

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 | ☐ Discharge |
| ☐ Fast Track Land Use* | ☐ Change of Consent Notice (s.221(3)) |
| ☒ Subdivision | ☐ Extension of time (s.125) |
| ☐ Consent under National Environmental Standard
(e.g. Assessing and Managing Contaminants in Soil) | |
| ☐ Other (please specify) _____ | |

*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?

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:

Kaparo Orchard Ltd.

Email:

Phone number:

Postal address:

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

6. Address for Correspondence

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

Name/s:

Email:

Phone number:

Work

Home

Postal address:

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

Postcode

* 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:

Kaparo Orchard Ltd.

Property Address/
Location:

71 Orchard Road
Keirikeri

Postcode 2035

8. Application Site Details

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

Name/s:

Site Address/
Location:

as above.

Postcode

Legal Description:

Val Number:

Certificate of title:

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 James Baxter 021 307 376
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.

To undertake a Non-Complying subdivision in the Rural Production zone.

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

☐ Regional Council Consent (ref # if known)

☐ National Environmental Standard consent

☐ Other (please specify)

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)

Kapito Orchard Ltd

Email:

Phone number:

Postal address:

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

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)

James D. Baxter

Signature:

(signature of bill payer)

[Redacted Signature]

Date 19/8/2025

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)

Rochelle Jacobs

Signature:

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

Date 21/10/25

Checklist (please tick if information is provided)

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

Subdivision Resource Consent Proposal

Kapiro Orchard Limited

71 Orchard Road, Kerikeri

21 October 2025

Attention: Liz Searle & Whitney Peat

Please find attached:

- an application form for a Subdivision Consent in the Rural Production Zone to create one additional allotment and;
- an application to cancel consent notice conditions under s221(3);
- an Assessment of Environmental Effects indicating the potential and actual effects of the proposals on the environment.

The proposed subdivision application has been assessed as a **Non-Complying Activity** under the Far North Operative District Plan and **Permitted** under the Proposed District Plan.

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

A Concept Development Meeting (CDM) was held with FNDC Intermediate Resource Planner Salamasina Brown and Engineer Ishan Koshatwar regarding the proposal. The CDM minutes are attached within **Appendix 7** of this application. The overall conclusion was that the application could be supported if a robust assessment was provided examining the surrounding environment and addressing engineering matters within the report. These have been provided for in the below application.

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

Regards,

Alex Billot



Resource Planner

Reviewed by:

Rochelle Jacobs



Director/Senior Planner

NORTHLAND PLANNING & DEVELOPMENT 2020 LIMITED



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Attachments

1. FNDC Application Signed
2. Certificate of Title – LINZ
3. Consent Notices and Easement Documents – LINZ
4. Subdivision Plan – Donaldsons Surveyors
5. Engineering Assessment – Haigh Workman
6. Correspondence – Heritage NZ
7. CDM Notes – FNDC
8. EBC-2024-1065 Approved Fire Fighting water supply – FNDC
9. EBC-2024-1065 Approved Geotechnical Investigation report – FNDC
10. EBC-2024-1065 Approved PSI – FNDC
11. EBC-2024-1065 Approved Onsite Wastewater System – FNDC
12. Easement 11346721.10 - LINZ



Assessment of Environment Effects Report

1.0 DESCRIPTION OF THE PROPOSED ACTIVITY

Subdivision

- 1.1 The proposal seeks to subdivide the site to create one additional allotment. The property is located at 71 Orchard Road, Kerikeri and is legally described as Lot 2 DP 540914. The title also includes a 1/11th share of Lot 12 DP 95612, which is located over 500 metres to the southwest of the site. Lot 12 DP 95612 contains an irrigation pond which serviced the parent titles. The 1/11th share will be split between the two proposed allotments.

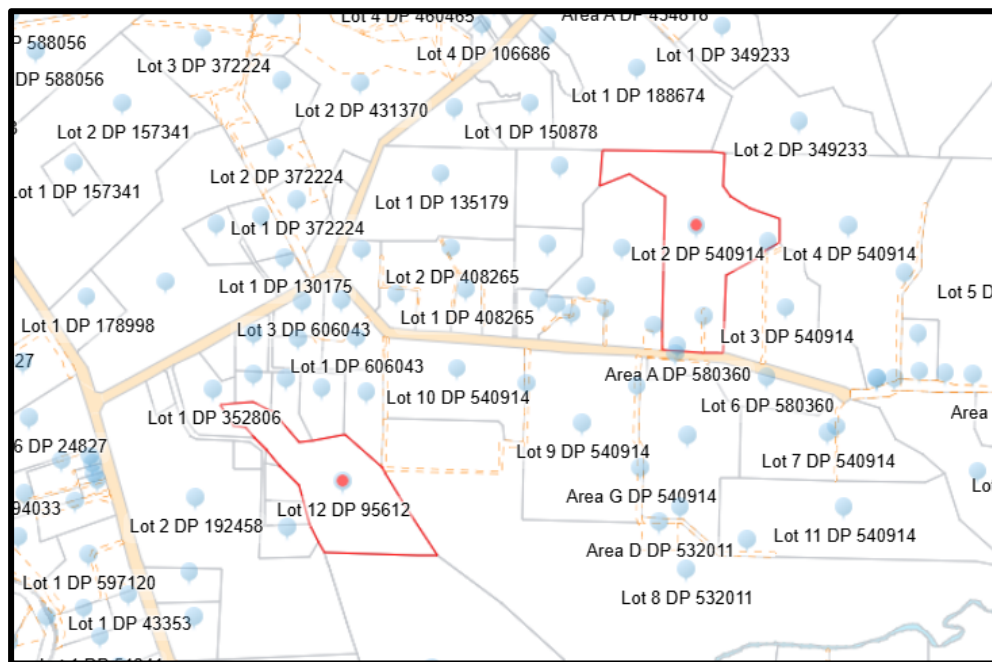


Figure 1: Locality plan showing allotments held within the subject title.

- 1.2 The proposed lot sizes are as follows:
- Lot 1 – 2.20ha – vacant site
 - Lot 2 – 4.06ha – to contain the existing dwelling
- 1.3 The site is zoned Rural Production, and the title is dated post 2000 (title date is 29th January 2020) and therefore will be assessed as a **Non-Complying Activity**.



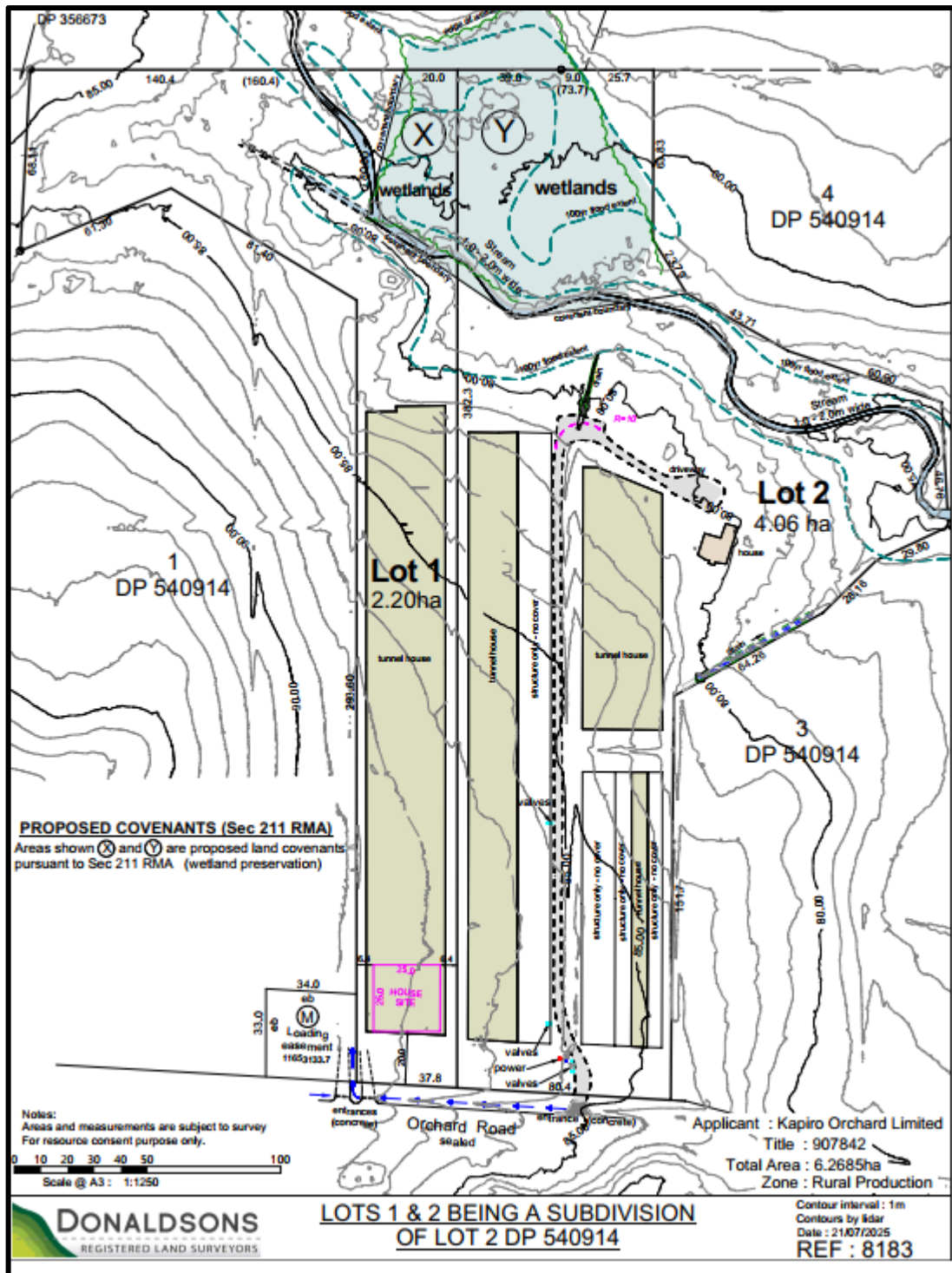


Figure 2: Proposed scheme plan.

Cancellation of Consent Notice Conditions

- 1.4 The Title for the subject site records three consent notice documents on the title under 8742435.2, 11346721.3 and 11653133.2. Application is sought to cancel the consent notice conditions within the registered documents as they affect land within Lot 2 DP 540914 on Record of Title 907842 pursuant to s221(3).



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

2.0 SITE DESCRIPTION

- 2.1 The property is located at 17 Orchard Road, Kerikeri. The property is an irregular shape, with Orchard Road bordering the southern boundary of the site and all other boundaries adjoining privately owned land. Access to the site is via two vehicle crossings from Orchard Road. One crossing is located within the southwestern corner of the site, with the other located further east. There is an existing consented dwelling located within the easternmost portion of the site which is accessed via the easternmost crossing and then via an existing metalled driveway which runs through the middle of the site.



Figure 3 - Existing dwelling

- 2.2 The southern portion of the site contains tunnel houses which are utilised to produce kiwifruit pollen and kiwifruit. These are depicted on the scheme plan. The northern portion of the site consists of a stream, small wetland areas and native bush. The wetland and the surrounding areas of native vegetation are proposed to be formally set aside for protection by way of land covenant. The stream has an average width of less than 2 metres and is surrounded by a mix of scrubby bush and weeds.
- 2.3 The surrounding environment consists of a mix of allotments. Some allotments contain just horticulture activities, with smaller allotments containing a residential dwelling, and some

allotments contain a mix of both. Further north of the site is land utilised for farming purposes. The immediate environment consists of horticulture blocks of 3 to 7 hectares, with smaller lots of less than a hectare also being prominent in the area. The area is therefore considered to be a mix of rural-residential and rural-lifestyle allotments, with a mix of activities occurring throughout.

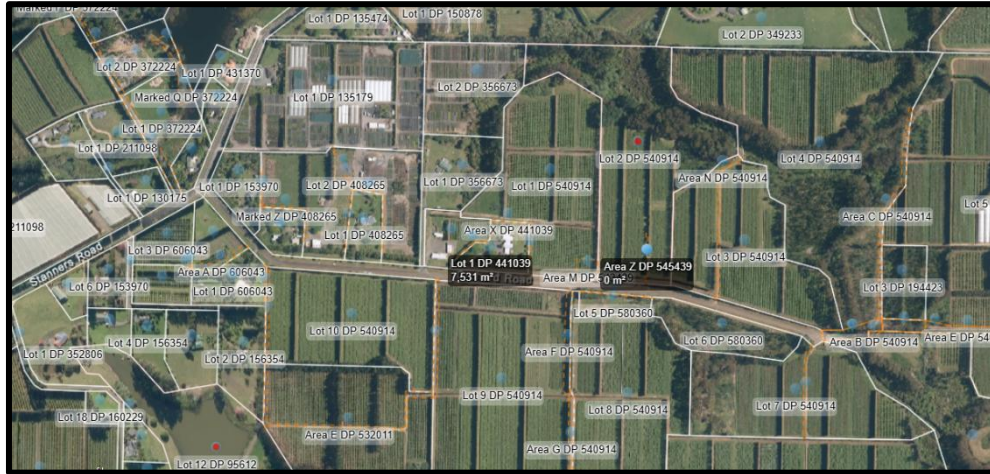


Figure 4: Aerial image of the site and surrounding environment.

Title

- 2.4 The subject site is legally described as Lot 2 DP 540914 and is held within Record of Title 907842 with a land area of 6.2685 hectares. The title is dated 29th January 2020. As mentioned, the title also includes a 1/11th share of Lot 12 DP95612, which has a total land area of 4.9184 hectares.
- 2.5 The title has multiple interests registered which will be discussed below.

Easement Certificate D438647.1 - Surrender Document 11653133.4

- 2.6 Document 11653133.4 was created for the partial surrender of easement D438647.1. This easement included the Area Marked Z on Deposited Plan 54539 on Lot 2 DP540914 (RT907842), where the benefited land was Lot 2 DP540914 (subject site).

Easement Instrument 11346721.10

- 2.7 This easement instrument provides rights to convey water over area G on DP532011 which was located within Lot 1 DP532011. The subject site has underlying rights to convey water over this area.

Easement Instrument 11653133.7

- 2.8 This easement instrument included the creation of Area Marked 'M' on Deposited Plan 543489, where Lot 1 DP 540914 is the burdened land and Lots 2 (subject site), 3, 8 and 10 DP 540914 are the benefited land. The purpose of the easement is for right of way (loading) and will be brought forward onto the new titles as shown on the proposed scheme plan.



2.9 This consent notice document was registered on 18th April 2011 and included provisions for the parent title. This consent notice was created as part of RC 2100355 which included the subdivision of Lot 1 DP 188982 to create two allotments (Lots 1 & 2 DP 441039). The subject site partially included Lot 2 DP 441039 at the time of this consent notice document and therefore conditions relating to Lot 2 DP 441039 are considered relevant to the subject site.



2.10 This consent notice document includes three conditions which are listed below:

i) That upon construction of any habitable building it shall have a roof water collection system with a minimum tank storage of 45,000 litres. The tank(s) shall be positioned so that they are accessible (safely) for fire fighting purposes and fitted with an outlet compatible with rural fire service equipment. Where more than one tank is utilised they shall be coupled together and at least one tank fitted with an outlet compatible with rural fire service equipment. Alternatively, the dwelling can be fitted with a sprinkler system approved by Council.

- ii) The operation of agricultural and horticultural equipment including sprays and chemicals (subject to compliance with any relevant legislation) may be a permitted activity. Accordingly, where rainwater is collected from exposed surfaces for human consumption in connection with any residential development, the occupiers of any such dwelling shall install an approved water filtration system.
- iii) The hedge shown as areas X, Y & Z on the survey plan for RC 2100355 is not to be cut down or removed without the approval of Council.

2.11 Condition (i) relates to habitable buildings and water storage. No new buildings are proposed as part of this application. Condition (ii) relates to rainwater harvesting. No new dwellings which would require the collection of rainwater are proposed as part of this application. Condition (iii) relates to an area of hedge which does not affect the subject site as it surrounds Lot 1 DP 4410396 which does not adjoin the subject site. These consent notice conditions are

proposed to be cancelled insofar as they affect the subject site, given that the subject site only partially includes land which formed Lot 2 DP 441039 and the site has been subdivided further. All relevant consent notices will be brought forward on to the new titles under a fresh new consent notice document.

Consent Notice 11346721.3

- 2.12 This consent notice document was created on 25th March 2019 as a result of RC 2190159 and the subsequent variation. The subject site was partially held with Lot 11 DP 532011 and Pt Lot 3 DP 95609 as a result of this subdivision. Therefore, consent notices relating to Lot 11 DP 532011 are considered relevant to the subject site.
- 2.13 Condition (i) advises that the lot has been identified as land that will be potentially covered by the NESCS. Given the land was to remain as production land, the NESCS was not addressed at the time of subdivision, and the lot owner will be responsible to address the NESCS regulations upon development. The proposed subdivision is similar in nature to the previous subdivision, and a similar condition is again offered as part of this application.
- 2.14 Condition (ii) is not applicable to the subject site. Condition (iii) relates to obtaining a TP58 at the time of development which requires onsite wastewater. No new systems are proposed as part of this application. Condition (iv) is an advice note stating that reticulated power supply and telecommunications were not a requirement of the subdivision. Condition (v) states that sufficient supply for fire fighting purposes is to be provided at the time of construction of a dwelling. Condition (vi) states that development is to be undertaken in accordance with the Site Suitability Report prepared as part of RC 2190159. Condition (vii) is not applicable. Condition (viii) is an advising the site is within an area identified as medium density kiwi area.
- 2.15 As part of this application, it is proposed to cancel the consent notice conditions insofar as they affect the subject site. Given that these consent notice conditions are outdated and can be reimposed on a fresh new consent notice document which refers to updated reports and legislation, it is considered appropriate to cancel the consent notice conditions insofar as they affect the subject site.

Consent Notice 11653133.2

- 2.16 This consent notice document was registered on 28th January 2020 as a result of RC 2190698, which created the subject site, Lot 2 DP 540914.
- 2.17 Condition (i) is similar to Condition (i) of CN11346721.3 such that it advises future owners that the consent under the NESCS was not required as part of the subdivision given the land was remaining as production land and if any future development occurs on the site then the NESCS will need to be considered. Condition (ii) is a requirement for a TP58 at the time of built development on the lot which requires onsite wastewater disposal. Condition (iii) advises that reticulated power supply and telecommunications were not a requirement of the subdivision. Condition (iv) requires water supply for firefighting purposes at the time of construction of a dwelling.



- 2.18 The conditions listed within this document have repeated previous consent notice conditions already registered on the title. As such, it is considered appropriate to cancel the consent notice conditions within this document insofar as they affect the subject site and reimpose the relevant conditions on a fresh new document, which will ensure coherency and clarity for future owners.

Site Features

- 2.19 Under the Operative District Plan (ODP), the site is located within the Rural Production zone and is not subject to any outstanding landscapes or other resource features.
- 2.20 Under the Proposed District Plan (PDP), the site is zoned as Horticulture and is not subject to any overlays.
- 2.21 Given the sites rural location there are no connections to reticulated services such as water supply, wastewater and stormwater. Lot 2 has existing provisions which service the existing dwelling. It is noted that the site does have access to the private Kerikeri irrigation scheme.
- 2.22 The Regional Policy Statement for Northland maps the site as well outside of the Coastal Environment and does not identify it as containing any areas of high natural character. As previously mentioned, the site does contain wetlands and areas of native bush, which will be protected as part of this proposal.



Figure 6 - Wetland area across the stream

2.23 The site is shown to have some flood susceptible areas surrounding the stream which runs through the northern portion of the site. This will be discussed further in this report.

2.24 The site and surrounding environment are not shown to contain any recorded archaeological sites. The site is shown to be within an Area of Interest for Ngāpuhi. Heritage NZ Pouhere Taonga (HNZPT) were contacted as part of the pre-application process and recommended the proposal proceed under the guidance of an ADP.

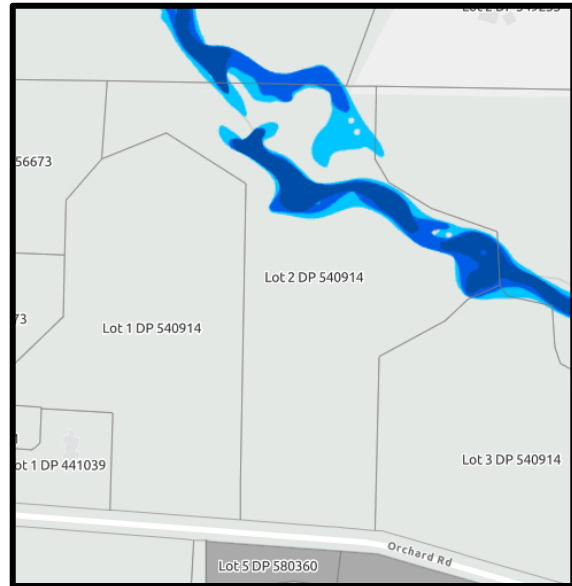


Figure 7: Flood susceptible areas within the site.

2.25 The subject site is not shown to contain any Protected Natural Areas (PNA). A wetland area has been identified within the site and is proposed to be set aside for formal protection by way of land covenant. There is also an existing stream with an average width of less than 2 metres which runs through the northern portion of the site. The remainder of the northern area of the site is scrubby bush and weeds.

2.26 The site is mapped as being within a kiwi present zone.

2.27 The site and surrounding environment are classified as having soils of 3s2 which are considered highly versatile under the RPS or the National Policy Statement for Highly Productive Land (NPS-HPL). An assessment of the NPS-HPL will be made as part of the application.

2.28 The site is not located within a Statutory Acknowledgement Area.

3.0 ACTIVITY STATUS OF THE PROPOSAL

Weighting of Plans

3.1 The Council notified its' PDP on 27 July 2022. Some specific rules have been highlighted as having immediate legal effect. 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.



- 3.2 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.

Operative District Plan

- 3.3 The subject site is located within the Rural Production Zone. An assessment of the relevant subdivision, zone and district wide rules of the District Plan is set out in the tables below.

Subdivision

- 3.3.1 The proposal will result in one additional allotment. An assessment of Chapter 13 has been undertaken below.

ASSESSMENT OF THE APPLICABLE SUBDIVISION RULES FOR THE RURAL PRODUCTION ZONE:		
<u>PERFORMANCE STANDARDS</u>		
Plan Reference	Rule	Performance of Proposal
13.7.2.1	MINIMUM LOT SIZES	Non-Complying The subject site has an area of 6.2685ha and will create two allotments of 2.20ha and 4.06ha The proposal cannot meet the RDA provisions as the title date is 2020. The proposed lot sizes also cannot meet the Discretionary provisions, and the subdivision will not be via management plan.
13.7.2.2	ALLOTMENT DIMENSIONS	Discretionary Lot 2 will contain the existing dwelling and as such, a concept building envelope is not applicable to this lot. Given the configuration of Lot 1 and the proposed covenanted areas within the site, a concept 30m by 30m building envelope cannot be provided for within the site. Nonetheless, it is noted that this is a concept building envelope only and there is ample area within the site for future built development if the site is developed in the future. Haigh Workman have provided an assessment of the vacant allotment which concluded the above.
13.7.2.3 – 9	Not Applicable for this application.	

- 3.3.2 The proposed subdivision is therefore assessed as a **Non-Complying Activity** in accordance with 13.7.2.1 of the ODP.



Rural Production Zone

3.3.3 Proposed Lot 2 will contain the existing dwelling and internal metalled accessway. Proposed Lot 1 will be vacant apart from containing a tunnel house. Therefore, an assessment of the relevant land use rules for the Rural Production zone has been undertaken below.

ASSESSMENT OF THE PERMITTED RURAL PRODUCTION ZONE RULES:		
<u>PERFORMANCE STANDARDS</u>		
Plan Reference	Rule	Performance of Proposal
8.6.5.1.1	RESIDENTIAL INTENSITY	Permitted Proposed Lot 2 will contain the existing dwelling and Proposed Lot 1 will be vacant. The first dwelling on a site is exempt from this rule.
8.6.5.1.2	SUNLIGHT	Permitted The existing structures within the allotments are of sufficient distance from all proposed boundaries such that there is no breach of the sunlight provisions.
8.6.5.1.3	STORMWATER MANAGEMENT	Permitted. Although the tunnel houses are not considered to be defined as a building, as the definition of a building excludes ‘<i>crop support structures no greater than 6m in height and located 3m from the boundary,</i>’ the current plastic covers on the tunnel houses would be considered to be a surface which creates a barrier to water penetration to the ground and therefore meeting the definition of an impermeable surface. Haigh Workman have recommended within their Engineering Report, that subject to a condition at 224c stage, the existing plastic covers on the tunnel houses are to be replaced with permeable mesh covers, which would render the covers as a permeable surface. Subject to the above offered condition of consent, the allotments will be able to comply with the permitted threshold for impermeable surfaces.
8.6.5.1.4	SETBACK FROM BOUNDARIES	Permitted. The existing dwelling within Lot 2 is located in excess of 10 metres from the proposed new boundary. The existing tunnel houses are in excess of 3m from the new dividing boundary as is required by subclause (b) of this rule which relates to crop protection structures.



8.6.5.1.5	TRANSPORTATION	A full assessment has been undertaken in the table below.
8.6.5.1.6	KEEPING OF ANIMALS	Not applicable.
8.6.5.1.7	NOISE	Not applicable.
8.6.5.1.8	BUILDING HEIGHT	Permitted. No new buildings sought.
8.6.5.1.9	HELICOPTER LANDING AREA	Not applicable.
8.6.5.1.10	BUILDING COVERAGE	Permitted The definition of a building excludes 'crop support structures no greater than 6m in height and located 3m from the boundary.' As such, the tunnel houses on site are not considered to be classified as a building. Therefore, Lot 1 is considered to not contain any buildings or structures which would trigger assessment under this rule. Lot 2 will contain existing built development which is considered to be well within the permitted threshold of 12.5% of the total site area.
8.6.5.1.11	SCALE OF ACTIVITIES	Permitted.
8.6.5.1.12	TEMPORARY EVENTS	Not applicable.

3.3.4 The proposal is therefore not considered to create any land use infringements under the ODP.

District Wide Matters

3.3.5 An assessment of the relevant District Wide Matters is outlined below:

ASSESSMENT OF THE APPLICABLE PERMITTED DISTRICT WIDE RULES:		
PERFORMANCE STANDARDS		
Plan Reference	Rule	Performance of Proposal
Chapter 12 – Natural and Physical Resources		
12.1	LANDSCAPE AND NATURAL FEATURES	Not applicable. The site does not contain any outstanding landscapes or natural features.
12.2	INDIGENOUS FLORA AND FAUNA	Not applicable The proposal does not involve any indigenous vegetation clearance.



12.3	SOILS AND MINERALS	Permitted. No excavations are anticipated as part of the proposal. However, if any minor excavations are required, it is anticipated that these will be well within the permitted threshold for the RP zone.
12.4	NATURAL HAZARDS	Not applicable. The site is not shown to be susceptible to coastal hazards, and no dwellings are proposed which would trigger the fire risk to residential unit's rule. The site does contain an area of shrubland on the northern boundary away from the proposed building site.
12.5	HERITAGE	Not applicable. The site is not located within a Heritage area.
12.6	AIR	This chapter has been deleted.
12.7.6.1.2	SETBACK FROM SMALLER LAKES, RIVERS AND WETLANDS	Permitted Activity There are no new buildings or impermeable surfaces sought as part of this proposal. There is ample area within Lot 1 to provide any future dwelling or impermeable surface which can comply with the provisions for setback from wetlands.
12.8	HAZARDOUS SUBSTANCES	Not applicable.
12.9	RENEWABLE ENERGY AND ENERGY EFFICIENCY	Not applicable.
Chapter 14 – Financial Contributions		
14.6.1	ESPLANADE AREAS	Not applicable. The stream within the site has an average width of 2 metres and therefore does not meet the definition of a river which would require assessment under this rule. As such, esplanade reserves or strips are not considered applicable to this proposal.
Chapter 15 - Transportation		
15.1.6A	TRAFFIC	Permitted Activity Proposed Lot 2 will contain the existing dwelling. The TIF for the site is within the permitted threshold for the zone. Lot 1 is vacant.
15.1.6B	PARKING	Permitted Activity The parking areas for Lot 2 will remain unchanged. There is adequate area on Lot 1 for future parking.
15.1.6C.1.1	PRIVATE ACCESSWAY IN ALL ZONES	Permitted Activity



		Lots 1 & 2 will utilise independent crossing places such that there is no need for a private accessway to be shared between the two lots. The existing dwelling on Lot 2 will continue to utilise the existing internal metalled driveway.
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	Permitted. No new private accessways are proposed as part of this application.
15.1.6C.1.4	ACCESS OVER FOOTPATHS	Not applicable.
15.1.6C.1.5	VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES	Permitted Activity Proposed Lot 1 will be accessed via an existing crossing place within the southwestern corner of the lot. Proposed Lot 2 will utilise an existing crossing place further east. Haigh Workman have included an assessment of the crossing places and recommended that the crossing to Lot 1 is upgraded to a sealed Type 1A crossing. Haigh Workman have advised that the crossing to Lot 2 exceeds the required Type 1A standards and therefore no requirement for upgrading is required.
15.1.6C.1.6	VEHICLE CROSSING STANDARDS IN URBAN ZONES	Not applicable.
15.1.6C.1.7	GENERAL ACCESS STANDARDS	Permitted Activity (a) There will be adequate turning on each site. (b) Not applicable. No new ROWs are proposed. (c) The areas which legal width exceeds formation requirements are grassed. (d) Stormwater will be managed on site.
15.1.6C.1.8	FRONTAGE TO EXISTING ROADS	Permitted Activity (a) Access to the site is from Orchard Road which is considered to meet the legal road width standards. (b) Orchard Road is a sealed road and is considered to be constructed to the required standards. (c) Access to the lots will be via existing crossing places. (d) The legal road carriageway is not known to encroach upon the subject property.
15.1.6C.1.9 – 11	Not applicable to this development.	

3.3.6 The proposal is therefore not considered to result in any infringements of the District Wide Matters.



Overall status of the proposal under the Operative District Plan

- 3.3.7 The proposal will create one additional allotment. The proposed lot sizes are 2.20ha and 4.06ha. The subject site has a title date post 2000. Due to the proposed lot sizes and the title date, the subdivision proposal is considered to be a **Non-Complying activity**.
- 3.3.8 In accordance with Rule 13.11 *Non-Complying Activities* the proposal will be assessed as being a **Non-Complying Activity** under the District Plan. The relevant sections of Chapter 13 will be assessed as part of this application.

Cancellation of Consent Notice Conditions

- 3.4 As mentioned, it is proposed to cancel the existing consent notice conditions as they affect the subject site and re-establish these as a new consent notice document which will be registered on the new titles for the new lots. This will ensure transparency as well as enable future lot owners to access the most up to date relevant information with ease.
- 3.5 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.
- 3.6 The cancellation of the consent notice conditions will be assessed as a **Discretionary Activity**.

Proposed District Plan

- 3.7 The proposal is also subject to the Proposed District Plan process. Within the Proposed District Plan, the site is zoned Horticulture. Assessment of the matters relating to the Proposed District Plan that have immediate legal effect, has been undertaken 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 site does not contain any hazardous substances to which these rules would apply.
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 Overlay Area.



Historic Heritage	All rules have immediate legal effect (HH-R1 to HH-R10) Schedule 2 has immediate legal effect	Not applicable. The site is not known to contain any 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 (SASM-R1 to SASM-R7) Schedule 3 has immediate legal effect	Not applicable. The site does not contain any sites or 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 known ecosystems or indigenous biodiversity to which these rules would apply.
Subdivision	The following rules have immediate legal effect: SUB-R6, SUB-R13, SUB-R14, SUB-R15, SUB-R17	Permitted. SUB-R6 relates to environmental benefit subdivisions which the proposal is not applying for. SUB-R13 relates to subdivision of a site within a heritage area overlay, which does not relate to the subject site. SUB-R14 relates to subdivision of a site that contains a scheduled heritage resource, which the site does not contain. SUB-R15 relates to a subdivision of a site containing a scheduled site and area of significance to Māori, which the site does not contain. SUB-R17 relates to a site containing a scheduled SNA, which the site does not include.
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	Permitted. No earthworks are anticipated as part of this proposal however it can be noted



	The following standards have immediate legal effect: EW-S3, EW-S5	that if any earthworks are to be undertaken, these shall proceed under the guidance of an ADP and will be in accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016, in accordance with Rules EW-12, EW-R13, EW-S3 and EW-S5.
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.

3.8 Overall, the proposal is assessed as being **Permitted** in terms of the PDP.

National Environmental Standards

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

3.9 The site is utilised for horticultural activities and as such the NESCO is applicable to the site. There is an existing dwelling located within Proposed Lot 2 for which a Preliminary Site Investigation (PSI) was undertaken in 2024 prior to the dwelling being located on site and as part of EBC-2024-1065. The PSI determined that within the area subject to the investigation, *'there are no significant contaminated land relate constraint on redevelopment of the land for residential purposes and that it is highly unlikely that there is a risk to human health if the activity is done to the investigation area.'* As a PSI existed for the proposal which determined the above, the development of the investigation area with a dwelling and shed was considered a Permitted Activity in terms of the NESCO.





Figure 8: Image showing location of dwelling within EBC-2024-1056 PSI report.

- 3.10 In regards to future use of the sites, specifically Lot 1, it is anticipated that the existing horticulture activity within the lots will remain, given the infrastructure and vines are there already. The Users' Guide for the NESCS states that a subdivision activity is '**not covered by the NES if the land being subdivided does not stop being production land. In this case, a newly created land parcel may continue to be used for production purposes without triggering any requirement for investigation under the NES. Similarly, the NES does not apply to the remaining part of the original farm so long as it does not stop being production land.** In this instance, this relates to Proposed Lot 1 which is anticipated to be utilised for horticultural use and therefore continue to be utilised for rural productive use, so long as the land does not stop being production land. Therefore, assessment of the NES against Proposed Lot 1 is not considered applicable.
- 3.11 However, it is noted that the lots are of a size where future residential activities may be developed in the future. It is our understanding that Council's standard approach is to impose consent notice conditions which require water filtration for habitable structures as well as a consent notice condition stipulating that the NESCS has not been considered as part of the subdivision resource consent and a PSI/DSI is to be submitted for the approval of Council upon building consent for a habitable structure. We accept this approach and anticipate these consent notice conditions will be imposed on the new titles.
- 3.12 It is therefore considered that the proposal is deemed **Permitted** in terms of the NESCS. Discussions regarding future consent notice conditions in relation to the NESCS will be discussed further in this report.



National Environmental Standards for Freshwater 2020

3.13 A wetland / native planting area has been identified within the northern reaches of the site, as detailed within the attached scheme plan and shown below for reference. It is proposed that this area as well as the surrounding margins are formally protected by way of land covenant as part of the subdivision process.

3.14 The stream provides a physical barrier between the wetland / native bush area and the remainder of the allotment. At present there is no physical access to this part of the site without crossing over a neighboring bridge. It was observed during the site visit that the vegetation located on the southern side of the stream was largely exotic species including gorse, gum trees, pinus radiata and Taiwanese cherry. As a result, these areas were not included in the formal protection.

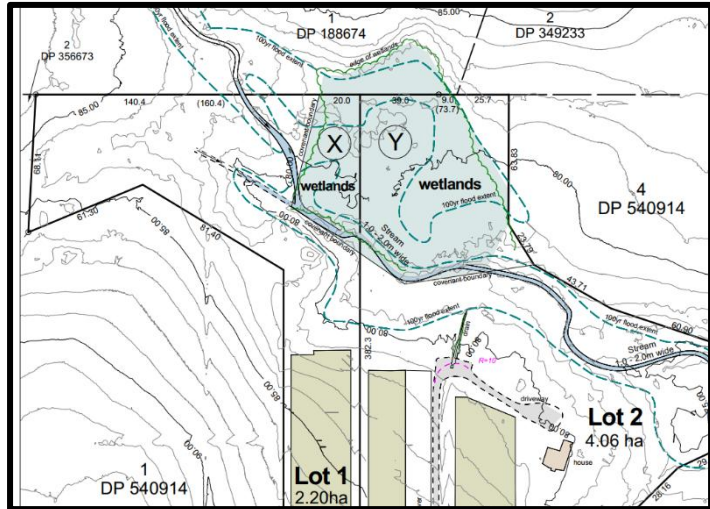


Figure 9: Snip of scheme plan shown area of wetland to be protected by way of land covenant.

3.15 It is noted that if Lot 1 is developed with future built development this may be within 100 metres of the wetland area. While this is the case, it is unlikely that there will be a hydrological connection given that the wetland area is located on the opposite side of the stream. As such it is anticipated that any future activity will be permitted insofar as the NES-F.

Other National Environmental Standards

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

4.0 STATUTORY ASSESSMENT

Section 104B of the Act

4.1 Section 104B governs the determination of applications for Discretionary and Non-Complying Activities. 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 104D of the Act

4.2 Section 104D applies to Non-Complying Activities only and is the gateway test. Non-Complying activities must pass at least one of the gateway tests in order for consent authorities to consider approval. The gateway tests are determined in assessing the applicable documents under Section 104(1).



Section 104(1) of the Act

4.3 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 of 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 reasonably necessary to determine the application.”*

4.4 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). Positive effects arising from this subdivision is that an additional allotment will be created in an area which is in close proximity to town centres, such as Kerikeri and Waipapa which provide opportunities for schools and employment. The lots are of a size where the horticultural activity can remain and be productive. The vacant lot is suitable for built development as determined by Haigh Workman. The existing wetland areas on site will also be formally protected, providing an environmental benefit as part of the application.

4.5 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’. A Site Suitability Report has been completed by Haigh Workman which found that the vacant lot is appropriate for built development and associated services.

4.6 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 in section 6.0 below.

4.7 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.



5.0 ENVIRONMENTAL EFFECTS ASSESSMENT

- 5.1 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

- 5.2 The proposal is a non-complying activity as per rule 13.7.2.1. The criteria within 13.10 of the District Plan is therefore to be used for assessment of the subdivision, in conjunction with the matters set out under Sections 104, 104B, 104D, and 106 of the Resource Management Act 1991. An assessment that corresponds with the scale and significance of the effects on the environment is provided below:
- 5.3 An assessment has been undertaken in accordance with Section 13.10 Assessment Criteria of the District Plan below.

ALLOTMENT SIZES AND DIMENSIONS

- 5.3.1 The proposal is to subdivide the site to create one additional allotment. Lot 2 will contain the existing dwelling and associated access, parking and manoeuvring areas and Lot 1 will be vacant. The intended purpose of the lots will be for rural-lifestyle living, similar to the current use of the site. Haigh Workman have completed a Site Suitability Report for the subdivision to determine whether Proposed Lot 1 is suitable for built development and onsite servicing, such as wastewater, stormwater and water supply. Haigh Workman determined that the lot is suitable for such development, with the provision for further investigation required at the time of such development, which can be included as consent notice conditions on the title for Lot 1. The proposal does not create any land use infringements of the permitted rules for the Rural Production zone, and it is considered that Lot 1 is of a size which can adequately accommodate future built development without creating any land use infringements. The lot sizes and dimensions are considered to be sufficient for operational and maintenance requirements.
- 5.3.2 While no residential development is proposed as part of this application, Lot 1 is of sufficient shape and size to accommodate compliant development in the future. As demonstrated within Haigh Workman's report, the allotment can accommodate built development and onsite servicing such that effects of non-compliance with the concept 30m by 30m building envelope will be negligible.
- 5.3.3 The site currently contains tunnel houses which contain kiwifruit which are harvested for flowers as well as for grafting with fruit. There are four blocks of kiwifruit, as is depicted on the scheme plan. Block A is to be contained within Proposed Lot 1, which is planted with Male Kiwifruit and will be harvested for flowers and milled to extract pollen. Block B is to be contained within Proposed Lot 2 which is also planted with Male Kiwifruit and will be harvested for flowers. Blocks C & D within Proposed Lot 2 will be ready for grafting in Winter



of 2026. The Applicant has advised that he is currently going through the process of replacing the tunnel house covers with a permeable cover to allow water to penetrate through. This is a costly and timely expense and reassures Council that it is the intent of the subdivision to ensure the allotments can remain in productive use which will generate an income for the future owners.



Figure 10: Aerial taken from northern boundary of site looking towards orchard road. Existing tunnel houses and dwelling visible on the site.

- 5.3.4 The site and surrounding environment are zoned as Rural Production, however the lot sizes range in size from 4000m² to 7 hectares. This area has been heavily developed in the past, with a congregation of allotments of 4000m² to 1 hectare being located near the intersection of Orchard Road and Stanners Road, less than 600 metres from the site. The northern side of Orchard Road contains allotments of around 7000m² to 8000m² with the southern side containing allotments between 1 hectare to 7 hectares. Directly adjoining the site on the western and eastern boundaries are lots of 4 hectares in size, however there are 7000m² allotments located within 100 metres of the site. Predominantly, the smaller allotments contain a dwelling and a small area of horticulture use, with the larger allotments being of similar use or only for horticulture use. The proposed allotments easily fall within the size range existing in the surrounding allotment and will boast the same use of the surrounding allotments, that being a dwelling with land utilised for horticulture use or a block fully utilised for horticulture use only.





Figure 11: Aerial image of the site and surrounding environment showing range of allotment sizes and existing activities.

5.3.5 As mentioned, the northern portion of the site contains an existing stream, as well as wetland areas which are confined to the northern reaches of the site, bounded by the stream. The remainder of the northern portion of the site is a mix of exotic species, which are determined to not be suitable for protection. Given the nature of this area of the site, further horticulture expansion has not been considered feasible and may generate reverse sensitivity effects on the natural habitats within the wetland and stream. The Applicant has constructed a dwelling within the north-eastern portion of Lot 2, where exotic weed species were located, which is considered to be a good use of this area of the site, given horticultural use would not be suitable. The proposal will see two allotments created which are within the size range existing in the surrounding environment and will boast activities similar to those in the surrounding environment. The productive use of the land is not considered to be jeopardised, given each lot has existing horticulture plants and infrastructure which will ensure the productive use feasible for any future owners. Due to the above, the proposed allotments are considered compatible with the pattern of the adjoining subdivision and land use activities.

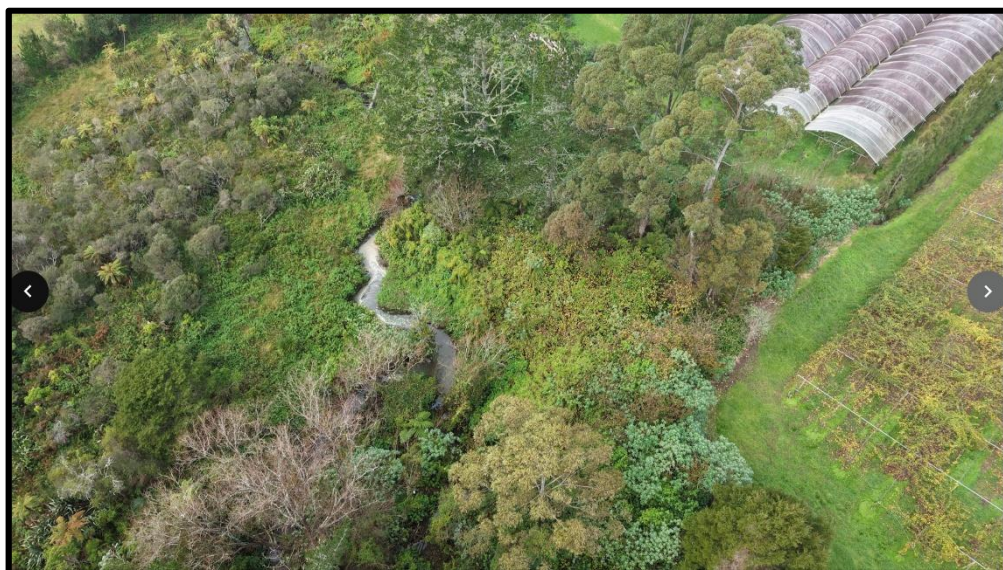


Figure 12: Aerial image of the stream and wetland area.

- 5.3.6 The site is located approximately 4 kilometres from Waipapa and approximately 10 kilometres from the heart of the Kerikeri township and as such, is in close proximity to places of employment, schools and social centres. This adds to the need for rural lifestyle lots in the area as it enables people a place to reside in close proximity to a town centre which can cater to their needs, whilst providing the opportunity to be self-resilient. The proposal is not considered to alter the productive use of the lot as the proposal will still enable the existing productive activities to continue, whilst providing an opportunity for an additional residential dwelling in the area, which is compatible with the surrounding land use.
- 5.3.7 In terms of access arrangements, there will be no additional crossing places required as part of the proposal. Both crossing places to be utilised are existing, with a condition of consent anticipated which requires the upgrading of the existing crossing place to Lot 1. The proposal is not considered to adversely affect traffic in the area, with the additional traffic movements anticipated to be easily absorbed into the surrounding environment.
- 5.3.8 In terms of cumulative and long-term implications and the preservation of the rural environment, the proposal is considered to enhance the preservation of the environment whilst ensuring cumulative effects are managed to a less than minor effect. The proposal will result in one additional allotment, with both lots anticipated to contain effects within the boundary of each allotment. The sites are large enough to manage stormwater onsite, without creating downstream effects. The proposal will not add any additional crossing places, mitigating traffic effects. The proposal will also see the wetland / native planting areas on site formally protected, enhancing the biological and environmental aspect of the site and surrounding environment. The productive use of the existing horticultural activities can remain, with the Applicant adding value to these activities by upgrading the tunnel house covers. While the site and surrounding environment are zoned Rural Production, this is heavily influenced by rural-residential development throughout and therefore, the addition of one allotment is not considered to create adverse cumulative effects given the surrounding environment already presents allotments similar to those proposed. Overall, it is considered that the proposal will have a positive effect on the rural environment and will be consistent with the surrounding environment.
- 5.3.9 The proposal is not considered out of character within the surrounding environment. The proposal is considered to be the best utilization of the land and enhances the site and surrounding environment.

NATURAL AND OTHER HAZARDS

- 5.3.10 Haigh Workman completed an assessment of the site in terms of natural hazards within Section 3.2 of their report. It was concluded that the site was not found as being susceptible to erosion, rockfall, subsidence, inundation or slippage.
- 5.3.11 The site is shown to be susceptible to river flood hazards around the bounds of the existing stream on site. Lot 2 has existing built development and there is ample area within Lot 1 where built development can occur which would not be within the flood susceptible areas. As such,



it is considered that there are no adverse effects created as a result of the subdivision in terms of flood susceptibility.

- 5.3.12 It is therefore considered that there are no natural hazards within the site which could adversely affect the subdivision of the site and no matters applicable under s106 of the Act.

WATER SUPPLY

- 5.3.13 Proposed Lot 2 has existing water supply via capturing of roof runoff into tanks on site. It is noted that the site is serviced by the private Kerikeri irrigation scheme.
- 5.3.14 Councils standard consent notice condition regarding firefighting is already registered on the current title. This will be cancelled and reimposed on the titles for the new lots.



Figure 13 - Existing dwelling water tanks and wastewater disposal system

STORMWATER DISPOSAL

- 5.3.15 The proposed lots will be over 2 hectares in area each, with Lot 2 containing the existing built development and Lot 1 being vacant. The existing built development on Lot 2 has existing attenuation methods for stormwater, with impermeable surfaces within this lot considered to be within 15% of the total site area.
- 5.3.16 Haigh Workman completed an assessment of Stormwater within Section 6 of their report. Given that the existing tunnel houses have a plastic cover which creates a large area of impermeable surface, Haigh Workman have recommended a condition of consent is entered for the subdivision that at s224 stage, the plastic covers be replaced with mesh covers. This would render the tunnel houses as a permeable surface. The Applicant has agreed to this, with some



covers already being replaced. This will result in both lots meeting the permitted standard for stormwater management. The below condition of consent is therefore offered:

Prior to the issuing of a certificate pursuant to Section 224(c) of the Act, the consent holder shall: Complete and provide confirmation that the existing plastic covers on all tunnel houses have been removed and replaced with mesh covers which are permeable in nature, as per the recommendations contained within Haigh Workman's Engineering Assessment dated 19th August 2025, referenced 24 071.

5.3.17 The below consent notice condition is offered as part of this application:

In conjunction with the construction of any building requiring building consent on the lot the consent holder must provide a stormwater management report prepared by a Suitably Qualified and Experienced Person detailing how stormwater will be managed in accordance with Council's Engineering Standards at building consent stage. Stormwater runoff from future new buildings and impermeable surface areas on the lots shall be restricted to that of predevelopment levels for a 10% AEP storm event plus an allowance for climate change. This excludes legally established existing buildings on the lots at the date of approval of RCXXXXXX [Lots 1 & 2]

5.3.18 It is considered with the inclusion of the above conditions (or conditions of similar wording that provides the same outcome), stormwater effects on adjacent properties, the surrounding environment and the wetland areas within the site, will be mitigated to a less than minor degree.

SANITARY SEWAGE DISPOSAL

5.3.19 Councils' infrastructure is not available to this rural site. Proposed Lot 2 has an existing system which was installed with the dwelling on site. The system is relatively new and is in good working order and can meet current guideline setback requirements, as per Haigh Workman's report.

5.3.20 Proposed Lot 1 is vacant. Haigh Workman completed an assessment of onsite wastewater disposal as part of their Engineering Assessment. A concept effluent field location has been provided for by Haigh Workman to conclude that the lot is suitable for onsite effluent disposal.

5.3.21 It is therefore anticipated that the standard consent notice condition will be imposed on the title for Lot 1 that requires a site specific TP58 for any future built development on the lots which requires an effluent system.

ENERGY SUPPLY, TOP ENERGY TRANSMISSION LINES, & TELECOMMUNICATIONS

5.3.22 The existing dwelling on Lot 2 has existing provisions for power and telecommunications.

5.3.23 It is not a requirement for rural production zoned lots to provide power and telecommunication connections at the time of subdivision. It is anticipated that the provision for power supply will be completed at the time of built development on Lot 1. There are many



options available now which do not require physical connection to telecommunications, such as rural broadband and Starlink.

- 5.3.24 Regardless, we offer Councils standard consent notice condition for Lot 1 that power supply and telecommunication services are not a requirement of the subdivision to ensure future owners are aware.

EASEMENTS FOR ANY PURPOSE

- 5.3.25 There are no proposed easements as part of this proposal, however there are areas to be set aside under land covenants. There are also existing easements which will be brought forward to the new titles as detailed earlier in this application report.

PROVISION OF ACCESS

- 5.3.26 Proposed Lot 1 will be accessed via the existing crossing place located near the southwestern corner of Lot 1. Haigh Workman have provided an assessment of the crossing places and recommended that the crossing place to Lot 1 is upgraded in accordance with the Type 1A standards. It is noted that this crossing is currently concrete and has been covered by a layer of gravel. The upgrade of this crossing is anticipated condition of consent on the subdivision decision document.



Figure 14: Existing crossing place to Proposed Lot 1 which is proposed to be upgraded.



Figure 15 – Lot 1 Crossing

- 5.3.27 Proposed Lot 2 will be accessed via the existing crossing place located in the south-eastern corner of the site. Haigh Workman have completed an assessment of the crossing place and

determined that the current standard exceeds the required standards for a Type 1A crossing. As such, no requirement for upgrade is anticipated.



Figure 17: Existing crossing place to Lot 2 which has been determined to meet the required engineering standards.



Figure 16 – Driveway to dwelling

5.3.28 Haigh Workman have also determined that the sight distances available at each crossing place comply with the required standards. Orchard Road is a low speed, low traffic and no-through road and as such Haigh Workman have advised that traversable headwalls are not considered necessary.

5.3.29 No upgrades to internal access / driveways are considered necessary.

5.3.30 As the subdivision will utilise existing crossing places and only add one additional allotment, it is considered that the proposal will not create any adverse effects on the environment in terms of traffic, visual and natural character effects.

EFFECT OF EARTHWORKS AND UTILITIES

5.3.31 There are no earthworks anticipated as part of this proposal as built development within Lot 1 does not form part of this proposal. Any excavations required for the upgrading of the crossing to Lot 1 are anticipated to be minor.

BUILDING LOCATIONS

5.3.32 Proposed Lot 2 has an existing dwelling and therefore no additional building locations are proposed within this lot.

5.3.33 Haigh Workman have assessed Lot 1 and concluded that the allotment is suitable for future built development and onsite servicing. It is noted that the proposed future building site is located within the same location as the tunnel houses. While this is the case, alternative sites are also available at the rear of the allotment, outside of productive areas. These areas would require additional engineering input at time of development. As both allotments are



anticipated to remain in productive use as a result of this proposal, the proposal has not been considered to trigger consent under the NESCS. A consent notice condition is proposed which advises future owners of this and that consent under the NESCS may be triggered as a result of any future development or change of use. This is similar to what has occurred during the process of the relocation of the current dwelling to site as well as being consistent with many other allotments in the surrounding environment.

5.3.34 The sites are not subject to inundation.

5.3.35 The site has a northerly outlook which enables any future house to take advantage of passive solar gain.

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

5.3.36 The site is not known to contain any heritage resources or archaeological features. The proposal has been sent to Heritage NZ who have recommended the proposal proceed under the guidance of an ADP. As such, it is considered that the proposal does not create any adverse effects in regards to heritage resources and the proposal shall proceed under the guidance of an ADP.

5.3.37 The site is located within an area where kiwi are noted as being present. The nearest kiwi high density area is located over 5 kilometres to the east. It is therefore considered appropriate to issue an advice note on the decision document advising that the site is within a kiwi present area and dogs and cats should be kept inside at night or tied up. This is considered to be in line with Council's Practice Note regarding kiwi present areas.

5.3.38 As discussed in previous sections of this report, it has been identified that there are existing wetland areas within the site. The proposal will include formal protection of the wetland areas as well as the wetland and stream riparian margins. The proposed measures are considered to ensure the long-term functionality and integrity of the wetland, riparian area and wider environment.

5.3.39 In addition to the wetland areas on the northern side of the stream, a mixture of natives are being planted on the southern side of the stream to create a native riparian corridor. This planting is occurring along the edges of the orchard drains as well as along the stream.



Figure 18 - New riparian planting

- 5.3.40 It is considered that the proposal will result in positive gains which will extend to the surrounding environment. This is considered to more than just mitigate adverse effects of the proposed subdivision; it provides full protection and enhancement of a wetland area and its associated riparian margins which meets the criteria within Section 13.10.13(b) and (g).
- 5.3.41 The below conditions and consent notice conditions are therefore offered to encompass the above, as well as the proposed covenanting of Areas X & Y on the scheme plan for conservation.

Survey Plan Approval (s223) conditions:

1. *Areas identified as X & Y in the scheme plan are to be subject to land covenants for conservation.*

Consent Notice Conditions:

- i. *The owners must preserve the indigenous trees and bush as well as the wetland areas identified in Areas X & Y on the title plan and shall not without the prior written consent of the Council and then only in strict compliance with any conditions imposed by the Council, cut down, damage or destroy any of such trees or bush. The owner must be deemed to be not in breach of this prohibition if any of such trees or bush shall die from natural causes not attributable to any act or default by or on behalf of the owner or for which the owner is responsible. [Lots 1 & 2]*

SOIL

- 5.3.42 The subdivision will create one additional allotment, with Proposed Lot 1 being 2.20 hectares and Proposed Lot 2 being 4.06 hectares, which will also contain the existing dwelling. The site currently contains tunnel houses accommodating existing horticultural activities, which are intended to remain as a result of the proposed subdivision.
- 5.3.43 The site has soils classified as LUC 3, which the Government has indicated will be removed from the NPS-HPL as part of the RMA reforms. These changes cannot yet be given any weighting as these are yet come into legal effect.
- 5.3.44 As mentioned throughout this report, it is the intention that the allotments remain in productive use, with the tunnel houses remaining. The proposal will see the potential for one additional dwelling to be created within Proposed Lot 1. While currently this is shown to be along the site's frontage it is likely that future development would occur within the northern portion of the site, which is currently covered in exotic species and is unsuitable for horticultural use. This is an underutilised portion of the site with high levels of amenity. This area has not been shown as a future building platform as part of this subdivision as additional engineering would likely be required. For the purposes of the subdivision, and establishing if there is a suitable location on the site for a future house this is achieved by locating the dwelling as shown on the scheme plan.
- 5.3.45 It is considered that the proposal provides a superior outcome for utilization of the lot, as the constraints of the site render the land unusable for large scale productive use. Those areas



which are unusable will be enhanced and the sites ecological value and local biodiversity will be formally protected.

ACCESS TO RESERVES AND WATERWAYS

- 5.3.46 The site is not located along the CMA nor are there any lakes or rivers which are at least 3m in width bank to bank within the site. The stream which does run through the middle of the site has been surveyed at less than 2 metres in width. The planted wetland areas are not considered applicable for access, given the purpose of covenanting these areas is for protection and ongoing rehabilitation.

LAND USE INCOMPATIBILITY

- 5.3.47 The site is located in an area which consists of a mixture of allotments. As mentioned, there is a large number of allotments along Orchard Road, which are less than 1 hectare in size and contain a residential dwelling and a small area of horticultural activity. Other allotments are up to seven hectares and either contain a dwelling and horticultural activity or a vacant block purely used for horticultural use. The proposal will create two allotments of 2.20 hectares and 4.06 hectares, which will both contain the existing horticultural activity within the site.
- 5.3.48 In terms of reverse sensitivity and land use incompatibility effects, these are not anticipated given that the existing use of the site will remain. While there will be potential to erect one additional dwelling within Proposed Lot 1, this is similar to the existing land use activities in the surrounding environment. There is ample area within Proposed Lot 1 to provide for future residential development which can meet the permitted setback and sunlight provisions. There is existing vegetation along the Orchard Road frontage which provides screening of the site from the road boundaries, and due to the existing topography, built development within Lot 1 can be visually obscured. Consent notice conditions can be imposed on the new titles advising of the horticultural use of the area and the requirement for water filtration systems for any dwelling.
- 5.3.49 In terms of effects on adjoining allotments, the site adjoins Lot 1 DP 540914 to the west, Lot 4 DP 540914 and Lot 3 DP 540914 to the east and Lot 1 DP 188674 to the north. The site is bounded by Orchard Road to the south.





Figure 19: Image showing site and adjoining allotments.

- 5.3.50 In terms of effects on Lot 1 DP 188674 to the north of the site, it is not considered that any adverse effects will be created given that this allotment will adjoin the proposed covenanted areas. The horticultural activities on site will remain. The portion of Lot 1 DP 188674 which adjoins the site appears to be a vegetated area, which likely follows the existing stream, such that this provides an additional physical buffer between the proposed allotment and Lot 1 DP 188674. This combined with the required 10m setback from the boundary for the Rural Production zone is considered to adequately mitigate effects on this allotment to a less than minor degree.
- 5.3.51 In terms of Lot 1 DP 540914 to the west, this will adjoin Proposed Lot 1. Given Lot 1 DP 540914 already adjoins smaller 7531m², 7442m², 1.4142ha and 2.2480ha allotments to the west and south, which contain either a residential unit or horticultural activity or both, it is considered that the proposed 2.2ha allotment will not create any adverse effects considering that what is proposed is already in existence. It is noted that Lot 1 DP 540914 contains horticultural activities, and the offered consent notice advising of horticultural activities in the area as well as a filtration system being placed on any potable water systems, is considered to mitigate any adverse effects. It is the intention that Proposed Lot 1 remain in productive use with the potential for a dwelling to be built on the site in the future. Given the required setbacks for the zone for any dwelling and the fact that the proposal will not introduce any new land use activities which do not already directly occur within adjoining allotments already, the proposal is not considered to create any adverse effects on Lot 1 DP 540914.



- 5.3.52 In terms of Lots 3 & 4 DP 540914 to the east, these allotments will adjoin Proposed Lot 2, which already contains an existing dwelling and horticultural activity. Given that the use of Lot 2 is not considered to change as the proposal does not increase the development rights within this lot, it is considered that there will be no adverse effects created on Lots 3 & 4 DP 540914, as what is currently in existence will remain unchanged. The stream appears to meander along the boundary of Proposed Lot 2 and Lot 4 DP 540914, providing a physical buffer between the two sites. It is noted that horticultural activities occur within these allotments and the consent notice condition advising of this and requiring a water filtration system will adequately mitigate reverse sensitivity effects.
- 5.3.53 As such, it is considered that the proposal is not considered to create any adverse effects on adjoining allotments. Given the proposal will create allotments which are larger than some in the surrounding environment as well as the intention being that the allotments are continued to be utilised for productive use, it is considered that there are no reverse sensitivity effects or land use incompatibility effects created. Any future built development within the lots will be required to comply with the permitted provisions for the zone as well as the consent notices, providing additional regulations to control such development to ensure these effects are mitigated to a less than minor degree.
- 5.3.54 Overall, the proposal is not considered to create any land use incompatibility or reverse sensitivity effects. The proposal will create allotments which are consistent with lots in the surrounding environment. The proposal is not considered to have any adverse effects adjoining property owners. No effects from existing land uses are anticipated. The proposal is considered consistent with the surrounding environment and the nature and character of the area.

PROXIMITY TO AIRPORTS

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

NATURAL CHARACTER OF THE COASTAL ENVIRONMENT

- 5.3.56 The site is not within the coastal environment.

ENERGY EFFICIENCY AND RENEWABLE ENERGY DEVELOPMENT/USE

- 5.3.57 No energy efficient or renewable energy development are sought as part of this proposal.

NATIONAL GRID CORRIDOR

- 5.3.58 The site is not within a national grid corridor.

Summary

- 5.3.59 The subdivision will result in one additional allotment being created which will contain an existing horticultural activity, which is consistent with other allotments in the immediate area. Proposed Lot 2 will contain the existing dwelling and Proposed Lot 1 will be of a size that can accommodate a future dwelling and associated infrastructure. Both lots will contain a portion of the existing horticultural activity on the site, ensuring that the allotments remain in



productive use. Due to similar sized allotments in the surrounding environment, it is considered there are no reverse sensitivity or incompatible land use activities created by the proposal. The proposal will provide a positive ecological and biological impact through protection of the wetland areas and riparian margins within the site. The proposal will enhance the rural amenity of the site and the area and provide better utilization of the land.

Other Matters

Precedence

- 5.4 A precedent effect is likely to arise in a situation where consent is granted to a non-complying activity that lacks the evident unique, unusual or distinguished qualities that serve to take the application out of the generality of cases or similar sites in the vicinity. If the activity boasts sufficient qualities that are unusual or unique, that other proposals may not contain, precedent effects may be avoided.
- 5.5 The subject site and proposal are considered unique given that the proposed allotments created will contain and continue the existing horticultural activity on the site. The Applicant has provided information that details the economic viability of both allotments as being feasible, with Block A estimated to produce \$78,000 with potential for more profitability if harvested by the owners. Block B is estimated to produce \$60,000 and Blocks C & D are estimated to produce \$85,000. This provides a situation where each allotment can remain in productive use whilst ensuring the lot sizes are of a suitable size to be managed by the residents of the site, rather than having to outsource due to the orchard size being too large. The Applicant intends to continue to reside on Proposed Lot 2, reducing the orchard size to one that is manageable for him. It is intended that Lot 1 will be sold which will enable either a future buyer to just utilise the allotment for productive use only, or gives a future owner the ability to construct a dwelling and continue to host the horticultural activity on the site.
- 5.6 As mentioned, although the proposal is not completely consistent with the intent of the Rural Production zone, given the existing development in the area, the surrounding environment consists of allotment sizes much smaller to those proposed. The proposal is therefore considered to be consistent with the character of the surrounding environment, such that the proposal is not considered to be unusual or objectionable with the surrounding environment.
- 5.7 The proposal also provides a unique situation where the area of wetland within the site and its vegetated margins, which currently do not benefit from any formal protection, will be set aside by land covenant. This will ensure that the wetland and its riparian margins are able to regenerate and be excluded from any future development within the site whether that be from built development or horticultural activities. The protection and continued enhancement of the wetland / native planting area provides a superior outcome where the biological and ecological enhancement of the wetland areas within the site will be provided for as well as having positive effects to the downstream environment. The stream onsite provides a physical buffer between the areas being set aside for protection and the remainder of the site, providing a visual and definite edge. This will be the first known area of wetland within the immediate environment to be set aside, with many other allotments in the area not containing



the same ecological features. This provides a unique situation compared to other allotments in the surrounding environment.

- 5.8 It is noted that the soils within the site are classified as LUC 3. As previously mentioned, the Government is proposing to remove LUC 3 soils from the NPS-HPL. This is expected to take effect early next year. As this has not yet come into effect, no legal weight can yet be given to this change. However, it is considered applicable to note that the proposed changes will apply to the subject site and surrounding environment. As previously mentioned, it is intended that the land remain in productive use, which is considered to be a feasible option with the information provided by the Applicant. The Applicant is also investing time and money into replacing the existing plastic covering for the tunnel houses with permeable material which provides reassurance that the land is intended to remain in productive use. A condition of consent has been offered to ensure that the replacement covering is undertaken as part of the subdivision works. This replacement will add value to the horticultural activity as well as providing beneficial outcomes for efficiency and economic viability. There is provision within the NPS-HPL for subdivision of a non-complying status which enables the continued productive use of the land, which will be discussed further in this report.
- 5.9 Overall, given that the proposed lots are intended to remain as commercial orchard, it is considered that the proposed subdivision will be largely indiscernible from that which currently exists on the site. Any future built development on Proposed Lot 1 can be visually obscured from most boundaries by the existing shelterbelts and effects from such development are considered to be within the permitted threshold of effect and will be controlled via the permitted provisions for the underlying zone as well as compliance with the offered consent notice conditions. The proposal provides a superior biological and ecological benefit by formally protecting the wetland areas within the allotment.
- 5.10 For the reasons detailed within this application, it is considered that the application will not set a precedent for similar development within the Rural Production zone or subsequently compromise the integrity of the plan.

Cancellation of Consent Notice Conditions

- 5.11 To ensure consistency and clarity for future owners of the lots, it is proposed to cancel the existing consent notice conditions relative to Lot 2 DP 540914 within Consent Notice Documents 8742435.2, 11346721.3 and 11653133.2 and re-establish them within a new consent notice document registered on the new titles for the proposed lots. This will ensure that the consent notice conditions relate to the new lots and are updated with any relevant information, such as reports.
- 5.12 The cancellation of consent notice conditions will be completed under Section 221(3) of the Act.



5.13 Each relevant consent notice condition will be detailed below. The purpose of this is to update the consent notice conditions so they reflect the new lots, Council's relevant standard wording and relevant Engineering Standards. This will remove any confusion for future owners.

5.14 An assessment of the consent notice documents has been provided below:

Consent Notice Conditions		Compliance of Proposal
Consent Notice 8742435.2		
(i)	That upon construction of any habitable building it shall have a roof water collection system with minimum tank storage of 45,000L. The tanks shall be positioned so that they are accessible (safely) for fire fighting purposes and fitted with an outlet compatible with rural fire service equipment. Where more than one tank is utilised they shall be coupled together and at least one tank fitted with an outlet compatible with rural fire service equipment. Alternatively, the dwelling can be fitted with a sprinkler system approved by Council.	This condition is proposed to be cancelled and new wording offered.
(ii)	The operation of agricultural and horticultural equipment including sprays and chemicals may be a permitted activity. Accordingly where rainwater is collected from exposed surfaces for human consumption in connection with any residential development, the occupiers of any such dwelling shall install an approved water filtration system.	This condition is proposed to be cancelled and reimposed on the new consent notice document.
(iii)	The hedge areas shown as areas X, Y and Z on the survey plan for RC2100355 is not to be cut down or removed without the approval of Council.	This condition is proposed to be cancelled given it does not affect the subject site rather Lot 1 DP 441039 which is located over 100 metres west of the site.
Consent Notice 11346721.3		
(i)	NESCS – Land within this lot has been identified as land that will potentially be covered by the NESCS. As it was production land at the time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the	This will be cancelled and brought forward on to the new titles given that the land is still remaining in productive use as a result of this subdivision.



	site. Activities covered by the NESCS include soil sampling, disturbance and/or removal and changing the use of land.	
(ii)	In conjunction with the construction of any building which includes a wastewater treatment and effluent disposal system the applicant shall submit for approval a TP58 report prepared by a CPEng or an approved TP58 writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment and disposal system can be fully contained within the lot boundary and comply with the Regional Water and Soil Plan Permitted Activity Standards.	This condition is proposed to be cancelled and new wording offered which can refer to the Haigh Workman Engineering Assessment provided with this application. The Regional Water and Soil Plan has now been superseded by the Proposed Regional Plan for Northland such that it is not considered relevant to refer to this document.
(iii)	Reticulated power supply and telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner.	This will be cancelled and brought forward on to the new titles.
(iv)	In conjunction with the construction of any dwelling on Lots 2-4, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions shall be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.	This will be cancelled and updated wording issued on the new consent notice document.
(v)	Any future development on Lots 1-9 and 11 shall be undertaken in general accordance with the restrictions and recommendations identified within the Hawthorn Geddes Subdivision Suitability Report submitted with RC 2190159 dated 14 August 2018 and subsequent email dated 23 October 2018.	This condition will be deleted given that the subject site was only partially located within Lot 11 and the Hawthorn Geddes report is now considered redundant. Haigh Workman have completed an Engineering Assessment for the proposed subdivision which can be referred to if required.



(vi) The lot owner is advised that the lot is within an area identified by the Department of Conservation as a medium density kiwi area. Therefore, mustelids should not be introduced or kept onsite and it is recommended that care should be taken with the keeping of cats and dogs as these animals may cause adverse effects on the kiwi population that may inhabit the area.	This condition is proposed to be cancelled. An advice note issued on the decision document is considered to be appropriate in this instance.
Consent Notice 11653133.2	
(i) NESCS – Land within this lot has been identified as land that will potentially be covered by the NESCS. As it was production land at the time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the NESCS include soil sampling, disturbance and/or removal and changing the use of land.	This will be cancelled and brought forward on to the new titles given that the land is still remaining in productive use as a result of this subdivision.
(ii) In conjunction with the construction of any building which includes a wastewater treatment and effluent disposal system the applicant shall submit for approval a TP58 report prepared by a CPEng or an approved TP58 writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment and disposal system can be fully contained within the lot boundary and comply with the Regional Water and Soil Plan Permitted Activity Standards.	This condition is proposed to be cancelled and new wording offered which can refer to the Haigh Workman Engineering Assessment provided with this application. The Regional Water and Soil Plan has now been superseded by the Proposed Regional Plan for Northland such that it is not considered relevant to refer to this document.
(iii) Reticulated power supply and telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner.	This will be cancelled and brought forward on to the new titles.



(iv) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions shall be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.	This will be cancelled and updated wording issued on the new consent notice document.
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5.15 For ease of reference, the below consent notice conditions are offered as part of this application, which are to be registered on the titles for the new lots.

1. *NESCS – Land within this lot has been identified as land that will potentially be covered by the NESCS. As it was production land at the time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the NESCS include soil sampling, disturbance and/or removal and changing the use of land. [Lots 1 & 2]*
2. *In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and is to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509 or other alternative as agreed by Fire and Emergency NZ. [Lots 1 & 2]*
3. *In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system, the applicant shall submit for Council approval an onsite wastewater report prepared by a Chartered Professional Engineer or a Council approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a reserve disposal area. [Lots 1 & 2]*
4. *Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain on the property owner. [Lots 1 & 2]*



5. *In conjunction with the construction of any building that requires building consent on the lot the consent holder must provide a stormwater management report prepared by a Suitably Qualified and Experienced Person detailing how stormwater will be managed in accordance with Council's Engineering Standards at building consent stage. Stormwater runoff from future new buildings and impermeable surface areas on the lots shall be restricted to that of predevelopment levels for a 10% AEP storm event plus an allowance for climate change. [Lots 1 & 2]*
6. *The owners must preserve the indigenous trees and bush as well as the wetland areas identified in Areas X & Y on the title plan and shall not without the prior written consent of the Council and then only in strict compliance with any conditions imposed by the Council, cut down, damage or destroy any of such trees or bush. The owner must be deemed to be not in breach of this prohibition if any of such trees or bush shall die from natural causes not attributable to any act or default by or on behalf of the owner or for which the owner is responsible. [Lots 1 & 2]*

6.0 POLICY DOCUMENTS

- 6.1 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

- 6.2 As detailed earlier in this assessment, the subject site does contain a horticultural activity which is listed on the HAIL. Proposed Lot 2 contains an existing dwelling which was found to be a Permitted Activity in terms of the NESCS at the time of the development. Regarding future use of the sites, specifically Lot 1, it is intended that the existing horticulture activity within the lots will remain, given the infrastructure and vines are there already. The Users' Guide for the NESCS states that a subdivision activity is '**not covered by the NES if the land being subdivided does not stop being production land. In this case, a newly created land parcel may continue to be used for production purposes without triggering any requirement for investigation under the NES. Similarly, the NES does not apply to the remaining part of the original farm so long as it does not stop being production land.** In this instance, this relates to Proposed Lot 1 which is anticipated to be utilised for horticultural use and therefore continue to be utilised for rural productive use, so long as the land does not stop being production land.
- 6.3 A consent notice condition has been offered which advises future owners that as the land has been considered to remain in productive use as part of the subdivision proposal, consent under the NESCS was not triggered and therefore assessment of the proposal against the NESCS was not undertaken. Any future development which may change the use of the site, such as development with a residential dwelling, would trigger assessment under the NESCS. This approach is considered consistent with previous subdivision approvals for the site and



surrounding allotments in the immediate environment as well as other applications with similar activities and intentions in the wider Rural Productive zone.

- 6.4 Therefore, assessment of the NES against Proposed Lot 1 is not considered applicable. The proposal has been deemed as Permitted in terms of the NESCS.

National Environmental Standards for Freshwater 2020

- 6.5 As detailed in previous sections of this report, the site does contain a natural inland wetland. It is noted that the any future building platform and access within Lot 1 may be within 100 metres of the natural inland wetland on the site. While this is the case, there would be no hydrological connection between a development area and the wetland area as the stream provides a natural barrier.
- 6.6 As part of this proposal, no works are anticipated within 100m of the wetland area which would have a hydrological connection. Therefore, the proposed works as part of this application are not considered to require consent under the NES-F and are therefore consistent with this legislation.

Other National Environmental Standards

- 6.7 No other NES are considered applicable to this proposal.

National Policy Statements

- 6.8 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 Statement on Electricity Transmission.
 - National Policy Statement for Highly Productive Land
 - New Zealand Coastal Policy Statement.
 - National Policy Statement for Indigenous Biodiversity
 - National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat

National Policy Statement for Freshwater Management

- 6.9 As detailed earlier in this report, the NPS-FM is applicable to this proposal as the proposal involves natural inland wetland areas.
- 6.10 The proposal is considered to be consistent with the objectives and policies of the NPS-FM as the proposal will see the areas of wetland located within the site, set aside by formal protection. The formal protection proposed will enhance the health and well-being of these areas. The proposal has considered the effects of the development on the wetland areas with conditions imposed to ensure the ongoing wellbeing of the wetland areas as well as controls in place to ensure erosion and sediment levels are controlled post development of the sites. The proposal will not result in loss of extent of the natural inland wetlands and will protect and restore the values of the wetlands within the site.



- 6.11 Overall, it is considered that the proposal provides a positive outcome for the health and wellbeing of the natural inland wetlands identified and will enhance this for future generations.

National Policy Statement for Highly Productive Land

- 6.12 The subject site has soils which are predominantly LUC3.
- 6.13 The NPS for HPL has one objective and 9 policies. These all relate to sites which are classified as having highly productive land. Highly Productive Land is defined as –

highly productive land means land that has been mapped in accordance with clause 3.4 and is included in an operative regional policy statement as required by clause 3.5 (but see clause 3.5(7) for what is treated as highly productive land before the maps are included in an operative regional policy statement and clause 3.5(6) for when land is rezoned and therefore ceases to be highly productive land)

- 6.14 As this is a new NPS the Regional Policy Statement is yet to map highly productive land and as such in assessing this, we refer to clause 3.5(7).

3.5(7) - Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:

- (a) Is*
 - i. zoned general rural or rural production; and*
 - ii. LUC 1, 2, or 3 land; but*
- (b) Is not*
 - i. identified for future urban development; or*
 - ii. subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle*

- 6.15 The subject site is zoned Rural Production and also contains soils classified as LUC 3. The PDP has not identified the site for future urban development, and the site is not subject to a plan change to rezone it from rural production to rural lifestyle.
- 6.16 It is therefore considered that the NPS for HPL is applicable to this application and an assessment of the relevant objective and policies within this document will be undertaken below. It is worth noting that the Government has provided direction that it is proposed to remove LUC3 soils from the NPS-HPL, however this has not yet come into legal effect.

2.1 Objective



Highly productive land is protected for use in land-based primary production, both now and for future generations.

- 6.16.1 The intended purpose of the allotments post subdivision is to continue the existing horticultural activities. The Applicant has provided economic viability of the proposed lots, which although the horticultural activity will be split into two, the overall economic viability will remain, given each Block can be harvested independently of each other. The lot sizes will enable a more manageable orchard size for a family who wish to live on and work off the land. The proposal is considered to protect the land for primary production for both now and future generations as it is providing allotments which can be easily managed for horticultural use without requiring the economic outlay to get the activity started.

Policy 1: Highly productive land is recognised as a resource with finite characteristics and long term values for land-based primary production.

- 6.16.2 The proposal will not alter the use of the land, with the horticultural activity remaining. This is considered to utilise the soils to ensure the long term use of the land for primary production.

Policy 2: The identification and management of highly productive land is undertaken in an integrated way that considers the interactions with freshwater management and urban development.

Policy 3: Highly productive land is mapped and included in regional policy statements and district plans.

- 6.16.3 As this is a new NPS, the RPS is yet to map HPL. Section 3.4 of the NPS for HPL provides some guidelines for mapping of HPL.

- 6.16.4 The site is not within an area which would be considered for rezoning for urban development.

- 6.16.5 Due to the nature of the proposal, it is considered that the proposed application does not affect the identification and management of HPL. As mentioned, the Government has provided direction that LUC 3 soils are proposed to be removed from the consideration of the NPS-HPL and therefore, this would render this NPS not applicable to the subject site.

Policy 4: The use of highly productive land for land-based primary production is prioritised and supported.

- 6.16.6 The proposal will prioritise the use of the land for primary production use by maintaining the existing horticultural activity on the site. The applicant provides support of this by replacing the existing plastic tunnel coverings with mesh permeable coverings, which will increase the productivity and economic viability of the horticultural activity. The use of the land for productive land has been prioritised and is considered to be the intention of the subdivision to allow more manageable land sizes whilst enabling a viable economic outcome for the residents of the land.



Policy 5: The urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 6: The rezoning and development of highly productive land as rural lifestyle is avoided, except as provided in this National Policy Statement.

6.16.7 The proposal does not involve the urban rezoning of the site.

Policy 7: The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 8: Highly productive land is protected from inappropriate use and development.

6.16.8 In terms of Policy 7, it is considered that Section 3.8 of the NPS-HPL is applicable to determine if subdivision of this nature is provided for within the NPS-HPL. Section 3.8 of the NPS-HPL is as follows:

3.8 Avoiding subdivision of highly productive land

1. Territorial authorities must avoid the subdivision of highly productive land unless one of the following applies to the subdivision, and the measures in subclause (2) are applied:

(a) the applicant demonstrates that the proposed lots will retain the overall productive capacity of the subject land over the long term:

(b) the subdivision is on specified Māori land:

(c) the subdivision is for specified infrastructure, or for defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990, and there is a functional or operational need for the subdivision.

2. Territorial authorities must take measures to ensure that any subdivision of highly productive land:

(a) avoids if possible, or otherwise mitigates, any potential cumulative loss of the availability and productive capacity of highly productive land in their district; and

(b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on surrounding land-based primary production activities

6.16.9 In terms of 3.8(1), it is considered the proposal will not affect the overall productive capacity of any areas of HPL over the long term. The Applicant has demonstrated that the proposed allotments can retain the existing productive capacity of the land whilst providing a viable economic outcome for the future owners of the allotments. Although it is intended for the sites to remain in productive use, the proposal does provide opportunity for a dwelling to be built within Proposed Lot 1, subject to meeting the provisions of the District Plan and compliance with the consent notices imposed. While it has been shown that the house site is near the site frontage, it is anticipated that any future built development would occur within the vacant portion of the site, which would enable the horticultural activity on the site to remain unaffected.

6.16.10 Given the nature of the activity on the site, it is considered that splitting the existing activity into two, would not adversely affect the productive capacity of the site. The Applicant has



demonstrated that the productive capacity can remain within each allotment and although the activity will be held within a smaller land area, the economic and productive capacity of each block is viable for long term gain. The proposal is considered to protect the land for long term use and future generations by providing lot sizes which are easily manageable by future owners, whilst enabling economic return such that they could live on and live off the land.

6.16.11 The surrounding environment has seen many allotments created which contain either a residential dwelling or horticultural activity or both, some of which are smaller than the lot sizes proposed or are of similar size or larger. This range provides reassurance that productive capacity of lots of this size are possible and viable. This is also seen within the Rural Production zone in general.

6.16.12 Given the above, it is considered that the proposal can meet 3.8(1)(a) and therefore subdivision of the site as proposed, is anticipated and provided for within the NPS-HPL.

6.16.13 Clause 3.8(1)(b) & (c) are not applicable to the proposal.

6.16.14 In terms of 3.8(2) the proposal is not considered to result in the potential cumulative loss of the availability and productive capacity of HPL in the district as has been explained above in detail within this report. The productive capacity and availability is considered to remain and is the intended purpose of this subdivision. As detailed within this report also, no reverse sensitivity effects are anticipated, given the existing use of the site will remain and activities similar to the proposal are already existing in the surrounding environment. The proposed subdivision will be relatively indiscernible from what is currently in existence given that the horticultural activity is to remain on the site and if future development of Lot 1 was to occur, this is anticipated to occur in the portion of land nearest to the wetland, which is not considered to be suitable for productive use given the location of the wetland and stream. As such, productive capacity of the site will remain. Consent notice conditions have been offered to mitigate reverse sensitivity effects to a less than minor degree such as requiring a water filtration system on any potable water systems.

6.16.15 As such, it is considered that the proposal meets the requirements in 3.8(2).

6.16.16 Overall, it is considered that the proposal meets the requirements within Section 3.8 of the NPS for HPL and therefore, subdivision of the proposed nature is considered to be provided for under this clause. It is therefore considered the proposal is consistent with Policy 7 given subdivision can be provided as per Section 3.8.

6.16.17 In terms of Policy 8, the proposal does not intend to change the use of the land, with additional investment being made into existing horticultural infrastructure on site. As the subdivision would provide for future built development (subject to meeting the provisions of the ODP and compliance with consent notice conditions), Section 3.9 of the NPS-HPL needs to be considered. It is worth noting that when LUC 3 soils are removed from the jurisdiction of the NPS-HPL, then any future development within Lot 1 would not need to be addressed under the NPS-HPL and would only be considered against the NESCS and other applicable standards



and policy at the time. Lot 2 already has existing built development on the lot and has not been considered against Section 3.9 of the NPS-HPL as no additional development rights will be created for this lot.

6.16.18 Section 3.9 states that territorial authorities must avoid the inappropriate use or development of highly productive land that is not land-based primary production except where it is provided for within Section 3.9.

6.16.19 In this case, both allotments are intended to remain in production such that the development is not considered to be inappropriate. The horticultural activity within the site is based within the southern portion, with the northern portion being an area of scrubby weeds and bush, a stream and natural inland wetland. The proposal will see the formal protection of the wetland, riparian edges and stream area. Expansion of the horticultural activity in the northern portion of the site has not been undertaken nor is it deemed viable given the unusual configuration of the lot, topography, the large number and size of rocks present which means the ground is unable to be farmed, and the location of the natural inland wetland and stream. Given the proximity of the stream and wetland, horticultural activity in close proximity could have adverse effects in terms of reverse sensitivity on the ecological and biological functions of the stream and wetland. Moreover, given the presence of the larger boulders in this location substantial earthworks would be required in order to use this land.

6.16.20 It is considered that the most appropriate use of the northern part of the site would be for a residential dwelling either to accommodate a future owner, staff or seasonal workers (to the south of the stream), sheds to support the horticultural activity on the site including machinery storage, workshop for fixing and repairing of equipment (to the south of the stream) or for this area to remain insitu. Any future development would be small scale and could be located such that it would not impact on the horticultural activity on the land. Development of a dwelling would enable future owners to live and work on the land, providing social, cultural and economic benefits for the residents as well as enhancing the economic viability of the orchard itself, which would enhance the productive capacity.

6.16.21 The above, confirms that the proposal can achieve the following sections in 3.9(2):

- (a) *it provides for supporting activities on the land* – By providing accommodation for the owner or workers. Provides sheds for machinery or for the repair of goods used on site.
- (e) *it is for the purpose of protecting, maintaining, restoring, or enhancing indigenous biodiversity*- Through the setting aside and protection of wetlands, native planted areas and riparian margins.
- (g) *it is small-scale or temporary land use activity that has no impact on the productive capacity of the land.*’ - The productive area of the site can remain in production. Future development if desired, can be located on the northern section of the site which as described above is not suitable for horticultural use. As detailed within the guidance some supporting activities detailed above can also be considered small scale.



6.16.22 It is not definite that Proposed Lot 1 would be developed with a dwelling, however it is considered that subclauses (a) & (g) provide for such an activity given that it would be a supporting activity and could be located such that it would have no impact on the productive capacity of the land.

6.16.23 In terms of (3), cumulative loss of the availability and productive capacity of HPL would not be anticipated given development could occur within the portion of the site which is not utilised for productive use. Reverse sensitivity effects would not be anticipated as detailed within this report, given that similar activities already exist in the surrounding environment and the proposal would not compromise the existing activities within the site.

6.16.24 As such, it is considered that any future development within Lot 1 can be provided for within Section 3.9 of the NPS-HPL, if the site was ever to be developed and the NPS-HPL was applicable to the site at the time of such development.

Policy 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.

6.16.25 As detailed within this report, reverse sensitivity effects are not anticipated. The proposal is not considered to constrain land based primary production activities on HPL given the existing use of the site will remain. The proposal will see activities provided for which already exist in the immediate environment and are not anticipated to alter the productive capacity of the land or that of adjoining allotments.

Summary

6.16.26 Overall, it is considered that the proposal is consistent with the objectives and policies of the NPS for HPL. It is considered that the subdivision of this nature is provided for within Clause 3.8 of the NPS for HPL, as the proposal will not affect the productive capacity of areas of HPL. Future development of Proposed Lot 1 is considered to be provided for within Section 3.9, however this may not be applicable if the Government proceeds with removal of LUC 3 from the NPS-HPL, such that development of the site could proceed without consideration under the NPS-HPL. Given this, assessment of Section 3.10 of the NPS-HPL has not been determined to be required.

Regional Policy Statement

6.17 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. The following assesses the application against various objectives and policies of the Regional Policy statement for Northland to assess whether the application is consistent with these aims.

Water Quality

Objective 3.2 Region-wide water quality



Improve the overall quality of Northland's fresh and coastal water with a particular focus on:

- (a) Reducing the overall Trophic Level Index status of the region's lakes;*
- (b) Increasing the overall Macroinvertebrate Community Index status of the region's rivers and streams;*
- (c) Reducing sedimentation rates in the region's estuaries and harbours;*
- (d) Improving microbiological water quality at popular contact recreation sites, recreational and cultural shellfish gathering sites, and commercial shellfish growing areas to minimise risk to human health; and*
- (e) Protecting the quality of registered drinking water supplies and the potable quality of other drinking water sources.*

Policy 4.2.1 Improving overall water quality

Improve the overall quality of Northland's water resources by:

- (a) Establishing freshwater objectives and setting region-wide water quality limits in regional plans that give effect to Objective 3.2 of this regional policy statement.*
- (b) Reducing loads of sediment, nutrients, and faecal matter to water from the use and development of land and from poorly treated and untreated discharges of wastewater; and*
- (c) Promoting and supporting the active management, enhancement and creation of vegetated riparian margins and wetlands.*

- 6.17.1 The proposal will see the wetland areas on site formally protected to not only enhance the wetland area on site but also within the wider catchment. The mitigation measures proposed will aid in reducing sedimentation rates as well as improve water quality within the wetland and beyond. The proposal is considered to promote and support the active management, enhancement and creation of vegetated riparian margins and wetlands.

Policy 4.3.4 – Water harvesting, storage and conservation

Recognise and promote the benefits of water harvesting, storage, and conservation measures.

- 6.17.2 Water supply will be via roof harvesting.

Ecosystems and Biodiversity

Objective 3.4 Indigenous ecosystems and biodiversity

Safeguard Northland's ecological integrity by:

- a) Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna;*
- b) Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and*
- c) Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species.*

- 6.17.3 Formal protection of wetland areas on the site is offered as part of this application. Through this work the extent and diversity of indigenous ecosystems will be safeguarded. As detailed in the commentary for this objective regulation *should include incentives to encourage*



subdivision, use and development involving restoration and protection of ecosystems and indigenous biodiversity. These have all been offered as part of this subdivision package.

Policy 4.4.1 – Maintaining and protecting significant ecological areas and habitats

(1) In the coastal environment, avoid adverse effects, and outside the coastal environment avoid, remedy or mitigate adverse effects of subdivision, use and development so they are no more than minor on:

(a) Indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;

(b) Areas of indigenous vegetation and habitats of indigenous fauna, that are significant using the assessment criteria in Appendix 5;

(c) Areas set aside for full or partial protection of indigenous biodiversity under other legislation.

(2) In the coastal environment, avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of subdivision, use and development on:

(a) Areas of predominantly indigenous vegetation;

(b) Habitats of indigenous species that are important for recreational, commercial, traditional or cultural purposes;

(c) Indigenous ecosystems and habitats that are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass, northern wet heathlands, coastal and headwater streams, floodplains, margins of the coastal marine area and freshwater bodies, spawning and nursery areas and saltmarsh.

(3) Outside the coastal environment and where clause (1) does not apply, avoid, remedy or mitigate adverse effects of subdivision, use and development so they are not significant on any of the following:

(a) Areas of predominantly indigenous vegetation;

(b) Habitats of indigenous species that are important for recreational, commercial, traditional or cultural purposes;

(c) Indigenous ecosystems and habitats that are particularly vulnerable to modification, including wetlands, dunelands, northern wet heathlands, headwater streams, floodplains and margins of freshwater bodies, spawning and nursery areas.

(4) For the purposes of clause (1), (2) and (3), when considering whether there are any adverse effects and/or any significant adverse effects:

(a) Recognise that a minor or transitory effect may not be an adverse effect;

(b) Recognise that where the effects are or maybe irreversible, then they are likely to be more than minor;

(c) Recognise that there may be more than minor cumulative effects from minor or transitory effects.

(5) For the purpose of clause (3) if adverse effects cannot be reasonably avoided, remedied or mitigated then it maybe appropriate to consider the next steps in the mitigation hierarchy i.e. biodiversity offsetting followed by environmental biodiversity compensation, as methods to achieve Objective 3.4.

6.17.4 Subclauses 1 & 2 are not applicable to this proposal as the site is not located within the coastal environment.

6.17.5 Subclause 3 relates to areas outside of the coastal environment but where subclause (1) does not apply and is therefore applicable to the proposal. The area of wetland onsite will be



formally protected, mitigating adverse effects on this area by formally identifying the area as significant for both current and future use.

6.17.6 Subclause 4 is relative to the proposal. As has been discussed within this report, the proposal is considered to adequately mitigate any effects to a less than minor degree.

6.17.7 Subclause 5 is not applicable.

Economic Wellbeing

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.

6.17.8 The proposal is considered to enhance the economic wellbeing of the community given one additional allotment will be created, with both allotments containing existing horticultural activity which can support future owners. Lot 2 is already developed with a dwelling such that the resident can live and work on the land. Lot 1 will only contain horticultural activities but there is opportunity for a future dwelling. Given the intended use of the allotments is for productive use, the economic wellbeing will be enhanced as the existing business can continue.

Reverse Sensitivity

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.

Policy 5.1.3 – Avoiding the adverse effects of new uses and development

Avoid the adverse effects, including reverse sensitivity effects of new subdivision, use and development, particularly residential development on the following:

(a) Primary production activities in primary production zones (including within the coastal marine area);

(b) Commercial and industrial activities in commercial and industrial zones;



- (c) The operation, maintenance or upgrading of existing or planned¹³ regionally significant infrastructure¹⁴; and*
- (d) The use and development of regionally significant mineral resources*

6.17.9 As detailed within this report, the proposal is considered to mitigate reverse sensitivity effects for existing activities in the area. The existing productive activity can continue to occur within the proposed allotments and is the intention of the subdivision. The proposal is not considered to affect the productive capacity of the orchard, given that each allotment will contain a financially viable horticultural operation. Consent notice conditions regarding water filtration systems have been offered.

Active Management

Objective 3.15 Active Management

Maintain and / or improve;

- (a) The natural character of the coastal environment and fresh water bodies and their margins;*
 - (b) Outstanding natural features and outstanding natural landscapes;*
 - (c) Historic heritage;*
 - (d) Areas of significant indigenous vegetation and significant habitats of indigenous fauna (including those within estuaries and harbours);*
 - (e) Public access to the coast; and*
 - (f) Fresh and coastal water quality*
- by supporting, enabling and positively recognising active management arising from the efforts of landowners, individuals, iwi, hapū and community groups.*

Policy 4.7.1 – Promote active management

In plan provisions and the resource consent process, recognise and promote the positive effects of the following activities that contribute to active management:

- a) Pest control, particularly where it will complement an existing pest control project / programme;*
- b) Soil conservation / erosion control;*
- c) Measures to improve water quality in parts of the coastal marine area where it has deteriorated and is having significant adverse effects, or in freshwater bodies targeted for water quality enhancement;*
- d) Measures to improve flows and / or levels in over allocated freshwater bodies;*
- e) Re-vegetation with indigenous species, particularly in areas identified for natural character improvement;*
- f) Maintenance of historic heritage resources (including sites, buildings and structures);*
- g) Improvement of public access to and along the coastal marine area or the margins of rivers or lakes except where this would compromise the conservation of historic heritage or significant indigenous vegetation and / or significant habitats of indigenous fauna;*
- h) Exclusion of stock from waterways and areas of significant indigenous vegetation and / or significant habitats of indigenous fauna;*
- i) Protection of indigenous biodiversity values identified under Policy 4.4.1, outstanding natural character, outstanding natural landscapes or outstanding natural features either through legal means or physical works;*
- j) Removal of redundant or unwanted structures and / or buildings except where these are of historic heritage value or where removal reduces public access to and along the coast or lakes and rivers;*



- k) Restoration or creation of natural habitat and processes, including ecological corridors in association with indigenous biodiversity values identified under Policy 4.4.1, particularly wetlands and / or wetland sequences;*
- l) Restoration of natural processes in marine and freshwater habitats.*

6.17.10 The proposal will achieve 3.15(d) by providing formal protection of the wetland areas on the site as well as stormwater controls for future built development. This active management will provide a proactive approach to ensure that these areas are enhanced.

Policy 4.7.3 – Improving Natural character

Except where in conflict with established uses promote rehabilitation and restoration of natural character in the manner described in Policy 4.7.1 in the following areas:

- (a) Wetlands, rivers, lakes, estuaries, and their margins;*
- (b) Undeveloped or largely undeveloped natural landforms between settlements, such as coastal headlands, peninsulas, ridgelines, dune systems;*
- (c) Areas of high natural character;*
- (d) Land adjacent to outstanding natural character areas, outstanding natural features, and outstanding natural landscapes;*
- (e) Remnants of indigenous coastal vegetation particularly where these are adjacent to water or can be linked to establish or enhance ecological corridors; and*
- (f) The areas or values identified in Policy 4.4.1 (protecting significant areas and species).*

6.17.11 The proposal will promote rehabilitation and restoration of natural character for the wetland areas on site via the measures discussed throughout this report.

Regional Form

Policy 5.1.1 – Planned and co-ordinated development Subdivision, use and development should be located, designed and built in a planned and coordinated manner which:

- (a) Is guided by the 'Regional Form and Development Guidelines' in Appendix 2;*
- (b) Is guided by the 'Regional Urban Design Guidelines' in Appendix 2 when it is urban in nature;*
- (c) Recognises and addresses potential cumulative effects of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;*
- (d) Is integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;*
- (e) Should not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity;*
- (f) Ensures that plan changes and subdivision to / in a primary production zone, do not materially reduce the potential for soil-based primary production on land with highly versatile soils¹⁰, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and*
- (g) Maintains or enhances the sense of place and character of the surrounding environment except where changes are anticipated by approved regional or district council growth strategies and / or district or regional plan provisions.*
- (h) Is or will be serviced by necessary infrastructure.*

6.17.12 The issues listed within Part A Regional form and development guidelines have been incorporated as part of the subdivision assessment. Part B urban design guidelines have been considered, however as this site is not located within an urban area, this is generally not



applicable to this particular site. The cumulative effects of this development are considered acceptable given the enhancement of wetland on site via the legal protections offered and development restrictions. This development will see positive effects given the horticultural activity can remain within allotments which are manageable. All necessary infrastructure can be provided at time of constructing a dwelling within Lot 1 while taking care to not adversely impact on the local ecology. Stormwater will be designed at the time of built development on Lot 1, with a consent notice condition being imposed to ensure no adverse effects are created on the wetland. Incompatible land uses and reverse sensitivity are not anticipated given that the intended use of the sites is already existing within the surrounding environment, and the development to service a future dwelling on Lot 1, can be at least 10m from the site boundaries. As detailed within this report, the proposal is not considered to reduce the potential for primary production on land with highly versatile soils, as the existing horticultural activity is proposed to remain, with ample area outside of the existing horticultural activity available for any future development within Lot 1. The development will maintain the sense of place by providing allotments which are of a size consistent with the surrounding environment and keeping the existing established activity on the proposed allotments. As detailed all necessary infrastructure can be provided on site. Public access is not applicable. Amenity values will be protected through the restrictions imposed on the development and the enhancement of the wetland area. On-site infrastructure can be provided for on site. No surf breaks are located within proximity to this site.

Summary

- 6.18 It can be concluded from the above that the proposal is generally compatible with the intent of the Regional Policy Statement. The proposal will effectively utilise the site, as well as enhance the amenity values of the area and ecological and biodiversity values, which will subsequently create a positive impact. The proposal is not considered to create any reverse sensitivity effects and can provide a suitable building platform within the new vacant allotment.

Far North District Plan

Relevant objectives and policies

- 6.19 The relevant objectives and policies of the Plan are those related to the Rural Environment and Rural Production Zone. The proposal is considered to create no more than minor adverse effects on the rural environment. The proposal is considered to be consistent with the surrounding environment. The activity it is considered generally consistent with the objectives and policies of the Plan, as per below.

Assessment of the objectives and policies within the Rural Environment

- 6.20 The following assessment is based upon the objectives and policies contained within section 8.3 and 8.4 of the District Plan.

Objectives

8.3.1 To promote the sustainable management of natural and physical resources of the rural environment.



- 6.20.1 Sustainable management of natural and physical resources will be promoted by the enhancement of the wetland area as well as ensuring the existing horticultural use of the site remains. The proposal will not see a change in use of the site, however will utilise and maximise the existing natural and physical resources on the site to provide a superior outcome to traditional forms of subdivision. Although development of Lot 1 with a dwelling may be undertaken in the future, it is considered this can be completed without compromising the natural and physical resources of the site as detailed within this application.

8.3.2 To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development.

- 6.20.2 The life supporting capacity of the soils is not considered to be compromised by this low-density development. The proposal will see one additional allotment created which can accommodate a future dwelling. The existing horticultural use of the site will remain and be the predominant use.

8.3.3 To avoid, remedy or mitigate the adverse and cumulative effects of activities on the rural environment.

- 6.20.3 Cumulative effects are considered to be mitigated to a less than minor degree. The surrounding environment has already been compromised with many smaller or similar sized lots created, with similar activities to those proposed. As such, it is considered that cumulative effects from this low-density subdivision will be less than minor as is evident with existing development in the area. The wetland areas on site will be formally protected to enhance the ecological and biological diversity of the site and downstream environment.

8.3.4 To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.

8.3.5 To protect outstanding natural features and landscapes.

- 6.20.4 The site is not known to contain any protected areas of significant vegetation or habitats of indigenous fauna, nor any outstanding features and landscapes. As detailed, there is a wetland area and associated riparian vegetation located within the site which will be formally protected by a covenant. This will provide ecological and biological enhancement of the wetland as well as aid in filtrating sediment from the upstream environment, enhancing the water quality of the downstream environment. Overall, it is considered that the proposal results in the protection and enhancement of natural features on the site.

8.3.6 To avoid actual and potential conflicts between land use activities in the rural environment.

- 6.20.5 As discussed throughout this report, the surrounding environment consists of lot sizes smaller or similar to this proposed. The existing horticultural activity on the site is to remain such that the productive use will remain unchanged. Lot 2 is already developed with a dwelling and although the proposal will provide opportunity for Lot 1 to be developed with a dwelling, this is not considered objectionable to existing activities in the surrounding environment which



directly adjoin, adjoining allotments of the subject site. Consent notice conditions have been offered to reduce the likelihood of conflicts in land use activities occurring.

8.3.7 To promote the maintenance and enhancement of amenity values of the rural environment to a level that is consistent with the productive intent of the zone.

8.3.8 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.

8.3.9 To enable rural production activities to be undertaken in the rural environment.

8.3.10 To enable the activities compatible with the amenity values of rural areas and rural production activities to establish in the rural environment.

- 6.20.6 Amenity values will be maintained and enhanced by promoting and enhancing the existing horticultural activity on the proposed lots. The allotments will not physically change from what is currently in existence, with any future development on Lot 1 having ample area to be set back from adjoining boundaries and the road boundary, such that it can be visually obscured. Superior outcomes are achieved via formal protection of the wetland area within the site as well as enhancing the existing horticultural activity. The proposal will see the productive activity within the site continue and productive activities on adjoining allotments being able to remain. As the existing productive activity is to remain, it is considered that the amenity values of the area will not be compromised.

Policies

8.4.1 That activities which will contribute to the sustainable management of the natural and physical resources of the rural environment are enabled to locate in that environment.

- 6.20.7 The proposal is considered to contribute to the sustainable management of the natural and physical resources as explained above.

8.4.2 That activities be allowed to establish within the rural environment to the extent that any adverse effects of these activities are able to be avoided, remedied or mitigated and as a result the life supporting capacity of soils and ecosystems is safeguarded and rural productive activities are able to continue.

8.4.3 That any new infrastructure for development in rural areas be designed and operated in a way that safeguards the life supporting capacity of air, water, soil and ecosystems while protecting areas of significant indigenous vegetation

- 6.20.8 Adverse effects are considered to be mitigated to a less than minor degree and the life supporting capacity of soils is considered to remain unaffected. Ecosystems on site and downstream of the site are considered to be enhanced through the protection and enhancement of the wetland areas on the sites. Rural productive activities can continue.
- 6.20.9 Proposed Lot 2 will contain existing infrastructure. Proposed Lot 1 will not contain any existing built development and therefore any new development will require new infrastructure, which will be designed at the time of such development of the lot. Consent notice conditions have



been offered to ensure that any new infrastructure is designed and operated in a way that does not create any adverse effects on the environment.

8.4.4 That development which will maintain or enhance the amenity value of the rural environment and outstanding natural features and outstanding landscapes be enabled to locate in the rural environment.

6.20.10 The site is not known to contain any outstanding natural features or landscapes. Amenity value is considered to be enhanced by the proposal. The wetland area on the site will be formally protected. While the development will enable another dwelling to be constructed the immediate surrounds is already developed to a similar degree.

8.4.5 That plan provisions encourage the avoidance of adverse effects from incompatible land uses, particularly new developments adversely affecting existing land-uses (including by constraining the existing land-uses on account of sensitivity by the new use to adverse effects from the existing use – i.e. reverse sensitivity).

6.20.11 The site is located in an area with allotments similar in size to the proposal. No incompatible land use or reverse sensitivity effects are anticipated as the proposal is not out of character within the surrounding environment and will not create any activities which are not currently within the immediate environment. The proposal will not alter the ability of rural production activities to occur on neighbouring sites. The existing productive activity on the site will remain. The proposal does not constrain the existing land use activities on adjoining allotments. No reverse sensitivity effects are anticipated as detailed within this application.

8.4.6 That areas of significant indigenous vegetation and significant habitats of indigenous fauna habitat be protected as an integral part of managing the use, development and protection of the natural and physical resources of the rural environment.

6.20.12 As part of this proposal, the wetland within the site will be formally protected to enhance the wetland and the downstream environment. It is considered the proposal provides a superior outcome because of this.

8.4.7 That Plan provisions encourage the efficient use and development of natural and physical resources, including consideration of demands upon infrastructure.

8.4.8 That, when considering subdivision, use and development in the rural environment, the Council will have particular regard to ensuring that its intensity, scale and type is controlled to ensure that adverse effects on habitats (including freshwater habitats), outstanding natural features and landscapes on the amenity value of the rural environment, and where appropriate on natural character of the coastal environment, are avoided, remedied or mitigated. Consideration will further be given to the functional need for the activity to be within rural environment and the potential cumulative effects of non-farming activities.

6.20.13 An Engineering Assessment has been completed by Haigh Workman which determined that Lot 1 is capable of containing independent infrastructure within the site boundaries. The intensity, scale and type of the proposal is considered to be compatible with lots in the



surrounding environment. No adverse effects on habitats, outstanding natural features and landscapes or on the amenity value of the rural environment are anticipated. The site is not located within the coastal environment. Amenity values and ecological value of the site will be enhanced. The additional allotment has a functional need to be within the rural environment, as there is a shortage of allotments of this size and character available throughout Northland within close proximity to a township. The cumulative effects of an additional allotment is considered to be mitigated due to the existing character of the surrounding environment.

Assessment of the objectives and policies within the Rural Production Zone

- 6.21 The following assessment is based upon the objectives and policies contained within section 8.6.3 and 8.6.4 of the District Plan.

Objectives

8.6.3.1 To promote the sustainable management of natural and physical resources in the Rural Production Zone.

- 6.21.1 As noted in the sections above, this subdivision will contribute to the sustainable management of natural and physical resources. The proposal will also see the wetland on the site formally protected and enhanced, promoting the natural resources in the site. The proposal is considered to be the best utilization of the site as will enable enhancement of the site.

8.6.3.2 To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well being and for their health and safety.

- 6.21.2 Efficient use and development is provided by creating two allotments that can feasibly continue the existing horticultural activities on the site, whilst enabling opportunity for residents to live and work off the land. Social, economic and cultural well-being will be provided for by enhancing the existing character of the site and surrounding environment while providing an additional allotment.

8.6.3.3 To promote the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

- 6.21.3 Amenity values will be altered slightly by the introduction of an additional dwelling if the vacant site is developed. However, this level of development is not out of character within the surrounding environment. Given the existing horticultural activities are to remain on the site, the site will not alter as perceived from the surrounding environment. Amenity values will also be enhanced by the protection of the wetland area within the site.

8.6.3.4 To promote the protection of significant natural values of the Rural Production Zone.

- 6.21.4 Natural values will be promoted by protecting the wetland within the site which will subsequently aid in enhancing water quality and biological diversity.



8.6.3.5 To protect and enhance the special amenity values of the frontage to Kerikeri Road between its intersection with SH10 and the urban edge of Kerikeri.

6.21.5 The site is not located along Kerikeri Road.

8.6.3.6 To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones.

8.6.3.7 To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources.

8.6.3.8 To enable the efficient establishment and operation of activities and services that have a functional need to be located in rural environments.

8.6.3.9 To enable rural production activities to be undertaken in the zone.

6.21.6 Reverse Sensitivity effects are not anticipated as detailed within this application. Given the existing horticultural use of the site will remain and the activities that the proposed subdivision will enable are existing in the surrounding environment, no incompatible land use is anticipated. Consent notice conditions have been imposed to mitigate reverse sensitivity effects. The proposal will enable the continued use and operation of the established kiwifruit vines on the property, which is considered to have a functional need to be located in the rural environment. Allotments of this size are considered to have a functional need to be established outside of urban areas. The proposal is considered appropriate in the locality due to the connectivity to the Kerikeri and Waipapa townships. The proposal provides allotments in close proximity to other similar developments as well as connectivity and access to employment, services and community infrastructure such as schools, daycares, halls, which reiterates the functional need of these types of allotments in the area. The proposal will enable rural production activities to be undertaken in the zone, both within the site and on adjoining allotments.

Policies

8.6.4.1 That the Rural Production Zone enables farming and rural production activities, as well as a wide range of activities, subject to the need to ensure that any adverse effects on the environment, including any reverse sensitivity effects, resulting from these activities are avoided, remedied or mitigated and are not to the detriment of rural productivity.

8.6.4.2 That standards be imposed to ensure that the off site effects of activities in the Rural Production Zone are avoided, remedied or mitigated.

8.6.4.3 That land management practices that avoid, remedy or mitigate adverse effects on natural and physical resources be encouraged.

8.6.4.4 That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

8.6.4.5 That the efficient use and development of physical and natural resources be taken into account in the implementation of the Plan.



6.21.7 The proposal is not anticipated to create any adverse effects nor any reverse sensitivity effects. The vacant allotment has been assessed as being suitable for future built development and onsite servicing, as per the recommendations within the report from Haigh Workman. Natural and physical resources will be promoted via protection of the wetland on the site and enabling and enhancing the existing productive activity on the site. The proposal is considered to be of low density and will provide allotments similar and consistent with those in the surrounding environment. The allotments will retain their productive use such that they are considered consistent with the intent of the zone.

8.6.4.6 That the built form of development allowed on sites with frontage to Kerikeri Road between its intersection with SH10 and Cannon Drive be maintained as small in scale, set back from the road, relatively inconspicuous and in harmony with landscape plantings and shelter belts.

6.21.8 The site does not have frontage with Kerikeri Road.

8.6.4.7 That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.

8.6.4.8 That activities whose adverse effects, including reverse sensitivity effects, cannot be avoided remedied or mitigated are given separation from other activities

8.6.4.9 That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural Production zone and in neighbouring zones.

6.21.9 The proposal is not anticipated to create any adverse effects in regards to conflicting land use activities. The site and surrounding environment consist of lots that range in size, with the majority containing a residential dwelling and area for some form of horticultural activities. The proposal will create allotments which fall within the existing allotment size range as well as enable activities of similar characteristics. No conflicting land use activities are anticipated given the intended use of the lots. No reverse sensitivity effects are anticipated, given the intended use of the sites and the existing activities within the surrounding environment as well as the offered consent notice conditions. The proposal is not considered to compromise the continued operation of lawfully established existing activities given the productive use of the site will remain and any future development on Lot 1 can be designed to ensure no reverse sensitivity effects are created.

Assessment of the objectives and policies for Subdivision Activities

6.22 The following assessment is based upon the objectives and policies contained within Section 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.

- 6.22.1 The subdivision will be consistent with the purpose of the rural production zone which is to *enable the continuation of the wide range of existing and future activities compatible with normal farming and forestry activities, and with rural lifestyle and residential uses while ensuring that the natural and physical resources of the rural area are managed sustainably.* The proposal will ensure that the natural and physical resources within the site are protected and enhanced, whilst enhancing the downstream environment. The proposal will provide allotments which are consistent with the existing lot sizes in the area and also provide allotments which can contain land use activities similar to those in the surrounding environment, such that no reverse sensitivity effects are anticipated. The proposal will promote the social, economic and cultural well-being of people and communities by providing an additional allotment in close proximity to places of employment, schools, social centres and recreation areas. The site is located within 4km from Waipapa and 10km of Kerikeri and therefore is an ideal location for families who want to be in close proximity to these locations, whilst enjoying the amenity of a rural environment.

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.

- 6.22.2 The life supporting capacity of air, water, soil and ecosystems are not anticipated to be jeopardised by the proposal. The proposal will enhance the ecosystems in the area and the water quality by protecting and enhancing the wetland within the site. The existing productive activity on the site is to remain, protecting the use of soils. The proposal is not anticipated to create any reverse sensitivity effects given the proposed lot sizes reflect those in the surrounding environment. The proposal is not anticipated to create or accelerate natural hazards.

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.

- 6.22.3 The site is not located within the coastal environment and is not known to contain any heritage resources.

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.

- 6.22.4 Water supply is existing for the dwelling on Lot 2. Provision for water supply will be provided at the time of built development on Lot 1. Stormwater management is existing for Lot 2, with Lot 1 being of ample area to provide this onsite at the time of built development on the lot.



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.

- 6.22.5 The proposal will result in a superior outcome, as the wetland on site will be formally protected and enhanced as a result of the proposal. This wetland provides a connection to the downstream environment and protection of this will have a direct positive impact on the overall wellbeing of the wetland system within the surrounding environment. The proposal will also see the existing horticultural activity on the site enhanced, by replacing the existing plastic coverings with permeable coverings. The proposal will create allotments which are easily manageable and feasibly able to provide an income for residents/owners of the site, in an area which has already seen similar development.

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.

- 6.22.6 The site is not known to contain any sites of significance to Māori. The proposal is not considered to affect the relationship between Māori and their ancestral lands.

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.

- 6.22.7 Electricity supply is not a requirement of the Rural Production zone. Lot 2 has existing provisions to the dwelling on site and electricity supply to Lot 1 will be at the discretion of future owners. Energy efficient design will be at the discretion of future owners for Lot 1, however the site is capable of taking advantage of this due to the orientation of the site. The proposal is considered to promote the efficient provision of infrastructure by utilising existing access points, such that no new crossing places are required from Orchard Road. 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.***

6.22.8 The site is not located within the coastal environment. The proposal is considered to have a positive effect on the features listed within (a)-(g) above. The proposal will enable the protection and enhancement of the wetland area within the site as well as enable the existing land use activities in the area to continue. The proposal will provide lots which are of a size and dimension similar to those in the surrounding environment.

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

6.22.9 As detailed above, the proposal will not require any additional crossing places as it will utilise existing crossing places. Pedestrian access is not a consideration in this rural environment.

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

6.22.10 Haigh Workman have completed an assessment of hazards within their report. The site is susceptible to flood hazards surrounding the existing stream, with ample area on site to provide for future built development within Lot 1 outside of the flood susceptible areas.

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.

6.22.11 Connection to utility services is not a consideration of this rural subdivision. The proposal is not considered to create any adverse effects in terms of access and servicing. As mentioned, no additional crossing places are proposed. Excavation, filling and vegetation removal are not proposed as part of this application.

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.

6.22.12 The proposal will result in the protection of the wetland on the site.

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.***

6.22.13 Financial contribution is not considered applicable to this proposal.

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

6.22.14 Water storage is existing for Lot 2 and has been considered for Lot 1, with a consent notice condition stating requirements for water supply for fire fighting purposes.

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.

6.22.15 Bonus development donor and recipient areas are not considered applicable to this proposal. The site is not located within the Conservation zone.

13.4.11 That subdivision recognises and provides for the relationship of Māori 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.

6.22.16 The proposal is considered to recognise the relationship of Māori with their lands and is not considered to have an effect on this relationship. The proposal has taken 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.

6.22.17 The management plan rule is not considered applicable to this low-density proposal. Superior environmental outcomes will be achieved by the formal protection of the wetland and its riparian margins within the site.

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.*

6.22.18 The proposal will see the wetland area contained within both allotments, formally protected. As the enhancement of the wetland will occur as part of the subdivision proposal as well as each title having a registered protection of the wetland area, it is considered the proposal will preserve and restore the wetland area within the site. Lot 2 will contain the existing built development with the design of built development on Lot 1 being at the discretion of future owners. Visual impact of any buildings within the site can be mitigated via placement and design, with ample areas on site which can assist with this. The site does not adjoin any foreshore or esplanade areas. The proposal is not anticipated to affect the relationship of Māori and their lands. No indigenous planting is proposed nor considered necessary. The site is not known to contain any historic heritage. The proposal is not considered to exacerbate natural hazards, with a stormwater report being required at the time of future built development on the lots.

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.

6.22.19 The objectives and policies of the Rural Environment and Rural Production zone have been assessed above and the proposal has been found to be consistent with these.

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.*

6.22.20 Lot 2 will contain existing built development. There is ample area within Lot 1 to ensure energy efficient design at the time of built development within the lot.

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.*

6.22.21 The site is not located within the National Grid Corridor.

Proposed District Plan

6.23 Under the notified Proposed District Plan, the site has been zoned Horticulture and therefore an assessment of the objectives and policies within this chapter have been included below. The proposal is considered to create no more than minor adverse effects on the rural environment and is consistent with the rural 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.

Assessment of Objectives and Policies for Subdivision Activities

6.24 The following assessment includes assessment of SUB01 – SUB04 and SUBP1 – SUBP11.

SUB-01 - 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 established 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 mitigated and existing risks reduced; and*
- (f) manages adverse effects on the environment.*

6.24.1 As has been discussed throughout this report, the proposal is considered to achieve the objectives of the zone and district wide provisions. No overlays apply to this site. The proposal will contribute to the local character and sense of place by providing allotments of similar size to those in the surrounding environment, which can boast similar activities, whilst providing protection of the wetland within the site. No reverse sensitivity effects are anticipated as has



been discussed throughout this report. The proposal will be consistent with the existing land use patterns in the surrounding environment. The proposal is not anticipated to increase risk from natural hazards. No adverse effects are anticipated.

SUB-02 - 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.***

6.24.2 The NPS for HPL has been assessed in depth within this report. The site does contain soils of LUC 3 which at present, are considered highly versatile under the NPS-HPL. As detailed within this report, the proposed subdivision is considered to be consistent with the objectives and policies of the NPS-HPL with an avenue for the proposal being provided within the NPS-HPL under Section 3.8. The proposal will see the existing horticultural activity remain on the site, which can provide a feasible income within each allotment. The proposal is considered to protect the existing productive activity on the site. The proposal does result in the protection of the wetland area on the site, and therefore is consistent with this objective.

SUB-03 - 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.***

6.24.3 The subject site is not in an area which benefits from reticulated services. Haigh Workman have completed a Site Suitability Report which determined that Lot 1 is capable of containing the required onsite infrastructure. Lot 2 will contain the existing onsite infrastructure which services the existing dwelling.

SUB-04 - 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***

6.24.4 No public open spaces or esplanade reserves are deemed applicable in this instance.

Policies

SUB-P1 - Enable boundary adjustments that:

- (a) do not alter:***



- (i) *the degree of non compliance with District Plan rules and standards;*
- (ii) *the number and location of any access; and*
- (iii) *the number of certificates of title; and*
- (b) *are in accordance with the minimum lot sizes of the zone and comply with access, infrastructure and esplanade provisions.*

6.24.5 The proposal does not include a boundary adjustment.

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

6.24.6 The proposal is not 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.*

6.24.7 An assessment of the zone objectives and policies will be undertaken below. Although the proposal will see allotments created which are not entirely consistent with the Horticulture zone and do not comply with the proposed minimum lot sizes, the proposed lots will see the existing horticultural activity remain, whilst enabling opportunity for Lot 1 to be developed with a dwelling. The Applicant has advised that each lot will contain a feasible income from the existing horticultural activity such that the lots will and can remain in productive use. Each lot will have access via an existing crossing place.

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

6.24.8 The proposal is considered to be consistent with the district wide, natural environment values, historical and cultural values as well as hazard and risks sections.

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.*



6.24.9 The site is not located within the General Residential, Mixed Use or Settlement zone under the PDP.

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 in accordance with the purpose, characteristics and qualities of the zone.***

6.24.10 As detailed within the Site Suitability Report from Haigh Workman, Lot 1 is capable of containing future onsite infrastructure to service any future development. Lot 2 will contain the existing onsite infrastructure which service the existing dwelling.

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

6.24.11 The site does not adjoin the coast or any qualifying water bodies and as such, no esplanade reserves have been proposed.

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.***

6.24.12 The site does not contain a SNA. However, the proposal will provide the protection of the existing wetland and its riparian margins within the site. As discussed earlier in this report, the proposal is not considered to 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.

6.24.13 The proposal does not include a management plan subdivision. The Management Plan Subdivision Rule (SUB-R7) does not have legal weighting and may be subject to the submission process and hence subdivision cannot be undertaken in accordance with this rule at this point in time.

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.

6.24.14 The proposal does not result in the subdivision of a minor residential unit from a principal dwelling.



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.***

6.24.15 The proposal is considered to be consistent with the scale, density, design and character of the environment. Although the proposed lot sizes are less than what is permitted for the horticulture zone, the proposal is considered consistent with lots in the surrounding environment and provides a transition zone on the outskirts of Kerikeri. Haigh Workman have completed an Engineering Assessment which found Lot 1 to be suitable for future onsite infrastructure. The proposal is not anticipated to exacerbate natural hazards. No effects on historic heritage, cultural values, natural features and landscapes, natural character or indigenous biodiversity values are anticipated. The site is not known to hold any historical, spiritual or cultural association held by tangata whenua.

Assessment of Objectives and Policies of the Horticulture zone

6.25 The following assessment includes assessment of HZ-01- HZ-03 and HZ-P1 – HZ-P7.

Objectives

HZ-01 - The Horticulture zone is managed to ensure its availability for Horticultural activities and its long-term protection for current and future generations.

HZ-02 The Horticulture zone enables horticultural and ancillary activities, while managing adverse environmental effects on site.

HZ-03 - Land use and subdivision in the Horticulture zone:

- a. avoids land sterilisation that reduces the potential for highly productive land to be used for a horticulture activity;***
- b. avoids land fragmentation that comprises the use of land for horticultural activities;***
- c. avoids any reverse sensitivity effects that may constrain the effective and efficient operation of primary production activities;***
- e. does not exacerbate any natural hazards;***
- f. maintains the rural character and amenity of the zone;***
- g. is able to be serviced by on-site infrastructure.***



- 6.25.1 The proposal will ensure the availability for horticultural activities by ensuring the lots are of suitable size to continue the existing horticultural activities within the site. This will enable the long-term protection for current and future generations. Horticultural activities will continue to occur on the site without any adverse effects anticipated on the surrounding environment. The proposal is not considered to result in land sterilisation given that the horticultural activities will continue within the proposed allotments. The proposal is not considered to result in land fragmentation that would compromise the land, given that the Applicant has provided figures which stipulate that each lot can provide a feasible income from the horticultural activities contained within each site. Reverse sensitivity effects are not anticipated as detailed within this application. The proposal is not anticipated to exacerbate natural hazards. The rural character and amenity of the zone will be maintained given the existing horticultural activities will remain on site. Lot 2 is already serviced by onsite infrastructure with Lot 1 determined to be suitable for future onsite infrastructure.

Policies

HZ-P1 - Identify a Horticulture Zone in the Kerikeri / Waipapa area using the following criteria:

- a) presence of highly productive land suitable for horticultural use;***
- b) access to a water source, such as an irrigation scheme or dam able to support horticultural use; and***
- c) infrastructure available to support horticultural use.***

- 6.25.2 The site is identified as having LUC 3 soils which are currently classified as highly productive land under the NPS-HPL although the Government has provided direction that LUC 3 soils will potentially be removed from the NPS-HPL consideration. The site does have part ownership of an allotment which is utilised as a water source. The site contains existing infrastructure to support the existing horticultural use of the site.

HZ-P2 - Avoid land use that:

- a) is incompatible with the purpose, function and character of the Horticulture Zone;***
- b) will result in the loss of productive capacity of highly productive land;***
- c) compromises the use of highly productive land for horticultural activities in the Horticulture Zone; and***
- d) does not have a functional need to be located in the Horticultural Zone and is more appropriately located in another zone.***

- 6.25.3 The proposal will see the existing land use activities occur within the site as well as the potential for Lot 1 to be developed with a dwelling. There is ample area within Lot 1 to construct a dwelling which would be located outside of the existing horticultural activity extent and be within an area of the site deemed unsuitable for horticultural activity given the boundary configuration, existing scrubby bush and close proximity to the stream and wetland areas. Development of Lot 1 with a dwelling is not considered to compromise the use of the land for horticultural activities as detailed above. It is considered that any future dwelling would have a functional need to be located in the environment to support the horticultural activity, as is similar to many other allotments in the area.



HZ-P3 - Enable horticulture and associated ancillary activities that support the function of the Horticulture zone, where:

- a) adverse effects are contained on site to the extent practicable; and***
- b) they are able to be serviced by onsite infrastructure.***

6.25.4 The proposal will see a subdivision of the site, where Lot 1 is adequate for future onsite infrastructure. No adverse effects are anticipated.

HZ-P4 - Ensure residential activities are designed and located to avoid, or otherwise mitigate, reverse sensitivity effects on horticulture activities, including adverse effects associated with dust, noise, spray drift and potable water collection.

6.25.5 Residential activities do not form part of this application however any future development on Lot 1 could be designed and located to ensure reverse sensitivity effects are mitigated. Consent notice conditions have been offered to advise future owners of the existing activities in the area as well as requiring a water filtration system for any future potable water system.

HZ-P5 - Manage the subdivision of land in the Horticulture zone to:

- a) avoid fragmentation that results in loss of highly productive land for use by horticulture and other farming activities;***
- b) ensure the long-term viability of the highly productive land resource to undertake a range of horticulture uses;***
- c) enable a suitable building platform for a future residential unit; and***
- d) ensure there is provision of appropriate onsite infrastructure.***

6.25.6 The proposed subdivision is not considered to fragment land that would result in loss of HPL given that the existing horticultural activity will be held across both lots, with each lot being provided a feasible income from the activity. The proposal will see the long-term viability of the site increased as it will create lots which are manageable, increasing productivity and profitability. Lot 2 contains an existing dwelling, with there being ample area within Lot 1 to contain a dwelling which is located outside of the horticultural activity extent. Onsite infrastructure can be provided within Lot 1 and is existing for Lot 2.

HZ-P6 - Encourage the amalgamation or boundary adjustments of Horticulture zoned land where this will help to make horticultural activities more viable on the land.

6.25.7 The proposal does not involve amalgamation or a boundary adjustment.

HZ – P7 - 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) whether the proposal will increase production potential in the zone;***
- b) whether the activity relies on the productive nature of the soil;***



- c) consistency with the scale and character of the rural environment;***
- d) location, scale and design of buildings or structures;***
- e) for subdivision or non-primary production activities:***
 - i. scale and compatibility with rural activities;***
 - ii. potential reverse sensitivity effects on primary production activities and existing infrastructure;***
 - iii. the potential for loss of highly productive land, land sterilisation or fragmentation***
- f) at zone interfaces:***
 - i. any setbacks, fencing, screening or landscaping required to address potential conflicts;***
 - ii. the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable;***
- g) the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer;***
- h) the adequacy of roading infrastructure to service the proposed activity;***
- i) Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity;***
- j) Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.***

6.25.8 The proposal is considered to increase the production potential of the zone as it will create lots which are of manageable size such that productivity will be increased within each lot. The horticultural activity is existing and will remain. The proposed allotments are considered consistent with the scale and character of the rural environment. Location, scale and design of structures within Lot 1 will be at the discretion of future owners. The scale and compatibility is consistent with lots in the surrounding environment. No reverse sensitivity effects are anticipated. Loss of HPL is not anticipated given the existing productive use of the site will remain. The site is not located at a zone interface. Lot 2 has existing onsite infrastructure and Lot 1 has been determined to be suitable for future onsite infrastructure. The site has a share in an existing allotment which contains a water source. The proposed allotments will utilise the existing crossing places to the site. No adverse effects on historic heritage, cultural values, natural features or indigenous biodiversity are anticipated. The site is not known to hold a historical, spiritual or cultural associated by tangata whenua.

Summary

- 6.26 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.
- 6.27 Although the proposal is considered to be a non-complying activity, allotments of this size are not unusual in the immediate and wider environment. Due to the close proximity of the site to the Kerikeri and Waipapa townships, there is considered to be a functional need for



allotments of this size to be located in the area, providing connectivity between smaller and larger rural productive lots. The proposal provides for the social, economic and cultural well being of the community by providing lifestyle allotments in close proximity to employment, services and community infrastructure.

- 6.28 The existing horticultural activity is intended to remain within the allotments, with the lots being of a more manageable size to increase productivity and profitability. The proposal will allow better utilization of the site and provide enhancement of the site and surrounding environment.
- 6.29 No reverse sensitivity effects are anticipated due to the nature of the surrounding environment. The proposal will result in a superior outcome by the formal protection of the wetland area within the site, which will in turn provide a positive effect on the downstream environment due to the natural filtration and biodiversity enhancement that will be provided as part of this proposal.



7.0 NOTIFICATION ASSESSMENT – SECTIONS 95A TO 95G OF THE ACT

Public Notification Assessment

- 7.1 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.

- 7.1.1 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]

- 7.1.2 The application is a Non-Complying activity. 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.

- 7.1.3 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.

7.1.4 The proposal will result in one additional allotment which has been assessed as being suitable for future built development and onsite servicing. The proposal will utilise existing crossing places for each allotment. The proposal will provide allotments which fall within the existing size range in the area and can accommodate similar land use activities. The wetland on site will be formally protected providing a superior outcome.

7.1.5 As determined with Section 5 the effects on the environment are considered to be less than minor and the proposal is generally consistent with the objectives and policies of the relevant policy documents as determined within Section 6 of this report.

7.1.6 It is therefore considered that there are no special circumstances that exist to justify public notification of the application because the proposal is not considered to be controversial or of significant public interest. There are no circumstances which are considered to be unusual or exceptional in this instance.

Public Notification Summary

7.1.7 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

7.2 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.

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).

7.2.1 There are no protected customary rights groups or customary marine title groups or statutory acknowledgement areas that are relevant to this application. Therefore Step 1 does not apply and 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).

- 7.2.2 There is no rule in the plan or national environmental standard that precludes notification. The application is not for a controlled activity. Therefore 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.

- 7.2.3 The proposal does not result in a boundary activity.

- 7.2.4 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.

- 7.2.5 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. An Assessment was made within Section 5 of this report which concluded that the effects on adjoining neighbours were less than minor given that the horticultural activities are to remain on site, there are existing allotments which contain similar activities to this proposed in the immediate environment and mitigation measures have been offered via consent notice conditions to ensure reverse sensitivity effects are mitigated to a less than minor degree.

- 7.2.6 It is therefore considered that there are no adverse effects created on adjoining allotments. It is considered that there are no other lots which may be adversely affected, as such lots are located a sufficient distance from the site.



- 7.2.7 Due to the size of allotments in the area, the development is considered consistent with other developments in the area and as such no other sites are considered to be adversely affected.
- 7.2.8 As a result of the above and with respect to section 95B(8) and section 95E, the proposal is considered to have a no more than minor effect on all owners and occupiers of adjacent properties. 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),

- 7.2.9 The proposal is to undertake a subdivision to create one additional allotment where each lot can continue the horticultural activity within the site. The proposal provides a superior outcome by protecting the wetland on the site. It is considered that no special circumstances exist in relation to the application.
- 7.2.10 Due to the nature of the surrounding environment and the measures proposed within this report, no reverse sensitivity effects are anticipated to be created.
- 7.2.11 It is therefore considered that there are no special circumstances that exist to warrant notification of the application to any other persons.

Limited Notification Assessment Summary

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

Notification Assessment Conclusion

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

8.0 PART 2 ASSESSMENT

- 8.1 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.
- 8.2 The proposal will meet Section 5 of the RMA as the development can achieve sustainable management of natural and physical resources by protecting the wetland within the site. The proposal is considered consistent in terms of its allotment sizes and character as the sites being created are generally comparable with subdivision patterns of the immediate surrounding environment.



- 8.3 Section 6 of the Act sets out a number of matters of national importance. It is considered that the proposal will not adversely affect any of these matters, as has been explained throughout this report.
- 8.4 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 efficient use and development of natural and physical resources, the maintenance and enhancement of amenity values. This development will result in an efficient use of the site and its resources as the site can be effectively used to continue to the existing horticultural activities. Amenity values will be maintained and enhanced.
- 8.5 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 subject site is not known to be located within an area of significance to Māori nor does the site indicate any historic archaeology is present. As such it is considered that the proposal has taken into account the principals of the Treaty of Waitangi; and is not considered to be contrary to these principals.
- 8.6 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 section 5 of the Act.

9.0 104D ASSESSMENT

- 9.1 As detailed in section 4.2 of this application, Section 104D of the Act requires that a Non-Complying subdivision must meet at least one of the gateway tests above in order for the decision-making authority to consider approving the application.
- 9.2 As detailed within section 5 above it is concluded that the effects of the proposal on the surrounding environment will be no more than minor. Passing the first test.
- 9.3 In section 6 above it was also concluded that the proposal would be generally consistent with the available policy documents. Passing the second test.
- 9.4 Case Law has determined that the precedent of granting resource consent is a relevant factor for a consent authority when considering whether to grant a Non-Complying resource consent. A precedent effect is likely to arise in a situation where consent is granted to a Non-Complying activity that lacks the evident unique, unusual or distinguished qualities that serve to take the application out of the generality of cases or similar sites in the vicinity. If the activity boasts sufficient qualities that are unusual or unique, that other proposals may not contain, precedent effects may be avoided. As discussed in Sections 5.4-5.10 of this report, in this case, the proposal is considered unique given the characteristics of the site. The site is in an area that is already compromised. The proposal will result in a superior outcome where the wetland on the site will be protected, providing benefit to not just the site but the downstream environment. The existing horticultural activities can continue within both allotments,



increasing productivity and profitability of the horticultural activity. Due to the existing development in the area, the proposal is considered to be consistent with development in the surrounding environment and is a reflection of the existing lot sizes and land use activities.

- 9.5 As both gateway tests have been satisfied it is concluded that the proposal can be approved under delegated authority by Council.

10.0 CONCLUSION

- 10.1 The proposal is to undertake a subdivision to create one additional allotment within the Rural Production zone. Proposed Lot 1 will be 2.2ha in area, with Proposed Lot 2 being 4.06ha in area and containing the existing dwelling. The proposal also includes formal protection and enhancement of the wetland area on the site. The proposal is considered to be consistent with neighbouring development patterns which have created rural lifestyle allotments.
- 10.2 In terms of section 104(1)(a) of the Act, the actual and potential effects of the proposal will be no more than minor.
- 10.3 It is also considered that the proposal will have no more than minor adverse effects on the wider environment; no persons will be adversely affected by the proposal and there are no special circumstances.
- 10.4 The proposal is a Non-Complying activity, an assessment of the gateway tests under section 104D have been undertaken. The proposal is considered to pass both gateway tests.
- 10.5 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.
- 10.6 It is considered that the proposal results in no more than minor effects on the environment and the proposal is generally consistent with the relevant objectives and policies set out under the District Plan and Regional Policy Statement. The development is considered appropriate for consent to be granted on a non-notified basis.



11.0 LIMITATIONS

- 11.1 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.
- 11.2 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.
- 11.3 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.
- 11.4 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 **907842**
Land Registration District **North Auckland**
Date Issued 29 January 2020

Prior References
870652

Estate Fee Simple
Area 6.2685 hectares more or less
Legal Description Lot 2 Deposited Plan 540914
Registered Owners
Kapiro Orchard Limited

Estate Fee Simple - 1/11 share
Area 4.9184 hectares more or less
Legal Description Lot 12 Deposited Plan 95612
Registered Owners
Kapiro Orchard Limited

Interests

Subject to a water supply right (in gross) over part Lot 12 DP 95612 marked N on SO 57412 in favour of (now) Kerikeri Irrigation Company Limited created by Gazette Notice B379536.2 - 11.2.1985 at 11:17 am

Subject to a drainage right over part Lot 2 DP 540914 marked Z on DP 545439 specified in Easement Certificate D438647.1 - 11.10.1999 at 2:41 pm

8742435.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 11.5.2011 at 12:50 pm (affects part Lot 2 DP 540914 formerly Lot 11 DP 532011)

Land Covenant in Easement Instrument 8742435.3 - 11.5.2011 at 12:50 pm

11346721.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 26.3.2019 at 3:47 pm (affects part Lot 2 DP 540914 formerly Lot 11 DP 532011)

Appurtenant to Lot 2 DP 540914 is a right to convey water created by Easement Instrument 11346721.10 - 26.3.2019 at 3:47 pm

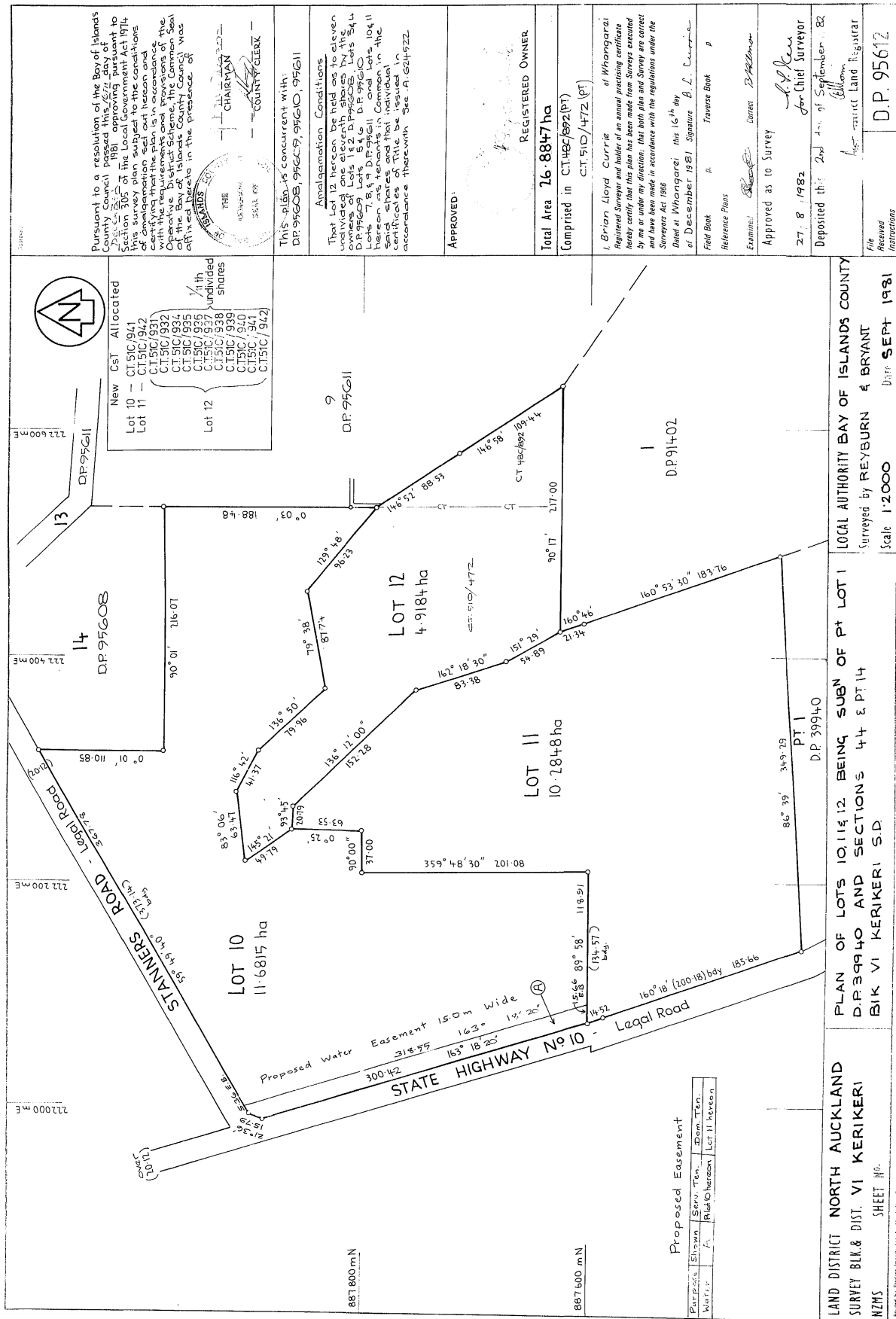
11653133.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 29.1.2020 at 10:36 am (affects Lot 2 DP 540914)

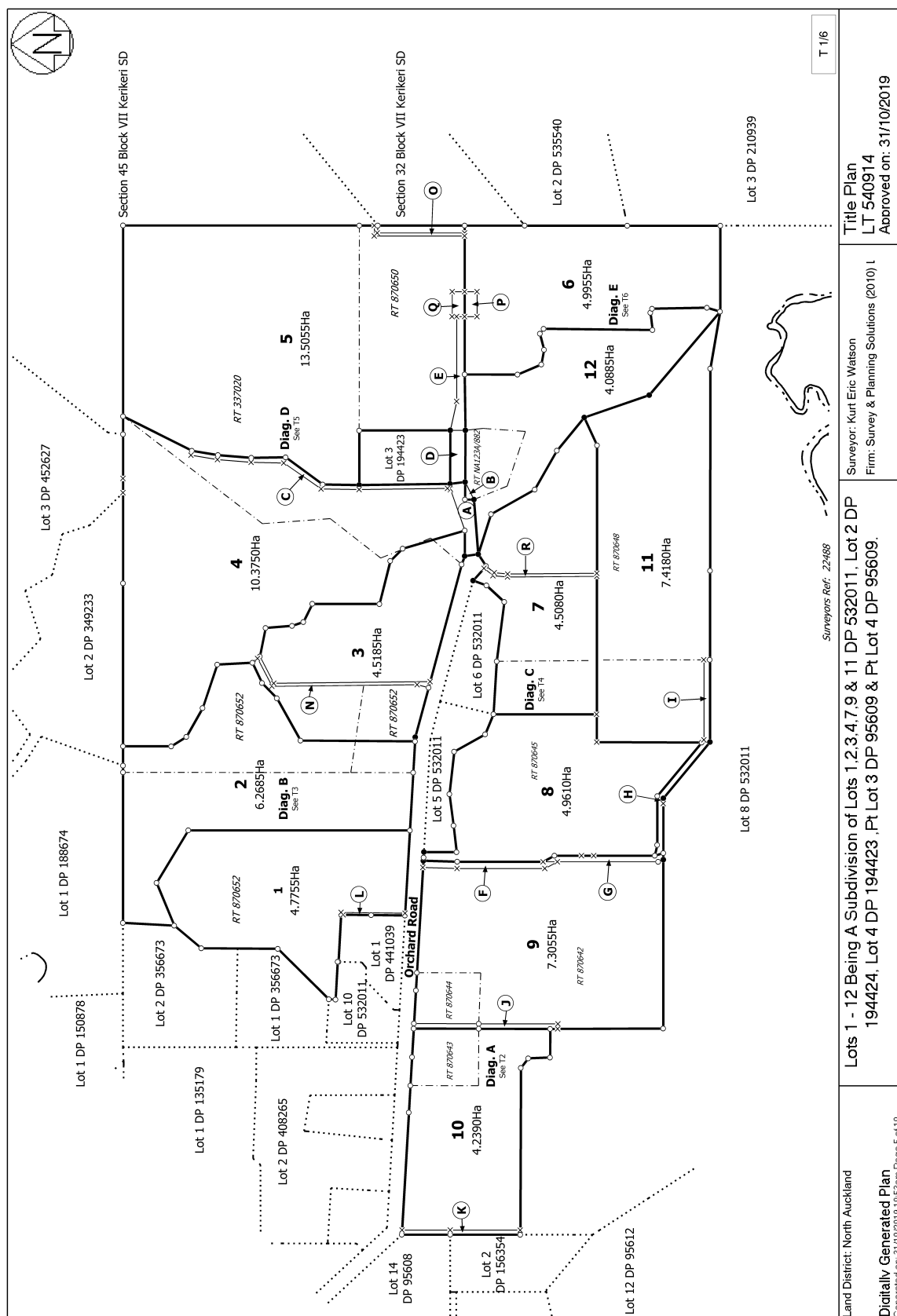
Subject to Section 241(2) Resource Management Act 1991 (affects DP 540914)

11653133.4 Surrender of the drainage right marked Z on DP 545439 as appurtenant to Lot 2 DP 540914 as specified in Easement Certificate D438647.1 - 29.1.2020 at 10:36 am

Appurtenant to Lot 2 DP 540914 is a right of way (loading) created by Easement Instrument 11653133.7 - 29.1.2020 at 10:36 am

13224227.4 Mortgage to ASB Bank Limited - 19.2.2025 at 9:36 am





View Instrument Details



Instrument No	8742435.2
Status	Registered
Date & Time Lodged	11 May 2011 12:50
Lodged By	Stuhlmann, Craig Scott
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991



Toitū Te Whenua
Land Information
New Zealand

Affected Computer Registers	Land District
548813	North Auckland
548814	North Auckland

Annexure Schedule: Contains 2 Pages.

Signature

Signed by Craig Scott Stuhlmann as Territorial Authority Representative on 11/05/2011 12:47 PM

*** End of Report ***



**Far North
District Council**

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THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING RC 2100355

Being the Subdivision of Lot 1 DP 189982 and 2/11th share in
Lot 12 DP 95612 & Pt 3 DP 95609

PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) 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 these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lot 2 – DP 441039

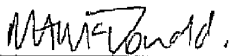
- i) That upon construction of any habitable building it shall have a roof water collection system with a minimum tank storage of 45,000 litres. The tank(s) shall be positioned so that they are accessible (safely) for fire fighting purposes and fitted with an outlet compatible with rural fire service equipment. Where more than one tank is utilised they shall be coupled together and at least one tank fitted with an outlet compatible with rural fire service equipment. Alternatively, the dwelling can be fitted with a sprinkler system approved by Council.

Lots 1 & 2 – DP 441039

- ii) The operation of agricultural and horticultural equipment including sprays and chemicals (subject to compliance with any relevant legislation) may be a permitted activity. Accordingly, where rainwater is collected from exposed surfaces for human consumption in connection with any residential development, the occupiers of any such dwelling shall install an approved water filtration system.
- iii) The hedge shown as areas X, Y & Z on the survey plan for RC 2100355 is not to be cut down or removed without the approval of Council.

Any plants that subsequently die or are removed or damaged are to be replaced as soon as possible, at least within the next planting season (May to September inclusive).

SIGNED:



Mr Murray McDonald

By the FAR NORTH DISTRICT COUNCIL

Under delegated authority:

MANAGER – RESOURCE MANAGEMENT

DATED at KERIKERI this

18th

day of

April

2011

View Instrument Details



Instrument No 11653133.4
Status Registered
Date & Time Lodged 29 January 2020 10:36
Lodged By Wilkins, Marcus Yardley
Instrument Type Partial Surrender of Easement



Affected Records of Title	Land District
907842	North Auckland

Affected Instrument	Easement Certificate D438647.1
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Annexure Schedule Contains 1 Pages.

Grantor Certifications

- I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Marcus Yardley Wilkins as Grantor Representative on 29/01/2020 10:34 AM

Grantee Certifications

- I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒
- I certify that the easement affected by this transaction is not the subject of a condition imposed by the territorial authority ☒
- I certify that the Mortgagee under Mortgage 11451837.2 has consented to this transaction and I hold that consent ☒

Signature

Signed by Marcus Yardley Wilkins as Grantee Representative on 29/01/2020 10:34 AM

*** End of Report ***

Approved for ADLS by Registrar-General of Land under No. 2018/6269

EASEMENT INSTRUMENT TO PARTIALLY SURRENDER EASEMENT OR PROFIT À PRENDRE

Section 109 Land Transfer Act 2017

**Grantor**

Seeka Limited

Grantee

Seeka Limited

Partial Surrender of Easement or profit à prendre

The Grantee, being the registered owner of the benefited land(s) set out in Schedule A, or being the Grantee in gross, hereby partially surrenders to the Grantor the easement(s) or *profit(s) à prendre* set out in Schedule A and the Grantor accepts the partial surrender of those easement(s) or *profit(s) à prendre*.

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of Easement or Profit	Creating Instrument number	Burdened Land (Record of Title) ¹	Benefited Land (Record of Title) or in gross ²
Drainage	D438647.1	Area marked Z on Deposited Plan 545439 on Lot 2 Deposited Plan 540914 (RT 907842)	Lot 2 Deposited Plan 540914 (RT 907842)

¹ If only part of the existing easement area is to be surrendered, include the full legal description or relevant easement marking and plan which defines that part.

² If only part of the benefited land is to be surrendered, include the full legal description of that part.

View Instrument Details



Instrument No 11653133.7
Status Registered
Date & Time Lodged 29 January 2020 10:36
Lodged By Wilkins, Marcus Yardley
Instrument Type Easement Instrument



Affected Records of Title	Land District
907841	North Auckland
907842	North Auckland
907843	North Auckland
907848	North Auckland
907850	North Auckland

Annexure Schedule Contains 2 Pages.

Grantor Certifications

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument ☒

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

I certify that the Mortgagee under Mortgage 11451837.2 has consented to this transaction and I hold that consent ☒

Signature

Signed by Graeme Elvin as Grantor Representative on 11/12/2019 11:31 AM

Grantee Certifications

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument ☒

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Graeme Elvin as Grantee Representative on 11/12/2019 11:32 AM

*** End of Report ***

Form 22

Easement Instrument to grant Easement or *profit à prendre*, or create Land Covenant

(Section 109 Land Transfer Act 2017)

Grantor

SEEKA LIMITED

Grantee

SEEKA LIMITED

Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered owner of the burdened land set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A*Continue in additional Annexure Schedule (if required)*

Purpose of easement or <i>profit</i>	Shown on	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right of Way (loading)	M on Deposited Plan 543489	Lot 1 Deposited Plan 540914 (RT 907841)	Lot 2 Deposited Plan 540914 (RT 907842) Lot 3 Deposited Plan 540914 (RT 907843) Lot 8 Deposited Plan 540914 (RT 907848) Lot 10 Deposited Plan 540914 (RT 907850)

Easements or Profits à prendre Rights and Powers (including terms, covenants and conditions)*Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required*

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule Five of the Property Law Act 2007.

The implied rights and powers are hereby added to by the provisions set out in Annexure Schedule.

Form 22 - continued

Annexure Schedule

Page 3 of 3 Pages

Insert Instrument Type

EASEMENT

Continue in additional Annexure Schedule (if required)

INTERPRETATION

Where there is a conflict between the provisions of the Fifth Schedule to the Land Transfer Regulations 2018 and the Fifth Schedule to the Property Law Act 2007, the provisions of the Fifth Schedule to the Property Law Act 2007 must prevail.

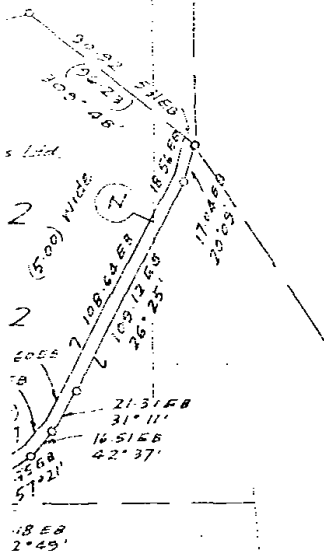
Where there is a conflict between the provisions of the Fifth Schedule to the Land Transfer Regulations 2018 and/or the Fifth Schedule to the Property Law Act 2007 and the provisions of this Easement Instrument, the provisions of this Easement Instrument must prevail.

RESTRICTION ON USE

The Grantor and the Grantee acknowledge that the rights and powers implied under the Right of Way (loading) easement affecting easement area "M" on Deposited Plan 540914 is limited such that the Grantee shall only have access to the easement area at such times as is reasonably required for the loading and unloading of fruit and only to attend to the loading and unloading of fruit and purposes incidental to such use.

B379536.2 GN

50/12/52/0/62



D.P. 91402

22200
East

Approved as to Easement
Boundaries.

District Commissioner
of Works.

Date

SCHEDULE OF WATER
SUPPLY EASEMENTS

Shown Description C.T. Ref. Area.

(M)	Pt Lot 11 D.P. 95612	51°/942	2256m ²
(N)	Pt Lot 12 D.P. 95612	51°/931 51°/932 51°/934-942	1009m ²

Total Area

Comprised in

Alexander Garry Wright of Auckland
Registered Surveyor and holder of an annual practising certificate
hereby certify that this plan has been made from Surveys executed
by me or under my direction: that both plan and Survey are correct
and have been made in accordance with the regulations under the
Surveyors Act 1956

Dated at Auckland this 5th day
of November 1982 Signature *AG Wright*

Field Book p. Traverse Book p.

Reference Plans

Examined *D. Jenkins* Correct *M. Williams*

Approved as to Survey

16 12 83 *M. Williams*
Chief Surveyor

Deposited this day of 19

LOCAL AUTHORITY *BAY OF ISLANDS COUNCIL*

Surveyed by *A.G. WRIGHT & ASSOCIATES*

Scale 1:2000

Date *SEPT 1982*

File *D3/92*
Resouce
instructions

District Land Registrar

S.057412

2R
S

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

CST. 510/931
510/932
510/934-6
Kapins Orchards

CT 5141942
Kapono Orchards Ltd.

Easements

PT. I

D. P. 39940

EASEMENTS REQUIRED FOR
WATER SUPPLY PURPOSE

*Declaring a Water Supply Pipeline Easement, in Gross, Acquired
for Irrigation Purposes in Block VI, Kerikeri Survey District, Bay
of Islands County*

PURSUANT to section 20 of the Public Works Act 1981, the Minister of Works and Development declares that, an agreement between Kapiro Orchards Limited, as registered Proprietor, and the Crown dated the 13th day of December 1984 and held in the office of the District Commissioner of Works at Auckland having been entered into, a water supply pipeline easement, in gross, over the land described in the Schedule hereto, subject to the rights and imposing the conditions contained in the said agreement is hereby acquired for irrigation purposes and shall vest in the Crown on the 24th day of January 1985.

SCHEDULE

NORTH AUCKLAND LAND DISTRICT

ALL those pieces of land, situated in Block VI, Kerikeri Survey District, described as follows:

Area
m²

Being

CT 51^c/931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942 } 2256 Part Lot 11, D.P. 95612; marked "M" on plan.
1009 Part Lot 12, D.P. 95612; marked "N" on plan.

As shown marked as above mentioned on S.O. Plan 57412, lodged in the office of the Chief Surveyor at Auckland.

Dated at Wellington this 15th day of January 1985.

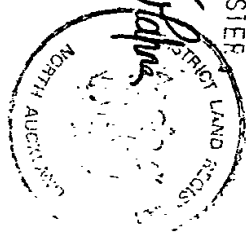
J. R. BATTERSBY,
for Minister of Works and Development.

(P.W. 64/1/1/1; Ak. D.O. 50/12/52/0/62)

16/1

Noted O.T.
18/2/85

11.17 11.FEB85 B 379536.2
PARTICULARS ENTERED IN REGISTER
LAND REGISTRY AUCKLAND
ASST. LAND REGISTRAR



View Instrument Details



Instrument No 11346721.3
Status Registered
Date & Time Lodged 26 March 2019 15:47
Lodged By Dreifuss, Kim Dunn
Instrument Type Consent Notice under s221(4)(a) Resource Management Act 1991



Toitū Te Whenua
Land Information
New Zealand

Affected Records of Title	Land District
870642	North Auckland
870643	North Auckland
870644	North Auckland
870645	North Auckland
870648	North Auckland
870649	North Auckland
870650	North Auckland
870652	North Auckland
870646	North Auckland
870647	North Auckland
870651	North Auckland

Annexure Schedule: Contains 4 Pages.

Signature

Signed by Guy Robert Carne Bidwill as Territorial Authority Representative on 26/03/2019 10:11 AM

*** End of Report ***



Private Bag 152, Havelock Ave
Kaharoa 0440, New Zealand
Freephone: 0800 920 029
Phone: 09 403 5200
Fax: 09 401 2137
Email: info@fncc.govt.nz
Website: www.fncc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING RC 2190159

Being the Subdivision of Pt Lot 3-4 DP 95609 Pt Lots 5-6 DP 95610 Pt Lots 7-9 DP 95611 Lot 2 DP 441039 Lot 2 DP 192458 Lots 3-4 DP 194423 Lot 2 DP 194424 Lots 5-6 DP 194425 Lots 7-8 DP 194426 - having 3/11 sh, 7x 1/11 sh in Lot 12 DP 95612, 1/6 sh in Lot 15 DP 156354
North Auckland Registry

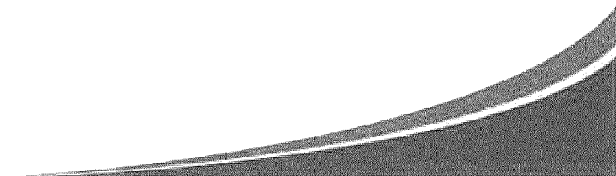
PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) of the Resource Management Act 1991, this Consent Notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner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

SCHEDULE

Lots 1 - 11 DP 532011

- (i) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011

Land within this lot has been identified as land that will potentially be covered by the above legislation. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include soil sampling, disturbance and/or removal and changing the use of the land.





Private Bag 752, Rimu Road
Whangarei 9410, New Zealand
Freephone: 0800 970 029
Phone: (09) 401 5200
Fax: (09) 401 2137
Email: enquiries@fndc.govt.nz
Website: www.fndc.govt.nz

Te Kaunihara o Tai Tokerau Ki Te Raki

Lot 5 DP 532011

- (ii) In conjunction with the construction of any building requiring a wastewater disposal system the lot owner shall obtain a Building Consent and install the wastewater treatment and effluent disposal system as detailed in the report prepared by Hawthorne Geddes, engineers and architects Ltd and submitted with Resource Consent 2190159.

The installation shall include an agreement with the system supplier or its authorised agent for the on going operation and maintenance of the wastewater treatment plant and the effluent disposal system.

Following 12 months of operation of the wastewater treatment and effluent disposal system the lot owner shall provide certification to Council that the system is operating in accordance with its design criteria.

Where a wastewater treatment and effluent disposal system is proposed that differs from that detailed in the above mentioned report, a new TP 58 / Site and Soil Evaluation Report will be required to be submitted, and Council's approval of the new system must be obtained, prior to its installation.

Lots 1-4 & 6-11 DP532011

- (iii) In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.

Lots 1 - 11 DP 532011

- (iv) Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner.





**Far North
District Council**

Private Bag 757, Havelock Ave
Kaitiaki 6140, New Zealand
Freephone: 0800 920 029
Phone: 09 401 5700
Fax: 09 401 7137
Email: ask@fncc.govt.nz
Website: www.fncc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

Lots 1 - 11 DP 532011

- (v) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for fire fighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

Lots 1 - 9 & 11 DP 532011

- (vi) All future development on Lots 1 - 9 and 11 shall be undertaken in general accordance with the restrictions and recommendations identified in the Hawthorn Geddes Subdivision Suitability Report submitted with RC 2190159, dated 14 August 2018, and subsequent email dated 23 October 2018.

Lots 5 – 6 DP 532011

- (vii) In conjunction with the construction of any building the owner shall demonstrate compliance with the 10m building line restriction as shown on the site plan attached within the Hawthorn Geddes Subdivision Suitability Report entitled "Proposed boundary adjustment 41 Orchard Road, Kerikeri", project no. 11440, Figure 2; unless the building consent application is supported by a report prepared by a suitably qualified geotechnical engineer that confirms development within this area is suitable and that any stability hazards are appropriately mitigated through engineered earthworks and foundation design.

Lots 1 - 11 DP 532011

- (viii) The Lot owner is advised that the lot is within an area identified by the Department of Conservation as a medium density kiwi area. Therefore, mustelids should not be introduced or kept on site and it is recommended that care should be taken with the keeping of cats and dogs, as these animals may cause adverse effects on the kiwi population that may inhabit the area. For more information on these areas please contact the Department of Conservation.





**Far North
District Council**

Frontal Bag 152, Richmond Ave
Laharua 0440, New Zealand
Telephone: 0800 970 029
Phone: 09 401 5700
Fax: 09 401 2137
Email: info@fncc.govt.nz
Website: www.fncc.govt.nz

Te Kaurihera o Tai Tokerau Ki Te Raki

SIGNED:

A handwritten signature in black ink, appearing to read 'P.J. Killalea'.

Mr Patrick John Killalea - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at KERIKERI this *25th* day of *March* 2019



View Instrument Details



Instrument No	11653133.2
Status	Registered
Date & Time Lodged	29 January 2020 10:36
Lodged By	Wilkins, Marcus Yardley
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991



Toitū Te Whenua
Land Information
New Zealand

Affected Records of Title	Land District
337020	North Auckland
870642	North Auckland
870643	North Auckland
870644	North Auckland
870645	North Auckland
870648	North Auckland
870650	North Auckland
870652	North Auckland
NA123A/882	North Auckland

Annexure Schedule Contains 2 Pages.

Signature

Signed by Marcus Yardley Wilkins as Territorial Authority Representative on 12/02/2020 04:40 PM

***** End of Report *****



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Email: ask.us@fndc.govt.nz
Website: www.fndc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

*Hei tei hui hui o tei hui hui
o tei hui hui o tei hui hui*

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING RC 2190698

Being the Subdivision of Pt Lot 3-4 DP 95609 Lot 2 DP 192458 Lots 3-4 DP 194423 Lots 1-11 DP 532011 - having 3/11 sh, 7x 1/11 sh in Lot 12 DP 95612, 1/6 sh in Lot 15 DP 156354
North Auckland Registry

PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) 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 these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lots 1 – 12 DP 540914

- (i) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011

Land within this lot has been identified as land that will potentially be covered by the above legislation. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include soil sampling, disturbance and/or removal and changing the use of the land.

- (ii) In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.



Far North
District Council

Private Bag 252, Hokianga Ave

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Freephone: 0800 920 029

Phone: (09) 401 5200

Fax: (09) 401 2137

Email: cs.l.us@fnhc.govt.nz

Website: www.fnhc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

Whakatairanga

- (iii) Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner.
- (iv) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for fire fighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509

SIGNED:

A handwritten signature in black ink, appearing to read 'P. Killalea'.

Mr Patrick John Killalea - Authorised Officer

By the FAR NORTH DISTRICT COUNCIL

Under delegated authority:

PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at KERIKERI this 28th day of January 2020



Company Extract

KAPIRO ORCHARD LIMITED

8230890

NZBN: 9429049794915

Entity Type:	NZ Limited Company
Incorporated:	06 Sep 2021
Current Status:	Registered
Constitution Filed:	Yes
Annual Return Filing Month:	October

Ultimate holding company: No

Company Addresses

Registered Office

38 Hekerua Road, Oneroa, Waiheke Island, 1081, NZ

Address for Service

38 Hekerua Road, Oneroa, Waiheke Island, 1081, NZ

Directors

BAXTER, James

138b Coates Avenue, Orakei, Auckland, 1071, NZ

MIYAZAKI, Mari

138b Coates Avenue, Orakei, Auckland, 1071, NZ

Shareholdings

Total Number of Shares: 100

Extensive Shareholdings: No

98	BAXTER, James 138b Coates Avenue, Orakei, Auckland, 1071, NZ
	MIYAZAKI, Mari 138b Coates Avenue, Orakei, Auckland, 1071, NZ
1	BAXTER, James 138b Coates Avenue, Orakei, Auckland, 1071, NZ
1	MIYAZAKI, Mari



Company Extract
KAPIRO ORCHARD LIMITED
8230890
NZBN: 9429049794915

138b Coates Avenue, Orakei, Auckland, 1071, NZ

For further details relating to this company, check <https://app.companiesoffice.govt.nz/co/8230890>
Extract generated 11 June 2024 11:35 AM NZST



LETTER OF AUTHORISATION

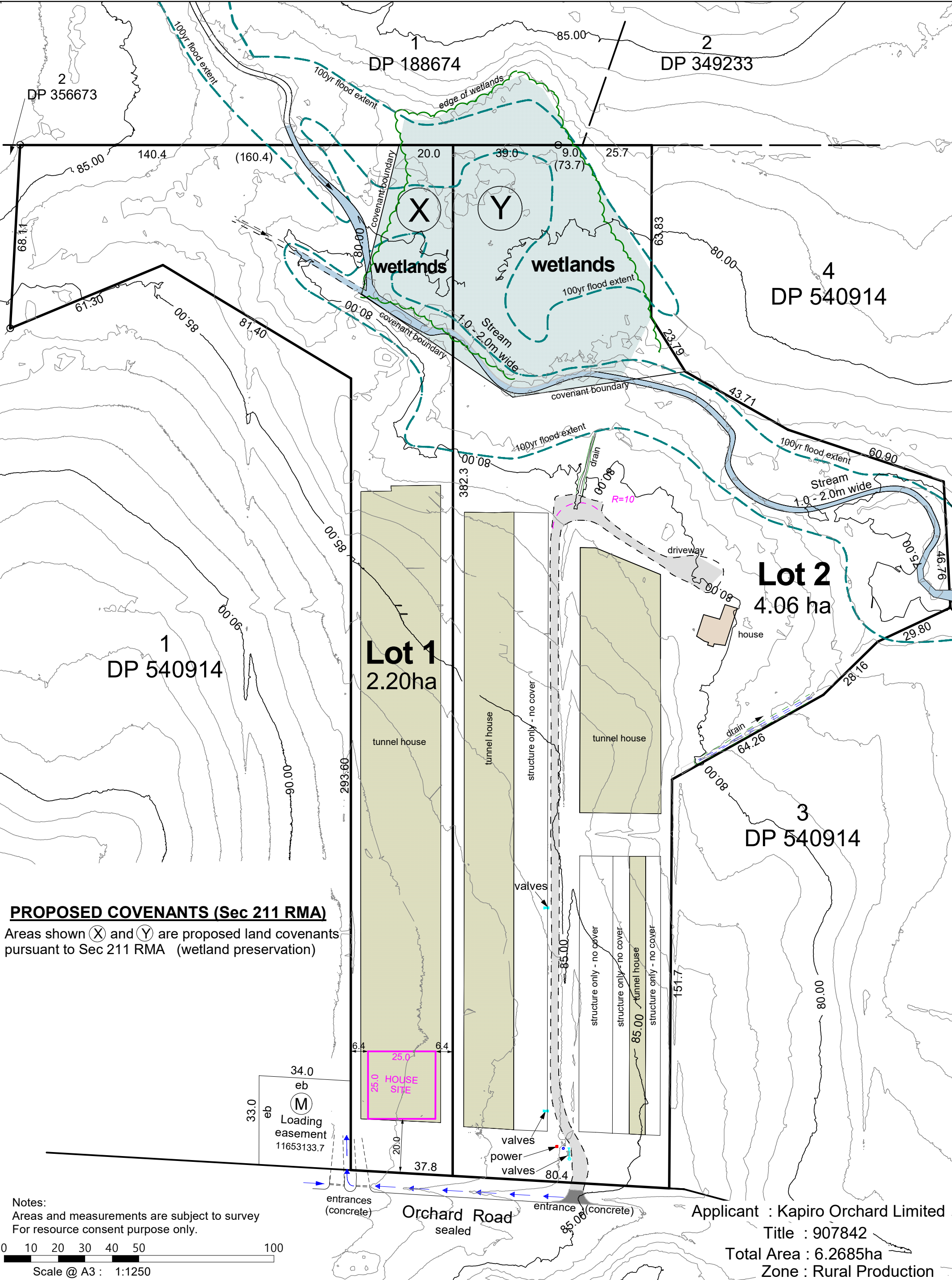
Friday 31st May 2024

To whom this may concern

I, James Baxter (Kapiro Orchard Limited), owner of 71 Orchard Road, Kerikeri, Lot 2 DP 540914, give permission for AW Designs / Relocate It Ltd. to act on our behalf for the lodgement and processing of the Building Consent at the above address.

Regards,


Kapiro Orchard Limited (James Baxter – Owner)



PROPOSED COVENANTS (Sec 211 RMA)

Areas shown (X) and (Y) are proposed land covenants pursuant to Sec 211 RMA (wetland preservation)

Notes:
Areas and measurements are subject to survey
For resource consent purpose only.

0 10 20 30 40 50 100
Scale @ A3 : 1:1250

Applicant : Kapiro Orchard Limited
Title : 907842
Total Area : 6.2685ha
Zone : Rural Production

Engineering Assessment for
Proposed Subdivision
71 Orchard Road, Kerikeri
Lot 2 DP 540914
for
Kapiro Orchard Limited

Supporting report for RC Applications to Far North District Council

Haigh Workman reference 24 071

19 August 2025



Revision History

Revision N ^o	Issued By	Description	Date
A	Joshua Cuming	For Resource Consent	19 August 2025

Prepared by



Joshua Cuming

Environmental Geologist
BSc (Geol, Env Stu.) CEnvP

Reviewed by



Tom Adcock
Senior Civil Engineer
BEng (Civil Engineering),
MEngNZ

Approved by



John Papesch
Senior Civil Engineer
BE (Civil Engineering),
CPEng, CMEngNZ

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Executive Summary

Haigh Workman Ltd (Haigh Workman) was commissioned by Kapiro Orchard Limited (the client) to undertake an engineering assessment of land at 71 Orchard Road, Kerikeri, Lot 2 DP 540914 (the site), for a proposed two lot subdivision.

The site is zoned 'Rural Production' under the Far North District Council District Plan.

The scope of the report includes the following assessment items:

- Natural hazards
- Vehicle access and parking
- Earthworks to complete the subdivision
- Stormwater and wastewater
- Water supply and firefighting

This report assesses earthworks, access, stormwater, wastewater, water supply and firefighting, with specific regard to the local authority plans and subdivision rules. A proposed subdivision plan prepared by Donaldsons Surveyors; ref. 8183 was made available at the time of writing this report.

Below is a synopsis of the key sections covered:

Natural Hazards

None of the nominated building platforms are impacted by natural hazards.

Orchard Road

Kerikeri Road is a Secondary Collector Road with a typical rural roading standard cross-section comprising an approximate 6m wide sealed carriageway with a speed limit of 60 km/hr.

Vehicle Crossings

The lot 1 vehicle crossing should be upgraded to a sealed Type 1A crossing. The crossing achieves the minimum sight distance required for access roads with a posted speed limit of 60 km/h.

The lot 2 crossing exceeds the required Type 1A crossing requirements. The crossing achieves the minimum sight distance required for access roads with a posted speed limit of 60 km/h.

Parking and Manoeuvring

Both lots have adequate land available for two car parking spaces including manoeuvring.

Earthworks

No earthworks are proposed at time of subdivision.

Stormwater Management

Anticipated impermeable surface coverage on any lot is unlikely to exceed the 15% threshold permitted by the District Plan rules.

Due to the large lot areas and relatively low impermeable surfaces, stormwater attenuation is not considered necessary. Runoff from developed surfaces will be discharged to ground on gentle slopes in a dispersive manner where it will be absorbed by the soils.

It is proposed that a condition of consent is entered for the subdivision that at 224c stage that the plastic covers be replaced with mesh covers meaning that the tunnel houses would not be considered an impermeable surface. The proposed development of proposed lot 1 will result in a large decrease in impermeable surfaces and resultant runoff.

Wastewater

Both lots contain ample suitable area for effluent disposal including reserve area. The soils were categorised as AS/NZS 1547 Class 5 soils, we recommend an irrigation rate of 3mm/d which will require a disposal area of 290m² for an indicative 4-bedroom dwelling and an additional 290m² for a 100% reserve area.

The Lot 2 existing wastewater treatment and disposal system was found to be in good working order with no olfaction smells or visible signs of surface breakout.

Water Supply

Domestic water supply may be provided using roof runoff collected in storage tanks.

Fire Fighting

Council Engineering Standards and Fire and Emergency NZ 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 Kapiro Orchard Limited (the client) to undertake an engineering assessment of land at 71 Orchard Road, Kerikeri, Lot 2 DP 540914 (the site), for a proposed two lot subdivision.

The scope of the report includes the following assessment items:

- Natural hazards
- Vehicle access and parking
- Earthworks to complete the subdivision
- Stormwater and wastewater
- Water supply and firefighting

A proposed subdivision plan prepared by Donaldsons Surveyors; ref. 8183 was made available at the time of writing this report.

The site is zoned 'Rural Production' under the Far North District Council District Plan.

1.2 Limitations

This report has been prepared for our Client, Kapiro Orchards Limited 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 potential house site identified. 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:	71 Orchard Road, Kerikeri
Legal Description:	Lot 2 Deposited Plan 540914
Area:	6.2685 ha
Zone:	Rural Production (Operative District Plan)

2.2 Site Description

The property is legally described as Lot 2 Deposited Plan 540914, having a total land area of 6.2685 ha. The property is irregular in plan shape and is located to the north of Orchard Road on generally flat to gentle east facing slopes.

An existing dwelling is present in proposed lot 2. The property is bordered to the west and east by developed orchards blocks and currently comprises existing orchards with shelter belt trees across the majority of the site. The northern and northeast extents of the site is largely undeveloped with a mixture of mature trees, and dense scrub and weeds. An unnamed stream closely follows the northern property boundary, flowing from west to east, draining to the southeast and the Kapiro River beyond the property boundary. A small swale drain extends along the eastern property boundary, draining stormwater into the unnamed stream to the northeast. The southern portion of the site drains to the southeast.

The central northern and part of the north-eastern area of the site has been partially cleared of vegetation with some stockpiles of felled trees and vegetation remaining onsite. In addition, several basalt boulders have been dislodged as part of the site clearance and have been stockpiled at several locations across the northeast part of the site.



Figure 1 - Site location

2.3 Proposed Subdivision

The scheme plan identifies one easement, the plan is appended.

Proposed Lots are described in Table 1.

Table 1 - Proposed Lots

Lots	Proposed Area (ha)	End-use
Lot 1	2.20	Rural residential
Lot 2	4.06	Rural residential
Total	6.26	

We understand that the proposed subdivision will be a non-complying activity under the Operative District Plan.

3 Environmental Setting

3.1 Published Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences, 1:250,000 Scale, Geological Map 2, 2009: *“Geology of the Whangarei area”*.
- NZMS 290 Sheet P04/05, 1: 100,000 scale, 1980: *“Soil map of Whangaroa-Kaikohe area”*.

3.1.1 Bedrock Geology

The site is within the bounds of the GNS Geological Map 2 “Geology of the Whangarei area”, 1:250,000 scale*. The published geology shows the site to be underlain by the Kerikeri Volcanic Group (Pvb) comprising older basaltic flows and flow remnants. The Kerikeri Volcanic Group is considered to be of Late Miocene to Pliocene age. An extract from the geological map is shown in Figure 2 with geological units presented in Table 2.

* Edbrooke, S.W; Brook, F.J. (compilers) 2009. Geology of the Whangarei area. Institute of Geological and Nuclear Sciences 1:250 000 geological Map 2. 1 sheet + 68 p. Lower Hutt, New Zealand: Institute of GNS Science.

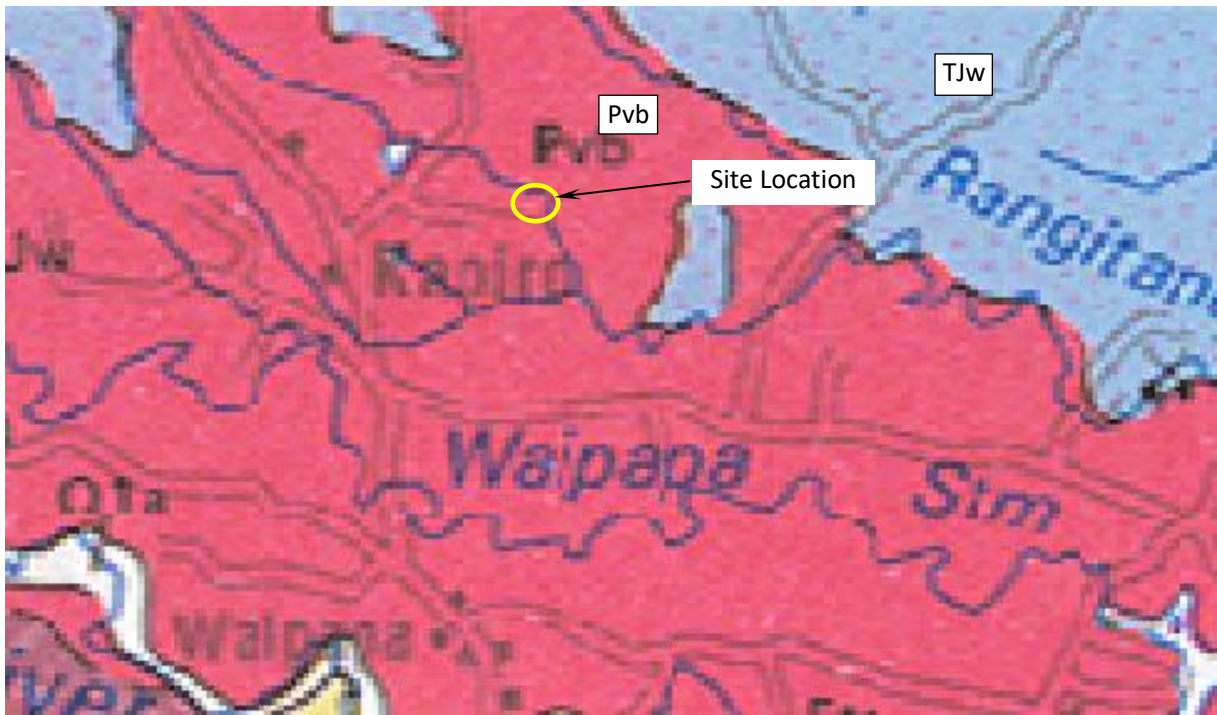


Figure 2 - Geological Map (Geology of Whangarei area, 1:250,000)

Table 2 - Geological Legend

Symbol	Unit Name	Description
Pvb	Kerikeri Volcanic Group (Basalt flows)	Older flows and flow remnants. Late Miocene to Pliocene age.
TJw	Waipapa Group	Massive to thin bedded, lithic volcaniclastic sandstone and argillite (TJw). Permian to Jurassic age.

3.1.2 Weathered Geology

Further reference to the published New Zealand land inventory maps (Whangaroa - Kaikohe), indicates the site is underlain by 'soils of the rolling and hilly land; well to moderately well drained Okaihau gravelly friable clay (OK) and Pungaere gravelly friable clay (PG)'. The underlying material weathers to 'soft red brown or dark grey brown clay to depths of 20m with many rounded corestones'.

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 the land associated with the nominated building platforms to these potential hazards in the table below.

Table 3 - Natural Hazards

Natural Hazard	Risk
Erosion (including coastal erosion, bank erosion, and sheet erosion)	No, subject to maintaining vegetation cover
Falling debris (including soil, rock, snow, and ice)	No
Subsidence (vertical settlement)	Low risk, to be addressed at building consent stage.
Inundation (including flooding, overland flow, storm surge, tidal effects, and ponding)	No. NRC flood mapping maps areas of the site predominantly within the channel of the unnamed stream. Both proposed lots have available building platforms elevated well above the stream including the existing house on lot 2.
Slippage	Low risk, to be addressed at building consent stage.

There is no significant risk from natural hazards that would cause Section 106 of the Resource Management Act to apply.

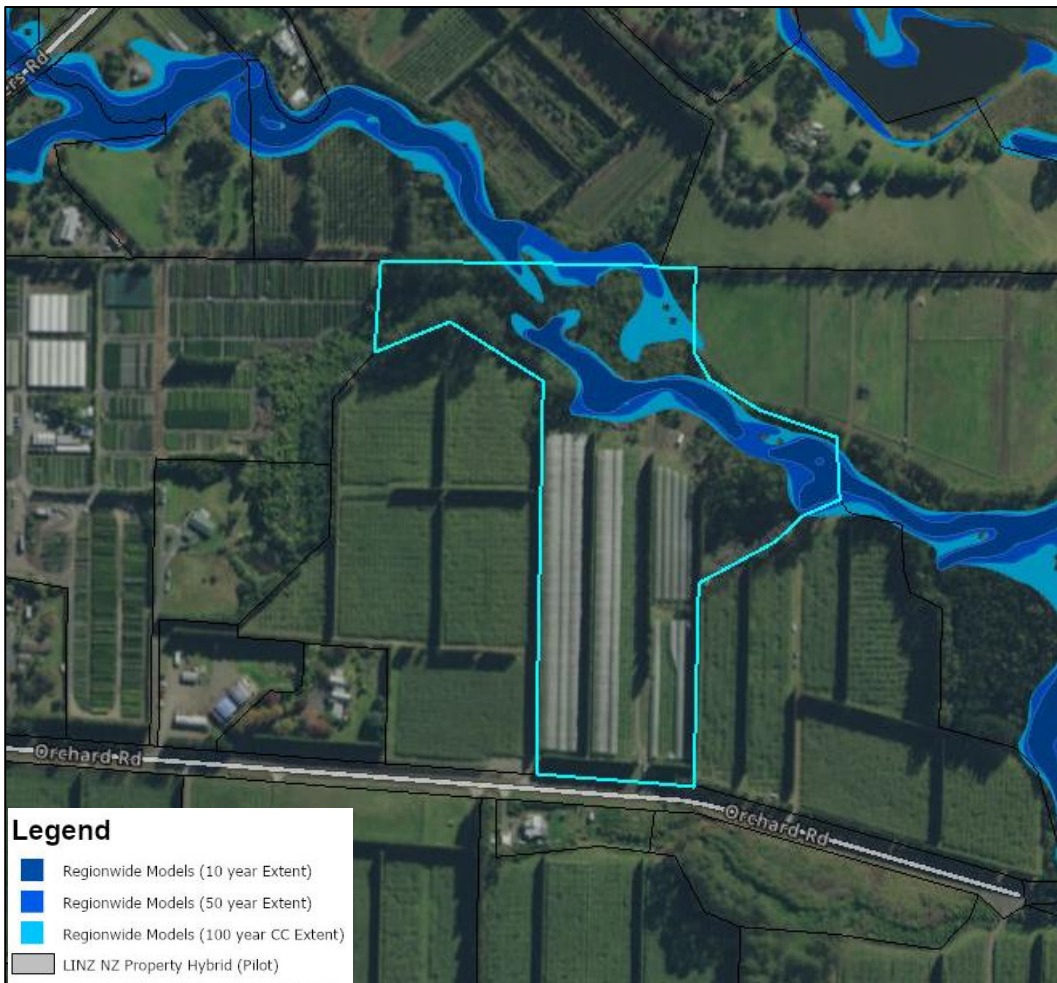


Figure 3 - Regionwide flood mapping

3.2.1 Preliminary Geotechnical Appraisal

The sites are considered a low risk of being susceptible to instability based on the mapped geology and gentle site slopes. A geotechnical appraisal has therefore not been provided for this application. As a result, geotechnical risk will need to be addressed at building consent stage.

4 Site Access

4.1 Site Access

Upon subdivision, both lots will gain access via Orchard Road.

4.2 Orchard Road

Orchard Road is a Secondary Collector Road with a typical rural roading standard cross-section comprising an approximate 6m wide sealed carriageway with a speed limit of 60 km/hr.



Figure 4 – Orchard Road

4.3 Vehicle Crossing

4.3.1 Proposed lot 1

An existing vehicle crossing is present. The crossing is unsealed. The crossing should be upgraded to a sealed Type 1A crossing as per sheet 21 of the FNDC engineering standards. The crossing achieves the minimum sight distance required for *access roads* with a posted speed limit of 60 km/h found on sheet 4 of the Far North Engineering Standards.

Orchard Road is a low speed, low traffic and non through road environment, therefore traversable headwalls are not considered necessary.

Table 4 - Vehicle crossing sight stopping distances.

Crossing	Direction of Sight	Measured SSD (m)	FNDC min. SSD (m)
Proposed lot 1	East	145+	85
Proposed lot 1	West	145+	85



Figure 5 - Existing crossing proposed lot 1



Figure 6 - Lot 1 vehicle crossing sight distance to east



Figure 7 - Lot 1 vehicle crossing sight distance to west

4.3.2 Proposed Lot 2

An existing concreted vehicle crossing is present. The crossing exceeds the required Type 1A crossing requirements with regard to required dimensions. The crossing achieves the minimum sight distance required for access roads with a posted speed limit of 60 km/h found on sheet 4 of the Far North Engineering Standards.

Orchard Road is a low speed, low traffic and non through road environment, therefore traversable headwalls are not considered necessary.

Table 5 - Vehicle crossing sight stopping distances.

Crossing	Direction of Sight	Measured SSD (m)	FNDC min. SSD (m)
Proposed lot 2	East	145+	85
Proposed lot 2	West	145+	85



Figure 8 - Existing crossing, proposed lot 2.



Figure 9 - Lot 2 existing vehicle crossing sight distance to east.



Figure 10 - Lot 2 existing vehicle crossing sight distance to west.

4.4 Driveways

Metalled driveways leading to the identified house sites can be formed in accordance with the District Plan requirements.

4.5 Parking and Manoeuvring

Parking and manoeuvring for two vehicles in accordance with District Plan can be accommodated within both proposed lots.

5 Earthworks

5.1 Proposed Earthworks

No earthworks are proposed at time of subdivision.

5.2 Regulatory Framework

Earthworks in the Rural Production zone are a permitted activity provided that they do not exceed 5000m³ in any 12 month period and does not involve a cut or filled face exceeding 1.5m in height.

The scale of earthworks on the site will not exceed the permitted activity limits.

The Proposed Far North District Plan was notified on 27 July 2022. The following 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

5.3 Earthworks Construction

Earthworks will be carried out in accordance with NZS 4404 and Council's Engineering Standards and Guidelines.

Erosion and sediment control for earthworks will be carried out in accordance with Council's Engineering Standards and Guidelines and Auckland Council GD05.

6 Stormwater Management

6.1 Existing Site Drainage

The majority of the site is currently planted in kiwifruit. The majority of the site drains towards the northeast towards the unnamed stream, with a small area in the south of the site draining towards the southeast. The site is typically gently sloping.

A field drain is located in approximately the centre of proposed lot 1 orientated north / south and flowing to the north.

6.2 Regulatory Framework

6.2.1 Far North District Plan Provisions

The site is zoned as Rural Production. The relevant permitted activity rule for stormwater is as follows:

8.6.5.1.3 STORMWATER MANAGEMENT

The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.

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).

6.2.2 Regional Plan Provisions

Proposed 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% Annual Exceedance Probability (AEP) or flooding of buildings on another property in a storm event of up to and including a 1% AEP.

6.2.3 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.

6.3 Impermeable Surfaces

The proposed subdivision provides for but does not include rural-residential / lifestyle development. It is anticipated that a house on lot 1 when built will be of a similar scale to the existing residential / lifestyle development in other rural-residential land in the area.

Existing and estimated impermeable surfaces on the lots when they are developed are as follows:

Table 6 - Potential Surface Coverage

Proposed Lot	Area (Ha)	Driveway Area (m ²)	Tunnel house (m ²)	Roof Area (m ²)	Total Impermeable Surface Area (m ²)	Pre-Development Percentage Impermeable	Post Development Percentage Impermeable	Activity Status
1	2.20	250 ¹	6,850 ²	250 ¹	450	31.1%	2.3%	Permitted
2	4.06	1,250	4,269	150	5,669	14.0%	13.96%	Permitted

¹ Estimated surface

² Impermeable plastic cover to be replaced with permeable mesh cover at 224c stage

There is currently 6,850m² of impermeable tunnel houses on proposed lot 1. It is proposed that a condition of consent is entered for the subdivision that at 224c stage that the plastic covers be replaced with mesh covers meaning that the tunnel houses would not be considered an impermeable surface. This report therefore addresses stormwater on the basis that the plastic covers will be replaced with mesh resulting in proposed impermeable surfaces for lot 1 being within the permitted threshold. The proposed development of proposed lot 1 will result in a large decrease in impermeable surfaces and resultant runoff.

The observed impermeable surfaces on lot 2 were less than that shown on the scheme plan with only the western tunnel house still covered in plastic. Anticipated impermeable surface coverage on lot 2 is not expected to exceed the 15% threshold permitted by the District Plan rules.

6.4 Proposed Stormwater Management

Stormwater management within the proposed subdivision is designed to control stormwater flows, reduce scour and ensure compliance with District and Regional Plan rules.

- To receive the maximum treatment benefits from overland flow, concentrated stormwater shall be dispersed via a spreader bar device or similar as per GD02 onto a gently sloping grassed or well vegetated surface. Refer standard details appended.
- Rainwater collection tanks on each lot for domestic water supply, with overflows piped to dispersed outlets.
- The rainwater collection tanks for the dwelling on lot 2 overflow to a spreader bar to the east of the dwelling.
- For driveways we recommend grass lined swales as are already present and performing well.

6.5 Assessment Criteria

In assessing a non-complying subdivision application the Council will exercise discretion on the following from Chapter 13.10.4:

Table 7 - Far North District Plan clause 13.10.4

Subdivision Stormwater Disposal Assessment Criteria	Comment
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(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.	The application complies with the proposed regional plan. The site does not drain into any urban drainage areas.
(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).	The application does not comply with Section 4.1.6 of the Far North Engineering Standards 2023. This is due to detention not being proposed as it is not considered necessary due to the large lot areas.
(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.	The application complies with the Strategic Plan.
(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.	Concentrated overflow will be disposed of to land in a dispersive manner to avoid erosion and nuisance. The proposed lots are all over 2 ha the vast majority of which will be retained as permeable areas.
(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.	Overflow from storage tanks will be disposed of to land in a dispersive manner to encourage absorption, avoid erosion and nuisance. Runoff from paved areas will be directed into grass lined swales, culverts then into natural flow paths to avoid erosion and nuisance.
(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.	NA to residential development.
(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.	Will discharge to natural slopes and flow paths. No reliance on piped or canal systems.
(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.	Runoff from the identified lot 1 house site will eventually make its way into the roadside watertable on orchard road. The water table is well formed to cater for this.
(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.	NA
(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of	Onsite retention is not proposed as the lot sizes are greater than 2ha.

discharge that existed on the land before the subdivision takes place.	
(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.	None.
(l) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipe lines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.	Stormwater will be disposed of by way of gravity.
(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.	None proposed.
(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.	None proposed.
(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.	None proposed.
(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.	NA
(q) The need for and extent of any financial contributions to achieve the above matters.	NA
(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.	NA

7 Potable Water

7.1 Potable Water Supply

There is no public water supply available at the site. Domestic water supply may be provided by roof runoff collected in storage tanks. Tanks should be installed to allow for a first flush following the application of sprays on adjacent orchards.

7.2 Fire Fighting

Council Engineering Standards and Fire and Emergency NZ 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 m³ within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank.

7.3 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.

8 On-site Effluent Disposal

8.1 Regulatory Framework

8.1.1 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

The proposed disposal areas are not steeper than 10 degrees. However, we recommend that when using surface laid irrigation, lines be firmly pinned to the ground and where there is an up-slope catchment that generates stormwater runoff, a stormwater interception drain be installed and maintained to divert surface runoff away from the disposal area.

District Council requires at time of subdivision a suitable reserve area equal to one hundred percent of the effluent disposal area.

The following analysis ensures that future on-site wastewater disposal on the vacant lots can comply with both the Operative District Plan and Regional Plan for Northland wastewater discharge rules.

8.2 Lot 1

8.2.1 Design Occupancy Rating

The onsite wastewater disposal for the proposed development of lot 1 has been assessed.

It has been assumed for the purpose of this site suitability report that the lots will contain four-bedroom residential units. In reference to TP58 Section 6.3.1, it is recommended that the design occupancy of six people is adopted for this report.

8.2.2 Design Flow Volumes

It is assumed that the proposed residential units will be designed with standard water reduction fixtures. AS/NZS1547 estimates wastewater generation for roof water collection supply properties with standard water reduction fixtures of 145 litres/person/day.

Total daily wastewater generation of the proposed development is calculated as follows:

$$\begin{aligned} \text{Total daily wastewater generation} &= \text{Daily occupancy number} \times \text{design flow allowances} \\ &= 6 \text{ persons} \times (145 \text{ litres/person/day}) \\ &= \underline{\underline{870 \text{ litres/day}}} \end{aligned}$$

Design flows of 870 litres per day for a four-bedroom household has been adopted for the purpose of this assessment.

8.2.3 Effluent Disposal

Effluent disposal systems will need to be situated to avoid surface runoff or protected by using interception drains. In addition, setbacks listed in Section 8.1 of this report will need to be adhered to, to ensure a suitable setback from the identified overland flow paths, boundaries and buildings.

8.2.4 Land Disposal System Sizing and Design

Suitable potential building areas on are available on elevated ground. With allowances for the required setback distances associated with the Regional Plan, there are various suitable effluent disposal locations.

Boreholes were advanced onsite to establish the category of soil present. The soils onsite were found to be AS/NZS1547:2012 Category 5: Light clay – poorly drained. For these soils we consider that surface or subsurface dripper lines are suitable. Dripper lines require secondary treated effluent to operate effectively. For Category 5 soils AS/NZS 1547 recommends a design irrigation rate of 3mm/d. Example disposal field locations are shown in Appendix A.

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

$$\begin{aligned} \text{Total area of dripper irrigation field} &= \frac{\text{Total daily wastewater generation}}{\text{Design irrigation rate}} \\ &= 870/3 \\ &= \underline{\underline{290 \text{ m}^2}} \end{aligned}$$

The appended drawing indicates there is space available for this dripper field area and a 100% reserve area.

8.2.5 Treatment Plant Design

The naming of a proprietary secondary treatment plant will be decided by the new owner at the building consent stage, when the position and scale of the building are known.

The system is to meet the quality output of AS/NZS 1546.3: 2003, producing effluent of less than 20 g/m³ of 5-day biochemical oxygen demand (BOD₅) and no greater than 30 g/m³ total suspended solids (TSS) at the estimated wastewater generation rate for the proposed development.

8.2.6 Effects on Environment

It is not likely that any detectable environmental effects will arise from utilising trickle irrigation greater than 3.0 m from the disposal field. Use of the secondary treated effluent for trickle irrigation would enhance landscape vegetation growth particularly during the drier summer months. Considering the size of the assessed lots and the vegetation coverage, there is a negligible risk of off-site effects and cumulative effects.

To minimise any potential issues, regular inspections and servicing of the treatment plant and disposal field should be completed. Along with the appropriate inspections and approvals prior to plant commissioning.

The disposal field locations indicated by the appended drawings have considered the appropriate separation distances.

8.3 Existing Wastewater System on Proposed Lot 2

The Lot 2 existing wastewater treatment and disposal system was found to be in good working order with no olfaction smells or visible signs of surface breakout. The wastewater system onsite consists of a 4500 litre secondary treatment system and dripperline disposal field. The wastewater system is consented, ref. EBC-2024-1065/0 refer to the figure below. Sufficient boundary setback is present.

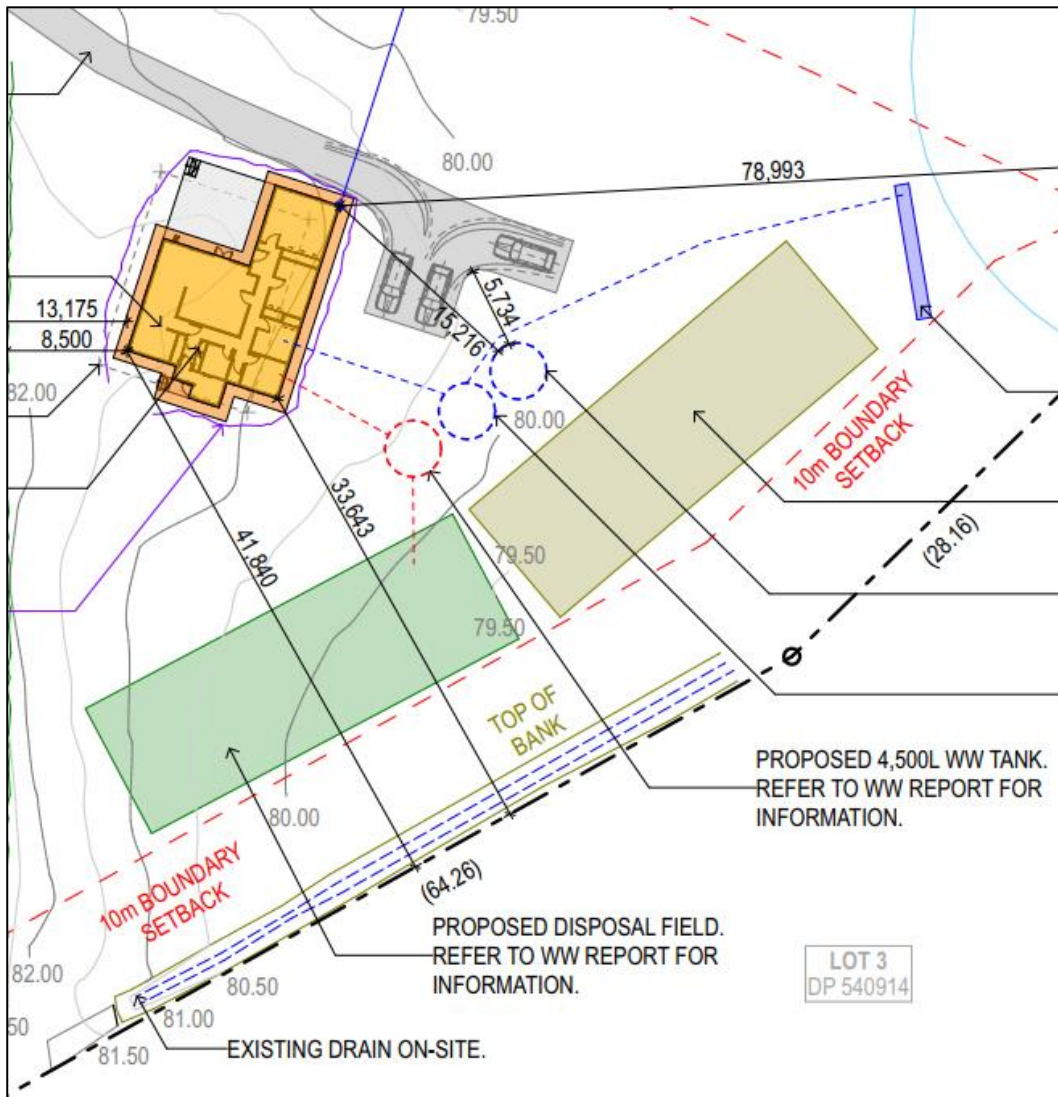
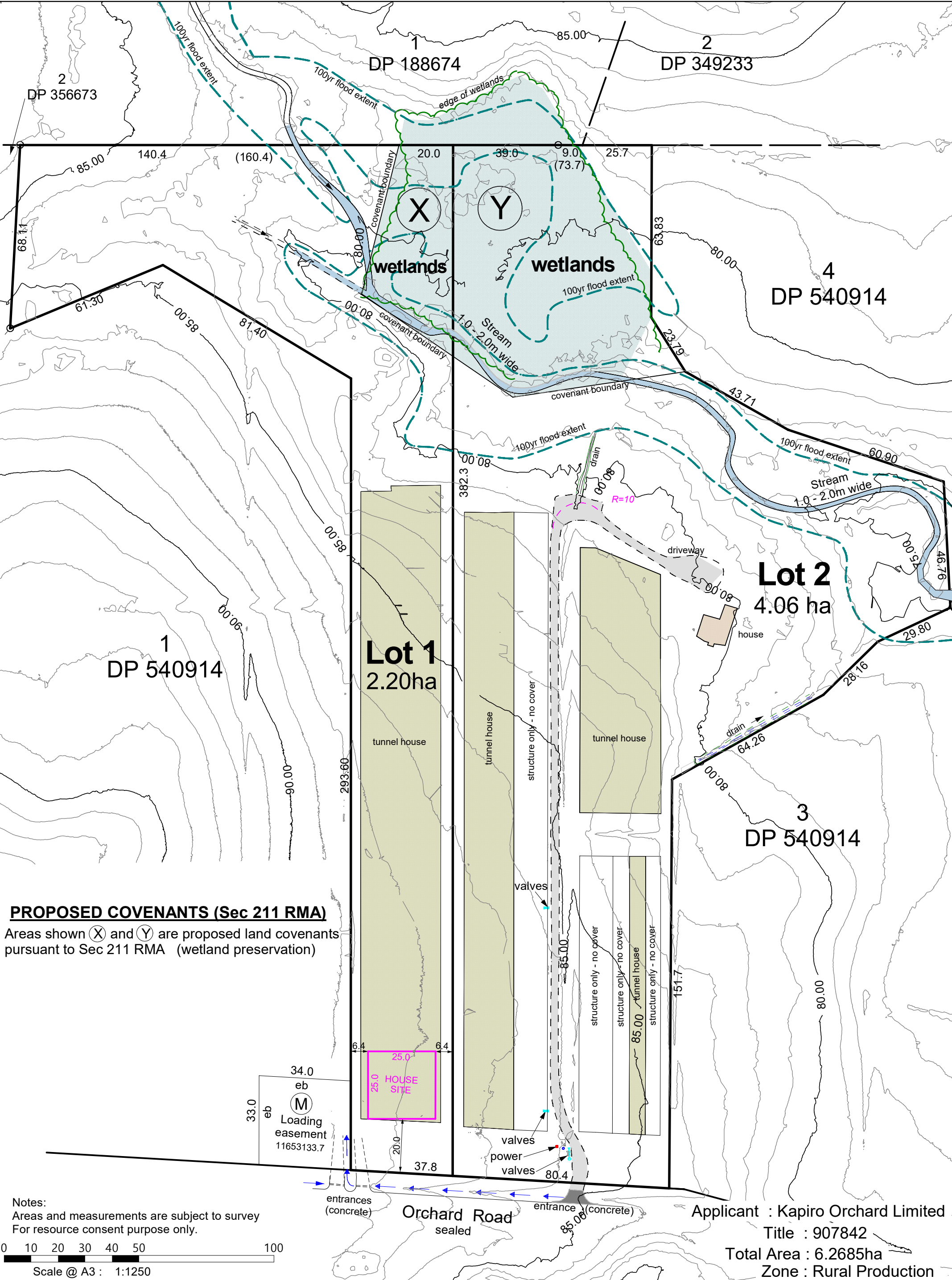


Figure 11 - Wastewater plan from EBC-2024-1065/0

Appendix A – Drawings

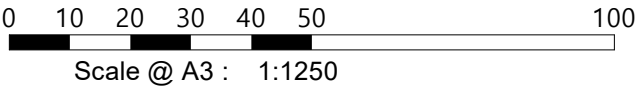
Drawing No.	Title	Scale
8183	Donaldsons – Lots 1 & 2 being a Subdivision of Lot 2 DP 540914, 27 July 2025.	1:1250 @A3
1	Haigh Workman – Subdivision Wastewater Plan	1:500 @A3



PROPOSED COVENANTS (Sec 211 RMA)

Areas shown (X) and (Y) are proposed land covenants pursuant to Sec 211 RMA (wetland preservation)

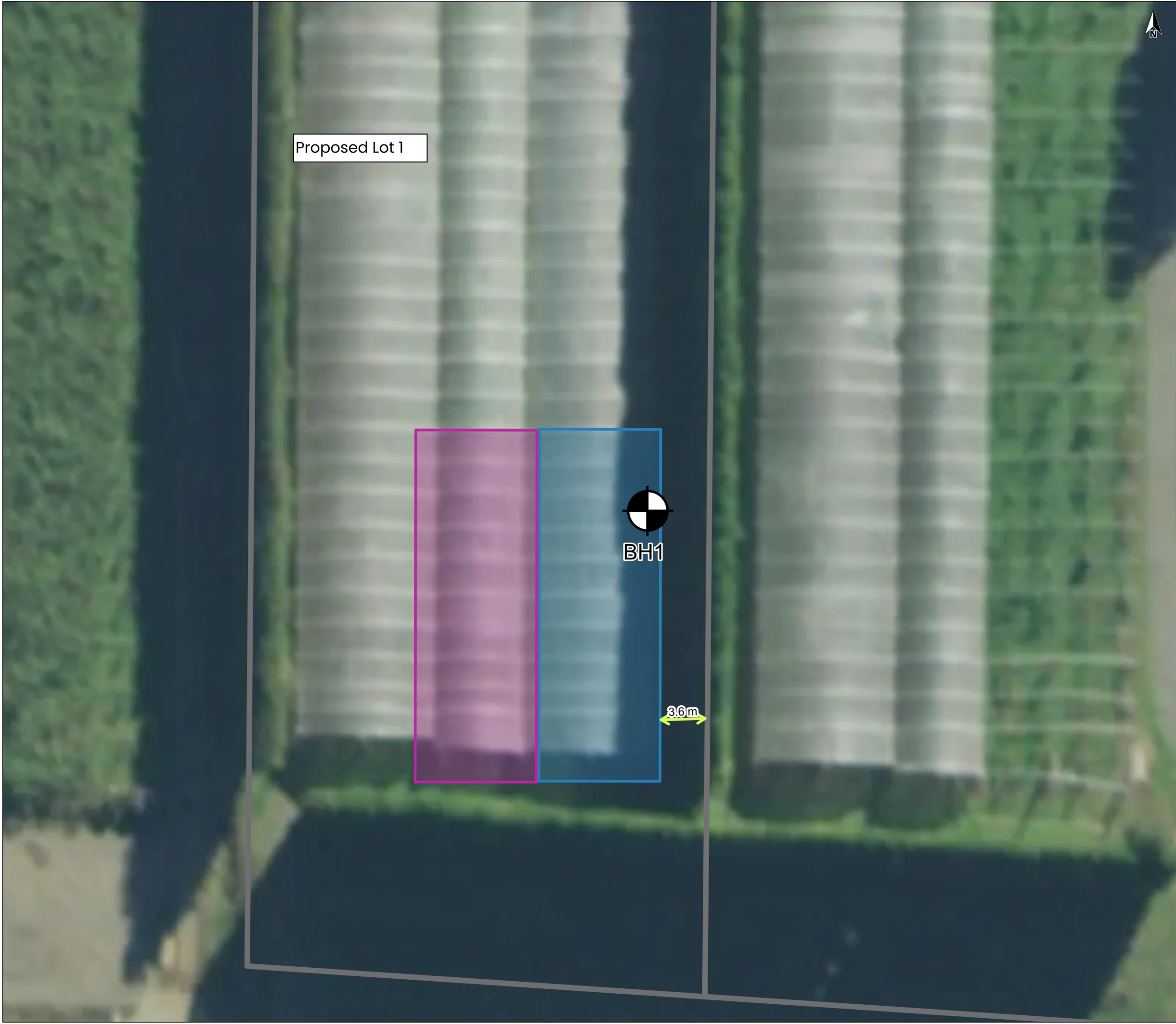
Notes:
Areas and measurements are subject to survey
For resource consent purpose only.



**LOTS 1 & 2 BEING A SUBDIVISION
OF LOT 2 DP 540914**

Applicant : Kapiro Orchard Limited
Title : 907842
Total Area : 6.2685ha
Zone : Rural Production

Contour interval : 1m
Contours by lidar
Date : 21/07/2025
REF : 8183



Legend

-  Boreholes
-  Site Boundary
-  Offset from boundary (3.6m)
-  Reserve area (290m²)
-  Disposal field (290m²)

0 5 m 10 m

LINZ CC BY 4.0 © Imagery Basemap contributors



Produced by **Datanest.earth**

Title: Subdivision Wastewater Plan

Client: Kapiro Orchards Limited

Size: A3

Project:
71 Orchard Road

Drawn:
JCum

Drawing No.:
1

Date:
08-08-2025

Checked: JP

Proj No: 24 071

Scale: 1:300

Version: REV1

Appendix B – Borehole Logs

Alex Billot

From: Stuart Bracey <SBracey@heritage.org.nz>
Sent: Monday, 22 September 2025 9:14 am
To: Alex Billot
Subject: RE: Request for comments - proposed subdivision 71 Orchard Road, Kerikeri

Morena Alex

HNZPT has reviewed the proposed activity and comments as follows,

- Due to the years of horticultural farming of the site any archaeological remains are unlikely.
- HNZPT has no comment to make on the activity.

Thanks for engaging with HNZPT,

Cheers,
Stuart

Stuart Bracey | Kaiwhakamāhere | Heritage Planner | Northern Region | Heritage New Zealand Pouhere Taonga | L10 SAP
Tower 151 Queen Street Auckland CBD | Private Box 105 291 Auckland City 1143 | mobile 027 684 0833 | 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

This communication may be a privileged communication. If you are not the intended recipient, then you are not authorised to retain, copy or distribute it. Please notify the sender and delete the message in its entirety.

From: Alex Billot <Alex@northplanner.co.nz>
Sent: Tuesday, 16 September 2025 11:38 am
To: Stuart Bracey <SBracey@heritage.org.nz>
Subject: Request for comments - proposed subdivision 71 Orchard Road, Kerikeri

Mōrena Stuart,

Have another one for you.

We are in the process of preparing a Non-Complying subdivision resource consent application to create one allotment in the Rural Production zone at 71 Orchard Road, Kerikeri.

The site currently contains tunnel houses utilised for kiwifruit production, with Proposed Lot 2 containing an existing dwelling. Proposed Lot 1 will be vacant. The indicative building envelope shown on the scheme plan for Lot 1 is for concept purposes only and is not a set building envelope.

It is the intended purpose that the tunnel houses will remain to enable the productive use of the site to continue. An aerial image of the site is shown below however is an outdated image, given the dwelling on Lot 2 is not shown nor the tunnel houses.



The northern portion of the site contains a stream and wetland areas. The wetland areas are proposed to be protected by way of covenant as part of the subdivision. The remainder of the bush area is a mix of exotic species.

Can you please advise if HNZPT has any comments on the proposal.

If you require any further information, please do not hesitate to get in touch.

Thank you for your time.

Kind regards,



Alex Billot
Resource Planner

Offices in Kaitia & Kerikeri
☎ 09 408 1866
Northland Planning & Development 2020
Limited

*My office hours are Monday, Tuesday,
Thursday & Friday 9am – 2pm.*

Concept Development Meeting Minutes

Date: 19/05/2025

Consent Number: CDM-2025-94

Address: 71 Orchard Road, Kerikeri

Duration of meeting: 27 minutes

1. Attendees:

Council Attendees

Salamasina Brown – Planner

Ishan Koshatwar – Engineer

Applicant Attendees

Rochelle – Northland Planning and Development

James Baxter – Applicant

2. Proposal & documents submitted for CDM



CDM Application
and Plans.pdf

3. Detail of proposal – as outlined by the applicant at the meeting

Subdivision to create one additional allotment in the Rural Production Zone. Land is subject to Highly Productive Soils LUC 3 and would be a Non-Complying Activity status under the Operative District Plan.

4. Discussion – at the meeting

Discussed the potential challenges in respect to lodging a Non-Complying subdivision. RC Planner Salamasina emphasized providing robust assessment as part of the AEE that also looked at the surrounding environment in depth and also how these lots (if any similar to the proposal or would be of a Non Complying lot size came to be i.e how were these approved? Was it via a Non Complying approval as well or RDA or DA?).

With respect to the site containing LUC 3 soils – RC Planner confirmed Council is aware of the Governments direction proposed to be removed from the NPS-HPL and is following any

updates or changes as they are announced. Council would not be able to give any weight to the recent updates provided by Central Government until these are live and operative.

Council is accepting applications for lodgement with respect to land with LUC soils. Planner Salamasina advised including a robust assessment as it relates to the NPS-HPL and for the Applicant to decide whether or not additional specialists reports i.e. a Soil Report will be necessary.

Planner Salamasina has suggested ordering the property files for the below decisions that include LUC soils:

- 2240161-RMASUB 1907 Diggers Valley Road LUC 3
- 2250012-RMASUB 68 Waikuku Road Waimate North Road (LUC 2)
- 2250208-RMASUB 682 Pungaere Road Kerikeri LUC 3 with soil report
- 2250311-RMASUB 23 Taheke Road Kaikohe LUC 2
- 2250394-RMALUC, 23 Waipapa West Road LUC 3

Engineering:

A potential building location will need to be shown on Lot 1 and if it will be within the Flood hazard shown then the necessary specialists reports (i.e. Site Suitability Report) will be required.

If the driveway and associated building platforms are demonstrated to sit outside the 100-year flood zone then the RC Engineer confirms no specialist report will be required. Including showing the access / driveway (not necessarily form) sitting outside the flood zone.

Vehicle crossing will need to be designed in accordance with the ODP rules. The ROW A will need to be formed to Appendix 3B-1. Applicant states a passing bay may need to be included as the length is over 100m. RC Engineer notes the site is reasonably flat and suggests that if a reasonable explanation is provided, then discussions about not requiring a passing bay may be considered. For example, if there is enough legal width then a passing bay is not always necessary.

For Lot 1 onsite water tanks and fire fighting provisions will be required to be shown.

Similarly demonstrate onsite wastewater disposal and system for any future development on Lot 1 can be accommodated for.

Just a note that if building was to be undertaken with this application then consideration would be required to comply with NRC rules. Applicant confirmed application will be designed to comply.

5. Conclusion and next steps

- Salamasina to send meeting minutes and example resource consents of HPL land.

Please note

The views and opinions by Council Officers at the Concept Development Meetings and in these associated notes provide their preliminary view only. A final determination on whether Council can support the consent or not, and whether the resource consent application will be processed on a notified or non-notified base can only be made upon receipt of a formal application, site visit and review.



FIRE
EMERGENCY

NEW ZEALAND

Non-Reticulated Firefighting Water Supplies, Vehicular Access & Vegetation Risk Reduction Application for New and Existing Residential Dwellings and Sub-Divisions

Applicant Information

Applicants Information	
Name:	Kapiro Orchard Ltd
Address:	38 Hekerua Road, Oneroa, Auckland 1081
Contact Details:	James Baxter 021 307376
Return Email Address:	jameskbaxter@outlook.com

Property Details

Property Details	
Address of Property:	71 Orchard Road Kerikeri 0295
Lot Number/s:	Lot 2 DP540914
Dwelling Size: (Area = Length & Width)	128 m2
Number of levels: (Single / Multiple)	Single level

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Firefighting Water Supplies and Vegetation Risk Reduction Waiver

“Fire and Emergency New Zealand strongly recommends the installation of automatic fire detection system devices such as smoke alarms for early warning of a fire and fire suppression systems such as sprinklers in buildings (irrespective of the water supply) to provide maximum protection to life and property”.

Waiver Explanation Intent

Fire and Emergency New Zealand [FENZ] use the New Zealand Fire Service [NZFS] Code of Practice for firefighting water supplies (SNZ PAS 5409:2008) (The Code) as a tool to establish the quantity of water required for firefighting purposes in relation to a specific hazard (Dwelling, Building) based on its fire hazard classification regardless if they are located within urban fire districts with a reticulated water supply or a non-reticulated water supply in rural areas. The code has been adopted by the Territorial Authorities and Water Supply Authorities. The code can be used by developers and property owners to assess the adequacy of the firefighting water supply for new or existing buildings.

The Community Risk Manager under the delegated authority of the Fire Region Manager and District Manager is responsible for approving applications in relation to firefighting water supplies. The Community Risk Manager may accept a variation or reduction in the amount of water required for firefighting for example; a single level dwelling measuring 200^m² requires 45,000L of firefighter water under the code, however the Community Risk Manager in Northland will except a reduction to 10,000L.

This application form is used for the assessment of proposed water supplies for firefighting in non-reticulated areas only and is referenced from (Appendix B – Alternative Firefighting Water Sources) of the code. This application also provides fire risk reduction guidance in relation to vegetation and the 20-metre dripline rule under the Territorial Authority’s District Plan. Fire and Emergency New Zealand are not a consenting authority and the final determination rests with the Territorial Authority.

For more information in relation to the code of practice for Firefighting Water supplies, Emergency Vehicle Access requirements, Home Fire Safety advice and Vegetation Risk Reduction Strategies visit www.fireandemergency.nz

1. Fire Appliance Access to alternative firefighting water sources - Expected Parking Place & Turning circle

Fire and Emergency have specific requirements for fire appliance access to buildings and the firefighting water supply. This area is termed the hard stand. The roading gradient should not exceed 16%. The roading surface should be sealed, able to take the weight of a 14 to 20-tonne truck and trafficable at all times. The minimum roading width should not be less than 4 m and the property entrance no less 3.5 metres wide. The height clearance along access ways must exceed 4 metres with no obstructions for example; trees, hanging cables, and overhanging eaves.

1 (a) Fire Appliance Access / Right of Way	
Is there at least 4 metres clearance overhead free from obstructions?	☒ YES ☐ NO
Is the access at least 4 metres wide?	☒ YES ☐ NO
Is the surface designed to support a 20-tonne truck?	☒ YES ☐ NO
Are the gradients less than 16%	☒ YES ☐ NO
Fire Appliance parking distance from the proposed water supply is 5 metres	

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

If access to the proposed firefighting water supply is not achievable using a fire appliance, firefighters will need to use portable fire pumps. Firefighters will require at least a one-metre wide clear path / walkway to carry equipment to the water supply, and a working area of two metres by two metres for firefighting equipment to be set up and operated.

1 (b) Restricted access to firefighting water supply, portable pumps required
Has suitable access been provided? ☐ YES ☐ NO
Comments: Click or tap here to enter text.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

2. Firefighting Water Supplies (FFWS)

What are you proposing to use as your firefighting water supply?

2 (a) Water Supply Single Dwelling

Tank	☐ Concrete Tank ☒ Plastic Tank ☐ Above Ground (Fire Service coupling is required - 100mm screw thread suction coupling) ☒ Part Buried (max exposed 1.500 mm above ground) ☐ Fully Buried (access through filler spout) Volume of dedicated firefighting water min 10,000 litres
------	---

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

2 (b) Water Supply Multi-Title Subdivision Lots / Communal Supply

Tank Farm	☐ Concrete Tank ☐ Plastic Tank ☐ Above Ground (Fire Service coupling is required - 100mm screw thread suction coupling) ☐ Part Buried (max exposed 1.500mm above ground) ☐ Fully Buried (access through filler spout) Number of tanks provided Click or tap here to enter text. Number of Tank Farms provided Click or tap here to enter text. Water volume at each Tank Farm Click or tap here to enter text. Litres Volume of dedicated firefighting water Click or tap here to enter text. litres
-----------	---

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

2 (c) Alternative Water Supply

Pond:	Volume of water: Click or tap here to enter text.
Pool:	Volume of water: Click or tap here to enter text.
Other:	Specify: Click or tap here to enter text.
	Volume of water: Click or tap here to enter text.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

3. Water Supply Location

The code requires the available water supply to be at least 6 metres from a building for firefighter safety, with a maximum distance of 90 metres from any building. This is the same for a single dwelling or a Multi-Lot residential subdivision. Is the proposed water supply within these requirements?

3 (a) Water Supply Location

Minimum Distance:	<i>Is your water supply at least 6 metres from the building?</i> ☒ YES ☐ NO
Maximum Distance	<i>Is your water supply no more than 90 metres from the building?</i> ☐ YES ☒ NO

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

3 (b) Visibility

How will the water supply be readily identifiable to responding firefighters? E.g.: tank is visible to arriving firefighters or, there are signs / markers posts visible from the parking place directing them to the tank etc.

Comments:

Visible

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

3 (c) Security

How will the FFWS be reasonably protected from tampering? E.g.: light chain and padlock or, cable tie on the valve etc.

Explain how this will be achieved:

Cable tie on valve

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

4. Adequacy of Supply

The volume of storage that is reserved for firefighting purposes must not be used for normal operational requirements. Additional storage must be provided to balance diurnal peak demand, seasonal peak demand and normal system failures, for instance power outages. The intent is that there should always be sufficient volumes of water available for firefighting, except during Civil Défense emergencies or by prior arrangement with the Fire Region Manager.

4 (a) Adequacy of Water supply

Note: *The owner must maintain the firefighting water supply all year round. How will the usable capacity proposed be reliably maintained? E.g. automatically keep the tank topped up, drip feed, rain water, ballcock system, or manual refilling after use etc.*

Comments:

Connected to reticulated mains, Kerikeri irrigation.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

5. Alternative Method using Appendix's H & J

If Table 1 + 2 from the Code of Practice is not being used for the calculation of the Firefighting Water Supply, a competent person using appendix H and J from the Code of Practice can propose an alternative method to determine firefighting water supply adequacy.

Appendix H describes a method for determining the maximum fire size in a structure. Appendix J describes a method for assessing the adequacy of the firefighting water supply to the premises.

5 (a) Alternative Method Appendix H & J	
If an alternative method of determining the FFWS has been proposed, who proposed it?	
Name: Click or tap here to enter text.	
Contact Details: Click or tap here to enter text.	
Proposed volume of storage?	Litres: Click or tap here to enter text.
Comments: Click or tap here to enter text. <i>* Please provide a copy of the calculations for consideration.</i>	

Internal FENZ Risk Reduction comments only:
Click or tap here to enter text.

6. Diagram

Please provide a diagram identifying the location of the dwelling/s, the proposed firefighting water supply and the attendance point of the fire appliance to support your application.



Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

7. Vegetation Risk Reduction - Fire + Fuel = Why Homes Burn

Properties that are residential, industrial or agricultural, are on the urban–rural interface if they are next to vegetation, whether it is forest, scrubland, or in a rural setting. Properties in these areas are at greater risk of wildfire due to the increased presence of nearby vegetation.

In order to mitigate the risk of fire spread from surrounding vegetation to the proposed building and vice-versa, Fire Emergency New Zealand recommends the following;

I. Fire safe construction

Spouting and gutters – Clear regularly and consider screening with metal mesh. Embers can easily ignite dry material that collects in gutters.

Roof – Use fire resistant material such as steel or tile. Avoid butanol and rubber compounds.

Cladding – Stucco, metal sidings, brick, concrete, and fibre cement cladding are more fire resistant than wood or vinyl cladding.

II. Establish Safety Zones around your home.

Safety Zone 1 is your most important line of defence and requires the most consideration. Safety Zone 1 extends to 10 metres from your home, you should;

- a) Mow lawn and plant low-growing fire-resistant plants; and*
- b) Thin and prune trees and shrubs; and*
- c) Avoid tall trees close to the house; and*
- d) Use gravel or decorative crushed rock instead of bark or wood chip mulch; and*
- e) Remove flammable debris like twigs, pine needles and dead leaves from the roof and around and under the house and decks; and*
- f) Remove dead plant material along the fence lines and keep the grass short; and*
- g) Remove over hanging branches near powerlines in both Zone 1 and 2.*

III. Safety Zone 2 extends from 10 – 30 metres of your home.

- a) Remove scrub and dead or dying plants and trees; and*
- b) Thin excess trees; and*
- c) Evenly space remaining trees so the crowns are separated by 3-6 metres; and*
- d) Avoid planting clusters of highly flammable trees and shrubs*
- e) Prune tree branches to a height of 2 metres from the ground.*

IV. Choose Fire Resistant Plants

Fire resistant plants aren't fire proof, but they do not readily ignite. Most deciduous trees and shrubs are fire resistant. Some of these include: poplar, maple, ash, birch and willow. Install domestic sprinklers on the exterior of the sides of the building that are less 20 metres from the vegetation. Examples of highly flammable plants are: pine, cypress, cedar, fir, larch, redwood, spruce, kanuka, manuka.

For more information please go to <https://www.fireandemergency.nz/at-home/the-threat-of-rural-fire/>

If your building or dwelling is next to vegetation, whether it is forest, scrubland, or in a rural setting, please detail below what Risk Reduction measures you will take to mitigate the risk of fire development and spread involving vegetation?

7 (a) Vegetation Risk Reduction Strategy

Cleared and grass around house

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

8. Applicant

Checklist



Site plan (scale drawing) – including; where to park a fire appliance, water supply, any other relevant information.



Any other supporting documentation (diagrams, consent).

I submit this proposal for assessment.

Name: James Baxter Dated: 8 June 2024

Contact No.: 021307376

Email: jameskbaxter@outlook.com

Signature: James Baxter.

9. Approval

In reviewing the information that you have provided in relation to your application being approximately a [Click or tap here to enter text.](#) square metre, Choose an item. dwelling/sub division, and non-sprinkler protected.

The Community Risk Manager of Fire and Emergency New Zealand under delegated authority from the Fire Region Manager, Te Hiku, and the District Manager has assessed the proposal in relation to firefighting water supplies and the vegetation risk strategy. The Community Risk Manager Choose an item. agree with the proposed alternate method of Fire Fighting Water Supplies. Furthermore, the Community Risk Manager agrees with the Vegetation Risk Reduction strategies proposed by the applicant.

Name: [Click or tap here to enter text.](#)

Signature: [Click or tap here to enter text.](#)

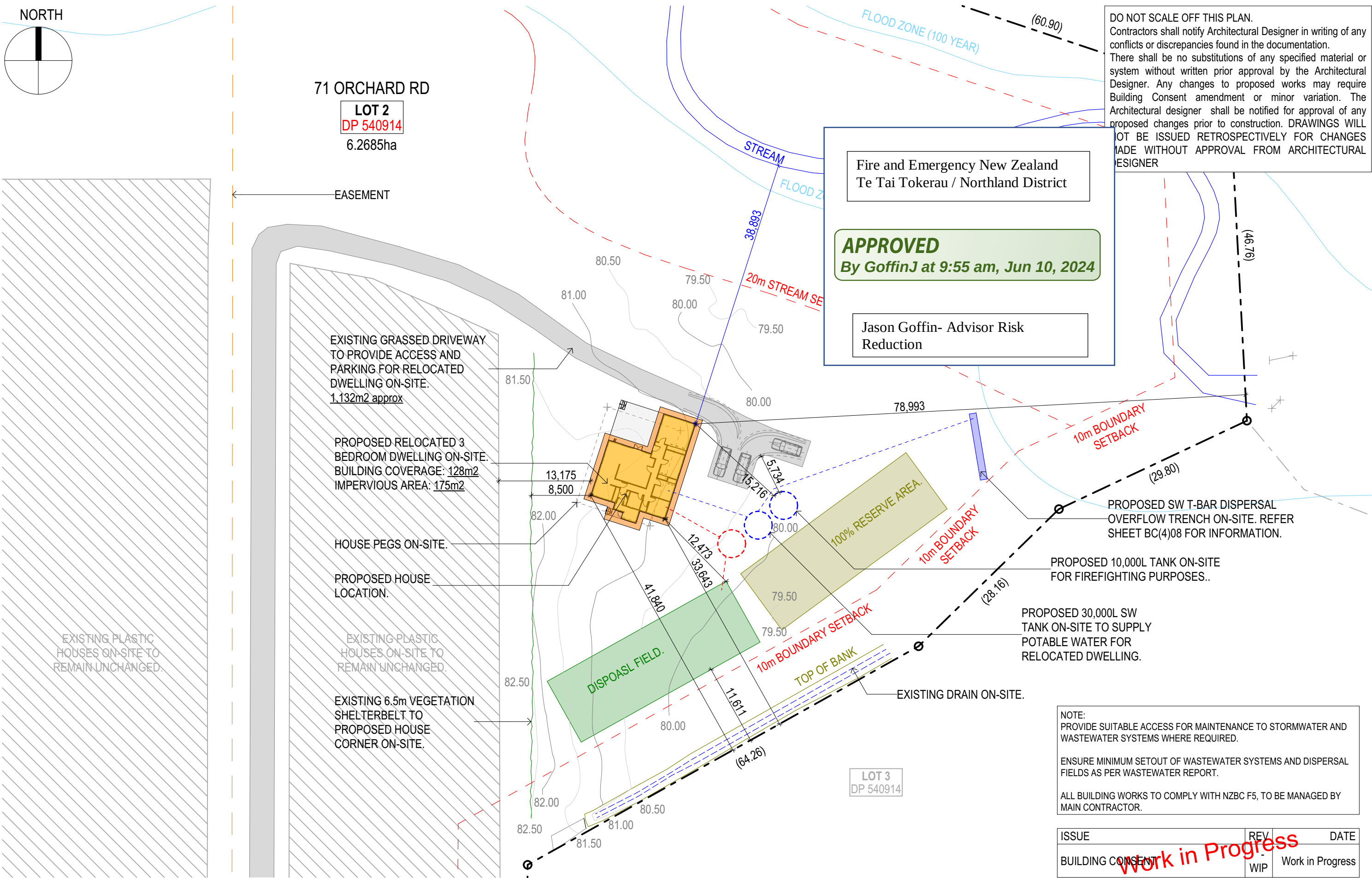
P.P on behalf of the Community Risk

Fire and Emergency New Zealand
Te Tai Tokerau / Northland District

APPROVED

By GoffinJ at 9:59 am, Jun 10, 2024

Jason Goffin- Advisor Risk
Reduction



Geotechnical Investigation Report
Proposed Building
71 Orchard Road, Kerikeri
Lot 2, Deposited Plan 540914
For
Kapiro Orchard Limited

Haigh Workman reference 24 071

May 2024



Revision History

Revision N ^o	Issued By	Description	Date
A	John Power	First Issue	May 2024

Prepared By



John Power

Geologist
Member NZGS

Reviewed By



Wayne Thorburn

Senior Geotechnical Engineer
CPEng, CMEngNZ

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Executive Summary

Haigh Workman Limited (Haigh Workman) were engaged by Kapiro Orchard Limited (the Client) to undertake a geotechnical investigation at 71 Orchard Road, Kerikeri. We understand that the Client intends to develop the site with relocation of a single level dwelling that will be supported on concrete encased timber post foundations. We also understand that a separate non-habitable shed will be constructed on the site. We envisage that the proposed shed will be founded on concrete slab-on-grade type foundation with deepened edge beams and spread footings.

Based on the results of the geotechnical investigation conducted by Haigh Workman and review of published geological maps, it is considered that the soils directly underlying the site comprise natural soils of the Kerikeri Volcanic Group. The recovered soils were generally described as being very stiff silt with trace to minor clay and trace fine to medium grained gravel content. Some basalt boulders are scattered across the site and it is expected that basalt boulders are likely to be encountered at variable depths when undertaking foundation excavations. Groundwater was not encountered during our site investigations. Groundwater levels can and do fluctuate and higher groundwater levels may be encountered following periods of prolonged or heavy rainfall, though testing was completed during a wet winter.

The natural soils recovered during subsoil investigations are considered suitable for supporting foundations subject to ground verification during construction. Foundation recommendations are outlined in Section 5 of this Report with construction recommendations outlined within Section 6.

We recommend that this report is read in full and that recommendations contained within are followed. Shallow concrete encased timber post foundations can be designed in accordance with NZS3604:2011, provided the minimum embedment depth is increased to 1.0m below the finished ground level due to the presence of expansive, fine grained soils. For consistency across shed foundation footprint, we recommend all spread footings be founded a minimum of 600mm (light weight claddings only) below the finished ground level (bfgl) into the very stiff natural soils and or compacted hardfill. A summary of our findings are as follows:

- Ultimate bearing capacity of 300kPa.
- Minimum embedment depth of 1.0m for all piles, founded into very stiff natural soils
- Geotechnical strength reduction factor – 0.5.
- Soil expansivity class – Site Class H (highly reactive soils).
- Seismic class – Site Class C (shallow soil site).
- Design in accordance with B1/AS1 or specific design following AS2870:2011 adopting the revised B1/AS1 return periods.

From ground investigations, there is a potential for shallow rock to be encountered onsite. Pile depths have been adjusted accordingly in design but provision for changes should be allowed for if encountered during construction subject to geotechnical engineer review.

1 Introduction

1.1 Project Brief and Scope

Haigh Workman Ltd (Haigh Workman) has been commissioned by Kapiro Orchard Limited (the Client) to undertake a geotechnical investigation for a proposed dwelling at and separate shed at 71 Orchard Road, Kerikeri (Lot 2, Deposited Plan 540914). This report presents the information gathered during the site investigation, interpretation of data obtained and site-specific geotechnical recommendations relevant to the site.

The scope of this report encompasses the geotechnical suitability in the context of the proposed development as defined in the Short Form Agreement dated 26 March 2024. This appraisal has been designed to assess the subsoil conditions for foundation design and identify geotechnical constraints for the proposed development.

This report provides the following:

- A summary of the published geology with reference to the geotechnical investigations undertaken.
- Analysis of the data obtained from site investigations, providing a geotechnical ground model.
- Foundation recommendations.
- Provide comment on ground stability and.
- Identification of any additional geotechnical risks and/or hazards.

1.2 Proposed Development

Based on the provided survey plan and discussion with the Client, we understand that the Client intends to develop the site with the relocation of a single level dwelling to be located towards the eastern property boundary. We envisage that the proposed relocatable dwelling will comprise a lightweight structure with suspended timber floors, supported on concrete encased timber post foundations. We also understand that the client intends to develop the site further with the construction of a separate, non-habitable shed, to be located 60m (approx.) to the northwest of the proposed dwelling, and that the proposed shed will be founded on concrete slab-on-grade type foundation with deepened edge beams and spread footings. No significant earthworks are anticipated for the proposed development other than foundation excavations.

This geotechnical investigation and report considers the geotechnical aspects for the proposed dwelling and shed, with particular reference to the proposed development locations, (refer Figure 1 and Appendix A).

Should the proposed development vary from the proposals described above and/or be relocated outside of the investigated area, further investigation and/or amendments to the recommendations made in this report may be required.

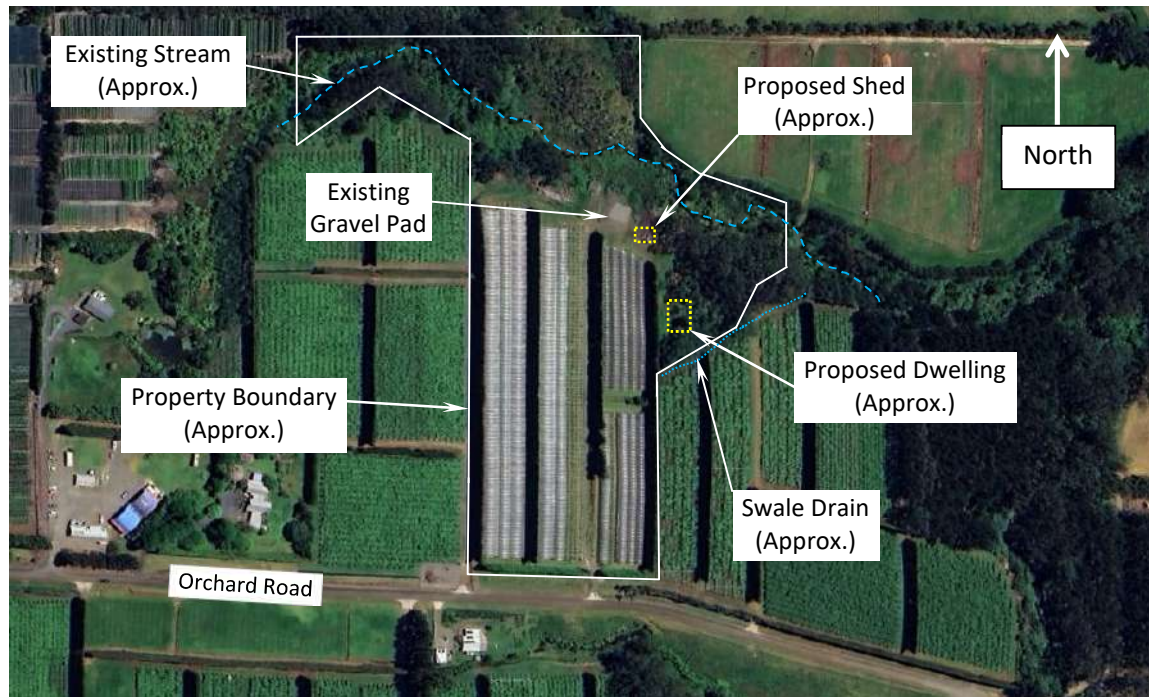


Figure 1 - Site Location

1.3 Site Description

The property is legally described as Lot 2, Deposited Plan 540914, having a total land area of 6.2685 ha. The property is irregular in plan shape and is located to the north of Orchard Road on generally flat to gentle east facing slopes. The property is boarded to the west, north and east by developed orchards blocks and currently comprises existing orchards with shelter belt trees across the majority of the site. The northern and northeast extents of the site is largely undeveloped with a mixture of mature trees, and dense scrub and weeds. An unnamed stream closely follows the northern property boundary, flowing from west to east, draining to the southeast and the Kapiro River beyond the property boundary. A small swale drain extends along the eastern property boundary, draining stormwater into the unnamed stream to the northeast.

The central northern and part of the eastern area of the site has been partially cleared of vegetation with some stockpiles of felled trees and vegetation remaining onsite. In addition, several basalt boulders have been dislodged as part of the site clearance and have been stockpiled at several location across the northeast part of the site. Part of the cleared area to the north of the existing orchard rows has been covered in gravel to form a gravel pad of 100m² (approx.). A shipping container currently sits on the gravel pad.

Southeast of the cleared area and gravel pad, an overgrown soil stockpile is located near the proposed dwelling location. Both the soil stockpile, vegetation and stumps will need to be removed and cleared prior to development of the dwelling and shed locations. We understand that the proposed dwelling will be located towards the northeast corner of the property with the proposed shed being located to the north of the dwelling, adjacent the existing gravel pad. The site is accessed off Orchard Road via an existing unsealed driveway near the southeast corner of the property, refer Figure 1 and Appendix A.

2 Desktop Study

2.1 Published Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences, 1:250,000 Scale, Geological Map 2, 2009: “Geology of the Whangarei area”.
- NZMS 290 Sheet P04/05, 1: 100,000 scale, 1980: “Soil map of Whangaroa-Kaikohe area”.

The site is within the bounds of the GNS Geological Map 2 “Geology of the Whangarei area”, 1:250,000 scale*. The published geology shows the site to be underlain by the Kerikeri Volcanic Group (Pvb) comprising older basaltic flows and flow remnants. The Kerikeri Volcanic Group is considered to be of Late Miocene to Pliocene age. An extract from the geological map is shown in Figure 2 with geological units presented in Table 1.

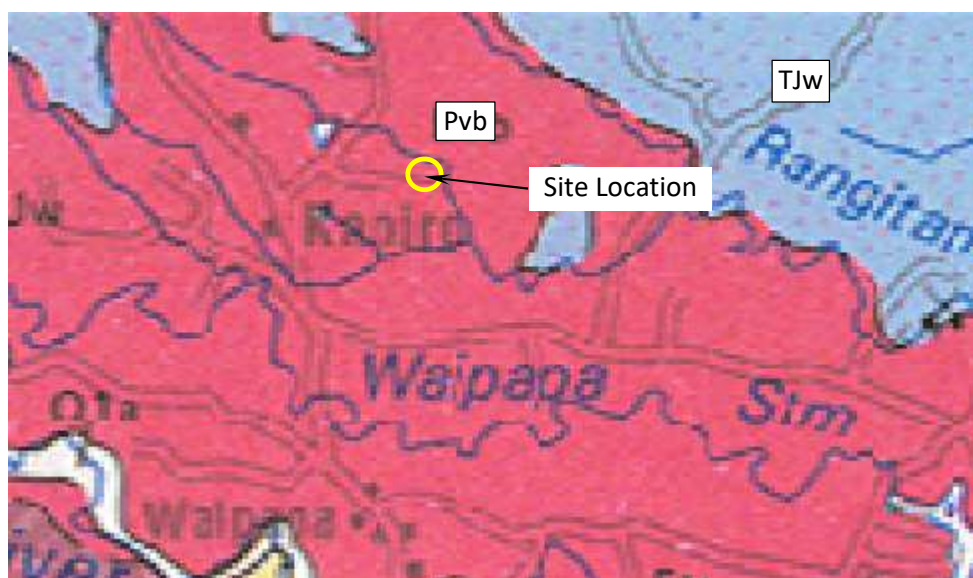


Figure 2 - Geological Map (Geology of Whangarei area, 1:250,000)

Table 1 - Geological Legend

Symbol	Unit Name	Description
Pvb	Kerikeri Volcanic Group (Basalt flows)	Older flows and flow remnants. Late Miocene to Pliocene age.
TJw	Waipapa Group	Massive to thin bedded, lithic volcanoclastic sandstone and argillite (TJw). Permian to Jurassic age.

* Edbrooke, S.W; Brook, F.J. (compilers) 2009. Geology of the Whangarei area. Institute of Geological and Nuclear Sciences 1:250 000 geological Map 2. 1 sheet + 68 p. Lower Hutt, New Zealand: Institute of GNS Science.

Further reference to the published New Zealand land inventory maps (Whangaroa - Kaikohe), indicates the site is underlain by 'soils of the rolling and hilly land; well to moderately well drained Okaihau gravelly friable clay (OK) and Pungaere gravelly friable clay (PG)'. The underlying material weathers to 'soft red brown or dark grey brown clay to depths of 20m with many rounded corestones'.

3 Ground Investigations

3.1 Subsurface Investigations

Haigh Workman undertook geotechnical investigations on 05 April 2024. The investigations comprised the drilling of five hand auger boreholes (BH01 to BH05), located across the approximate proposed development areas. Hand auger boreholes were undertaken to a maximum depth of 3.0 metres below ground level (mbgl). Vane shear tests were undertaken within cohesive soils at regular intervals during the advancement of the hand auger boreholes.

A hand held shear vane with 19mm blade was used to measure the Vane Shear Strengths of the cohesive, in-situ material. All shear strengths shown on the appended logs are Vane Shear Strengths in accordance with NZGS; "Guideline for Handheld Shear Vane Test", 2001. Unsuccessful tests where soils were too difficult to penetrate with the shear vane were recorded as 'unable to penetrate' (UTP) and are inferred to represent soils with vane shear strengths more than 100kPa.

A Scala penetrometer was used during drilling of hand auger boreholes BH04 and BH05 to assist in penetration of very stiff/dense soil horizons with high granular content. Scala penetrometer testing was also undertaken at the the base of boreholes BH01 to BH03 with testing deemed to be at refusal with blow counts of greater than 20 blows per 100m of penetration and or when the Scala was deemed to be "bouncing". Refusal of the Scala penetrometer has been interpreted as refusal on weathered basalt boulders at depth.

Investigations were logged in accordance with The New Zealand Geotechnical Society, "Guidelines for the Field Classification and Description of Soil and Rock for Engineering Purposes" (2005). Investigation locations are shown on the drawings in Appendix A with investigation hand auger borehole logs included within Appendix B. At the time of our site investigation, the surface conditions were dry.

3.2 Ground Conditions

The investigation for the proposed dwelling location comprised the drilling of three hand auger boreholes (BH01 to BH03) completed amongst the generally dense vegetation near the eastern property boundary. The ground contour across the investigation area was generally flat to gently sloping to the east. A stockpile of soil and debris is located in the general area of the proposed dwelling location. Both the soil stockpile, existing vegetation and tree stumps will need to be removed and cleared prior to development of the dwelling site. The source of the soil stockpile is unknown but is considered to be site won material that has likely been stockpiled during clearance and development of the site for horticultural use.

Two hand auger boreholes (BH04 & BH05) were drilled at the approximate location of the proposed shed, some 60m northwest of the proposed dwelling. The area around the proposed shed has been mostly cleared of vegetation with some large stockpiles of vegetation remaining onsite. Some large basalt boulders have been dislodged and moved during the partial clearance of the northern part of the site.

Hand auger boreholes BH01 to BH04 encountered natural soils of the Kerikeri Volcanic Group below a thin veneer of topsoil. Borehole BH05 encountered fill material to 0.3m deep, underlain by natural soils of the Kerikeri Volcanic Group. Detailed logs are presented within Appendix B. Table 2 summarises the materials encountered, with depth to base of each unit provided. A geological model has been developed based on the investigation and is presented in Appendix A. For the purposes of this report, subsoil conditions on the site have been interpolated between the boreholes and some variation between borehole positions are likely.

Table 2 - Summary of Borehole Results

Borehole Number	Topsoil (mbgl)	Non-certified Fill Material (mbgl)	Kerikeri Volcanic Group Soils (mbgl)	Groundwater Observations
BH01	0.0 to 0.2	NA	0.2 to >1.1	Groundwater not encountered.
BH02	0.0 to 0.2	NA	0.2 to >0.6	Groundwater not encountered.
BH03	0.0 to 0.2	NA	0.2 to >1.1	Groundwater not encountered.
BH04	0.0 to 0.2	NA	0.2 to >3.0	Groundwater not encountered.
BH05	NA	0.0 to 0.3	0.3 to >1.9	Groundwater not encountered.

Note - Depths measured from existing ground surface level.

NA – Not Applicable.

3.2.1 **Topsoil**

A thin veneer of topsoil was encountered within borehole BH01 to BH04 to a depth of 0.2mbgl. The topsoil comprised a very stiff, light brown to dark brown silt with trace fine gravel content that was dry and having no plasticity. Below the topsoil, natural soils of the Kerikeri Volcanic Group were encountered to a maximum depth of 3.0mbgl (BH04).

3.2.2 **Fill**

Fill was encountered within borehole BH05 to a maximum encountered depth of 0.3mbgl. The fill material encountered comprised brownish orange silt with minor fine to medium gravel that was very stiff, dry and of no plasticity. The fill material encountered is considered to comprise intermixed topsoil and fill material originating from site during site clearance across the northern part of the site. Due to the variable nature of the fill material encountered, the fill has been categorised as 'non-certified' and will not be suitable to support foundations.

3.2.3 ***Kerikeri Volcanic Group***

Kerikeri Volcanic Group soils were encountered within all the hand auger boreholes. The Kerikeri Volcanic Group soils encountered typically comprised silt with trace to minor clay content and trace fine to medium grained gravel content throughout. The soils were described as very stiff, light brownish orange, light orange to orange becoming light grey to light greenish grey, mottled orange with increasing depth. The soils were further described as dry to moist, becoming moist to wet with increasing depth and of having generally low plasticity.

Where vane shear strength test results were recorded within the Kerikeri Volcanic Group soils, results were greater than 100kPa. The majority of tests were unsuccessful due to soils being either too difficult to penetrate with the shear vane or where granular content in the soils would return unreliable test results. Unsuccessful tests were recorded as 'unable to penetrate' (UTP) and are inferred to represent soils with vane shear strengths more than 100kPa, i.e., very stiff. Recorded vane shear strengths are shown on the appended borehole logs within Appendix B. Refusal of the Scala penetrometer tests at variable depths suggests weathered basalt boulders (corestones) are common across the area.

The ground surface and geological section across the proposed development area was determined using Council Lidar data. The geological cross section shows the ground conditions across the investigation area to be relatively consistent, i.e., natural soils of the Kerikeri Volcanic Group below a thin veneer of topsoil and non-certified fill material. The geological cross section is included within Appendix A.

3.2.4 ***Groundwater***

Groundwater was not encountered during the drilling of the investigation boreholes. No evidence of groundwater seepage or static groundwater level was observed within the boreholes. Groundwater is expected at or close the existing stream elevation, estimated at being 3.0m below the proposed dwelling and shed locations. Soil moisture observations were recorded with moisture conditions typically being moist, becoming moist to wet with increasing depth. At the time of drilling, surface conditions were dry. Groundwater levels can and do fluctuate and higher groundwater levels may be encountered following periods of prolonged or heavy rainfall.

3.2.5 ***Laboratory Testing***

A soil sample was collected from the recovered soils at location BH01 between 0.5m and 0.9mbgl. The sample was sent to an IANZ accredited laboratory to undertake testing to determine the materials Atterberg limits and linear shrinkage. Laboratory test results are presented in Appendix C, with results discussed in Section 4.

4 Geotechnical Assessment

4.1 Visual Stability Assessment

Site contours across the proposed development area were recorded at being flat to gentle with slopes in the order of 1° to 4°. The natural ground conditions across the site were found to be generally consistent with no evidence of slope instability identified on the natural slopes across the site. It is considered that the proposed dwelling and shed locations are currently stable and suitable for development.

4.2 Liquefaction Susceptibility

A detailed liquefaction potential assessment was outside the scope of this ground investigation. The results of our investigation show the surface soils to be underlain by fine grained soils of the Kerikeri Volcanic Group. The Kerikeri Volcanic Group soils are of Late Miocene to Pliocene age (1.8-11.2 million years). Based on the underlying soil type and age, we consider the site soils and underlying geology are not susceptible to liquefaction under seismic conditions.

The results of our investigation show the proposed development locations are underlain by cohesive soils with a generally deep groundwater level (>3.0m) and high plasticity index (PI) of 87. The site soils are considered too plastic to liquify under seismic conditions. Based on the laboratory results and the low seismic hazard, we do not consider the proposed development locations to be at risk of liquefaction during a seismic event.

4.3 Shrink/Swell Behaviour

The New Zealand Building Code outlines expansive soils are those with a liquid limit greater than 50% and a linear shrinkage greater than 15%. Case histories of shrink-swell cases indicates soils with a liquid limit (LL) greater than 50% and plasticity index (PI) greater than 30% are considerably more susceptible to shrinkage and therefore considered as expansive soils. Atterberg limits test results on the sample collected during the site investigation are presented in Table 3 below.

Table 3 - Atterberg Limits and Linear Shrinkage Test Results

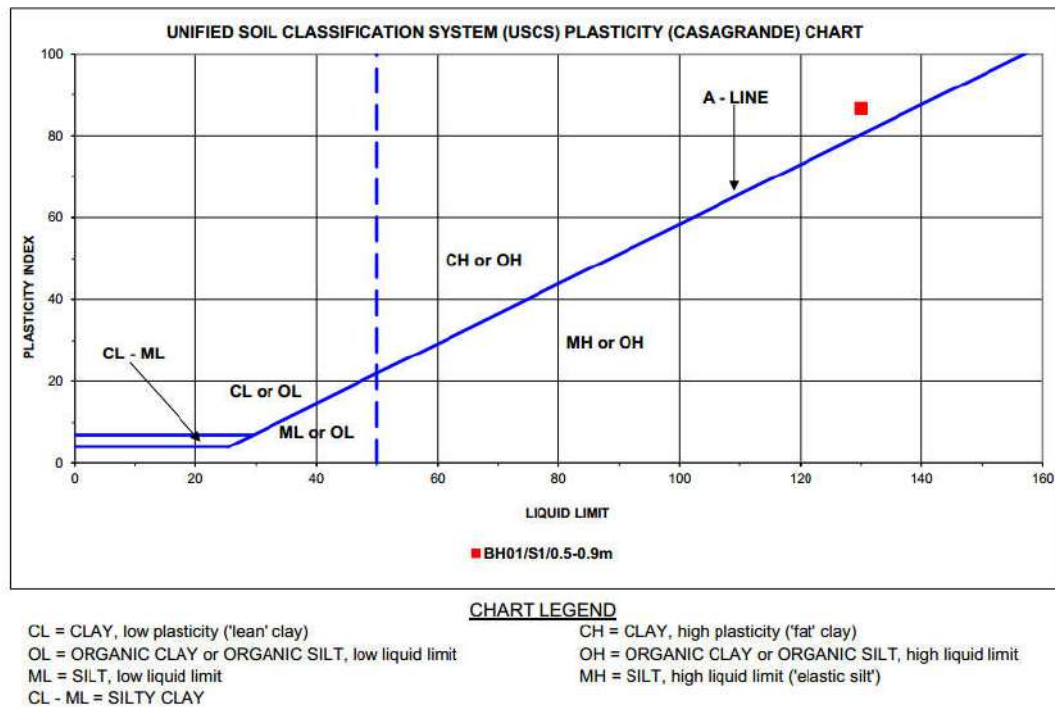
Sample I.D.	Depth (mbgl)	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Linear Shrinkage %
BH01	0.5 to 0.9	42.9	130	43	87	24

The results indicate that the natural soils of the Kerikeri Volcanic Group underlying the site are expansive and subject to seasonal volume change, predominantly shrinkage during summer which can result in surface settlements due to volume change.

Based on the laboratory results, it is our opinion that the site can be classified as Class H, highly expansive (in accordance with the New Zealand Building Code) and deepened foundations will be necessary to mitigate the effects of prolonged dry seasons.

Results are plotted on the Casagrande Chart in Figure 3 below, with the sample plotting above the A-Line, which further reinforces the highly expansive nature of the soil (Wesley, 2010[†]).

Figure 3 - Casagrande Chart



Based on laboratory testing, the foundation soils lie outside the definition of 'good ground' as outlined in NZS3604:2011. Shallow foundations may be designed in accordance with B1/AS1 or AS 2870:2011 with an allowance for class 'H', 'highly expansive' soil, adopting the revised return periods outlined in B1/AS1.

[†] Geotechnical Engineering in Residual Soils, Laurence, D. Wesley (2010).

5 Foundation Recommendations

5.1 General

Concept drawings were not available at the time of writing. However, based on the provided survey plan and discussion with the Client, an indicative location for the proposed relocatable dwelling and new shed has been established. We envisage that the proposed dwelling will comprise a lightweight structure with suspended timber floors, supported on concrete encased timber post foundations. Based on discussions with the Client we understand that the proposed new shed will be founded on concrete slab-on-grade type foundations with deepened edge beams and spread footings. Foundation recommendations for the proposed dwelling are provided based on the site contours remaining unchanged, i.e., no cuts or fill placement other than required for foundation excavations.

Investigations identified that a thin layer of fill underlies part of the proposed shed location. Due to the variable nature of the fill material, the fill has been categorised as 'non-certified' and will not be suitable for the support of foundations, i.e., all fill material to be removed prior to preparing foundations.

Shed foundation recommendations are provided based on any existing non-certified fill material below the proposed shed footprint is removed and replaced with granular hardfill (GAP40), compacted to an engineered standard (refer Section 6.0).

Based on our findings, the underlying natural soils of the Kerikeri Volcanic Group are considered suitable for supporting foundations subject to ground verification during construction. We recommend that final subgrade levels be inspected by a geotechnical engineer to confirm that all unsuitable material has been removed, i.e., topsoil, and non-certified fill material, and that a suitable subgrade has been achieved immediately below the proposed shed footprint.

5.2 Foundations

5.2.1 *Proposed Dwelling*

Ground investigations across the proposed development area identified that the subsoils are suitable for supporting foundations subject to ground verification. Foundations can be designed using an ultimate bearing capacity of 300kPa and a geotechnical strength reduction factor of 0.5. We recommend that foundations comprise post foundations that are taken to found into very stiff natural soils of the Kerikeri Volcanic Group. Shallow concrete encased timber post foundations can be designed in accordance with NZS3604:2011, provided the minimum embedment depth is increased to 1.0m below the finished ground level due to the presence of expansive, fine grained soils.

Foundations may be designed in accordance with NZS 3604:2011, under the following conditions:

- Ultimate bearing capacity of 300kPa.
- Minimum embedment depth of 1.0m for all piles, founded into very stiff natural soils.
- Geotechnical strength reduction factor – 0.5.

- Soil expansivity class – Site Class H (highly expansive soils).
- Seismic class – Site Class C (shallow soil site).

Bearing capacity values included in this report are for vertical loads only and do not take in to account horizontal shear or moment. From ground investigations, there is a potential for shallow rock and or boulders to be encountered onsite. Pile depths have been adjusted accordingly in design but provision for changes should be allowed for if encountered during construction subject to geotechnical engineer review.

We recommend that all foundations are subject to verification by a geotechnical engineer at the time of drilling to confirm that posts holes are terminating within very stiff natural soils of the Kerikeri Volcanic Group, prior to placement of posts and concrete.

5.3 Shallow Foundations

5.3.1 *Proposed Shed*

Ground investigations identified that the ground conditions across the proposed shed footprint is suitable for shallow foundations, provided any unsuitable material is removed (i.e., topsoil or non-certified fill material) and that any founding subsoils are subject to ground verification.

We recommend that site soils are cut to create a level platform below the proposed footprint of the proposed shed, with the proposed structure being founded on a concrete slab-on-grade type foundations with deepened edge beams or spread footings.

Based on the in-situ vane shear testing, an ultimate bearing capacity of 300kPa can be adopted for limit state design for shallow foundations. Bearing capacity values included in this report are for vertical loads only and do not consider horizontal shear or moment. We recommend that the exposed subgrade be inspected by a geotechnical engineer to confirm that all unsuitable material has been removed, i.e., topsoil and non-certified fill material, prior to placement of any hardfill.

For consistency across shed foundation footprint, we recommend all spread footings be founded a minimum of 600mm (light weight claddings only) below the finished ground level (bfgl) into the very stiff natural soils and or compacted hardfill. Foundations may adopt the following conditions (on the basis all non-certified fill material is removed):

- Ultimate bearing capacity of 300kPa.
- Geotechnical strength reduction factor – 0.5.
- Soil expansivity class – Site Class H (highly expansive soils).
- Seismic class – Site Class C (shallow soil site).
- Design in accordance with B1/AS1 or specific design following AS2870:2011 adopting the revised B1/AS1 return periods for expansive soils.

6 Construction

6.1 Earthworks

At the time of writing, no earthworks plans were available for the proposed development. We envisage that the proposed dwelling will be located over the existing topography with no significant earthworks other than foundation excavations expected.

We envisage that the proposed shed will be constructed on a level building platform and that only minor earthworks to remove unsuitable material, i.e., topsoil and any non-certified fill material below the proposed shed footprint will be required.

Final subgrade level should be inspected by a geotechnical engineer familiar with the contents of this report, to confirm that a suitable subgrade has been achieved and that any unsuitable material has been removed below the proposed shed footprint.

We recommend that any intended earthworks, including foundation excavations are undertaken during drier periods when groundwater levels are expected to be low in order to eliminate the potential for groundwater to be intercepted during excavations.

Exposed soils should not be left exposed longer than necessary to avoid damage to the subgrade, e.g. cracking during summer or saturation during heavy rainfall. Once inspected, the subgrade should be immediately covered with 100 mm of granular hardfill or polythene and should be watered down prior to covering to maintain moisture within the subgrade.

6.2 Filling

Earthworks comprising removal of unsuitable material, i.e., topsoil and non-certified fill material and filling may be required to create a level building platform for the proposed shed. We recommend that any cut material is removed from site or placed in an approved area located well away from the proposed shed. The exposed subgrade shall be benched prior to fill placement with benches not exceeding 200mm in height.

Where required, fill material shall be imported granular hardfill, GAP40 or GAP65 and verification of compaction should be undertaken by a professional engineer at regular lifts, i.e., inspection at pre-placement and every 200mm thereafter. Any placed hardfill should extend a minimum of 1.0m beyond the proposed structure footprint before battering down at batter slope angles not exceeding 1V:3H (18 degrees). A minimum Clegg Impact Value (CIV) of 25 is recommended or 95% of the material's maximum dry density.

Any fill placed more than 0.6m thick, beneath or within 1.0m of the proposed structure will need confirmation by the engineer that settlement caused by filling will not cause adverse effects to the proposed structure. Prior to commencing filling, a pre-fill inspection of the subgrade should be undertaken by a professional engineer. Further advice should be sought if filling is intended. The 600mm fill thickness does not include replacement of the existing non-certified fill material, i.e., the existing fill can be replaced with hardfill, and will require confirmation by the geotechnical engineer that the subgrade is suitable prior to filling.

6.3 Wetting of Floor Slabs

With potentially expansive soils, it is important that the soils at slab subgrade are not permitted to dry out as they may be susceptible to re-swell on wetting (in the months after pouring the slab), exerting significant swelling pressures and potentially causing damage to the floor slab. We therefore recommend that any prepared pad be inspected by a geotechnical engineer and promptly covered with at least 100mm of GAP20 type material or periodically wet down for at least one week prior to slab placement. All excavations should be left open for the shortest possible time prior to pour and should be protected by covering/lining with polythene or similar within 24 hours of excavation. These measures will reduce the risk of 'hogging' and cracking of the slab.

6.4 Retaining Walls

It is our understanding that no retaining walls are to be constructed as part of this development. Should retaining walls be proposed, then all retaining walls shall be designed by a Chartered Professional Engineer (CPEng) who is familiar with the contents of this report.

6.5 Services

At the time of writing, no known underground services cross beneath the subject site. We recommend that any new services are accurately located on site and the depth to invert be determined prior to the commencement of foundation excavations.

6.6 Planned Vegetation

The foundation designer and architect shall consider the proximity of trees when preparing designs as trees can exacerbate the normal seasonal variation of soil moisture levels and associated with that, the vertical and horizontal movement of the founding soils. Further, mechanical interference with foundations by tree roots should be considered. Where building foundations lie within 5.0m of the driplines of large trees, specific foundation design may be required, i.e., piled foundations.

6.7 Stormwater Disposal

Stormwater shall be piped well away from any proposed building platform to avoid over saturation of the subsoils. All stormwater overflow drainages should be well channelled away from the development area to be disposed of in a controlled and dispersive manner.

6.8 Construction Observations

We recommend that the consent drawings are submitted for review to either ourselves, or another professional geotechnical engineer who is familiar with the contents of this report, prior to submission to Council for Building Consent approval. We recommend this review is carried out to check the compatibility of the design with the recommendations given within this report.

We consider the following specific items, but not limited to will need to be addressed prior to and at the time of construction to ensure the foundation soils are consistent with the assumptions made in this geotechnical report:

1. Observe the ground conditions within foundation pile holes prior to placement of foundation piles and pouring of concrete to ensure piles are founded into very stiff natural soils.
2. Observe the exposed subgrade prior to placement of hardfill and within foundation excavations.
3. Observe any fill being placed with testing undertaken prior to preparing foundations. A minimum Clegg Impact Value (CIV) of 25 is required for granular hardfill (GAP40/65).

Provision should be allowed for modifying the foundation solution at this time should unforeseen ground conditions be encountered.

We can carry out the engineering inspections and provide the PS4 documentation if required. Should any required inspections not be completed, then any required PS4 documentation may not be obtained for the work which may result in a Code Compliance Certificate being withheld.

We recommend that all required inspections as stated on the Building Consent inspections are undertaken by a Chartered Professional Engineer (CPEng) with the relevant practice field. Prior notification of at least 48 hours ahead of any site inspection is appreciated.

7 Limitations

This report has been prepared for the use of Kapiro Orchards Limited with respect to the particular brief outlined to us. This report is to be used by our Client and their Consultants and may be relied upon when considering geotechnical 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 Ltd. The recommendations given in this report are based on site data from discrete locations.

Inferences about the subsoil conditions away from the test locations have been made but cannot be guaranteed. We have inferred an appropriate geotechnical model that can be applied for our analyses. However, variations in ground conditions from those described in this report could exist across the site. Should conditions encountered differ to those outlined in this report we ask that we be given the opportunity to review the continued applicability of our recommendations. Furthermore, should any changes be made, we must be allowed to review the new development proposal to ensure that the recommendations of this report remain valid.

Appendix A – Drawings

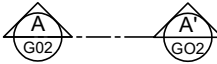
Drawing No.	Title
24 071/G01	Site Features and Investigation Location Plan
24 071/G02	Geological Cross Section A-A'

NOTES:

1. THIS DRAWING IS BASED ON MEASUREMENTS BY TAPE AND CLINOMETER AND IS APPROXIMATE ONLY.
2. THE GROUND MODEL HAS BEEN INFERRED FROM THE BOREHOLE DATA. INFERENCES ABOUT THE SOILS CONDITIONS BETWEEN TEST LOCATIONS HAVE BEEN MADE BUT CANNOT BE GUARANTEED.
3. DRAWING NOT TO BE USED FOR CONSTRUCTION PURPOSES.

LEGEND

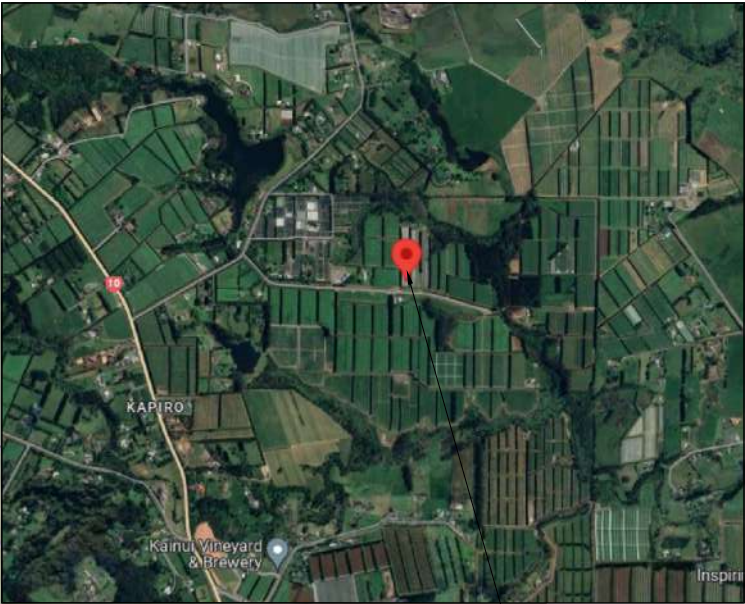
Geological Cross Section



Hand Auger Borehole



BH01



Site Location



SCALE 1:1000

Issue	Date	Revision
A	23/04/2024	FIRST ISSUE

DWG Site Features Investigation Location Plan			
Scale	1: 1000 @A3	Date	23 April 2024
Drawn	JP	Checked	WT
Approved	JP		
File	C:\USERS\JOHNPOWER\HAIGH WORKMAN LIMITED\SUITEFILES - CLIENTS\KAPIRO ORCHARD LTD\JOBS\24 071 - 71 ORCHARD ROAD, KERIKERI (LOT 2 DP 540914)\ENGINEERING\GEO\G13. DRAWINGS_CAD\24 071 SITE PLAN - JP.DWG		

HAIGH WORKMAN Civil & Structural Engineers	
6 Fairway Drive Kerikeri, BOI	T: 09 407 8327 F: 09 407 8378 E: info@haighworkman.co.nz
DIMENSIONS MUST NOT BE SCALE MEASURED FROM THESE DRAWINGS. THE CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS INCLUDING, SITE LEVELS, HEIGHTS AND ANGLES ON SITE PRIOR TO COMMENCING ANY WORK. THE COPYRIGHT TO THESE DRAWINGS AND ALL PARTS THERE OF REMAIN THE PROPERTY OF HAIGH WORKMAN LTD. ©2020	

Project	Geotechnical Investigation 71 Orchard Road, Kerikeri (Lot 2, DP540914)	
Client	Kapiro Orchard Limited	
Project No.	24 071	RC no. N/A

DWG No.	G01
Sheet No.	1 of 2

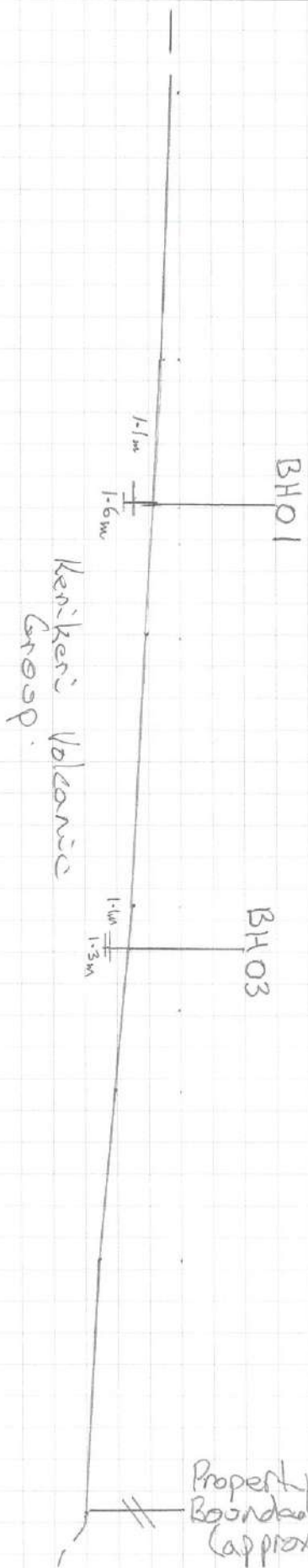
Geological Cross Section A-A'

West (A)

East (A')

Proposed Dwelling Location (approx.)

Property Boundary (approx.)



Legend:
Not to scale.

BH01

- Existing Ground Surface.

UTP - - - - -
- Cone Shear Strength test (UTP)

UTP - - - - -
- End of Borehole.

- Seal Penetration Depth

Drawing No. 24 071/502

Appendix B – Hand Auger Logs

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6 Fairway Drive
Kerikeri, 0230
New Zealand



Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH01

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT: Kapiro Orchard Ltd

DATE STARTED: 05/04/2024

DATE COMPLETED: 05/04/2024

SITE: 71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)

DRILLING METHOD: Hand Auger

HOLE DIAMETER (mm): 50mm

LOGGED BY: JP

CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT , trace clay, trace fine gravel; brown, mottled orange, speckled yellow and dark orange. Very stiff, dry, no plasticity. [Topsoil]	0.0	T.S.		Groundwater Not Encountered.		UTP	0 2 4 6 8 101214161820
SILT , minor clay, trace fine gravel; brownish orange, mottled light orange, speckled yellow. Very stiff, dry, low plasticity. [Kerikeri Volcanic Group] From 0.4m: Becomes light orange, mottled orange, speckled white.							
Clayey SILT ; light orange, streaked light pink. Very stiff, moist, low to medium plasticity.	0.5	K.V.G.					
SILT , trace of clay, trace of fine gravel; light orange, light grey and light pinkish red. Very stiff, moist, low plasticity. Gravel: weakly cemented. From 1.0m: Becomes reddish orange, speckled black and grey.	1.0					UTP UTP	
End of Hole at 1.1m. (Unable To Penetrate)							
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

LEGEND

TOPSOIL

CLAY

SILT

SAND

GRAVEL

FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.
Scala penetrometer testing undertaken at base of hole from 1.1m to 1.6mbgl.
Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

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New Zealand



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Civil & Structural Engineers

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info@haighworkman.co.nz

Borehole Log - BH02

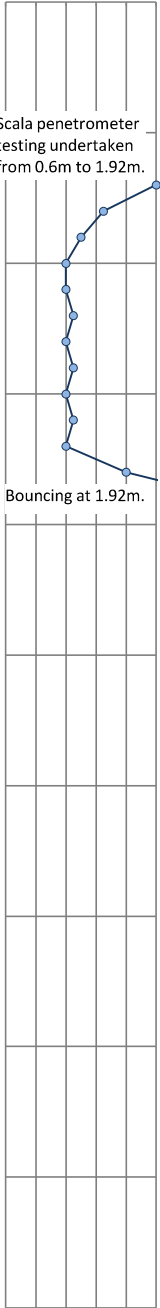
Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT: Kapiro Orchard Ltd
Date Started: 05/04/2024
Date Completed: 05/04/2024

SITE: 71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)
DRILLING METHOD: Hand Auger
HOLE DIAMETER (mm): 50mm

LOGGED BY: JP
CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT, trace fine gravel; brown, mottled orange. Very stiff, dry, no plasticity. Rootlets. [Topsoil]	0.0	T.S.		Groundwater Not Encountered.		UTP UTP	0 4 8 12 16 20  Scala penetrometer testing undertaken from 0.6m to 1.92m. Bouncing at 1.92m.
SILT, minor clay, trace fine gravel; orange, mottled brown. Very stiff, dry to moist, low plasticity. From 0.4m: Becomes orange, mottled brown and light yellow. At 0.5m: Becomes orange and dark orange, mottled brown.	0.5	K.V.G.					
End of Hole at 0.6m. (Unable To Penetrate)	1.0						
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

LEGEND

 TOPSOIL

 CLAY

 SILT

 SAND

 GRAVEL

 FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.

Scala penetrometer testing undertaken at base of hole from 0.6m to 1.92mbgl.

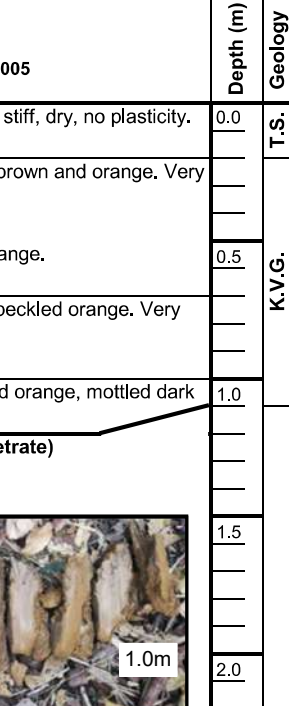
Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

C:\Users\JohnPower\Haigh Workman Limited\SuiteFiles - Clients\Kapiro Orchard Ltd\Jobs\24 071 - 71 Orchard Road, Kerikeri (Lot 2 DP 540914)\Engineering\Geotech\Field Work\24 071 BHs

Phone 09 407 8327
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JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)	
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger	LOGGED BY: JP
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm	CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT , trace fine gravel; dark brown, mottled black. Very stiff, dry, no plasticity. Minor carbonaceous material. [Topsoil]	0.0	T.S.					10 14 18 22 26 30
SILT , trace clay, trace fine gravel; brown, mottled dark brown and orange. Very stiff, dry, low plasticity. [Kerikeri Volcanic Group]							
From 0.5m: Becomes light brownish orange, mottled orange.	0.5	K.V.G.				241	
Clayey SILT , trace fine gravel; light brownish orange, speckled orange. Very stiff, dry to moist, medium plasticity.							
SILT , minor fine to medium gravel; brownish orange and orange, mottled dark orange. Very stiff, dry to moist, no plasticity.	1.0					UTP UTP	Scala penetrometer testing undertaken from 1.1m to 1.3m.
End of Hole at 1.1m. (Unable To Penetrate)							Bouncing at 1.3m.
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

LEGEND



TOPSOIL



CLAY



SILT



SAND



GRAVEL



FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.

Scala penetrometer testing undertaken at base of hole from 1.1m to 1.3mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

Borehole Log - BH04

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)	
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger	LOGGED BY: JP
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm	CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005		Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT , trace fine gravel; light brown, mottled light orange. Very stiff, dry, no plasticity. Rootlets. [Topsoil]	0.0	KERIKERI VOLCANIC GROUP	T.S.				UTP UTP UTP 9 12 UTP UTP	0 3 6 9 12
SILT , minor clay, trace fine gravel; light orange, streaked orange. Very stiff, dry to moist, low plasticity. [Kerikeri Volcanic Group]								
SILT & GRAVEL ; light grey mottled orange. Very stiff/dense. Gravel: fine.								
SILT , some clay, trace fine gravel; orange, mottled light yellow, speckled dark orange. Very stiff, moist, low plasticity.	0.5							
SILT , minor clay, trace fine gravel; light brownish orange, mottled orange and light grey. Very stiff, moist, low plasticity.								
SILT , some fine to medium gravel; light orange and light greenish grey, streaked orange. Very stiff, moist, no plasticity.	1.0							
SILT , trace fine gravel and coarse sand; light whitish grey, mottled orange. Very stiff, moist, no plasticity.								
From 1.4m: Trace clay; grey, streaked orange. Moist to wet.	1.5							
SILT , trace clay, trace coarse sand; light greenish grey, speckled white. Stiff, wet, no plasticity. Slightly dilatant.	2.0							
SILT , fine to medium gravel, trace clay; light greenish grey, streaked white. Very stiff, wet, no plasticity.	2.5							
End of Hole at 3.0m. (Target Depth)		3.0						
	3.5							
	4.0							
	4.5							

LEGEND



TOPSOIL



CLAY



RESULTS



AND



GRAVEL



ELL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil.

Scala penetrometer testing undertaken to advance hand auger beyond hard/dense layer. Testing from 0.7m to 1.9mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

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JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)	
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger	LOGGED BY: JP
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm	CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)		
SILT , minor fine to medium gravel; brownish orange. Very stiff, dry, no plasticity. [Topsoil & Fill]	0.0	T.S./FIL		Groundwater Not Encountered.		UTP	Scala penetrometer undertaken to advance auger hole beyond hard/dense layer. 0.3m to 0.9m.		
SILT , trace clay, trace fine to medium gravel; light brownish orange, streaked orange. Very stiff, dry, no plasticity. [Kerikeri Volcanic Group]									
SILT , minor clay, trace fine gravel; light brownish orange, mottled orange and white. Very stiff, dry to moist, low plasticity.	0.5	KERIKERI VOLCANIC GROUP						UTP	
SILT , minor fine gravel and coarse sand; light grey and orange. Very stiff, dry to moist, no plasticity. Gravel: weakly cemented.	1.0							UTP	
SILT , trace clay, trace fine gravel; light greenish grey, speckled white. Very stiff, moist to wet, no plasticity.								UTP	
From 1.6m: Becomes light brownish orange and grey. Wet.	1.5							UTP	
SILT , some fine gravel, trace coarse sand, trace clay; light greenish grey, mottled orange, speckled black. Very stiff, wet, no plasticity.									
End of Hole at 1.9m. (Unable To Penetrate)									
	2.0								
	2.5								
	3.0								
	3.5								
	4.0								
	4.5								

LEGEND



TOPSOIL



CLAY



RESULTS



SAND



GRAVEL



Elli

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil.

Scala penetrometer testing undertaken to advance hand auger beyond hard/dense layer. Testing from 0.3m to 0.9mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

Appendix C – Laboratory Results

Please reply to: W.E. Campton

Page 1 of 3

Haigh Workman Ltd.
PO Box 89
Kerikeri 0245

Job Number: 63632#L
BGL Registration Number: 2828
Checked by: JL

Attention: **JOHN POWER**

29th April 2024

ATTERBERG LIMITS TESTING

Dear Sir,

Re: 71 ORCHARD ROAD, KERIKERI

Your Reference: 24 071

Report Number: 63632#L:AL-LS/Orchard Road

The following report presents the results of Atterberg Limits testing at BGL of a soil sample delivered to this laboratory on the 23rd of April 2024. Test results are summarised below, with page 3 showing where the samples plots on the Unified Soil Classification System (Casagrande) Chart.

Test standards used were:

Water Content:	NZS4402:1986:Test 2.1
Liquid Limit:	NZS4402:1986:Test 2.2
Plastic Limit:	NZS4402:1986:Test 2.3
Plasticity Index:	NZS4402:1986:Test 2.4
Linear Shrinkage:	NZS4402:1986:Test 2.6

Borehole Number	Sample Number	Depth (m)	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Linear Shrinkage (%)*
BH01	S1	0.5 – 0.9m	42.9	130	43	87	24

*The amount of shrinkage of the sample as a percentage of the original sample length.

The whole soil was used for the water content test (the soil was in a natural state), and for the liquid limit and plastic limit tests. The soil was wet up and dried where required for the liquid limit and plastic limit tests.

As per the reporting requirements of NZS4402: 1986: Test 2.1: water content is reported to two significant figures for values below 10%, and to three significant figures for values of 10% or greater. Test 2.2: liquid limit and test 2.3: plastic limit are reported to the nearest whole number.

Please note that the test results relate only to the sample as-received, and relate only to the sample under test.

Thank you for the opportunity to carry out this testing. If you have any queries regarding the content of this report please contact the person authorising this report below at your convenience.

Yours faithfully,

Wayne Campton
Key Technical Person
Laboratory Manager
Babbage Geotechnical Laboratory



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation. This report may not be reproduced except in full & with written approval from BGL.

BGL Babbage Geotechnical Laboratory	Job Number:	63632#L	Sheet 1 of 1	Page 3 of 3	
	Reg. Number:	2828 (116)	Version No:	7	
	Report No:	63632#L:AL-LS/Orchard Road		Version Date: July 2022	
	Project:	71 ORCHARD ROAD, KERIKERI			
DETERMINATION OF THE LIQUID LIMIT, PLASTIC LIMIT & THE PLASTICITY INDEX			Tested By:	SG	24-Apr-24
			Compiled By:	PC	29-Apr-24
			Checked By:	WEC	29-Apr-24
Test Methods: NZS4402: 1986: Test 2.2, Test 2.3 and Test 2.4					

SUMMARY OF TESTING						
Borehole Number	Sample Number	Depth (m)	Liquid Limit	Plastic Limit	Plasticity Index	Soil Classification Based on USCS Chart Below
BH01	S1	0.5 - 0.9m	130	43	87	CH

The chart below & soil classification terminology is taken from ASTM D2487-17^{e1} "Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)", April 2020, & is based on the classification scheme developed by A. Casagrande in the 1940's (Casagrande, A., 1948: Classification and identification of soil. Transactions of the American Society of Civil Engineers, v. 113, p. 901-930). The chart below & the soil classification given in the table above are included for your information only, and are not included in the IANZ endorsement for this report.

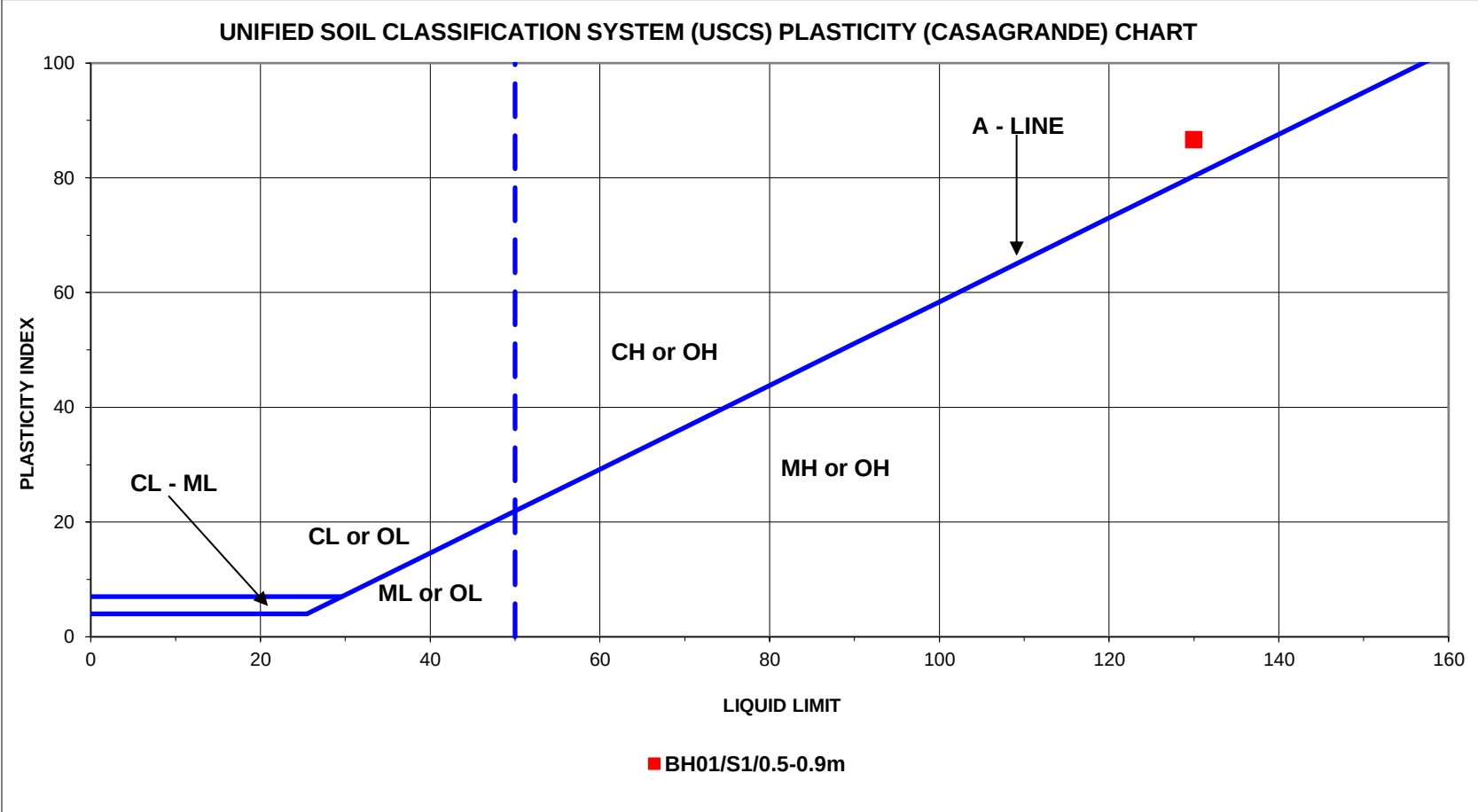
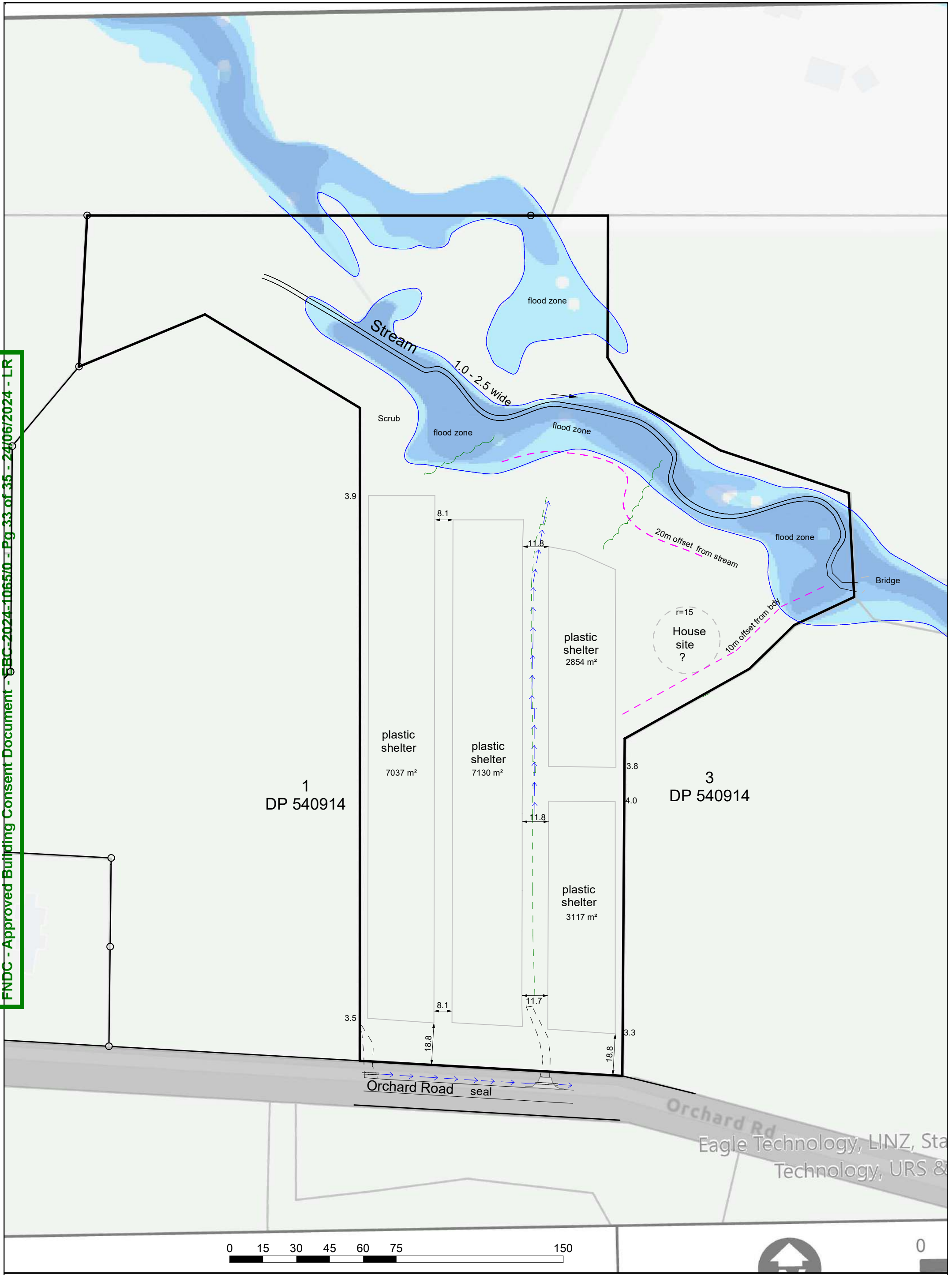


CHART LEGEND	
CL = CLAY, low plasticity ('lean' clay)	CH = CLAY, high plasticity ('fat' clay)
OL = ORGANIC CLAY or ORGANIC SILT, low liquid limit	OH = ORGANIC CLAY or ORGANIC SILT, high liquid limit
ML = SILT, low liquid limit	MH = SILT, high liquid limit ('elastic silt')
CL - ML = SILTY CLAY	

Appendix D – Survey Plan

FNDC - Approved Building Consent Document - EBC-2024-1065/0 - Pg 32 of 35 - 24/06/2024 - LR



Appendix E – Producer Statement Advisory Note

FNDC - Approved Building Consent Document - EBC-2024-1065/0 - Pg 34 of 35 - 24/06/2024 - LR

IMPORTANT ADVISORY NOTE**PRODUCER STATEMENT – CONSTRUCTION REVIEW (PS4)**

The Building Consent Authority (BCA) frequently requires Producer Statements–Construction Review (PS4) to be submitted to the BCA in order for a Code of Compliance Certificate (CCC) to be issued. A PS4 is usually required for each specialist area. The requirement for a consultant to issue a PS4 related to their area of work will appear as a condition in the Building Consent documents.

It is the consent holder's responsibility to notify Haigh Workman Limited for geotechnical construction monitoring and testing required for subsequent issue of a PS4. An initial inspection of stripped or excavated ground must take place before any fill or blinding concrete is placed. Retrospective site monitoring of completed or partially completed geotechnical work is not possible and a PS4 will not be issued without all the required observations.

In order to secure our construction monitoring services and avoid delays on site, Haigh Workman Limited require at least 24 hours' notice prior to the time the site visit is required. Construction monitoring is limited to items that have been recommended, designed and detailed by Haigh Workman Limited. We are unable to inspect non-consented or unauthorised work. Haigh Workman Limited do not carry out construction monitoring or issue PS4's for work that has been recommended, designed or detailed by other consultants without prior approval from Haigh Workman Limited. Haigh Workman Limited will not issue a PS4 where construction monitoring and/or testing have been carried out by any other consultant. The PS4 must be sought from the consultant who carried out those inspections.

The full Building Consent, with stamped plans with consent numbers (or a legible copy of the same) including all amendments, shall be made available to us during inspections. We will not commence construction monitoring until the documentation is available or provided to us prior to our site visit.

Unless stated otherwise in our terms of engagement, the fees associated with construction monitoring and the issue of PS4's are separate from any work carried out prior to commencement of construction. We are able to provide a fee estimate for this work if required. We cannot provide a fixed quote because the quantum of work required frequently depends on the construction program and the performance of others. These things are not known to us in advance of construction. Our normal terms of trade require payment of fees monthly during the inspection period and full settlement prior to release of any PS4.

Preliminary Site Investigation with Limited Sampling for Proposed Development at

71 Orchard Road, Kerikeri
Lot 2, Deposited Plan 540914

Kapiro Orchard Limited
Haigh Workman reference 24 071
Rev A

22 May 2024



Document History and Status

Revision N°	Date	Description	Issued By
A	14 May 2024	Preliminary Site Investigation with Limited Sampling (PSI)	Joshua Cuming

Prepared by



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Executive Summary

Haigh Workman Limited completed a desktop assessment and field investigation and prepared a Preliminary Site Investigation for the proposed subdivision of 71 Orchard Road, Kerikeri.

It is proposed that the investigation area be developed with a dwelling and shed.

This Preliminary Site Investigation with limited sampling 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 Ministry for the Environment Guidelines for Contaminated Site Investigations requirements. This investigation and reporting have been prepared, reviewed and authorised by a Suitably Qualified and Experienced Practitioner, as required under the National Environmental Standard for Contaminants in Soils.

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

- Cat. A.10 – Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glasshouses or spray sheds,
 - The wider site has historically been utilized as historically as an orchard (post 1982),
 - No evidence that pesticide were used or stored on the investigation area, however spray draft is possible,
 - Surrounding historical land-use being horticultural land-use (orchards and market gardens) may possibly apply an additional environmental risk to the proposed site and proposed future development.

Twelve shallow soil samples were collected and analysed as four composite samples and two samples analysed as individual samples, including two duplicate soil samples for Quality Assurance / Quality Control purposes.

Laboratory analytical results reported:

- All Contaminants of Concern concentrations were below applicable Human Health Criteria for Rural Residential (25% produce) criteria,
- Metals concentrations were above Background Soil Concentrations in five of the six soil samples analysed, and
- Organochlorine Pesticides concentrations were below laboratory Method Detection Limits in all soil samples analysed.

Based on these findings:

- Soil sampling has confirmed that there are no significant contaminated land related constraint on redevelopment of the land for residential purposes and that it is highly unlikely that there is a risk to human health if the activity is done to the investigation area,
- Soil / fill material with Metals concentrations above Background Levels is not considered as 'Cleanfill' for disposal purposes:
 - If material exceeding Background Level criteria must be removed from site it is to be disposed of a facility licensed to accept such materials,
 - Material exceeding Background Level criteria could be retained and re-used on-site as a sustainable option and to reduce disposal costs if suitable,

- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a Suitably Qualified and Experienced Practitioner prior to disposal.

It is considered that the proposed development 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 area 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 development is a Permitted Activity (8) under the National Environmental Standard for Contaminants in Soils as this Preliminary Site Investigation states the soil contamination is less than the applicable standard in regulation 7.

The investigation area is the area being developed and its curtilage which is 6,948m³, this allows for 347m³ soil disturbance and 69m³ soil removal (per year) as a Permitted Activity under the National Environmental Standard for Contaminants in Soils.

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

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1 Introduction

Haigh Workman Limited (Haigh Workman) were engaged by Kapiro Orchards Limited (the client) to undertake a Preliminary Site Investigation (PSI) with limited sampling in association with the proposed dwelling and shed at 71 Orchard Road, Kerikeri, the investigation area and property boundaries are shown in Figure 1 below and provided in Appendix A.

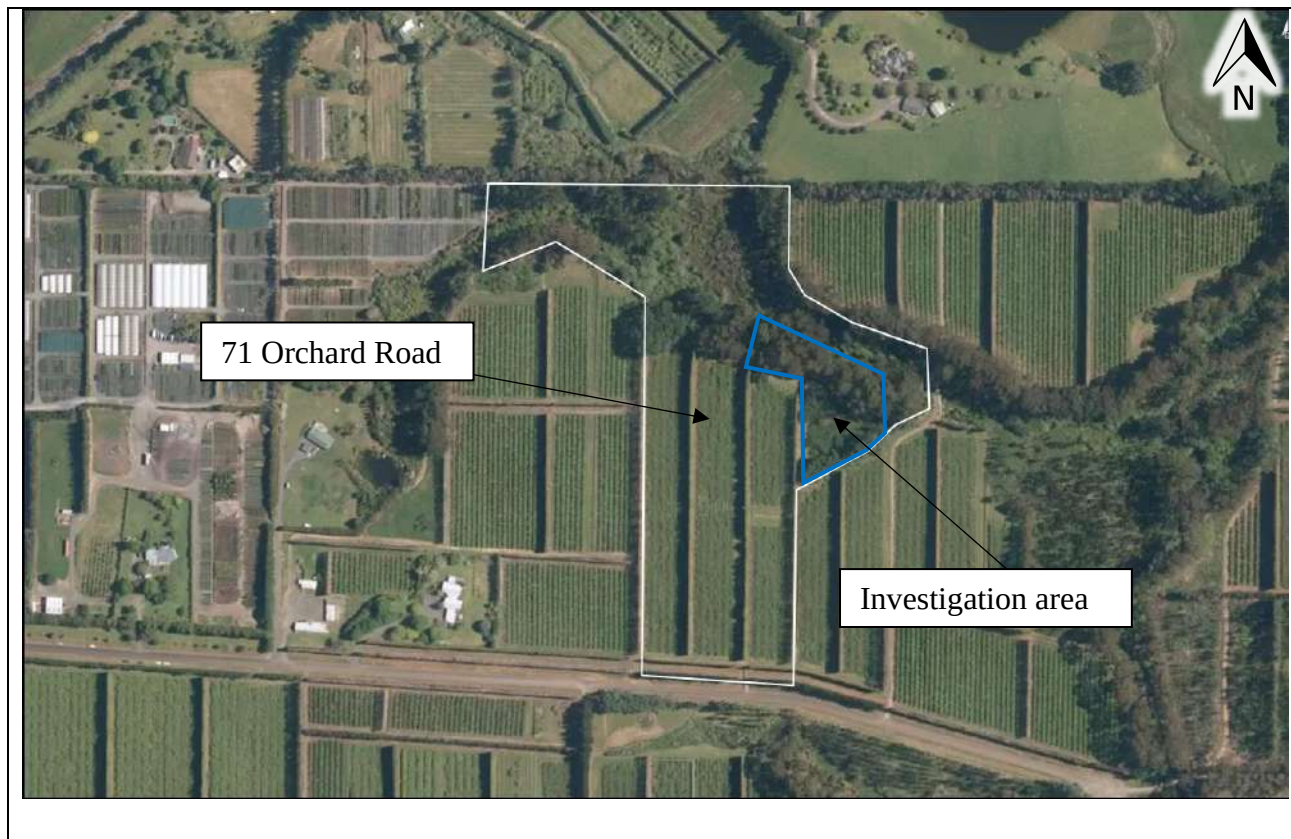


Figure 1- Site Location (Source: Datanest)

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 Guidelines³ (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 identifies the site as: **Rural Production**.

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

The proposed development comes under the adopted exposure scenario in the *Methodology* as: **Rural Residential**.

1.2 Purpose and Scope

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

1. 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
2. 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 PSI with limited sampling, which includes the following:

- Site walkover,
- Review of available environmental investigation reports previously prepared for the site (or parts of the site),
- 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 with limited sampling reporting (this report).

This report comprises a PSI with limited sampling prepared by Haigh Workman in general accordance with MfE guidelines for contaminated site investigations, NES-CS and FNDC requirements. 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 Kapiro Orchards Limited (the client), with respect to the brief outlined to us for the proposed development 71 Orchard Road. 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	71 Orchard Road, Kerikeri
Legal Description	Lot 2 DP 540914
Certificate of Title(s)	907842
FNDC Zoning	Rural Production
Grid Reference NZMS 260 Map Reference (NZGD1949)	-35.178509, 173.920913.
Approx. Site Area (m ²)	62,685 m ²
Investigation Area (m ²)	6,948 m ²

The southern part of the site is utilised for horticultural use, no dwellings are present on the site.

The investigation area is the curtilage of the proposed dwelling and shed.

2.1 Proposed Development

It is understood the client intends to construct a dwelling and a shed on the property. Development plans were not available at the time of completing this report.

3 Environmental Setting

3.1 Site Layout and Surrounds

A site walkover was undertaken on 5 April 2024. Photographs from the site walkover are provided in Appendix B.

The following was observed on the site:

- No buildings are present onsite, a shipping container used by the owner for tool storage was present,
- The investigation area is covered with blue gum trees and native vegetation,
- The majority of the site outside of the investigation area is being utilised for horticultural (kiwifruit) production,
- A grass track and a shelter belt (in places) separates the kiwifruit production areas from the investigation area,
- The ground surface is generally flat with a gentle slope towards the northeast,
- A small soil stockpile was present on the edge of the investigation area, and
- The investigation area has frequent cobbles and boulders at the surface likely making it unsuitable for horticulture.

3.2 Geology, Hydrology and Hydrogeology

Sources of Information:

- Institute of Geological & Nuclear Sciences, 1:250,000 Scale, Geological Map 2, 2009: *"Geology of the Whangarei area"*.

- NZMS 290 Sheet P04/05, 1: 100,000 scale, 1980: "Soil map of Whangaroa-Kaikohe area".

The site is within the bounds of the GNS Geological Map 2 "Geology of the Whangarei area", 1:250,000 scale⁵. The published geology shows the site to be underlain by the Kerikeri Volcanic Group (Pvb) comprising older basaltic flows and flow remnants. The Kerikeri Volcanic Group is considered to be of Late Miocene to Pliocene age. An extract from the geological map is shown in Figure 2 with geological units presented in Table 2.

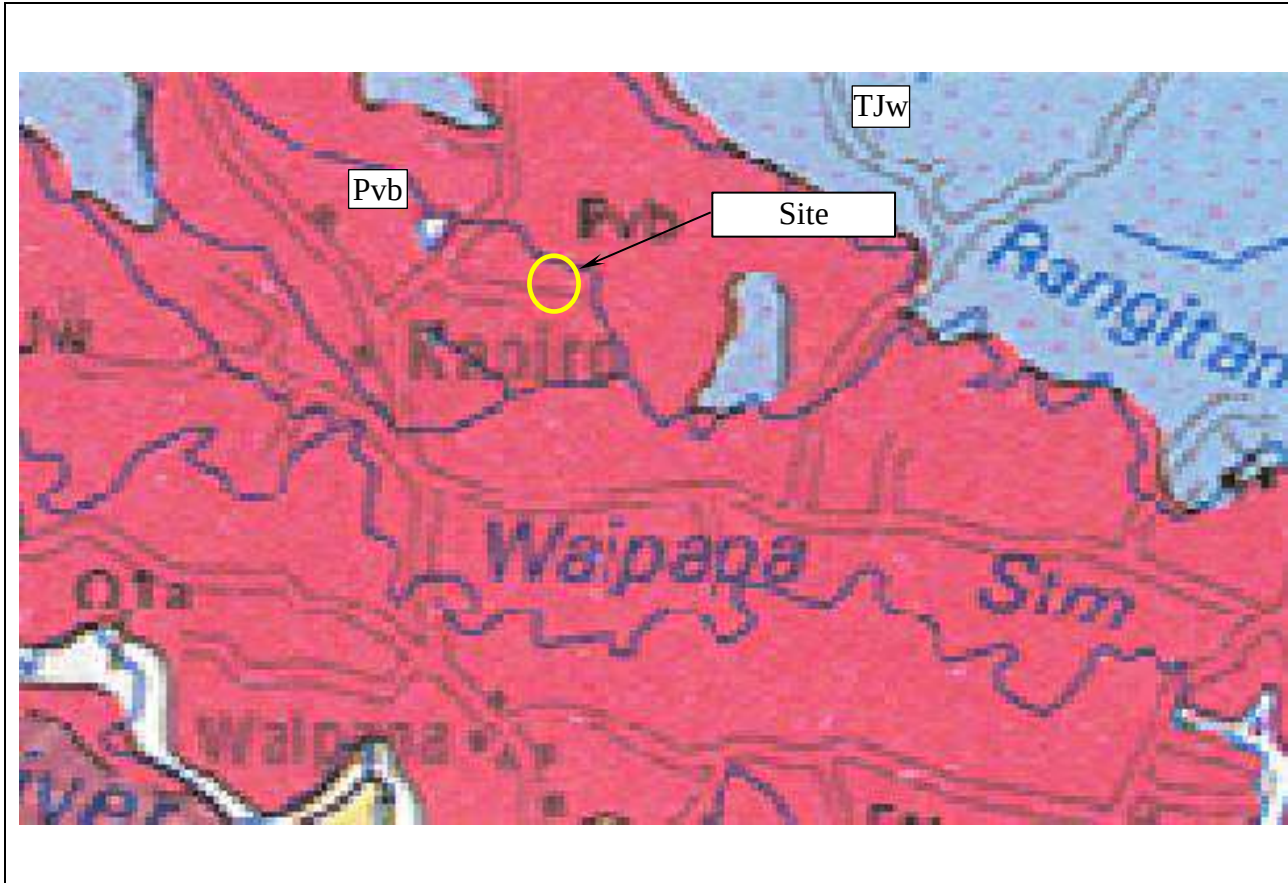


Figure 2 - Geological Map (Geology of Whangarei area, 1:250,000)

Table 2 - Geological Legend

Symbol	Unit Name	Description
Pvb	Kerikeri Volcanic Group (Basalt flows)	Older flows and flow remnants. Late Miocene to Pliocene age.
TJw	Waipapa Group	Massive to thin bedded, lithic volcanoclastic sandstone and argillite (TJw). Permian to Jurassic age.

Further reference to the published New Zealand land inventory maps (Whangaroa - Kaikohe), indicates the site is underlain by 'soils of the rolling and hilly land; well to moderately well drained Okaihau gravelly friable clay (OK) and Pungaere gravelly friable clay (PG)'. The underlying material weathers to 'soft red brown or dark grey brown clay to depths of 20m with many rounded corestones'.

⁵ Edbrooke, S.W; Brook, F.J. (compilers) 2009. Geology of the Whangarei area. Institute of Geological and Nuclear Sciences 1:250 000 geological Map 2. 1 sheet + 68 p. Lower Hutt, New Zealand: Institute of GNS Science.

Table 3 - Hydrology and Flooding (Source: Northland Regional Council GIS Website)

	Presence/Location	Comments
Watercourses & Water Features within 200 m (Ponds, lakes etc)	A tributary to the Kapiro Stream is present to the northeast of site.	Not applicable
Flood Risk	The 10, 50 and 100 year flood hazard zones are mapped as being present onsite.	Source FNDC GIS.
Private Groundwater bores within 200 m	No groundwater boreholes are recorded within 200m.	Source NRC GIS.
Source Protection Zones within 200 m	The site is recorded as being underlain by the Kerikeri Aquifer.	Source NRC GIS.

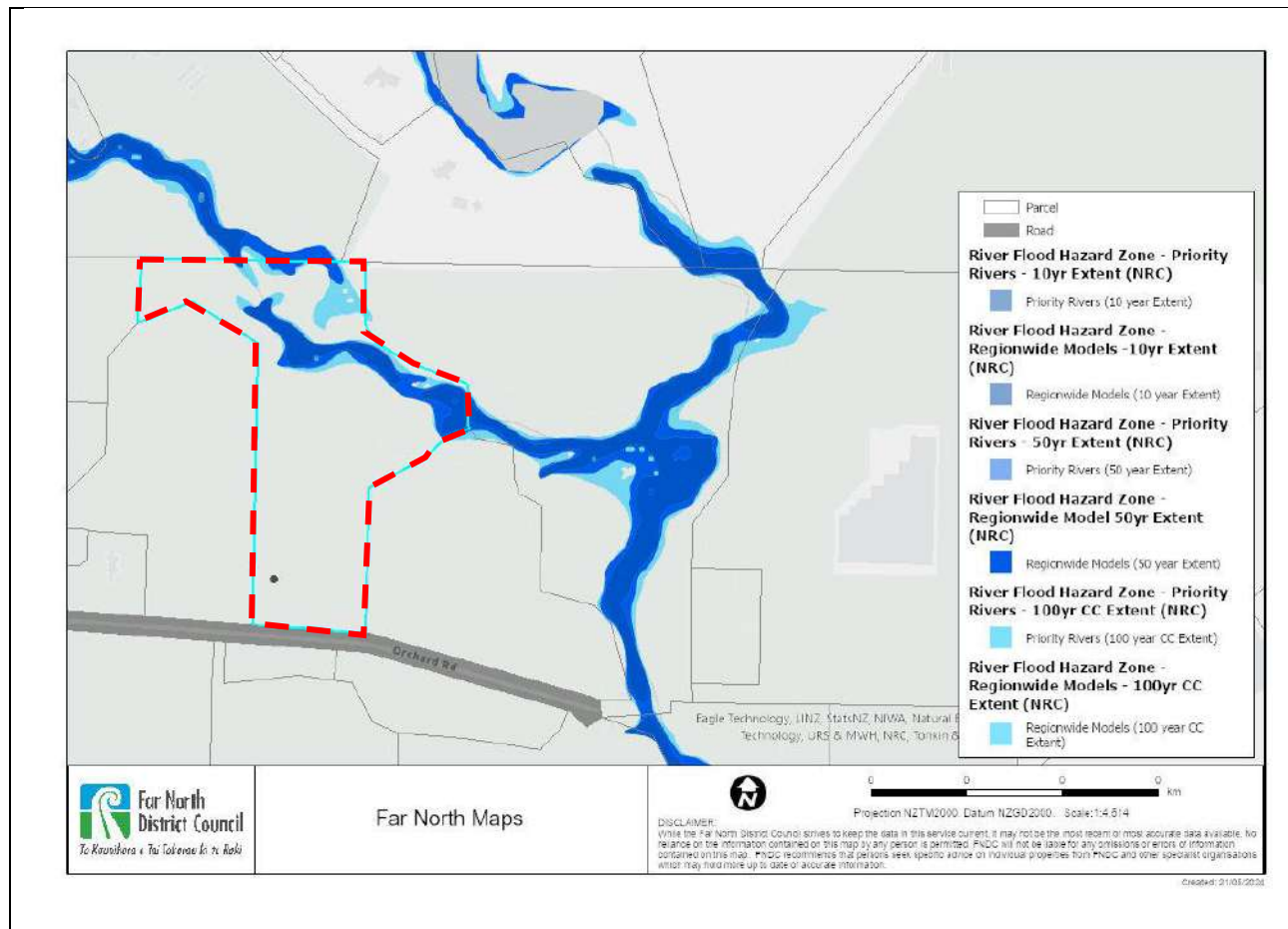


Figure 3: Flood Modelled Areas (Source: FNDC GIS Website)

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 1950 to 2023. A review of the historical aerial photography is provided in Table 3 below.

Historical aerial photographs are provided in Appendix C.

Table 3 – Historical Aerial Photography review

Date	Source	Description
1950	Retrolens	- Majority of site appears to be in pasture with shelter belts planted, - No buildings are present onsite, - The investigation area is covered in vegetation, and - Surrounding land-use is pastureland.
1953, 1968, 1977, 1978	Retrolens	No significant changes visible onsite or on surrounding sites.
1982	Retrolens	- The southern part of the site is utilised as an orchard, - The investigation area has been partially cleared of bush, - The orchard does not extend into the investigation area, and - The majority of surrounding sites are now being used for horticultural use.
2003	Google Earth Pro	- The previously cleared area of the investigation area is now back in bush, and - A dwelling is now present to the west of the site.
2007, 2009, 2012, 2013	Google Earth Pro	No significant changes visible onsite or surrounding sites.
2017	Google Earth Pro	- The orchard area is now covered, indicating the possibility that a crop such as kiwifruit have been planted, and - No significant changes visible on surrounding sites.
2018, 2019, 2020, 2022	Google Earth Pro	No significant changes visible onsite or on surrounding sites.
2023	Google Earth Pro	- An area of the investigation area has been cleared of vegetation, and - No significant changes visible on surrounding sites.

The most recent historical aerial photograph is dated November 2023 and is sourced from Google Earth Pro. Site conditions observed in the November 2023 historical aerial photograph are similar to those observed during the 5 April 2024 site walkover.

4.2 Certificates of Title

Copies of the Certificates of Title are provided in Appendix D. The Certificate of Title information does not indicate any further activities listed on the HAIL have occurred on the site.

4.3 Contamination Enquiry

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

The Contamination Enquiry did not identify any current or historical HAIL activities for the site. It was noted, however, that historical aerial photography of the site shows the possible presence of horticultural activities and therefore HAIL Category A.10. (Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glasshouses or spray sheds).

The Contamination Enquiry also reports records of pollution incidents, bores, contaminated site and air discharges and industrial trade process consents, closed landfills and air quality permitted activities within approximately 250m of the site.

Based on information in the Contamination Enquiry, no activities considered likely to cause contamination at the site were identified within 250m.

A copy of the Contamination Enquiry is attached in Appendix E.

4.4 Property Files

The property file contains resource consent applications for several subdivisions and boundary adjustments. The property files do not indicate any further activities listed on the HAIL have occurred on the site.

5 HAIL assessment

Based on previous land-use and development information for the site, Table 4 below summarises the potential for contamination associated with site activities and land uses that may have been undertaken on site classified under the HAIL.

Table 4 - Site Activities / Land Uses and Potential HAIL Categories

Date(s)	HAIL Activity	Primary Source	Potential Contaminants	Locations
1982 - present	A.10 - Persistent pesticide storage or use including sports turfs, market gardens, orchards, glass houses or spray houses.	Historical Aerial Photography	Metals and OCP	South of the site. There is no evidence that pesticide has been stored or used within the investigation area. However, it is possible that spray drift from the adjacent orchard has occurred.

6 Soil Contamination Investigation

6.1 Identified Contaminants of Concern

The site was identified for potential soil contamination during the review of historical documents and the 5 April 2024 site walkover. Relevant to the HAIL assessment and site history, the potential CoC for the site investigation area included:

- Metals, and
- Organochlorine Pesticides (OCP).

6.2 Soil Investigation

Soil sampling from the site investigation area was undertaken on 5 April 2024 and comprised soil sampling by a SQEP from Haigh Workman. Sampling locations are provided in Appendix A. Photographic documentation from the investigation is provided in Appendix B.

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 portion of the area of investigation that is adjacent to the orchard area. Sampling was undertaken along this margin as it was considered to be the most likely to be affected by spray drift. Samples were collected at approximately 20m spacings. In addition, 3 samples were taken from a small soil stockpile on the edge of the investigation area.

Twelve shallow soil samples were collected and analysed as four composite samples and two samples analysed as individual samples, including one duplicate soil sample for Quality Assurance / Quality Control (QA / QC) purposes.

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 – 0.1m bgl.

- Encountered soil comprised natural soils, comprising of silty topsoil material.

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 or hand trowel from pre-determined test pit locations across the site investigation area. 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 subcontract 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 Testing

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 for this investigation because:

- Site history of low-level broad contamination may exist from historical spraying,
- The investigation was focussed on non-volatile contaminants,
- Sub-samples were the same soil type, same exposure to contaminants and similar depth
- The maximum number of sub-samples composited together was three, 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 commercial / industrial land-use have been adopted:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2012: Rural Residential land-use,
- National Environmental Protection (Assessment of Site Contamination) Amendment Measure (NEPM), Guideline on Investigation Levels for Soil and Groundwater, Schedule B1 (NEPM, 2013). Table 1-A Health Investigation Levels for soil contaminants – Residential (A) land-use, and
- Managing Risks Associated with Former Sheep-Dip Sites (MfE, 2006).

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 is included with the Soil Analytical Results summarized in Table 5 below.

8 Analytical Results

Twelve shallow soil samples were collected and analysed as four composite samples and two samples analysed as individual samples, including two duplicate soil samples for Quality Assurance / Quality Control (QA / QC) purposes.

Laboratory analytical results reported:

- All CoC concentrations were below applicable MfE NES Human Health Criteria for Rural Residential (25% produce) criteria,
- Metals concentrations were above Background Soil Concentrations in five of the six soil samples analysed, and
- OCP concentrations were below laboratory Method Detection Limits (MDL) in all soil samples analysed.

Laboratory analytical results are summarised in Table 5 below. Soil sampling locations are provided in Haigh Workman Drawing 24 071 / 1 provided in Appendix A. Laboratory analytical results and COC documentation are provided in Appendix G

Table 5 - Soil Analytical Results

		Test Analysis Levels (mg/kg)						MfE	Background Soil Concentrations ²
Sample Reference		Composite # 1 (TP1, TP2 & TP3)	Composite # 2 (TP4 & TP5)	Composite # 3 (TP6 & TP8)	TP7	TP9 (dup of TP7)	Composite # 4 (SP1 S1, SP1 S2 & SP1 S3)	NES ¹	
Sample Date		05 April 2024							
Sample Depth (m)		0-0.1							
Metals	As	4.7	4.6	1.8	6.4	6.1	6.9	17	4.1
	Cd	0.05	0.05	0.11	0.17	0.13	0.07	0.8	0.2
	Cr	110	94	82	140	110	180	290	765
	Cu	17	13	10	28	27	18	10,000	27.9
	Pb	6.1	6.9	3	6.4	6.8	6.9	160	11.4
	Ni	32	16	13	31	43	33	400 ³	590
	Zn	36	23	15	26	28	16	7,400 ³	47.5
OCP	ΣDDT	< MDL	< MDL	< MDL	< MDL	< MDL	Not analysed	45	12 ⁴
	Aldrin	< MDL	< MDL	< MDL	< MDL	< MDL	Not analysed	1.1	-
	Dieldrin	< MDL	< MDL	< MDL	< MDL	< MDL	Not analysed	1.1	-
	Lindane	< MDL	< MDL	< MDL	< MDL	< MDL	Not analysed	33 ⁵	-

Notes: **Concentration:** Values below accepted Background Levels (Metals) and / or laboratory MDL (OCP)
Concentration: Values above accepted Background Levels and / or laboratory MDL but in compliance with relevant criteria
dup: duplicate sample

¹ NES – MfE NES Human Health Criteria for Rural Residential (25% produce) Use (MfE, 2012).

² Manaaki Whenua Landcare Research – Trace element background concentration explorer (Landcare Research, 2023)

(<https://experience.arcgis.com/experience/4e6e25842cc6427ca850bdf644010922/page/Explorer/>).

³ NEPM – Guideline on Investigation Levels for Soil and Groundwater (Schedule B1) for Residential (A) sites (NEPM, revised 2013).

⁴ In the absence of Environmental criteria for Total DDT, the Auckland Unitary Plan (AUP) Permitted Activity Soil Acceptance Criteria for Environmental Discharge: AUP Operative in part (AUP, 2024) has been applied.

⁵ MfE Soil Guidelines for Former Sheep-Dip Sites for Commercial / Industrial sites (MfE, 2006).

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 Limited⁶ 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 Chain of Custody documentation, are presented in Appendix G.

9.1 QA / QC Relative Percentage Difference

One duplicate soil sample set (TP9, duplicate of TP07) was 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 collected for every 20 soil samples collected.

⁶ Eurofins Environmental Testing NZ Limited, an IANZ⁶ and NZS/ISO/IEC 17025:2018⁶ accredited laboratory incorporating the aspects of ISO 9000:2015⁶ 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 4% to 34%. RPD values for the duplicate pairs met Haigh Workman QA / QC acceptance criteria of less than 50%.

QA / QC results are presented in Table 6 below. Laboratory analytical results are provided in Appendix G.

Table 6- Quality Assurance / Quality Control Results

Contaminants of Concern		Results (mg/kg)		RPD (%)
		TP07_0.1m	TP9_0.1m	
Heavy Metals	As	6.4	6.1	5
	Cd	0.13	0.13	27
	Cr	140	110	24
	Cu	28	18	4
	Pb	5.9	6.9	6
	Hg	0.48	0.34	34
	Ni	31	43	32
	Zn	26	28	7
OCP	ΣDDT	< MDL	< MDL	-
	Aldrin	< MDL	< MDL	-
	Dieldrin	< MDL	< MDL	-
	Lindane	< MDL	< MDL	-

MDL – Method Detection Limit

RPD – Relative Percentage Difference

10 Discussion

10.1 Conceptual Site Model

The assessment provided in Table 7 below expands on the potential sources of contamination identified within the area of the proposed residential development 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 land-use.

Table 7 - Conceptual Site Model

Potential Source	Potential Receptors	Potential Pathways	Assessment
CoC across the site (below Applicable Criteria and / or laboratory MDL)	Construction, maintenance / excavation workers	Inhalation of dust / ingestion / dermal contact with exposed soils.	<u>Incomplete Pathway:</u> Contaminant concentrations are below applicable Human Health criteria.
	Future site users	Inhalation of dust / ingestion / dermal contact with exposed soils.	<u>Incomplete Pathway:</u> Contaminant concentrations are below applicable Human Health criteria.

11 Regulatory Requirements

11.1 NES - CS

It is considered that the proposed development are 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 Changing use

Based on findings from this investigation, Table 8 below presents potential Resource Consent requirements for the proposed activity under the provisions of the NES-CS. This investigation presents factual 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 8- Potential Resource Consent Requirements

Potential Source	Potential Applicable Planning Rules
National Environmental Standards (NES)	PERMITTED ACTIVITY (subject to requirements under Rule 8) - A PSI with limited sampling (this investigation) has been prepared, - Contamination concentrations comply with NES Human Health criteria, and - Conditions of Rule 8 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.*

The 'piece of land' for this investigation is the area being developed and its curtilage which is 6,948m³, this allows for 347m³ soil disturbance and 69m³ soil removal (per year) as a Permitted Activity under the NES-CS.

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 with limited sampling 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 developed with a dwelling and shed.

Historical information available for the site and observations from the 5 April 2024 site walkover indicate that the following HAIL activities have, or potentially have occurred at the site:

- HAIL Cat. A.10 – Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glasshouses or spray sheds,
 - The site has historically been utilized as historically as an orchard (post 1982),
 - No evidence that pesticide were used or stored on the investigation area, however spray draft is possible, and
 - Surrounding historical land-use being horticultural land-use (orchards and market gardens) may possibly apply an additional environmental risk to the proposed site and proposed future development.

Twelve shallow soil samples were collected and analysed as four composite samples and two samples analysed as individual samples, including one duplicate soil sample for QA / QC purposes.

Laboratory analytical results reported:

- All CoC concentrations were below applicable MfE NES Human Health Criteria for Rural Residential (25% produce) criteria,
- Metals concentrations were above Background Soil Concentrations in five of the six soil samples analysed, and
- OCP concentrations were below laboratory MDL in all soil samples analysed.

Based on these findings:

- Soil sampling has confirmed that there are no significant contaminated land related constraint on redevelopment of the land for residential purposes and that it is highly unlikely that there is a risk to human health if the activity is done to the investigation area,
- Soil / fill material with Metals concentrations above Background Levels is not considered as 'Cleanfill' for disposal purposes:

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

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:

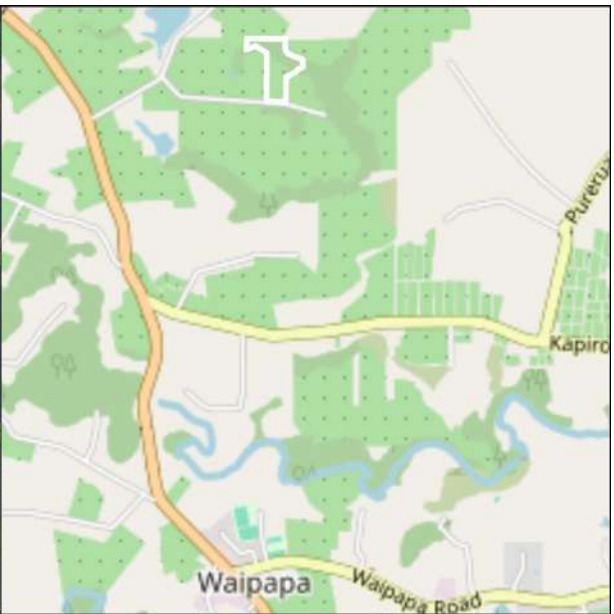
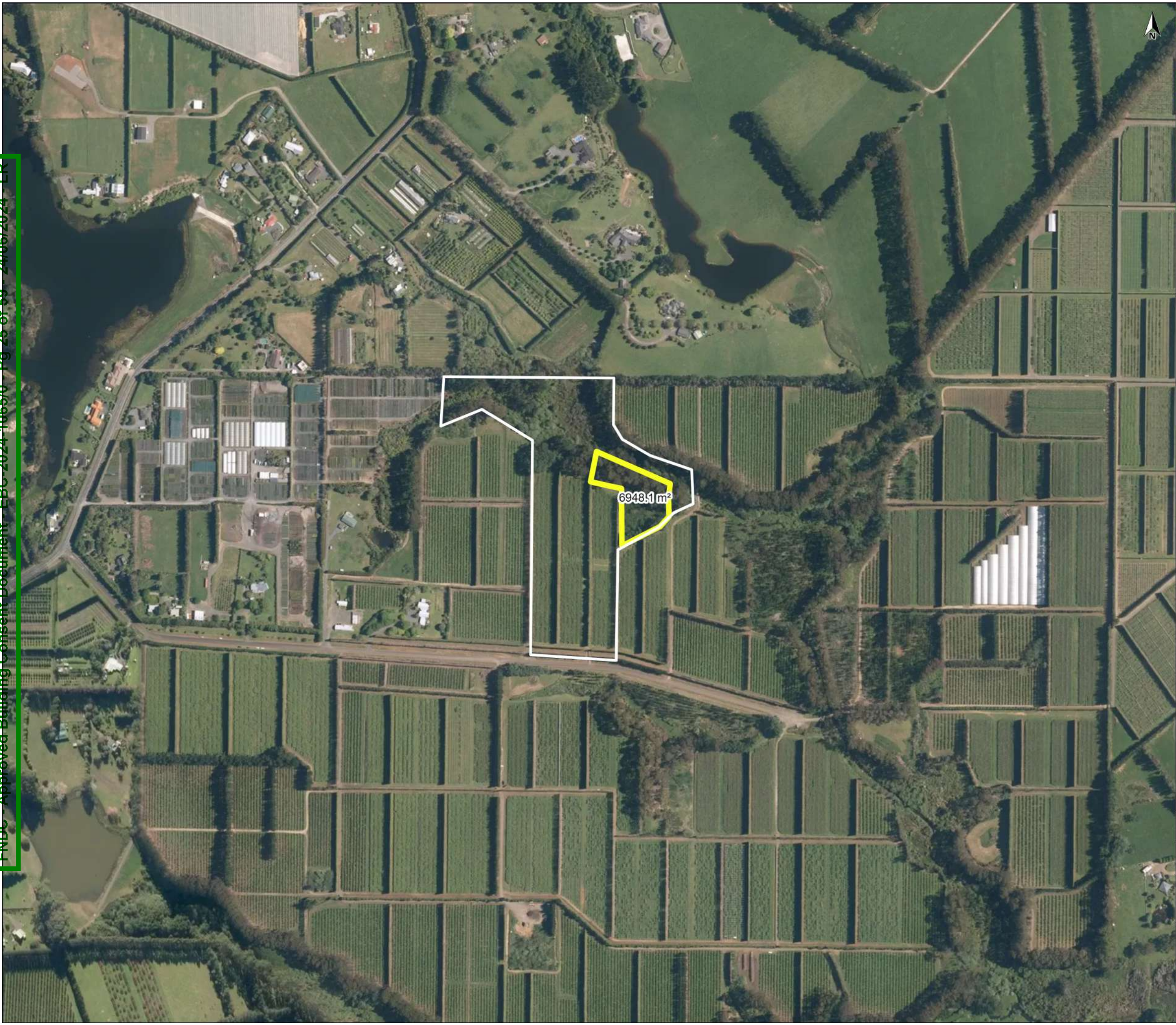
- Buried Rubbish,
- Buried construction or demolition waste,
- Un-anticipated soil colours or odours,
- Buried tanks or drums, and
- Encountering materials that may contain Asbestos, including fibrous building materials and fibre cement construction products.

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

End of Report – Appendices to follow.

Appendix A – Site Plans

Drawing No.	Title
Drawing 1	Site Location Plan – Haigh Workman
Drawing 2	Site Investigation Plan – Haigh Workman
8183	Survey of features on Lot 2 DP 540914 – Donaldsons Registered Land Surveyors



Legend

- Site Boundary
- Investigation Area

0 50 m 100 m
LINZ CC BY 4.0 © Imagery Basemap contributors



Produced by **Datanest.earth**

Title: Site Location Plan		
Client: Kapiro Orchards Limited		Size: A3
Project: 71 Orchard Road	Drawn: JCum	Drawing No.: 1
Date: 28-05-2024	Checked: JP	
Proj No: 24 071	Scale: 1:5000	Version: REV1



Legend

- Stockpile 1
- Sample locations
- Site Boundary
- Proposed dwelling location (approximate)
- Proposed shed location (approximate)
- Investigation Area

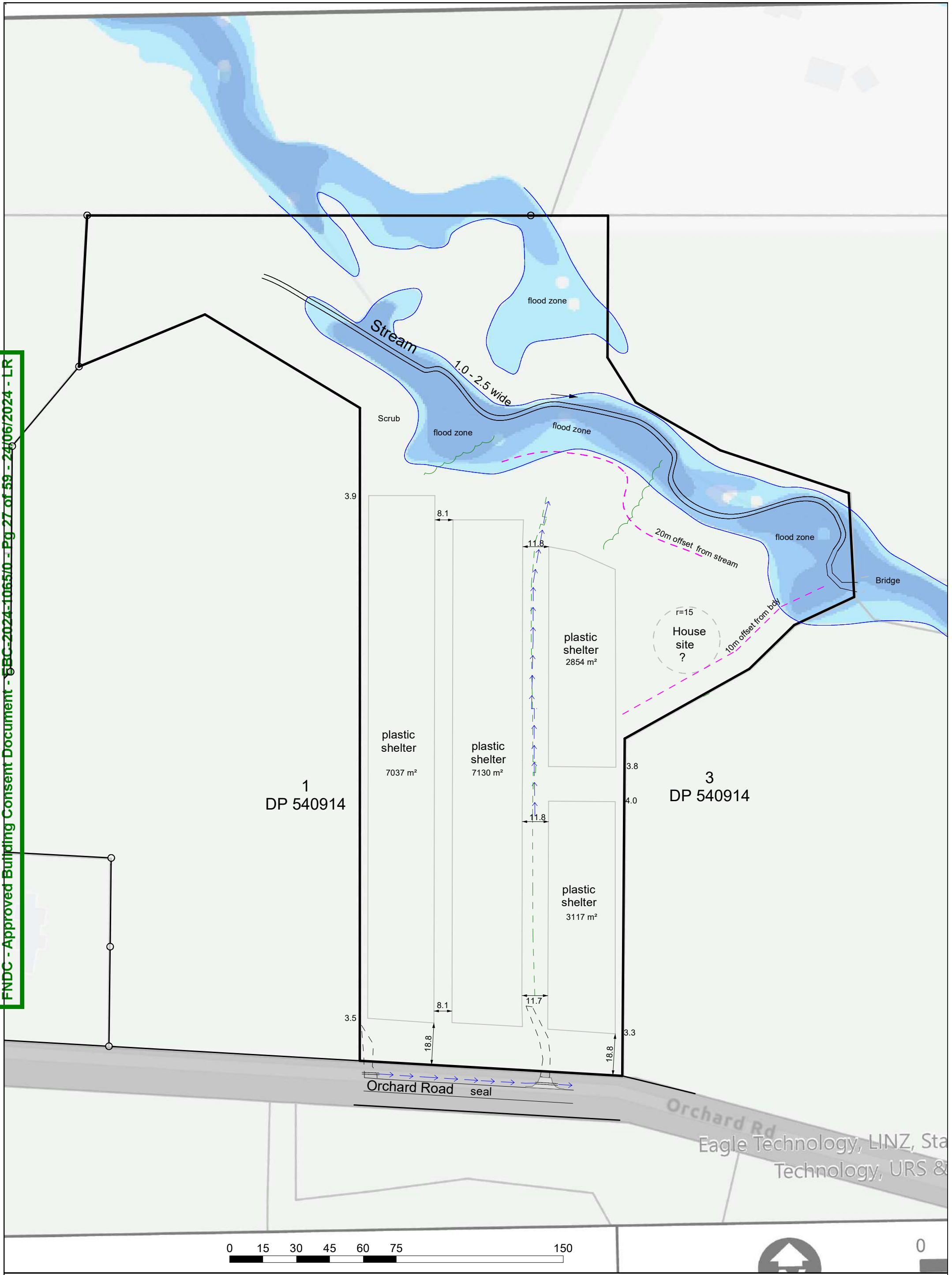
0 5 m 10 m

LINZ CC BY 4.0 © Imagery Basemap contributors

HAIGH WORKMAN
Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Site Investigation Plan		
Client: Kapiro Orchards Limited		Size: A3
Project: 71 Orchard Road	Drawn: JCum	Drawing No.: 2
Date: 21-05-2024	Checked: JP	
Proj No: 24 071	Scale: 1:500	Version: REV1*



Appendix B – Photographic Documentation



1. South of investigation area, with orchard to the right on neighbouring property.



2. Approximate location of proposed dwelling.



3. Investigation area to right with shelter belt separating the investigation area from the orchard on the left.



4. Felled trees in the north of the investigation area.



5. Boulders at the ground surface in investigation area.



6. Orchard to the south of the investigation area.

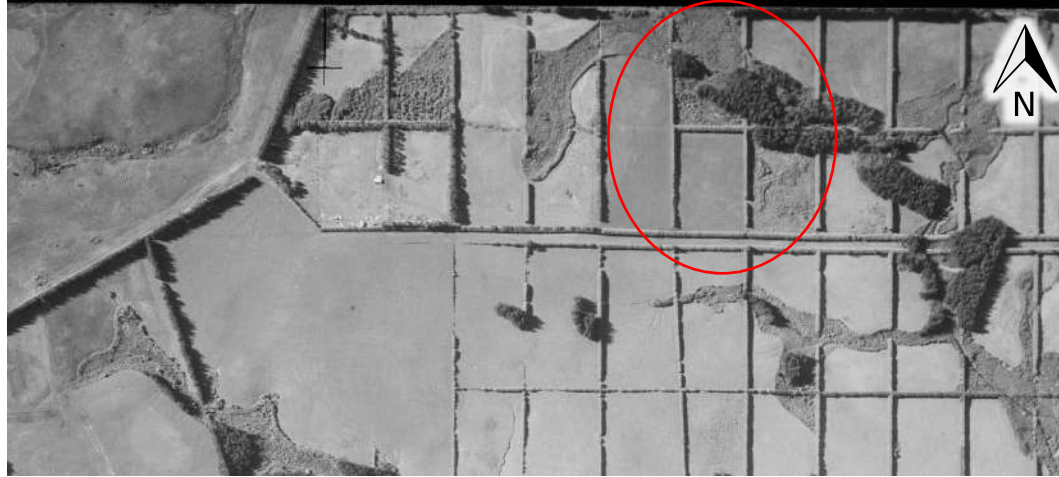


7. Cleared in north of investigation area.



8. Tool storage container

Appendix C – Historical Aerial Photography



1950, Retrolens.



1968, Retrolens



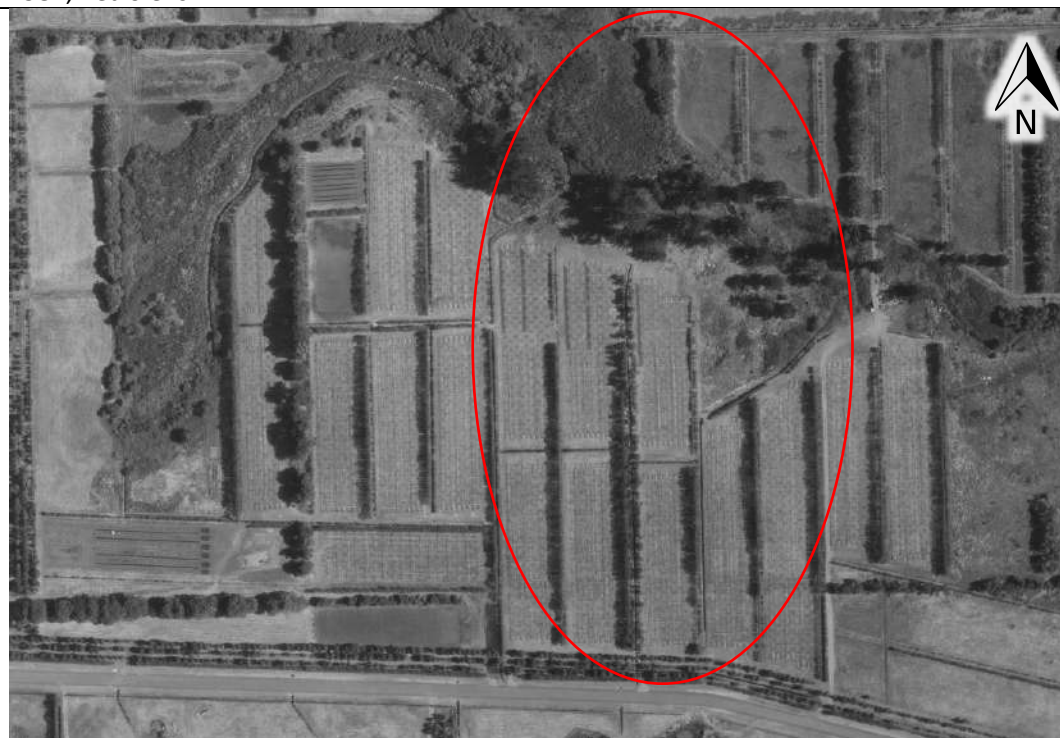
1977, Retrolens



1978, Retrolens



1982, Retrolens



1982, Retrolens



2003, Google Earth Pro



2007, Google Earth Pro



2009, Google Earth Pro



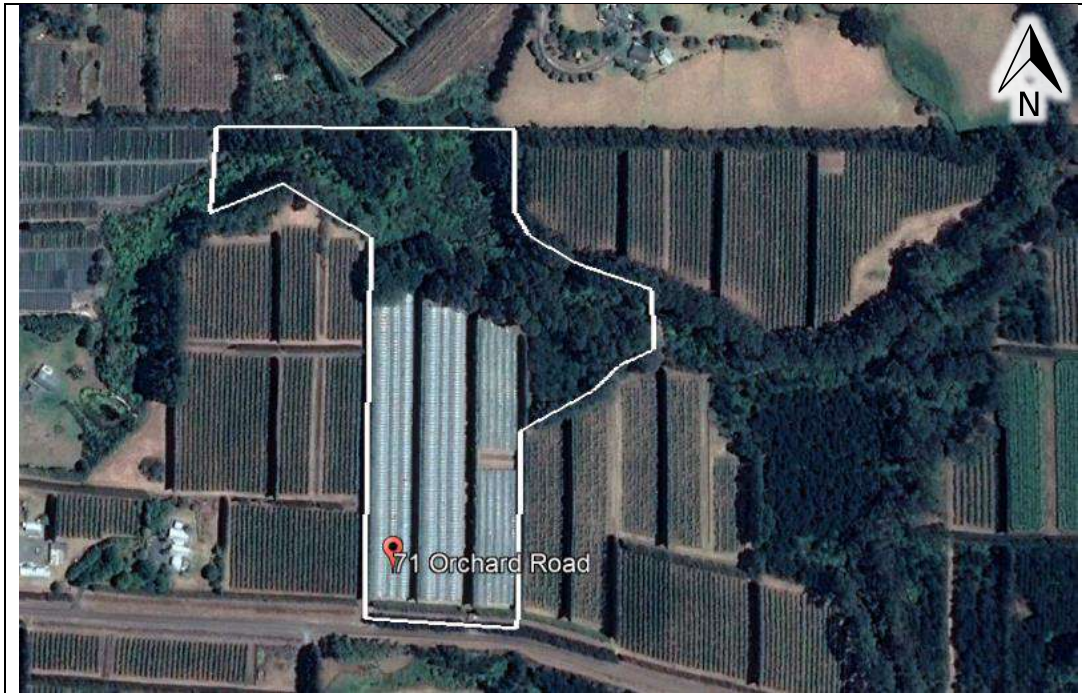
2012, Google Earth Pro



2013, Google Earth Pro



2016, Google Earth Pro



2017, Google Earth Pro



2018, Google Earth



2019, Google Earth Pro



2020, Google Earth Pro



2022, Google Earth Pro



2023, Google Earth Pro

Appendix D – Certificates of Title

Appendix E – Contamination Enquiry Request

Josh Cumming

From: Contaminated Land Management Team <contamination@nrc.govt.nz>
Sent: Wednesday, 10 April 2024 2:23 pm
To: Josh Cumming
Subject: RE: Environmental incidents Lot 2 DP 540914 (NRC Ref# REQ.619956)
Attachments: REQ.619956 records within 250 metres.xlsx

Hi Josh

Regarding your site query for Lot 2 DP 540914 (71 Orchard Road, Kerikeri):

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. It is noted that aerial images of the site show the presence of horticultural activities and therefore HAIL Activity A10. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds may apply.

There are no environmental incidents, resource consents or bores recorded on the property.

NRC has aerial images of the site for the following years that can be provided upon request – 2000, 2007, 2014, 2017 and 2023.

I have attached a spreadsheet with information relating to incidents, other SLU sites and active resource consents within 250m of the subject property. If you require any further information on any of these please let me know.

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
Nicola

Nicola Bull
Compliance Specialist - Waste Management
P 09 470 1210 (extension 9123)
M 0274 343 674



Disclaimer

Unless specifically included in the response above, council warns that information is not available about building materials that can cause land contamination at any property, including, but not limited to, wood that has been chemically treated, lead-based paint and asbestos containing materials. Caution is advised with regard to these materials, including undertaking a comprehensive due diligence investigation to establish whether these materials are or have been present at any time, past and present.

The information provided in this email is information from the Selected Land Use Register and Northland Regional Council Incident Records only, unless otherwise specified. Council may hold information about the site in other registers or databases. A full search of council records will need to be undertaken to determine if this is the case, and the requestor must specifically request this, and cover council's reasonable costs. The information supplied in this email should not be solely relied upon for determining whether there is contamination at a site, for remediation of the site or any other purpose. Compliance with R6.2 of the Resource Management (National Environmental Standard for Assessing and Managing

Contaminants in Soil to Protect Human Health) Regulations 2011 ('NES') requires that territorial authority records are searched, and any information supplied in this e-mail is required to form part of that search. If contamination is confirmed, there may be contaminant guideline values that apply to the land, in addition to the NES soil contamination guidelines. We cannot accept any liability arising from the absence of information from our registers. We advise clients to engage the services of a suitably qualified and experienced contaminated land specialist where uncertainty exists.

From: Josh Cuming <joshcuming@haighworkman.co.nz>
Sent: Tuesday, April 2, 2024 3:53 PM
To: Contaminated Land Management Team <contamination@nrc.govt.nz>
Subject: Environmental incidents Lot 2 DP 540914

Hi

Please may we have any information on file regarding HAIL and environmental incidents within 250 m of the below site?

71 Orchard Road, Kerikeri
Lot 2 DP 540914



Kind regards

Josh Cuming
Environmental Geologist
CEnvP, MEIANZ.
Phone 09 407 8327
Mobile 027 316 8362
joshcuming@haighworkman.co.nz



HAIGH WORKMAN
Civil & Structural Engineers

[Website](#) . [LinkedIn](#) . [Careers](#)

Appendix F – Soil Sample Descriptions

 Phone 09 407 8327 Fax 09 407 8378 www.haighworks.co.nz info@haighworkman.co.nz					
P O Box 89, 0245 6 Fairway Drive, Kerikeri, New Zealand					
Sample Hole Log					
PAGE 01 OF 01					
Job No.: 24 071		Samples: TP01 - 9 & SP1 S1-3			
Client: Kapiro Orchard Limited		Date: 05.04.2024			
Location: 71 Orchard Road, Kerikeri		Time: 10:00 - 13:00			
Method: Spade and trowel		Logged: JCum			
Conditions: Overcast		Checked: AT			
Borehole ID	Soil Description	Depth (m bgl)	Sample Point Location	Comments	Testing
TP1	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP1, TP2 and TP3 - Metals and OCPs
TP2	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP1, TP2 and TP3 - Metals and OCPs
TP3	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP1, TP2 and TP3 - Metals and OCPs
TP4	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP4 & TP5 - Metals and OCPs
TP5	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP4 & TP5 - Metals and OCPs
TP6	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP6 and TP8 - Metals
TP7	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Metals and OCPs
TP8	Topsoil - Silt	0 - 0.1	Representative sample	No visual or olfactory signs of contamination	Composite TP6 and TP8 - Metals
TP9	Topsoil - Silt	0 - 0.1	Duplicate of TP7	No visual or olfactory signs of contamination	Metals and OCPs
SP1 S1	Topsoil - Silt	NA	Stockpile consisting of topsoil	No visual or olfactory signs of contamination	Composite with SP1 S1-3- Metals
SP1 S2	Topsoil - Silt	NA	Stockpile consisting of topsoil	No visual or olfactory signs of contamination	Composite with SP1 S1-3- Metals
SP1 S3	Topsoil - Silt	NA	Stockpile consisting of topsoil	No visual or olfactory signs of contamination	Composite with SP1 S1-3- Metals

Appendix G – Laboratory Analytical Results and Chain of Custody Documentation

FNDC - Approved Building Consent Document - EBC-2024-1065/0 - Pg 48 of 59 - 24/06/2024 - LR

Company	Haigh Workman Limited			Project №	24 071			Project Manager	Joshua Cuming			Sampler(s)	Joshua Cuming																												
Address	6 Fairway Drive, Kerikeri, 0230			Project Name	71 Orchard Road			EDD Format ESdat, EQulS etc				Facility Code																													
Contact Name	Joshua Cuming			Analyses Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing.	HOLD	Moisture Set	Total Petroleum Hydrocarbons (NZ MfE 1999)	Metals M8 (NZ MfE)	Eurofins Suite M10-NZ: Canterbury Soil Addendum Metals (As, B, Cd, Cr, Cu, Mn, Ni, Pb, Zn, Hg) (NZ MfE)	Asbestos - AS4964	Asbestos in Soils (NZ GAMAS)	Asbestos Absence / Presence	Organochlorine Pesticides (NZ MfE)	Polycyclic Aromatic Hydrocarbons (NZ MfE)	BTEx					Email for Invoice	paula@haighworkman.co.nz																				
Phone №	028 8516 0190																			Email for Results	joshcuming@haighworkman.co.nz																				
Special Directions																				Containers Change container type & size if necessary.			Required Turnaround Time (TAT) Default will be 5 days if not ticked.																		
Purchase Order																					☐ Overnight (reporting by 9am) ♦ ☐ Same day ☐ 1 day ☐ 2 days ☐ 3 days ☒ 5 days (Standard) ☐ Other()																				
Quote ID №																					Sample Comments / Dangerous Goods Hazard Warning																				
Client Sample ID				Sampled Date/Time dd/mm/yy hh:mm		Matrix Solid (S) Water (W)																																			
TP1_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP1, TP2 and TP3																	
TP2_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP1, TP2 and TP3																	
TP3_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP1, TP2 and TP3																	
TP4_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP4 and TP5																	
TP5_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP4 and TP5																	
TP6_0.1m				05.04.24		Soil				AKL				AKL								1		Composite with TP6 and TP8																	
TP7_0.1m				05.04.24																																					

Haigh Workman Limited
6 Fairway Drive
Kerikeri
NZ 0230



All tests reported herein
have been performed in
accordance with the
laboratory's scope of
accreditation

Attention: Josh Cuming

Report 1085837-S
Project name 71 ORCHARD ROAD
Project ID 24071
Received Date Apr 09, 2024

Client Sample ID			TP7_0.1m	COMP TP1TP2 & TP3	COMP TP4 & TP5	COMP TP6 & TP8
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K24-Ap0021538	K24-Ap0021539	K24-Ap0021540	K24-Ap0021541
Date Sampled			Apr 05, 2024	Not Provided ¹²	Not Provided ¹²	Not Provided ¹²
Test/Reference	LOR	Unit				
Organochlorine Pesticides (NZ MfE)						
Comments			G01	G01	G01	G01
2,4'-DDD	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4'-DDE	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4'-DDT	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDE	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDT	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
DDT + DDE + DDD (Total)*	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
a-HCH	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aldrin	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
b-HCH	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Chlordanes - Total	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
cis-Chlordane	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
d-HCH	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dieldrin	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan I	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan II	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Endosulfan sulphate	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Endrin	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Endrin aldehyde	0.01	mg/kg	< 0.1	< 0.1	0.27	< 0.1
Endrin ketone	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
g-HCH (Lindane)	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Heptachlor	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Heptachlor epoxide	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Methoxychlor	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toxaphene	0.5	mg/kg	< 5	< 5	< 5	< 5
trans-Chlordane	0.01	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloredate (surr.)	1	%	INT	60	55	59
Tetrachloro-m-xylene (surr.)	1	%	65	68	67	66

Client Sample ID			TP7_0.1m	COMP TP1TP2 & TP3	COMP TP4 & TP5	COMP TP6 & TP8
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K24-Ap0021538	K24-Ap0021539	K24-Ap0021540	K24-Ap0021541
Date Sampled			Apr 05, 2024	Not Provided ¹¹²	Not Provided ¹¹²	Not Provided ¹¹²
Test/Reference	LOR	Unit				
Metals M8 (NZ MfE)						
Arsenic	0.1	mg/kg	6.4	4.7	4.6	1.8
Cadmium	0.01	mg/kg	0.17	0.05	0.14	0.11
Chromium	0.1	mg/kg	140	110	94	82
Copper	0.1	mg/kg	28	17	13	10
Lead	0.1	mg/kg	6.4	6.1	6.9	3.0
Mercury	0.01	mg/kg	0.48	0.29	0.25	0.14
Nickel	0.1	mg/kg	31	32	16	13
Zinc	5	mg/kg	26	36	23	15
Sample Properties						
% Moisture	1	%	23	21	18	24

Client Sample ID			COMP SP1 S1S2&S3	TP9_0.1m
Sample Matrix			Soil	Soil
Eurofins Sample No.			K24-Ap0021542	K24-Ap0021550
Date Sampled			Not Provided ¹¹²	Apr 05, 2024
Test/Reference	LOR	Unit		
Organochlorine Pesticides (NZ MfE)				
Comments				G01
2,4'-DDD	0.01	mg/kg	-	< 0.1
2,4'-DDE	0.01	mg/kg	-	< 0.1
2,4'-DDT	0.01	mg/kg	-	< 0.1
4,4'-DDD	0.01	mg/kg	-	< 0.1
4,4'-DDE	0.01	mg/kg	-	< 0.1
4,4'-DDT	0.01	mg/kg	-	< 0.1
DDT + DDE + DDD (Total)*	0.01	mg/kg	-	< 0.1
a-HCH	0.01	mg/kg	-	< 0.1
Aldrin	0.01	mg/kg	-	< 0.1
b-HCH	0.01	mg/kg	-	< 0.1
Chlordanes - Total	0.01	mg/kg	-	< 0.1
cis-Chlordane	0.01	mg/kg	-	< 0.1
d-HCH	0.01	mg/kg	-	< 0.1
Dieldrin	0.01	mg/kg	-	< 0.1
Endosulfan I	0.01	mg/kg	-	< 0.1
Endosulfan II	0.01	mg/kg	-	< 0.1
Endosulfan sulphate	0.01	mg/kg	-	< 0.1
Endrin	0.01	mg/kg	-	< 0.1
Endrin aldehyde	0.01	mg/kg	-	< 0.1
Endrin ketone	0.01	mg/kg	-	< 0.1
g-HCH (Lindane)	0.01	mg/kg	-	< 0.1
Heptachlor	0.01	mg/kg	-	< 0.1
Heptachlor epoxide	0.01	mg/kg	-	< 0.1
Hexachlorobenzene	0.01	mg/kg	-	< 0.1
Methoxychlor	0.01	mg/kg	-	< 0.1
Toxaphene	0.5	mg/kg	-	< 5
trans-Chlordane	0.01	mg/kg	-	< 0.1
Dibutylchloredate (surr.)	1	%	-	63
Tetrachloro-m-xylene (surr.)	1	%	-	70

Client Sample ID			COMP SP1 S1S2&S3	TP9_0.1m
Sample Matrix			Soil	Soil
Eurofins Sample No.			K24- Ap0021542	K24- Ap0021550
Date Sampled			Not Provided ¹²	Apr 05, 2024
Test/Reference	LOR	Unit		
Metals M8 (NZ MfE)				
Arsenic	0.1	mg/kg	6.9	6.1
Cadmium	0.01	mg/kg	0.07	0.13
Chromium	0.1	mg/kg	180	110
Copper	0.1	mg/kg	18	27
Lead	0.1	mg/kg	6.9	6.8
Mercury	0.01	mg/kg	0.50	0.34
Nickel	0.1	mg/kg	33	43
Zinc	5	mg/kg	16	28
Sample Properties				
% Moisture	1	%	18	22

Sample History

Where samples are submitted/analysed over several days, the last date of extraction 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.

Description	Testing Site	Extracted	Holding Time
Organochlorine Pesticides (NZ MfE) Method: LTM-ORG-2220 OCP & PCB in Soil and Water by GCMSMS	Auckland	Apr 10, 2024	14 Days
Metals M8 (NZ MfE) Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Auckland	Apr 10, 2024	28 Days
% Moisture Method: LTM-GEN-7080 Moisture Content in Soil by Gravimetry	Auckland	Apr 10, 2024	14 Days



web: www.eurofins.com.au
email: EnviroSales@eurofins.com

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road Penrose, Auckland 1061 +64 9 526 4551 IANZ# 1327	Unit C1/4 Pacific Rise, Mount Wellington, Auckland 1061 +64 9 525 0568 IANZ# 1308	43 Detroit Drive Rolleston, Christchurch 7675 +64 3 343 5201 IANZ# 1290	1277 Cameron Road, Gate Pa, Tauranga 3112 +64 9 525 0568 IANZ# 1402

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
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Eurofins ProMicro Pty Ltd

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Company Name: Haigh Workman Limited
Address: 6 Fairway Drive
Kerikeri
NZ 0230

Project Name: 71 ORCHARD ROAD
Project ID: 24071

Order No.:
Report #: 1085837
Phone: 09 4078 327
Fax:

Received: Apr 9, 2024 3:30 PM
Due: Apr 16, 2024
Priority: 5 Day
Contact Name: Josh Cuming

Eurofins Analytical Services Manager : Katyana Gausel

Sample Detail						HOLD	Moisture Set	Organochlorine Pesticides (NZ MTE)	Metals M8 (NZ MTE)
Auckland Laboratory - IANZ# 1327						X	X	X	X
Auckland (Focus) Laboratory - IANZ# 1308									
Christchurch Laboratory - IANZ# 1290									
Tauranga Laboratory - IANZ# 1402									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	TP7_0.1m	Apr 05, 2024		Soil	K24-Ap0021538		X	X	X
2	COMP TP1TP2 & TP3	Not Provided		Soil	K24-Ap0021539		X	X	X
3	COMP TP4 & TP5	Not Provided		Soil	K24-Ap0021540		X	X	X
4	COMP TP6 & TP8	Not Provided		Soil	K24-Ap0021541		X	X	X
5	COMP SP1 S1S2&S3	Not Provided		Soil	K24-Ap0021542		X		X
6	TP1_0.1m	Apr 05, 2024		Soil	K24-Ap0021543	X			
7	TP2_0.1m	Apr 05, 2024		Soil	K24-Ap0021544	X			

NZBN: 9429046024954

ABN: 50 005 085 521

ABN: 91 05 0159 898

ABN: 47 009 120 549

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Site# 20794

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 Site# 25079 & 25289

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NATA# 2377
Site# 2370

Perth ProMicro
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2561
Site# 2554

Company Name: Haigh Workman Limited
Address: 6 Fairway Drive
Kerikeri
NZ 0230

Project Name: 71 ORCHARD ROAD
Project ID: 24071

Order No.:
Report #: 1085837
Phone: 09 4078 327
Fax:

Received: Apr 9, 2024 3:30 PM
Due: Apr 16, 2024
Priority: 5 Day
Contact Name: Josh Cuming

Eurofins Analytical Services Manager : Katyana Gausel

Sample Detail						HOLD	Moisture Set	Organochlorine Pesticides (NZ MfE)	Metals M8 (NZ MfE)
Auckland Laboratory - IANZ# 1327						X	X	X	X
Auckland (Focus) Laboratory - IANZ# 1308									
Christchurch Laboratory - IANZ# 1290									
8	TP3_0.1m	Apr 05, 2024		Soil	K24-Ap0021545	X			
9	TP4_0.1m	Apr 05, 2024		Soil	K24-Ap0021546	X			
10	TP5_0.1m	Apr 05, 2024		Soil	K24-Ap0021547	X			
11	TP6_0.1m	Apr 05, 2024		Soil	K24-Ap0021548	X			
12	TP8_0.1m	Apr 05, 2024		Soil	K24-Ap0021549	X			
13	TP9_0.1m	Apr 05, 2024		Soil	K24-Ap0021550		X	X	X
14	SP1 S1	Apr 05, 2024		Soil	K24-Ap0021551	X			
15	SP1 S2	Apr 05, 2024		Soil	K24-Ap0021552	X			
16	SP1 S3	Apr 05, 2024		Soil	K24-Ap0021553	X			
Test Counts						10	6	5	6

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	ppm: parts per million
µg/L: micrograms per litre	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	Colour: Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
ΣPA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Organochlorine Pesticides (NZ MfE)							
2,4'-DDD	mg/kg	< 0.01			0.01	Pass	
2,4'-DDE	mg/kg	< 0.01			0.01	Pass	
2,4'-DDT	mg/kg	< 0.01			0.01	Pass	
4,4'-DDD	mg/kg	< 0.01			0.01	Pass	
4,4'-DDE	mg/kg	< 0.01			0.01	Pass	
4,4'-DDT	mg/kg	< 0.01			0.01	Pass	
a-HCH	mg/kg	< 0.01			0.01	Pass	
Aldrin	mg/kg	< 0.01			0.01	Pass	
b-HCH	mg/kg	< 0.01			0.01	Pass	
cis-Chlordane	mg/kg	< 0.01			0.01	Pass	
d-HCH	mg/kg	< 0.01			0.01	Pass	
Dieldrin	mg/kg	< 0.01			0.01	Pass	
Endosulfan I	mg/kg	< 0.01			0.01	Pass	
Endosulfan II	mg/kg	< 0.01			0.01	Pass	
Endosulfan sulphate	mg/kg	< 0.01			0.01	Pass	
Endrin	mg/kg	< 0.01			0.01	Pass	
Endrin aldehyde	mg/kg	0.01			0.01	Pass	
Endrin ketone	mg/kg	< 0.01			0.01	Pass	
g-HCH (Lindane)	mg/kg	< 0.01			0.01	Pass	
Heptachlor	mg/kg	< 0.01			0.01	Pass	
Heptachlor epoxide	mg/kg	< 0.01			0.01	Pass	
Hexachlorobenzene	mg/kg	< 0.01			0.01	Pass	
Methoxychlor	mg/kg	< 0.01			0.01	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
trans-Chlordane	mg/kg	< 0.01			0.01	Pass	
Method Blank							
Metals M8 (NZ MfE)							
Arsenic	mg/kg	< 0.1			0.1	Pass	
Cadmium	mg/kg	0.01			0.01	Pass	
Chromium	mg/kg	< 0.1			0.1	Pass	
Copper	mg/kg	< 0.1			0.1	Pass	
Lead	mg/kg	< 0.1			0.1	Pass	
Mercury	mg/kg	< 0.01			0.01	Pass	
Nickel	mg/kg	< 0.1			0.1	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Organochlorine Pesticides (NZ MfE)							
4,4'-DDT	%	89			70-130	Pass	
Methoxychlor	%	80			70-130	Pass	
LCS - % Recovery							
Metals M8 (NZ MfE)							
Arsenic	%	104			80-120	Pass	
Cadmium	%	95			80-120	Pass	
Chromium	%	96			80-120	Pass	
Copper	%	103			80-120	Pass	
Lead	%	104			80-120	Pass	
Mercury	%	104			80-120	Pass	
Nickel	%	94			80-120	Pass	
Zinc	%	106			80-120	Pass	
LCS - % Recovery							

FNDC - Approved Building Consent Document - EBC-2024-1065/0 - Pg 56 of 59 - 24/06/2024 - LR

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organochlorine Pesticides (NZ MfE)									
2,4'-DDD			%	89			70-130	Pass	
2,4'-DDE			%	81			70-130	Pass	
2,4'-DDT			%	77			70-130	Pass	
4,4'-DDD			%	98			70-130	Pass	
4,4'-DDE			%	97			70-130	Pass	
a-HCH			%	95			70-130	Pass	
Aldrin			%	89			70-130	Pass	
b-HCH			%	92			70-130	Pass	
cis-Chlordane			%	75			70-130	Pass	
d-HCH			%	89			70-130	Pass	
Dieldrin			%	85			70-130	Pass	
Endosulfan I			%	97			70-130	Pass	
Endosulfan II			%	91			70-130	Pass	
Endosulfan sulphate			%	80			70-130	Pass	
Endrin			%	87			70-130	Pass	
Endrin aldehyde			%	89			70-130	Pass	
Endrin ketone			%	106			70-130	Pass	
g-HCH (Lindane)			%	101			70-130	Pass	
Heptachlor			%	88			70-130	Pass	
Heptachlor epoxide			%	83			70-130	Pass	
Hexachlorobenzene			%	94			70-130	Pass	
trans-Chlordane			%	97			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides (NZ MfE)				Result 1					
2,4'-DDT	K24-Ap0019489	NCP	%	85			70-130	Pass	
4,4'-DDT	K24-Ap0019489	NCP	%	81			70-130	Pass	
a-HCH	K24-Ap0019489	NCP	%	100			70-130	Pass	
b-HCH	K24-Ap0019489	NCP	%	101			70-130	Pass	
cis-Chlordane	K24-Ap0019489	NCP	%	85			70-130	Pass	
d-HCH	K24-Ap0019489	NCP	%	96			70-130	Pass	
Dieldrin	K24-Ap0019489	NCP	%	103			70-130	Pass	
Endosulfan sulphate	K24-Ap0019489	NCP	%	91			70-130	Pass	
Endrin aldehyde	K24-Ap0019489	NCP	%	75			70-130	Pass	
Methoxychlor	K24-Ap0019489	NCP	%	77			70-130	Pass	
Toxaphene	K24-Ap0010289	NCP	%	0.0000000			70-130	Fail	Q08
Spike - % Recovery									
Metals M8 (NZ MfE)				Result 1					
Mercury	K24-Ap0019508	NCP	%	113			75-125	Pass	
Spike - % Recovery									
Organochlorine Pesticides (NZ MfE)				Result 1					
2,4'-DDD	K24-Ap0021539	CP	%	84			70-130	Pass	
2,4'-DDE	K24-Ap0021539	CP	%	85			70-130	Pass	
4,4'-DDD	K24-Ap0021539	CP	%	80			70-130	Pass	
4,4'-DDE	K24-Ap0021539	CP	%	99			70-130	Pass	
Aldrin	K24-Ap0021539	CP	%	94			70-130	Pass	
Endosulfan I	K24-Ap0021539	CP	%	108			70-130	Pass	
Endosulfan II	K24-Ap0021539	CP	%	112			70-130	Pass	
Endrin	K24-Ap0021539	CP	%	96			70-130	Pass	
Endrin ketone	K24-Ap0021539	CP	%	94			70-130	Pass	
g-HCH (Lindane)	K24-Ap0021539	CP	%	99			70-130	Pass	
Heptachlor	K24-Ap0021539	CP	%	86			70-130	Pass	
Heptachlor epoxide	K24-Ap0021539	CP	%	75			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hexachlorobenzene	K24-Ap0021539	CP	%	91			70-130	Pass	
trans-Chlordane	K24-Ap0021539	CP	%	121			70-130	Pass	
Spike - % Recovery									
Metals M8 (NZ MfE)				Result 1					
Arsenic	K24-Ap0021542	CP	%	101			75-125	Pass	
Cadmium	K24-Ap0021542	CP	%	117			75-125	Pass	
Chromium	K24-Ap0021542	CP	%	177			75-125	Fail	Q08
Copper	K24-Ap0021542	CP	%	112			75-125	Pass	
Lead	K24-Ap0021542	CP	%	116			75-125	Pass	
Nickel	K24-Ap0021542	CP	%	102			75-125	Pass	
Zinc	K24-Ap0021542	CP	%	116			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Organochlorine Pesticides (NZ MfE)				Result 1	Result 2	RPD			
2,4'-DDD	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
2,4'-DDE	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
2,4'-DDT	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
4,4'-DDD	K24-Ap0019086	NCP	mg/kg	0.01	0.01	4.9	30%	Pass	
4,4'-DDE	K24-Ap0019086	NCP	mg/kg	0.07	0.07	1.1	30%	Pass	
4,4'-DDT	K24-Ap0019086	NCP	mg/kg	0.01	0.01	2.6	30%	Pass	
a-HCH	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Aldrin	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
b-HCH	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
cis-Chlordane	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
d-HCH	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Dieldrin	K24-Ap0019086	NCP	mg/kg	0.01	< 0.01	99	30%	Fail	Q15
Endosulfan I	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endosulfan II	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endosulfan sulphate	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endrin	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endrin aldehyde	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Endrin ketone	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
g-HCH (Lindane)	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Heptachlor epoxide	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Hexachlorobenzene	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Methoxychlor	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
trans-Chlordane	K24-Ap0019086	NCP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Metals M8 (NZ MfE)				Result 1	Result 2	RPD			
Arsenic	K24-Ap0021541	CP	mg/kg	1.8	2.8	41	30%	Fail	Q02
Cadmium	K24-Ap0021541	CP	mg/kg	0.11	0.13	18	30%	Pass	
Chromium	K24-Ap0021541	CP	mg/kg	82	80	2.7	30%	Pass	
Copper	K24-Ap0021541	CP	mg/kg	10	11	8.6	30%	Pass	
Lead	K24-Ap0021541	CP	mg/kg	3.0	4.1	30	30%	Pass	
Mercury	K24-Ap0021541	CP	mg/kg	0.14	0.20	34	30%	Fail	Q15
Nickel	K24-Ap0021541	CP	mg/kg	13	12	5.9	30%	Pass	
Zinc	K24-Ap0021541	CP	mg/kg	15	15	<1	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	K24-Ap0021541	CP	%	24	24	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	N/A
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Katyana Gausel	Analytical Services Manager
Raymond Siu	Senior Analyst-Metal
Raymond Siu	Senior Analyst-Organic



Raymond Siu

Senior Instrument Chemist (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates IANZ accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Dear James Baxter

Re: On-Site Wastewater System for Lot 2 DP 540914, 71 orchard Road, Kerikeri

Haigh Workman Limited has been engaged to design an on-site wastewater system to service a proposed 3 bedroom relocatable dwelling and shed with toilet.

Site Description

The site is legally described as Lot 2 DP 540914. It is irregular in shape and covers an area of 6.2685 hectares.

The development area is flat to gently sloping towards the northeast.

Flood modelling commissioned by NRC indicates that lower portions of the site are affected by 10-year, 50-year and 100-year ARI inland flooding events. However, the proposed disposal areas and treatment tank are located on elevated ground, away from the flood susceptible land.

Site Investigations

A representative of Haigh Workman visited the site on 5 April 2024 to investigate features and ground conditions.

3 boreholes were advanced. The boreholes refused at depths of 0.6 – 1.1m, topsoil was 200mm thickness in each of the boreholes.

The soil onsite is mapped as Okaihau very gravelly friable clay (OK) which is classified as '*excessively to somewhat excessively drained*'.

No evidence of groundwater seepage was observed at the soil investigation location.

Based on our site investigations the natural soils were categorised as AS/NZS1547:2012 Category 5: Light clay – poorly drained or TP58 Category 6: Sandy clay, non-swelling clay and silty clay – slowly drained.

Wastewater Generation

Water supply will be from tank supply. Design wastewater flows can be calculated using the guidelines in Section 6 of TP58.

The proposed development is for a 3 bedroom dwelling. Based on TP58 the design occupancy is 5 people. The shed will have up to two workers using the toilet facilities.

TP58 Table 6.2 indicates daily wastewater flows of 160 litres/person/day (l/p/d) for a household 11/5.5 or 6/3 Flush Toilet(s) and standard fixtures, low water use dishwasher and no garbage grinder (*Category C*). Design flows are as follows;

- 5 people will generate 160 l/p/d, which totals 800 litres of wastewater per day.

- 2 workers will generate 40 l/p/d, which totals 80 litres of wastewater per day.

Total wastewater generation is 880 litres per day.

Treatment System

A secondary treatment system shall be installed. The treatment plant is to meet the quality output of AS/NZS 1546.3:2003 and be capable of producing effluent having less than 20 g/m³ of BOD₅ and 30 g/m³ TSS when consistently loaded with 9880 litres/day. The secondary treatment system will be located on Pt Lot 6 DP 50235.

The treatment system shall be accessible for regular maintenance and servicing and be set back more than 3 m from buildings.

Disposal System

AS/NZS 1547 recommends a design irrigation rate (DIR) of 3mm/d for the soil category in this area. The required land application area is 294 m². A reserve area of 294m² is also available on-site, per the appended site plan. Pressure-compensating dripperlines are to be laid generally across the slope at spacings of 1.0m in the location shown on the attached site plan. Dripper lines can be buried or laid on the surface as the canopy cover is greater than 80%.

An upslope interception drain is required.

A Davey 53A/B pump or equivalent is required to adequately pressurize the field and ensure long life. One flush valve is required per lateral for maintenance flushing of the field.

DNL valves are to be installed at the start of laterals to prevent effluent flowing to the lowest dripperline.

Table 1: Summary of design details

Criteria	Comments
Occupancy	5 persons and 2 works
Wastewater source	Households with 11/5.5 or 6/3 Flush Toilet(s) and standard fixtures, low water use dishwasher and no garbage grinder (<i>Category C</i>)
Wastewater generation	880 L/d
Treatment system	Secondary treatment plant
Location of effluent disposal	As per drawings
Effluent disposal system	Surface or buried dripperline
Maximum length of dripperline per flush valve	100 m
Irrigation pump	Davey D53A/B or equivalent
Soil type	TP58 category 6 or AS/NZS1547 category 5
Application rate	3 mm/d
Extent of land application area	294 m ²
Slope of land application area	5-7°

This report has been prepared for the use of Kapiro Orchard Limited with respect to the brief outlined to us. This report may be used for consent and implementation of the specified design. The information

and opinions contained within this report shall not be used for any other purpose without prior review and agreement by Haigh Workman Ltd.

Nga Mihi Nui,

Prepared by:



Joshua Cuming
Environmental Geologist
BSc Geol and EnvStu., CEnvP.

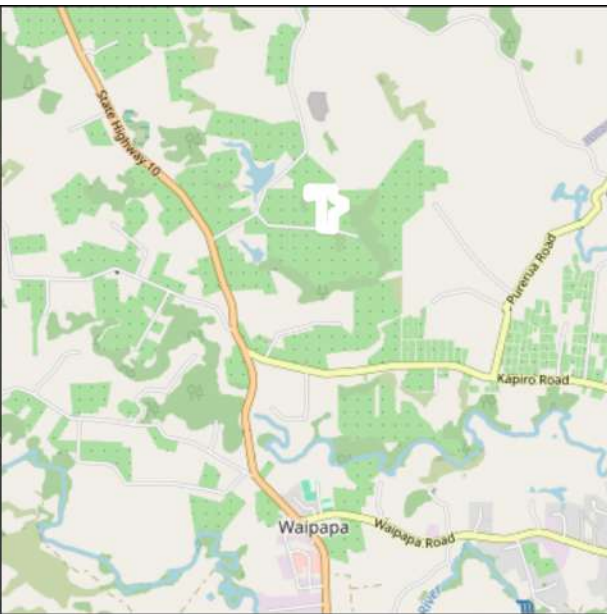
Review & Approved by:



John Papesh
Senior Civil Engineer / Director
BE Civil, CPEng, CMEngNZ

Appendices

- Site Investigation Plan
- Wastewater Design Plan
- Disposal Field Details
- Consent Notice
- Borehole Logs
- NRC Regulatory Compliance Table
- On-site Wastewater Disposal Site Evaluation Investigation Checklist
- On-site Domestic Wastewater Management (Advice to Homeowner/Occupier)
- Producer Statement – PS1



Legend

- RWRM_Regionwide_Models__10_year_Extent
- Regionwide Models (10 year Extent)
- Boreholes
- Field drain
- Stream
- 1m contours (LINZ)
- Site Boundary

0 5 m 10 m

LINZ CC BY 4.0 © Imagery Basemap contributors, NRC,
Water Technology, URS & MWH



Produced by Datanest.earth

Title: Wastewater Investigation Plan

Client: Kapiro Orchards Limited

Size: A3

Project:
71 Orchard Road

Drawn:
JCum

Drawing No.:
1

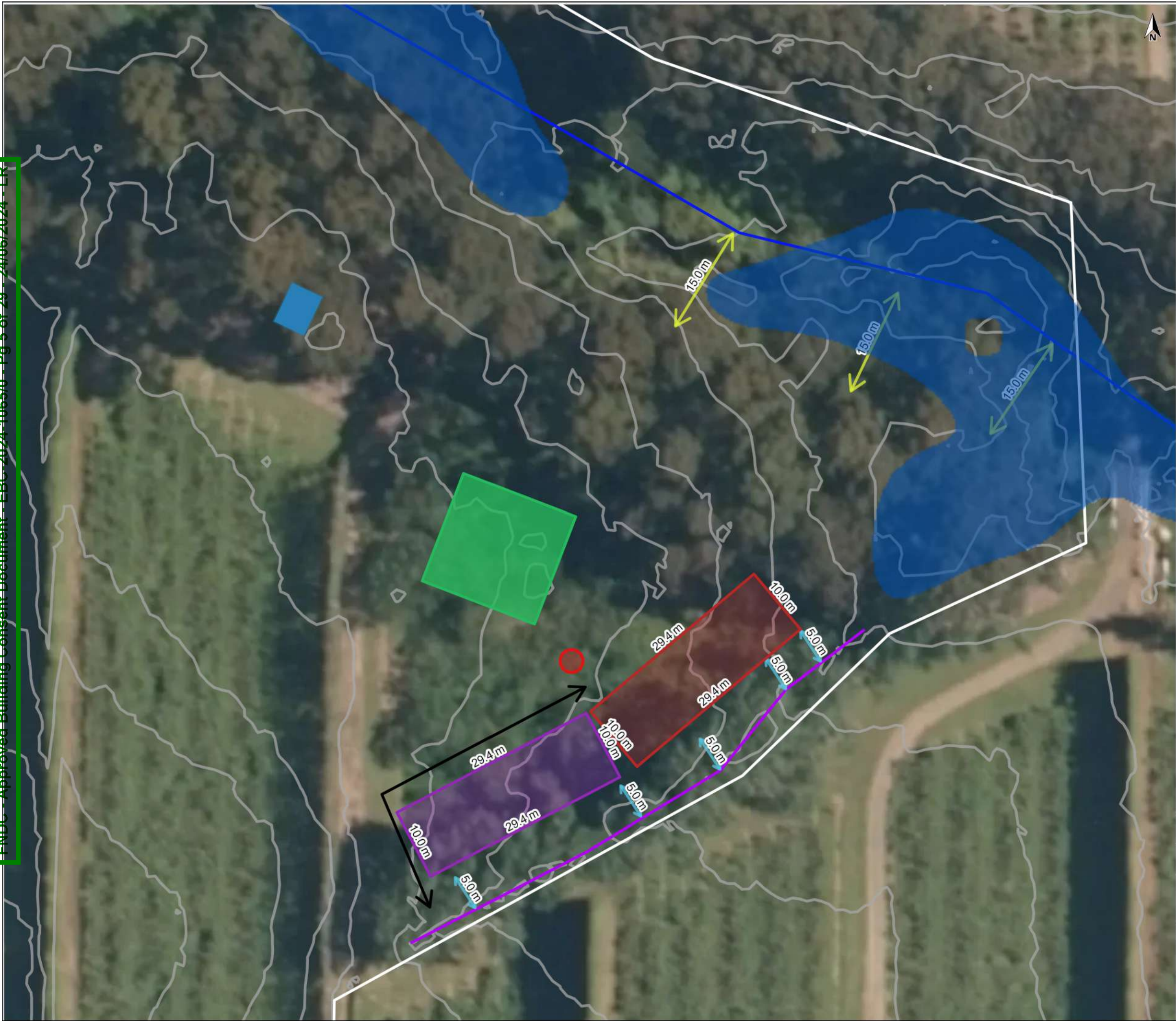
Date: 15-05-2024

Checked: JP

Proj No: 24 071

Scale: 1:500

Version:
REV1



Legend

- Proposed dwelling (approximate location)
- RWRM_Regionwide_Models__10_year_Extent
- Regionwide Models (10 year Extent)
- Site Boundary
- Disposal field
- Reserve area
- Treatment tank (indicative location)
- Setback from field drain (5m)
- Field drain
- Stream
- Setback from river (15m)
- 1m contours (LINZ)
- Proposed shed location (approximate)

0 5 m 10 m

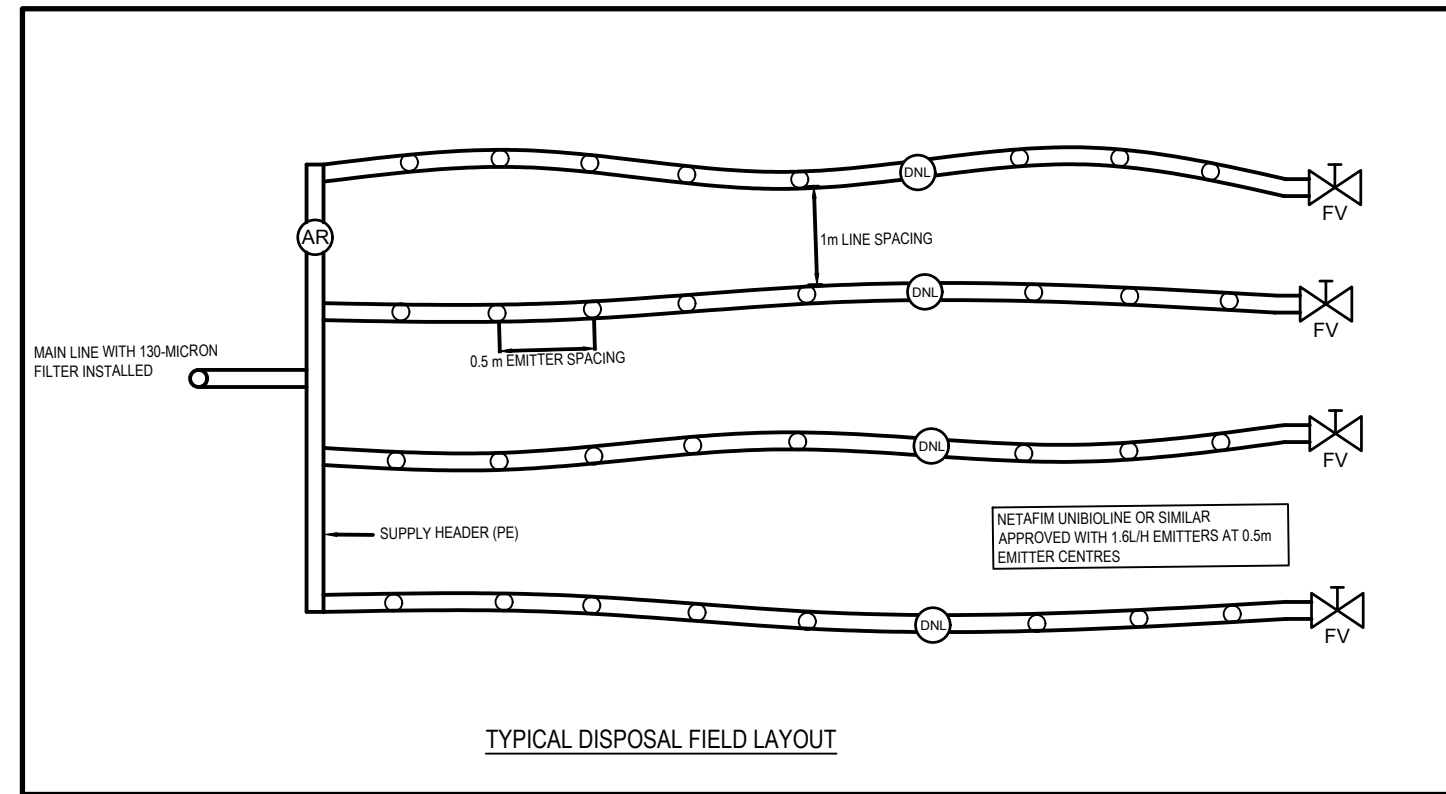
LINZ CC BY 4.0 © Imagery Basemap contributors, NRC,
Water Technology, URS & MWH

HAIGH WORKMAN
Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Wastewater Design Plan

Client: Kapiro Orchards Limited		Size: A3
Project: 71 Orchard Road	Drawn: JCum	Drawing No.: 2
Date: 05-06-2024	Checked: JP	
Proj No: 24 071	Scale: 1:500	Version: REV12



LEGEND:

AIR / VACUUM RELEASE VALVE

FV

FLUSHING VALVE

DNL NON-LEAKAGE VALVE

NOTE:

1. WHERE DRIPPERLINE LATERALS ARE NOT LAID AT THE SAME ELEVATION, DRIPLINE NON LEAKAGE VALVES ARE REQUIRED ALONG THE LENGTH OF EACH LATERAL.

Rev	Date	Description	By	Checked	DWG Disposal area layout			 HAIGH WORKMAN Civil & Structural Engineers 6 Fairway Drive Kerikeri, BOI T: 09 407 8327 F: 09 407 8378 E: info@haighworkman.co.nz DIMENSIONS MUST NOT BE SCALE MEASURED FROM THESE DRAWINGS. THE CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS INCLUDING, SITE LEVELS, HEIGHTS AND ANGLES ON SITE PRIOR TO COMMENCING ANY WORK. THE COPYRIGHT TO THESE DRAWINGS AND ALL PARTS THERE OF REMAIN THE PROPERTY OF HAIGH WORKMAN LTD. ©2020	Project 71 Orchard Road Lot 2 DP 540914		Stage 01
1	15/05/2024	Issued for Approval	JP	JP					Client James Baxter	Dwg No. 03	
					A3 Scale: NTS	Date 02/05/2023	Project No. 24 071			RC no.	
					Drawn JCum	Checked JP					Approved JP
					File						
									Sheet No. 3 of 3		

View Instrument Details



Instrument No 11653133.2
Status Registered
Date & Time Lodged 29 January 2020 10:36
Lodged By Wilkins, Marcus Yardley
Instrument Type Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Records of Title	Land District
337020	North Auckland
870642	North Auckland
870643	North Auckland
870644	North Auckland
870645	North Auckland
870648	North Auckland
870650	North Auckland
870652	North Auckland
NA123A/882	North Auckland

Annexure Schedule Contains 2 Pages.

Signature

Signed by Marcus Yardley Wilkins as Territorial Authority Representative on 12/02/2020 04:40 PM

*** End of Report ***



Private Bag 752, Harwood Ave
Takaka 5410, New Zealand
Teeephone: 0800 920 029
Phone (09) 401 5200
Fax: (09) 401 2137
Email: enr@fnhc.govt.nz
Website: www.fnhc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

*the top of the world
north of the north*

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING RC 2190698

Being the Subdivision of Pt Lot 3-4 DP 95609 Lot 2 DP 192458 Lots 3-4 DP 194423 Lots 1-11 DP 532011 - having 3/11 sh, 7x 1/11 sh in Lot 12 DP 95612, 1/6 sh in Lot 15 DP 156354
North Auckland Registry

PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) 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 these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lots 1 – 12 DP 540914

- (i) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011

Land within this lot has been identified as land that will potentially be covered by the above legislation. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include soil sampling, disturbance and/or removal and changing the use of the land.

- (ii) In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.



**Far North
District Council**

Private Bag 752, Meremere Ave
Kakaho D440, New Zealand
Freephone: 0800 920 929
Phone: (09) 401 5200
Fax: (09) 401 2132
Email: ask.us@fnkc.govt.nz
Website: www.fnc.govt.nz

Te Kaunihera o Tai Tokerau Ki Te Raki

- (iii) Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner.
- (iv) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for fire fighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509

SIGNED:

 Mr Patrick John Killalea - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at KERIKERI this 28th day of January 2020



PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand



Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH01

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT: Kapiro Orchard Ltd

DATE STARTED: 05/04/2024

DATE COMPLETED: 05/04/2024

SITE: 71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)

DRILLING METHOD: Hand Auger

HOLE DIAMETER (mm): 50mm

LOGGED BY: JP

CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT , trace clay, trace fine gravel; brown, mottled orange, speckled yellow and dark orange. Very stiff, dry, no plasticity. [Topsoil]	0.0	T.S.		Groundwater Not Encountered.		UTP	0 2 4 6 8 101214161820
SILT , minor clay, trace fine gravel; brownish orange, mottled light orange, speckled yellow. Very stiff, dry, low plasticity. [Kerikeri Volcanic Group] From 0.4m: Becomes light orange, mottled orange, speckled white.							
Clayey SILT ; light orange, streaked light pink. Very stiff, moist, low to medium plasticity.	0.5	K.V.G.					
SILT , trace of clay, trace of fine gravel; light orange, light grey and light pinkish red. Very stiff, moist, low plasticity. Gravel: weakly cemented. From 1.0m: Becomes reddish orange, speckled black and grey.	1.0					UTP UTP	Scala penetrometer testing undertaken from 1.1m to 1.6m.
End of Hole at 1.1m. (Unable To Penetrate)							
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

LEGEND

TOPSOIL

CLAY

SILT

SAND

GRAVEL

FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.
Scala penetrometer testing undertaken at base of hole from 1.1m to 1.6mbgl.
Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

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HAIGH WORKMAN
Civil & Structural Engineers

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Borehole Log - BH02

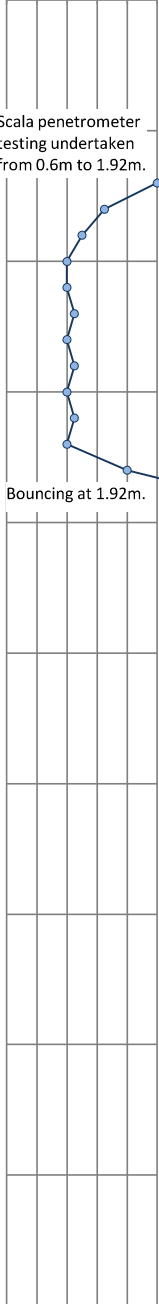
Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT: Kapiro Orchard Ltd
Date Started: 05/04/2024
Date Completed: 05/04/2024

SITE: 71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)
DRILLING METHOD: Hand Auger
HOLE DIAMETER (mm): 50mm

LOGGED BY: JP
CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT, trace fine gravel; brown, mottled orange. Very stiff, dry, no plasticity. Rootlets. [Topsoil]	0.0	T.S.		Groundwater Not Encountered.		UTP UTP	0 4 8 12 16 20 
SILT, minor clay, trace fine gravel; orange, mottled brown. Very stiff, dry to moist, low plasticity. From 0.4m: Becomes orange, mottled brown and light yellow. At 0.5m: Becomes orange and dark orange, mottled brown.	0.5	K.V.G.					
End of Hole at 0.6m. (Unable To Penetrate)	1.0						
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

LEGEND

 TOPSOIL

 CLAY

 SILT

 SAND

 GRAVEL

 FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.
Scala penetrometer testing undertaken at base of hole from 0.6m to 1.92mbgl.
Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

C:\Users\JohnPower\Haigh Workman Limited\SuiteFiles - Clients\Kapiro Orchard Ltd\Jobs\24 071 - 71 Orchard Road, Kerikeri (Lot 2 DP 540914)\Engineering\Geotech\Field Work\24 071 BHs

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Borehole Log - BH03

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm
		LOGGED BY:	JP
		CHECKED BY:	WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)																																																												
SILT , trace fine gravel; dark brown, mottled black. Very stiff, dry, no plasticity. Minor carbonaceous material. [Topsoil]	0.0	T.S.		Groundwater Not Encountered.			101418222630 <table><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>																																																												
SILT , trace clay, trace fine gravel; brown, mottled dark brown and orange. Very stiff, dry, low plasticity. [Kerikeri Volcanic Group]		K.V.G.																																																																	
From 0.5m: Becomes light brownish orange, mottled orange.	0.5																																																																		
Clayey SILT , trace fine gravel; light brownish orange, speckled orange. Very stiff, dry to moist, medium plasticity.																																																																			
SILT , minor fine to medium gravel; brownish orange and orange, mottled dark orange. Very stiff, dry to moist, no plasticity.	1.0																																																																		
End of Hole at 1.1m. (Unable To Penetrate)																																																																			
	1.5																																																																		
	2.0																																																																		
	2.5																																																																		
	3.0																																																																		
	3.5																																																																		
	4.0																																																																		
	4.5																																																																		

Scala penetrometer testing undertaken from 1.1m to 1.3m.

Bouncing at 1.3m.

LEGEND

TOPSOIL

CLAY

SILT

SAND

GRAVEL

FILL

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil. K.V.G. = Kerikeri Volcanic Group.

Scala penetrometer testing undertaken at base of hole from 1.1m to 1.3mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

Borehole Log - BH04

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)	
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger	LOGGED BY: JP
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm	CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005		Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT , trace fine gravel; light brown, mottled light orange. Very stiff, dry, no plasticity. Rootlets. [Topsoil]	0.0	KERIKERI VOLCANIC GROUP	T.S.				UTP UTP UTP 9 12	0 3 6 9 12
SILT , minor clay, trace fine gravel; light orange, streaked orange. Very stiff, dry to moist, low plasticity. [Kerikeri Volcanic Group]								
SILT & GRAVEL ; light grey mottled orange. Very stiff/dense. Gravel: fine.								
SILT , some clay, trace fine gravel; orange, mottled light yellow, speckled dark orange. Very stiff, moist, low plasticity.	0.5							
SILT , minor clay, trace fine gravel; light brownish orange, mottled orange and light grey. Very stiff, moist, low plasticity.								
SILT , some fine to medium gravel; light orange and light greenish grey, streaked orange. Very stiff, moist, no plasticity.	1.0							
SILT , trace fine gravel and coarse sand; light whitish grey, mottled orange. Very stiff, moist, no plasticity.								
From 1.4m: Trace clay; grey, streaked orange. Moist to wet.	1.5							
SILT , trace clay, trace coarse sand; light greenish grey, speckled white. Stiff, wet, no plasticity. Slightly dilatant.	2.0							
SILT , fine to medium gravel, trace clay; light greenish grey, streaked white. Very stiff, wet, no plasticity.	2.5							
End of Hole at 3.0m. (Target Depth)		3.0					UTP	
		3.5						
		4.0						
		4.5						

LEGEND



Note: UTP = Unable To Penetrate. T.S. = Topsoil.

Scala penetrometer testing undertaken to advance hand auger beyond hard/dense layer. Testing from 0.7m to 1.9mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Borehole Log - BH05

Hole Location: Refer to Site Plan

JOB No. 24 071

CLIENT:	Kapiro Orchard Ltd	SITE:	71 Orchard Road, Kerikeri (Lot 2 Deposited Plan 540914)	
Date Started:	05/04/2024	DRILLING METHOD:	Hand Auger	LOGGED BY: JP
Date Completed:	05/04/2024	HOLE DIAMETER (mm)	50mm	CHECKED BY: WT

Soil Description Based on NZGS Logging Guidelines 2005	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)			
SILT , minor fine to medium gravel; brownish orange. Very stiff, dry, no plasticity. [Topsoil & Fill]	0.0	T.S./FIL		Groundwater Not Encountered.		UTP	Scala penetrometer undertaken to advance auger hole beyond hard/dense layer, 0.3m to 0.9m.			
SILT , trace clay, trace fine to medium gravel; light brownish orange, streaked orange. Very stiff, dry, no plasticity. [Kerikeri Volcanic Group]										
SILT , minor clay, trace fine gravel; light brownish orange, mottled orange and white. Very stiff, dry to moist, low plasticity.	0.5	KERIKERI VOLCANIC GROUP								
SILT , minor fine gravel and coarse sand; light grey and orange. Very stiff, dry to moist, no plasticity. Gravel: weakly cemented.	1.0									
SILT , trace clay, trace fine gravel; light greenish grey, speckled white. Very stiff, moist to wet, no plasticity.										
From 1.6m: Becomes light brownish orange and grey. Wet.	1.5									
SILT , some fine gravel, trace coarse sand, trace clay; light greenish grey, mottled orange, speckled black. Very stiff, wet, no plasticity.										
End of Hole at 1.9m. (Unable To Penetrate)										
	2.0									
	2.5									
	3.0									
	3.5									
	4.0									
	4.5									

LEGEND



TOPSOIL



CLAY



RESULTS



SAND



GRAVEL



Elli

Corrected shear vane reading

Remoulded shear vane reading

Scala Penetrometer

Note: UTP = Unable To Penetrate. T.S. = Topsoil.

Scala penetrometer testing undertaken to advance hand auger beyond hard/dense layer. Testing from 0.3m to 0.9mbgl.

Hand Held Shear Vane S/N: DR2278. Groundwater not encountered.

*Proposed Regional Plan for Northland
Section C.6.1.3*

Other on-site treated domestic wastewater discharge – permitted activity

The discharge of domestic type wastewater into or onto land from an on-site system and the associated discharge of odour into air from the on-site system are permitted activities, provided:

Item	Requirement	Compliance Statement
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	Complies. This design has been carried out in accordance with the design guidance provided in AS/NZS 1547:2012,
2)	The volume of wastewater discharged does not exceed two cubic metres per day, and	Complies (~880 litres / day proposed)
3)	The discharge is not via a spray irrigation system or deep soakage system, and	Complies (LPED proposed)
4)	The slope of the disposal area is not greater than 25 degrees, and	Complies (Slopes are 7° or less)
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 Australian/New Zealand Standard On-Site Domestic Wastewater Management (AS/NZS 1547:2012); or b) an irrigation line system that is dose loaded and covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	Complies. The irrigation system will be dose limited. The dripperlines will be buried or covered in mulch.
6)	for the discharge of wastewater <u>onto the surface of slopes greater than 10 degrees:</u> c) the wastewater, excluding greywater, has received at least secondary treatment, and d) the irrigation lines are firmly attached to the disposal area, and e) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and f) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and g) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or h) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and	Not applicable. Slopes are not greater than 10 degrees.
7)	the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems, and	Complies – see site plan
8)	for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and	Complies
9)	the following reserve disposal areas are available at all times:	100% Reserve area provided

	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, and	
10)	<i>the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and</i>	Proposed per Maintenance recommendations
11)	<i>the discharge does not contaminate any groundwater water supply or surface water, and</i>	Will comply given provided design parameters
12)	<i>there is no surface runoff or ponding of wastewater, and</i>	Will comply given provided design parameters
13)	<i>there is no offensive or objectionable odour beyond the property boundary.</i>	Will comply given provided design parameters

FAR NORTH DISTRICT COUNCIL
On-site Wastewater Disposal Site Evaluation
Investigation Checklist

Part A –Owners Details

1. Applicant Details:

Applicant Name	James Baxter
Company Name	
Property Owner Name(s)	James Baxter

Nature of Applicant*	Owner
----------------------	-------

(*i.e. Owner, Leasee, Prospective Purchaser, Developer)

2. Consultant / Site Evaluator Details:

Consultant/Agent Name	Haigh Workman			
Site Evaluator Name	Joshua Cuming			
Postal Address	PO Box 89			
	Kerikeri			
Phone Number	Business	09 407 8327	Private	
	Mobile		Fax	
Name of Contact Person	Joshua Cuming			
E-mail Address	joshcuming@haighworkman.co.nz			

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

Yes		No	☒	(Please tick)
If yes, give Reference Numbers and Description				
There are no known existing discharge consents for the proposed site.				

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted

If so, specify Application Details and Consent No.

(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

Part B- Property Details

1. Property for which this application relates:

Physical Address of Property	71 Orchard Road, Kerikeri
Territorial Local Authority	FAR NORTH DISTRICT COUNCIL
Regional Council	NORTHLAND REGIONAL COUNCIL
Legal Status of Activity	Permitted: ☒ Controlled: Discretionary:
Relevant Regional Rule(s) (Note 1)	C.6.1.3 Proposed Regional Plan for Northland (Appeals Version)
Total Property Area (m ²)	6.2685 - Total Site Area.
Map Grid Reference of Property If Known	

2. Legal description of land (as shown on Certificate of Title)

Lot No.	2	DP No.	540914	CT No.	
Lot No.				CT No.	
Other (specify)					

Please ensure copy of Certificate of Title is attached ☒

PART C: Site Assessment - Surface Evaluation

Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

Yes	☒	No		(Please tick one)
-----	-------------------------------------	----	--	-------------------

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

No previous development on the area of the site being developed. Balance of the site is an orchard.

1. Has a Slope Stability Assessment been carried out on the property?

Yes	✓	No	
-----	---	----	--

Please tick

If No, why not?

If Yes, please give details of report (and if possible, please attach report):

Author	John Power
Company/Agency	Haigh Workman Ltd
Date of Report	May 2024

It is considered that at present, the existing site and the proposed development location is currently stable and suitable for development.

2. Site Characteristics (See Table 1 attached):

Provide descriptive details below:

Performance of Adjacent Systems:

N/A

Estimated Rainfall and Seasonal Variation:

1775 mm per year (1016 mm winter, 759 mm summer). Kerikeri Airport – Historical average NIWA – The climate of Northland.

Vegetation / Tree Cover:

Exotic vegetation including trees.

Slope Shape: (Please provide diagrams)

Sloping northeast

Slope Angle:

Up to 7 degrees in disposal area

Surface Water Drainage Characteristics:

Gently slopes towards stream to the north of site. Field drain to the south east of disposal area.

Flooding Potential: NO

If yes, specify relevant flood levels on appended site plan, i.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.

Surface Water Separation:

Required setbacks are achieved.

Site Characteristics: or any other limitation influencing factors

No.

3. Site Geology

Check Rock Maps

Kerikeri Volcanic Group

Geological Map Reference Number

GNS Geological Map 2

4. What Aspect(s) does the proposed disposal system face? (please tick).

North		West	
North-West		South-West	
North-East	✓	South-East	
East		South	

5. Site clearances, (Indicate on site plan where relevant)

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)	Minimum Set back Distances (m)	Regulation
Boundaries	<i>1.5</i>	<i>> 1.5</i>	<i>1.5</i>	<i>NRC</i>
Surface water, drains	<i>> 5</i>	<i>> 5</i>	<i>5</i>	<i>NRC</i>
Groundwater	<i>> 1.5</i>	<i>> 1.5</i>	<i>1.5</i>	<i>NRC</i>
Stands of Trees/Shrubs	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>-</i>
Wells, water bores	<i>>20</i>	<i>>20</i>	<i>20</i>	<i>NRC</i>
Embankments/retaining walls	<i>> 3</i>	<i>> 3</i>	<i>3 or 45°</i>	<i>NRC</i>
Buildings	<i>> 3</i>	<i>> 3</i>	<i>3</i>	<i>NRC</i>
Coastal Marine area	<i>> 30</i>	<i>> 30</i>	<i>30</i>	<i>FNDC</i>
River, lake, stream, pond, wetland	<i>> 15</i>	<i>> 15</i>	<i>15</i>	<i>NRC</i>
Exclusion Areas				
Floodplain	<i>> 5 % AEP</i>	<i>> 5 % AEP</i>	<i>5 % AEP</i>	<i>NRC</i>

PART D: Site Assessment - Subsoil Investigation

Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

Test Pit			No of Test Pits	<i>0</i>
Bore Hole	✓	<i>Up to 3m depth</i>	No of Bore Holes	<i>3</i>
Other (specify):				

Soil Report attached?

Yes	✓	No		Please tick
-----	---	----	--	-------------

2. Was fill material intercepted during the subsoil investigation?

Yes		No	✓	Please tick
-----	--	----	---	-------------

If yes, please specify the effect of the fill on wastewater disposal

3. Percolation testing (mandatory and site specific for trenches in soil type 4 to 7)

Please specify the method

Test Report Attached?	Yes		No	✓	Please tick
-----------------------	-----	--	----	---	-------------

4. Are surface water interception/diversion drains required?

Yes	☒	No	☐	Please tick
-----	-------------------------------------	----	--------------------------	-------------

If yes, please show on site plan

4a Are subsurface drains required?

Yes	☐	No	☒	Please tick
-----	--------------------------	----	-------------------------------------	-------------

If yes, please provide details

5. Please state the depth of the seasonal water table:

Winter	> 3	m	Measured	☐	Estimated	☒
Summer	> 3	m	Measured	☒	Estimated	☐

6. Are there any potential storm water short circuit paths?

Yes	☐	No	☒	Please tick
-----	--------------------------	----	-------------------------------------	-------------

If the answer is yes, please explain how these have been addressed

7. Based on results of subsoil investigation above, please indicate the disposal field soil category

Is Topsoil Present?	Yes	If so, Topsoil Depth?	0.2m
---------------------	-----	-----------------------	------

AS/NZS 1547:2012	Description	Drainage	Tick One
1	Gravel, coarse sand	Rapid draining	☐
2	Sandy loams - well drained	Well-draining	☐
3	Loams	Moderate well drainage	☐
4	Clay Loams	Imperfectly drained	☐
5	Light Clays	Poorly draining	☒
6	Medium to heavy clays	Very Poorly drained	☐

Reasons for placing in stated category

Provided from soil characteristics encountered during site specific investigation

PART E: Discharge Details
1. Water supply source for the property (please tick):

Rainwater (roof collection)	☒
Bore/well	☐
Public supply	☐

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available

Number of Bedrooms	3		
Design Occupancy	5		(Number of People)
Per capita Wastewater Production	145	160	180 (tick) (Litres per person per day)
Other - specify	90		
2 workers in shed producing 40l/p/d = 80 litres per day.			
Total Daily Wastewater Production	880		(litres per day)

3. Do any special conditions apply regarding water saving devices

a) Full Water Conservation Devices?	Yes		No	☒	(Please tick)
b) Water Recycling - what %?		%			(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage

4. Is Daily Wastewater Discharge Volume more than 2000 litres:

Yes		(Please tick)
No	☒	(Please tick)

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

5. Gross Lot Area to Discharge Ratio:

Gross Lot Area	62,685	m ²
Total Daily Wastewater Production	880	(Litres per day)(from above)
Lot Area to Discharge Ratio	>3	

7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?

Yes	☒	No		Please tick
-----	-------------------------------------	----	--	-------------

8. Is a Northland Regional Council Discharge Consent Required?

Yes		No	☒	(Please tick)
-----	--	----	-------------------------------------	---------------

PART F: Primary Treatment

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, dual chamber explain why not

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
	Total Capacity	

2. Type of Septic Tank Outlet Filter to be installed?

Yes – 3.5mm outlet filter must be attached as filtration outlet on sullage/greywater settlement tank per Section 15.1.5 of the Northland Regional Water and Soil Plan (See Permitted Activity requirements, Pp 152-153)

<https://www.nrc.govt.nz/media/n5jckq0t/consolidatedregionalwaterandsoilplanasat2014updated2016web.pdf>

PART G: Secondary and Tertiary Treatment

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

Secondary Treatment	☒	
Home aeration plant	☐	
Commercial aeration plant	☐	
Intermediate sand filter	☐	
Recirculating sand filter	☐	
Recirculating textile filter	☐	
Clarification tank	☐	
Tertiary Treatment	☐	
Ultraviolet disinfection	☐	
Chlorination	☐	
Other		Specify

PART H: Land Disposal Method

1. Please indicate the proposed loading method: (please tick)

Gravity	☐
Dosing Siphon	☒
Pump	☐

2. High water level alarm to be installed in pump chambers

Yes ☒

If not to be installed, explain why

3. If a pump is being used, please provide the following information:

Total Design Head	<i>TBC by installer</i>	(m)
Pump Chamber Volume	<i>At least 300L</i>	(Litres)
Emergency Storage Volume	<i>At least 960L</i>	(Litres)

4. Please identify the type(s) of land disposal method proposed for this site: (please tick)

Surface Dripper Irrigation		
Sub-surface Dripper irrigation	✓	
Standard Trench		
Deep Trench		
Mound		
Evapo-transpiration Beds		
Other		Specify

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

Loading Rate	<i>3</i>	(Litres/m2/day)
Disposal Area	<i>Design</i>	<i>294</i> (m2)
Basal	<i>Reserve</i>	<i>294</i> (m2)

Explanation

<i>3mm/day loading rate adopted for Cat 5soils (AS/NZS1547).</i>

6. What is the available reserve wastewater disposal area

Reserve Disposal Area (m ²)	<i>294</i>
Percentage of Primary Disposal Area (%)	<i>100</i>

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:
Description and Dimensions of Disposal Field:

<i>29.4 x 10m dripper field. Plan a included in appendices.</i>				
Plan Attached?	Yes	✓	No	(Please tick)

If not, explain why not

--

PART I: Maintenance & Management

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

Yes		No	☒	(Please tick)
-----	--	----	-------------------------------------	---------------

Name of Suppliers

To be advised by client

PART J: Assessment of Environmental Effects

1. Is an assessment of environmental effects (AEE) included with application?

Yes	☒	No		(Please tick)
-----	-------------------------------------	----	--	---------------

If Yes, list and explain possible effects

No negative outcomes expected given the provided design is implemented and maintained well on-site.

PART K: Is Your Application Complete?

In order to provide a complete application you have remembered to:

Fully Complete this Assessment Form	☒
Include a <i>Location Plan</i> and <i>Site Plan</i> (with Scale Bars)	☒
Attach an Assessment of Environmental Effects (AEE)	☒

Declaration

I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

Name <i>Joshua Cuming</i>	Signature	
Position <i>Environmental Geologist</i>	Date	16.05.2024

Note

Any alteration to the site plan or design after approval will result in non-compliance.

ENVIRONMENTAL EFFECTS, MITIGATION MEASURES

A. Assessment of Environmental Effects

Impact on Surface Water (incl. flood times) [Minor](#)

Impact on Ground Water [Minor](#)

Impact on Soils [Minor](#)

Impact on Amenity Values [Minor](#)

B. Public Health Issues:

Should access to the disposal area be discouraged? [Yes](#)

Will odour effects be greater than usual? [No](#)

Will noise effects be greater than usual? [No](#)

C. Mitigation Measures

Has conservative approach been taken in choosing system design capacity? [Yes, consideration of soil type](#)

Is system design robust (cope with fluctuations of load, climate)? [Yes](#)

Is level of treatment high? [Medium – final treatment within soil](#)

Protection against failure storage, alarms? [Yes.](#)

Is hydraulic loading rate conservative? [Yes, within recommended range for loading rate](#)

Is distribution area protected from hydraulic overload (interception drains)? [Yes](#)

Will soil type enhance treatment? [Yes](#)

Are desired separation distances attainable? (to surface water, groundwater, bores) [Yes](#)

Is the reserve area adequate? [Yes](#)

ON-SITE DOMESTIC WASTEWATER MANAGEMENT

Advice to Homeowner/Occupier

Homeowner and occupiers are legally responsible to keep their on-site wastewater system in good working order. The following schedule gives advice on the use and maintenance of the system.

1. Use of the System

For the on-site wastewater system to work well there are some good habits to encourage and some bad habits to avoid:

1.1 In order to reduce sludge building up in the tank:

- (i) Scrape all dishes to remove fats, grease etc, before washing.
- (ii) Keep all possible solids out of system.
- (iii) Don't use a garbage grinder unless the system has been specifically designed to carry the extra load.
- (iv) Don't put sanitary napkins, other hygiene products or disposable nappies into the system.

1.2 In order to keep bacteria working in the tank and in the land-application area:

- (i) Use biodegradable soaps.
- (ii) Use a low-phosphorus detergent.
- (iii) Use a low-sodium detergent in dispersive soil areas.
- (iv) Use detergents in the recommended quantities.
- (v) Don't use powerful bleaches, whiteners, nappy soakers, spot removers and disinfectants.
- (vi) Don't put chemicals or paint down drain.

1.3 Conservation of water will reduce the volume of effluent disposed to the land-application area, make it last longer and improving its performance. Conservation measures could include:

- (i) Installation of water-conservation fittings.
- (ii) Taking showers instead of baths.
- (iii) Only washing clothes when there is a full load.
- (iv) Only using the dishwasher when there is a full load.

1.4 Avoid overloading the system by spacing out water use evenly. For example not doing all the washing on one day and by not running the washing machine and dishwasher at the same time.

1.5

2. Maintenance

2.1 The primary wastewater-treatment unit (septic tank) will need to:

- (i) Be desludged regularly i.e. every 3 to 5 years, or when scum and sludge occupy 2/3 of the volume of the tank (or first stage of a two-stage system).
- (ii) Be protected from vehicles.
- (iii) Have any grease trap cleaned out regularly.
- (iv) Have the vent and/or access cover of the septic tank kept exposed.
- (v) Have the outlet filter inspected and cleaned.

2.2 The land-application area needs protection as follows:

- (i) Where surface water diversion drains are required by the design, these need to be kept clear to reduce the risk of stormwater runoff entering the effluent soakage area.
- (ii) No vehicles or stock should be allowed on trenches or beds.
- (iii) Deep rooting trees or shrubs should not be grown over absorption trenches or pipes.
- (iv) Irrigation areas are not play areas for children and access should be restricted.
- (v) Any evapo-transpiration areas should be designed to deter pedestrian traffic.
- (vi) The baffles or valves in the distribution system should be periodically (monthly or seasonally) changed to direct effluent into alternative trenches or beds, if required by the design.

2.3 Evapo-transpiration and irrigation areas should have their grass mowed and plants maintained to ensure that these areas take up nutrients with maximum efficiency.

2.4 For aeration treatment systems. Check equipment and:

- (i) Follow the manufacturer's instructions for maintaining and cleaning pumps, siphons, and septic tank filters.
- (ii) Clean disc filters or filters screens on irrigation-dosing equipment periodically by rinsing back into the primary wastewater-treatment unit.
- (iii) Flush drip irrigation lines periodically to scour out any accumulated sediment.

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance on use of Producer Statements (formerly page 2) is available at www.engineeringnz.org)

ISSUED BY: Haigh Workman Limited (Job number: 24 071)
(Design Firm)

TO: James Baxter
(Owner/Developer)

TO BE SUPPLIED TO: Far North District Council
(Building Consent Authority)

IN RESPECT OF: On-site wastewater system
(Description of Building Work)

AT: 71 Orchard Road
(Address)

Town/City: Kerikeri (Address) **LOT** 2 **DP** 1999909 **SO**

We have been engaged by the owner/developer referred to above to provide:

A design for an onsite wastewater system in accordance with technical publication TP58

(Extent of Engagement)

services in respect of the requirements of Clause(s) **G13 (durability 15 yrs)** of the Building Code for:

☐ All or ☒ Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

☒ Compliance Documents issued by the Ministry of Business, Innovation & Employment **G13/VM4** or
(verification method/acceptable solution)

☐ Alternative solution as per the attached schedule

The proposed building work covered by this producer statement is described on the drawings titled:

Wastewater Design Plan and numbered **24 071**;
together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

- (i) Site verification of the following design assumptions site verification of the soil type.
- (ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:

☐ CM1 ☒ CM2 ☐ CM3 ☐ CM4 ☐ CM5 (Engineering Categories) or ☐ as per agreement with owner/developer (Architectural)

I, John Papesch am: ☒ CPEng 224301 # ☐ Reg Arch #
(Name of Design Professional)

I am a member of: ☒ Engineering New Zealand ☐ NZIA and hold the following qualifications: **BE (Civil) CMEngNZ**

The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Design Firm is a member of ACENZ: ☐

SIGNED BY: John Papesch (Signature)
(Name of Design Professional)

ON BEHALF OF: Haigh Workman Limited Date: 6/06/2024
(Design Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.
THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, ENGINEERING NEW ZEALAND AND NZIA

GUIDANCE ON USE OF PRODUCER STATEMENTS

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting Engineers New Zealand in consultation with the Building Officials Institute of New Zealand. The original suit of producer statements has been revised at the date of this form as a result of enactment of the Building Act (2004) by these organisations to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with reasonable grounds for the issue of a Building Consent or a Code Compliance Certificate, without having to duplicate design or construction checking undertaken by others.

PS1 Design Intended for use by a suitably qualified independent design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 Design Review Intended for use by a suitably qualified independent design professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 Construction Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011²

PS4 Construction Review Intended for use by a suitably qualified independent design professional who undertakes construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACENZ, Engineering NZ and NZIA to interpret the Producer Statement.

Competence of Design Professional

This statement is made by a Design Firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its designers.

A competent design professional will have a professional qualification and proven current competence through registration on a national competence based register, either as a Chartered Professional Engineer (CPEng) or a Registered Architect.

Membership of a professional body, such as Engineering New Zealand (formerly IPENZ) or the New Zealand Institute of Architects (NZIA), provides additional assurance of the designer's standing within the profession. If the design firm is a member of the Association of Consulting Engineers New Zealand (ACENZ), this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent design professional".

*Professional Indemnity Insurance

As part of membership requirements, ACENZ requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard, small projects. If the parties deem this inappropriate for large projects the minimum may be up to \$500,000.

Professional Services during Construction Phase

There are several levels of service which a Design Firm may provide during the construction phase of a project (CM1-CM5 for Engineers³). The Building Consent Authority is encouraged to require that the service to be provided by the Design Firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design firm's engagement.

Attached Particulars

Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.

Refer Also:

- 1 Conditions of Contract for Building & Civil Engineering Construction
NZS 3910: 2013
- 2 NZIA Standard Conditions of Contract SCC 2011
- 3 Guideline on the Briefing & Engagement for Consulting Engineering Services
(ACENZ/IPENZ 2004)
- 4 PN Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org
www.nzia.co.nz



View Instrument Details



Instrument No 11346721.10
Status Registered
Date & Time Lodged 26 March 2019 15:47
Lodged By Dreifuss, Kim Dunn
Instrument Type Easement Instrument



Affected Records of Title	Land District
870642	North Auckland
870645	North Auckland
870648	North Auckland
870649	North Auckland
870650	North Auckland
870652	North Auckland
337020	North Auckland

Annexure Schedule: Contains 2 Pages.

Grantor Certifications

- I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Guy Robert Carne Bidwill as Grantor Representative on 26/03/2019 10:39 AM

Grantee Certifications

- I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument ☒
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument ☒
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply ☒
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period ☒

Signature

Signed by Guy Robert Carne Bidwill as Grantee Representative on 26/03/2019 10:39 AM

*** End of Report ***

Form 22**Easement Instrument to grant easement or *profit à prendre***

(Section 109 Land Transfer Act 2017)

Grantor

Turners and Growers Horticulture Limited

Grantee

Turners and Growers Horticulture Limited

Grant of Easement or *Profit à prendre*

The Grantor being the registered owner of the burdened land set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s).

Schedule A

Purpose of Easement, or <i>profit</i>	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right to convey water	G on Deposited Plan 532011	Lot 1 Deposited Plan 532011 (Record of Title 870642)	Lot 4 Deposited Plan 532011 (Record of Title 870645), Lot 7 Deposited Plan 532011 (Record of Title 870648), Lot 9 Deposited Plan 532011 (Record of Title 870650), Lot 11 Deposited Plan 532011, Part Lot 3 DP 95609 and Lot 2 DP 194424 (Record of Title 870652) and Part Lot 4 Deposited Plan 95609 (Record of Title 337020)

	E on Deposited Plan 532011	Lot 8 Deposited Plan 532011 (Record of Title 870649)	Lot 1 Deposited Plan 532011 (Record of Title 870642), Lot 4 Deposited Plan 532011 (Record of Title 870645), Lot 7 Deposited Plan 532011 (Record of Title 870648), Lot 9 Deposited Plan 532011 (Record of Title 870650), Lot 11 Deposited Plan 532011, Part Lot 3 DP 95609 and Lot 2 DP 194424 (Record of Title 870652) and Part Lot 4 Deposited Plan 95609 (Record of Title 337020)
	F on Deposited Plan 532011	Lot 1 Deposited Plan 532011 (Record of Title 870642)	Lot 8 Deposited Plan 532011 (Record of Title 870649)

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule 5 of the Property Law Act 2007.