



Our Reference: 10855.1 (FNDC)

11 March 2026

Resource Consents Department
Far North District Council
JB Centre
KERIKERI

Dear Sir/Madam

RE: Proposed Subdivision at 108 Kapiro Road, - T & G Global Limited

I am pleased to submit application on behalf of T & G Global Limited, for proposed subdivision of two adjacent titles zoned Rural Production, where both titles are dated prior to April 2000 and where the subdivision layout of each title is a restricted discretionary activity. The subdivision also requires consent under NES for Assessing and Managing Contaminants in Soil to Protect Human Health, as a controlled activity.

The application fee of \$7,066 has been paid separately via direct credit.

Regards

Lynley Newport
Senior Planner
THOMSON SURVEY LTD

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 [Form 9](#)). 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:

T & G Global Limited on behalf of Turners & Growers Fresh Limited

Email:

Phone number:

Postal address:

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

Have you been the subject of abatement notices, enforcement orders, infringement notices and/or convictions under the Resource Management Act 1991? Yes No

If yes, please provide details.

6. Address for correspondence

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

Name/s:

Lynley Newport

Email:

lynley@turners.co.nz

Phone number:

Postal address:

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

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

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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:

Turners & Growers Fresh Limited

Property address/
location:

c/- T&G Global Limited

P O Box 56

Shortland Street

Auckland 1010

Postcode

8. Application site details

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

Name/s:	Turners & Growers Fresh Limited		
Site address/ location:	Kapiro Road		
	KERIKERI		
	Postcode		
Legal description:	Lots 3 & 4 DP 148680	Val Number:	
Certificate of title:	NA88B/704 & NA88B/705		

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.

Contact Stephanie Fife (T&G Site Manager) before accessing site

Mob +64 212210462

Email: stephanie.fife@tandgfresh.co.nz

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.

Subdivisions of two adjacent titles both zoned Rural Production, to create four additional titles, as a restricted discretionary activity under the Operative District Plan and a controlled activity under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

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

Disturbing, removing or sampling soil

Changing the use of a piece of land

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

14. Draft conditions:

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

If yes, please be advised that the timeframe will be suspended for 5 working days as per s107G of the RMA to enable consideration for the draft conditions.

15. 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)

T&G Global Limited c/- Ian Hendry

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.

15. Billing details continued...

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)

Ian David Hendry

Signature:

(signature of bill payer)

Date 06-Mar-2026

MANDATORY

16. 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.

17. Declaration

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

Name (please write in full)

Ian David Hendry

Signature

Digitally signed by Ian Hendry
Date: 2026.03.06 09:36:21 +13'00'

Date 06-Mar-2026

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

See overleaf for a checklist of your information...

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.

T & G Global

PROPOSED SUBDIVISION

**Requiring consent under the Far North District Plan
and the
National Environmental Standard for Assessing and Managing
Contaminants in Soil to Protect Human Health**

108 Kapiro Road, Kerikeri

PLANNING REPORT AND ASSESSMENT OF ENVIRONMENTAL EFFECTS



**Thomson Survey Ltd
Kerikeri**

1.0 INTRODUCTION

1.1 The Proposal

The applicants propose to carry out a subdivision of land at 108 Kapiro Road, Kerikeri, held in two titles, to create a total of 6 lots (4 additional). The proposal is to create two additional vacant residential sections of approximately 5,000m² from each of the existing titles, leaving a large residual horticultural/agricultural lot for each title. Whilst one application, the proposal is effectively two subdivisions on adjacent titles, both dated prior to April 2000, and both meeting restricted discretionary thresholds.

This results in the Scheme Plan presented in Appendix 1, where proposed Lots 1-3 are within Lot 3 DP 148680, and Lots 4-6 are within Lot 4 DP 148680. Lot sizes are proposed to be:

Lot 1	5240m ² (vacant land);
Lot 2	5040m ² (vacant land);
Lot 3	4.698ha (citrus orchard);
Lot 4	5100m ² (vacant land);
Lot 5	5030m ² (vacant land); and
Lot 6	10.314ha (containing several existing buildings/tunnel houses & Vodafone equipment at rear of site)

Both titles are currently accessed off an expansive commercial scale crossing from Kapiro Road, located on an adjacent title (owned by applicant). That adjacent title does not form part of this application and no right of way is proposed over that access. Instead it is proposed to form a new double width crossing off Kapiro Road to serve Lots 1-3 and 6. Lots 4 & 5 are proposed to have their own single width crossings directly off Kapiro Road.

Internal easements are provided for as shown on the scheme plan in Appendix 1.

1.2 Scope of this Report

This assessment and report accompanies the Resource Consent Application and is provided in accordance with Section 88 and Schedule 4 of the Resource Management Act 1991. The application seeks consent under the District Plan for restricted discretionary activity subdivision. The name and address of the owner of the property is contained in the Form 9 Application form.

The subdivision requires consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS) as a controlled activity.

2.0 PROPERTY DETAILS

Location:	108 Kapiro Road, Kerikeri
Legal description:	Lots 3 & 4 DP 148680
Record of Title:	NA88B/704 & NA88B/705, both dated 1992, with a combined area of 17.0532ha (copies attached in Appendix 3).

3.0 SITE DESCRIPTION

3.1 Physical Site Characteristics

The site has historically been utilised for horticulture (citrus) and currently still has lemon trees standing on the bulk of the land. There is a central raceway / access running the length of

the site, north to south. The site accommodates Turners and Growers site office, staff facilities and carparking area (within Lot 6), along with several tunnel houses, also within the front portion of Lot 6. Near the rear of the site is a Vodafone tower and associated equipment.



Main access through the site, looking south

Land to be in Lots 4 & 5 has supported crops but these are no longer in any kind of productive use. Land to be in Lots 1 & 2 and both balance areas is in citrus. At the rear of the tunnel houses on Lot 6, and at the southern boundary of Lots 4 & 5, there is a watercourse with dense vegetation (predominantly exotic) on both banks. The watercourse flows west to east. There is also an area of scrubland/bush at the very south of the site, all to remain in the larger balance lots.



Looking due east along the southern edge of the riparian vegetation (north end of Lot 6)

The topography is such that the land is level on entry into the site, then slopes gently downwards as one progresses into the site, and across an existing watercourse, before rising gently again to a high point about midway through the balance lots. The land then slopes gently down again towards the rear (south) of the site.

The site is not serviced by any Council 3 water infrastructure.

3.2 Mapped Site Characteristics

The property is zoned Rural Production in the Operative District Plan, with no resource overlays applying. It is proposed to be zoned Horticulture in the Proposed District Plan, again with no overlay applying.

The Land Use Capability classifications (soil class) mapped across the site is Class 3 over the majority, with the southern-most portion mapped as Class 4.

The site is not currently shown/listed as a HAIL site or Selected Land Use [source: FNDC online HAIL sites map and NRC online SLU map], but is known to have historically been, and still is, used for horticulture.

The site does not contain any mapped or scheduled historic sites, notable trees, archaeological sites or Sites of Significance to Maori [source: FNDC online Historic sites map]. The site is not mapped as containing any areas of significant indigenous vegetation or habitat and has no areas set aside for Conservation.

The site is not mapped as containing any high or outstanding landscape or natural character values [source: FNDC and NRC online maps]. Neither does the site contain any biodiversity wetlands [source: NRC online maps]. The site is mapped as being within a 'kiwi present' area [source: FNDC online maps].

The site is not mapped as being subject to any flood hazard [source: FNDC's PDP maps].

3.3 Legal Interests

The land in Lot 3 DP 148680 is subject to a right of way in favour of Lots 2 & 4 (the latter being part of the application site).

3.4 Consent History

An examination of the property files for both Lots 3 & 4 DP 148680 shows the following:

Building Consent History:

BP5006379, issued in 1986 for garage/implement shed;

BC4058839, issued in 1986 for implement shed;

BC-1995-15020, issued in 1994 for packhouse alterations;

BC 1999-869, issued in 1998 for new office and lab;

BC 2001-939 for new plastic commercial greenhouse;

BC 2001-1421, issued in 2001 for a new roof over potting area;

Proposed subdivision

BC 2003-993 & BC 2003-1045 both associated with a relocatable for workshop shed/storage;

BC-2005-962 issued in 2004 for a farm building;

BC 2006-173, issued in 2005 to use a relocated building as an office;

BC 2014-975, issued in 2014 for plastic tunnel extension to existing greenhouse;

EXM-2019-10006 – exemption from requiring a building consent, for 4 x 4 transportable portacom buildings, canopy and deck construction and the installation of water tanks.

Resource Consent History:

792804-TCPBIC – historic subdivision;

RC 2010900, issued in 2001 for potting shed;

RC 2030599, issued in 2003 for the relocatable workshop shed/storage – refer BC 2003-1045;

RC 2050555, issued in 2004 for an implement shed;

RC 2060084, issued in 2005 for the use of a relocatable as an off – refer BC 2006-173;

RC 2220785-RMACOC – for the Vodafone installation.

4.0 SCHEDULE 4 – INFORMATION REQUIRED IN AN APPLICATION

Clauses 2 & 3: Information required in all applications

<i>(1) An application for a resource consent for an activity must include the following:</i>	
<i>(a) a description of the activity:</i>	Refer Sections 1 and 5 of this Planning Report.
<i>(b) an assessment of the actual or potential effect on the environment of the activity:</i>	Refer to Section 6 of this Planning Report.
<i>(b) a description of the site at which the activity is to occur:</i>	Refer to Section 3 of this Planning Report.
<i>(c) the full name and address of each owner or occupier of the site:</i>	This information is contained in the Form 9 attached to the application.
<i>(d) a description of any other activities that are part of the proposal to which the application relates:</i>	Refer to Section 3 of this Planning Report. for existing activities within the site. The application is for subdivision.
<i>(e) a description of any other resource consents required for the proposal to which the application relates:</i>	Consent is being sought for subdivision, pursuant to the Far North Operative District Plan; and for consent pursuant to the NES for Assessing and Managing Contaminants in Soil to Protect Human Health.
<i>(f) an assessment of the activity against the matters set out in Part 2:</i>	Refer to Section 7 of this Planning Report.

<p><i>(g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b), including matters in Clause (2):</i></p> <p><i>(a) any relevant objectives, policies, or rules in a document; and</i> <i>(b) any relevant requirements, conditions, or permissions in any rules in a document; and</i> <i>(c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).</i></p>	Refer to Sections 5 and 7 of this Planning Report.
<p><i>(3) An application must also include any of the following that apply:</i></p>	
<p><i>(a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):</i></p> <p><i>(b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):</i></p> <p><i>(c) if the activity is to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, an assessment of the activity against any resource management matters set out in that planning document (for the purposes of section 104(2B)).</i></p>	<p>The site is vacant land.</p> <p>There is no existing resource consent. Not applicable.</p> <p>The site is not within an area subject to a customary marine title group. Not applicable.</p>

Clause 4: Additional information required in application for subdivision consent

<p><i>(4) An application for a subdivision consent must also include information that adequately defines the following:</i></p>	
<p><i>(a) the position of all new boundaries;</i> <i>(b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan;</i> <i>(c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:</i></p>	Refer to Scheme Plans in Appendix 1.

<p>(d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:</p> <p>(e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:</p> <p>(f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):</p> <p>(g) the locations and areas of land to be set aside as new roads.</p>	
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Clause 5: Additional information required for application for reclamation – not applicable.

Clause 6: Information required in assessment of environmental effects

<i>(1) An assessment of the activity's effects on the environment must include the following information:</i>	
<i>(a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:</i>	Refer to Section 6 of this planning report. The activity will not result in any significant adverse effect on the environment.
<i>(b) an assessment of the actual or potential effect on the environment of the activity:</i>	Refer to Section 6 of this planning report.
<i>(c) if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use:</i>	Not applicable as the application does not involve hazardous installations.
<i>(d) if the activity includes the discharge of any contaminant, a description of— (i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and (ii) any possible alternative methods of discharge, including discharge into any other receiving environment:</i>	The subdivision does not involve any discharge of contaminant.
<i>(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:</i>	Refer to Section 6 of this planning report.
<i>(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:</i>	Refer to Section 8 of this planning report. No affected persons are identified.

<i>g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:</i>	No monitoring is required as the scale and significance of effects does not warrant any.
<i>(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).</i>	No protected customary right is affected.

Clause 7: Matters that must be addressed by assessment of environmental effects (RMA)

<i>(1) An assessment of the activity's effects on the environment must address the following matters:</i>	
<i>(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:</i>	Refer to Sections 6 and 8 of this planning report and also to the assessment of objectives and policies in Section 7.
<i>(b) any physical effect on the locality, including any landscape and visual effects:</i>	Refer to Section 6. The activity is a restricted discretionary activity and visual effects are not a matter to which the Council restricts its discretion. The site has no outstanding or high landscape or natural character values.
<i>(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:</i>	Refer to Section 6.
<i>(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:</i>	Refer to Section 6.
<i>(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants:</i>	The subdivision will not result in the discharge of contaminants, nor any unreasonable emission of noise.
<i>(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.</i>	The subdivision site is not subject to natural hazards and does not involve hazardous installations.

5.0 ACTIVITY STATUS

5.1 Operative District Plan

The property is zoned Rural Production. No resource features apply. The subdivision standards applying in the zones are contained in Table 13.7.2.1 as shown below.

TABLE 13.7.2.1: MINIMUM LOT SIZES

(viii) RURAL PRODUCTION ZONE

Controlled Activity Status (Refer also to 13.7.3)	Restricted Discretionary Activity Status (Refer also to 13.8)	Discretionary Activity Status (Refer also to 13.9)
The minimum lot size is 20ha.	1. Subdivision that complies with the controlled activity standard, but is within 100m of the boundary of the Minerals Zone; 2. The minimum lot size is 12ha; or 3. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 4,000m² and there is at least 1 lot in the subdivision with a minimum lot size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; or 4. A maximum of 5 lots in a subdivision (including the parent lot) where the minimum size of the lots is 2ha, and where the subdivision is created from a site that existed at or prior to 28 April 2000; 5.....	1. The minimum lot size is 4ha; or 2. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 2,000m ² and there is at least 1 lot in the subdivision with a minimum size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; or 3. A subdivision in terms of a management plan as per Rule 13.9.2 may be approved.

Both Titles are dated 1992. Each is subject to subdivision application pursuant to option 3 of the restricted discretionary options in the above table. There will be two lots in excess of 4,000m² and a balance lot exceeding 4ha in area, in both instances. The activity is therefore a restricted discretionary activity.

Zone Rules

The land currently in Lot 3 DP 148680 is vacant land and its subdivision does not create any breach of zone rules. Lot 4 DP 148680 contains existing buildings/structures, all of which will be in the large 10.3ha lot. There is no breach of boundary related rules as a result of new proposed boundary between Lots 4 & 6 and any existing development within the latter. In summary, I have not identified any zone rule breaches.

District Wide Rules

There are no applicable rules in Chapter 12 of the Operative District Plan. Excavation and/or filling will be minor, related solely to access. Volume will be well within permitted activity thresholds.

In regard to the requirement to comply with rules in 15.1.6C Access, I have not identified any breaches. New entrances to lots will be to the required standard, and internal shared private access will also be to the required standard.

5.2 Proposed District Plan

The property is zoned Rural Production under the new Proposed District Plan, publicly notified on 27th July 2022. Immediate legal effect has been given to a limited number of rules and these are addressed below.

Rules HS-R2, R5, R6 and R9 in regard to hazardous substances on scheduled sites or areas of significance to Maori, significant natural areas or a scheduled heritage resource.

As the application site and proposal does not involve hazardous substances, and the site does not contain any heritage resources of significant natural areas, these rules are not relevant to the proposal.

Heritage Area Overlays – N/A as none apply to the application site.

Historic Heritage rules and Schedule 2 – N/A as the site does not have any identified (scheduled) historic heritage values.

Notable Trees – N/A – no notable trees on the site.

Sites and Areas of Significance to Maori – N/A – the site does not contain any site or area of significance to Maori.

Ecosystems and Indigenous Biodiversity – Rules IB-R1 to R5 inclusive.

As no clearance of any indigenous vegetation is proposed, these rules are not relevant.

Subdivision (specific parts)

Only subdivision provisions relating to land containing Significant Natural Area or Heritage Resources have immediate legal effect. The site contains no scheduled or mapped Significant Natural Areas or Heritage Resources.

Activities on the surface of water – N/A as no such activities are proposed.

Earthworks – Only some rules and standards have legal effect. These are Rules EW-R12 and R13 and related standards EW-S3 and ES-S5 respectively. EW-R12 and associated EW-S3

relate to the requirement to abide by Accidental Discovery Protocol if carrying out earthworks and artefacts are discovered. The subdivision works will involve only very minor earthworks related to access. Such works can be subject to the ADP. EW-13 and associated EW-S5 relate to ensuring Erosion and Sediment Control measures are in place during earthworks. They cite compliance with GD05. Any earthworks necessary for access can be subject to GD05.

Signs – N/A – signage does not form part of this application.

Orongo Bay Zone – N/A as the site is not in Orongo Bay Zone.

In summary, there are no zone rules in the PDP with immediate legal effect that affect the proposal's activity status.

6.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

The assessment of environmental effects below includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment, as required by Clause 2(3)(c) of Schedule 4 of the Act.

A restricted discretionary activity is described in s87A of the Act, clause (3).

If an activity is described in this Act, regulations (including any national environmental standard), a plan, or a proposed plan as a restricted discretionary activity, a resource consent is required for the activity and—

*(a) **the consent authority's power to decline a consent, or to grant a consent and to impose conditions on the consent, is restricted to the matters over which discretion is restricted** (whether in its plan or proposed plan, a national environmental standard, or otherwise); and*

(b) if granted, the activity must comply with the requirements, conditions, and permissions, if any, specified in the Act, regulations, plan, or proposed plan.

It is also subject to s104C of the Act:

*(1) When considering an application for a resource consent for a restricted discretionary activity, a consent authority must consider **only** those matters over which-*

(a) A discretion is restricted in national environmental standards or other regulations;

(b) It has restricted the exercise of its discretion in its plan or proposed plan;

*(3) if it grants the application, the consent authority may impose conditions under section 108 **only** for those matters over which –*

(a) A discretion is restricted in national environmental standards or other regulations;

(b) It has restricted the exercise of its discretion in its plan or proposed plan.

The subdivision meets the restricted discretionary number/size of lots specified in Table 13.7.2.1. Far North District Plan lays out in 13.8.1, the matters to which it restricts its discretion in determining whether to grant consent to a restricted discretionary activity, and then lays out the matters to which it will restrict its discretion when considering whether to impose conditions.

13.8.1 SUBDIVISION WITHIN THE RURAL PRODUCTION ZONE

..... In considering **whether or not to grant consent** on applications for restricted discretionary subdivision activities, the Council will restrict the exercise of its discretion to the following matters:

- (i) for applications under 13.8.1(a):
- effects on the natural character of the coastal environment for proposed lots which are in the coastal environment.
- (ii) for applications under 13.8.1(b) or (c):
- effects on the natural character of the coastal environment for proposed lots which are in the coastal environment;
 - effects of the subdivision under (b) and (c) above within 500m of land administered by the Department of Conservation upon the ability of the Department to manage and administer its land;
 - effects on areas of significant indigenous flora and significant habitats of indigenous fauna;
 - the mitigation of fire hazards for health and safety of residents.

In considering **whether or not to impose conditions** on applications for restricted discretionary subdivision activities the Council will restrict the exercise of its discretion to the following matters:

- (1) the matters listed in 13.7.3;
(2) the matters listed in (i) and (ii) above

In the case of this application, the application is lodged pursuant to 13.8.1(b), and therefore clause (ii) applies. The matters listed under clause (ii) are all addressed below in the matters covered in the AEE, however a summary is provided below:

- effects on the natural character of the coastal environment for proposed lots which are in the coastal environment;

The property is not within the coastal environment.

- effects of the subdivision under (b) and (c) above within 500m of land administered by the Department of Conservation upon the ability of the Department to manage and administer its land;

There is no land administered by the Department of Conservation within 500m of the application site.

- effects on areas of significant indigenous flora and significant habitats of indigenous fauna;

The site contains no areas of significant indigenous flora or significant habitat of indigenous fauna.

- the mitigation of fire hazards for health and safety of residents.

There are no areas of bush that will be within 20m of any likely future residential unit.

In summary, there are no grounds for the Council to refuse consent.

In determining conditions of consent, the following AEE is offered.

6.1 Allotment sizes and dimensions

All lots can readily accommodate a 30m x 30m square building envelope complying with permitted activity boundary setbacks. The lots are considered of a suitable size and shape.

6.2 Property Access

New shared entrance/access will be formed off Kapiro Road to access Lots 1, 2, 3 and 6. This will be formed to the appropriate FNDC standard for the number of lots being served, i.e. double width. It is proposed that new crossings/entrances will be formed to proposed Lots 4 & 5, each being to the required standard (single-width). Refer to Section 6.1 of the Subdivision Site Suitability Report (SSSR) attached as Appendix 4.



Looking east along road frontage from the existing entrance into the T & G site, located within adjacent Lot 2 DP 148680

The new proposed double width entrance will be located between sign and power pole. There is excellent visibility in both directions. Similarly, the proposed new crossings into Lots 4 & 5 will be located so as to avoid power poles, and both have good sight distances in both directions.

Internal to the site, right of way easements will provide for access into the large balance Lot 6, including proposed area G to provide improved alignment. Refer to Section 6.2 of the SSSR in Appendix 4. Proposed Lots 1 & 2 will traverse this right of way to their frontages. All rights of way, where not already to the required standard, will be formed/upgraded to comply.

6.3 Natural and Other Hazards

The site is not subject to any natural hazards. Referring to the SSSR, there are existing swale drains within the site that serve as primary conveyance structures and as overland flow paths. These are proposed to remain as-is. The report considers the position of those existing overland flow paths, as presented in Drawing Sheet 100. Finished floor levels will need to consider proximity to overland flow paths, ensuring adequate freeboard, where necessary.

The sites are not at risk from erosion, alluvium, avulsion, subsidence, rockfall, landslip or flooding. There is no reason under section 106 of the Act to decline the subdivision.

The site has historically been, and still is, in horticulture, and is therefore subject to assessment under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS). This is discussed in more detail in Section 7.5. In summary, the Combined Preliminary and Detailed Site Investigation Report supporting the application – refer Appendix 5 – concludes it is highly unlikely that there will be any risk to human health as a result of the proposed activity. No soil samples showed any results exceeding human health limits. The application is a controlled activity under the NES-CS.

6.4 Water Supply

There is no Council reticulated water supply available to the property. The SSSR in Appendix 4 recommends roof runoff water tanks be adopted for potable water supply. In addition, the Council can impose its standard requirement in regard to providing fire fighting water supply for any new residential development within the lots, specifically Lots 1, 2, 4 and 5, at time of building consent.

6.5 Sanitary Sewage Disposal

The SSSR addresses on site wastewater treatment and disposal in its section 2. It conservatively uses a 5 bedroom (8 person) scenario for its preliminary design assessment. The SSSR recommends that each lot is subject to building consent specific review and design for any on site wastewater system. It concludes that lots can provide for on site treatment and disposal in compliance with the Regional Plan's permitted activity standards. The SSSR includes a preliminary AEE in its Appendix D to demonstrate the proposed wastewater disposal concept will have a less than minor effect on the environment.

Whilst the report recommends secondary treatment, it also states that primary treatment may be suitable, provided suitable treatment quality, disposal area and compliance with the NRC's permitted standards can be demonstrated.

6.6 Stormwater Disposal

The SSSR assesses on-site stormwater management in its section 3. Development can occur on all lots readily complying with the zone's permitted activity coverage thresholds. For the smaller lots, the report bases its assessment on a roof area of up to 300m² and driveway/parking area of 200m². It addresses the right of way separately. The report includes a stormwater management concept for both.

Concept stormwater attenuation is outlined in section 3.4 of the SSSR.

6.7 Energy Supply & Telecommunications

Power and telecoms are not a requirement for rural subdivisions. Council can impose a consent notice to this effect.

6.8 Easements for any purpose

Refer to Scheme Plan in Appendix 1. This shows existing easement A and new easements A-G – refer to Memorandum of Easements.

6.9 Preservation of heritage resources, vegetation, fauna and landscape, and land set aside for conservation purposes

The site contains none of the following items listed in Rule 13.7.3.9 of the District Plan. There are no Notable Trees (Appendix 1D of the DP); no Historic Sites, Buildings or Objects (1E); no Outstanding Natural Features or Outstanding Landscape Features (1A and 1B); and no archaeological sites (1G) or Sites of Cultural Significance to Māori (1F).

Indigenous Flora & Fauna:

The property contains no areas of significant indigenous vegetation or habitat. The riparian vegetation behind proposed Lots 4 & 5 is dominated by exotic species. The area of bush/scrub at the very south of the property was not looked at when a site visit was carried out, but is likely a mixture of exotic and indigenous. In any event it remains untouched and unaffected by the proposal, being predominantly within the large Lot 6 and not in the vicinity of any proposed 5000m² lot.

The property is within a large mapped kiwi present area but not close to any mapped high density kiwi area. I believe a simple advice note would suffice to remind the consent holder and future purchasers of the potential for kiwi to be present and to therefore ensure any dogs or cats kept on site are kept inside at night.

6.10 Access to reserves and waterbodies

There are no qualifying waterbodies forming a boundary with any lot of less than 4ha in area.

6.11 Earthworks

Subdivision earthworks may be required to upgrade and form access. These can be subject to the ADP and to appropriate Erosion and Sediment Control measures. The SSSR report outlines likely volumes, easily within the ODP's permitted activity thresholds.

6.12 Land use compatibility (reverse sensitivity)

The application site is in an area supporting horticulture, but which also supports residential living, to the west, east and north (across Kapiro Road). This existing setting/character has been considered in the proposed layout. Lots 4 & 5 are located on a part of the site that has

not proven productive at all in terms of horticulture. The lots are adjacent to residential use. Converting this land to residential use reduces the likelihood of reverse sensitivity issues arising between adjacent properties – a positive effect. The land immediately to the south of Lots 4 & 5 is dominated by thick riparian vegetation, providing abundant buffer between any future residential use on Lots 4 & 5 and any ongoing horticultural operation on Lot 6. The tunnel houses to remain on Lot 6 are hidden from view from Lot 4 by an existing well established vegetation screen, showing at top right of the picture below.



Lots 1 & 2 are proposed on land currently containing citrus orchard. Immediately to their north is vacant vegetated land, with residential use beyond. Land to the immediate west is not in productive use. Again, converting land in Lots 1 & 2 to residential use reduces the risk of reverse sensitivity issues arising between land uses on adjacent sites.

There is currently no shelter screening established on new proposed internal boundaries of Lots 1 & 2 in regard to continuing activities on Lot 3.



Looking north along central access, with proposed Lot 2 at left of road, centre picture

It would mitigate the risk of reverse sensitivity effects further if the eastern boundary of proposed Lot 2, and rear boundaries of Lots 1 & 2 were subject to a requirement to establish (and maintain) effective vegetative screening/hedging on those boundaries.

In summary I consider the proposal has taken into account the risk of reverse sensitivity issues arising and can appropriately mitigate those risks.

7.0 STATUTORY ASSESSMENT

7.1 Operative District Plan Objectives and Policies

As a restricted discretionary subdivision activity, the proposal would be considered consistent with the relevant Objectives and Policies in Chapter 13 Subdivision. The proposal promotes sustainable management of the natural and physical resources of the District. It is an appropriate subdivision that does not compromise the life-supporting capacity of air, water, or ecosystems, and adverse effects are capable of mitigation (Objectives 13.3.1 and 2 and Policy 13.4.14).

The lots have ample scope for on-site wastewater treatment and disposal. The lots will be reliant on on-site water catchment and supply. On site stormwater management is feasible so as to avoid off site effects (Objective 13.3.5 and related Policy 13.4.8).

I am not aware of any sites of significance to Māori or cultural values associated with the site. Building setbacks can readily meet requirements from overland flow paths. No major earthworks are required and no indigenous vegetation clearance is envisaged or required (Objective 13.3.7 and Policy 13.4.11)

Objectives 13.3.8-13.3.10 are about ensuring subdivisions have access to adequate services and make efficient use of infrastructure. I believe the proposal is consistent with these objectives. Power and telecoms are not a requirement of rural subdivisions.

The site displays no landscape values and no known cultural or heritage values. The site does not have high or outstanding natural character values. I do not believe the subdivision will prevent adjacent land uses from continuing to operate (Policy 13.4.1).

Safe and efficient access can be provided (Policies 13.4.2 and 3)

Relevant Rural Production Zone objectives and policies include:

Objectives:

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

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.

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.

Proposed subdivision

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

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.

And policies

8.6.4.1 That a wide range of activities be allowed in the Rural Production Zone, subject to the need to ensure that any adverse effects on the environment, including any reverse sensitivity effects, on the environment 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.

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.

Objective 8.6.3.5 and Policy 8.6.4.6 are not considered relevant as they are solely related to Kerikeri Road.

The proposed subdivision promotes an efficient use and development of the land (Objective 8.6.3.2). Whilst the site has been in citrus, the applicants have advised the crop is basically at the end of its productive life. To create large lot residential sites, where reverse sensitivity issues either are reduced or can be appropriately mitigated, represents a sustainable use of the land's natural and physical resources.

Amenity values can be maintained (8.6.3.3). Reverse sensitivity effects are satisfactorily addressed. The continued use of parts of both lots, and adjacent land, for productive uses, is not threatened by the subdivision (Objectives 8.6.3.6-8.6.3.9 inclusive and Policies 8.6.4.8 and 8.6.4.9).

Policy 8.6.4.7 anticipates a wide range of activities that promote rural productivity, whilst avoiding the actual and potential adverse effects of conflicting land use activities. The proposed subdivision does not affect the ability of any nearby productive unit to continue to operate, as well as the balance within the sites. The immediate area supports an existing range of activities, including productive use, commercial and residential. I am of the view that the subdivision does not create additional land use incompatibility effects of a minor or more than minor nature.

The proposal provides for sustainable management of natural and physical resources (8.2.4.1). Off site effects can be avoided, remedied or mitigated (8.6.4.2 and 8.6.4.3). Amenity values can be maintained through the size of the lots (open space to built environment ratio) (8.6.4.4). The proposal enables the efficient use and development of natural and physical resources (8.6.4.5).

In summary, I believe the proposal to be consistent with the Rural Production Zone objectives and policies.

7.2 Proposed District Plan

An assessment against the relevant objectives and policies in the Subdivision section of the Proposed District Plan (PDP) follows:

SUB-O1

Subdivision results in the efficient use of land, which:

- a. achieves the objectives of each relevant zone, overlays and district wide provisions;*
- b. contributes to the local character and sense of place;*
- c. avoids reverse sensitivity issues that would prevent or adversely affect activities already 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.*

SUB-O2

Subdivision provides for the:

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

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

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

SUB-O4

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

Proposed subdivision

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

I consider the subdivision to be an efficient use of land for reasons outlined earlier in this report. The subdivision is in keeping with the local character in that it creates large lot residential sites of a size and layout similar to others in the immediate area, leaving balance land available for other use. Whilst the application site, and a large area around it, is proposed to be zoned or identified for Horticulture, it should be acknowledged by the Council that this area already accommodates a large amount of residential living set amongst productive uses, as well as commercial activities. The proposal does not create additional adverse reverse sensitivity effects of a minor or more than minor nature. The site is not subject to any hazard. Adverse effects on the environment are considered to be minor and capable of mitigation (SUB-O1).

The subdivision is of land that contains no outstanding natural features or landscapes and is not in the coastal environment. Neither does the site have any areas of high or outstanding natural character. The site is not identified as having any Site or Areas of Significance to Maori or Heritage Resources. Whilst it is acknowledged that the lots contain LUC 3 soils, and that such soils fall within the NPS Highly Productive Land's definition of 'highly productive land', that definition has recently been amended to exclude an application for resource consent on LUC 3 land provided that consent application is not for rural lifestyle purposes. Lots of 5000m² in area are not 'rural lifestyle' lots, being aligned with rural residential lot sizes. In any event the Council does not have the discretion to consider the fragmentation or sterilisation of highly productive land due to the restricted discretionary activity status of the application under the ODP.

The lots will have onsite servicing and have access to Council road network (SUB-O3). No Esplanade Reserve is required (SUB-O4).

SUB-P1

Enable boundary adjustments that:

.....

Not relevant – application is not a boundary adjustment.

SUB-P2

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

Not relevant – application does not involve public works, infrastructure, reserves or access lots.

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.*

The proposal does not meet the minimum lot size applying in the PDP's Horticulture zone. Whilst the subdivision may not be consistent with the purpose, characteristics and qualities of the zone per se, it is consistent with the characteristics and qualities of the zone in the

immediate area. The lots are of an appropriate shape and size to support development; and have legal and physical access.

SUB-P4

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

The subdivision has had regard to all the matters listed, where relevant.

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: ...

Not relevant as the sites are not zoned any of the zones referred to.

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 the purpose, characteristics and qualities of the zone.

The sites are reliant on existing on-site servicing. The sites have access to Council road network.

SUB- P7

Require the vesting of esplanade reserves when subdividing land adjoining the coast or other qualifying water bodies.

No Esplanade Reserve is required.

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.

Not relevant as the sites are not proposed to be zoned Rural Production.

SUB-P9

Avoid subdivision [sic] 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.

Not relevant as the sites are not zoned Rural Production or Rural Lifestyle under the PDP.

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.

Not relevant. No minor residential units proposed.

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.

All of the above have been considered in the layout and number of lots being proposed.

In summary I believe the proposed subdivision to be consistent with the PDP's objectives and policies in regard to subdivision.

The site is zoned Horticulture in the Proposed District Plan.

Objectives

HZ-O1

The Horticulture zone is managed to ensure its long-term availability for horticultural activities and its longterm protection for the benefit of current and future generations.

HZ-O2

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

HZ-O3

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 compromises 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;
- d. does not exacerbate any natural hazards;
- e. maintains the rural character and amenity of the zone;
- f. is able to be serviced by on-site infrastructure.

The applicants advise that the current citrus crop is nearing the end of its useful life. This is not to say that the entire site should be retired from any kind of horticultural use, and the proposal does not suggest this, leaving two larger lots remaining available for some sort of crop reliant on soils, should a future owner wish to re-establish some sort of crop. Whilst the proposal may appear contrary to part (b), it leaves plenty of land available for horticultural activities, and the Council cannot consider fragmentation in any event, given the restricted discretionary activity category under the ODP.

Reverse sensitivity effects can be effectively mitigated. The site is not subject to any natural hazard. The subdivision maintains rural character and amenity and the lots are able to be serviced by on-site infrastructure. Overall, I believe the proposal to be more consistent than not with the objectives of the Horticulture Zone.

It is important to note that the Horticulture Zone and its provisions have no legal effect and the presiding document in assessing this application is the ODP. As a restricted discretionary activity under the ODP, the Council's discretion is restricted to matters relating to reverse sensitivity only when it comes to 'highly productive land' as defined in the NPS HPL. It should also be noted that the subdivision does not create rural lifestyle lots, and therefore the LUC 3 soils within the site do not fall within the definition of highly productive land.

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.

This policy applies to the consent authority, not an individual property owner.

HZ-P2

Avoid land use that:

Not relevant as the application is a subdivision, not a land use.

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.

Not relevant as application is not for a horticulture or associated ancillary activity.

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.

N/A as no residential activities are being applied for. Reverse sensitivity effects are assessed in the AEE earlier in this report.

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.

The subdivision does not avoid fragmentation, because it is a subdivision. However, it leaves the vast majority of the sites available for use by horticulture. As stated earlier, the creation of large residential lots is not creating rural lifestyle lots and therefore the Council need not

regard the LUC 3 soils within the site as meeting the definition of 'highly productive land'. All lots have available building platforms and can provide for on-site servicing.

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.

This is not considered a viable or practical alternative.

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.*

The subdivision does not require any consent under the PDP and the above policy is therefore of limited relevance. I consider the subdivision to maintain rural character and amenity and the lots are suitable for their intended use.

7.3 Part 2 Matters

The subdivision is a restricted discretionary subdivision activity. It is therefore deemed to be consistent with the Operative District Plan, a document prepared in order to give effect to Part 2.

5 Purpose

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*
 - (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*

-
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposal provides for peoples' social and economic well being, and for their health and safety, while sustaining the potential of natural and physical resources, safeguarding the life-supporting capacity of air, water, soil and the ecosystems; and avoiding, remedying or mitigating adverse effects on the environment.

6 *Matters of national importance*

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
- (f) *the protection of historic heritage from inappropriate subdivision, use, and development:*
- (g) *the protection of protected customary rights:*
- (h) *the management of significant risks from natural hazards.*

The application site does not contain or display any of the features, resources or values outlined in Section 6.

7 *Other matters*

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

- (a) *kaitiakitanga:*
- (aa) *the ethic of stewardship:*
- (b) *the efficient use and development of natural and physical resources:*
- (ba) *the efficiency of the end use of energy:*
- (c) *the maintenance and enhancement of amenity values:*
- (d) *intrinsic values of ecosystems:*
- (e) *[Repealed]*
- (f) *maintenance and enhancement of the quality of the environment:*
- (g) *any finite characteristics of natural and physical resources:*
- (h) *the protection of the habitat of trout and salmon:*
- (i) *the effects of climate change:*
- (j) *the benefits to be derived from the use and development of renewable energy.*

Regard has been had to any relevant parts of Section 7 of the RMA, "Other Matters". These include 7(b), (c), (d) and (f). It is considered that the proposal represents efficient use and development of a site. Proposed layout, along with wastewater and stormwater management, will ensure the maintenance of amenity values and the quality of the environment. The proposal has had regard to the values of ecosystems.

8 Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The principles of the Treaty of Waitangi have been considered and it is believed that this proposed subdivision does not offend any of those principles.

In summary, it is considered that all matters under s5-8 inclusive have been adequately taken into account.

7.4 National Policy Statements

The only relevant national policy statement that I have identified is the National Policy Statement for Highly Productive Land (NPS-HPL). This requires regional councils to map highly productive land within their region. No such mapping has yet been carried out and in the interim, the NPS outlines what should be 'treated' as highly productive land (clause 3.5(7)):

- *land zoned general rural or rural production; and*
- *LUC 1, 2, or 3 land; but*
- *Is not identified for future urban development; or*
- *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; or*
- *Subject to a resource consent application for subdivision, use or development on LUC 3 land for any activity other than rural lifestyle.*

The application is for the creation of a total of 4 x 5,000m² lots, effectively and practically large lot residential use – not rural lifestyle. Therefore, it is my opinion that the LUC 3 soils within the site fall outside the current definition of highly productive land. In any event, the Council has confirmed that where the application is a restricted discretionary subdivision application, any assessment of the proposal against the NPS HPL can and will be limited to Reverse Sensitivity Effects only. Referring to the AEE earlier in this report:

"The application site is in an area supporting horticulture, but which also supports residential living, to the west, east and north (across Kapiro Road). This existing setting/character has been considered in the proposed layout. Lots 4 & 5 are located on a part of the site that has not proven productive at all in terms of horticulture. The lots are adjacent to residential use. Converting this land to residential use reduces the likelihood of reverse sensitivity issues arising between adjacent properties – a positive effect. The land immediately to the south of Lots 4 & 5 is dominated by thick riparian vegetation, providing abundant buffer between any future

residential use on Lots 4 & 5 and any ongoing horticultural operation on Lot 6. The tunnel houses to remain on Lot 6 are hidden from view from Lot 4 by an existing well established vegetation screen.

"Lots 1 & 2 are proposed on land currently containing citrus orchard. Immediately to their north is vacant vegetated land, with residential use beyond. Land to the immediate west is not in productive use. Again, converting land in Lots 1 & 2 to residential use reduces the risk of reverse sensitivity issues arising between land uses on adjacent sites.

"There is currently no shelter screening established on new proposed internal boundaries of Lots 1 & 2 in regard to continuing activities on Lot 3.

"It would mitigate the risk of reverse sensitivity effects if the eastern boundary of proposed Lot 2, and rear boundaries of Lots 1 & 2 were subject to a requirement to establish (and maintain) effective vegetative screening/hedging on those boundaries.

"In summary I consider the proposal has taken into account the risk of reverse sensitivity issues arising and can appropriately mitigate those risks."

7.5 National Environmental Standards (NES)

The NES for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS) is relevant given the site's historic horticultural use.

A Combined Preliminary and Detailed Site Investigation is attached in Appendix 5. This provides site information and informs of the history of the sites. It provides a sampling and analysis plan and provides the sample results. In summary the report considers that there is very low risk to long-term human health exposure. Testing showed that soil contamination does not exceed the applicable standard in Regulation 7 of the NES CS. This results in the proposal being a controlled activity under the NES-CS.

7.6 Regional Policy Statement for Northland (RPS)

The RPS contains objectives and policies related to infrastructure and regional form and economic development. These are enabling in promoting sustainable management in a way that is attractive for business and investment. The proposal is consistent with these objectives and policies.

The RPS also has policies ensuring that productive land is not subject to fragmentation and/or sterilisation to the point where productive capacity is materially reduced, and that reverse sensitivity effects be avoided, remedied or mitigated. It should be noted that this subdivision is a restricted discretionary subdivision application and the Council's powers and matters of discretion are restricted accordingly.

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;

In regard to this subdivision, it is considered that the risk of reverse sensitivity issues arising is not significantly increased and can be successfully managed. The area around the site supports a mixture of horticultural and residential uses already. In my opinion the proposal does not prevent or threaten the continuation of any adjacent land in productive use, for that use to continue.

The associated Policy to the above Objective is **Policy 5.1.1 – Planned and coordinated development**.

Subdivision, use and development should be located, designed and built in a planned and co-ordinated manner which:

(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; ...

(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 soils, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and ...

Objectives and Policies in the Regional Policy Statement for Northland (RPS) provide direction when examining the subdivision of land in production zones where the soils meet the definition of 'highly versatile', the RPS states that Class I, II and III soils are 'highly versatile'. The site contains some LUC III soils, however it should be noted that the higher order NPS HPL does not contain the same definition for highly productive land that the RPS has for "highly versatile soils". The subdivision will enable a high proportion of the underlying titles to remain available for soil based production should a new lot owner seek to re-establish some form of productive use.

Overall, I do not believe that the proposal materially reduces the potential for soil-based primary production to continue on land with highly versatile soils.

5.1.3 Policy – Avoiding the adverse effects of new use(s) 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);.....

The proposal does not, in my opinion, prevent the continued use of adjacent land for production use. Reverse sensitivity effects have been addressed earlier.

I believe the proposal is not contrary to any of the objectives or policies in the Regional Policy Statement for Northland.

7.7 Regional Plans

The subdivision does not result in any breaches of the Regional Plan (Appeals version).

8.0 S 95A-E & CONSULTATION

8.1 S95A Public Notification Assessment

A consent authority must follow the steps set out in s95A to determine whether to publicly notify an application for a resource consent. Step 1 specifies when public notification is mandatory in certain circumstances. No such circumstances exist. Step 2 of s95A specifies the circumstances that preclude public notification. No such circumstances exist. Step 3 of s95A must therefore be considered. This specifies that public notification is required in certain circumstances. No such circumstance exists. The application is not subject to a rule or national environmental standard that requires public notification. This report and AEE concludes that the activity will not have, nor is it likely to have, adverse effects on the environment that are more than minor. In summary public notification is not required pursuant to Step 3 of s95A.

8.2 S95B Limited Notification Assessment

A consent authority must follow the steps set out in s95B to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified pursuant to s95A. Step 1 identifies certain affected groups and affected persons that must be notified. No such group or persons are identified in this instance. Step 2 of s95B specifies the circumstances that preclude limited notification. No such circumstances exist and Step 3 of s95B must be considered. This specifies that certain other affected persons must be notified, specifically:

- (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.*

The application is not for a boundary activity. The s95E assessment below concludes that there are no affected persons to be notified.

8.3 S95D Level of Adverse Effects

The AEE in this report assesses effects on the environment and concludes that these will be no more than minor.

8.5 S95E Affected Persons

A person is an 'affected person' if the consent authority decides that the activity's adverse effects on the person are minor or more than minor (but are not less than minor). A person is not an affected person if they have provided written approval for the proposed activity.

The activity is a restricted discretionary activity under the ODP and a controlled activity under the NES-CS. The activity is therefore considered an anticipated and expected one. The existing access used by the sites is on the adjacent Lot 2 DP 148680, also owned by the applicant, however it will not be used to access the proposed lots. Off site effects will be mitigated so as to be less than minor. The adjacent property to proposed Lot 1 features well established shelter and screening vegetation along the boundary. The adjacent property to the east of Lot 5 is in large lot residential use. There are some boundary plantings but not to the extent of totally screening one site from the other. I believe there would be a preference to have another large lot residential use next door compared with horticultural activity. No adjacent properties have been identified as affected.

The site does not contain any heritage or cultural sites or values and there are no areas of indigenous vegetation or habitat. The site is not accessed off state highway. No pre lodgement consultation has been considered necessary with tangata whenua, Heritage NZ, Department of Conservation or Waka Kotahi.

9.0 CONCLUSION

The site is considered suitable for the proposed subdivision, and effects on the wider environment are no more than minor. There is no District Plan rule or national environmental standard that requires the proposal to be publicly notified. No special circumstances have been identified that would suggest public notification is required. No affected persons are identified.

I consider the proposal to be consistent with the Operative District Plan and consistent with most, but not all of the Proposed District Plans' objectives and policies. However, in saying that, the Council's discretion in considering the granting of the consent, pursuant to the ODP, and what conditions to impose, is restricted to reverse sensitivity matters and absolute consistency with the PDP's objectives and policies is not necessary.

I consider the proposal to be consistent with Part 2 of the Act and any relevant national or regional planning instrument.

It is requested that the Council give favourable consideration to this application and grant approval, on a non notified basis.



Signed
Lynley Newport
Senior Planner
THOMSON SURVEY LTD

Dated

11th March 2026

10.0 LIST OF APPENDICES

Appendix 1	Scheme Plan(s)
Appendix 2	Locality Plan
Appendix 3	Record of Title and relevant instruments
Appendix 4	Subdivision Site Suitability Engineering Report
Appendix 5	Combined Preliminary and Detailed Site Investigation

Appendix 1

Scheme Plan(s)

EXISTING EASEMENT			
PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 3 HEREON	C357799.5

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY	(A)(B)	LOT 3 HEREON	LOTS 1, 2, & 6 HEREON
	(D)	LOT 3 HEREON	LOTS 2 & 6 HEREON
	(E)	LOT 3 HEREON	LOT 6 HEREON
	(F)	LOT 6 HEREON	LOT 3 HEREON
	(G)	LOT 6 HEREON	LOT 1 - 3 HEREON
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY & DRAIN WATER	(C)	LOT 1 HEREON	LOT 2 HEREON



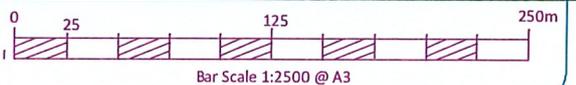
This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF THOMSON SURVEY LTD AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF THOMSON SURVEY LTD

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
 Comprised in: NA88B/704 & NA88B/705
 Total Area: 17.0532ha
 Zoning: Rural Production
 Resource features: NIL



315 Kerikeri Rd
 P.O. Box 372 Kerikeri
 Email: kerikeri@tsurvey.co.nz
 Ph: (09) 4077360
 www.tsurvey.co.nz

Registered Land Surveyors, Planners & Land Development Consultants

**PROPOSED SUBDIVISION OF
 LOTS 3 & 4 DP 148680**
 108 KAPIRO ROAD, KERIKERI
 PREPARED FOR: T & G GLOBAL

Survey	Name	Date	ORIGINAL SCALE	SHEET SIZE
Design			1:2500	A3
Drawn	SL	17.12.25		
Approved				
Rev	KY	03.03.26		
		10855 Scheme 20260303		

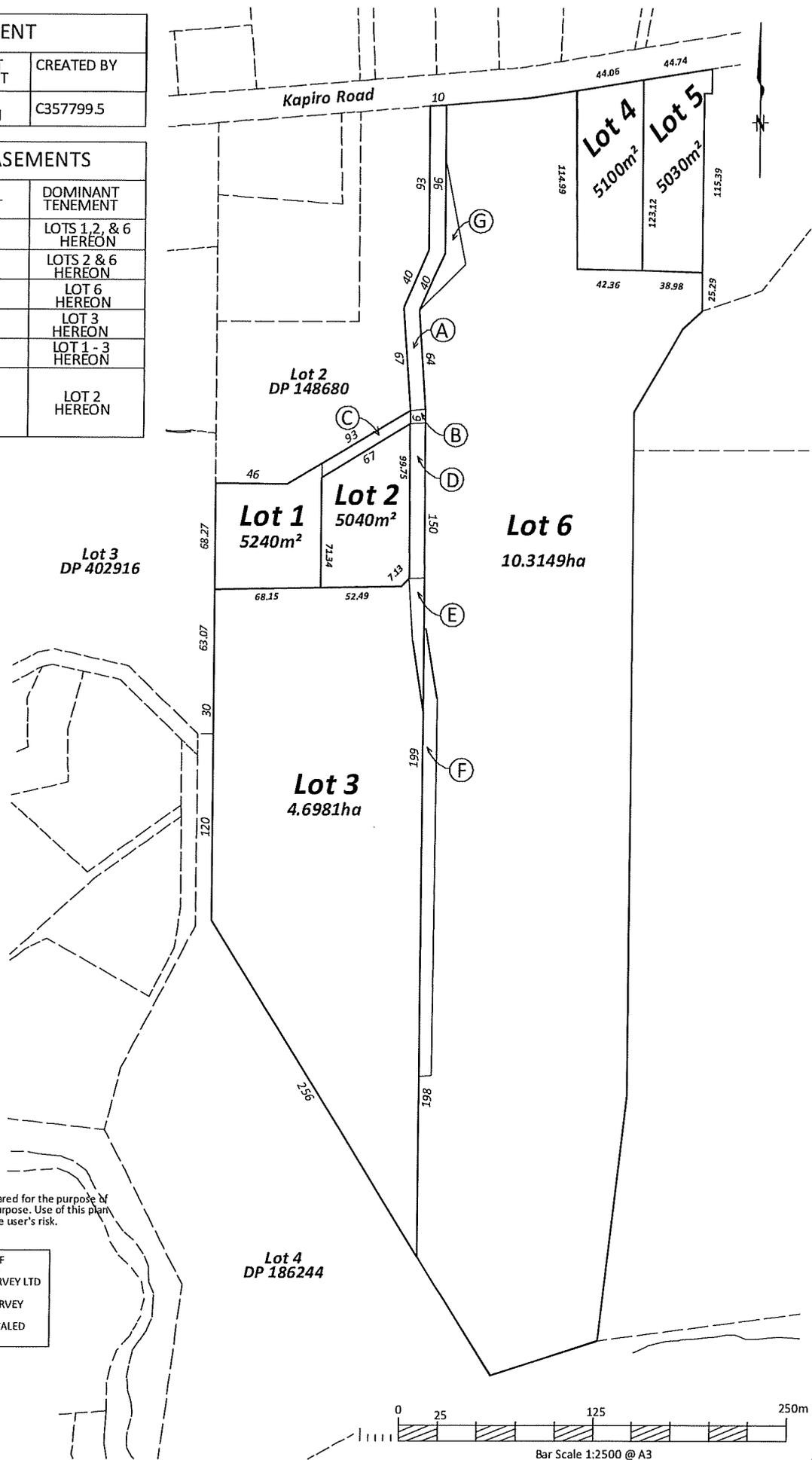
Surveyors Ref. No.:

10855

Sheet 1 of 1

EXISTING EASEMENT			
PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 3 HEREON	C357799.5

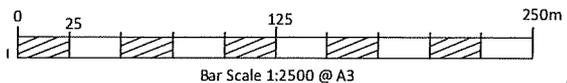
MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
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	(E)	LOT 3 HEREON	LOT 6 HEREON
	(F)	LOT 6 HEREON	LOT 3 HEREON
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY & DRAIN WATER	(G)	LOT 6 HEREON	LOT 1 - 3 HEREON
	(C)	LOT 1 HEREON	LOT 2 HEREON



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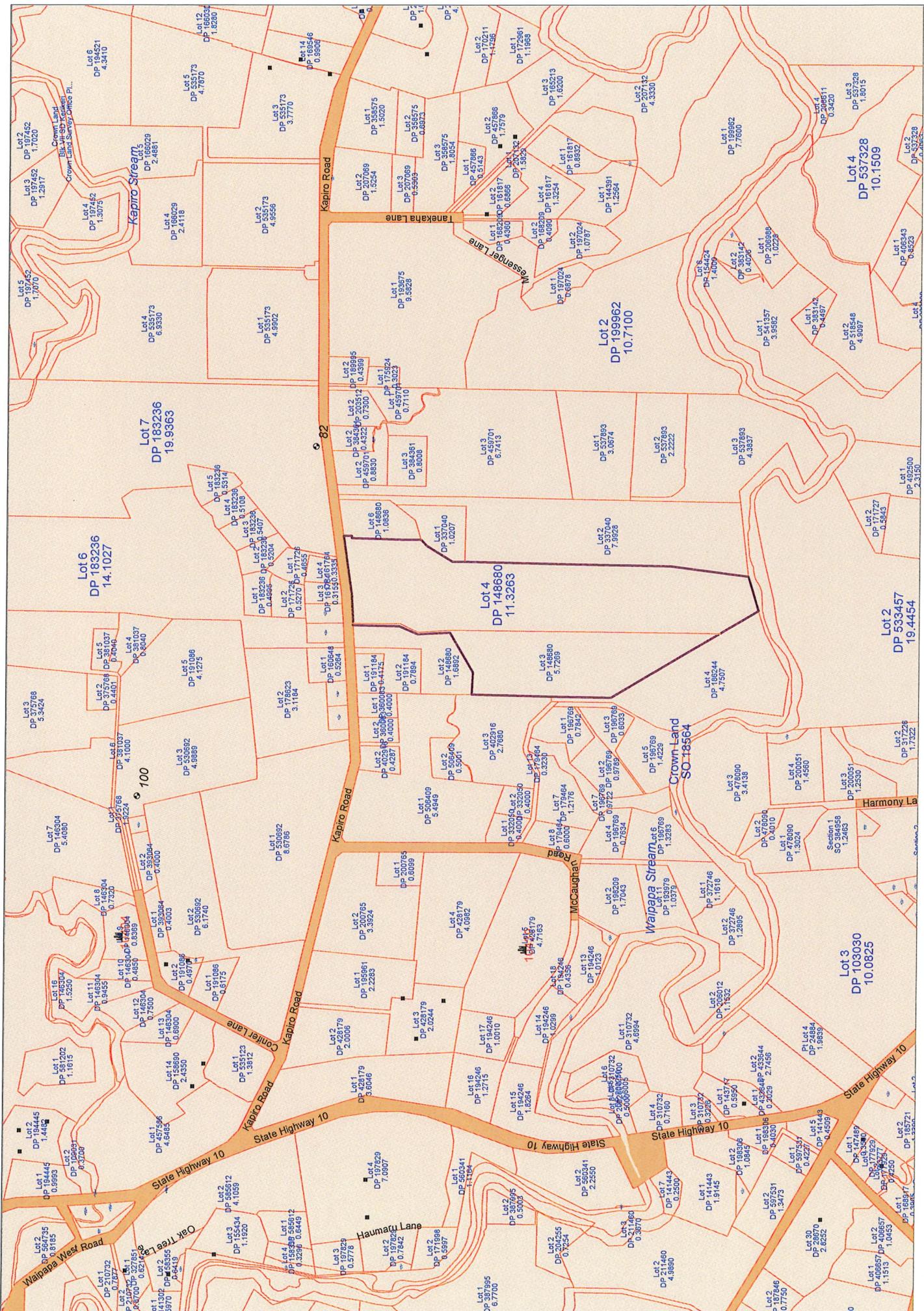
PROPOSED SUBDIVISION OF LOTS 3 & 4 DP 148680
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Drawn	SL	17.12.25		
Approved				
Rev	KY	03.03.26		
		10855 Scheme 20260303		

Surveyors Ref. No:
10855
 Sheet 1 of 1

Appendix 2

Locality Plan



Any person wishing to rely on the information shown on this map must independently verify the information
 Scale 1:10000 Topographical and Cadastral map derived from LINZ data. Printed: 11-Mar-2026 10:27.

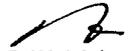
Appendix 3

Record of Title and relevant instruments



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**




R. W. Muir
Registrar-General
of Land

Identifier **NA88B/704**
Land Registration District **North Auckland**
Date Issued 20 March 1992

Prior References
NA46D/630

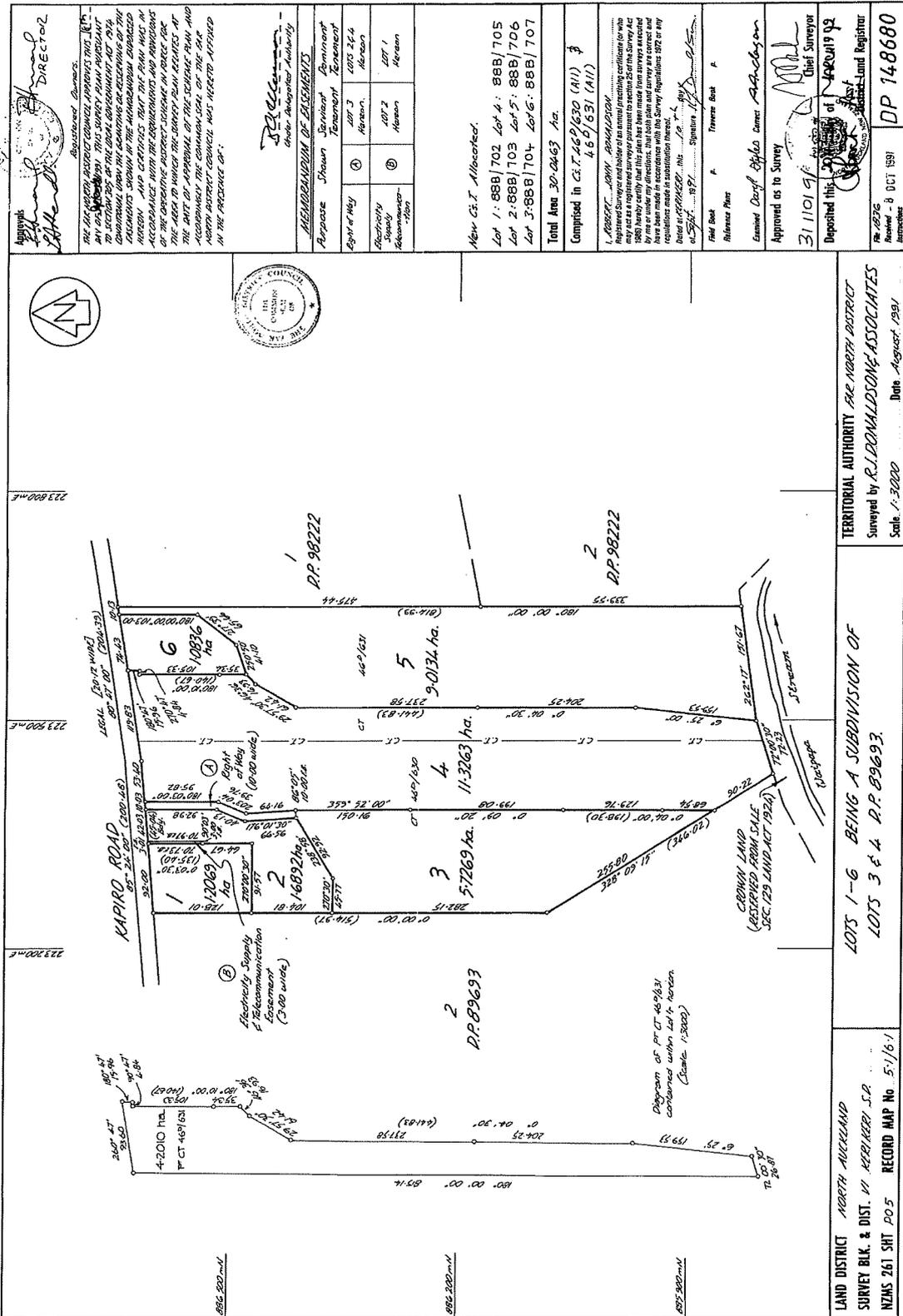
Estate Fee Simple
Area 5.7269 hectares more or less
Legal Description Lot 3 Deposited Plan 148680
Registered Owners
Turners & Growers Fresh Limited

Interests

Saving and excepting all minerals within the meaning of the Land Act 1924 on or under the land and reserving always to Her Majesty the Queen and all persons lawfully entitled to work the said minerals a right of ingress egress and regress over the said land

Subject to a right of way over part marked A on DP 148680 specified in Easement Certificate C357799.5 - 20.3.1992 at 2.51 pm

The easements specified in Easement Certificate C357799.5 are subject to Section 309 (1) (a) Local Government Act 1974 13332929.5 Mortgage to Bank of New Zealand - 2.7.2025 at 7:01 am



1. APPROVED...
 2. APPROVED...
 3. APPROVED...
 4. APPROVED...
 5. APPROVED...
 6. APPROVED...

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51

CENTIMETRES



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**




R.W. Muir
Registrar-General
of Land

Identifier **NA88B/705**
Land Registration District **North Auckland**
Date Issued 20 March 1992

Prior References
NA46D/630 NA46D/631

Estate Fee Simple
Area 11.3263 hectares more or less
Legal Description Lot 4 Deposited Plan 148680

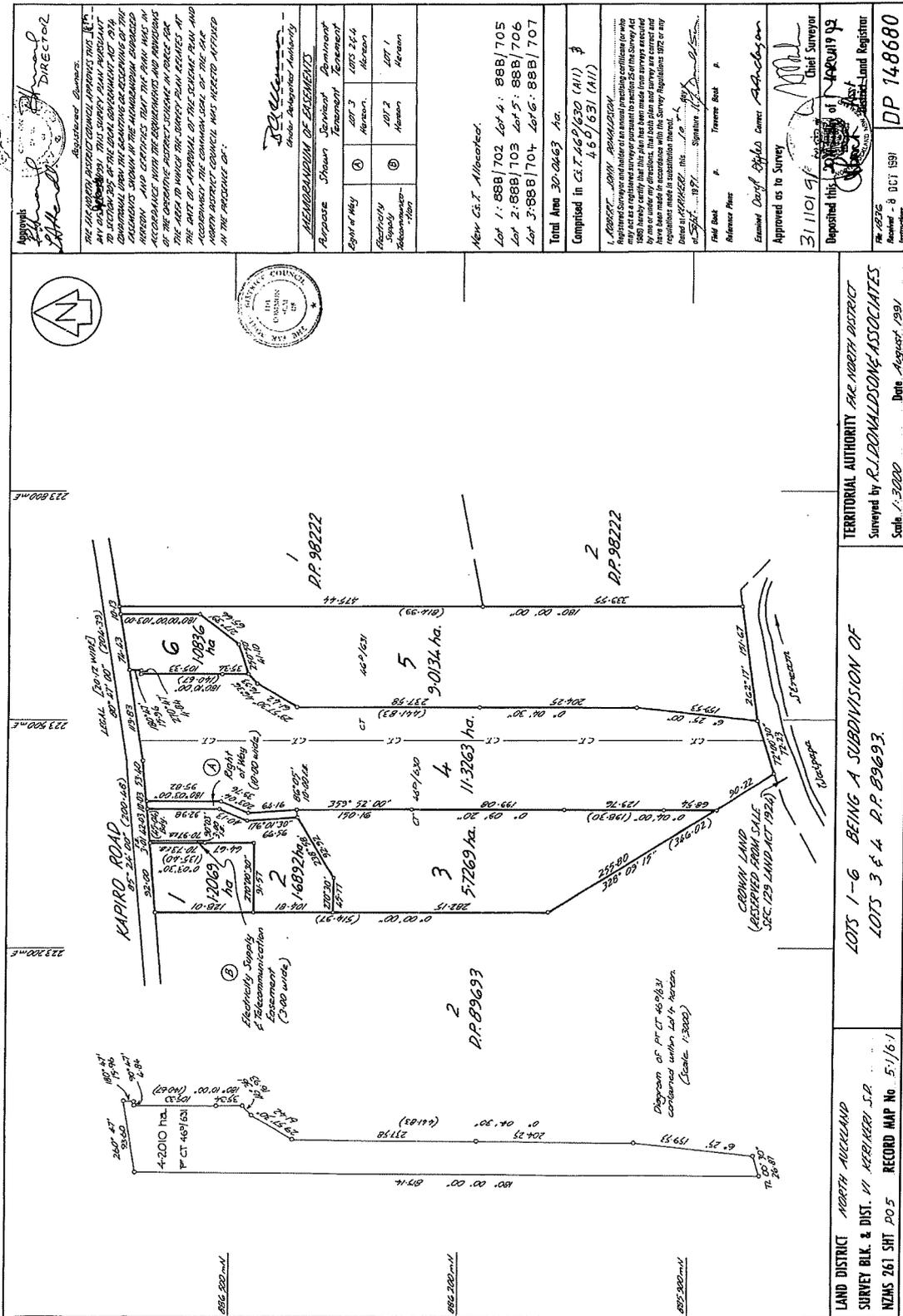
Registered Owners
Turners & Growers Fresh Limited

Interests

Saving and excepting all minerals within the meaning of the Land Act 1924 on or under the land and reserving always to Her Majesty the Queen and all persons lawfully entitled to work the said minerals a right of ingress egress and regress over the said land

Appurtenant hereto is a right of way specified in Easement Certificate C357799.4 - 20.3.1992 at 2.51 pm

The easements specified in Easement Certificate C357799.4 are subject to Section 309 (1) (a) Local Government Act 1974
13332929.5 Mortgage to Bank of New Zealand - 2.7.2025 at 7:01 am



LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. VI. KAPIRO RD.
NZMS 261 SH1 205 RECORD MAP No 51/6/1

LOTS 1-6 BEING A SUBDIVISION OF
LOTS 3 & 4 R.P. 89693.

TERRITORIAL AUTHORITY FOR NORTH DISTRICT
Surveyed by R.J. DONALDSON & ASSOCIATES
Scale: 1:2000 Date: August 1991

APPROVED TO SURVEY
31 1101 91
DEPOSITED THIS 27th DAY OF FEBRUARY 1992
REGISTERED
DP 148680

RECEIVED
8 OCT 1991



W. H. DONALDSON, SURVEYOR GENERAL, DEPARTMENT OF SURVEY AND LAND INFORMATION, NEW ZEALAND
 DRAWN BY G.D. DONALDSON

Approved by the District Land Registrar, South Auckland No. 351560
 Approved by the District Land Registrar, North Auckland, No. 4380/81
 Approved by the Registrar-General of Land, Wellington, No. 436748-1483

C357799.5EC

EASEMENT CERTIFICATE

(IMPORTANT: Registration of this certificate does not of itself create any of the easements specified herein).

I/We ANBORN HOLDINGS LIMITED at Kerikeri

being the registered proprietor(s) of the land described in the Schedule hereto hereby certify that the easements specified in that Schedule, the servient tenements in relation to which are shown on a plan of survey deposited in the Land Registry Office at **Auckland** on the **31st** day of **XIX** October 1991 under No. **148680** are the easements which it is intended shall be created by the operation of section 90A of the Land Transfer Act 1952.

**SCHEDULE
 DEPOSITED PLAN NO.**

Nature of Easement (e.g., Right of Way, etc.)	Servient Tenement		Dominant Tenement Lot No.(s) or other Legal Description	Title Reference
	Lot No.(s) or other Legal Description	Colour, or Other Means of Identification, of Part Subject to Easement		
Right of Way	Lot 3	A	Lots 2 & 4	88D/704 88D/703 88D/705

State whether any rights or powers set out here are in addition to or in substitution for those set out in the Seventh Schedule to the Land Transfer Act 1952.

1. *Rights and powers:*

2. Terms, conditions, covenants, or restrictions in respect of any of the above easements:

Dated this 10th day of February, 19 92

Signed by the above named
THE COMMON SEAL of
ANEORN HOLDINGS LIMITED was
hereunto affixed

in the presence of

Witness

Occupation

Address

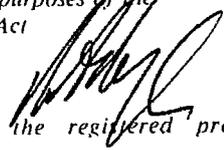


A handwritten signature in black ink, appearing to be "R. J. G. C.", written over the seal.

EASEMENT CERTIFICATE

(IMPORTANT): Registration of this certificate does not of itself create any of the easements specified herein.

Correct for the purposes of the Land Transfer Act

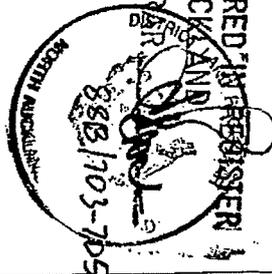


Solicitor for the registered proprietor

The within easement when created will be subject to Section 30(1)(a) Local Government Act 1974



LAW NORTH PARTNERS
SOLICITORS
KERIKERI



12.51 20.MAR92 C 357799
PARTICULARS ENTERED IN REGISTER
AND REGISTRY AUCKLAND
ASST. LAND REGISTRAR

57



Appendix 4

Subdivision Site Suitability Engineering Report



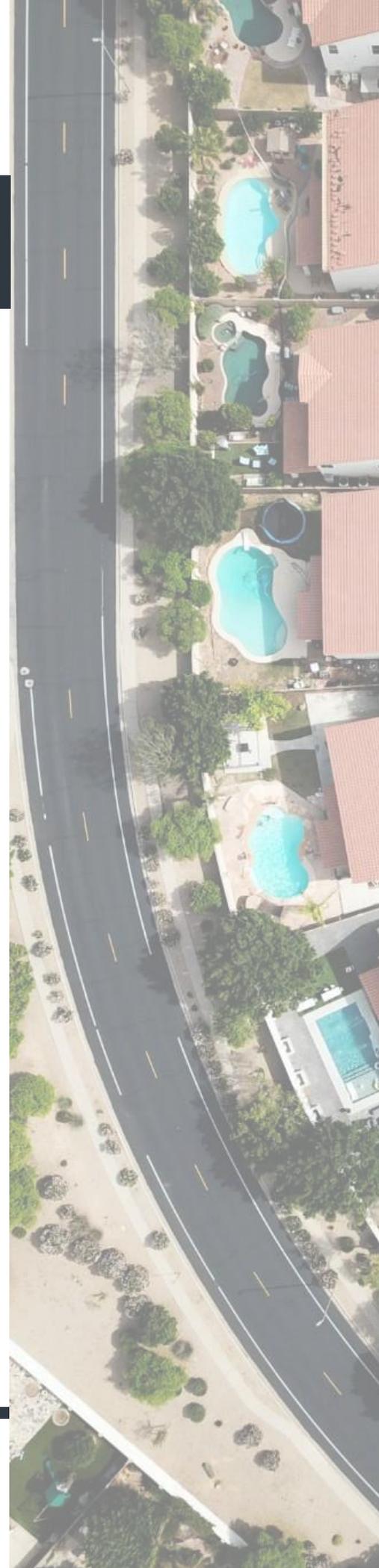
geologix
consulting engineers

SUBDIVISION SITE SUITABILITY ENGINEERING REPORT

LOT 3-4 DP 148680
KAPIRO ROAD, KERIKERI

T & G GLOBAL

C0749N-S-02
FEBRUARY 2026
REVISION 1





DOCUMENT MANAGEMENT

Document Title	Subdivision Site Suitability Engineering Report
Site Reference	Lot 3-4 DP 148680 Kapiro Road, Kerikeri
Client	T & G Global
Geologix Reference	C0749N-S-02
Issue Date	February 2026
Revision	01
Prepared	Ford Yang Civil Design Engineer, MEngNZ 
Reviewed	Sebastian Hicks Principal Civil Engineer, CPEng Reg. 1168062, CMEngNZ, IntPE(NZ) /APEC Engineer 
Approved	Edward Collings Managing Director, CEnvP Reg. 0861, CPEng Reg. 1033153, CMEngNZ
File Reference	Z:\Projects\C0700-C0799\C0749N - T&G Global, Kapiro Road, Kerikeri\C0749N-02\06 - Reports

REVISION HISTORY

Date	Issue	Prepared	Reviewed	Approved
February 2026	First Issue – For Consent	FY	SH	EC



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1 INTRODUCTION

This Site Suitability Engineering Report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for T & G Global as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

Our scope of works has been undertaken to assist with the Resource Consent application in relation to the proposed subdivision of Lot 3-4 DP 148680 Kapiro, Kerikeri, the 'sites', to create four rural residential lots and two rural production lots.

This assessment addresses preliminary engineering elements of wastewater, stormwater, water supply, firefighting, access and associated earthworks requirements to provide building platforms with less than minor effects on the environment as a result of the proposed activities outlined in Section 1.1. This report is purposed to support the Resource Consent application and guide the requirements of future detailed design and/ or engineering plan approval processes. This report should be read in conjunction with other reports and documents prepared in support of the application.

1.1 Proposal

A proposed scheme plan¹ was presented to Geologix at the time of writing, prepared by Thomas Survey and has been reproduced within Appendix A as Drawing No 100. It is understood from the scheme plan that there will be four new lots in the proposed subdivision. A probable future on-lot development concept for the new lots will comprise a maximum building coverage of 300 m² within a designated 30 x 30 m square building site. It is anticipated that potential driveway or parking areas shall occupy 200 m².

The subdivision is proposed to be serviced by onsite water supply, wastewater and stormwater management. Utility services (power & telecom) are to connect to the existing public networks. The above is summarised in Table 1 and detailed further within this report, with reference to the Preliminary Engineering Design Plans enclosed within Appendix A. Any amendments to the referenced scheme plan may require an update to the recommendations of this report.

¹ Proposed Subdivision of Lots 3&4 DP148680 (ref No. 10855) Prepared by Thomson Survey Dated on 20.01.26

Table 1: Summary of Proposed Subdivision

Existing Lot	Proposed Lot No.	Size (ha)	Purpose
LOT 3 DP 148680	1	0.524	New rural residential
	2	0.504	New rural residential
	3	4.698	Existing rural production
LOT 4 DP 148680	4	0.51	New rural residential
	5	0.503	New rural residential
	6	10.315	Existing rural production

1.2 Site Description and Existing Infrastructure

The site is legally described as Lot 3-4 DP 148680 with a total site area of 17.054 ha and designated by the FNDC Operative District Plan as within the Rural Production zone. The current title comprises an existing agricultural block. Proposed Lot 6, a balance lot of Lot 4 DP 148680, comprises an existing office, car park and ancillary structures near the frontage with Kapiro Road. The remaining proposed lots are all under existing orchard plantations.

Behind the existing operations area there is a stream with a broad riparian area that traverses the site from west to east. There is a mapped downstream flooding hazard associated with the Waipapa Stream, but this is not present within the site boundary. Available LiDAR data does indicate some overland flow paths through the proposed lots by way of existing surface water drains located along shelter belt lines.

The property is surrounded by similar, agricultural blocks and rural residential sites.

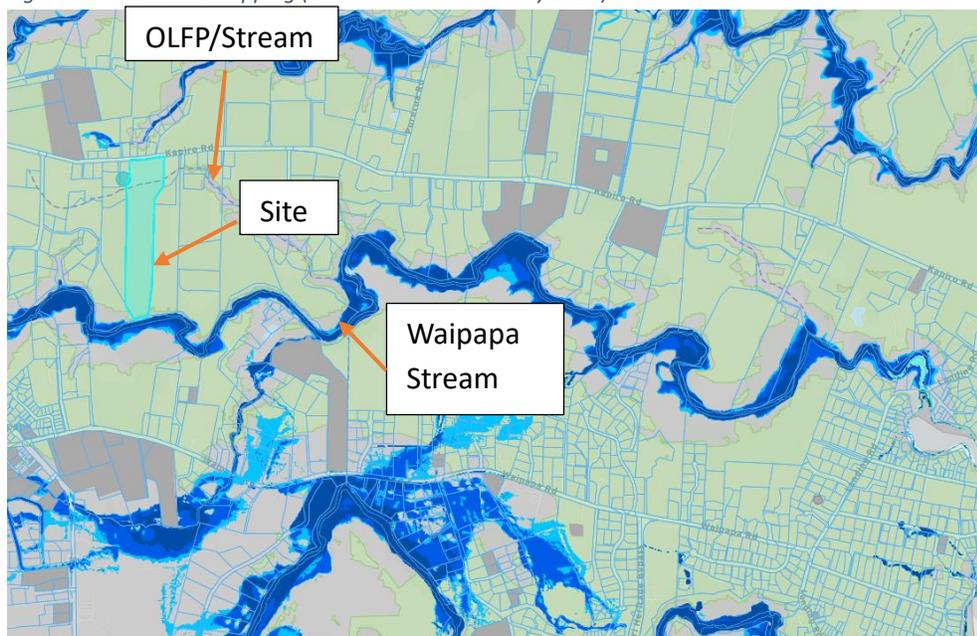
Far North District Council (FNDC) GIS mapping indicates that no existing 3 water infrastructure or reticulated networks are present within Kapiro Road or the site boundaries. This report has been prepared with the goal of the subdivision being self-sufficient for the purpose of wastewater, stormwater, and potable water management.

1.3 Surface Water Features and Overland Flowpaths

Figure 1 delineates the FNDC Atlas GIS flood hazard mapping, which identifies an overland flow path or stream traversing the northern portion of the site, from west to east. Although this area is subject to concentrated shallow overland flow, the mapping confirms that it does not fall within a designated floodplain extent. The site itself is not exposed to fluvial inundation risk.

Downstream properties that border the Waipapa Stream exhibit mapped overland flow and flood susceptibility, however, no existing built structures appear to be located within the defined flood hazard envelope.

Figure 1: Flood Plain Mapping (FNDC Atlas GIS - January 2026)



The site's position (red line in Figure 2) is located in the lower portion of a wider catchment associated to the Waipapa Stream and relatively close in proximity to the coastal discharge point.

Figure 2: Catchment Locality Plan – Waipapa River System (Note blue lines refer to rivers)



2 WASTEWATER ASSESSMENT

2.1 Wastewater Volume and Treatment

It is proposed that the new Lots will be serviced by on-site wastewater treatment systems and disposal fields. A preliminary design is presented in this section and on Drawing No. 100 to demonstrate the proposed new Lots can support on-site wastewater management. In lieu of specific development plans, the preliminary design assumes that the proposed new Lots may support up to a five-bedroom dwelling with a peak occupancy of eight people².

In lieu of potable water infrastructure servicing the site, roof rainwater collection within on-lot tanks has been proposed for this assessment. The design water volume for roof water tank supply is estimated at 160 litres/ person/ day³ based upon standard water saving fixtures⁴ being installed within the future development. This results in a total daily wastewater generation of 1,280 litres/ day per proposed lot.

No specific treatment system design restrictions and manufacturers are currently in place. Future developers will be required to elect a treatment system and provide system specifications at Building Consent. It is recommended that secondary treatment systems are accounted for within future developments. However, primary treatment systems may be suitable, provided the developer can demonstrate suitable treatment quality, disposal area and compliance with the NRC Proposed Regional Plan.

2.2 Wastewater Discharge

To provide even distribution, evapotranspiration assistance and to minimise effluent runoff it is recommended that suitably treated effluent is conveyed to land disposal via Pressure Compensating Dripper Irrigation (PCDI) systems.

Available geological mapping⁵ indicates the site to be directly underlain by Kerikeri Volcanic Group Late Miocene basalt of Kaikohe - Bay of Islands Volcanic Field. These Neogene igneous rocks (basalt) can be expected to contain Basalt lava material, volcanic plugs and minor tuff material.

² TP58 Table 6.1.

³ TP58 Table 6.2, AS/ NZS 1547:2012 Table H3.

⁴ Low water consumption dishwashers and no garbage grinders.

⁵ Geological & Nuclear Science, 1:250,000 scale Geological Map, Sheet 2, Whangarei, 2009.

A site walkover survey and intrusive ground investigation was undertaken by Geologix on 3rd February 2026. Two hand auger boreholes were formed to depths of 1.2 m bgl, in the locations recorded on Drawing No. 100 and engineering logs presented as Appendix C. A qualified engineering geologist recorded the recovered arisings as brown clayey silt with trace gravel with depth, moist and of low plasticity. Groundwater was not encountered during the ground investigation.

The shallow soils are generally inferred to meet the drainage characteristics of TP58 Category 5/ NZS1547 Category 4. For a typical PCDI discharge system, a Soil Loading Rate (SLR) of 3.5mm/ day has been adopted from NZS1547 Table 5.2.

The proposed PCDI system may be surface laid, covered with minimum 150 mm mulch and planted with specific evapotranspiration species to provide a minimum of 80 % species canopy cover. Alternatively, lines could be subsurface laid to topsoil with minimum 200 mm thickness and planted with lawn grass. Clean, inert site-won topsoil sourced during development from building and/ or driveways footprints may be used in the land disposal system to increase minimum thicknesses.

To satisfy the preliminary design, primary and reserve disposal fields are required as follows, as presented on Drawing No. 100.

- **Preliminary Primary Disposal Field.** A minimum PCDI primary disposal field of 366 m² laid parallel to the natural contours.
- **Preliminary Reserve Disposal Field.** A minimum reserve disposal field equivalent to 30% of the primary disposal field is required under NRP rule C.6.1.3(9)(b) for secondary or tertiary treatment systems. It is recommended each proposed lot provides a 110 m² reserve disposal area.

2.3 Summary and Assessment of Environmental Effects

Based on the above concept design assumptions a summary of the concept wastewater design is presented as Table 2. It is recommended that each lot is subject to Building Consent specific review and design amendment according to final development plans by a suitably qualified professional. This is typically applied as a condition of consent.

Table 2: Concept Wastewater Design Summary

Design Element	Specification
Concept development	Five-bedroom, peak occupancy of 8 (per lot)
Concept design generation volume	160 litres/ person/ day – 1,280 litres/ day/ lot
Water saving measures	Standard. Combined use of 11 litre flush cisterns, automatic washing machine & dishwasher, no garbage grinder ¹
Water meter required?	No
Recommended treatment quality	Secondary
Soil drainage category	TP58 Category 5, NZS1547 Category 4
Soil loading rate	3.5mm/ day
Concept primary disposal field size	Surface/ subsurface laid PCDI. Min. 366 m ²
Concept reserve disposal field size	Surface/ subsurface laid PCDI. Min. 30 %, or 110 m ²
Concept disposal field level	Sited above 5 % AEP event. No specific site requirements.
Dosing method	Pump with high water level visual and audible alarm. Minimum 24-hour emergency storage volume.
Stormwater Control	Divert surface/ stormwater drains away from disposal fields. Contour drains not required. Stormwater management discharges downslope of all disposal fields.
NRC Proposed Regional Plan Activity Status	Permitted.

A preliminary site-specific Assessment of Environmental Effects (AEE) is presented as Appendix D to demonstrate the proposed wastewater disposal concept will have a less than minor effect on the environment. It is recommended that the AEE is reviewed at the time of Building Consent once specific development plans, final disposal field locations and treatment systems are established.

3 STORMWATER ASSESSMENT

The permitted activity rules of the Far North District Plan allow for up to 15% impermeable surfaces in the Rural Production Zone. Whilst built development within the new rural lots following subdivision will result in an increase in impermeable surfaces from the existing coverage, it is highly unlikely to exceed the 15% permitted activity threshold, which would equate to approximately 800 m² per rural residential site, even taking into account ROW coverage. Considering the nature of rural subdivision and residential development, increased storm water runoff occurs as pervious surfaces such as pasture are converted to impervious features such as roads or future on-lot buildings and driveways.

3.1 Impervious Surfaces and Activity Status

A summary of the impervious areas of the proposed lots is provided as Table 3 below which has been developed from our observations and the provided Scheme Plan. For the proposed lots, this has been taken as conceptual maximum probable development of typical rural residential scenarios.

The activity status reflected in Table 5 is with respect to Operative FNDC Plan Section 8.6.5.1.3 only. Considering this, all proposed lots are considered **Permitted Activity**.

The main proposed new impervious area is listed as below

- Concept new roof area of up to 300m² per lot for the proposed residential lots **(Lot 1, 2, 4, 5)**
- Concept new driveway/park area of up to 200m² per lot for the proposed residential lots **(Lot 1, 2, 4, 5)**



- Proposed accessway (RoW), additional passing bay in Easement A, 3m wide driveway formation in Easement C:
 - The passing bay area will be 50m²
 - The proposed RoW within Easement C will be 85m long and 3m wide and will cover an area of 255 m².
 - Therefore, the total new impervious accessway area as ROW will be 305m².

3.2 Stormwater Management Concept

The stormwater management concept considered in this report has been prepared to meet the requirements of the local and regional consent authorities considering the design storm event as follows:

- **Probable Future Development (Lot 1, 2, 4, 5).** The probable future on-lot development concept for Lots includes up to 300 m² potential roof area and up to 200 m² potential driveway or parking areas within the lot boundary.

Stormwater mitigation will be achieved by means of attenuation within roof water tanks with driveway and parking areas being treated as an offset.

It is noted that there are existing swale drains within the site, some in proposed lots, that serve as primary conveyance structures and as overland flow paths. Such drains are on the eastern boundary of proposed Lot 5 and central of proposed Lot 2. These are proposed to remain as-is as flows are manageable for the purposes of safe residential development. Future developments must consider the position of these existing drains/overland flow paths, as presented in Drawing Sheet 100, such that they are suitably maintained or diverted where necessary. Finished floor levels must also consider safe proximity to overland flow paths including for adequate freeboard where necessary.

Additionally, there are existing culverts in place that provide continuity of these flows under accessways, such as at the proposed driveway entrance to proposed Lot 1. The effect of runoff from new impervious area onto these devices is mitigated by means of the proposed attenuation with roof tanks for all lots.



- **Proposed RoW Access (Easement A ,C)** The new impervious areas in RoWs A and C will be unsealed metal surfaces. Runoff from the new RoW A accessway will be drained into the existing roadside swale drain. Runoff from the new passing bay in RoW A and the RoW C accessway will naturally disperse to adjacent grassed surfaces before entering the downstream watercourse.

Considering the ROW accessways are proposed to be established in the subdivision stage, stormwater mitigation of the new impervious area has been considered. However, attenuation of runoff from the new impervious area is considered to offer negligible benefit and be somewhat impractical. This is because:

- the proposed impervious area is relatively minor, comprising only **0.0305ha** (0.2% of the total 17.05ha site area).
 - Furthermore, as the site is located in the lower reaches of the wider Waipapa River catchment, the minor increase in runoff will discharge prior to the arrival of the wider catchment peak. Therefore, the up/downstream hydraulic effects posed by this new impervious area are considered less than minor.
- **Proposed Right to Drain Easement (Lot 1).** An existing stormwater culvert crossing in Lot 1's future driveway is proposed have a right-to-drain easement over it in favour of Lot 2. Refer Figure 3.



Figure 3: Existing culvert in Proposed Lot 1 future driveway, requiring right-to-drain easement (in favour of Lot 2)



3.3 Design Storm Event

Relevant design rainfall intensity and depths have been ascertained for the site location from the NIWA HIRDS meteorological model⁹. The NIWA HIRDS rainfall data is presented in full within Appendix E. Provision for climate change has been adopted by means of applying a factor of 20 % to rainfall intensities, in accordance with FNDC Engineering Standards 2023.

The Table 4 stipulates that flow attenuation controls reduce the post-development peak discharge to 80 % of the pre-development condition for the 50 % and 20% AEP storm event. To be compliant with the above rules, the attenuation modelling within this report has been undertaken for all of the above storm events. The results are summarised in Table 5, with calculations provided in full in Appendix E.

Due to the site's position in the lower portion of a wider catchment as shown in Figure 2, its effect on any downstream flooding is negligible. Therefore, hydraulic attenuation for the 10% and 1% AEP event (flood control) is not recommended. Providing attenuation could be potentially detrimental, as delayed peak flows from the site are more likely to coincide with the arrival of upstream peaks, thereby exacerbating downstream flood risks.

Outlet dispersion devices should be designed to manage the 10% AEP event to reduce scour and erosion at discharge locations. These are detailed further in Section 3.4.1.

3.4 Concept Stormwater Attenuation

The rational method has been adopted by Geologix with run-off coefficients as published by FNDC Engineering Standards¹⁰ to provide a suitable concept attenuation design to limit post-development peak flows to 80% of pre-development conditions. The proposed devices with the concept design are listed below:

- Roof Runoff Tanks

Conceptual storage and outlet requirements within the tanks are included in Table 4 and a typical schematic retention/ detention tank arrangement detail is presented as Drawing No. 400 within Appendix A.

Table 4: Summary of Concept Stormwater Attenuation

Item	Pre-development Impervious Area	Post-development Impervious Area	Proposed Concept Attenuation Method
Future Concept Development (Lot 1, 2)			
Potential buildings	0 m ²	300 m ²	Detention within roof water tanks
Potential driveways	0 m ²	200 m ²	Off-set detention in roof water tanks
Total	0 m²	500 m²	

Calculations to support the concept design are presented within Appendix E to this report. A summary of the probable future development attenuation concept design is presented as Table 5. It is recommended that this concept design is refined at the Building Consent stage once final development plans are available.

Table 5: Probable Future Development Attenuation Concept - Tanks

Design Parameter	Flow Attenuation: 50 % AEP (80 % of pre dev)	Flow Attenuation: 20 % AEP (80 % of pre dev)
Regulatory Compliance	FNDC Engineering Standards Table 4-1	FNDC Engineering Standards Table 4-1
Pre-development peak flow	5.27 l/s	6.83 l/s
80 % pre-development peak flow	4.22 l/s	5.46 l/s
Post-development peak flow	9.60 l/s	12.44 l/s
Total Storage Volume Required	8,027 litres	11,353 litres
Concept Summary:	<ul style="list-style-type: none"> - Attenuation storage calculation accounts for offset flow from 200 m² driveway (not explicitly indicated in summary above. Refer Appendix E for calcs in full) - 2 x 25,000 litre tanks is sufficient for attenuation (11,353 l) + domestic water storage (38,647 l) 	

3.4.1 On-Lot Discharge

The direct discharge of water tank overflow in a concentrated manner can cause scour and erosion in addition to excessive saturation of shallow soils. Roof water will be captured in detention tanks and used for drinking supply needs. It is recommended that overflow from rainwater detention tanks is conveyed in sealed pipes to a designated discharge point downslope of proposed building footprints and wastewater disposal fields.

It is recommended that the conceptually sized dispersion devices are subject to specific assessment at the Building Consent stage to limit scour and erosion from tank overflows.

Typical rural residential developments construct either above or below ground discharge dispersion pipes. Feeding pipes can be either buried or pinned to the surface as desired. It is recommended that all pipes are designed to accommodate the design storm event peak flows from the attenuation tank and including minimum 100 mm dia. PVC piping.



3.5 Stormwater Quality

The key contaminant risks of the site setting include:

- Sediments and minor contaminants washed from impervious surfaces.
- Leaf matter, grass, and other organic debris.

Stormwater treatment requirements are minor to maintain good quality stormwater discharge. Stormwater quality will be provided by:

- Leaf guards on roof guttering/ first flush devices on roof guttering and downpipes.
- Rainwater tank for potable use onsite only to be filled by roof runoff.
- Stormwater discharges directed towards roading swale drains where possible.
- Grassed swale drains from rainwater inception (road surfaces) to discharge points, where required.

The risk of other contaminants being discharged out of the site boundaries (hydrocarbons, metals etc.,) because of the proposed activities once stormwater has been processed through the above measures that will affect the downstream water quality is considered low.

4 POTABLE WATER & FIRE FIGHTING

In the absence of potable water infrastructure within Kapiro Road or within the site it is recommended that roof runoff water tanks are adopted for potable water supply with appropriate filtration and UV disinfection at point of use. The volume of potable water supply on each lot should consider the required stormwater detention volume identified within Table 5 for proposed Lots. On these properties additional tanks may be required for sufficient potable water volumes.

Furthermore, the absence of potable water infrastructure and fire hydrants within Kapiro Road require provision of the on-lot roof water supply tanks to be used for firefighting purposes, if required. Specific analysis and calculation for firefighting is outside the scope of this report and may require specialist input. Supply for firefighting should be made in accordance with SNZ PAS4509:2008.



5 EARTHWORKS

The following earthworks provisions are anticipated to form the subdivision:

- **Construction of new 3m accessway within RoW C, including new SW culvert.**
Earthworks area < 260m²; Earthworks volume < 80m³
- **Construction of RoW A accessway upgrades.**
 - Section of new continuous accessway running north-south between existing car park and adjacent yard that is about 1m lower in elevation.
Earthworks area < 100m²; Earthworks volume < 75m³
 - Single passing bay earthworks volume < 20m³
- **New single width vehicle crossings to Lot 4 & 5.** Combined earthworks area = 80m²; combined earthworks volume < 25m³)
- **New double width vehicle crossing to RoW A.** Combined earthworks area = 60m²; combined earthworks volume < 20m³

Proposed earthwork volumes are well within the 5000m³ Permitted Activity volume limit outlined by FNDC District Plan Rule 12.3.6.1.1(a) and the maximum cut and fill height of <3.0 m combined cut and fill to comply with 12.3.6.1.1(b).

6 VEHICLE CROSSINGS AND INTERNAL ACCESS

6.1 Vehicle Crossings

Two new vehicle crossings from Kapiro Road will be proposed to serve Lots 4 & 5 separately. The location of the vehicle crossings are indicated to keep sufficient clearance from a nearby power pole and the existing vehicle crossing on the opposite side of Kapiro Road as indicated on Drawing No. 100 within Appendix A. The proposed vehicle crossings are recommended to match the FNDC/S/6 standard.

A third vehicle crossing off Kapiro Road will be proposed to provide access to proposed lots 1 - 3 and 6. The existing private accessway of minimum 3 metre width shall be designated within Right of Way A – G. The proposed vehicle crossing is recommended to match the FNDC/S/6 double width standard.

6.2 Right of Way

The proposed right of way easements generally comprise an existing metal accessway that is proposed to be used as-is as it provides at least 3m width of well-formed and well-drained unsealed metal surfaced pavement. Limited upgrades are recommended for construction at subdivision formation as detailed below and presented on Drawing No. 100 within Appendix A.

Within RoW A, a section of new accessway construction is required to provide suitable thoroughfare from the existing car park area to a relatively lower yard area where **RoW G** is situated. This will essentially provide a gently sloped accessway for continuity. The earthworks involved for this upgrade is minor as described in Section 5. Existing drainage culverts in this area are proposed to be maintained for use.

A single new passing bay is proposed on the southern side of the stream crossing (near to RoW B and C). This will provide suitable passing space for vehicles that are exiting from proposed Lots 1, 2, 3 & 6 to give way to oncoming vehicles.

A new 3m wide unsealed carriageway within **RoW C** will provide suitable access to the two rear residential sites of Lot 1 and 2. This includes the provision of a new stormwater culvert for continuity and suitable discharge of the roadside drainage within RoW D.

RoW B, D, E, F shall be maintained as-is for access to the balance lots 3 & 6.

It is recommended that the above-mentioned upgrades are specifically designed and constructed subject to conditions for 223/224 compliance.

7 LIMITATIONS

This report has been prepared for T & G Global as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to



this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this report and accompanying plans.

The recommendations and opinions in this report are based on arisings extracted from exploratory boreholes at discrete locations and any available existing borehole records. The nature and continuity of subsurface conditions, interpretation of ground condition and models away from these specific ground investigation locations are inferred. It must be appreciated that the actual conditions may vary from the assumed ground model. Differences from the encountered ground conditions during subdivision construction may require an amendment to the recommendations of this report.



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APPENDIX A

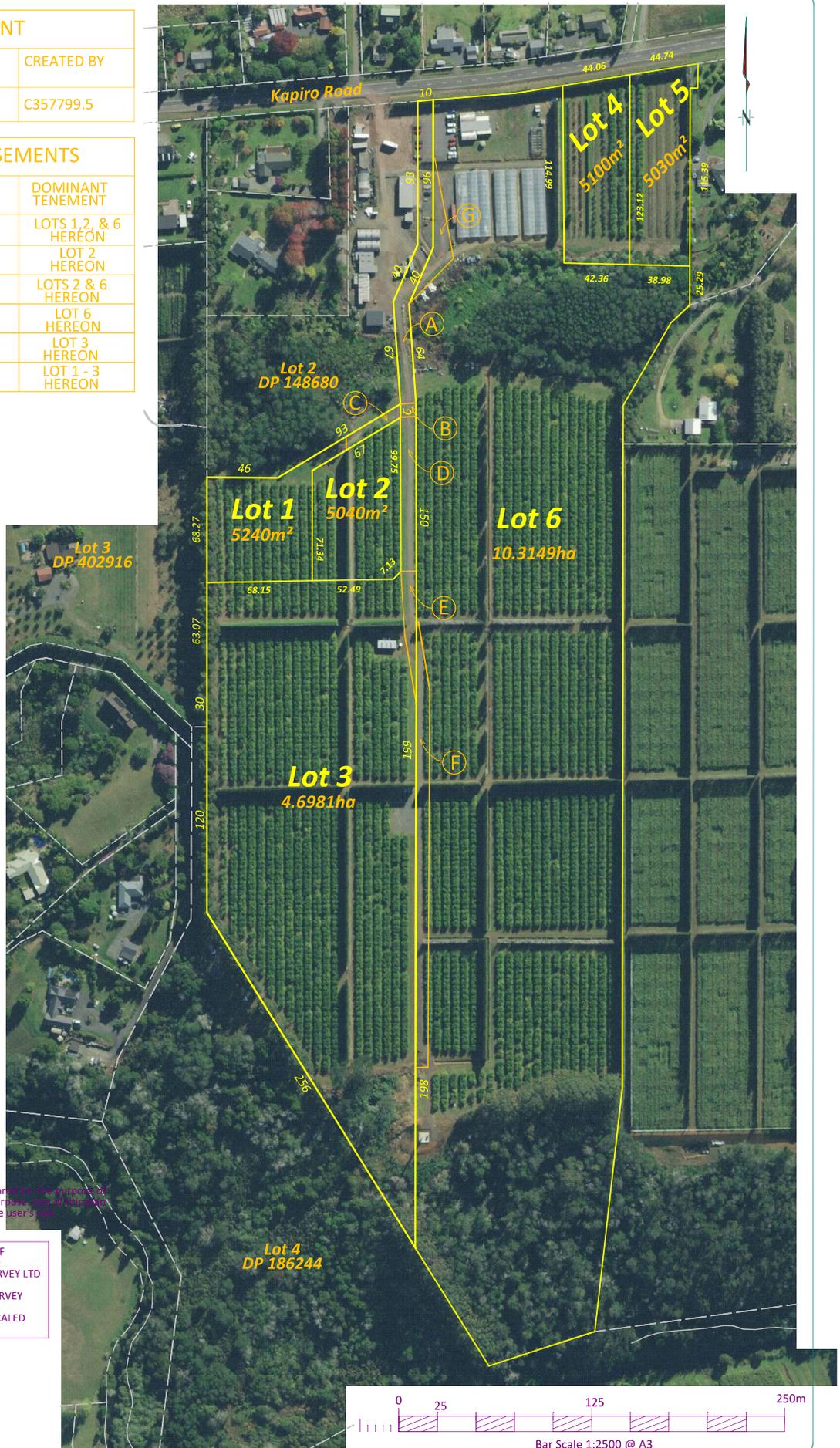
Drawings

EXISTING EASEMENT

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 3 HEREON	C357799.5

MEMORANDUM OF EASEMENTS

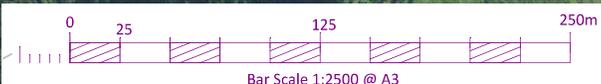
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY TELECOMMUNICATIONS & ELECTRICITY	(A) (B)	LOT 3 HEREON	LOTS 1, 2, & 6 HEREON
	(C)	LOT 1 HEREON	LOT 2 HEREON
	(D)	LOT 3 HEREON	LOTS 2 & 6 HEREON
	(E)	LOT 3 HEREON	LOT 6 HEREON
	(F)	LOT 6 HEREON	LOT 3 HEREON
	(G)	LOT 6 HEREON	LOT 1 - 3 HEREON



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

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 AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY
 TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
 Comprised in: NA88B/704 & NA88B/705
 Total Area: 17.0532ha
 Zoning: Rural Production
 Resource features: NIL



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 315 Kerikeri Rd
 P.O. Box 372 Kerikeri
 Email: kerikeri@tsurvey.co.nz
 Ph: (09) 4077360
 www.tsurvey.co.nz
 Registered Land Surveyors, Planners & Land Development Consultants

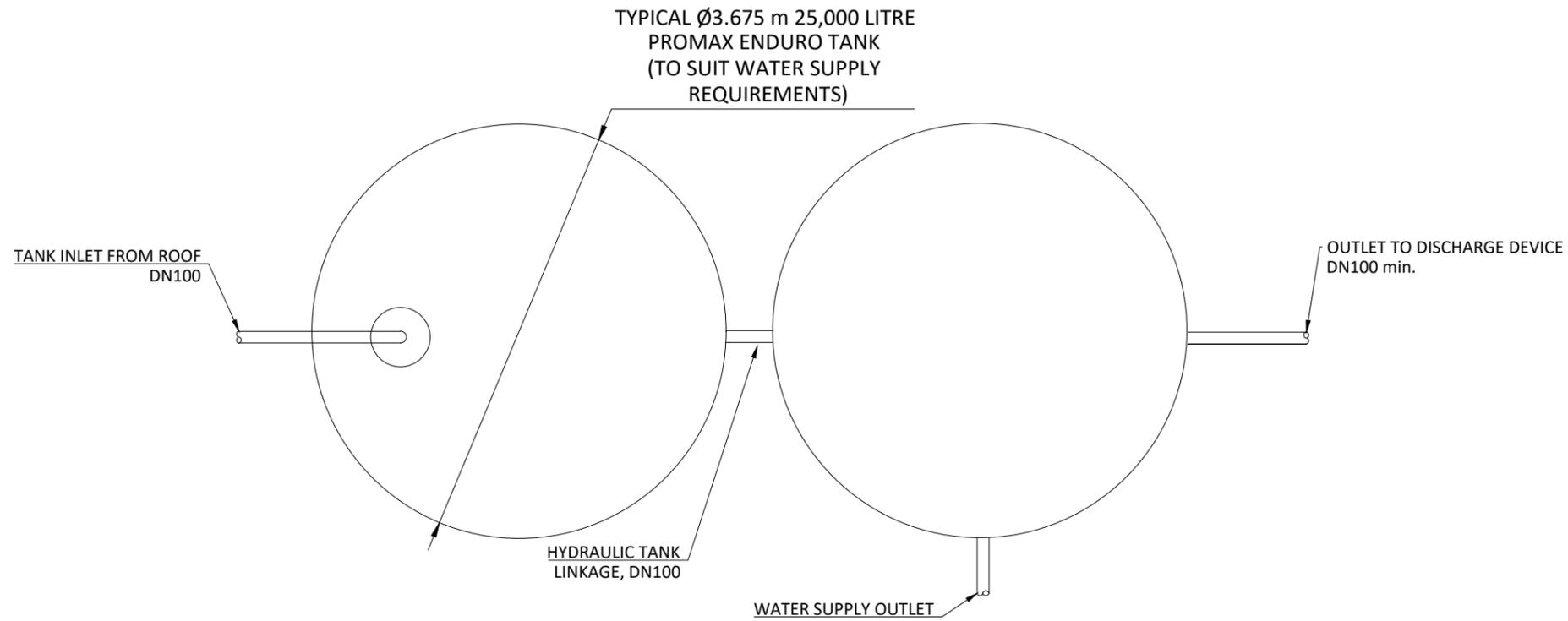
PROPOSED SUBDIVISION OF LOTS 3 & 4 DP 148680
 108 KAPIRO ROAD, KERIKERI
 PREPARED FOR: T & G GLOBAL

Name	Date	ORIGINAL SCALE	SHEET SIZE
Survey		1:2500	A3
Design			
Drawn	SL 17.12.25		
Approved			
Rev	SL 20.01.26		
10855 Scheme			

Surveyors Ref. No:
10855
 Sheet 1 of 1

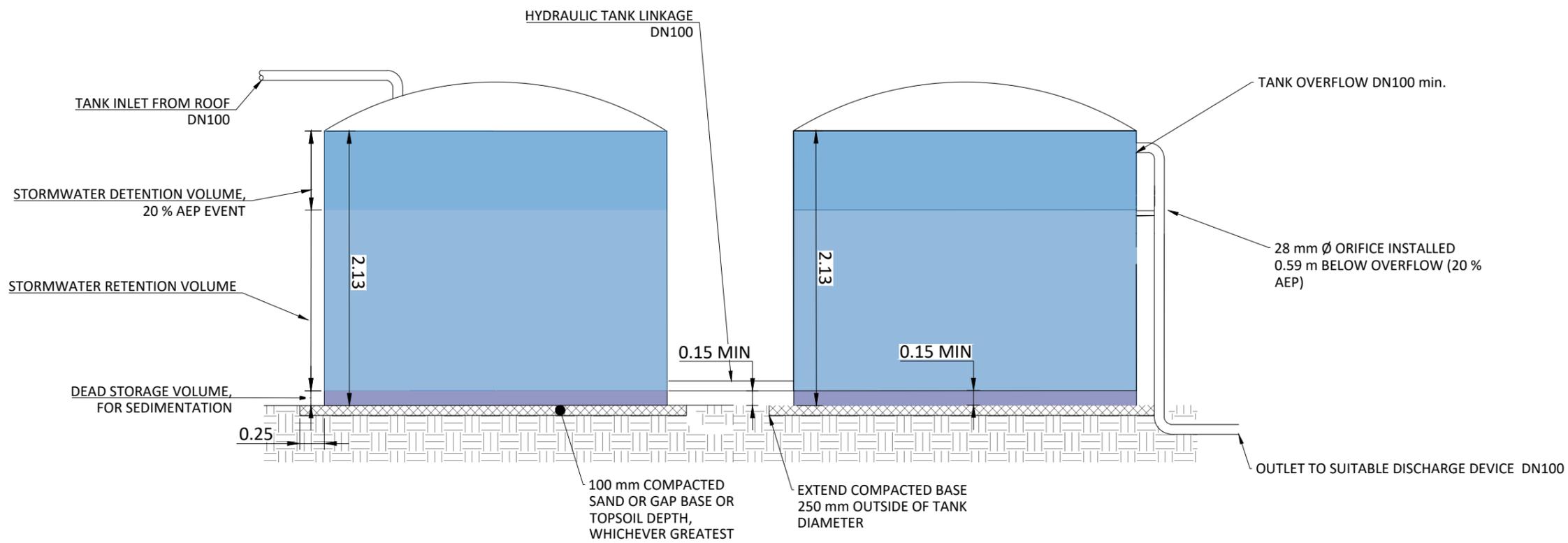
PROPOSED TANK PLAN VIEW

1:50, A3

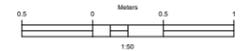


PROPOSED TANK SIDE VIEW

1:50, A3



GENERAL NOTES



A	FOR CONSENT	05/02/2026
Revision	Issue	Date

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AUCKLAND | NORTHLAND

Project Name and Address
 C0749N-02
 108 KAPIRO ROAD, KERIKERI
 PROP. SUBDIVISION OF LOTS 3 & 4 DP 148680
 KERIKERI

Project C0749N-02	Drawn By FS
----------------------	----------------

Client
T&G Global

Sheet Title
STORMWATER TANK DETAILS

Sheet
400

FILE PATH: N:\Projects\C0700-C0799\C0749N - T&G Global, Kapiro Road, Kerikeri\C0749N\02\07 - Technical & Drawings\Drawings\C0749N-5-100-400-FS C0749-02 existing surface DRAFT_1_0219.dwg

PLOTED: 05/02/2026

APPENDIX B

Site Photographs

Figure 4: Proposed Lot 5 vehicle crossing, facing west down Kapiro Road.



Figure 5: Proposed RoW A proposed upgrade between car park area and lower yard, facing west

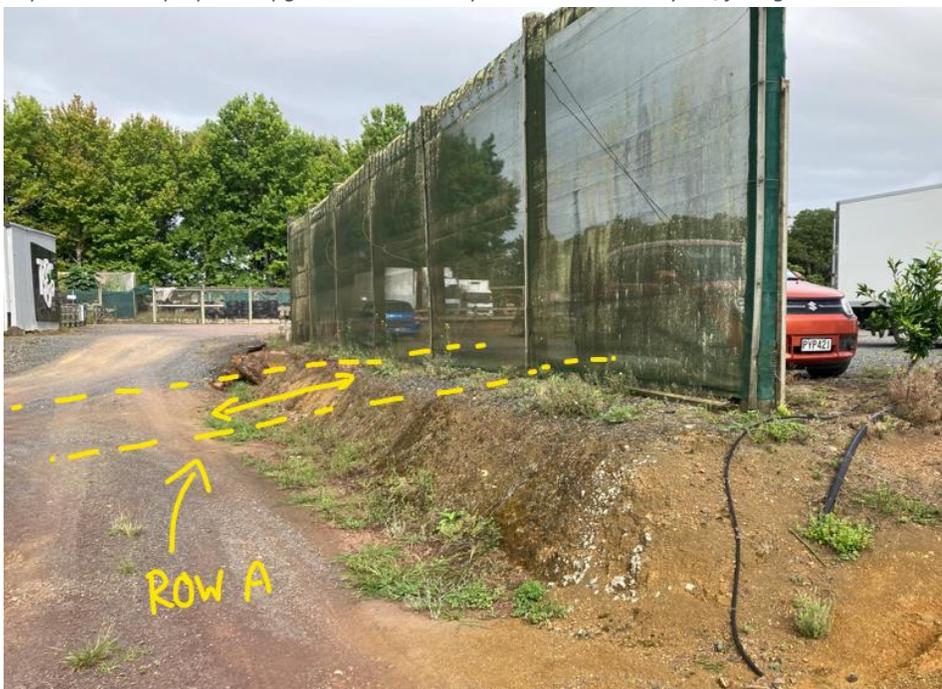




Figure 6: Existing metallated yard with proposed RoW A and G, facing south west

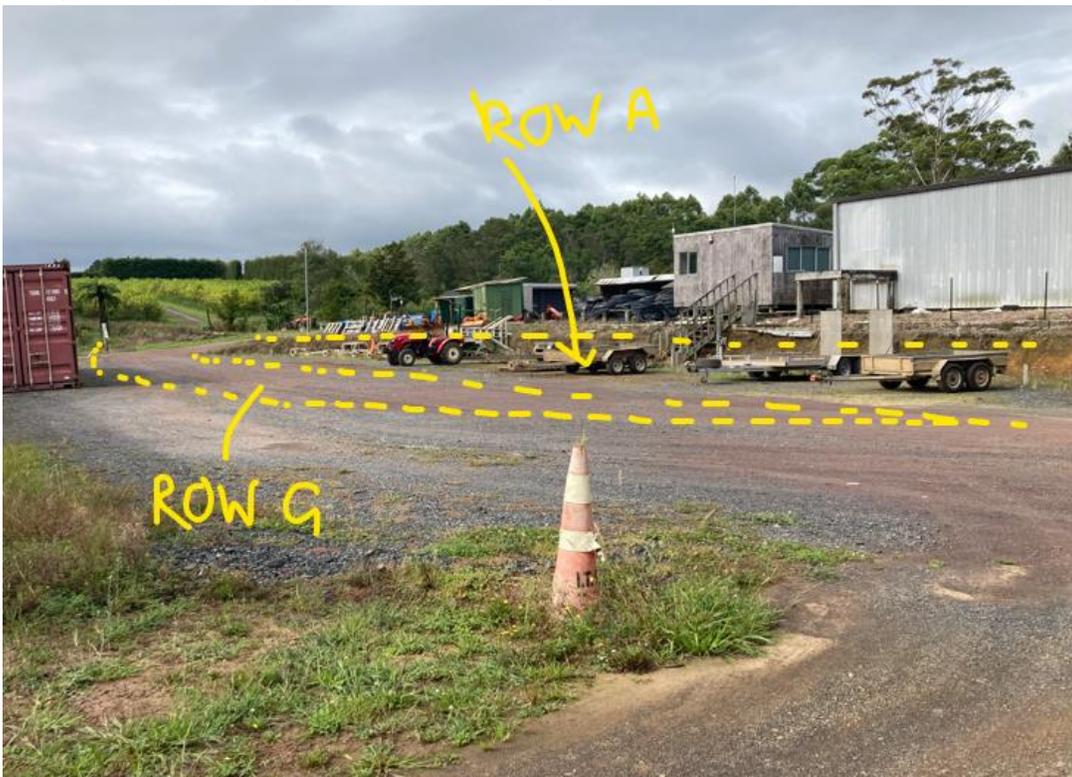




Figure 7: Existing accessway covered by RoW A / G, looking south-west



Figure 8: RoW A, at existing stream crossing, with proposed passing bay position on southern side





Figure 9: Junction on RoW B, C, D, looking south



Figure 10: Proposed RoW C approx position, facing west





Figure 11: Proposed RoW D, facing north, alongside Proposed Lot 2





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APPENDIX C

Engineering Borehole Records



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WASTEWATER LOG

Project Ref:

Client: Regeneration Holdings Ltd

Project Name: T&G Global, Kapiro Road, Karikeri

Hole ID: **HA01 (S2Lot5)**

Project Location: Kapiro Road, Kerikeri

Date: 03-02-2026

Hole Position: 1,684,199.59 mE 6,105,064.01 mN 82 m

Logged By: CA Approved: AW

DEPTH (M)	MATERIAL DESCRIPTION (SEE CLASSIFICATION AND SYMBOLOGY SHEET FOR DETAILS)	LEGEND	WASTEWATER CATEGORY (NZS1547)	WASTEWATER ASSESSMENT		GROUND WATER
				MOISTURE	COLOR	
0	SILT, with trace rootlets; brown; moist; friable, [TOPSOIL].					0
0.2 m	Clayey SILT; brown; moist; low plasticity, [RESIDUAL SOIL].					
0.5 m	Clayey SILT; light brown; moist; low plasticity, [KERIKERI VOLCANICS].					
1	Clayey SILT, with trace gravel; light brown; moist; low plasticity. Gravel is fine to medium, subrounded to sub-angular, [KERIKERI VOLCANICS].					1
1.2 m	Terminated at 1.2 m					2

Remarks:

- Hand Auger terminated at target depth.
- Groundwater not encountered during drilling.



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WASTEWATER LOG

Project Ref:

Client: Regeneration Holdings Ltd

Project Name: T&G Global, Kapiro Road, Karikeri

Hole ID: **HA02 (S2Lot4)**

Project Location: Kapiro Road, Kerikeri

Date: 03-02-2026

Hole Position: 1,684,163.99 mE 6,105,073.03 mN 83 m

Logged By: CA Approved: AW

DEPTH (M)	MATERIAL DESCRIPTION (SEE CLASSIFICATION AND SYMBOLGY SHEET FOR DETAILS)	LEGEND	WASTEWATER CATEGORY (NZS1547)	WASTEWATER ASSESSMENT		GROUND WATER
				MOISTURE	COLOR	

0	SILT, with trace rootlets; dark brown; moist; friable; [TOPSOIL].					0
0.1 m	Clayey SILT, with gravel; dark brown mottled light brown; moist; low plasticity. Gravel is fine to medium, sub-rounded to sub-angular; [RESIDUAL SOIL].					
0.5 m	Silty CLAY; light brown; moist; high plasticity; [KERIKERI VOLCANICS].					
1						1
1.2 m	Terminated at 1.2 m					2

- Remarks:
- Hand Auger terminated at target depth reached.
 - Groundwater not encountered during drilling.



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WASTEWATER LOG

Project Ref:

Client: Regeneration Holdings Ltd

Project Name: T&G Global, Kapiro Road, Karikeri

Hole ID: **HA03 (S2Lot2)**

Project Location: Kapiro Road, Kerikeri

Date: 03-02-2026

Hole Position: 1,684,003.52 mE 6,104,842.39 mN 88 m

Logged By: CA Approved: AW

DEPTH (M)	MATERIAL DESCRIPTION (SEE CLASSIFICATION AND SYMBOLGY SHEET FOR DETAILS)	LEGEND	WASTEWATER CATEGORY (NZS1547)	WASTEWATER ASSESSMENT		GROUND WATER
				MOISTURE	COLOR	
0	SILT, with trace rootlets; dark brown; moist; friable; [TOPSOIL].					0
0.2	Clayey SILT, with trace gravel; light brown; moist; low plasticity. Gravel is fine to medium; sub-rounded to sub-angular; [RESIDUAL SOIL].					
0.6	Silty CLAY; reddish brown; moist; high plasticity; [KERIKERI VOLCANICS].					
1	Terminated at 1.2 m					1
2						2

Remarks:

1. Hand Auger terminated to target depth.
2. Groundwater not encountered during drilling.



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WASTEWATER LOG

Project Ref:

Client: Regeneration Holdings Ltd

Project Name: T&G Global, Kapiro Road, Karikeri

Hole ID: **HA04 (S2Lot1)**

Project Location: Kapiro Road, Kerikeri

Date: 03-02-2026

Hole Position: 1,683,950.45 mE 6,104,843.78 mN 87 m

Logged By: CA Approved: AW

DEPTH (M)	MATERIAL DESCRIPTION (SEE CLASSIFICATION AND SYMBOLGY SHEET FOR DETAILS)	LEGEND	WASTEWATER CATEGORY (NZS1547)	WASTEWATER ASSESSMENT		GROUND WATER
				MOISTURE	COLOR	
0	SILT, with trace rootlets; brown; dry; friable; [TOPSOIL].					0
0.1 m	Clayey SILT, with trace gravel; brown; moist; low plasticity. Gravel is fine to medium, sub-rounded to sub-angular; [RESIDUAL SOIL].					
0.6 m	Silty CLAY, with gravel; reddish brown; moist; low plasticity. Gravel is fine to medium, sub-angular to sub-rounded; [KERIKERI VOLCANICS].					
1						1
2	Terminated at 1.2 m					2

Remarks:

- 1. Hand Auger terminated to target depth.

APPENDIX D

Wastewater Assessment of Effects

Table 3: Wastewater Assessment of Environmental Effects

Item	NRC Separation Requirement ²	FNDC Separation Requirement	Site Assessment ³
Individual System Effects			
Flood plains	Above 5 % AEP	NR	Complies. Disposal field well above mapped flood hazard.
Stormwater flowpath ⁴	5 m	NR	Complies, see annotations on Drawing No. 100.
Surface water feature ⁵	15 m	15 – 30 m	Complies.
Coastal Marine Area	15 m	30 m	Complies.
Existing water supply bore.	20 m	NR	Complies.
Property boundary	1.5 m	1.5	Complies. Including proposed subdivision boundaries.
Winter groundwater table	0.6 m	0.6 m	Complies.
Topography			Complies, <10 °.
Cut off drain required?			No.
Discharge Consent Required?			No.
	TP58	NZS1547	
Cumulative Effects			
Biological Oxygen Demand	≤20 g/m ³		Complies – secondary treatment.
Total Suspended Solids	≤30 g/m ³		Complies – secondary treatment.
Total Nitrogen	10 – 30 g/m ³	15 – 75 g/m ³	Complies – secondary treatment.



Phosphorous	NR	4 – 10 g/m ³	Complies – secondary treatment.
Ammonia	NR	Negligible	Complies – secondary treatment.
Nitrites/ Nitrates	NR	15 – 45 g/m ³	Complies – secondary treatment.

Conclusion: Effects are less than minor on the environment.

1. *AEE based on proposed secondary treated effluent.*
2. *Northland Regional Plan Table 9.*
3. *Based on the recommendations of this report and Drawing No. 100.*
4. *Including any formed road with kerb and channel, and water-table drain that is down-slope of the disposal area.*
5. *River, lake, stream, pond, dam, or natural wetland.*

AEP Annual Exceedance Probability.

NR No Requirement.



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APPENDIX E

Stormwater Calculations

Project Ref:	C0749N	STORMWATER ATTENUATION TANK DESIGN	
Project Address:	LOT 3-4 DP 148680, Kapiro Road		
Design Case:	PROPOSED DEVELOPMENT		
Date:	27/1/2026	50 % AEP STORM EVENT, 80 % OF PRE DEVELOPMENT	

ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).
 PRE-DEVELOPMENT RUNOFF IS FACTORED BY 80% TO SUIT FNDC STANDARDS
 RUNOFF COEFFICIENTS DETERMINED FROM FNDC ENGINEERING STANDARDS 2023 TABLE 4-3.

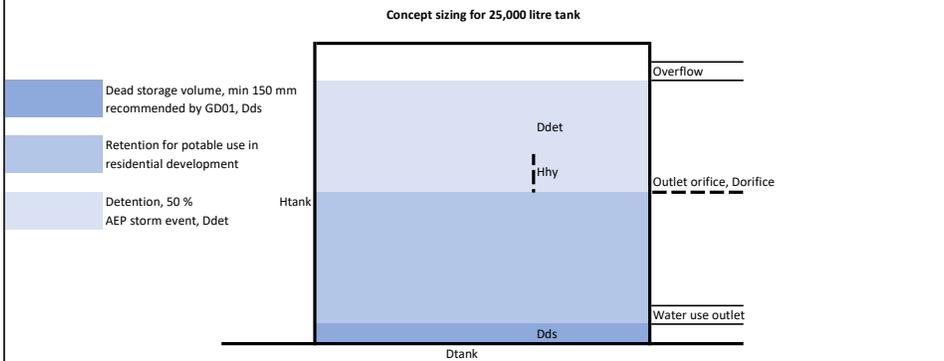
PRE DEVELOPMENT CATCHMENT PARAMETERS				POST DEVELOPMENT CATCHMENT PARAMETERS			
ITEM	AREA, A, m ²	COEFFICIENT, C	DESCRIPTION	ITEM	AREA, A, m ²	COEFFICIENT, C	DESCRIPTION
IMPERVIOUS A				TO TANK	300	0.96	ROOF
IMPERVIOUS B	0	0		OFFSET	200	0.8	DRIVEWAY - METAL
IMPERVIOUS C	0	0		PERVIOUS	0	0	
EX. PERVIOUS	500	0.59	PASTURE	EX. CONSENTED	0	0	
TOTAL	500		TYPE C	TOTAL	500		TYPE C

RAINFALL INTENSITY, 50% AEP, 10MIN DURATION			
50 % AEP RAINFALL INTENSITY, 10 MIN, I, mm/hr	64.3	mm/hr	* CLIMATE CHANGE FACTOR OF 20% APPLIED IN ACCORDANCE WITH FNDC ENGINEERING STANDARDS 4.3.9.1. NIWA HISTORIC RAINFALL INTENSITY DATA, 10MIN, IS MULTIPLIED BY CLIMATE CHANGE FACTOR.
CLIMATE CHANGE FACTOR, 2.1 DEG, 10 MIN*	20	%	
50 % AEP RAINFALL INTENSITY, 10 MIN WITH CC	77.16	mm/hr	

PRE AND POST-DEVELOPMENT RUNOFF, 50%AEP, VARIOUS DURATIONS							
DURATION, min	INTENSITY, mm/hr	CC FACTOR	INTENSITY WITH CC, mm/hr	POST DEV RUNOFF, Qpost, l/s	PRE DEV RUNOFF, Qpre, l/s	80% of PRE DEV RUNOFF, Qpre(80%), l/s	COMMENTS
10	64.30	1.2	77.16	9.60	5.27	4.22	Critical duration (time of concentration) for the catchments is 10min
20	46.80	1.2	56.16	6.99	3.84	3.07	
30	38.80	1.2	46.56	5.79	3.18	2.54	
60	27.90	1.2	33.48	4.17	2.29	1.83	Pre-dev calculated on Intensity without CC factor
120	19.80	1.2	23.76	2.96	1.62	1.30	
360	10.90	1.2	13.08	1.63	0.89	0.71	
720	7.17	1.2	8.60	1.07	0.59	0.47	
1440	4.52	1.2	5.42	0.67	0.37	0.30	
2880	2.72	1.2	3.26	0.41	0.22	0.18	
4320	1.96	1.2	2.35	0.29	0.16	0.13	

ATTENUATION ANALYSIS, VARIOUS DURATIONS						
DURATION, min	OFFSET FLOW, Qoff, l/s	TANK INFLOW, Qin, l/s	ALLOWABLE TANK OUTFLOW, Qpre(80%) - Qoff, l/s	SELECTED TANK OUTFLOW, Qout, l/s	DIFFERENCE (Qin - Qout), l/s	Required Storage, litres
10	3.43	6.17	0.79	0.79	5.39	3232
20	2.50	4.49	0.57	0.79	3.71	4448
30	2.07	3.72	0.47	0.79	2.94	5290
60	1.49	2.68	0.34	0.79	1.89	6813
120	1.06	1.90	0.24	0.79	1.11	8027
360	0.58	1.05	0.13	0.79	0.26	5627
720	0.38	0.69	0.09	0.79	No Att. Req.	0
1440	0.24	0.43	0.06	0.79	No Att. Req.	0
2880	0.15	0.26	0.03	0.79	No Att. Req.	0
4320	0.10	0.19	0.02	0.79	No Att. Req.	0

ATTENUATION TANK DESIGN OUTPUT



SPECIFICATION

TOTAL STORAGE REQUIRED	8.027 m ³	Select largest storage as per analysis
TANK HEIGHT, Htank	2.6 m	Concept sizing for 25,000 litre tank
TANK DIAMETER, Dtank	3.5 m	No. of Tanks 2
TANK AREA, Atank	19.24 m ²	Area of two tanks hydraulically linked
TANK MAX STORAGE VOLUME, Vtank	50030 litres	
REQUIRED STORAGE HEIGHT, Ddet	0.42 m	Below overflow
DEAD STORAGE VOLUME, Dds	0.15 m	GD01 recommended minimum
TOTAL WATER DEPTH REQUIRED	0.57 m	
SELECTED TANK OUTFLOW, Qout, l/s	0.00079 m ³ /s	Selected tank outflow
AVERAGE HYDRAULIC HEAD, Hhy	0.21 m	
AREA OF ORIFICE, Aorifice	6.27E-04 m ²	
ORIFICE DIAMETER, Dorifice	28 mm	
VELOCITY AT ORIFICE	2.86 m/s	At max. head level

Project Ref:	C0749N	STORMWATER ATTENUATION TANK DESIGN	
Project Address:	LOT 3-4 DP 148680, Kapiro Road		
Design Case:	PROPOSED DEVELOPMENT		
Date:	27/1/2026 REV 1		

ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).
 PRE-DEVELOPMENT RUNOFF IS FACTORED BY 80% TO SUIT FNDC STANDARDS
 RUNOFF COEFFICIENTS DETERMINED FROM FNDC ENGINEERING STANDARDS 2023 TABLE 4-3.

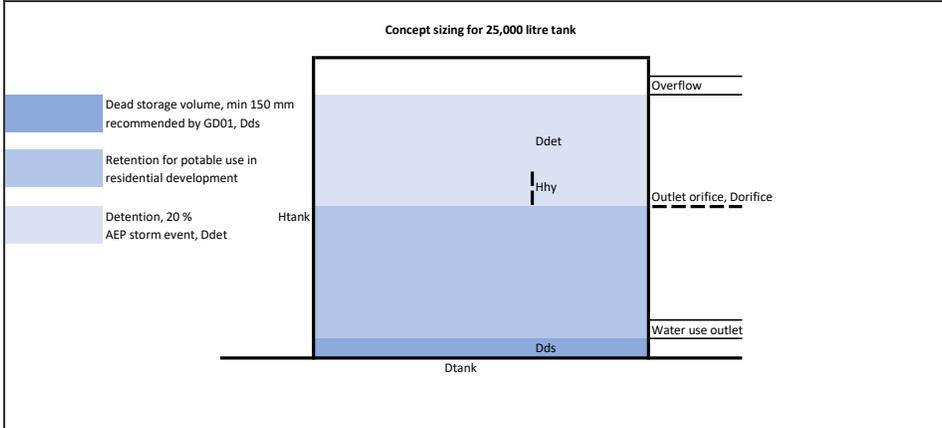
PRE DEVELOPMENT CATCHMENT PARAMETERS				POST DEVELOPMENT CATCHMENT PARAMETERS			
ITEM	AREA, A, m ²	COEFFICIENT, C	DESCRIPTION	ITEM	AREA, A, m ²	COEFFICIENT, C	DESCRIPTION
IMPERVIOUS A	0	0		TO TANK	300	0.96	ROOF
IMPERVIOUS B	0	0		OFFSET	200	0.8	DRIVEWAY - METAL
IMPERVIOUS C	0	0		PERVIOUS	0	0	
EX. PERVIOUS	500	0.59	PASTURE	EX. CONSENTED	0	0	
TOTAL	500	TYPE C		TOTAL	500	TYPE C	

RAINFALL INTENSITY, 20% AEP, 10MIN DURATION			
20 % AEP RAINFALL INTENSITY, 10 MIN, I, mm/hr	83.3	mm/hr	* CLIMATE CHANGE FACTOR OF 20% APPLIED IN ACCORDANCE WITH FNDC ENGINEERING STANDARDS 4.3.9.1. NIWA HISTORIC RAINFALL INTENSITY DATA, 10MIN, IS MULTIPLIED BY CLIMATE CHANGE FACTOR.
CLIMATE CHANGE FACTOR, 2.1 DEG, 10 MIN*	20	%	
20 % AEP RAINFALL INTENSITY, 10 MIN WITH CC	100.0	mm/hr	

PRE AND POST-DEVELOPMENT RUNOFF, 20%AEP, VARIOUS DURATIONS							
DURATION, min	INTENSITY, mm/hr	CC FACTOR	INTENSITY WITH CC, mm/hr	POST DEV RUNOFF, Q _{post} , l/s	PRE DEV RUNOFF, Q _{pre} , l/s	80% of PRE DEV RUNOFF, Q _{pre(80%)} , l/s	COMMENTS
10	83.30	1.2	99.96	12.44	6.83	5.46	Critical duration (time of concentration) for the catchments is 10min
20	60.70	1.2	72.84	9.06	4.97	3.98	
30	50.40	1.2	60.48	7.53	4.13	3.30	
60	36.30	1.2	43.56	5.42	2.97	2.38	Pre-dev calculated on Intensity without CC factor
120	25.80	1.2	30.96	3.85	2.11	1.69	
360	14.30	1.2	17.16	2.14	1.17	0.94	
720	9.39	1.2	11.27	1.40	0.77	0.62	
1440	5.93	1.2	7.12	0.89	0.49	0.39	
2880	3.57	1.2	4.28	0.53	0.29	0.23	
4320	2.58	1.2	3.10	0.39	0.21	0.17	

ATTENUATION ANALYSIS, VARIOUS DURATIONS							
DURATION, min	OFFSET FLOW, Q _{off} , l/s	TANK INFLOW, Q _{in} , l/s	ALLOWABLE TANK OUTFLOW, Q _{pre(80%)} - Q _{off} , l/s	SELECTED TANK OUTFLOW, Q _{out} , l/s	DIFFERENCE (Q _{in} - Q _{out}), l/s	Required Storage, litres	COMMENTS
10	4.44	8.00	1.02	0.90	7.10	4258	Selected Tank Outflow is selected for critical duration (time of concentration).
20	3.24	5.83	1.74	0.90	4.93	5913	
30	2.69	4.84	1.44	0.90	3.94	7089	
60	1.94	3.48	1.04	0.90	2.58	9305	select largest required storage, regardless of duration, to avoid overflow for event of any duration
120	1.38	2.48	0.74	0.90	1.58	11353	
360	0.76	1.37	0.41	0.90	0.47	10212	
720	0.50	0.90	0.27	0.90	0.00	62	
1440	0.32	0.57	0.17	0.90	No Att. Req.	0	
2880	0.19	0.34	0.10	0.90	No Att. Req.	0	
4320	0.14	0.25	0.07	0.90	No Att. Req.	0	

ATTENUATION TANK DESIGN OUTPUT



SPECIFICATION		
TOTAL STORAGE REQUIRED	11.353 m ³	Select largest storage as per analysis
TANK HEIGHT, H _{tank}	2.6 m	Concept sizing for 25,000 litre tank
TANK DIAMETER, D _{tank}	3.5 m	No. of Tanks 2
TANK AREA, A _{tank}	19.24 m ²	Area of two tanks hydraulically linked
TANK MAX STORAGE VOLUME, V _{tank}	50030 litres	
REQUIRED STORAGE HEIGHT, D _{det}	0.59 m	Below overflow
DEAD STORAGE VOLUME, D _{ds}	0.15 m	GD01 recommended minimum
TOTAL WATER DEPTH REQUIRED	0.74 m	
SELECTED TANK OUTFLOW, Q _{out} , l/s	0.00090 m ³ /s	Selected tank outflow
AVERAGE HYDRAULIC HEAD, H _{hy}	0.30 m	
AREA OF ORIFICE, A _{orifice}	6.03E-04 m ²	
ORIFICE DIAMETER, D _{orifice}	28 mm	
VELOCITY AT ORIFICE	3.40 m/s	At max. head level

HIRDS V4 Intensity-Duration-Frequency Results

Site name: Custom Location

Coordinate system: WGS84

Longitude: 173.9428

Latitude: -35.1938

DDF Mode Parameters: c d e f g h i

Values: 0.00234073 0.5155522 -0.0165708 -0.00362778 0.25359755 -0.0116598 3.2387231

Example: Duration (hrs) ARI (yrs) x y Rainfall Rate (mm/hr)

24 100 3.17805383 4.60014923 10.6907631

Rainfall intensities (mm/hr) :: Historical Data

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	58.8	42.7	35.4	25.5	18.1	9.94	6.53	4.1	2.5	1.8	1.4	1.15
2	0.5	64.3	46.8	38.8	27.9	19.8	10.9	7.17	4.5	2.7	2	1.5	1.27
5	0.2	83.3	60.7	50.4	36.3	25.8	14.3	9.39	5.9	3.6	2.6	2	1.67
10	0.1	97.2	70.9	58.9	42.5	30.2	16.7	11	7	4.2	3.1	2.4	1.97
20	0.05	111	81.3	67.6	48.9	34.8	19.3	12.7	8.1	4.9	3.5	2.8	2.28
30	0.033	120	87.5	72.7	52.6	37.5	20.8	13.8	8.7	5.3	3.8	3	2.47
40	0.025	126	91.8	76.4	55.3	39.4	21.9	14.5	9.2	5.5	4	3.2	2.61
50	0.02	130	95.4	79.3	57.4	40.9	22.8	15.1	9.6	5.8	4.2	3.3	2.71
60	0.017	134	98.2	81.7	59.2	42.2	23.5	15.5	9.9	6	4.3	3.4	2.8
80	0.013	140	103	85.4	61.9	44.1	24.6	16.3	10	6.2	4.5	3.6	2.94
100	0.01	145	106	88.2	64	45.7	25.4	16.8	11	6.5	4.7	3.7	3.04
250	0.004	163	129	99.8	72.5	51.8	28.9	19.2	12	7.4	5.4	4.2	3.48

Intensity standard error (mm/hr) :: Historical Data

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	7.6	4.8	3.6	2.6	1.8	1.1	0.77	0.6	0.4	0.3	0.2	0.19
2	0.5	8.3	5.2	3.9	2.8	2	1.2	0.84	0.7	0.4	0.3	0.3	0.21
5	0.2	12	7.4	5.7	3.8	2.8	1.7	1.2	0.9	0.6	0.5	0.4	0.29
10	0.1	15	9.8	7.6	4.8	3.6	2.2	1.5	1.1	0.7	0.5	0.4	0.34
20	0.05	19	13	10	6.2	4.7	2.9	1.9	1.3	0.9	0.6	0.5	0.41
30	0.033	21	15	12	7.2	5.6	3.4	2.2	1.5	1	0.7	0.6	0.45
40	0.025	24	17	14	8	6.3	3.9	2.5	1.6	1	0.8	0.6	0.48
50	0.02	26	18	14	8.7	6.9	4.2	2.7	1.7	1.1	0.8	0.6	0.5
60	0.017	27	19	15	9.3	7.4	4.5	2.9	1.8	1.1	0.8	0.7	0.53
80	0.013	30	22	17	10	8.3	5.1	3.3	1.9	1.2	0.9	0.7	0.56
100	0.01	33	23	19	11	9.1	5.6	3.6	2	1.3	0.9	0.7	0.59
250	0.004	44	33	26	16	13	8	5.2	2.5	1.6	1.2	0.9	0.73

Rainfall intensities (mm/hr) :: RCP2.6 for the period 2031-2050

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	62.9	45.7	37.9	27.3	19.2	10.5	6.84	4.3	2.6	1.8	1.4	1.18
2	0.5	69	50.2	41.6	30	21.2	11.5	7.53	4.7	2.8	2	1.6	1.3
5	0.2	89.6	65.3	54.2	39.1	27.7	15.1	9.9	6.2	3.7	2.7	2.1	1.72
10	0.1	105	76.4	63.4	45.8	32.5	17.8	11.7	7.3	4.4	3.2	2.5	2.04
20	0.05	120	87.7	72.9	52.7	37.4	20.6	13.5	8.5	5.1	3.7	2.9	2.36
30	0.033	129	94.4	78.5	56.8	40.3	22.2	14.5	9.1	5.5	4	3.1	2.56
40	0.025	136	99.2	82.5	59.7	42.4	23.4	15.3	9.6	5.8	4.2	3.3	2.7
50	0.02	141	103	85.6	62	44.1	24.3	15.9	10	6	4.4	3.4	2.81
60	0.017	145	106	88.2	63.9	45.4	25	16.4	10	6.2	4.5	3.5	2.9
80	0.013	151	111	92.2	66.8	47.5	26.2	17.2	11	6.5	4.7	3.7	3.04
100	0.01	156	115	95.3	69.1	49.2	27.2	17.8	11	6.8	4.9	3.8	3.15
250	0.004	176	129	108	78.3	55.8	30.9	20.3	13	7.7	5.6	4.4	3.61

Rainfall intensities (mm/hr) :: RCP2.6 for the period 2081-2100

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	62.9	45.7	37.9	27.3	19.2	10.5	6.84	4.3	2.6	1.8	1.4	1.18
2	0.5	69	50.2	41.6	30	21.2	11.5	7.53	4.7	2.8	2	1.6	1.3
5	0.2	89.6	65.3	54.2	39.1	27.7	15.1	9.9	6.2	3.7	2.7	2.1	1.72
10	0.1	105	76.4	63.4	45.8	32.5	17.8	11.7	7.3	4.4	3.2	2.5	2.04
20	0.05	120	87.7	72.9	52.7	37.4	20.6	13.5	8.5	5.1	3.7	2.9	2.36
30	0.033	129	94.4	78.5	56.8	40.3	22.2	14.5	9.1	5.5	4	3.1	2.56
40	0.025	136	99.2	82.5	59.7	42.4	23.4	15.3	9.6	5.8	4.2	3.3	2.7
50	0.02	141	103	85.6	62	44.1	24.3	15.9	10	6	4.4	3.4	2.81
60	0.017	145	106	88.2	63.9	45.4	25	16.4	10	6.2	4.5	3.5	2.9
80	0.013	151	111	92.2	66.8	47.5	26.2	17.2	11	6.5	4.7	3.7	3.04
100	0.01	156	115	95.3	69.1	49.2	27.2	17.8	11	6.8	4.9	3.8	3.15
250	0.004	176	129	108	78.3	55.8	30.9	20.3	13	7.7	5.6	4.4	3.61

Rainfall intensities (mm/hr) :: RCP4.5 for the period 2031-2050

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	64	46.5	38.5	27.7	19.5	10.6	6.92	4.3	2.6	1.9	1.5	1.19
2	0.5	70.2	51	42.3	30.5	21.5	11.7	7.63	4.8	2.8	2	1.6	1.31
5	0.2	91.2	66.5	55.1	39.8	28.1	15.4	10	6.3	3.8	2.7	2.1	1.74
10	0.1	107	77.8	64.6	46.7	33.1	18.1	11.8	7.4	4.4	3.2	2.5	2.05
20	0.05	122	89.3	74.2	53.7	38.1	20.9	13.7	8.6	5.1	3.7	2.9	2.38
30	0.033	132	96.2	80	57.9	41.1	22.5	14.8	9.3	5.5	4	3.1	2.58
40	0.025	138	101	84	60.8	43.2	23.7	15.5	9.8	5.8	4.2	3.3	2.72
50	0.02	143	105	87.2	63.2	44.9	24.7	16.2	10	6.1	4.4	3.5	2.83
60	0.017	148	108	89.8	65.1	46.2	25.4	16.7	11	6.3	4.5	3.6	2.92
80	0.013	154	113	94	68.1	48.4	26.6	17.5	11.6	6.5	4.8	3.7	3.07
100	0.01	159	117	97.1	70.4	50.1	27.6	18.1	11	6.8	4.9	3.9	3.18
250	0.004	180	132	110	79.8	56.8	31.4	20.6	13	7.8	5.6	4.4	3.64

Rainfall intensities (mm/hr) :: RCP4.5 for the period 2081-2100

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	67	48.9	40.5	29.2	20.5	11.1	7.16	4.5	2.6	1.9	1.5	1.21
2	0.5	73.8	53.7	44.5	32.1	22.6	12.2	7.91	4.9	2.9	2.1	1.6	1.34
5	0.2	96.2	70.1	58.2	42	29.6	16.1	10.4	6.5	3.9	2.8	2.2	1.78
10	0.1	113	82.2	68.2	49.3	34.8	18.9	12.3	7.7	4.6	3.3	2.6	2.11
20	0.05	129	94.4	78.5	56.7	40.2	21.9	14.2	8.9	5.3	3.8	3	2.44
30	0.033	139	102	84.5	61.2	43.3	23.6	15.4	9.6	5.7	4.1	3.2	2.65
40	0.025	146	107	88.8	64.3	45.6	24.9	16.2	10	6	4.4	3.4	2.79
50	0.02	152	111	92.3	66.8	47.4	25.9	16.9	11	6.3	4.5	3.6	2.91
60	0.017	156	114	95	68.8	48.8	26.7	17.4	11	6.5	4.7	3.7	3
80	0.013	163	119	99.4	72.1	51.1	28	18.2	11	6.8	4.9	3.8	3.15
100	0.01	169	123	103	74.5	52.9	29	18.9	12	7.1	5.1	4	3.27
250	0.004	190	140	116	84.4	60	32.9	21.5	14	8.1	5.8	4.6	3.74

Rainfall intensities (mm/hr) :: RCP6.0 for the period 2031-2050

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	63.5	46.2	38.3	27.5	19.4	10.6	6.89	4.3	2.6	1.9	1.5	1.19
2	0.5	69.7	50.7	42	30.3	21.4	11.6	7.59	4.8	2.8	2	1.6	1.31
5	0.2	90.5	66	54.8	39.5	28	15.3	9.98	6.3	3.7	2.7	2.1	1.73
10	0.1	106	77.2	64.1	46.3	32.8	18	11.8	7.4	4.4	3.2	2.5	2.05
20	0.05	121	88.7	73.7	53.3	37.8	20.7	13.6	8.5	5.1	3.7	2.9	2.37
30	0.033	131	95.5	79.4	57.4	40.8	22.4	14.7	9.2	5.5	4	3.1	2.57
40	0.025	137	102	83.4	60.4	42.9	23.6	15.4	9.7	5.8	4.2	3.2	2.65
50	0.02	142	104	86.6	62.7	44.6	24.5	16.1	10	6.1	4.4	3.4	2.82
60	0.017	146	107	89.2	64.6	45.9	25.3	16.6	10	6.3	4.5	3.5	2.91
80	0.013	153	112	93.3	67.6	48.1	26.5	17.4	11	6.6	4.7	3.7	3.06
100	0.01	158	116	96.4	69.9	49.7	27.4	18	11	6.8	4.9	3.9	3.17
250	0.004	178	131	109	79.2	56.4	31.2	20.5	13	7.8	5.6	4.4	3.63

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Appendix 5

Combined Preliminary and Detailed Site
Investigation



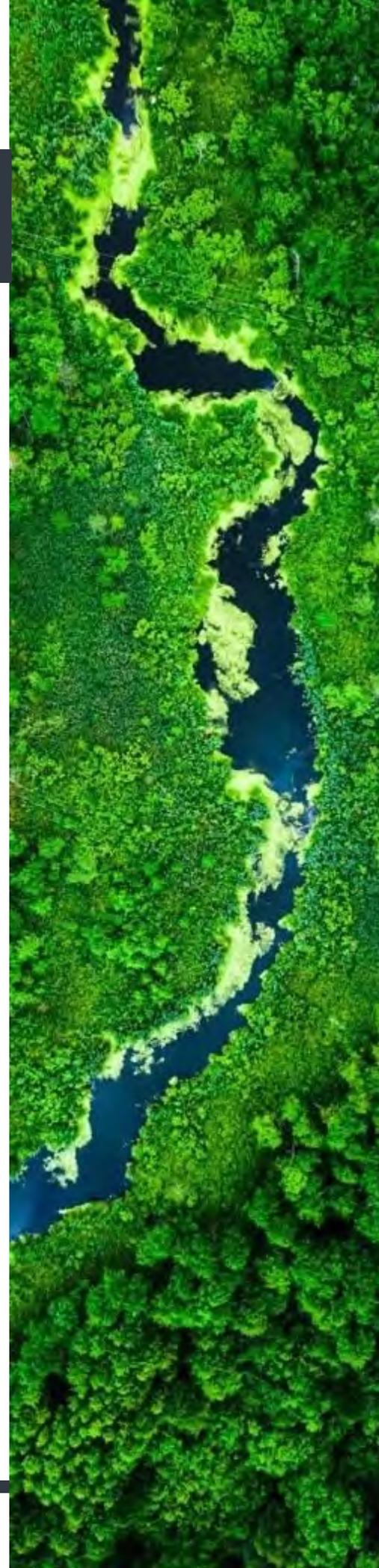
geologix
consulting engineers

COMBINED PRELIMINARY AND DETAILED SITE INVESTIGATION

LOT 3-4 DP 148680,
KAPIRO ROAD, KERIKERI

T & G GLOBAL

C0749N-E-02
FEBRUARY 2026
REVISION 1





DOCUMENT MANAGEMENT

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1 INTRODUCTION

This combined Preliminary and Detailed Site Investigation (PSI/ DSI) report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for T & G Global as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

This investigation was to assist with the Resource Consent application in relation to the proposed subdivision of Lots 3-4 DP 148680, 108 Kapiro Road, Kerikeri (herein, referred to as the 'site', Figure 1, Section 2.1).

1.1 Background and Objectives

At the time of writing this report, the site is proposed for a six-lot subdivision. Proposed subdivision plans by Thomson Survey Limited dated 20 January 2026 are provided in Appendix A.

The Ministry for Environment's (MfE's) Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES:CS) (MfE, 2011a) applies to all site activities that trigger the NES:CS which are defined by Regulation 5 Subclauses (2) to (6). When one or more of these activities occur within a piece of land for which an activity or industry described by the Hazardous Activities and Industries List (HAIL) is either being undertaken, has previously been undertaken or is more likely than not to have occurred on it the NES:CS is enacted.

Therefore, the objective of this investigation was to:

- Determine the applicability of the NES:CS to the site.
- Assess the likelihood of human health risk associated with the proposed subdivision.
- Characterise site soils within the site (refer to Section 4), to assess the potential risks to human health and the environment; and
- Assess the requirements for potential consents in relation to the NES:CS.

1.2 Scope of Works

The following scope of works was undertaken in accordance with the staged process defined by the MfE Contaminated Land Management Guidelines (CLMG) No. 1 - *Reporting on Contaminated Site in New Zealand*. Ministry for the Environment, Wellington, New Zealand, Revised in 2021 (MfE 2011b).

- Desktop review of:
 - Provided council property information.
 - The Northland Regional Council (NRC) Selected Land Use Register (SLUR).



- The Far North District (FNDC) Far North Maps.
- Historical aerial photography available on the Local Government Geospatial Alliance's (LGGA's) Retrolens webpage as well as FNDC Maps LINZ Aerial Imagery.
- Soil sampling comprising the collection of 54 surface soil samples (including six duplicate samples) from 48 locations within the site.
- As required by the NES:CS, six duplicate sample were collected to confirm the consistency of the analysis.
- Soil samples were sent to RJ Hill Laboratories (Hills) for analysis (with Chain of Custody documentation).
- Preparation of this report in general accordance with current contaminated land guideline documents by a Suitably Qualified and Experienced Practitioner (SQEP) as defined by the NES:CS.

2 SITE INFORMATION/ DESCRIPTION

2.1 Site Identification

The site is located at 108 Kapiro Road in Kerikeri, approximately 1 km east of the State Highway 10 (Twin Coast Discovery Highway) and Kapiro Road intersection. The site setting is presented in Figure 1 below with the centre of the site approximately at geographical position NZGD: 1684088. 6104810.

Figure 1: Site Setting.





The site is legally described as Lots 3-4 DP 148680 with a total site area of approximately 17.054 ha and designated by the FNDC Operative District Plan as within the Rural Production zone. The current title comprises an existing agricultural block. Proposed Lot 6 (balance lot of Lot 4 DP 148680) comprises an existing office, car park and nursery (greenhouses) near the frontage with Kapiro Road. The remaining proposed lots are all under existing orchard plantations (predominantly citrus). Details of the site are listed in Table 1 below.

Table 1: Site Details.

Address	Zone	Legal Description	Area (m ²)
108 Kapiro Road, Kerikeri	Rural Production	Lots 3-4 DP 148680	170,532

2.2 Proposal and Proposed Site Use

It is understood that the Client proposes to subdivide the rural property into six separate sites. The proposed application includes subdivision formation only and not lot-specific development at this stage. A summary of the proposed subdivision plan is outlined in Table 2 below.

Table 2: Summary of Proposed Subdivision

Proposed Subdivision of Lots 3-4 DP 148680			
Existing Lots	Proposed Lots	Size Range (ha)	Purpose
Lot 3 DP 148680	1	0.5240	New Rural Residential
	2	0.5040	New Rural Residential
	3	4.6981	No change - Rural Production
	4	0.5100	New Rural Residential
Lot 3 DP 1486801	5	0.5030	New Rural Residential
	6	10.3149	No change - Rural Production

This understanding has been established from the proposed subdivision plan provided by Thomson Survey Limited dated 20 January 2026, provided in Appendix A. Any amendments to the referenced proposed subdivision plan may require an update to the scope and/ or recommendations of this report.

It is expected that any future soil disturbance activities will be required to potentially upgrade existing site access roads, create new site access/ driveway for the proposed new lots, and to form potential future building platforms. However, no earthworks are proposed at this stage.

The current site use for the proposed rural residential subdivision areas (proposed Lots 1,2, 4 and 5) are anticipated to change from rural production to rural residential. However, majority of the site area (i.e., proposed Lots 3 and 6) is not proposed to change, is remaining as production land.

2.3 Current Land Use

The site is currently in use for horticultural activities. The site is zoned Rural Production under the FNDC Operative District Plan.



The future site use of the majority of the site is not anticipated to change (i.e., proposed Lots 3 and 6), while a small portion of the site (i.e., proposed new Lots 1, 2, 4 and 5) is proposed for rural residential land use following the proposed subdivision.

2.4 Surrounding Land Uses

The site is surrounded by mixed use rural properties including horticultural land use to the east, north-west and north-east, and rural residential properties to the north, north-east and west. And grazing land to the north and south.

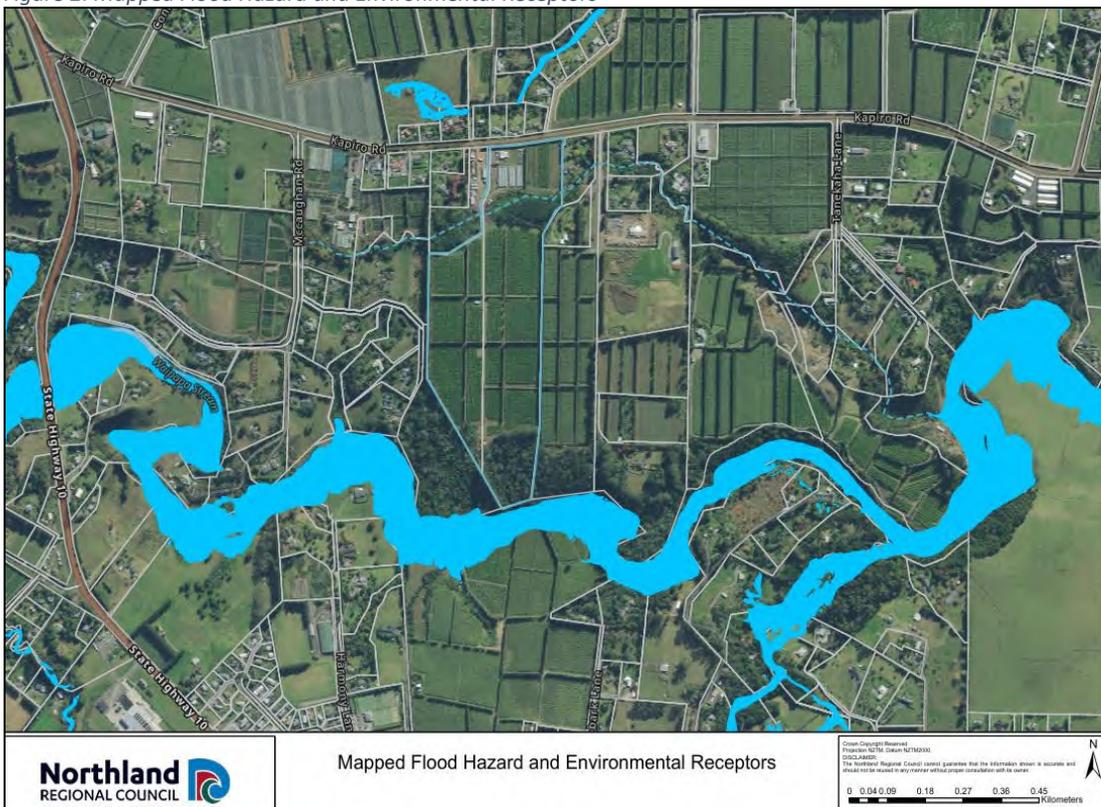
2.5 Environmental Setting/ Ecological Receptors

To provide protection for natural resources, ecological receptors on or near a site should be considered. The nearest ecological receptors are a tributary of the Waipapa Stream which traverses the northern portion of the site (from west to east) and the Waipapa Stream, located adjacent to the site’s southern boundary.

In relation to this consent application, Both the tributary of the Waipapa Stream and the Waipapa Stream is located within an influencing distance (i.e., less than 100 m), therefore, are considered an environmental receptor.

Additionally, Figure 2 indicates the site is outside of a mapped flood hazard area, flood hazard under all modelled scenarios

Figure 2: Mapped Flood Hazard and Environmental Receptors





To note, the tributary indicated on Figure 2 above (blue dashed line) did not appear on the NRCs Natural Hazards Map, therefore, was manually drawn in for reference purposes only, may not be accurate.

2.6 Geology

Published geological records indicates that to be directly underlain by Kerikeri Volcanic Group Late Miocene basalt of Kaikohe - Bay of Islands Volcanic Field. These Neogene igneous rocks (basalt) can be expected to contain Basalt lava material, volcanic plugs and minor tuff material. (GNS Science, 2022).

2.7 Site Inspection

A site walkover in conjunction with onsite investigation works was undertaken in January 2026 and the following observations were made. Selected site photographs (specifically the areas proposed for change of use) are provided in Appendix B):

- The site appears as outlined by the most recent available 2025 aerial photograph (Google Earth Pro).
- The site is in use for horticultural purposes (i.e., citrus orchard).
- Majority of structures (e.g., offices and greenhouses etc.) and associated parking areas are located on the northern portion of the site.
- A small storage/ shed structure is present within the central portion of the site, approximately 40 m south of the proposed residential Lots 1 and 2.
 - Includes agrichemicals storage.
- The balance of the site is predominantly citrus orchard, with a small portion of undeveloped land on the southern and northern portions (south of existing greenhouses and proposed Lots 4 and 5) of the site.
- No burn pits/ burn areas (e.g., burning of refuse) were observed on site.
- No treated timber posts observed onsite, specifically within the proposed residential land use areas (proposed Lots 1, 2, 4 and 5) which is typical of the type of horticulture (e.g., citrus orchard).

3 HISTORICAL SITE USE

A review of selected publicly available information was undertaken to gain an understanding of the history of the site, particularly the nature and location of potentially contaminating activities that may have occurred within the site. This included reviews of:

- Publicly available historical aerial photographs from the Local Government Geospatial Alliance's (LGGAs) Retrolens and FNDC Maps (LINZ Aerial Imagery).



- Provided council property information, and
- NRCs SLUR.

3.1 Historical Aerial Photographs

Historical aerial photographs of the site and the surrounding area taken between 1950 and 2025 were sourced from the LGGAs Retrolens and FNDC Maps. A summary of observations made from the review of these photographs is provided below. Historical aerial photographs are provided in Appendix C.

Our review comprises visually evident land-use activities within the site boundaries of the site which may pose a risk to human or environmental receptor health. Land-use history activities relevant to the site are summarised as follows:

LGGAs Retrolens

- **1950-1982:** The earliest available historical aerial photographs indicate that the site appears to have been used for grazing land prior to 1950. No significant changes are observed within the site over this period.

There are no available historical aerial photographs between 1982 and 2000.

FNDC Maps LINZ Aerial Imagery

- **2000:** The site is utilised for horticultural use, with the majority of the site in orchard. No structures are present on site.

Undeveloped land is present on the southern portions and northern portions of the site, consistent to observations made during the site inspection.

- **2005-2006:** Several greenhouses, structures and associated parking areas are located on the northern portion of the site. The small shed as observed during the site inspection is visible on the central west portion of the site, south of proposed Lots 1 and 2.

There are no available historical aerial photographs between 2006 and 2014.

- **2014-Present:** The 2014-2016 aerial image shows additional structures (i.e., site offices) and associated parking is present on the northern portion of the site. A small, shed type structure is present on the southern portion of the site.

No other significant changes were observed over this period to date.

In summary, the site was in use for grazing land purposes prior to 1950 until circa 2000, where the site was then used for horticultural land use with the establishment of an orchard.



3.2 Property Information

A summary of the relevant property information reviewed is provided below and selected relevant property information is provided in Appendix D.

3.2.1 *Property Files*

The review of the site property information provided by the client contained a series of plans permits and consenting information. Information regarding Lot 2 DP 148680 was also included within the property information, however, as Lot 2 is located outside of the site boundaries, information regarding Lot 2 was disregarded.

No additional relevant information regarding contamination and/ or contaminating activities were noted within the provided information.

3.2.2 *Selected Land Use Register*

A review of the NRCs selected land use register (SLUR) was undertaken in February 2026. No HAIL activities have currently been identified within the property. The nearest identified HAIL area identified is located to the north-west of the site, northern side of Kapiro Road.

3.3 Actual/ Potential HAIL Activities

Specific land use and associated activities through the available site history can be appointed to a site wide HAIL category A10; persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds.

The above desktop review presents current and historical potential land-use activities that may have impacted the natural environmental properties of the shallow soils. Considering the nature of these activities are surface based and significant ground disturbance has not visibly been undertaken it can be concluded that potentially impacted soils will lie within the upper 0.5 m of the soil column.

The above land use activities equate to the whole site area (i.e., horticulture over the entire site). Therefore, the entire, 170,532 m² area of the site can be determined as a 'piece of land' according to the definitions of the NES:CS.

4 SAMPLING AND ANALYSIS PLAN

4.1 Potential Contaminants of Concern

Based on the potential HAIL activity(s) identified and from our experience, it is expected that contaminants of concern (CoC) (if any) associated with horticultural activities would typically be contained within the topsoil/ shallow site soils and may include heavy metals and, organochlorine pesticides resulting from the potential spraying of crops.



4.2 Sampling Methodology

Due to the proposed subdivision plan, only proposed Lots 1, 2, 4 and 5 are planned for change of use (i.e., rural residential), proposed Lots 3 and 6 are remaining as production land (no change). Therefore, sampling was undertaken within proposed Lots 1, 2, 4 and 5 only. Should the subdivision plan change indicating a change of use for proposed Lots 3 and 6, then further investigation will be required.

Based on the above and due to the potential HAIL activities identified (Section 3.3), the following sampling was undertaken to determine contaminant concentrations within a portion of the identified HAIL area (i.e., proposed Lots 1,3, 4 and 5 only). Based on this, the sampling investigation has targeted the surface horizon from within a portion of the site (i.e., proposed Lots 1,3, 4 and 5 only) comprising topsoil/ shallow site soils from up to 0.2 m below ground level (bgl) to target the CoCs and to quantify the nature and dispersion of any residual contamination. Sample locations are indicated on Figure 4 below and Drawing 700 in Appendix E.

Soil sampling was undertaken in general accordance with the MfE CLMG No.5 - *Site Investigation and Analysis of Soils* (revised 2021) (MfE, 2011c). The MfE sampling guidelines for a site area ranging from 10,000 m² – 15,000 m² recommend up to 21-25 sampling points. From our experience, the following sampling programme was undertaken:

- From a total of 48 sample locations (designated S2C01a, S2C01b, S2C01c to S2C016a, S2C016b, S2C016c), 48 shallow soil samples were collected from the surface horizon comprising topsoil from 0.0 - 0.2 m bgl. Samples were composited into 16 samples (three primary subsamples per one composite sample) and analysed for the CoCs (metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc) and OCPs)
- As required by the NES:CS, six duplicate soil samples from six locations were also collected and labelled under a unique identification (S2QC1a, b and c samples, and S2QC2a, b and c samples) and composited into two duplicate composite samples and analysed for metals only.
- Samples were composited within the laboratory environment.
- Two individual samples designated S2pH1 and S2pH2 were also collected and analysed for pH.
- Sampling was undertaken in accordance with Geologix Standard Operating Procedures including:
 - Each soil sample was collected using a clean pair of nitrile gloves for each sample, then placed into laboratory supplied sample containers. Prior to sampling at each location, the sampling equipment was decontaminated by washing with potable water, followed by a decontamination solution, and rinsing with deionised water.
 - The soil samples were placed in new laboratory supplied sample containers, placed in



chilly bins with ice and couriered to a RJ Hill Laboratories (Hills) in Hamilton alongside Chain of Custody documentation.

Figure 3: Approximate Sample Locations.



4.3 Quality Assurance and Quality Control

The quality assurance/ quality control (QA / QC) procedures employed during the works included:

- Collection of soil samples by suitably qualified staff in accordance with Geologix standard operating procedures.
- Submission of all samples to the analytical laboratory within the acceptable holding times for the contaminants of concern.
- Submission of six duplicate soil samples from locations S2C01 (a, b and c samples) and S2C14 (a, b and c samples). These duplicate samples were composited into two composite samples and submitted under the unique identification S2QC01 and S2QC2 respectively and analysed for metals only.
- Sample analysis by Hill Laboratories who are accredited by International Accreditation New Zealand (IANZ) for the analyses performed.

4.4 Soil Guideline Values

The following environmental guidelines were used to screen the sample results. Relevant guidelines values are provided in the data analysis table attached as Appendix E.

4.4.1 Background Concentrations

According to Regulation 5(9) of the NES:CS, if a DSI can demonstrate that any contaminants on a HAIL site are at, or below, background concentrations, then the NES:CS regulations do not apply. However, there are no natural background concentration available for Northland region at the time of this investigation. Therefore Regulation 5(9) of the NES:CS is not applicable.

4.4.2 Soil Contaminant Standards (NES:CS)

The NES:CS (MfE, 2011) details soil contaminant standards (SCSs) for seven inorganic substances. SCSs are available for these substances and compounds when present in land used for five land use scenarios. The contaminants analysed at this site for which SCSs are available are arsenic, cadmium, chromium, copper and lead. For this site, a rural residential/ lifestyle block 25% produce and commercial land use scenarios were adopted, which includes the following source-pathway-receptor assumptions:

- The selected residential SCSs assume that intended future land use will be either:
 - Rural residential/ lifestyle lot, for single dwelling sites with gardens, including some home-grown produce consumption, or
 - Commercial site with varying degrees of exposed soil.
- Potential receptors include site workers during the redevelopment works and residents or workers (dependant on the site use) following the redevelopment.
- The NES:CS adopted standards for rural residential/ lifestyle block 25% produce and commercial have been used to assess risks to both site workers and end users of the site.
- It has been assumed that the average soil pH is 5, and that all lead is present in inorganic form.

4.4.3 Other Applicable Human Health Standards

For contaminants of potential concern that are not priority contaminants, the NESCS references the hierarchy defined in the MfE CLMG No.2 – *Hierarchy and Application in New Zealand of Environmental Guideline Values* (MfE, 2011d).

In accordance with this hierarchy, the Australian National Environment Protection Council (NEPC) (1999 rev: 2013) National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM) has been used for two metals (nickel and zinc). Health-based investigation levels for 'Residential A' and 'Commercial/ industrial' land use have been selected in accordance with the potential proposed end use of the site and to protect site workers during the development work.

'Residential A' investigation levels are described in the ASC NEPM to include "*Residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake (no*



poultry), also includes childcare centres, preschools and primary schools” (NEPC 2013).

‘Commercial/ Industrial’ investigation levels are described in the ASC NEPM to include “*premises such as shops, offices, factories and industrial sites” (NEPC 2013).*

5 SAMPLING RESULTS

Laboratory analytical results of the samples collected are summarised in Section 5.1 below and the soil analytical results table attached as Appendix E. The full laboratory analytical reports are provided in Appendix F.

5.1 Analytical Results

As previously mentioned, all composite samples were analysed for metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc) and OCPs with the two individual samples for pH only. The results of the laboratory analysis indicated the following:

- No heavy metals were detected above human health criteria.
- No OCPs were detected above the laboratory level of reporting.
- From the two samples collected for pH analysis, pH was measured at 6.3 (sample S2pH1) and 5.3 (sample S2pH2).
- In addition, no visual or olfactory evidence of contamination was observed in any of the soil samples collected.

5.2.1 Confidence in Results

The analytical laboratory is required to conduct cross checking and routine duplicate sample analysis to maintain an IANZ accreditation. Discrete project specific duplicate analysis was undertaken to confirm the reliability of laboratory analysis. In accordance with CLMG, primary to secondary sample acceptable relative difference (RPD) is 50 % for soil samples.

Six duplicate samples (S2QC1a, b and c samples, and S2QC2a, b and c samples) were composited into two composite samples and analysed for metals to replicate the analysis of composite samples S2C01 (a, b and c samples) and S2C14 (a, b and c samples) respectively. The relative percentage difference (RPD) between the primary and duplicate samples ranged between 0% and 22%. As such, it is considered that the precision of the sampling and analysis is well within acceptable limits. The results are presented in the data analysis table attached as Appendix E.

5.2 Summary of Results

The result of analytical testing indicates that contaminants concentrations of the CoCs are below human health guidelines for a rural/ lifestyle block land use scenario.

6 DISPOSAL DOCUMENTATION

A disposal criteria analysis for metals has been made in accordance with the MfE Hazardous Waste Acceptance Criteria (WAC) screening criteria for Class A and B landfill facilities and summarised as follows:

- With the exception of Composite Sample 6 locations, site wide exceedance of Class A landfill screening criteria for total chromium.
- Site wide exceedance of Class B landfill screening criteria for:
 - Total chromium from all sample locations.
 - Copper from all sample locations.
 - Zinc from all sample locations from within proposed Lots 4 and 5.
- Localised exceedance of Class B landfill screening criteria for zinc from sample locations Composite Samples 3, 4, and 7 from within proposed Lots 1 and 2.

Based on the above, and as natural background concentrations are not available for Northland, soils do not meet the requirement and definition of clean fill and any soil proposed for removal from site shall be disposed of to an appropriate managed fill facility. Sample results should be provided to a managed fill facility to determine if they can accept.

7 RISK ASSESSMENT

Although all laboratory results were below the human health criteria and no natural background concentrations for northland region are available. Based on the information presented in this report, a quantitative risk assessment of contamination potential to cause an effect upon human and/ or ecological receptors was still undertaken. This is further developed into a regulatory assessment for consent.

The available information summarised above (Sections 2 – 6) indicates the site has been used for horticultural activities conducted from circa 2000 to date. HAIL activities (category A10 particularly associated with contaminants associated with historical horticultural land-use.

The following Conceptual Site Model (CSM), Table 3 below, has been developed for the potentially complete contaminant pathways at the site:

Table 3: Conceptual Site Model.

Source	Pathway	Receptor	Risk Score
Metals and OCPs	<ul style="list-style-type: none"> • Incidental soil ingestion. • Inhalation of dusts. • Dermal absorption. 	<ul style="list-style-type: none"> • Site users/ workers of the site. • Future site users. 	<ul style="list-style-type: none"> • Incomplete/ very low – as results below human health limits



Metals and OCPs in soil remaining on site.	<ul style="list-style-type: none"> • Migration 	<ul style="list-style-type: none"> • Groundwater • Surface water 	<ul style="list-style-type: none"> • Incomplete/ very low – as results below human health limits
Metals and OCPs in soil taken away from site.	<ul style="list-style-type: none"> • Migration 	<ul style="list-style-type: none"> • Groundwater • Surface water 	<ul style="list-style-type: none"> • Low – provided taken to a suitable managed fill facility

For an exposure pathway to be complete and subsequently cause a risk, there must be a contamination source, a contaminant transport mechanism (pathway) and a receptor, typically human or ecological.

7.1 Quantification of Risk and Discussion

The actual and potential HAIL activities undertaken (refer to Section 3.3) on site identifies a very low potential risk to human health and ecological receptors across the site area.

As such, due to concentrations below human health criteria, a very low risk is applied to long-term human health exposure to the proposed use for rural residential purposes if these soils are to remain on site.

8 REGULATORY CONSIDERATIONS (CONTAMINATED LAND)

Based on the findings of this investigation, the NES:CS regulations apply to the entire site area. Proposed subdivision plans by Thomson Survey Limited dated 19 November 2025 are provided in Appendix A. This section provides clarification of consent conditions against national, regional and local standards and regulations in regard to the proposed subdivision only.

8.1 National Environmental Standards

The NES:CS regulation applies to activities of subdivision and soil disturbance where HAIL activity is being / has been / more likely than not to have been undertaken. The results of the historical review indicated that, under subclause (7) the NES:CS applies to the site due to the HAIL Category A10; Persistent pesticide bulk storage or use including sport turfs, market garden green house or spray sheds.

In relation to soil disturbance, no soil disturbance is proposed as part of the subdivision at this time, however, the NES:CS allows (per year) a soil disturbance volume of 25 m³ per 500 m² of 'piece of land' area and soil disposal volume of 5 m³ per 500 m² of piece of land area.

Calculated on a 'piece of land' basis, to be able to comply with this activity status, allowable earthwork volumes to form the subdivision and post subdivision (i.e., site development) have been provided on Table 4 below.



Table 4: Allowable Soil Disturbance Volumes

Site	Site Area (m ²)	Allowable Soil Disturbance - Per Year (m ³)	Allowable Off-site Disposal - Per Year (m ³)
Lots 3-4 DP 148680 (subdivision)	170,532	8,526.6	1705.32
Proposed Lot 1 (site development)	5,240	262	52.4
Proposed Lot 2 (site development)	5,040	252	50.4
Proposed Lot 3 (production land)	46,981	2,349.05	469.81
Proposed Lot 4 (site development)	5,100	255	51
Proposed Lot 5 (site development)	5,030	251.5	50.3
Proposed Lot 6 (production land)	103,149	5,157.45	1031.49

Therefore, where any potential future soil disturbance volume remains below or at the allowable limits, the activity of soil disturbance would be considered to be a permitted activity. In addition, should any soil disturbance volumes exceed the above allowable thresholds, the activity would be considered as a controlled activity

For subdivision and soil disturbance activities (if undertaken) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7. Therefore, activities of subdivision and proposed soil disturbance (if any) is considered to be a controlled activity.

In addition, to note, proposed Lots 3 and 6 are proposed to remain as production land (no change proposed), therefore, under regulation 5(8)(c) of the NES:CS, the regulations do not apply to this proposed activity and Lots 3 and 6.

8.2 Northland Regional Plan

Potentially contaminated land refers to land where a HAIL activity is / has been undertaken. Due to the identified HAIL activity within the site, the piece of land (i.e., the entire site) is considered to be potentially contaminated land. However, based on our investigation, contaminants do not pose a human health risk or environmental risk. Therefore, the proposed activity (subdivision, and potential future soil disturbance) complies with rule C.6.8.2 (discharges from contaminated land), which is considered a permitted activity under the proposed regional plan.

In addition, and to be noted; Northland Regional Plan Rule C.6.8.1 (Investigating potentially contaminated land – permitted activity), the disturbance of land for a site investigation to assess the concentration of hazardous substances in soil, water or air is a permitted activity, provided:



- 1) The site investigation is certified by a suitably qualified and experienced practitioner, and
- 2) The person or organisation initiating the site investigation provides a copy of the site investigation report to the Regional Council within three months of the completion of the investigation, and
- 3) Site investigations undertaken to assess the concentrations of contaminants in soil are undertaken in accordance with Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Ministry for the Environment, 2011).

This report complies with items 1 and 3 above, therefore, to fully comply with rule C.6.8.1, this report must be submitted to the Regional Council within three months of the completion of the investigation.

9 SUMMARY AND RECOMMENDATIONS

This combined Preliminary and Detailed Site Investigation (PSI/ DSI) report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for T & G Global (the 'Client'). This investigation was to assist with the Resource Consent application in relation to the proposed subdivision of Lots 3-4 DP 148680, 108, Kapiro Road, Kerikeri ('site'). The following summarises the findings of the investigation:

In summary, the site was in use for grazing land purposes prior to 1950 until circa 2000, where the site was then used for horticultural land use with the establishment of an orchard.

Based on the HAIL activity above, the NES:CS applies.

HAIL category A10 was identified (as indicated in Section 3.3), however, soil results confirm that:

- No heavy metals or OCPs were detected over human health criteria guidelines.
- No OCPs were detected above the laboratory level of reporting.

Based on the findings of the investigation, Geologix considers that there is very low risk to long-term human health exposure in the proposed subdivision and soil disturbance activities (if undertaken) if these soils are to remain on site. Site soils, while suitable for onsite use (subject to geotechnical suitability), any soils proposed for removal from site (if any) shall be disposed of to an appropriate managed fill facility.

For subdivision and soil disturbance activities (if undertaken) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7. Therefore, subdivision and/ or any soil disturbance activities (if required) associated with the proposed subdivision regarding contaminated land will be required as a controlled activity under the NES:CS and in addition permitted activity under the proposed Northland Regional Plan. Noting that proposed Lots 3 and 6 are proposed to remain as production land (no change proposed), therefore, under regulation 5(8)(c) of the NES:CS, regulations do not apply to proposed Lots 3 and 6 for this activity.



As previously mentioned, to comply with rule C.6.8.1, this report must be submitted to the Regional Council within three months of the completion of the investigation.

To be noted, due to the proposed subdivision plan, only proposed Lots 1, 2, 4 and 5 are planned for change of use (i.e., rural residential land use), proposed Lots 3 and 6 are remaining as production land (no change). Therefore, sampling was undertaken within proposed Lots 1, 2, 4 and 5 only. Should the subdivision plan change indicating a change of use for proposed Lots 3 and 6, then further investigation will be required.

10 LIMITATIONS

This report has been prepared for T & G Global as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this plan.

The recommendations and opinions in this report are based on arisings extracted from sample points at discrete locations. The nature and continuity of subsurface conditions, interpretation of ground condition and models away from these specific sampling investigation locations are inferred. It must be appreciated that the actual conditions may vary from the assumed conceptual site model. Differences from the encountered ground conditions during subdivision construction may require an amendment to the recommendations of this report.



11 REFERENCES

Far North District Council Maps, <https://www.fndc.govt.nz/Our-services/Far-North-Maps>. Accessed February 2026.

GNS Science, 2022. New Zealand Geology Webmap, Scale 1:250,000, <http://data.gns.cri.nz/geology/>. Accessed February 2026.

Ministry for the Environment, 2011a. Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

Ministry for the Environment, 2011b. Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (revised 2021). Wellington, New Zealand.

Ministry for the Environment, 2011c. Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (revised 2021). Wellington, New Zealand.

Ministry for the Environment, 2011d. Contaminated Land Management Guidelines No. 2: Hierarchy and Application in New Zealand of Environmental Guideline Values (revised 2011). Wellington, New Zealand.

Northland Regional Council Online Maps, <https://www.nrc.govt.nz/your-council/online-services/online-maps>. Accessed February 2026.

Retrolens Historical Image Resource. <https://retrolens.co.nz/>. Accessed February 2026.

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APPENDIX A

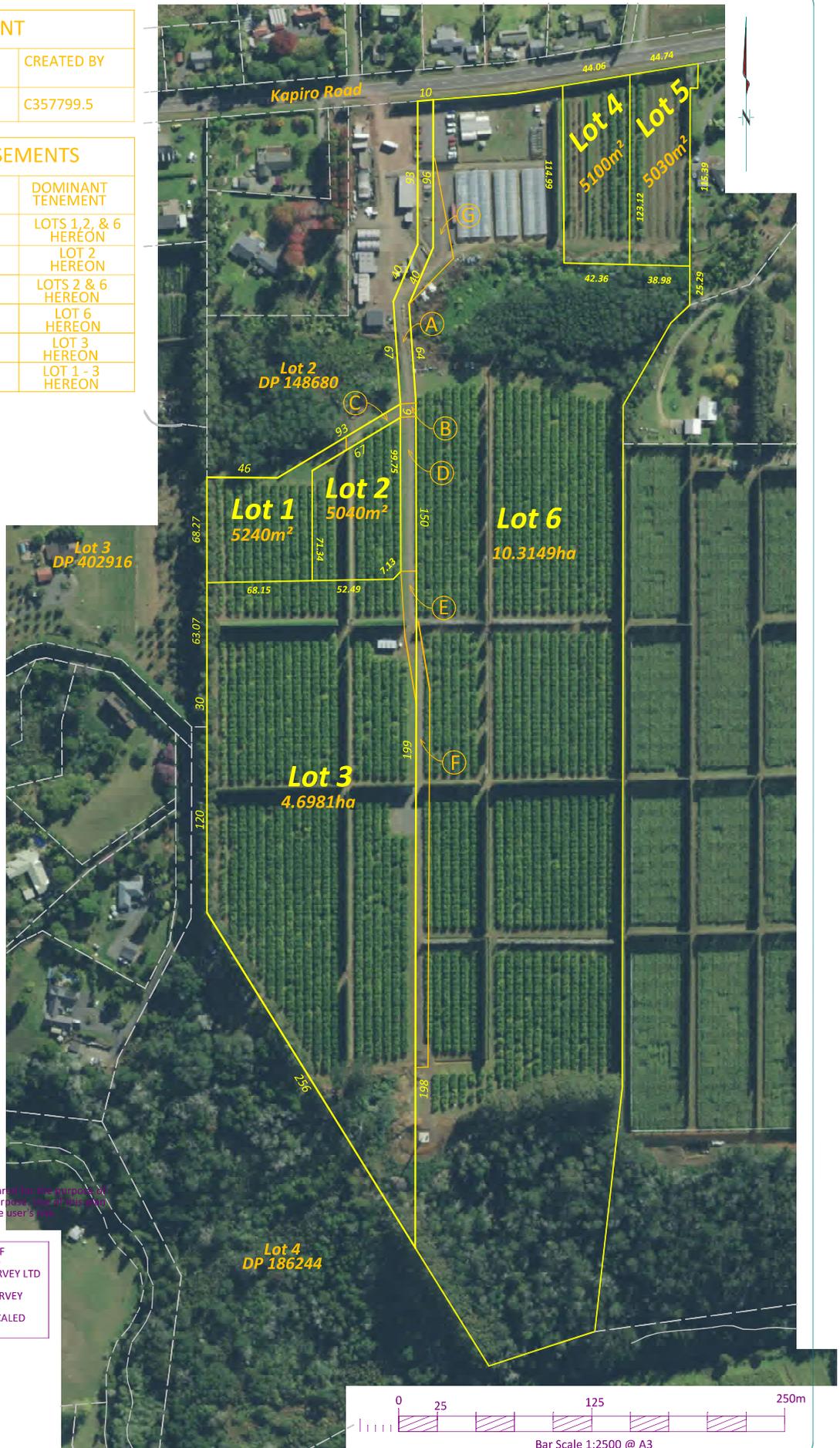
Subdivision Plans

EXISTING EASEMENT

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 3 HEREON	C357799.5

MEMORANDUM OF EASEMENTS

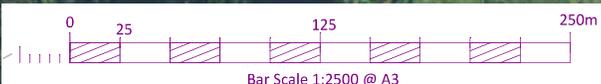
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY TELECOMMUNICATIONS & ELECTRICITY	(A) (B)	LOT 3 HEREON	LOTS 1, 2, & 6 HEREON
	(C)	LOT 1 HEREON	LOT 2 HEREON
	(D)	LOT 3 HEREON	LOTS 2 & 6 HEREON
	(E)	LOT 3 HEREON	LOT 6 HEREON
	(F)	LOT 6 HEREON	LOT 3 HEREON
	(G)	LOT 6 HEREON	LOT 1 - 3 HEREON



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

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF THOMSON SURVEY LTD AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF THOMSON SURVEY LTD
 AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY
 TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
 Comprised in: NA88B/704 & NA88B/705
 Total Area: 17.0532ha
 Zoning: Rural Production
 Resource features: NIL



THOMSON SURVEY LIMITED
 315 Kerikeri Rd
 P.O. Box 372 Kerikeri
 Email: kerikeri@tsurvey.co.nz
 Ph: (09) 4077360
 www.tsurvey.co.nz
 Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOTS 3 & 4 DP 148680
 108 KAPIRO ROAD, KERIKERI
 PREPARED FOR: T & G GLOBAL

Name	Date	ORIGINAL SCALE	SHEET SIZE
Survey		1:2500	A3
Design			
Drawn	SL 17.12.25		
Approved			
Rev	SL 20.01.26		
10855 Scheme			

Surveyors Ref. No:
10855
 Sheet 1 of 1



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APPENDIX B

Selected Site Photographs



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SITE PHOTOGRAPHS

Project: 108 Kapiro Road, Kerikeri

Project no.: C0749N

Figure no.: 1 of 4

Photograph 1: Site entrance, looking east.



Photograph 2: Northern portion of site, looking south-east.





Photograph 3: Greenhouses within the northern portion of the site, looking east.



Photograph 4: Example of the site condition, proposed Lot 1, looking south-west.





Photograph 5: Example of the site condition, proposed Lot 2, looking south-west.



Photograph 6: Storage shed (including chemical storage) located approximately 40 m south of proposed Lot 2, looking south-west.





Photograph 7: Example of the site condition, proposed Lot 5, looking north-east.



Photograph 8: Example of the site condition, proposed Lot 4, looking north-west.





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APPENDIX C

Historical aerial photographs

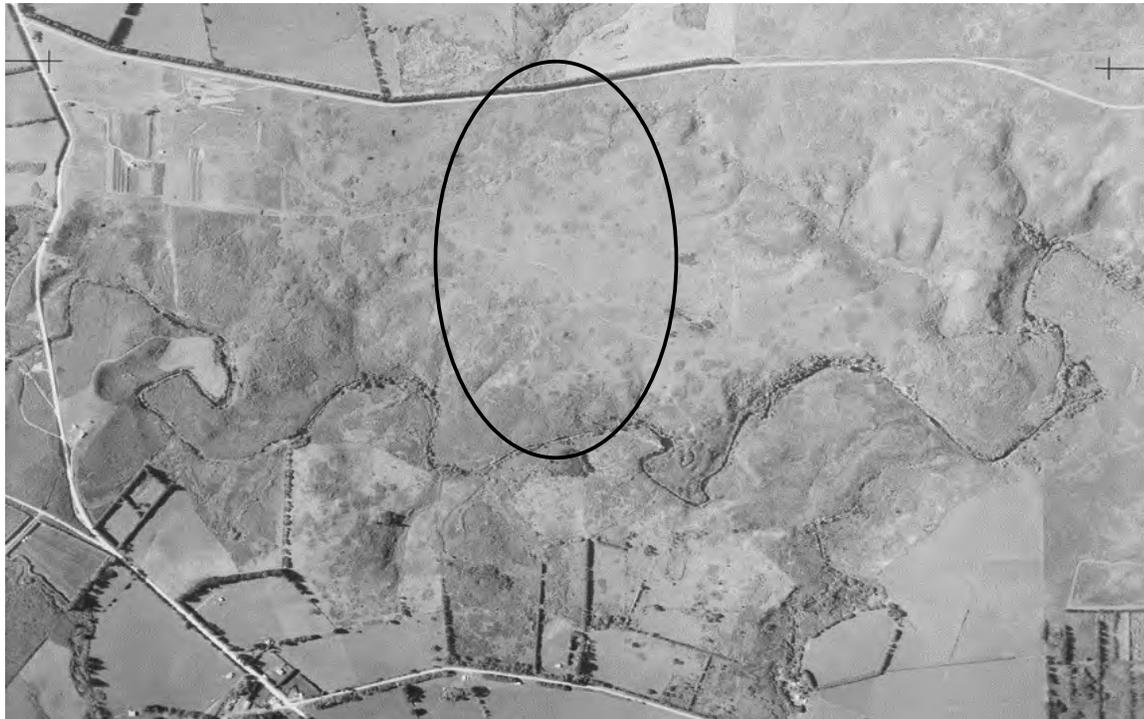


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Historical Aerial Photographs

Project: 108 Kapiro Road, Kerikeri
Project no.: C0749N
Figure no.: 1 of 5

1950: Retrolens



1968: Retrolens





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Historical Aerial Photographs

Project: 108 Kapiro Road, Kerikeri
Project no.: C0749N
Figure no.: 2 of 5

1977: Retrolens



1979: Retrolens





1982: Retrolens



2000: FNDC Maps (LINZ Aerial Imagery)





2005-2006: FNDC Maps (LINZ Aerial Imagery)



2014-2016: FNDC Maps (LINZ Aerial Imagery)





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Historical Aerial Photographs

Project: 108 Kapiro Road, Kerikeri

Project no.: C0749N

Figure no.: 5 of 5

2023-2025: FNDC Maps (LINZ Aerial Imagery)





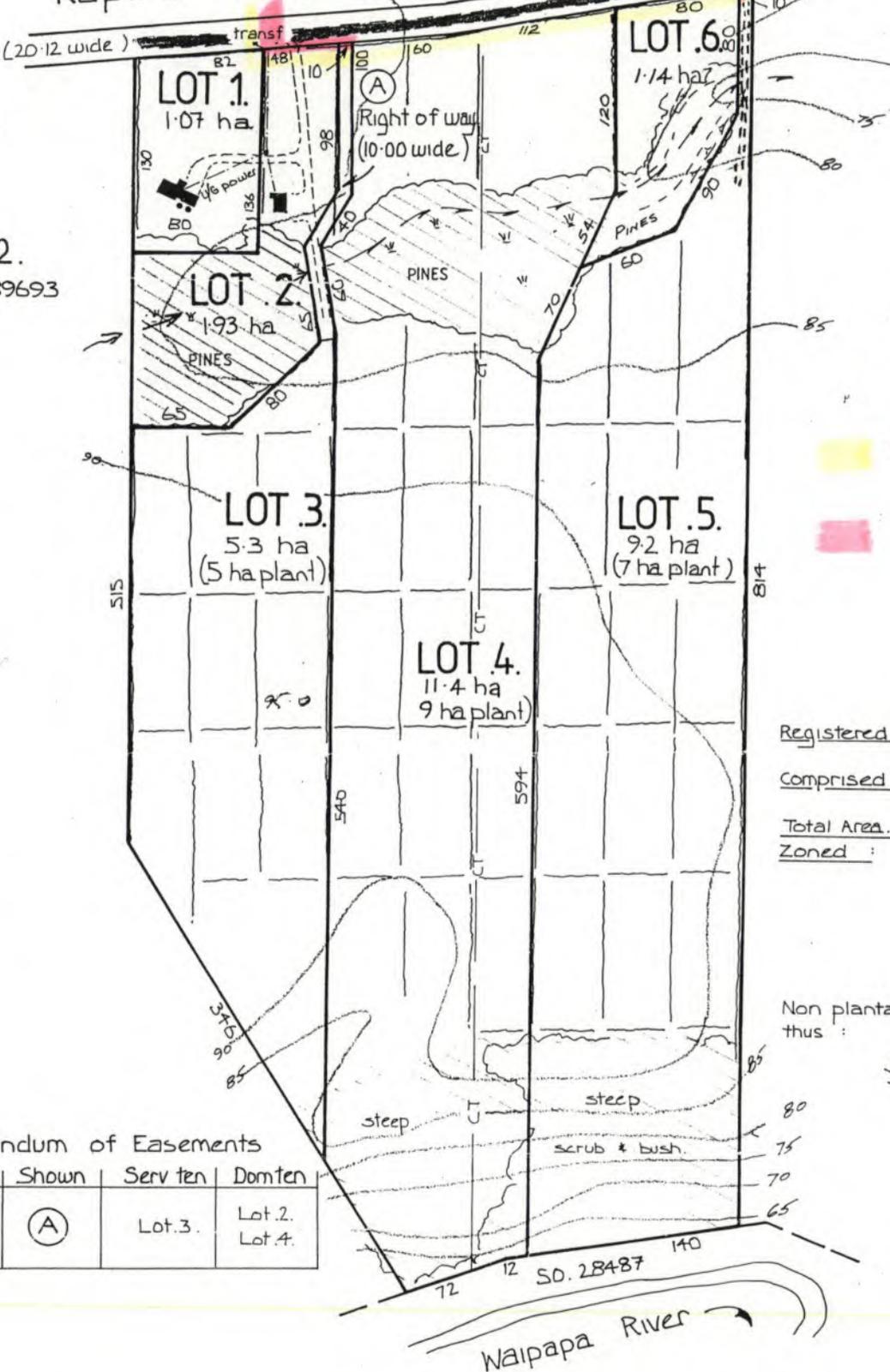
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APPENDIX D

Selected Property Information

Kapiro Road (legal) (sealed)

(20.12 wide) transf



.2.
DP 89693

.5.
DP 89693

option (a)

option (b)

Registered Owner :
Anborn Holdings LTD
Comprised in : CT 46D/630
 * CT 46D/631
Total Area. : 30.0500 ha.
Zoned : Rur 1.A.

Non plantable Land shown thus :



Memorandum of Easements

Purpose	Shown	Serv ten	Dom ten
Right of way	(A)	Lot.3.	Lot.2. Lot.4.

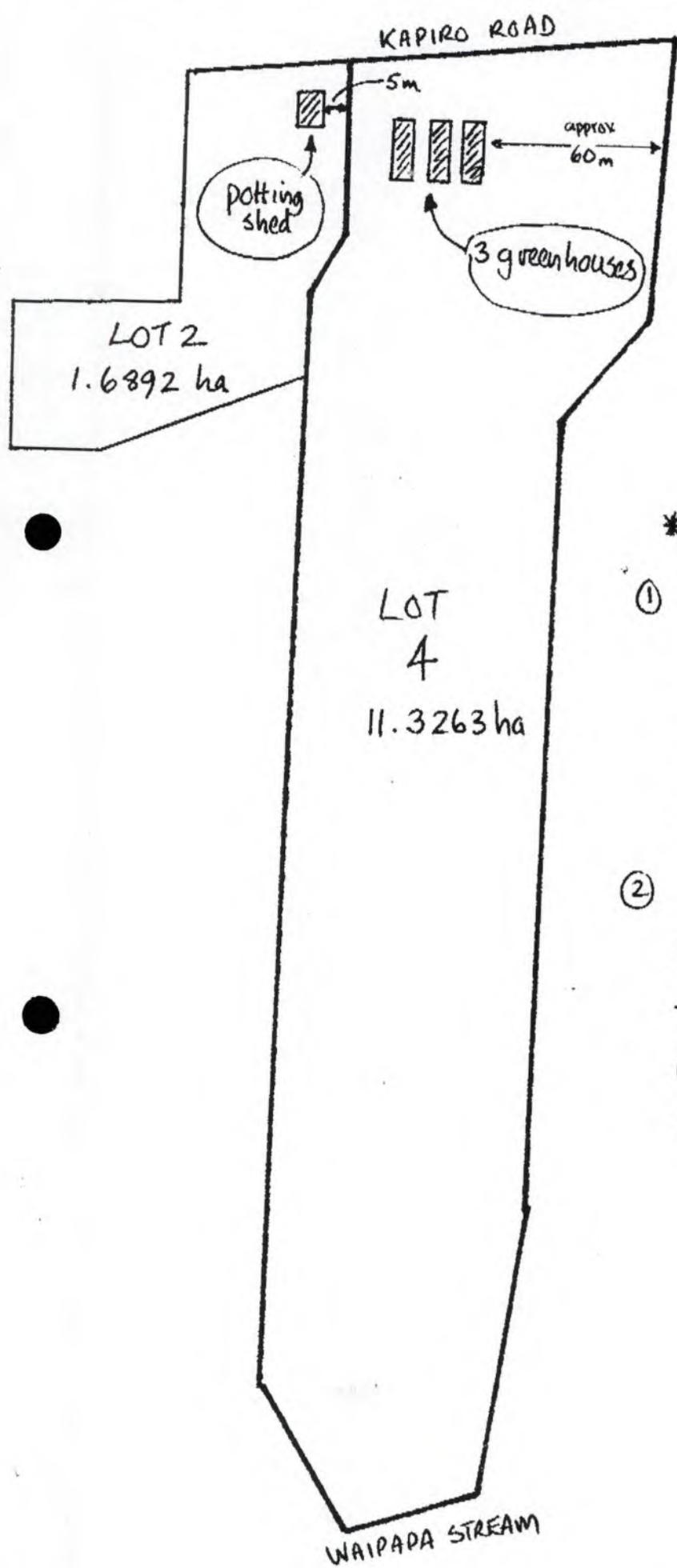
Proposed Subdivision of Lots 3 & 4. DP 89693.

* All areas & measurements subject to survey

R.J. Donaldson & Assoc.
Registered Land Engineering Surveyors.
Box 211 Kerikeri Ph: 79182
Office: Kerikeri House, Kerikeri Rd., Kerikeri.

Far North District.

DRAWN <i>LI.</i>	CHECKED <i>HTS</i>	SCALE	SHEET
TRACED	DATE Aug 1990	1:3000	SERIES OF
			REF 1836



ATTENTION
 MARIAN FERNANDO

* PLEASE NOTE:

- ① KERIFRESH IS THE OWNER OF LOTS 2 & 4. BOTH LOTS ARE USED BY KERIFRESH FOR CITRUS NURSERY AND CITRUS ORCHARDING ACTIVITIES.
- ② AS OWNER OF LOT 4, KERIFRESH GIVES CONSENT FOR THIS POTTING SHED TO BE CONSTRUCTED ON ITS WESTERN BOUNDARY.

Andrew Harty
 (ANDREW HARTY)

9/5/01

FAR NORTH DISTRICT COUNCIL

FAR NORTH OPERATIVE DISTRICT PLAN [BO] Section]

AND

FAR NORTH PROPOSED DISTRICT PLAN

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

an application for Resource Consent
under the aforesaid Act by

KERIFRESH LTD

FILE NUMBER RC 2030599

That pursuant to Sections 105 (1)(a) and 108 of the Resource Management Act 1991, the Council grants its consent to construct a relocated double garage subject to the conditions given below.

The property in respect of which the application is made is situated at Kapiro Road, Kerikeri being more particularly described as Lot 3 DP 148680.

1. The development shall be carried out in accordance with the approved plans dated 31st January 2003 attached to this consent with the Council's "Approved Plan" stamp affixed to it.

In consideration of the application under Section 104 of the Act, the following reasons are given for this decision:

1. Written approvals from adjoining owners and interested parties to the proposed activity has not been sought, as the Council is of the opinion that no one will be adversely affected by the grant of consent to the proposal. However immediate neighbours have given written consents.
2. There are no apparent conflicts with the purpose of the Act, nor with the matters or principles noted in Sections 6, 7 and 8 of the Act, nor with the objectives and policies of the two relevant District Plans.
3. The imposed conditions will ensure compliance with the relevant rules of the District Plans, and will adequately avoid, or mitigate to a minor impact level, the expected effects on the environment.

DECISION PREPARED BY: Marian Fernando, Resource Planner

CONSENT GRANTED UNDER DELEGATED AUTHORITY:

P. J. Killelea RESOURCE CONSENTS MANAGER

31st January 2003 DATE

RC 2030599

RECORD OF DECISION ON RESOURCE CONSENT APPLICATIONS

Participants:

PJK
MHF

Decision Date: 31st January 2003

Granted Date: 21/01/03

Issued Date: 4/2/03

RMA Number : 2030599
RFS Type : Landuse
Val Number : 213-355-00
Applicant : KERIFRESH LTD
Start Date : 16.01.03
Location : Kapiro Road, Kerikeri
Hearing Date : NA
Activity (TDP/PDP) : C10 Permitted / Controlled
Outcome : Approved
No. of lots : NA
Types of lots : NA
Zone (TDP/PDP) : B 40 GRR Rural 1 A(BOI)/ Gen Rural
Area of Site : 5.7269 ha
Proposal : To construct a relocated garage

Issues : Relocated building is a controlled activity under PDP. The garage is to be located in the middle of a large property with more than 10m from any boundary and will not cause any adverse visual effect on neighbours.

Property File	Sewerage (BES)	Roading (GCI)	Com Fac (SMH)	Finance (AJB)	Transit NZ	DoC	Projects (LMN)
✓							
Monitoring (CAS)	Env Health (GB/JG)	Liq License (LAL)	Legal (YAS)	NZHPT	NRC	Building (HAH)	Comm. Brd
						✓	

G
T
G



**FORM 5
BUILDING CONSENT**

Section 51, Building Act 2004

Building Consent Number: BC-2014-975/0

THE BUILDING

Street Address of Building

108 Kapiro Road, Kerikeri 0294

Building Name:

Level/unit number:

Legal description of land where building is located:

LOTS 2-4 DP 148680 BLK VI KERIKERI SD-LOTS
2 4 INT IN & LOTS 2 3 SUBJ TO ESMTS

Location of Building within site / block number:

THE OWNER

Name of Owner:

Kerifresh Limited

Contact Person Name:

David Stringer

Mailing Address:

C/- David Stringer

PO Box 372

Kerikeri 0245

Street Address / Registered Office:

As Above

Phone Number:

Landline:

Mobile:

09 407 7360

Daytime:

After Hours:

Facsimile Number:

Email Address:

david@tsurvey.co.nz

Website:

First point of contact for communications with the building consent authority:

Far North District Council

Freephone: 0800 920029

Memorial Avenue

Phone: (09) 401 5200

Private Bag 752

Fax: (09) 401 2137

Kaikohe 0440

Email: ask.us@fndc.govt.nz

New Zealand

Website: www.fndc.govt.nz

BUILDING WORK

The following building work is authorised by this building consent:

Plastic Tunnel Extension to Existing Greenhouse

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

108 Kapiro road
Proposed tunnel house extension



**CERTIFICATE OF COMPLIANCE
UNDER SECTION 139 OF THE RESOURCE MANAGEMENT ACT 1991**

Council Reference: 2220785-RMACOC
Applicant: Vodafone New Zealand Limited
Property Address: 108 Kapiro Road, Kerikeri 0294
Legal Description: Lots 6-7 DP 183236 Lots 2-4 DP 148680
Description of Application: Establishment of a new telecommunications facility for vodafone New Zealand Limited

Acting under delegated authority, I certify that the installation of a telecommunication facility (which involves removing existing trees, earthworks and installing a 25-metre mast supporting 12 panel antennas, equipment cabinet, and security fence) can be done lawfully at 108 Kapiro Road, Kerikeri, without a resource consent under the Operative Far North District Plan, the Proposed Far North District Plan and the National Environmental Standard for Telecommunication Facilities 2016 as at the date on which the application was received, 18-May-2022.



Pat Killalea

Date: 14th November 2022

Principal Planner

Notes

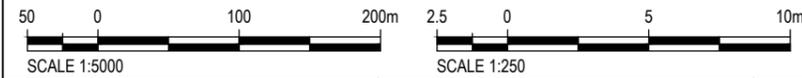
1. This Certificate is issued in relation to the following plans and information:
 - Equipment Layout Plan, Drawing No. S-010-SP, prepared by Vodafone and Aurecon and dated 11.03.22
 - Orcx Raised Plinth Mobile Phone Cabinet Sound Level Distance Tables, Report No. Rp 001 20180724, prepared by Marshall Day Acoustics and dated 04.09.2018
2. The information provided by the applicant in support of the request for this Certificate has been relied upon. Any error or omissions within that supporting information identified after the issue of this Certificate may render this Certificate null and void.
3. This Certificate will lapse five years from the date it was received if it is not given effect to unless an application made pursuant to section 125 of the Resource Management Act 1991 is granted to extend the period it can be given effect to.



LOCALITY MAP
1:5000

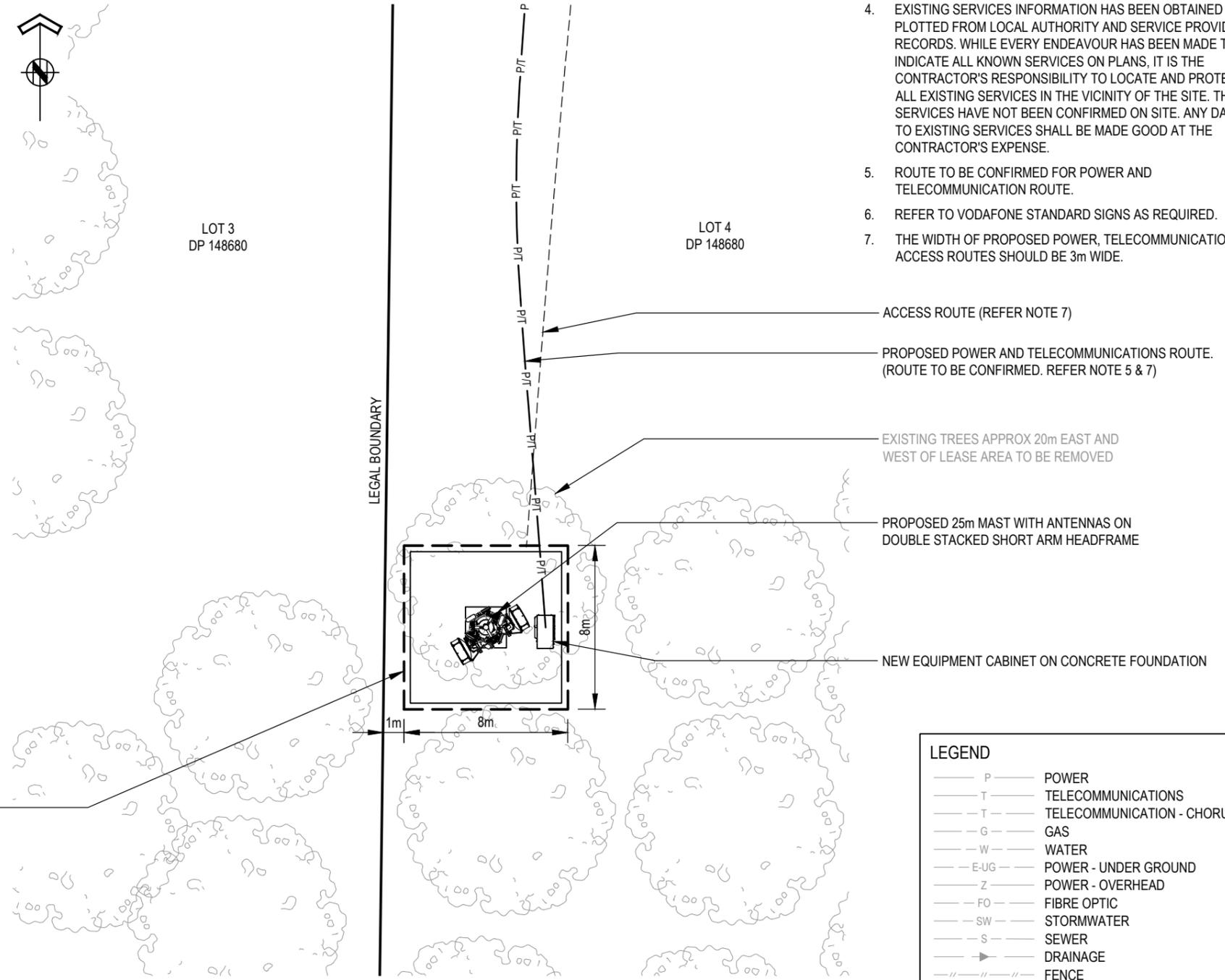
IMAGE : SOURCE FROM THE LINZ DATA SERVICE

PROPOSED VODAFONE LEASE AREA
64m² (8.0m x 8.0m)



APPROVED PLAN
Planner: pkillalea
RC: 2220785
Date: 14/11/2022

- NOTES :**
- ACCESS TO SITE FROM KAPIRO ROAD AS SHOWN.
 - THE NORTH POINT IS INDICATIVE ONLY.
BOUNDARIES, BEARINGS AND DISTANCES SHOWN ARE APPROXIMATE AND SUBJECT TO SURVEY.
LEVELS GIVEN ARE FROM GROUND LEVEL AND ARE APPROXIMATE ONLY.
 - ALL EXISTING SURFACES AND FEATURES SHALL BE FULLY REINSTATED TO THEIR ORIGINAL CONDITION.
 - EXISTING SERVICES INFORMATION HAS BEEN OBTAINED AND PLOTTED FROM LOCAL AUTHORITY AND SERVICE PROVIDERS RECORDS. WHILE EVERY ENDEAVOUR HAS BEEN MADE TO INDICATE ALL KNOWN SERVICES ON PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING SERVICES IN THE VICINITY OF THE SITE. THESE SERVICES HAVE NOT BEEN CONFIRMED ON SITE. ANY DAMAGE TO EXISTING SERVICES SHALL BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.
 - ROUTE TO BE CONFIRMED FOR POWER AND TELECOMMUNICATION ROUTE.
 - REFER TO VODAFONE STANDARD SIGNS AS REQUIRED.
 - THE WIDTH OF PROPOSED POWER, TELECOMMUNICATION AND ACCESS ROUTES SHOULD BE 3m WIDE.



SITE LAYOUT PLAN
1:250

LEGEND

— P —	POWER
— T —	TELECOMMUNICATIONS
- - - T - - -	TELECOMMUNICATION - CHORUS
— G —	GAS
— W —	WATER
- - - E-UG - - -	POWER - UNDER GROUND
— Z —	POWER - OVERHEAD
- - - FO - - -	FIBRE OPTIC
- - - SW - - -	STORMWATER
- - - S - - -	SEWER
—>—>—>	DRAINAGE
- - - - -	FENCE
- - - - -	ACCESS ROUTE
— — — — —	LEGAL BOUNDARY
○	MANHOLE



Drawn	SB	Date	11.03.22
Designed	SB	Date	11.03.22
Checked	DB	Date	11.03.22
Approved	DB	Date	11.03.22
Checked		Date	
Approved		Date	
2	ISSUE FOR INFORMATION	DB	12.10.22
1	ISSUE FOR INFORMATION	SB	01.06.22
REF	REVISION DETAILS	BY	DATE

Project:
VODAFONE NZ LTD
WAIKAPA (N1WPB)
108 KAPIRO ROAD
KERIKERI

Drawing Title:
EQUIPMENT LAYOUT

CONFIDENTIAL
DO NOT COPY

A person using Vodafone drawings and other data accepts the risk of:
1. Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. Using the drawings or other data for any purpose not agreed to in writing by Vodafone

Status PLANNING	
Site Code N1WPB	Scale AS SHOWN
Site Type GREENFIELD	Sheet Size A3
Drawing No. S-010-SP	Rev. 2

Office: AUPAU Plot Date: 12/10/2022 3:38:34 pm Filename: C:\USERS\DAVID.BELL\WARDACC\CSAURECON\508280 - VODAFONE SITES\PROJECT FILES\N1WPB-WAIKAPA_DRAWING\DRGN\N1WPB-WAIKAPA-GF-RD-S010SP.DWG



Legend

Permitted Activities - Permitted Activity (Point)

- Coastal Permit
- Discharge Permit
- Land Use Consent
- Water Permit
- SLU Points
- SLU Polygons



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APPENDIX E

Summary of Soil Analytical Results

Sample Location Plan

Table 1a: Soil Analytical Results	Sample Name	Composite Sample 1 (S2C01a, S2C01b & S2C01c)			Composite Sample 2 (Composite of S2C02a, S2C02b & S2C02c)	Composite Sample 3 (Composite of S2C03a, S2C03b & S2C03c)	Composite Sample 4 (Composite of S2C04a, S2C04b & S2C04c)	Composite Sample 5 (Composite of S2C05a, S2C05b & S2C05c)	Composite Sample 6 (Composite of S2C06a, S2C06b & S2C06c)	Composite Sample 7 (Composite of S2C07a, S2C07b & S2C07c)	Composite Sample 8 (Composite of S2C08a, S2C08b & S2C08c)	Composite Sample 9 (Composite of S2C09a, S2C09b & S2C09c)	NES:CS ¹ Human Health Rural/ Lifestyle Block Criteria	NES:CS ² Human Health Commercial/ Industrial Criteria
		Primary	Duplicate (S2QC1)	RPD (%)										
Heavy Metals														
Arsenic		3	3	0	2	2	3	< 2	2	2	3	3	17	70
Cadmium		0.15	0.15	0	0.2	0.22	0.2	0.13	0.16	0.26	0.13	< 0.10	0.8	1,300
Chromium ⁵		138	139	1	130	145	141	108	86	112	120	136	290	6,300
Copper		35	35	0	45	54	50	27	31	45	40	40	>10,000	>10,000
Lead		7.9	7.6	4	7.1	5.6	5.9	7.6	9.2	6	5.7	5.9	160	3,300
Nickel		18	18	0	17	15	15	15	14	13	15	12	400 ³	6,000 ⁴
Zinc		16	15	6	20	24	23	13	16	21	18	35	7,400 ³	400,000 ⁴
Organochlorine Pesticides (OCPs) - None detected in any of the samples analysed for OCPs over laboratory limit of reporting. Refer to full laboratory reports attached.														

Table 1b: Soil Analytical Results	Sample Name	Composite Sample 10 (Composite of S2C10a, S2C10b & S2C10c)	Composite Sample 11 (Composite of S2C11a, S2C11b & S2C11c)	Composite Sample 12 (Composite of S2C12a, S2C12b & S2C12c)	Composite Sample 13 (Composite of S2C13a, S2C13b & S2C13c)	Composite Sample 14 (Composite of S2C14a, S2C14b & S2C14c)			Composite Sample 15 (Composite of S2C15a, S2C15b & S2C15c)	Composite Sample 16 (Composite of S2C16a, S2C16b & S2C16c)	S2pH1	S2pH2	NES:CS ¹ Human Health Rural/ Lifestyle Block Criteria	NES:CS ² Human Health Commercial/ Industrial Criteria
						Primary	Duplicate (S2QC2)	RPD (%)						
Heavy Metals														
Arsenic		< 2	< 2	3	2	2	< 2	0	< 2	3	pH 6.3	pH 5.3	17	70
Cadmium		< 0.10	< 0.10	0.11	< 0.10	0.12	0.11	9	< 0.10	< 0.10			0.8	1,300
Chromium ⁵		131	137	152	141	121	118	3	143	139			290	6,300
Copper		37	45	46	28	49	48	2	37	64			>10,000	>10,000
Lead		6	5.2	5.1	6.2	6.1	5.9	3	6.8	6			160	3,300
Nickel		12	10	17	11	10	11	10	9	10			400 ³	6,000 ⁴
Zinc		27	29	31	22	71	57	22	29	46	7,400 ³	400,000 ⁴		
Organochlorine Pesticides (OCPs) - None detected in any of the samples analysed for OCPs over laboratory limit of reporting. Refer to full laboratory reports attached.														

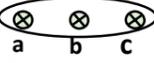
Highlighted, coloured cell indicates samples exceeds human health guideline

Notes:

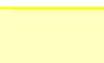
All results in milligrams per kilogram (mg/kg) unless stated otherwise.
RPD - relative percent difference.

1. Ministry for the Environment National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health -Rural/ Lifestyle Block Land Use Scenario.
2. Ministry for the Environment National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health -Commercial/ Industrial Land Use Scenario.
3. National Environmental Protection Measure (Assessment of Site Contamination)1999, update 2013 Schedule B1, Land use Residential A.
4. National Environmental Protection Measure (Assessment of Site Contamination)1999, update 2013 Schedule B1, Land use Commercial/ Industrial D.
5. Criteria presented are for chromium VI.

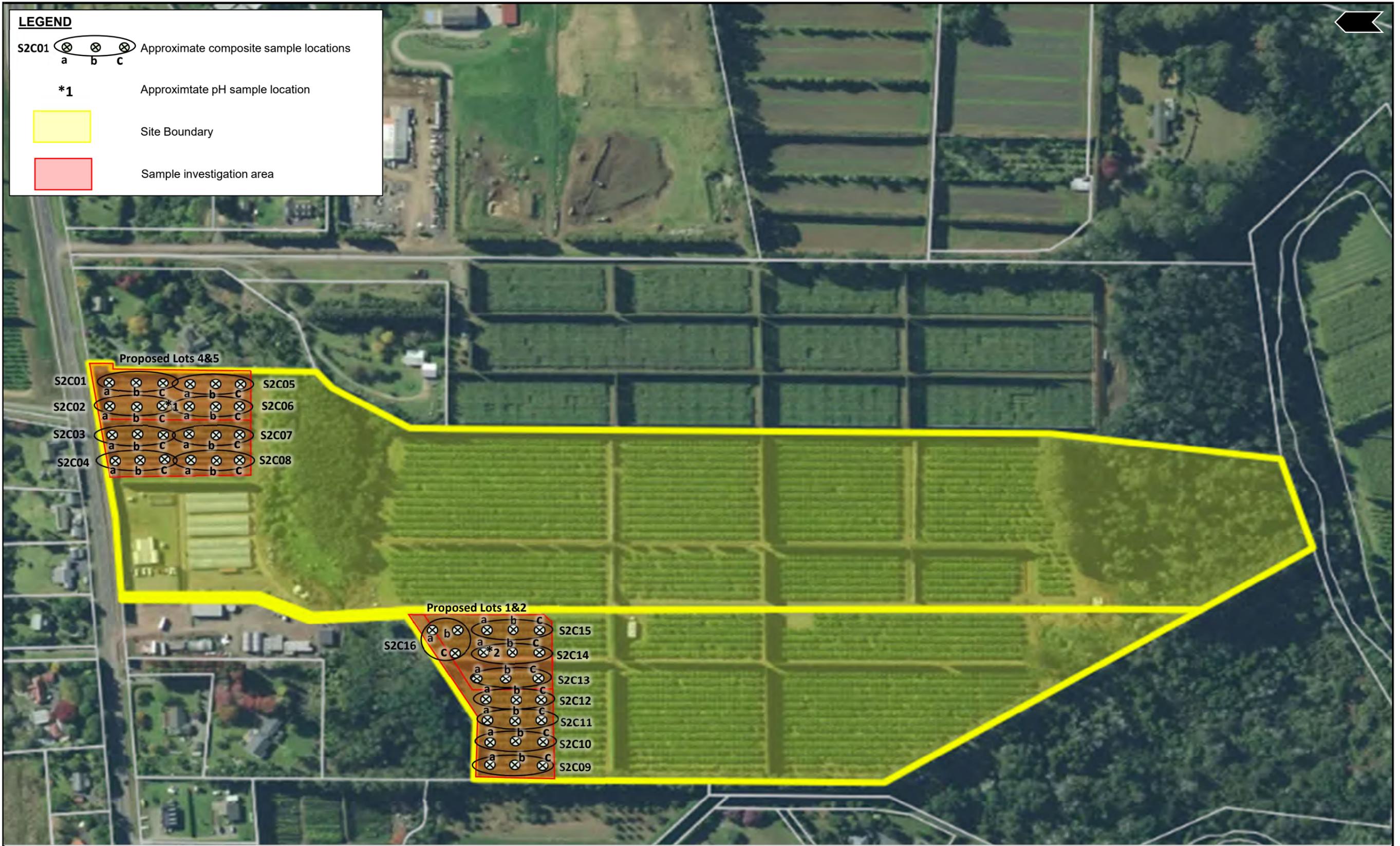
LEGEND

S2C01  Approximate composite sample locations

*1  Approximate pH sample location

 Site Boundary

 Sample investigation area



	DRAWN: RM	PROJECT: C0749N, 108 KAPIRO ROAD, KERIKERI						STATUS: FINAL
	VERIFIED: RM	CLIENT: T&G GLOBAL	0	09/02/26	FIRST ISSUE - RESOURCE CONSENT	RM	EC	DRAWING TITLE: ENVIRONMENTAL SITE PLAN
	APPROVED: EC		REV	DATE	REVISION DETAILS	BY	APP	DRAWING NUMBER: 700 SCALE: NTS



geologix
consulting engineers

APPENDIX F

Laboratory Reports

Certificate of Analysis

Page 1 of 4

Client:	Geologix Consulting Engineers Limited	Lab No:	4086641	SPV1
Contact:	Ray Mayor C/- Geologix Consulting Engineers Limited 13/2181 East Coast Road Stanmore Bay Silverdale 0932	Date Received:	30-Jan-2026	
		Date Reported:	10-Feb-2026	
		Quote No:	142948	
		Order No:		
		Client Reference:	C0749N	
		Submitted By:	Ray Mayor	

Sample Type: Soil						
Sample Name:		S2pH1 29-Jan-2026	S2pH2 29-Jan-2026	Composite of S2C01a, S2C01b & S2C01c	Composite of S2C02a, S2C02b & S2C02c	Composite of S2C03a, S2C03b & S2C03c
Lab Number:		4086641.55	4086641.56	4086641.57	4086641.58	4086641.59
Individual Tests						
Dry Matter	g/100g as rcvd	-	-	77	79	77
pH*	pH Units	6.3	5.3	-	-	-
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	-	-	3	2	2
Total Recoverable Cadmium	mg/kg dry wt	-	-	0.15	0.20	0.22
Total Recoverable Chromium	mg/kg dry wt	-	-	138	130	145
Total Recoverable Copper	mg/kg dry wt	-	-	35	45	54
Total Recoverable Lead	mg/kg dry wt	-	-	7.9	7.1	5.6
Total Recoverable Nickel	mg/kg dry wt	-	-	18	17	15
Total Recoverable Zinc	mg/kg dry wt	-	-	16	20	24
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
alpha-BHC	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
beta-BHC	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
delta-BHC	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
gamma-BHC (Lindane)	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
cis-Chlordane	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
trans-Chlordane	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
2,4'-DDD	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
4,4'-DDD	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
2,4'-DDE	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
4,4'-DDE	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
2,4'-DDT	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
4,4'-DDT	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Total DDT Isomers	mg/kg dry wt	-	-	< 0.08	< 0.08	< 0.08
Dieldrin	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endosulfan I	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endosulfan II	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endosulfan sulphate	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endrin	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endrin aldehyde	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Endrin ketone	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Heptachlor	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Heptachlor epoxide	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Hexachlorobenzene	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013
Methoxychlor	mg/kg dry wt	-	-	< 0.013	< 0.013	< 0.013

Sample Type: Soil

Sample Name:	Composite of S2C04a, S2C04b & S2C04c	Composite of S2C05a, S2C05b & S2C05c	Composite of S2C06a, S2C06b & S2C06c	Composite of S2C07a, S2C07b & S2C07c	Composite of S2C08a, S2C08b & S2C08c
Lab Number:	4086641.60	4086641.61	4086641.62	4086641.63	4086641.64

Individual Tests						
Dry Matter	g/100g as rcvd	76	75	76	77	77
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	< 2	2	2	3
Total Recoverable Cadmium	mg/kg dry wt	0.20	0.13	0.16	0.26	0.13
Total Recoverable Chromium	mg/kg dry wt	141	108	86	112	120
Total Recoverable Copper	mg/kg dry wt	50	27	31	45	40
Total Recoverable Lead	mg/kg dry wt	5.9	7.6	9.2	6.0	5.7
Total Recoverable Nickel	mg/kg dry wt	15	15	14	13	15
Total Recoverable Zinc	mg/kg dry wt	23	13	16	21	18

Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
alpha-BHC	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
beta-BHC	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
delta-BHC	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
gamma-BHC (Lindane)	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
cis-Chlordane	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
trans-Chlordane	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
2,4'-DDD	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
4,4'-DDD	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
2,4'-DDE	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
4,4'-DDE	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
2,4'-DDT	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
4,4'-DDT	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Total DDT Isomers	mg/kg dry wt	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Dieldrin	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endosulfan I	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endosulfan II	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endosulfan sulphate	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endrin	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endrin aldehyde	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Endrin ketone	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Heptachlor	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Heptachlor epoxide	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Hexachlorobenzene	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013
Methoxychlor	mg/kg dry wt	< 0.014	< 0.013	< 0.014	< 0.013	< 0.013

Sample Name:	Composite of S2C09a, S2C09b & S2C09c	Composite of S2C10a, S2C10b & S2C10c	Composite of S2C11a, S2C11b & S2C11c	Composite of S2C12a, S2C12b & S2C12c	Composite of S2C13a, S2C13b & S2C13c
Lab Number:	4086641.65	4086641.66	4086641.67	4086641.68	4086641.69

Individual Tests						
Dry Matter	g/100g as rcvd	82	79	82	80	81
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	< 2	< 2	3	2
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Total Recoverable Chromium	mg/kg dry wt	136	131	137	152	141
Total Recoverable Copper	mg/kg dry wt	40	37	45	46	28
Total Recoverable Lead	mg/kg dry wt	5.9	6.0	5.2	5.1	6.2
Total Recoverable Nickel	mg/kg dry wt	12	12	10	17	11
Total Recoverable Zinc	mg/kg dry wt	35	27	29	31	22

Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
alpha-BHC	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
beta-BHC	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
delta-BHC	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013

Sample Type: Soil

Sample Name:		Composite of S2C09a, S2C09b & S2C09c	Composite of S2C10a, S2C10b & S2C10c	Composite of S2C11a, S2C11b & S2C11c	Composite of S2C12a, S2C12b & S2C12c	Composite of S2C13a, S2C13b & S2C13c
Lab Number:		4086641.65	4086641.66	4086641.67	4086641.68	4086641.69
Organochlorine Pesticides Screening in Soil						
gamma-BHC (Lindane)	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
cis-Chlordane	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
trans-Chlordane	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
2,4'-DDD	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
4,4'-DDD	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
2,4'-DDE	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
4,4'-DDE	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
2,4'-DDT	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
4,4'-DDT	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Total DDT Isomers	mg/kg dry wt	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Dieldrin	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endosulfan I	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endosulfan II	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endosulfan sulphate	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endrin	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endrin aldehyde	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Endrin ketone	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Heptachlor	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Heptachlor epoxide	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Hexachlorobenzene	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013
Methoxychlor	mg/kg dry wt	< 0.013	< 0.013	< 0.012	< 0.013	< 0.013

Sample Name:		Composite of S2C14a, S2C14b & S2C14c	Composite of S2C15a, S2C15b & S2C15c	Composite of S2C16a, S2C16b & S2C16c	Composite of S2QC1a, S2QC1b & S2QC1c	Composite of S2QC2a, S2QC2b & S2QC2c
Lab Number:		4086641.70	4086641.71	4086641.72	4086641.73	4086641.74

Individual Tests						
Dry Matter	g/100g as rcvd	79	81	74	-	-
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	2	< 2	3	3	< 2
Total Recoverable Cadmium	mg/kg dry wt	0.12	< 0.10	< 0.10	0.15	0.11
Total Recoverable Chromium	mg/kg dry wt	121	143	139	139	118
Total Recoverable Copper	mg/kg dry wt	49	37	64	35	48
Total Recoverable Lead	mg/kg dry wt	6.1	6.8	6.0	7.6	5.9
Total Recoverable Nickel	mg/kg dry wt	10	9	10	18	11
Total Recoverable Zinc	mg/kg dry wt	71	29	46	15	57

Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
alpha-BHC	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
beta-BHC	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
delta-BHC	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
cis-Chlordane	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
trans-Chlordane	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
2,4'-DDD	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
4,4'-DDD	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
2,4'-DDE	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
4,4'-DDE	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
2,4'-DDT	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
4,4'-DDT	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Total DDT Isomers	mg/kg dry wt	< 0.08	< 0.08	< 0.08	-	-
Dieldrin	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Endosulfan I	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Endosulfan II	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-

Sample Type: Soil						
Sample Name:	Composite of S2C14a, S2C14b & S2C14c	Composite of S2C15a, S2C15b & S2C15c	Composite of S2C16a, S2C16b & S2C16c	Composite of S2QC1a, S2QC1b & S2QC1c	Composite of S2QC2a, S2QC2b & S2QC2c	
Lab Number:	4086641.70	4086641.71	4086641.72	4086641.73	4086641.74	
Organochlorine Pesticides Screening in Soil						
Endosulfan sulphate	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Endrin	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Endrin aldehyde	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Endrin ketone	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Heptachlor	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Heptachlor epoxide	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Hexachlorobenzene	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-
Methoxychlor	mg/kg dry wt	< 0.013	< 0.012	< 0.014	-	-

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%.	-	55-56
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	57-74
Soil Prep Dry & Sieve for Agriculture	Air dried at 35°C and sieved, <2mm fraction.	-	55-56
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.10 - 4 mg/kg dry wt	57-74
Organochlorine Pesticides Screening in Soil	Sonication extraction, GC-ECD analysis. Tested on as received sample. In-house based on US EPA 8081.	0.010 - 0.06 mg/kg dry wt	57-72
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	57-72
Composite Environmental Solid Samples*	Individual sample fractions mixed together to form a composite fraction.	-	1-54
pH*	1:2 (v/v) soil : water slurry followed by potentiometric determination of pH. In-house.	0.1 pH Units	55-56

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 30-Jan-2026 and 10-Feb-2026. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Kim Harrison MSc
Client Services Manager - Environmental



STATEMENT OF QUALIFICATION

I Edward John Collings of Geologix Consulting Engineers Ltd certify that:

1. This combined Preliminary and Detailed Site Investigation meets the requirements of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the NES:CS) because it has been:
 - a. Prepared and certified by a suitably qualified and experienced practitioner registered under the Certified Environmental Practitioner Scheme (Registration Number 0861) and Engineering New Zealand Chartered Professional Engineer (Registration Number 1033153).
 - b. The SQEP has over 18 years post graduate experiencing practicing as an environmental consultant with a tertiary education qualification equivalent to a Master of Science with supporting evidence from Engineering New Zealand that the Consultant has equivalent knowledge to Washington Accord equivalence.
 - c. Reported on in accordance with the current edition of Contaminated Land Management Guidelines No. 1 – Reporting on contaminated sites in New Zealand, 2021.

2. This investigation concludes that:
 - a. For subdivision and soil disturbance activities (if any) under Regulation 9 of the NES:CS the soil contamination does not exceed the applicable standard in Regulation 7 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations.

Evidence of qualifications and experience of the suitably qualified and experienced practitioner is available below.

Signed:

Dated: 18 February 2026



Role	Name	Relevant Experience
Project Manager	Ray Mayor Unitec New Zealand, 2010, Bachelor of Engineering (Environmental) Unitec New Zealand, 2007, Diploma in Environmental Technology	Ray is a Senior Environmental Consultant with more than 17 years' experience on contaminated sites. His project experience includes conducting site assessments, compliance monitoring, managing environmental risk and remediation across numerous sites including residential, industrial and commercial developments as well as New Zealand Defence Force sites.
Senior Technical Reviewer	Edward Collings MPhys (Hons) Physical Geography Certified Environmental Practitioner Chartered Professional Engineer	Edward is a Principal Engineer and Managing Director with more than 18 years' experience on geotechnical design and contaminated land remediation on a variety of residential, commercial and critical infrastructure projects in the UK and New Zealand. Edward attained recognition as a Certified Environmental Practitioner in 2016 in Australia and New Zealand with specialist knowledge in contaminated land and groundwater remediation and wastewater design. In recent years Edward has provided professional engineering assessments for prospective candidates to the scheme.