroleum Hydrocarbons, Polycyclic Aromatic Hydrocarbons, Benzene, Toluene, Ethylbenzene and Xylenes and Asbestos.

Laboratory analytical results reported:

- Total Petroleum Hydrocarbons concentrations in one soil sample exceeded applicable Human Health criteria,
- Metals concentrations were above Background Soil Concentrations in some of the soil samples analysed,
- Polycyclic Aromatic Hydrocarbon concentrations were above laboratory Method Detection Limits in some soil samples,
- Building cladding material sampled from the northern most dwelling contained amosite and chrysotile Asbestos, and
- Asbestos was not detected in any soil samples analysed**.**

Based on these findings:

- Prior to earthworks or subdivision, a Site Management Plan and / or Remedial Action Plan must be prepared for the site,
- The Site Management Plan may include re-sampling of the area in exceedance of the adopted criteria as natural attenuation / natural bioremediation may have reduced concentrations below the adopted criteria,
- Soil / fill material with Metals concentrations above Background Levels and / or Polycyclic Aromatic Hydrocarbon or Total Petroleum Hydrocarbon concentrations above laboratory Method Detection Limits are not considered as ‘Cleanfill’ for disposal purposes,

  - If soil / fill material exceeding Background Level criteria must be removed from site it is to be disposed of at a facility licensed to accept such materials,
- Soil / fill material exceeding Background Level criteria can be retained and re-used on-site as a sustainable option and to reduce disposal costs if suitable, and
- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a SQEP prior to disposal.

It is considered that the proposed subdivision is covered under the National Environmental Standard for Contaminants in Soils regulations. The National Environmental Standard for Contaminants in Soils describes a 'piece of land' as the piece of land that has had, or currently has, or most likely has had, activities listed on the Hazardous Activities and Industries List and soil disturbance is proposed.

The proposed subdivision will be a Restricted Discretionary Activity (10) under the National Environmental Standard for Contaminants in Soils as this Combined Preliminary / Detailed Site Investigation states the soil contamination exceeds the applicable standard in regulation 7.

Our findings, conclusions and recommendations are detailed in the following report and appendices.

1 Introduction

Haigh Workman Limited (Haigh Workman) were engaged by Billie and Troy Denison (the client) to undertake a combined Preliminary / Detailed Site Investigation (PSI/DSI) in association with the proposed subdivision at the site. The property boundaries are shown in Figure 1 below and provided in Appendix A.

Figure 1 - Site Location (Source: Google Earth Pro)

1.1 Legislative Requirements

An assessment has been conducted under the Hazardous Activities and Industries List (HAIL)[1] and the Resource Management (National Environmental Standard for Assessing Contaminants in Soil to Protect Human Health) Regulations (NES-CS)[2].

Assessment of the land-uses and exposure scenarios has been carried out in accordance with Ministry for Environment (MfE) Contaminated Land Management Guidelines[3] (CLMG), *Methodology for Deriving Contaminants for the Protection of Human Health*[4] (*Methodology*) and the NES-CS.

The Far North District Council (FNDC) Operative District Plan zones the site as: **Coastal Residential**.

The proposed subdivision has been assessed under the adopted exposure scenario in the *Methodology* as: **Rural-Residential / Lifestyle Block with 25% produce**.

[1] Ministry for Environment, *Hazardous Activities and Industries List (HAIL),* March 2023.
[2] Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations, 2011
[3] Ministry for Environment, *Contaminated Land Management Guidelines Nos. 1 to 5*, 2011 *(Guidelines Nos. 1 & 5, Revised 2021)*,
[4] Ministry for Environment, *Methodology for Deriving Contaminants for Protection of Human Health,* 2011

1.2 Purpose and Scope

The purpose of the PSI/DSI investigation, under the NES-CS, is required:

1. To comply with regulation 3 of the NES-CS,
2. To establish whether or not the site is HAIL or has been HAIL (it is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it) (Regulation 5(7) or 6(3)), and
3. If the site is HAIL and the activity is a change of use or subdivision, to show the activity is permitted by demonstrating that it is highly unlikely that there will be a risk to human health in the particular circumstances of the site and proposed use or subdivision (Regulation 8(4)).

The investigation comprises a combined PSI/DSI, which includes the following:

- Site walkover,
- Review of environmental setting including topography, geology and hydrogeology,
- Review of historical aerial photographs, historical titles, Northland Regional Council (NRC) Contamination Enquiry and FNDC Property Files,
- Collection and laboratory analysis of soil samples for identified Contaminants of Concern (CoC),
- Interpretation of laboratory analytical results, and
- PSI/DSI reporting (this report).

This report comprises a PSI/DSI prepared by Haigh Workman in general accordance with MfE guidelines for contaminated site investigations and NES-CS. This investigation and reporting have been prepared, reviewed and authorised by Suitably Qualified and Experienced Practitioners (SQEP), in general accordance with MfE CLMG No. 1 Reporting on Contaminated Sites in New Zealand.

1.3 Limitations

This report has been prepared by Haigh Workman for the sole benefit of Billie and Troy Denison (the client), with respect to the brief outlined to us for the proposed subdivision of 80 Waterfront Road, Pukenui. This report is to be used by the client and their consultants and may be relied upon when considering geo-environmental advice. Furthermore, this report may be utilised in the preparation of building and / or resource consent applications with local authorities. The information and opinions contained within this report shall not be used in other context for any other purpose without prior review and agreement by Haigh Workman.

The comments and opinions presented in this report are based on the findings of a desktop study, and subsurface conditions encountered. Responsibility cannot be accepted for any conditions not revealed by this investigation. Should conditions encountered differ to those outlined in this report we should be notified. Allowance for a review of the design should be made should ground conditions vary from these assumed.

2 Site Description

Table 1 - Site identification

Street Address	80 Waterfront Road, Pukenui
Legal Description	Lot 1 DP 350647
Certificate of Title(s)	NA320/30
FNDC Zoning	Coastal Residential
Grid Reference NZMS 260 Map Reference (NZGD1949)	-34.826205, 173.130283
Approx. Site Area (m^2)	48, 945 m^2 (4.89 hectares)
Piece of land **(m^2)**	As per table 6.

The majority of the site is covered in pasture and the topography is rolling.

Three dwellings with associated sheds for domestic purposes are present onsite. In the southwest of the site is a building that was previously used as an office.

2.1 Proposed Subdivision

It is understood that the client wishes to subdivide the existing site into two individual Lots (Lot 1 and Lot 2).

A proposed subdivision plan is provided in Appendix A.

3 Environmental Setting

3.1 Site Layout and Surrounds

A site walkover was undertaken on 2 October 2024. Photographs from the 2 October 2024 site walkover are provided in Appendix B.

The following was observed on the site:

- Three dwellings and associated domestic sheds were present onsite,
- The northernmost dwelling was clad in fibre cement sheets,
- A small (approximately 15m^3) stockpile of imported topsoil was present in the northeast of the site,
- Machinery was being stored to the south of the southernmost dwelling,
- Cattle yards were present in the southeast of the site, it is not thought that a sheep dip has ever been present on the site,
- Two burn piles were located in the south of the site. The more northerly pile consisted primarily of organic material, the more southerly stockpile contained timber and inorganic material.

3.2 Geology, Hydrology and Hydrogeology

Sources of Information:

- Institute of Geological & Nuclear Sciences 1:250,000 Geological Map 1, 2009: "*Geology of the Kaitaia area*".
- NZMS 290 Sheet N 02/03, 1: 100,000 scale, 1980: *"Soil map of the North Cape-Houhora area".*

The site is within the bounds of the GNS Geological Map 1 "Geology of the Kaitaia area", 1:250,000 scale. The published geology shows the site to be underlain by the Karioitahi Group. An exert of the geological map is shown in Figure 2 below, with geological units presented in Table 2.

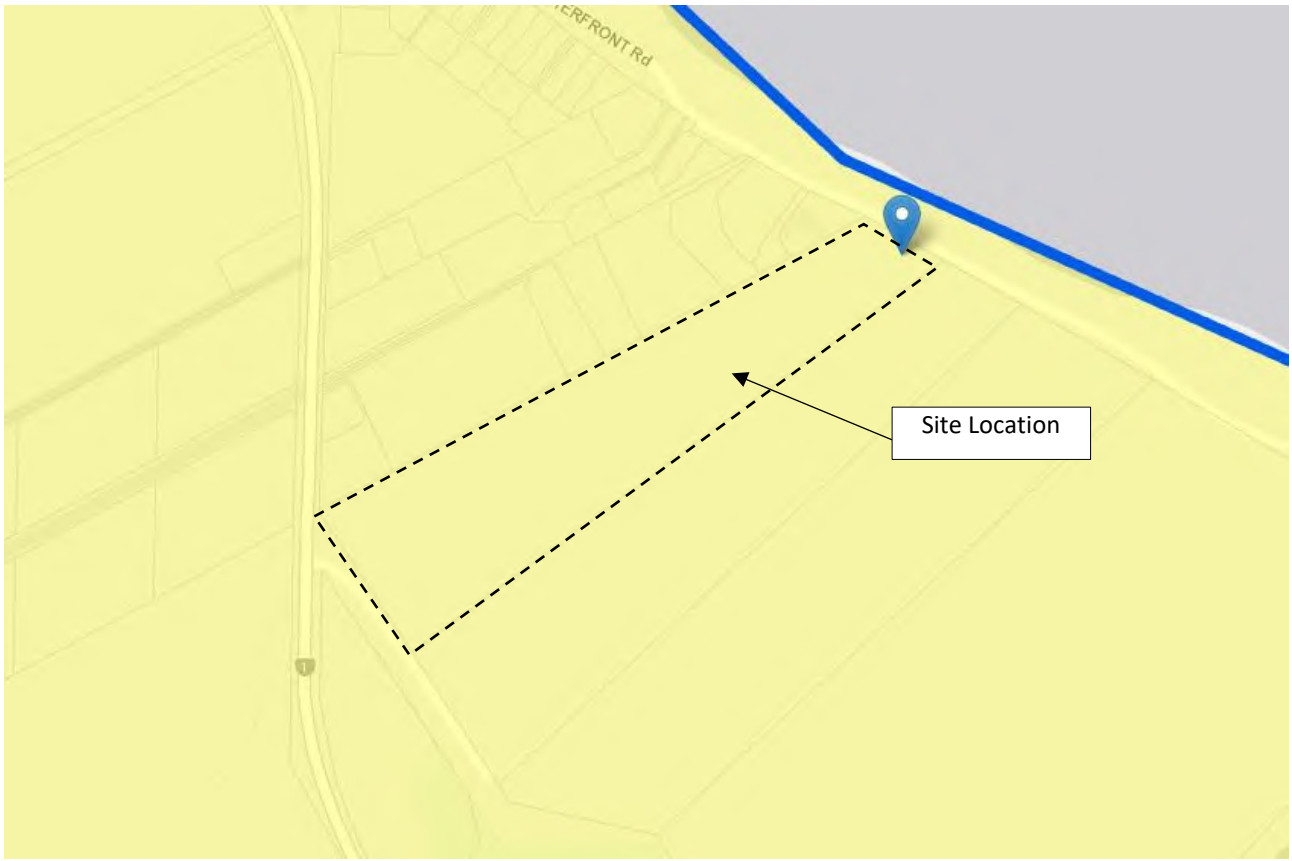


Figure 2 - Geological Map

Table 2 - Geological Legend

Symbol	Unit Name	Description
eQdp	Karioitahi Group	Weakly cemented and partly consolidated sand in parabolic dunes. Interdune lake and swamp deposits.

Further reference to the published New Zealand land inventory maps (Whangaroa-Kaikohe 1980), indicates the site is underlain by *'soils of the coastal sand dune complex, well to moderately well drained Houhora Sand and Tangitiki sandy loam and sand.'*

3.3 Flooding and Hydrology

Table 3 - Flooding and Hydrology

	Presence/Location	Comments
Watercourses & Water Features within 100 m (Ponds, lakes etc)	Houhora Harbour is located directly to the northeast of the site. A tributary to the Ariawa Stream is present approximately 30m to the southwest of the site.	-
Flood Susceptibility	Low. None recorded within or within 20 m of the site boundaries.	-
Private wells within 200 m	One well is located onsite. Another four wells are located to the northwest of the site. Where the purpose of the wells was included, the use was domestic.	NRC GIS database.
Source Protection Zones within 200 m	Site is within the NRC Main Northland Aquifers (Aupouri-Houhora) overlay.	Site contamination is considered to be localised to immediately beneath the soil surface and unlikely to infiltrate the underlying aquifer.

4 Historical Information

The history of the site was established through a review of historical aerial photographs, Land Information New Zealand (LINZ) Certificates of Title, NRC Contamination Enquiry and FNDC Property Files.

4.1 Historical Aerial Photography

Historical aerial photographs for the site were obtained from Retrolens (http://retrolens.nz/map/) and Google Earth Pro. Photographs available for the subject area are dated from 1944 to 2023. A review of the historical aerial photography is provided in Table 4 below.

Historical aerial photographs are provided in Appendix C.

Table 4 - Historical aerial photography review

Date	Source	Description
1944	Retrolens	• The northeast end of the site has been cleared for pasture. The southwest of the site appears to be covered in scrub. • Rural dwellings are present on the surrounding properties. • Surrounding properties are covered in a mixture of pasture and scrub.
1977	Retrolens	• The site is now in pasture with several trees present. • Offsite scrub has been cleared to make way for pasture. • Additional rural dwellings have been built on surrounding properties.
1978 1980 1985	Retrolens	• No significant changes visible onsite or surrounding sites.
1993	NRC	• A grassed track for paddock car racing straddles the site and the property to the south. • A vehicle dismantler is visible on the second property southeast of the site. • Further residential properties have been constructed north of the site.
2003	NRC	• Cars from the vehicle dismantlers are now visible on a small area in the northeast of the site. • Cars from the vehicle dismantler are now visible on the property to the southeast of the site. • Cattle yards are now visible in the south of the site.
2004	Google Earth Pro	• No significant changes visible onsite or on surrounding sites.
2006	NRC	• No cars are present onsite. • The majority of cars have been removed from the property to the south.
2007	Google Earth Pro	• A building is present in the south of the site.
2009	Google Earth Pro	• An earthworks cut has been undertaken in the centre of the site adjacent to the southeast boundary. • An earthworks cut has been undertaken on the property to the southeast.
2013	Google Earth Pro	• A dwelling and shed has been constructed where the recent earthworks were undertaken.
2015 2016	Google Earth Pro	• No significant changes visible onsite or on surrounding sites.
2018	Google Earth Pro	• Earthworks have been undertaken in the northeast of the site. • Storage containers are present in the southwest of the site.
2021	Google Earth Pro	• A shed has been constructed in the northeast of the site. • A new building is visible in the southwest of the site. • A significant number of cars on the two properties to the southeast have been removed.
2023	Google Earth Pro	• A new dwelling is present in the northeast of the site. • Earthworks have been carried out in the centre of the site to create platform for dwelling.

The most recent historical aerial photograph is dated October 2023 and is sourced from Google Earth Pro. Site conditions observed in the October 2023 historical aerial photograph differ slightly, with a relocated dwelling visible in the centre of the site.

4.2 Certificates of Title

A review of Certificates of Title held by LINZ was completed for the site. No additional potential HAIL activities were identified through the title review.

Copies of the Certificates of Title are provided in Appendix D.

4.3 Contamination Enquiry

A site contamination enquiry was requested from the NRC Contaminated Land Team.

The Contamination Enquiry did not identify any current of historical HAIL activities for the site.

The neighbouring site 94 Waterfront Road is identified as having HAIL activities occur on it, being identified as an automotive dismantling facility. Offsite migration is not considered to be a cause of contamination on the subject site.

The Contamination Enquiry also reports records of pollution incidents, bores, contaminated site and air discharges and air quality permitted activities within approximately 100m of the site.

Based on information in the Contamination Enquiry, no activities considered likely to cause contamination at the site were identified within 200m. A copy of the Contamination Enquiry is attached in Appendix E.

4.4 Site Interview

During the site walkover a brief conversation was had with the property owner Robert Bradley. The conversation confirmed the observations made during the site walkover and desk study regarding historical and current land use. The owner stated that none of the material excavated on the neighbouring site which houses a vehicle wreckers that he also owns was deposited on the subject site.

4.5 Property Files

Documents included in the property file relate to resource consents for subdivision, land use consent and building consent. Descriptions and dates are included in the table below.

Table 5 - Summary of property file information

Reference	Description	Date
2031096-RMASUB	Subdivision of parent lot into 3 lots total including the site.	2004
BC-20110252	Notice to fix for building work carried out without a building consent.	2010
2200318-RMALUC	Land use consent for shed in northeast of site.	2020
EBC-2020-111151 0	Building consent for shed in northeast of site.	2020
EBC-2022-761 0	Building consent for shed in northeast of site.	2022

5 HAIL assessment

Based on previous land-use and the site walkover, Table 6 below summarises the potential for contamination associated with site activities and land uses that may have been undertaken on site classified under the HAIL.

Migration of contamination from offsite sources is not considered to be a source of contamination onsite.

Table 6 - Site Activities / Land Uses and Potential HAIL Categories

Area Reference	Date(s)	HAIL Activity	Primary Source	Potential Contaminants	Locations	Area
1	Post 2021 - Present	E.1 - Asbestos products manufacture or disposal, including sites with buildings containing asbestos products known to be in a deteriorated condition.	Site walkover	Asbestos	Relocated house in north of site.	124m^2
2	Post 2021 - Present	F.8 - Transport depots or yards, including areas used for refueling or the bulk storage of hazardous substances.	Site Walkover, Historic Aerial Imagery	Metals, BTEX, TPH and PAH.	Machinery storage area in the middle of the site.	504m^2
3	2003 - 2006	G.4 - Scrap yards including automotive dismantling, wrecking or scrap metal yards.	Historic Aerial Imagery	Metals, BTEX, TPH, PAH and Asbestos.	Small area in northern half of site.	911m^2
4	Post 1985 - 2018	G.4 - Scrap yards including automotive dismantling, wrecking or scrap metal yards (considered the most relevant HAIL activity).	Property File	Metals, BTEX, TPH and PAH.	Former paddock racing loop.	863m^2
5	Post 2021 - Present	I - Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity it could be a risk to human health or the environment.	Site Walkover, Historic Aerial Imagery	Metals	Two burn piles in south of site.	531m^2
6	Post 2021 - Present	I - Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity it could be a risk to human health or the environment.	Site Walkover, Historic Aerial Imagery	Lead	Northern dwelling and middle dwelling. Lead based paint.	Northern dwelling 124m^2 Middle dwelling 162m^2

6 Contamination Investigation

6.1 Identified Contaminants of Concern

The site was identified for potential soil contamination during the review of historical documents and the 2 October 2024 site walkover. Relevant to the HAIL assessment and site history, the potential CoC for the site investigation area included:

- Metals,
- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX),
- Total Petroleum Hydrocarbons (TPH),
- Polycyclic Aromatic Hydrocarbons (PAHs), and
- Asbestos.

6.2 Site Investigation

Soil sampling from the site investigation area was undertaken on 2 October 2024 and comprised soil sampling by a SQEP from Haigh Workman. Sampling locations are provided in Appendix A. Photographic documentation from the investigation and walkover is provided in Appendix B.

Whilst onsite the following additional potential sources / signs of contamination were identified:

- Two burn piles in the south of the site.
- Hydrocarbon odours and stained soil in the machinery storage area.
- Potential asbestos cladding on the northern most dwelling onsite.
- Lead based paints on relocated dwellings.
- A small stockpile (approximately 15m^3) of imported topsoil in the north of the site.

Minor ground disturbance for sampling activities was conducted as a permitted activity under NES-CS regulation 8(2), where soil sampling is defined within regulation 5(3).

Soil sampling consisted of targeted sampling of the areas shown in drawing 2 included in Appendix A.

Twenty-three soil samples (18 shallow soil samples and 5 deeper soil samples) and one building material sample were collected. Sixteen soil samples analysed as individual samples, including one duplicate soil sample for Quality Assurance / Quality Control (QA / QC) purposes. Two samples were analysed as a composite sample. The building material sample was analysed for Asbestos.

The exposure scenarios for the priority contaminants listed above in Section 6.1 include soil ingestion, dermal exposure, and inhalation, soil samples were retrieved from below the surface between 0 – 0.075m below ground level (bgl). Samples were also retrieved in some locations at a depth of 0.3m bgl.

Encountered soil typically comprised dark brown sandy topsoil overlying light brown sand. Black stained soil with a hydrocarbon odour was encountered in locations TP8, TP9 and TP14.

The suspected Asbestos cladding in the northern most dwelling was in a moderately weathered condition. One piece of the cladding had broken off, this piece was collected for analysis, a soil sample was taken also taken in this location (TP16).

Soil sample descriptions are provided in Appendix F.

During the fieldwork access was made available to Haigh Workman across the whole investigation area.

6.3 Soil Sampling Protocol

Soil samples were collected from a spade, hand auger or hand trowel from test pit locations across the site investigation areas. Soil sampling equipment was decontaminated between sampling locations and disposable nitrile gloves were used and replaced between sampling locations in order to prevent cross-contamination. All samples were collected in accordance with strict environmental sampling protocols to ensure reliable and representative results.

All sample containers and preservatives, where applicable, were supplied by the subcontracted laboratory and were consistent with the specifications provided in Section 6.4 – Sample Handling, of the Contaminated Land Management Guidelines No. 5 – Site Investigation and Analysis of Soils (MfE, Revised 2021). All samples were labelled with unique identifiers indicating the sampling location. Samples were couriered directly to the laboratory (Eurofins) under continuous Chain of Custody (COC) documentation. Each COC form had a unique laboratory number.

6.3.1 Composite Sampling

Composite sampling involves collecting individual samples from different locations, typically between two and four samples, and mixing an equal mass of each of the samples (subsamples) together to form one composite sample (undertaken at the laboratory). A composite sample can then be analysed, and the results will represent the average of the constituent sub-samples.

Composite sampling was appropriate where undertaken for this investigation because:

- The investigation was focussed on non-volatile contaminants,
- Sub-samples were the same soil type, same exposure to contaminants and in the same stockpile,
- The maximum number of sub-samples composited together was two, and
- The composite was assembled in the laboratory and not in the field.

When the average concentration represented by the composite sample exceeds the adopted guideline criteria, analysis of individual samples should be undertaken to clarify the contaminant distribution.

6.3.2 Duplicate samples

A duplicate sample involves collecting two separate samples from a single sample location, storing these in separate containers, and submitting them for analysis to the laboratory as two separate samples. Samples are given separate sample numbers so the laboratory is unaware that the sample is a duplicate.

A duplicate sample measures the contaminant concentration difference between the two samples. The results of duplicate variance analysis are presented below in Section 9.1. One duplicate for every 20 results was adopted.

7 Assessment Criteria

7.1 Human Health Assessment

The adopted assessment criteria for this investigation have been selected in accordance with the hierarchy defined by MfE Contaminated Land Management Guidelines No. 2 (MfE, 2011) and are summarized below. Assessment criteria for Rural-Residential / Lifestyle Block with 25% Produce have been adopted:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2012: Rural Residential / Lifestyle Block with 25% Produce,
- Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand - Residential,
- Managing Risks Associated with Former Sheep-Dip Sites (MfE, 2006), and
- New Zealand Guidelines for Assessing and Managing Asbestos in Soil (2017).

It is considered that the Rural-Residential / Lifestyle Block with 25% Produce criteria are appropriate based on the proposed subdivision plan provided in Appendix A.

7.2 Background Concentrations Assessment

Background levels are particularly relevant when considering whether soils can be considered as 'cleanfill'. Results have been assessed against the following criteria:

- Maanaki Whenua Landcare Research, Predicted Background Soil Concentrations.

Guideline assessment criteria are included with the Soil Analytical Results summarized Appendix G.

8 Analytical Results

Twenty-three soil samples (18 shallow soil samples and 5 deeper soil samples) and one building material sample were collected. Sixteen soil samples analysed as individual samples, including one duplicate soil sample for Quality Assurance / Quality Control (QA / QC) purposes. Two samples were analysed as a composite sample. The building material sample was analysed for asbestos.

Laboratory analytical results reported:

- TPH concentrations in one sample (TP14_0.075m) comprising shallow topsoil exceeded MfE NES-CS Rural-Residential / Lifestyle Block (25% produce) Human Health Criteria,
- Metals concentrations were above Background Soil Concentrations in seven of the 18 soil samples analysed,
- Polycyclic Aromatic Hydrocarbon concentrations were above laboratory Method Detection Limits in some soil samples,
- Building cladding material sampled from the northern most dwelling contained amosite and chrysotile asbestos, and
- Asbestos fibres were not detected in the two soil samples analysed.

Summarised laboratory analytical results are summarised in Appendix G. Soil sampling locations are provided in in Appendix A. Laboratory analytical results and COC documentation are provided in Appendix H.

9 Quality Assurance / Quality Control

Quality assurance (QA) and quality control (QC) are essential elements for site investigation. QA relates to the planned activities implemented so that quality requirements will be met, and QC relates to the observation techniques and activities used to demonstrate the quality requirements have been met.
Soils were inspected for visual and olfactory indicators of contamination and logged and are attached in Appendix F.

Between samples equipment was decontaminated by brushing, spraying with clean potable water and rinsing with high purity de-ionised water. To reduce the potential for cross-contamination, each sample was taken using disposable nitrile gloves that were discarded following the collection of each sample.

Appropriate Personal Protective Equipment (PPE) was used by Haigh Workman staff including disposable nitrile gloves, highly visible vest and steel toe capped boots. All disposable PPE was treated as contaminated and disposed of appropriately.

Soil samples were placed in sample containers supplied by Eurofins Laboratories, which were then capped, labelled with a unique identifier and placed in a chilly bin prior to transport by Courier. Standard chain of custody documentation is enclosed in Appendix G.

Any laboratory analysing samples of contaminated media must be able to show it has in-house quality assurance procedures and quality control checks (QA / QC) to ensure accurate testing and reporting of analyses. IANZ, or equivalent overseas accreditation, provides confidence that the receiving laboratory has appropriate QA / QC procedures in place. Eurofins Environmental Testing NZ Limited[5] is IANZ and NZS/ISO/IEC 17025:2018 accredited, and was the laboratory elected for testing.

Following receipt of the samples by Eurofins Laboratories, the samples were scheduled for analysis of the identified contaminants of concern. Records of laboratory QA / QC and the results of chemical testing including methodologies as received from the laboratory and COC documentation, are presented in Appendix G.

9.1 QA / QC Relative Percentage Difference

One duplicate soil sample set (TP6_0.075m, duplicate of TP1_0.075m) were collected for QA / QC purposes. The duplicate soil sample was collected using the same soil sampling procedures and analysed at the laboratory (Eurofins) using the same sample preparation and analysis procedures as the original soil samples. One QA / QC sample was analysed for every 20 soil samples analysed.

[5] Eurofins Environmental Testing NZ Limited, an IANZ[5] and NZS/ISO/IEC 17025:2018[5] accredited laboratory incorporating the aspects of ISO 9000:2015[5] relevant to testing laboratories. International Accreditation New Zealand which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). New Zealand Standard, General Requirements for the Competence of Testing and Calibration Laboratories, 2018. ISO9000: Quality Management Systems.

Relative Percentage Difference (RPD) calculations for analytes reported above the laboratory MDL ranged from 0% to 29.41%. RPD values for the duplicate pair all met Haigh Workman QA / QC acceptance criteria of less than 50%.

QA / QC results are presented in Table 7 below. Laboratory analytical results are provided in Appendix H.

Table 7 - Quality Assurance / Quality Control Results

Analyte	RPD Acceptance	TP1_0.075m (mg/kg)	TP6_0.075m (mg/kg)	RPD
Arsenic	50%	2.28	2.24	1.77%
Benzene	50%	< 0.05	< 0.05	-
Benzo(a) pyrene	50%	< 0.02	< 0.02	-
Benzo(a)anthracene	50%	< 0.02	< 0.02	-
Benzo(a)pyrene TEQ (lower bound)	50%	< 0.02	< 0.02	-
Benzo(a)pyrene TEQ (medium bound)	50%	0.02	0.02	0%
Benzo(a)pyrene TEQ (upper bound)	50%	0.05	0.05	0%
Benzo(b)fluoranthene	50%	< 0.02	< 0.02	-
Benzo(g,h,i)perylene	50%	< 0.02	< 0.02	-
C10-C14 Fraction	50%	< 10	< 10	-
C15-C36 Fraction	50%	< 20	< 20	-
C7-C9 Fraction	50%	< 5	< 5	-
Cadmium	50%	0.07	0.08	13.33%
Chromium (III+VI)	50%	3.7	3.6	2.74%
Chrysene	50%	< 0.02	< 0.02	-
Copper	50%	2.3	2.2	4.44%
Dibenz(a,h)anthracene	50%	< 0.02	< 0.02	-
Fluoranthene	50%	< 0.02	< 0.02	-
Fluorene	50%	< 0.02	< 0.02	-
Indeno(1,2,3-c,d)pyrene	50%	< 0.02	< 0.02	-
Lead	50%	3.9	2.9	29.41%
Mercury	50%	< 0.1	< 0.1	-
Naphthalene	50%	< 0.02	< 0.02	-
Nickel	50%	1.4	1.3	7.41%
Phenanthrene	50%	< 0.02	< 0.02	-
Pyrene	50%	< 0.02	< 0.02	-
Toluene	50%	< 0.05	< 0.05	-
Total BTEX	50%	< 0.15	< 0.15	-
Total pm Xylene Ethylbenzene	50%	< 0.15	< 0.15	-
TPH-SG C_7-C_{36} (Total)	50%	< 35	< 35	-
Xylene (o)	50%	< 0.05	< 0.05	-

Zinc	50%	12	11	8.7%

RPD – Relative Percentage Difference

10 Discussion

10.1 Conceptual Site Model

The assessment provided in Table 8 below expands on the potential sources of contamination identified and exposure pathways. It is based on the potential effects of the proposed land-use and soil disturbance activities on human health and the environment associated with the rural-residential / lifestyle block land-use.

Table 8 – Conceptual Site Model

Potential Source	Potential Receptors	Potential Pathways	Assessment
CoC in location of TP14	Construction, maintenance / excavation workers	Inhalation of dust / ingestion / dermal contact with exposed soils.	Complete Pathway: Contaminant concentrations are above applicable Human Health criteria.
	Site users	Inhalation of dust / ingestion / dermal contact with exposed soils.	Complete Pathway: Contaminant concentrations are above applicable Human Health criteria.
Remainder of the site	Construction, maintenance / excavation workers	Inhalation of dust / ingestion / dermal contact with exposed soils.	Incomplete Pathway: Contaminant concentrations are below applicable Human Health criteria.
	Site users	Inhalation of dust / ingestion / dermal contact with exposed soils.	Incomplete Pathway: Contaminant concentrations are below applicable Human Health criteria.

11 Regulatory Requirements

11.1 NES-CS

It is considered that the proposed subdivision is covered under the NES-CS regulations.

The NES-CS describes a 'piece of land' as the area that has had, or currently has, or most likely has had, activities listed on the HAIL and soil disturbance is proposed.

11.1.1 Subdivision

Based on findings from this investigation, Table 9 below presents potential Resource Consent requirements for the proposed activity under the provisions of the NES-CS. This investigation presents information for the site. Matters of control and discretion, however, rest with the consenting authority (FNDC) based on their assessment of this report. It would be appropriate to seek clarification of FNDC or an Environmental Planning Specialist for further information on resource consenting requirements.

Table 9- Potential Resource Consent Requirements

Potential Source	Potential Applicable Planning Rules
NES-CS	RESTRICTED DISCRETIONARY ACTIVITY (subject to requirements under Rule 10) • A DSI (this investigation) has been prepared, • The report on the DSI must state that the soil contamination exceeds the applicable standard in regulation 7, • Restricted Activity status assumes a Site Management Plan / Remediation Action Plan (SMP / RAP) or other mitigations will be prepared for the site, and • The consent authority must have the report. Conditions of Rule 10 must be complied with.

11.1.2 Disturbing Soil

The NES-CS describes a *'piece of land'* as the area that has had, currently has, or has most likely has had activities listed on the HAIL:

8(3) Disturbing Soil

- *8(3)(c) The volume of the disturbance of soil of the piece of land must be no more than 25m3 per 500m2.*
- *8(3)(d)(ii) Soil must not be taken away in the course of the activity, except that for all other purposes combined, a maximum of 5m3 per 500m2 of soil may be taken away per year.*

Each of the pieces of land have been assessed for allowable earthworks as a Permitted Activity under the NES-CS in the table below.

Table 10 - Piece of land Allowable Permitted Activity Earthworks

Area Reference	Locations	Area	Allowable soil disturbance (per year)	Allowable soil removal (m^3 per year)	Notes
1	Relocated house in north of site.	124m^2	6	1.2	-
2	Machinery storage area in centre of site	504m^2	25	5	-
3	Small area in northern half of site.	911m^2	45.5	9.1	-
4	Former paddock racing loop.	863m^2	43	8.6	-
5	Two burn piles in south of site.	531m^2	26.5	5.3	-
6	Northern dwelling and middle dwelling. Lead based paint.	Northern dwelling 124m^2, and Middle dwelling 162m^2	N/A	N/A	Not considered to be a piece of land as chemical analysis showed lead below background levels.

11.2 Northland Regional Council

As per Rule C.6.8.1 of the Proposed Regional Plan for Northland, copies of site investigation reports must be provided to the regional council within three months of completion of the investigation (reports can be sent to: contamination@nrc.govt.nz).

12 Conclusion & Recommendations

This PSI/DSI was carried out for the investigation site in accordance with the scope of work and current applicable regulations. This report has been prepared in accordance with MfE Guidelines for Contaminated Site Investigations and FNDC requirements. This investigation and reporting have been prepared, reviewed and authorised by a SQEP, as required under the NES-CS.

It is proposed that the site be subdivided.

Historical information available for the site and observations from the site walkovers indicate that the following HAIL activities have, or potentially have occurred at the site:

- HAIL Cat. E.1 – Asbestos products manufacture or disposal, including sites with buildings containing asbestos products known to be in a deteriorated condition ,

    - The northern most dwelling on the property was clad with asbestos containing material,
- HAIL Cat F.8 – Transport depots or yards, including areas used for refueling or the bulk storage of hazardous substances,
    - Machinery was being stored in an area in the centre of the site,
- HAIL Cat. G.4 – Scrap yards including automotive dismantling, wrecking or scrap metal yards,
    - The scrap yard on the neighbouring site briefly spread onto the subject site,
    - A small portion of a paddock racing track extended onto the site,
- HAIL Cat I – Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity it could be a risk to human health or the environment.
    - Two burn piles were present in the south of the site.

Twenty-three soil samples (18 shallow soil samples and 5 deeper soil samples) and one building material sample were collected. Sixteen soil samples analysed as individual samples, including one duplicate soil sample for Quality Assurance / Quality Control (QA / QC) purposes. Two samples were analysed as a composite sample. The building material sample was analysed for asbestos.

Laboratory analytical results reported:

- TPH concentrations in one sample (TP14_0.075m) comprising shallow topsoil exceeded MfE NES-CS Rural-Residential / Lifestyle Block (25% produce) Human Health Criteria,
- Metals concentrations were above Background Soil Concentrations in seven of the 18 soil samples analysed,
- TPH concentrations were above laboratory Method Detection Limits in some soil samples,
- Polycyclic Aromatic Hydrocarbon concentrations were above laboratory Method Detection Limits in some soil samples,
- Building cladding material sampled from the northern most dwelling contained amosite and chrysotile asbestos, and
- Asbestos fibres were not detected in the two soil samples analysed**.**

Based on these findings:

- Prior to earthworks or subdivision, a SMP and / or RAP must be prepared for the site,
- The SMP may include resampling of the area in exceedance of the adopted criteria as natural attenuation / natural bioremediation may have reduced concentrations below the adopted criteria.
- Soil / fill material with Metals concentrations above Background Levels and / or Polycyclic Aromatic Hydrocarbon or Total Petroleum Hydrocarbon concentrations above laboratory Method Detection Limits are not considered as ‘Cleanfill’ for disposal purposes:
    - If soil / fill material exceeding Background Level criteria must be removed from site it is to be disposed of at a facility licensed to accept such materials,
- Soil / fill material exceeding Background Level criteria can be retained and re-used on-site as a sustainable option and to reduce disposal costs if suitable, and
- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a SQEP prior to disposal.

It is considered that future proposed subdivision is covered under the National Environmental Standard for Contaminants in Soils regulations. The National Environmental Standard for Contaminants in Soils describes a 'piece of land' as the piece of land that has had, or currently has, or most likely has had, activities listed on the Hazardous Activities and Industries List and soil disturbance is proposed.

The future proposed subdivision will be a Restricted Discretionary Activity (10) under the National Environmental Standard for Contaminants in Soils as this Combined Preliminary / Detailed Site Investigation states the soil contamination exceeds the applicable standard in regulation 7.

13 Unverified Material Discovery

Should visual and / or olfactory evidence of gross contamination be identified during excavation works. It is recommended that works cease in that area and a SQEP familiar with the site attends to inspect the impacted soils. If required, the SQEP will undertake sampling to confirm the level and scope of contamination. The area should also be physically isolated using a high visibility fence if practicable.

Indications that uncontrolled filling with waste and / or unverified material may have occurred on site include:

- Buried Rubbish,
- Buried construction or demolition waste,
- Un-anticipated soil colours or odours,
- Buried tanks or drums, and
- Encountering materials that may contain Asbestos, including fibrous building materials and fibre cement construction products.

Site management should brief operatives onsite of the above signs during site inductions.

14 Practitioner Certifying Statement

I, Joshua Cuming of Haigh Workman Limited certify that:

This Detailed Site Investigation meets the requirements of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the NES-CS) because it has been:

- Undertaken by a Suitably Qualified and Experienced Practitioner, and
- Reported on in accordance with the current edition of Contaminated Land Management Guidelines No. 5 – Site Investigation and Analysis of Soils,
- Reported on in accordance with the current edition of the Contaminated Land Management Guidelines No. 1 – Reporting on contaminated sites in New Zealand, and
- The report has been certified by a Suitably Qualified and Experienced Practitioner.

This Detailed Site Investigation concludes that:

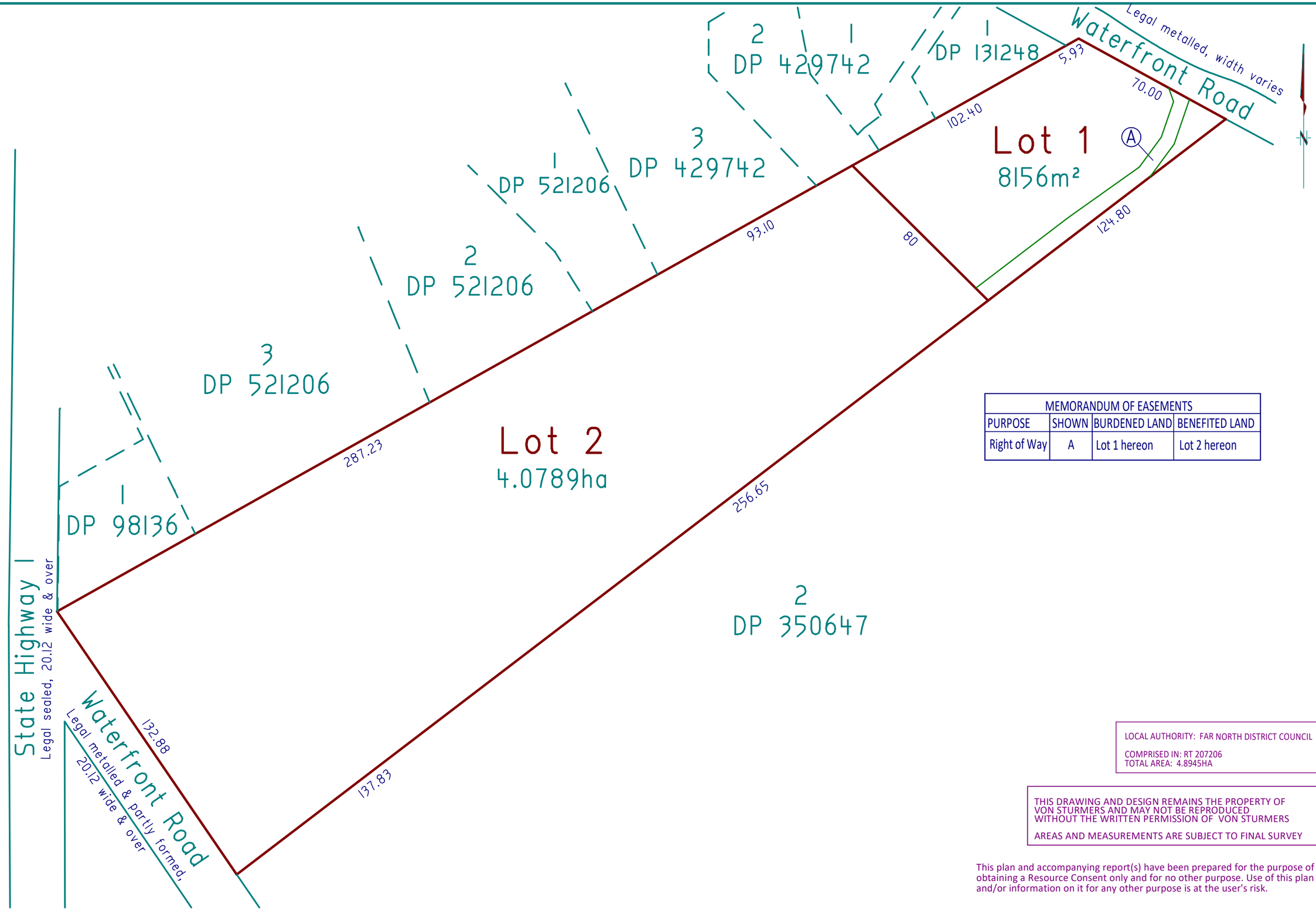
- The results from ground investigations exceed the applicable standard in Regulation 7 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations, and
- Based on the information reviewed, the proposed activity cannot meet permitted activity requirements set out under section 8 of the NES-CS and as such will require a consent as a Restricted Discretionary activity under section 10 of the NES-CS.

I have completed a Bachelor of Science (Geology and Environmental Studies). I have over 9 years' experience in contaminated land management.

End of Report – Appendices to follow.

Appendix A – Site Plans

Drawing No.	Title
Drawing 1	Site Location Plan – Haigh Workman
Drawing 2	Piece of Land Plan – Haigh Workman
Drawing 3	Site Investigation Plan – Haigh Workman
15454	Proposed Subdivision of Lot 1 DP 350647 – Von Sturmers



MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	A	Lot 1 hereon	Lot 2 hereon

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

COMPRISED IN: RT 207206
TOTAL AREA: 4.8945HA

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

VON STURMERS
Registered Land Surveyors, Planners & Land Development Consultants

Ph: (09) 408 6000
Email: kaitaia@saps.co.nz

131 Commerce Street, Kaitaia

PROPOSED SUBDIVISION OF LOT 1 DP 350647

PREPARED FOR: B DENISON

	Name	Date
Survey		
Design		
Drawn	SH	13-08-2024
Rev		

ORIGINAL

SCALE 1:1500

SHEET SIZE A3

Surveyors Ref. No: 15454

Series

Sheet of

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	A	Lot 1 hereon	Lot 2 hereon

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

COMPRISED IN: RT 207206
TOTAL AREA: 4.8945HA

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

VON STURMERS
Registered Land Surveyors, Planners & Land Development Consultants

Ph: (09) 408 6000
Email: kaitaia@saps.co.nz

131 Commerce Street, Kaitaia

PROPOSED SUBDIVISION OF LOT 1 DP 350647

PREPARED FOR: B DENISON

	Name	Date
Survey		
Design		
Drawn	SH	13-08-2024
Rev		

ORIGINAL
SCALE 1:1500
SHEET SIZE A3

Surveyors Ref. No: 15454
Series
Sheet of

Legend

Site Boundary

0 25 m 50 m

HAIGH WORKMAN Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Site Location Plan		
Client: Troy Denison		Size: A3
Project: 80 Waterfront Road	Drawn: JCum	Drawing No.: 1
Date: 12-11-2024	Checked: AT	
Proj No: 24 204	Scale: 1:2500	Version: REV1

Legend

- Potential HAIL Locations
- Site Boundary

0 25 m 50 m

HAIGH WORKMAN Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Piece of Land Plan		
Client: Troy Denison		Size: A3
Project: 80 Waterfront Road	Drawn: JCum	Drawing No.: 2
Date: 13-11-2024	Checked: AT	
Proj No: 24 204	Scale: 1:2000	Version: REV1

Legend

- Trialpit locations
- Site Boundary
- Potential HAIL Locations

0 25 m 50 m

HAIGH WORKMAN Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Site Investigation Plan		
Client: Troy Denison		Size: A3
Project: 80 Waterfront Road	Drawn: JCum	Drawing No.: 3
Date: 13-11-2024	Checked: AT	
Proj No: 24 204	Scale: 1:2000	Version: REV1

Appendix B – Photographic Documentation

1. Northern most dwelling with moderately weathered asbestos containing cement cladding.

2. Stockpiled imported topsoil.

3. View from north of the site looking towards the centre of the site. Area which had historically been used for car storage.

4. Former paddock racing track on right of photo

5. Southern most dwelling.

6. Machinery storage area with stained soil with hydrocarbon odour (TP9)

7. Machinery storage area with stained soil with hydrocarbon odour (TP8)

8. Machinery storage area with stained soil with hydrocarbon odour (TP8)

9. Burnpile containing mainly organic material.

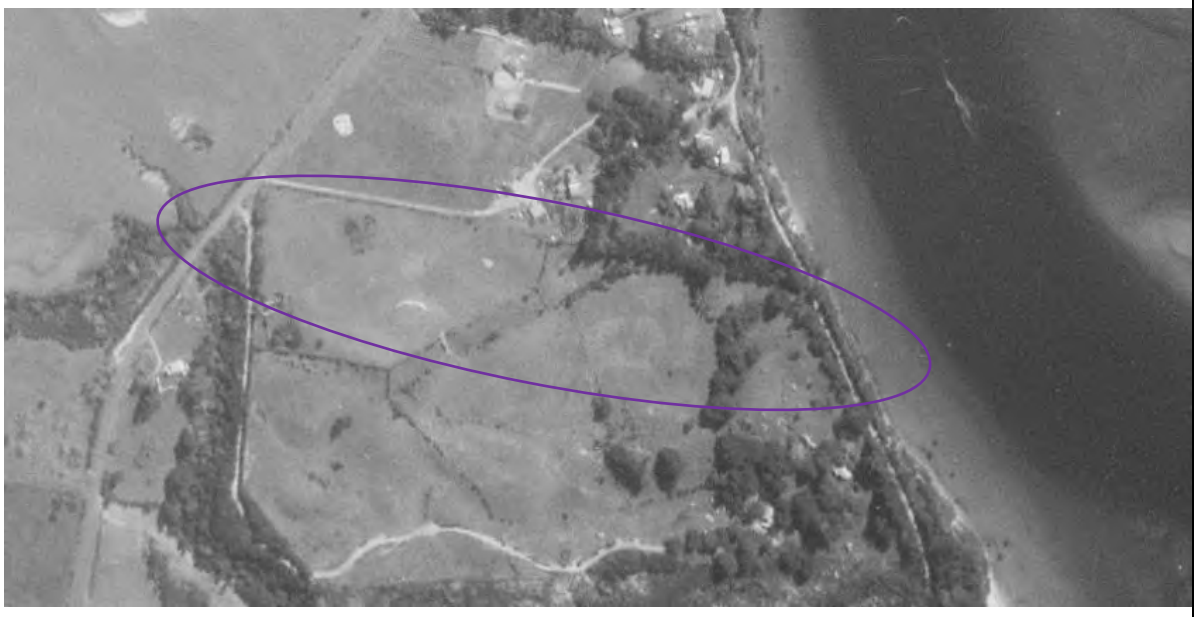
10. Southern burnpile containing organic material and timber.

Appendix C – Historical Aerial Photography

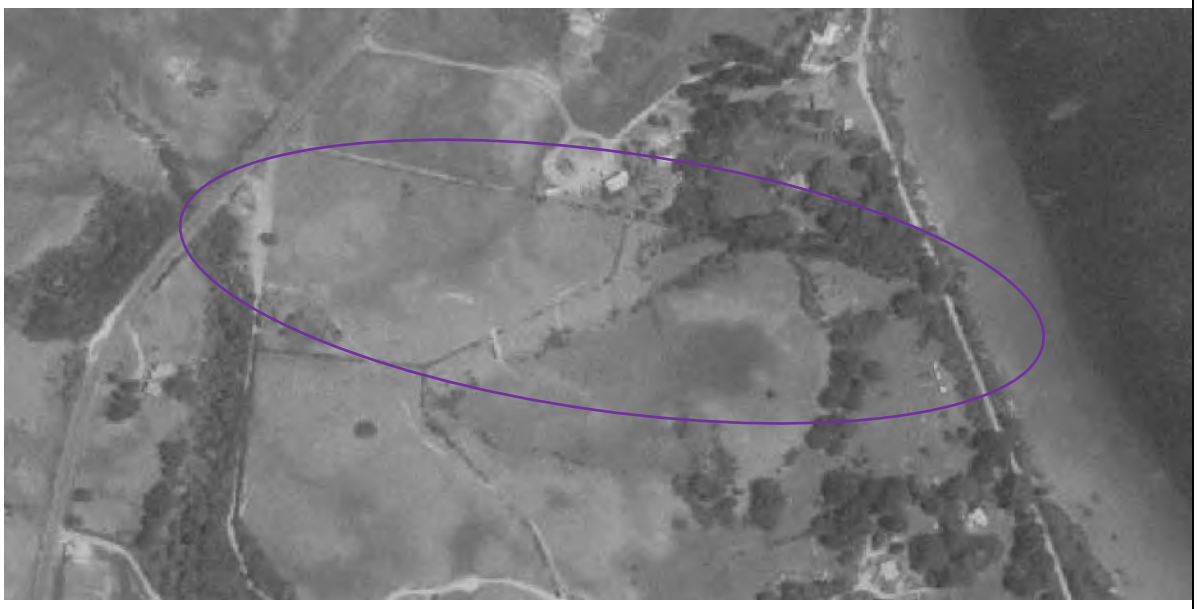
Aerial Photograph – 1944 (Source: Retro Lens)

Aerial Photograph – 1977 (Source: Retro Lens)

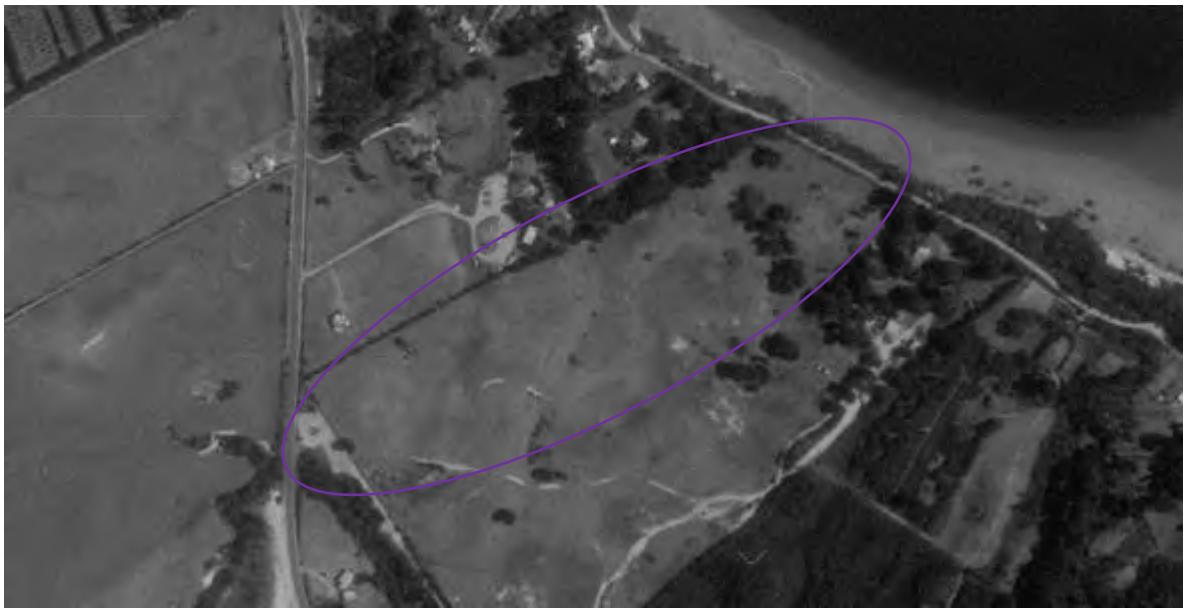
Aerial Photograph – 1978 (Source: Retro Lens)



Aerial Photograph – 1980 (Source: Retro Lens)



Aerial Photograph – 1985 (Source: Retrolens)



Aerial Photograph – 1993 (Source: NRC)

Aerial Photograph – 2003 (Source: NRC)

Aerial Photograph – 2004 (Source: Google Earth Pro)

Aerial Photograph – 2006 (Source: NRC)

Aerial Photograph – 2007 (Source: Google Earth Pro)

Aerial Photograph – 2009 (Source: Google Earth Pro)

Aerial Photograph – 2013 (Source: Google Earth Pro)

Aerial Photograph – 2015 (Source: Google Earth Pro)

Aerial Photograph – 2016 (Source: Google Earth Pro)

Aerial Photograph – 2018 (Source: Google Earth Pro)

Aerial Photograph – 2019 (Source: Google Earth Pro)

Aerial Photograph – 2021 (Source: Google Earth Pro)

Aerial Photograph – 2023 (Source: Google Earth Pro)

Appendix D – Certificates of Title

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Historical Search Copy

R.W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier **207206**

Land Registration District **North Auckland**

Date Issued 27 October 2005

Prior References
NA320/30

Estate Fee Simple

Area 4.8945 hectares more or less

Legal Description Lot 1 Deposited Plan 350647

Original Registered Owners
Thomas Graham Bradley

Interests

6624741.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 27.10.2005 at 9:00 am

7128534.1 Transfer to Bradleys R & S Limited - 23.11.2006 at 9:00 am

7128534.2 Mortgage to Thomas Graham Bradley - 23.11.2006 at 9:00 am

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**207206**
Land Registration District	**North Auckland**
Date Issued	27 October 2005

Prior References
NA320/30

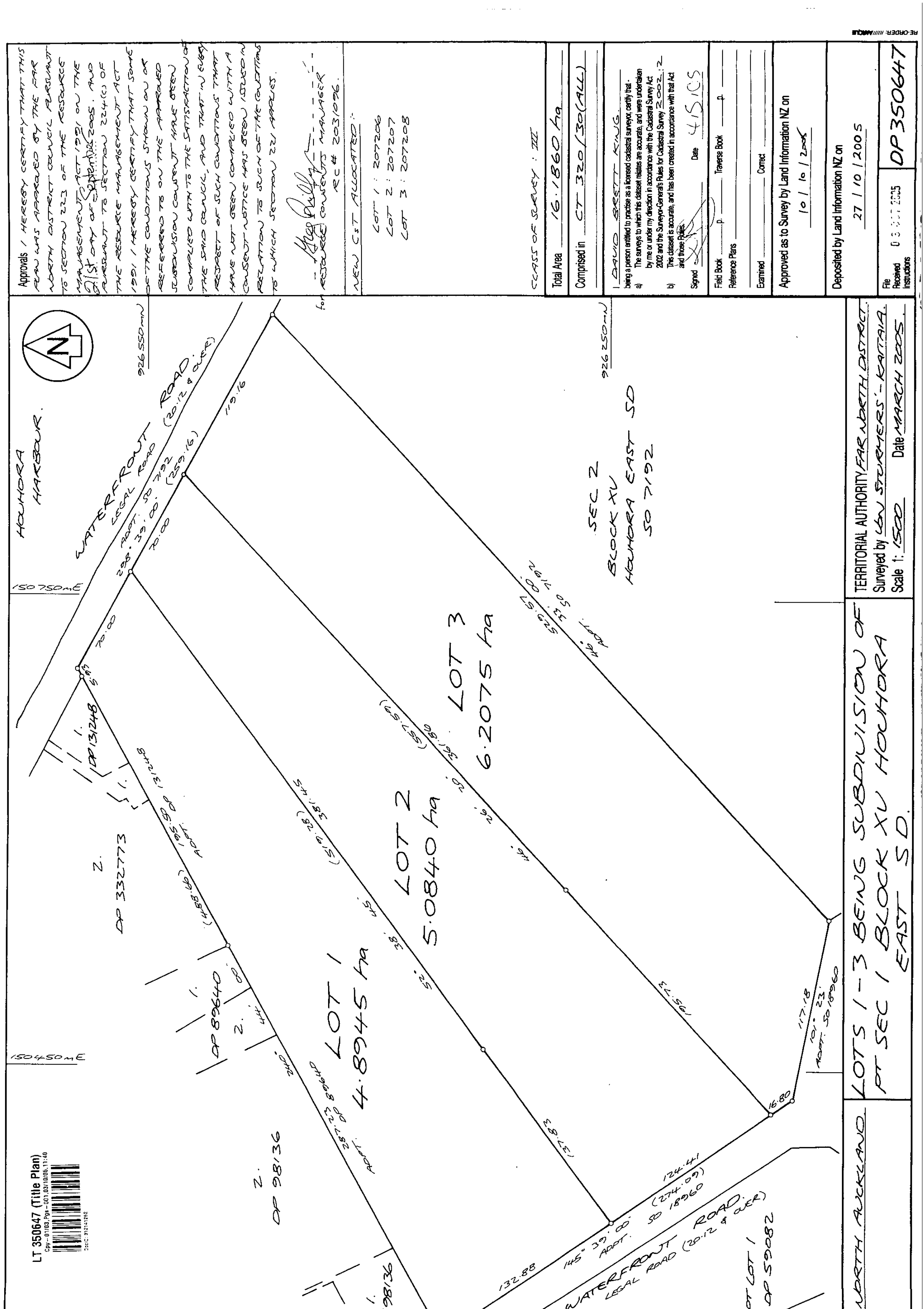
Estate	Fee Simple
Area	4.8945 hectares more or less
Legal Description	Lot 1 Deposited Plan 350647
Registered Owners	

Bradleys R & S Limited

Interests

6624741.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 27.10.2005 at 9:00 am

7128534.2 Mortgage to Thomas Graham Bradley - 23.11.2006 at 9:00 am


LOTS 1 - 3 BEING SUBDIVISION OF PT SEC 1 BLOCK XV HOUHORA EAST SD.
LOT 1 4.8945 ha
LOT 2 5.0840 ha
LOT 3 6.2075 ha
SEC 2 BLOCK XV HOUHORA EAST SD SO 7192
HOUHORA HARBOUR
WATERFRONT ROAD (20.12 & OVER) LEGAL ROAD
STATE HIGHWAY No 1F (FAR NORTH ROAD) LEGAL ROAD (20.12 & OVER)
DP 332773
DP 98136
DP 89640
DP 13248
PT LOT 1 DP 59082
150750mE
150450mE
926550mN
926250mN
LT 350647 (Title Plan)
NEW CT ALLOCATED:
LOT 1 : 207206
LOT 2 : 207207
LOT 3 : 207208
CLASS OF SURVEY : III
Total Area 16.1860 ha
Comprised in CT 320/30 (ALL)
I DAVID BRETT KING
Approved as to Survey by Land Information NZ on 10 / 10 / 2005
Deposited by Land Information NZ on 27 / 10 / 2005
DP 350647
LAND DISTRICT NORTH AUCKLAND
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by LEN STURMERS - KAITAIA
Scale 1: 1500
Date MARCH 2005
RC# 2031096

Appendix E – Contamination Enquiry Request

Josh Cuming

From: Contaminated Land Management Team <contamination@nrc.govt.nz>
Sent: Thursday, 26 September 2024 3:49 pm
To: Josh Cuming
Subject: RE: Environmental incidents - Lot 1 DP 350647 (NRC reference: REQ.622221)
Attachments: Sites within 100m.xlsx

Regarding your site query 80 Waterfront Road, Pukenui (Lot 1 DP 350647).

The property that you have enquired about is not listed on the NRC Selected Land-use Register (SLR) for any current or historical Hazardous Activities and Industries List (HAIL) activities. Please note that the SLR is not a comprehensive list of all sites that have a HAIL land use history. It is a live record and therefore continually being updated.

There are no environmental incidents or current resource consents recorded on the property. There is one bore recorded on the property with details below.

Reference number	Bore Type	Purpose	X	Y
LOC.200065	Permitted - pre plan	Unknown	1611768	6146154

There are 2 resource consents, 4 bores, 0 environmental incident and 1 SLU site recorded within 100m of the property – please see summary details in the attached spreadsheet. Further information can be provided on request, please quote the Reference number.

SLU site 042339 has recently been added to the register and is currently undergoing landowner notification.

NRC has aerial images of the site for the following years that can be provided upon request: 1993, 2003, 2006, 2007, 2008, 2009, 2014, 2015, 2018 & 2023.

Please note, as per Rule C.6.8.1 of the Proposed Regional Plan for Northland, copies of site investigation reports, where land disturbance has occurred, must be provided to the regional council within three months of completion of the investigation.

Reports can be sent to contamination@nrc.govt.nz

If I can be of any further assistance, please do not hesitate to contact me.

Regards

Kyle Richards
Environmental Monitoring Officer – Industrial & Trade Activities
Northland Regional Council » Te Kaunihera ā rohe o Te Taitokerau
M 027 268 8938

Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

P 0800 002 004 **» W** www.nrc.govt.nz

From: Josh Cuming <joshcuming@haighworkman.co.nz>
Sent: Wednesday, September 18, 2024 11:57 AM
To: Contaminated Land Management Team <contamination@nrc.govt.nz>
Subject: Environmental incidents - Lot 1 DP 350647

Hi

Please may we have any information on file regarding HAIL and environmental incidents onsite and within 100 m of the below site?

- 80 Waterfront Road, Pukenui (Lot 1 DP 350647)

Kind regards

Josh Cuming
Environmental Geologist
CEnvP, MEIANZ.
Phone 09 407 8327
joshcuming@haighworkman.co.nz

40 YEARS of Engineering Excellence
HAIGH WORKMAN LTD
Civil & Structural Engineers

Website . LinkedIn . Careers

Bores

Reference number	Bore Type	Purpose	X	Y	Comments
LOC.209170	Consented	Domestic needs	1611768	6146024	
LOC.314465	Consented	Domestic needs	1611882	6146283	
LOC.209028	Consented	Domestic needs	1612075	6146382	These two locations are potentially duplicates of the same bore.
LOC.209168	Consented	Domestic needs	1612043	6146344	
LOC.200064	Permitted - pre plan	Unknown	1611768	6146255	

Resource consents within 100m

Reference number	Type - Subtype	Authorisation Description
AUT.045706.01.01	Land Discharge - Sewage	Discharge primary treated wastewater to land at Far North Road, Pukenui
AUT.045706.02.01	Air Discharge - Sewage	Discharge contaminants (odour) to air at Far North Road, Pukenui

SLU sites within 100m

Reference number	Site Name	Site Description	Classification	HAIL Activity/Activities
SLU.042339	Scrap yard - Waterfront Road, Pukenui	94 Waterfont Rd, Pukenui. This is the site of an automotive dismantling, wrecking yard.	Verified HAIL: Risk not quantified	G4. Scrap yards including automotive dismantling and wrecking

Appendix F – Soil Sample Descriptions

HAIGH WORKMAN LTD
Civil & Structural Engineers

P O Box 89, 0245
6 Fairway Drive,
Kerikeri, New Zealand

Phone 09 407 8327
Fax 09 407 8378
www.haighworks.co.nz
info@haighworkman.co.nz

Sample Hole Log

Job No.:	24 204		
Client:	Billlie and Troy Denison	**Date:**	2/10/2024
Location:	80 Waterfrot Road, Kaikohe	**Logged:**	JCum
Method:	Spade and trowel, excavator	**Checked:**	AT

Borehole ID	Soil Description	Depth (m bgl)	Sample Point Location	Comments	Testing
TP1	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	TPH, PAH, BTEX, Metals.
TP2	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Hold
TP3	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	TPH, PAH, BTEX, Metals, Asbestos presense.
TP4	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Hold
TP5	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	TPH, PAH, BTEX, Metals, Asbestos presense.
TP6	Dark brown , Sandy TOPSOIL	0-0.075	Duplicate of TP1 0-0.075	No visual or olfactory signs of contamination	TPH, PAH, BTEX, Metals, Asbestos presense.
TP7	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Lead
TP8	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	Dark staining and hydrocarbon odour.	TPH, PAH, BTEX, Metals, Asbestos presense.
TP8	Light brown, SAND	0.3	As per site investigation plan.	Slight hydrocarbon odour	TPH
TP9	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	TPH, PAH, BTEX, Metals, Asbestos presense.
TP10	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	Slight hydrocarbon odour	TPH, PAH, BTEX, Metals, Asbestos.
TP11	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Metals
TP11	Light brown, SAND	0.3	As per site investigation plan.	No visual or olfactory signs of contamination	Hold
TP12	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Metals
TP12	Light brown, SAND	0.3	As per site investigation plan.	No visual or olfactory signs of contamination	Hold
TP13	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Metals
TP13	Light brown, SAND	0.3	As per site investigation plan.	No visual or olfactory signs of contamination	Hold
TP14	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	Dark staining and hydrocarbon odour.	TPH, PAH, BTEX, Metals, Asbestos presense.
TP14	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	Slight hydrocarbon odour	TPH
TP15	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Lead
TP16	Dark brown , Sandy TOPSOIL	0-0.075	As per site investigation plan.	No visual or olfactory signs of contamination	Asbestos
SP1 S1	Dark brown , Sandy TOPSOIL	NA	As per site investigation plan.	No visual or olfactory signs of contamination	Composite SP1 S1 and SP1 S2 - Metals
SP1 S2	Dark brown , Sandy TOPSOIL	NA	As per site investigation plan.	No visual or olfactory signs of contamination	Composite SP1 S1 and SP1 S2 - Metals
Suspected ACM	Cement fibre cladding	NA	As per site investigation plan.	No visual or olfactory signs of contamination	Asbestos presense

Appendix G – Summarised Laboratory Results

Analyte	Units	COMP-SP1 S1 & SP1 S2	TP1 0.075	TP10 0.075	TP11 0.075	TP12 0.075	TP13 0.075	TP14 0.075	TP14 0.3	TP15 0.075	TP3 0.075	TP5 0.075	TP6 0.075	TP7 0.075	TP8 0.075	TP8 0.3	TP9 0.075	Human Health, Lifestyle Block	Human Health, Residential	Human Health, Groundwater Protection	Background concetrations
Depth																					
Sampled Date		10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024	10-02-2024				
Soil Type / Depth		Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand				
Arsenic	mg/kg	0.91	2.28	**4.42**	2.97	1.31	**16.4**	1.28	-	-	1.07	0.58	2.24	-	**6.72**	-	3.5	17[5,21]		-	**4.1**
Cadmium	mg/kg	**0.14**	0.07	0.01	**0.09**	**0.16**	0.06	**0.17**	-	-	0.1	0.08	0.08	-	**0.65**	-	0.02	0.8[5,21,22]		-	**0.08**
Chromium (III+VI)	mg/kg	3.6	3.7	5.3	4.5	4	9.2	3.4	-	-	3.1	1.9	3.6	-	8.9	-	4.8	290[5]		-	**15.5**
Copper	mg/kg	13.7	2.3	1	5.9	3.1	13.6	2.8	-	-	3.5	6.3	2.2	-	**25.7**	-	2.3	10,000[5,23]		-	**15.7**
Lead	mg/kg	3.8	3.9	2.3	5.8	6.5	**78.4**	**20.4**	-	4.9	4.8	3.4	2.9	3	**13.9**	-	3.3	160[5]		-	**11.4**
Mercury	mg/kg	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	-	< 0.1	< 0.1	< 0.1	-	< 0.1	-	< 0.1	200[5]		-	
Acenaphthene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	170[6,25]	-	
Acenaphthylene	mg/kg	-	< 0.02	< 0.02	-	-	-	5	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	100[6,25]	-	
Anthracene	mg/kg	-	< 0.02	< 0.02	-	-	-	0.71	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	1,700[6,25,26]	-	
Fluoranthene	mg/kg	-	< 0.02	< 0.02	-	-	-	0.83	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	650[6,25]	-	
Fluorene	mg/kg	-	< 0.02	< 0.02	-	-	-	0.68	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	160[6,25]	-	
Phenanthrene	mg/kg	-	< 0.02	< 0.02	-	-	-	1	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	180[6,25]	-	
Benzene[4,17]	mg/kg	-	< 0.05	< 0.05	-	-	-	< 0.05	-	-	< 0.05	< 0.05	< 0.05	-	< 0.05	-	< 0.05	-	1.1[1,30]	2.8[3,36]	
Xylene (o)[13]	mg/kg	-	< 0.05	< 0.05	-	-	-	0.052	-	-	< 0.05	< 0.05	< 0.05	-	< 0.05	-	< 0.05	-	48	-	
Toluene[11] [18]	mg/kg	-	< 0.05	< 0.05	-	-	-	< 0.05	-	-	< 0.05	< 0.05	< 0.05	-	< 0.05	-	< 0.05	-	68[1,30,31]	700[3,36,37]	
Total BTEX	mg/kg	-	< 0.15	< 0.15	-	-	-	< 0.15	-	-	< 0.15	< 0.15	< 0.15	-	< 0.15	-	< 0.15	-	-	-	
Total pm Xylene Ethylbenzene[14] [19]	mg/kg	-	< 0.15	< 0.15	-	-	-	< 0.15	-	-	< 0.15	< 0.15	< 0.15	-	< 0.15	-	< 0.15	-	48	410	
Nickel	mg/kg	1	1.4	2.5	2	1.4	1.6	1	-	-	1	0.7	1.3	-	5.9	-	2.3	-	-	-	
Benzo(a)anthracene	mg/kg	-	< 0.02	< 0.02	-	-	-	0.06	-	-	< 0.02	< 0.02	< 0.02	-	0.03	-	< 0.02	-	-	-	
Benzo(a) pyrene[16]	mg/kg	-	< 0.02	< 0.02	-	-	-	0.03	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	0.27[1,35]	-	
Benzo(a)pyrene TEQ (lower bound)	mg/kg	-	< 0.02	< 0.02	-	-	-	0.03	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Benzo(a)pyrene TEQ (medium bound)	mg/kg	-	0.02	0.02	-	-	-	0.04	-	-	0.02	0.02	0.02	-	0.03	-	0.02	-	-	-	
Benzo(a)pyrene TEQ (upper bound)	mg/kg	-	0.05	0.05	-	-	-	0.06	-	-	0.05	0.05	0.05	-	0.05	-	0.05	-	-	-	
Benzo(b)fluoranthene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Benzo(g,h,i)perylene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Chrysene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Dibenz(a,h)anthracene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Indeno(1,2,3-c,d)pyrene	mg/kg	-	< 0.02	< 0.02	-	-	-	< 0.02	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	-	-	
Naphthalene[15] [20]	mg/kg	-	< 0.02	< 0.02	-	-	-	6.5	-	-	< 0.02	< 0.02	< 0.02	-	< 0.02	-	< 0.02	-	58[1,34]	53[3,36]	
Pyrene[12]	mg/kg	-	< 0.02	< 0.02	-	-	-	2.7	-	-	< 0.02	< 0.02	< 0.02	-	0.04	-	< 0.02	-	1,600[1,31,32,33]	-	
C10-C14 Fraction[7]	mg/kg	-	< 10	< 10	-	-	-	5,600	-	-	< 10	< 10	< 10	-	25	-	< 10	-	470[1,27]	-	
C15-C36 Fraction[8]	mg/kg	-	< 20	44	-	-	-	21,000	-	-	< 20	< 20	< 20	-	19,000	-	1,400	-	20,000[1,28]	-	
TPH-SG C7-C36 (Total)	mg/kg	-	< 35	44	-	-	-	26,000	< 35	-	< 35	< 35	< 35	-	19,000	1,000	1,400	-	-	-	
C7-C9 Fraction[9]	mg/kg	-	< 5	< 5	-	-	-	< 500	-	-	< 5	< 5	< 5	-	< 5	-	< 5	-	120[1,29]	-	
Zinc	mg/kg	13	12	8	29	22	**75**	39	-	-	**4**	7	11	-	**51**	-	9	-	-	-	**47.5**
TPH-SG C10-C14	mg/kg	-	-	-	-	-	-	-	< 10	-	-	-	-	-	-	< 10	-	-	-	-	
TPH-SG C15-C36	mg/kg	-	-	-	-	-	-	-	< 20	-	-	-	-	-	-	1,000	-	-	-	-	
TPH-SG C7-C9	mg/kg	-	-	-	-	-	-	-	< 5	-	-	-	-	-	-	< 5	-	-	-	-	

Scenarios:

Shaded	Indicates result exceeds for Human Health, Lifestyle Block
Shaded	Indicates result exceeds for Human Health, Residential
Shaded	Indicates result exceeds for Human Health, Groundwater Protection

Criteria adopted from the following guidelines:

[1]Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE 1999) Criteria for Human Health, Residential and (All Pathways) Sand and contamination depth <1m

[1]Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE 1999) Criteria for Human Health, Residential and (Inhalation of indoor air) Sand and contamination depth <1m

[2]Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE 1999) Criteria for Human Health, Lifestyle Block

[3]Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE 1999) GW Criteria for Human Health, Groundwater Protection from table Table 4.20 and Sand and contamination depth <1m and Depth To Groundwater: 4m

[4]Methodology for Deriving Soil Guideline Values Protective of Human Health (NES, 2011) Criteria for Human Health, Residential

[5]Methodology for Deriving Soil Guideline Values Protective of Human Health (NES, 2011) Criteria for Human Health, Lifestyle Block

[6]Users' Guide to the Guidelines for Assessing and Managing Contaminated Gasworks Sites in New Zealand (MfE, 1997) Criteria for Human Health, Residential

Notes:

This table does not represent the full analytical results, please refer to the laboratory results for full details.
Assumes soil pH of 5 for Cadmium.
Backgroundconcentrations are from "Trace element background concentration explorer" Manaaki Whenua - Landcare Research

Guideline Changes:

[7]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[8]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[9]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[10]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[11]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[12]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[13]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[14]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand. Criteria for Xylenes used conservatively.

[15]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[16]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[17]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[18]Sand <1m Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[19]Sand sample <1m, groundwater depth 4m. Guidelines for Assessing and Managing Hydrocarbon Contaminated Sites in New Zealand

[20]Sand sample <1m

Guideline Notes:

[21]Human health

[22]pH 5. Concentrations increase with increasing pH.

[23]No limit – the derived value exceeds 10,000 mg/kg, a concentration that is unlikely to be exceeded in practice.

[24]10% produce consumption

[25]50% produce consumption

[26]interim guideline

[27]Limiting pathway-volatilisation

[28]Health based criterio is not applicable and 20,000mg/kg adopted. At 20,000 mg/kg residual separate phase is expected to have formed in soil matrix. Some aesthetic impact may be noted.

[29]Limiting pathway -Maintenance/excavation

[30]Limiting pathway -volatilisation

[31]Likely to form residual separate phase

[32]Limiting pathway -produce consumption

[33]Non carcinogenic PAH

[34]Also relevant for Agricultural use

[35]Produce - limiting pathway

[36]GW 4m

[37]formation of residual separate phase

Appendix H – Laboratory Analytical Results and Chain of Custody Documentation

CHAIN OF COUSTODY RECORD

Eurofins | Environment Testing

- [ ] Sydney Laboratory
- [ ] Brisbane Laboratory
- [ ] Perth Laboratory
- [ ] Melbourne Laboratory

Company	Haigh Workman Limited	Project №	24 204	Project Manager	Joshua Cuming
Address	6 Fairway Drive, Kerikeri	Project Name	80 Waterfront Road	EDD Format	
Contact Name	Joshua Cuming	Facility Code		Sampler(s)	Joshua Cuming
Phone №	027 316 8362			Handed over by	
Special Directions				Email for Invoice	joshcuming@haighworkman.co.nz accounts@haighworkman.co.nz
Purchase Order				Email for Results	joshcuming@haighworkman.co.nz
Quote ID №					

Required Turnaround Time (TAT)

- [ ] Overnight (reporting by 9am)
- [ ] Same day
- [ ] 1 day
- [ ] 2 days
- [ ] 3 days
- [x] 5 days (Standard)
- [ ] Other (

Nr	Client Sample ID	Sampled Date/Time	Matrix	HOLD	Moisture Set	B7	Lead	M8	AS 4964	Composite with M8 analysis	Asbestos ID in building material 2 day	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	TP1 0.075	2/10/24	Soil			AKL												1		
2	TP2 0.075	2/10/24	Soil	AKL														1		
3	TP3 0.075	2/10/24	Soil			AKL			AKL									1	1	
4	TP4 0.075	2/10/24	Soil	AKL														1		
5	TP5 0.075	2/10/24	Soil			AKL												1		
6	TP6 0.075	2/10/24	Soil			AKL												1		
7	TP7 0.075	2/10/24	Soil				AKL											1		
8	TP8 0.075	2/10/24	Soil			AKL												1		
9	TP8 0.3	2/10/24	Soil	AKL														1		
10	TP9 0.075	2/10/24	Soil			AKL												1		
11	TP10 0.075	2/10/24	Soil			AKL												1		
12	TP11 0.075	2/10/24	Soil					AKL										1		
13	TP11 0.3	2/10/24	Soil	AKL														1		
14	TP12 0.075	2/10/24	Soil					AKL										1		
15	TP12 0.3	2/10/24	Soil	AKL														1		
16	TP13 0.075	2/10/24	Soil					AKL										1		
17	TP13 0.3	2/10/24	Soil	AKL														1		
18	TP14 0.075	2/10/24	Soil			AKL												1		
19	TP14 0.3	2/10/24	Soil	AKL														1		
20	TP15 0.075	2/10/24	Soil				AKL											1		
21	TP16 0.075	2/10/24	Soil	AKL														1		
22	SP1 S1	2/10/24	Soil							AKL								1		Composite SP1 S2 and SP1 S2
23	SP1 S2	2/10/24	Soil							AKL								1		Composite SP1 S2 and SP1 S2
24	Suspected ACM 1	2/10/24	Cement Tile								AKL								1	Potential ACM
25																				
26																				
1	Total Counts																	23	2	

Date/Time: 10/10/24 14:07
Chilled: Yes / No
Temp: 8.8°C
+2.8°C
Correction:
Final Temp: [illegible] C

Method of Shipment	☐ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Signature	Date	Time
Laboratory Use Only	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature	Date	Time	Temperature	
	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature	Date	Time	Report №	

Eurofins Environment Testing Australia Pty Ltd

Submission of samples to the laboratory will be deemed as acceptance of Eurofins Standard Terms and Conditions unless agreed otherwise.

EUNZAU
00728821
Order
051-11618-729084-93

EUNZAU
00728889
Order
051-11618-729152-93

ON HOLD WT33[illegible]

CHAIN OF CUSTODY RECORD

[illegible]

- ☐ **Sydney Laboratory** [illegible]
- ☐ **Brisbane Laboratory** [illegible]
- ☐ **Perth Laboratory** [illegible]
- ☐ **Melbourne Laboratory** [illegible]

Company	Haigh Workman Limited	Project Nr	24 204
Address	6 Fairway Drive, Kerikeri	Project Name	80 Waterfront Road
Contact Name	Joshua Cuming	Project Manager	Joshua Cuming
Phone Nr	027 316 8362	EDD Format	
Special Directions		Facility Code	
Purchase Order		Sampler(s)	Joshua Cuming
Quote ID Nr		Handed over by	
		Email for Invoice	joshcuming@haighworkman.co.nz accounts@haighworkman.co.nz
		Email for Results	joshcuming@haighworkman.co.nz

Required Turnaround Time (TAT)

- ☐ Overnight (reporting by 9am)♦
- ☐ Same day♦
- ☐ 1 day♦
- ☐ 2 days♦
- ☐ 3 days♦
- ☑ 5 days (Standard)
- ☐ Other)

♦ Surcharges will apply

Analyses [illegible]

Containers

Nr	Client Sample ID	Sampled Date/Time	Matrix	HOLD	Moisture Set	B7	Lead	M8	Asbestos in soil AS 4964 3 day	Composite with M8 analysis	Asbestos ID in building material 2 day	TPH	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	TP1 0.075	2/10/24	Soil																1		
2	TP2 0.075	2/10/24	Soil																1		
3	TP3 0.075	2/10/24	Soil																1	1	
4	TP4 0.075	2/10/24	Soil																1		
5	TP5 0.075	2/10/24	Soil																1		
6	TP6 0.075	2/10/24	Soil																1		
7	TP7 0.075	2/10/24	Soil																1		
8	TP8 0.075	2/10/24	Soil																1		
9	TP8 0.3	2/10/24	Soil									AKL							1		
10	TP9 0.075	2/10/24	Soil																1		
11	TP10 0.075	2/10/24	Soil																1		
12	TP11 0.075	2/10/24	Soil																1		
13	TP11 0.3	2/10/24	Soil																1		
14	TP12 0.075	2/10/24	Soil																1		
15	TP12 0.3	2/10/24	Soil																1		
16	TP13 0.075	2/10/24	Soil																1		
17	TP13 0.3	2/10/24	Soil																1		
18	TP14 0.075	2/10/24	Soil																1		
19	TP14 0.3	2/10/24	Soil									AKL							1		
20	TP15 0.075	2/10/24	Soil																1		
21	TP16 0.075	2/10/24	Soil						AKL										1		
22	SP1 S1	2/10/24	Soil																1		
23	SP1 S2	2/10/24	Soil																1		
24	Suspected ACM 1	2/10/24	Cement Tile																	1	
25																					
26																					
1	Total Counts																		23	2	

EUNZAU
00735712
Order
051-11618-735976-93

Method of Shipment	☐ Courier (#	☐ Hand Delivered	☐ Postal	Name		Signature		Date	Time
Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time	Temperature
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time	Report No

Environment Testing NZ

ANALYTICAL REPORT

REPORT CODE **AR-24-NU-086654-02 #** REPORT DATE **01/11/2024**

This amended report supersedes Analytical Report number AR-24-NU-086654-01, dated 17/10/2024.

Attention Haigh Workman Limited
Josh Cuming
6 Fairway Drive
230 Kerikeri
NEW ZEALAND
Phone +642885160190
Email joshcuming@haighworkman.co.nz

Contact for your orders: Radhi Premkumar **Order code:** EUNZAU-00728821
Submission Reference: 80 Waterfron Road;24 204
Comments: Reported sample 816-2024-00252915 undiluted TPH results

SAMPLE CODE **816-2024-00252910**

Sample Name TP1 0.075
Reception Date & Time: 10/10/2024 14:07 **Reception temperature:** 11.6 °C
Analysis Started on: 14/10/2024 **Analysis Ending Date:** 17/10/2024
Sampled Date & Time 02/10/2024 00:00 **Sampled By** JOSHUA CUMING
Attempt to Chill was evident Yes **Sample correctly preserved** Yes
Appropriate sample containers used Yes

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	2.28	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.07	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	3.7	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	2.3	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	3.9	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.4	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001

		RESULTS		LOQ
②NWEBH	**PAH BaP TEQ**			
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	<20	mg/kg	20
	TPH-SG C7-C36 (Total)	<35	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	12	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252911**		
Sample Name	TP3 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	1.07	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.10	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	3.1	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	3.5	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	4.8	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.0	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	<20	mg/kg	20
	TPH-SG C7-C36 (Total)	<35	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	4	mg/kg	1

	RESULTS	LOQ

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252912**		
Sample Name	TP5 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	0.58	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.08	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	1.9	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	6.3	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	3.4	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	0.7	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001

		RESULTS		LOQ
②NWEBH	**PAH BaP TEQ**			
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	<20	mg/kg	20
	TPH-SG C7-C36 (Total)	<35	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	7	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252913**		
Sample Name	TP6 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	2.24	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.08	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	3.6	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	2.2	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	2.9	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.3	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	<20	mg/kg	20
	TPH-SG C7-C36 (Total)	<35	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	11	mg/kg	1

	RESULTS	LOQ

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE 816-2024-00252914

Sample Name	TP7 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

	RESULTS		LOQ
②NW511 **Lead - Total**			
Lead (Pb)	3.0	mg/kg	0.1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE 816-2024-00252915

Sample Name	TP8 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	01/11/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

	RESULTS		LOQ
②NW499 **Arsenic - Total**			
Arsenic (As)	6.72	mg/kg	0.05
②NW0AK **BTEX**			
Benzene	<0.05	mg/kg	0.0005
o-Xylene	<0.05	mg/kg	0.0005
Toluene	<0.05	mg/kg	0.0005
Total BTEX	<0.15	mg/kg	0.003
Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504 **Cadmium - Total**			

		RESULTS		LOQ
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.65	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	8.9	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	25.7	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	13.9	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	5.9	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	0.03	mg/kg	0.0001
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.03	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	0.04	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	25	mg/kg	10
	TPH-SG C15-C36	19000	mg/kg	20
	TPH-SG C7-C36 (Total)	19000	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	51	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	01/11/2024	30	14	No
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252916**		
Sample Name	TP9 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	3.50	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.02	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	4.8	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	2.3	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	3.3	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	2.3	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene	<0.02	mg/kg	0.0001

		RESULTS		LOQ
②NWEBH	**PAH BaP TEQ**			
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	1400	mg/kg	20
	TPH-SG C7-C36 (Total)	1400	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	9	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252917**		
Sample Name	TP10 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	4.42	mg/kg	0.05

		RESULTS		LOQ
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	<0.05	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.01	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	5.3	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	1.0	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	2.3	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	2.5	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	<0.02	mg/kg	0.001
	Anthracene	<0.02	mg/kg	0.001
	benz (a) anthracene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene	<0.02	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	<0.02	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.02	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.05	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	<0.02	mg/kg	0.0001
	Fluorene	<0.02	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	<0.02	mg/kg	0.0001
	Phenanthrene	<0.02	mg/kg	0.0001
	Pyrene	<0.02	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	44	mg/kg	20
	TPH-SG C7-C36 (Total)	44	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	8	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	**816-2024-00252918**		
Sample Name	TP11 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②**NW499**	**Arsenic - Total**			
	Arsenic (As)	2.97	mg/kg	0.05
②**NW504**	**Cadmium - Total**			
	Cadmium (Cd)	0.09	mg/kg	0.01
②**NW507**	**Chromium - Total**			
	Chromium (Cr)	4.5	mg/kg	0.2
②**NW509**	**Copper - Total**			
	Copper (Cu)	5.9	mg/kg	0.3
②**NW511**	**Lead - Total**			
	Lead (Pb)	5.8	mg/kg	0.1
②**NW515**	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②**NW517**	**Nickel - Total**			
	Nickel (Ni)	2.0	mg/kg	0.2
②**NW528**	**Zinc - Total**			
	Zinc (Zn)	29	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	816-2024-00252919		
Sample Name	TP12 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	1.31	mg/kg	0.05
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.16	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	4.0	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	3.1	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	6.5	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.4	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	22	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	816-2024-00252920		
Sample Name	TP13 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	16.4	mg/kg	0.05

		RESULTS		LOQ
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.06	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	9.2	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	13.6	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	78.4	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.6	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	75	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE **816-2024-00252921**

Sample Name	TP14 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	1.28	mg/kg	0.05
②NW0AK	**BTEX**			
	Benzene	<0.05	mg/kg	0.0005
	o-Xylene	0.0520	mg/kg	0.0005
	Toluene	<0.05	mg/kg	0.0005
	Total BTEX	<0.15	mg/kg	0.003
	Total p,m Xylene, Ethylbenzene	<0.15	mg/kg	0.0015
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.17	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	3.4	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	2.8	mg/kg	0.3

		RESULTS		LOQ
②NW511	**Lead - Total**			
	Lead (Pb)	20.4	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	<0.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.0	mg/kg	0.2
②NWEBH	**PAH BaP TEQ**			
	Acenaphthene	<0.02	mg/kg	0.0001
	Acenaphthylene	5.0	mg/kg	0.001
	Anthracene	0.71	mg/kg	0.001
	benz (a) anthracene	0.06	mg/kg	0.0001
	Benzo(a)pyrene	0.03	mg/kg	0.0001
	Benzo(a)pyrene TEQ (lower bound)	0.03	mg/kg	0.001
	Benzo(a)pyrene TEQ (medium bound)	0.04	mg/kg	0.004
	Benzo(a)pyrene TEQ (upper bound)	0.06	mg/kg	0.008
	Benzo(b+k)fluoranthene	<0.02	mg/kg	0.001
	Benzo(g,h,i)perylene	<0.02	mg/kg	0.001
	Chrysene	<0.02	mg/kg	0.0001
	Dibenz(a,h)anthracene	<0.02	mg/kg	0.0001
	Fluoranthene	0.83	mg/kg	0.0001
	Fluorene	0.68	mg/kg	0.0001
	Indeno(1,2,3-cd)pyrene	<0.02	mg/kg	0.0001
	Naphthalene	6.5	mg/kg	0.0001
	Phenanthrene	1.0	mg/kg	0.0001
	Pyrene	2.7	mg/kg	0.0001
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	5600	mg/kg	10
	TPH-SG C15-C36	21000	mg/kg	20
	TPH-SG C7-C36 (Total)	26000	mg/kg	35
	TPH-SG C7-C9	<500	mg/kg	5
②NW528	**Zinc - Total**			
	Zinc (Zn)	39	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	17/10/2024	15	180	Yes
NW0AK	BTEX	02/10/2024	17/10/2024	15	14	No
NW504	Cadmium - Total	02/10/2024	17/10/2024	15	180	Yes
NW507	Chromium - Total	02/10/2024	17/10/2024	15	180	Yes
NW509	Copper - Total	02/10/2024	17/10/2024	15	180	Yes
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes
NW515	Mercury - Total	02/10/2024	17/10/2024	15	28	Yes
NW517	Nickel - Total	02/10/2024	17/10/2024	15	180	Yes
NWEBH	PAH BaP TEQ	02/10/2024	17/10/2024	15	14	No
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	15/10/2024	13	14	Yes
NW528	Zinc - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	816-2024-00252922		
Sample Name	TP15 0.075		
Reception Date & Time:	10/10/2024 14:07	**Reception temperature:**	11.6 °C
Analysis Started on:	14/10/2024	**Analysis Ending Date:**	17/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW511	**Lead - Total**			
	Lead (Pb)	4.9	mg/kg	0.1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW511	Lead - Total	02/10/2024	17/10/2024	15	180	Yes

SAMPLE CODE	816-2024-00252923		
Sample Name	COMP-SP1 S1 & SP1 S2		
Reception Date & Time:	11/10/2024 14:11	**Reception temperature:**	11.6 °C
Analysis Started on:	11/10/2024	**Analysis Ending Date:**	16/10/2024
Sampled Date & Time	02/10/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	0.91	mg/kg	0.05
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.14	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	3.6	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	13.7	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	3.8	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	0.2	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	1.0	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	13	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	02/10/2024	16/10/2024	14	180	Yes
NW504	Cadmium - Total	02/10/2024	16/10/2024	14	180	Yes
NW507	Chromium - Total	02/10/2024	16/10/2024	14	180	Yes
NW509	Copper - Total	02/10/2024	16/10/2024	14	180	Yes
NW511	Lead - Total	02/10/2024	16/10/2024	14	180	Yes
NW515	Mercury - Total	02/10/2024	16/10/2024	14	28	Yes
NW517	Nickel - Total	02/10/2024	16/10/2024	14	180	Yes
NW528	Zinc - Total	02/10/2024	16/10/2024	14	180	Yes

LIST OF METHODS

NU3N7 **Total Petroleum Hydrocarbons (TPH):** Internal Method LTM-ORG-2010, GC-FID

NW0AK **BTEX:** Internal Method, GC-MS

NW499 **Arsenic - Total:** APHA Online Edition 3125 B mod.

NW504 **Cadmium - Total:** APHA Online Edition 3125 B mod.

NW507 **Chromium - Total:** APHA Online Edition 3125 B mod.

NW509 **Copper - Total:** APHA Online Edition 3125 B mod.

NW511 **Lead - Total:** APHA Online Edition 3125 B mod.

NW515 **Mercury - Total:** APHA Online Edition 3125 B mod.

NW517 **Nickel - Total:** APHA Online Edition 3125 B mod.

NW528 **Zinc - Total:** APHA Online Edition 3125 B mod.

NWEBH **PAH BaP TEQ:** Internal Method, GC-MS

Signature

Gabriela Carvalhaes Business Unit Manager - Wellington

EXPLANATORY NOTE

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⑥Test result is provided by the customer and is not accredited
⑦Tested at the sampling point by Eurofins and is not accredited
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✗ (Unsatisfactory) means does not meet the specification
✓ (Satisfactory) means meets the specification
MAV means Maximum Allowable Value

General

1. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
2. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
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4. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
5. Analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
6. Samples were analysed on an 'as received' basis.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).
If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.
Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.
For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.
Holding times are expressed in days.

Units

mg/kg: milligrams per kilogram
µg/L: micrograms per litre
org/100 mL: Organisms per 100 millilitres
CFU: Colony Forming Unit
mg/L: milligrams per litre
ppb: parts per billion
NTU: Nephelometric Turbidity Units
Colour: Pt-Co Units (CU)
ppm: parts per million
%: Percentage
MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
US EPA	United States Environmental Protection Agency

Quality Controls

All test method Quality Controls including method blanks, reference samples, spikes, surrogates and duplicate sample testing have passed and are within the control limits.

END OF REPORT

Environment Testing NZ

ANALYTICAL REPORT

REPORT CODE **AR-24-NU-092389-01** REPORT DATE **05/11/2024**

Attention Haigh Workman Limited
Josh Cuming
6 Fairway Drive
230 Kerikeri
NEW ZEALAND
Phone +642885160190
Email joshcuming@haighworkman.co.nz

Contact for your orders: Radhi Premkumar **Order code:** EUNZAU-00734799
Submission Reference: 71 BROADWAY, 24122

SAMPLE CODE **816-2024-00188969**

Sample Name TP3_0.4
Sample Reference SOIL
Reception Date & Time: 30/10/2024 13:31
Analysis Started on: 30/10/2024 **Analysis Ending Date:** 05/11/2024
Sampled Date & Time 01/08/2024 00:00 **Sampled By** JOSHUA CUMING
Attempt to Chill was evident Yes **Sample correctly preserved** Yes
Appropriate sample containers used Yes

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	6.45	mg/kg	0.05
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.09	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	75.3	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	50.7	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	36.9	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	0.4	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	11.6	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	135	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	01/08/2024	04/11/2024	95	180	Yes
NW504	Cadmium - Total	01/08/2024	05/11/2024	96	180	Yes
NW507	Chromium - Total	01/08/2024	05/11/2024	96	180	Yes
NW509	Copper - Total	01/08/2024	04/11/2024	95	180	Yes
NW511	Lead - Total	01/08/2024	04/11/2024	95	180	Yes
NW515	Mercury - Total	01/08/2024	04/11/2024	95	28	No
NW517	Nickel - Total	01/08/2024	05/11/2024	96	180	Yes
NW528	Zinc - Total	01/08/2024	04/11/2024	95	180	Yes

SAMPLE CODE	816-2024-00201587		
Sample Name	TP7 0.45m		
Sample Reference	SOIL		
Reception Date & Time:	30/10/2024 13:31		
Analysis Started on:	30/10/2024	**Analysis Ending Date:**	05/11/2024
Sampled Date & Time	01/08/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	4.57	mg/kg	0.05
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.06	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	56.3	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	38.5	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	24.2	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	2.1	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	9.1	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	81	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	01/08/2024	04/11/2024	95	180	Yes
NW504	Cadmium - Total	01/08/2024	05/11/2024	96	180	Yes
NW507	Chromium - Total	01/08/2024	05/11/2024	96	180	Yes
NW509	Copper - Total	01/08/2024	04/11/2024	95	180	Yes
NW511	Lead - Total	01/08/2024	04/11/2024	95	180	Yes
NW515	Mercury - Total	01/08/2024	04/11/2024	95	28	No
NW517	Nickel - Total	01/08/2024	05/11/2024	96	180	Yes
NW528	Zinc - Total	01/08/2024	04/11/2024	95	180	Yes

SAMPLE CODE	816-2024-00201589		
Sample Name	TP9 0.3m		
Sample Reference	SOIL		
Reception Date & Time:	30/10/2024 13:31		
Analysis Started on:	30/10/2024	**Analysis Ending Date:**	05/11/2024
Sampled Date & Time	01/08/2024 00:00	**Sampled By**	JOSHUA CUMING
Attempt to Chill was evident	Yes	**Sample correctly preserved**	Yes
Appropriate sample containers used	Yes		

		RESULTS	LOQ
②NW499	**Arsenic - Total**		

		RESULTS		LOQ
②NW499	**Arsenic - Total**			
	Arsenic (As)	5.05	mg/kg	0.05
②NW504	**Cadmium - Total**			
	Cadmium (Cd)	0.06	mg/kg	0.01
②NW507	**Chromium - Total**			
	Chromium (Cr)	73.0	mg/kg	0.2
②NW509	**Copper - Total**			
	Copper (Cu)	47.0	mg/kg	0.3
②NW511	**Lead - Total**			
	Lead (Pb)	32.9	mg/kg	0.1
②NW515	**Mercury - Total**			
	Mercury (Hg)	0.4	mg/kg	0.1
②NW517	**Nickel - Total**			
	Nickel (Ni)	12.0	mg/kg	0.2
②NW528	**Zinc - Total**			
	Zinc (Zn)	100	mg/kg	1

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NW499	Arsenic - Total	01/08/2024	04/11/2024	95	180	Yes
NW504	Cadmium - Total	01/08/2024	05/11/2024	96	180	Yes
NW507	Chromium - Total	01/08/2024	05/11/2024	96	180	Yes
NW509	Copper - Total	01/08/2024	04/11/2024	95	180	Yes
NW511	Lead - Total	01/08/2024	04/11/2024	95	180	Yes
NW515	Mercury - Total	01/08/2024	04/11/2024	95	28	No
NW517	Nickel - Total	01/08/2024	05/11/2024	96	180	Yes
NW528	Zinc - Total	01/08/2024	04/11/2024	95	180	Yes

LIST OF METHODS

NW499	**Arsenic - Total:** APHA Online Edition 3125 B mod.	NW504	**Cadmium - Total:** APHA Online Edition 3125 B mod.
NW507	**Chromium - Total:** APHA Online Edition 3125 B mod.	NW509	**Copper - Total:** APHA Online Edition 3125 B mod.
NW511	**Lead - Total:** APHA Online Edition 3125 B mod.	NW515	**Mercury - Total:** APHA Online Edition 3125 B mod.
NW517	**Nickel - Total:** APHA Online Edition 3125 B mod.	NW528	**Zinc - Total:** APHA Online Edition 3125 B mod.

Signature

Gabriela Carvalhaes Business Unit Manager - Wellington

EXPLANATORY NOTE

① Test is not accredited
② Test is subcontracted within Eurofins group and is accredited
③ Test is subcontracted within Eurofins group and is not accredited
④ Test is subcontracted outside Eurofins group and is accredited
⑤ Test is subcontracted outside Eurofins group and is not accredited
⑥ Test result is provided by the customer and is not accredited
⑦ Tested at the sampling point by Eurofins and is not accredited
⑧ Tested at the sampling point by Eurofins and is accredited
⑨ Test is RLP accredited
⑩ Test is subcontracted within Eurofins group and is RLP accredited

N/A means Not Applicable
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LOQ means Limit of Quantification and the unit of LOQ is the same as the result unit
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Holding times are expressed in days.

Units

mg/kg: milligrams per kilogram
µg/L: micrograms per litre
org/100 mL: Organisms per 100 millilitres
CFU: Colony Forming Unit
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ppb: parts per billion
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%: Percentage
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Terms

APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
US EPA	United States Environmental Protection Agency

Quality Controls

All test method Quality Controls including method blanks, reference samples, spikes, surrogates and duplicate sample testing have passed and are within the control limits.

END OF REPORT

Environment Testing NZ

ANALYTICAL REPORT

REPORT CODE **AR-24-NU-092665-01** REPORT DATE **06/11/2024**

Attention Haigh Workman Limited
Josh Cuming
6 Fairway Drive
230 Kerikeri
NEW ZEALAND
Phone +642885160190
Email joshcuming@haighworkman.co.nz

Contact for your orders: Radhi Premkumar
Submission Reference: 80 WATERFRONT ROAD, 24204
Order code: EUNZAU-00735712
Purchase Order Number: 24204

SAMPLE CODE 816-2024-00252994

Sample Name TP8 0.3
Reception Date & Time: 31/10/2024 17:09
Analysis Started on: 06/11/2024
Analysis Ending Date: 06/11/2024
Sampled Date & Time 02/10/2024 00:00
Sampled By Joshua Cuming
Attempt to Chill was evident Yes
Sample correctly preserved Yes
Appropriate sample containers used Yes

		RESULTS		LOQ
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	1000	mg/kg	20
	TPH-SG C7-C36 (Total)	1000	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	06/11/2024	35	14	No

SAMPLE CODE 816-2024-00252998

Sample Name TP14 0.3
Reception Date & Time: 31/10/2024 17:09
Analysis Started on: 06/11/2024
Analysis Ending Date: 06/11/2024
Sampled Date & Time 02/10/2024 00:00
Sampled By Joshua Cuming
Attempt to Chill was evident Yes
Sample correctly preserved Yes
Appropriate sample containers used Yes

		RESULTS		LOQ
NU3N7	**Total Petroleum Hydrocarbons (TPH)**			
	TPH-SG C10-C14	<10	mg/kg	10
	TPH-SG C15-C36	<20	mg/kg	20
	TPH-SG C7-C36 (Total)	<35	mg/kg	35
	TPH-SG C7-C9	<5	mg/kg	5

HOLDING TIMES

Test		Sampling Date	Holding End	Effective Holding (days)	Requirement (days)	Compliance
NU3N7	Total Petroleum Hydrocarbons (TPH)	02/10/2024	06/11/2024	35	14	No

LIST OF METHODS

NU3N7 **Total Petroleum Hydrocarbons (TPH):** Internal Method LTM-ORG-2010, GC-FID

Signature

Gabriela Carvalhaes Business Unit Manager - Wellington

EXPLANATORY NOTE

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Colour: Pt-Co Units (CU)
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TCLP	Toxicity Characteristic Leaching Procedure
US EPA	United States Environmental Protection Agency

Quality Controls

All test method Quality Controls including method blanks, reference samples, spikes, surrogates and duplicate sample testing have passed and are within the control limits.

The Customer acknowledges and accepts that: (a) where Eurofins is not responsible for sampling, the test result(s) in this report apply only to the sample as received. Customer is solely responsible for the sampling process and warrants that the sample provided to Eurofins is representative of the lot / batch from which the samples were drawn; and (b) Eurofins expresses no opinion and accepts no liability in respect of the Customer's production process or homogeneity of the product.
This document can only be reproduced in full.
The tests are identified by a five-digit code, their description is available on request.
Accreditation does not apply to comments or graphical representations.
Unless otherwise stated, all tests in this analytical report (except for subcontracted tests) are performed at 35 O'Rorke Road, Penrose, Auckland, NEW ZEALAND.
The laboratory is not responsible for the information provided by the customer which can affect the validity of the results, for example: sampling information such as date/time, field data etc.
Eurofins may subcontract the performance of part or all of the Services to a third party and the Customer authorises the release of all information necessary to the third party for the provision of the Services.
All samples become the property of Eurofins to the extent necessary for the performance of the Services.
Eurofins will not be required to store samples and may destroy or otherwise dispose of the samples or return the samples to the Customer (at the Customer's cost in all respects) immediately following analysis of the samples.
If the Customer pays for storage of the samples Eurofins will take commercially reasonable steps to store the samples for the agreed period in terms of industry practice.
The Eurofins water sampling service follows methodology based on AS/NZS 5667 and / or best practice to collect and transport samples that are fit for the purpose of analytical testing. The laboratory is not responsible for sampling activities unless explicitly indicated by the statement "Sampled by Eurofins" on the report for water samples.
The Customer acknowledges that the Services are provided using the current state of technology and methods developed and generally applied by Eurofins and involve analysis, interpretations, consulting work and conclusions. Eurofins shall use commercially reasonable degree of care in providing the Services.
This report is produced and issued on the basis of information, documents and/or samples provided by, or on behalf of, the Customer and solely for the benefit of the Customer who is responsible for acting as it sees fit on the basis of this report. Neither Eurofins nor any of its officers, employees, agents or subcontractors shall be liable to the Customer nor any third party for any actions taken or not taken on the basis of this report nor for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to Eurofins.
Eurofins shall have no liability for any indirect or consequential loss including, without limitation, loss of production, loss of contracts, loss of profits, loss of business or costs incurred from business interruption, loss of opportunity, loss of goodwill or damage to reputation and cost of product recall (including any losses suffered as a result of distribution of the Customer's products subject of the Services prior to the report being released by Eurofins). It shall further have no liability for any loss, damage or expenses arising from the claims of any third party (including, without limitation, product liability claims) that may be incurred by the Customer.
Eurofins General Terms and Conditions apply.

END OF REPORT

eurofins

Environment Testing NZ

For the attention of **Josh Cuming** joshcuming@haighworkman.co.nz	From : Katyana Gausel **EUNZAUSampleReception@eurofins.com** Eurofins Environment Testing NZ Ltd Client Support Service
Company / organisation : **Haigh Workman Limited** 6 Fairway Drive 230 Kerikeri	Date 10/10/2024 Temperature at reception 11.6Â°C

Acknowledgement receipt of samples for analysis

Josh Cuming,
We have received the following sample(s) and we thank you for your order. Please check that all information has been included correctly in the reference, product description of the sample(s) and analyses requested and inform us of any modification. The reference shown here will also appear on the analytical report.
Our order Id EUNZAU-00728821

Our references	Your references		
816-2024-00252910			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252911			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252912			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252913			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024

Eurofins Environment Testing NZ Ltd
PO Box 12545
35 O'Rorke Road
NZ-1642Auckland
NEW ZEALAND

Phone 0800 387 63467
www.eurofins.co.nz
EUNZAUSampleReception@eurofins.com

816-2024-00252914			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252915			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252916			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252917			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252918			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252919			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	

Environment Testing NZ

816-2024-00252920			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252921			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252922			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252923			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252924			
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024
816-2024-00252925	**Sample cancelled**		
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :		11/10/2024

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Environment Testing NZ

816-2024-00252926		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252927		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252928		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252929		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252930		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	
816-2024-00252931		**Sample cancelled**	
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	JOSHUA CUMING
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name)		
	Estimated date of results :	11/10/2024	

Thank you and best regards
Katyana Gausel

Eurofins Environment Testing NZ Ltd
PO Box 12545
35 O'Rorke Road
NZ-1642Auckland
NEW ZEALAND

Phone 0800 387 63467
www.eurofins.co.nz
EUNZAUSampleReception@eurofins.com

Environment Testing NZ

For the attention of **Josh Cuming** joshcuming@haighworkman.co.nz	From : Radhi Premkumar **EUNZAUSampleReception@eurofins.com** Eurofins Environment Testing NZ Ltd Client Support Service
Company / organisation : **Haigh Workman Limited** 6 Fairway Drive 230 Kerikeri	Date 01/11/2024

Acknowledgement receipt of samples for analysis

Josh Cuming,
We have received the following sample(s) and we thank you for your order. Please check that all information has been included correctly in the reference, product description of the sample(s) and analyses requested and inform us of any modification. The reference shown here will also appear on the analytical report.
Your order Id: 24204 of
Our order Id EUNZAU-00735712

Our references	Your references		
816-2024-00252994	TP8 0.3		
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	Joshua Cuming
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name) Quotation nÂ° HASZ1624000935 NU0JN: Chemistry Processing Fee NU3N7: Total Petroleum Hydrocarbons(TPH)_Soil [NZ Enviro]		
	Estimated date of results :	08/11/2024	
816-2024-00252998	TP14 0.3		
Sampled Date & Time	02/10/2024 00:00:00	Sampled By	Joshua Cuming
Attempt to Chill was evident	true	Sample correctly preserved	true
Appropriate sample containers used	true		
	Analyses requested (code+name) Quotation nÂ° HASZ1624000935 NU3N7: Total Petroleum Hydrocarbons(TPH)_Soil [NZ Enviro]		
	Estimated date of results :	08/11/2024	

Thank you and best regards
Radhi Premkumar

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PO Box 12545
35 O'Rorke Road
NZ-1642Auckland
NEW ZEALAND

Phone 0800 387 63467
www.eurofins.co.nz
EUNZAUSampleReception@eurofins.com

Certificate of Analysis

Client	Haigh Workman Ltd
Client Contact	Aaron Thorburn
Phone Number	
Email	aaron@haighworkman.co.nz
Address	Unit 3, 30 Rauiri Drive, Marsden Cove, Whangarei 1180

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

IANZ# 1308

Certificate ID	Q-01126	Date Sampled[2]	02/10/2024
Samples Taken By[2]	Joshua Cuming	Date Sample(s) Received	14/10/2024
Project Reference[2]	24 204	Date Sample(s) Analysed & Issued	14/10/2024
Site Address[2]	80 Waterfront Road		
Location Sample Analysed	Eurofins | Focus Unit C1, 4 Pacific Rise Mount Wellington Auckland 1060		

Lab ID	Sample ID[2]	Sample Details[2]	Sample type	Sample size(g)[2]	Fibres Identified
1	TP3 0.075	-	Soil	284.0	ORF, NAD

Opinions and interpretations expressed herein are outside the scope of Eurofins | Focus IANZ accreditation

Analytical Notes	-

Fibre Identification Key:			
*	See Analytical Notes	**ORF**	Organic Fibre
CHR	Chrysotile (White Asbestos)	**SMF**	Synthetic Mineral Fibre
AMO	Amosite (Brown / Grey Asbestos)	**NFD**	No Fibres Detected
CRO	Crocidolite – (Blue Asbestos)	**NAD**	No Asbestos Detected
UMF	Unknown Mineral Fibre		

Sample Size Guide:	
Sufficient	Sample weight >1 g
Limited	Sample weight between 0.5 g -1 g
Insufficient	Sample weight <0.5 g; small size could misrepresent what is in sampled material. Suggest the client obtain a larger sample.

Analysis Methods:

1. Samples submitted have been analysed to determine the presence of asbestos using stereo microscopy followed by polarised light microscopy (PLM) and dispersion staining (DS) techniques as documented in AS 4964–2004 for Qualitative Identification of Asbestos in Bulk Samples.
2. Eurofins | Focus did not carry out any sampling, and the data presented are based on the samples submitted. Data supplied by the client is indicated with superscript [2] and may impact the results.
3. This certificate should be read in its entirety and shall not be reproduced except in full without written approval of the laboratory.

Methodology

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples by polarised light microscopy (PLM) and dispersion staining (DS) techniques. NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS 4964 – 2004 requires that these are reported as UMF unless confirmed by an independent technique.
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2 mm fraction is greater than approximately 30 g to 60g, then a subsampling routine based on ISO 3082:2009(E) is employed. NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis in accordance with AS 4964 - 2004.
Bonded asbestos containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly combined. The resultant material is then further examined in accordance with AS 4964 - 2004. NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.
Limit of Reporting	The performance limitation of the AS 4964 - 2004 method for non-homogeneous samples is 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered at the nominal reporting limit of 0.01% (w/w). The *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPM) screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly Asbestos Fines (AF), to aid assessment against the NEPM criteria.

Sample History

Where samples are submitted/analysed over several days, the last extraction date is reported. If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time. Client samples are disposed of 3 months after analysis.

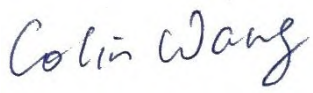
Description	Testing Site	Extracted	Holding Time
AS4964-2004	Auckland	14/10/2024	Indefinite

Eurofins Environment Testing NZ LTD (Trading as Eurofins | Focus)
Unit C1, 4 Pacific Rise Mount Wellington, Auckland 1060
New Zealand
Telephone: +64 9 525 0568

Comments

Asbestos Counter/Identifier:

Colin Wang Senior Analyst-Asbestos



Colin Wang

Senior Analyst-Asbestos (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

Measurement uncertainty of test data is available on request or please click here.

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The Customer acknowledges and accepts that: (a) where Eurofins is not responsible for sampling, the test result(s) in this report apply only to the sample as received. Customer is solely responsible for the sampling process and warrants that the sample provided to Eurofins is representative of the lot / batch from which the samples were drawn; and (b) Eurofins expresses no opinion and accepts no liability in respect of the homogeneity of the product.
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If the Customer pays for storage of the samples Eurofins will take commercially reasonable steps to store the samples for the agreed period in terms of industry practice.
The Customer acknowledges that the Services are provided using the current state of technology and methods developed and generally applied by Eurofins and involve analysis, interpretations, consulting work and conclusions. Eurofins shall use commercially reasonable degree of care in providing the Services.
This report is produced and issued on the basis of information, documents and/or samples provided by, or on behalf of, the Customer and solely for the benefit of the Customer who is responsible for acting as it sees fit on the basis of this report. Neither Eurofins nor any of its officers, employees, agents or subcontractors shall be liable to the Customer nor any third party for any actions taken or not taken on the basis of this report nor for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to Eurofins.
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Eurofins General Terms and Conditions apply

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Unit C1, 4 Pacific Rise Mount Wellington, Auckland 1060
New Zealand
Telephone: +64 9 525 0568

Certificate of Analysis

Client	Haigh Workman Ltd
Client Contact	Aaron Thorburn
Phone Number	
Email	aaron@haighworkman.co.nz
Address	Unit 3, 30 Rauiri Drive, Marsden Cove, Whangarei 1180

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

IANZ# 1308

Certificate ID	Q-01168	Date Sampled[2]	02/10/2024
Samples Taken By[2]	Joshua Cuming	Date Sample(s) Received	01/11/2024
Project Reference[2]	24 204	Date Sample(s) Analysed & Issued	04/11/2024
Site Address[2]	80 Waterfront Road		
Location Sample Analysed	Eurofins | Focus Unit C1, 4 Pacific Rise Mount Wellington Auckland 1060		

Lab ID	Sample ID[2]	Sample Details[2]	Sample type	Sample size(g)[2]	Fibres Identified
1	TP16 0.075	-	Soil	188.5	ORF, NAD

Opinions and interpretations expressed herein are outside the scope of Eurofins | Focus IANZ accreditation

Analytical Notes	-

Fibre Identification Key:			
*	See Analytical Notes	**ORF**	Organic Fibre
CHR	Chrysotile (White Asbestos)	**SMF**	Synthetic Mineral Fibre
AMO	Amosite (Brown / Grey Asbestos)	**NFD**	No Fibres Detected
CRO	Crocidolite – (Blue Asbestos)	**NAD**	No Asbestos Detected
UMF	Unknown Mineral Fibre		

Sample Size Guide:	
Sufficient	Sample weight >1 g
Limited	Sample weight between 0.5 g -1 g
Insufficient	Sample weight <0.5 g; small size could misrepresent what is in sampled material. Suggest the client obtain a larger sample.

Analysis Methods:

1. Samples submitted have been analysed to determine the presence of asbestos using stereo microscopy followed by polarised light microscopy (PLM) and dispersion staining (DS) techniques as documented in AS 4964–2004 for Qualitative Identification of Asbestos in Bulk Samples.
2. Eurofins | Focus did not carry out any sampling, and the data presented are based on the samples submitted. Data supplied by the client is indicated with superscript [2] and may impact the results.
3. This certificate should be read in its entirety and shall not be reproduced except in full without written approval of the laboratory.

Methodology

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples by polarised light microscopy (PLM) and dispersion staining (DS) techniques. NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS 4964 – 2004 requires that these are reported as UMF unless confirmed by an independent technique.
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2 mm fraction is greater than approximately 30 g to 60g, then a subsampling routine based on ISO 3082:2009(E) is employed. NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis in accordance with AS 4964 - 2004.
Bonded asbestos containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly combined. The resultant material is then further examined in accordance with AS 4964 - 2004. NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.
Limit of Reporting	The performance limitation of the AS 4964 - 2004 method for non-homogeneous samples is 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered at the nominal reporting limit of 0.01% (w/w). The *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPM) screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly Asbestos Fines (AF), to aid assessment against the NEPM criteria.

Sample History

Where samples are submitted/analysed over several days, the last extraction date is reported. If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time. Client samples are disposed of 3 months after analysis.

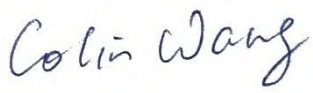
Description	Testing Site	Extracted	Holding Time
AS4964-2004	Auckland	04/11/2024	Indefinite

Eurofins Environment Testing NZ LTD (Trading as Eurofins | Focus)
Unit C1, 4 Pacific Rise Mount Wellington, Auckland 1060
New Zealand
Telephone: +64 9 525 0568

Comments

Asbestos Counter/Identifier:

Colin Wang Senior Analyst-Asbestos



Colin Wang

Senior Analyst-Asbestos (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

Measurement uncertainty of test data is available on request or please click here.

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The Customer acknowledges that the Services are provided using the current state of technology and methods developed and generally applied by Eurofins and involve analysis, interpretations, consulting work and conclusions. Eurofins shall use commercially reasonable degree of care in providing the Services.
This report is produced and issued on the basis of information, documents and/or samples provided by, or on behalf of, the Customer and solely for the benefit of the Customer who is responsible for acting as it sees fit on the basis of this report. Neither Eurofins nor any of its officers, employees, agents or subcontractors shall be liable to the Customer nor any third party for any actions taken or not taken on the basis of this report nor for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to Eurofins.
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Unit C1, 4 Pacific Rise Mount Wellington, Auckland 1060
New Zealand
Telephone: +64 9 525 0568

Certificate of Analysis

Client	Haigh Workman Ltd
Client Contact	Aaron Thorburn
Phone Number	
Email	aaron@haighworkman.co.nz
Address	Unit 3, 30 Rauiri Drive, Marsden Cove, Whangarei 1180

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

IANZ# 1308

Certificate ID	S-20501	Date Sampled[2]	02/10/2024
Samples Taken By[2]	Joshua Cuming	Date Sample(s) Received	14/10/2024
Project Reference[2]	24 204	Date Sample(s) Analysed & Issued	14/10/2024
Site Address[2]	80 Waterfront Road		
Location Sample Analysed	Eurofins | Focus Unit C1, 4 Pacific Rise Mount Wellington Auckland 1060		

Lab ID	Sample ID[2]	Sample Details[2]	Sample type	Sample size[2]	Fibres Identified
1	1	Suspected ACM 1	Cement Product	Sufficient	**AMO**, **CHR**, ORF

Opinions and interpretations expressed herein are outside the scope of Eurofins | Focus IANZ accreditation

Analytical Notes	-

Fibre Identification Key:			
*	See Analytical Notes	**ORF**	Organic Fibre
CHR	Chrysotile (White Asbestos)	**SMF**	Synthetic Mineral Fibre
AMO	Amosite (Brown / Grey Asbestos)	**NFD**	No Fibres Detected
CRO	Crocidolite – (Blue Asbestos)	**NAD**	No Asbestos Detected
UMF	Unknown Mineral Fibre		

Sample Size Guide:	
Sufficient	Sample weight >1 g
Limited	Sample weight between 0.5 g -1 g
Insufficient	Sample weight <0.5 g; small size could misrepresent what is in sampled material. Suggest the client obtain a larger sample.

Analysis Methods:	
1.	Samples submitted have been analysed to determine the presence of asbestos using stereo microscopy followed by polarised light microscopy (PLM) and dispersion staining (DS) techniques as documented in AS 4964–2004 for Qualitative Identification of Asbestos in Bulk Samples.
2.	Eurofins | Focus did not carry out any sampling, and the data presented are based on the samples submitted. Data supplied by the client is indicated with superscript [2] and may impact the results.
3.	This certificate should be read in its entirety and shall not be reproduced except in full without written approval of the laboratory.

Methodology

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples by polarised light microscopy (PLM) and dispersion staining (DS) techniques. NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS 4964 – 2004 requires that these are reported as UMF unless confirmed by an independent technique.
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2 mm fraction is greater than approximately 30 g to 60g, then a subsampling routine based on ISO 3082:2009(E) is employed. NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis in accordance with AS 4964 - 2004.
Bonded asbestos containing material (ACM)	The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly combined. The resultant material is then further examined in accordance with AS 4964 - 2004. NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.
Limit of Reporting	The performance limitation of the AS 4964 - 2004 method for non-homogeneous samples is 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered at the nominal reporting limit of 0.01% (w/w). The *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPM) screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly Asbestos Fines (AF), to aid assessment against the NEPM criteria.

Sample History

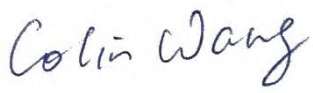
Where samples are submitted/analysed over several days, the last extraction date is reported. If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time. Client samples are disposed of 3 months after analysis.

Description	Testing Site	Extracted	Holding Time
AS4964-2004	Auckland	14/10/2024	Indefinite

Comments

Asbestos Counter/Identifier:

Elsie Xu Analyst-Asbestos



Colin Wang

Senior Analyst-Asbestos (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

Measurement uncertainty of test data is available on request or please click here.

This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

The Customer acknowledges and accepts that: (a) where Eurofins is not responsible for sampling, the test result(s) in this report apply only to the sample as received. Customer is solely responsible for the sampling process and warrants that the sample provided to Eurofins is representative of the lot / batch from which the samples were drawn; and (b) Eurofins expresses no opinion and accepts no liability in respect of the homogeneity of the product.
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New Zealand
Telephone: +64 9 525 0568

unlocking the past
ASL Archaeology Solutions Ltd, PO Box 48134, Blockhouse Bay, Auckland 0644
Phone/Fax: 09 6267860
Email: info@archaeologysolutions.co.nz
Web: www.archaeologysolutions.co.nz

3. February 2020

Bay Planning Ltd
Kerikeri
via e-mail
Attn.: Rochelle Braithwaite

3960 SH1, Houhora, Troy and Billie Denison property

The author has undertaken an archaeological site visit and survey of the property on 3960 SH1 on 22nd January 2020.

Three archaeological sites were recorded on the property.

Two of them, N03/149 and 151 could not be relocated despite reasonable accurate location description on the site records.

The third site, N03/139 has been relocated and the previous location description is accurate, but it is not on the above mentioned property but on the seaward side of Waterfront Road, opposite #74.

The earthworks on the building site were surveyed and no archaeological features were found. A few shells might relate to modern activities on the property as the shells were not burnt and had no midden rakeout associated with it. Long term local residents relate the hearsay that shell was made into fertiliser for farming on this site during the 20th century. The shell found on site would be consistent with this narrative.

No archaeological features were observed on the property.

It is recommended to continue with the development as planned.

The updated site records for all three recorded sites are attached.

Kind regards,

Dr. Hans-Dieter Bader

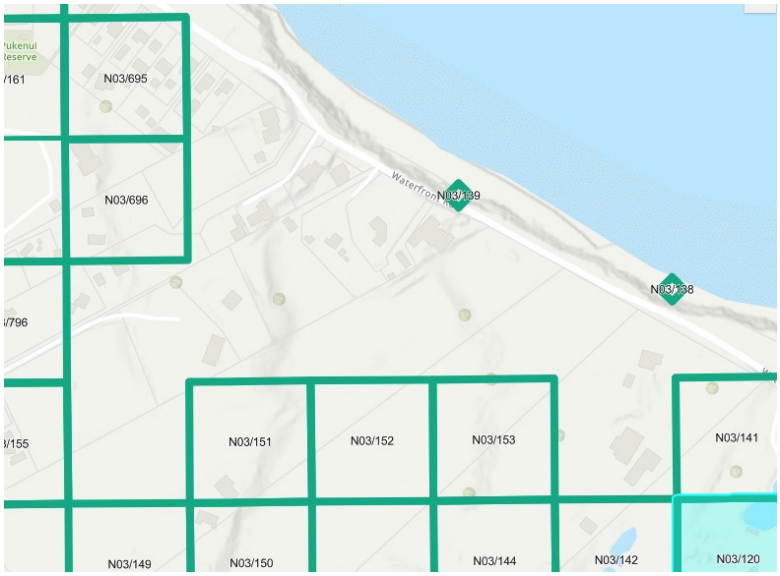
Figure 1: The property and the observed archaeological site along the cliff edge on the seaward side of Waterfront Road.

Alex Billot

From: Stuart Bracey <SBracey@heritage.org.nz>
Sent: Tuesday, 23 September 2025 12:13 pm
To: Alex Billot
Cc: Jan Danilo
Subject: RE: Request for comments - 80 Waterfront Road, Pukenui
Attachments: Heritage New Zealand Northland ADP modified 081018.pdf

Hi Alex,
HNZPT has reviewed this development proposal and advises as follows;
Based on the previous development on this site and the archaeological assessment carried out at that time, an advice note in relation to an Accidental Discovery Protocol will be sufficient in this situation (see attached ADP).

Cheers,
Stuart



Stuart Bracey I Kaiwhakamāhere I Heritage Planner I Northern Region I Heritage New Zealand Pouhere Taonga **I** L10 SAP Tower 151 Queen Street Auckland CBD **I** Private Box 105 291 Auckland City 1143 **I** mobile 027 684 0833 **I** visit www.heritage.org.nz and learn more about NZ's heritage places.

Tairangahia a tua whakarere; Tatakihia nga reanga o amuri ake nei – Honouring the past; Inspiring the future

---

From: Alex Billot <Alex@northplanner.co.nz>
Sent: Monday, 22 September 2025 12:00 pm
To: Stuart Bracey <SBracey@heritage.org.nz>
Subject: RE: Request for comments - 80 Waterfront Road, Pukenui

Hi Stuart,

Any update on this one – we are hoping to lodge this week.

Thanks.

Kind regards,

NORTHLAND
PLANNING & DEVELOPMENT

Alex Billot
Resource Planner

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

My office hours are Monday, Tuesday, Thursday & Friday 9am – 2pm.

From: Stuart Bracey <SBracey@heritage.org.nz>
Sent: Tuesday, 16 September 2025 11:52 am
To: Alex Billot <Alex@northplanner.co.nz>
Subject: RE: Request for comments - 80 Waterfront Road, Pukenui

Hi Alex,
I am just following this up – I will get back to you shortly,

Cheers,
Stuart

Stuart Bracey I Kaiwhakamāhere I Heritage Planner I Northern Region I Heritage New Zealand Pouhere Taonga **I** L10 SAP Tower 151 Queen Street Auckland CBD **I** Private Box 105 291 Auckland City 1143 **I** mobile 027 684 0833 **I** visit www.heritage.org.nz and learn more about NZ's heritage places.

Tairangahia a tua whakarere; Tatakihia nga reanga o amuri ake nei – Honouring the past; Inspiring the future

From: Alex Billot <Alex@northplanner.co.nz>
Sent: Monday, 15 September 2025 9:39 am
To: Stuart Bracey <SBracey@heritage.org.nz>
Subject: FW: Request for comments - 80 Waterfront Road, Pukenui

Morena Stuart,

We are hoping to lodge this consent in the coming weeks and have just realised we did not receive a response from HNZPT last year when the email was sent through (see below email trail).
Would you please be able to have a look into this one for me and let me know HNZPT comments on the proposal.

If you need any further information, just let me know.

Thanks.

Kind regards,

NORTHLAND
PLANNING & DEVELOPMENT

Alex Billot
Resource Planner

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

My office hours are Monday, Tuesday, Thursday & Friday 9am – 2pm.

From: Alex Billot
Sent: Monday, 16 September 2024 1:36 pm
To: James Robinson <jrobinson@heritage.org.nz>; Bill Edwards <BEdwards@heritage.org.nz>
Cc: 'Alice Morris' <AMorris@heritage.org.nz>
Subject: Request for comments - 80 Waterfront Road, Pukenui

Tēnā koutou,

We have been engaged by our clients to complete the subdivision application at 80 Waterfront Road, Pukenui.

The proposal is to undertake a subdivision of the site to create one additional allotment.
Lot 1 has an existing dwelling on the site, which landuse resource consent was issued for the dwelling in 2020 under RC2200318. As part of this landuse consent application, Heritage NZ requested an Archaeological Site Damage Assessment which was provided in February 2020, where it was concluded that there are no other archaeological sites within the development area for the dwelling on Lot 1 and from the archaeology recorded, only one could be located. An ADP was issued on the decision document.

Lot 2 will also contain existing development.

I have attached the scheme plan and the previous Archaeological Assessment completed by ASL Archaeology Solutions dated 2020.

If you could please provide feedback on the proposal, that would be greatly appreciated.

If you require any further information, please do not hesitate to contact me.

Kind regards,

NORTHLAND
PLANNING & DEVELOPMENT

Alex Billot
Resource Planner

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

My office hours are Monday, Thursday & Friday 9am – 2pm.

Alex Billot

From: Alex Billot
Sent: Friday, 6 December 2024 1:37 pm
To: Te Hono Support
Subject: Proposed subdivisions - Pukenui

Kia ora,

We are preparing two subdivision applications in Pukenui (one down Waterfront Road and one down Houhora Heads Road).
Can you please assist with advising who the Iwi contacts are for this rohe so we can consult with them prior to lodgement of the applications?

Thanks in advance.

Kind regards,

NORTHLAND
PLANNING & DEVELOPMENT

Alex Billot
Resource Planner

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

My office hours are Monday, Thursday & Friday 9am – 2pm.

Top Energy Limited
Level 2, John Butler Centre
60 Kerikeri Road
P O Box 43
Kerikeri 0245
New Zealand
PH +64 (0)9 401 5440
FAX +64 (0)9 407 0611

18 September 2024

Alex Billot
Northland Planning & Development 2020 Ltd

Email: info@northplanner.co.nz

To Whom It May Concern:

RE: PROPOSED SUBDIVISION
B Denison – 80 Waterfront Road, Pukenui. Lot 1 DP 350647.

Thank you for your recent correspondence with attached proposed subdivision scheme plans.

Top Energy's requirement for this subdivision is nil.
Design and costs to provide a power supply could be provided after application and an on-site survey have been completed.
Link to application: Top Energy | Top Energy

In order to get a letter from Top Energy upon completion of your subdivision, a copy of the resource consent decision must be provided.

Yours sincerely

Aaron Birt
Planning and Design
T: 09 407 0685
E: aaron.birt@topenergy.co.nz

Northland Planning Development

From: Chorus Property Development Do Not Reply <npdnoreply@chorus.co.nz>
Sent: Tuesday, 17 September 2024 3:59 pm
To: npdnoreply@chorus.co.nz
Subject: Chorus 10986278 : We can service your development

Hi

Your reference: Dension subdivision Pukenui
Development address: 80 Waterfront Road, Pukenui, Far North District, 0484

This email is to confirm that Chorus can provide our fibre network to your development. An indicative cost for the work we would need to do (noting that this excludes costs for any work you may be required to do inside the site boundary) is presented in the below notes:

A high level estimate to extend our fibre network to your development is $85,000 Incl. GST.

Please note: The communications technology available to serve customers in our rural areas is rapidly changing. Copper is no longer the only option for customers, and is in some cases, not the best option. New Zealand runs on fibre, and the UFB roll-out has gone past 87 per cent of Kiwis. We would like to extend fibre further to enable more Kiwis to receive the best technology available. We will not be investing in extending the copper network further.

If you would like this formalised into a quote, then please log in to your account and let us know. If you need to amend the connection numbers or provide updated plans, you can also do that via your account.

Chorus New Property Development Team

Please do not reply to this email as this inbox is not monitored. For any follow up queries please visit www.chorus.co.nz/develop-with-chorus or log in to your account. If you do not yet have an account with us, you will need to create an account to view your job progress and documentation.

Northland Planning Development

From: Charlotte Niederer <Charlotte.Niederer@nzta.govt.nz>
Sent: Monday, 11 November 2024 11:53 am
To: Northland Planning Development
Subject: RE: 80 Waterfront Road, Pukenui - Application-2024-1236 CRM:0487000032

Hi Alex,

As the lots will not have direct vehicle access onto the state highway and they will be accessed via Waterbridge Road (paper road vested in Council) then the decision of whether Waterfront Road should be upgraded in some form falls with the Council. I note that it appears Rule 15.1.6C.1.8 (below) would apply to the subdivision of the site.

I did circulate the proposal to our Network Manager and Safety Engineer anyway and they reiterated that unless the Council identify NZTA as an affected party then we have no input into the process. However, if we are able to influence the outcome, our preference would be for the paper road to be sealed where it meets/intersects with the state highway (something as simple as a NZTA Diagram C type access point would be sufficient).

15.1.6C.1.8 FRONTAGE TO EXISTING ROADS

(a) Where any proposed subdivision has frontage to a road or roads that do not meet the legal road width standards specified by the Council in its *"Engineering Standards and Guidelines" (June 2004 – Revised 2009)*, road widening shall be vested in the name of the Council.

(b) Where any proposed subdivision has frontage to a road or roads that are not constructed to the standards specified by the Council in its *"Engineering Standards and Guidelines" (June 2004 – Revised 2009)*, then the applicant shall complete the required improvements.

(c) Where a site has more than one road frontage or frontage to a service lane or right-of-way (ROW) in addition to a road frontage, access to the site shall be in a place that:

(i) facilitates passing traffic, entering and exiting traffic, pedestrian traffic and the intended use of the site;

(ii) is from the road or service lane or ROW that carries the lesser volume of traffic.

(d) Where any proposed subdivision has frontage to a road on which the carriageway encroaches, or is close to the subject lot or lots, the encroachment or land shall vest in Council such that either the minimum berm width between the kerb or road edge and the boundary is 2m or the boundary is at least 6m from the centreline of the road whichever is the greater.

Regards,

Charlotte Niederer (she/her)

Intermediate Planner

Poutiaki Taiao | Environmental Planning, Te Toki Tārai - System Design

Email: charlotte.niederer@nzta.govt.nz
Cell: 021 242 0132
NZ Transport Agency Waka Kotahi
Christchurch, Level 1, BNZ Centre,
120 Hereford Street

PO Box 1479, Christchurch 8022, New Zealand
Facebook | Twitter | LinkedIn

WAKA KOTAHI NZ TRANSPORT AGENCY www.nzta.govt.nz

---------- Original Message ----------
From: Alex Billot <info@northplanner.co.nz>;
Received: Mon Oct 21 2024 09:15:17 GMT+1300 (New Zealand Daylight Time)
To: Charlotte Niederer <charlotte.niederer@nzta.govt.nz>;
Subject: RE: 80 Waterfront Road, Pukenui - Application-2024-1236 CRM:0487000032

Hi Charlotte,

There is nothing registered on the title from what I can see.
I have attached an image of the title below and the registered consent notice 6624741.1 is attached to this email, which only references gates (a) and (b), which do not affect the subject site.

Kind regards,

Alex Billot
Resource Planner

My office hours are Monday, Thursday & Friday 9am – 2pm

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

From: Charlotte Niederer <Charlotte.Niederer@nzta.govt.nz>
Sent: Friday, 18 October 2024 4:18 pm
To: Northland Planning Development <info@northplanner.co.nz>
Subject: RE: 80 Waterfront Road, Pukenui - Application-2024-1236 CRM:0487000032

Hi Alex,

Thank you for this additional information.

I'm just after one point of clarification, please. I can see that existing Lot 3 DP 350647 has the consent notice restricting the use of gates a and b, but are there any consent notices (or other restrictions) preventing the application site and adjoining Lot 2 DP 350647 from currently gaining access onto the paper road/informal section of Waterfront Road?

Thanks,

Charlotte Niederer (she/her)
Intermediate Planner

Poutiaki Taiao | Environmental Planning, Te Toki Tārai - System Design
Email: charlotte.niederer@nzta.govt.nz
Cell: 021 242 0132
NZ Transport Agency Waka Kotahi
Christchurch, Level 1, BNZ Centre,
120 Hereford Street
PO Box 1479, Christchurch 8022, New Zealand
Facebook | Twitter | LinkedIn

From: Northland Planning Development <info@northplanner.co.nz>
Sent: Thursday, October 10, 2024 1:38 PM
To: Charlotte Niederer <Charlotte.Niederer@nzta.govt.nz>
Subject: RE: 80 Waterfront Road, Pukenui - Application-2024-1236 CRM:0487000032

Hi Charlotte,

Thanks for your email.

To answer your questions:

-
  - The informal section of Waterfront Road along the boundary of Lot 2, is a paper road and is of metalled formation. It is not sign posted as a road.
  - ROW A from Waterfront Road to Lot 2, is to enable access to the north-eastern portion of a Lot 2. Due to the site's topography, access to the southern portion of Lot 2 is difficult from Waterfront Road due to a steep hill. Therefore access to the dwelling on Lot 2 is from the unformed paper road along the southern boundary of the lot.
  - In regards to use of the neighbouring lots and their use of the paper road - there is a consent notice registered on the titles which states the following:

-
  - It is not proposed that the paper road is sealed. A consent notice condition will be offered as part of the application stating that Council has no responsibility for the upkeep and maintenance of the paper road. It is proposed to remain in its current state.
  - A subdivision was completed on the opposite side of State Highway 1, where there is a large metalled area between the road carriageway and the site boundary, used for a pullover bay. It was noted on the NZTA written approval (NZTA ref: 2021-2232), that *'there is an existing turn around area in between the site and the state highway carriageway, there is no expectation for the applicant to undertake works or upgrades in this area.'* No sealing beyond the site boundary was required. I have attached the previous NZTA written approval for the subdivision on the opposite

side of the State Highway, for your reference. It is considered that this situation is similar to the subject proposal, where there is an existing metalled paper road which is not proposed to be upgraded. As Proposed Lot 2 does not access directly from the State Highway, no upgrade of the crossing place into the site is considered necessary. As the adjoining Lots 2 & 3 have strictly restricted use for cattle and farm machinery as well movement of the mussel farm equipment, it is considered that use of the access to the paper road from the State Highway is minimal, with only Lot 2 having residential access. As such, it is considered that effects from this proposal will be less than minor on the roading network, with no upgrading of the paper road or sealing required.

Kind regards,

Alex Billot
Resource Planner

My office hours are Monday, Thursday & Friday 9am – 2pm

Offices in Kaitaia & Kerikeri
09 408 1866
Northland Planning & Development 2020 Limited

From: Charlotte Niederer <Charlotte.Niederer@nzta.govt.nz>
Sent: Thursday, 3 October 2024 6:20 pm
To: Northland Planning Development <info@northplanner.co.nz>
Subject: 80 Waterfront Road, Pukenui - Application-2024-1236 CRM:0487000032

Hi Alex,

I am the planner at NZTA that has been allocated this application.

Prior to me sending through the application to our safety engineer and network manager for comment could you please provide more information about the informal section of Waterfront Road/the SH1 access along the southern boundary of the application site, please? Based on the information available to me it appears to be a paper road (it is only partly formed and is not sign posted as road).

Additionally, I note that the proposed scheme plan provides for Right of Way access for proposed Lot 2 via proposed Lot 1. Is the intention therefore to close/prevent access onto SH1 via Waterfront Road to the south and for a consent notice to be proposed preventing access along this boundary? What is also the intention with the other adjoining properties to the southeast of the application that also appear to use the paper road? I know these properties are not subject to the application but i am just trying to gain a better understanding of the paper roads use and the intentions here on in.

If access to the paper road is still proposed, my initial thoughts are that we would require an upgrade, including sealing of the road where it connects with the SH1 carriageway.

Regards,

Charlotte Niederer (she/her)
Intermediate Planner

Poutiaki Taiao | Environmental Planning, Te Toki Tārai - System Design
Email: charlotte.niederer@nzta.govt.nz
Cell: 021 242 0132
NZ Transport Agency Waka Kotahi
Christchurch, Level 1, BNZ Centre,
120 Hereford Street
PO Box 1479, Christchurch 8022, New Zealand
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