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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of 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 Covnsent representative to discuss this application prior to lodgement?

◯ **Yes** ✔ **No**

2. Type of consent being applied for

(more than one circle can be ticked):

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

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

3. Would you like to opt out of the fast track process?

✔ **Yes** ◯ **No**

4. Consultation

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

If yes, which groups have you consulted with?

Who else have you consulted with?

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

5. Applicant details

Name/s: Mark Gould

Email: [redacted]

Phone number: [redacted]

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

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: Northland Planning & Development 2020 Ltd

Email: [redacted]

Phone number: [redacted]

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

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

7. Details of property owner/s and occupier/s

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

Name/s: Mark Anthony Gould

Property address/ location: [redacted]

8. Application site details

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

Name/s: Mark Anthony Gould

Site address/ location: Mangatoetoe Road, Kaitaia

Postcode

Legal description: Section 81 Parish of Kaiaka **Val Number:** 00037-13600

Certificate of title: NA63/29

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

Site visit requirements:

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

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

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

Please contact Applicant prior to site visit.

9. Description of the proposal

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

Proposal to subdivide the site to create two additional allotments. The proposal has been assessed as a Restricted Discretionary Activity under the ODP. The proposal includes an amalgamation condition which will need to be sent to LINZ.

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

10. Would you like to request public notification?

◯ **Yes** ✔ **No**

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

(more than one circle can be ticked):

◯ **Building Consent** Enter BC ref # here (if known)

◯ **Regional Council Consent (ref # if known)** Ref # here (if known)

◯ **National Environmental Standard Consent** Consent here (if known)

◯ **Other (please specify)** Specify 'other' here

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

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

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

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

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

13. Assessment of environmental effects:

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

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

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)	Mark Gould
Email:	[redacted]
Phone number:	
Postal address: (or alternative method of service under section 352 of the act)	

Fees Information

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

15. Billing details continued...

Declaration concerning Payment of Fees

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

Name: (please write in full) MARK ANTHONY GOULD

Signature: (signature of bill payer) [redacted] Date 14/05/26

16. Important Information:

Note to applicant

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

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

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

Fast-track application

Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement.

A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:

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

17. Declaration

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

Name (please write in full) MARK ANTHONY GOULD

Signature [redacted] ate 14/05/26

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

See overleaf for a checklist of your information...

Checklist

Please tick if information is provided

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

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

Subdivision Resource Consent Proposal

Mark Gould

Mangatoetoe Road, Kaitaia

Date: 15/05/2026

Please find attached:

- an application form for a Subdivision Resource Consent in the ***Rural Production*** under the Operative District Plan; and
- an Assessment of Environmental Effects indicating the potential and actual effects of the proposal on the environment.

The subdivision requires consent under the Operative District Plan as a **Restricted Discretionary Activity**. The subdivision is a **Permitted Activity** under the Proposed District Plan.

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

Regards

[redacted]

Alex Billot

Resource Planner

Reviewed by

[redacted]

Sheryl Hansford

Director/Senior Planner

NORTHLAND PLANNING & DEVELOPMENT 2020 LIMITED

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2. **Certificate of Title** – *LINZ*
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Assessment of Environment Effects Report

1.0 DESCRIPTION OF THE PROPOSED ACTIVITY

Subdivision

1.1 The proposal is to undertake a subdivision of Section 81 Parish of Kaiaka to create two additional lots. The site does not contain any existing dwellings and is a vacant lot which previously contained pines which have since been harvested. The site is located within the Rural Production zone under the Operative District Plan (ODP).

1.2 The proposed lot sizes are as follows -

- Lot 1 – 2.1985 hectares - vacant land
- Lot 2 – 2.1585 hectares – vacant land
- Lot 3 – 75.05 hectares – vacant land (balance lot) – to be amalgamated with residual parcels Pt Allot 81.

Areas and measurements are subject to final survey.

1.3 Given the title date for the site is 1892, the subdivision proposal has been assessed as a **Restricted Discretionary** Activity.

Amalgamation Condition

1.4 When Mangatoetoe Road was created, the southern portion of the site was split, creating residual parcels of land between Mangatoetoe Road and the river located on the southern side. The balance of the lot on the northern side of Mangatoetoe Road and the residual parcels on the southern side remained under the same legal description and title (Pt Allotment 81 Parish of Kaiaka). These residual parcels will remain with the legal description of Pt Allotment 81 Parish of Kaiaka as the boundaries will not be changing. They will all be amalgamated with the balance lot (Proposed Lot 3) and as such, given a new legal description will not be created, the residual parcels are not defined as individual lots for the purpose of this proposal.

1.5 The amalgamation condition below is proposed and will need to be sent to LINZ for approval:

'That Lots 3 Hereon, Pt Allot. 81, Pt Allot. 81, Pt Allot. 81 & Pt Allot. 81 PSH of Kaiaka be held in the same Record of Title.'

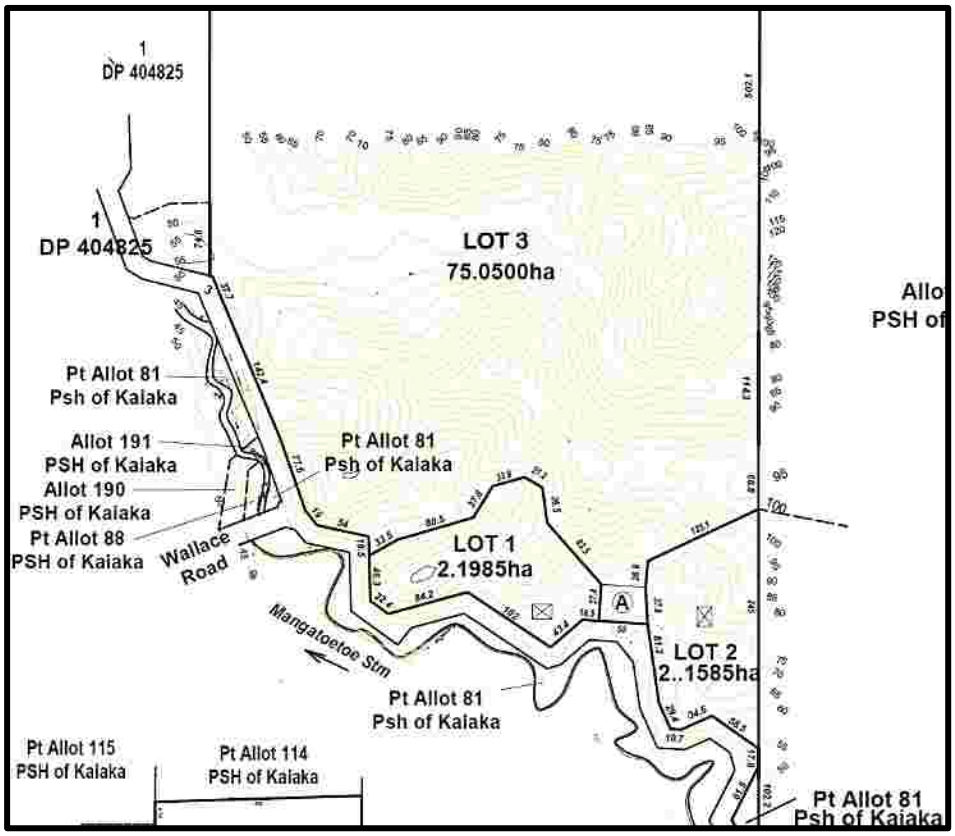


Figure 1: Proposed scheme plan.

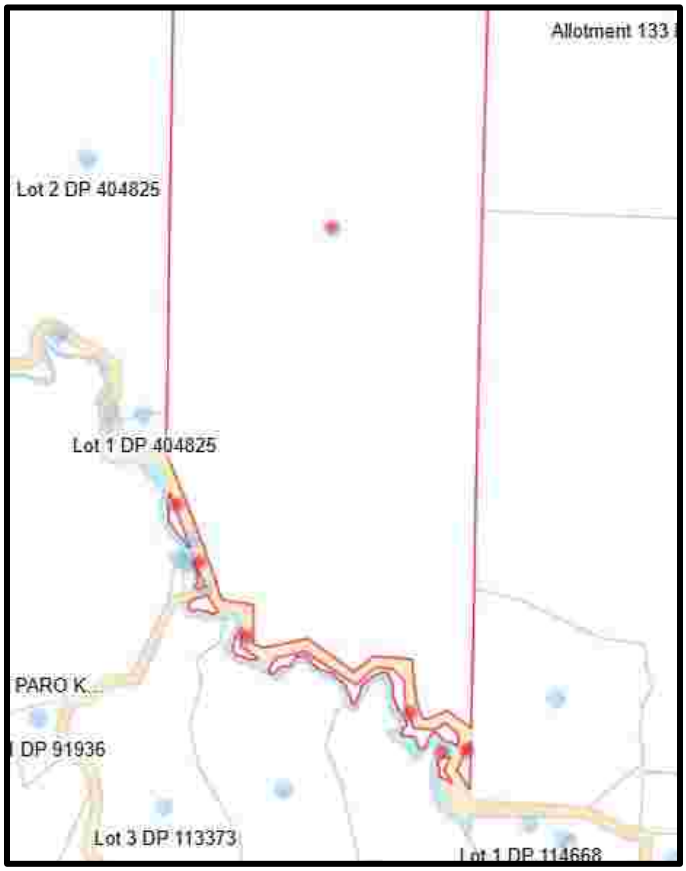


Figure 2: Snip of current lot configuration showing residual lots on southern side of Mangatoetoe Road.

2.0 THE SITE AND SURROUNDING ENVIRONMENT

2.1 The site is located within the Rural Production zone within the Operative District Plan as well as within the Rural Production zone under the Proposed District Plan. The site is currently a large vacant piece of land utilized for rough grazing purposes. The majority of the land contained pine trees which were felled approximately 4 years ago. Since then, the land has been subject of exotic vegetation regeneration. The slope of the land is undulating, with some steep areas.

2.2 The surrounding lots also with frontage to Mangatoetoe Road, vary considerably in size. There are smaller rural-residential lots of around 4,000m^2, rural lifestyle lots of 1-2 hectares and larger farming lots in excess of 10 hectares to 50 hectares.

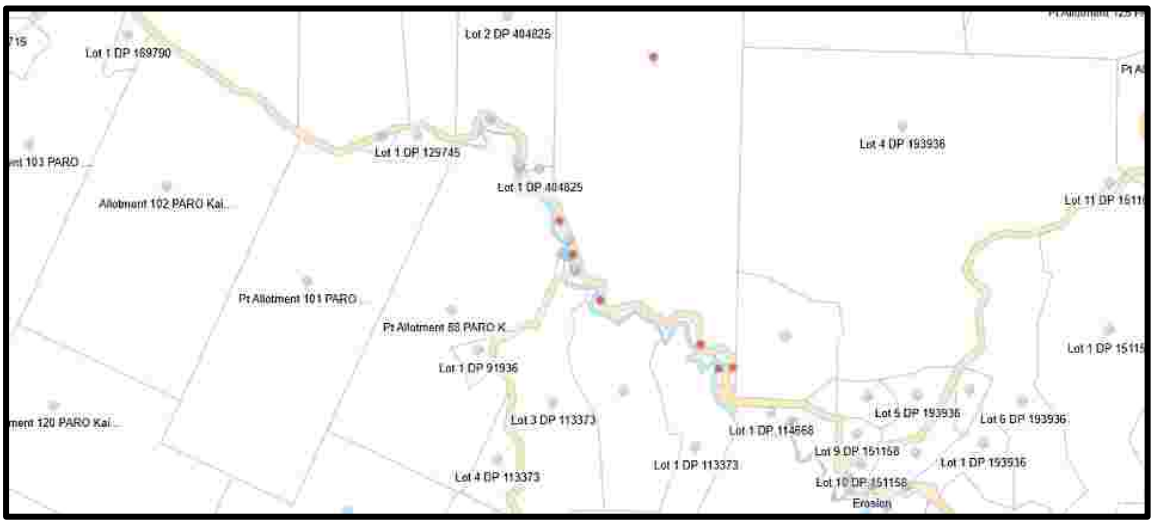


Figure 3: Lots in the surrounding environment.

2.3 A Site Suitability and Civil Infrastructure Report (SSR) has been prepared by LDE in support of the proposal, which is attached within **Appendix 4** of this application. Assessment included wastewater, stormwater, water supply, access and geotechnical aspects.

2.4 Access to the site is from Mangatoetoe Road, with LDE confirming that there is an existing culvert which will be upgraded to ensure capacity. This access point will be a shared access point between Lots 1, 2 & 3. A right of way will be formed within Lot 3 to provide access to Lots 1 & 2. The private accessway will be formed to comply with the FNDC Engineering Standards as per the recommendations by LDE. There is an existing farm crossing located in the western portion of the site, where Lot 3 adjoins Lot 1 DP 404825 (359 Mangatoetoe Road). No upgrading of this access is anticipated given it will be a farm access.

Figure 4: Image of existing access to Lots 1, 2 & 3, which will be upgraded to Council standards.

Figure 5: Existing access location. ROW A will be created within area adjoining Magatoetoe Road.

Figure 6: Looking towards where ROW A will be created. Existing metalled access.

Figure 7: Existing farm access to Lot 3 (where vehicle is located). Access which services 359 does not form part of this application.

2.5 Wastewater will be provided for onsite at the time of built development within Lots 1, 2 & 3. LDE have used a 6 people occupancy, which found Lots 1 & 2 suitable for disposing of wastewater onsite. Lot 3 did not form part of the assessment given it will be the balance lot over 75 hectares in area.

2.6 In terms of the geotechnical aspect, LDE have recommended building restriction lines for Lots 1 & 2 as well as recommendations for any future site development to mitigate the effects of slope instability.

2.7 The site is shown to have soils classified as 4w1 along the road frontage, 5c1 within a small portion located within the southwestern corner of the site, with the remainder being 6e8. These soils are not classified as highly versatile soils under the Regional Policy Statement for Northland (RPSN). Therefore, no consideration of the National Policy Statement for Highly Productive Land (NPS-HPL) will be provided for within this application.

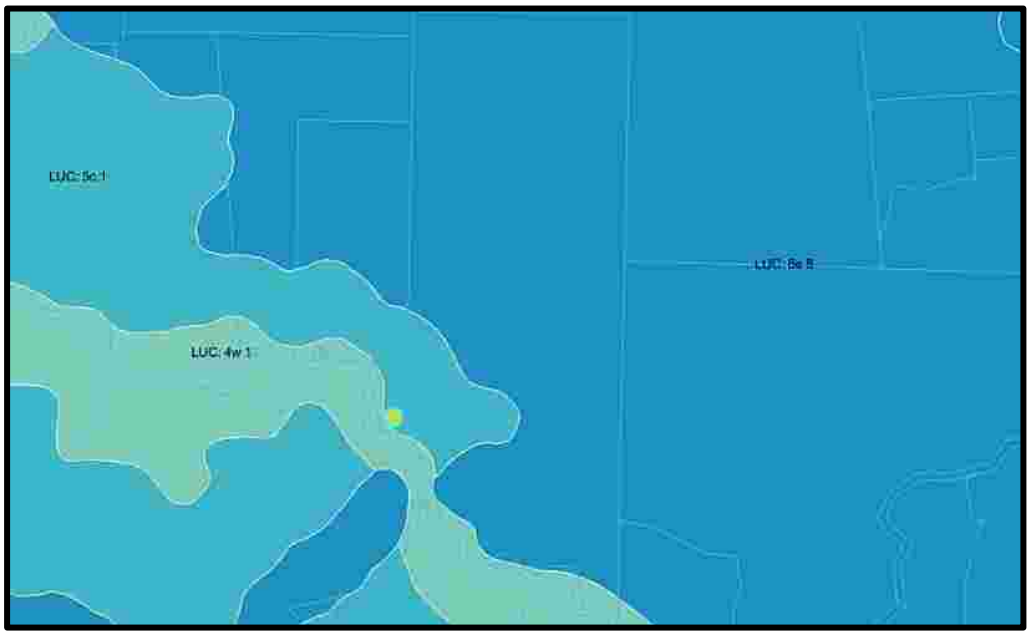


Figure 8: FNDC LUC Maps.

2.8 The site is not shown to contain any areas of PNA or reserves. As mentioned, the site had previously contained an extensive area of pines. The site is located in an area where kiwi are noted as being present.

2.9 The site is shown to have some areas of river flood susceptibility. These areas slightly encroach into small portions of the site along the road boundary, with an area of localised flooding located along an existing stream which runs east-west through the southern portion of the site, located on the opposite side of Mangatoetoe Road. LDE have completed an assessment

of natural hazards within the proposed allotments and have determined areas for future development outside of hazard areas. This will be detailed further in this assessment.

2.10 The FNDC Maps do not indicate any recorded archaeological sites within the site or immediate environment.

2.11 With regard to the Regional Policy Statement for Northland the site is located outside of the Coastal Environment and is not subject to any Outstanding Natural features and Landscapes.

2.12 The site is not located within or near a Statutory Acknowledgement Area.

Title

2.13 Section 81 Parish of Kaiaka is held within Record of Title NA63/29, which is dated 30 March 1892, with a legal area of 80.9371ha. There are no existing consent notices or easements registered on the title.

3.0 ACTIVITY STATUS OF THE PROPOSAL

Weighting of Plans

3.1 The Council notified its' PDP on 27 July 2022. The period for public submissions closed on the 21 October 2022. A summary of submissions was notified on the 4 August 2023. The further submission period closed on the 5 September 2023.

3.2 A large number of comprehensive submissions were received across the board such that the Council has confirmed that other than the rules which were initially identified as having immediate legal effect no additional rules will have legal effect until such time as a decision is made on those provisions.

3.3 District Plan hearings on submissions have recently concluded, however no decisions on the PDP have been issued. For this reason, PDP rules which do not have immediate legal effect are not considered.

3.4 Recent advice from Council is that objectives and policies of the PDP are now given more weighting.

Operative District Plan

3.5 The site is zoned as Rural Production under the ODP, and therefore the site will be assessed against the criteria relevant to the Rural Production zone, including subdivision, zone and district wide rules.

ASSESSMENT OF THE APPLICABLE SUBDIVISION RULES FOR THE RURAL PRODUCTION ZONE:		
	PERFORMANCE STANDARDS	
Plan Reference	**Rule**	**Performance of Proposal**
13.7.2.1 (i)	**MINIMUM LOT SIZES**	**Restricted Discretionary Activity.** The title date is 1892 and therefore, the proposal can comply with the Restricted Discretionary criteria under Rule 13.7.2.1(i) clause 4 of the RDA provisions. The proposal is therefore assessed as a **Restricted Discretionary Activity.**
13.7.2.2	**ALLOTMENT DIMENSIONS**	**Complies** The proposed lots contain suitable areas for built development and associated onsite servicing as determined within the SSR prepared by LDE.
13.7.2.3 - 13.7.2.9	**Not Applicable for this application.**	

3.6 The subdivision proposal is able to meet the **Restricted Discretionary** provisions for the Rural Production zone.

Rural Production zone

3.7 The subject site is currently vacant land with no existing built development. The proposal will see the existing metalled access within proposed ROW A upgraded and extended, such that this will account for impermeable surfaces within Proposed Lot 3. The amount of impermeable surfaces created is considered to be well within the permitted threshold of 15% of the total site area, given Lot 3 is 75ha in area. As such, it is considered that the proposal will not result in any infringement of the permitted rules contained within Section 8.6.5.1 of the ODP. As such no further assessment of these rules has been provided for.

3.8 An assessment of the District Wide Matters has been undertaken below.

District Wide Matters

Plan Reference	Rule	Performance of Proposal
Chapter 12		
12.1	**LANDSCAPES AND NATURAL FEATURES**	**Permitted.** The subject site does not contain any outstanding landscape areas.
12.2	**INDIGENOUS FLORA AND FAUNA**	**Permitted.** The proposal will not result in removal of any indigenous flora or fauna.
12.3	**SOILS AND MINERALS**	**Permitted.** Excavation works will be required to construct the private accessway within Easement A. It is considered the excavations will be well within the permitted volumes for the Rural Production zone.
12.4	**NATURAL HAZARDS**	**Permitted.** The site is not susceptible to coastal erosion and there are no new dwellings proposed which would breach the fire risk rule.
12.5	**HERITAGE**	**Permitted.** The site is not located within a Heritage Area nor does it contain any notable trees or historic sites.
12.6	**AIR**	**Deleted chapter.**

12.7	**LAKES, RIVERS, WETLANDS AND THE COASTLINE**	**Permitted.** The proposal is not known to be in proximity to any lakes, rivers, wetlands or the coastline.
12.8	**HAZARDOUS SUBSTANCES**	**Permitted.** The site does not contain any known hazardous substances.
12.9	**RENEWABLE ENERGY AND ENERGY EFFICIENCY**	**Permitted.** No renewable energy is proposed.
Chapter 15 – Transportation		
15.1.6A	**TRAFFIC**	**Permitted Activity** The first residential unit on a site and farming activities are exempt from this rule. The proposed lots will be vacant. The permitted TIF for the zone is 60 if not accessed from a State Highway, or 30 if accessed from a State Highway. As such, the proposal can comply with this section.
15.1.6B	**PARKING**	**Permitted Activity** The proposed lots do not contain an existing residential dwelling. There is ample area for future parking requirements.
15.1.6C.1.1	**PRIVATE ACCESSWAY IN ALL ZONES**	**Permitted.** (a) There is one private accessway proposed over Lot 3 to provide access to Lots 1 & 2. There will be three users of this private accessway. LDE have included the design of this accessway within their Site Suitability Report. The accessway has been designed in accordance with the FNDC Engineering Standards 2023, with a proposed minimum width of 4.5m which includes 2x 0.25m shoulders. Maximum grade of 12.5% has been proposed for the first 5 meters from the road reserve boundary and a maximum of 22.2% for the remainder. Metal surfacing is proposed.

		(b) As above. (c) The private accessway will only serve three HEs each. (d) Not Applicable. (e) Not Applicable.
15.1.6C.1.2	**PRIVATE ACCESSWAYS IN URBAN ZONES**	**Not applicable.**
15.1.6C.1.3	**PASSING BAYS ON PRIVATE ACCESSWAYS IN ALL ZONES**	**Permitted.** The private accessway will be approximately 38 metres long and as such, no passing bays are proposed.
15.1.6C.1.4	**ACCESS OVER FOOTPATHS**	**Not applicable.**
15.1.6C.1.5	**VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES**	**Permitted** (a) Proposed Lots 1, 2 & 3 will utilise one access point which will be constructed in accordance with Councils Engineering Standards in accordance with the SSR from LDE. (b) Mangatoetoe Road is a metalled road. (c) The vehicle crossing to Lots 1, 2 & 3 will service three allotments and as such, the private accessway will be 6m wide and extend a minimum of 6m from the edge of the carriageway.
15.1.6C.1.6	**VEHICLE CROSSING STANDARDS IN URBAN ZONES**	**Not applicable.**
15.1.6C.1.7	**GENERAL ACCESS STANDARDS**	**Permitted.** (a) Not applicable. (b) There are no bends proposed on the private accessway. (c) The sides of the driveway will remain in grass. (d) Stormwater will be managed on site.
15.1.6C.1.8	**FRONTAGE TO EXISTING ROADS**	**Permitted.** (a) Managatoetoe Road is considered to meet the legal road width standards.

		(b) Managatoetoe Road is considered to be constructed to the required standards. (c) Lots 1, 2 & 3 will be accessed via the right of way rather than directly from Managatoetoe Road. (d) There are no known encroachments of the carriageway into the proposed lots.
15.1.6C.1.9 – 15.1.6C..11 are not applicable to this application		

3.9 It is therefore determined that the proposal does not result in any breaches of the applicable Zone or District Wide Rules.

Overall status of the proposal under the Operative District Plan

3.10 The subdivision proposal is able to meet the Restricted Discretionary provisions for the Rural Production zone as per the requirements within 13.7.2.1(i).

3.11 The proposal will be assessed as a Restricted Discretionary Activity with the relevant sections of 13.8.1 and 13.7.3 being assessed as part of this application process.

Proposed District Plan

3.12 The proposal is also subject to the Proposed District Plan process. Within the Proposed District Plan, the site is zoned Rural Production. Assessment of the matters relating to the Proposed District Plan that have immediate legal effect, has been undertaken below:

Chapter	Rule Reference	Compliance of Proposal
Hazardous Substances	The following rules have immediate legal effect: Rule HS-R2 has immediate legal effect but only for a new significant hazardous facility. HS -R5 relates to a hazardous facility within a scheduled site and area of significance to Māori. HS-R6 relates to a hazardous facility within an SNA.	**Not applicable.** The site does not contain any hazardous substances to which these rules would apply.

	HS-R9 relates to a hazardous facility within a scheduled heritage resource.	
Heritage Area Overlays	All rules have immediate legal effect (HA-R1 to HA-R14) All standards have immediate legal effect (HA-S1 to HA-S3)	**Not applicable.** The site is not located within a Heritage Area Overlay.
Historic Heritage	All rules have immediate legal effect (HH-R1 to HH-R10) Schedule 2 has immediate legal effect	**Not applicable.** The site does not contain any areas of historic heritage.
Notable Trees	All rules have immediate legal effect (NT-R1 to NT-R9) All standards have legal effect (NT-S1 to NT-S2) Schedule 1 has immediate legal effect	**Not applicable.** The site does not contain any notable trees.
Sites and Areas of Significance to Māori	All rules have immediate legal effect (SASM-R1 to SASM-R7) Schedule 3 has immediate legal effect.	**Not applicable.** The site does not contain any sites or areas of significance to Māori.
Ecosystems and Indigenous Biodiversity	All rules have immediate legal effect (IB-R1 to IB-R5)	**Not applicable.** The proposal does not include any indigenous vegetation pruning trimming, clearance or associated land disturbance. No plantation forestry activities are proposed. Therefore, the proposal is not in breach of rules IB-R1 to IB-R5.
Subdivision	The following rules have immediate legal effect:	**Not applicable.** The subdivision is not an Environmental Benefit Subdivision

	SUB-R6, SUB-R13, SUB-R14, SUB-R15, SUB-R17	(SUB-R6), Subdivision of a site with heritage area overlay (SUB-R13), Subdivision of site that contains a scheduled heritage resource (SUB-R14), Subdivision of a site containing a scheduled site and area of significance to Māori (SUB-R15) or Subdivision of a site containing a scheduled SNA (SUB-R17).
Activities on the Surface of Water	All rules have immediate legal effect (ASW-R1 to ASW-R4)	**Not applicable.** The proposal does not involve activities on the surface of water.
Earthworks	The following rules have immediate legal effect: EW-R12, EW-R13 The following standards have immediate legal effect: EW-S3, EW-S5 As stated above the mapping system records the subject site as containing the Ratana Temple which is located on the adjoining site. Schedule 3 lists the legal description of MS07-18 as being P Ahipara A32A which is the adjoining site.	**Permitted.** Any earthworks will proceed under the guidance of an ADP and will be in accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016, in accordance with Rules EW-12, EW-R13, EW-S3 and EW-S5.
Signs	The following rules have immediate legal effect: SIGN-R9, SIGN-R10 All standards have immediate legal effect but only for signs on or	**Not applicable.** No signs are proposed as part of this application.

	attached to a scheduled heritage resource or heritage area	
Orongo Bay Zone	Rule OBZ-R14 has partial immediate legal effect because RD-1(5) relates to water	**Not applicable.** The site is not located in the Orongo Bay Zone.

3.13 The assessment above indicates that the proposal is determined to be a **Permitted Activity** in regard to the Proposed District Plan. Therefore, no further assessment of these rules will be undertaken.

National Environmental Standards

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

3.14 The site is not known to have or previously contained any activities listed on the HAIL. The site has been utilized for grazing of livestock and previously contained pines which have since been felled. As such, the application has been considered **Permitted** in terms of this regulation.

National Environmental Standards for Freshwater 2020

3.15 NES-F sets out requirements for carrying out activities identified as posing a risk to the health of freshwater and freshwater ecosystems, and to ensure the objectives and policies within the National Policy Statement for Freshwater Management are met.

3.16 There are no known wetland areas near the proposed allotments which would trigger the requirement for consent under the NES-F. The proposal does not include reclamation of a river nor is it anticipated to affect the passage of fish.

3.17 As such, it is considered that the proposal is **Permitted** in terms of this regulation.

Other National Environmental Standards

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

4.0 STATUTORY ASSESSMENT

Section 104C of the Act

4.1 Section 104C governs the determination of applications for Restricted Discretionary Activities. When considering an application for resource consent, a consent authority must consider only those matters over which a discretion is restricted in national environmental standards or

other regulations, or it has restricted the exercise of its discretion in its plan or proposed plan. The consent authority can grant or refuse the application. If the application is granted, the consent authority may impose conditions under Section 108 only for those matters listed above.

Section 104(1) of the Act

4.2 Section 104(1) of the Act states that when considering an application for resource consent –

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

(a) Any actual and potential effects on the environment for allowing the activity; and

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

(b) Any relevant provisions of –
- *(i) A national environmental standard*
- *(ii) Other regulations*
- *(iii) A national policy statement.*
- *(iv) A New Zealand Coastal Policy Statement*
- *(v) A regional policy statement or proposed regional policy statement.*
- *(vi) A plan or proposed plan; and*

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

4.3 Actual and potential effects arising from a development as described in 104(1)(a) can be both positive and adverse (as described in section 3 of The Act). The proposal is considered to have actual and potential effects that are acceptable. The proposal is to subdivide the site to create two additional allotments. The proposal will result in allotments where some form of rural productive use can still be undertaken on each site, as well as residential development to enable future owners to reside on and live off the land.

4.4 Section 104(1)(ab) requires that the consent authority consider 'any measure proposed or agreed to by the applicant for the purposes of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity'. It is considered the proposal is not of a scale or nature that would require specific offsetting or environmental compensation measures to ensure positive effects on the environment. It is considered that all effects can be managed within the proposed lot

boundaries. As noted above, the proposed development itself will generate positive effects that are consistent with the intent of the Rural Production zone.

4.5 Section 104(1)(b) requires the consent authority to consider the relevant provisions of the above listed documents. An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that the activity may have on the environment has been provided in section 6.

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

5.0 ENVIRONMENTAL EFFECTS ASSESSMENT

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

Subdivision

5.2 The proposal is considered to be a Restricted Discretionary activity as per rules 13.8.1. In considering whether to impose conditions on applications for restricted discretionary subdivision activities, the Council will restrict the exercise of its discretion to the following matters listed in 13.8.1 & 13.7.3. An assessment that corresponds with the scale and significance of the effects on the environment is provided below.

Subdivision within the Rural Production Zone

5.3 As per Section 13.8.1 of the District Plan, in considering whether or not to grant consent on applications for restricted discretionary subdivision activities, the Council will restrict the exercise of its discretion to the following matters:

- *effects on the natural character of the coastal environment for proposed lots which are in the coastal environment;*
- *effects of the subdivision under **(b)** and **(c)** above within 500m of land administered by the Department of Conservation upon the ability of the Department to manage and administer its land;*

- *effects on areas of significant indigenous flora and significant habitats of indigenous fauna;*
- *the mitigation of fire hazards for health and safety of residents.*

5.4 The subject site is not located within the Coastal Environment.

5.5 The site is not located within 500 metres of land administered by DOC.

5.6 The proposal is not considered to have any effects on areas of significant indigenous flora or habitats of indigenous fauna. The proposal will create lots which can adequately manage effects within the proposed lot boundaries.

5.7 The proposal is not considered to exacerbate fire hazards for the health and safety of residents.

Subdivision

5.8 In considering whether or not to impose conditions on applications for restricted discretionary subdivision activities the Council will restrict the exercise of its discretion to the following matters listed in 13.7.3.

PROPERTY ACCESS

5.8.1 LDE have completed an assessment of the proposed access within their Site Suitability Report contained within **Appendix 4**. Please refer to this report for more detailed information, with the below providing a summary of LDE's findings.

5.8.2 Proposed Lots 1, 2 & 3 will utilise one vehicle crossing place. There is an existing culvert and metalled access to the site which will be utilised. The crossing and culvert will be upgraded as per the recommendations within the LDE report. A private accessway will then be constructed over Proposed Lot 3 to service both Lots 1 & 2. The private accessway will also be constructed to the standards set out within the LDE Report (Section 4.2.1). The use of one crossing place is considered the safest and most practical option given the winding nature of Mangatoetoe Road. The proposed crossing place is said to meet the required sightline distances. Refer to Figures 4-7 earlier in this report for images of the proposed access.

5.8.3 The private accessway will require culverts to accommodate existing overland flowpaths. LDE have recommended that culverts along with inlets/outlets and armouring are designed/sized at detailed design stage. It is anticipated that this will be imposed as a condition of consent given the private accessway will be designed and constructed at subdivision stage.

5.8.4 Proposed Lot 3 also has additional farm access, which will remain as farm use, such that no upgrading of the farm accesses are proposed.

5.8.5 As assessed earlier in this report, the application is assessed as being Permitted in terms of Chapter 15 of the ODP. Access has been provided to the lots in the safest and most practical way as assessed by LDE.

NATURAL AND OTHER HAZARDS

5.8.6 LDE have completed an extensive assessment of natural hazards and land susceptibility within the SSR. Please refer to the SSR for more detailed information, with the below commentary providing an overview of the findings within the SSR.

5.8.7 The southern portion of the site is shown to be susceptible to river flood hazards which has been assumed to be due to the location of Mangatoetoe Stream. Proposed Lots 1, 2 & 3 are located at a higher elevation than the adjoining Mangatoetoe Road and Stream and are therefore not anticipated to be susceptible to river flood hazards. LDE have noted that there is known downstream flooding and have therefore provided concept designs and attenuation to account for the 1% AEP event, as will be detailed below. Building locations have been provided for which are outside of flood susceptibility.

5.8.8 In terms of land instability, LDE have recommended building restriction lines for Lots 1 & 2 as well as recommendations for any future site development to mitigate the effects of slope instability. Building platforms have been indicated within the SSR prepared by LDE. LDE have recommended that earthworks to form the building platforms shall be formed in cut only, with any fill placement requiring specific engineering assessment at the BC stage or being supported by an engineered retaining structure. LDE have noted that one of the building platforms on Lot 2 would require specifically designed, in ground retaining structures to support any future development as well as any cuts steeper than 1V:3H and higher than 3m requiring retaining. Foundation design has also been commented on within the SSR.

5.8.9 In terms of section 106 of the Act, the likelihood of natural hazards occurring is low. No material damage is expected, and the proposal is not considered to accelerate or worsen natural hazards, given that future development can be located outside of the flood prone areas and consent notice conditions can control design of future buildings to mitigate land instability susceptibility. It is therefore considered that there are no matters under s106 of the Act which would cause the Council to refuse the subdivision consent. An assessment of the proposal against the National Policy Statement for Natural Hazards (NPS-NH) will be undertaken further in this report.

WATER SUPPLY

5.8.10 All lots will be vacant land as part of this proposal. Therefore, it is anticipated that the standard consent notice condition will apply for any future dwelling constructed on the sites.

STORMWATER DISPOSAL

5.8.11 LDE have completed a thorough assessment for stormwater management within Section 4.4 of the SSR. Please refer to the SSR for further detail, with the below comments providing a summary of LDE's findings.

5.8.12 LDE determined that attenuation is required to be undertaken up to the 1% AEP.

5.8.13 The private accessway and new internal driveways will require culverts to accommodate existing overland flowpaths. LDE have recommended that culverts along with inlets/outlets and armouring are designed/sized at detailed design stage. The construction/design of the private accessway within Easement A will be completed as part of the subdivision stage, with a condition of consent anticipated to reflect this. The internal private driveways within Lots 1 & 2 will be constructed at time of built development to the lots, such that a consent notice advising that attenuation of the internal driveway is recommended, is anticipated to be issued on the new titles for Lots 1 & 2.

5.8.14 LDE have identified that post-development flow rates of Lots 1 & 2 shall be limited to 80% of pre-development rates. Roof overflow has been recommended to be managed using above ground or below ground storage tanks. Runoff from the driveways shall be collected via side drains, channels and scruffy domes. Overflow from all tanks is to be discharged to side drains or channels along private driveways.

5.8.15 The required attenuation for the right of way is intended to be offset by providing additional attenuation capacity for overflow from the storage tanks and runoff from the driveways within Lots 1 & 2. LDE have recommended that a consent notice is imposed requiring each property owner to attenuate flows to 80% pre-development conditions, including provision for half of the ROW area.

5.8.16 Given the recommendations are adhered to within the LDE SSR as well as the offered consent notice conditions, it is considered stormwater can be adequately managed within the lot boundaries, with downstream effects considered to be no more than minor.

SANITARY SEWAGE DISPOSAL

5.8.17 Council's infrastructure is not available to this rural site.

5.8.18 LDE assessed the suitability of Lots 1 & 2 for onsite wastewater disposal. A future dwelling with 6-person occupancy was designed for. LDE confirmed that each lot could accommodate onsite wastewater disposal with a site-specific report being required at the time of built development on the lots. Lot 3 was not included within this assessment given the lot area is over 75 hectares in area and is indicated to continue to be utilised for rural productive use.

5.8.19 Overall, it is considered that the proposal does not result in adverse effects in terms of wastewater disposal and all effects can be managed within the new lot boundaries. It is anticipated that a consent notice condition will apply for Lots 1 & 2 requiring a site specific TP58 report at the time of development on the lots.

ENERGY SUPPLY & TELECOMMUNICATIONS

5.8.20 The provision for power supply and telecommunications is not a requirement for the Rural Production zone. The provision of energy supply and telecommunications is not anticipated to be a condition of consent for this proposal.

EASEMENTS FOR ANY PURPOSE

5.8.21 There are no existing easements registered on the title. There is one proposed easement as a result of the subdivision.

5.8.22 Easement A will be for the purpose of right of way which will provide Lots 1 & 2 rights for access over Lot 3.

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

5.8.23 The subject site does not contain any notable trees, historic sites, building or objects. The site is not known to contain any sites of historical or cultural significance. The site is not shown as containing an Outstanding Natural Feature or Landscape Feature. There are no archaeological sites listed on the property. The site is not shown to contain any areas of PNA or protected indigenous vegetation.

5.8.24 The site is shown to be within an area where kiwi may be present. It is considered that an Advice Note advising the Applicant of this, is suitable in this instance.

5.8.25 It is therefore considered that the proposed subdivision does not have any adverse effects on any indigenous vegetation or fauna habitats, heritage resources or landscapes.

ACCESS TO RESERVES AND WATERWAYS

5.8.26 The site does not have any access to public reserves, waterways or esplanade reserves where public access would be warranted. It is therefore considered that the provision for public access is not applicable to this proposal.

LAND USE COMPATIBILITY

5.8.27 The site and surrounding allotments are zoned Rural Production. The surrounding lots also with frontage to Mangatoetoe Road, vary considerably in size. There are smaller rural-residential lots of around 4,000m^2, rural lifestyle lots of 1-2 hectares and larger farming lots in excess of 10 hectares to 50 hectares.

5.8.28 The typical land use is productive lots which contain a residential dwelling, or vacant lots utilised for productive activities. The proposal will see two additional allotments created which are of similar size to lots in the surrounding environment.

5.8.29 Given that the proposal will create lots similar to those in the surrounding environment, it is considered that the proposal is not objectionable with the surrounding environment nor will any reverse sensitivity effects be created given the large size of the lots and ample area for future residential development within Lots 1 & 2.

5.8.30 It is therefore considered that the proposal is not objectionable with lots in the surrounding environment and does not set a precedence given it is an application enabled as a Restricted

Discretionary activity within the plan and lots of similar size and land use activities are already present in the surrounding environment.

PROXIMITY TO AIRPORTS

5.8.31 The subject site is not located in close proximity to any airport boundaries.

6.0 POLICY DOCUMENTS

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

National Environmental Standards

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

6.2 In terms of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NES), it is considered that the proposal does not trigger the requirement for investigation under the NES as detailed within Section 4 of this report.

Other National Environmental Standards

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

National Policy Statements

6.4 There are currently 10 National Policy Statements in place. These are as follows:

- National Policy Statement on Urban Development
- National Policy Statement for Freshwater Management
- National Policy Statement for Renewable Electricity Generation
- National Policy Statement for Electricity Networks
- New Zealand Coastal Policy Statement
- National Policy Statement for Highly Productive Land
- National Policy Statement for Indigenous Biodiversity.
- National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat
- 2023
- National Policy Statement for Infrastructure 2025
- National Policy Statement for Natural Hazards 2025

6.5 The only applicable NPS is considered to be the NPS for Natural Hazards (NPS-NH) given the sites are affected by natural hazards.

National Policy Statement for Natural Hazards 2025

6.6 The new National Policy Statement for Natural Hazards is applicable to the site given the area of the site affected by flood susceptibility as well as expansive soils. LDE have completed a thorough assessment of the NPS-NH and have provided the below risk matrix in regard to the proposed subdivision.

Table 7: Summary of natural hazards, their impacts on the development and the interpreted risk.

Hazard		Assessment Description	Consequence	Likelihood	Raw Risk
Ground Conditions	Low Bearing Materials	The surficial soils beneath the site are typically stiff to very stiff. The surficial soils are expected to have a static geotechnical ultimate bearing capacity (GUBC) of >300 kPa.	Minor	Unlikely	Low
	Compressible Soils	Uncertified fill and compressible soils were not encountered in our hand testing.	Negligible	Unlikely	Low
	Expansive Soils	The plasticity of the surficial soils encountered on site was highly variable, however high plasticity clays and silts were encountered in the upper soil profile. The anticipated reactivity of site subsoils based on field methods is high, with Characteristic surface deformations anticipated to be up to 76 mm.	Moderate	Possible	Medium
Earthquake	Surface Fault Rupture	The GNS Active Faults Database (2022) does not show any faults passing beneath the site. There also does not appear to be any surface expressions which would indicate the presence of an active fault beneath or within proximity to the site.	Minor	Very Rare	Low
	Seismicity	The national seismic hazard model for New Zealand shows that the area has low seismicity.	Moderate	Rare	Low
	Liquefaction	The site is mapped by FNDC as being unlikely to be impacted by liquefaction. Ground conditions at the site reflect this assessment.	Negligible	Rare	Low
	Cyclic Softening	The clay soils encountered at the site were generally insensitive; hence the risk of cyclic softening is considered low.	Negligible	Rare	Low
	Lateral Spreading	The risk of lateral spreading occurring at the site is considered to be low given the low liquefaction risk.	Negligible	Rare	Low
Tsunami		The site is elevated at approximately 100 m and is not considered to be at risk of inundation during a Tsunami.	Negligible	Rare	Low
Slope Instability		The building platforms are generally located on gentle to moderate slopes. However the slopes outside of the building platforms may be subject to instability.	Moderate	Possible	Medium
Flooding		The building platforms are elevated >5 m above the 1% flood height, however the accessway is within an area mapped as being at risk of inundation during a flood.	Minor	Possible	Medium
Coastal Hazards		The site is not located near the coast and is not considered to be at risk from coastal hazards.	Minor	Unlikley	Low

Notes

- LDE risk matrixing index values are as per Table 1 from NPS-NH 2025

6.7 LDE have recommended a suite of mitigation measures to manage the risk of hazards assessed as being medium risk. Given the recommendations made within the LDE report and the offered consent notice conditions as well as building restriction lines which restrict development to suitable areas of the sites, it is considered that the impact of natural hazards is low. LDE have confirmed that any subsequent use of the land is unlikely to accelerate, worsen or result in material damage to the land, other land, or structure. Sufficient provision has been made for physical access to each lot and no material damage of future development is anticipated.

Regional Policy Statement

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

6.9 The proposal will result in two additional allotments which will be of a size where they can be utilised for residential development and some form of productive use. No effects on ecosystems and biodiversity are anticipated as has been discussed throughout this report.

6.10 It can be concluded from the above that the proposal is generally compatible with the intent of the Regional Policy Statement. The proposal is not considered to create any reverse sensitivity effects.

Far North Operative District Plan

Relevant objectives and policies

6.11 The relevant objectives and policies of the Plan are those related to the Subdivision Chapter, the Rural Environment and the Rural Production Zone. The proposal is considered to create no more than minor adverse effects on the rural environment. The proposal is considered to be consistent with the rural character of the surrounding area and is considered to have negligible effects on the rural amenity value of the area. The proposal is considered to be consistent with the objectives and policies of the Plan given the proposal is a Restricted Discretionary Activity and therefore anticipated within the Plan. Those relevant objectives and policies are listed within **Appendix 5** attached to this application.

Proposed District Plan

6.12 Under the Proposed District Plan, the site is zoned Rural Production. The proposal is considered to create no more than minor adverse effects on the rural environment and is consistent with the rural intent of the surrounding environment and the zone. The proposal is considered to be consistent with the objectives and policies of the Proposed District Plan. Those relevant objectives and policies are listed within **Appendix 5** attached to this application.

Summary

6.13 The above assessment demonstrates that the proposal will be consistent with the relevant objectives and policies and assessment criteria of the relevant statutory documents.

7.0 SECTION 125 – LAPSING OF CONSENT

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

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

Public Notification Assessment

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

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

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

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

8.1.2 The application is for a Restricted Discretionary activity but not a boundary activity. No preclusions apply in this instance. Therefore, Step 3 must be assessed.

Step 3: If not precluded by Step 2, public notification required in certain circumstances
(7) Determine whether the application meets either of the criteria set out in subsection (8) and,—
(a)if the answer is yes, publicly notify the application; and
(b)if the answer is no, go to step 4.
(8)The criteria for step 3 are as follows:
(a)the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:
(b)the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.

8.1.3 No applicable rules require public notification of the application. The proposal is not considered to have a more than minor effect on the environment as detailed in the sections above.

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

8.1.4 There are no special circumstances that exist to justify public notification of the application because the proposal is for a subdivision within the Rural Environment where two additional lots will be created which is consistent with allotments in the surrounding environment, which is considered as neither exceptional nor unusual.

Public Notification Summary

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

Limited Notification Assessment

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

Step 1: Certain affected groups and affected persons must be notified.

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

8.3.1 There are no protected customary rights groups or customary marine title groups or statutory acknowledgement areas that are known to be relevant to this application.

Step 2: Limited notification precluded in certain circumstances.

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

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

Step 3: Certain other affected persons must be notified

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

8.3.3 The proposal is not for a boundary activity.

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

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

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

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

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

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

8.3.5 With respect to section 95B(8) and section 95E, the permitted baseline was considered as part of the assessment of environmental effects undertaken in Section 5 of this report, which found that the potential adverse effects on the environment will be minor. In regard to effects on persons, the assessment in Sections 4, 5 & 6 are also relied on, and the following comments made:

- The size of the proposed allotments is consistent with the character of the allotments in the locality. Therefore, the proposed allotment sizes are not objectionable with the surrounding environment.
- The proposal is not considered to create any reverse sensitivity effects.
- The proposal has been assessed as a Restricted Discretionary Activity and is therefore considered to be anticipated by the plan.
- The development is not considered to be contrary to the objectives and policies under the Operative District Plan or Proposed District Plan.
- All other persons are sufficiently separated from the proposed development and works, such that there will be no effects on these people.

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

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

Step 4: Further notification in special circumstances

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

8.3.8 The proposal is to subdivide the site to create two additional allotments. No reverse sensitivity effects or incompatible land use activities are anticipated. It is considered that no special circumstances exist in relation to the application.

Limited Notification Assessment Summary

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

Notification Assessment Conclusion

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

9.0 PART 2 ASSESSMENT

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

9.2 The proposal will meet Section 5 of the RMA as the proposal will sustain the potential of natural and physical resources whilst meeting the foreseeable needs of future generations as the proposal is considered to retain the productive use of the land while still providing for their social, economic and cultural well-being. In addition, the proposal will avoid adverse effects on the environment and will maintain the rural character of the site and surrounding environment.

9.3 Section 6 of the Act sets out a number of matters of national importance. These matters of national importance are considered relevant to this application. The proposal is not located within the coastal environment nor is it located near any lakes, rivers or wetlands. The site does not contain any areas of Outstanding Natural Features and Landscapes nor any indigenous vegetation. The site is not located along the coastal marine area or near lakes or rivers where public access would be required. The site is not known to contain any areas of cultural significance, and the proposal is not considered to affect the relationship of Māori and their culture and traditions. The site is not known to contain any sites of historical significance or be within an area subject to customary rights. The proposal is not anticipated to increase

the risk of natural hazards and will not accelerate, exacerbate or worsen the effects from natural hazards. It is therefore considered that the proposal is consistent with Section 6 of the Act.

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

9.5 Section 8 requires Council to take into account the principals of the Treaty of Waitangi. It is considered that the proposal raises no Treaty issues. The subject site is not known to be located within an area of significance to Māori. The proposal has taken into account the principals of the Treaty of Waitangi and is not considered to be contrary to these principals.

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

10.0 CONCLUSION

10.1 The proposal is to undertake a subdivision as a Restricted Discretionary Activity, where two additional allotments will be created. Proposed Lots 1 & 2 have been assessed as suitable for future residential development and onsite servicing, with Proposed Lot 3 being the balance lot. Access can be safely provided to the lots. The proposal will not create any reverse sensitivity effects on existing land use activities in the area.

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

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

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

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

11.0 LIMITATIONS

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

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

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

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

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

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

R.W. Muir
Registrar-General
of Land

Identifier **NA63/29**

Part-Cancelled

Land Registration District **North Auckland**

Date Issued 30 March 1892

Prior References

DI 4A.145 WA 798

Estate	Fee Simple
Area	80.9371 hectares more or less
Legal Description	Section 81 Parish of Kaiaka
Registered Owners	

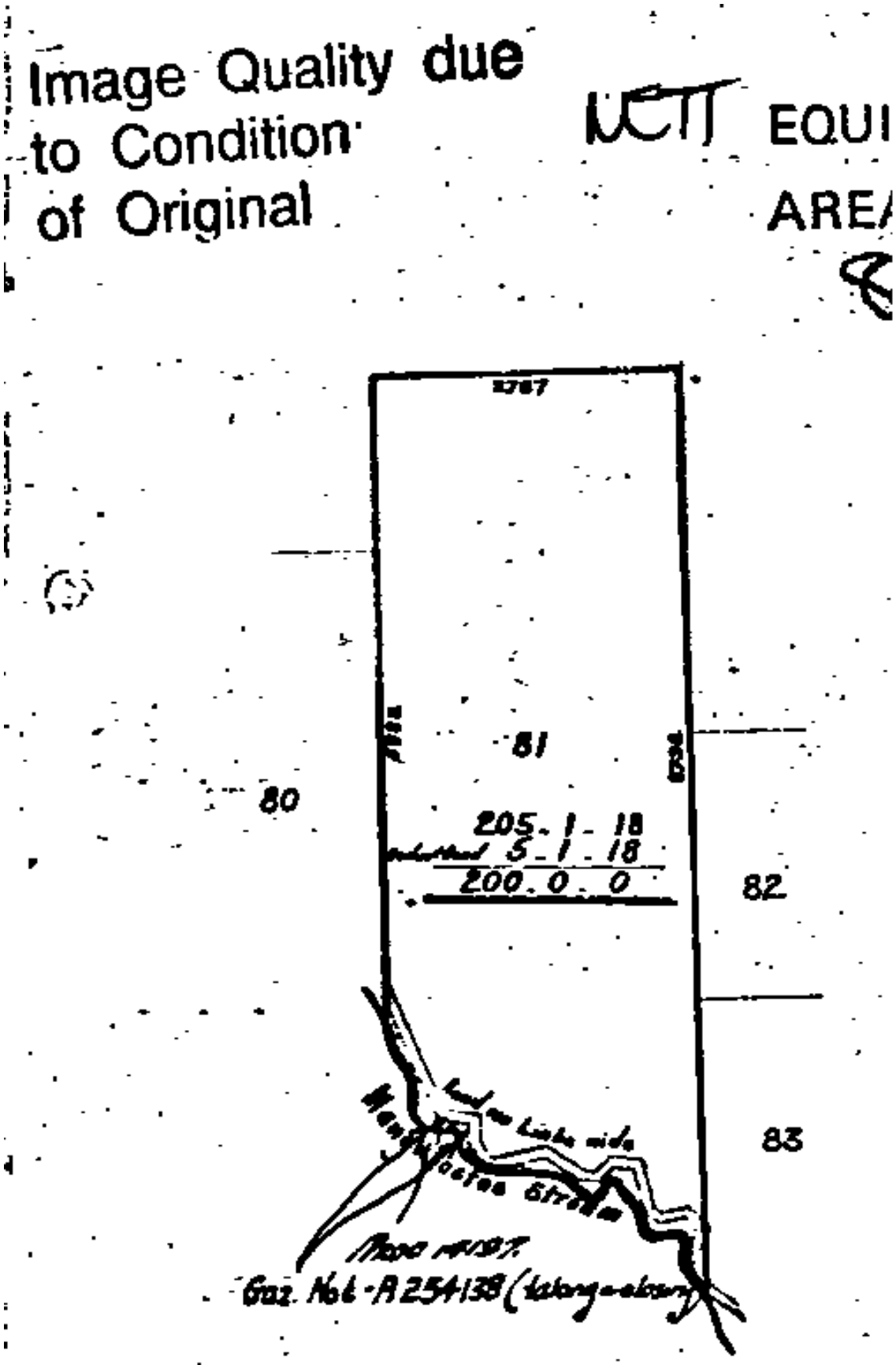
Mark Anthony Gould

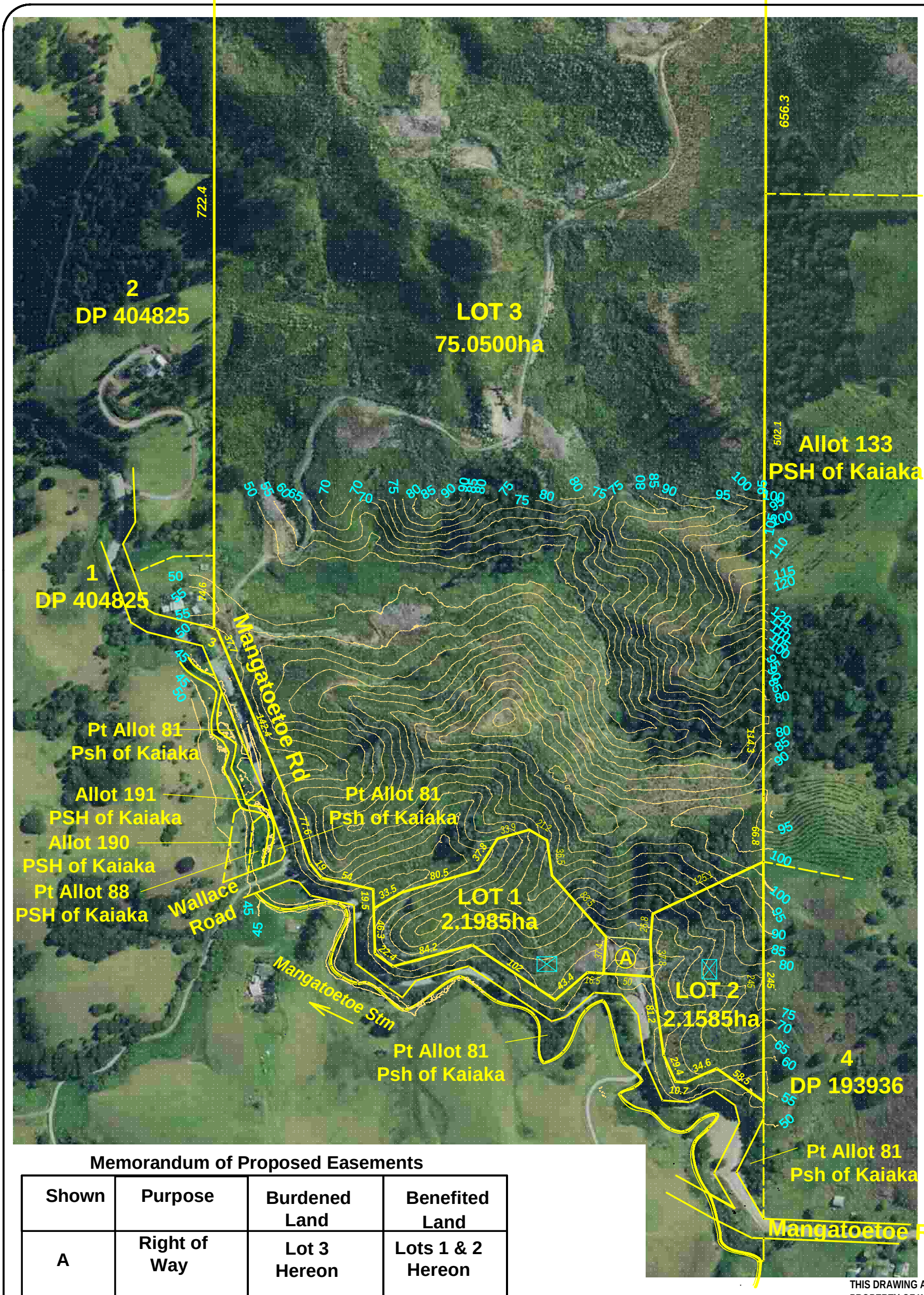
Interests

14197 Proclamation proclaiming part (4.5 perches) taken for road - 14.5.1954 at 10.00 am

A254138 Gazette Notice proclaiming part (29.4 perches) as road - 27.10.1967 at 9.00 am

Image Quality due to Condition of Original





Memorandum of Proposed Easements

Shown	Purpose	Burdened Land	Benefited Land
A	Right of Way	Lot 3 Hereon	Lots 1 & 2 Hereon

Amalgamation Condition

'That Lot 3 Hereon, Pt Allot. 81, Pt Allot. 81, Pt Allot. 81 & Pt Allot. 81 PSH of Kaiaka be held in the same Record of Title See.....

Local Authority: Far North District Council

Total Area: 80.8526 CT
Comprised in:NA63/29

Levels in terms of: NZ Vertical Datum
Contour interval is:5m

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

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

0 30 60 90 120 150 180 210 320m

Prepared for: M A Gould

WILLIAMS AND KING
Registered Land Surveyors, Planners & Land Development Consultants
Ph: (09) 407 6030
Email: kerikeri@saps.co.nz
27 Hobson Ave
PO Box 937 Kerikeri

Proposed Subdivision of Pt Allot 81 PSH of Kaiaka

	Name	Date
Survey		
Design		
Drawn	W & K	Mar 2026
Rev		Apr 2026

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

24777

1
DP 404825

1
DP 404825

LOT 3
75.0500ha

Allot 133
PSH of Kaiaka

Pt Allot 81
Psh of Kaiaka

Allot 191
PSH of Kaiaka

Allot 190
PSH of Kaiaka

Pt Allot 88
PSH of Kaiaka

Wallace Road

Pt Allot 81
Psh of Kaiaka

LOT 1
2.1985ha

LOT 2
2..1585ha

Mangatoetoe Stm

Pt Allot 81
Psh of Kaiaka

Pt Allot 81
Psh of Kaiaka

Mangatoetoe Rd

Pt Allot 115
PSH of Kaiaka

Pt Allot 114
PSH of Kaiaka

Pt Allot 113
PSH of Kaiaka

Pt Allot 133
PSH of Kaiaka

1
DP 404825

LOT 3
75.0500ha

4
DP 193936

DIAGRAM
To Scale

Pt Allot 81
Psh of Kaiaka

Allot 191
PSH of Kaiaka

Allot 190
PSH of Kaiaka

Pt Allot 88
PSH of Kaiaka

Wallace Road

Pt Allot 81
Psh of Kaiaka

LOT 1
2.1985ha

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Pt Allot 81
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Pt Allot 81
Psh of Kaiaka

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0 30 60 90 120 150 180 210 320m

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Proposed Subdivision of Pt Allot 81 PSH of Kaiaka

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Survey		
Design		
Drawn	W & K	Mar 2026
Rev		Apr 2026

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

24777

LDE
engineers • scientists

Mark Gould

SITE SUITABILITY AND CIVIL INFRASTRUCTURE REPORT

81 Mangatoetoe Road, Kaitaia

Project Reference: 30334
May 14, 2026

DOCUMENT CONTROL

Version	Date	Comments
A	11/05/2026	Issued for Consent
B	14/05/2026	Issued for Consent - Minor Changes

GEOTECHNICAL ASSESSMENT

Prepared by	Authorised By
Caleb Gasston Senior Engineering Geologist/Geophysicist *PhD (Geology), MEngNZ*	**Conor Pullman** Chartered Engineering Geologist *BSc, PGDipSci, CMEngNZ (PEngGeol)*

CIVIL INFRASTRUCTURE ASSESSMENT

Prepared By	Reviewed & Authorised By
Riaan Louwrens BTech (Civil) CMEngNZ (Eng. Technician)	**Hamish Gibson** Northern Civil Team Lead *BEngTech – Civil, MEngNZ*

CONTENTS

1 INTRODUCTION

LDE Ltd was engaged by Mark Gould to undertake geotechnical and civil engineering assessments for the proposed subdivision on Part Allot 81 PSH OF, Kaiaka (81 Mangatoetoe Road). It is proposed to subdivide the property to create two new residential lots, and a balance lot.

This report has been prepared for submission to Far North District Council, alongside an application for resource consent.

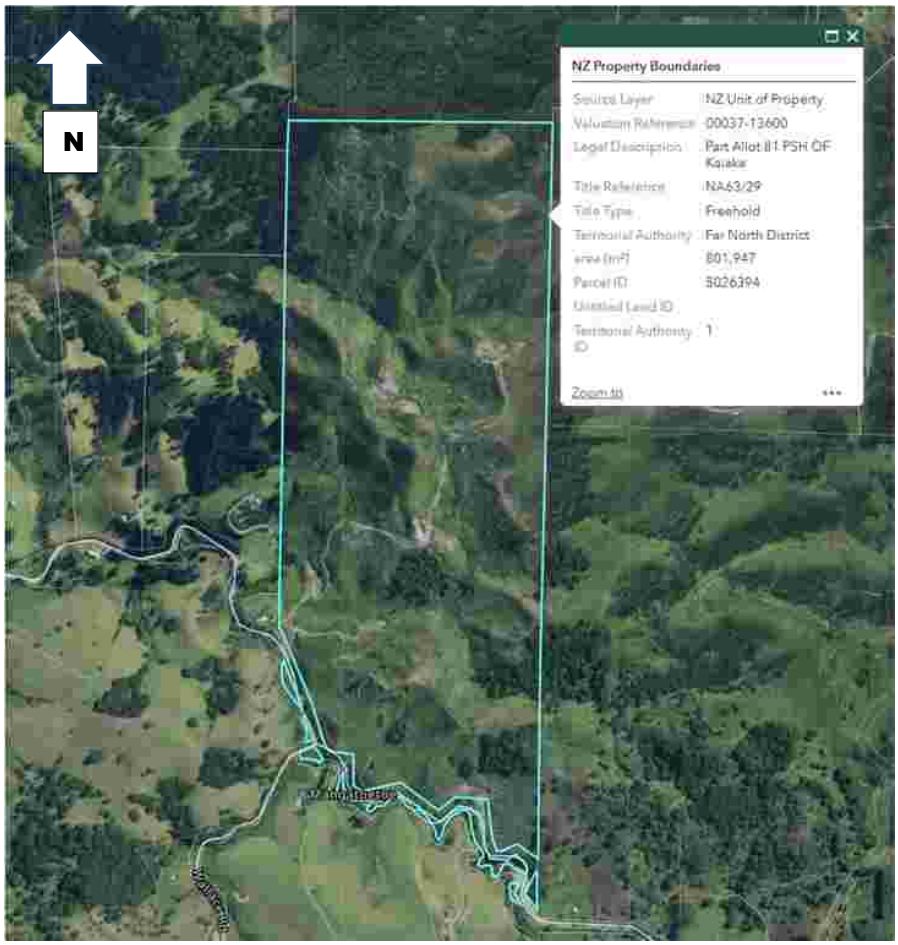

Figure 1: Location plan Part Allot 81 PSH OF, Kaiaka (Image Sourced from FNDC GIS Maps)

2 PROPOSED DEVELOPMENT

It is proposed to subdivide the site into three rural lots, including two rural lifestyle lots (lots 1 and 2) and one balance lot (Lot 3). The existing farm access will be upgraded and extended to form a new right of way, created over Lot 3, to access Lot 1, Lot 2, and Lot 3. The existing vehicle crossing from Mangatoetoe Road will require upgrading to FNDC standards. Proposed Lot 1 is to have a land area of approximately 21,985 m^2, proposed Lot 2 a land area of approximately 21,585 m^2, and the balance lot (Lot 3) to have a land area of 764,956 m^2. Potential building platforms encompassing an area of 200 m^2 are assessed for each lot, one within lot 1 and two within Lot 2.

The proposed scheme plan is shown in figure 2 below.

Figure 2: Site plan of proposed subdivision

3 DESKTOP STUDY

3.1 Site Description

The site is situated approximately 13.5 km to the east of the Kaitaia township on the northern side of Mangatoetoe Road (Figure 3). The site, legally described as Part Allot 81 PSH OF Kaiaka, is a roughly rectangular shaped rural lot which comprises approximately 808,526 m^2 of land. The surrounding area consists mainly of rural production properties and is zoned Rural Production under the Operative District Plan. The site covers steep hill topography, with slope gradients generally in the range of 1V:2.5 H to 1V:1H and up to 1V:0.5H The subject site is outside of the FNDC reticulation boundary for water supply, stormwater and wastewater and will need to be serviced on-site.

The site has been utilised for forestry production in the past, with the bulk of the plantation being felled sometime in the several years prior to this investigation. Several piles of forestry slash and several skid pads are present across the wider site. A number of farm tracks have been recently formed across the site to aid with constructing fence lines.

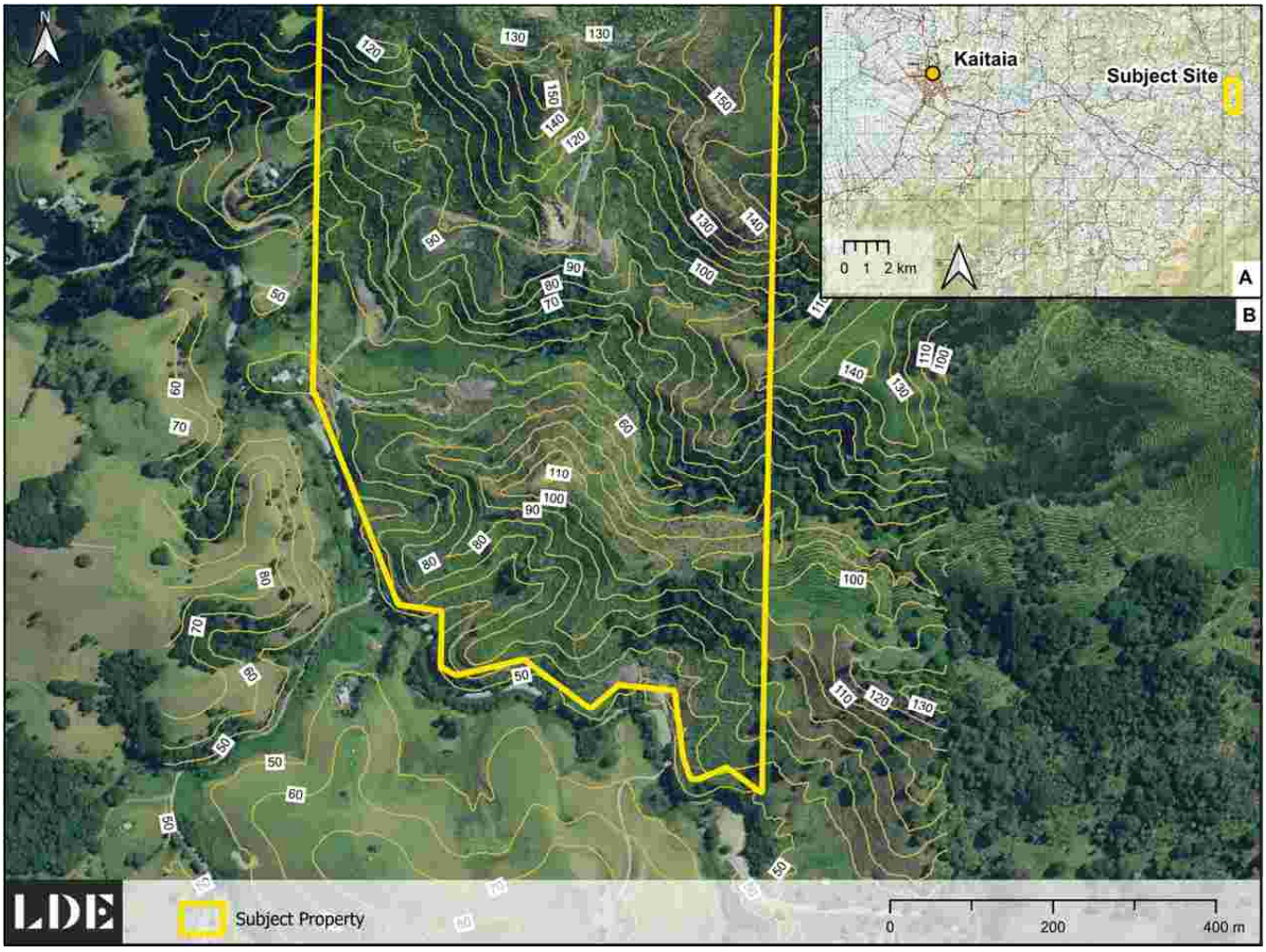

Figure 3: 81 Mangatoetoe Road, Kaitaia and surrounding area.

3.2 Mapped Hazards

LDE reviewed FNDC's Far North Maps (Te Kaunihera o Te Hiku o te Ika (FNDC), 2026) and NRC's Hazard Maps (Northland Regional Council, 2026). The site is mapped as being impacted by or potentially susceptible to the following natural hazards:

- Flooding in a 10%, 2%, and 1% annual exceedance probability rain event.

The site is not mapped as being susceptible to any other natural hazards on the reviewed FNDC and NRC sources.

3.3 Historical Information

LDE's review of relevant historical information including historic aerial photographs revealed the following:

- The site was vacant, used predominantly for pastoral land up until sometime between 1982 and 2000 when the site was converted to pine plantation forestry.
- Harvesting was undertaken across 2022 and 2023, with the pine trees being removed.

4 CIVIL INFRASTRUCTURE ASSESSMENT

4.1 Water Supply

4.1.1 Onsite Supply

No reticulated water supply is available in vicinity.

Accordingly, we consider that potable water supply can be satisfied through collection of rainwater from roof areas and storage in rainwater tanks. We recommend installing a minimum storage tank containing 2x25,000L for potable water supply for a four-bedroom house. Appropriate filters should be installed to provide suitable drinking water.

However, it should be noted that additional storage tanks can be installed at the property owner's discretion to provide redundancy during periods of drought.

4.1.2 Firefighting Water Supply

To comply with New Zealand Fire Service Firefighting Water Supply Code of Practice a storage volume of 45,000L needs to be provided which is within a 90m radius of the proposed dwellings. This requirement can be further defined post Resource Consent, which can be met by either installing the required storage volume in one location within 90m of each of the proposed dwellings or be addressed via storage on each site during building consent stage.

4.2 Access

4.2.1 ROW

It is proposed to construct a right of way servicing Lot 1 – 2 on Lot 3 within Easement A. A site plan which includes the ROW is included in the drawings under **Appendix E**.

The ROW is proposed to be metalled having a minimum width of 4.5m which includes 2 x 0.25m unsealed shoulders. The ROW is to have a maximum 12.5% grade for the first 5 meters from the road reserve boundary, and maximum 22.2% for the remainder.

The area of the proposed ROW is relatively small, and it is proposed that attenuation for the ROW is addressed during building consent using either above or below ground tanks. The exact volumes will be confirmed during building consent stage. Refer to section 4.4 for more detail addressing the attenuation of the ROW.

4.2.2 Private Driveways

Private driveways along with attenuation are to be designed during building consent stage. Detail on the drawings included in **Appendix E** are indicative only to demonstrate feasibility.

4.3 Onsite Wastewater Disposal

There is no existing public reticulated wastewater system available and therefore onsite wastewater disposal will be required.

4.3.1 Subsurface Conditions

Based on the findings of the site investigation and boreholes, the soil has been conservatively assessed as Category 4. A conservative design loading rate of 3.5mm/day has therefore been selected. It is proposed to dispose the effluent via PCDI.

4.3.2 Clearances

Minimum separation distances on the site can easily be maintained as per the requirements of NZS 1547. The following setbacks were considered considering secondary wastewater system:

- A 1.5 metre clearance from the disposal field to all site boundaries.
- A minimum 0.6mm groundwater table separation.
- A 15m setback from any surface water.

We consider a wastewater disposal field can be located within the proposed site meeting the required setback distances.

In the LDE investigation of the proposed wastewater disposal fields, no groundwater table was encountered 3.0m below the existing ground levels when a 50mm auger was sunk at the proposed location of the disposal field. Borehole logs are included in **Appendix B** of the report.

4.3.3 Daily Wastewater Demand

With the assumption that a four-bedroom dwelling is likely to be constructed on each of the various proposed Lots with an occupancy of six persons, we have calculated the required disposal areas to demonstrate that onsite disposal is available within the proposed lot. Accordingly, a building specific design will be required for the dwelling at building consent which will specifically size the treatment device and disposal field.

With an on-site rainwater collection from the roof areas as water supply and assuming standard water saving fixtures will be installed, a wastewater flow allowance of 180L/day/person has been used in the onsite disposal design system.

These assumptions result in a daily wastewater flow of 1,080 L/day for each of the dwellings on the respective lots.

4.3.4 Site Grades

The site grades over areas feasible for effluent disposal range from 14° to 24° (approximately 25% to 45% slope). Reduction rates will be a crucial part of designing the disposal fields, with reduction typically being between 30% and 50%.

4.3.5 Recommended System

For resource consent purposes, a secondary treatment system is proposed.

There are many secondary treatment systems which could be suitable which will be determined in the detailed design stage once developed plans for each dwelling are available.

We consider the most viable option for the site is discharging the secondary treated effluent to pressure compensated dripper lines. Given the daily wastewater demand of 1,080L/day and the soil loading rate of 1.8 mm/day (3mm/day reduced by 40%) the disposal area required for each of the respective lots will be 600m^2.

Each lot also require provision for a reserve disposal area equalling that of the calculated disposal area, totalling 1,200m^2 to be dedicated on each lot for disposal area.

Disposal fields areas of the required size have been identified on the engineering drawings included in **Appendix A** which complies with the various clearances.

Accordingly, we consider that the proposed development can achieve wastewater disposal on site.

4.3.6 Detailed Design

We note the design outlined above is for the purposes of resource consent application and a specific design suitable for building consent and construction will be required following the development of the house designs.

4.4 Stormwater

4.4.1 Existing Infrastructure

There is no existing public stormwater infrastructure within the vicinity of the subject site, except for an existing culvert at the main vehicle crossing onto Mangatoetoe Road.

4.4.2 Overland Flow Paths / Flood Risk

4.4.2.1 Flooding

Flood-prone areas have been identified on the Northland Regional Council Hazard GIS map considering the 1% AEP Regionwide Model, refer to Figure 4 below.

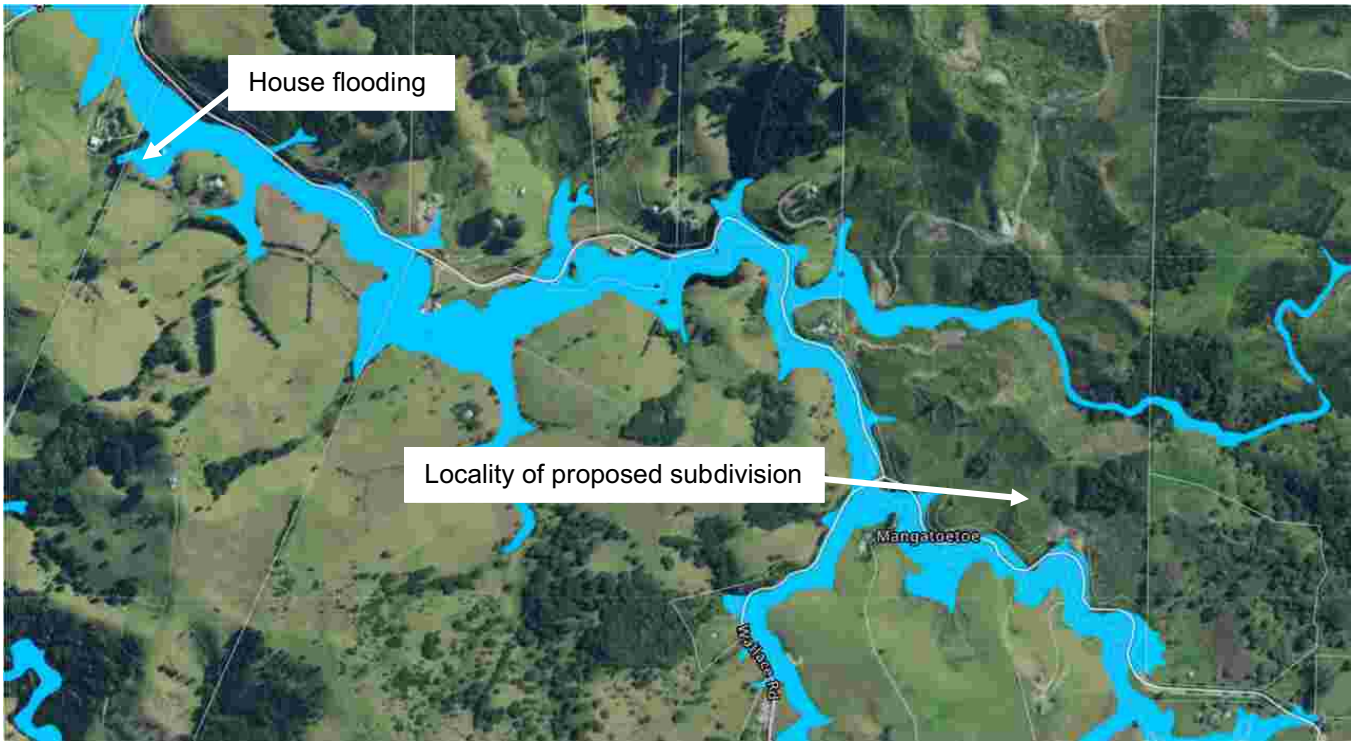

Figure 4: Extent of 1% AEP Flooding (Image Sourced from NRC GIS Maps)

Given the flooding of houses downstream of subject development considering the 1% AEP event, it is required that attenuation is undertaken for the proposed subdivision up to the 1% AEP which is in accordance with the requirements of FNDC.

4.4.2.2 Overland Flow Paths

There are various overland flow paths traversing through Lot 1 and Lot 2 relevant to the proposed development. The catchments for these overland flow paths are relatively small, with the overland flow paths not posing any obvious risks.

The ROW and private driveways however all require culverts to accommodate these overland flow paths across the site. These culverts along with inlets/outlets and armouring are to be sized/designed during detailed design stage.

All the overland flow paths have been identified on the civil engineering drawing set included in **Appendix E.**

4.4.3 Stormwater Attenuation

The development will introduce new impervious areas. To mitigate adverse hydrologic impacts, runoff from the site must be attenuated to the 1% Annual Exceedance Probability (AEP) flood event. Specifically, post-development flow rates shall be limited to 80% of pre-development rates.

It is proposed that roof overflow and runoff from the private driveways of both lots be managed using either above-ground or below-ground storage tanks. Runoff from the private driveways shall be collected via side drains, channels, and scruffy domes. Overflow from rainwater harvesting tanks shall discharge into the side drains or channels along the private driveways.

The required attenuation for the right-of-way (ROW) is intended to be offset by providing additional attenuation capacity for overflow from the rainwater harvesting tanks and runoff from the private driveways on Lot 1 and Lot 2.

Consent notices will need to be attached to Lot 1 and Lot 2. Lot 1 and 2 must attenuate flows to 80% of pre-development conditions including over attenuating to make provision for half of the ROW area. The total ROW area requiring attenuation must be offset on Lot 1 and Lot 2.

A proposed site plan is included in **Appendix E.**

4.4.4 Concept Attenuation

4.4.4.1 Stormwater Analysis

We have used HEC-HMS to model both the pre- and post-development scenarios to calculate the required storage volumes, the size and the configurations of outlet orifices to limit post development stormwater peak flow rates to 80% that of predevelopment flow rates.

The pre-development rainfall depths used in the stormwater analysis have been taken from the historical data extracted from the NIWA HIRDS V4 website. The 24-hour rainfall depths have been increased by 20% to account for climate change. The analysis considered the 50%, 10% and 1% AEP rainfall events.

A SCS Type 1A storm profile with 24-hour duration was used in the modelling.

The rainfall data used in the analysis is included in **Appendix D** of the report.

4.4.4.2 Analysis Parameters

A summary of impervious and pervious areas relevant to the modelling for only Lot 2 are shown in Table 1 below. The attenuation effort required for Lot 1 is substantially less compared to Lot 2, hence only Lot 2 is evaluated to proof feasibility.

Table 1: Pervious and Impervious Areas

Description	**Existing (m^2)**	**Proposed (m^2)**
Permeable	800	0
Impermeable	0	400 (roof area, paving) – Captured for attenuation 300 (private driveway and ROW) – Captured for attenuation 100 (private driveway and ROW) – Not captured for attenuation*

**Note: May not be feasible capturing the lower areas if only above ground tanks were to be incorporated.*

Table 2 below shows the parameters used in the HEC-HMS hydrological model of the site. A hydrological soil group, Class C, was adopted to determine the applicable curve numbers used in the SCS curve method for stormwater modelling. The hydrological soil group was inferred based on site-specific geotechnical information, with a time of concentration of 10 minutes being used due to the small catchment areas being assessed.

Table 2: HEC-HMS Model Parameters

Land use, group C soils	**Runoff curve Number**	**Initial rainfall abstraction (mm)**
Permeable (Grass/Garden)	74	5
Impervious Pavement Area	98	0

4.4.4.3 Analysis Results

A summary of the results from the model is shown in Table 3 below.

Table 3: Analysis Results

Storm Event	**Predevelopment (l/s)**	**Post development (l/s)**
50% AEP	2.94	1.66
10% AEP	5.80	4.10
1% AEP	10.59	7.75

A summary of the outputs from HEC-HMS is included in **Appendix C** of the report along with the schematics demonstrating how the model was compiled.

4.4.4.4 Tank and Orifice Configuration

We have used 25,000L tanks (3m high) for the attenuation modelling.

The orifice configuration as per Table 4 below was used enable the required attenuation for both tanks

Table 4: Orifice Details

Orifice #	Height to Centre of Orifice from Swale Invert (mm)	Orifice / Outlet Diameter (mm)
1	0.1	14
2	1.4	20
3	2.0	20
Overflow	2.9	100

4.4.4.5 Discharge

It is proposed to discharge the tanks to riprap at locations demonstrated on the drawings included in **Appendix E**.

5 GEOTECHNICAL SUITABILITY ASSESSMENT

LDE undertook a geotechnical assessment at the site to assess ground conditions and quantify any potential geotechnical hazards which may impact on the subject development. This included a thorough walkover and hand testing completed by a senior engineering geologist from our Kerikeri office.

5.1 Geology

The 1:250k Geology Map of New Zealand (Heron, 2020) GNS Science identifies the site as being underlain by Eocene and Oligocene-aged aged sedimentary rocks of the Taipa Mudstone and Mahurangi Limestone, both of which are sub-groups within the Northern Allochthon. Our assessment of the site indicates that the development area is underlain by intermixed sandstone and mudstone units which have weathered to residual soils in the upper part of the subsurface profile.

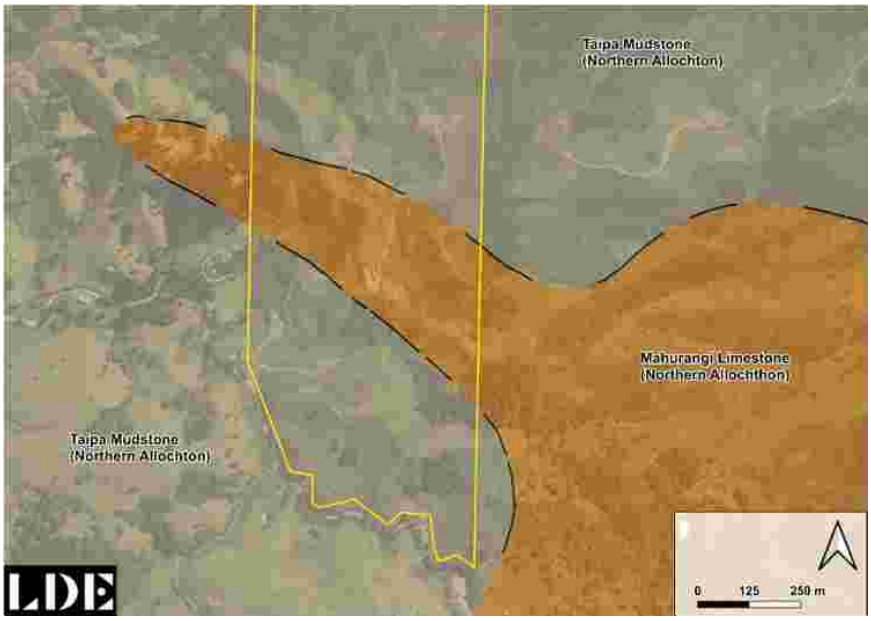

Figure 5: The mapped geology of the site and surrounding areas - from Heron (2020).

5.2 Geomorphology

The subject site occupies a series of sub-parallel, generally NW trending ridgelines within the broader hill country. The development area occupies the SW flanks of one such ridgeline, overlooking the Mangatoetoe Stream to the south. The apex of the ridge is sharp with moderate to steep slopes (18-45°) forming the flanks. Across the wider site, geomorphic indicators of deep-seated slope instability are evident, however this is mostly confined to the northern side of the subject ridge. Some indications of historic slope instability, including weathered scarps, are present around the heads of gullies steeper than 1V:3H, within the broader development area, and more than 20 m away from the proposed building platforms.

The building platform for Lot 1 occupies a low topographic knob at the base of a SW trending spur which extends from the broader ridgeline. The slopes across the platform are generally gentle to moderate, averaging 10°, and overlook steep slopes, both natural and cut slopes, beyond the platform that lead down to Mangatoetoe Road. The potential building platforms for Lot 2 occupy the ridges of two broad SW trending spurs. The slopes across the platforms are generally gentle to moderate, averaging 10° for the southern platform and 14° for the northern platform. Beyond the platforms the slopes become moderate to steep (18-45°).

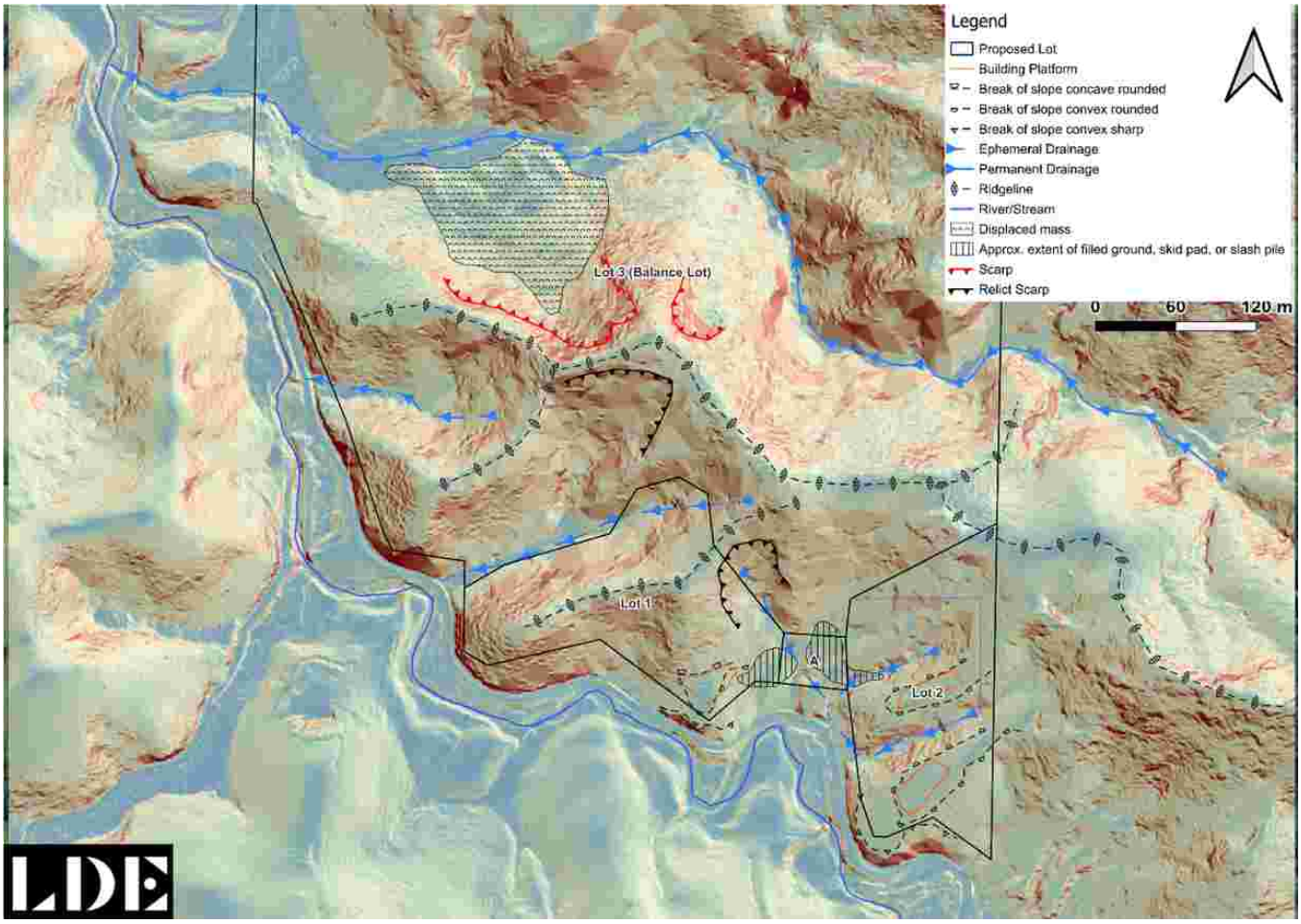

Figure 6: Geomorphology map of the site.

5.3 Site Investigation

A site walkover and hand testing were undertaken on the 16th and 17th of February 2026, which included 9no. hand augered boreholes and 3no. Dynamic Cone Penetrometer (DCP) tests. Following this initial field work, the scheme plan was revised, with the total lots being reduced to two and the lot boundaries being rearranged. Additional testing was then undertaken on the 2nd of April 2026 to account for the amended lot locations. For each of Lot 1 and Lot 2, 2no. hand auger tests and 1no. DCP test were undertaken for each potential building platform. Shear vane tests were undertaken every 0.2 m depth in the tests for the building platforms. DCP tests were also undertaken in the base of selected holes to assess the depth to the weathering horizon. The relevant test for Lots 1 and 2 are tests numbered HA6 to HA11 and DCP02 to DCP04.Test locations are shown on the geotechnical investigation plan below (Figure 77) and in Appendix A. Detailed test logs are provided in Appendix B.

Figure 7: Geotechnical investigation plan.

5.4 Ground Conditions

The building platform for Lot 1 was found to be underlain by residual soils of the Taipa Mudstone, which underlay 50 mm of topsoil, and extended to a depth of 3.9 m below ground level (m bgl). The residual soils consisted of 0.5 m of very stiff, high plasticity silty CLAY, overlying medium dense to dense, silty SAND. Measured shear strengths in the residual soils were in the range of 80-200+ kPa; recorded DCP blow counts were in the range of 2-10 blows/50mm. Inferred highly weathered rock was encountered beneath the dense SAND at 3.9 m bgl.

The building platforms for Lot 2 were underlain with residual soils of the Taipa Mudstone, which underlay 200 mm of topsoil, and extend to highly weathered rock, encountered between 1.2-3.2 m bgl. The residual soils consisted of layers of stiff to very stiff, high plasticity, clayey SILT and silty CLAY, interbedded with layers of medium dense to dense SAND. Measured shear strengths in the residual soils were in the range of 82-200+ kPa; recorded DCP blow counts were in the range of 1-14 blows/50mm. In HA11 a weak layer was encountered with the DCP at 2.5 m, with blow counts of 0.5. Shear strengths were recorded in the layer, however these were undertaken following testing with the DCP and are likely residual shear strengths. Texturally the material in the weak layer was similar to other silty CLAY units encountered across the site.

The depth to highly weathered rock, varied depending on the location of the test on the ridge. HA08 and HA10, undertaken on the NW sides of the ridges, encountered highly weathered rock at 1.2 m bgl and 1.4 m respectively. HA09 and HA11, undertaken on the SE side of the ridges, encountered highly weathered rock at 2.8 m bgl.

Groundwater was not encountered at any of our test locations; however seepages were observed in the base of the gullies and at localised low points across the site. It is therefore likely that groundwater is located some 5-7 m below the level of the building platforms.

5.5 Natural Hazards

This section summarises our assessment of the natural hazards within the property in close proximity to the proposed building platforms as broadly required by Section 106 of the Resource Management Act (1991 and subsequent amendments) and including geotechnical and coastal hazards given in Section 71(3) of the Building Act (2004). This includes erosion, inundation, subsidence, and slippage.

This section also includes our assessment of ground beneath the building site which is outside the definition of "Good Ground" as defined by NZS3604 (2011) "Timber Framed Buildings".

5.5.1 Natural Hazards Risk Assessment

A risk assessment is provided in accordance with the National Policy Statement for Natural Hazards 2025 (Ministry for the Environment, 2025). This requires the assessment of a likelihood of the hazard occurring at the site in terms of Annual Exceedance Probability for any given year (AEP) or Average Recurrence Interval or 'return period' (ARI).

Where possible, this information is taken from existing reporting or site assessments, for example region wide coastal inundation reporting or council flood mapping available from online GIS hazard mapping databases. Table 5 below from the NPS-NH 2025 outlines the risk levels for various combinations of likelihoods and consequence levels.

Table 5: NPS-NH 2025 Risk Matrix (Table 1 within NPS-NH)

		Likelihood Level						
		Almost Certain	**Very Likely**	**Likely**	**Possible**	**Unlikely**	**Rare**	**Very Rare**
	ARI (years) **AEP**	up to 10 10% or more	10-20 10% to 5%	20-50 5% to 2%	50-100 2% to 1%	100-500 1% to 0.2%	500-5000 0.2% to 0.02%	>5000 <0.02%
Consequence Level	**Catastrophic**	Very High	Very High	Very High	High	Medium	Medium	Medium
	Major	Very High	Very High	High	High	Medium	Medium	Medium
	Moderate	High	High	High	Medium	Medium	Low	Low
	Minor	Medium	Medium	Medium	Medium	Low	Low	Low
	Negligible	Low	Low	Low	Low	Low	Low	Low

Table 6 below sets out the consequence of any given hazard in terms of damage to property and potential for injury or fatalities.

Table 6 - Consequence Table (Table 2 within NPS-NH)

Consequence Level	Damage to property	Potential for injury or fatalities
Catastrophic	Severe damage to land and building(s), potential for collapse or total destruction of structures. Building(s) need to be demolished, rebuilt or relocated.	High threat to life safety, with probable fatalities and/or critical injuries.
Major	Major damage to land and building(s), including structural damage. Loss of use and substantial repair required.	Unsafe for people, with potential for many injuries, or critical injuries and/or fatalities.
Moderate	Some damage to land and non-structural damage to building(s). Limited loss of use, repairs required.	Unsafe for people, with potential for injuries, although expected to be minor.
Minor	Minor damage to land and building(s). No loss of use, minimal repairs required.	Isolated minor injuries possible.
Negligible	No loss of use, no building repairs required.	No injuries.

A summary of the results of the assessment of the risk to the development for different hazards is presented in Table 7. Hazards for which the risk to land or the proposed development is assessed as being medium or higher are discussed in further detail in the sections that follow. Engineering mitigation measures are provided in Section 6.

Table 7: Summary of natural hazards, their impacts on the development and the interpreted risk.

Hazard		Assessment Description	Consequence	Likelihood	Raw Risk
Ground Conditions	**Low Bearing Materials**	The surficial soils beneath the site are typically stiff to very stiff. The surficial soils are expected to have a static geotechnical ultimate bearing capacity (GUBC) of >300 kPa	Minor	Unlikely	Low
	Compressible Soils	Uncertified fill and compressible soils were not encountered in our hand testing.	Negligible	Unlikely	Low
	Expansive Soils	The plasticity of the surficial soils encountered on site was highly variable, however high plasticity clays and silts were encountered in the upper soil profile. The anticipated reactivity of site subsoils based on field methods is high, with Characteristic surface deformations anticipated to be up to 78 mm.	Moderate	Possible	Medium
Earthquake	**Surface Fault Rupture**	The GNS Active Faults Database (2022) does not show any faults passing beneath the site. There also does not appear to be any surface expressions which would indicate the presence of an active fault beneath or within proximity to the site.	Minor	Very Rare	Low
	Seismicity	The national seismic hazard model for New Zealand shows that the area has low seismicity.	Moderate	Rare	Low
	Liquefaction	The site is mapped by FNDC as being unlikely to be impacted by liquefaction. Ground conditions at the site reflect this assessment.	Negligible	Rare	Low

Hazard		Assessment Description	Consequence	Likelihood	Raw Risk
	Cyclic Softening	The clay soils encountered at the site were generally insensitive; hence the risk of cyclic softening is considered low.	Negligible	Rare	Low
	Lateral Spreading	The risk of lateral spreading occurring at the site is considered to be low given the low liquefaction risk.	Negligible	Rare	Low
Tsunami		The site is elevated at approximately 100 m and is not considered to be at risk of inundation during a Tsunami.	Negligible	Rare	Low
Slope Instability		The building platforms are generally located on gentle to moderate slopes. However the slopes outside of the building platforms may be subject to instability.	Moderate	Possible	Medium
Flooding		The building platforms are elevated >5 m above the 1% flood height, however the accessway is within an area mapped as being at risk of inundation during a flood.	Minor	Possible	Medium
Coastal Hazards		The site is not located near the coast and is not considered to be at risk from coastal hazards.	Minor	Unlikley	Low

Notes

- LDE risk matrixing index values are as per Table 1 from NPS-NH 2025

5.5.2 Site Subsoil Class

Based on the published geological information for the region discussed in 10.2 and the testing undertaken at the site, we consider that the site classification of C- "Shallow Soil" Site is appropriate as defined by NZS 1170.5 (2004).

5.5.3 Seismic Actions

In accordance with the NZ Building Code and NZS 1170.5 (2004): Any proposed structures at the site are likely to be Importance Level 2 (IL2) with a design working life of 50 years, and therefore: -

- The Serviceability Limit State (SLS) design earthquake has an annual exceedance probability of 1/25.
- The Ultimate Limit State (ULS) design earthquake has an annual exceedance probability of 1/500
- Furthermore, an intermediate state event (ILS) has been considered in accordance with Module recommendations (New Zealand Geotechnical Society (NZGS) & Ministry of Business Innovation and Employment (MBIE), 2021) for an annual exceedance probability of 1/100.

Ground motions adopted in accordance with Module 1 (2021) for geotechnical design are summarised in Table 8.

Table 8: Summary of adopted seismic parameters

Seismic Parameters	SLS	ILS	ULS
Horizontal Peak Ground Acceleration (PGA), g	0.03	0.07	0.19
Effective Magnitude, Mw	5.8	5.8	6.5

5.6 Slope Stability

5.6.1 Numerical Stability Assessment

Given the presence of moderate to steep slopes across the site, and the evidence of past instability it was necessary to undertake a detailed, numerical assessment, to determine whether instability of the slope may impact on the proposed development.

Three design cross-sections were considered for the assessment of slope stability, one for each building platform, the cross-sections extend from gully to gully, across each spur/knob. The topographic profiles for the cross-sections were derived from a 1 m digital elevation model (DEM) of the site, itself derived from the 2018-2020 Northland Regional LiDAR survey. The locations of the cross-sections are shown on the site plan below and in Appendix A. The analysis results are provided in Appendix F.

Figure 8: Cross section locations shown as blue lines. BPa is Building Platform A, BPb Building Platform B.

5.6.2 Methodology & Assumptions

The stability of the site has been assessed based on the geomorphology of the surrounding slopes, shallow ground testing data, and numerical stability analyses carried out using specialist geotechnical software (Rocscience Inc. SLIDE 2 Modeler v. 9.008).

The numerical analyses included assessments of the slope stability under likely worst case groundwater conditions over the life of potential future dwelling (long term design conditions), the extreme condition of a fully saturated slope and ULS seismic conditions. As all three potential building platforms straddle local high points, separate analyses were undertaken for the slopes to the left (LH) and the slopes to the right (RH) of the building platforms, as viewed in cross-section.

The GLE/Morgenstern-Price method, which considers interslice forces, has been adopted within the analysis, with non-circular failures surfaces used within the analysis. A staged pseudo-static method proposed by Duncan et al (1990) is used to analyse the stability of slopes during earthquake shaking. The soil strength parameters used in the analyses are shown in Table 9 and were generally derived by back-analysis, published and unpublished correlation charts and tables for the materials encountered in the investigation. Consideration has been given to the behaviour of the materials with long term loading, and their strength under likely worst case moisture content levels. The adopted model geometry adopts a weathering profile, like that observed in the hand testing. The analysis limits were adjusted to focus the analysis on the location of the proposed building platforms, and areas which were found to impact these.

Where adequate FoS could not be achieved in the seismic case, a displacement-based approach was used to assess the seismic performance of ground across the proposed building platforms, with an adopted criterion of a maximum of 25 mm of lateral movement under SLS seismic loads and a maximum of 100 mm of lateral movement during a ULS seismic event for non-liquefied soils. The empirical methods outlined in Section 5.3 have been used to estimate liquefaction induced lateral displacements.

Table 9: Adopted material strength parameters.

Material	Unit Weight (kNm^{-3})	Strength Type	Internal Friction Angle (°)	Cohesion (kPa)	UCS (kPa)	GSI	Mi
Residual Soil	18	Mohr-Coulomb	30	2	-	-	-
Highly Weathered Materials	20	Mohr-Coulomb	35	5	-	-	-
Notes: Undrained parameters were used for stability modelling in seismic cases.							

Table 10: Minimum factor of safety criteria for each design scenario.

Design Case	Factor of Safety (FOS)
Design Groundwater Conditions	1.5
Extreme Groundwater Conditions	1.2
ULS Seismic Event	1.0

5.6.3 Slope Stability Results

A summary of the slope stability results is presented in Table 11 below. The results consider both the inundation risk (over-slip) from the slope above the building platform and the instability hazard (under-slip) of the slope below the building platform. The achieved critical factors of safety are the minimum FOS achieved across both the LH and RH slope for each 20x10 m (200 m^2) building platform.

Table 11: Summary of slope stability results.

Cross Section Line	Case No.	Conditions of Analysis	*Minimum Required FoS*	Critical FOS	
				Global	Building Platform
Section 1 – Lot 1	1	*Design* Groundwater – Static	*1.5*	**1.39**	**2.52**
	2	*Extreme* Groundwater – Static	*1.2*	**0.63**	**1.41**
	3	**ULS** Seismic Undrained (Duncan Wright Wong (1990) method)	*1.0*	**1.01**	**1.31**
Section 2 – Lot 2 BPa	1	*Design* Groundwater – Static	*1.5*	**1.29**	**1.71**
	2	*Extreme* Groundwater – Static	*1.2*	**1.07**	**1.31**
	3	**ULS** Seismic Undrained (Duncan Wright Wong (1990) method)	*1.0*	**0.99**	**1.07**
Section 3 – Lot 2 BPb	1	*Design* Groundwater – Static	*1.5*	**1.16**	**1.64**
	2	*Extreme* Groundwater – Static	*1.2*	**1.01**	**1.35**
	3	**ULS** Seismic Undrained (Duncan Wright Wong (1990) method)	*1.0*	**0.85**	**1.12**

Notes:
- All FoS given are GLE/Morgenstern-Price.
- Cases where the achieved FoS does not meet the required FoS are indicated in red.

Each of the proposed building platforms analysed here was found to be stable and met the criteria for each design scenario. However, the steeper flanks of each slope, located some metres beyond each building platform were either found to be unstable or did not meet the design criteria. As such building restriction limits are proposed for each building platform location. Further detail is provided in the following sections.

The results of the numerical assessment for Lot 1 (Section 1) shows close agreement with the geomorphology of the slopes. The steep slopes to the SW side of the building platform (CH0-50) exhibited poorer performance than the more moderate slopes to the SE (CH80-117). Under design groundwater conditions, the surrounding slopes are generally stable (FOS > 1.0), however the SW slope does not meet the design criterion (FOS of 1.2). Under extreme ground water conditions and loading associated with a ULS seismic event, the SW slope is found to be unstable (FOS<1.0). The SE slope is found to be stable, and meet required design criteria, for all assessed design scenario. Modelled landslide surfaces with FOS less than the required design criteria, extend up to 11 m behind the crest of the SW slope (located at 9 m along section).

The results of the numerical assessment for Lot 2 Building Platform A (Section 2) shows the slopes are generally stable (FOS > 1.0) under design ground water and extreme groundwater conditions. The slope to the north of Building Platform A (CH0-CH45), generally meets the design criteria in all scenarios from a global stability standpoint, however shallow, localised slip circles with critical FOS less than the design criteria are observed where the slope is over-steepened across small lengths. Such shallow instability on the northern slope is not expected to impact on Building Platform A. For the slope to the south of Building Platform A (CHH65-CH113) the design criterion is not met for the extreme groundwater scenario (FOS = 1.07) and the slope is shown to be unstable under loading associated with a ULS seismic event (FOS < 1.0). Modelled landslide surfaces with FOS less than the required design criteria, extend up to 12 m behind the crest of the Southern slope (located at 74 m along section), and come to within 1 m of the proposed building platform.

The results of the numerical assessment for Lot 2 Building Platform B (Section 3) shows the slopes to the north (CH0-CH22) and the south (CH50-CH117) of Building Platform B are generally stable (FOS > 1.0) under design and extreme groundwater conditions. However, the design criteria are not met for either scenario for both the north and south slope. Both the northern and southern slopes are shown to be unstable under loading associated with a ULS seismic event (FOS < 1.0). Modelled landslide circles with FOS less than the required design criteria, extend up to 8 m behind the crest of the northern slope (located at 18 m along section). Modelled landslide surfaces with FOS less than the required design criteria, extend up to 20 m behind the crest of the southern slope (located at 81 m along section).

5.6.4 Mitigation measures

The modelled stability of the slopes outside of the proposed building platforms are either shown to be unstable or achieve FOS lower than the design criteria. To reduce the risk of potential instability impacting on the proposed development, building restriction limits should be established to ensure future building does not occur in areas of the slope susceptible to instability. This is discussed in further detail in Section 6.1.

For Lot 2 Building Platform A palisade retaining walls will be required to protect the building platform along the southern side To provide an adequate margin of safety against instability.

In addition to the building restriction limits, future buildings constructed on slopes with a gradient steeper than 1V:5H should have foundations designed to withstand soil creep, further details are provided in Section 6.4.

5.7 Expansive Soils

No laboratory testing of the soil properties was completed. Based on field tests, the surficial soils display characteristics of low plasticity at the field moisture content and may maintain plastic behaviour over a broad range of moisture content. By extension of soil mechanics principles, the soils are best regarded as potentially being moderately reactive. The site subsoils are therefore best regarded as being class ‘H’ – Highly Expansive when assessed in accordance with B1/AS1 (2021). A 500-year design characteristic ground movement (ys) of up to 78 mm is expected.

Foundations shall be embedded the minimum depths as outlined in Section 6.4 below where effects of soil volume changes between seasons is expected to be minor.

5.8 Conclusions

From our assessment of the natural hazard and ground deformation risks presented to the proposed development we consider that the site is suitable for development. We further consider that the risk of natural hazards impacting on the development to be low subject to the recommendations given in Section 60 being adopted in full.

6 ENGINEERING RECCOMENDATIONS

6.1 Slope Instability Mitigation Measures

6.1.1 Building Restriction Limits

Building restriction limits (BRLs) have been designated for each proposed new residential allotment, the BRLs encompass areas of each lot where the stability analysis showed the FOS for all modelled scenarios exceeded the design criteria. No part of any future building should be constructed outside of the area encompassed by the BRL for each new allotment without specific engineering assessment. Note that the BRLs do not include wastewater disposal fields as buildings, these can be formed outside of the BRLs. The BRL for each building platform is indicated in the site plan below (Figure 9) and in Appendix F. If construction is proposed outside of these restrictions, additional geotechnical testing and slope stability analysis will be required at building consent to confirm the suitability of the proposed development. Note that we have assumed a 10m x 20m building platform within the area encompassed by the BRL for each lot.

6.1.2 Retaining Walls

The slope stability analysis for Lot 2 Building Platform A indicates that landslide surfaces with FOS less than the design criteria came to within 1 m of the building platform. As such, specifically designed, in-ground retaining structures will be required to support any future development in this location, along the southern side of the building platform.

Additionally, any cuts steeper than 1V:3H, and higher than 3 m, will require retaining.

Figure 9: Building Restriction Limits, shown in orange, for each of the proposed building platforms, shown in red.

6.2 Building Platform Development

The proposed building platforms fall across slopes with gradients in the range of 1V:6H-1V:4H. Earthworks to form level building platforms shall be formed in cut only. Any fill placement shall require specific engineering assessment at the Building Consent stage or be supported by an engineered retaining structure.

Cut batters to form level building platforms shall be formed to a maximum angle of 18° (1V:3H) to a maximum height of 3 m or shall be supported by an engineered retaining structure

6.3 Site Contouring and Topsoiling

The finished ground level should be graded so that water cannot pond against, beneath or around the buildings for the economic life of structure. To achieve this, it will be important that the building platform beneath the topsoil grades away from the site. Contouring should avoid the potential for concentration and discharge of surface water over point locations which could result in soil erosion or instability.

6.4 Foundation Recommendations

Ground with a Geotechnical Ultimate Bearing Capacity (GUBC) of 300kPa is expected to be available from beneath topsoil at the site. Due to the sites expansive soil characteristics, the site does not meet the definition of ‘good ground’ under NZS3604.

6.4.1 Foundation Type

Based on the site investigation and analysis, we consider that foundations comprising of shallow strip footings, or bored and poured timber piles, embedded below a depth of 900 mm, or a reinforced, waffle raft, concrete slab designed to withstand surface movements up to 78 mm, are likely suitable for the site conditions though this should be confirmed at building consent.

It is considered that any structure proposed to be constructed on, or within 5 m of ground steeper than 1V:5H (~11°), will require foundations designed to resist soil creep.

So long as these recommendations are adhered to, we anticipate the residual risk to the development presented by Expansive Soils and slope instability to be Low.

6.4.2 Design Considerations

Based on the scope of work completed, the following aspects need to be considered in detailed design:

- Site Class - Class C - Shallow soil
- Expansive soils – H in terms of NZBC (y_s=78mm)
- Soil creep – foundations should be designed for loss of support.

6.5 Potable And Fire Fighting Water

As per Section 4.1 the proposed lots can be served with tanks for both potable and firefighting water purposes.

6.6 Effluent Disposal

In accordance with Section 4.3, we consider that the proposed development can achieve wastewater disposal on site.

6.7 Stormwater/Surface Water

As shown in the Section 4.4 of the report, stormwater neutrality can be achieved via attenuation tanks and a pond for various impervious covers. Our preliminary assessment also shows that each lot has sufficient space available, which is not prone to flooding for 1% AEP storm.

Consent notices will need to be attached to Lot 1 and Lot 2. Lot 1 and 2 must attenuate flows to 80% of pre-development conditions including over attenuating to make provision for half of the ROW area. The total ROW area requiring attenuation must be offset on Lot 1 and Lot 2.

6.7.1 Service Pipes

All service pipes, stormwater structures should be designed and constructed to ensure adequate capacity, strength, and water tightness to prevent leakage into the platform through blockage, running under pressure, or structural failure.

All service pipes installed within any fill should be flexible, or flexibly joined, so that they may deflect without breaking if the ground settles.

A record should be kept of the position, type, and size of all subsoil drains, and in particular of their outlets.

6.8 Trees and Shrubs

Trees can cause damage through heaving as a result of root growth and / or settlement resulting from soil shrinkage from the moisture uptake of the roots. This should be taken into consideration when determining the location of any future buildings/determining the appropriate foundation system/installing services. Mitigation may be required to prevent adverse effects of tree roots on services and building foundations.

If new trees, shrubs or gardens are established, care should be taken to ensure:

- The vegetation does not interfere with any subfloor ventilation or services to the structure.
- Over-watering of the vegetation does not saturate the ground near the foundations.
- Trees or shrubs with the potential to develop significant root systems should be planted a minimum distance equal to the mature height of the plant away from the foundations.

6.9 Site Maintenance

Prompt repair of plumbing leaks should be undertaken. Blocked, broken or faulty spouting should be attended to immediately.

The discharge of uncontrolled surface water over the site and surrounding areas should be avoided at all costs.

7 SUSTAINABILITY

Considering sustainability as early as possible in a project's development, could lead to significant project opportunities and wider positive outcomes. Geotechnical opportunities for increased sustainability for this project include:

- Stripping and stocking topsoil for reuse (dependant on presence/ levels of contaminants).
- Designing for cut and fill balance where possible.

- Reuse of site won materials, or using materials won from other sites including use of recycled crushed concrete aggregate for hard fill.
- Contributing site investigation data to the New Zealand Geotechnical Database (NZGD) to help reduce the site investigations needed in the future.
- Using local consultants and contractors to reduce transport related emissions.

8 CONCLUSION

The purpose of this report is to accompany a resource consent application for the proposed two lot subdivision at 81 Mangatoetoe Road, Kaitaia (Part Allot 81 PSH OF, Kaiaka).

Following development of the site in accordance with our recommendations, we consider that:

a) The land in respect of which a consent is sought, or any structure on the land built in accordance with our recommendations, is unlikely to be subject to material damage by erosion, falling debris, subsidence, slippage, or inundation from any source; and

b) In accordance with the National Policy Statement on Natural Hazard 2025, all natural hazards have been assessed as low risk and/or the recommended engineering measures are sufficient to manage the risk to the development; and

c) Any subsequent use that is likely to be made of the land is unlikely to accelerate, worsen, or result in material damage to the land, other land, or structure by erosion, falling debris, subsidence, slippage, or inundation from any source; and

d) Sufficient provision has been made for physical access to each allotment to be created by the subdivision.

e) the proposed development can be adequately serviced with regard to water supply, firefighting water supply, wastewater, stormwater using the recommendations outlined in this report.

9 LIMITATIONS

This report should be read and reproduced in its entirety including the limitations to understand the context of the opinions and recommendations given.

This report has been prepared exclusively for Mark Gould in accordance with the brief given to us or the agreed scope and they will be deemed the exclusive owner on full and final payment of the invoice. Information, opinions, and recommendations contained within this report can only be used for the purposes with which it was intended. LDE accepts no liability or responsibility whatsoever for any use or reliance on the report by any party other than the owner or parties working for or on behalf of the owner, such as local authorities, and for purposes beyond those for which it was intended.

Opinions given in this report are based on visual methods and subsurface investigations at discrete locations designed to the constraints of the project scope to provide the best assessment of the environment. It must be appreciated that the nature and continuity of the subsurface materials between these locations are inferred and that actual conditions could vary from that described herein. We should be contacted immediately if the conditions are found to differ from those described in this report.

This report was prepared in general accordance with current standards, codes and best practice at the time of this report. These may be subject to change.

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APPENDIX A

GEOTECHNICAL INVESTIGATION PLAN

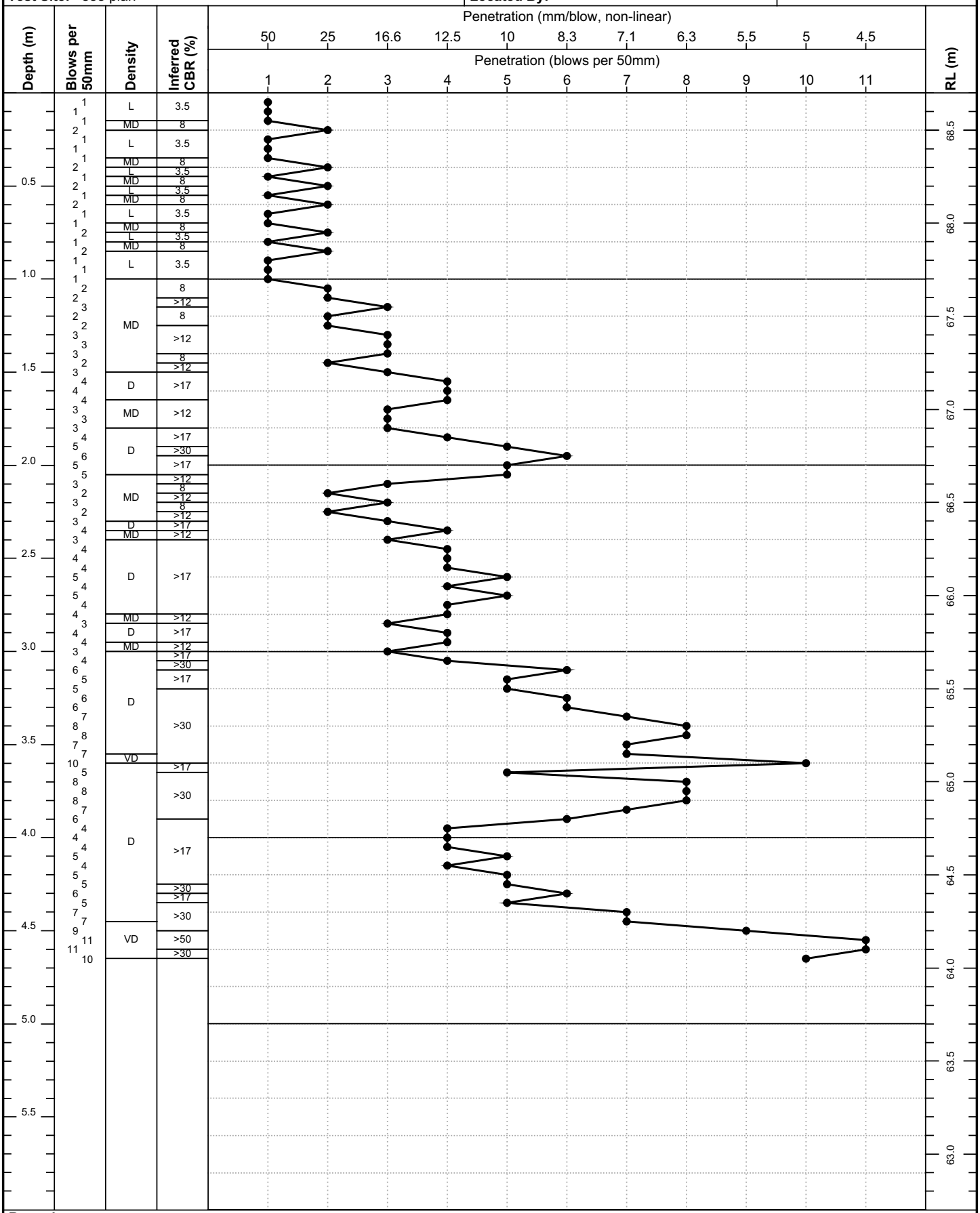

Legend
Proposed Residential Structure
Geotechnical Testing
Hand Auger + DCP
Dynamic Cone Penetrometer
0
20
40 m
DCP02
HA06
Lot 1 BP
HA07
HA10
Lot 2 BPa
DCP04
HA11
HA08
DCP03
Lot 2 BPb
HA09
70
60
90
80
50

APPENDIX B

TEST LOGS

Dynamic Cone Penetrometer Log

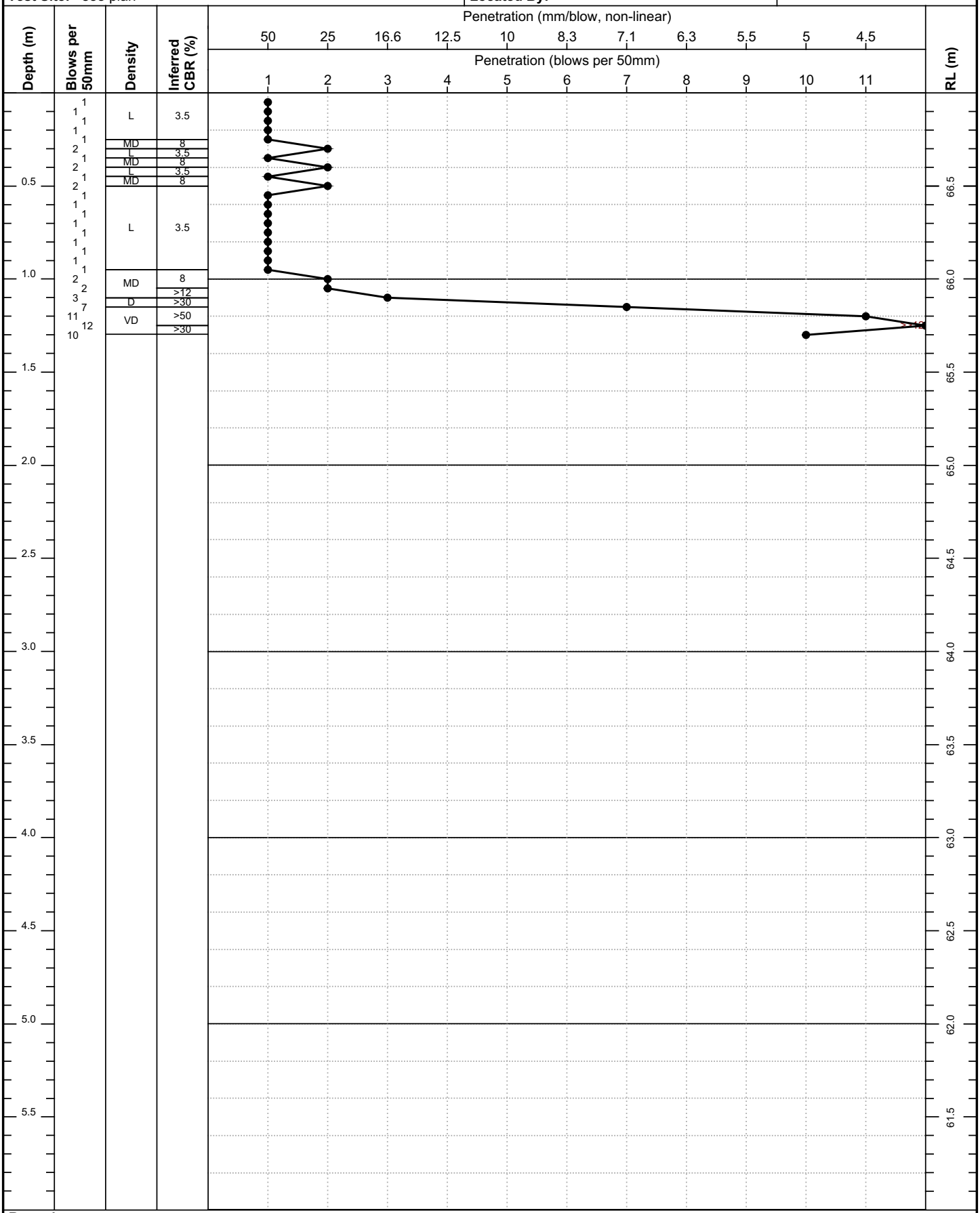
Test ID:	**DCP02**				
Project ID:	30334				
Sheet:	1 of 1				
Client:	Mark Gould	**Coordinates:**	6112992mN, 1637468mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	68.7m	**Checked By:**	CJG
Test Site:	see plan	**Located By:**			



Remarks: Results may be affected by skin friction, particularly where the tested depth exceeds 1.5m. Density classification in terms of NZGS Field Description of Soil and Rock (2005).

Dynamic Cone Penetrometer Log

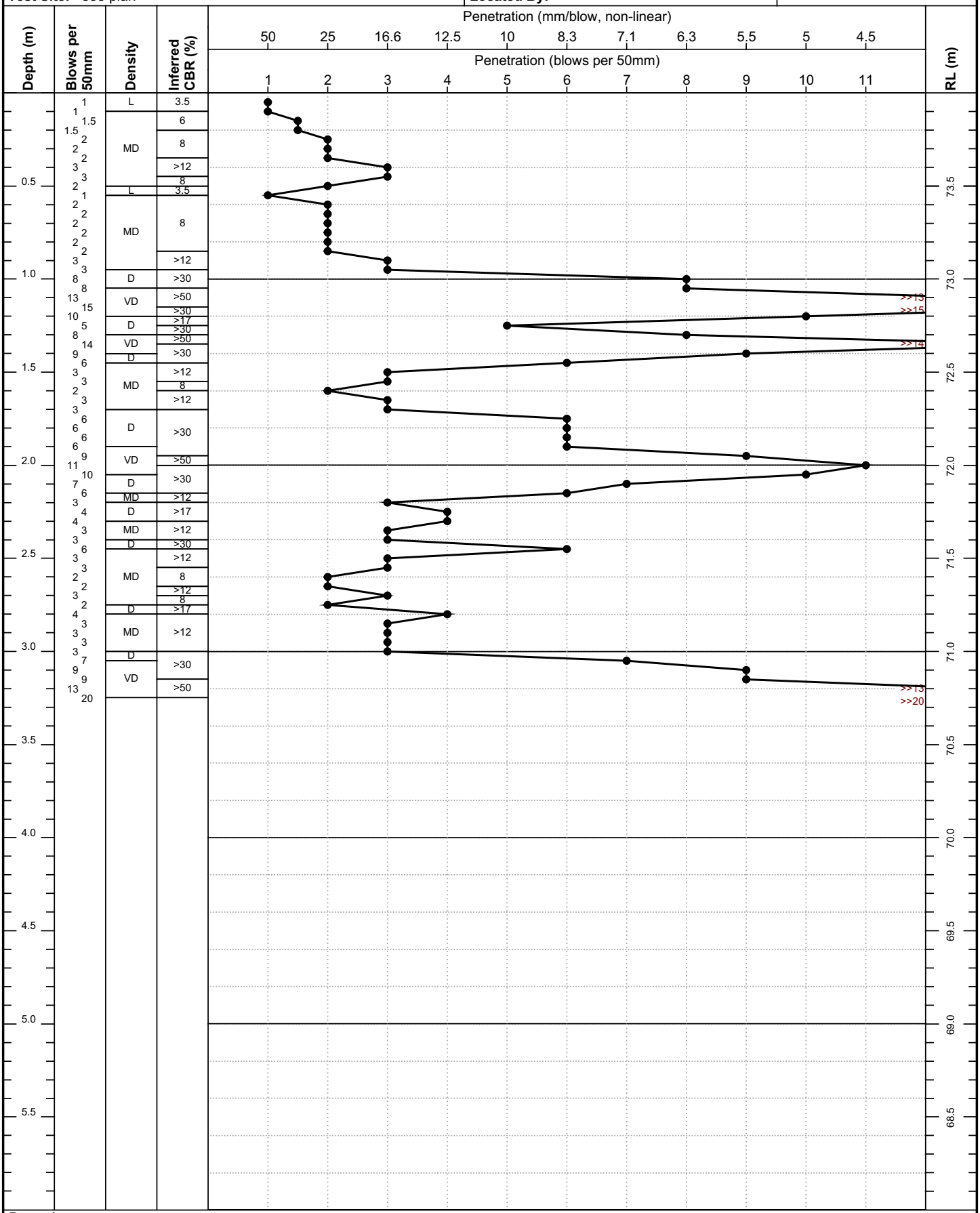
				Test ID:	**DCP03**
				Project ID:	30334
				Sheet:	1 of 1
Client:	Mark Gould	**Coordinates:**	6112889mN, 1637648mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	BL
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	67m	**Checked By:**	CJG
Test Site:	see plan	**Located By:**			



Remarks: Results may be affected by skin friction, particularly where the tested depth exceeds 1.5m. Density classification in terms of NZGS Field Description of Soil and Rock (2005).

Dynamic Cone Penetrometer Log

Test ID:	**DCP04**				
Project ID:	30334				
Sheet:	1 of 1				
Client:	Mark Gould	**Coordinates:**	6112954mN, 1637653mE	**Test Date:**	02/04/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	74m	**Checked By:**	CJG
Test Site:	see plan	**Located By:**			



Remarks: Results may be affected by skin friction, particularly where the tested depth exceeds 1.5m. Density classification in terms of NZGS Field Description of Soil and Rock (2005).

Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA06**				
Project ID:	30334				
Sheet:	1 of 1				
Client:	Mark Gould	**Coordinates:**	6112979mN, 1637475mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	62.3m	**Prepared By:**	CG
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm)	In-situ Testing: Vane undrained shear strength, s_u (kPa)	Values: Vane ID: 3408 peak / residual (sensitivity)	RL (m)
0.0	Topsoil.					62.3
	Silty CLAY; brown and orangish brown. Very stiff; moist; low plasticity.				198 / 69 (2.9)	
0.5	0.40m - 0.70m: Orange.				153 / 86 (1.8)	
	Clayey SILT, with some sand; greenish brown. Very stiff; moist; low plasticity.				194 / 102 (1.9)	
1.0	Clayey SAND; greenish brown. Very stiff; moist; low plasticity.				181 / 96 (1.9)	61.5
	Clayey SILT; light brown with some light grey. Very stiff; moist; low plasticity.				119 / 44 (2.7)	
1.5	1.40m - 1.70m: Brown and light grey.				143 / 84 (1.7)	
	1.60m - 1.70m: Some brownish green sand intermixed.				115 / 48 (2.4)	
	1.70m - 2.20m: Light brown and light grey with some dark brown.				109 / 43 (2.5)	61.0
2.0	2.20m - 2.35m: Sandy SILT; orange. Very stiff; moist; non-plastic.				117 / 56 (2.1)	
	Clayey SILT; mottled: yellowish white, light brown and dark brown. Very stiff; moist to wet; low plasticity.				188 / 58 (3.2)	
2.5	2.50m - 2.55m: SAND; greenish brown.				227+	60.5
	2.80m - 2.90m: Silty SAND; greenish brown. Stiff.				112 / 46 (2.4)	
3.0	3.00m - 3.05m: SAND; greenish brown.	Groundwater not encountered			115 / 61 (1.9)	
	SILT; brown. Very stiff; moist to wet; non-plastic.				84 / 44 (1.9)	60.0
3.5	Clayey SILT; brown and orange. Very stiff; moist; low plasticity.				99 / 44 (2.3)	
	4.00m - 4.20m: Silty SAND; greenish brown; moist.				74 / 49 (1.5)	
4.0	4.20m: Brown; moist to wet.				99 / 58 (1.7)	59.5
	4.30m - 4.40m: SAND; greenish brown.				82 / 53 (1.5)	
	4.40m: Orange, light brown, light grey with some black.				132 / 49 (2.7)	
4.5	4.50m - 4.60m: SAND; greenish brown.				181 / 63 (2.9)	59.0
	4.65m - 4.70m: SAND; greenish brown.				191 / 77 (2.5)	
5.0					162 / 59 (2.7)	58.5
5.5					11▶ 16▶ 14▶	58.0
						57.5
						57.0
						56.5

Hole Depth: 4.70m

Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

Vane peak
Vane residual
Vane UTP
Standing water level
Groundwater inflow
Groundwater outflow
UTP = Unable to Penetrate

Generated with CORE-GS by Geroc - HAxTP Log v9 - 30/04/2026 5:39:23 pm

Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA07**
Project ID:	30334
Sheet:	1 of 1

Client:	Mark Gould	**Coordinates:**	6112947mN, 1637479mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	BL
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	56.3m	**Prepared By:**	BL
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Geology	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm)	In-situ Testing: Vane undrained shear strength, s_u (kPa)	Values: Vane ID: 2864 peak / residual (sensitivity)	RL (m)
0.0	Topsoil	Organic silty SAND; dark greyish brown; moist; non plastic.	Groundwater not encountered				56.0
0.5	Taipa Mudstone in Northland Allochthon	Silty CLAY minor sand; light brownish orange, orange mottling; moist; high plasticity.				200+	
						200+	
		Silty SAND trace clay; greenish brown, brownish orange streaks; moist; very stiff; non plastic.				200+	
1.0		Silty SAND some clay; greenish brown, brownish orange streaks; moist; very stiff; low plasticity.				200+	55.5
						180 / 36 (5.0)	
1.5		Silty SAND trace clay; greenish brown, brownish orange streaks; moist; very stiff; non plastic.				183 / 31 (5.9)	55.0
						179 / 31 (5.8)	
2.0						UTP	54.5
2.5						176 / 34 (5.2)	54.0
						UTP	
3.0							53.5
3.5							53.0
4.0							52.5
4.5							52.0
5.0							51.5
5.5							51.0
							50.5

13▶
14▶
16▶

Hole Depth: 2.60m **Termination:** Hard Material

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA08**
Project ID:	30334
Sheet:	1 of 1

Client:	Mark Gould	**Coordinates:**	6112899mN, 1637637mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	64.8m	**Prepared By:**	CG
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Geology	Graphic Log	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm) 2 4 6 8; Vane undrained shear strength, s_u (kPa) 50 100 150 200	Values: Vane ID: 3408 peak / residual (sensitivity)	RL (m)
0.0	Topsoil (0.10)		Topsoil.	Groundwater not encountered			64.8
0.5	Taipa Mudstone in Northland Allochthon		Clayey SILT, with some sand; greenish brown. Very stiff; moist; low plasticity.			227+	64.5
			Silty SAND; brownish green. Dense; moist; non-plastic.				
1.0			Clayey SILT; greenish brown with some brown. Very stiff; moist; low plasticity.			UTP	64.0
			Silty SAND; brownish green. Dense; moist.		14▶ 22▶		63.5
1.5							63.0
2.0							62.5
2.5							62.0
3.0							61.5
3.5							61.0
4.0							60.5
4.5							60.0
5.0							59.5
5.5							59.0

Hole Depth: 0.90m

Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

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Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA09**
Project ID:	30334
Sheet:	1 of 1

Client:	Mark Gould	**Coordinates:**	6112870mN, 1637647mE	**Test Date:**	17/02/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	BL
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	63.8m	**Prepared By:**	BL
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Geology	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm)	In-situ Testing: Vane undrained shear strength, s_u (kPa)	Values: Vane ID: 2864 peak / residual (sensitivity)	RL (m)
0.0	Top soil	Organic silty SAND; dark greyish brown; moist; non plastic.	Groundwater not encountered	2, 4, 6, 8	50, 100, 150, 200	82 / 19 (4.3)	63.8
0.5	Taipa Mudstone in Northland Allochthon	Clayey SILT some sand; brownish orange; slightly moist; very stiff; high plasticity.				200+	63.5
1.0		Silty SAND; greenish brown; moist; very stiff; no plasticity.				174 / 37 (4.7)	63.0
1.5		Silty CLAY with minor sand; light brownish orange; moist; stiff to very stiff; high plasticity.				UTP	62.5
2.0		Silty SAND; greenish brown; moist; very stiff; no plasticity.				132 / 24 (5.5)	62.0
2.5		Silty CLAY with minor sand; light brownish orange; moist; stiff to very stiff; high plasticity.				174 / 70 (2.5)	61.5
3.0		Silty SAND; greenish brown; moist; very stiff; no plasticity.				134 / 29 (4.6)	61.0
3.5						94 / 19 (4.9)	60.5
4.0						140 / 40 (3.5)	60.0
4.5						114 / 26 (4.4)	59.5
5.0						184 / 37 (5.0)	59.0
5.5							58.5
							58.0

13►
11►

Hole Depth: 2.30m **Termination:** Hard Material

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Generated with CORE-GS by Geroc - HAxTP Log v9 - 30/04/2026 5:39:25 pm

Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA10**
Project ID:	30334
Sheet:	1 of 1

Client:	Mark Gould	**Coordinates:**	6112961mN, 1637629mE	**Test Date:**	02/04/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	70m	**Prepared By:**	CJG
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Geology	Graphic Log	Material Description	Water	In-situ Testing	Values	RL (m)
0.0	Taipa Mudstone in Northland Allochthon		Topsoil.	Groundwater not encountered	Dynamic cone penetrometer (blows / 50mm) 2 4 6 8; Vane undrained shear strength, s_u (kPa) 50 100 150 200	Vane ID: 3408 peak / residual (sensitivity)	70.0
0.5			Clayey SILT; greenish brown. Very stiff; moist; medium plasticity.			181 / 82 (2.2)	69.5
1.0			Sandy SILT; brownish green. Medium dense to dense; moist; non-plastic.			132 / 49 (2.7)	69.0
1.5					15▶ 18▶ 20▶		68.5
2.0							68.0
2.5							67.5
3.0							67.0
3.5							66.5
4.0							66.0
4.5							65.5
5.0							65.0
5.5							64.5

Hole Depth: 1.40m **Termination:** Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Hand Auger Borehole Log

Method: 50mm Hand Auger

Test ID:	**HA11**				
Project ID:	30334				
Sheet:	1 of 1				
Client:	Mark Gould	**Coordinates:**	6112942mN, 1637649mE	**Test Date:**	02/04/2026
Project:	Geotechnical Investigation	**System:**	NZTM	**Logged By:**	CJG
Location:	81 Mangatoetoe Road, Kaitaia	**Elevation:**	66.5m	**Prepared By:**	CJG
Test Site:	Refer to site plan	**Located By:**	Surveyed	**Checked By:**	CJG

Depth (m)	Geology	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm)	In-situ Testing: Vane undrained shear strength, s_u (kPa)	Values: Vane ID: 3408 peak / residual (sensitivity)	RL (m)
0.0	Taipa Mudstone in Northland Allochthon	Clayey SILT, with some sand; greenish brown. Very stiff; moist; low plasticity.	Groundwater not encountered	2, 4, 6, 8	50, 100, 150, 200	227+	66.0
0.5						214 / 59 (3.6)	
1.0		Silty SAND; brownish green. Medium dense; moist; non-plastic.					65.5
1.5		Silty CLAY; orange. Very stiff; moist; high plasticity.					65.0
		Silty SAND; brownish green. Medium dense; moist to wet; non-plastic.					
2.0		Silty CLAY; orange. Stiff; moist; high plasticity.					64.5
		Sandy SILT; brownish green. Medium dense; moist to wet; non-plastic.					
		Silty CLAY; orange. Stiff; moist; high plasticity.					
2.5		Silty SAND; brownish green. Medium dense to dense; moist.					64.0
		Silty CLAY; orangish grey with brown flecks. Stiff; moist; high plasticity.				49 / 36 (1.4)	
3.0		Silty SAND; brownish green. Medium dense; moist; already disturbed by DCP .					63.5
3.5							63.0
4.0							62.5
4.5							62.0
5.0							61.5
5.5							61.0

Hole Depth: 2.80m

Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

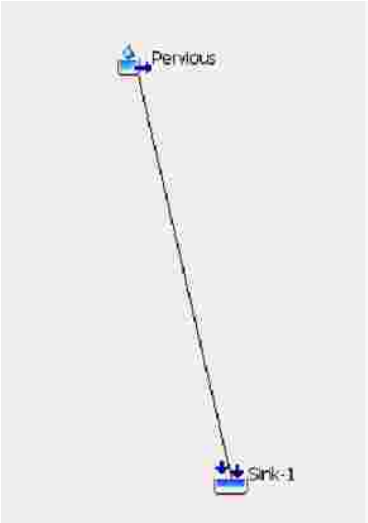
UTP = Unable to Penetrate

APPENDIX C

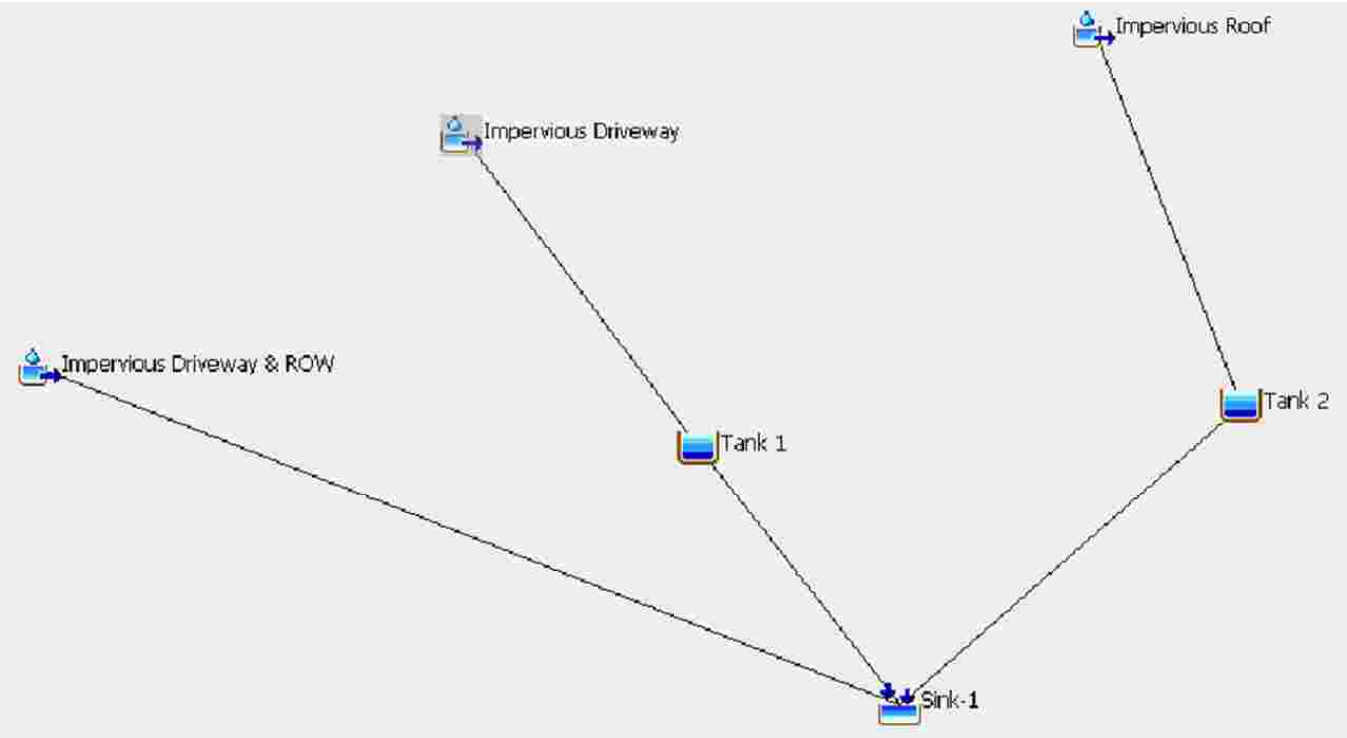
HEC-HMS SCHEMATICS AND DETAILED OUTPUTS

HEC HMS LAYOUT

PRE-DEVELOPMENT



POST-DEVELOPMENT



PREDEVELOPMENT

Project: 81 Mangatoetoe Simulation Run: Pre 2

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:32:40

Basin Model: Predevelopment
Meteorologic Model: Pre 2 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Pervious	0.00080	0.00294	1 January 2000, 08:...	60.21148
Sink-1	0.00080	0.00294	1 January 2000, 08:...	60.21148

Project: 81 Mangatoetoe Simulation Run: Pre 10

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:33:15

Basin Model: Predevelopment
Meteorologic Model: Pre 10 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Pervious	0.00080	0.00580	1 January 2000, 08:...	113.15952
Sink-1	0.00080	0.00580	1 January 2000, 08:...	113.15952

Project: 81 Mangatoetoe Simulation Run: Pre 100

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:33:30

Basin Model: Predevelopment
Meteorologic Model: Pre 100 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Pervious	0.00080	0.01059	1 January 2000, 08:...	200.60979
Sink-1	0.00080	0.01059	1 January 2000, 08:...	200.60979

PREDEVELOPMENT

Project: 81 Mangatoetoe Simulation Run: Post 2

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:36:11
Basin Model: Postdevelopment
Meteorologic Model: Post 2 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Impervious Roof	0.00040	0.00284	1 January 2000, 08:...	109.39196
Tank 2	0.00040	0.00093	1 January 2000, 09:...	93.33908
Sink-1	0.00080	0.00166	1 January 2000, 08:...	96.38164
Impervious Driveway	0.00030	0.00213	1 January 2000, 08:...	109.39196
Tank 1	0.00030	0.00048	1 January 2000, 10:...	96.10161
Impervious Drivewa...	0.00010	0.00071	1 January 2000, 08:...	109.39196

Project: 81 Mangatoetoe Simulation Run: Post 10

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:37:05
Basin Model: Postdevelopment
Meteorologic Model: Post 10 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Impervious Roof	0.00040	0.00441	1 January 2000, 08:...	171.86903
Tank 2	0.00040	0.00236	1 January 2000, 08:...	146.63161
Sink-1	0.00080	0.00410	1 January 2000, 08:...	149.53989
Impervious Driveway	0.00030	0.00331	1 January 2000, 08:...	171.86903
Tank 1	0.00030	0.00117	1 January 2000, 09:...	145.97457
Impervious Drivewa...	0.00010	0.00110	1 January 2000, 08:...	171.86903

Project: 81 Mangatoetoe Simulation Run: Post 100

Start of Run: 01Jan2000, 00:00
End of Run: 02Jan2000, 00:00
Compute Time: 23Apr2026, 14:37:26
Basin Model: Postdevelopment
Meteorologic Model: Post 100 Year
Control Specifications: Control 1

Show Elements: All Elements Volume Units: MM 1000 M3 Sorting: Watershed Explorer

Hydrologic Element	Drainage Area (KM2)	Peak Discharge (M3/S)	Time of Peak	Volume (MM)
Impervious Roof	0.00040	0.00682	1 January 2000, 08:...	267.44261
Tank 2	0.00040	0.00377	1 January 2000, 08:...	239.76498
Sink-1	0.00080	0.00775	1 January 2000, 08:...	240.35541
Impervious Driveway	0.00030	0.00511	1 January 2000, 08:...	267.44261
Tank 1	0.00030	0.00287	1 January 2000, 08:...	232.11358
Impervious Drivewa...	0.00010	0.00170	1 January 2000, 08:...	267.44261

APPENDIX D

RAINFALL DATA

Rainfall depths (mm): Historical Data									
ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h
1.58	0.633	8.59	13	16.4	23.9	33.6	54.1	69.9	87.1
2	0.5	9.4	14.3	18	26.1	36.8	59.3	76.7	95.7 114.8*
5	0.2	12.2	18.5	23.4	34	48	77.5	100	125
10	0.1	14.3	21.7	27.4	39.9	56.4	91.1	118	148 177.6*
20	0.05	16.4	25	31.6	46	65	105	136	171
30	0.033	17.7	27	34.1	49.7	70.2	114	148	185
40	0.025	18.6	28.4	35.9	52.3	74	120	156	195
50	0.02	19.3	29.5	37.3	54.4	77	125	162	203
60	0.017	19.9	30.4	38.5	56.1	79.4	129	167	210
80	0.013	20.9	31.9	40.3	58.8	83.3	135	176	220
100	0.01	21.6	33	41.8	61	86.3	140	182	228 273.6*

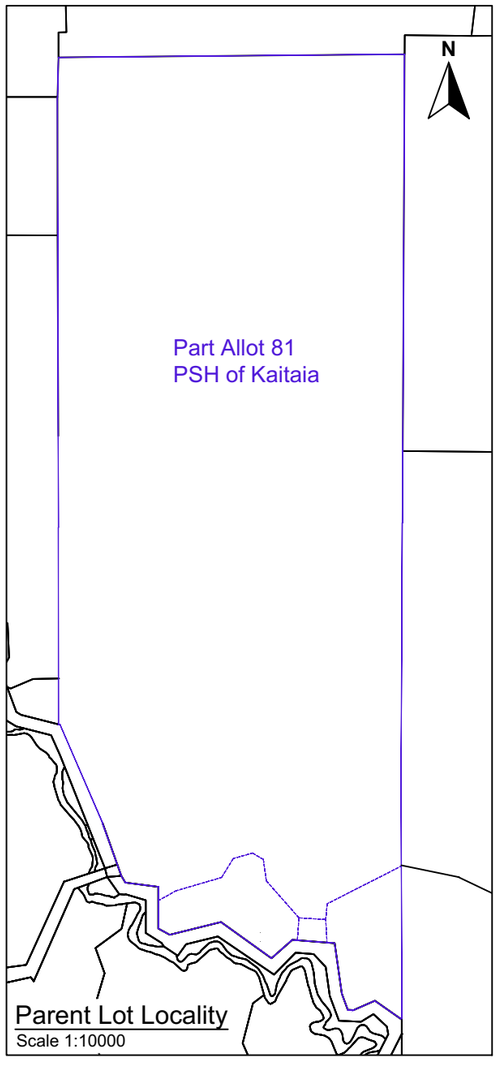
**Values increased by 20% to account for climate change*

APPENDIX E

Civil Engineering Drawing Set

LEGEND

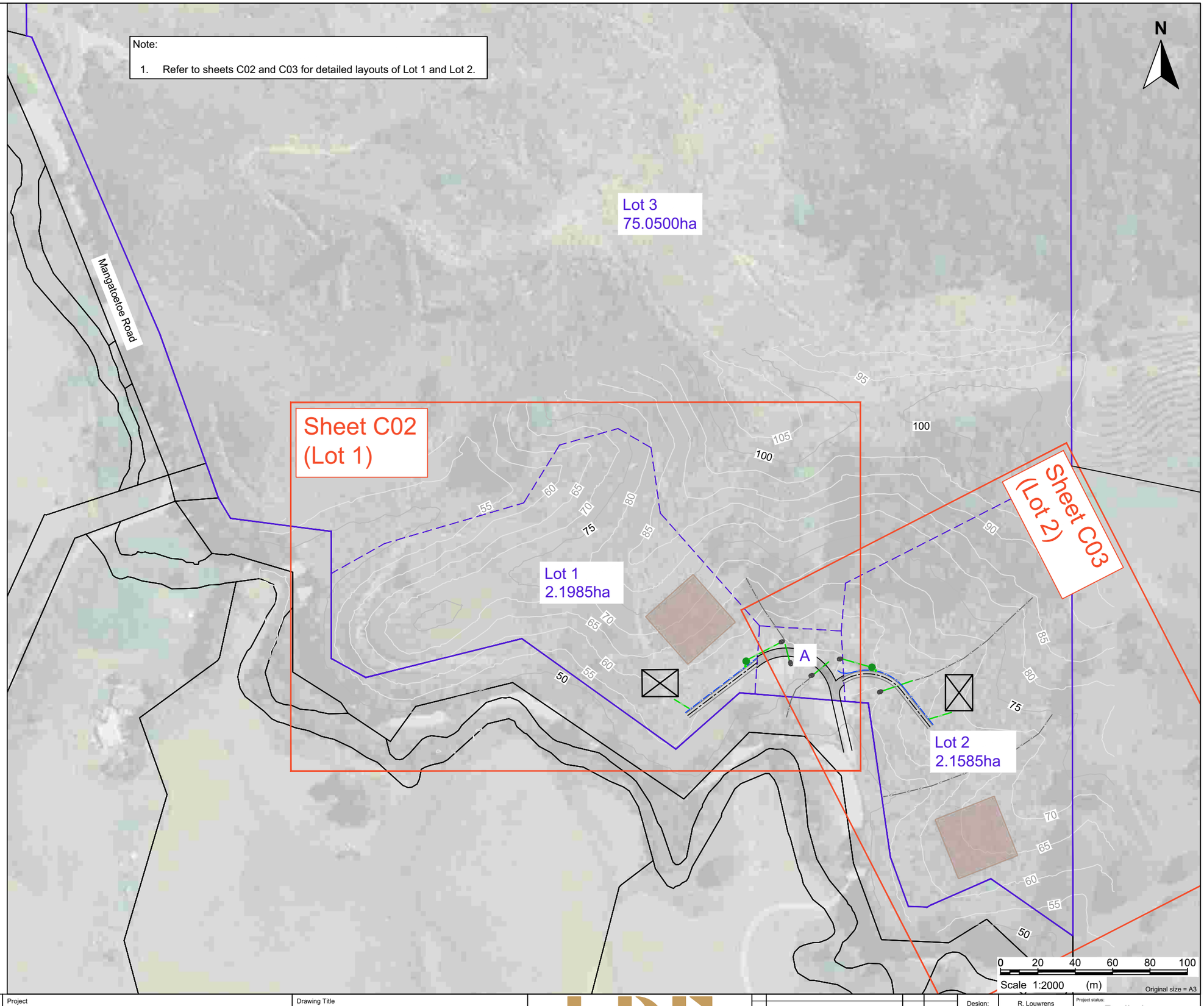
- Subject Lot
- Subdivision Boundaries
- Other Lot Boundaries
- Major Contour (25m)
- Minor Contour (5m)
- Existing Overland Flow Path
- Proposed House Platform
- Proposed Effluent Disposal Area
- Proposed SW Culvert/Pipe
- Proposed Attenuation Tank
- Proposed Scruffy Dome
- Proposed Channel



Parent Lot Locality
Scale 1:10000

Note:

1. Refer to sheets C02 and C03 for detailed layouts of Lot 1 and Lot 2.



Client	Mark Gould		
Project	81 Mangatoetoe Road Subdivision Kaitaia		
Drawing Title	Proposed Site Plan - Overall		
LDE engineers • scientists			
A	Resource Consent	H.G.	28-04-2026
No.	Issue/Revision	Aprvd	Date
Design:	R. Louwrens	Project status:	Preliminary
Drawn:	R. Louwrens	Project:	30334
Approved:	H. Gibson	Drawing No:	C01
Scale A3:	As Shown	Issue/Rev	A

LEGEND

- Subject Lot
- Subdivision Boundaries
- Other Lot Boundaries
- Major Contour (25m)
- Minor Contour (5m)
- Existing Overland Flow Path
- Proposed House Platform
- Proposed Effluent Disposal Area
- Proposed SW Culvert/Pipe
- Proposed Attenuation Tank
- Proposed Scruffy Dome
- Proposed Channel

N

General Notes:

1. Private driveway and associated stormwater infrastructure only shown to prove feasibility. Actual layout and detail subject to detailed design at building consent stage.
2. Riprap to be installed downstream of all piped outlets. Riprap to be sized during detailed design.
3. All culverts, inlets and outlets to be sized during detailed design.
4. Attenuation tanks located on Lot 1 and 2 to accommodate attenuation of ROW by means of offsetting. Consent notices to be incorporated accordingly for Lot 1 and Lot 2.

Wastewater Notes:

1. With the assumption that a four-bedroom dwelling is likely to be constructed on each of the various proposed Lots with an average occupancy of six persons, we have calculated the required disposal areas to demonstrate that onsite disposal is available within the proposed lot. Accordingly, a building specific design will be required for the dwelling at building consent which will specifically size the treatment device and disposal field. With an on-site rainwater collection from the roof areas as water supply and assuming standard water saving fixtures will be installed, a wastewater flow allowance of 180L/day/person has been used in the onsite disposal design system. These assumptions result in a daily wastewater flow of 1,080 L/day for each of the dwellings on the respective lots.
2. The most viable option for the site is discharging the secondary treated effluent to pressure compensated dripper lines. Given the daily wastewater demand of 1,080L/day and the soil loading rate of 1.8 mm/day (3mm/day reduced by 40%) the disposal area required for each of the respective lots will be 600m^2. Each lot also require provision for a reserve disposal area equalling that of the calculated disposal area, totalling 1,200m^2 to be dedicated on each lot for disposal area.

Lot 1
2.1985ha

Indicative location feasible for waste water effluent disposal (1,200m²)

Easement A located on Lot 3

Proposed ROW, 4.5m wide (280m² as shown)

Proposed tank overflow

Runoff from rainwater harvesting overflow and runoff from private driveway captured via scruffy dome in channel for attenuation within 25,000L tank and discharged as shown

Proposed SW culverts

A

30m buffer zone

Rainwater harvesting overflow discharged to channel

Vehicle crossing to be upgraded to FNDC Engineering Standards - Type 1

Proposed channel, to be lined with riprap where velocities exceed 2 m/s

-1:2.5 -1:2.4 -1:2.4 -1:3.0 -1:3.0

9m 17m

47m 40 30 20 10 0

50 55 60 65 70 75 80 85 100 105

0 7.5 15 22.5 30 37.5

Scale 1:750 (m)

Original size = A3

Client: Mark Gould	Project: 81 Mangatoetoe Road Subdivision, Kaitaia	Drawing Title: Proposed Site Plan - Lot 1	LDE engineers • scientists	A / Resource Consent / H.G. / 28-04-2026 (No. / Issue/Revision / Aprvd / Date)	Design: R. Louwrens	Drawn: R. Louwrens	Approved: H. Gibson	Scale A3: As Shown	Project status: Preliminary	Project: 30334	Drawing No: C02	Issue/Rev: A

LEGEND

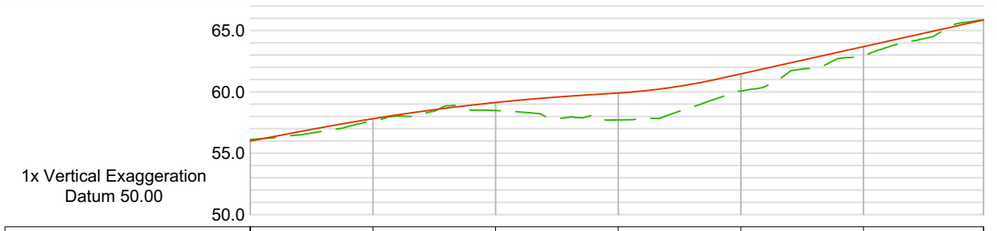
- Subject Lot
- Subdivision Boundaries
- Other Lot Boundaries
- Major Contour (25m)
- Minor Contour (5m)
- Existing Overland Flow Path
- Proposed House Platform
- Proposed Effluent Disposal Area
- Proposed SW Culvert/Pipe
- Proposed Attenuation Tank
- Proposed Scruffy Dome
- Proposed Channel

Wastewater Notes:

1. With the assumption that a four-bedroom dwelling is likely to be constructed on each of the various proposed Lots with an average occupancy of six persons, we have calculated the required disposal areas to demonstrate that onsite disposal is available within the proposed lot. Accordingly, a building specific design will be required for the dwelling at building consent which will specifically size the treatment device and disposal field. With an on-site rainwater collection from the roof areas as water supply and assuming standard water saving fixtures will be installed, a wastewater flow allowance of 180L/day/person has been used in the onsite disposal design system. These assumptions result in a daily wastewater flow of 1,080 L/day for each of the dwellings on the respective lots.
2. The most viable option for the site is discharging the secondary treated effluent to pressure compensated dripper lines. Given the daily wastewater demand of 1,080L/day and the soil loading rate of 1.8 mm/day (3mm/day reduced by 40%) the disposal area required for each of the respective lots will be 600m^2. Each lot also require provision for a reserve disposal area equalling that of the calculated disposal area, totalling 1,200m^2 to be dedicated on each lot for disposal area.

General Notes:

1. Private driveway and associated stormwater infrastructure only shown to prove feasibility. Actual layout and detail subject to detailed design at building consent stage.
2. Riprap to be installed downstream of all piped outlets. Riprap to be sized during detailed design.
3. All culverts, inlets and outlets to be sized during detailed design.
4. Attenuation tanks located on Lot 1 and 2 to accommodate attenuation of ROW by means of offsetting. Consent notices to be incorporated accordingly for Lot 1 and Lot 2.



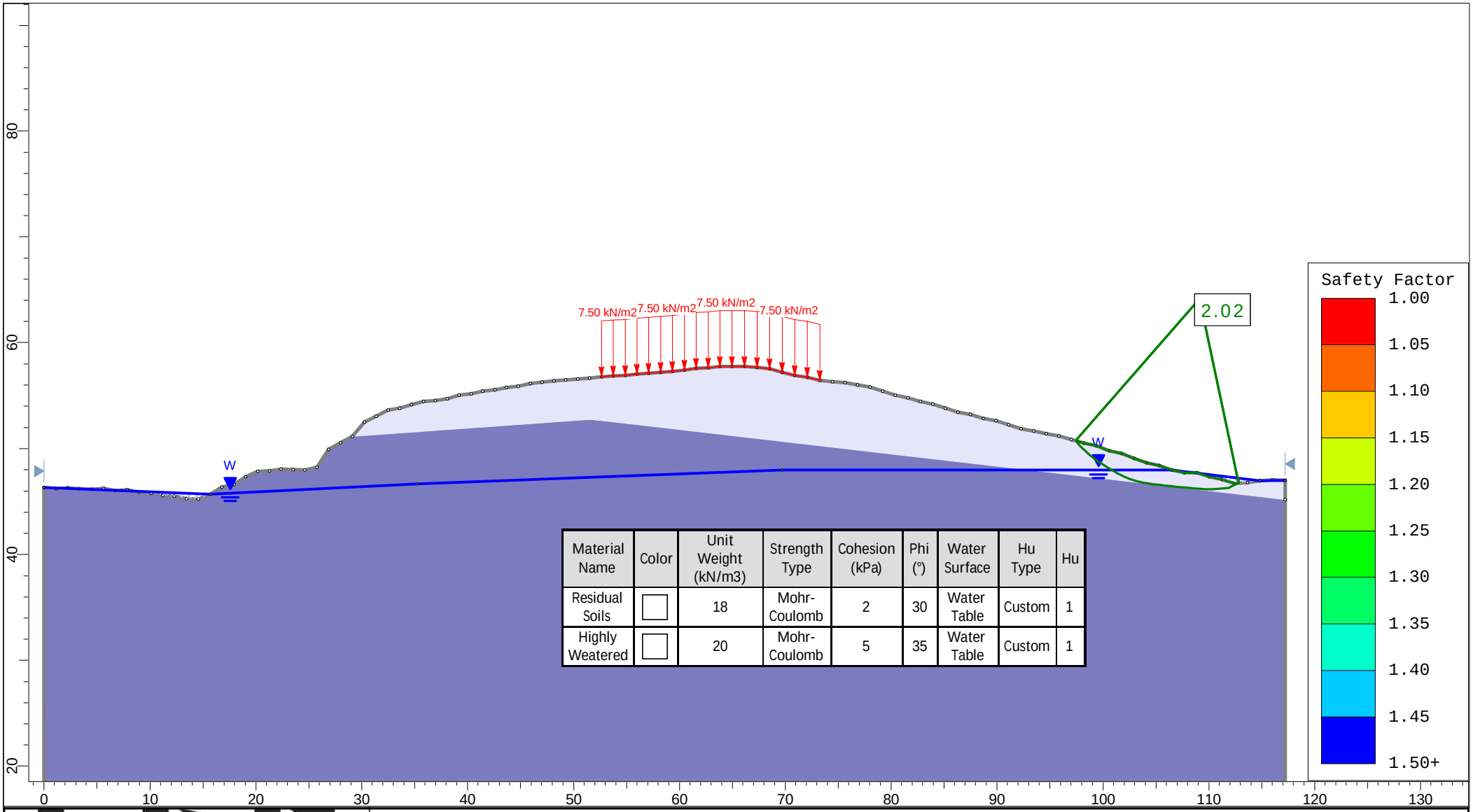
Design Levels	56.00	57.82	59.14	59.91	61.47	63.69	65.86
Existing Levels	56.11	57.63	58.48	57.72	60.07	62.95	65.86
Cut (-) / Fill (+) Depth	-0.11	+0.19	+0.65	+2.19	+1.40	+0.73	0.00
Chainage		10.00	20.00	30.00	40.00	50.00	
Vertical Geometry		18.8% 5.33m	R:172.0m | K:1.7 21.238m	6.5% 3.50m	R:52.6 | K:0.5 8.27m	22.2% 21.47m	

Long Section - LOT 2 PRIVATE DRIVEWAY

Client: Mark Gould	Project: 81 Mangatoetoe Road Subdivision Kaitaia	Drawing Title: Proposed Site Plan - Lot 2	LDE engineers • scientists			Design: R. Louwrens	Project status: Preliminary
						Drawn: R. Louwrens	Project: 30334
						Approved: H. Gibson	Drawing No: C03 / Issue/Rev: A
						Scale A3: As Shown	
			A	Resource Consent	H.G. 28-04-2026		
			No.	Issue/Revision	Aprvd Date		

APPENDIX F

SLOPE STABILITY ANALYSIS



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type	Hu
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Custom	1
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Custom	1

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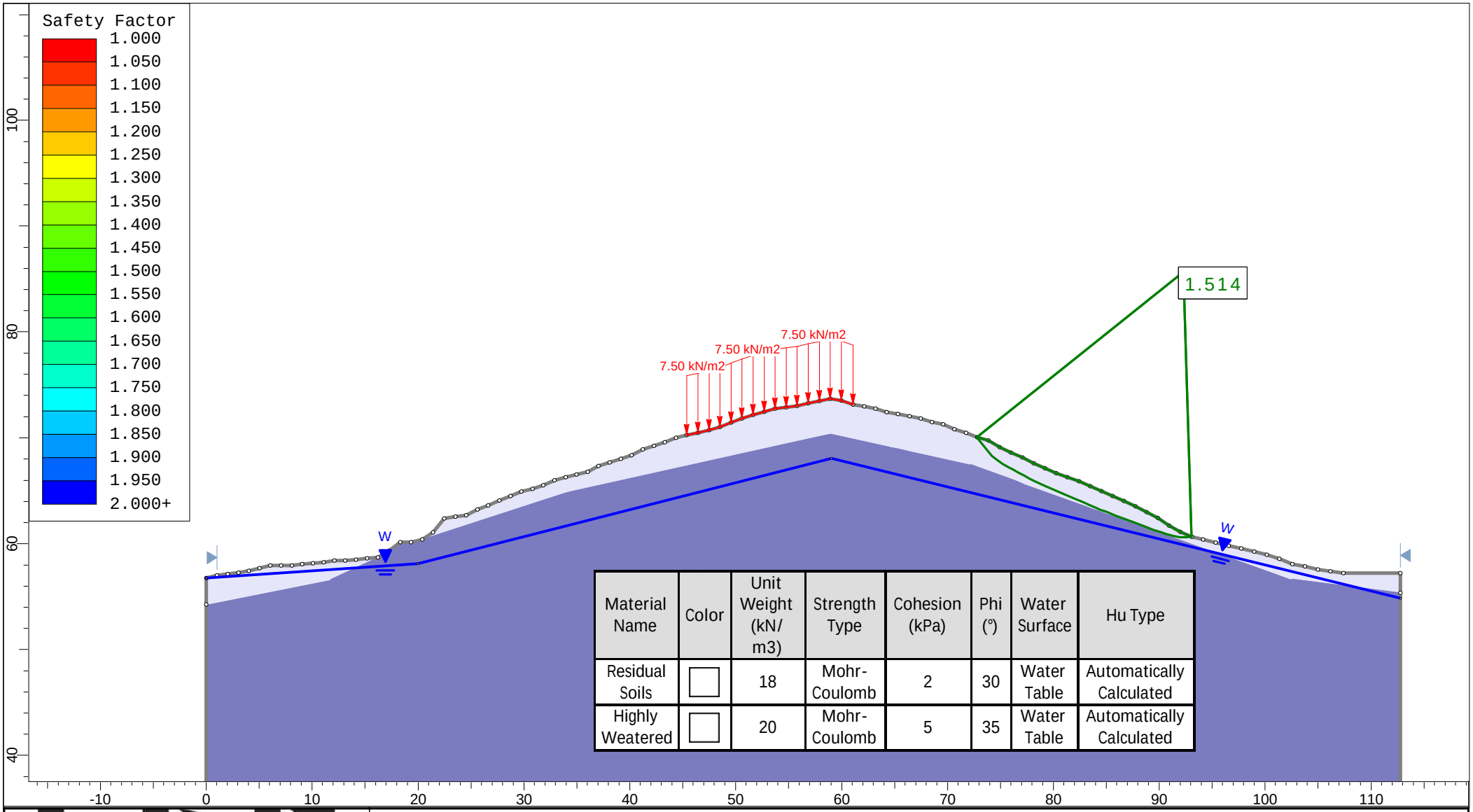
Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision
Lot 1 Building Platform	Scenario: RH Slope - Design GW - Global Minimum
Drawn By: CJG	Date: 5/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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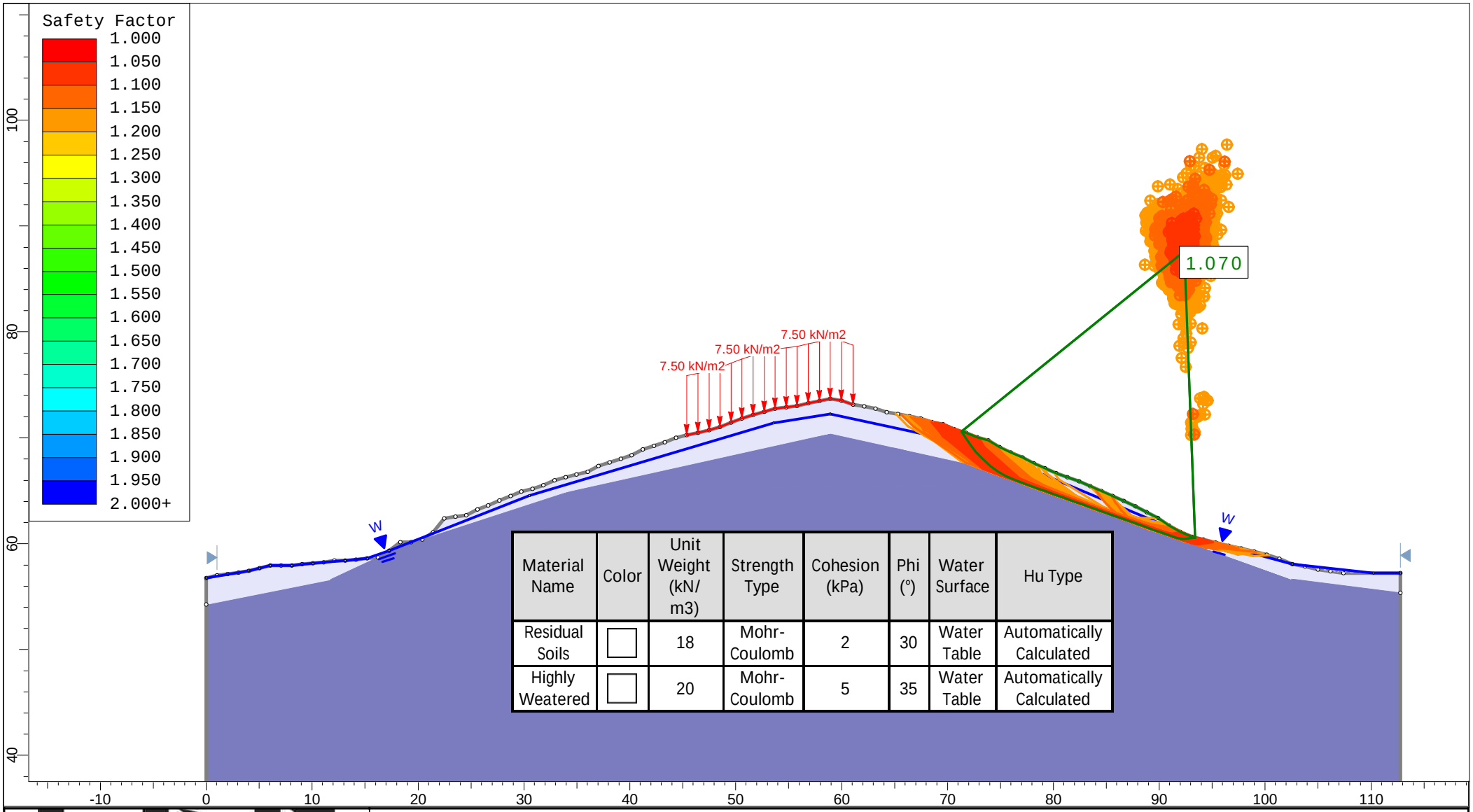
Project Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform A	*Scenario* Master Scenario
Drawn By CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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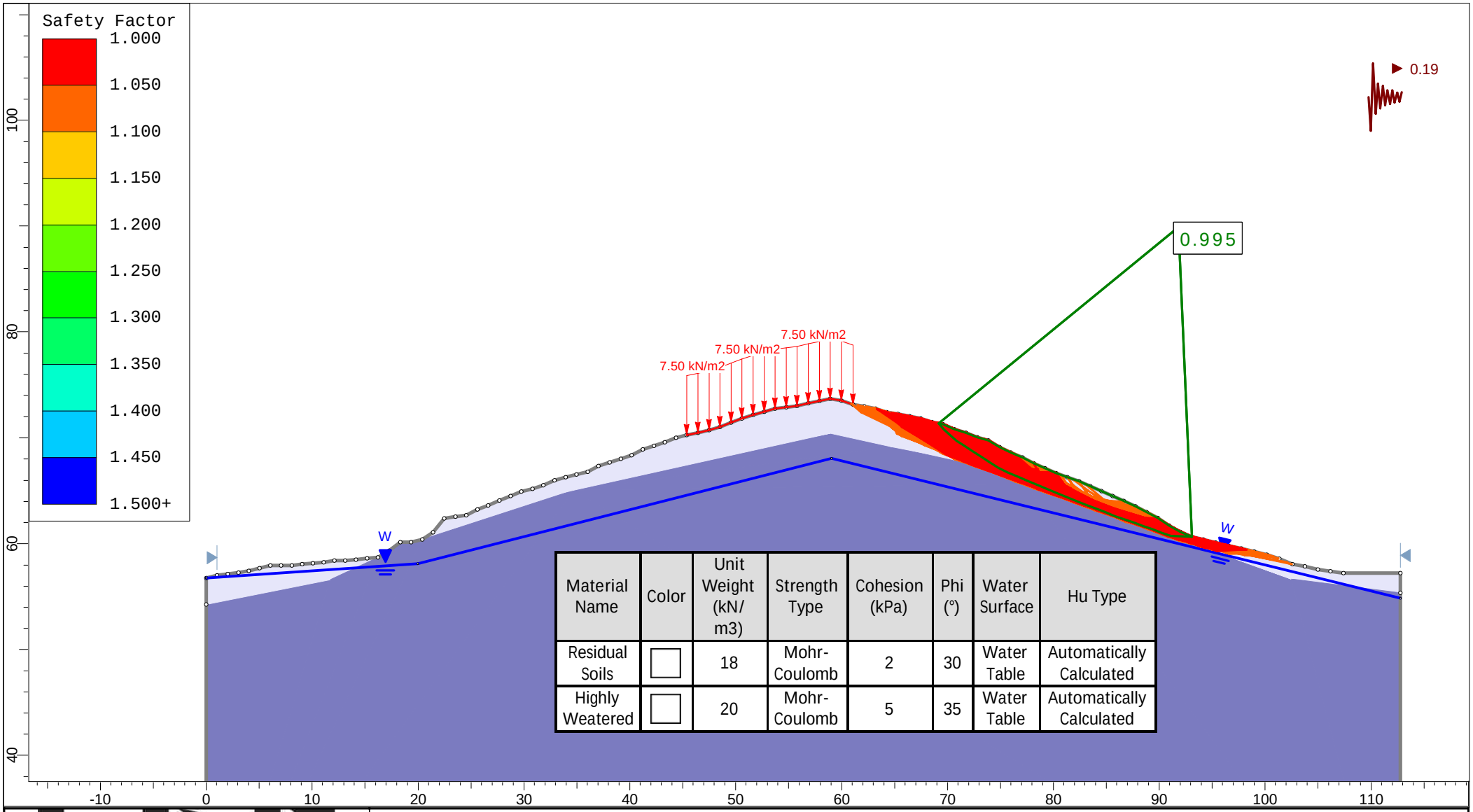
Project Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform A	*Scenario* RH Slope - Extreme GW - FOS<1.2
Drawn By CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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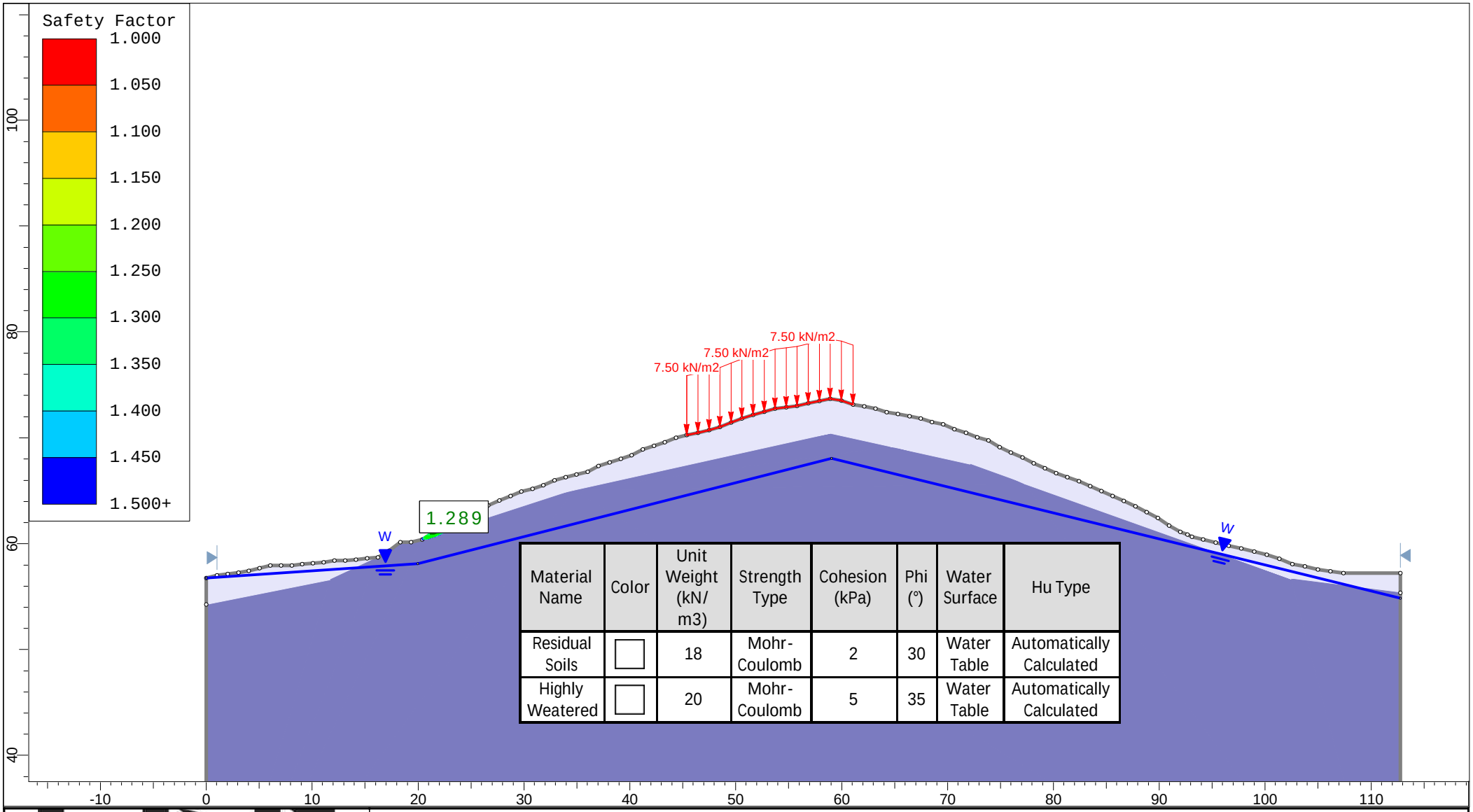
Project
Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision

Lot 2 Building Platform A

Scenario
RH Slope - ULS - FOS<1.1

Drawn By
CJG

Date
6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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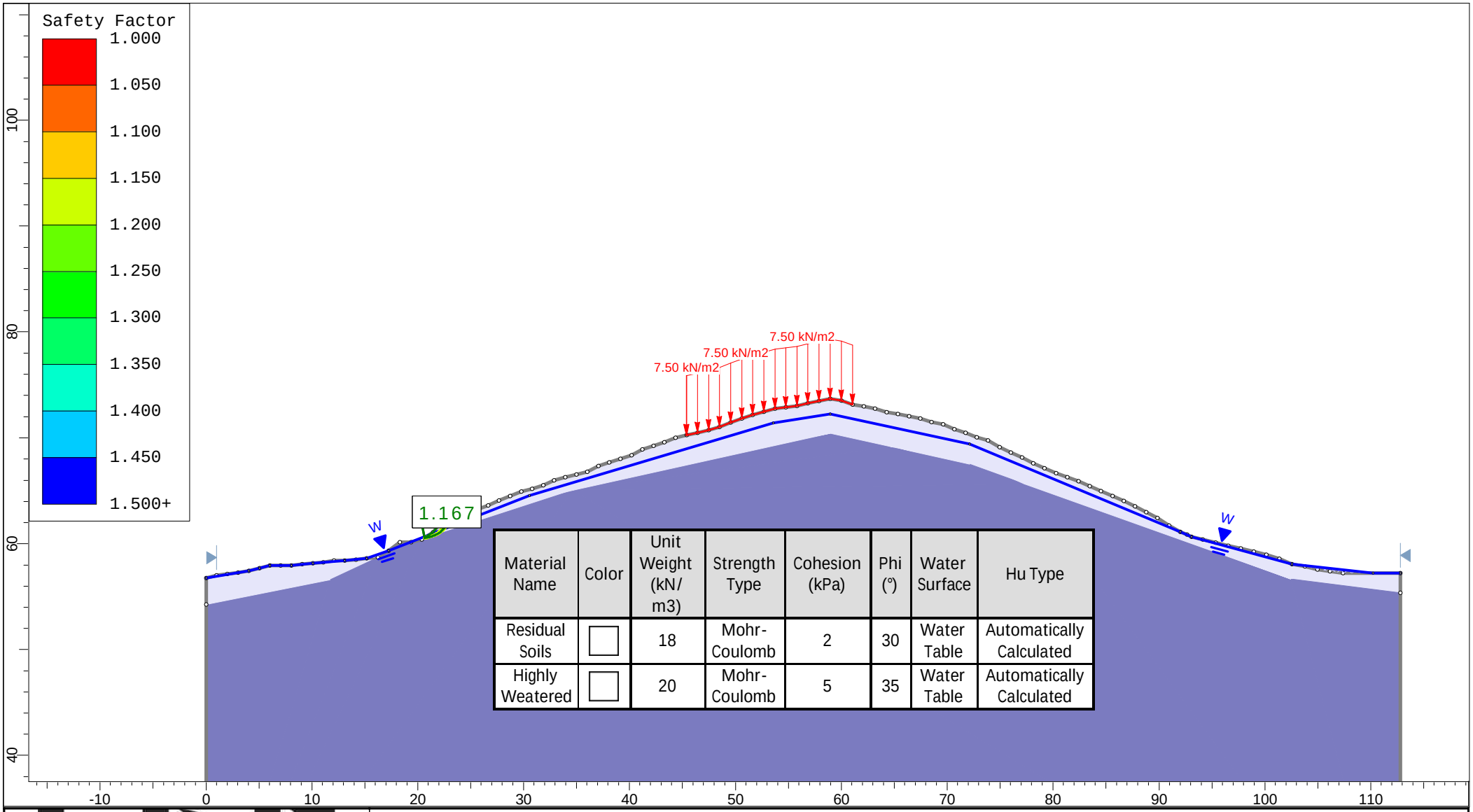
Project Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform A	*Scenario* Master Scenario
Drawn By CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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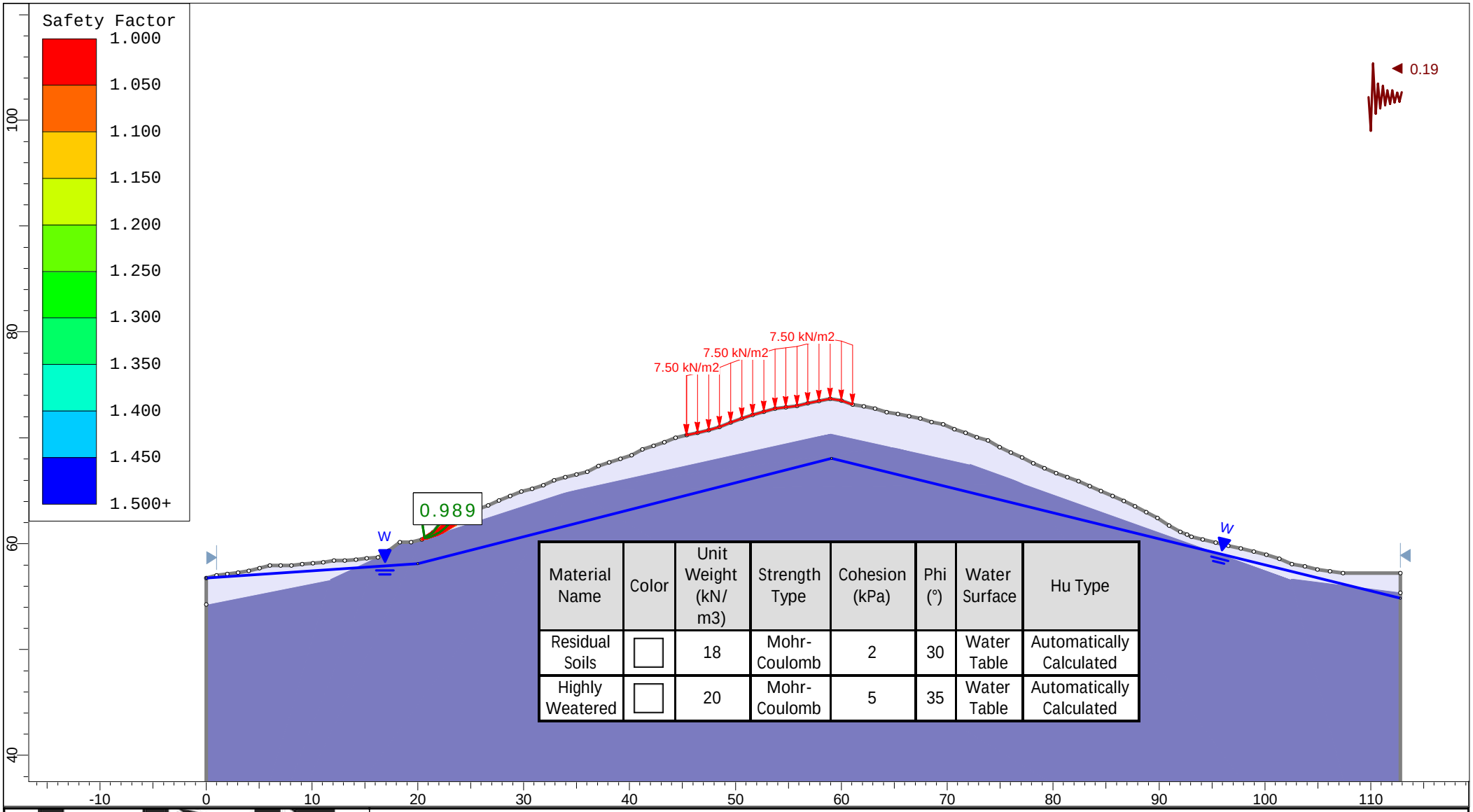
Project Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform A	*Scenario* LH Slope - Extreme GW - FOS<1.2
Drawn By CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
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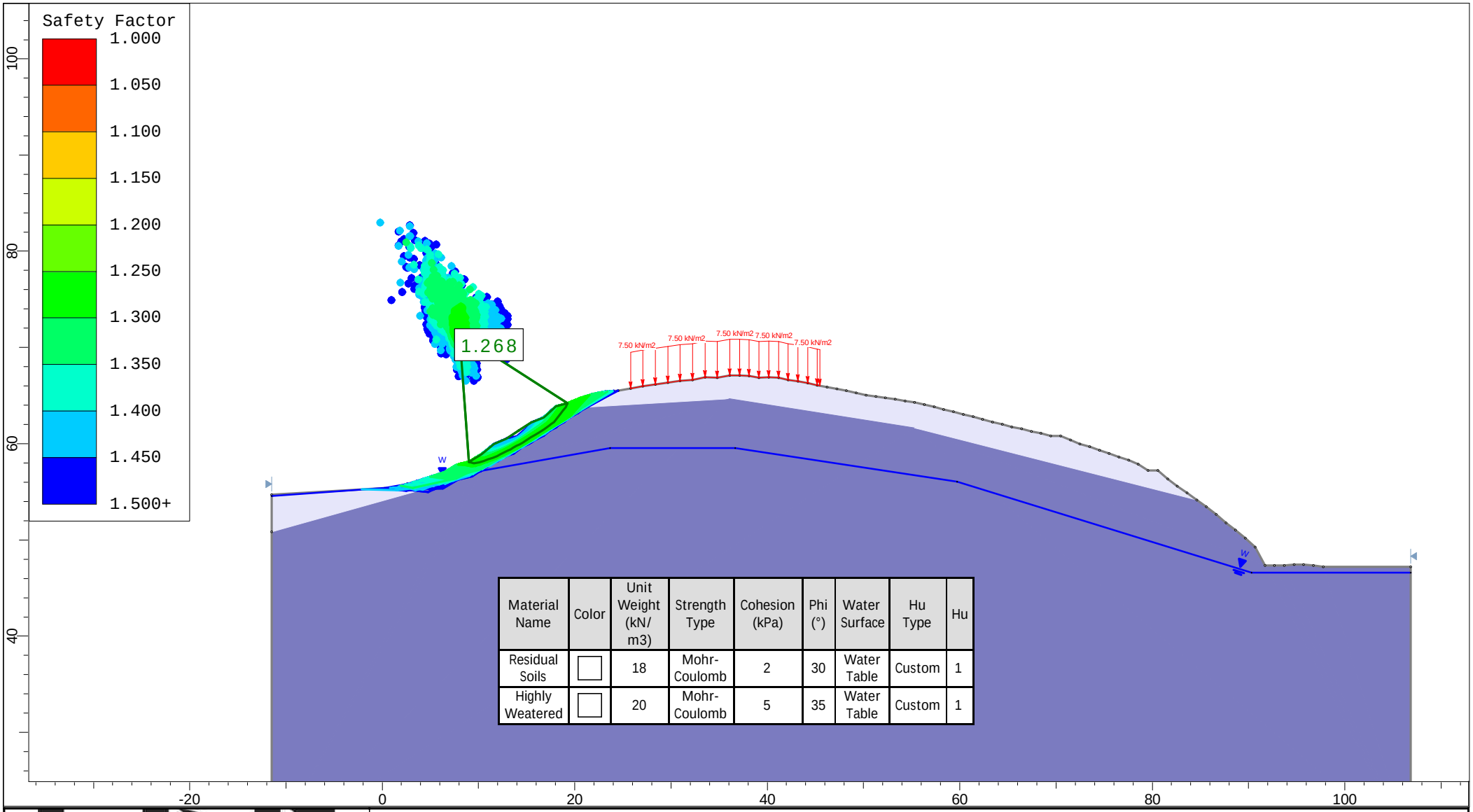
Project Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform A	*Scenario* LH Slope - ULS - FOS<1.1
Drawn By CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type	Hu
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Custom	1
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Custom	1

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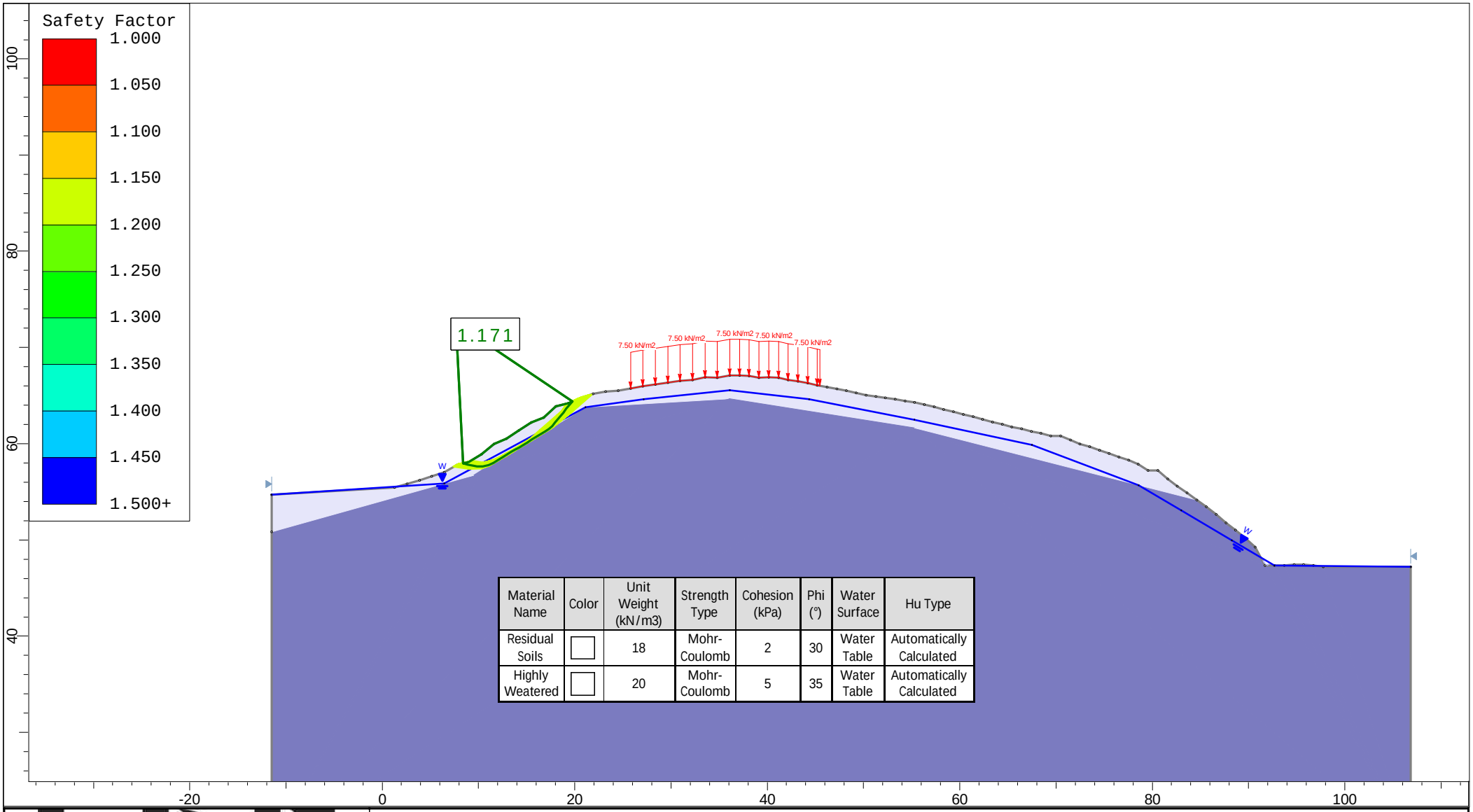
Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	Master Scenario
Drawn By	CJG	*Date* 6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
Residual Soils		18	Mohr-Coulomb	2	30	Water Table	Automatically Calculated
Highly Weatered		20	Mohr-Coulomb	5	35	Water Table	Automatically Calculated

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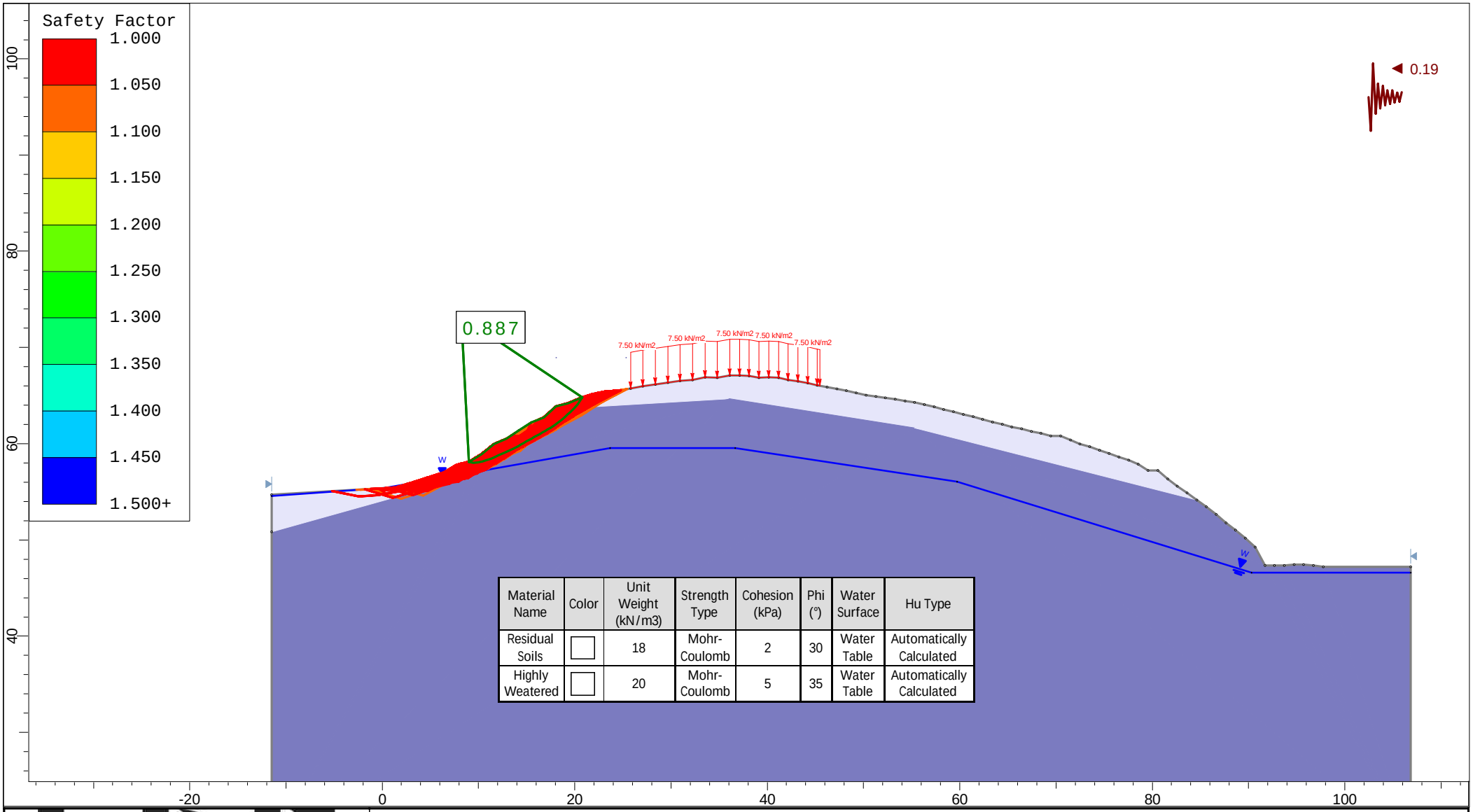
Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	LH Slope - Extreme GW - FOS<1.2
Drawn By CJG	*Date*	6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
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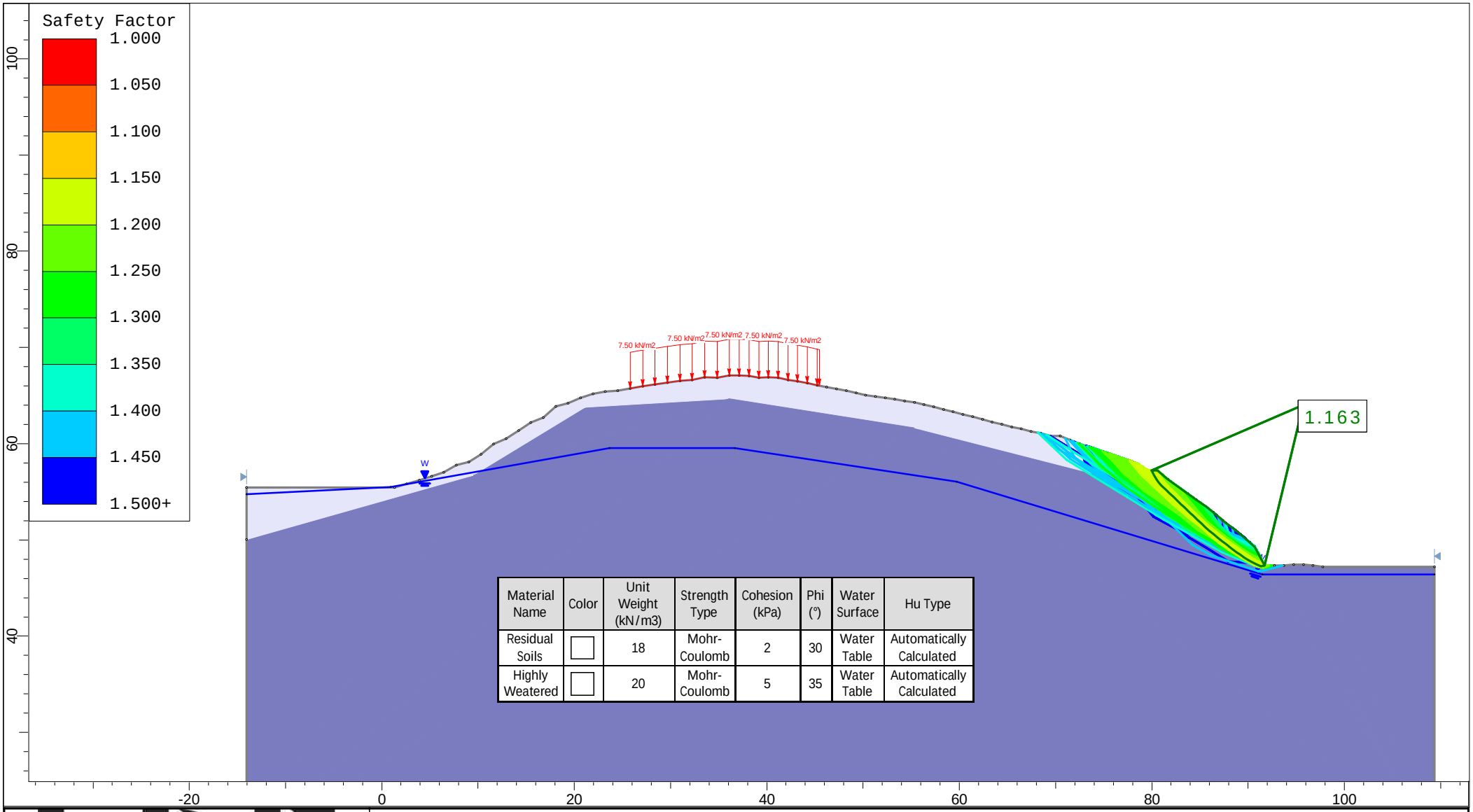
Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	LH Slope - ULS - FOS<1.1
Drawn By CJG	*Date*	6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
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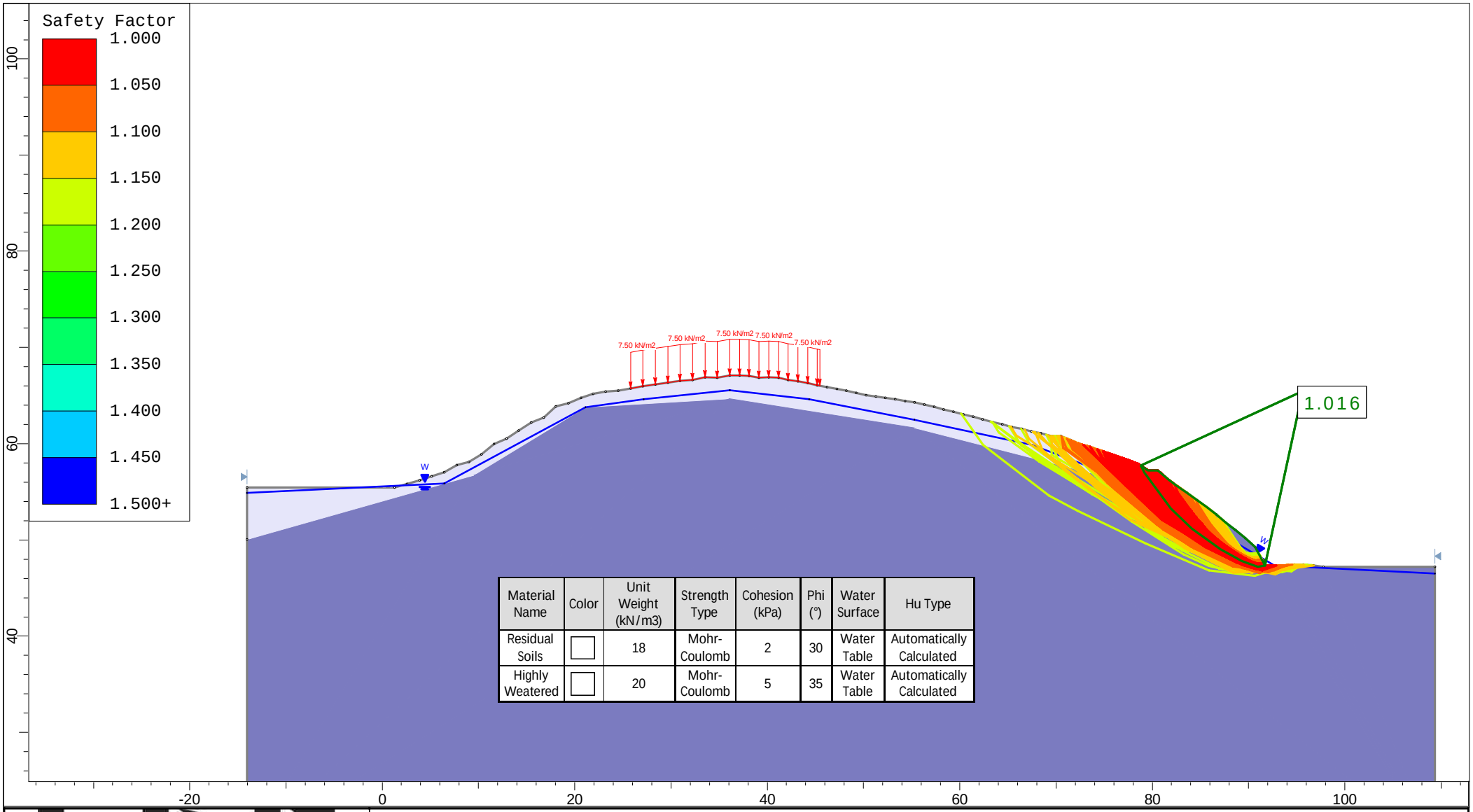
Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	Master Scenario
Drawn By CJG	*Date*	6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
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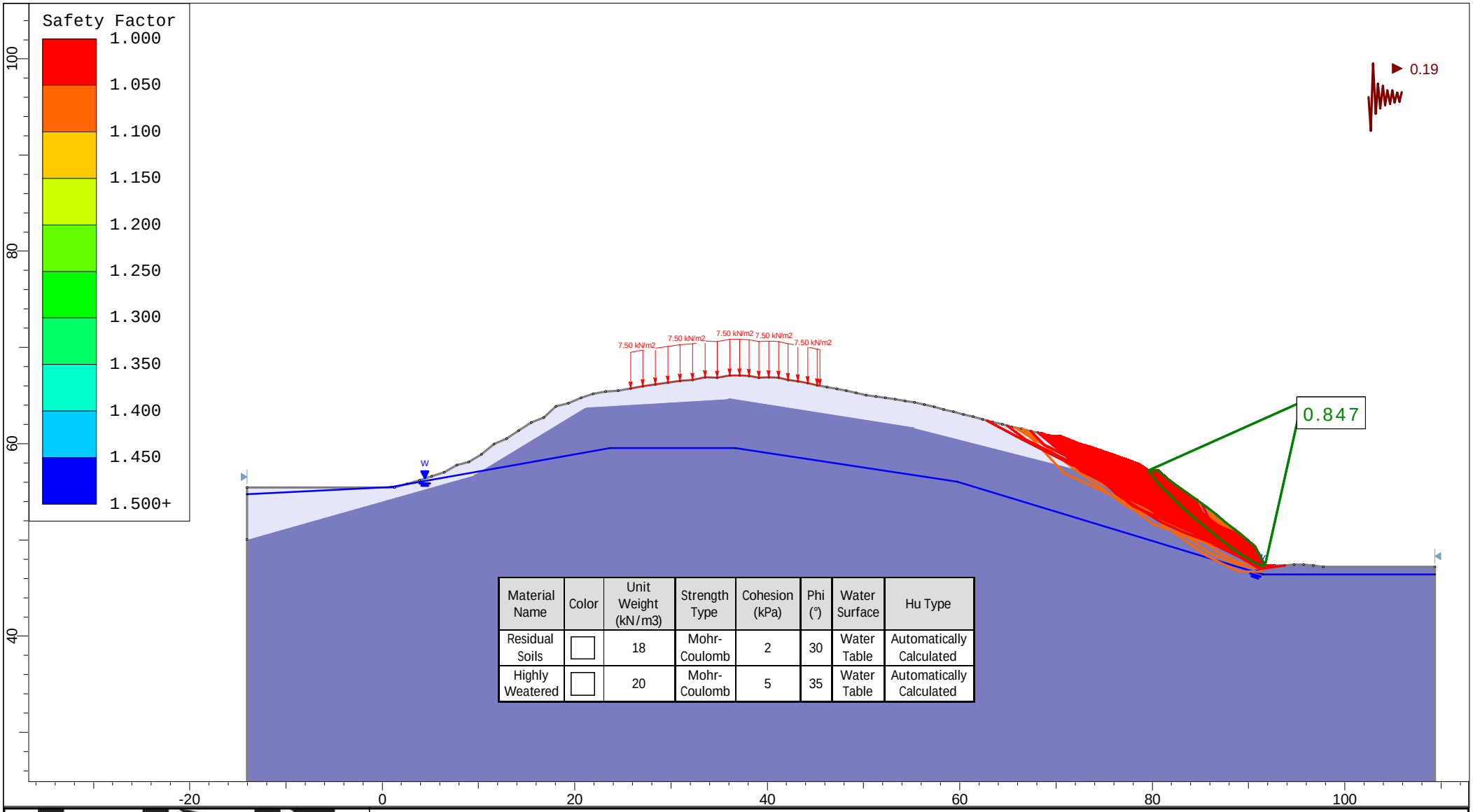
engineers • scientists

Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	RH Slope - Extreme GW - FOS<1.2
Drawn By CJG	*Date*	6/05/2026



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type
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Project	Lot 81 Mangatoetoe Road, Kaitaia - Proposed Subdivision	
Lot 2 Building Platform B	*Scenario*	RH Slope - ULS - FOS<1.1
Drawn By CJG	*Date*	6/05/2026

Operative District Plan Relevant Objectives and Policies

Objectives and policies within the Subdivision Chapter

Objectives

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

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

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

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

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

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

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

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

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

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

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

Policies

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

- *natural character, particularly of the coastal environment;*
- *ecological values;*
- *landscape values;*
- *amenity values;*
- *cultural values;*
- *heritage values; and*
- *existing land uses.*

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

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

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

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

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

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

(a) result in increased demands on car parking associated with non-residential activities; or

(b) result in increased demand for esplanade areas; or

(c) involve adverse effects on riparian areas; or

(d) depend on the assimilative capacity of the environment external to the site.

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

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

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

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

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

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

(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;

(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;

(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;

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

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

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

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

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

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

(a) development of energy efficient buildings and structures;

(b) reduced travel distances and private car usage;

(c) encouragement of pedestrian and cycle use;

(d) access to alternative transport facilities;

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

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

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

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

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

Objectives and policies within the Rural Environment

Objectives

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

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

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

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

8.3.5 To protect outstanding natural features and landscapes.

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

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

8.3.8 To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development.

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

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

Policies

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

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

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

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

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

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

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

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

Objectives and policies within the Rural Production Zone

<u>Objectives</u>

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

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

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

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

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

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

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

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

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

Policies

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

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

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

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

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

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

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

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

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

Proposed District Plan Objectives and Policies

Rural Production Zone

Objectives

RPROZ-O1 - The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.

RPROZ-O2 - The Rural Production zone is used for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be in a rural environment.

RPROZ-O3 - Land use and subdivision in the Rural Production zone:

(a)protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production;

(b)protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation;

(c)does not compromise the use of land for farming activities, particularly on highly productive land;

(d)does not exacerbate any natural hazards; and

(e)is able to be serviced by on-site infrastructure.

RPROZ-O4 - The rural character and amenity associated with a rural working environment is maintained.

Policies

RPROZ-P1 - Enable primary production activities, provided they internalise adverse effects onsite where practicable, while recognising that typical adverse effects associated with primary production should be anticipated and accepted within the Rural Production zone.

RPROZ-P2 - Ensure the Rural Production zone provides for activities that require a rural location by:

(a)enabling primary production activities as the predominant land use;

(b)enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail, visitor accommodation and home businesses.

RPROZ-P3 - Manage the establishment, design and location of new sensitive activities and other non-productive activities in the Rural Production Zone to avoid where possible, or otherwise mitigate, reverse sensitivity effects on primary production activities.

RPROZ-P4 - Land use and subdivision activities are undertaken in a manner that maintains or enhances the rural character and amenity of the Rural Production zone, which includes:

(a)a predominance of primary production activities;

(b)low density development with generally low site coverage of buildings or structures;

(c)typical adverse effects such as odour, noise and dust associated with a rural working environment; and

(d)a diverse range of rural environments, rural character and amenity values throughout the District.

RPROZ-P5 - Avoid land use that:

(a)is incompatible with the purpose, character and amenity of the Rural Production zone;

(b)does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone;

(c)would result in the loss of productive capacity of highly productive land;

(d)would exacerbate natural hazards; and

(e)cannot provide appropriate on-site infrastructure.

RPROZ-P6 - Avoid subdivision that:

(a)results in the loss of highly productive land for use by farming activities.

(b)fragments land into parcel sizes that are no longer able to support farming activities, taking into account:

1. the type of farming proposed; and

2. whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land.

(c)provides for rural lifestyle living unless there is an environmental benefit.

RPROZ-P7 - Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:

(a)whether the proposal will increase production potential in the zone;

(b)whether the activity relies on the productive nature of the soil;

(c)consistency with the scale and character of the rural environment;

(d)location, scale and design of buildings or structures;

(e)for subdivision or non-primary production activities:

i. scale and compatibility with rural activities;

ii. potential reverse sensitivity effects on primary production activities and existing infrastructure;

iii. the potential for loss of highly productive land, land sterilisation or fragmentation

(f)at zone interfaces:

i. any setbacks, fencing, screening or landscaping required to address potential conflicts;

ii. the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable;

(g)the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer;

(h)the adequacy of roading infrastructure to service the proposed activity;

(i)Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity;

(j)Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.