

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

*\*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](mailto:tehonosupport@fndc.govt.nz)

## 5. Applicant details

**Name/s:**

A. & K. Smith

**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:**

Donaldson's Surveyors

**Email:**

**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:**

Anthony & Kerrie Smith

Property address/  
location:

3 Waters Lane

Kerikeri

Postcode

## 8. Application site details

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

Name/s:

Site address/  
location:

  
  
  
 Postcode

Legal description:

Val Number:

Certificate of title:

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

### Site visit requirements:

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

Is there a dog on the property?  Yes  No

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

## 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.

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)

Donaldson's Surveyors Ltd

**Email:**

i

**Phone number:**

v

**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)

Micah Donaldson

**Signature:**

(signature of bill payer)

**Date** 04-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](http://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)

Micah Donaldson

**Signature**

**Date** 04-Mar-2026

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

*See overleaf for a checklist of your information...*

## Checklist

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*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.

Donaldson's Surveyors Limited

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# DONALDSONS

REGISTERED LAND SURVEYORS

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# PLANNING REPORT

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PROPOSED SUBDIVISION

A. & K. SMITH, 3 WATERS LANE, KERIKERI

Date: 4 March 2026

Reference: 8689



**CSNZ** THE CONSULTING  
SURVEYORS  
OF NEW ZEALAND  
A DIVISION OF THE NEW ZEALAND INSTITUTE OF SURVEYORS

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NZIS Registered Professional Surveyor.  
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## INTRODUCTION

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The owners of Lot 3 DP-354175, seek Resource Consent to subdivide creating 1 additional lot.

The property is located at 3 Waters Lane, Kerikeri.

Proposed Lot 1 = 2867m<sup>2</sup>

Proposed Lot 2 = 2060m<sup>2</sup>

The proposed allotment sizes are consistent with the wider rural environment, and the intentions of the Proposed District Plan, however under the Rural Living zone standards of the Far North District Plan the activity is non-complying.

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## SITE DESCRIPTION

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The properties legal reference:

**Appellation:** Lot 3 DP-152357

**Registered Owners:** A. & K. Smith

**Computer Freehold Register:** NA91A/42

**Total Area:** 4929m<sup>2</sup>

The site contains an existing dwelling and detached garage situated near the southeastern boundary, both accessed via a metalled driveway.

Established hedging and mature landscape planting are located along the external boundaries, providing effective screening and buffering from adjoining properties and the roadside.

The surrounding locality exhibits a mixed natural-residential character, with residential development integrated within a predominantly rural setting. The prevailing allotment pattern comprises sites ranging between approximately 2,000m<sup>2</sup> and 4,000m<sup>2</sup>.

Of particular relevance are comparable allotments within the immediate vicinity, including Lots 1 and 2 DP 522808, Lots 1 and 2 DP 544492, and Lots 1 and 2 DP 541418. These properties, each with areas of approximately 2,000m<sup>2</sup>, are located in close proximity to and/or fronting Waipapa Road, and contribute to the established character of the surrounding environment.

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## RESOURCE MANAGEMENT ACT 1991

The subdivision of land falls under the Resource Management Act 1991 and is required to demonstrate compliance with provisions applicable to the activity and its status under the District Plan.

### SCHEDULE 4

*An application for Resource Consent for an activity must include the following, outlining aspects of relevance to the proposed activity and zone expectations:*

**ASSESSMENT OF THE ACTIVITY AGAINST THE MATTERS UNDER PART 2 RMA**

*Part 2 Purpose and Principles*

#### **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 application site is well removed from its natural state having been subdivided in 2002 from a larger rural production site.

The site is absent of any known significant natural ecosystems and is not located within close proximity to any known ones.

Overall, there are no specific natural and physical resources of concern. The site is well established with excess land better utilised for further development, possible without being contrary to the Rural Living zones objectives and policies, or cause to the depletion of any bush or waterways.

The subdivision requires minimal earthworks, and future development can readily occur over an easy contour.

Stormwater management devices are proposed to control outflow from future impermeable surfaces on Lot 2. Roof water is to be controlled in attenuation tanks located alongside the future dwelling. Overall, stormwater from the site would be managed to mitigate effects on the environment via consent notice requirements.

The applicant engaged the services of wastewater investigation to confirm the proposed lots are compliant with TP-58 guidelines. The outcome confirms the proposed Lots are suitable.

The applicant engaged the services of a geotechnical assessment and this confirms that the site is suitable for building purposes.

#### **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:*

The site is not averse to subdivision effects particularly impacts on wetlands, lakes or rivers. The impact on the coast is nil.

*(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*

There are no known outstanding natural features or landscapes.

*(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*

There are no areas of significant vegetation or habitats of indigenous fauna within the subject boundaries.

*(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*

Not applicable.

*(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*

The Ngāti Rehia Hapu Management Plan identifies key concerns related to water quality and the fragmentation of indigenous vegetation, issues they are committed to protecting and improving. The subdivision proposal does not directly conflict with these concerns, as it requires no vegetation clearance or significant earthworks. Effluent disposal will meet higher standards through secondary treatment, and the site's soil quality ensures effective soakage, minimizing disposal concerns. Additionally, there will be no impact on fisheries.

Ngāti Rehia acknowledges that they are not inherently opposed to development, but emphasize that such development must not harm their heritage, culture, or the environment. Much of Waipapa Road is zoned for residential use, and the subdivision maximizes the potential of an undersized property no longer suited for rural activities.

Overall, the proposal is considered to have a minimal environmental impact, aligning with the goal of preserving the existing environment.

*(f) the protection of historic heritage from inappropriate subdivision, use, and development:*

There are no known historic heritage sites.

*(g) the protection of protected customary rights.*

There are no known customary rights to consider.

## **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.

The proposal is considered to adequately uphold all aspects without causing any unreasonable adverse effects.

The proposed development of the land not only supports the efficient use of a site zoned for residential purposes, but also brings economic benefits. The subdivision will increase the availability of residential land, meeting growing demand in the area and stimulating local construction and related industries. This can create jobs, promote investment, and contribute to the economic vitality of the region. Additionally, the development may enhance local infrastructure and services, benefiting the wider community.

The site's orientation to the north also optimises renewable energy use, supporting sustainable living while minimising long-term energy costs for future residents. The applicant's commitment to effective stormwater management and climate change adaptation further reinforces the sustainability and resilience of the development.

There are no direct onsite habitats of concern.

While the subdivision may not directly enhance amenity values, it is in line with the objectives and policies of the Rural Living zone. The site is located in an environment that is transitioning, and the increased density of sites reflects this broader shift. From a social wellbeing perspective, the development provides much-needed housing options, potentially improving accessibility for a range of residents and fostering a sense of community. Overall, the proposal aligns with the region's growth needs while balancing environmental and social considerations.

### **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*

The proposal is not considered to contradict the Treaty of Waitangi's interpretations.

## **ASSESSMENT OF THE ACTIVITY AGAINST SECTION 104(1)(B)**

Section 104(1)(b)  
any relevant provisions of—

- (i) a national environmental standard:
- (ii) other regulations:
- (iii) a national policy statement:
- (iv) a New Zealand coastal policy statement:
- (v) a regional policy statement or proposed regional policy statement:
- (vi) a plan or proposed plan;

Under various headings, the application covers all relevant provisions including, the Far North District Plan, National Environmental Standards, and Regional Policy Statement. There are no other relevant provisions.

An application must also include an assessment of the activity's effects on the environment that -

- (a) *includes the information required by clause 6*
- (b) *address the matters specified in clause 7; and*
- (c) *includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.*

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### CLAUSE 6

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(1) An assessment of the activity's effects on the environment must include the following information:

- (a) *if it is likely that the activity will result in any significant adverse effects on the environment, a description of any possible alternative locations or methods for undertaking the activity:*

The impact of subdividing the property presents no unreasonable adverse effects on flora or fauna.

The proposal presents no significant adversity to the environment. The effects are considered less than minor compared to the permitted baseline described following.

- (b) *an assessment of the actual or potential effects on the environment of the activity.*

There are no apparent adverse environmental effects resulting from the subdivision activity itself. However, like any residential development, cumulative effects typically include impacts from effluent discharge, increased stormwater runoff, traffic movements, noise, and the visual effects of new structures.

These potential effects are well-understood and considered fully compatible with the surrounding properties. Based on the scale and nature of the proposed development, there are no concerns that would warrant further investigation. Additionally, the development is governed by the guidelines of the Rural Living zone, which provide a framework to mitigate and manage these effects effectively.

The level of effects are considered adequately understood and less than minor.

- (c) *if the activity includes the use of hazardous substances and installations, an assessment of any risk to the environment that are likely to arise from such use.*

Not applicable.

- (d) *if the activity includes the discharge of any contaminants, 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:*

Effluent disposal would uphold high standards in accordance with TP-58 to ensure compliance with the Northland Regional Water and Soil Plan.

Effluent disposal standards would also be registered on a consent notice to inform future landowners of their responsibility to install secondary treatment for any new habitable building.

- (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 effects:*

There are no issues to address.

- (f) *identification of the persons affected by the activity and consultation undertaken, and any response to the views of any person consulted:*

The proposal although being non-complying is considered to present effects less than minor not to require neighbour's consultation.

To fully understand the potential effects of the subdivision and identify who may be affected, it is important to consider that the development, in its proposed configuration, mirrors a scenario where two buildings are a permitted activity. Under the Rural Living zone, a parent title area of 4000m<sup>2</sup> is sufficient to accommodate a residential unit and a secondary building, such as a home office or similar use.

The Rural Living zone encourages alternative accommodation and business activities, as outlined in the relevant objectives. As such, the provision for a secondary building is an established right, and its inclusion could result in a visual appearance of multiple buildings on the site. This is a key consideration in assessing the potential visual and amenity impacts, as the overall development may reflect the presence of more structures than typically expected in a single residential setting.

However, these effects are anticipated to be manageable within the context of the zone's objectives and the existing character of the area.

*8.7.4.4 That no limits be placed on the types of housing and forms of accommodation in the Rural Living Zone, in recognition of the diverse needs of the community.*

*8.7.4.5 That non-residential activities can be established within the Rural Living Zone subject to compatibility with the existing character of the environment.*

*8.7.4.6 That home-based employment opportunities be allowed in the Rural Living Zone.*

The concept of the permitted baseline further clarifies what the site is capable of accommodating without requiring resource consent. Prior to subdivision, the parent title allows for the construction of a residential unit and secondary building, such as a home office, granny flat, without triggering additional regulatory scrutiny. However, through subdivision, the resulting 2000m<sup>2</sup> lots are subject to more stringent land use rules, particularly concerning impermeable surface area and building site coverage, which may limit the range of permitted activities.

In this context, it is clear that the proposed subdivision does not result in a greater level of environmental or amenity effects than what is already permitted under the current zoning. In fact, the subdivision imposes additional constraints on land use, as it reduces the available area for development and introduces greater oversight by the local authority regarding what is acceptable on each lot.

Therefore, while the subdivision creates new lots, it also limits the scope for future development compared to the broader allowances that would apply to the parent title, thereby reducing the potential for adverse effects.

- (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:*

No monitoring appears necessary.

- (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).*

No concern.

- (2) A requirement to include information in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

This is covered under the heading 'Northland Regional Policy Statement' below.

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### CLAUSE 7

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7 Matters that must be addressed by assessment of environmental effects

- (1) *An assessment of an activity's effects on the environment must address the following matters:*

- (a) *any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:*

The proposal is considered to align with and promote the objectives of the Rural Living zone, while being compatible with surrounding land uses. It is anticipated to have no unreasonable adverse effects on the wider community, including social, economic, or cultural aspects.

Overall, the subdivision is designed to integrate smoothly with the existing environment, maintaining the rural character and minimizing any potential conflicts with neighbouring land uses.

- (b) *any physical effects on the locality, including any landscape, and visual effects.*

No concern.

- (c) *Any effects on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity.*

The subdivision does not result in any habitat disturbance. Future building activity would be within an area that has an easy contour, is cleared of any vegetation, and already has services available at the road boundary.

(d) *any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural values, or other special value, for present and future generations:*

Key values outlined are not depleted.  
There is no influence on Fisheries.

(e) *any discharge of contaminants in to the environment, including any unreasonable emissions of noise, and options for the treatment and disposal of contaminants:*

Stormwater and sewage are the main discharges and these both present a standard level of effects through use of best practice as described under their respective headings 'Chapter 13 assessment',

(f) *any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.*

To the best of our knowledge there are no concerns.

In summary, the proposal is seen as an activity that supports both the personal and broader community economic wellbeing, while promoting the efficient use of land near the urban periphery of Kerikeri. The development aligns with the region's growth objectives and contributes to the ongoing economic vitality of the retail and construction sectors. By maximising the use of available land, the proposal helps meet local housing demand, stimulates economic activity, and supports sustainable growth in the area.

## PERMITTED BASELINE

To gather an understanding of development potential on a parcel of land of size 4929m<sup>2</sup> the following provides a description of some generic land use scenarios that are not fanciful.

The assessment describes how an environment may look as of right, and compares those effects against those proposed. The aim is to explore actual or permissible effects on the environment and where effects are more than minor initiate affected party's consultation.

The permitted baseline demonstrates permitted activities a site can incur, and provides the council with discretion to remove those effects from consideration when assessing resource consents.

Additionally, the receiving environment (beyond the subject site) is the environment upon which a proposed activity might have effects. The Environment Court in *Eyres Eco Park v Rodney District Council* (A147/04) suggested that existing use rights are part of the environment.

When assessing the environmental impact it is permissible and often desirable or necessary to consider the future state of the environment upon which effects will occur, including:

- The future state of the environment as it might be modified by permitted activities.
- The environment as it might be modified by implementing resource consents that have already been granted at the time a particular application is being considered.

The most common land use scenarios relate to home office / business activity, where a 4000m<sup>2</sup> allotment has sufficient area to provide for a residential unit plus a secondary building without exceeding the two primary rules, impermeable surface (imp) percentage and building coverage.

An approximate indication includes:

Permitted scenario could see a 200m<sup>2</sup> house with a 100m<sup>2</sup> secondary building for business use easily comply with the permitted 12.5% imp, similarly the building cover allows up to 10%,  $((200 + 100) / 4000 \times 100 = 7.5\%)$

The next rule is scale of activities, which reads; the total number of people engaged at any one period of time in activities on a site.

This allows for up to 1 persons per 1000m<sup>2</sup>, a total of 4 persons at any one period of time.

Traffic movements are limited to 20 one-way movements per day, but does not restrict foot traffic, or traffic from minivan.

From these parameters a reasonable land use scenario and business venture could entail:

- 1) *bed and breakfast accommodation*
- 2) *professionals office*
- 3) *small scale dairy / take away coffee*
- 4) *plumbing or electrician base client show room*

Although the various land use scenarios for the site are relatively restrictive, they remain feasible through effective control mechanisms.

The most common land use under the proposal would likely be a "bed and breakfast" operation, where a 50m<sup>2</sup> secondary building could be used for accommodation purposes. This aligns with the objectives of the Rural Living zone, which supports such land use.

Overall, while a range of land use activities are technically possible, with limited statutory assessments or development control mechanisms. The proposal does not introduce land use that deviates substantially from what is already anticipated under the current zoning.

The subdivision results in two smaller lots, which, due to their reduced size, inherently limit the scope of land use activities and any adverse effects deemed to be less than minor.

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## NORTHLAND REGIONAL POLICY STATEMENT

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The Northland Regional Policy Statement presents guidelines for the northland region but has limited relevance to this designated development zone and its absence of any vulnerable ecology.

### **3.4 Indigenous ecosystems and biodiversity**

*Safeguard Northland's ecological integrity by:*

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

There is no immediate risk to or impact on ecosystems. The site already has the base infrastructure in place.

#### **4.6.1 Policy - Protecting the integrity of natural character, natural features and landscapes**

*b) By avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects of subdivision, use and development on natural character, natural features and natural landscapes in the following way;*

*(i) Ensuring the location, intensity, scale and form of subdivision and built development maintains, and is subservient to, predominantly natural elements, landforms and processes, including vegetation patterns, ridgelines, headlands, peninsulas, dune systems, reefs and freshwater bodies and their margins; and*

*(iii) Encouraging new subdivision and built development to consolidate within and around existing settlements or where natural character and landscape has already been significantly compromised*

The proposal is in keeping with the policy intent being a site capable of further intensification without causing any significant adversity to natural character.

The size of the proposed lots is of scale and form that maintains, and is subservient to, the nature of the predominantly natural elements. There is no impact on high natural character or wetlands.

#### **6.1.1 Policy - Regional and district plans**

*Regional and district plans shall:*

*(a) Only contain regulation if it is the most effective and efficient way of achieving resource management objective(s), taking into account the costs, benefits and risks;*

*(b) Be as consistent as possible;*

*(c) Be as simple as possible;*

*(d) Use or support good management practices;*

*(e) Minimise compliance costs and enable audited self-management where it is efficient and effective;*

*(f) Enable subdivision, use and development that accords with the Regional Policy Statement; and*

*(g) Focus on effects and where suitable use performance standards.*

The subdivision activity is small-scale absent of any unreasonable adverse effects on the environment. The vicinity at large has been tagged for residential living purposes and a precedent exists with allotment many established allotments averaging 2000m<sup>2</sup>, accordingly the activity is considered to promote the subject environment.

The allotments capture land that is not worthy of production based activity, and supports the aim to avoid versatile soils capable of horticultural and agricultural use.

#### **Part B) Regional urban design guidelines**

##### **Context**

*Quality urban design sees buildings, places and spaces not as isolated elements but as part of the whole town or city. In this regard, quality urban design:*

*(a) Takes a long-term view; and*

*(b) Recognises and builds on landscape context and character; and*

### **Character**

*Quality urban design reflects and enhances the distinctive character and culture of our urban environments, and recognises that character is dynamic and evolving, not static. In this regard, quality urban design:*

*(a) Reflects the unique identity of each town, city and neighbourhood and strengthens the positive characteristics that make each place distinctive;*

### **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);*

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

The proposal does not conflict with the Regional Policy Statement, and the location is not vulnerable to the effects of development, being nothing more than infill development.

The proposal is not seen to clash with the Regional Policy Statement and therefore should be assessed under Resource Consent on an enabling basis.

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## **NATIONAL ENVIRONMENTAL STANDARDS**

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The property is not known to be a HAIL site.

There are no other national environmental standards applicable to the application site and subdivision activity.

## NATIONAL POLICY STATEMENT

### FOR FRESHWATER MANAGEMENT 2020

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#### Part 1

#### 1.3 Fundamental concept - Te Mana o te Wai

*(1) Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.*

#### Objectives and Policies

##### 2.1

The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that priorities:

- (a) first, the health and wellbeing of water bodies and freshwater ecosystems*
- (b) second, the health needs of people (such as drinking water)*
- (c) third, the ability of people and communities to provide for their social, economic and cultural wellbeing, now and in the future.*

##### 2.2

#### Policy 3

*Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*

#### Policy 4

*Freshwater is managed as part of New Zealand's integrated response to climate change.*

#### Policy 6

*There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration promoted.*

#### Policy 9

*The habitats of indigenous freshwater species are protected.*

#### 3.5 Integrated management

**(1)** Adopting an integrated approach ki uta ki tai, as required by Te Mana o te Wai, requires that local authorities must:

- (a) recognise the interconnectedness of the whole environment, from the mountains and lakes, down the rivers to lagoons, estuaries and to the sea.*
- (b) recognise interactions between freshwater, land, water bodies, ecosystems, and receiving environments.*
- (c) manage freshwater, and land use and development, in catchments in an integrated and sustainable way to avoid, remedy, or mitigate adverse effects, including cumulative effect on the health and well-being of water bodies, freshwater ecosystems, and receiving environments.*
- (d) Encourage the co-ordination and sequencing of regional or urban growth.*

The National Policy Statement (NPS) emphasises development must avoid adverse effects that could compromise wetlands or the natural components linked to waterways. As such, subdivision designs and land use activities must take these factors into account. This proposal is unique in that any earthworks required for site establishment will be minimal in scale, and there are no known inland wetlands within 100 meters of the site. Rural residential land use typically presents low risk to water quality, with no significant sources of water contaminants. For example, vehicle access and parking areas for Lot 2 are situated at a considerable distance

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from any waterway, allowing natural sheetflow processes to absorb and treat stormwater runoff at the onset of a storm. Additionally, stormwater attenuation measures are incorporated to further manage flow rates and facilitate subsurface soakage, enhancing stormwater control, meaning there would be no change to the hydrological function of a wetland.

In contrast, common rural activities that contribute to water degradation—such as fertilizer application, crop spraying, stock effluent, intensive grazing, and ploughing near waterways—pose a much greater risk to water quality. These practices can have more severe negative effects on water-based ecosystems. Considering this, the proposal offers a balanced approach, with minimal impact on water quality or surrounding environmental components. Smaller lots often promote a more centralised approach to land management, where landowners are more likely to engage in stewardship practices such as planting and pest control, leading to improved environmental outcomes.

This proposal satisfactorily aligns with the intent of freshwater management and upholds the principles outlined in the National Policy Statement for Freshwater Management.

## DISTRICT PLAN

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The property is located in the Rural Living zone and is not listed as having any Outstanding Landscape.

### Rural Living Zone Context

*The Rural Living Zone is an area of transition between town and country. The transition is expressed in terms mainly of residential intensity and lot sizes. The potential for the adverse effects of farming to be of concern for residential zones and vice versa, is reduced by the presence of the Rural Living Zone, where both rural and residential activities co-exist and form an area with a distinctive and separate character.*

### Environmental Outcomes Expected

#### 8.7.2.1

*A Rural Living Zone where residential living on small rural lots is compatible with those other rural activities that have an emphasis on production rather than lifestyle.*

#### 8.7.2.2

*A Rural Living Zone where the controls on the activities ensure a high standard of privacy and amenity for residential activities.*

The proposal proves compatible with the evident rural living trend along Waipapa Road.

## OBJECTIVES AND POLICIES

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*8.7.3.1 To achieve a style of development on the urban periphery where the effects of the different types of development are compatible.*

*8.7.3.2 To provide for low density residential development on the urban periphery, where more intense development would result in adverse effects on the rural and natural environment.*

*8.7.4.2 That the Rural Living Zone be applied to areas where existing subdivision patterns have led to a semi-urban character but where more intensive subdivision would result in adverse effects on the rural and natural environment.*

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8.7.4.3 That residential activities have sufficient land associated with each household unit to provide for outdoor space, and where a reticulated sewerage system is not provided, sufficient land for on-site effluent disposal.

8.7.4.4 That no limits be placed on the types of housing and forms of accommodation in the Rural Living Zone, in recognition of the diverse needs of the community.

8.7.4.5 That non-residential activities can be established within the Rural Living Zone subject to compatibility with the existing character of the environment.

8.7.4.6 That home-based employment opportunities be allowed in the Rural Living Zone.

The objectives and in particular, the policies of the Rural Living zone clearly indicate that the area is intended for diversification, with no specific limits on housing types or accommodation forms. The zone also allows for the establishment of non-residential activities.

The proposed subdivision aligns well with both the growth expectations for the area and the current development trends, which show a pattern of smaller lots, often below 2000m<sup>2</sup>, in the immediate vicinity. As such, the proposal is consistent with the existing environment and will not create any significant disconnect. Instead, it complements the surrounding land uses, resulting in minimal adverse effects.

**OBJECTIVES AND POLICIES (Subdivision)**

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

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

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

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

The proposal is consistent with, and supports, the objectives and policies for subdivision in the area. There is no disconnect with the existing environment, nor does the proposal result in any adverse environmental impacts.

**ALLOTMENT SIZES 13.7.2**

(Table 7)

Status	Rural Living Zone (Far North District Plan)
Discretionary Activity	The minimum lot size is 3,000m <sup>2</sup> (with provision for stormwater and wastewater disposal as a necessary part of the application).

Lot 1 = 2150m<sup>2</sup>

Lot 2 = 1840m<sup>2</sup>

The proposed allotment sizes do not comply with the controlled or discretionary minimum area requirements. However, the immediate environment establishes a strong precedent, with many existing lots around 2000m<sup>2</sup>, which supports the appropriateness of the proposed allotment sizes in this context. Additionally, effluent disposal and stormwater aspects have been addressed as outlined under assessment criteria below.

Both lots have suitable width to incorporate a 30m x 30m allotment shape parameter including 3-metre setbacks.

## RURAL LIVING ZONE

### ASSESSMENT CRITERIA CHAPTER 13 FAR NORTH DISTRICT PLAN

#### Allotment Sizes and Dimensions

The proposed allotment sizes are suitable to accommodate essential infrastructure, including building footprints, parking, outdoor spaces, and the efficient management of effluent and stormwater. These lot sizes are consistent with the character of the surrounding area.

This development represents infill growth, with a series of similarly sized allotments extending along the Kerikeri Inlet Road frontage, contributing to the area's established pattern of land use.

#### 13.10.1 ALLOTMENT SIZES AND DIMENSIONS

*(a) Whether the allotment is of sufficient area and dimensions to provide for the intended purpose or land use, having regard to the relevant zone standards and any District wide rules for land uses.*

Lot 1, as an existing as-built example, demonstrates how a site of this size can comfortably accommodate all necessary infrastructure without compromising outdoor living space. This vicinity is designated as a transition zone, and the reduction in the standard minimum allotment size under the Proposed District Plan aims to better utilize existing infrastructure and meet the growing demand for residential sites.

The Strategic Directions outlined in the Proposed District Plan include:

- *Alignment with the Council's vision for the district's development and environmental quality, as set out in Far North 2100, the district's 80-year strategy;*
- *Fostering a prosperous economy by enabling a wide range of rural and urban business activities in appropriate locations;*
- *Managing urban growth through the integration of existing and future infrastructure, ensuring sufficient land and opportunities to meet housing and business growth demands.*

This proposal aligns with and supports these strategic objectives.

*(b) Whether the proposed allotment sizes and dimensions are sufficient for operational and maintenance requirements.*  
No concern.

*(c) The relationship of the proposed allotments and their compatibility with the pattern of the adjoining subdivision and land use activities, and access arrangements.*

The proposal has been demonstrated to be compatible with the wider development trends.

*(d) Whether the cumulative and long term implications of proposed subdivisions are sustainable in terms of preservation of the rural and coastal environments.*

No concerns the site is alienated land and its further utilisation for residential purposes of this scale promotes sustainable development consistent with council strategic direction.

### **Hazards**

There are no known natural hazards.

### **Water Supply**

There is a public water supply located along Waters Lane, from which a new connection may be available the site.

If this is not available, domestic water supply will be provided by roof runoff collected in storage tanks.

In regards to firefighting; Lot 1 is an asbuilt situation and therefore would not be subject to firefighting mitigation. Lot 2 however, is a vacant site and the applicant offers to register a consent notice on the title that requires a fire fighting water storage of 10,000 lt for any habitable building up to 300m<sup>2</sup>, and anything larger would need to be in accordance with Fire & Emergency NZ standards.

### **Stormwater**

Lot 1 reflects an established land use scenario. While the existing impermeable surface coverage calculates at 17%, exceeding the permitted standard by 4.5%, this exceedance is appropriately offset by the proposed treatment of Lot 2. Specifically, all impermeable surfaces on proposed Lot 2 will be fully mitigated through the recommended stormwater detention measures.

In practical terms, whereas a typical site is permitted up to 12.5% impermeable surface coverage without any detention measures, the proposal effectively reduces the operative threshold for Lot 2 to 0%. This ensures that the overall stormwater effects of the subdivision are neutralised, notwithstanding the existing exceedance on Lot 1.

For clarity, this approach does not create a requirement for resource consent for future impermeable surfaces per se. The underlying rule framework remains unchanged, including the 12.5% permitted impermeable surface standard under Rule 8.7.5.1.5 (Stormwater Management). However, the proposed consent notice will require, at the building consent stage, that any new impermeable surfaces be supported by appropriate stormwater attenuation measures. This mechanism ensures that stormwater effects are appropriately managed while remaining consistent with the intent and application of the relevant district plan provisions.

#### Lot 1:

A minor land use consent is therefore requested on that basis for Stormwater Management exceeding 15% impermeable surface area on proposed Lot 1 and that any future building activity be subject to stormwater detention measures.

#### Lot 2:

Be required to provide, within its net area a means for the disposal of collected stormwater from the roof of all buildings and impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties.

It is proposed to control discharge flow rate to match or be less than predevelopment flows in the post-development scenario designed in accordance with the onsite control practices as contained in

“Technical Publication 10, Stormwater Management Devices - Design Guidelines Manual” Auckland Regional Council (2003).

A consent notice is proposed for any building activity on Lot 2 to require stormwater attenuation for 1%, 10% & 50% AEP storm events in accordance with Council Engineering Standards and Guidelines.

Land Use consent can therefore be issued in confidence to allow both Lots 1 & 2 a 20% impermeable surface coverage, subject to all impermeable surfaces on Lot 2 being attenuated at the future building stage.

Refer to the proposed consent notice wording below.

### **Sewage**

An effluent disposal assessment has been prepared by IDE Ltd, and describes sufficient area including for 100% backup disposal field without compromise to stormwater drainage patterns.

### **Energy Supplies & Telecommunications**

Comments from service providers Top Energy Ltd and Chorus NZ Ltd are attached.

Requirements are to provide documentation that the service providers of electricity and telecommunications are satisfied with the arrangements made for the provision of services.

### **Easements & Covenants**

There are no existing easements over the property.

There are 3 separate appurtenant water supply rights registered on the title (Transfer 752251.3 & 594061.6 & B050589.4), which would by default get carried down onto both new titles whether relevant or not.

There is an existing Gross stormwater easement over Lot 4 DP 155799 which takes stormwater from Wiapapa Road, and this has frontage to both proposed Lots 1 & 2, securing their existing and future development and discharge needs.

There are no existing land covenants.

The applicant offers the following land covenants pursuant to Section 221 RMA:

- 1 *In conjunction with the construction of any additional building/s (excluding those existing as at March 2026), the owner of the Lot shall submit to Council a report and design, prepared by a Suitably Qualified and Experienced Person, in accordance with Council's Engineering Standards 2023. The report must provide details of stormwater attenuation to 80% of pre-development flows for the 1%, 10% & 50% AEP rain events, including allowance for climate change, and maintenance program to be administered by the landowner, to the satisfaction of the council engineer.*  
**[Lots 1 & 2]**
  
- 2 *In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system, the applicant shall submit with the Building Consent application an Onsite Wastewater Report prepared by a Suitably Qualified and Experienced Person in accordance with AS/NZS 1547:2012 or TP58. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus an appropriately sized reserve disposal area in accordance with the Northland Regional Council Regional Plan for Northland requirements.*

- 3 **[Lot 2]**  
*Upon construction of any habitable building, sufficient water supply for fire fighting purposes is to be provided and be accessible by fire fighting appliances in accordance with Council's Engineering Standards 2023 and more particularly with the 'FENZ Fire Fighting Code of Practice SNZ PAS 4509:2008'. An alternative means of compliance with this standard will require written approval from Fire and Emergency NZ.*  
**[Lot 2]**
- 4 *In conjunction with the construction of any building requiring building consent, a geotechnical report prepared by a Suitably Qualified and Experienced Person shall be provided.*  
**[Lot 2]**

#### **Property Access**

Vehicle access has been addressed in the infrastructure report attached prepared by IDE Ltd.

The report states:

*An existing metalled vehicle crossing is present at 3 Waters Lane, to access the existing dwelling within Lot 1. Lot 1 vehicle crossing does not need a culvert, as it is located at the top of over-vertical curve.*

*Proposed Lot 2 is accessed by a vehicle crossing with 300mmØ culvert beneath, established in 2019, in compliance with FNDC crossing S/6B.*

#### **TRANSPORTATION**

The Transportation assessment attached confirms the access, entrance, parking and manoeuvring are able to meet council engineering standards and guidelines. Additionally, the road frontages are in adequate condition not to require upgrading and does not encroach into the legal boundary to require land acquisition for road vesting.

#### **EFFECT OF EARTHWORKS AND UTILITIES**

##### **Soil**

There is no soil disturbance required to complete the subdivision.  
The life supporting capacity of the sites soil is not compromised.

##### **Access to water bodies**

Not applicable.

##### **Land Use Incompatibility**

The proposal is in keeping with the surrounding environment.

##### **Proximity to Airports**

No concern.

##### **Natural Character of the coastal environment**

The property does not have a coastal influence.

##### **Energy Efficiency**

The proposal is considered to adopt an acceptable level of energy efficiency being located in close walking distance to public facilities and the building site orientates with good solar gain.

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## RURAL LIVING ENVIRONMENT

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### ENVIRONMENTAL OUTCOMES EXPECTED

*8.7.2.1 A Rural Living Zone where residential living on small rural lots is compatible with those other rural activities that have an emphasis on production rather than lifestyle.*

*8.7.2.2 A Rural Living Zone where the controls on the activities ensure a high standard of privacy and amenity for residential activities.*

*8.7.2.3 A Rural Living Zone where activities are self-sufficient in terms of water supply, sewerage and drainage, while not causing adverse effects on the environment.*

The scale of the proposal respective to the nature of the subject environment is considered to uphold the outcomes expected.

### OBJECTIVES AND POLICIES

*8.7.3.1 To achieve a style of development on the urban periphery where the effects of the different types of development are compatible.*

*8.7.3.2 To provide for low density residential development on the urban periphery, where more intense development would result in adverse effects on the rural and natural environment.*

*8.7.4.2 That the Rural Living Zone be applied to areas where existing subdivision patterns have led to a semi-urban character but where more intensive subdivision would result in adverse effects on the rural and natural environment.*

*8.7.4.3 That residential activities have sufficient land associated with each household unit to provide for outdoor space, and where a reticulated sewerage system is not provided, sufficient land for on-site effluent disposal.*

*8.7.4.4 That no limits be placed on the types of housing and forms of accommodation in the Rural Living Zone, in recognition of the diverse needs of the community.*

*8.7.4.5 That non-residential activities can be established within the Rural Living Zone subject to compatibility with the existing character of the environment.*

*8.7.4.6 That home-based employment opportunities be allowed in the Rural Living Zone.*

The objectives and associated policies provide a clear and consistent indication that the Rural Living Zone is intended to enable broad and flexible diversification. In particular, the framework anticipates a wide range of residential outcomes, with no prescriptive limitations on housing typology or form of accommodation. The policy direction also expressly contemplates the establishment of compatible non-residential activities, recognising that a degree of mixed use is both anticipated and appropriate within this zone.

In that context, the proposed subdivision is fully aligned with the strategic intent and anticipated growth pattern for the Rural Living Zone. The scale, layout, and design of the development respond to the

enabling nature of the provisions and reflect the planned transition from traditional rural land use to a more varied rural-residential environment.

Furthermore, the proposal will not result in any appreciable disconnect with the established character of the locality. Rather, it will integrate with and reinforce the existing pattern of development and surrounding land uses. The subdivision respects the spatial qualities, landscape setting, and amenity values of the area, and any associated effects are considered to be no more than minor. Overall, the proposal promotes the intended function of the zone while maintaining consistency with the character and environmental qualities of the receiving environment.

## *NATURAL AND PHYSICAL RESOURCES*

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There is no vegetation clearance or earthworks required, meaning those effects are less than minor.

Existing Use on Lot 1

### **8.7 RURAL LIVING ZONE**

#### **8.7.5.1.1 RESIDENTIAL INTENSITY**

There would be only one residential unit per lot.

#### **8.7.5.1.2 SCALE OF ACTIVITIES**

Not applicable to standard residential use.

#### **8.7.5.1.3 BUILDING HEIGHT**

The maximum height of any building shall be 9m.  
The existing building is not over 9m.

#### **8.7.5.1.5 STORMWATER MANAGEMENT**

The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 12.5% or 3,000m<sup>2</sup>, whichever is the lesser.

Lot 1 exceeds the site coverage standards by 4.5%.

Stormwater mitigation is proposed extensively for any building development that occurs on Lot 2, and this would readily compensate for the minor exceedance occurring on Lot 1.

Land Use consent is accordingly requested for this activity breach.

Lot 2 is vacant, and all future impermeable surfaces would be subject to stormwater attenuation as described in the infrastructure report attached.

#### **8.7.5.1.6 SETBACK FROM BOUNDARIES**

The proposed boundary positions more than 20m from the existing dwelling. No concern.

#### **8.7.5.1.7 SCREENING FOR NEIGHBOURS - NON-RESIDENTIAL ACTIVITIES**

Not applicable.

#### **8.7.5.1.8 TRANSPORTATION**

As discussed, both lots are able to comply with the transportation standards and there are no Right of Way easements required to secure access.

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#### 8.7.5.1.9 HOURS OF OPERATION - NON-RESIDENTIAL ACTIVITIES

Not applicable.

#### 8.7.5.1.10 KEEPING OF ANIMALS

Not applicable.

#### 8.7.5.1.11 NOISE

No concern with residential activity.

#### 8.7.5.1.12 HELICOPTER LANDING AREA

Not applicable.

#### 8.7.5.1.13 BUILDING COVERAGE

The existing buildings on Lot 1 include a dwelling and a shed, having a total area of  $172\text{m}^2 / 2680\text{m}^2 = 6.4\%$  Compliant.

In summary, a minor land use is requested to allow Lot 1 to exceed 12.5 % impermeable surface area under rule 8.7.5.1.5 Stormwater Management, as a controlled activity (compliant with 8.7.5.2.2), which allows 20% impermeable surface coverage.

## PROPOSED DISTRICT PLAN

The site is located in the Rural Residential Zone (RRZ) under the Proposed District Plan and is not affected by any hazard overlays.

The proposed district plan zone rules have limited legal effect, and are shown only to distinguish uniformity with relevant objectives and policies.

*The role of the Rural Residential zone is to provide an opportunity for people to enjoy a spacious, peri-urban living environment located close to a settlement. The Rural Residential zone is located on the fringe of the District's settlements and provides a transition to the surrounding Rural Production and/or Rural Lifestyle and Horticulture zones.*

#### **Objectives**

**RRZ-01** *The Rural Residential zone is used predominantly for rural residential activities and small scale farming activities that are compatible with the rural character and amenity of the zone.*

**RRZ-02** *The predominant character and amenity of the Rural Residential Zone is maintained and enhanced, which includes:*

- a. peri-urban scale residential activities;*
- b. small-scale farming activities with limited buildings and structures;*
- c. smaller lot sizes than anticipated in the Rural Production or Rural Lifestyle Zones; and*
- d. a diverse range of rural residential environments reflecting the character and amenity of the adjacent urban area.*

**RRZ-03** *The Rural Residential zone helps meet the demand for growth around urban centres while ensuring the ability of the land to be rezoned for urban development in the future is not compromised.*

**RRZ-04** *Land use and subdivision in the Rural Residential zone:*

- a. maintains rural residential character and amenity values;*
- b. supports a range of rural residential and small-scale farming activities; and*
- c. is managed to control any reverse sensitivity issues that may occur within the zone or at the zone*

interface.

**Policies**

**RRZ-P1** Enable activities that will not compromise the role, function and predominant character and amenity of the Rural Residential Zone, while ensuring their design, scale and intensity is appropriate, including:

- a. rural residential activities;
- b. small-scale farming activities;
- c. home business activities;
- d. visitor accommodation; and
- e. small-scale education facilities.

**RRZ-P2** Avoid activities that are incompatible with the role, function and predominant character and amenity of the Rural Residential Zone including:

- a. activities that are contrary to the density anticipated for the Rural Residential Zone;
- b. primary production activities, such as intensive indoor primary production or rural industry, that generate adverse amenity effects that are incompatible with rural residential activities; and
- c. commercial or industrial activities that are more appropriately located in an urban zone or a Settlement Zone.

**RRZ-P3** Avoid where possible, or otherwise mitigate, reverse sensitivity effects from sensitive and other nonproductive activities on primary production activities in adjacent Rural Production Zones and Horticulture Zones.

**RRZ-P4** Require all subdivision in the Rural Residential zone to provide the following reticulated services to the boundary:

- a. telecommunications:
  - i. fibre where it is available;
  - ii. copper where fibre is not available;
  - iii. copper where the area is identified for future fibre deployment.
- b. local electricity distribution network.

The subdivision proposal is consistent with the objectives and policies without being repugnant to their intent.

Existing Land Use Activity (Lot 1)

**RRZ-R1 New buildings or structures, and extensions or alterations to existing buildings or structures**

**RRZ-S1** Maximum height

**RRZ-S2** Height in relation to boundary

**RRZ-S3** Setback (excluding from MHWS or wetland, lake and river margins)

**RRZ-S4** Setback from MHWS; and

**RRZ-S5** Building or structure coverage.

he existing building use is either protected by existing use rights under section 10 of the Resource Management Act, and is therefore exempt from assessment, or alternatively the proposed boundary adjustment does not result in any infringement of the relevant performance standards. Accordingly, the proposal does not create any new non-compliance in respect of the established buildings or their lawful use.

**RRZ-R2** Impermeable surface coverage

*The impermeable surface coverage of any site is no more than 12.5% or 2,500m<sup>2</sup>, which ever is lesser.*

The site coverage is 9.7% and therefore complies.

**RRZ-R3 Residential activity**

*PER-1*

*The site area per residential unit is at least 4,000m<sup>2</sup>.*

Compliant.

**RRZ- R4 - RRZ-R23**

Not applicable.

**Standards**

The proposal is not subject to any of the Standards, either by default, having no legal effect or are not applicable.

**District Wide Matters**

Provisions under earthworks and natural hazards have immediate legal effect.

Other aspects with immediate legal effect include heritage, ecosystems and indigenous biodiversity, however are not considered applicable to the site or scale of activity at hand.

**Subdivision**

*Subdivision is the process of dividing an allotment or building into one or more additional lots or units or changing an existing boundary location. The way an allotment is subdivided, including its size and shape is important as it not only determines the quality and character of development, but it also impacts on surrounding sites and the future use of the land. Subdivision affects the natural and physical environment and introduces long-term development patterns that are unlikely to be reversed.*

**Objectives**

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

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

**Rules**

**SUB-R3** Subdivision of land to create a new allotment

**CON-1**

- 1. The subdivision complies with standards:*

*SUB-S2 Requirements for building platforms for each allotment;*  
*SUB-S3 Water supply;*  
*SUB-S4 Stormwater management;*  
*SUB-S5 Wastewater disposal;*  
*SUB-S6 Telecommunications and power supply;*  
*SUB-S7 Easements for any purpose;*

*CON-2*

*1. The subdivision complies with standards:*  
*SUB-S1 Minimum allotment sizes*  
*SUB-S8 Esplanades*

The subdivision rules do not currently have legal effect.

### **Summary of Proposed District Plan**

The proposed District Plan has limited legal effect, and those standards applicable all prove to have effects less than minor not to require further assessment.

The proposal is considered to accord with relevant objectives and policies under the proposed district plan.

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## **SUMMARY**

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In summary, the subdivision assessment criteria reflect the purpose and principles of the Resource Management Act 1991 (RMA), particularly the sustainable management of natural and physical resources. Having regard to the scale, nature, and context of the proposal, no unreasonable adverse environmental effects are anticipated, either at the subdivision stage or as a result of subsequent development enabled by the one additional lot.

While the activity is classified as non-complying, the associated effects are assessed as less than minor.

The surrounding locality is characterised by a number of established 2,000m<sup>2</sup> allotments, which provides a clear and compelling indication of the receiving environment. In this context, the proposal is consistent with the established pattern of development and does not represent an incongruous or unanticipated outcome.

The subdivision is aligned with the objectives and policies of the Rural Living Zone and the broader Rural Environment framework. It supports the anticipated pattern of low-density rural-residential development while maintaining the character and amenity values of the area. The proposal is also consistent with the relevant objectives and policies of both the proposed and operative District Plans. Accordingly, it satisfies the gateway tests under section 104D of the RMA.

### **Non-Notification Request**

Although the application is for a non-complying activity, it is appropriate that it be processed on a non-notified basis for the following reasons:

- Any potential adverse environmental effects are assessed as less than minor;
- There is no rule or national environmental standard that requires public or limited notification;
- No persons are considered to be adversely affected;
- The applicant has not requested notification; and
- The proposal is consistent with the intent and outcomes anticipated for the Rural Living Zone and integrates appropriately with the existing environment.

Given that the effects are no more than minor and the proposal is consistent with the relevant statutory objectives and policies, the applicant respectfully requests that the application be processed on a non-notified basis pursuant to the relevant provisions of the RMA.

## CONCLUSION

The subject site does not display any environmentally sensitive or vulnerable characteristics that would render it unsuitable for subdivision. There are no identified features or constraints that would be adversely affected by the proposal, and the subdivision will not give rise to any degradation of the wider environmental context. The receiving environment is already characterised by rural-residential development, and the proposal will integrate with this established pattern.

The subdivision is consistent with the objectives and policies of the Rural Living Zone. The enabling framework anticipates this form and scale of development, and the assessment undertaken demonstrates that any actual or potential adverse effects will be no more than minor.

The proposal has also been assessed against higher-order planning instruments. It is consistent with the Northland Regional Council Regional Policy Statement, and accords with the relevant provisions of the National Environmental Standards for Freshwater and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health. The application demonstrates compliance with the applicable policy and regulatory framework at both regional and national levels.

Furthermore, the proposal has been considered in light of Part 2 of the Resource Management Act 1991, which sets out the purpose and principles of the Act. The subdivision promotes the sustainable management of natural and physical resources and appropriately recognises the matters set out in sections 6 and 7. The application includes a balanced assessment of environmental effects and provides sufficient detail to meet the requirements of Schedule 4 respective to the permitted baseline.

Having regard to the overall statutory and policy framework, and given the absence of more than minor adverse effects, the proposed subdivision is considered appropriate for approval by the local authority, subject to the imposition of standard conditions of consent.



Micah Donaldson  
MNZIS - Assoc. NZPI - RPSURV

**DONALDSONS**

Land / Engineering Surveyors and Development Planners





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



  
R. W. Muir  
Registrar-General  
of Land

**Identifier** NA91A/42  
**Land Registration District** North Auckland  
**Date Issued** 12 November 1992

**Prior References**  
NA72A/89

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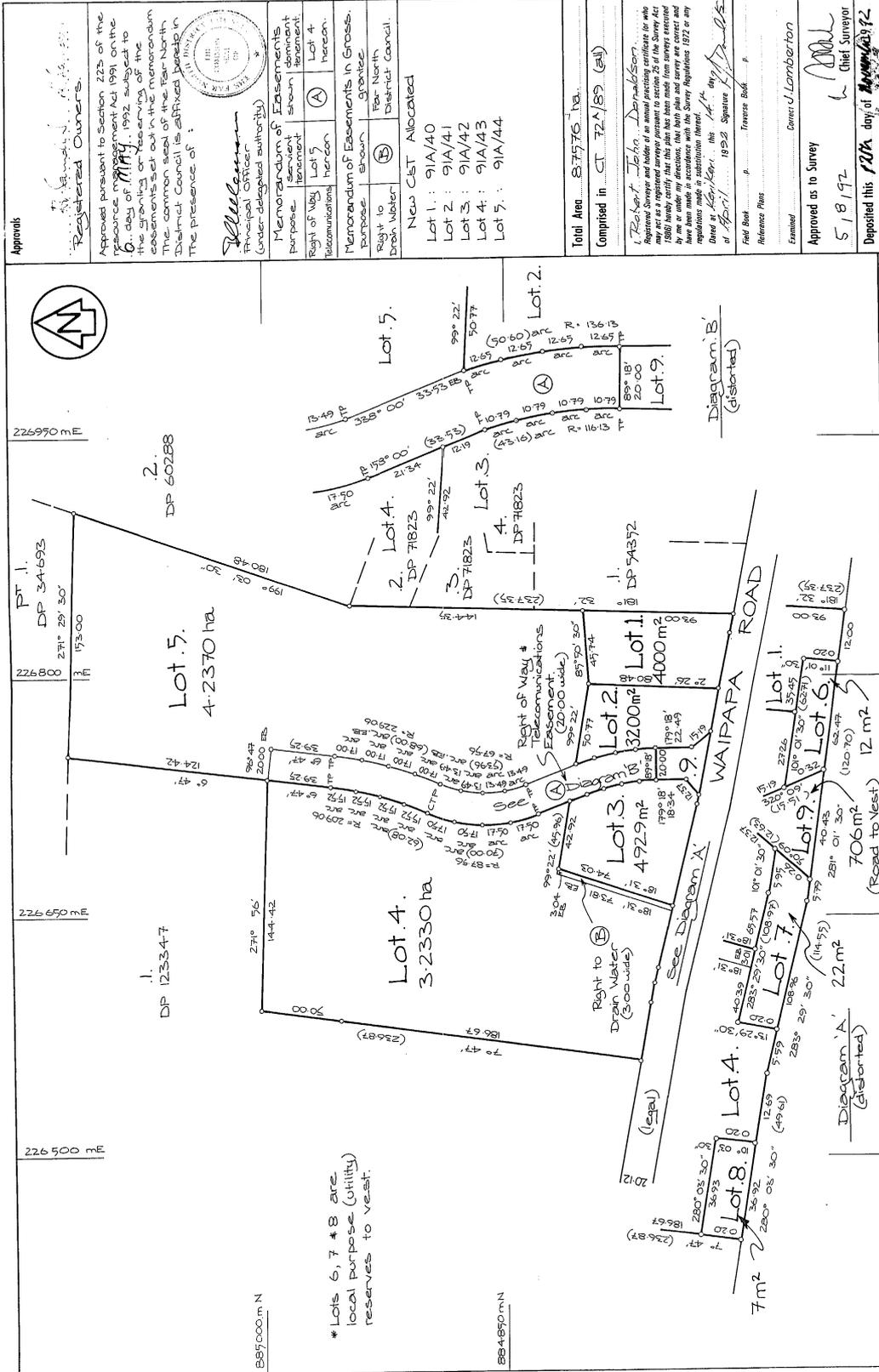
**Estate** Fee Simple  
**Area** 4929 square metres more or less  
**Legal Description** Lot 3 Deposited Plan 152357

**Registered Owners**  
Anthony John Smith and Kerrie Fiona Smith

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**Interests**

Fencing Agreement in Transfer 290550  
Appurtenant hereto are water rights created by Transfer 752251.3  
Appurtenant hereto is a water right created by Transfer 594061.6  
Appurtenant hereto is a right to take and convey water created by Transfer B050589.4



Approved pursuant to Section 225 of the Resource Management Act 1991 on the 01 day of July 1992 subject to the conditions set out in the Memorandum of Easements on the Plan of Subdivision. The District Council is affixed hereto in the presence of:

*[Signature]*  
 District Council Registrar

*[Signature]*  
 District Council Registrar

Memorandum of Easements Purpose: Right of Way Telecommunications Lot 4 Lot 5 hereon hereon hereon

Memorandum of Easements in Gross Purpose: Right to drain water hereon

New CST Allocated  
 Lot 1: 91A/40  
 Lot 2: 91A/41  
 Lot 3: 91A/42  
 Lot 4: 91A/43  
 Lot 5: 91A/44

Total Area: 84576 ha  
 Completed in CT 72A/89 (5/1)

*[Signature]*  
 Registered Surveyor and Holder of an annual practicing certificate for who may act as a registered surveyor in New Zealand. This plan and survey are correct by me or under my direction, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.

Date of Approval: this 14th day of July 1992  
 at Wellington 1952 Signature Book # 1025

Field Book # 1025 Traverse Book # 1025  
 Reference Plans

Examined Conor J. Lamberton  
 Approved as to Survey 6 Chief Surveyor  
 Deposited this 17th day of August 1992  
 at Wellington District Registrar  
 File No. 1025/14 JUL 1992  
 DP 123347

LAND DISTRICT North Auckland  
 Survey Blk. & Dist. XI Northern SD  
 NZMS 261 Sheet Record Map No. P05/61

TERRITORIAL AUTHORITY For North District  
 Surveyed by R.S. Donaldson & Assoc.  
 Scale 1: 1500 Date March 1992

Printed by Surveying Imports Ltd. Auckland, New Zealand



3 Waters Lane, Kerikeri      TSmith      14/02/2026 Lot 1  
Assumption: Existing use rights apply, 180m<sup>2</sup> gravelled driveway removed and lawn added 2019

Designed using rational formula       $Q = CIA$  (L/s)  
 $Q_{ve} = 0.65 \times Q_{max}$  (L/s)

10 years rainfall intensities (mm/hr) RCP8.5 (Source: NIWA HIRS Data)

10 min	145.0	30 min	88.7	2 hr	43.3	12 hr	2.2
20 min	107.0	1 hr	63.1	6 hr	22.0	24 hr	

Pre-Development Site Area			Post-Development Site Area		
Surface Type	c	A (m2)	Surface Type	c	A (m2)
Landscape Surface	0.30	1929	Landscape Surface	0.30	1929
Unsealed Surface	0.85	286	Unsealed Surface	0.85	286
Driveway Surface	0.95	0	Driveway Surface	0.95	0
Roof Surface	0.95	212	Roof Surface	0.95	212
Total =		2427	Total =		2427

286 measured in topo survey  
 20.5% incl 40m<sup>2</sup> carport added 2024

Pre-development Peak Discharge

<b>Q<sub>total</sub></b> =	31.4	L/s	A
<b>Q<sub>landscape</sub></b> =	23.3	L/s	B
<b>Q<sub>unsealed</sub></b> =	9.8	L/s	C
<b>Q<sub>driveway</sub></b> =	0.0	L/s	D
<b>Q<sub>roof</sub></b> =	8.1	L/s	E

Post-development Peak Discharge

<b>Q<sub>total</sub></b> =	31.4	L/s	F
<b>Q<sub>landscape</sub></b> =	23.3	L/s	G
<b>Q<sub>unsealed</sub></b> =	9.8	L/s	H
<b>Q<sub>driveway</sub></b> =	0.0	L/s	I
<b>Q<sub>roof</sub></b> =	8.1	L/s	J

discharge to extg roadside connection

3 Waters Lane, Kerikeri TSmith 14/02/2026 Lot 2

**Assumption: Post development discharge rate remains the same or less after development**

Designed using rational formula

$$Q = CIA \quad (\text{L/s})$$

$$Q_{ve} = 0.65 \times Q_{max} \quad (\text{L/s})$$

10 years rainfall intensities (mm/hr) RCP8.5 (Source: NIWA HIRS Data)

10 min	145.0	30 min	88.7	2 hr	43.3	12 hr	2.2
20 min	107.0	1 hr	63.1	6 hr	22.0	24 hr	

Pre-Development Site Area			Post-Development Site Area		
Surface Type	c	A (m2)	Surface Type	c	A (m2)
Landscape Surface	0.30	2356	Landscape Surface	0.30	2056
Unsealed Surface	0.85	144	Unsealed Surface	0.85	144
Driveway Surface	0.95	0	Driveway Surface	0.95	0
Roof Surface	0.95	0	Roof Surface	0.95	300
Total =		2500	Total =		2500

**Pre-development Peak Discharge**

Qt <sub>total</sub> =	28.5	L/s	A
Q <sub>landscape</sub> =	28.5	L/s	B
Q <sub>unsealed</sub> =	4.9	L/s	C
Q <sub>driveway</sub> =	0.0	L/s	D
Q <sub>roof</sub> =	0.0	L/s	E

**Post-development Peak Discharge**

Qt <sub>total</sub> =	36.3	L/s	F
Q <sub>landscape</sub> =	24.8	L/s	G
Q <sub>unsealed</sub> =	4.9	L/s	H
Q <sub>driveway</sub> =	0.0	L/s	I
Q <sub>roof</sub> =	11.5	L/s	J

**Control Data**

Pre-Development (c*A) value	829	m2	Total Pre-Dev (c*A)
Post-Development not drain into Tank (c*A) value	762	m2	Item G + H(partial)
Post-Development (c*A) into Tank	285	m2	Item H(partial)+I+J
Target Flow Rate to reduce to	28.5	L/s	Item A
Flows not drain into Detention Tank - Item G	29.8	L/s	Item G + H(partial)
>> Max Post-Development Flow from Detention Tank Q	1.3	L/s	
>> Max Allowable Average Flow from Detention Tank Q <sub>ve</sub>	0.8	L/s	

**Tank Storage**

Tank Area	A =	11.2	m <sup>2</sup>	Promax 30m <sup>3</sup>	MH dia	3.78 m dia	MH dia
Tank Volume Provided	V =	30.0	m <sup>3</sup>		Tank H	2.67 m high	Tank H
Overflow	Dia	100	mm	*100mm is min dia			
Orifice diameter	d =	13.00	mm	*flow for < Max Allowable Average 0.9 L/s			

**Storage Inflow and Outflow Calculations**

Time (min)	Intensity (mm/hr)	Depth (mm)	Inflow (L)	Discharge (L)	Overflow (L)
10	145	24.2	6888	783	0
20	107	35.7	10165	1566	0
30	89	44.4	12640	2349	0
60	63	63.1	17984	4698	0
120	43	86.6	24681	9396	0

Totasl storage height reqd	2.29
Size of lower orifice	0.011
Storage height 100 to 10yr	0.40
Size of upper orifice	0.013
	0

Extreme rainfall assessment with climate changeProjected temperature change with RCP methodRainfall intensities (mm/h)**Rainfall intensities (mm/hr) :: RCP8.5 for the period 2081-2100**

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h	
1.58	0.633	84.1	61.9		51.3	36.4	24.9	12.6	7.81	4.71	2.72	1.94	1.51	1.25
2	0.5	93	68.5		56.7	40.3	27.6	14	8.69	5.21	3.02	2.16	1.68	1.38
5	0.2	123	90.7		75.2	53.4	36.7	18.6	11.6	6.95	4.03	2.89	2.25	1.85
10	0.1	145	107		88.7	63.1	43.3	22	13.7	8.23	4.78	3.42	2.67	2.2
20	0.05	167	124		102	72.9	50.1	25.5	15.9	9.51	5.54	3.96	3.1	2.54
30	0.033	181	133		111	78.7	54.1	27.6	17.2	10.3	5.99	4.29	3.35	2.75
40	0.025	190	140		116	82.7	56.9	29.1	18.1	10.8	6.31	4.52	3.53	2.9
50	0.02	197	146		121	86	59.1	30.2	18.8	11.3	6.57	4.7	3.67	3.01
60	0.017	203	150		124	88.6	60.9	31.1	19.4	11.6	6.77	4.85	3.79	3.11
80	0.012	212	157		130	92.8	63.8	32.6	20.3	12.2	7.1	5.08	3.96	3.26
100	0.01	219	162		135	95.9	65.9	33.7	21	12.6	7.34	5.25	4.11	3.37
250	0.004	247	183		152	108	74.4	38.1	23.8	14.3	8.31	5.95	4.65	3.82

# PRODUCER STATEMENT

## DESIGN: ON-SITE EFFLUENT DISPOSAL SYSTEMS (T.P.58)

ISSUED BY:.....Tony Smith, IDE 2016 Ltd.....(approved qualified design professional)

TO:.....Smith Family Trust.....(owner)

TO BE SUPPLIED TO: .....Far North District Council.....

PROPERTY LOCATION:.....3 Waters Lane, Kerikeri...(proposed 2 Lot development)

LOT 3 DP 152357.....VALUATION NUMBER.....

TO PROVIDE : Design an on-site effluent disposal system in accordance with Technical paper 58 and provide a schedule to the owner for the systems maintenance.

THE DESIGN: Has been in accordance with G13 (Foul Water) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity Insurance (Design) to a minimum value of \$200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:

- (1) The site verification of the soil types.
- (2) All proprietary products met the performance requirements.

The proposed design will met the relevant provisions of the Building Code and 8.15 of The Far North District Council Engineering Standards.

.....(Signature of approved design professional)

...NZCE(Civil), NZIM Dip Mgmt, CMEngNZ CPEng .....(Professional qualifications)

...172659.....(Licence Number or professional Registration number)

Address ...3 Waters Lane.....

..... Kerikeri.....

Phone Number.....

Fax Number .....

Cell Phone 021 987 662

Date 26/11/2025

**Note:** This form is to accompany every application for a Building Consent incorporating a T.P.58. Approval as a design professional is at Councils discretion.

### On-site Wastewater Disposal Site Evaluation Investigation Checklist

**FAR NORTH DISTRICT COUNCIL**

# **Appendix E**

**TP58**

## **On-site Wastewater Disposal Site Evaluation Investigation Checklist**

**Part A –Owners Details**

**1. Applicant Details:**

Applicant Name	Tony Smith		
Company Name	Smith Family Trust		
	First Name(s)		Surname
Property Owner Name(s)	Tony & Kerrie	Smith	

Nature of Applicant*	Owner
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(\*i.e. Owner, Leasee, Prospective Purchaser, Developer)

**2. Consultant / Site Evaluator Details:**

Consultant/Agent Name	IDE 2016 Ltd			
Site Evaluator Name	Tony Smith			
Postal Address	3 Waters lane, Kerikeri			
Phone Number	Business		Private	
	Mobile	021987662	Fax	
Name of Contact Person	Tony Smith			
E-mail Address	ideld@xtra.co.nz			

**3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?**

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	(Please tick)
If yes, give Reference Numbers and Description				
Historic wastewater treatment and disposal under BC-1995-994-0				

**4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted**

If so, specify Application Details and Consent No.

(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)


**Part B- Property Details**

**1. Property for which this application relates:**

Physical Address of Property	3 Waters Lane
	Kerikeri
Territorial Local Authority	FAR NORTH DISTRICT COUNCIL
Regional Council	NORTHLAND REGIONAL COUNCIL
Legal Status of Activity	Permitted:                      Controlled:                      Discretionary:
Relevant Regional Rule(s) (Note 1)	
Total Property Area (m <sup>2</sup> )	
Map Grid Reference of Property If Known	

**2. Legal description of land (as shown on Certificate of Title)**

Lot No.	3	DP No.	152357	CT No.	
Other (specify)					

Please ensure copy of Certificate of Title is attached

**PART C: Site Assessment - Surface Evaluation**

**(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)**

**Note: Underlined terms defined in Table 1, attached**

**Has a relevant property history study been conducted?**

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	(Please tick one)
-----	-------------------------------------	----	--------------------------	-------------------

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

Geotechnical investigation report performed by Wilton Joubert GIR issued with borelogs and site soakage tests

**1. Has a Slope Stability Assessment been carried out on the property?**

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Please tick
-----	-------------------------------------	----	--------------------------	-------------

If No, why not?


If Yes, please give details of report (and if possible, please attach report):

Author	
Company/Agency	Wilton Joubert Ltd
Date of Report	20/10/2023
Brief Description of Report Findings:-	

**2. Site Characteristics (See Table 1 attached):**

Provide descriptive details below:

**Performance of Adjacent Systems:**

N/A - site existing irrigation field 1998 in place

**Estimated Rainfall and Seasonal Variation:**

Information available from **N.I.W.A MET RESEARCH**

**Vegetation / Tree Cover:**

mown lawn across Lot 2, with extensive border trees and shrubs bordering lots

**Slope Shape: (Please provide diagrams)**

**Slope Angle:**

1-3%

**Surface Water Drainage Characteristics:**

mown grass open lot, gently slopes towards north

**Flooding Potential: NO**

If yes, specify relevant flood levels on appended site plan, i.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.

**Surface Water Separation:**

>15m

**Site Characteristics: or any other limitation influencing factors**


**3. Site Geology**

**Check Rock Maps**

Kerikeri volcanic group

Geological Map Reference Number	
---------------------------------	--

**4. What Aspect(s) does the proposed disposal system face? (please tick)**

North	<input checked="" type="checkbox"/>	West	<input type="checkbox"/>
North-West	<input type="checkbox"/>	South-West	<input type="checkbox"/>
North-East	<input type="checkbox"/>	South-East	<input type="checkbox"/>
East	<input type="checkbox"/>	South	<input type="checkbox"/>

**5. Site clearances,( Indicate on site plan where relevant)**

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)
Boundaries		Check Council requirements
Surface water, rivers Creeks drains etc	>15m	>15m
Groundwater	N/A	N/A
Stands of Trees/Shrubs	>15m	>15m
Wells, water bores	>15m	>15m
Embankments/retaining walls	N/A	N/A
Buildings	>5m	>5m
Other (specify):		

**PART D: Site Assessment - Subsoil Investigation**

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)

Note: Underlined terms defined in Table 2, attached

**1. Please identify the soil profile determination method:**

Test Pit		(Depth _____ m	No of Test Pits	
Bore Hole		(Depth <u>3.2</u> m	No of Bore Holes	2
Other (specify):	Wilton Joubert GIR			

Soil Report attached?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Please tick
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**2. Was fill material intercepted during the subsoil investigation?**

Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Please tick
-----	--------------------------	----	-------------------------------------	-------------

If yes, please specify the effect of the fill on wastewater disposal


**3. percolation testing (mandatory and site specific for trenches in soil type 4 to 7)**

Please specify the method
soil classification in GIR

Test Report Attached?	Yes		No	X	Please tick
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**4. Are surface water interception/diversion drains required?**

Yes		No	X	Please tick
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If yes, please show on site plan

**4a Are subsurface drains required**

If yes enter details

**5. Please state the depth of the seasonal water table:**

Winter		m	Measured	>3.2m	Estimated	
Summer		m	Measured		Estimated	

**6. Are there any potential storm water short circuit paths?**

Yes		No	X	Please tick
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If the answer is yes, please explain how these have been addressed


**7. Based on results of subsoil investigation above, please indicate the disposal field soil category (Refer TP58 Table 5.1)**

Is Topsoil Present?	Y	If so, Topsoil Depth?	0.2	(m)
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Soil Category	Description	Drainage	Tick One
1	Gravel, coarse sand	Rapid draining	
2	Coarse to medium sand	Free draining	
3	Medium-fine & loamy sand	Good drainage	
4	Sandy loam, loam & silt loam	Moderate drainage	
5	Sandy clay-loam, clay loam & silty clay-loam	Moderate to slow drainage	X
6	Sandy clay, non-swelling clay & silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

**Reasons for placing in stated category**

soil tests, borelogs and geotechnical investigation performed by Wilton Joubert

**PART E: Discharge Details**

**1. Water supply source for the property (please tick):**

Rainwater (roof collection)	X
Bore/well	
Public supply	

**2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available**

**(Refer TP58 Table 6.1 and 6.2)**

Number of Bedrooms	3			
Design Occupancy	6			(Number of People)
Per capita Wastewater Production			180	(tick) (Litres per person per day)
Other - specify				
Total Daily Wastewater Production	1080			(litres per day)

**3. Do any special conditions apply regarding water saving devices**

a) Full Water Conservation Devices?	Yes		No	X	(Please tick)
b) Water Recycling - what %?	0	%			(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage


**4. Is Daily Wastewater Discharge Volume more than 2000 litres:**

Yes		(Please tick)
No	X	(Please tick)

*Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required*

**5. Gross Lot Area to Discharge Ratio:**

Gross Lot Area	2,500 for Lot 2	M <sup>2</sup>
Total Daily Wastewater Production	1,080	(Litres per day)(from above)
Lot Area to Discharge Ratio	2.31	

**7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?**

Yes		No	X	Please tick
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**8. Is a Northland Regional Council Discharge Consent Required?**

Yes		No	X	(Please tick)
-----	--	----	---	---------------

**PART F: Primary Treatment** (Refer TP58 Section 7.2)

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, dual chamber explain why not

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
1	Bio Tube septic tank	4,500
	Total Capacity	4,500 L

2. Type of Septic Tank Outlet Filter to be installed?

**PART G: Secondary and Tertiary Treatment**

(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

Secondary Treatment	<input checked="" type="checkbox"/>	
Home aeration plant	<input checked="" type="checkbox"/>	
Commercial aeration plant	<input type="checkbox"/>	
Intermediate sand filter	<input type="checkbox"/>	
Recirculating sand filter	<input type="checkbox"/>	
Recirculating textile filter	<input type="checkbox"/>	
Clarification tank	<input type="checkbox"/>	
Tertiary Treatment	<input type="checkbox"/>	
Ultraviolet disinfection	<input type="checkbox"/>	
Chlorination	<input type="checkbox"/>	
Other		Specify <input type="text"/>

**PART H: Land Disposal Method**

(Refer TP58 Section 8)

1. Please indicate the proposed loading method: (please tick)

Gravity	<input type="checkbox"/>
Dosing Siphon	<input type="checkbox"/>
Pump	<input checked="" type="checkbox"/>

2. High water level alarm to be installed in pump chambers

Yes  X

If not to be installed, explain why


**3. If a pump is being used, please provide the following information:**

Total Design Head	TBC	(m)
Pump Chamber Volume	TBC	(Litres)
Emergency Storage Volume	TBC	(Litres)

**4. Please identify the type(s) of land disposal method proposed for this site: (please tick)**  
(Refer TP58 Sections 9 and 10)

Surface Dripper Irrigation		
Sub-surface Dripper irrigation	X	
Standard Trench		
Deep Trench		
Mound		
Evapo-transpiration Beds		
Other		Specify

**5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:**

Loading Rate	8	(mm/day)
Disposal Area	Design	360 (m <sup>2</sup> )
	reserve	180 (m <sup>2</sup> )

**Explanation** (Refer TP58 Sections 9 and 10)

soil identification from WJ GIR, allowable GD06 infiltration of 8 to 10mm/day
conservative treatment and disposal design

**6. What is the available reserve wastewater disposal area** (Refer TP58 Table 5.3)

Reserve Disposal Area (m <sup>2</sup> )	135
Percentage of Primary Disposal Area (%)	100

**7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:**

**Description and Dimensions of Disposal Field:**

gentle slope across mature mown grass				
PCDI irrigation sub-surface proposed				
Plan Attached?	Yes	X	No	(Please tick)

**If not, explain why not**


**PART I: Maintenance & Management**

(Refer TP58 Section 12.2)

**1. Has a maintenance agreement been made with the treatment and disposal system suppliers?**

Yes	TBC	No		(Please tick)
-----	-----	----	--	---------------

Name of Suppliers

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**PART J: Assessment of Environmental Effects**

**1. Is an assessment of environmental effects (AEE) included with application?**

(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

Yes		No	X	(Please tick)
-----	--	----	---	---------------

If Yes, list and explain possible effects

**PART K: Is Your Application Complete?**

**1. In order to provide a complete application you have remembered to:**

Fully Complete this Assessment Form	X
Include a <i>Location Plan</i> and <i>Site Plan</i> (with Scale Bars)	X
Attach an Assessment of Environmental Effects (AEE)	

**1. Declaration**

I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

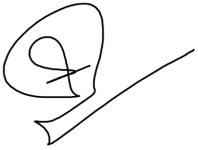
Name	Tony Smith	Signature	
Position	Principal Engineer	Date	14/02/2026

**Note**

**Any alteration to the site plan or design after approval will result in non compliance.**

**SITE** Lot 3 DP 152357, 3 Waters Lane, Kerikeri  
**PROJECT** Proposed 2-Lot Rural-Residential Subdivision  
**CLIENT** Tony Smith  
**REFERENCE NO.** 129819  
**DOCUMENT** Geotechnical Site Suitability Report  
**STATUS/REVISION NO.** FINAL – Resource Consent  
**DATE OF ISSUE** 20 October 2023

Report Prepared For	Email
Tony Smith	ideltd@xtra.co.nz

<b>Authored by</b>	<b>N. Ngaropo</b> <i>BSc (Geol)</i>	Engineering Geologist	nikora@wjl.co.nz	
<b>Reviewed by</b>	<b>N. Anson</b> <i>BE (Civil), MEngNZ</i>	Geotechnical Engineer	nick@wjl.co.nz	
<b>Approved by</b>	<b>A. Asadi</b> <i>(PhD(Geotech), CPEng, CMEngNZ)</i>	Senior Geotechnical Engineer	afshin@wjl.co.nz	

## 1 EXECUTIVE SUMMARY

The following table is intended to be a concise summary which must be read in conjunction with the relevant report sections as referenced herein.

<b>Development Type:</b>	Subdividing 1 Lot into 2
<b>District Plan Zone:</b>	Rural Living
<b>Development Proposals Supplied:</b>	Scheme Plan Sketch Mark-up Provided by the client displayed on a plan prepared by PK Engineering Ltd titled "Proposed Subdivision Waters Land, Kerikeri Lot 3, DP 152357", Project No. 09-73; Dated December 2009.
<b>Lot Sizes:</b>	Proposed Lot 1 – 2477m <sup>2</sup> Proposed Lot 2 – 2500m <sup>2</sup>
<b>NZS3604 Type Structure/s:</b>	Inferred
<b>Geology Encountered:</b>	Kerikeri Volcanic Group
<b>Fill Encountered:</b>	Fill was not encountered during our investigation
<b>Overall Site Gradient in Proximity to Development:</b>	Land throughout the property (on both proposed lots) are near level to gently sloping down towards the north-east at grades of less than 5°.
<b>Natural Hazards:</b>	<p><b>Stability:</b> Overall Low Risk of deep-seated global instability within the nominated building platforms – refer to Section 8.2 for specific detail.</p> <p><b>Liquefaction:</b> Negligible risk of liquefaction susceptibility and damage – refer to Section 8.3.</p>
<b>Suitable Shallow Foundation Type(s):</b>	<p>Subject to appropriate landform modifications, expansive soil and non-engineered fill considerations, we expect that a new residential dwelling designed in <b>general</b> accordance with NZS3604 can be built on Proposed Lot 2, making use of, but not limited to, various of the following foundation options:</p> <ul style="list-style-type: none"> <li>• Shallow Pile Type Foundations supporting a timber subfloor, or</li> <li>• Reinforced Concrete Stiffened Raft Type Floor System, or</li> <li>• Conventional Reinforced Concrete Slab, with Perimeter Reinforced Concrete Foundations on Ground / Masonry Block Foundation Walls, both designed for expansive soils which will require specific engineering design.</li> </ul>
<b>Shallow Soil Bearing Capacity:</b>	Yes – Natural Soils & Engineered Fill Only Geotechnical Ultimate Bearing Capacity = 300 kPa
<b>NZBC B1 Expansive Soil Classification :</b>	Class H – Highly Expansive ( $\gamma_s = 78\text{mm}$ )
<b>NZS1170.5:2004 Site Subsoil Classification:</b>	Class C – Shallow Soil stratigraphy
<b>Earthworks:</b>	<p>It is envisioned that minor earthworks operations will be carried out on site. It is not clear at this early stage what the final proposals for land modification may involve. Considering the shallow gradients across the nominated building platform in Proposed Lot 2, it is expected that only minor cut/fill earthworks will be undertaken to form level building platform. Once available, the implications of any future earthworks are to be confirmed at building consent stage during Site Specific Geotechnical Assessment.</p> <p>Please refer to text of report for further detail.</p>

## 2 INTRODUCTION

### 2.1 SCOPE OF WORK

Wilton Joubert Limited (WJL) was engaged by the client, **Tony Smith** to undertake a geotechnical site suitability assessment of ground conditions at the above site, to support a 1-into-2 Lot residential subdivision of existing Lot 3 DP 152357, as depicted to us on the supplied Subdivision Scheme Plan Mark-up Sketch, on a plan prepared by PK Engineering Ltd and titled “*Proposed Subdivision Waters Lane, Kerikeri Lot 3, DP 152357*”, project No. 09-73; dated December 2009 (refer Figures 1 and 2 below).

The following report provides preliminary site suitability recommendations with respect to stability and geotechnical constraints, where an indicative development area has been assessed for Proposed Lot 2.

No development plans have been provided for the proposed construction of a future dwelling in Proposed Lot 2 however, a nominated 30m x 30m platform has been marked within the proposed lot boundaries, and hence we have assessed the suitability of the site subsoils as per our site plan below (also attached within the appendices of this report) not only in terms of bearing capacity, but also for differential foundation movement due to soil expansivity and/or soil creep.

Furthermore, our scope does not include any environmental assessment of site soils or groundwater.

Please note, the primary purpose of this report is to support the geotechnical suitability of the proposed development in principle, subject to specific engineering design (SED) of foundations. This report alone should not be used to support any future Building Consent application(s) unless submitted to Council in conjunction with a Geotechnical Review Memorandum or Site-Specific Review supporting such future SED. Any revision of the supplied Subdivision Scheme Plan and/or development proposals with geotechnical implications should be referred to us for review.

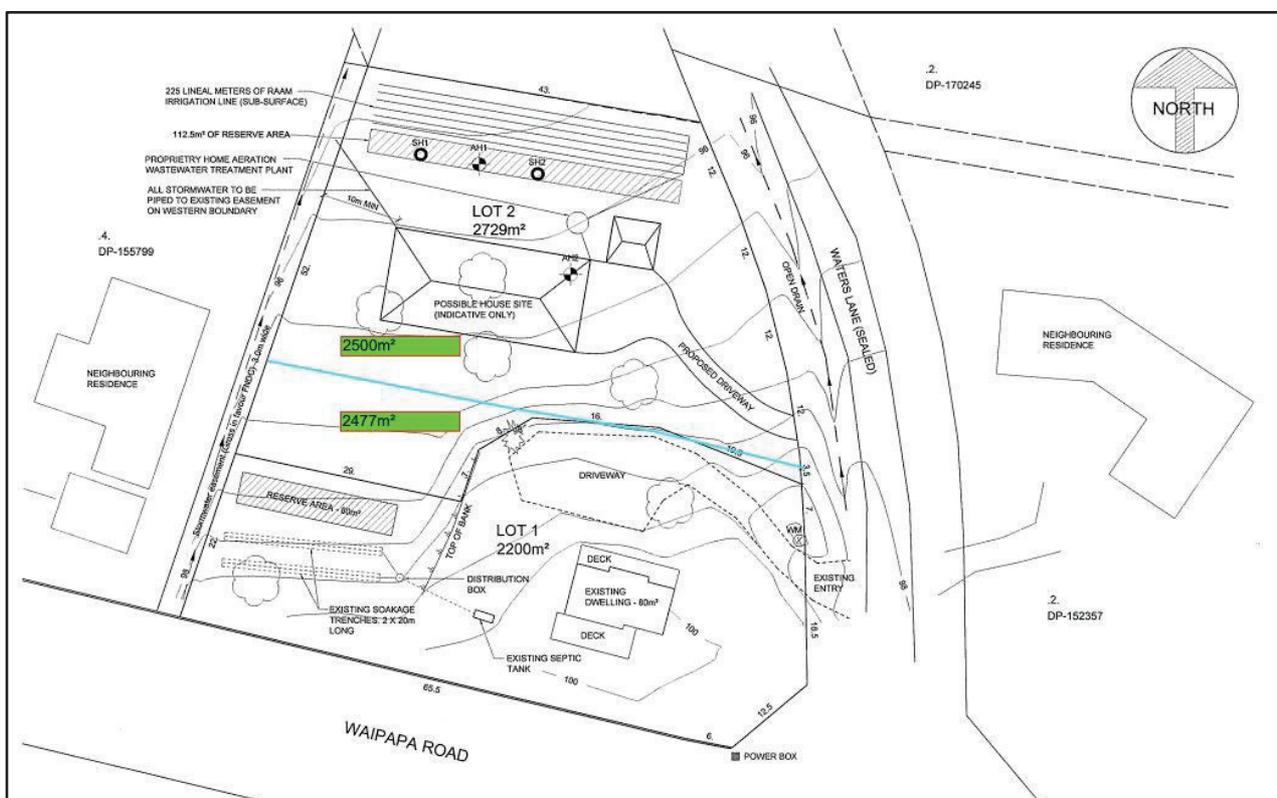


Figure 1 –Subdivision Scheme Plan Prepared by PK Engineering.



Figure 2 – Excerpt of WJL Site Plan Overlain on Scheme Plan Supplied by PK Engineering Ltd.

### 3 SITE DESCRIPTION

The subdividing parent property legally described as Lot 3 DP 152357, is located at 3 Waters Lane, Kerikeri. 3 Waters Lane forms the eastern boundary and Waipapa Road forms the southern boundary. The parent property is being split into 2 residential lots of which, Proposed Lot 2 will be the subject of this geotechnical assessment, while Proposed Lot 1 contains the existing residential dwelling, is excluded from geotechnical consideration and recommendations within this report.

Current access to the nominated building platform is via a gravel covered entrance directly from 3 Waters Lane in the northeast corner of the parent Lot, whilst future access is yet to be finalised.

Proposed Lot 2 will be 2,500m<sup>2</sup> in size and is situated north of the existing dwelling. The lot is mainly grass covered with mature trees around its' periphery and also scattered throughout the property. Grades across the investigated area were near level to gently sloping at less than 3-5° for more than 30m in all directions. Refer Figure 3.

Land use of the surrounding properties is predominantly rural residential lifestyle, with similar landform features within the neighbouring blocks. There were no signs of hummocky ground and/or soil cracking apparent within the vicinity of the nominated building platform.



**Figure 3: Site Photo – From the Eastern Boundary facing West Overlooking the Nominated Building Area to the right on Proposed Lot 2. Orange Cones are Indicative of Field-Testing Locations.**



**Figure 4: Site Photo – Facing North Overlooking the current Access to Proposed Lot 2 from the Eastern Boundary.**

At the time of preparing this report, we note Far North District Council (FNDC) GIS Waters Map indicates that reticulated Stormwater and Potable Water Connections are available in proximity to the property, however, Wastewater Connections do not appear to be available.

#### **4 PUBLISHED GEOLOGY**

Local geology at the property is noted on the GNS Science New Zealand Geology Web Map, Scale 1:250,000, as Kerikeri Volcanic Group Late Miocene basalt of Kaikohe – Bay of Islands Volcanic Field (Figure 5 - red shaded area), described as; “Basalt lava, volcanic plugs and minor tuff”, refer; ‘GNS Science Website’, considered to be some 9.7 to 1.8 million years old.

The natural materials encountered within the investigated boreholes were consistent with our expectations of Kerikeri Volcanic Group materials.

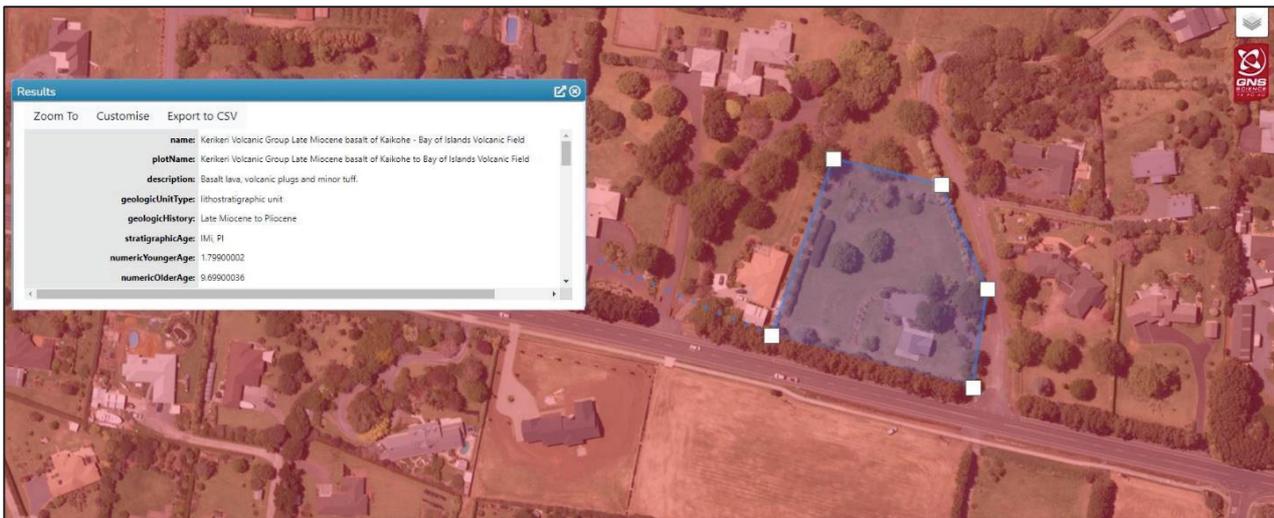


Figure 5 - Screenshot from New Zealand Geology Web Map hosted by GNS Science. Lot 3 DP 152357 highlighted in Blue.

## 5 NATURAL HAZARDS

The Northland Regional Council Hazard Maps indicate some flood prone land over 300m away from the property generally confined to inland river (refer Figure 6 below). Given that the investigated platform is setback approximately 367m to the north-east of the mapped 100-year predicted river flood zone, we expect this flood zonation to have no impact on any future development within the nominated building platform of Proposed Lot 2.



Figure 6 – Screenshot from Northland Regional Council (NRC) Online GIS Showing Modelled River Flooding Extent.

## 6 **GEOTECHNICAL INVESTIGATION**

WJL carried out a shallow ground investigation at the nominated building platform in Proposed Lot 2 on 12 October 2023. Our subsoil testing involved the excavation of two hand auger boreholes (HA) of 50mm diameter, drilled to a maximum depth of 3.20m below present ground level (bpgl),

The approximate locations of the HAs are shown on the appended Site Plan.

The soil sample arisings from the boreholes were logged in accordance with the “Field Description of Soil and Rock”, NZGS, December 2005. In-situ undrained shear vane tests were measured at intervals of depth and then adjusted in accordance with the New Zealand Geotechnical Society (NZGS); Guidelines for Handheld Shear Vane Testing, August 2001, with strengths classified in accordance with the NZGS Field Classification Guidelines; Table 2.10, December 2005. The materials identified are described in detail on the appended records, together with the results of the various tests undertaken, plus the groundwater conditions as determined during time on site.

## 7 **GEOTECHNICAL FINDINGS**

The following is a summary of the ground conditions encountered in our investigation. Please refer to the appended logs for greater detail.

### 7.1 **TOPSOIL**

Surficial topsoil was encountered in both Hand Auger boreholes to a depth of 0.20m bpgl.

### 7.2 **FILLED GROUND**

Fill was not encountered during our investigation.

### 7.3 **NATURAL GROUND**

The underlying natural deposits encountered within the investigated building platform were consistent with our expectations of Kerikeri Volcanic Group comprising of very stiff clayey SILTs and silty CLAYs, with varying amounts of fine to coarse, weakly to strongly fused clasts throughout.

Measured in-situ, BS1377 adjusted peak shear strengths in the natural soils ranged from 179kPa (30kPa remoulded) to greater than 225kPa and / or Unable To Penetrate (UTP). Sensitivities to disturbance, where able to be determined, typically indicated sensitive subgrade according to NZGS Guidelines.



*Figure 7 – Arisings from HA01 – Lot 2.*



Figure 8 – Arisings from HA02 – Lot 2

#### 7.4 GROUNDWATER

Groundwater was not encountered within any investigated boreholes.

#### 7.5 SUMMARY TABLE

The following table summarises our inferred stratigraphic profiling.

Table 1: Stratigraphic Summary Table; NE=Not Encountered,

Investigation Hole ID	Topsoil	Kerikeri Volcanic Group Materials	Ground Water Level Encountered During Drilling	Reason for Borehole Termination
HA01 (3.0m drill depth)	0.00m – 0.20m	0.20m – 3.20m	NE	Target Depth
HA02 (3.0m drill depth)	0.00m – 0.20m	0.20m – 3.20m	NE	Target Depth
Minimum Cu (kPa)	-	179 kPa	-	-
Average Cu (kPa)	-	>200 kPa	-	-
Maximum Cu (kPa)	-	>225+ kPa	-	-

## 8 GEOTECHNICAL ASSESSMENT

### 8.1 SHALLOW SOIL EXPANSIVITY

Absent of site-specific testing, we provide a conservative preliminary soil expansivity classification of Class H (Highly) expansive soils as defined in clause 7.5.13.1.2, as introduced to NZS3604 by Amendment 19 of NZBC Structure B1/AS1.

- NZBC B1 Expansive Soil Class H
- Upper Limit of Characteristic surface movement (ys) 78mm

Future foundation design recommendations are given in the appropriate Conclusions and Recommendations section below.

Given that the soils are not considered to lie within the definition of “good ground” as per NZS3604, the design of shallow foundations are no longer covered by that standard, and care must be taken to mitigate against the potential seasonal shrinkage and swelling effects of expansive foundation soils on both superstructures and floors. We therefore recommend specific engineering design should be undertaken by a qualified engineer for the design of the proposed foundations.

### 8.2 SITE STABILITY

The overall property is located on near level ground with gently sloping gradients of less than 3°-5° in the north-west direction. Soil strengths were found to be very high, and no signs of soil creep, hummocky ground or soil cracking was apparent within the immediate vicinity of the proposed lot during our on-site investigation.

As such we consider that the risk of moderate to deep-seated slope instability impacting on the proposed development to be significantly low based on:

- Very stiff underlying subsoils encountered, which contained adequate vane shear strengths and bearing capacities for shallow type foundations,
- The lack of groundwater encountered within the soil profile,
- No evidence of previous instability within the property or immediate vicinity, and
- The lack of any steep slopes within proximity of the proposed lot.

In the long-term, provided that all of the recommendations within this report, or subsequent revisions, are adhered to, then we do not anticipate any significant risk of instability either within or immediately beyond the proposed development.

### 8.3 LIQUEFACTION HAZARD ASSESSMENT

Liquefaction is a natural phenomenon where a loss of strength of sand-like soils is experienced following cyclic induced stress, which is typically a result of prolonged seismic shaking and the resultant increase in pore water pressure of saturated soils.

Cyclic loading during prolonged seismic shaking induces an increase in pore water pressure, which in turn decreases the effective stress of a sand-like deposit of soil. Excess pore water pressure (EPWP) can build to such an extent that the effective stress of the underlying soils is reduced to near zero, whereby the soils no longer carry shear strength and behave as a semi solid/fluid. In such a scenario, excess pore water pressures will follow the path of least resistance to eventual dissipation, which can lead to the manifestation of liquefied soils towards the surface, or laterally towards a free-face (edge of slope, riverbank, etc.) or layers that have not yet undergone liquefaction.

A screening procedure based on geological criteria was adopted to examine whether the proposed development might be susceptible to liquefaction, with observations as follows:

- There are no known active faults traversing through the site,
- There is no historical evidence of liquefaction at this location,



- (a) Rules in the district plan:
- (b) Conditions of a resource consent, either generally or pursuant to section 220(1)(d):
- (c) Other matters, including works.

And we are therefore satisfied that Proposed Lot 2 should be generally suitable for building development in terms of NZS3604:2011, provided that site-specific geotechnical assessment be undertaken to support a future BC Application for Proposed Lot 2 once final land modification proposals have been devised, adhering to the following recommendations of this report, unless over-ridden by said site-specific geotechnical assessment.

## 9.1 FOUNDATION DESIGN

The natural surficial cohesive soils within the site have been assessed as being expansive to differing degrees depending on their depth within the ground profile, and therefore will need to be specifically assessed in accordance with NZBC B1 – Structure, once land modification profiles have been formulated.

Due to the presence of non-engineered fill and expansive soils identified beneath both nominated building platforms, any proposed foundations are expected to require Specific Engineering Design (SED) as the soil conditions are considered to fall outside the NZS3604 definition of 'Good Ground'. All foundations will need to be designed to account for expansive soils as specifically assessed at the site by a suitably qualified engineer, according to how each future building platform is modified. For interim design processes, we recommend the assumption of a Class H expansive soil rating.

A new residential dwelling within proposed Lot 2 should be able to utilise various foundation type options which may include, but not be limited to, the following:

- Bored, concrete-encased tanalised timber piles, supporting a suspended timber subfloor,
- Reinforced Concrete Stiffened Raft Type Floor System, or
- Conventional Reinforced Concrete Slab-on-grade with deepened perimeter footings on Ground / Masonry Block Foundation Walls, both designed for expansive soils which will require SED.

**Any NZ3604 style isolated footings require a minimum embedment of 0.90m below final cleared ground level and into stiff virgin/natural material.**

### 9.1.1 SHALLOW FOUNDATION BEARING CAPACITY

The following bearing capacity values are considered to be appropriate for the design of shallow foundations for proposed Lots 1 and 2, subject to founding directly on or within competent engineered fill and/or natural ground, for which careful Geo-Professional inspections of the subgrade should be undertaken to check that underlying ground conditions are in keeping with our expectations:

**Table 2: Bearing Capacity Values**

<b>Geotechnical Ultimate Bearing Capacity</b>	300 kPa
<b>ULS Dependable Bearing Capacity (<math>\Phi=0.5</math>)</b>	150 kPa

Any non-engineered fill is not suitable for support of permanent structures such as building foundations, retaining walls, pavement etc.

When finalising the development proposals, it should be checked that all foundations lie outside 45° envelopes rising up from:

- 0.50 metres below the invert of service trenches, and/or
- the toe of adjacent retaining walls,

unless such foundation details are found by specific design, to be satisfactory. For any surcharging foundations, deeper foundation embedment's with piles may be required.

During inspections post-obtaining BC, it is important to exercise caution to verify that the natural ground meets the recommended bearing capacity mentioned in this report and any sub-sequent geotechnical report specifically addressing the future development within both nominated building platforms. This is crucial for preserving stability and structural integrity.

## 9.2 NZS1170.5:2004 SITE SUBSOIL CLASSIFICATION

We consider the nominated building platform to be underlain with a Class C – Shallow Soil Site.

## 9.3 SITE PREPARATION & EARTHWORKS

It is envisioned that minor earthworks operations will be carried out on site. It is not clear at this early stage what the final proposals for land modification may involve. Considering the shallow gradients across the nominated building platform in Lot 2, it is expected that only minor cut/fill earthworks will be undertaken to form level building platform. Once available, the implications of any future earthworks are to be confirmed at building consent stage during Site Specific Geotechnical Assessment.

All earthworks should be undertaken in accordance with the following standards:

- NZS4431:1989 “Code of Practice for Earth Fill Residential Development”,
- Section 2 “Earthworks & Geotechnical Requirements” of NZS4404:2010 “Land Development and Subdivision Infrastructure”, and
- Chapter 2 “Site Development Suitability (Geotechnical and Natural Hazards” of the Far North District Council Engineering Standards, (Version 0.6 issued May 2023).

### 9.3.1 SITE CLEARANCE

Competency of the exposed subgrade underlying all future foundations and structures should be confirmed by a Geo-Professional. In this regard, we recommend the stripping of all vegetation, topsoil as well as any non-engineered fill deposits prior to requesting Geo-Professional inspection/s of the stripped ground to confirm that the underlying natural subgrade conditions are in keeping with the expectations of this report.

Without such inspections being undertaken, a Chartered Professional Geotechnical Engineer is unable to issue a Producer Statement - PS4 – Design Review which could result in the failure to meet Building Consent requirements as set by Council as conditions of consent.

Additionally, it is recommended that All topsoil, existing non-engineered fill, buried topsoil, and organic-rich material deemed to be unsuitable for any future foundations should be stripped first from any areas beyond the cut platform prior to the placement of landscaping fill.

### 9.3.2 SUBGRADE PROTECTION

The subgrade, where exposed, should not be exposed for any prolonged period but should be covered with as a minimum, a 100mm thick layer of granular fill such as GAP40 basecourse, as soon as possible.

Likewise, pile/pier inverts should be poured as soon as possible once inspected by a Geo-Professional or covered with a protective layer of site concrete.

### 9.3.3 TEMPORARY & LONG-TERM EARTHWORKS

We recommend that earthworks only be undertaken during periods of fine weather.

During times of inclement weather, earthwork sites should be shaped to assist in stormwater run-off. Any batter excavations should be protected with a geotextile fabric with the toe of the excavations shaped so as to avoid ponded water, as saturating site soils could result in a reduction of bearing capacities.

Temporary stormwater diversion must be constructed around the upslope perimeter of bulk excavations to direct overland flows away from excavations. This could take the form of a soil bund or other measures as deemed appropriate by the supervising Geo-Professional.

All temporary cuts not exceeding 1.5m should be battered back at gradients no steeper than 1V:0.5H.

Additionally, we do not recommend leaving any cuts and fills that exceed vertical heights of 0.6m unsupported without specific assessment and approval by a Geo-Professional.

Finally, all exposed batters should be covered with topsoil or geotextile before being re-grassed and/or planted as soon as practicable to aid in stabilising the slopes.

### 9.3.4 CUT/FILL LIMITATIONS

Generally speaking, fills greater than 0.60m depth which have not been reviewed and approved herein, should be considered as being outside the constraints of NZS3604, and hence should not be undertaken on this site unless reviewed and approved by a Geo-Professional familiar with the report contents herein. Filling in excess of this magnitude may, in certain circumstances, disturb existing stability conditions such as by overloading slopes and/or retaining walls, or inducing consolidation settlements of adjacent structures.

### 9.3.5 GENERAL SITE WORKS

We stress that any and all works should be undertaken in a careful and safe manner so that Health & Safety is not compromised, and that suitable Erosion & Sediment control measures should be put in place. Any stockpiles placed should be done so in an appropriate manner so that land stability and/or adjacent structures are not compromised.

Furthermore:

- All works must be undertaken in accordance with the Health and Safety at Work Act 2015,
- Any open excavations should be fenced off or covered, and/or access restricted as appropriate,
- The location of all services should be verified at the site prior to the commencement of construction,
- The Contractor is responsible at all times for ensuring that all necessary precautions are taken to protect all aspects of the works, as well as adjacent properties, buildings and services, and
- Should the contractor require any site-specific assistance with safe construction methodologies, please contact Wilton Joubert Limited for further assistance.

## 9.4 STORMWATER & SURFACE WATER CONTROL

Uncontrolled stormwater flows must not be allowed to run onto or over site slopes, or to saturate the ground, so as to adversely affect slope stability or foundation conditions.

Overland flows and similar runoff such as from any higher ground should be intercepted by means of shallow surface drains and/or small bunds and be directed away from building footprints to protect building platforms from both saturation and erosion. Water collected in interceptor drains should be diverted away from building sites to appropriate disposal points. All stormwater runoff from roofs and paved areas, should be collected in sealed pipes and be discharged to a stable disposal point that is not directly downslope of any future structure.

Under no circumstances should concentrated overflows from any source discharge into or onto the ground in an uncontrolled fashion.

## 10 UNDERGROUND SERVICES

Although Far North District Council (FNDC) GIS Maps do not indicate any public underground services (i.e., stormwater, wastewater lines) to be present across the existing site, other underground services, public or private, mapped, or unmapped, of any type could be present. It is recommended to stay on the side of caution during the commencement of any future works within the proposed development area.

## 11 LIMITATIONS

We anticipate that this report is to be submitted to Council in support of a Resource Consent application.

This report has been commissioned solely for the benefit of our client, the **Tony Smith**, in relation to the project as described herein, and to the limits of our engagement, with the exception that the local Territorial

Authority may rely on it to the extent of its appropriateness, conditions, and limitations, when issuing the subject consent.

Any variations from the development proposals as described herein as forming the basis of our appraisal should be referred back to us for further evaluation. Copyright of Intellectual Property remains with Wilton Joubert Limited, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants, or agents, in respect of any other geotechnical aspects of this site, nor for its use by any other person or entity, and any other person or entity who relies upon any information contained herein does so entirely at their own risk. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.

Although this report may be submitted to a local authority in connection with an application for a consent, permission, approval, or pursuant to any other requirement of law, this disclaimer shall still apply and require all other parties to use due diligence where necessary and does not remove the necessity for the normal inspection of site conditions and the design of foundations as would be made under all normal circumstances.

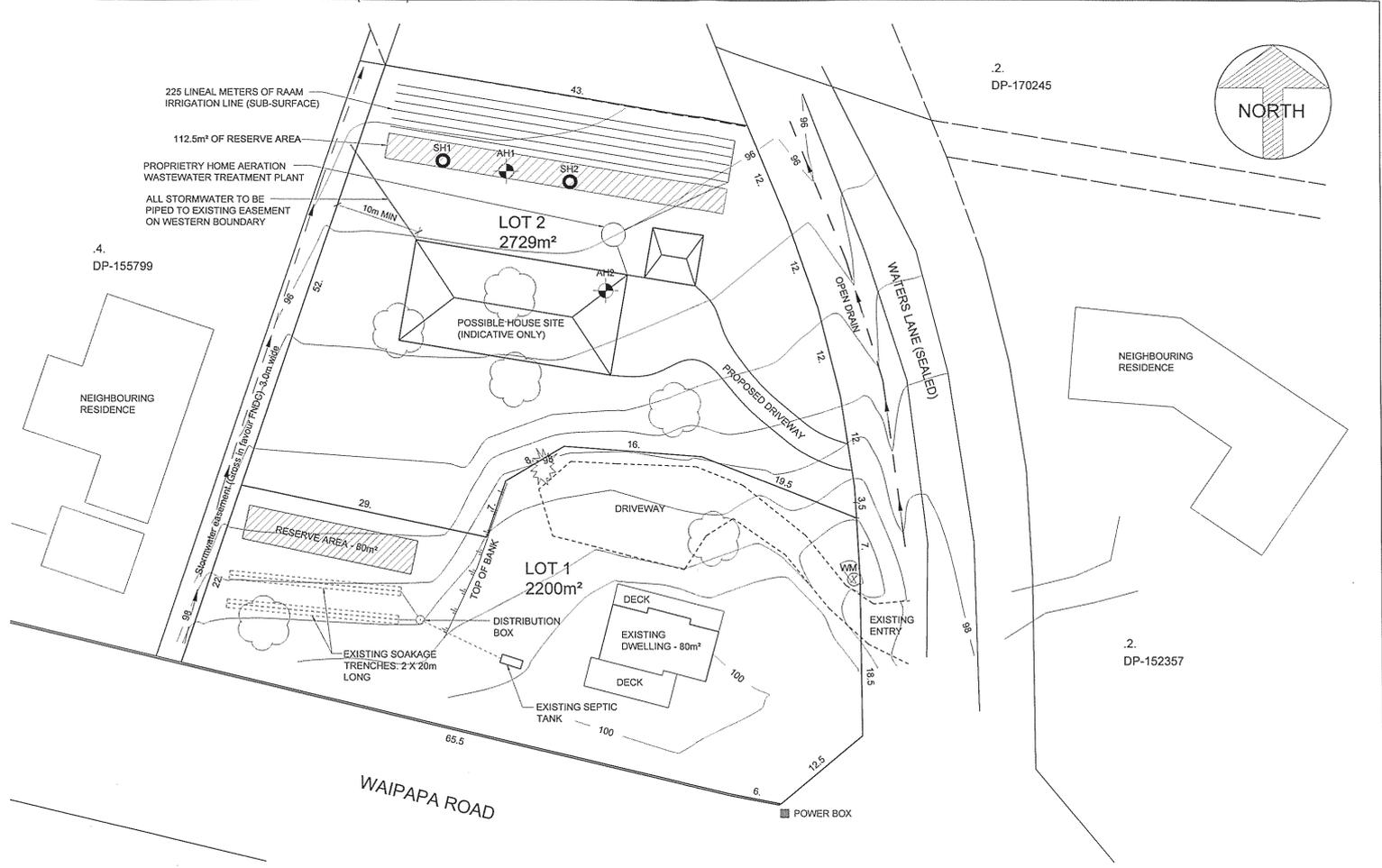
Thank you for the opportunity to provide our service on this project, and if we can be of further assistance, please do not hesitate to contact us.

Yours faithfully,

**WILTON JOUBERT LIMITED**

**Enclosures:**

- Scheme Plan (1 sheet)
- Site Plan (1 sheet)
- Hand Auger Borehole Records (2 sheets)
- 'Foundation Maintenance & Footing Performance' sheet BTF18: A Homeowner's Guide, published by CSIRO (4 sheets)



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PROJECT: **PROPOSED SUBDIVISION  
 WATERS LANE, KERIKERI  
 LOT 3, DP 152357**

CLIENT: **J ALLISON**

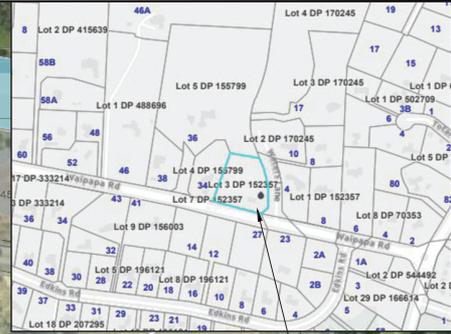
DRAWING: **SITE PLAN**

Drawn	Checked	Date	Scale	CAD FILE NAME
JC	PK	DEC 09	1:400	SITE PLAN

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PROJECT No: **10 - 73**

No	Date	Revision Detail
S1		A3



SYMBOL KEY	
	HAND AUGER LOCATIONS
	PROPOSED DEVELOPMENT

- GENERAL NOTES**
- SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING.
  - BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
  - ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
  - ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.

<p><b>WILTON JOUBERT</b> Consulting Engineers</p> <p>Northland: 09 845 6100 Christchurch: 03 824 1063 Auckland: 09 527 5196 Waikato: 03 443 8039 www.wiltonjoubert.co.nz</p>	<table border="1"> <thead> <tr> <th colspan="3">ISSUE / REVISION</th> </tr> <tr> <th>No.</th> <th>DATE</th> <th>BY / DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OCT 2023</td> <td>NPN / ISSUED WITH GEOTECHNICAL REPORT</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	ISSUE / REVISION			No.	DATE	BY / DESCRIPTION	A	OCT 2023	NPN / ISSUED WITH GEOTECHNICAL REPORT							<p><b>SERVICES NOTE</b></p> <p>WHERE EXISTING SERVICES ARE SHOWN THEY ARE INDICATIVE ONLY AND MAY NOT INCLUDE ALL THE SERVICES WHICH ARE SUBJECT TO CHECK AND VERIFY THAT ALL OR NONE OF ANY SERVICES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND VERIFY ALL EXISTING SERVICES PRIOR TO AND FOR THE DURATION OF THE CONTRACT WORKS.</p> <p><b>GEOTECHNICAL</b></p>	<p><b>SITE PLAN</b></p> <p>PROPOSED 2-LOT SUBDIVISION</p>	<p><b>LOT 3 DP 152357</b> 3 WATERS LANE KERIKERI NORTHLAND</p>	<table border="1"> <tr> <td>ORIGINAL DRAWING SIZE:</td> <td>A3</td> <td>OFFICE:</td> <td>KERIKERI</td> </tr> <tr> <td>DRAWING SCALE:</td> <td>1:500</td> <td>COORDINATE SYSTEM:</td> <td>NOT COORDINATED</td> </tr> <tr> <td>DRAWING NUMBER:</td> <td>129819-G600</td> <td>DATE:</td> <td>A</td> </tr> </table> <p>COPYRIGHT - WILTON JOUBERT LIMITED</p>	ORIGINAL DRAWING SIZE:	A3	OFFICE:	KERIKERI	DRAWING SCALE:	1:500	COORDINATE SYSTEM:	NOT COORDINATED	DRAWING NUMBER:	129819-G600	DATE:	A
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DRAWING NUMBER:	129819-G600	DATE:	A																													

# HAND AUGER : HA01

JOB NO.: 129819 SHEET: 1 OF 1

START DATE: 12/10/2023

NORTHING:

GRID:

DIAMETER: 50mm

EASTING:

ELEVATION: Ground

SV DIAL:

FACTOR:

DATUM:

CLIENT: WJL

PROJECT: Geotechnical Suitability

SITE LOCATION: 3 Waters Lane, Kerikeri

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE				COMMENTS, SAMPLES, OTHER TESTS
					PEAK STRENGTH (kPa)	REMOULD STRENGTH (kPa)	SENSITIVITY	DCP - SCALA (Blows / mm)	
Topsoil	TOPSOIL, dark brown, moist	TS	0.0 - 0.1						
Kerikeri Volcanic Group	Clayey SILT, brown, very stiff, moist, low/ medium plasticity	X	0.1 - 0.2						
			0.2 - 0.4						
	Clayey SILT, occasional yellow/ orange, silt and gravel inclusions	X	0.4 - 0.6						
			0.6 - 0.8						
	Slightly clayey SILT, brown occasional white/black, very stiff, moist, low plasticity, friable, SILT inclusions (ASH)	X	0.8 - 1.0						
			1.0 - 1.2						
				1.0m: occasional orange yellow SILTY / GRAVEL inclusions as strongly fused volcanic clasts					
				1.1m: occasional light pink SILT / GRAVEL inclusions as weakly to strongly fused volcanic clasts					
				1.2 - 1.4					
				1.4 - 1.6					
				1.6 - 1.8					
				1.8 - 2.0					
				2.0 - 2.2					
				2.2 - 2.4					
				2.4 - 2.6					
			2.6 - 2.8						
			2.8 - 3.0						
			3.0 - 3.2						
			3.2 - 3.4						

**REMARKS**

End of borehole @ 3.20m (Target Depth: 3.20m)

NZGS Definition of Relative Density for Coarse Grain soils: VL - Very Loose; L - Loose; MD - Medium Dense; D - Dense; VD - Very Dense

LOGGED BY: SJP

▼ Standing groundwater level

CHECKED BY: NxA

▽ GW while drilling



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# HAND AUGER : HA02

JOB NO.: 129819 SHEET: 1 OF 1

START DATE: 12/10/2023

NORTHING:

GRID:

DIAMETER: 50mm

EASTING:

SV DIAL: DR4830

ELEVATION: Ground

FACTOR: 1.49

DATUM:

CLIENT: WJL

PROJECT: Geotechnical Suitability

SITE LOCATION: 3 Waters Lane, Kerikeri

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE				COMMENTS, SAMPLES, OTHER TESTS
					PEAK STRENGTH (kPa)	REMOLD STRENGTH (kPa)	SENSITIVITY	DCP - SCALA (Blows / mm)	
Topsoil	TOPSOIL		0.0 - 0.2						
Kerikeri Volcanic Group	Silty CLAY, orangey brown, very stiff, moist, low plasticity, occasional clasts		0.2 - 0.6	Groundwater Not Encountered					
			0.6m: Buried roots						
			0.6 - 0.8						
			0.8 - 1.0						
			1.0 - 1.2						
			1.2 - 1.4						
			1.4 - 1.6						
			1.6 - 1.8						
			1.8 - 2.0						
			2.0 - 2.2						
Kerikeri Volcanic Group	Clayey SILT, orangey brown, very stiff, moist, low plasticity, occasional clasts		2.2 - 2.4	Groundwater Not Encountered					
			2.3m: Minor voids						
			2.4 - 2.6						
			2.5m: Becoming wet						
			2.6 - 2.8						
			2.8 - 3.0						
			2.8m: Pocket of light brown SILT, yellow						
			3.0 - 3.2						
			3.2 - 3.4						
			3.4 - 3.6						
	EOH: 3.20m - Target Depth		3.6 - 3.8						

**REMARKS**

End of borehole @ 3.20m (Target Depth: 3.20m)

NZGS Definition of Relative Density for Coarse Grain soils: VL - Very Loose; L - Loose; MD - Medium Dense; D - Dense; VD - Very Dense

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# Foundation Maintenance and Footing Performance: A Homeowner's Guide



PUBLISHING  
BTF 18-2011  
replaces  
Information  
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

## Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870-2011, the Residential Slab and Footing Code.

## Causes of Movement

### Settlement due to construction

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

### Erosion

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

### Saturation

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume, particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

### Seasonal swelling and shrinkage of soil

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

### Shear failure

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.

In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

## GENERAL DEFINITIONS OF SITE CLASSES

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites, which may experience only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes
H1	Highly reactive clay sites, which may experience high ground movement from moisture changes
H2	Highly reactive clay sites, which may experience very high ground movement from moisture changes
E	Extremely reactive sites, which may experience extreme ground movement from moisture changes

### Notes

1. Where controlled fill has been used, the site may be classified A to E according to the type of fill used.
2. Filled sites. Class P is used for sites which include soft fills, such as clay or silt or loose sands; landslip; mine subsidence; collapsing soils; soil subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise.
3. Where deep-seated moisture changes exist on sites at depths of 3 m or greater, further classification is needed for Classes M to E (M-D, H1-D, H2-D and E-D).

### Tree root growth

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

### Unevenness of Movement

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

### Effects of Uneven Soil Movement on Structures

#### Erosion and saturation

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpend).

Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

#### Seasonal swelling/shrinkage in clay

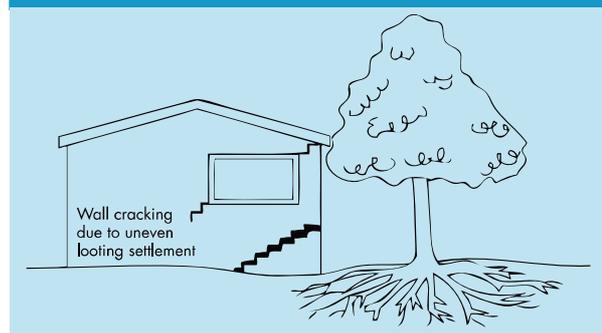
Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.

As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the

### Trees can cause shrinkage and damage



external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

#### Movement caused by tree roots

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

#### Complications caused by the structure itself

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

#### Effects on full masonry structures

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.

The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

**Effects on framed structures**

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation causes a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

**Effects on brick veneer structures**

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

**Water Service and Drainage**

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem. Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.

- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

**Seriousness of Cracking**

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870-2011.

AS 2870-2011 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

**Prevention/Cure**

**Plumbing**

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

**Ground drainage**

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

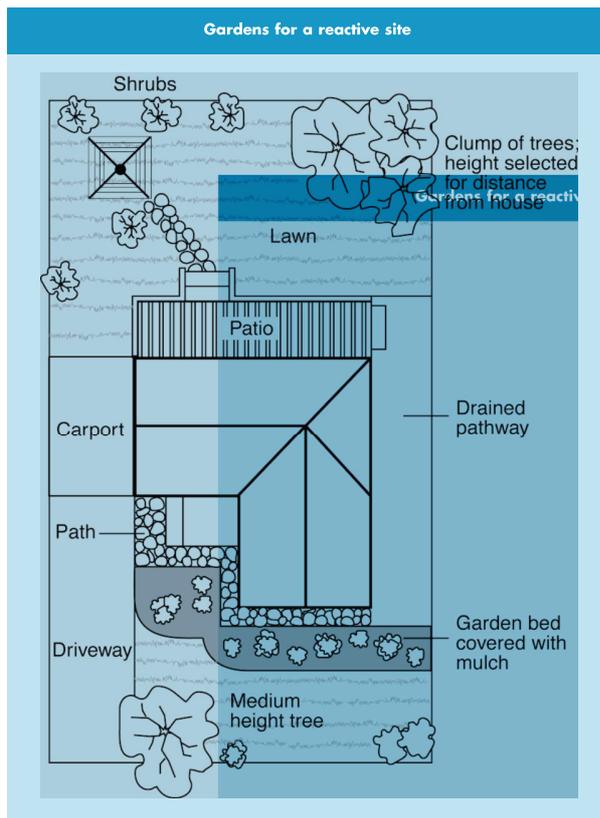
It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

**Protection of the building perimeter**

It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving should

<b>CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS</b>		
<b>Description of typical damage and required repair</b>	<b>Approximate crack width limit (see Note 3)</b>	<b>Damage category</b>
Hairline cracks	<0.1 mm	0
Fine cracks which do not need repair	<1 mm	1
Cracks noticeable but easily filled. Doors and windows stick slightly.	<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired.	5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted.	15–25 mm but also depends on number of cracks	4



extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

#### Condensation

In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

**Warning:** Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

#### The garden

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order. Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

#### Existing trees

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

#### Information on trees, plants and shrubs

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

#### Excavation

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

#### Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

**This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.**

The information in this and other issues in the series was derived from various sources and was believed to be correct when published.

The information is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject.

Further professional advice needs to be obtained before taking any action based on the information provided.

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# **INFRASTRUCTURE REPORT**

**3 Waters Lane, Kerikeri**

Prepared for:

Smith Family Trust

February 2026

## PROJECT INFORMATION

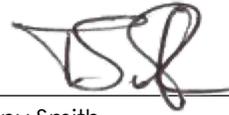
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DATE OF ISSUE: 14/02/2026

REVISION 1

AUTHOR & REVIEWED



Tony Smith  
Senior Engineer  
CMEngNZ, CPEng

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DATE:	REVISION	AUTHOR	REVIEWED
31/01/2026	-	TS	TS
14/02/2026	1	TS	TS

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# 1. OVERVIEW

## 1.1. PROJECT

The purpose of this infrastructure report is intended to accompany a Resource Consent application for the development of a 2-Lot Rural Residential Subdivision.

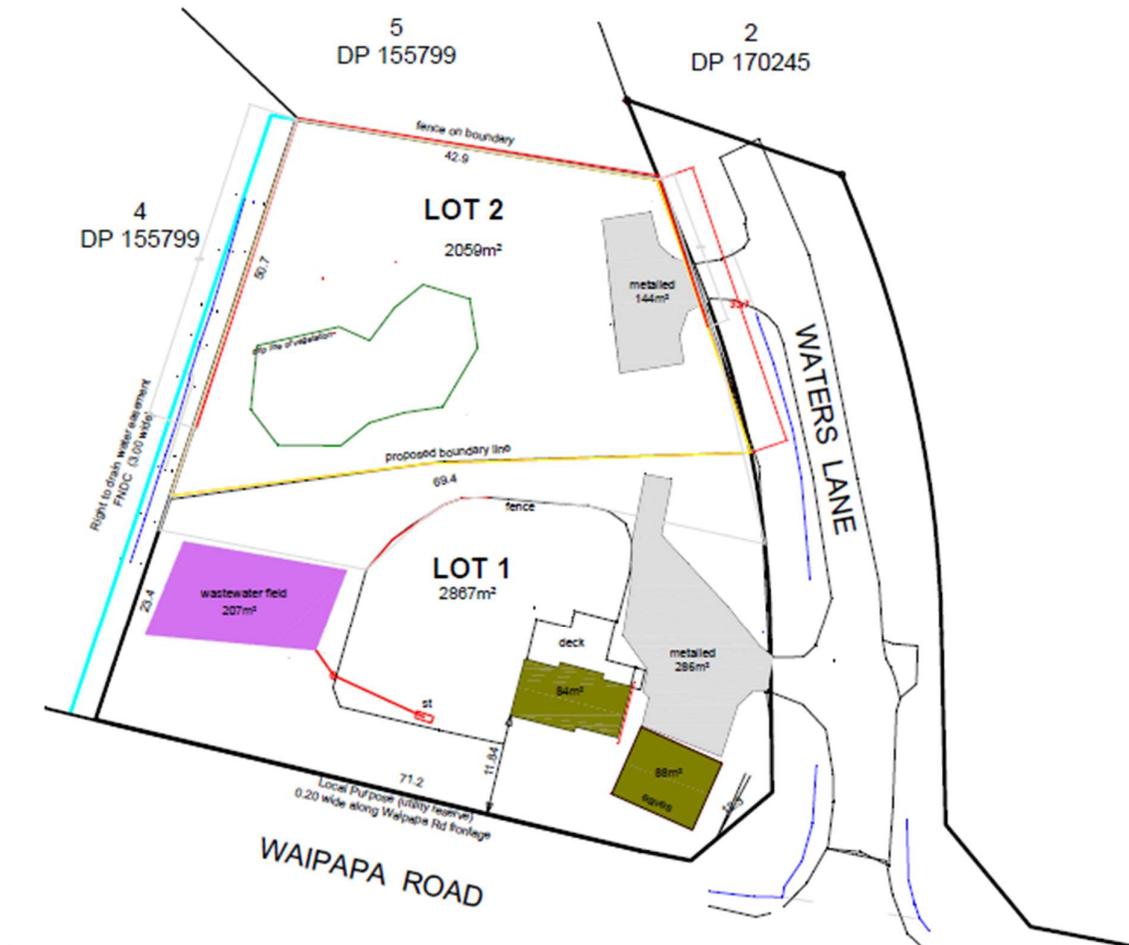


Figure 1. Proposed Subdivision Plan

This report provides information in support of the Resource Consent application for both LandUse and Subdivision of the property. This report is to be read in conjunction with the engineering drawings and calculations.

The following matters are addressed herein:

- Introduction, Site and Locality
- Legal descriptions and other interests
- Existing site characteristics and consents currently in place
- Proposed development
- Earthworks

- Roading and Accessways
- Surface water and flooding
- Stormwater Disposal
- Wastewater Disposal
- Water supply reticulation and firefighting
- Other Services

Each matter is addressed within the relevant sections below. Refer to appended Engineering Drawings for details of the proposed development.

The calculations and assessments included in this report are preliminary in nature based on the information available at the time of issue.

## 1.2. LEGAL DESCRIPTION

<b>Applicant</b>	Smith Family Trust
<b>Address</b>	3 Waters Lane, Kerikeri
<b>Legal Description</b>	Lot 3 DP 152357
<b>Site Area</b>	Total area of 0.4926 Ha
<b>District Plan</b>	Far North District Council
<b>Current Use</b>	Lot 2 in mown grass
<b>Zoning</b>	Rural Living under the current District Plan

## 1.3. EXISTING SITE DESCRIPTION

The existing site is located to the west of Waters Lane, located approx. 2km north-east of central Kerikeri, which has twin formed accesses into the site (numbered 3 and 9), for the existing dwelling at #3 and to a cabin at the northern boundary. A topographical survey plan from Donaldsons is attached as Appendix A.

The site slopes gently towards the north, while an overland flowpath lies along the western boundary, conveys water from the public road and discharges to the north.



Figure 2. Existing Site Plan

#### 1.4. Consents in place:

- 1.4.1. BC-1995-994-0 was approved for the original dwelling constructed in 1996
- 1.4.2. BC-2015-1202-1 was approved in 2015 for a shed built adjacent to the dwelling which was completed and CCC signed off. Graveled parking was extended to 286m<sup>2</sup>
- 1.4.3. BC-2018-814-0 was approved for a sullage point to be installed to serve a 2-bedroom tiny house to be placed (on what is proposed to be Lot 2) in 2019. A sullage point, with storage tank and pump was installed to lift wastewater from the tiny house and deliver it to the existing 4,500L septic tank (on what will be Lot 1). The existing dwelling wastewater disposal field, comprising 2 x 20m long effluent lines were extended by a further 4 x 20m lines for proposed use and 50% reserve area. Still further space exists if further extension in capacity would be required.

#### 1.5. PROPOSED DEVELOPMENT

The proposed development consists of the following:

- 2 residential lots, one containing the existing dwelling and a vacant lot.
- Road access to Lot 2 (existing vehicle entrance installed 2019).
- Stormwater discharge considering pre to post development attenuation will be detained using rainwater re-use tanks for the new dwelling, with an overflow discharging to the existing drainage easement to the west of Lot 2.
- No flood hazards are found on either FNDC or NRC systems. Site access and proposed buildings are located clear of overland flow paths and hazards.
- If available, water supply will be obtained from FNDC main located in Waters Lane. If unavailable, potable water supply of potable water for consumption will be made from roof-fed tanks. An example of interconnected tanks, a platform for fire access and overflow discharge is attached.
- Wastewater systems will be required for the lot using on-site decentralised wastewater treatment and disposal to ground, using TP58 design parameters, based upon soil characteristics. An example wastewater design for Lot 2 is attached as Appendix E) to show how Lot 2 can be serviced for wastewater.
- Power and communications services have been confirmed as available, and subject to confirmation as part of the detailed design phase.

## 2. GEOTECHNICAL ASSESSMENT & EARTHWORKS

Wilton Joubert have provided a site suitability report, which addresses site stability, foundations and any planned earthworks, should the owner wish to.

We anticipate that minor trimming and platforms for dwellings will be completed as part of future building consent applications.

## 3. ROAD ACCESS

### 3.1. VEHICLE CROSSINGS

An existing metalled vehicle crossing is present at 3 Waters Lane, to access the existing dwelling within Lot 1. Lot 1 vehicle crossing does not need a culvert, as it is located at the top of over-vertical curve.

Proposed Lot 2 is accessed by a vehicle crossing with 300mmØ culvert beneath, established in 2019, In compliance with FNDC crossing S/6B.

## 4. FLOODING AND OVERLAND FLOW

### 4.1. OVERLAND FLOWPATHS (OLFP's)

According to FNDC GeoMaps, a man-made drainage easement, 2m wide lies adjacent to the overall sites' west boundary (within Lot 4 DP 155799), draining a portion of the Waipapa Road carriageway and the site, which discharges to the north.

### 4.2. POST DEVELOPMENT SCENARIO

No change to flooding or overland flow will occur in the post-development scenario as any new buildings on Lot 2 will have flow attenuation tanks for the 10 yr and 100 yr events utilising 30,000 litre tanks with orifices and overflow similar to the example attached, which discharge to the western flowpath.

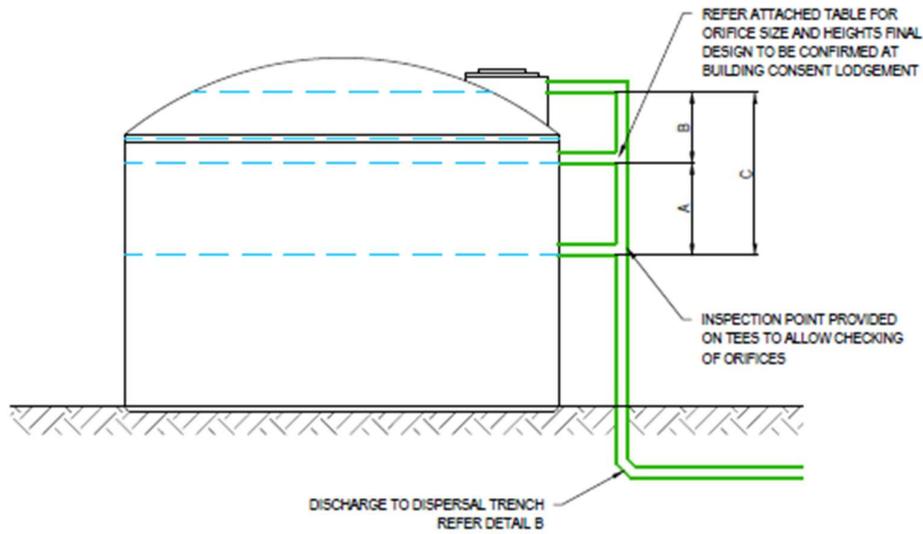


Figure 3 Example of the Promax 30,000L roof-fed rainfall attenuation tank

## 5. THREE WATERS

The following provides a summary of the three-water engineering considerations for the development of this Site. NZS 4404:2010 Land Development and Subdivision Infrastructure established design and construction standards for both stormwater and wastewater disposal, requiring the development to provide appropriate means for the disposal of stormwater, wastewater and water for fire supply and potable drinking water.

A sketch of site features is attached below.



Figure 3. Site Features

## 5.1. STORMWATER

### 5.1.1. Existing Site Drainage

The majority of the new lot is currently in mown grass with an existing formed parking area. The overall site drains towards north-west and the Waipapa Stream, which is located 500m north of the site. Stormwater from Lot 1 discharges to roadside drainage connection installed in 2015.

Slopes on the new lot are flat to slight (up to 3%).

### 5.1.2. Proposed stormwater management

Low impact design is being used with the following proposals:

- Leaf diverters are proposed for downpipes
- Stormwater attenuation from roofs to pre-development flows.

Lot 2 shall be required to provide, within its net area a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties.

We propose to control discharge flow rate to match or be less than pre-development flows in the post-development scenario designed in accordance with the onsite control practices as contained in "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003).

We can confirm that from modelling that the discharge of stormwater does not cause or increase flooding of land on another property in a storm event of up to and including a 10% Annual Exceedance Probability (AEP) or flooding of buildings on another property in a storm event of up to and including a 1% AEP. On site attenuation and re-use on each new lot will be required to limit discharges to pre-development flows.

An example stormwater management using anticipated site-specific pre vs post development design coverage and to provide scenario of total roof and paved surface imperviousness and using a Promax 30m<sup>3</sup> tank of 3.78mØ, and 3.12m high, resulting in attached orifice calculations and dimensions. An update to this will be required at Lot 2 Building Consent stage.

#### 5.1.2.1. Council Engineering Standards 2023

The FNDC Engineering Standards have recently been updated, and Council is encouraging their use. The primary stormwater system shall be capable of conveying 10% AEP design storm events without surcharge (see Section 4.3.9 Hydrological Design Criteria).

The design proposes that new dwelling on Lot 2 provide hydraulic neutrality by way of roof-fed rainfall-runoff tanks for each dwelling, with site-specifically designed orifices, presented at time of Building Consent (BC).

Hydrological balance can be maintained by limiting the maximum rate of discharge and peak flood levels for post-development to that at pre-development levels.

#### 5.1.3. Impermeable Surfaces

The proposed subdivision provides for rural-residential development. It is anticipated that a dwelling will be of a similar scale to the existing residential / lifestyle development on the parent site.

Typical impermeable surfaces on the lot when it is developed are estimated for a 2,500m<sup>2</sup> site as a maximum of 444m<sup>2</sup> of impervious surfaces (dwelling roof, shed and paths) which equates to 18%.

To allow the future owner to construct a typical house, driveway and associated sheds, we request that site coverage for the new lot shall be increased to permit 20% site coverage with a detailed engineering assessment toolbox, a typical example as attached.

## 5.2. WASTEWATER

A decentralised on-site wastewater treatment and effluent disposal solution is proposed for the new lot. An example of design for a 3-bedroom dwelling is provided as Appendix E.

Hand augers and soil classification was performed, which has been used for soil classification. An example design has been produced for a treatment and disposal system for a new dwelling on Lot 2.

### 5.2.1. Regulatory Framework

The discharge of wastewater effluent to land is regulated by a permitted activity.

Our conceptual design example has provided for the on-site system is designed and constructed in accordance with the TP58 and Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012).

The volume of wastewater discharged does not exceed two cubic metres per day, and providing for wastewater that has received secondary treatment to be discharged via a trench or bed system in soil category 5 that is designed in accordance with Appendix L of AS/NZS 1547:2012.

## 5.3. WATER

### 5.3.1. Potable Water Supply

There is a public water supply located along Waters Lane, from which a new connection may be available the site.

If this is not available, domestic water supply will be provided by roof runoff collected in storage tanks. An example of tanks and their connections for attenuation and re-use is attached.

### 5.3.2. Fire Fighting

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

We understand that an alternative approval can be sought, where a dwelling is less than 200m<sup>2</sup> (or in other conditions, less than 300m<sup>2</sup>) without additional risk can be made by FENZ. We attach emailed correspondence from FENZ (Appendix J) confirming 10,000 litres storage is accepted. A platform will be provided to ensure that a FENZ pump can sit with no more than 1.5m height to the tank lid.

## 6. OTHER SERVICES

Network utilities are present in the vicinity of the site and currently service the underlying lots. Initial consultation has confirmed each operator has sufficient capacity to service the development. We are currently working through initial consultation and design.

Chorus has existing fibre and copper services adjacent to the site.

Top Energy has an existing transformer package located outside the site and has confirmed that network capacity exists to serve the development.

We can confirm that ducting for power, fibre and water were laid in 2025 across Waters Lane at the new site entry, while adjacent services for #17 were laid.

## 7. CONCLUSIONS

The proposed lot is in mown lawn, with no identified areas of instability or concern as per Wilton Joubert report attached. No earthworks are proposed.

A drainage channel conveys water from a portion of Waipapa Road within an easement across Lot 4 DP 155799 (west neighbour), and discharges flows to the north. The buildable site platform and road access, provide the necessary freeboard and safe access.

Wastewater from a future dwelling will be treated and disposed to ground by an individual de-centralised plant for the dwelling, with final design and details covered under a Building Consent. The system will ensure the final effluent is of high-quality, complying with New Zealand Standards.

Potable water supply will be provided by way of either towns-main supply or a roof-fed water tank, to service a new dwelling. Firefighting will be provided by having sufficient storage as per FENZ requirements.

Telecommunications and power network providers have confirmed there is capacity in the network and agreements and works required are currently being designed/agreed.

The information gathered to-date confirms the site and associated infrastructure, is suitable for the proposed development to be fully serviced.

## 8. APPENDICES

### *Appendix A – Topographical Survey*

## Appendix B – Scheme Plan

## Appendix C - Engineering Plans

*Appendix D - Engineering Calculations – SW & rainwater attenuation/re-use*

*Appendix E – Wastewater Report & example treatment layout*

*Appendix F – Site Suitability Report (GIR- Wilton Joubert)*

*Appendix G – FENZ approval of 10m<sup>3</sup> fire water storage (email)*



*Top Energy Limited*

Level 2, John Butler Centre  
60 Kerikeri Road  
P O Box 43  
Kerikeri 0245  
New Zealand  
PH +64 (0)9 401 5440  
FAX +64 (0)9 407 0611

3 March 2026

Micah Donaldson  
Donaldsons Surveyors Limited  
PO Box 211  
KERIKERI

Email: [micah@donaldsons.net.nz](mailto:micah@donaldsons.net.nz)

To Whom It May Concern:

**RE: PROPOSED SUBDIVISION  
AJ & KF Smith – 3 Waters Lane, Kerikeri. Lot 3 DP 152357.**

Thank you for your recent correspondence with attached proposed subdivision scheme plans.

Top Energy's requirement for this subdivision is that power be made available for the additional lot. Top Energy advises that proposed lot 1 has an existing power supply. Design and costs to provide a power supply to proposed lot 2 would be provided after application and an on-site survey have been completed.

Link to application: [Top Energy | Top Energy](#)

In order to get a letter from Top Energy upon completion of your subdivision, a copy of the resource consent decision must be provided.

Yours sincerely

**Aaron Birt**  
Planning and Design  
T: 09 407 0685  
E: [aaron.birt@topenergy.co.nz](mailto:aaron.birt@topenergy.co.nz)

# Chorus New Zealand Limited

03 March 2026

Chorus reference: 11529392

**Attention:** Donaldson's Surveyors Ltd

**Quote: New Property Development**

**1 connections at 3 Waters Lane , Kerikeri, Far North District, 0230**

**Your project reference: 8689 Smith**

Thank you for your enquiry about having Chorus network provided for the above development.

Chorus is pleased to advise that, as at the date of this letter, we are able to provide reticulation for this property development based upon the information that has been provided:

Fibre network	\$1,400.00
---------------	------------

The total contribution we would require from you is **\$1,610.00 (including GST)**. This fee is a contribution towards the overall cost that Chorus incurs to link your development to our network. This quote is valid for 90 days from 02 March 2026. This quote is conditional on you accepting a New Property Development Contract with us for the above development.

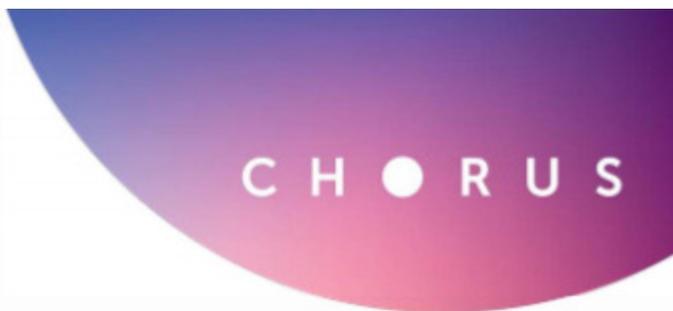
If you choose to have Chorus provide reticulation for your property development, please log back into your account and finalise your details. If there are any changes to the information you have supplied, please amend them online and a new quote will be generated. This quote is based on information given by you and any errors or omissions are your responsibility. We reserve the right to withdraw this quote and requote should we become aware of additional information that would impact the scope of this letter.

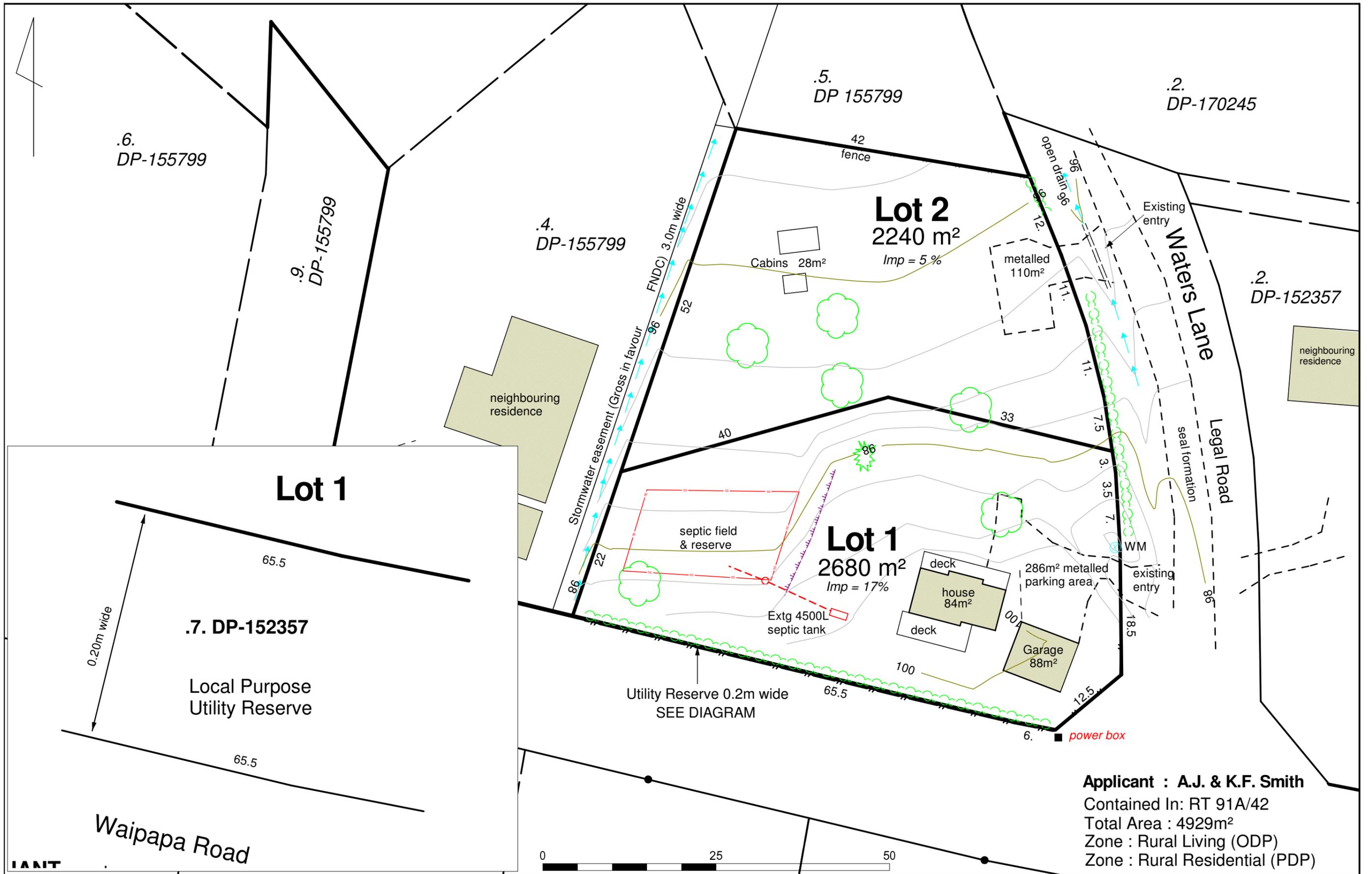
Once you would like to proceed with this quote and have confirmed all your details, we will provide you with the full New Property Development Contract, and upon confirmation you have accepted the terms and paid the required contribution, we will start on the design and then build.

For more information on what's involved in getting your development connected, visit our website [www.chorus.co.nz/develop-with-chorus](http://www.chorus.co.nz/develop-with-chorus)

Kind Regards

Chorus New Property Development Team





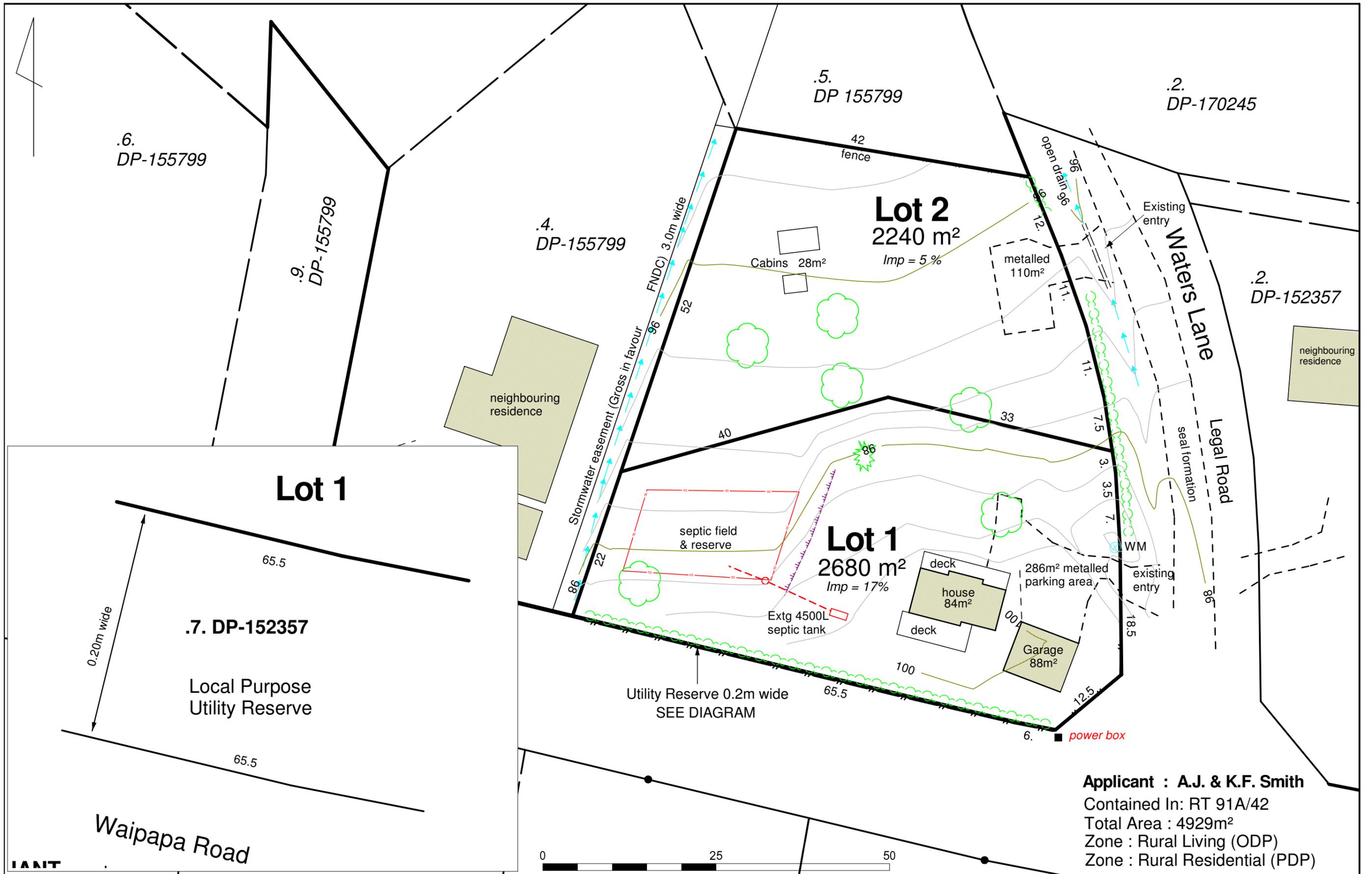
**Applicant : A.J. & K.F. Smith**  
 Contained In: RT 91A/42  
 Total Area : 4929m<sup>2</sup>  
 Zone : Rural Living (ODP)  
 Zone : Rural Residential (PDP)

Areas and measurements are subject to survey  
 Impermeable surfaces detail from IDE 2016 Ltd  
 Contour interval : 0.5m  
 Scale @ A3 : 1:500  
 Date : Feb. 2026

Job : 8689



IANIT



**Applicant : A.J. & K.F. Smith**  
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 Date : Feb. 2026

Job : 8689



IANIT

# DONALDSONS

REGISTERED LAND SURVEYORS

**8689**

4 March 2026

N. Cowley & J. Graham  
Planning Division  
Far North District Council  
Private Bag 752  
Kaikohe

Dear Nicola & Jo,

## PROPOSED SUBDIVISION

A. & K. SMITH, 3 WATERS LANE, KERIKERI

We hereby submit an application for Resource Consent to create one additional allotment within the Rural Living Zone. The proposal is assessed as a non-complying activity under the relevant District Plan provisions in breach of rule 13.7.2.1(iv).

This application is accompanied by the following supporting documentation:

- Application form & deposit \$3044
- Planning report
- Scheme plan
- Record of Title
- Top Energy Ltd & Chorus NZ comments
- Infrastructure Report & Stormwater calculations
- Geotechnical Report
- Wastewater Assessment (TP-58)

Yours faithfully,

Micah Donaldson  
*MNZIS - Assoc. NZPI*

**DONALDSONS**

Registered Land / Engineering Surveyors and Development Planners



**CSNZ** THE CONSULTING  
SURVEYORS  
OF NEW ZEALAND  
A DIVISION OF THE NEW ZEALAND INSTITUTE OF SURVEYORS