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

Office Use Only Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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: Takou Trust Trust c/o Doreen Rihari

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: Barker & Associates c/o Makarena Dalton & Kasey Zhai

Email: [redacted]

Phone number:

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

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

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: Takou Trust

Property Address/ Location: 202A-F Te Rawhiti Road, Takou Bay

(located at the end of Te Ra Road)

Postcode

8. Application Site Details

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

Name/s:	Takou Trust
Site Address/ Location:	202A-F Te Rawhiti Road, Takou Bay Postcode
Legal Description:	Takou Block
Val Number:	
Certificate of title:	NA2D/192

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 Doreen Rihari via 021892230 prior to arranging the 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.

Landuse consent is sought to construct up to 94 papakāinga units with supporting infrastructure, accessways and landscape planting.

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

10. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

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

(more than one circle can be ticked):

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

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

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

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

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

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

13. Assessment of Environmental Effects:

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

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

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full) Takou Trust c/o Doreen Rihari

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.

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) Whati Rameka

Signature: [redacted] MANDATORY
(signature of bill payer

Date 12-Jun-2025

15. Important Information:

Note to applicant
You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.
You may apply for 2 or more resource consents that are needed for the same activity on the same form.
You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

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

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

15. Important information continued...

Declaration

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

Name: (please write in full) Whati Rameka [redacted]

Signature: [redacted] Date 12-Jun-2025

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

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.

Takou Bay Papakāinga

Integrated Development

202A-F Te Rawhiti Road

Assessment of Environmental Effects and Statutory Analysis

13 June 2025

B&A
Urban & Environmental

Prepared for:
Takou Trust Ahu Whenua Trust

B&A Reference:

25331

Status:

Final Revision 1.0

Date:

13 June 2025

Prepared by:

Kasey Zhai

Associate, Barker & Associates Limited

Reviewed by:

Makarena Dalton

Senior Associate, Barker & Associates Limited

Contents

Appendices

1.0 Applicant and Property Details

To:	**Far North District Council (FNDC or Council)**
Site Address:	202A-F Te Rawhiti Road, Kaeo
Applicant Name:	Takou Trust Ahu Whenua Trust
Address for Service:	Barker & Associates Ltd Level 1 62 Kerikeri Road Kerikeri 0230 Attention: Makarena Dalton / Kasey Zhai
Legal Description:	Takou Block (refer to Record of Title as **Appendix 1**)
Site Area:	136 hectares
District Plan:	Far North Operative District Plan ('**FNDP**') and Proposed Far North District Plan ('**PDP**')
FNDP Zoning:	Rural Production and General Coastal
PDP Zoning:	Māori Purpose - Rural
FNDP and PDP Overlays & Controls:	FNDP: MS06-34 and MS06-43 (located within Takou East Block) PDP: Coastal Environment
Additional Limitations:	NRC Natural Hazards River Flood Hazard 50 and 100 year
Locality Diagram:	Refer to **Figure 1**
Brief Description of Proposal:	Landuse consent is sought to construct up to 94 papakāinga units with supporting infrastructure, accessways and landscape planting.
Summary of Reasons for Consent:	FNDP: Discretionary activity resource consent is required for Integrated Development on Māori freehold land in accordance with Rules 8.6.5.4.2 and 10.6.5.4.4. Discretionary activity resource consent is required for earthworks and non-compliances to 15.1.6C.1.1.(a) and (c) Private accessways. Discretionary and non-complying activity resource consents are required for TIFs exceeding 120 in the General Coastal Zone and 200 in the Rural Production Zone.

2.0 Introduction and Background

This report has been prepared to address a resource consent application submitted by Takou Trust Ahu Whenua Trust (hereafter referred to as '**Takou Trust**') for papakāinga development at Takou Block in Takou Bay. This report is intended to address the relevant matters under the Resource Management Act 1991 ('**RMA**').

2.1 Takou Block

Takou Block is held in Māori freehold land, comprises three allotments measuring a total of 323 hectares held under one Record of Title (refer **Appendix 1**), and is administered by Takou Trust and Takou Trust Māori Reservation.

The significance of the Takou Block to Takou Trust is recognised below:

> *"We are responsible trustees for the administration and management of Takou Block (MLC Title: 29815). We represent over 1120 beneficial owners. Our Papakāinga and Marae Reservation extends across 322 hectares of freehold Māori land.*
>
> *Mataatua ki Takou is our marae. She resides within our Papakāinga and is governed by the Takou Marae Reservation Trust. After many years the Wharekai is nearly built. Once completed Phase 2 will begin with the building of the Wharenui.*
>
> *Ko Takou te awa. She is the resting place of our ancestral Mataatua Waka. She plays an integral role in the separation of our present and our past; human living and those who have passed on; contemporary traditions and tikanga tāonga tuku iho. Across Takou (awa) the Marae Trust and Te Rūnanga o Ngāti Rēhia care for one of the first Kauri Sanctuaries of Te Taitokerau.*
>
> *The heart of our Papakāinga beats with the mauri of multiple generations. We are the sovereign people of our whenua."*

Takou is of cultural significance and kaitiaki of the Mataatua Waka.

This application and the proposed papakāinga development relate to the allotment identified by the star below shown in **Figure 1**. It is proposed that the allotment will be developed in accordance with 96 Licence to Occupy ('**LTO**') areas, as shown in **Figure 2**[1].

[1] Noting only 94 are set aside for development as set out in section 3.1 below.

Figure 1: Takou Block shown blue outline and the subject site identified (source: Emaps).

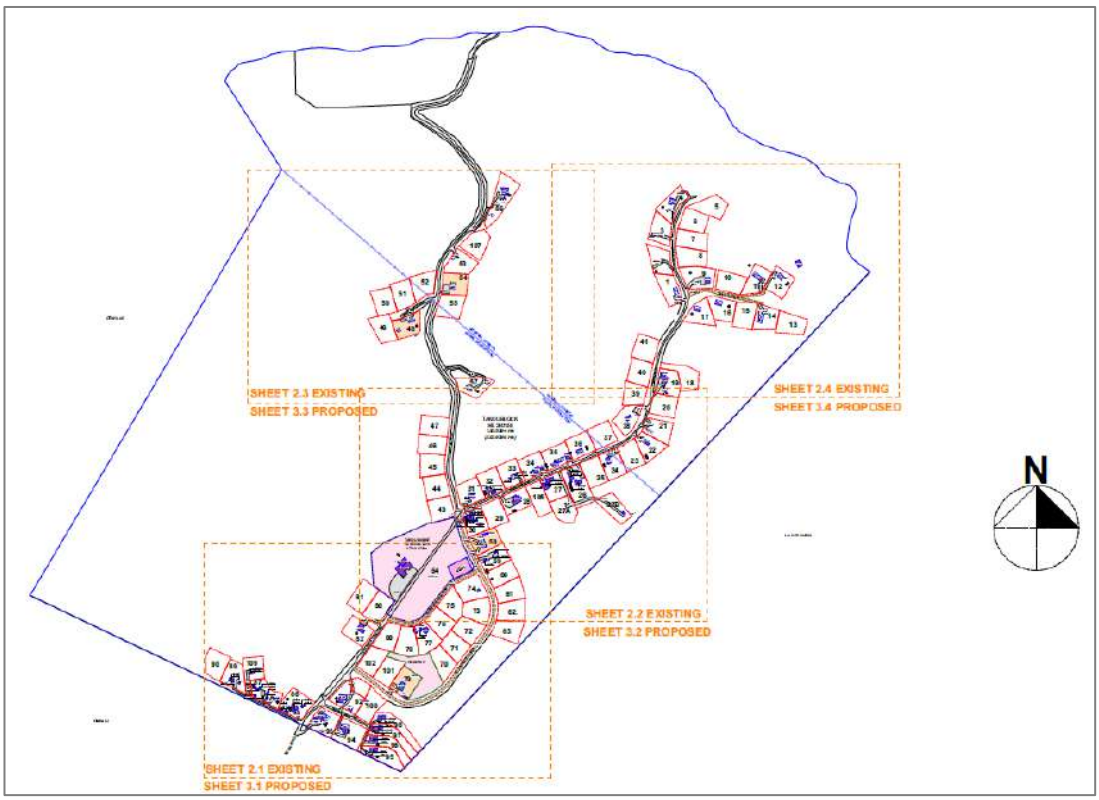

Figure 2: Layout of site LTO areas (source: Laminata).

2.2 Far North District Plan Definitions

2.2.1 Site

The FNDP defines a 'Site' as follows:

> *"(a) An area of land which is:*
>
> *Composed of one allotment in one certificate of title or two or more contiguous allotments held together in one or more certificates of title in such a way that the allotments cannot be dealt with separately without the prior consent of the Council; or*
>
> *Contained in a single allotment on an approved survey plan of subdivision for which approvals under s223 and/or s224 of the Act have been obtained and for which a separate certificate of title could be issued without further consent of the Council.*
>
> *…."*

On this basis, the site is considered to be the allotment identified by the star at **Figure 1**.

2.3 Pre-Application Meeting

The proposal was discussed with Council at a pre-application meeting on 10 June 2025 and key meeting notes are included at **Appendix 2**. The key matters discussed are summarised below:

- Establishment of papakāinga and Mataatua ki Takou Marae at Takou have been a longstanding aspiration of the hapu and whanau in Takou. The resource consent will provide for an integrated approach to enable this.
- Takou is of cultural significance – kaitiaki of the Mataatua Waka.
- There are 1100 shareholders within Takou Trust.
- A number of whare have already been established at Takou Bay. First homes were established in the early 90s, and gradual ad hoc development over the last 30 years.
- This application seeks to establish the overall layout of the papakāinga and to enable all LTO areas to be developed with one papakāinga dwelling (including redevelopment of existing developed sites). The application seeks to achieve consistency across the whenua and set clear expectations and parameters for whanau to develop LTO areas.
- A 10-year resource consent duration is sought and will be considered to be given effect to on construction of the first whare.

3.0 Site Context

3.1 Site Description

As identified above, the site is one of three allotments held in Takou Block, measuring approximately 136 hectares. The site fronts Takou Bay along its north-eastern boundary and is irregular in shape, and primarily held in pasture with undulating topography. There are 96 LTO areas, where 94 LTO areas are available for development and are of a minimum size of 2,000m^2. The remaining two LTO areas (LTO areas 64 and an unnumbered LTO area to the west of Te Rawhiti

Road) are utilised for Marae Reservation and reserve purposes. The existing marae, Mataatua ki Takou, is located within LTO 64 and can accommodate up to 300 people during hui / special events. In addition, 40 of the LTO areas contain existing papakāinga dwellings.

The zoning of the site is split between Rural Production and General Coastal zone, as shown in Figure 3 below.

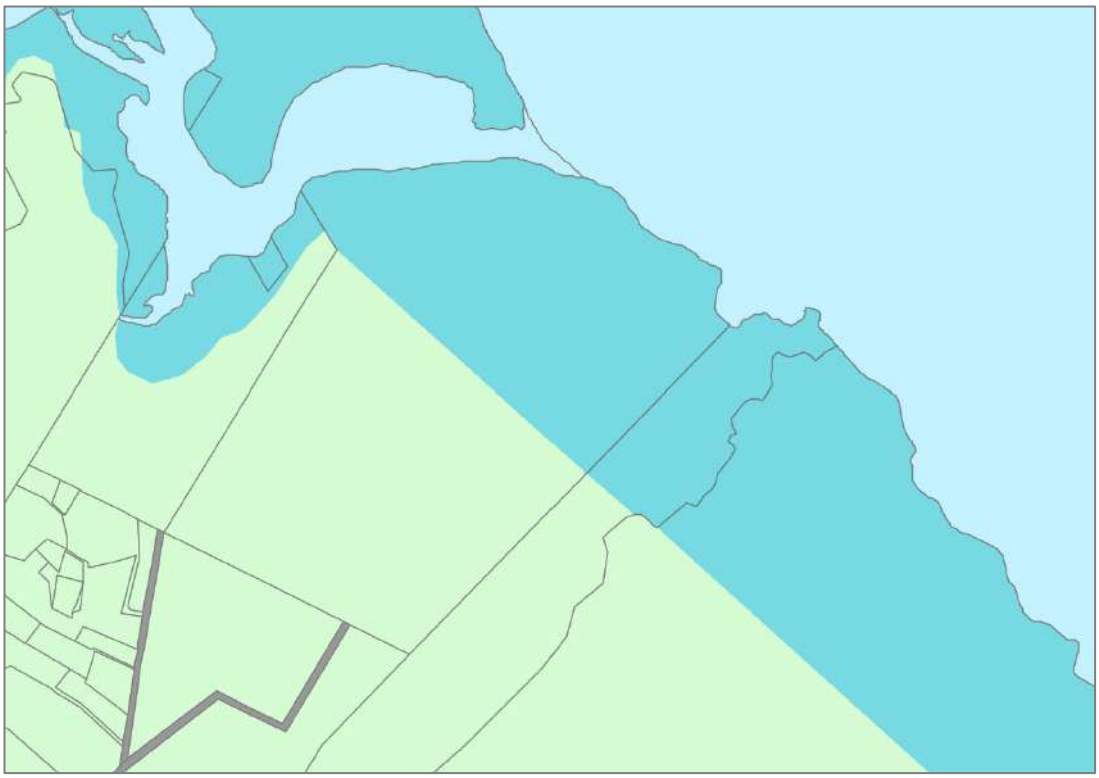

Figure 3: Site zoning (source: FNDP Planning Maps).

The site is accessed via Te Ra Road, and the formed legal road terminates at the site's south western boundary. Privately formed accessways are located within the site and provide access to the LTO areas, which are located within the centre and towards the south eastern boundary of the site.

There are a number existing dwellings and accessory buildings established by way of LTO agreements authorised by the Māori Land Court in accordance with Te Ture Whenua Māori Act 1993.

The site contains existing waterbodies, including permanent and intermittent streams and wetlands. In terms of vegetation, there are areas of indigenous broadleaf forest, regenerating kanuka-broadleaf scrubland, as well as exotic species, including gorse and woolly nightshade. Significant areas of existing vegetation are located within the site, including at the eastern and southern boundaries. In terms of waterbodies, there are three wetlands located within existing gully systems. The network of intermittent and permanent streams predominantly flow toward Takou Bay. All waterbodies are located outside of the LTO areas and accessways.

The ecological features within the site are identified in Figure 4 below.

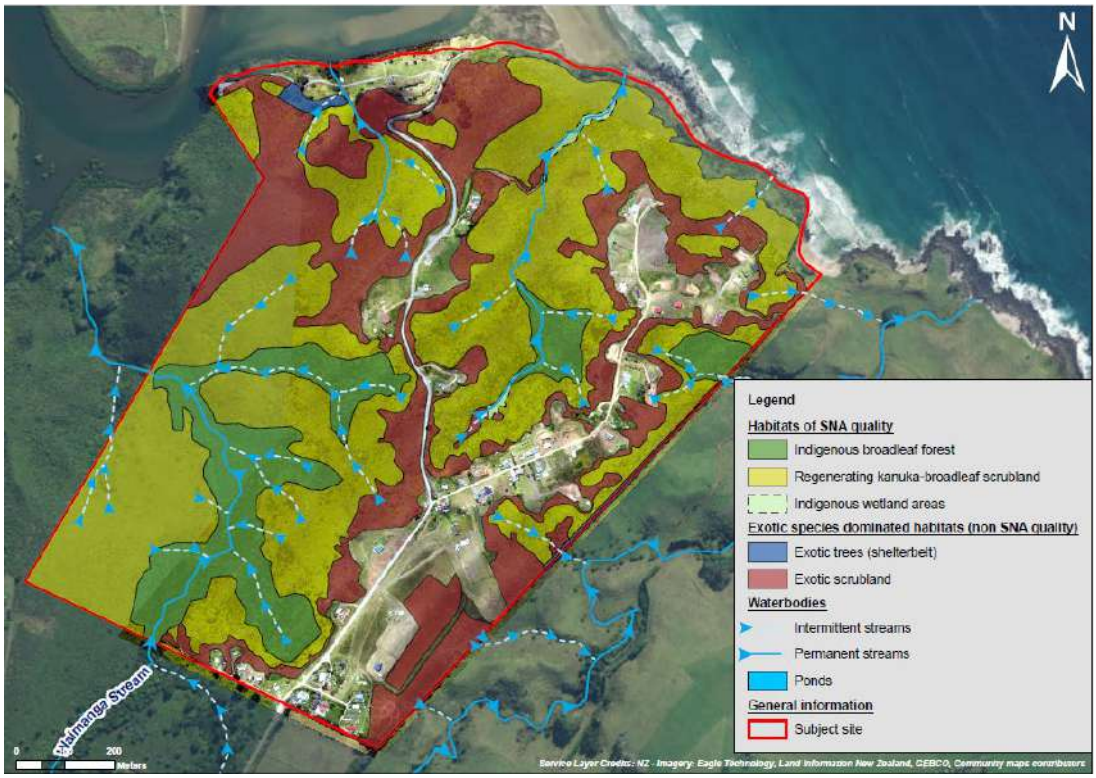

Figure 4: Existing waterbodies and vegetation within the site (source: Wild Ecology).

The site is subject to the Coastal Environment, Outstanding Natural Landscapes ('ONL') Overlay and the 50 and 100 year River Flood Hazard under the Northland Regional Policy Statement ('RPS') Maps. As illustrated in Figure 5 below, the proposed dwellings and LTO areas will be clear of the ONL and River Flood Hazards identified under the RPS but some development will be located within the Coastal Environment Overlay.

Figure 5: Northland Regional Policy Statement map showing the extent of the Coastal Environment, Outstanding Natural Landscape, and areas subject to the 50- and 100-year flood hazard.

3.2 Surrounding Locality

The surrounding locality is characterised by larger properties held in pasture, and used for lifestyle living and rural production activities, including orcharding and livestock grazing. Residential dwellings and buildings ancillary to productive uses are dispersed throughout the surrounding environment. The township of Waipapa is located approximately 15 kilometres to the south.

Takou Bay, a privately accessed beach located adjacent to the north-eastern boundary. Land located adjacent to the north east, and separated by the Takou River is also held under the same ownership as the subject site.

4.0 Proposal

A summary of the key elements of the proposal is set out below. More detailed descriptions on particular aspects of the proposal are set out in the specialist reports and plans accompanying the application.

4.1 Papakāinga Housing

The proposal is to provide for one papakāinga dwelling within 94 existing LTO areas, including:

- The construction of 12 new dwellings and three relocatable dwellings within 15 LTO areas (LTO areas 8, 10, 18, 23, 25, 29, 37, 41, 60, 62, 78, 93, 13, 48, 58, and 79); and

- Within all other LTO areas, the provision for the construction of one papakāinga dwelling per LTO area. Where LTO areas that contain existing development are to be redeveloped in the future, this consent will provide for up to one new papakāinga dwelling per LTO area.

The proposed housing typologies will comprise 11x two-bedroom dwellings and 1x one-bedroom dwelling. Table 1 below includes a summary of the 16 LTO areas which include papakāinga housing under this application:

Table 1: Summary of proposed dwellings and relocatable dwellings.

LTO Area	Area (m^2)	Proposed Dwelling	Operative Far North District Plan Zoning
8	2023	73m^2 2-bedroom dwelling	General Coastal
10	2023	66m^2 2-bedroom dwelling	General Coastal
18	2023	73m^2 2-bedroom dwelling	General Coastal
23	2023	73m^2 2-bedroom dwelling	Split Zone
25	2023	66m^2 2-bedroom dwelling with connected deck to living area	Rural Production
29	2023	73m^2 2-bedroom dwelling	Rural Production
37	2023	73m^2 2-bedroom dwelling	Split Zone
41	2097	93m^2 2-bedroom dwelling	General Coastal
60	2023	73m^2 2-bedroom dwelling	Rural Production
62	2084	67m^2 2-bedroom dwelling	Rural Production
78	2158	92m^2 2-bedroom dwelling	Rural Production
93	2232	123^2 2-bedroom dwelling	Rural Production
48	2023	97m^2 3-bedroom dwelling	Rural Production
58	2023	120m^2 dwelling	Rural Production
79	2023	145m^2 3-bedroom dwelling	Rural Production

The proposed new dwellings located in the General Coastal Zone will have exterior cladding with a reflectance value of 30% or less.

Further details of the proposed dwellings and the site layout are shown in the architecture plans prepared by Laminata and included at Appendix 3.

With respect to the other LTO areas, conditions of consent are proposed in relation to future papakāinga development. The proposed conditions are included at Appendix 4 and seek to ensure

that future dwellings within the LTO areas are constructed in accordance with the relevant recommendations identified under this application.

In addition, provision is also made for greater building coverage (30%) and impermeable surfaces (35%) within each LTO area than the underlying zones provide for. This is to enable future development to occur efficiently, as compliance with the maximum permitted allowances on an LTO area basis would be difficult to achieve. The balance of the site would be free of development.

The proposed conditions will ensure that compliance with the zone rules can be achieved overall when assessed in the context of the entire site.

4.2 Access and Parking

The proposed parking and access arrangements are detailed in the civil engineering drawings prepared by Chester included at **Appendix 5** and **Appendix 6**, and the Architectural Drawings at Appendix 3. In summary:

- **Site access:** Access to the site will be retained via Te Rawhiti Road being an existing accessway from Te Ra Road, which is formed as an extension of the legal road corridor.
- **Private accessways:** As identified above, all LTO areas are accessed from the existing private accessways within the site. A number of targeted upgrades are proposed, as illustrated in the civil engineering drawings (refer drawing series 800) and summarised below:
    - Upgrades to the existing site access at Te Ra Road;
    - Formation of Te Rawhiti Road and Mataatua Road at the south eastern part of the site;
    - New passing bays located at strategic 70m-100m intervals to provide for safe two-way vehicle movement;
    - Widening of the formed carriageway where required to generally achieve a formed width of 4m; and
    - Intersection upgrades, including widening, at intersections with Te Rawhiti Road.
- **Vehicle crossings:** New single width vehicle crossings are proposed to service each LTO area. These vehicle crossings do not adjoin a legal road, and will provide for access between the LTO areas and the private accessway.

4.3 Landscaping

A Landscape Plan has been prepared by Hawthorn Landscape Architects and is included at Appendix 7. Landscape planting is proposed within visually prominent LTO areas, as well as throughout the site. It is anticipated that a condition of consent will be applied to require these outcomes.

4.4 On-site Servicing

A Land Development Report has been prepared by Chester, and is included at **Appendix 5**. The Report details the proposed infrastructure servicing arrangements for the proposal and includes a number of recommendations with respect to LTO areas that will be developed at a future date. In summary:

- Stormwater: The proposed stormwater management approach seeks to maintain the site's existing runoff regime, including the discharge volume. Stormwater treatment and conveyance will be managed comprehensively within the site, including through roadside and vegetated swales, subsoil drains, and landscaped flow paths. Subsoil drains and culverts will be utilised in locations where open drainage is inappropriate.

  To ensure that cumulative stormwater effects can be managed with respect to impervious areas within each LTO area, a consent condition is proposed to ensure that the total impervious surface area within each LTO area does not exceed 35%. This will ensure that total impervious areas across the site are below the maximum permitted thresholds within both the Rural Production and General Coastal zones.

- Wastewater: Wastewater is proposed to be treated and disposed of on-site within each LTO area in accordance with Council Engineering Standards and AS/NZ 1547:2012. Each LTO area is of a sufficient size to accommodate a primary dispersal bed and reserve area within its boundaries. Chester has identified three treatment and disposal options that could be utilised across the site, depending on individual design requirements. These options include on-site systems with primary treatment and trench disposal, secondary treatment and trench disposal, and secondary treatment and LPED disposal.

  The proposed wastewater approach is a permitted activity under Rule C.6.1.3 of the Northland Regional Plan (refer section 7.3 of the Land Development Report). A discharge consent is therefore not required from NRC.

- Potable water supply: Individual on-site water tanks will be located within the LTO areas to provide potable water supply for dwellings. Where a new dwelling is not currently proposed under this application, it is anticipated that the sizing of the water tank will be confirmed at the time of building consent in accordance with the Building Code.

- Firefighting water supply: Two options have been identified for on-site water storage for firefighting purposes. Option A includes communal water tanks, generally no more than 90m from any dwelling. Additional water tanks will also be strategically positioned to ensure there will be a sufficient cumulative supply across the site. Alternatively, Option B includes providing individual storage within each LTO area. The proposed arrangement under Option A is illustrated within the civil engineering drawings (refer drawing series 110), and has been designed in consultation and agreement with Fire and Emergency New Zealand, refer Appendix B of the Land Development Report.

4.5 Enabling Works

The proposal includes the following enabling works to accommodate the proposed new papakāinga dwellings and upgrades to the private accessways:

- Earthworks: Earthworks are required to create level building platforms and private driveways within each LTO area that is to be developed. In addition, earthworks will be required to form the proposed passing bays and upgrades to the internal intersections. The proposed earthworks include a total volume of 7,245m^3 cut and 5,743m^3 fill over an area of 4.1 hectares. Erosion and sediment controls are proposed in accordance with Auckland Council's GD05 Design Guidelines, and will include a stabilised entry, silt and super silt fences, wheel wash, progressive site stabilisation, and decanting earth bunds.

No earthworks are proposed within 10m of an existing natural wetland under this application, as illustrated in the Ecological Features mapping prepared by Wild Ecology.

- **Vegetation Clearance**: Vegetation clearance is proposed to accommodate the new papakāinga dwellings, and will be limited to the removal of exotic species. As the extent of indigenous vegetation within the LTO areas is limited, any vegetation removal required will be less than 500m^2. Existing vegetation and its classification are identified in the Ecological Impact Assessment included at **Appendix 8**.

4.6 Duration of Consent

In accordance with Section 123 of the RMA, a **10-year consent** duration is requested for the following reasons:

- The scale of the proposal is significant where the site contains 94 LTO areas available to accommodate papakāinga dwelling, and the proposal provides for the development of up to one papakāinga dwelling within each LTO area. The LTO area will be developed by whanau over time.
- Traditional lending pathways are not always available leading to complicated and difficult project financing. Obtaining resource consent is the first step to establishing project feasibility to support funding applications or seek lending from banks.
- It is cost effective and efficient avoiding the need for repeated consenting processes.

5.0 Reasons for Consent

A rules assessment against the provisions of the Operative Far North District Plan ('**FNDP**') is attached as **Appendix 9.** The Proposed Far North District Plan ('**PDP**') contains rules with immediate legal effect, a rules assessment against those rules is also included.

The proposal requires consent for the matters outlined below.

5.1 Operative Far North District Plan

Chapter 8 Rural Environment – Section 6 Rural Production Zone

- The proposal is for papakāinga housing on Māori freehold land which does not comply with Rule 8.6.5.2.2 Papakāinga Housing, as the proposed LTO areas cannot meet the minimum 3,000m^2 exclusive use area threshold. A management plan is provided throughout this application, accompanying specialist reports and proposed conditions of consent, as such, the proposal is Integrated Development. As such, **Discretionary activity** resource consent is sought for an Integrated Development pursuant to Rule 8.6.5.4.2.

Chapter 10 Coastal Environment – Section 6 General Coastal Zone

- The proposal is for papakāinga housing on Māori freehold land which does not comply with Rules 10.6.5.1.1 Visual Amenity and 10.6.5.2.1 Papakāinga Housing. A management plan is provided throughout this application, accompanying specialist reports and proposed conditions of consent, as such, the proposal is Integrated Development. As such,

Discretionary activity resource consent is sought for an Integrated Development pursuant to Rule 10.6.5.4.4.

Chapter 12 – Natural and Physical Resources – Soil and Minerals

- The proposal includes a volume of 8.657m^3 of earthworks in the Rural Production Zone, and is **a Restricted Discretionary** activity pursuant to Rule 12.3.6.2.3.
- The proposal does not comply with one or more permitted or Restricted Discretionary activity standards and is a **Discretionary** activity pursuant to Rule 12.3.6.3:
    - The proposal includes a volume of 4,331m^3 in the General Coastal Zone, and exceeds the restricted discretionary activity quantity of 2,000m^3 under Rule 12.3.6.2.1(a).

Chapter 12 – Natural and Physical Resources – Natural Hazards

- The proposal does not comply with one or more permitted activity standards and is a **Discretionary** activity pursuant to Rule 12.4.6.3:
    - The proposal includes LTO areas where existing and future building platforms will be located closer than 20m to the dripline of trees within existing areas of scrubland.

Chapter 15 - Transportation

- The proposal will enable up to 34 papakāinga dwellings in the General Coastal Zone, and at 5 traffic movements per unit will result in 170 TIFs. A traffic intensity threshold of more than 120 in the General Coastal Zone is a **Non-complying** activity.
- The proposal will enable up to 60 papakāinga dwellings in the Rural Production Zone, and at 5 traffic movements per unit will result in 300 TIFs. A traffic intensity threshold of more than 200 in the General Coastal Zone is a **Discretionary** activity.
- The proposal does not comply with one or more permitted activity standards and is a **Discretionary** Activity pursuant to Rule 15.1.6C.2:
    - The proposed private accessways will have a formed carriageway width of 4m with passing bays spaced at intervals, and will not be in accordance with the requirements of Appendix 3B-1 as required under Rule 15.1.6C.1.1(a); and
    - The proposal includes private accessways serving more than the maximum permitted threshold of 8 household equivalents under Rule 15.1.6C.1.1(c).

5.2 Activity Status

Overall, this application is for a non-complying activity.

6.0 Public Notification Assessment (Sections 95A, 95C and 95D)

6.1 Assessment of Steps 1 to 4 (Sections 95A)

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

6.1.1 Step 1: Mandatory public notification is required in certain circumstances

Step 1 requires public notification where this is requested by the applicant; or the application is made jointly with an application to exchange of recreation reserved land under section 15AA of the Reserves Act 1977.

The above does not apply to the proposal.

6.1.2 Step 2: If not required by step 1, public notification precluded in certain circumstances

Step 2 describes that public notification is precluded where all applicable rules and national environmental standards preclude public notification; or where the application is for a controlled activity; or a restricted discretionary, discretionary or non-complying boundary activity.

In this case, the applicable rules do not preclude public notification, and the proposal is not a controlled activity or boundary activity. Therefore, public notification is not precluded.

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

Step 3 describes that where public notification is not precluded by step 2, it is required if the applicable rules or national environmental standards require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

As noted under step 2 above, public notification is not precluded, and an assessment in accordance with section 95A is required, which is set out in the sections below. As described below, it is considered that any adverse effects will be less than minor.

6.1.4 Step 4: Public notification in special circumstances

If an application is not required to be publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified.

Special circumstances are those that are:

- Exceptional or unusual, but something less than extraordinary; or
- Outside of the common run of applications of this nature; or
- Circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

It is considered that there is nothing noteworthy about the proposal. The proposal is for papakāinga housing to support the social and cultural wellbeing of Takou Trust whanau on their ancestral land. In particular, the FNDP anticipates papakāinga housing within the Rural Production and General Coastal Zones on Māori Freehold Land in accordance with Rules 8.6.5.2.2(b) and 10.6.5.4.4 for Integrated Development. It is therefore considered that the application cannot be described as being out of the ordinary or giving rise to special circumstances.

6.2 Section 95D Statutory Matters

In determining whether to publicly notify an application, section 95D specifies a council must decide whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor.

In determining whether adverse effects are more than minor:

- Adverse effects on persons who own or occupy the land within which the activity will occur, or any land adjacent to that land, must be disregarded.

  The land to be excluded from the assessment is listed in section 6.3 below.

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded.

  In this case, resource consent is required for papakāinga development in the Rural Production and General Coastal Zones. It is therefore considered that there is no permitted baseline that can be usefully applied to disregard potential adverse effects associated with the proposal.

  Notwithstanding however, both zones include bulk and location standards for buildings, which can be usefully applied to consider effects relating to building bulk and intensity.

- Trade competition must be disregarded.

  This is not considered to be a relevant matter in this case.

- The adverse effects on those persons who have provided their written approval must be disregarded.

  No persons have provided their written approval for this proposal.

The sections below set out an assessment in accordance with section 95D, including identification of adjacent properties, and an assessment of adverse effects.

6.3 Land Excluded from the Assessment

In terms of the tests for public notification (but not for the purposes of limited notification or service of notice), the adjacent properties to be excluded from the assessment are shown in **Figure 6** below, and include:

(1) Lot 2 DP 334790;

(2) 96 Te Ra Road, Kaeo;

(3) 95 Te Ra Road, Kaeo;

(4) 61 Cavalli View Road, Kaeo; and

(5) 62 Cavalli View Road, Kaeo.

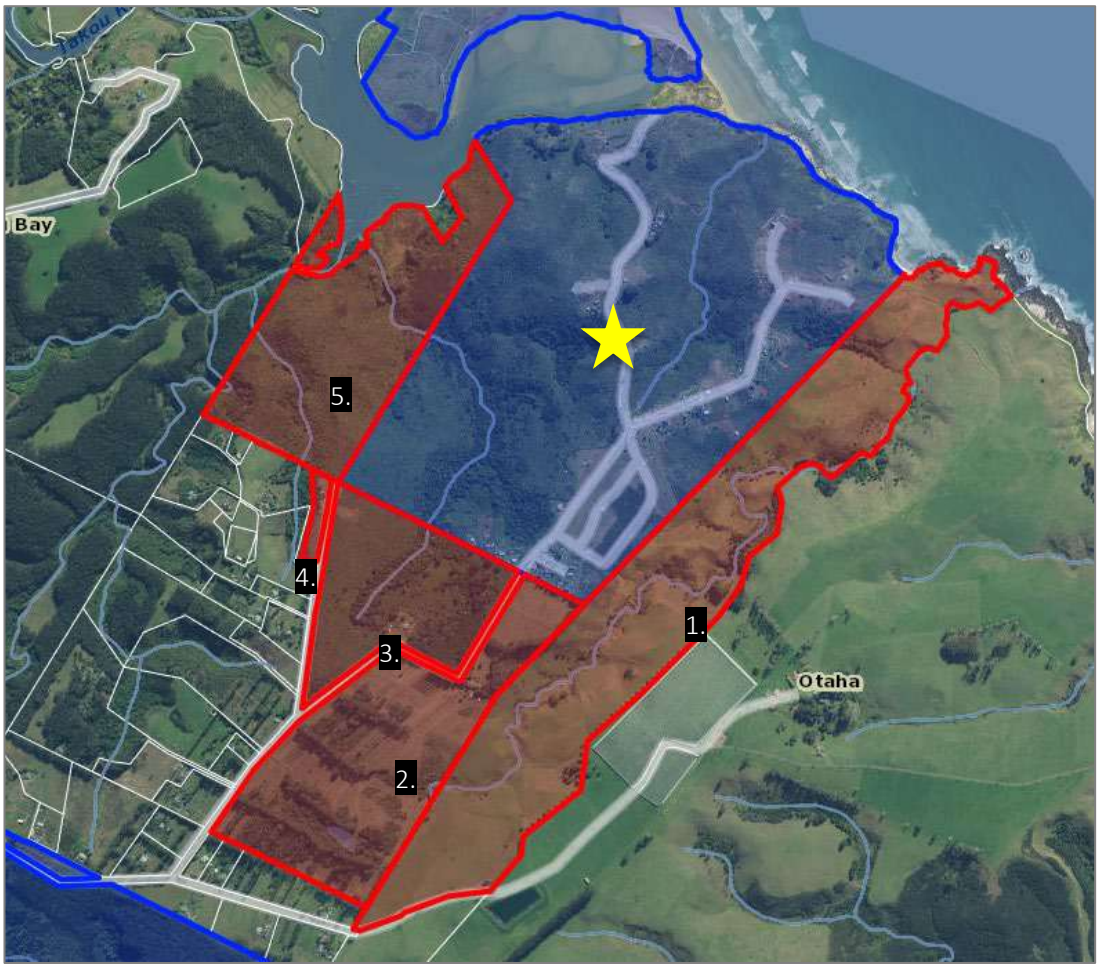

Figure 6: Adjacent properties in relation to subject site identified by the star (source: CoreLogic Emaps)

6.4 Assessment of Effects on the Wider Environment

The following sections set out an assessment of wider effects of the proposal, and it is considered that effects in relation to the following matters are relevant:

- Earthworks and construction;
- Character and amenity;
- Landscape;
- Transportation;
- Earthworks and construction;
- Infrastructure servicing;
- Productive capacity and reverse sensitivity;

- Ecological values;
- Natural Hazards
- Māori cultural values; and
- Cumulative effects.

These matters are set out and discussed below.

6.4.1 Earthworks and Construction Effects

As set out in Section 4, the completed papakāinga development will involve 12,988m^3 of earthworks across a total area of 4.1 hectares to form the internal accessways and create level building platforms.

The following is noted with respect to the proposed earthworks and construction activities:

- During earthworks and construction, it is proposed to install erosion and sediment control measures to avoid any adverse sedimentation effects. A Land Development Report with bulk earthworks and erosion and sediment control plans has been prepared by Chester included at Appendix 6. All proposed sediment and erosion control measures will be designed in accordance with Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region GD2016/005 (GD05). Key elements of the sediment control plans include a stabilise entry, silt and super silt fences, wheel wash, progressive site stabilisation, and decanting earth bunds;
- It is anticipated that the construction works will be able to comply with the FNDP's noise standards having regard to the nature of the proposal. It is considered that any adverse effects associated with noise would be temporary in nature;
- It is anticipated that earthworks and construction will be carried out during standard construction hours, such that any adverse lighting effects on the wider environment are not anticipated;
- There is sufficient space on the subject site to provide parking for construction vehicles. It is considered that any adverse construction traffic effects will be temporary and able to be appropriately managed;
- An accidental discovery protocol will be followed;
- The earthworks are limited to a maximum depth of 1m, with majority of works being up to 0.5m, and adverse site stability effects are not anticipated to occur;
- An accidental discovery protocol will be followed; and
- The earthworks will be located outside of identified natural hazards, including modelled flood hazards.

To manage construction activities associated with the internal road upgrades, a condition requiring a Construction Management Plan (CMP) is anticipated so ensure the associated bulk earthworks are appropriately managed.

Taking into account the temporal nature of the effects, proposed mitigation measures, it is considered that any adverse effects associated with earthworks and constructions, including any resulting effects on water quality, will be appropriately avoided or mitigated to be less than minor.

6.4.2 Character and Amenity

The proposed papakāinga development is located within the Rural Production and General Coastal Zones, which are typically characterised by expansive pastural areas, residential dwellings, and ancillary farm buildings. In addition, the General Coastal Zone is characterised by its coastal focus and associated natural character.

The proposal will enable the construction of up to 94 papakāinga dwellings with ancillary buildings, clustered within the 136 hectare site, and the following comments are made with respect to potential effects on character and amenity values within the surrounding environment:

- The proposed LTO areas are generally located at least 20m from the site boundaries, with the exception of 14 of the 94 LTO areas (being 13, 27B, 63, 86, 87, 89, 90, 93, 94 95, 96, 97, 98, and 109) creating separation between building form and the wider environment. The LTO areas which are located closer to, or adjoining the site boundary largely contain existing dwellings and are screened by existing vegetation at the respective boundaries;
- Although a limited number LTO areas are located close to the site boundaries, they are sufficiently sized to accommodate development that can comply with the sunlight and yard setback controls of the respective zones;
- The papakāinga layout follows the existing private roading layout, with new roads proposed to formalise and provide a safe and legible internal roading network to each LTO. The papakāinga layout is clustered to enable development of papakāinga housing within the identified LTO's while ensuring open areas will be retained and within the balance of the site. The balance area will remain free of development ensuring the existing broadleaf and regenerating kanuka will continue to cloak the undulating hillside to assist with managing the overall intensity of building form across the site;
- All proposed dwellings will comply with the relevant bulk and location controls, and are of modest single storey profiles. The other LTO areas are able to accommodate compliant buildings in the future;
- Planting is proposed in accordance with the landscape drawings included at **Appendix 7**, which in addition to existing vegetation located at the site boundaries, will contribute to screening and softening the built form of the proposed papakāinga;
- There is a limited viewing audience from the public road and beyond the immediately adjoining properties due to the topography of the site, the existing land form, and Te Ra Road being a no exit road which extends into the subject site in a north-south orientation;
- The site adjoins a section of Takou Bay that has limited access available to the public (except via boat), and viewing audiences from this direction will be limited. In addition, the closest LTO areas are located over 140m from the northern boundary adjacent to Takou Bay, and no LTO areas are located within the Outstanding Natural Landscape overlay;
- New buildings proposed within the General Coastal Zone will be finished in natural or recessive colours with the Light Reflectance Value (LRV) of 30% or less assisting built form for integrate into the wider landform;
- The proposal will result in a low level of building coverage and impermeable areas across the site. As identified within the Architectural Drawings included at **Appendix 3**, the extent of building coverage and impermeable areas will be below the permitted controls for the Rural

Production and General Coastal Zones. Although a greater extent of building coverage is proposed within each LTO area to enable development to occur, the site will retain an overall level of compliance with the relevant controls.

Assuming a LTO area of 2,000m^2, a 30% building coverage across 94 LTO areas would equate to less than six hectares or approximately 4.5%. Section 8.3 of the Land Development Report included at **Appendix 5** assesses the total impermeable surface coverage across the site at an allowance of 35% coverage per LTO area as well as inclusion of other existing impermeable surfaces within the site, and estimates this to be 8.45 hectares or 6.2%. These figures will remain less than the relevant maximum permitted allowances provided for in the Rural Production and General Coastal Zones.

It is therefore considered that the bulk and intensity of built form can be appropriately accommodated within the context of the site and surrounding rural environment.

Overall, and having regard to the above, it is considered that due to the layout of the LTO areas, separation distance from site boundaries, proposed landscaping, and overall bulk and intensity of buildings, potential adverse effects on rural and coastal character and amenity can be appropriately mitigated and will be less than minor.

6.4.3 Landscape and Visual Effects

A Landscape and Visual Effects Assessment ('**LVA**') has been prepared by Hawthorn Landscape Architects and is included at **Appendix 7**. The key conclusions with respect to landscape and visual effects are as follows:

- The proposed earthworks will generate 'low' adverse landscape visual effects;
- The proposed papakāinga dwellings are small in scale and given their location and the implementation of darker building materials in the General Coastal Zone and the proposed landscaping, it is anticipated that the buildings can visually integrate with the surrounding environment;
- The number of potential viewers who can see the development is limited due to the lack of public access to the surrounding coastline; and

Overall, potential visual effects from the surrounding visual catchment will be 'low', except that areas off Tuatua Terrace and Pipitia Terrace located in the General Coastal Zone may generate 'low-moderate' effects as a result of the potential for all buildings to be up to 8m in height.

In addition to the conclusions made in the LVA, the following comments are also noted:

- As shown in Appendix 1 to the LVA, the viewing points located to the north and north-west of the site are located at a significant distance from the site, and not within private properties adjacent to the site. Furthermore, View Point 1 is located within a land parcel that forms part of Takou Block, and View Points 2 and 3 are located within areas of Takou Bay which are not publicly accessible;
- With respect to the Coastal Environment and those LTO areas located within the General Coastal Zone, it is considered that the limited viewing audience, use of recessive cladding in accordance with the District Plan zone requirements, proposed planting, retaining a sense of openness within the side outside of the LTO areas, and the existing undulating land form will

contribute to mitigating actual and potential landscape and visual effects associated with the proposal; and

- The proposal is for papakāinga located on Māori Freehold land, and it is considered that the proposed development, including the clustering of LTO areas within the site, is provided for by the ODP and can be accommodated in the context of the site.

Taking account of the above and having regard to the proposed conditions of consent, it is considered that the proposal can visually integrate with the existing landscape, and any actual and potential adverse visual effects of the proposal on landscape values can be appropriately mitigated and will be less than minor.

6.4.4 Transportation

Transport matters, including traffic, access, and parking, have been considered in the Integrated Transport Assessment prepared by TPC and included at Appendix 10. TPC's assessment considers effects with respect to the road network, trip generation, and internal private accessway and parking arrangement. The key conclusions with respect to traffic related matters are as follows:

- The projected peak-hour trips based on the FNDP Traffic Intensity Factor is likely to be greater than actual volumes due to the site's location, where drivers are likely to consolidate vehicle trips to minimise unnecessary driving;
- The traffic volumes generated by the site, including the proposed papakāinga dwellings and existing marae, can be accommodated within the site and within the surrounding public road network;
- Following the proposed upgrades, the internal accessways can operative safely and efficiently. In particular, the proposed passing bays, in conjunction with the existing low speed environment, and adequate sight lines will facilitate safe two-way vehicle movements within the 4m carriageway;
- The accessways are sufficiently wide to create adequate separation distance between vehicles and pedestrians;
- As the site will be an integrated papakāinga, the majority of site users will be familiar with the access arrangements;
- The provision of a public road is not required to manage potential transportation effects, and it is noted that the site is not proposed to be subdivided; and
- Vehicle access to and from all LTO areas can be accommodated within the existing accessways, and as such, restrictions and/or controls on the form and location of vehicle crossings and access within LTO areas is not required.

Given the assessment and conclusions from TPC's assessment, the proposed access arrangements are considered to be appropriate for the development. Overall, it is considered that any adverse effects with respect to traffic, access, and parking related matters will be avoided or mitigated to be less than minor.

6.4.5 Infrastructure Servicing

The provision of infrastructure to service the site for papakāinga is detailed in Section 4.4 above and has been considered in the Land Development Report prepared by Chester. Their report and

drawings are attached at **Appendix 5** and **Appendix 6**, and confirm that the LTO areas can be adequately serviced within the boundaries of the site with respect to stormwater, wastewater, and water supply for potable use and firefighting purpose. It is therefore considered that no adverse environmental effects will result.

6.4.6 Productive Capacity and Reverse Sensitivity

The subject site is underlaid by a mix of LUC class 4 and 6 soils, which is not identified to be "Highly Productive Land" under the National Policy Statement for Highly Productive Land ('**NPS-HPL**').

With regard to reverse sensitivity, the land within the surrounding environment consists primarily of pasture, and the following comments are noted in relation to potential reverse sensitivity effects:

- The LTO areas are generally located within the centre of the site, with the exception of a limited number of LTO areas that are located close to the eastern boundary. In these instances, there is existing vegetation which provides screening between the LTO areas and immediately adjacent property;
- In this case, the proposal is for papakāinga on Māori Freehold Land, where it is considered that the scale and intensity of development for papakāinga dwellings is not out of character; and
- Overall, it is considered that separation from site boundaries, the layout of LTO areas, and vegetation screening will contribute towards mitigating potential reverse sensitivity effects associated with other rural activities within the surrounding environment.

Taking account of the above, it is considered that potential adverse effects on productive capacity and reverse sensitivity will be less than minor.

6.4.7 Ecological Values

An Ecological Impact Assessment (**EiC**) has been undertaken by Wild Ecology and is included at **Appendix 8**. Wild Ecology has undertaken desktop analysis and site investigations to identify and record watercourses, including permanent and intermittent streams and wetlands, and indigenous vegetation and significant habitats.

As illustrated in **Figure 4** above, all existing waterbodies and the majority of indigenous vegetation are located outside of the LTO areas and areas and will not be impacted by the proposed papakāinga development. In particular, proposed and future buildings, as well as associated infrastructure such as, roading, water tanks and wastewater disposal fields will be located at least 30m away from identified waterbodies.

The potential effects of the proposal are assessed at Table 5 of the EiC. In summary, Wild Ecology assess that the proposal's actual or potential adverse effects on ecological values will be 'low' for the following reasons:

- Earthworks will be carried in accordance with GD05 and the requirements for the Northland Regional Plan, mitigating potential effects associated with sediment runoff to adjacent watercourses and wetland;
- The proposed earthworks, construction of papakāinga dwellings, and construction of on-site infrastructure are not anticipated to adversely affect the hydrology, habitat quality, or water quantity of the existing wetlands;

- As no indigenous vegetation clearance is proposed, the potential effects on impacted habitats or species will be 'low'.

Overall, the findings of Wild Ecology are accepted and, on this basis, it is considered that any potential adverse ecological effects resulting from the proposal will be avoided or mitigated to be less than minor.

6.4.8 Natural Hazards

The layout of the LTO areas will result existing and future building platforms will be located closer than 20m to the dripline of trees within existing areas of scrubland. In instances where the existing scrubland is exotic, sufficient buffer distances will be achieved through vegetation clearance. However, in two instances (LTO areas 13 and 90), a 20m buffer cannot be established without removing indigenous vegetation. In these cases, the adjacent vegetation has been identified as kanuka-broadleaf scrubland, which is classified as a low flammable species. Furthermore, it is noted that appropriate provision will be made within the site to service each LTO area with water supply for firefighting purposes.

For these reasons, it is considered that the level of fire risk to dwellings will be low and that potential adverse effects will be less than minor.

6.4.9 Māori Cultural Values

The proposed papakāinga is not located within an area or site identified within the FNDP or PDP as being a site of significance to Māori. In relation to scheduled sites MS06-34 and MS06-43, these features are located within Takou Block East north of Takou River. Given no development is proposed within Takou Block East it is considered that any potential effects of the associated cultural values will be managed through the avoidance of development in this area.

The papakāinga housing is proposed for the purposes of enabling whanau members to return and connect to their ancestral land, and as such is considered to strengthen whānau's relationship and values to the site.

On this basis, there are no known adverse effects on Māori cultural values that are considered to arise from this proposal.

6.4.10 Cumulative Effects

The following comments are noted in relation to potential adverse cumulative effects on rural character and amenity:

- The proposal is for papakāinga on Māori Freehold land, which is an anticipated activity within both the Rural Production and General Coastal Zones. In this case, the LTO areas are less than the required minimum size, however the potential visual effects are considered to be less than minor for the reasons discussed at Section 6.4.2 above.
- The proposed onsite infrastructure arrangements are considered to adequately service the development to manage potential adverse effects associated with the proposal;
- Each LTO area can be sufficiently serviced by safe and efficient access and provided with on-site parking; and

- Access and private accessways for the proposal are sufficiently designed to accommodate the proposed activity, and potential transport and access effects will be internalised within the site.

Overall, and having regard to the above, it is considered that the proposal and site layout where LTO areas are clustered within the centre of the site is appropriate in the context of a papakāinga development on Māori Freehold land, in line with traditional papakāinga design principles;

6.5 Summary of Effects

Overall, it is considered that any adverse effects on the environment relating to this proposal will be less than minor.

6.6 Public Notification Conclusion

Having undertaken the section 95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory;
- Under step 2, public notification is not precluded;
- Under step 3, public notification is not required as it is considered that the activity will result in less than minor adverse effects; and
- Under step 4, there are no special circumstances.

Therefore, based on the conclusions reached under steps 3 and 4, it is recommended that this application be processed without public notification.

7.0 Limited Notification Assessment (Sections 95B, 95E to 95G)

7.1 Assessment of Steps 1 to 4 (Sections 95B)

If the application is not publicly notified under section 95A, the council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

7.1.1 Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups; or affected persons under a statutory acknowledgement affecting the land (being on land, or adjacent to land, that is subject to a statutory acknowledgement area).

The above does not apply to this proposal.

7.1.2 Step 2: If not required by step 1, limited notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and national environmental standards preclude limited notification; or the application is for a controlled activity (other than the subdivision of land).

In this case, the applicable rules do not preclude limited notification and the proposal is not a controlled activity. Therefore, limited notification is not precluded.

7.1.3 Step 3: If not precluded by step 2, certain other affected persons must be notified

Step 3 requires that, where limited notification is not precluded under step 2 above, a determination must be made as to whether any of the following persons are affected persons:

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary activity, and therefore an assessment in accordance with section 95E is required and is set out below.

Overall, it is considered that any adverse effects on persons will be less than minor, and accordingly, that no persons are adversely affected.

7.1.4 Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

In this instance, having regard to the assessment in section 6.1.4 above, it is considered that special circumstances do not apply.

7.2 Section 95E Statutory Matters

If the application is not publicly notified, a council must decide if there are any affected persons and give limited notification to those persons. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).

In deciding who is an affected person under section 95E:

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded;
- Only those effects that relate to a matter of control or discretion can be considered (in the case of controlled or restricted discretionary activities); and
- The adverse effects on those persons who have provided their written approval must be disregarded.

These matters were addressed in section 6.2 above, and no written approvals have been obtained.

Having regard to the above provisions, an assessment is provided below.

7.3 Assessment of Effects on Persons

Adverse effects in relation to rural character, amenity, and transportation on persons are considered below.

Wider effects, such as earthworks and construction effects, character and amenity, landscape and visual effects, transportation, infrastructure servicing, productive capacity and reverse sensitivity, ecological values, natural hazards, Māori cultural values, and cumulative effects were considered in section 6.4 above, and considered to be less than minor.

7.3.1 Persons at Lot 2 DP 334790

Figure 7: Lot 2 DP 334790 (red) in relation to the subject site (blue) (source: CoreLogic Emap).

The property at Lot 2 DP 334790 adjoins the length of the eastern boundary of the subject site, as illustrated in Figure 7 above. The property is held in pasture and contains an existing residential dwelling accessed at Otaha Road, and located over 800m away from the closest south eastern portion of the subject site. The proposal will result in a change in character with the introduction of the papakāinga at the eastern boundary of the subject site. It is considered that the proposal will not result in adverse effects for owners and occupiers of this property for the following reasons:

- The proposed papakāinga dwellings and LTO areas close to the eastern boundary of the subject site will be sufficiently separated and/or screened from the shared boundary and the existing dwelling at Lot 2 DP 334790 by vegetation to mitigate adverse visual effects on character and amenity values as well as privacy;
- Generally, all proposed papakāinga dwellings and future development within other LTO areas will be orientated towards the centre of the site and away from the eastern boundary, which will mitigate privacy effects;
- The topography of the site and undulating land form will contribute to minimising visual effects associated with the proposal; and
- As assessed by TPC, all traffic movements associated with the proposal can be accommodated within Te Ra Road.

Taking the above into account, it is considered that any adverse effects on owners and occupiers at the aforementioned property will be less than minor.

7.3.2 Persons Adjacent to the South

Figure 8: Adjacent properties to the south (red) in relation to subject site (blue) (source: CoreLogic Emap).

The properties at 95 and 95 Te Ra Road adjoin the southern boundary of the subject site, and property at 61 Cavalli View Road adjoins the south western corner of the subject site as illustrated in Figure 8 above. The properties are held in pasture and utilised for rural lifestyle living. The existing dwellings and accessory buildings at 95 and 95 Te Ra Road are located over 250m from the common boundary with the subject site, and the existing dwelling at 61 Cavalli View Road is located over 50m way, and separate by Cavalli View Road. The proposal will result in a change in character with the introduction of the papakāinga at the eastern boundary of the subject site.

With respect to 95 and 96 Te Ra Road, it is considered that the proposal will not result in adverse effects for owners and occupiers of this property for the following reasons:

- The LTO areas at the southern boundary have been designed to around existing papakāinga dwellings, and will not result in a significant visual change when viewed from these adjoining properties. In addition, this proposal will provide for up to one papakāinga dwelling in each LTO area, and will not result in an increase in development intensity in this location; and
- Separation distances from these existing dwellings as well as existing vegetation within the subject site will mitigate visual effects on character and amenity values as well as privacy.

With respect to 61 Cavalli View Road, there is over 400m separation distance between the site boundary and the closest dwellings/LTO areas within the subject site. In addition, the existing dwelling at this property has a north western outlook, and will be oriented away from the subject site. Overall, it is considered that these existing separation distances will mitigate adverse visual effects.

With respect to all properties adjacent to the south, all traffic movements associated with the proposal can be accommodated within Te Ra Road.

Taking the above into account, it is considered that any adverse effects on owners and occupiers at the aforementioned properties will be less than minor.

7.3.3 Persons at 62 Cavalli View Road

Figure 9: 62 Cavalli View Road (red) in relation to the subject site (blue).

The property at 62 Cavalli View Road adjoins the length of the western boundary of the subject site, as illustrated in Figure 9 above. The property is held in pasture and is currently vacant of development.

All proposed papakāinga dwellings and the LTO areas for future development are located over 300m, and will be partially screened by existing vegetation and the topography of the site and undulating land form. In addition, all traffic movements associated with the proposal can be accommodated within Te Ra Road. It is considered that any adverse effects on owners and occupiers at the aforementioned property will be less than minor.

7.3.4 Summary of Effects

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned properties will be less than minor in relation to rural character, amenity, and transportation effects. Wider effects, including earthworks and construction effects, character and amenity, landscape and visual effects, transportation, infrastructure servicing, productive capacity and reverse sensitivity, ecological values, natural hazards, Māori cultural values, and cumulative effects were assessed in section 6.4 above and are considered to be less than minor.

It is considered, therefore, that there are no adversely affected persons in relation to this proposal.

7.4 Limited Notification Conclusion

Having undertaken the section 95B limited notification tests, the following conclusions are reached:

- Under step 1, limited notification is not mandatory;

- Under step 2, limited notification is not precluded;
- Under step 3, limited notification is not required as it is considered that the activity will not result in any adversely affected persons; and
- Under step 4, there are no special circumstances.

Therefore, it is recommended that this application be processed without limited notification.

8.0 Consideration of Applications (Section 104)

8.1 Statutory Matters

Subject to Part 2 of the Act, when considering an application for resource consent and any submissions received, a council must, in accordance with section 104(1) of the Act have regard to:

- Any actual and potential effects on the environment of allowing the activity;
- Any relevant provisions of a national environmental standard, other regulations, national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement; a plan or proposed plan; and
- Any other matter a council considers relevant and reasonably necessary to determine the application.

As a non-complying activity, section 104D of the Act states that a council may only grant the application if:

(a) adverse effects will be no more than minor; or

(b) the activity is not contrary to the objectives and policies of the relevant plans.

8.2 Weighting of Proposed Plan Changes: Far North Proposed District Plan

The Far North Proposed District Plan (PDP) is currently progressing through the Hearings Process. These are anticipated to extend until September 2025 before moving to a Decision.

It is considered that the proposal can be predominantly assessed against the FNDP provisions. There are some provisions of the PDP which have immediate legal effect, including Earthworks, and Indigenous Biodiversity, and the proposal will comply with all permitted activity rules that have immediate legal effect.

Under the PDP, the site is proposed to be zoned Māori Purpose - Rural. An assessment of the proposal against the relevant FNDP and PDP objectives and policies is provided below. It is considered that different outcomes would arise between the two plan versions. However, as the PDP is still going through the hearings process and no decisions have been issued, it is generally considered that greater weight should be given to the FNDP provisions.

9.0 Effects on the Environment (Section 104(1)(A))

Having regard to the actual and potential effects on the environment of the activity resulting from the proposal, it was concluded in the assessment above that any wider adverse effects relating to

the proposal will be less than minor and that no persons would be adversely affected by the proposal.

Further, it is considered that the proposal will also result in positive effects including enabling the ongoing development of Takou Block and for whānau to re-establish connection with their whenua and to provide for their social, economic and cultural needs.

Overall, it is considered that the proposal will have positive effects, and any actual and potential adverse effects on the environment of allowing the activity are less than minor.

10.0 District Plan and Statutory Documents (Section 104(1)(B))

10.1 National Policy Statements

10.1.1 National Policy Statement for Freshwater Management 2020

The National Policy Statement for Freshwater Management 2020 (**NPS-FM**) replaced the NPS-FM 2014 and came into effect on 3 August 2020.

The NPS-FM includes one objective as follows:

> *"(1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:*
>
> *(a) first, the health and well-being of water bodies and freshwater ecosystems*
>
> *(b) second, the health needs of people (such as drinking water)*
>
> *(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future."*

This objective seeks to manage natural and physical resources through setting a clear hierarchy for which the resources should be managed. Specifically, it seeks to prioritise the health and wellbeing of water bodies and freshwater ecosystems over all other matters. The NPS-FM also includes 15 policies that seek manage freshwater in a way that give effect to Te Mana o Te Wai.

It is considered that the proposal has appropriately considered the objectives and policies of the NPS-FM through the assessment and classification of all watercourses within the site boundaries where there are a number of existing permanent and intermittent streams and natural inland wetlands. The proposed papakāinga development has been designed to avoid these existing natural features. In particular, the proposed earthworks to upgrade the accessway and to create level building platforms within those LTO areas proposed for development are located outside of a 100m setback from all natural inland wetlands. As such, it is considered that the proposal will enable the health and well-being of these waterbodies and freshwater ecosystems to be priorities.

10.1.2 National Policy Statement – Indigenous Biodiversity

The National Policy Statement for Indigenous Biodiversity (**NPS-IB**) was published by the Minister of the Environment on 7 July 2023 and came into force on 4 August 2023.

The NPS-IB applies to indigenous biodiversity in the terrestrial environment throughout Aotearoa New Zealand. The NPS-IB does not contain rules that apply to the current proposal, rather the

relevant objective and policies in Part 2, and further 3.16 (Indigenous Biodiversity outside of SNAs) require consideration at section 104 stage. Therefore, the NPS-IB does apply to the proposal as a higher order planning document that the consent authority is required to "have regard to" pursuant to section 104(1)(b)(iii) of the Resource Management Act 1991 ("RMA").

The proposal will not require the clearance of indigenous vegetation or result in a loss of indigenous biodiversity including habitat. It is therefore considered that the proposal accords with the relevant provisions of the NPS-IB.

10.2 Northland Regional Policy Statement

The Northland Regional Policy Statement (**RPS**) covers the management of natural and physical resources across the Northland Region. The provisions within the RPS give guidance at a higher planning level in terms of the significant regional issues.

The objectives and policies relevant to the proposal are assessed below. Overall, it is considered that the proposal accords with the RPS.

10.2.1 Part 3 Objectives

The following objectives of the RPS are considered to be relevant to the proposal:

> ***3.3 Ecological flows and water levels***
>
> *Maintain flows, flow variability and water levels necessary to safeguard the lifesupporting capacity, ecosystem processes, indigenous species and the associated ecosystems of freshwater.*
>
> ***3.4 Indigenous ecosystems and biodiversity***
>
> *Safeguard Northland's ecological integrity by:*
>
> *a) Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna;*
>
> *a) Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and*
>
> *b) Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species.*

Comment: An ecological assessment prepared by Wild Ecology is attached and eclosed at **Appendix 8.** All ecological features have been identified and their value assessed as part of this proposal, which does not result in the clearance of any indigenous vegetation identified in accordance with the RPS. In addition, the earthworks proposed under this application will be over 100m from existing natural inland wetlands, and the hydraulic neutrality of existing wetland environments will be maintained. The proposal is considered to accord with the directions of objectives 3.3 and 3.4 of the RPS.

> ***3.11 Regional form***
>
> *Northland has sustainable built environments that effectively integrate infrastructure with subdivision, use and development, and have a sense of place, identity and a range of lifestyle, employment and transport choices.*

Comment: The proposal is for papakāinga development on Māori Freehold land and will formalise existing development as well as enable further development to occur over time as whanau develop

the land. Onsite servicing for the proposal has taken a comprehensive design approach to ensure the development will be appropriately managed.

3.12 Tangata whenua role in decision-making

Tangata whenua kaitiaki role is recognised and provided for in decision-making over natural and physical resources.

Comment: This proposal represents Takou Trust's cultural identity and values over this whenua, in a manner that is consistent with their role as kaitiaki.

10.2.2 Part 4 Policies

The following policies of the RPS are considered to be relevant to the proposal:

4.4.1 Policy – Maintaining and protecting significant ecological areas and habitats

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

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

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

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

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

a) Areas of predominantly indigenous vegetation;

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

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

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

d) Areas of predominantly indigenous vegetation;

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

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

Comment: The northern portion of the subject site is partially located in the RPS coastal environment. In terms of indigenous vegetation and habitats of indigenous fauna, Wild Ecology has as undertaken an assessment of the existing ecological features of the site against Appendix 5 of the RPS, confirming that existing broadleaf forest, kanuka-broadleaf regenerating scrubland, and indigenous wetland meet the criteria. As identified above, the proposal does not invo

lve the removal of indigenous vegetation and will retain all existing natural inland wetlands within the subject site.

5.1.1 Policy – Planned and coordinated development

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

a) Is guided by the 'Regional Form and Development Guidelines' in Appendix 2;

b) Is guided by the 'Regional Urban Design Guidelines' in Appendix 2 when it is urban in nature;

c) Recognises and addresses potential cumulative effects of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;

d) Is integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;

e) Should not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity;

f) Ensures that plan changes and subdivision to / in a primary production zone, do not materially reduce the potential for soil-based primary production on land with highly versatile soils, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and

g) Maintains or enhances the sense of place and character of the surrounding environment except where changes are anticipated by approved regional or district council growth strategies and / or district or regional plan provisions.

h) Is or will be serviced by necessary infrastructure.

[our emphasis added]

Comment: Particular consideration has been given to 5.1.1(a), (c), (e), (f) and (h) and it is considered that the proposal accords with the relevant directions of these policies. In particular, the proposed development incorporates quality design principles including context, character, choice, connections, creativity custodianship and collaboration. With specific reference to 5.1.1(h) the proposal can be adequately serviced in terms of transportation, water, wastewater, and stormwater by existing and proposed infrastructure as highlighted within the Land Development and ITA Report at Appendix 5 and Appendix 10.

In addition, the proposed development is considered to be compatible with the character of the surrounding environment, including the existing rural and coastal character, and will be sufficiently separated and/or screened from adjacent rural land uses. In addition, the proposal is not located on land that has been identified as highly productive. Therefore it is considered that the proposal will avoid the potential for reverse sensitivity effects and will accord with 5.1.1(e), (f), and (g).

8.3.2 Policy – Marae and Papakāinga

The regional and district councils shall recognise the historical, cultural, and social importance of marae and papa kāinga, and enable their ongoing use and development in regional and district plans.

Comment: Policy 8.3.2 provides specifically for marae and papakāinga and directs that district and regional councils shall recognise the historical and social importance of papakāinga, and enable

their ongoing use and development within their respective plans. The proposal is for papakāinga housing on Māori Freehold land, and Policy 8.3.2 is considered to be relevant to the proposal, where council's are required to recognise and enable such activities.

10.3 Operative Far North District Plan

The FNDP was made operative in part in 2007 and fully operative in 2009. Below is an assessment of the relevant objectives and policies to the proposal.

10.3.1 Part 3 – District-wide Provisions: Chapter 12 – Soils & Minerals

Objectives contained in 12.3.3 seeks to manage adverse effects associated with excavation and filling in an integrated manner with the Northland Regional Council. The objectives seek to maintain the life supporting capacity of soils, while ensuring adverse effects are either avoided, remedied or mitigated.

The proposal involves the excavation and filling to establish safe and efficient accessways, buildig platforms, and parking and manoeuvring areas. The proposal has minimised earthworks to reduce the visual impacts and temporary effects will be managed through the use of erosion and sediment controls that have been designed in accordance with best practice.

Overall, the proposal is considered to accord with the FNDP objectives for earthworks.

10.3.2 Part 3 – District-wide Provisions: Chapter 15 – Transportation

Objectives contained in 15.1.3 seek to minimise the adverse effects of traffic through the provision of appropriate parking, access, and promotes the safe and efficient movement / circulation of vehicles and pedestrians. The policies contained in 15.1.4 seek to achieve this by ensuring an appropriate evaluation of the activities is undertaken at the time of development that ensures appropriate provisions of parking and associated matters is undertaken as part of any proposal.

An ITA has been prepared by TPC which concludes that access arrangements proposed to and from, and within the site can accommodate the anticipated vehicle volumes in a safe and efficient manner. In addition, the proposal will not compromise the safety and efficiency of Te Ra Road.

Overall, the proposal is considered to accord with the FNDP objectives for transportation.

10.3.3 Chapter 8: Rural Environment – Rural Production Zone

The Objectives of the Rural Production Zone relate to enabling efficient use and development of the Rural Productive Zone, promoting sustainable management of natural and physical resources, avoiding, remedying or mitigating conflicts between land use activities and the adverse effects of incompatible use or development on natural and physical resources and amenity values. Objective 8.6.3.2 seeks 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 wellbeing.

The proposal achieves Objective 8.6.3.2 by retaining the potential productive function of the 136 hectare site while providing papakāinga housing to provide for the social and cultural wellbeing of tangata whenua and res-establishes connection with their land.

Policy 8.6.4.1 seeks to enables farming and rural production activities as well as a wide range of activities while ensuring that the adverse effects on the environment, including reverse sensitivity effects, are avoided, remedied or mitigated and are not to the detriment of rural productivity.

Policy 8.6.4.7 refers to avoiding the actual and potential adverse effects of conflicting land use activities, while Policy 8.6.4.8 refers to providing separation from other activities where adverse effects occur.

The proposal seeks to establish papakāinga development which has been carefully designed in an integrated manner to ensure the maintenance and enhancement of the rural character and amenity of the wider rural environment. The design and location of LTO areas and residential units has ensured appropriate separation of activities to avoid conflicting land use and potential reverse sensitivity and the efficient use of land. In addition, the topography of the site, existing vegetation as well as the positioning to neighbouring properties means that adverse on character and amenity are avoided.

With regard to the policies seeking to manage the effects of the proposal, the assessment in Section 6.4 demonstrates that the adverse effects of the proposal will be less than minor. Reverse sensitivity and land use incompatibility effects are not considered to arise, with appropriate mitigation proposed to manage this.

Overall, the proposal is considered to be consistent with the anticipated outcomes of the Rural Production Zone.

10.3.4 Chapter 10: Coastal Environment – General Coastal Zone

The Objectives of the General Coastal Zone seek to ensure that subdivision, use, and development within the coastal environment are carried out in a way that preserves the area's natural character and protects it from inappropriate or detrimental activities. They focus on managing land use and development to maintain the ecological and aesthetic qualities of the coast while ensuring that future generations can still meet their needs through the responsible use of natural and physical resources. This includes preventing overdevelopment, promoting sustainable practices, and safeguarding the integrity of coastal ecosystems from activities that could lead to long-term environmental harm.

The proposal achieves the objectives by including specific design considerations within that part of the subject site that is zoned General Coastal, including bespoke on-lot planting within those LTO areas that will be visually prominent when viewed from the direction of Takou Bay. Compliance is achieved with the requirement for buildings to be of a low reflectance value. Furthermore, no buildings or LTO areas will be located within the coastal environment or Outstanding Natural Landscapes overlay as identified under the RPS.

Policy 10.6.4.1 seeks to permit a wide range of activities in the General Coastal Zone where their effects can be appropriately managed. Policies 10.6.4.2, 10.6.4.3, and 10.6.4.4 seek to manage subdivision, use, development, and activities to ensure the visual and landscape qualities of the coastal environment are protected. Policy 10.6.4.5 recognises that Māori are significant land owners in the General Coastal Zone and seeks to recognise and provide for the relationship of Māori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga. Policy 10.6.4.6 seeks to ensure that the design, form, location and siting of earthworks has regard to the natural character of the existing landscape.

The proposal seeks to establish papakāinga development on Māori Freehold Land, and is an activity that is anticipated within the General Coastal Zone. With respect to Policies 10.6.4.2, 10.6.4.3, and 10.6.4.4, it is considered that the proposal will be compatible with the existing natural character

of the surrounding environment for the reasons discussed above and in Sections 6.4.2 of this report.

Overall, the proposal is considered to be consistent with the anticipated outcomes of the General Coastal Zone.

10.4 Far North Proposed District Plan

10.4.1 Tangata whenua

The Tangata Whenua chapter of the PDP provides a set of objectives and policies regarding the relationship between tangata whenua and the Council, the protection of cultural heritage, and the enhancement of tangata whenua well-being.

The objectives seek to establish a strong, high-trust partnership between tangata whenua and the Council, ensuring tangata whenua have meaningful opportunities to actively participate as kaitiaki in resource management processes. They aim to protect areas of significance to Māori and cultural resources. The objectives also recognise the importance of maintaining mana whenua in their rohe through enduring connections to culture, ancestral lands, and natural resources. Additionally, they promote the enhancement of tangata whenua economic, social, and cultural well-being through enabling development on Māori land and Treaty settlement land.

The policies give effect to these objectives by promoting collaboration between the Council and tangata whenua through Mana Whakahono ā Rohe agreements and other partnership arrangements. They ensure tangata whenua are provided with opportunities to participate in resource management processes that affect their ancestral land, water, and taonga. The policies emphasise the protection of Māori historic heritage and cultural resources, facilitated through collaboration with iwi and hapū to identify and schedule significant sites and cultural landscapes. They also seek to enable development on Māori land to support tangata whenua well-being, provided adverse environmental effects are appropriately managed. Furthermore, the policies recognise tangata whenua as specialists of their tikanga, including when assessing resource consent applications.

The proposed papakāinga development is considered to be consistent with these objectives and policies for the following reasons:

- The development will enable tangata whenua to strengthen and maintain their mana whenua within their rohe by supporting the occupation and use of ancestral land;
- The development will contribute to the economic, social, and cultural well-being of tangata whenua by enabling residential land use on Māori Freehold Land administered under Te Ture Whenua Māori Act 1993; and
- The proposal enables the use and development of Māori land to support tangata whenua well-being, while adopting measures to appropriately manage potential adverse environmental effects as set out in section 6.4 above.

10.4.2 Strategic Direction - Economic and social wellbeing

Objective SD-SP-O2 seeks to develop initiatives that support the wellbeing of tangata whenua, in partnership with iwi and hapū. The proposed development is considered to give effect to this strategic direction, as it is a hapū led proposal providing papakāinga housing for tangata whenua.

The development will assist in delivering affordable housing that meets the social and cultural needs of tangata whenua.

10.4.3 Māori Purpose Zone

The objectives and policies of the Māori Purpose zone are set out in MPZ-O1 to MPZ-O3 and MPZ-P1 to MPZ-P4 of the PDP.

The objectives of the Māori Purpose zone seek to ensure the viability of the zone for future generations, while enabling a range of social, cultural, and economic development opportunities that support occupation, use, development and the ongoing relationship with ancestral land. The objectives also seek to ensure that such development is undertaken in a way that reflects the sustainable carrying capacity of both the land and the surrounding environment.

The policies support the objectives by providing for the use and development of ancestral Māori land, with an emphasis on enabling activities such as marae, papakāinga, customary use, and small-scale commercial ventures, provided adverse effects are avoided, remedied, or mitigated. Development is managed to ensure compatibility with surrounding land uses, maintenance of character and amenity values, and adequate servicing by infrastructure. The policies also require consideration of the scale, design, and location of development, along with measures to manage reverse sensitivity effects and natural hazards, and to protect highly productive land, historic heritage, cultural values, and biodiversity.

The proposed papakāinga development is considered to be consistent with these objectives and policies for the following reasons:

- The development supports the ongoing occupation, use, and development of ancestral Māori land;
- It is considered that the proposal will provide affordable housing solutions resulting in positive economic and social effects;
- The proposed scale, design, and layout are considered appropriate for the site and surrounding area for the reasons set out in section 6.4.2 and 6.4.3 above;
- The attached Land Development Report at **Appendix 5** confirms that the development can be appropriately serviced;
- The proposal can be accommodated by the existing road network, and appropriate provision has been made to enable safe and efficient vehicle movements within the site;
- The proposal will not occur on highly productive land; and
- Potential reverse sensitivity effects are considered to be less than minor for the reasons set out in section 6.4.6 above.

10.5 Summary

It is considered that the proposed development is generally in accordance with the objectives and policies of the NPS-FW, NPS-IB, RPS, FNDP and PDP.

11.0 Part 2 Matters

Section 5 of Part 2 identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use, development and protection of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Section 6 of the Act sets out a number of matters of national importance including (but not limited to) the protection of outstanding natural features and landscapes and historic heritage from inappropriate subdivision, use and development.

Section 7 identifies a number of "other matters" to be given particular regard by Council and includes (but is not limited to) Kaitiakitanga, the efficient use of natural and physical resources, the maintenance and enhancement of amenity values, and maintenance and enhancement of the quality of the environment.

Section 8 requires Council to take into account the principles of the Treaty of Waitangi.

Overall, as the effects of the proposal are considered to be less than minor, and the proposal accords with the relevant FNDP objectives and policies, it is considered that the proposal will not offend against the general resource management principles set out in Part 2 of the Act.

12.0 Other Matters (Section 104(1)(C))

12.1 Record of Title Interests

The Record of Title for the site are subject to a number of interests (refer **Appendix 1**). None of these are anticipated to affect the resource consent application as discussed in **Table 2** below:

Table 2: Record of Title interests.

Interest	Comment
8368193.3 – Status Order determining the status of the within land to be Māori Freehold Land.	Confirmation of land status.

12.2 Special Information Requirements

As consent is sought for integrated development under Rules 8.6.5.4.2 and 10.6.5.4.4 a management plan is required. The relevant information for this requirement is set out and discussed in **Table 2** below:

Table 3: Integrated Development Management Plan Requirements.

Information Requirement	Comment
A plan showing the location of the property (including property boundaries), topography,	The context and existing site plans provided within the Architectural Drawings prepared by

adjoining uses, location of the activities proposed in the application, existing vegetation (type and location), drainage patterns, existing and proposed access road/s, location of any outstanding landscapes or natural features, location of any covenanted or otherwise protected areas.	Laminata and included at **Appendix 3** provide the required information.
A description of the purpose of the application and the activities which are proposed.	Refer to section 4 of this report which details the proposal.
A description of the degree (if any) to which the proposed development will exceed the standards set for permitted, controlled, restricted discretionary and discretionary activities in the zone.	An assessment against the Rural Production Zone and General Coastal Zone standards has been provided as **Appendix 9**.
Details of the staging (if any) which is proposed.	No staging is proposed as part of the application.
A description of any heritage resources on the property.	N/A – No Heritage resources have been identified on site.
Other information which is relevant to any assessment of the effects of the application, is as follows: • *Details of provisions made for sewage and stormwater disposal and the proposals for avoiding, remedying or mitigating any adverse effects on receiving environments of stormwater flows;* • *Details of any earthworks;* • *Details of the geotechnical aspects of the property;* • *Details of any natural hazard areas and the measures which will be taken to avoid any adverse effects;* • *Details of the measures (if any) to protect indigenous vegetation and habitats, outstanding landscapes and natural features, heritage resources and riparian margins;* • *The extent to which areas of open space, reserves, natural vegetation and other amenities are already provided by the land owning group on other whanau and hapu lands in the vicinity.*	A suite of specialist reports has been appended to this application, including: • Traffic Impact Assessment; • Land Development (Civil) Report; • Ecological Impact Assessment; and • Landscape and Visual Effects Assessment. Collectively, these reports are considered to provide sufficient detail to understand the various site constraints and how the various elements of the proposal are to be managed. The proposed conditions of consent (enclosed at **Appendix 4**) provide a suitable management framework to ensure future development will occur in a manner that is appropriate to manage adverse effects to a level that is less than minor and acceptable.
The extent to which the application promotes energy efficiency and renewable energy development and use as provided for in Policy 13.4.15 through incorporating the following initiatives: • *Development of energy efficient buildings (e.g. by providing a north-facing site with*	The proposed papakāinga layout is considered to allow for energy-efficient buildings through providing a north-south orientated accessway network that enables east-west orientated LTO areas. Additionally, space is available for renewable energy solutions should whānau wish to implement it.

the ability to place a building on an east/west axis); • *Reduced travel distances and car usage by designing a layout with as many links to adjacent sites and surrounding roads as practicable;* • *Encouragement of pedestrian and cycle use by designing a layout that allows easy direct access to and from, shops, schools, work places, reserves and other amenities;* • *Access to alternative transport facilities;* • *Domestic scale renewable energy and/or community renewable energy development;* • *Solar street lighting.*	

13.0 Section 104D Non-complying Activities

To be able to grant consent to a non-complying activity, a council must be satisfied that either the adverse effects of the activity on the environment will be minor (s104D(1)(a)), or the proposed activity will not be contrary to the objectives and policies of a proposed plan or plan (s104D(1)(b)). This consideration is commonly known as the 'threshold test' or the 'gateway test'. If either of the limbs of the test can be passed, then the application is eligible for approval, but the proposed activity must still be considered under section 104. There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test' can be considered to be passed.

As identified in the assessment above, the adverse effects of the activity on the environment will be less than minor and the proposed activity will not be contrary to the objectives and policies of the plan. As such the application can be considered under section 104 and a determination made on the application as provided by section 104B.

14.0 Conclusion

The proposal involves papakāinga development at Takou Block.

Based on the above report it is considered that:

- Public notification is not required as adverse effects in relation to earthworks and construction effects, character and amenity, landscape and visual effects, transportation, infrastructure servicing, productive capacity and reverse sensitivity, ecological values, natural hazards, Māori cultural values, and cumulative effects are considered to be less than minor. There are also positive effects including enabling the ongoing development of Takou Block and for whānau to re-establish connection with their whenua and to provide for their social, economic and cultural needs.
- Limited notification is required as potential adverse effects arising from the proposal will be appropriately managed to level where no persons are considered adversely affected by the proposal;

- The proposal accords with the relevant FNDP objectives and policies; and
- The proposal is considered to be consistent with Part 2 of the Act.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that it can be granted on a non-notified basis.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
QUALIFIED

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **507089**

Land Registration District **North Auckland**

Date Registered 09 December 2009 09:00 am

Prior References

8368193.1 NA2D/192

Type Amalgamation Order under Section 435 Maori Affairs Act 1953

Instrument MFAO 8368193.1

Area 322.9290 hectares more or less

Legal Description Takou Block

Registered Owners

Annette Auckland, Waitai Tua, Whati Rameka, Brian Heihei, Adrian Hoterene Shortland, Alexander John Rameka, Josiah Nathan Shaw, Akuhata Shortland and Doreen Atawhai Rihari as responsible trustees jointly, no survivorship

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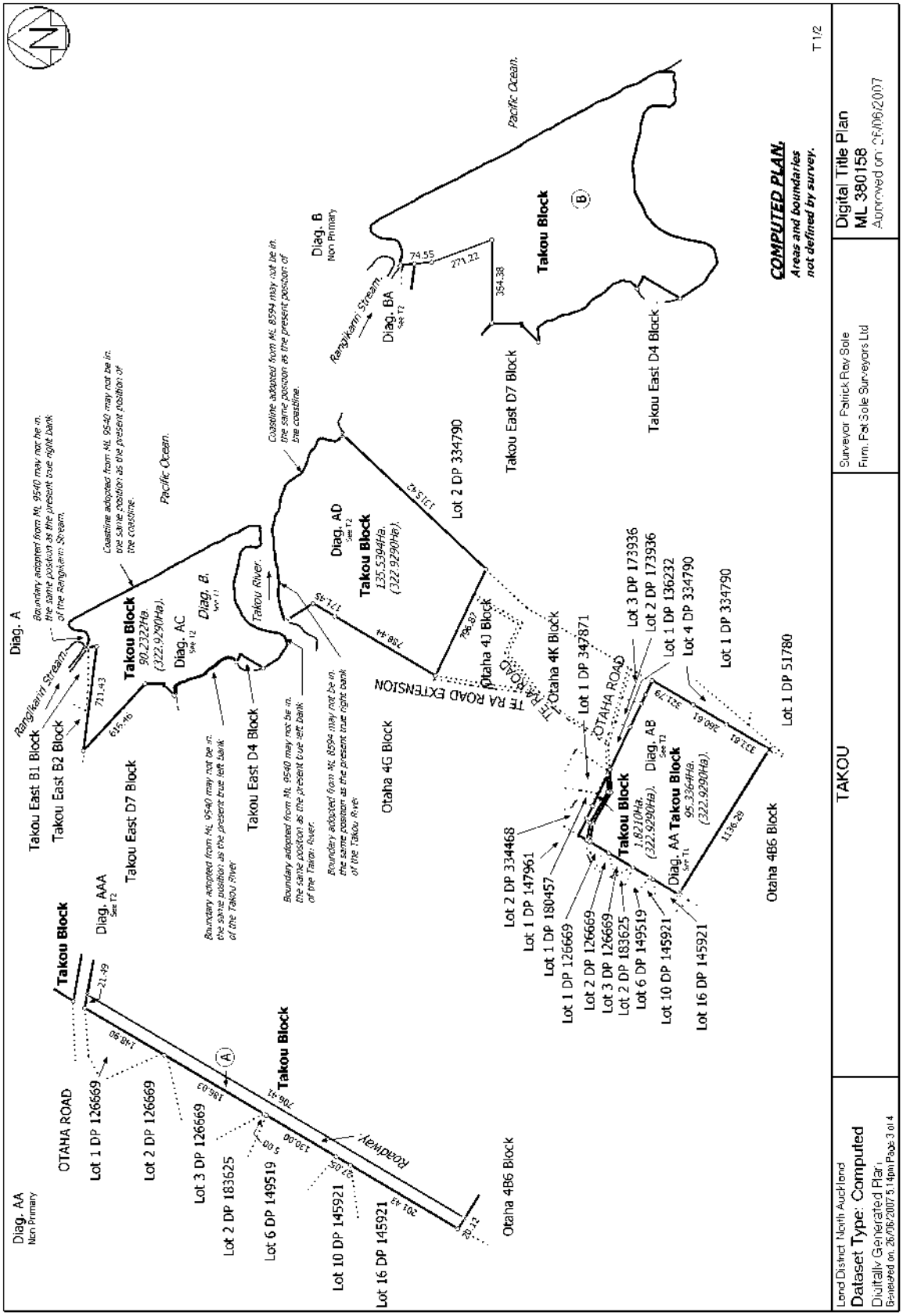
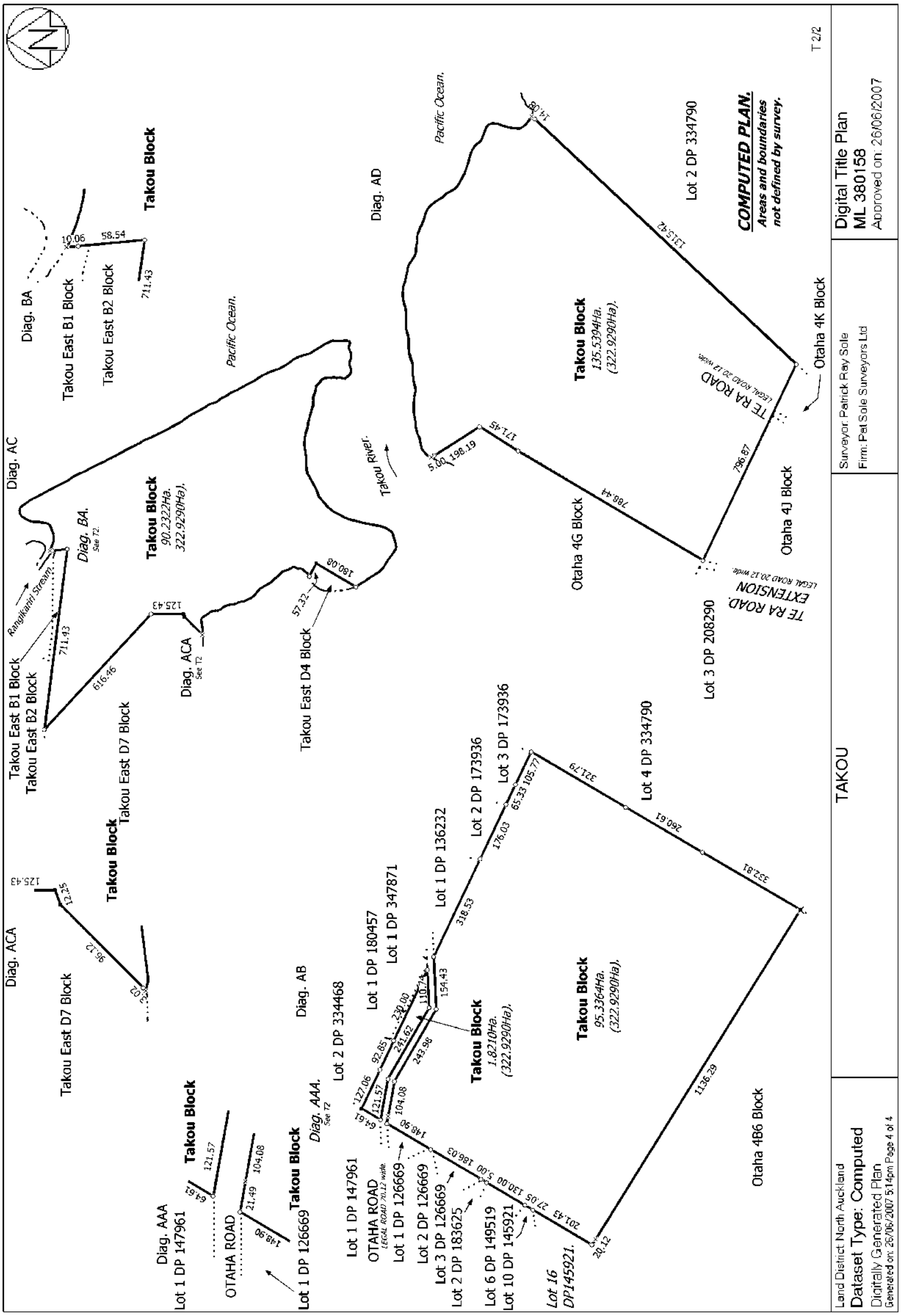
Interests

The within order has been embodied in the register pursuant to Section 124(1) Te Ture Whenua Maori Act 1993. It will not be finally constituted a folium of the register until a plan has been deposited pursuant to Section 167(5) Land Transfer Act 1952

8368193.3 Status Order determining the status of the within land to be Maori Freehold Land - 9.12.2009 at 9:00 am


Diag. A
Takou East B1 Block
Takou East B2 Block
Takou East D7 Block
Takou East D4 Block
Takou Block
90.2322Ha.
(322.9290Ha).
Rangikanini Stream.
Boundary adopted from Mt. 9540 may not be in the same position as the present true right bank of the Rangikanini Stream.
Coastline adopted from Mt. 9540 may not be in the same position as the present position of the coastline.
Pacific Ocean.
Diag. AAA
See T2
Diag. AC
See T2
Diag. B
See T1
Takou River.
Boundary adopted from Mt. 9540 may not be in the same position as the present true left bank of the Takou River.
Boundary adopted from Mt. 8594 may not be in the same position as the present true right bank of the Takou River.
Coastline adopted from Mt. 8594 may not be in the same position as the present position of the coastline.
Diag. AD
See T2
Takou Block
135.5394Ha.
(322.9290Ha).
Lot 2 DP 334790
Diag. B
Non Primary
Diag. BA
See T2
Takou East D7 Block
Takou East D4 Block
Takou Block
Otaha 4G Block
Otaha 4J Block
Otaha 4K Block
TE RA ROAD EXTENSION
OTAHA ROAD
Lot 1 DP 347871
Lot 3 DP 173936
Lot 2 DP 173936
Lot 1 DP 136232
Lot 4 DP 334790
Lot 1 DP 334790
Lot 1 DP 51780
Diag. AB
See T2
Takou Block
1.8210Ha.
(322.9290Ha).
Diag. AA
See T1
Takou Block
95.3364Ha.
(322.9290Ha).
Lot 2 DP 334468
Lot 1 DP 147961
Lot 1 DP 180457
Lot 1 DP 126669
Lot 2 DP 126669
Lot 3 DP 126669
Lot 2 DP 183625
Lot 6 DP 149519
Lot 10 DP 145921
Lot 16 DP 145921
Otaha 4B6 Block
Diag. AA
Non Primary
OTAHA ROAD
Lot 1 DP 126669
Lot 2 DP 126669
Lot 3 DP 126669
Lot 2 DP 183625
Lot 6 DP 149519
Lot 10 DP 145921
Lot 16 DP 145921
Takou Block
Takou Block
Otaha 4B6 Block
Roadway
COMPUTED PLAN.
Areas and boundaries not defined by survey.
T 1/2
Land District North Auckland
Dataset Type: Computed
Digitally Generated Plan
Generated on 26/06/2007 3:14pm Page 3 of 4
TAKOU
Surveyor Patrick Ray Sole
Firm. Pat Sole Surveyors Ltd
Digital Title Plan
ML 380158
Approved on 26/06/2007


Digital Title Plan
ML 380158
Approved on: 26/06/2007
Surveyor: Patrick Ray Sole
Firm: Pat Sole Surveyors Ltd
TAKOU
Land District North Auckland
Dataset Type: Computed
Digitally Generated Plan
Generated on: 26/06/2007 5:14pm Page 4 of 4
T 2/2
COMPUTED PLAN.
Areas and boundaries not defined by survey.
Takou Block
135.5394Ha.
(322.9290Ha).
Takou Block
90.2322Ha.
322.9290Ha).
Takou Block
95.3364Ha.
(322.9290Ha).
Takou Block
1.8210Ha.
(322.9290Ha).
Pacific Ocean.
Takou River.
Rangikarini Stream.
TE RA ROAD
LEGAL ROAD 20.12 wide.
TE RA ROAD.
EXTENSION
OTAHA ROAD
LEGAL ROAD 20.12 wide
Diag. BA
Diag. AC
Diag. AD
Diag. ACA
Diag. AB
Diag. AAA
Takou East B1 Block
Takou East B2 Block
Takou East D7 Block
Takou East D4 Block
Otaha 4K Block
Otaha 4J Block
Otaha 4G Block
Otaha 4B6 Block
Lot 2 DP 334790
Lot 3 DP 208290
Lot 4 DP 334790
Lot 3 DP 173936
Lot 2 DP 173936
Lot 1 DP 136232
Lot 1 DP 347871
Lot 1 DP 180457
Lot 2 DP 334468
Lot 1 DP 147961
Lot 1 DP 126669
Lot 2 DP 126669
Lot 3 DP 126669
Lot 2 DP 183625
Lot 6 DP 149519
Lot 10 DP 145921
Lot 16
DP145921.

Report on Maori Land details for the following Record(s) of Title

Record(s) of Title

507089	Identified as potentially Maori Freehold Land

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

Meeting Notes

Project: Takou Block – Proposed Papakāinga Development

Date: 10 June 2025

Time: 3.30pm – 5.00pm

Location: FNDC Offices / Teams

Attendees:

Name	Role/Organisation
Doreen Rihari	Takou Trust
Whati Rameka	Takou Trust
Makarena Dalton	B&A – Planning (Applicant)
Kasey Zhai	B&A – Planning (Applicant)
Nick Williamson	FNDC – Planning Resource Consenting (TL)
Nadia de la Guerre	FNDC – RC Engineering (TL)
Swetha Maharaj	FNDC – Planning Resource Consenting
Eden Nathan	FNDC – Planning Resource Consenting

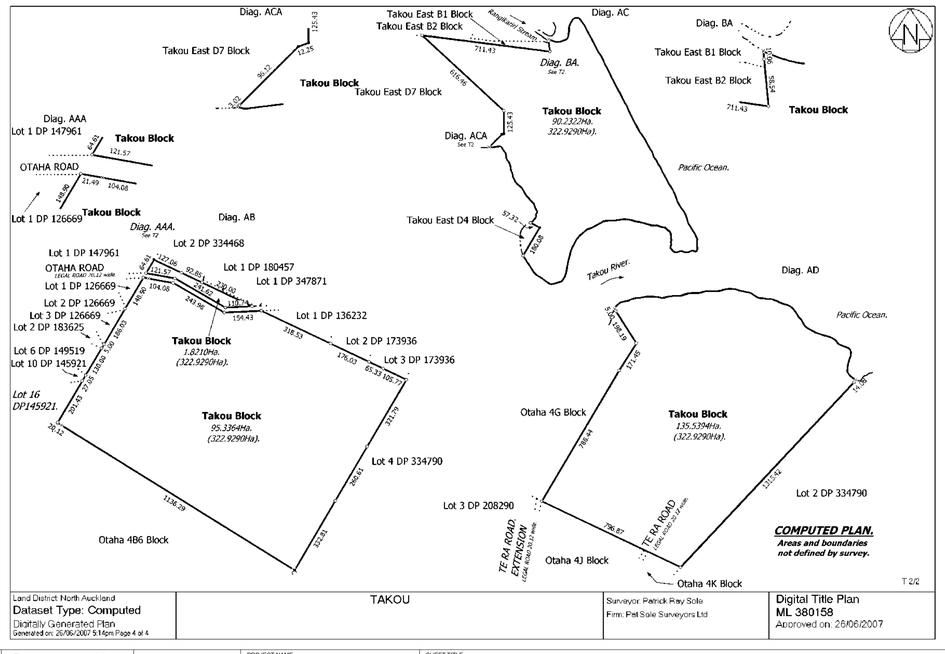
Apologies: Ishan Koshatwar (FNDC – RC Engineering)

Item	Detail
1	Introduction to Takou Trust provided by WR and MD: • Establishment of papakāinga and Mataatua ki Takou Marae at Takou have been a longstanding aspiration of the hapu and whanau in Takou. The resource consent will provide for an integrated approach to enable this. • Takou is of cultural significance – kaitiaki of the Mataatua Waka. • There are 1100 shareholders within Takou Trust. • A number of whare have already been established at Takou Bay. First homes were established in the early 90s, and gradual ad hoc development over the last 30 years.
2	Site and application overview provided by MD and WR: *Site* • Development is within one of three parcels held in a single record of title. • Subject site is accessed from the end of Te Ra Road. • 96 LTO areas in total, 94 available for development. • Mataatua ki Takou Marae located in LTO 64, as well as a small reserve area. • 40 LTO areas of the 94 have been developed in some way.

	• The sites of significance and the land parcel across from the river are under a Māori reservation, managed by Takou Trust Māori Reservation. This area is wāhi tapu. *Resource consent application* • Application seeks to establish the overall layout of the papakāinga and to enable all LTO areas to be developed with one papakāinga dwelling (including redevelopment of existing developed sites). • The consent also includes construction of 12 new dwellings and consent for three existing relocatable dwellings. • 10-year duration is sought. • Consent to be given effect to once all internal roading has been constructed. NW advised that the consent would be considered to be given effect to on construction of the first whare. • Provision for LTO areas to be developed up to 35% impermeable surfaces and 30% building coverage.
3	Infrastructure overview • On-site servicing proposed for three waters. • Individual wastewater treatment and disposal systems proposed. A communal system was investigated early on in the process, however would be cost prohibitive and create complexities for ongoing maintenance.
4	Transport • Te Rawhiti Road will be rerouted to take main traffic away from Mataatua ki Takou Marae to minimise vehicle movements and dust outside of the Marae. • All internal roading to remain private. • All carriageways will generally be formed to a minimum of 4m wide, with passing bays located at 70-100m away. Intersection widening is also proposed to allow two-way vehicle movements. • MD confirmed that a 4m formed carriageway width is based on minimum transport safety requirements while ensuring that Te Rawhiti Road can operate safely given that it will be carrying the majority of traffic. Further assessment and details will be included in the ITA for the lodged resource consent application.
5	Ecology • Exotic scrubland will be removed where required to facilitate building platforms. • Takou Trust are underway with active pest and weed management, with 700 traps/traplines already established throughout existing scrubland. • No earthworks proposed within 10m of identified natural inland wetlands. • Indigenous vegetation is existing, and is not proposed to be protected under this application.
6	Overall development / general • NW advised that FNDC is supportive of enabling providing as much flexibility as possible through the consenting process. MD confirmed that the set parameters under the application include 94 developable LTO areas and the provision of up to one papakāinga dwelling on each LTO area. The resource consent will set the most the flexible framework to enable the development of papakāinga within the parameters identified in the consent – these seek to

	assist Takou Trust in administering the whenua for papakāinga development while also establishing a framework to allow the assessment of individual buildings consents in the future. • NW queried how existing LTO areas have been developed. WR confirmed that the LTO does not constrain the type and number of dwellings, however there is a requirement to obtain the relevant consents. This application seeks to achieve consistency across the whenua and set clear expectations and parameters for whanau to develop LTO areas. • NW queried whether restrictions for impermeable surfaces and building coverage on a LTO basis was required. MD confirmed that this is intended to provide certainty as each LTO area is developed by whanau. This is to avoid each building consent being required to calculate the coverage across the site as a whole. This approach on a per LTO basis will help narrow the scope and make the building consent process easier.
7	Next steps • Lodgement in June 2025 – will lodge week ending 13 June provided final ITA is received.

LOCATION MAP



TAKOU BAY PAPAKĀINGA

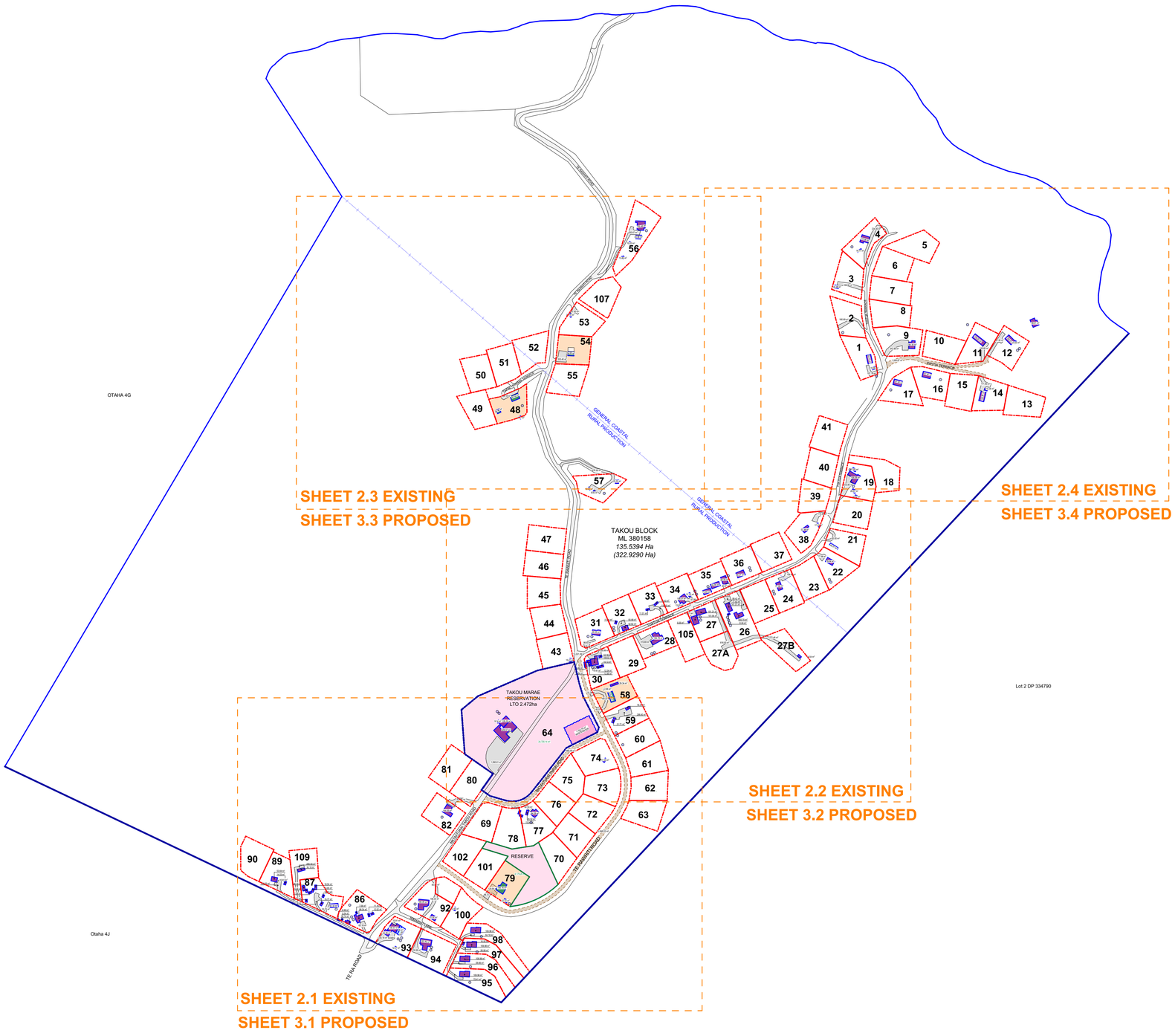
Resource consent application for;
Papakāinga Development within existing LTO areas.
This includes: 12 new dwellings,3 existing dwellings (retrospective consent) and roading upgrades.

Site Details

Address	202A-F Tuaru Road, Kaeo (the parcel for Papakāinga development is located at the end of Te Ra Road)
ODP Zone	Rural Coastal Zone, Rural Production Zone
ODP Overlays	N/A
PDP Zone	Māori Purpose – Rural
PDP Overlays	Coastal Environment
NRC Overlays	Coastal Environment Outstanding Natural Environment (N/A within LTO areas)

Sheet Index

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE COVER	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 1.1	REVISION



1 OVERALL SITE EXISTING KEY PLAN 1:3300

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS		SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	OVERALL EXISTING SITE KEY PLAN	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	Shown@A1 DATE: 6/06/2025	1.2	

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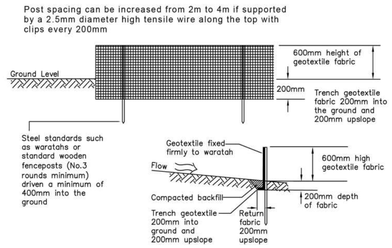
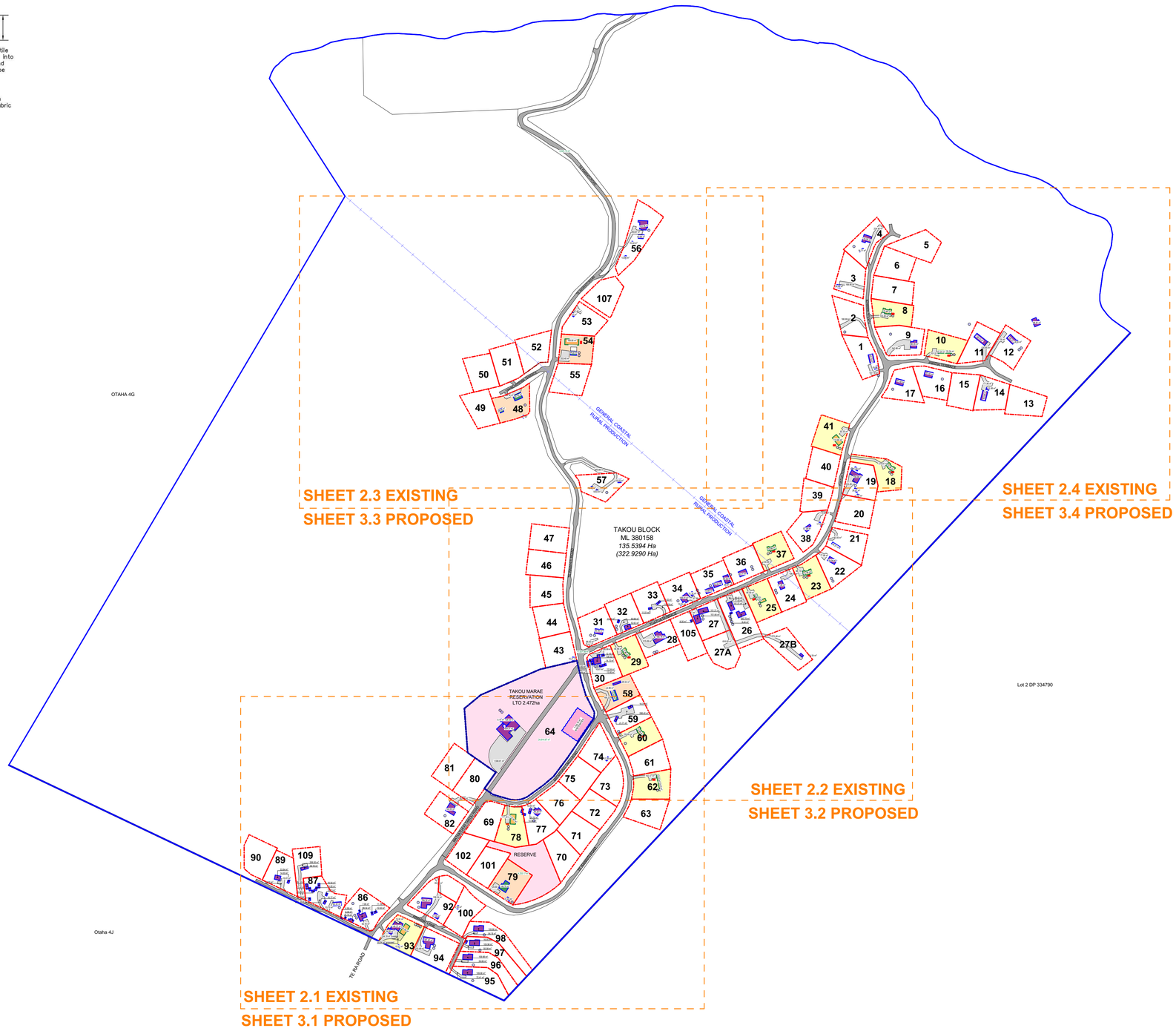


NOTE: Temporary erosion and sediments control measures will be installed for each proposed LTO areas where needed.



COVERAGES | TAKOU BLOCK *135.5394Ha*			
AREA	**EXISTING**	**PROPOSED**	**%**
PAVED	28,161m²	31011m²	2.29%
BUILDING	6,298m²	7,345m²	0.54%
LANDSCAPE	1,320,935m²	1,317,038m²	97.17%
TOTAL IMPERV.	34,459m²	38,356m²	2.83%
TOTAL SITE	**1,355,394m²**		

PAVED COVERAGE BREAKDOWN			
AREA	**EXISTING**	**PROPOSED**	
ROADS	18,102m²	19,343m²	
DRIVEWAYS	9,368m²	10,744m²	
WATER TANKS	691m²	924m²	

NOTE: Access driveways and parking areas on existing LTO's have been counted as formed impermeable (gravel). Coverage has been taken from recent site areial overlays, on site investigation and drone photgraphy.

1 OVERALL SITE PROPOSED / COVERAGES KEY PLAN 1:3300

PROJECT No.			PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL		TAKOU BAY PAPAKĀINGA	OVERALL SITE PROPOSED / COVERAGES KEY PLAN	LUC DRAFT	DESIGN:	NM	Shown@A1	1.3	
						DRAWN:	NM			
						CHECKED:	JM	DATE: 6/06/2025		
						APPROVED:	---			

LTO	AREA	LTO	AREA
58	2023m²	80	2116m²
59	2023m²	81	2142m²
60	2023m²	82	2023m²
61	2023m²	86	2271m²
62	2084m²	87	2023m²
63	2023m²	89	2023m²
64	2.472ha	90	2023m²
69	2023m²	92	2335m²
70	2023m²	93	2232m²
71	2023m²	94	2654m²
72	2095m²	95	2155m²
73	2154m²	96	2030m²
74	2170m²	97	2012m²
75	2024m²	98	2089m²
76	2024m²	100	2023m²
77	2126m²	101	2023m²
78	2158m²	102	2023m²
79	2230m²	109	2023m²
80	2116m²		

KEY

- SITE FOR RETROSPECTIVE CONSENT
- RELOCATED HOUSE
- SITE FOR NEW HOUSING
- NEW DWELLING
- DRIVEWAY
- WATER TANKS
- WASTE WATER TANK
- EXISTING DEVELOPED DWELLING
- EXISTING GRAVEL ROAD TO BE UPGRADED

1 EXISTING PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE EXISTING PART SITE PLAN 1	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 2.1	REVISION

LTO	AREA	LTO	AREA
18	2023m²	33	2023m²
19	2174m²	34	2022m²
20	2023m²	35	2023m²
21	2023m²	36	2023m²
22	2023m²	37	2023m²
23	2023m²	38	2023m²
24	2023m²	39	2023m²
25	2100m²	40	2023m²
26	2023m²	41	2097m²
27	2023m²	43	2023m²
27A	2023m²	44	2023m²
27B	2023m²	45	2023m²
28	2023m²	46	2023m²
29	2000m²	47	2023m²
30	2023m²	57	2023m²
31	2023m²	105	2023m²
32	2023m²		

KEY

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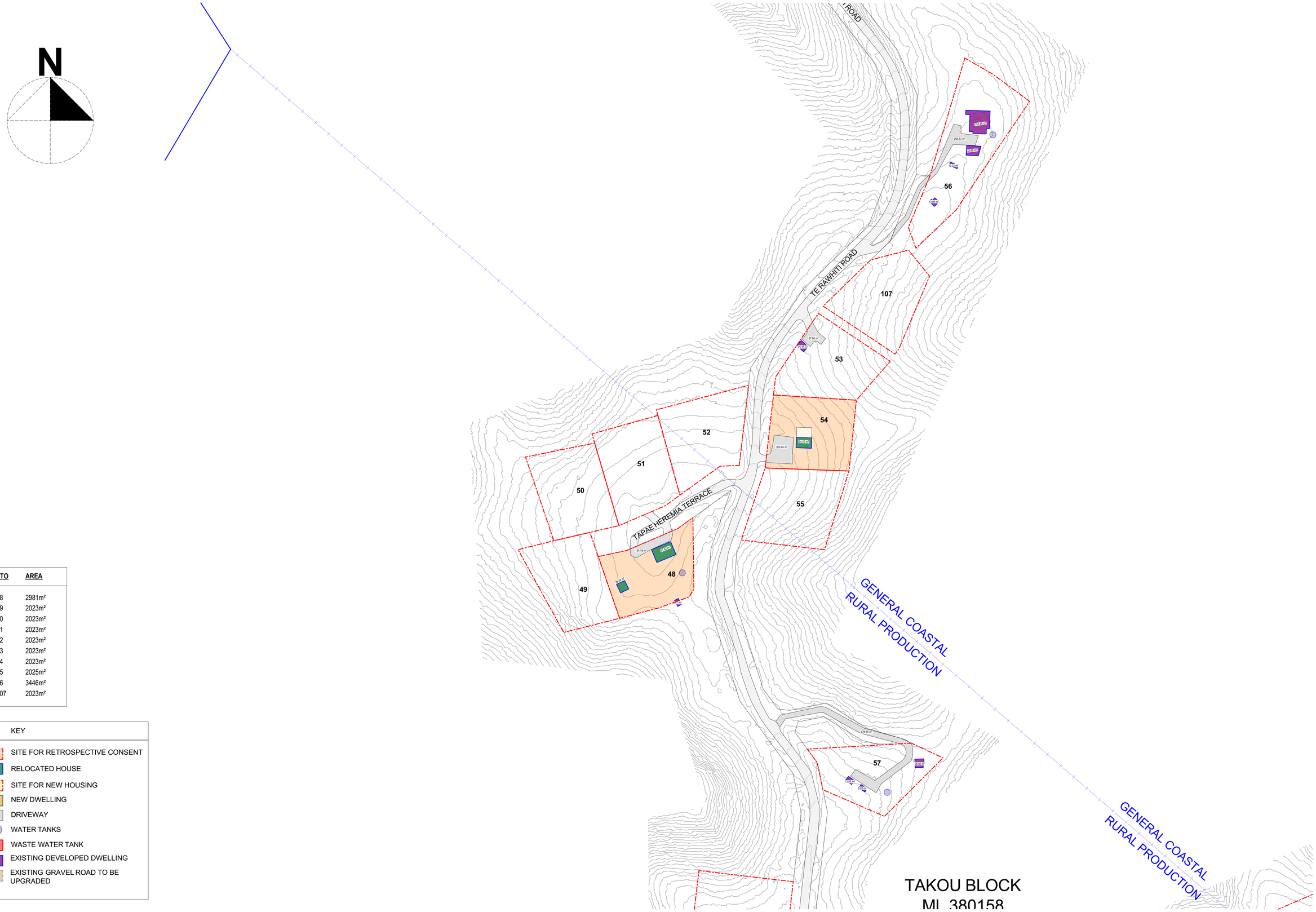
1 EXISTING PART SITE PLAN 1:1000

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	EXISTING PART SITE PLAN 2	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	2.2	



LTO	AREA
48	2981m²
49	2023m²
50	2023m²
51	2023m²
52	2023m²
53	2023m²
54	2023m²
55	2025m²
56	3446m²
107	2023m²

KEY

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- WASTE WATER TANK
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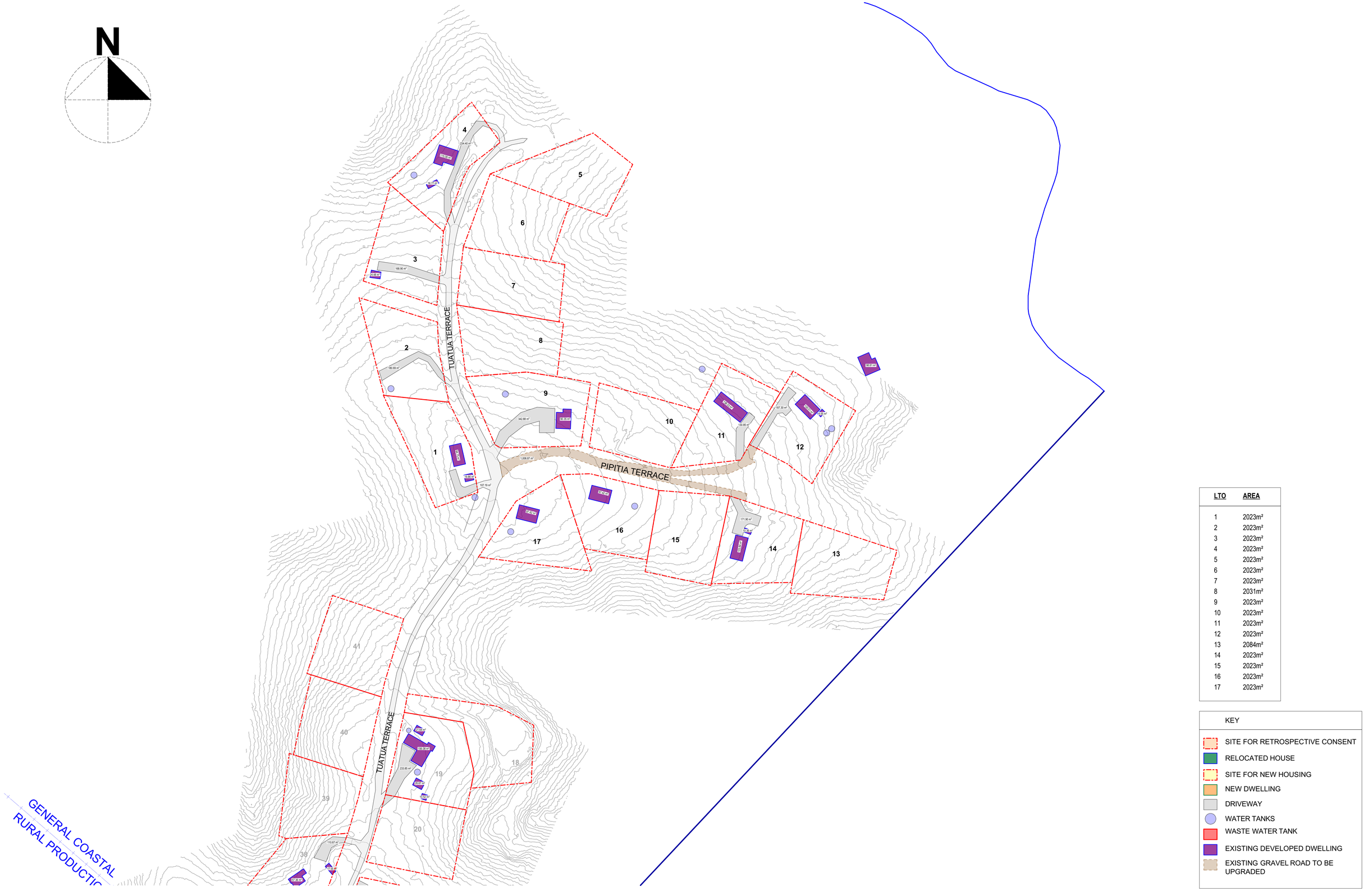
- EXISTING GRAVEL ROAD TO BE UPGRADED

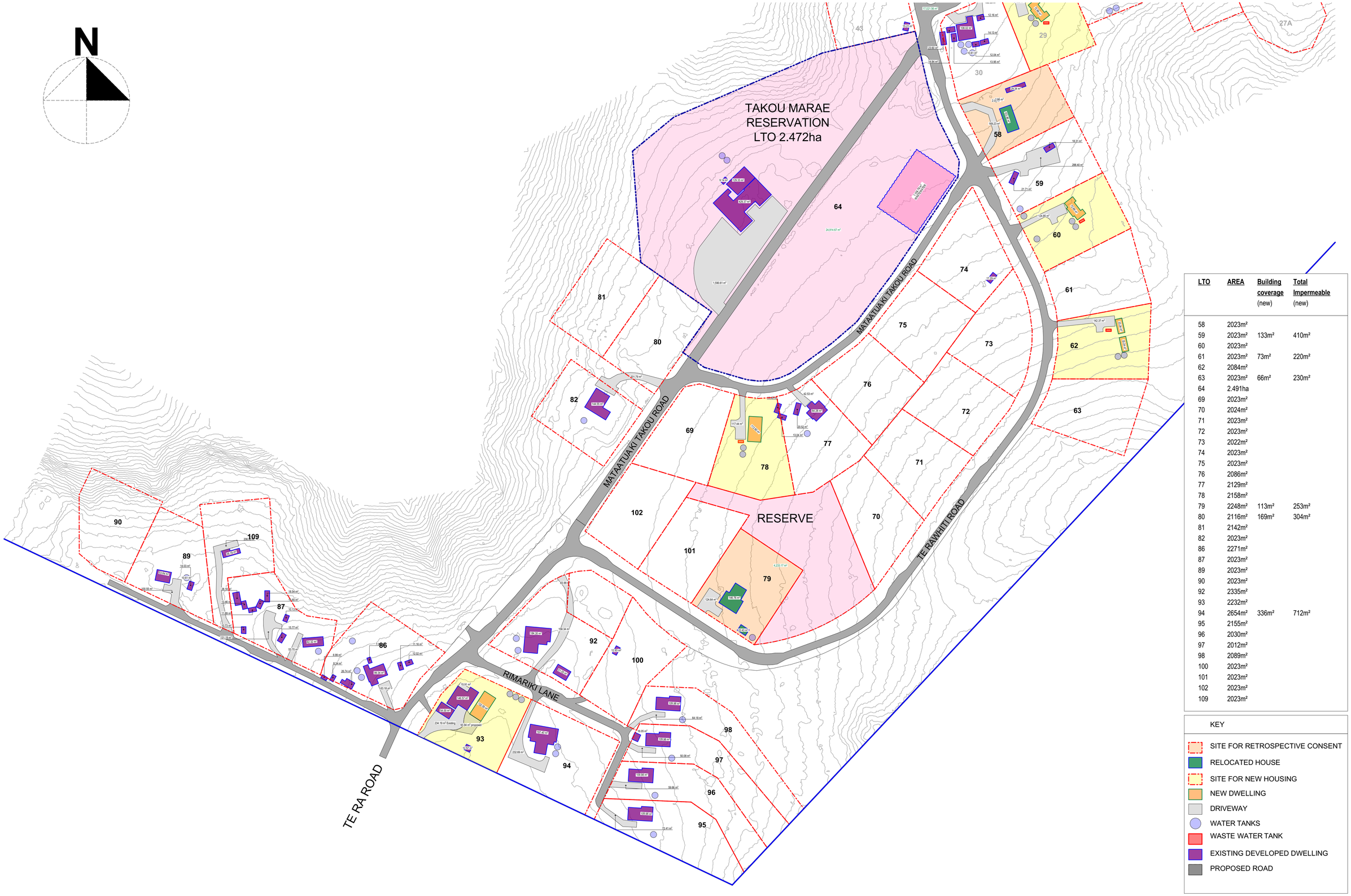
1 EXISTING PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE EXISTING PART SITE PLAN 3	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 2.3	REVISION



1 EXISTING PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE EXISTING PART SITE PLAN 4	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 2.4	REVISION



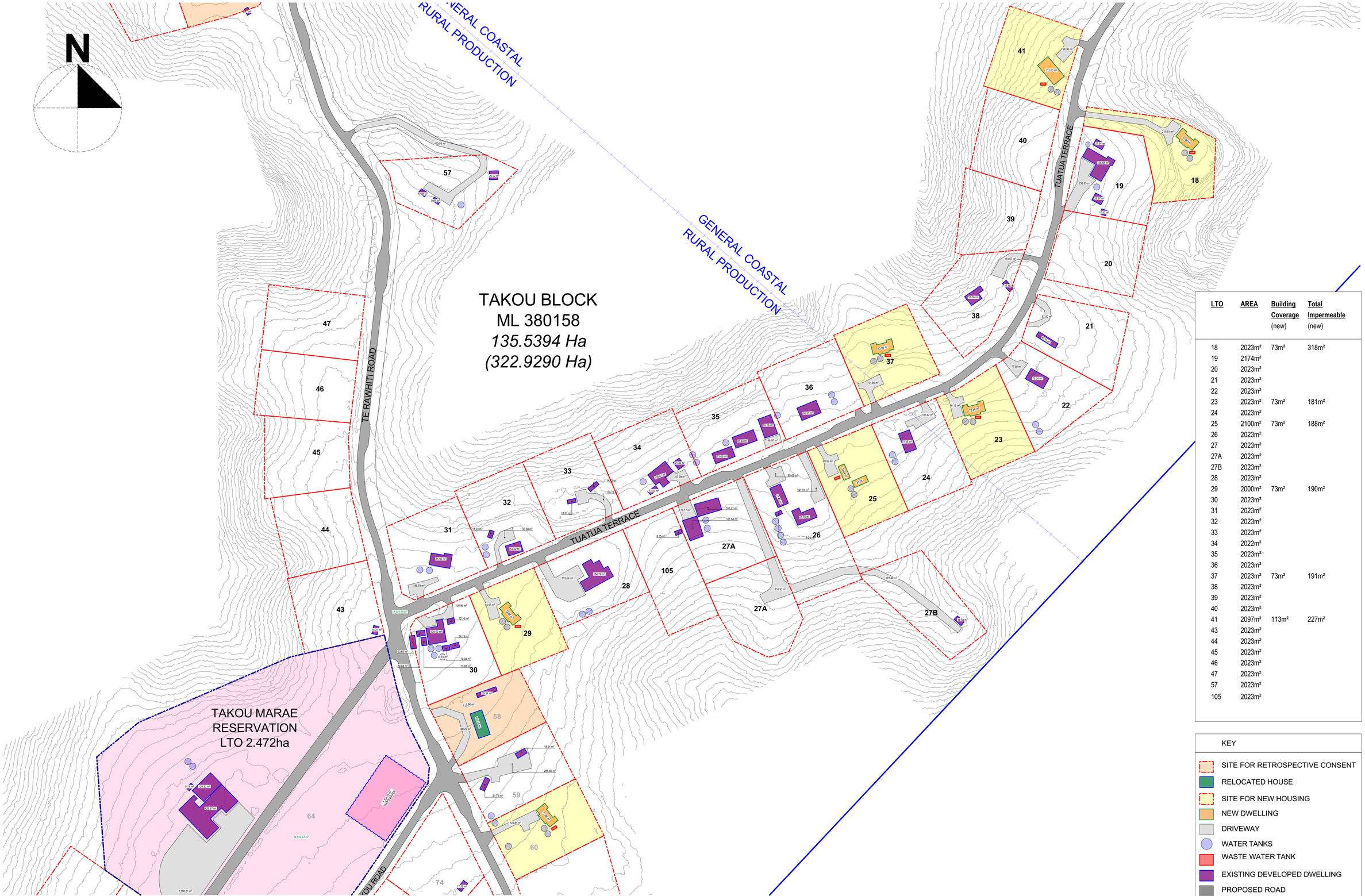
LTO	AREA	Building coverage (new)	Total Impermeable (new)
58	2023m²		
59	2023m²	133m²	410m²
60	2023m²		
61	2023m²	73m²	220m²
62	2084m²		
63	2023m²	66m²	230m²
64	2.491ha		
69	2023m²		
70	2024m²		
71	2023m²		
72	2023m²		
73	2022m²		
74	2023m²		
75	2023m²		
76	2086m²		
77	2129m²		
78	2158m²		
79	2248m²	113m²	253m²
80	2116m²	169m²	304m²
81	2142m²		
82	2023m²		
86	2271m²		
87	2023m²		
89	2023m²		
90	2023m²		
92	2335m²		
93	2232m²		
94	2654m²	336m²	712m²
95	2155m²		
96	2030m²		
97	2012m²		
98	2089m²		
100	2023m²		
101	2023m²		
102	2023m²		
109	2023m²		

KEY

- SITE FOR RETROSPECTIVE CONSENT
- RELOCATED HOUSE
- SITE FOR NEW HOUSING
- NEW DWELLING
- DRIVEWAY
- WATER TANKS
- WASTE WATER TANK
- EXISTING DEVELOPED DWELLING
- PROPOSED ROAD

1 PROPOSED PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE PROPOSED PART SITE PLAN 1	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 3.1	REVISION



LTO	AREA	Building Coverage (new)	Total Impermeable (new)
18	2023m²	73m²	318m²
19	2174m²		
20	2023m²		
21	2023m²		
22	2023m²		
23	2023m²	73m²	181m²
24	2023m²		
25	2100m²	73m²	188m²
26	2023m²		
27	2023m²		
27A	2023m²		
27B	2023m²		
28	2023m²		
29	2000m²	73m²	190m²
30	2023m²		
31	2023m²		
32	2023m²		
33	2023m²		
34	2022m²		
35	2023m²		
36	2023m²		
37	2023m²	73m²	191m²
38	2023m²		
39	2023m²		
40	2023m²		
41	2097m²	113m²	227m²
43	2023m²		
44	2023m²		
45	2023m²		
46	2023m²		
47	2023m²		
57	2023m²		
105	2023m²		

KEY

- SITE FOR RETROSPECTIVE CONSENT
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- SITE FOR NEW HOUSING
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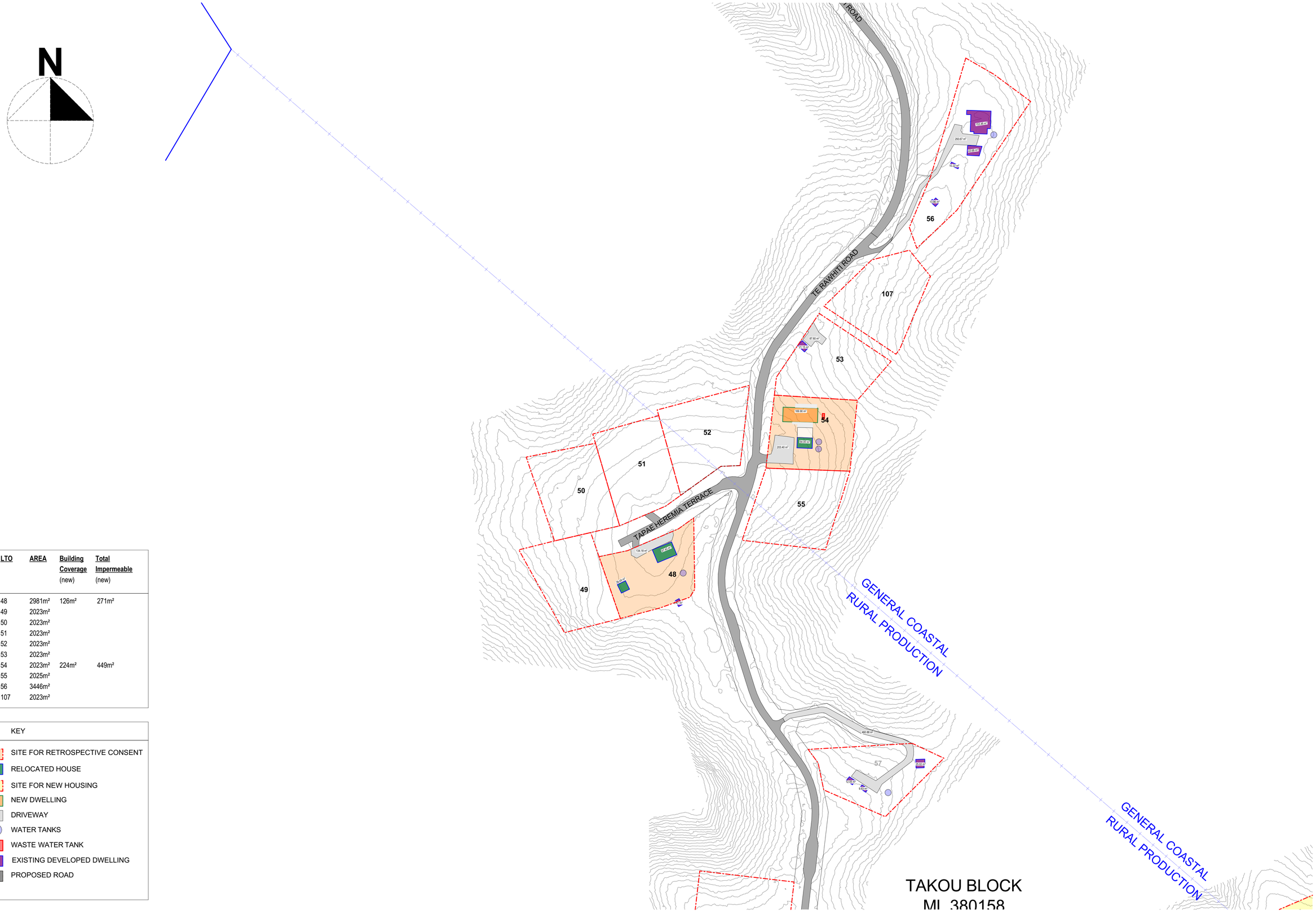
- DRIVEWAY
- WATER TANKS
- WASTE WATER TANK
- EXISTING DEVELOPED DWELLING
- PROPOSED ROAD

1 PROPOSED PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE PROPOSED PART SITE PLAN 2	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 3.2	REVISION



LTO	AREA	Building Coverage (new)	Total Impermeable (new)
48	2981m²	126m²	271m²
49	2023m²		
50	2023m²		
51	2023m²		
52	2023m²		
53	2023m²		
54	2023m²	224m²	449m²
55	2025m²		
56	3446m²		
107	2023m²		

KEY

- SITE FOR RETROSPECTIVE CONSENT
- RELOCATED HOUSE
- SITE FOR NEW HOUSING
- NEW DWELLING
- DRIVEWAY
- WATER TANKS
- WASTE WATER TANK
- EXISTING DEVELOPED DWELLING
- PROPOSED ROAD

1 PROPOSED PART SITE PLAN 1:1000

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	PROPOSED PART SITE PLAN 3	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	3.3	

LTO	AREA	Building coverage (new)	Total Impermeable (new)
1	2023m²		
2	2023m²		
3	2023m²		
4	2023m²		
5	2023m²		
6	2023m²		
7	2023m²		
8	2031m²	125m²	199m²
9	2023m²		
10	2023m²	66m²	190m²
11	2023m²		
12	2023m²		
13	2084m²		
14	2023m²		
15	2023m²		
16	2023m²		
17	2023m²		

KEY

- SITE FOR RETROSPECTIVE CONSENT
- RELOCATED HOUSE
- SITE FOR NEW HOUSING
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- WASTE WATER TANK
- EXISTING DEVELOPED DWELLING
- PROPOSED ROAD

1 PROPOSED PART SITE PLAN 1:1000

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE PROPOSED PART SITE PLAN 4	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 3.4	REVISION

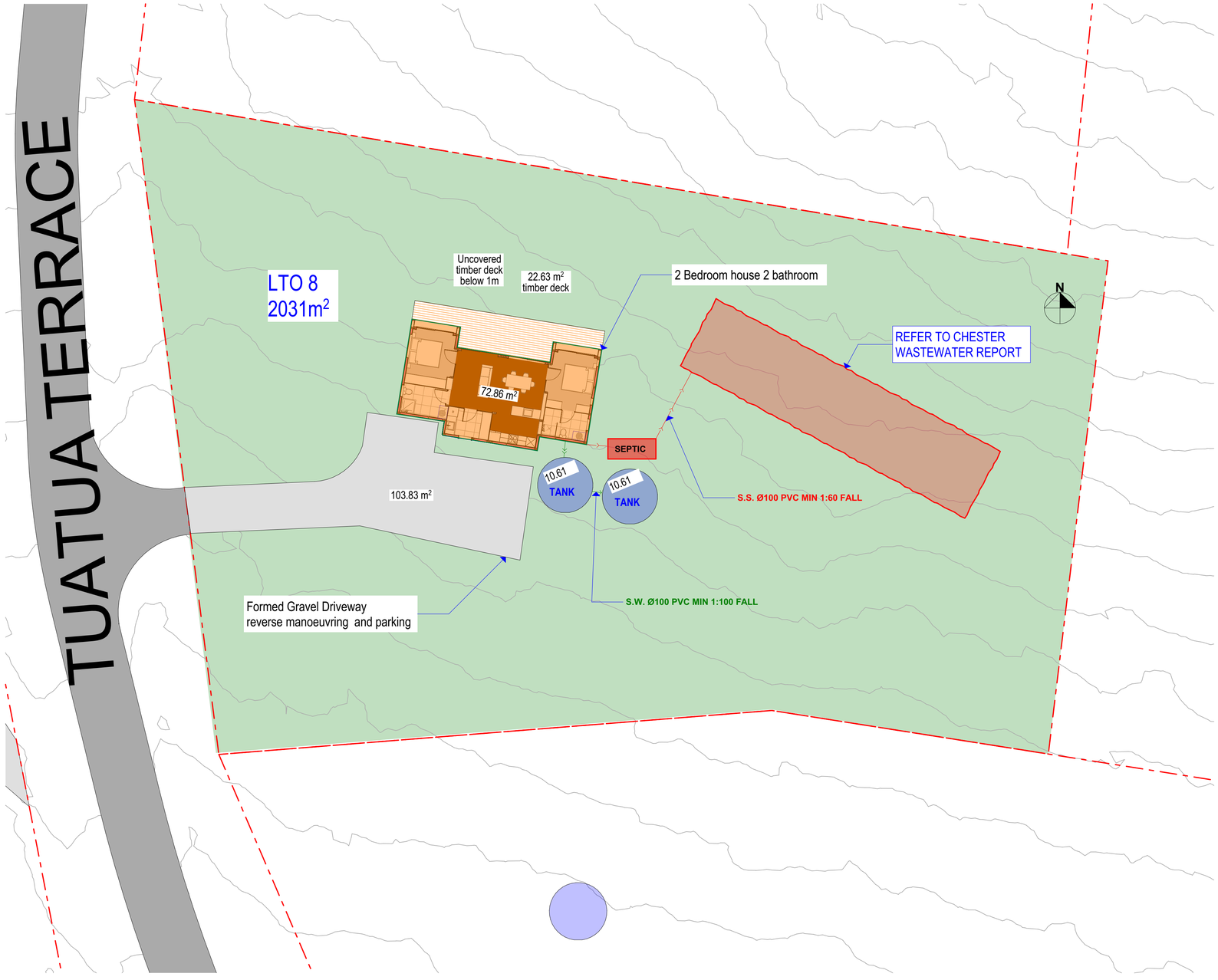
Zone	General Coastal	
Legal	LTO 8	
Area	2031m²	
Building Coverage	73m²	3.6%
Paved	125m² (gravel driveway,tanks)	6.2%
Total Impervious	199m²	9.8%
Height	3720mm (proposed building height)	
Colour palette (Coastal)	CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

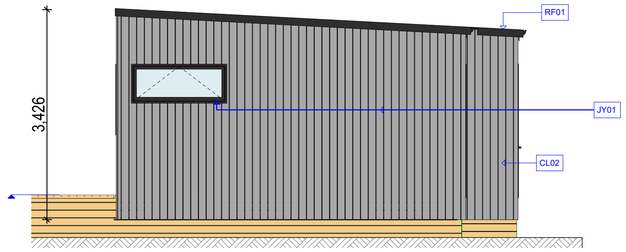
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



1 LTO 8 - SITE PLAN 1:150

NORTH



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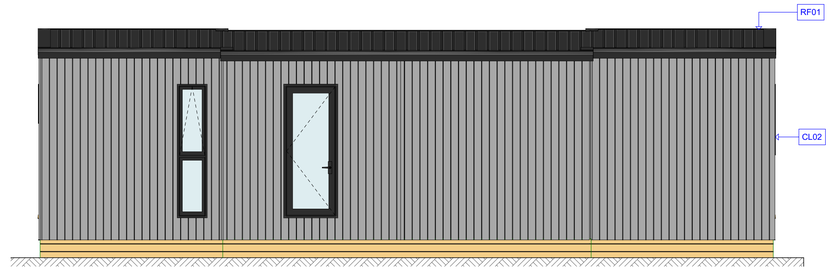
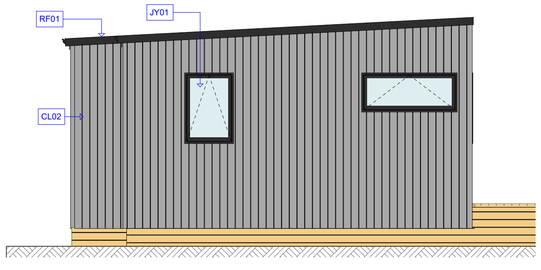


SOUTH



EAST

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 8 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 4.1	REVISION

Zone	General Coastal	
Legal	LTO 10	
Area	2023m²	
Building Coverage	66m²	3.2%
Paved	124m²(gravel driveway,tanks)	6.1%
Total Impervious	190m²	9.3%
Height	3500mm (proposed building height)	
Colour palette (Coastal)	CL01 Flaxpod CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

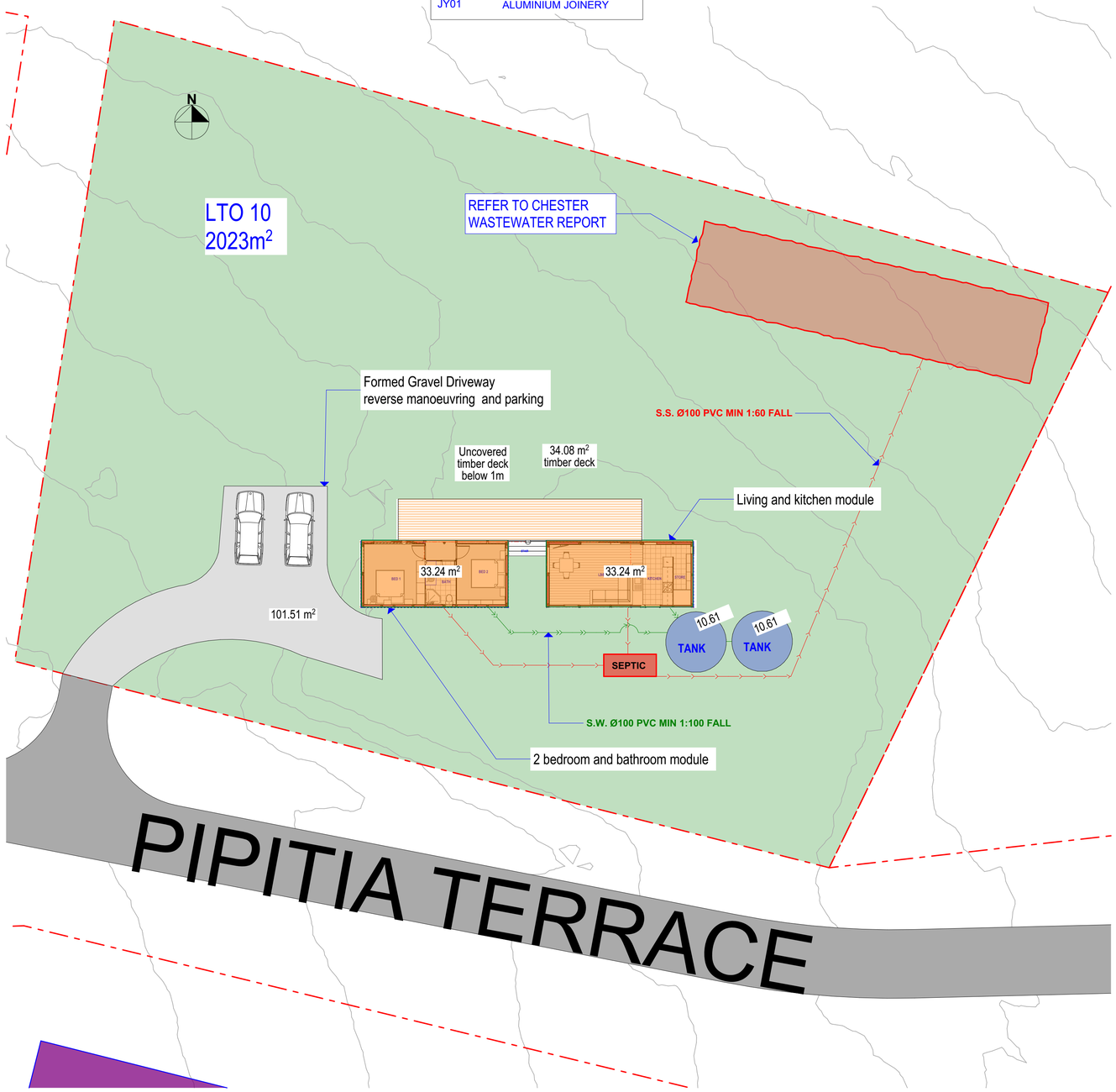
KEYNOTES

WALLS
CL01 VERTICAL - COLOURSTEEL METALCRAFT T-RIB

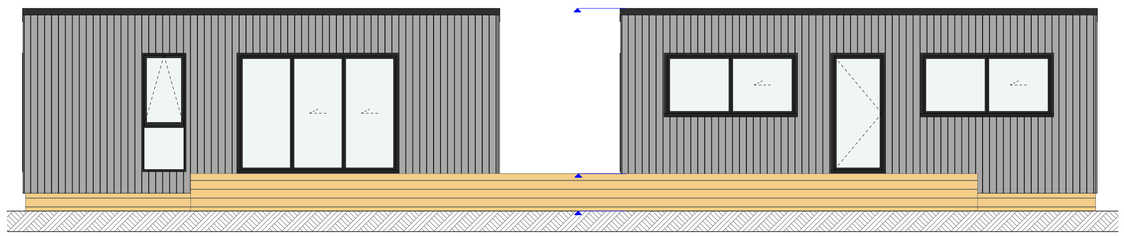
WALLS
CL02 140x27 MCA SHIPLAP WB MT POKAKA Shiplap Weatherboards

ROOFS
RF01 ROOF - COLOURSTEEL METALCRAFT T-RIB

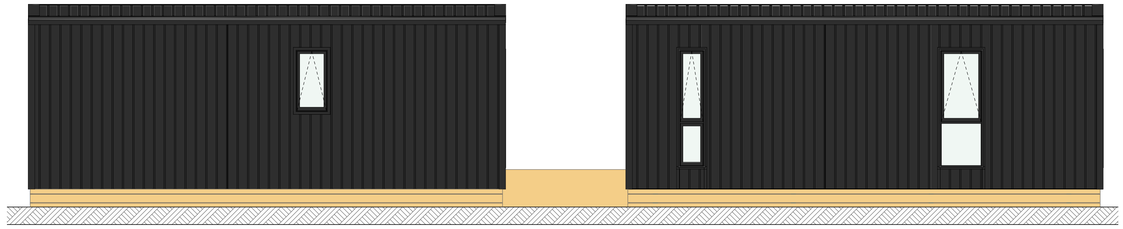
EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



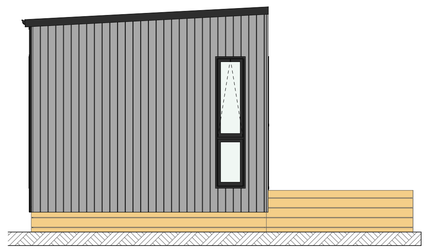
1 LTO 10 SITE PLAN 1:150



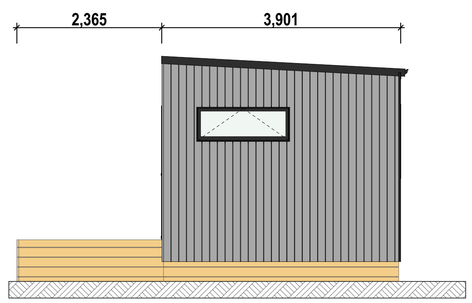
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	LTO10 - PROPOSED 2 BED HOUSE	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	DATE: 6/06/2025	Shown@A1	4.2	

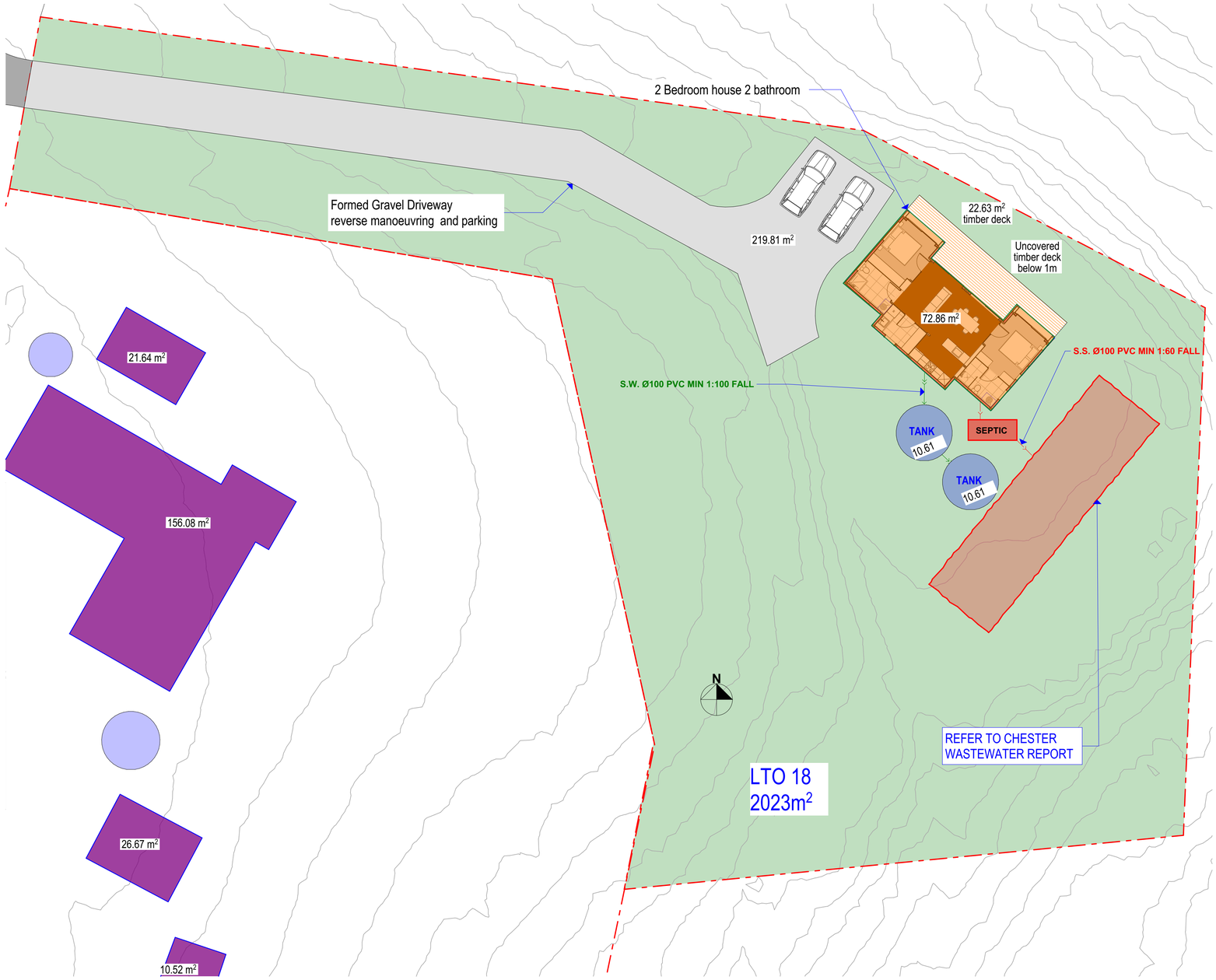
Zone	General Coastal	
Legal	LTO 18	
Area	2023m²	
Building Coverage	73m²	3.6%
Paved	225m²(gravel driveway,tanks)	11.1%
Total Impervious	318m²	15.7%
Height	3720mm (proposed building height)	
Colour palette (Coastal)	CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

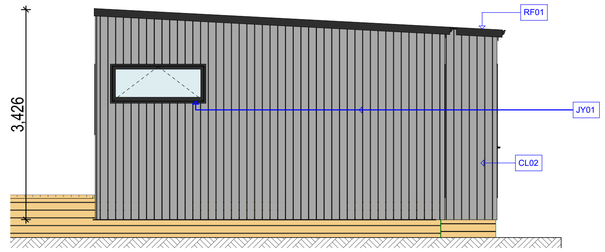
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

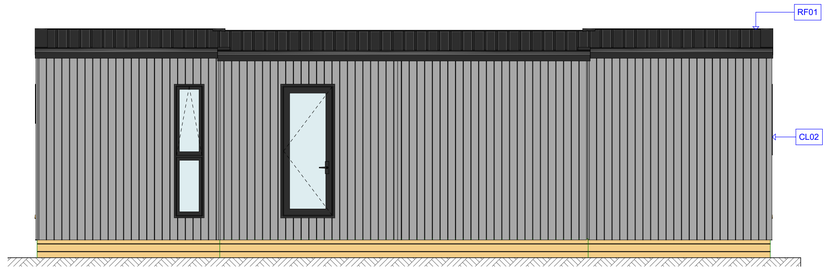


1 LTO 18 - SITE PLAN 1:150

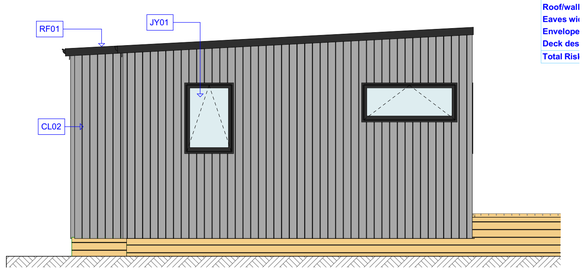
NORTH



WEST



SOUTH



EAST 1:50

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PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 18 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 4.3	REVISION

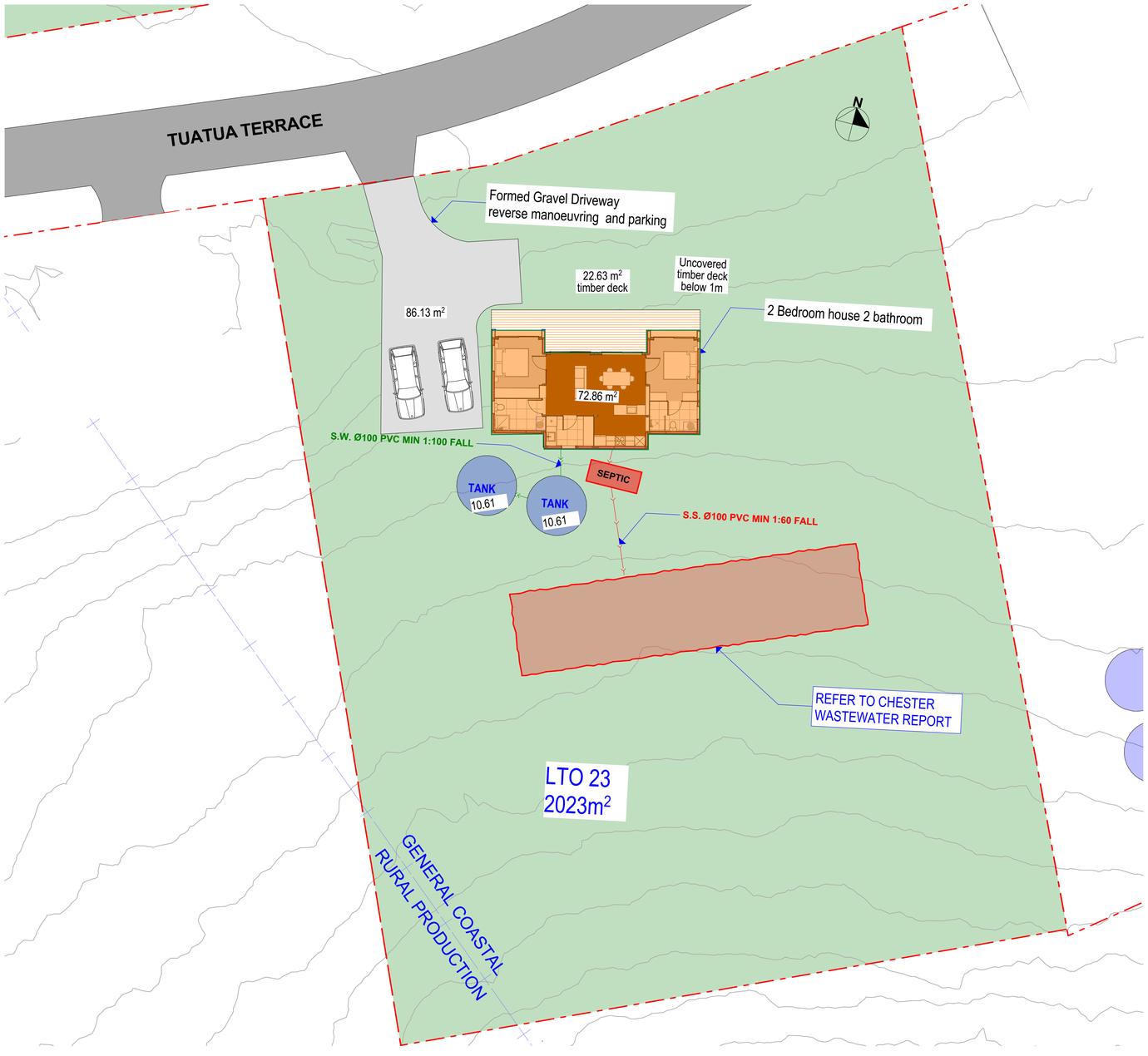
Zone	General Coastal	
Legal	LTO 23	
Area	2023m²	
Building Coverage	73m²	3.6%
Paved	108m²(gravel driveway,tanks)	5.3%
Total Impervious	181m²	8.9%
Height	3720mm (proposed building height)	
Colour palette (Coastal)	CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

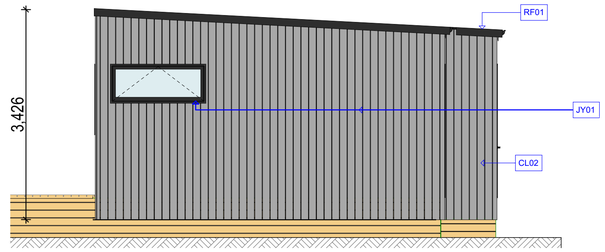
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



1 LTO 23 - SITE PLAN 1:150

NORTH



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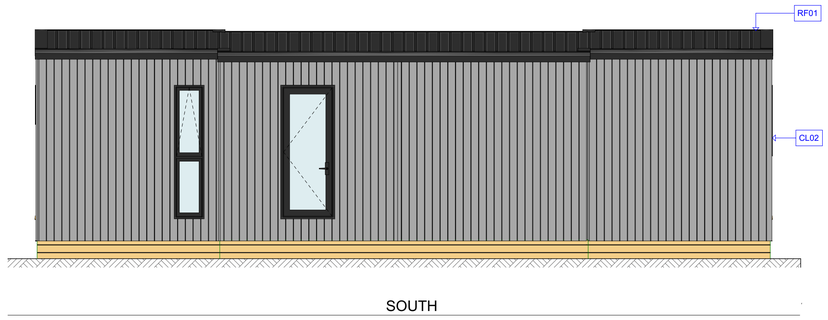

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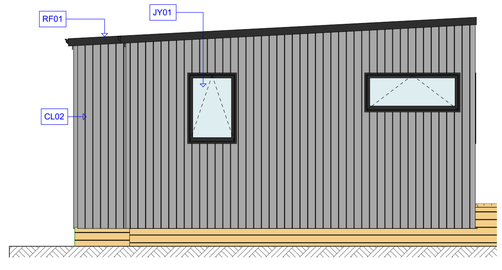


EAST

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 23 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 4.4	REVISION

Zone	Rural Production	
Legal	LTO 25	
Area	2100m²	
Building Coverage	66²	3.1%
Paved	122m²(gravel driveway,tanks)	5.8%
Total Impervious	188m²	8.9%
Height	3500mm (proposed building height)	
Colour palette	Any of the 3 Standard Laminata colours	

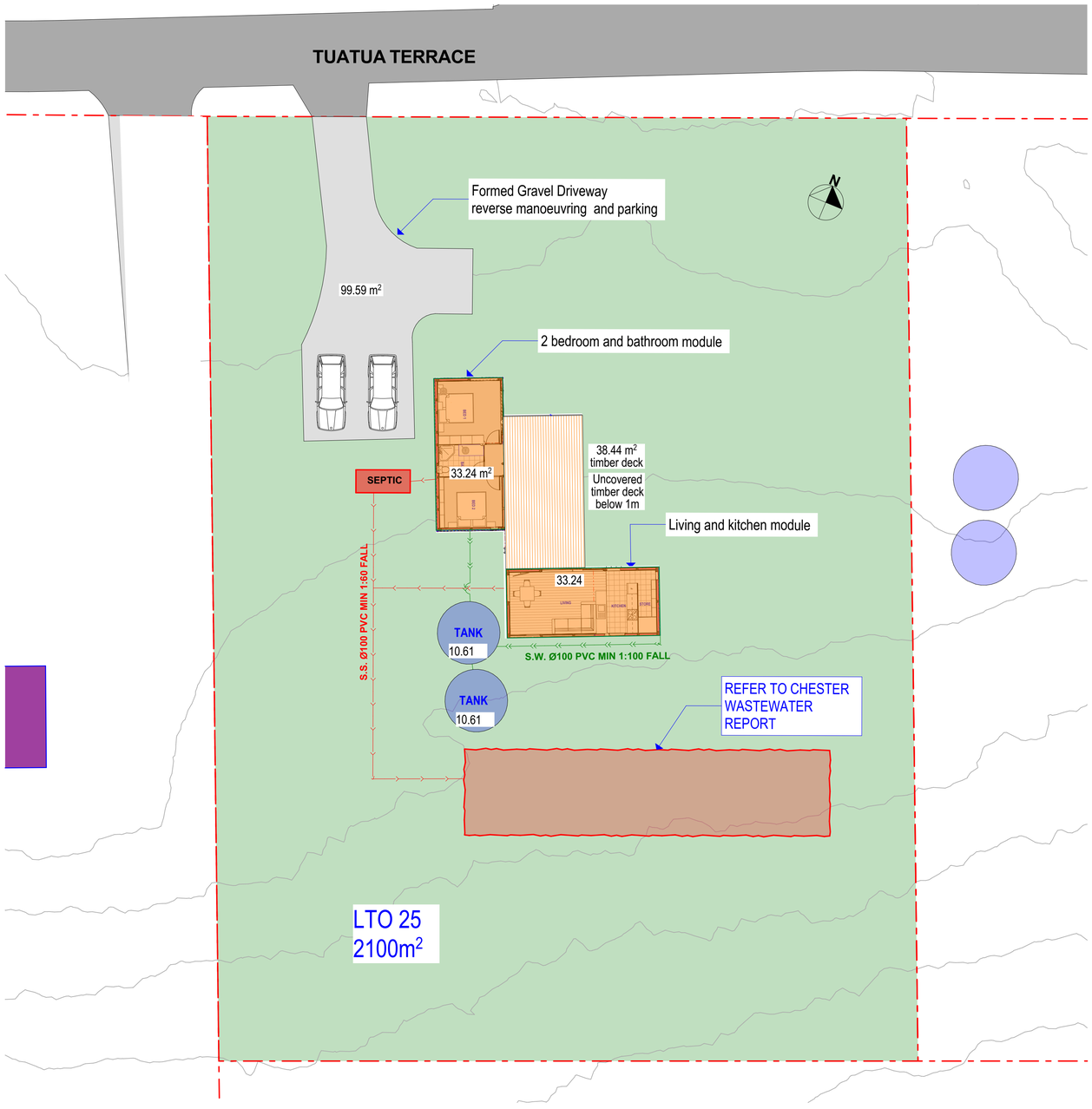
KEYNOTES

WALLS
CL01 VERTICAL - COLOURSTEEL
METALCRAFT T-RIB

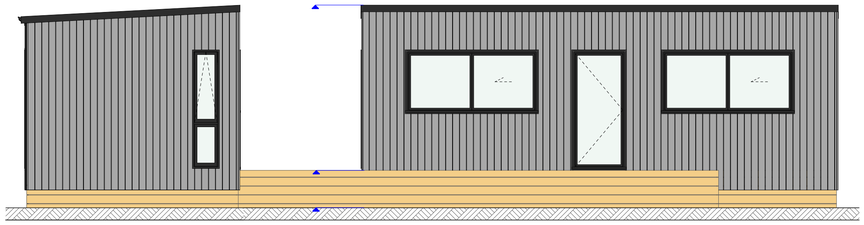
WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

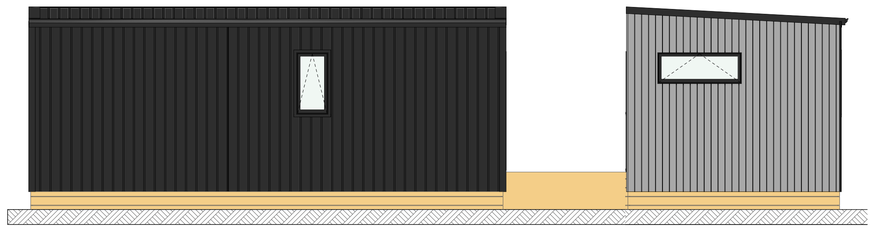
EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



1 LTO 25 - SITE PLAN 1:150



EAST ELEVATION



WEST ELEVATION

SOUTH ELEVATION

NORTH ELEVATION

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 25 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.5**	REVISION

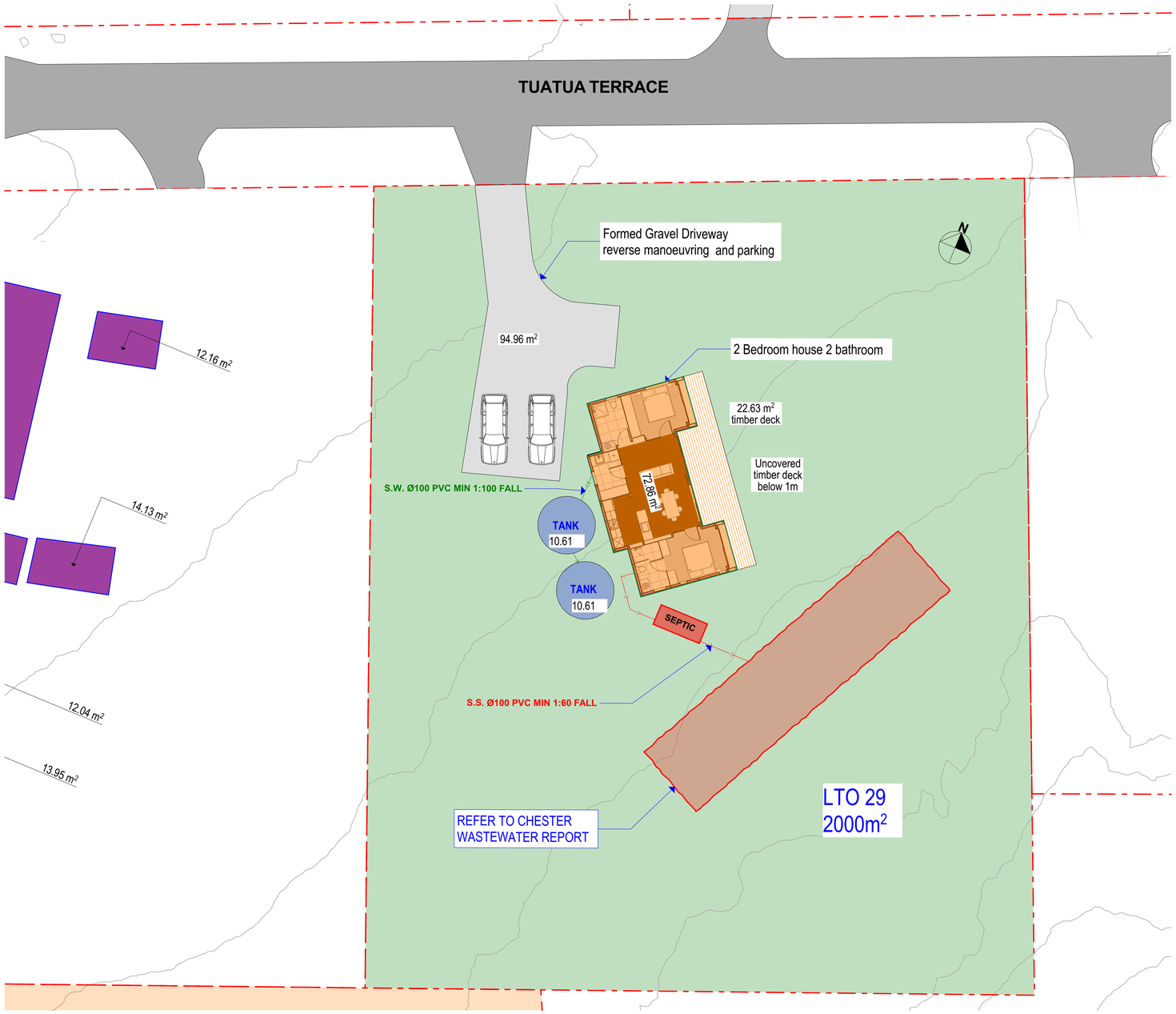
Zone	Rural Production	
Legal	LTO 29	
Area	2000m²	
Building Coverage	73m²	3.6%
Paved	117m²(gravel driveway,tanks)	5.9%
Total Impervious	190m²	9.5%
Height	3720mm (proposed building height)	
Colour palette	Any of the 3 Standard Laminata colours	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

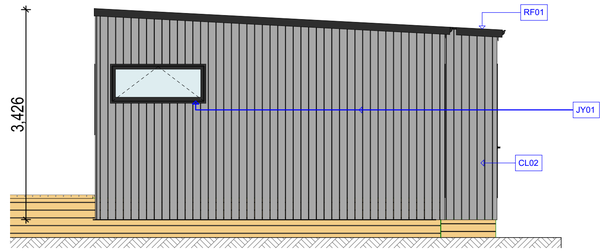
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



1 LTO 29 - SITE PLAN 1:150

NORTH EAST ELEVATION



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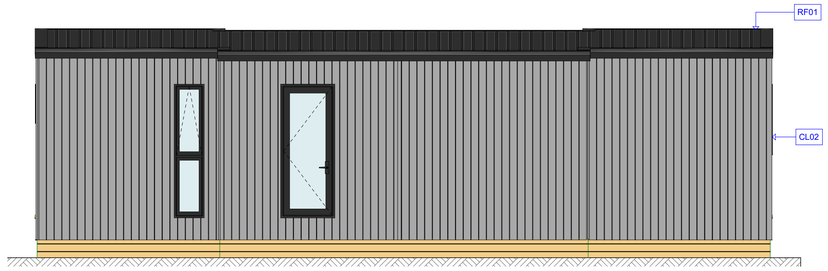
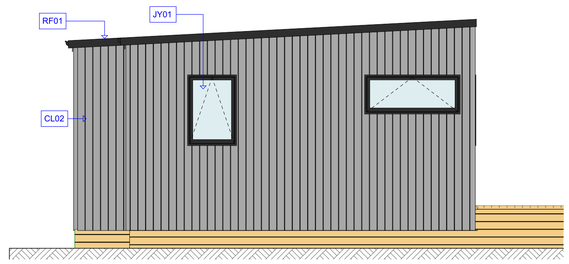


SOUTH WEST ELEVATION



SOUTH EAST ELEVATION 1:50

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	LTO 29 - PROPOSED 2 BED HOUSE	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	4.6	

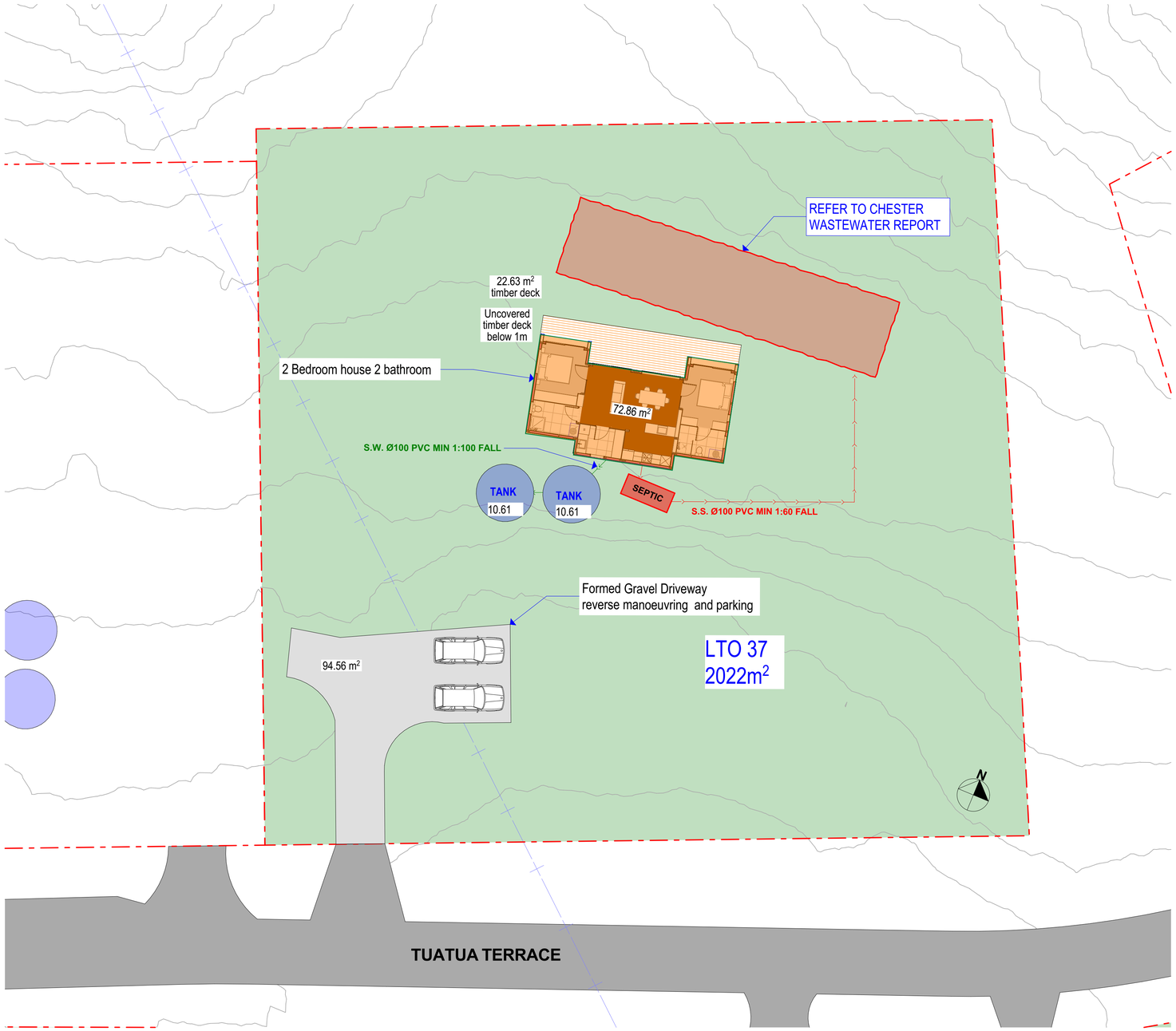
Zone	General Coastal	
Legal	LTO 37	
Area	2022m²	
Building Coverage	73m²	3.6%
Paved	118m²(gravel driveway,tanks)	5.8%
Total Impervious	191m²	9.4%
Height	3720mm (proposed building height)	
Colour palette	Any of the 3 standard Laminata colours	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

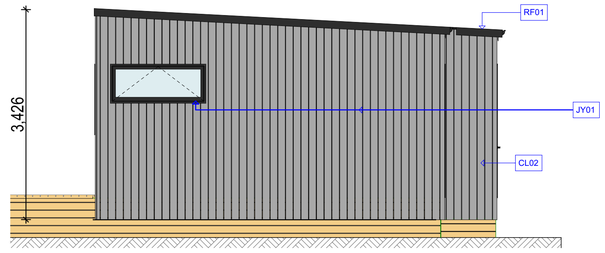
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

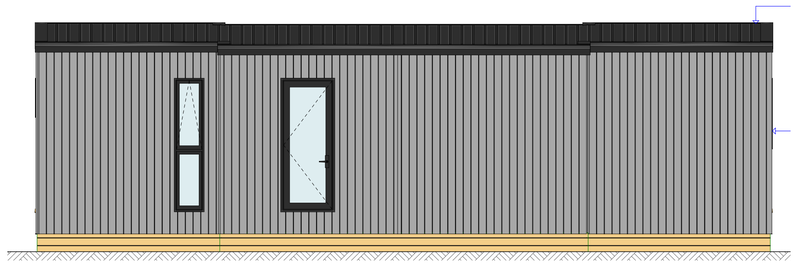


1 LTO 37 - SITE PLAN 1:150

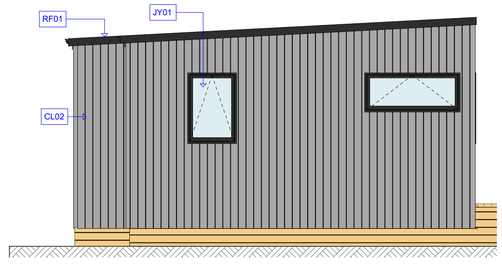
NORTH



WEST



SOUTH



EAST

PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS		SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	LTO 37 - PROPOSED 2 BED HOUSE	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	Shown@A1 DATE: 6/06/2025	**4.7**	

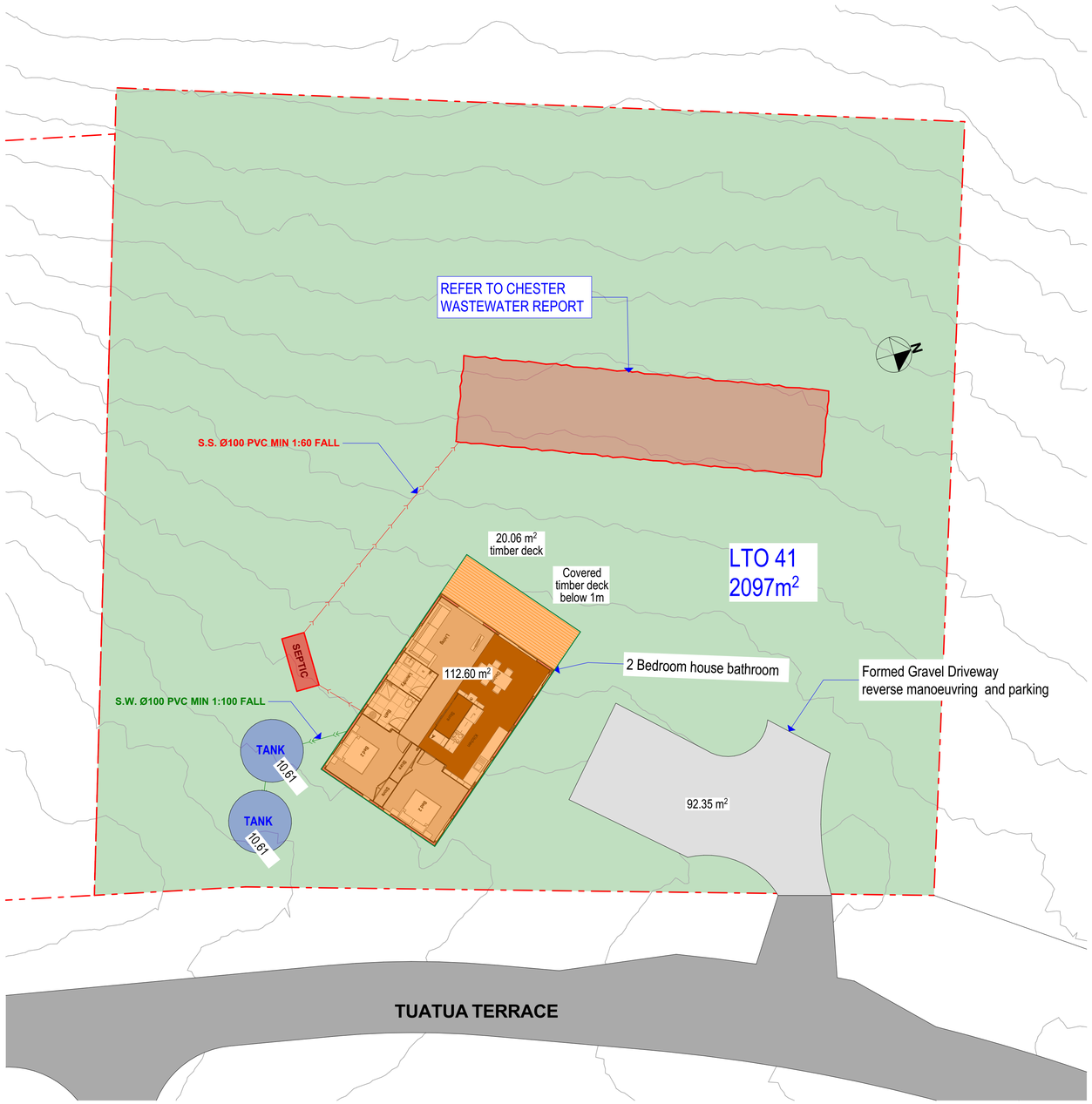
Zone	General Coastal	
Legal	LTO 41	
Area	2097m²	
Building Coverage	113m²	5.3%
Paved	114m²(gravel driveway,tanks)	5.4%
Total Impervious	227m²	10.7%
Height	4270mm (proposed building height)	
Colour palette (Coastal)	CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB MT POKAKA Shiplap Weatherboards

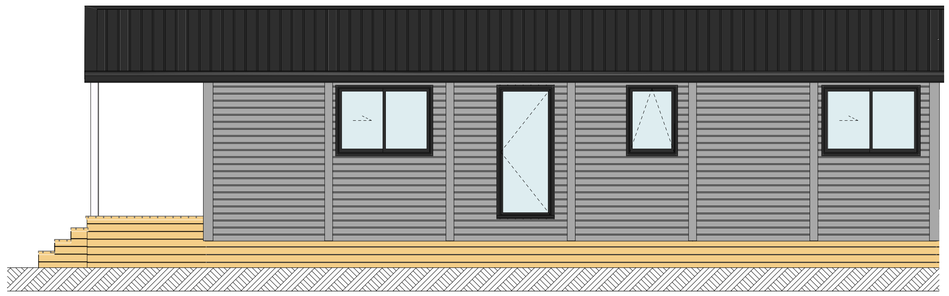
ROOFS
RF01 ROOF - COLOURSTEEL METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

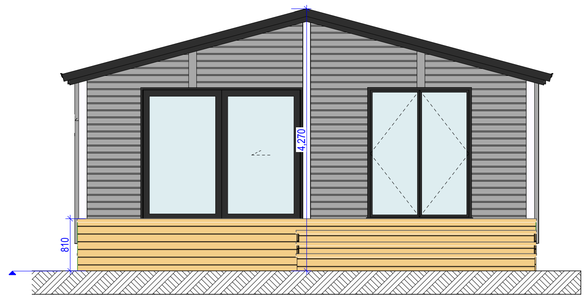


1 LTO 41 - SITE PLAN 1:150

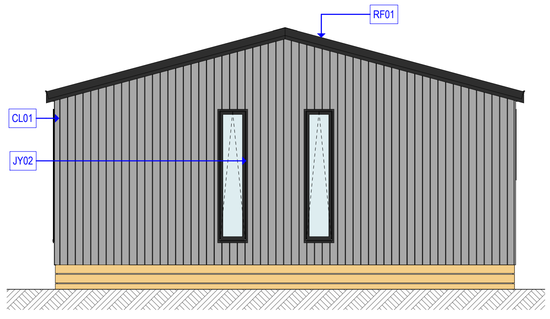
NORTH EAST ELEVATION



SOUTH WEST ELEVATION



NORTH EAST ELEVATION



SOUTH EAST ELEVATION

PROJECT No.			PROJECT NAME	SHEET TITLE		STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL		TAKOU BAY PAPAKĀINGA	LTO 41 - PROPOSED 2 BED HOUSE		LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	**4.8**	

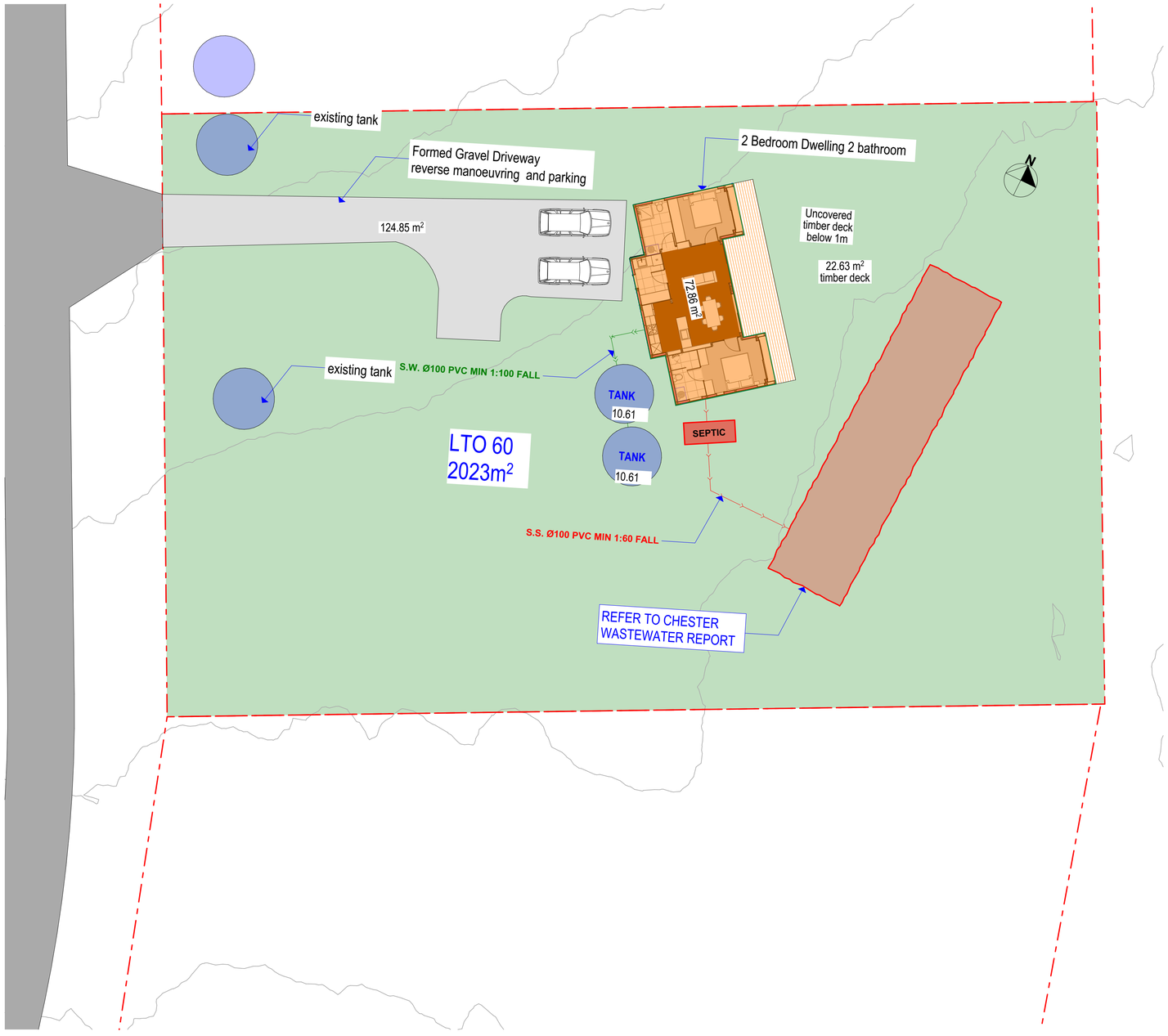
Zone	General Coastal	
Legal	LTO 60	
Area	2023m²	
Building Coverage	73m²	3.6%
Paved	147m²(new gravel driveway,tanks)	7.3%
Total Impervious	220m²	10.9%
Height	3720mm (proposed building height)	
Colour palette (Coastal)	CL02 Cinder Block Grey - LRV 14% RF01 Flaxpod LVR 7% JY01 Flaxpod	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB MT POKAKA Shiplap Weatherboards

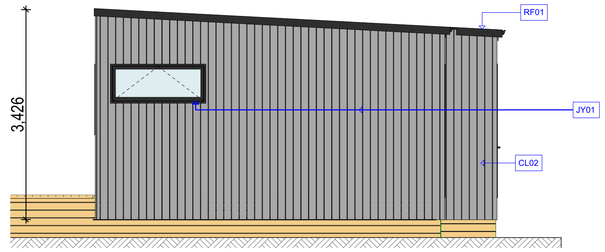
ROOFS
RF01 ROOF - COLOURSTEEL METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

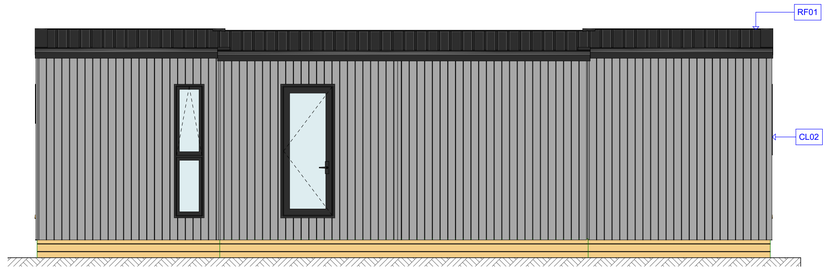


1 LTO 60 - SITE PLAN 1:150

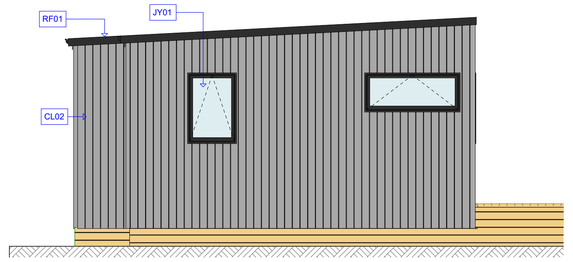
NORTH EAST ELEVATION



SOUTH EAST ELEVATION



SOUTH WEST ELEVATION



NORTH WEST ELEVATION

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 60 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: ---		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.9**	REVISION

Zone	Rural Production	
Legal	LTO 62	
Area	2084m²	
Building Coverage	66m²	3.1%
Paved	164m²(gravel driveway,tanks)	7.9%
Total Impervious	230m²	11.0%
Height	3500mm (proposed building height)	
Colour palette	Any of the 3 Standard Laminata colours	

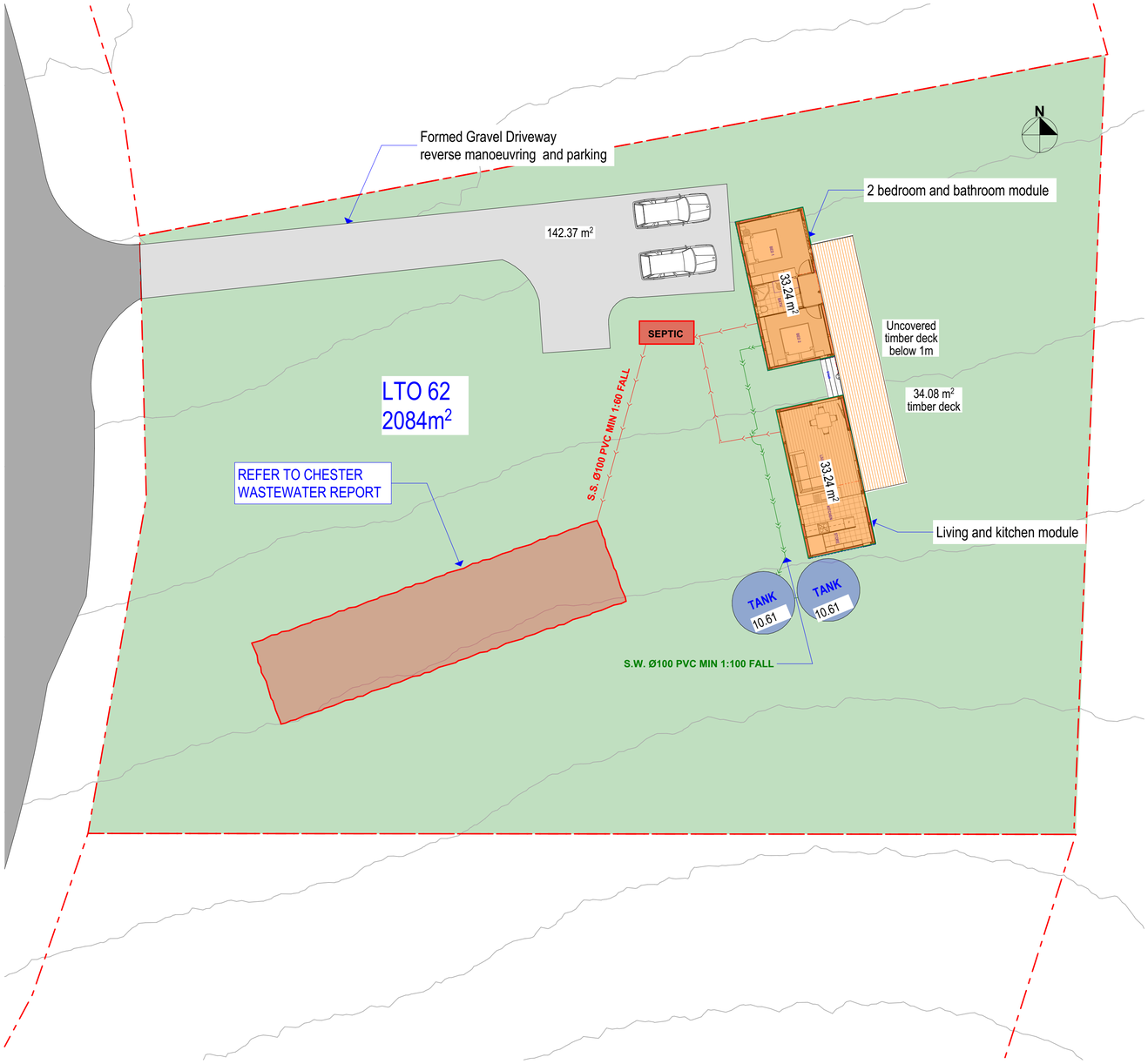
KEYNOTES

WALLS
CL01 VERTICAL - COLOURSTEEL
METALCRAFT T-RIB

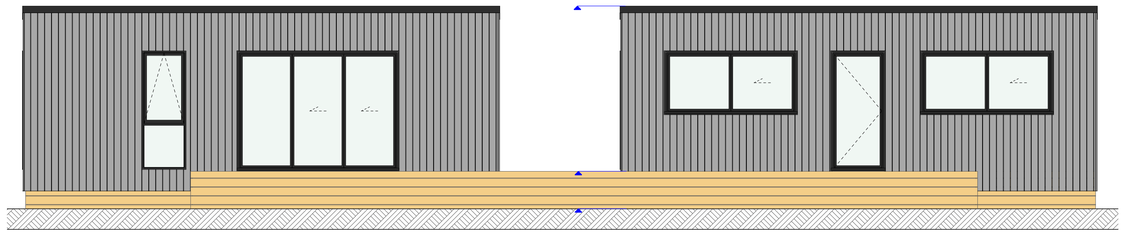
WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

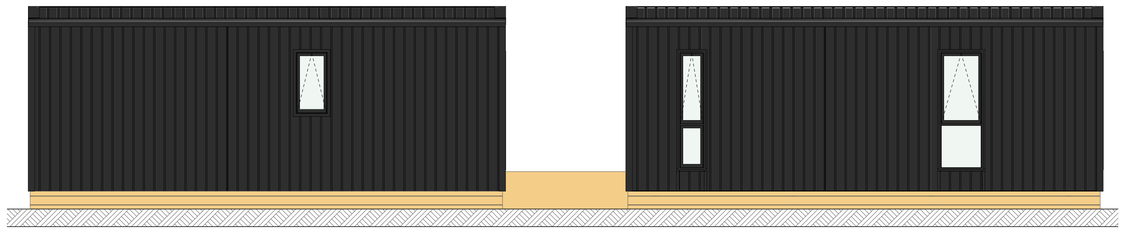
EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY



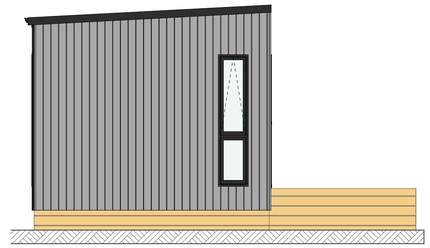
1 LTO 62 - SITE PLAN 1:150



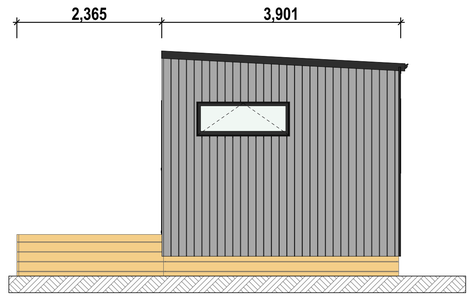
EAST ELEVATION



WEST ELEVATION



2 SOUTH ELEVATION



NORTH ELEVATION

PROJECT No.		PROJECT NAME	SHEET TITLE		STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	LTO 62 - PROPOSED 2 BED HOUSE		LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	4.10	

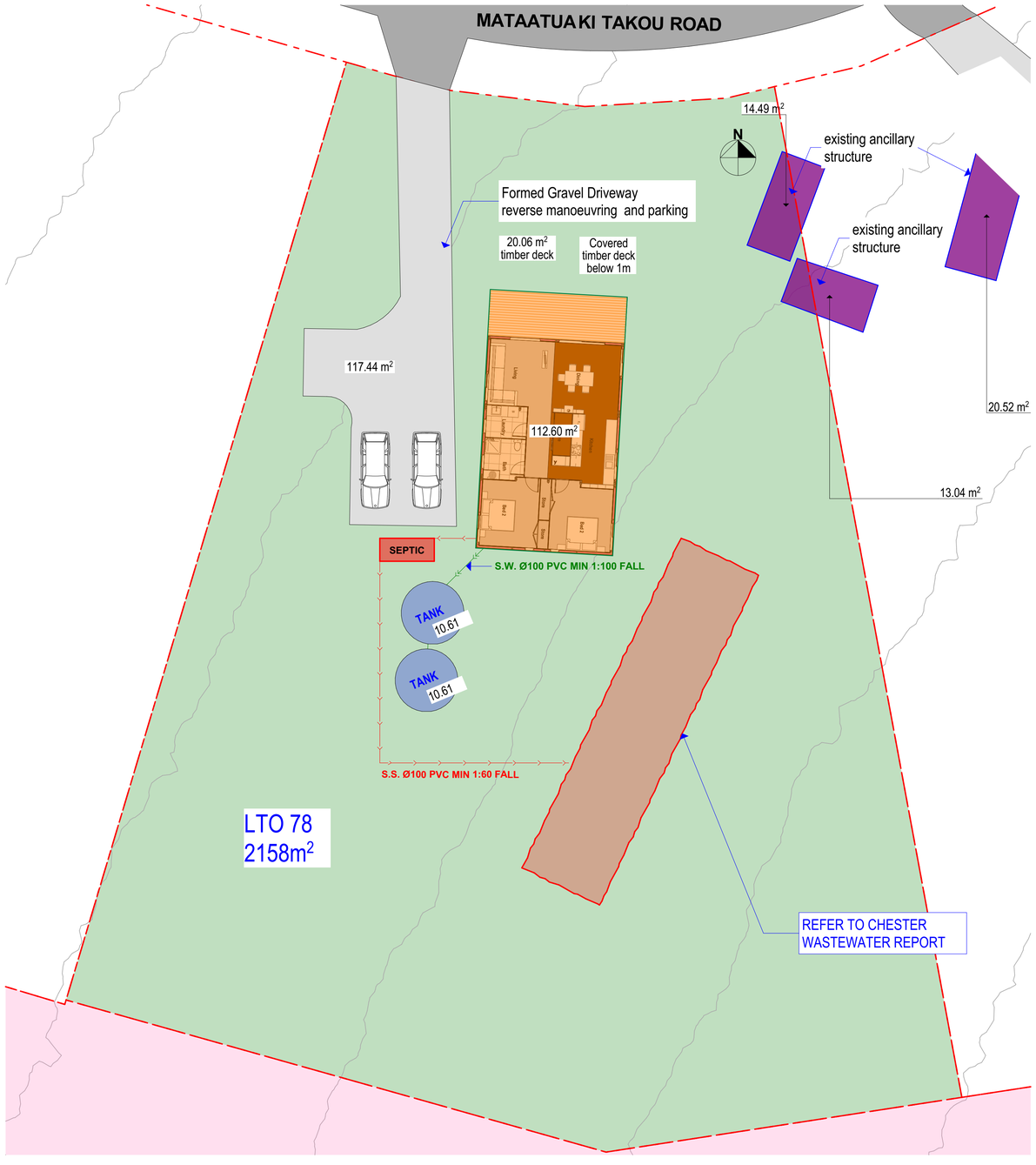
Zone	Rural Production	
Legal	LTO 78	
Area	2158m²	
Building Coverage	113m² (proposed only)	5.2%
Paved	140m²(gravel driveway,tanks)	6.5%
Total Impervious	253m²	11.7%
Height	4270mm (proposed building height)	
Colour palette	Any of the 3 Standard Laminata colours	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB MT POKAKA Shiplap Weatherboards

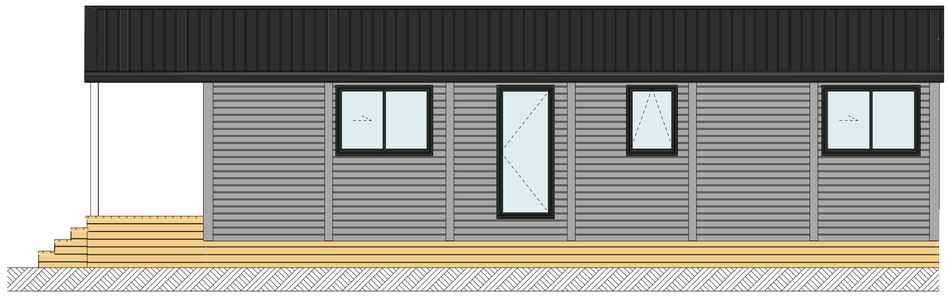
ROOFS
RF01 ROOF - COLOURSTEEL METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

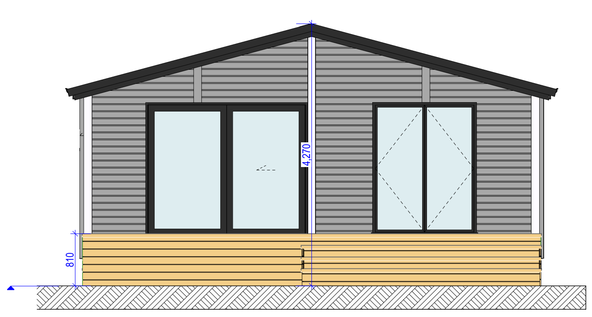


1 LTO 78 - SITE PLAN 1:150

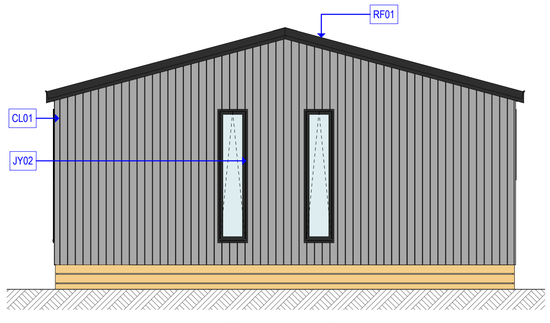
EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 78 - PROPOSED 2 BED HOUSE	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.11**	REVISION

Zone	Rural Production	
Legal	LTO 93	
Area	2232m²	
Building Coverage	336m²	15.1%
Paved	376m²(gravel driveway,tanks)	16.8%
Total Impervious	712m²	31.9%
Height	4270mm (proposed building height)	
Colour palette	Any of the 3 Standard Laminata colours	

KEYNOTES

WALLS
CL02 140x27 MCA SHIPLAP WB
MT POKAKA Shiplap
Weatherboards

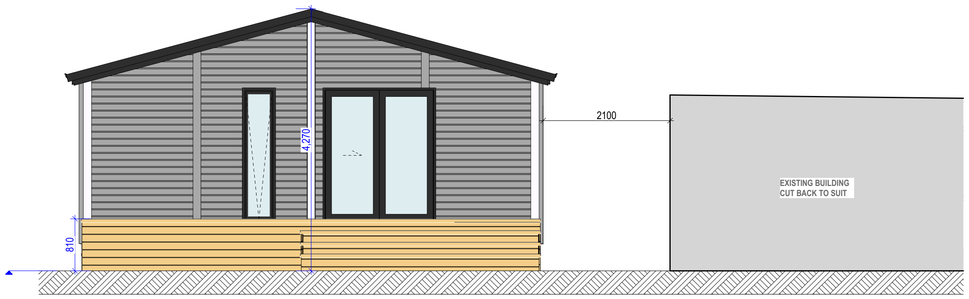
ROOFS
RF01 ROOF - COLOURSTEEL
METALCRAFT T-RIB

EXTERIOR JOINERY
JY01 ALUMINIUM JOINERY

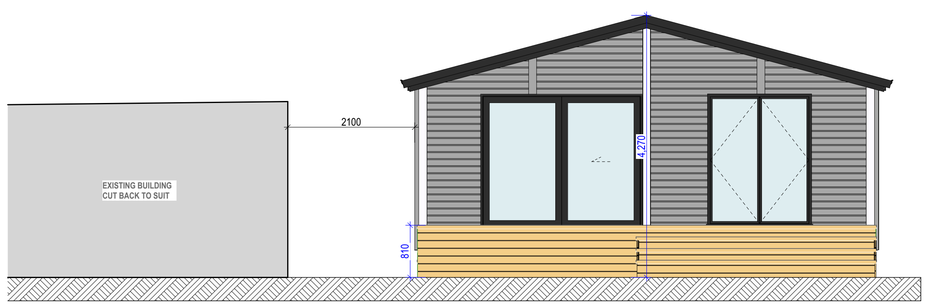
1 LTO 93 - SITE PLAN 1:150

NORTHWEST

SOUTHEAST



NORTHEAST



SOUTHWEST

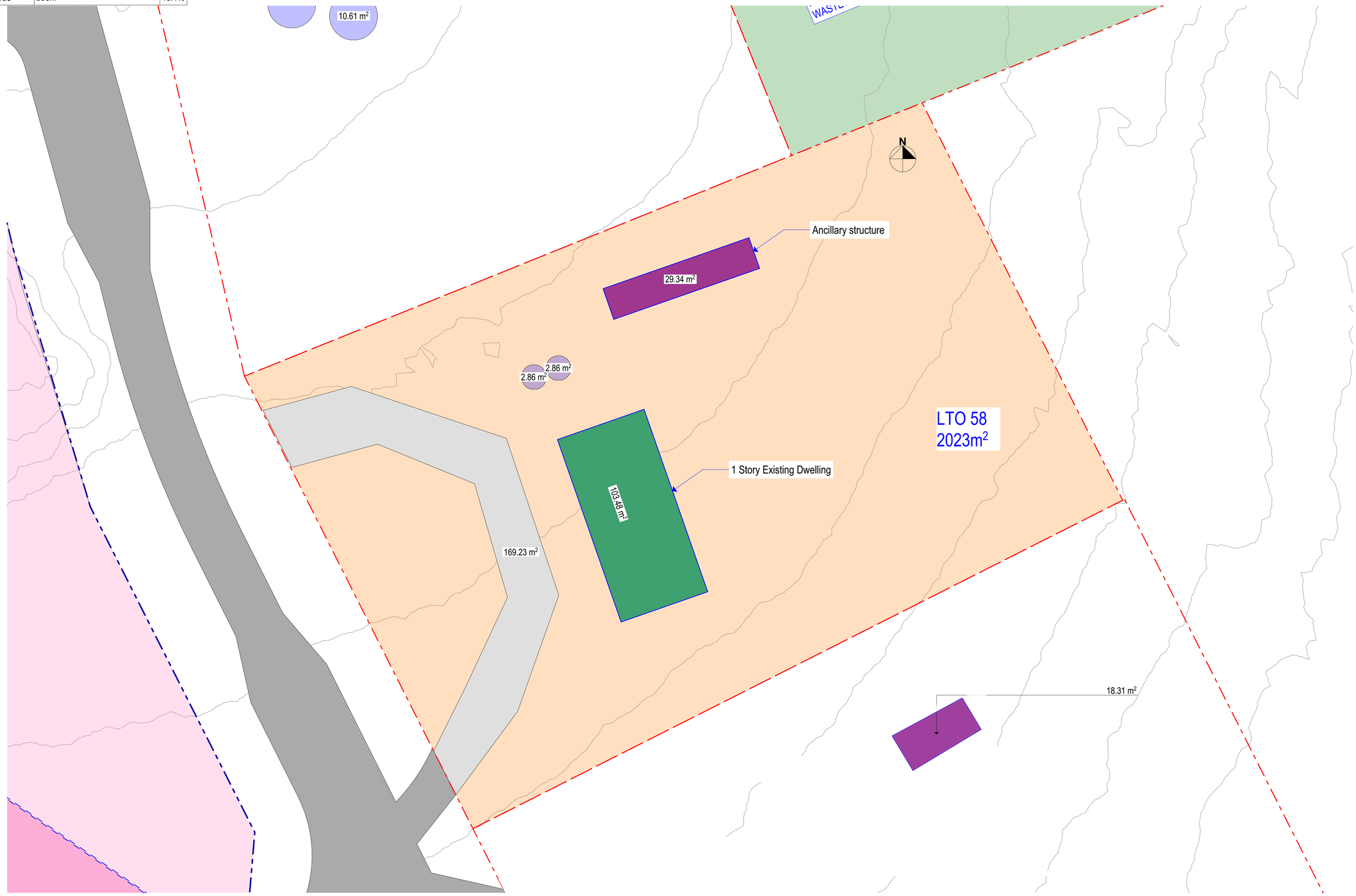
PROJECT No.		PROJECT NAME	SHEET TITLE	STATUS			SCALE:	SHEET NUMBER	REVISION
TP002	Laminata ARCHITECTURAL	TAKOU BAY PAPAKĀINGA	LTO 93 - REPLACE EXISTING HOUSE	LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		Shown@A1 DATE: 6/06/2025	4.12	

Zone	Rural Production	
Legal	LTO 54	
Area	2023m²	
Building Coverage	224m²	11.1%
Paved	225m²(gravel driveway,tanks)	11.1%
Total Impervious	449m²	22.2%

1 LTO 54 - SITE PLAN 1:150

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 54 - PROPOSED 4 BEDROOM	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.13**	REVISION

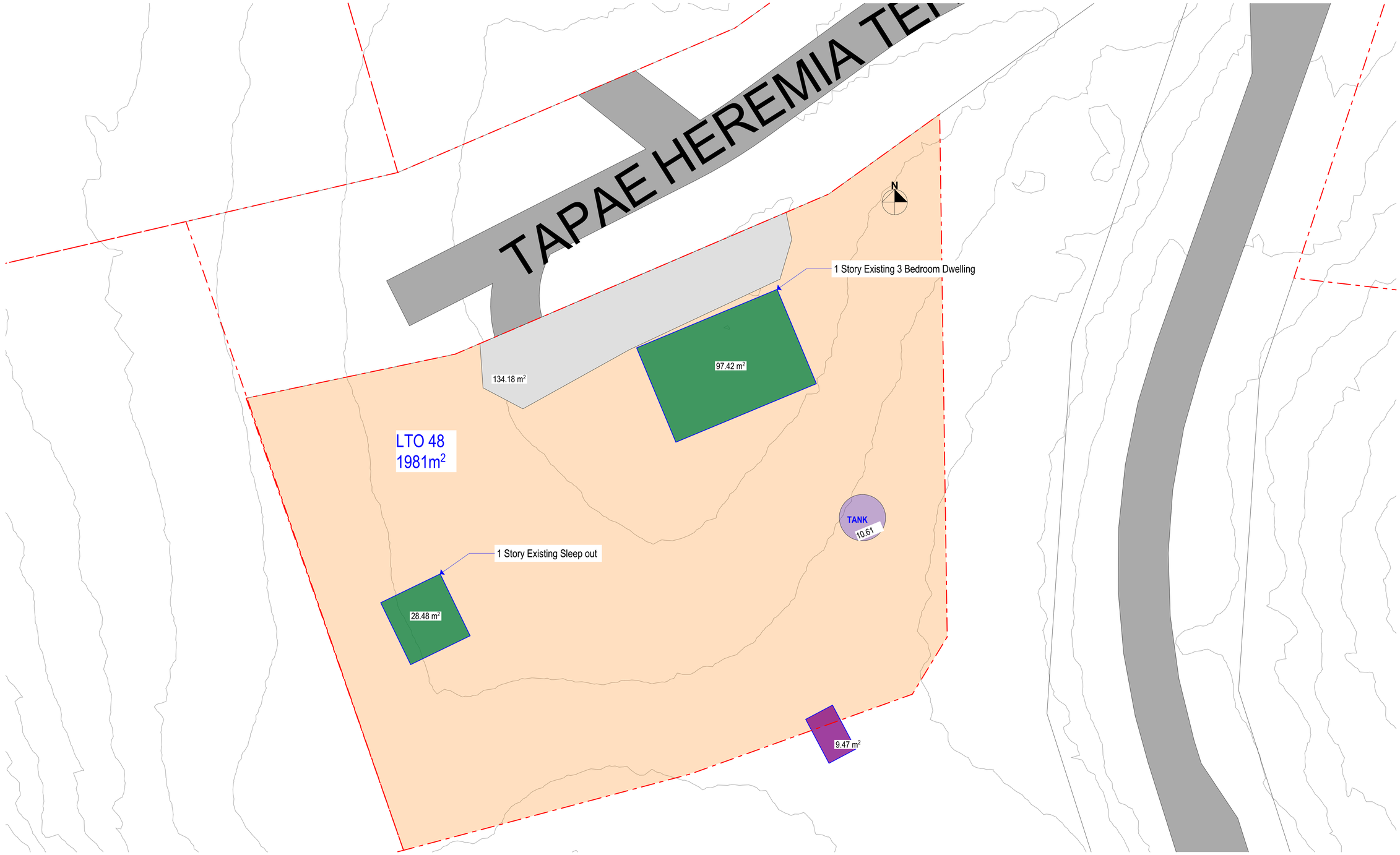
Zone	Rural Production	
Legal	LTO 58	
Area	2023m²	
Building Coverage	133m²	6.5%
Paved	175m²(gravel driveway,tanks)	8.6%
Total Impervious	308m²	15.1%



1 LTO 58 - SITE PLAN 1:150

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME: TAKOU BAY PAPAKĀINGA	SHEET TITLE: LTO 58 - EXISTING DWELLING	STATUS: LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER: **4.14**	REVISION:

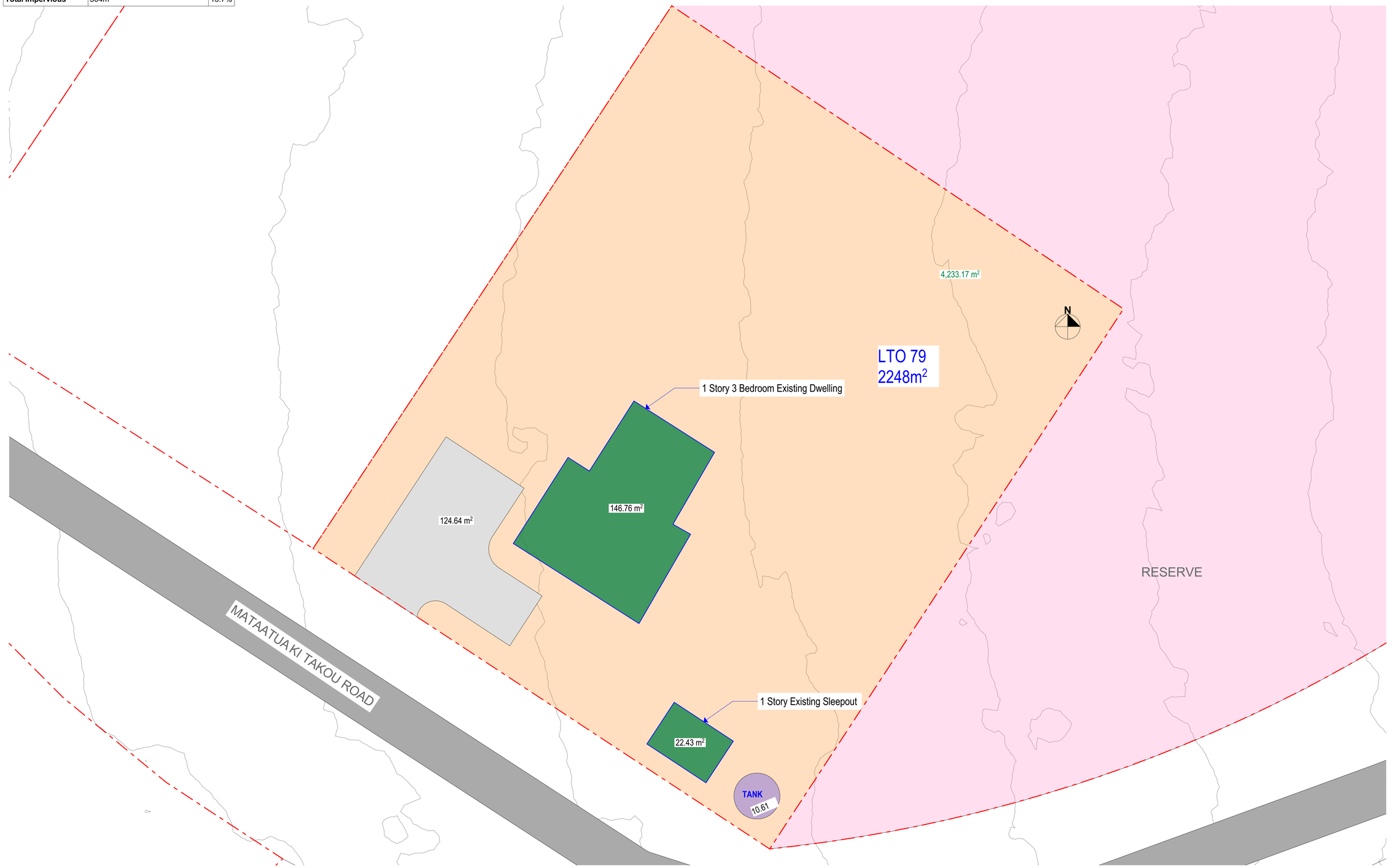
Zone	Rural Production	
Legal	LTO 48	
Area	1981m²	
Building Coverage	126m²	6.4%
Paved	145m²(gravel driveway,tanks)	7.3%
Total Impervious	271m²	13.7%



1 LTO 48 - SITE PLAN 1:150

PROJECT No. TP002	Laminata ARCHITECTURAL		PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 48 - EXISTING DWELLING	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --		SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.15**	REVISION

Zone	Rural Production	
Legal	LTO 79	
Area	2248m²	
Building Coverage	169m²	7.6%
Paved	135m²(gravel driveway,tanks)	6.1%
Total Impervious	304m²	13.7%



1 LTO 79 - SITE PLAN 1:150

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE LTO 79 - EXISTING DWELLING	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER **4.16**	REVISION

COLOUR PALLETE

Laminata

MT POKAKA

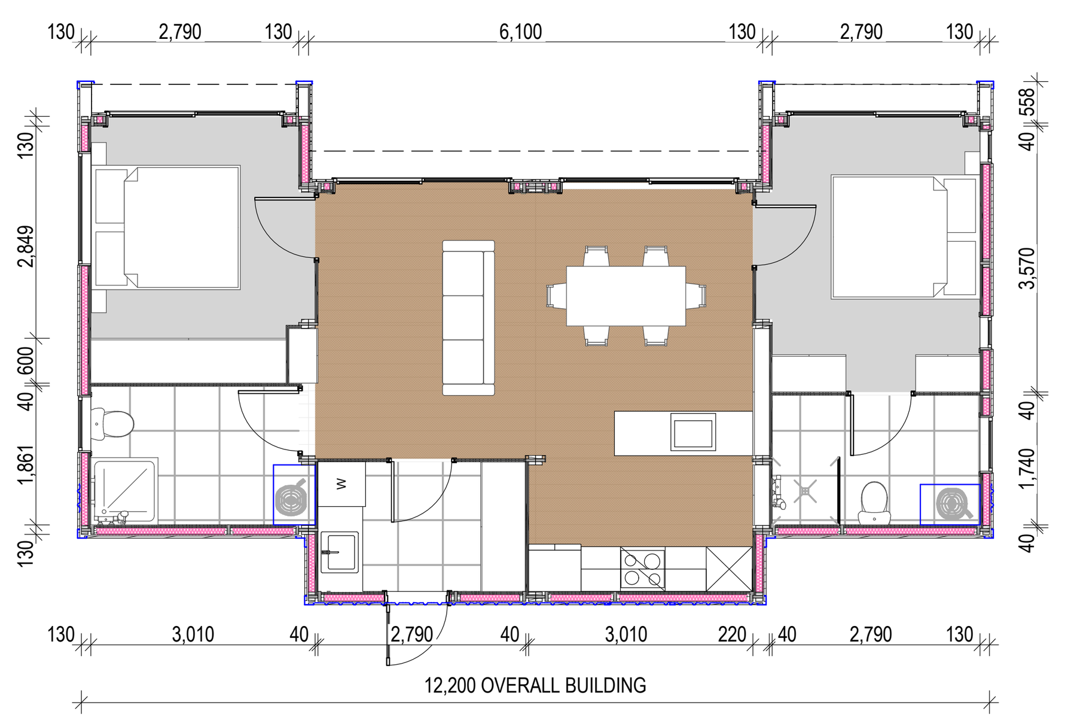
Laminata

MT POKAKA

Laminata

MT POKAKA

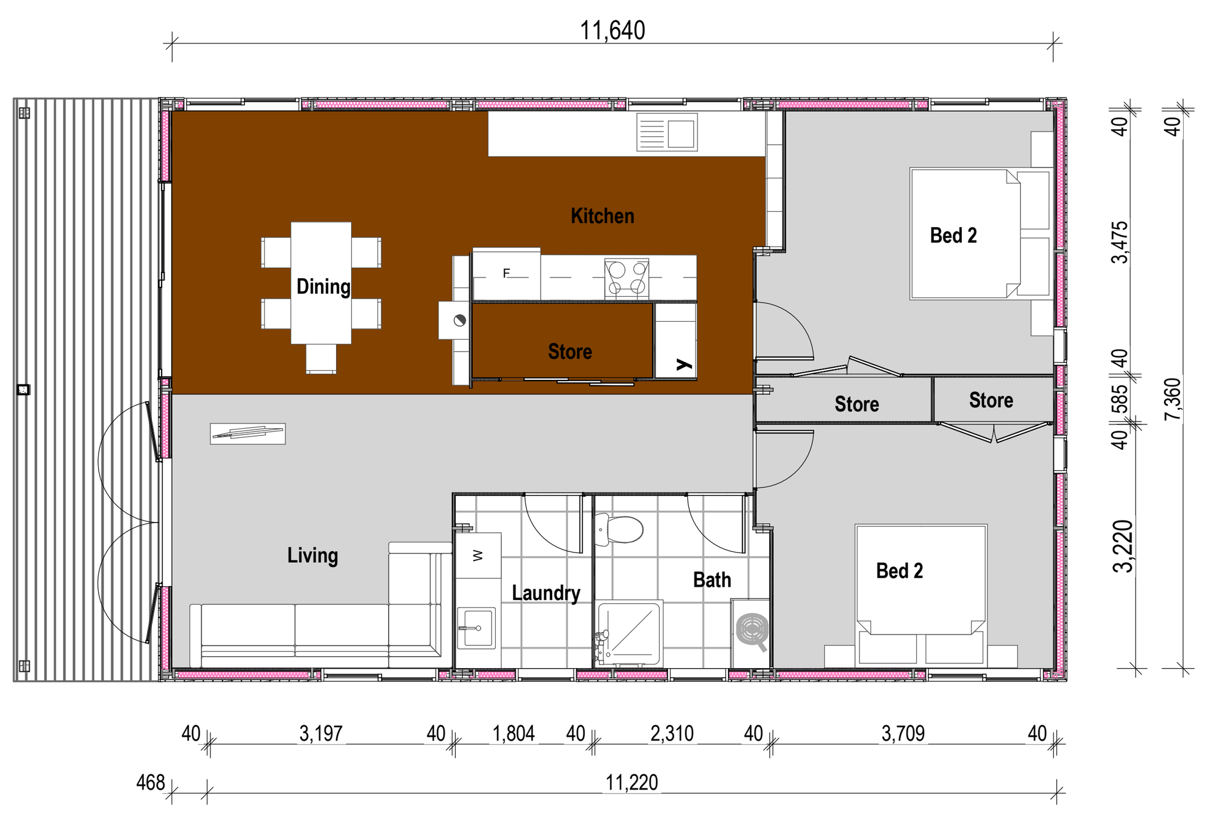
TYPOLOGIES



1 AWANUI 2 BEDROOM 1:100

FLOOR PLAN ALLOCATION

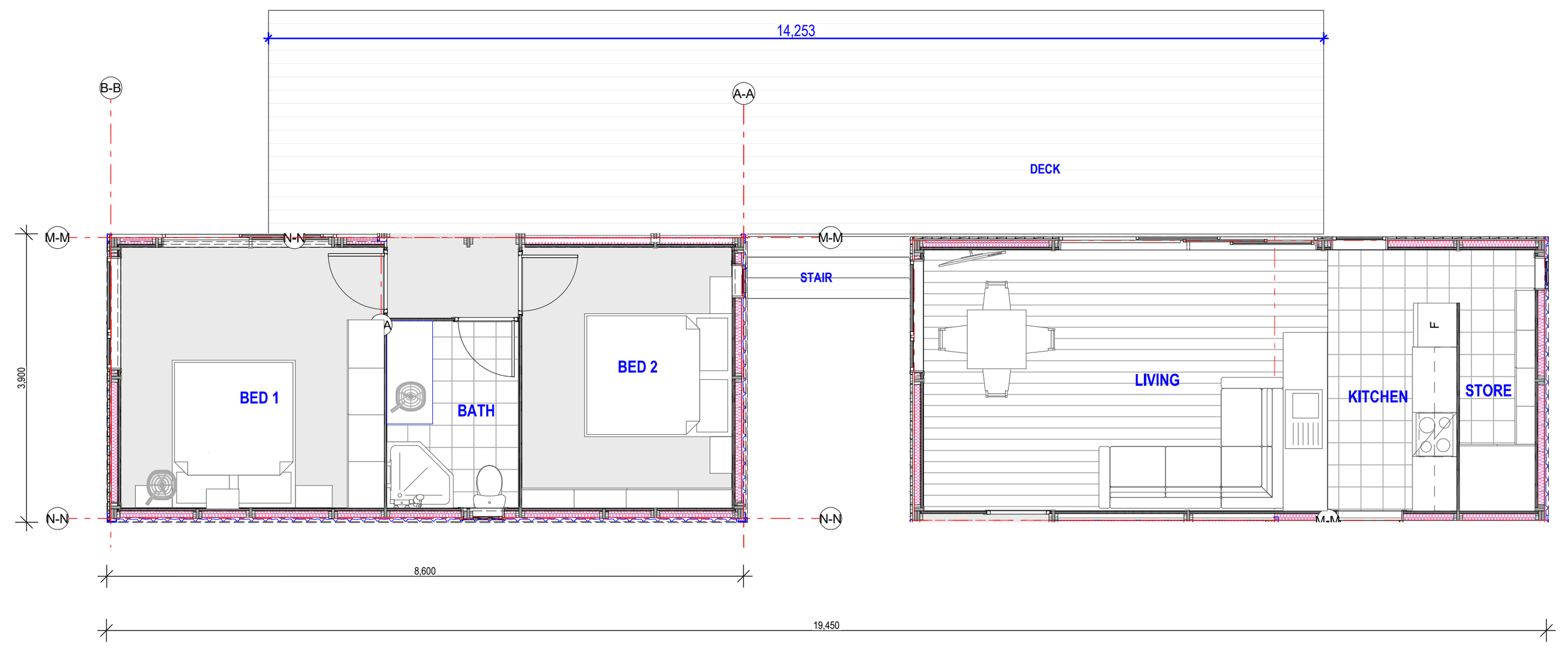
LTO 8 - SHEET 4.1
LTO 18 - SHEET 4.3
LTO 23 - SHEET 4.4
LTO 29 - SHEET 4.6
LTO 37 - SHEET 4.7
LTO 60 - SHEET 4.9



2 MATAURI 2 BEDROOM 1:100

FLOOR PLAN ALLOCATION

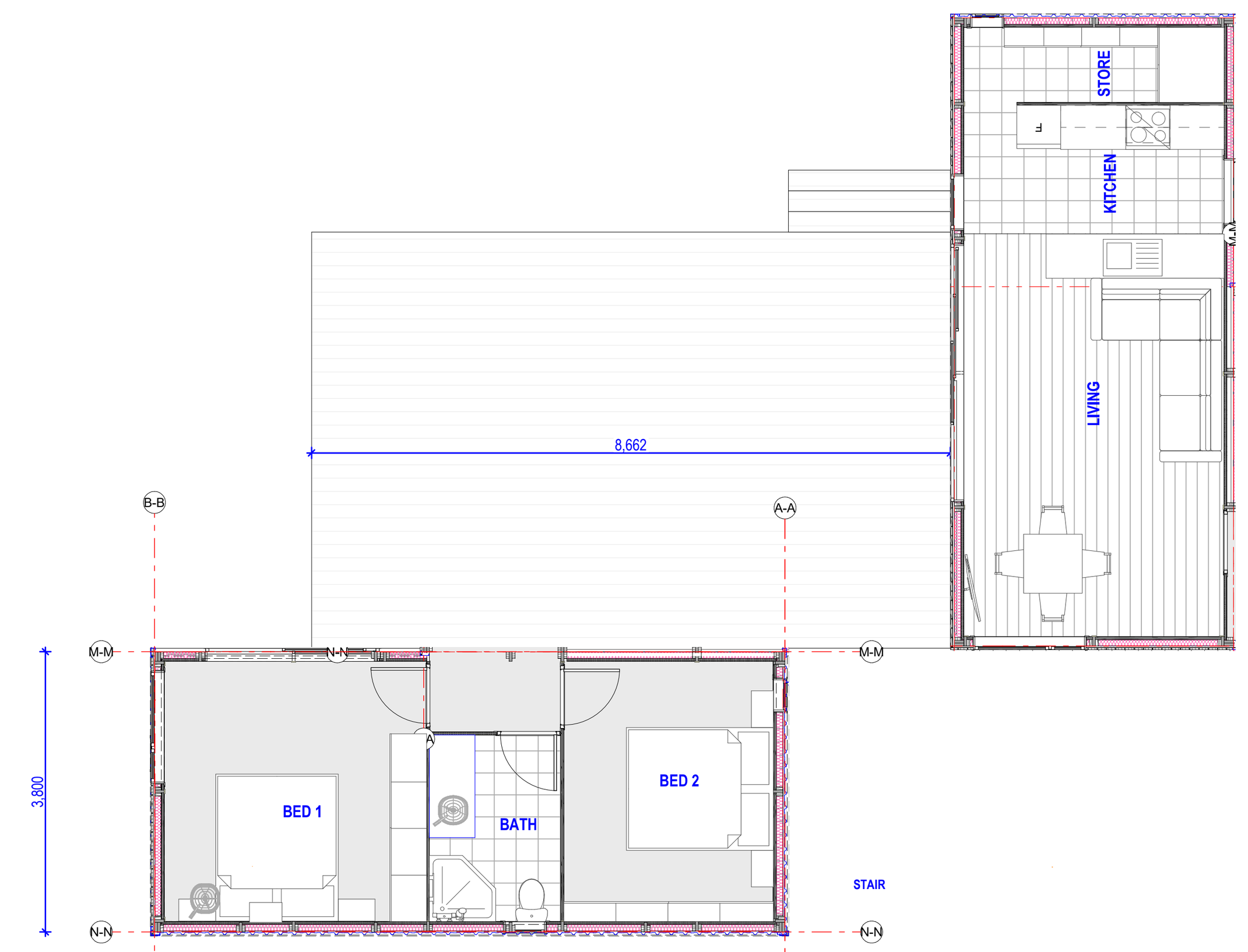
LTO 41 - SHEET 4.8
LTO 78 - SHEET 4.11
LTO 93 - SHEET 4.12



3 POD LIFE - LINEAR 1:100

FLOOR PLAN ALLOCATION

LTO 10 - SHEET 4.2
LTO 62 - SHEET 4.10



4 POD LIFE - LSHAPE 1:100

FLOOR PLAN ALLOCATION

LTO 25 - SHEET 4.5

PROJECT No. TP002	Laminata ARCHITECTURAL	PROJECT NAME TAKOU BAY PAPAKĀINGA	SHEET TITLE NEW DWELLING COLOUR PALETTE / TYPOLOGY	STATUS LUC DRAFT	DESIGN: NM DRAWN: NM CHECKED: JM APPROVED: --	SCALE: Shown@A1 DATE: 6/06/2025	SHEET NUMBER 4.17	REVISION

Proposed Consent Conditions

The following consent conditions are proposed for the papakāinga development at 202A-F Te Rawhiti Road.

In general accordance

(1) The activity shall be carried out in general accordance with the approved plans prepared by Laminata Architectural referenced "Takou Bay Papakāinga", dated XX XX 2025, Rev XX, and attached to this consent with the Council's "Approved Stamp" affixed to it.

(2) The activity shall be carried out in general accordance with the recommendations of the Land Development Report prepared by Chester referenced "Land Development Report Te Ra Road, Kaeo, Northland Takou Bay Papakāinga", dated XX XX 2025, Rev X.

(3) The activity shall be carried out in general accordance with the approved plans prepared by Chester referenced "Civil Design – Takou Bay Papakāinga, dated XX XX 2025, Rev XX", and attached to this consent with the Council's "Approved Stamp" affixed to it.

Lapse Date

(4) Under section 125 of the RMA, this consent lapses 10 years after the date it is granted unless:

(a) The consent is given effect to; or

(b) The council extends the period after which the consent lapses.

On-going Conditions

Licence to Occupy Areas

(5) No more than one residential unit as defined by the Operative District Plan shall be constructed within an individual Licence to Occupy area.

***Advice Note**: Residential Unit is defined by the Operative Far North District Plan 2009 as "A building, a room or a group of rooms, used, designed or intended to be used by one or more persons as a self-contained single, independent and separate household. Any accessory building providing sleeping accommodation and bathroom facilities but no cooking or dishwashing or laundry facilities will be treated as forming part of a residential unit / dwelling."*

(6) The maximum impermeable areas within each individual Licence to Occupy area shall be no more than 35%.

Advice note:

Any impermeable areas located outside of the identified Licence to Occupy areas shall be assessed against the relevant District Plan standard across the site.

(7) The maximum building coverage within each individual Licence to Occupy area shall be no more than 30%.

Advice note:

Any new buildings located outside of the identified Licence to Occupy areas shall be assessed against the relevant District Plan standard across the site.

Earthworks

(8) The maximum threshold for earthworks undertaken on each individual Licence to Occupy area shall not exceed 200m^2 within a single calendar year.

All earthworks within each individual Licence to Occupy area must be controlled with erosion and sediment control measures in accordance with Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005).

Fire Fighting Water Supply

(9) At the time of building consent for a papakāinga housing unit within an individual Licence to Occupy area, the consent holder shall provide suitable water storage for firefighting water supply in accordance with SNZ PAS 4509:2008. Water storage can be provided communally or individually within each exclusive use area at the following minimum volumes:

(a) For communal firefighting supply, a minimum of 45m^3 of water storage must be provided and must be located within 90m of each residential unit.

(b) For individual on-site firefighting supply, a minimum of 10m^3 of water storage must be provided per residential unit must be provided.

Wastewater Treatment and Disposal

(10) At the time of building consent for a papakāinga housing unit within an individual Licence to Occupy area, the consent holder shall ensure that any new wastewater system within a Licence to Occupy Area is constructed in accordance with the recommendations contained within the Land Development Report prepared by Chester referenced "Land Development Report Te Ra Road, Kaeo, Northland Takou Bay Papakāinga", dated XX XX 2025, Rev X.

Stormwater Conveyance and Disposal

(11) At the time of building consent for a papakāinga housing unit within an individual Licence to Occupy area, the consent holder shall ensure that stormwater generated within the Licence to Occupy area is managed in accordance with the recommendations contained within the Land Development Report prepared by Chester referenced "Land Development Report Te Ra Road, Kaeo, Northland Takou Bay Papakāinga", dated XX XX 2025, Rev X.

Land Development Report

Te Ra Road, Kaeo, Northland
Takou Bay Papakainga

Prepared For:
Te Pouahi o Te Taitokerau Trust

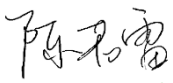
Job No.: 15876
Rev: 1
Date: 5 June 2025

CHESTER

Revision History

Revision No	Description/comments	Prepared By	Date
0	Draft issue	S Siva	28/05/2025
1	First Issue	S Siva	05/06/2025

Document Control

Action	Name	Signed	Date
Prepared by	S. Siva Civil Engineer		04/06/2025
Reviewed by	J. Chen Civil Engineer		05/06/2025
Approved by	N. Jull Senior Civil Engineer		05/06/2025

Distribution

Business/company	Attention	Role
Barker & Associates Ltd	Makarena Dalton	Planner

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1 Introduction

Chester Consultants Ltd has been engaged by Te Pouahi o Te Taitokerau Trust on behalf of the Takou Trust to provide a Land Development Report with respect to the proposed development at Te Ra Road, Kaeo, Northland.

This report has been prepared solely for the benefit of this specific project, and Far North District Council (FNDC). Chester Consultants Ltd accepts no liability for inaccuracies in third party information used as part of this report. The reliance by other parties on the information or opinions contained in the report shall, without our prior review and agreement in writing, be at such parties' sole risk.

This report is based on development data provided by the client, Barker & Associates, Hawthorn Landscape Architects, Traffic Planning Consultants, and data obtained from FNDC and Northland Regional Council (NRC) maps current to the site at the time of this document's production. Should alterations be made which impact upon the development not otherwise authorised by this report then the design / comments / recommendations contained within this report may no longer be valid.

In the event of the above, the property owner should immediately notify Chester Consultants Ltd to enable the impact to be assessed and, if required, the design and or recommendations shall be amended accordingly and as necessary.

2 Existing Site Description

The property is located at Te Ra Road, Kaeo, Northland and is legally described as Pt Takou Block. Takou Block is Māori Freehold land and measures approximately 323.5ha (3 parcels, held in 1 record of title). The development site is the middle parcel which comprises approximately 61.9 hectares of General Coastal Zone land and 73.6 hectares of Rural Production Zone land, resulting in a total site area of approximately 135.5 hectares. Takou Trust have prepared an overall masterplan of their whenua allocating 96 Licence to Occupy (LTO) areas including their existing Marae site that is held in a Māori Reservation and an unnumbered LTO utilised for reserve purposes.

The site contains existing dwellings, gravel roads, indigenous and exotic vegetation, intermittent and permanent streams. The site topography varies between gently rolling pasture areas to steep vegetated slopes. The majority of the existing dwellings and driveways are constructed along the ridge lines. The site is currently accessed from Te Ra Road. The site is divided into two distinct zones under the FNDC Operative District Plan: one portion is designated as 'Rural Production,' while the other is zoned as 'General Coastal. The figures below depict the site and some of the surrounding features.

Figure 1: Existing site aerial image (FNDC GIS Maps 20/03/2025)

Figure 2: Existing metalled road access looking southeast from Rimariki lane & Te Ra Road junction (Chester 06/03/2025)

Figure 3: View of Rimariki lane looking west (Chester 06/03/2025)

Figure 4: View of Te Rawhiti Road looking north from Te Rawhiti Road & Tuatua Terrace junction (Chester 06/03/2025)

Figure 5: View of Tuatua Terrace looking east from Te Rawhiti Road & Tuatua Terrace junction (Chester 06/03/2025)

Figure 6: Te Ra Road in front of Marae (Chester 18/04/2025)

Figure 7: Tuatua Terrace (Chester 18/04/2025)

3 Proposal

Takou Trust have an overall masterplan of their whenua allocating 96 Licence to Occupy (LTO) areas, including their existing Marae site that is held in a Māori Reservation and an unnumbered LTO utilised for reserve purposes. Refer to the proposed site plan by Barker & Associates and Figure 8 below for further details.

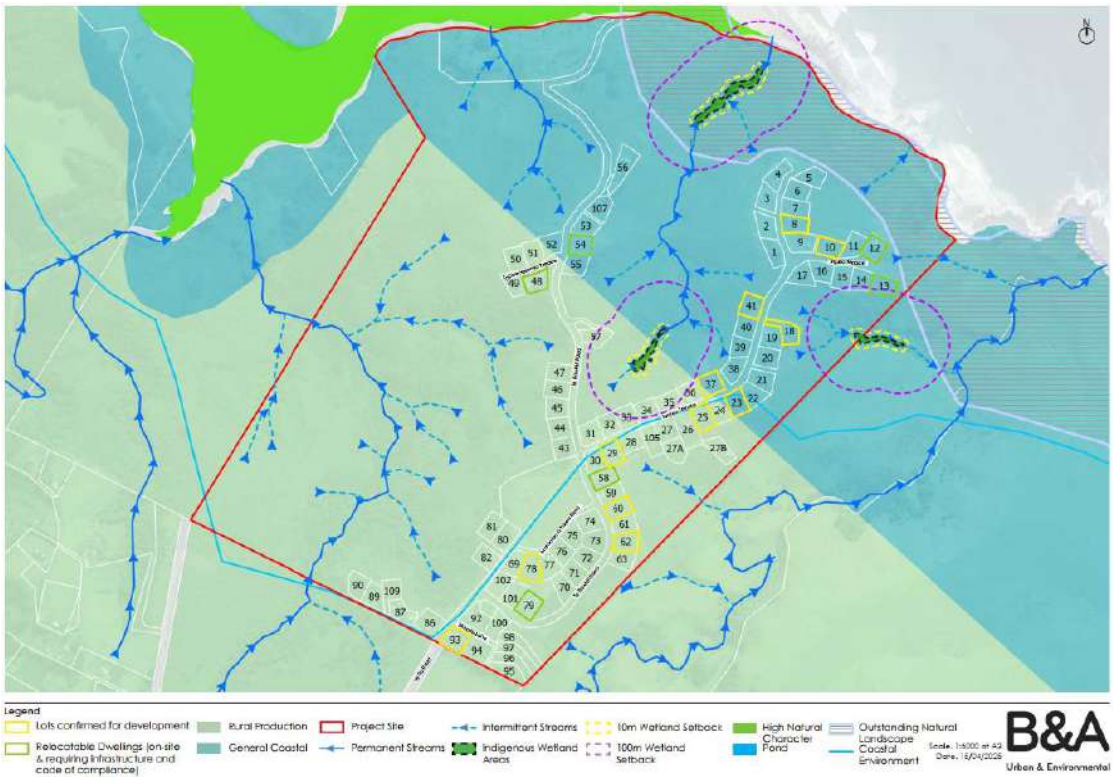

Figure 8: Proposed Site Plan (Barker & Associates)

The proposal is to establish 94 LTO areas to provide for one papakāinga dwelling per LTO area, including:

- The construction of 12 new dwellings and four relocatable dwellings within 16 LTO areas (LTO areas 8, 10, 18, 23, 25, 29, 37, 41, 60, 62, 78, 93, 13, 48, 58, and 79); and
- Within the other LTO areas, the provision for the construction of one papakāinga dwelling per LTO area. Where LTO areas which contain existing development are to be redeveloped in the future, this consent will provide up to one new papakāinga dwelling per LTO area.
- Formalise and construct internal private roading.
- Complete enabling earthworks to achieve the above.

The proposal is further detailed in the Assessment of Environmental Effects Report prepared by Barker & Associates.

This report is intended to accommodate a Resource Consent application and report on, and include recommendations with respect to the following:

- Earthworks, Erosion & Sediment Control,
- Access,
- Water Supply,
- Wastewater,
- Stormwater,
- Flood Risk Assessment

This report is intended to be read in conjunction with the accompanying Chester drawings.

3.1 Previous Civil Reporting

Previous civil technical reporting has been completed relating to this site. This comes from the existing consented development that has occurred across the site as well as feasibility assessments commissioned by Takou Trust for this proposal. As part of producing this report we have reviewed the reports provided to us by the Takou Trust. Table 1 below lists the reports we have reviewed and comments on their relevance to our assessment.

Table 1: Summary of Previous Civil Reporting

Document Description	Comment
Papakainga Suitability Report (Draft) by Cook Costello dated 17 May 2010	The report identifies the need for earthworks in road construction, with subsoils suitable for cut-to-fill operations, requiring erosion control measures. It recommends rainwater tanks, vegetated strips and swale drains as acceptable methods for stormwater management and confirms that all building sites are well-elevated above flood-prone areas. For wastewater management, the report acknowledges the viability of an onsite system while also suggesting a modular centralized alternative. A rainwater tank is considered a feasible option, with an additional recommendation to explore a community water supply dam. Soil investigation, Slope stability and firefighting water requirements are also addressed.
On-site Wastewater Disposal Report (TP58) by O'Brien Design Consulting (Revision A) for lot 48 dated 15 September 2020	The report covers site investigation and a specific on-site wastewater design for LTO 48.
Design of on-site wastewater system Haigh Workman for proposed Mataatu Marae dated 16 September 2020	The report proposes a wastewater system with secondary treatment and dripper line disposal.
Stormwater Management report by Haigh Workman for proposed Mataatua Marae dated 06 October 2020	The proposed stormwater discharge utilizes a level spreader without attenuation, as the development qualifies as a permitted activity.
On-site Wastewater Disposal Report (TP58) by O'Brien Design Consulting (Revision A) for lot 12 dated 13 December 2023	The report covers site investigation and specific on-site wastewater design for LTO 12.
Feasibility report (Draft revision 1) by RS Eng dated 14 February 2024	Overland flows were assessed using the HEC-RAS model. The report recommends sealing the road adjacent to residential sites, with a footpath and street lighting for safety. For stormwater management, it concludes that attenuation is not required and suggests swale drains, piped infrastructure, and a chip-seal surface, with stormwater either discharging to natural watercourses or returning to sheet flow. For wastewater management, both individual and communal treatment and disposal options were explored, with a communal system recommended for future multi-unit developments. Regarding water supply, options including rainwater storage tanks, bore/spring supply, dam construction, and supply from the Takou River were considered. A communal system with the option to construct a dam is proposed, acknowledging the high upfront and maintenance costs.
Summary of Options (Issue 1) by RS Eng dated 28 February 2024	The report suggests upgrading the existing metalled road to a sealed road to ensure all-weather access. It also explores various options for water supply and firefighting needs, including sourcing water from existing springs, groundwater bores, or a storage reservoir, along with a water treatment plan.
Site Suitability Report by T & A Structures for Lot 48 dated 29 March 2024	The reports cover foundation classification and soil investigation for the LTO 12 site. They recommend implementing controlled or non-concentrated discharge, directing runoff to open ground

Site Suitability Report by T & A Structures for Lot 12 dated 19 April 2024.	The reports cover foundation classification and soil investigation for the LTO 12 site. They recommend implementing controlled or non-concentrated discharge, directing runoff to open ground

4 Earthworks, Erosion & Sediment Control

4.1 Earthworks

Minor earthworks are proposed across the site to form access, widen existing roads, and manage secondary flow. Given the works proposed and the topography around those areas, no significant retaining structures or batter slopes will be required.

4.1.1 Earthworks Area and Volume

The table below sets out our estimation of the earthworks required to execute the project works.

Table 2: Estimated Earthwork Volumes

Zone	Work Item	Area (m^2)	Cut (m^3)	Fill (m^3)
Rural Production	Road Works	15881	1918	739
	Private Site Works (200m^2 per LTO)	12000	3000	3000
	Subtotal	**27811**	**4918**	**3739**
General Coastal	Road Works	5905	627	304
	Private Site Works (200m^2 per LTO)	6800	1700	1700
	Subtotal	**12705**	**2327**	**2004**
	Total	**40586**	**7245**	**5743**

We note that the majority of the works required are related to maintenance works of the existing roads/tracks, obtaining roading material for use on the same site, and clearing of existing roadside drains. Such works maybe excluded from the definitions of excavation and filling under the FNDC operative plan.

It is assumed that each Licence to Occupy (LTO) will require an earthwork area of approximately 200 m^2. Given that each LTO has a minimum site area of 2,000 m^2, this corresponds to earthworks affecting approximately 10% of the total area per LTO.

It is also important to highlight that development across individual LTOs is anticipated to occur progressively over time rather than concurrently. Therefore, the earthwork volume for private sites presented in the table above does not represent a single-stage construction scenario. Instead, it reflects cumulative earthwork activity that will take place over multiple stages of development.

4.1.2 Construction Methodology

In general work operations across the site to execute the project works will involve:

- Installation of erosion and sediment controls.
- Stripping of organic layers and unsuitable material within road extent.
- Minor earthworks.
- Drainage and services.
- Roading.
- House piling.
- Progressive Stabilization and Landscaping.
- Decommissioning of erosion and sediment controls.
- On-going mulching and establishment of vegetation.

The final construction methodology to complete works will be determined with input from the contractor at pre-commencement stage.

4.2 Erosion and sediment control

Best practice erosion and sediment control will be implemented to mitigate the effect of the earthworks on the surrounding environment. The sediment control devices will be constructed in general accordance with Auckland Council's Guidance Document 005 (GD05) and may include, but not be limited to the following:

- Stabilised Construction Entranceway,
- Silt Fences / Super Silt Fences,
- Wheel wash,
- Progressive site stabilisation.
- Decanting Earth Bunds.

The Contractor will be ultimately responsible for specific design, installation, maintenance, and removal of various protection measures in accordance with GD05 as necessary to align with actual construction operations and staging.

5 Access

The development site is currently accessed via an existing private metalled road network that connects directly to Te Ra Road. This access point is proposed to be retained. To support the development, a series of internal private roads are proposed to be formed and/or upgraded. To maximise efficiency and manage budget constraints, the existing private metalled roads will be retained where possible, with maintenance and targeted widening works undertaken to improve functionality. A minimum carriageway width of 4 metres is proposed for all new roads, as well as for upgrades to existing roads where the current width is less than 4 metres. To ensure safe and efficient two-way vehicle movement, strategically positioned passing bays will be provided at appropriate intervals, as illustrated in the accompanying drawings. This approach balances access requirements with the rural character of the site and optimises the use of existing infrastructure. In all cases the longitudinal gradient of the roads within the network that serves houses (i.e. excluding the last stretch of beach access) is at grades <=12.5%. Figure 9 to Figure 11 below show some of the typical roading cross sections proposed.

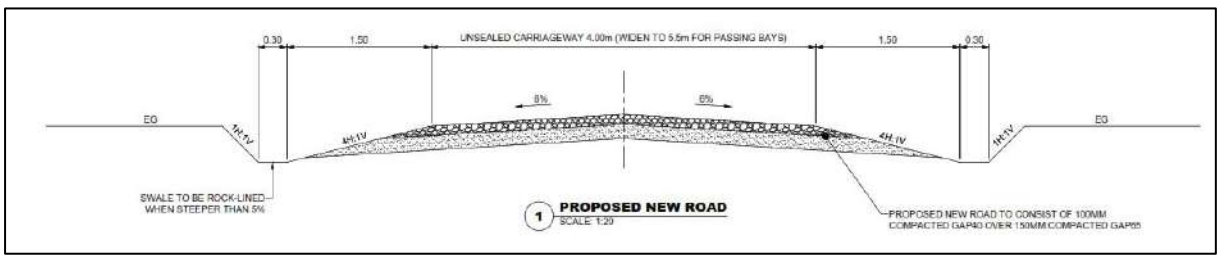

Figure 9: Typical New Road Section

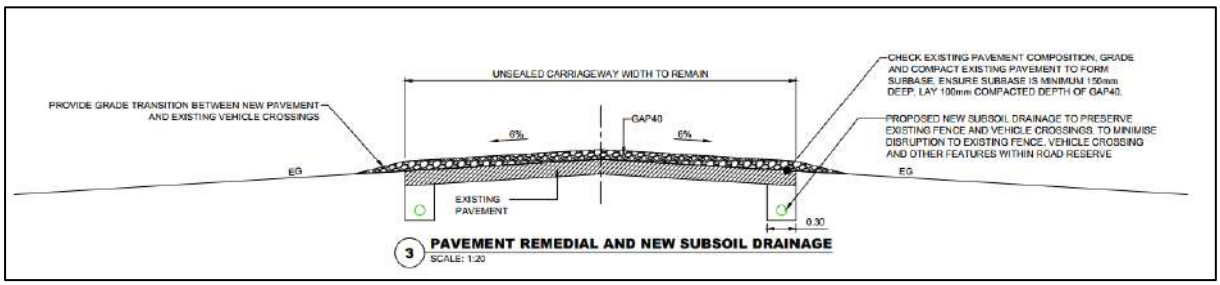

Figure 10: Typical Road Upgrade (On ridgeline, free draining either way)

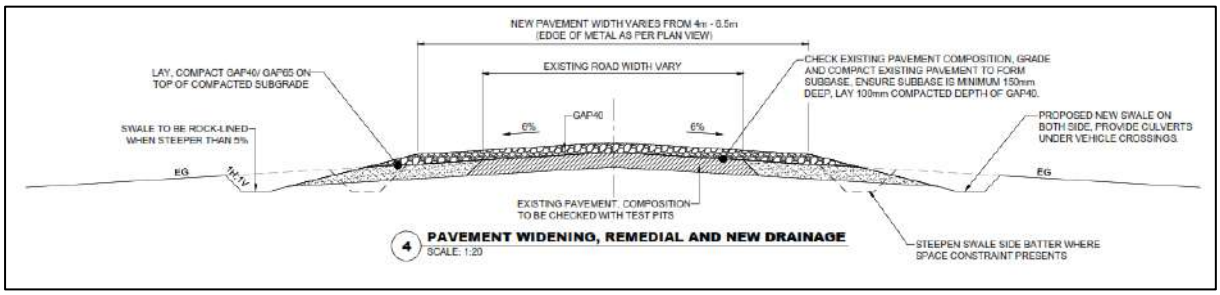

Figure 11: Typical Road Upgrade and Widening

For further information, refer to the accompanying 800 series drawings and traffic reporting by Traffic Planning Consultants Limited.

6 Water Supply

6.1 Existing Water Supply Network

There is no public reticulated water supply available to the site.

6.2 Proposed Potable Water Supply

It is proposed to utilise on-site water tanks to service the proposed development in terms of potable water supply, which is typical in the surrounding rural area and Papakainga. Other options such as a communal bores and treatment have been considered however ruled out due to being cost prohibitive.

6.2.1 Potable Water Tank Sizing

At the time of the building consent application for the proposed new dwellings, the rainwater tanks will be designed and installed in accordance with the New Zealand Building Code G12 Section 5. The following Figure 7 extracted from the Auckland Region Countryside Living Toolbox is a recommendation for potable water supply volumes. For practical storage reasons based on the available water capture from the roof area and the number of bedrooms per dwelling, we are recommending 25m^3 of storage for 1-bedroom dwellings and 50m3 of storage for the 2- and 3-bedroom dwellings.

Table C12
Minimum Tank Size for RDC Homes Having Tanks as Sole Water Source

Usable Roof Area (m^2)	Bedrooms				
	1	2	3	4	5
100	20	50			
120	15	35	75		
140	10	30	60		
160		20	50		
180			45	75	
200			35	65	
220			30	55	90
240			30	50	80
260				45	70
280				40	65
300				35	60

Colours indicate units of 25 cubic metres (5,000 gallons):

1 x 25 m^3 | 2 x 25 m^3 | 3 x 25 m^3 | 4 x 25 m^3

Figure 12: Recommended Tank Size based on Roof Area and Bedrooms from The Countryside Living Toolbox Table C12

Refer to the 110 series drawings prepared by Chester for more information.

6.3 Firefighting Water Supply

There is no reticulated water supply available to the site so firefighting water supply will be provided from static on-site water sources in order mitigate fire risk. Typically, in FNDC, for papakāinga like this, on-site fire water supply solutions are designed in accordance SNZ PAS 4509:2008 but with the exception that 10,000 litres is acceptable for dwellings up to 200m^2, and 20,000 litres for larger houses. In the context of this development which is to achieve resource consent for one papakāinga dwelling per LTO area, we recommend the following consent condition:

*Each dwelling shall have **access** to water for firefighting purposes. The water source must meet the following criteria:*

- *For a dwelling less than 200m^2 be a minimum of 10,000 L; or*
- *For a dwelling exceeding 200m^2 be a minimum of 20,000 L; and*
- *Be within 90metres of the dwelling; and*
- *Be accessible and available all year round; and*
- *May be comprised of water tanks, permanent natural waterbodies, dams, swimming pools, whether located on or off the LTO.*

6.3.1 Communal Fire Water Supply Option

Dependent on available funding the Takou Trust has the option to implement a communal firefighting water solution to comply with the proposed condition/strategy above.

As such we have developed a solution that could be implemented. The option comprises of strategically located 10,000-litre tanks to service multiple LTOs as shown in the drawing series 110. This approach has received approval from Fire and Emergency New Zealand (FENZ). These dedicated firefighting tanks can be connected to the adjacent LTO's potable water tanks, with overflow directed into the firefighting tanks so they are supplemented by direct rainwater collection. Where adjacent LTO sites have not yet been developed, an alternative means of maintaining water levels in the firefighting tanks would be required to ensure compliance.

To reiterate, the above is only an option that the Takou Trust may implement to comply with the proposed condition. It should not be made a condition of consent to implement but rather taken as a demonstration of how the proposed condition may be achieved in practice.

7 Wastewater

7.1 Existing Reticulation

The development site is not connected to the existing public wastewater network. Currently, existing dwellings are serviced by on-site wastewater treatment and disposal systems. A similar approach is proposed for the new development, with each lot to be equipped with an appropriately designed on-site wastewater system in accordance with regulatory requirements.

7.2 Proposed Wastewater System

7.2.1 Subsoil Classification

According to the NRC Soils Factsheet Viewer, the majority of the site is underlain by Okaihau gravelly friable clay (OK), with the remaining portion consisting of Pungaere gravelly friable clay (PK). As outlined in NRC Soils Factsheet 8.1.3, the Okaihau soil has a drainage class ranging between 4 and 5, indicating well to somewhat excessively drained conditions. The Pungaere soil has a drainage class of 3, corresponding to moderately drained conditions. These drainage characteristics are considered suitable for on-site stormwater and wastewater management.

Figure 13: Subsoil details (NRC Soils Factsheet Viewer 24/04/2025)

These subsoil classifications were further confirmed through on-site investigations. For design purposes, the soils have been identified as soil category 3, clay loams with moderate to high structure, in accordance with AS/NZS 1547:2012. This classification has informed the development of an indicative on-site wastewater dispersal field design, in alignment with both AS/NZS 1547:2012 and the provisions of the Proposed Regional Plan for Northland. The findings are consistent with prior assessments undertaken by Cook Costello, RS Engineering, and O'Brien Design Consulting, all of which support the suitability of the site's soils for on-site wastewater and stormwater management. The following sections outline our assessment and indicative design approach, which will be refined during the detailed design phase.

7.2.2 Proposed On-Site Wastewater Disposal Area Requirements

An On-site Wastewater Disposal assessment in accordance with the FNDC Engineering Standards & ASNZS 1547-2012 has been undertaken. The tables below summarise the wastewater demand and the dispersal area requirements for some of the different types of treatment and land application options available. We note the options below are not an exhaustive list but are the most likely options to be utilised across the LTO's.

Table 3: Design Loading Rate for Different Treatment and Land Application Systems

Treatment and Land Application Option	Design Loading Rate (DLR)
Primary Treatment System Trench Disposal	15 mm/day
Secondary Treatment System Trench Disposal	30 mm/day
Secondary Treatment System LPED Disposal	3 mm/day

A reduction to the Design Irrigation Rate (DIR) is applied, as outlined in the table below, for the Low-Pressure Effluent Distribution (LPED) system across varying slope gradients.

Table 4: Recommended Reduction in DIR According to Slope as Per ASNZS 1547-2012

Slope	Reduction in DIR
Flat up to 10%	No reduction
10% to 20%	20%
20% to 30%	50%

Table 5: Wastewater Demand & Dispersal Area Requirements

Type	Design Occupancy	L/p/d	L/d	Dispersal Area (m^2) *				
				Trench with Primary Treatment	Trench with Secondary Treatment	LPED System Flat-10%	LPED System 10-20%	LPED System 20-30%
1 Bedrooms	2	180	360	24	12	120	150	240
2 Bedrooms	4	180	720	48	24	240	300	480
3 Bedrooms	5	180	900	60	30	300	375	600
4 Bedrooms	6	180	1080	72	36	360	450	720
5 Bedrooms	8	180	1440	96	48	480	600	960

* Shown areas are total field area including spacing for LPED systems and trench base area only (not including minimum spacing requirements) for trenches. I.e. the actual land area required to accommodate a trench system will be bigger than that in the table when you allow for spacing.

Overall, all Licence to Occupy (LTO) areas are of sufficient size to accommodate the on-site wastewater treatment and disposal system options identified above.

7.2.3 Indicative Wastewater System Layouts

Individual on-site wastewater treatment systems will be utilised for each LTO. We have developed indicative designs for three different treatment/disposal options that could be utilised, depending on the individual LTO and house proposal specifics.

Refer to the accompanying Civil drawing for further details. The 110 series drawings show an indicative land application area for each LTO to be built out as part of the proposal assuming a 3-Bedroom House with Secondary Treatment and Trench Disposal. Drawing 510 compares the three different options presented above for a standard 3-bedroom dwelling on LTO 23. LTO 23 was selected as it has sloping terrain and is representative of a worst-case option.

7.3 Proposed Regional Plan for Northland

Table 6 below sets out our assessment on an LTO-by-LTO basis against section C.6.1.3 (Other on-site treated domestic wastewater discharge – permitted activity), which is a permitted activity of the Proposed Regional Plan for Northland, February 2024.

Table 6: Proposed Regional Plan for Northland - Permitted Activity Assessment

Rule C.6.1.3:	Assessment/Comment
1. *the on-site system is designed and constructed in accordance with AS/NZS 1547:2012*	The on-site system will be designed accordance with *AS/NZS 1547:2012*
2. *volume of wastewater discharged does not exceed two cubic metres per day*	The maximum daily design flow volume is 1.44m^3/d (for 5 bedroom) which is less than 2 cubic meters.
3. *the discharge is not via a spray irrigation system or deep soakage system*	Soakage or spray irrigation is not proposed
4. *the slope of the disposal area is not greater than 25 degrees*	*Irrigation field proposed in the areas where the slope is less than 25 degrees*
5. *for wastewater that has received secondary treatment or tertiary treatment, it is discharged via:* *a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of Australian/New Zealand Standard On-Site Domestic Wastewater Management (AS/NZS 1547:2012); or*	Complied.

b) an irrigation line system that is dose loaded and covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	
6. *for the discharge of wastewater onto the surface of slopes greater than 10 degrees:* *a) the wastewater, excluding greywater, has received at least secondary treatment, and* *b) the irrigation lines are firmly attached to the disposal area, and* *c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and 159* *d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and* *e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or* *f) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and*	Secondary treatment is proposed for the LPED & trench system. Necessary cover to be maintained for LPED and the lines to be firmly secured. Required setbacks are achieved. Cut-off drain will be provided where required.
7. *the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems, and*	Appropriate setbacks are achieved from the disposal and reserve area.
8. *for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and*	For the septic tank system filter is proposed to retain solids greater than 3.5mm
9. *the following reserve disposal areas are available at all times:* *a) one hundred percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or* *b) thirty percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment, and*	100% reserve area can be achieved for primary treatment and 30% reserve area can be achieved for secondary treatment.
10. *the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and*	LTO owners to engage a contractor for periodic maintenance of the system.
11. *the discharge does not contaminate any groundwater water supply or surface water, and*	Groundwater is located more than 2m deep and the disposal field is located away from the water courses.
12. *there is no surface runoff or ponding of wastewater, and*	Noted
13. *there is no offensive or objectionable odour beyond the property boundary*	Noted

7.4 Wastewater Summary

Overall, all LTO areas are of a sufficient size to accommodate the options for on-site wastewater treatment and disposal system identified in this Report' or similar.

8 Stormwater

8.1 Existing Stormwater Network

The site is not connected to a public stormwater network. Stormwater drains through four small, naturally occurring streams that convey surface runoff away from the site. The property lies partially within the Takou River catchment, with all stormwater ultimately discharging to the coast—either directly or via the Takou River system.

The site's hilly topography has resulted in the formation of several sub-catchments, with surface water draining along clearly defined flow paths within valleys and gullies. The western portion of the site contains the Waimanga Stream, the most significant watercourse on the property, which flows in a generally north-south direction before discharging into the Takou River. Overland flow from the central ridgeline is directed into this stream via a series of shallow gullies located downslope of the proposed building sites.

On the eastern side, two additional streams manage surface runoff. One of these streams traverses the site and discharges directly to the coastal margin at the southern end of the beach. The other, known as the Otaha Stream, runs parallel to the southeastern site boundary within the adjacent property.

These observations are further supported by the Papakāinga Suitability Report (Draft) prepared by Cook Costello, dated 17 May 2010, and the Feasibility Report by RS Eng (Draft Revision 1), dated 14 February 2024. In their assessment, Cook Costello identified the existing stormwater runoff patterns and delineated the site into distinct catchments, demonstrating that all surface water ultimately discharges to the coast. This aligns with the current site analysis.

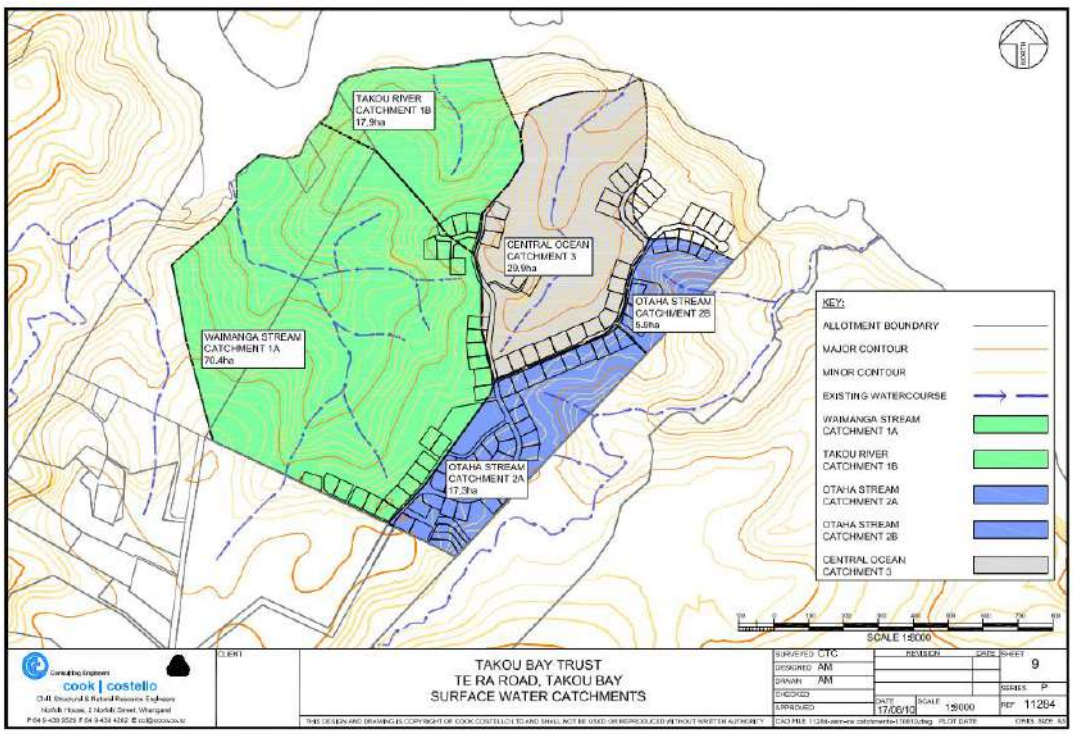

Figure 14: Existing Stormwater Catchments and Overland Flow Paths (Papakāinga Suitability Report by Cook Costello, dated 17 May 2010)

Additionally, RS Eng carried out hydrological modelling using a rain-on-grid methodology within the HEC-RAS software environment. Their modelling identified overland flow paths consistent with those observed

on-site and documented in our assessment, further validating the natural drainage patterns and confirming the adequacy of the existing overland flow network for conveying stormwater away from the site.

Figure 15: Existing 1%AEP+CC Overland Flow Paths (Feasibility report by RS Eng dated 14 February 2024)

8.2 Proposed Stormwater Management Strategy

The stormwater management plan for the site is based on preserving existing hydrological patterns and directing runoff through natural flow paths. All stormwater generated from the development will be conveyed to the site's existing stream network, replicating pre-development drainage conditions to the greatest extent possible.

To achieve this, stormwater will be managed using a combination of engineered and natural systems. Roadside swales, vegetated swales, subsoil drains, and landscaped flow paths will be prioritised for their dual role in conveying and treating runoff. These systems help slow flow velocities, support infiltration, and improve water quality through natural filtering processes.

In locations where open drainage is unsuitable—such as through developed areas, narrow road corridors, and vehicle accessways subsoil drains and culverts will be used to ensure effective flow conveyance.

The core objective of the design is to maintain the site's existing runoff regime, both in terms of flow direction and discharge volume. By doing so, the design minimises the risk of downstream effects, reduces the need for major infrastructure, and supports compliance with stormwater quality and quantity management requirements.

8.3 Impervious Coverage

The site is located within both the Rural Production Zone and the General Coastal Zone, as defined under the Operative and Proposed Far North District Council (FNDC) District Plans. In accordance with both planning frameworks, impervious surfaces are permitted activities up to 10% of the gross site area in the General Coastal Zone and up to 15% in the Rural Production Zone.

Permitted activity:
8.6.5.1.3 Stormwater Management: The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.

10.6.5.1.6 *Stormwater Management:* The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 10%.

The development site comprises approximately 61.9 hectares of General Coastal Zone land and 73.6 hectares of Rural Production Zone land, resulting in a total site area of approximately 135.5 hectares. Based on the proposed roading plan, the impervious area generated by roads is estimated to be approximately 1.6 hectares. The proposed development at the Marae site is expected to contribute an additional 0.2 hectares of impervious area. From aerial imagery, the developed LTOs are observed to contain approximately up to 35% impervious area per LTO as a worst case (majority are much lower). Similarly, it is anticipated that the remaining LTOs will be developed with a maximum impervious coverage of 35% (based on a conservative assumption of a 420 m^2 roof (house and axillary buildings) and 280 m^2 for a driveway on each LTO as a worst case), adding approximately 6.65 hectares of impervious surface.

In total, the full build out of the site, assuming worst case imperviousness on LTO-by-LTO basis of 35%, the total impervious surface area across the site would equate to approximately 8.45 hectares or 6.2% of the total site area, which remains well below the permitted activity thresholds for stormwater management.

8.3.1 Cumulative Effects on an individual LTO Basis

As indicated by the above the proposed stormwater strategy for the site total assumes an individual maximum LTO imperviousness of 35%.

To avoid the potential for cumulative adverse stormwater effects to occur by having one or many individual LTO's creating more impervious are than this stormwater management plan allows, we recommend a consent condition that limits the imperviousness per LTO to 35%.

8.4 Stormwater Conveyance and Disposal

To effectively manage stormwater runoff generated from the development and ensure that surface water flows are properly distributed across the site to prevent flow concentration and potential downstream scour, two complementary management methods are proposed:

1. Roadside Conveyance Network

Stormwater from roads and the upstream catchment will be managed via a shared conveyance network. This system will consist of roadside swales, subsoil drains, and culverts infrastructure as required by site conditions. The network is designed to direct runoff toward existing natural drainage features while providing preliminary treatment through vegetated systems that promote filtration and sediment removal. The flow will be discharged over a suitably designed scour protection riprap to mitigate erosion at the outlet / discharge locations.

2. LTO – Conveyance and On-Site Dispersal

Stormwater generated within individual Licensed to Occupy (LTO) lots will be managed through one of the following methods, depending on site-specific conditions:

a. Use of Vegetated Swales:

Where LTO's have sloping topography and natural stormwater flow towards another LTO at the lower end of the property, a vegetated swale is proposed to intercept runoff from the upstream catchment. The swale will redirect the flow through a controlled path and discharge it into the roadside swales.

b. Discharge to Roadside Swale

Where a LTO is upslope and adjacent to a road with a roadside swale, the LTO may discharge to the roadside swale drain.

c. Discharge via Level Spreaders:

Where no suitable drainage paths exist within an LTO, where topographical gradients permit, and the site is not up-slope of another LTO or Road, stormwater will be discharged using level spreaders. These structures are designed to evenly distribute runoff across stable, vegetated surfaces, promoting infiltration and reducing the risk of erosion, scouring, or concentrated flow at the point of discharge.

These options aim to manage stormwater in a manner that aligns with the site's natural drainage patterns, supports water quality outcomes, and complies with low-impact design principles.

Refer to the 110 and 420 series of the accompanying civil design drawings for further details.

8.5 Stormwater Management

The following sections discuss the proposed stormwater management approach for the development in accordance with the key stormwater management criteria outlined in Table 4-1 of the FNDC Engineering Standards. Our proposal considers the site-specific catchment and downstream receiving environment characteristics.

8.5.1 Stormwater Quality Treatment

The proposed impervious surfaces within the development include roof areas, driveways, and low-traffic volume roads, all of which are classified as low contamination yielding surfaces. The development seeks to minimise imperviousness as much as practical by utilising metalled road surfaces and one-way systems for a significant portion of the common access way. This will facilitate passive stormwater treatment through both infiltration and runoff reduction.

For the roads and LTOs without site-specific stormwater management, runoff will be directed to a roadside shallow grassed swale, which will act as a primary means of stormwater quality treatment. The swale will provide filtration, improving water quality before discharge.

In the case of the LTOs with on-site stormwater management, runoff from the roofs and driveways—both considered low contamination surfaces—will be managed by directing the runoff to either level spreaders, existing overland flow paths, or drains. The natural vegetation and grass along these flow paths will further enhance stormwater quality treatment through filtration.

Given these design features, no additional stormwater quality treatment is deemed necessary for the site. The proposed passive treatment measures are considered sufficient to address stormwater quality concerns.

8.5.2 Volume (Stream Protection)

Volume management is only required when discharging directly into a natural stream or modified channel. The proposed stormwater network does not discharge directly into a natural stream or modified channel, runoff from the site-specific stormwater management system, as well as from the roadside swales, will be managed with appropriate scour protection. Discharge points will be strategically located to ensure the surface water flows are distributed evenly, thereby avoiding flow concentration and minimizing the risk of downstream scour. Additionally, all LTOs are equipped with rainwater tanks, which will provide stormwater retention.

Given the above no further volume controls are proposed nor deemed required.

8.5.3 Flow Attenuation (50% and 20% AEP event)

As discussed in the previous section, the proposed impervious coverage is well below the permitted activity threshold, and the site is located at the bottom of the catchment and does not discharge into an existing stormwater network. Furthermore, the rural character of the site, the availability of direct discharge points to coastal receiving environments, the provision of on-site water storage systems offering retention

capacity, and the low proportion of impervious surfaces, it is assessed that stormwater attenuation measures are not necessary.

Collectively, these factors demonstrate that the proposed development will have minimal impact on runoff volumes or downstream environments, and that attenuation is not required to meet applicable planning and infrastructure performance standards.

Given the above no further flow attenuation controls are proposed nor deemed required.

8.5.4 Flood Control (1% AEP event)

For reasons like Flow Attenuation, we do not recommend any specific Flood Control Attenuation, we note that the site discharges directly to coastal receiving environments and will not cause or increase flooding on another property.

8.6 Proposed Regional Plan for Northland

Table 7 below sets out the relevant matters of control under Section C.6.4.2 of the Proposed Regional Plan for Northland with engineering comment.

Table 7: Proposed Regional Plan for Northland - Permitted Activity Assessment

Rule C.6.4.2	Assessment/Comment
1. *The discharge or diversion is not from:* *a. a public stormwater network, or* *b. a high-risk industrial or trade premises, and*	The discharge is <u>not</u> from a public stormwater network or high-risk industrial or trade premises.
2. *The diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10 percent annual exceedance probability, or flooding of buildings on another property in a storm event of up to and including a one percent annual exceedance probability, and*	The site is located at the bottom of the catchment and the discharge will not cause or increase flooding on another property.
3. *where the diversion or discharge is from a hazardous substance storage or handling area:* *a. the stormwater collection system is designed and operated to prevent hazardous substances stored or used on the site from entering the stormwater system, or* *b. there is a secondary containment system in place to intercept any spillage of hazardous substances and either discharges that spillage to a trade waste system or stores it for removal and treatment, or* *c. if the stormwater contains oil contaminants, the stormwater is passed through a stormwater treatment system designed in accordance with the Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand (Ministry for the Environment, 1998) prior to discharge, and*	The discharge is <u>not</u> from a hazardous substance storage or handling area.
4. *Where the diversion or discharge is from an industrial or trade premises:* *a. the stormwater collection system is designed and operated to prevent any contaminants stored or used on the site, other than those already controlled by condition 3) above, from*	The discharge is <u>not</u> from an industrial or trade premises.

entering stormwater unless the stormwater is discharged through a stormwater treatment system, and *b. any process water or liquid waste stream on the site is bunded, or otherwise contained, within an area of sufficient capacity to provide secondary containment equivalent to 100 percent of the quantity of any process water or liquid waste that has the potential to spill into a stormwater collection system, in order to prevent trade waste entering the stormwater collection system, an*	
5. The diversion or discharge is not into potentially contaminated land, or onto potentially contaminated land that is not covered by an impervious area, and	The discharge is <u>not</u> into potentially contaminated land, or onto potentially contaminated land that is not covered by an impervious area.
6. The diversion and discharge does not cause permanent scouring or erosion of the bed of a water body at the point of discharge, and	Erosion and scour protection is proposed at the points of discharge.
7. The discharge does not contain more than 15 milligrams per litre of total petroleum hydrocarbons, and	The proposed impermeable areas are all low contaminant yielding and are very unlikely to pick up petroleum hydrocarbon contaminants of more than 5 milligrams per litre.
8. The discharge does not cause any of the following effects in the receiving waters beyond the zone of reasonable mixing: *a. the production of conspicuous oil or grease films, scums or foams, of floatable or suspended materials, or* *b. a conspicuous change in the colour or visual clarity, or* *c. an emission of objectionable odour, or* *d. the rendering of freshwater unsuitable for consumption by farm animals, or* *e. the rendering of freshwater taken from a mapped priority drinking water abstraction point (refer I Maps | Ngā mahere matawhenua) unsuitable for human consumption after existing treatment.*	None of these effects are anticipated on the receiving waters.

9 Natural Hazards – Flooding

9.1 Council Data – Natural Hazards Mapping & Flood Mapping

According to the NRC Hazard Maps, for 1% AEP, a small flood-susceptible area is located west of the site adjacent to the Takou River and in the northern part of the site near the coast.

Figure 16: Flood Susceptible Areas (NRC Coastal Flood Hazard Mapping 04/04/2025)

9.2 Previous Assessments

Cook Costello and RS Engineering have previously conducted an assessment for this site, including detailed flood modelling, to identify the extent of potential flooding. Their analysis has provided valuable insights into flood risks and has been used to inform the development design, ensuring that the proposed site remains outside identified flood zones and is suitable for residential development.

9.3 Flood Risk Discussion

This flood susceptibility is primarily attributed to the combined effects of tidal and fluvial influences during extreme events. The designated flood-susceptible areas correspond to the low-lying land adjacent to the watercourse. However, the proposed development sites and existing infrastructure are situated at elevations above and outside of the mapped flood zone. As such, it is considered that these sites are suitable for residential development and are not at risk of flooding.

9.4 Development Controls

The proposed development and existing infrastructure are located above the flood zone and outside flood-prone areas, on this basis no specific flood control are required, we note that local surface water and secondary flow path has been considered in the design.

10 Summary

In our opinion the site is suitable for the proposed development, subject to Far North District Council approval with regards to the matters addressed in this report and summarised below. The development can be undertaken in general accordance with the engineering standards with no specific area of non-compliance that in our opinion would have an actual or potential adverse effect on the environment or negatively affect any persons.

10.1 Earthworks, Erosion & Sediment Control

Minor earthworks are proposed to enable the development. Best practice erosion and sediment control measures in accordance with GD05 are proposed to manage the potential effect on the environment.

10.2 Access

Provision for access to and within the development has been made by way of new roads, maintenance and widening of the existing roads.

10.3 Water Supply

The site is not located within a reticulated water supply area and provision is made for each LTO to have on-site water tanks. Adequate firefighting water supply shall be provided through dedicated firefighting tanks—either an individual tank for each LTO or a shared system—to be confirmed at the Building Consent stage.

10.4 Wastewater

The site is located outside the reticulated wastewater area and provision is made for each LTO to have an onsite site wastewater system compliment with the relevant guidelines and regional permitted activity criteria.

10.5 Stormwater

Stormwater on site will be managed using a combination of swales, subsoil drains, and landscaped flow paths. These features are designed to convey and treat runoff in accordance with best practice and relevant standards.

10.6 Natural Hazards - Flooding

The proposed development areas and existing infrastructure are located on higher ground above the flood zone and are considered suitable for residential development, with no significant flood risk anticipated.

11 Limitations

- This assessment contains the professional opinion of Chester Consultants as to the matters set out herein, in light of the information available to it during the preparation, using its professional judgement and acting in accordance with the standard of care and skill normally exercised by professional engineers providing similar services in similar circumstances. No other express or implied warranty is made as to the professional advice contained in this report.
- We have prepared this report in accordance with the brief as provided and our terms of engagement. The information contained in this report has been prepared by Chester Consultants at the request of Te Pouahi o Te Taitokerau Trust and is exclusively for its client use and reliance. It is not possible to make a proper assessment of this assessment without a clear understanding of the terms of engagement under which it has been prepared, including the scope of the instructions and directions given to and the assumptions made by Chester Consultants Ltd. The assessment will not address issues which would need to be considered for another party if that party's particular circumstances, requirements and experience were known and, further, may make assumptions about matters of which a third party is not aware. No responsibility or liability to any third party is accepted for any loss or damage whatsoever arising out of the use of or reliance on this assessment by any third party.
- The assessment is also based on information that has been provided to Chester Consultants Ltd from other sources or by other parties. The assessment has been prepared strictly on the basis that the information that has been provided is accurate, completed, and adequate. To the extent that any information is inaccurate, incomplete, or inadequate, Chester Consultants Ltd takes no responsibility and disclaims all liability whatsoever for any loss or damage that results from any conclusions based on information that has been provided to Chester Consultants Ltd.

12 Appendices

Appendix A – Civil Design Drawings (Bound Separately)

Appendix B – FENZ Consultation and Approval

CIVIL ENGINEERING DRAWING SCHEDULE:

SHEET	TITLE	REVISION									
	REVISION DATE	28/05/2025	05/06/2025								
001	DRAWING SCHEDULE	0	1								
110	THREE WATER LAYOUT - SHEET 1 OF 5	0									
111	THREE WATER LAYOUT - SHEET 2 OF 5	0									
112	THREE WATER LAYOUT - SHEET 3 OF 5	0									
113	THREE WATER LAYOUT - SHEET 4 OF 5	0									
114	THREE WATER LAYOUT - SHEET 5 OF 5	0									
200	EARTHWORKS PLAN - SHEET 1 OF 5	-	0								
201	EARTHWORKS PLAN - SHEET 2 OF 5	-	0								
202	EARTHWORKS PLAN - SHEET 3 OF 5	-	0								
203	EARTHWORKS PLAN - SHEET 4 OF 5	-	0								
204	EARTHWORKS PLAN - SHEET 5 OF 5	-	0								
205	TYPICAL EARTHWORKS PLAN FOR LTO	-	0								
210	EROSION AND SEDIMENT CONTROL PLAN - SHEET 1 OF 5	-	0								
211	EROSION AND SEDIMENT CONTROL PLAN - SHEET 2 OF 5	-	0								
212	EROSION AND SEDIMENT CONTROL PLAN - SHEET 3 OF 5	-	0								
213	EROSION AND SEDIMENT CONTROL PLAN - SHEET 4 OF 5	-	0								
214	EROSION AND SEDIMENT CONTROL PLAN - SHEET 5 OF 5	-	0								
215	TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO	-	0								
420	ON-SITE STORMWATER FLOW DISPERSAL OPTIONS & SWALE DETAIL	0									
510	ON-SITE WASTEWATER SYSTEM OPTIONS	0									
800	ROADING PLAN - SHEET 1 OF 5	0									
801	ROADING PLAN - SHEET 2 OF 5	0									
802	ROADING PLAN - SHEET 3 OF 5	0									
803	ROADING PLAN - SHEET 4 OF 5	0									
804	ROADING PLAN - SHEET 5 OF 5	0									
805	ROAD CROSS SECTION DETAILS	0									
806	ROAD CROSS SECTION DETAILS	0									
807	ROAD CROSS SECTION DETAILS	0									
808	COMMON ACCESS LONG SECTIONS	-	0								
809	COMMON ACCESS LONG SECTIONS	-	0								
810	COMMON ACCESS LONG SECTIONS	-	0								
811	COMMON ACCESS LONG SECTIONS	-	0								
812	COMMON ACCESS LONG SECTIONS	-	0								
813	COMMON ACCESS LONG SECTIONS	-	0								

SCHEDULE LEGEND	
ORIGINAL ISSUE	0
NOT REVISED	
REVISED	1
NOT INCLUDED IN SET	-
DELETED FROM SET	~~TITLE~~

CIVIL DESIGN - TAKOU BAY PAPAKAINGA
TE POUAHI O TE TAITOKERAU TRUST
TE RA ROAD, KAEO, NORTHLAND

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

REV	DATE	AMENDMENTS	BY
1	05/06/25	FOR CONSENT	SS
0	28/05/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: DRAWING SCHEDULE

DRAWING: C001 REV: 1
SCALE: NTS @ A1
PROJECT: 15876
ISSUE: CONSENT

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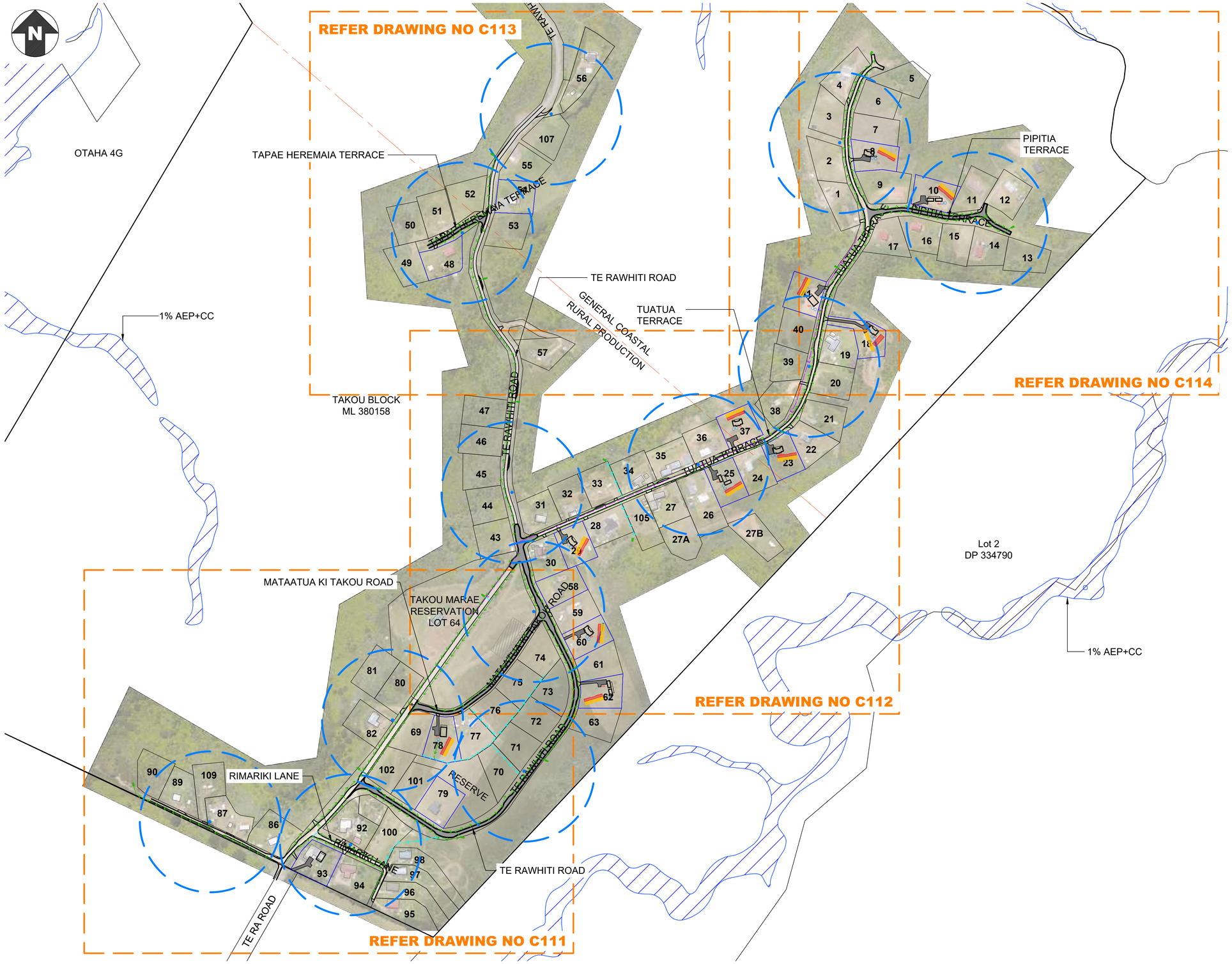

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

SITE LEGEND:

- 1% AEP+CC
- EXISTING OVERHEAD POWER LINES
- EXISTING UNDERGROUND POWER LINES
- PROPOSED UNDERGROUND POWER LINES
- EXISTING POWER POLE

TOPOGRAPHIC DATA NOTES:

1. DRONE IMAGERY PROVIDED BY TAIAO SUVEYORS AND CAPTURED ON 17/10/2023.
3. SUPPLEMENTAL GROUND DATA PROVIDED BY LINZ DATA SERVICE AND DATED 18/03/2025.
4. DATA LOCATED ON MOUNT EDEN 2000 HORIZONTAL COORDINATE SYSTEM.
5. DATA SET TO NEW ZEALAND VERTICAL DATUM 2016.

NOTE:

REFER DRAWING C420 FOR STORMWATER OPTIONS.
REFER DRAWING C510 FOR WASTEWATER OPTIONS.
TO BE CONFIRMED AT DETAILED DESIGN.

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:2500 0 25 50 75 100 125 250

REV	DATE	AMENDMENTS	BY
0	28/05/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 28/05/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: THREE WATER LAYOUT- SHEET 1 OF 5

DRAWING: C110 REV: 0
SCALE: 1:2500 @ A1
PROJECT: 15876
ISSUE: CONSENT

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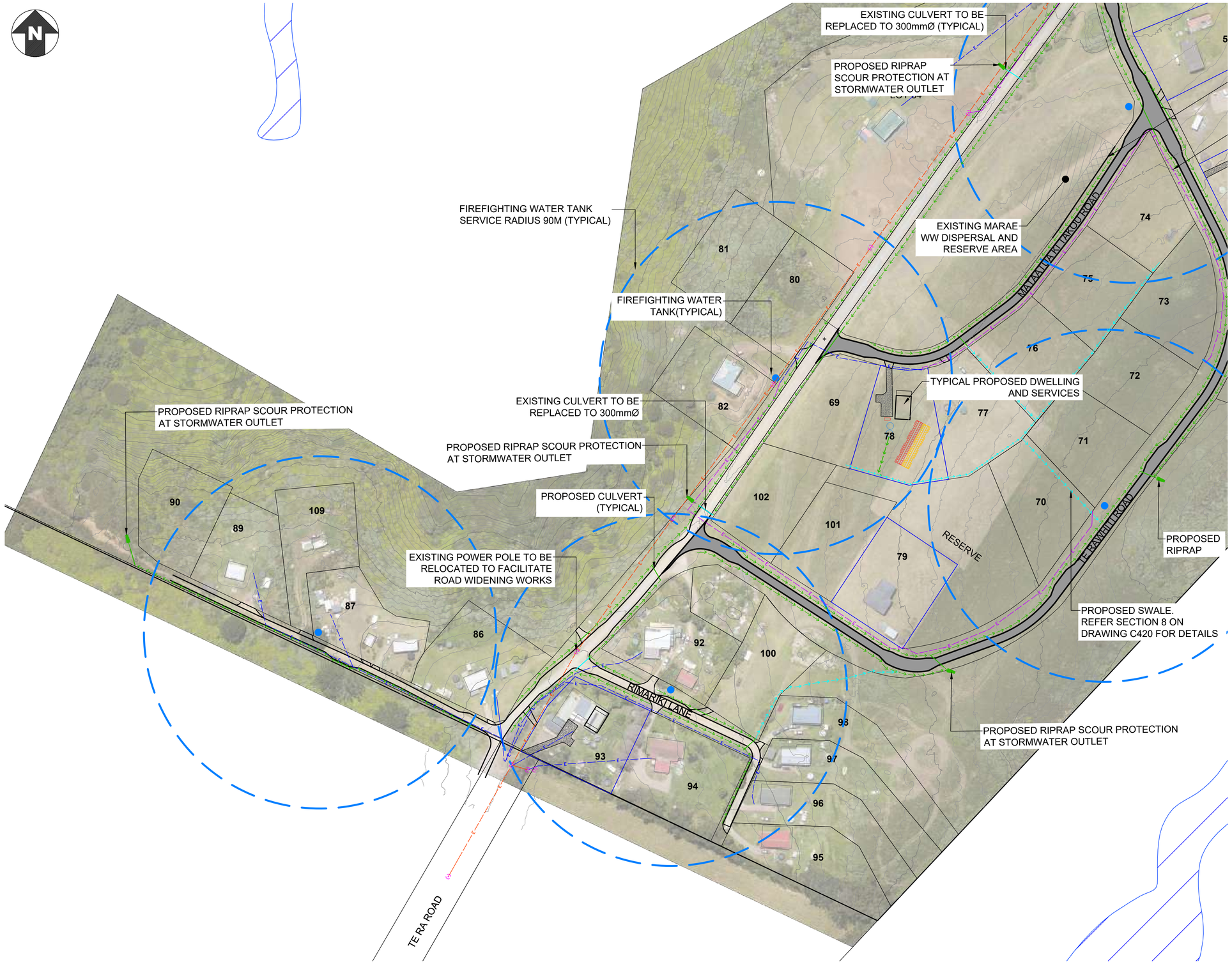

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

SITE LEGEND:

- 1% AEP+CC
- EXISTING OVERHEAD POWER LINES
- EXISTING UNDERGROUND POWER LINES
- PROPOSED UNDERGROUND POWER LINES
- EXISTING POWER POLE

NOTE:

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1:1000 0 10 20 30 40 50 100

REV	DATE	AMENDMENTS	BY
0	28/05/25	FOR CONSENT	SS

DRAFTER:	S SIVA	JOB:	CIVIL DESIGN - TAKOU BAY PAPAKAINGA
DESIGNER:	S SIVA	CLIENT:	TE POUAHI O TE TAITOKERAU TRUST
CHECKER:	N JULL	ADDRESS:	TE RA ROAD, KAEO, NORTHLAND
DATE:	28/05/2025	DRAWING:	THREE WATER LAYOUT- SHEET 2 OF 5

DRAWING:	C111	REV:	0
SCALE:	1:1000 @ A1		
PROJECT:	15876		
ISSUE:	CONSENT		

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FIREFIGHTING WATER TANK SERVICE RADIUS 90M (TYPICAL)

PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

PROPOSED CULVERT (TYPICAL)

FIREFIGHTING WATER TANK(TYPICAL)

TYPICAL PROPOSED DWELLING AND SERVICES

PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

EXISTING CULVERT TO BE REPLACED TO 300mmØ (TYPICAL)

CONSTRUCT EARTH BUND TO SEPARATE DIRECT RUNOFF FROM THE WASTEWATER FIELD IF THE RESERVE AREA IS UTILISED.

PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

REROUTING OF PROPOSED UNDERGROUND POWER LINE

EXISTING MARAE WW DISPERSAL AND RESERVE AREA

PROPOSED CULVERT (TYPICAL)

TE RAWHITI ROAD

UATUA TERRACE

MATAALUAKI TAKOU ROAD

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

SITE LEGEND:

- 1% AEP+CC
- EXISTING OVERHEAD POWER LINES
- EXISTING UNDERGROUND POWER LINES
- PROPOSED UNDERGROUND POWER LINES
- EXISTING POWER POLE

NOTE:

REFER DRAWING C420 FOR STORMWATER OPTIONS.
REFER DRAWING C510 FOR WASTEWATER OPTIONS.
TO BE CONFIRMED AT DETAILED DESIGN.

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:1000 0 10 20 30 40 50 100

REV	DATE	AMENDMENTS	BY
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DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 28/05/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: THREE WATER LAYOUT- SHEET 3 OF 5

DRAWING: C112 REV: 0
SCALE: 1:1000 @ A1
PROJECT: 15876
ISSUE: CONSENT

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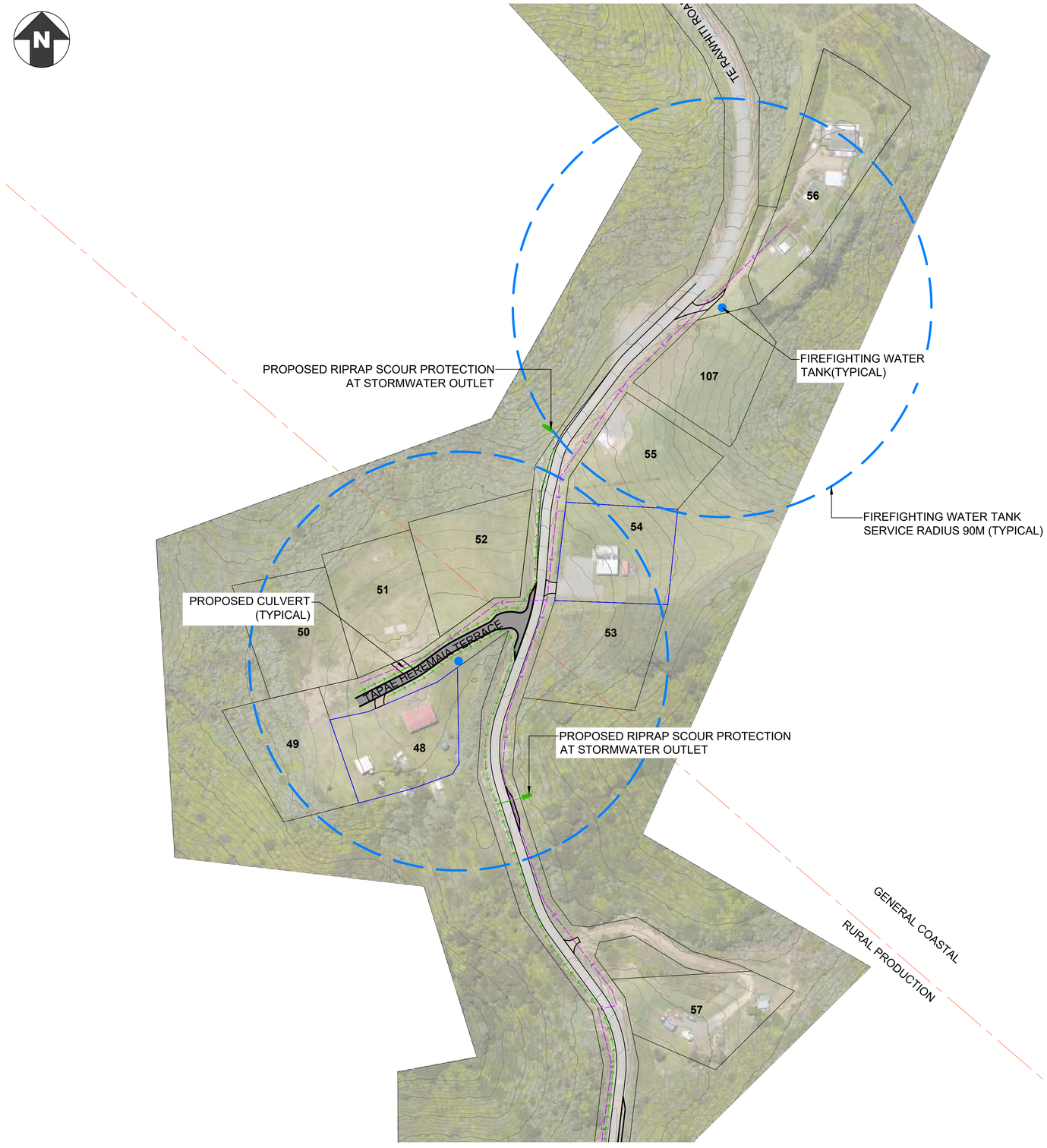

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- PROPOSED CULVERT

SITE LEGEND:

- 1% AEP+CC
- EXISTING OVERHEAD POWER LINES
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- PROPOSED UNDERGROUND POWER LINES
- EXISTING POWER POLE

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CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: THREE WATER LAYOUT- SHEET 4 OF 5

DRAWING: C112 REV: 0
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PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

FIREFIGHTING WATER TANK SERVICE RADIUS 90m (TYPICAL)

TYPICAL PROPOSED DWELLING AND SERVICES

PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

PROPOSED RIPRAP SCOUR PROTECTION AT STORMWATER OUTLET

FIREFIGHTING WATER TANK (TYPICAL)

PROPOSED CULVERT (TYPICAL)

PIPITIA TERRACE

TUATUA TERRACE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 39 40 41

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

SITE LEGEND:

- 1% AEP+CC
- EXISTING OVERHEAD POWER LINES
- EXISTING UNDERGROUND POWER LINES
- PROPOSED UNDERGROUND POWER LINES
- EXISTING POWER POLE

NOTE:

REFER DRAWING C420 FOR STORMWATER OPTIONS.
REFER DRAWING C510 FOR WASTEWATER OPTIONS.
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DRAFTER: S SIVA
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JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: THREE WATER LAYOUT- SHEET 5 OF 5

DRAWING: C114 REV: 0
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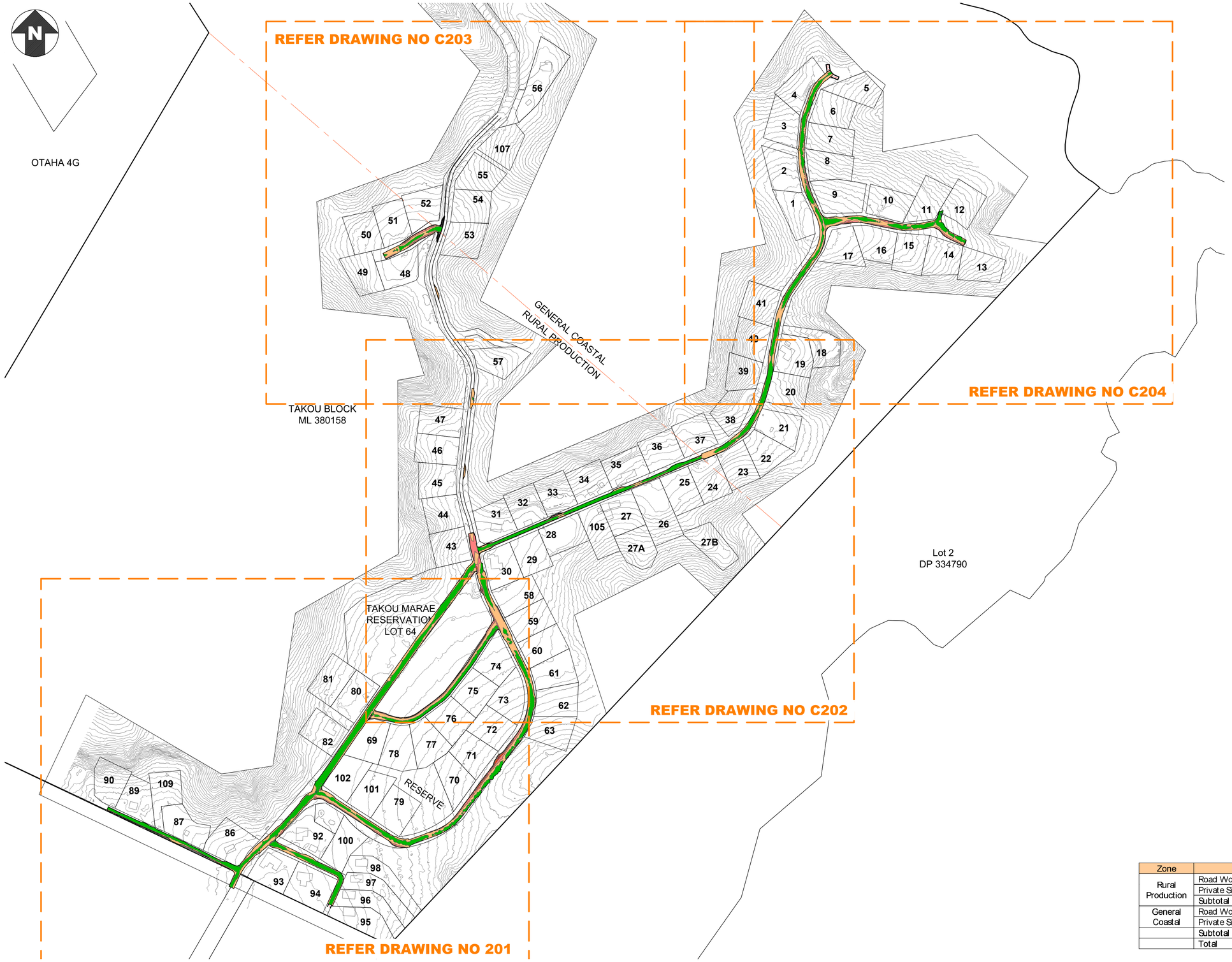

EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
3. TEMPORARY EARTHWORKS, SHORING, AND ENABLING WORKS TO BE DESIGNED BY OTHERS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. WORKS ARE TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDANCE DOCUMENT 2016/05 (GD05), EROSION AND SEDIMENT CONTROL GUIDE.
5. PLANS DETAIL THE GENERAL SEDIMENT AND EROSION CONTROL MEASURES. ACTUAL CONTROLS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE ADAPTED TO SUIT THE CURRENT STAGE OF WORKS.

CUT/FILL DEPTHS TABLE

LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-2.00	-1.50	
-1.50	-1.00	
-1.00	-0.50	
-0.50	0.00	
0.00	0.50	
0.50	1.00	

Zone	Work Item	Area (m^2)	Cut (m^3)	Fill (m^3)
Rural Production	Road Works	15881	1918	739
	Private Site Works (200m^2 per LTO)	12000	3000	3000
	Subtotal	27811	4918	3739
General Coastal	Road Works	5905	627	304
	Private Site Works (200m^2 per LTO)	6800	1700	1700
	Subtotal	12705	2327	2004
	Total	40586	7245	5743

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:2500 0 25 50 75 100 125 250

REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EARTHWORKS PLAN -SHEET 1 OF 5

DRAWING: C200 REV: 0
SCALE: 1:2500 @ A1
PROJECT: 15876
ISSUE: CONSENT

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DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

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EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
3. TEMPORARY EARTHWORKS, SHORING, AND ENABLING WORKS TO BE DESIGNED BY OTHERS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
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CUT/FILL DEPTHS TABLE

LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-2.00	-1.50	
-1.50	-1.00	
-1.00	-0.50	
-0.50	0.00	
0.00	0.50	
0.50	1.00	

Zone	Work Item	Area (m^2)	Cut (m^3)	Fill (m^3)
Rural Production	Road Works	15881	1918	739
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1:1000 0 10 20 30 40 50 100

REV	DATE	AMENDMENTS	BY
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DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EARTHWORKS PLAN -SHEET 2 OF 5

DRAWING: C201 REV: 0
SCALE: 1:1000 @ A1
PROJECT: 15876
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-2.00	-1.50	
-1.50	-1.00	
-1.00	-0.50	
-0.50	0.00	
0.00	0.50	
0.50	1.00	

Zone	Work Item	Area (m²)	Cut (m³)	Fill (m³)
Rural Production	Road Works	15881	1918	739
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	Subtotal	12705	2327	2004
	Total	40586	7245	5743

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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REV	DATE	AMENDMENTS	BY
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DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EARTHWORKS PLAN -SHEET 3 OF 5

DRAWING: C202 REV: 0
SCALE: 1:1000 @ A1
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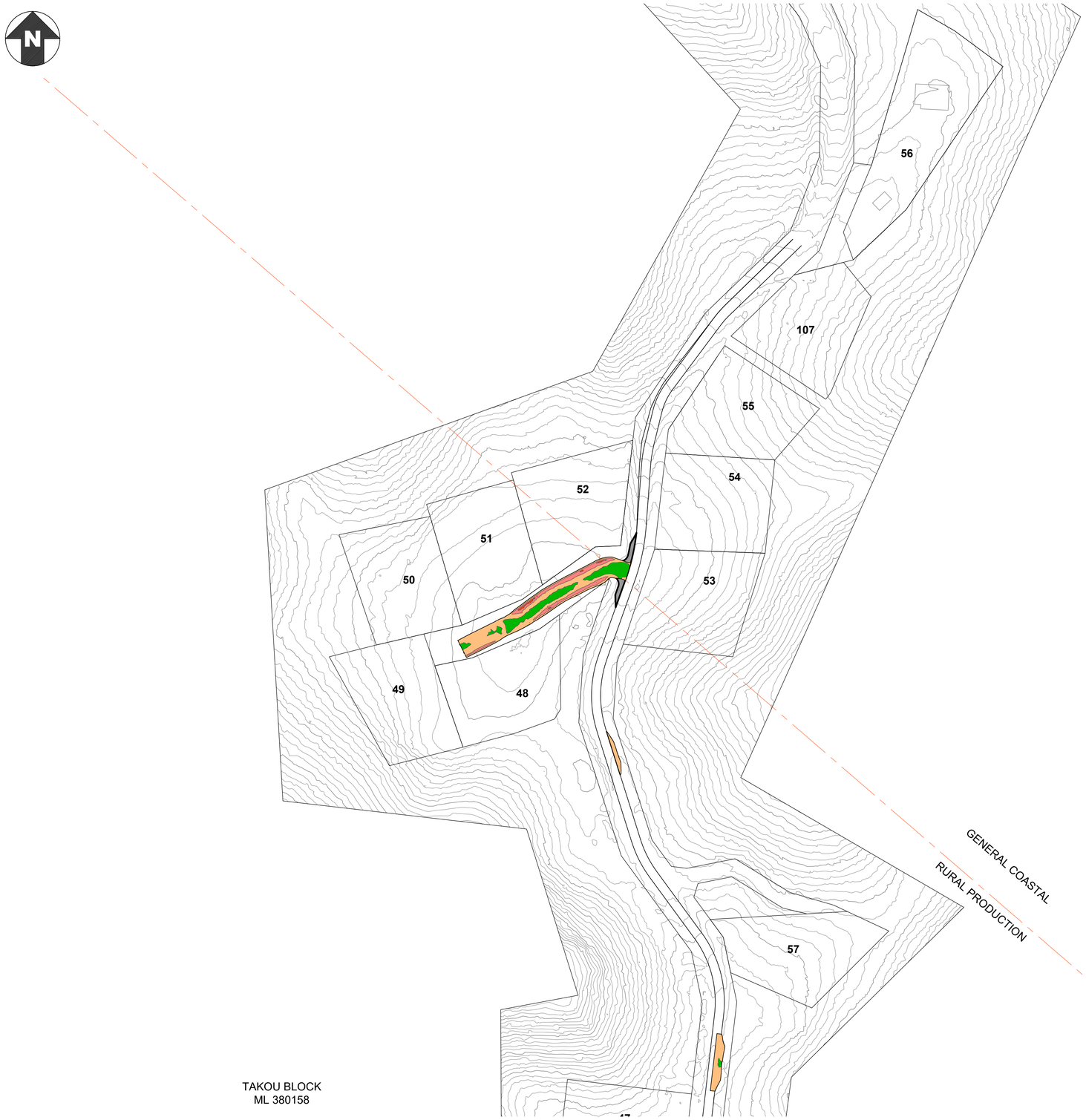
DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR



EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
3. TEMPORARY EARTHWORKS, SHORING, AND ENABLING WORKS TO BE DESIGNED BY OTHERS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. WORKS ARE TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDANCE DOCUMENT 2016/05 (GD05), EROSION AND SEDIMENT CONTROL GUIDE.
5. PLANS DETAIL THE GENERAL SEDIMENT AND EROSION CONTROL MEASURES. ACTUAL CONTROLS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE ADAPTED TO SUIT THE CURRENT STAGE OF WORKS.

CUT/FILL DEPTHS TABLE

LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-2.00	-1.50	
-1.50	-1.00	
-1.00	-0.50	
-0.50	0.00	
0.00	0.50	
0.50	1.00	

Zone	Work Item	Area (m^2)	Cut (m^3)	Fill (m^3)
Rural Production	Road Works	15881	1918	739
	Private Site Works (200m^2 per LTO)	12000	3000	3000
	Subtotal	27811	4918	3739
General Coastal	Road Works	5905	627	304
	Private Site Works (200m^2 per LTO)	6800	1700	1700
	Subtotal	12705	2327	2004
	Total	40586	7245	5743

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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REV	DATE	AMENDMENTS	BY
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DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EARTHWORKS PLAN -SHEET 4 OF 5

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DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

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EARTHWORK NOTES:

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CUT/FILL DEPTHS TABLE

LOWER RANGE (m)	UPPER RANGE (m)	COLOUR
-2.00	-1.50	
-1.50	-1.00	
-1.00	-0.50	
-0.50	0.00	
0.00	0.50	
0.50	1.00	

Zone	Work Item	Area (m²)	Cut (m³)	Fill (m³)
Rural Production	Road Works	15881	1918	739
	Private Site Works (200m² per LTO)	12000	3000	3000
	Subtotal	27811	4918	3739
General Coastal	Road Works	5905	627	304
	Private Site Works (200m² per LTO)	6800	1700	1700
	Subtotal	12705	2327	2004
	Total	40586	7245	5743

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DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EARTHWORKS PLAN -SHEET 5 OF 5

DRAWING: C204 REV: 0
SCALE: 1:1000 @ A1
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DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

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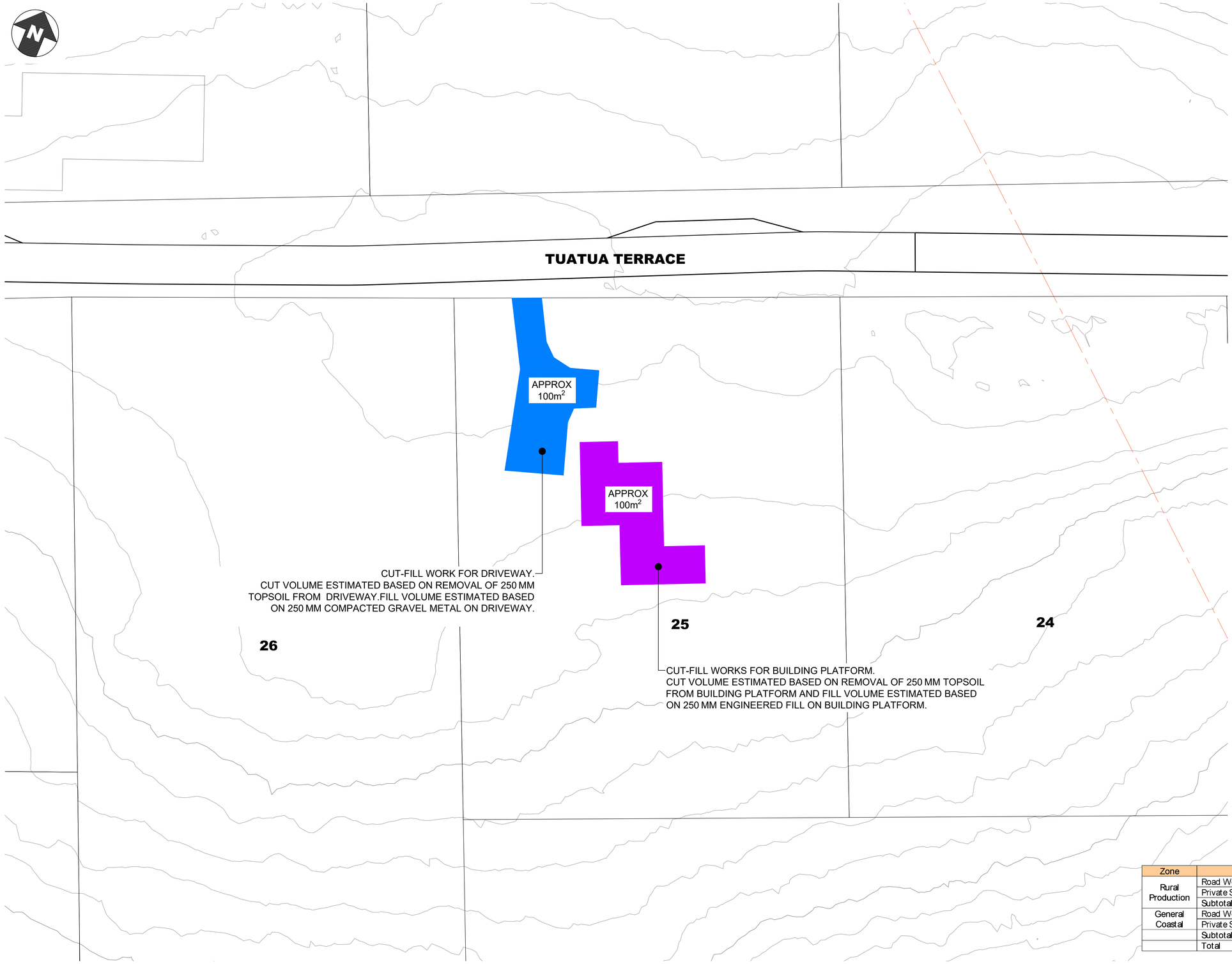

EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
3. TEMPORARY EARTHWORKS, SHORING, AND ENABLING WORKS TO BE DESIGNED BY OTHERS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. WORKS ARE TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDANCE DOCUMENT 2016/05 (GD05), EROSION AND SEDIMENT CONTROL GUIDE.
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Zone	Work Item	Area (m^2)	Cut (m^3)	Fill (m^3)
Rural Production	Road Works	15881	1918	739
	Private Site Works (200m^2 per LTO)	12000	3000	3000
	Subtotal	27811	4918	3739
General Coastal	Road Works	5905	627	304
	Private Site Works (200m^2 per LTO)	6800	1700	1700
	Subtotal	12705	2327	2004
	Total	40586	7245	5743

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: TYPICAL EARTHWORKS PLAN FOR LTO

DRAWING: C205 REV: 0
SCALE: 1:200 @ A1
PROJECT: 15876
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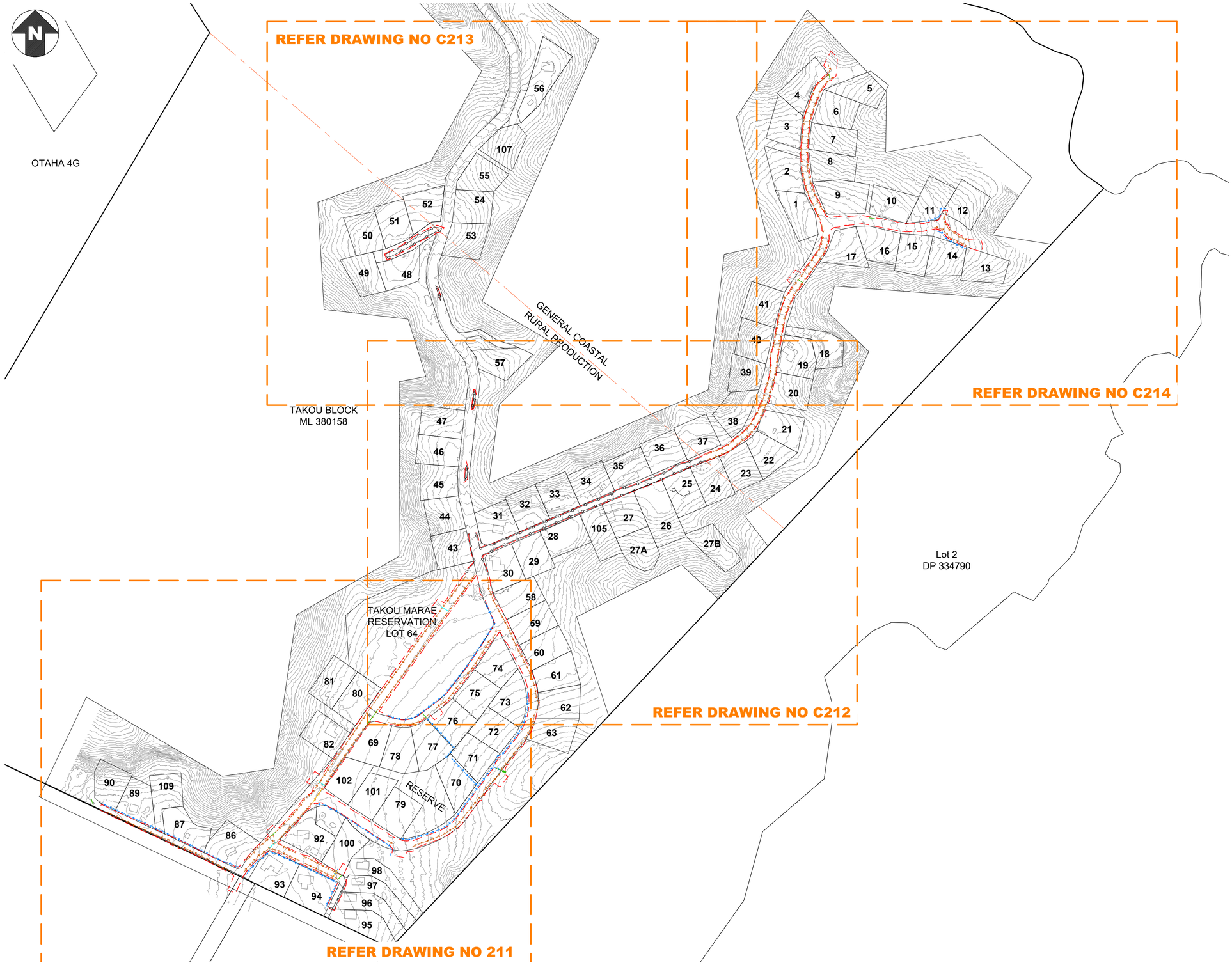

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
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5. PLANS DETAIL THE GENERAL SEDIMENT AND EROSION CONTROL MEASURES. ACTUAL CONTROLS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE ADAPTED TO SUIT THE CURRENT STAGE OF WORKS.

NOTE:

1. ROADSIDE SWALES AND OTHER SWALES TO BE CONSTRUCTED AT THE INITIAL STAGE OF CONSTRUCTION TO DIVERT AND CONVEY CLEAN WATER & DIRTY WATER AS SHOWN.
2. REFER DRAWING C215 FOR TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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REV	DATE	AMENDMENTS	BY
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DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EROSION AND SEDIMENT CONTROL PLAN -SHEET 1 OF 5

DRAWING: C210 REV: 0
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PROJECT: 15876
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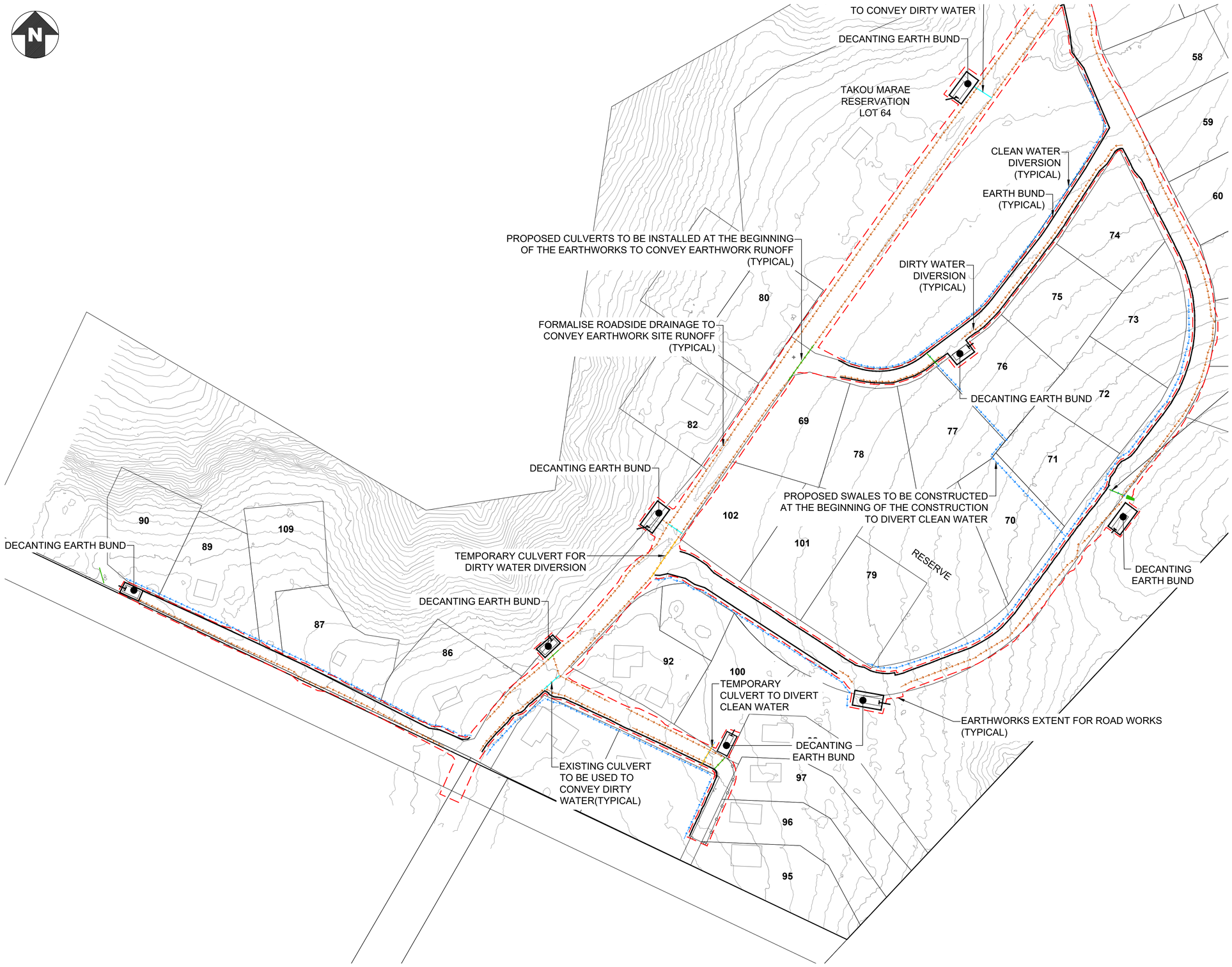

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
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NOTE:

1. ROADSIDE SWALES AND OTHER SWALES TO BE CONSTRUCTED AT THE INITIAL STAGE OF CONSTRUCTION TO DIVERT AND CONVEY CLEAN WATER & DIRTY WATER AS SHOWN.
2. REFER DRAWING C215 FOR TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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DESIGNER: S SIVA
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DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EROSION AND SEDIMENT CONTROL PLAN -SHEET 2 OF 5

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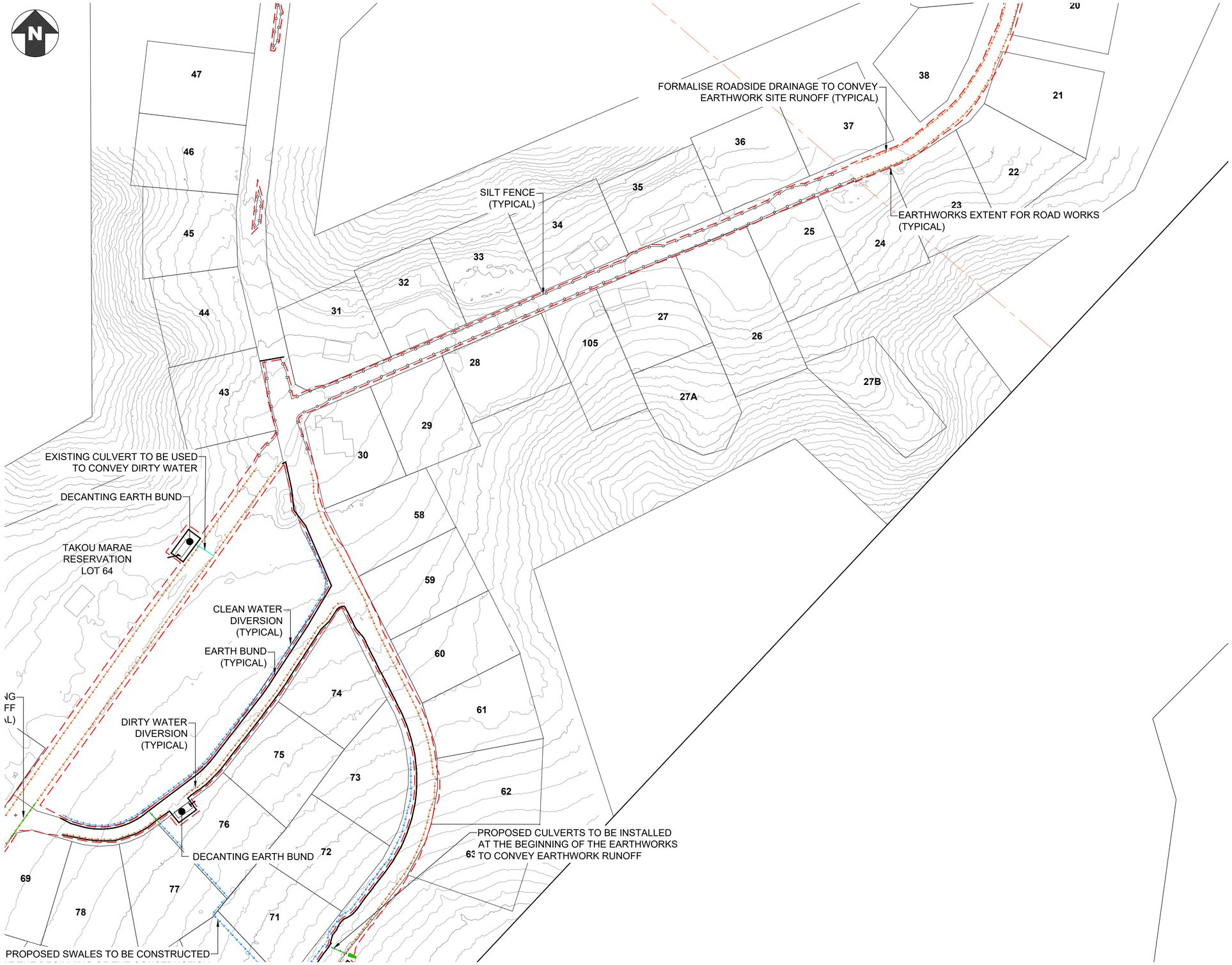

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

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NOTE:

1. ROADSIDE SWALES AND OTHER SWALES TO BE CONSTRUCTED AT THE INITIAL STAGE OF CONSTRUCTION TO DIVERT AND CONVEY CLEAN WATER & DIRTY WATER AS SHOWN.
2. REFER DRAWING C215 FOR TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EROSION AND SEDIMENT CONTROL PLAN -SHEET 3 OF 5

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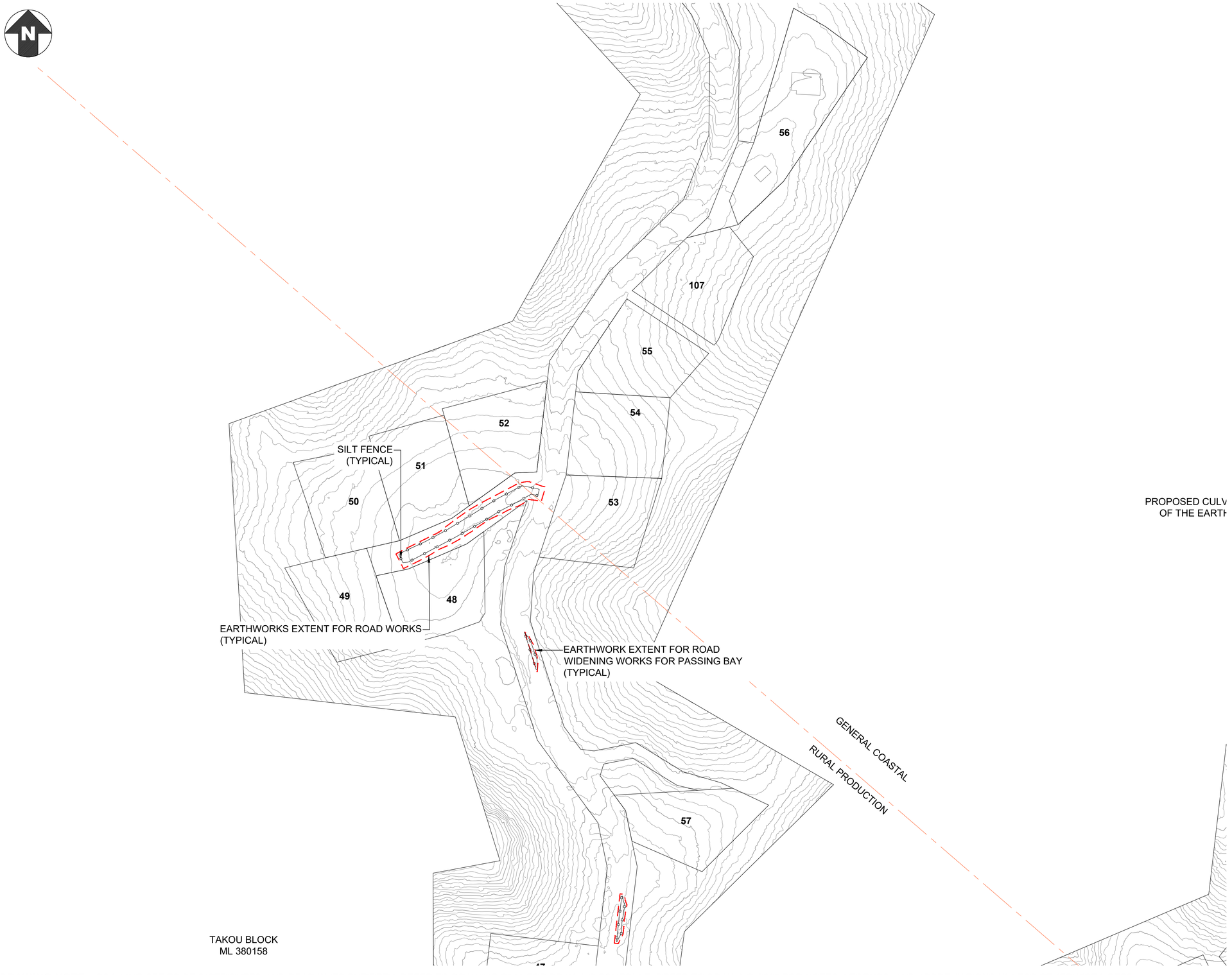

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

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NOTE:

1. ROADSIDE SWALES AND OTHER SWALES TO BE CONSTRUCTED AT THE INITIAL STAGE OF CONSTRUCTION TO DIVERT AND CONVEY CLEAN WATER & DIRTY WATER AS SHOWN.
2. REFER DRAWING C215 FOR TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

PROPOSED CULV
OF THE EARTH

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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DRAFTER: S SIVA
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CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EROSION AND SEDIMENT CONTROL PLAN -SHEET 4 OF 5

DRAWING: C213 REV: 0
SCALE: 1:1000 @ A1
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ISSUE: CONSENT

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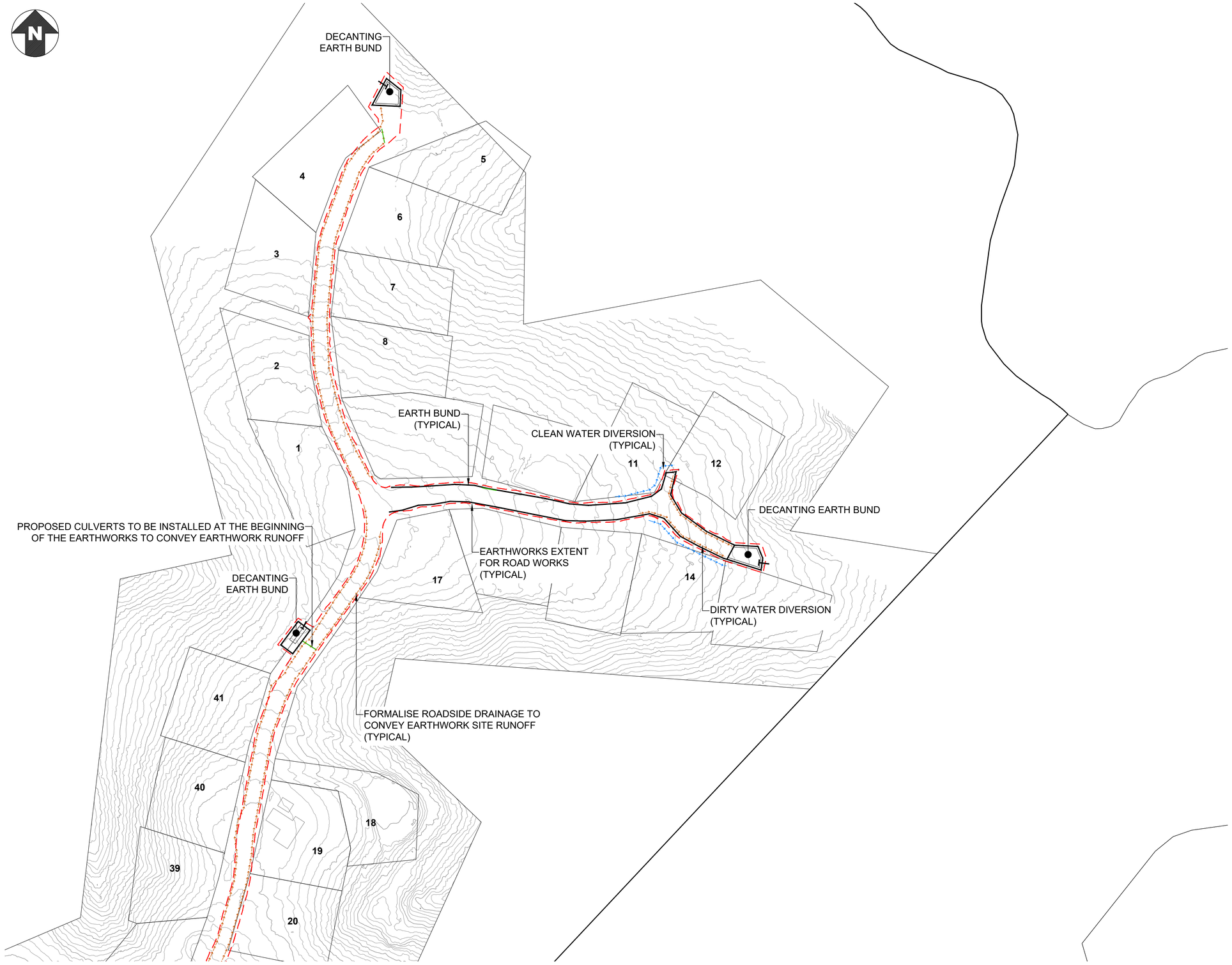

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

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2. REFER DRAWING C215 FOR TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: EROSION AND SEDIMENT CONTROL PLAN -SHEET 5 OF 5

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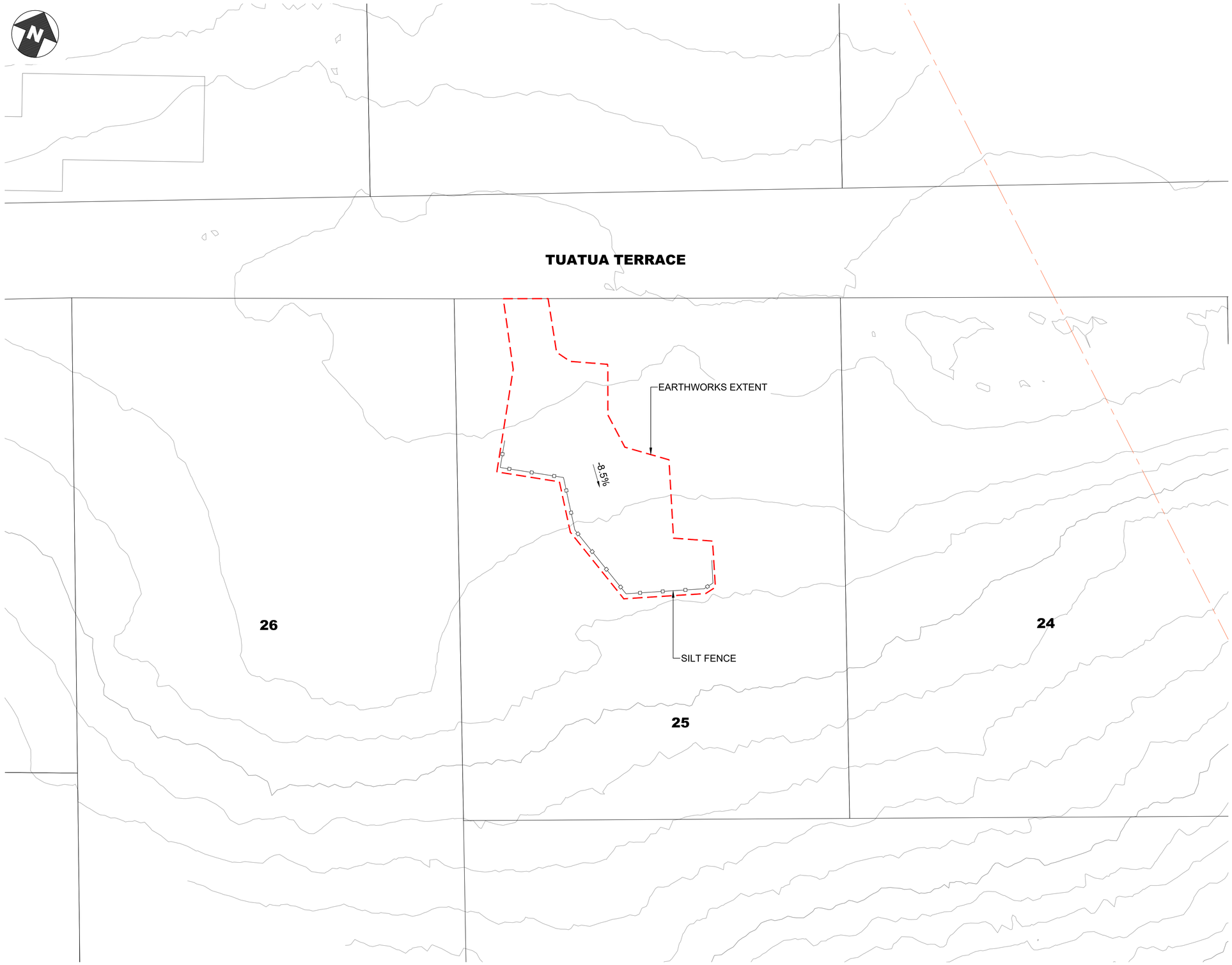

LEGEND:

- EARTHWORK EXTENT
- PROPOSED EARTH BUND
- PROPOSED SILT FENCE
- DIRTY WATER DIVERSION
- CLEAN WATER DIVERSION

EARTHWORK NOTES:

1. CUT TO FILL VOLUMES ARE FROM EXISTING GROUND INCLUDING TOP SOIL TO FINAL GROUND INCLUDING TOPSOIL, PAVEMENT.
2. NO BULKING FACTORS HAVE BEEN USED IN THE VOLUME ESTIMATION.
3. TEMPORARY EARTHWORKS, SHORING, AND ENABLING WORKS TO BE DESIGNED BY OTHERS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. WORKS ARE TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDANCE DOCUMENT 2016/05 (GD05), EROSION AND SEDIMENT CONTROL GUIDE.
5. PLANS DETAIL THE GENERAL SEDIMENT AND EROSION CONTROL MEASURES. ACTUAL CONTROLS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE ADAPTED TO SUIT THE CURRENT STAGE OF WORKS.

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: TYPICAL EROSION AND SEDIMENT CONTROL PLAN FOR LTO

DRAWING: C215 REV: 0
SCALE: 1:200 @ A1
PROJECT: 15876
ISSUE: CONSENT

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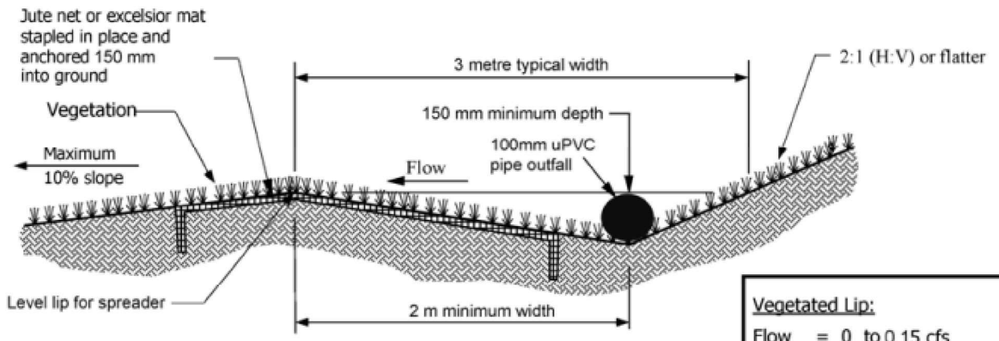
DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR



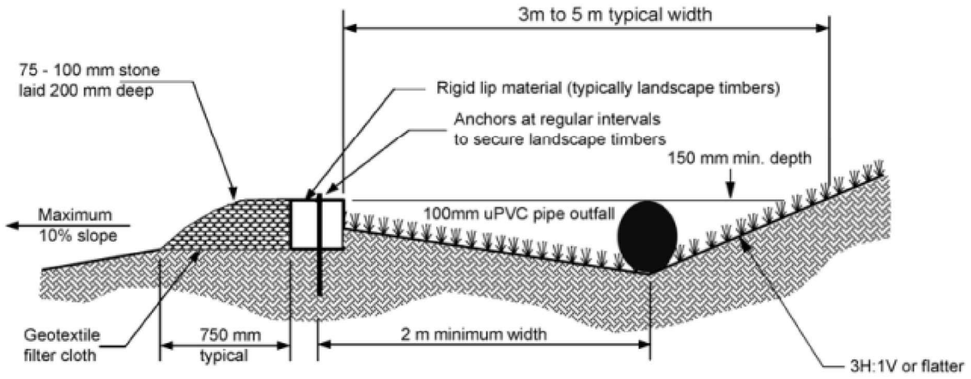
Level Spreader — Vegetated Lip

Vegetated Lip:

Flow = 0 to 0.15 cfs
Length = 3 metres
Width = 3 metres

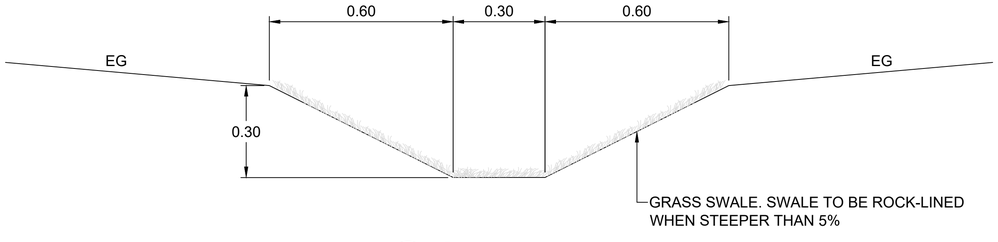
Rigid Lip:

Flow = 0.15 to 0.4 m/s
Length = 3 to 10 metres
Width = 3m to 5 m

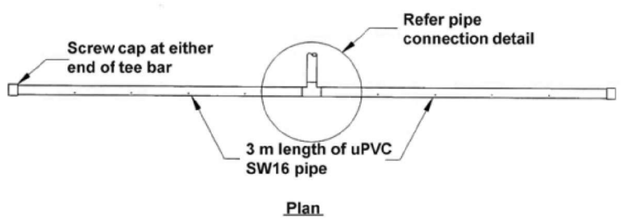


Level Spreader — Rigid Lip

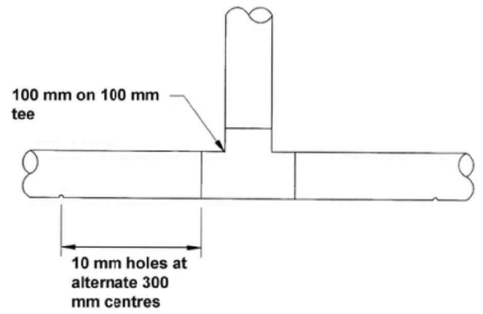
RIGID BOUNDARY FLOW DISPERSAL



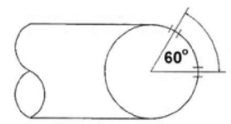
8 SWALE DETAIL
SCALE: 1:20



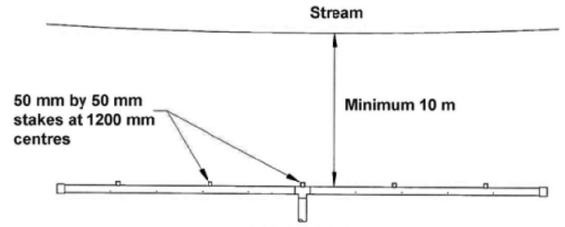
Plan



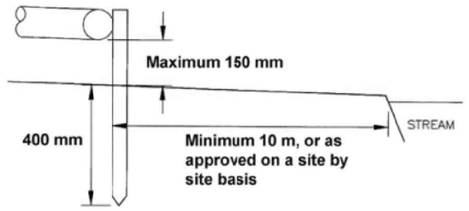
Pipe connection detail



Pipe outlet hole Arrangement detail



Layout Detail

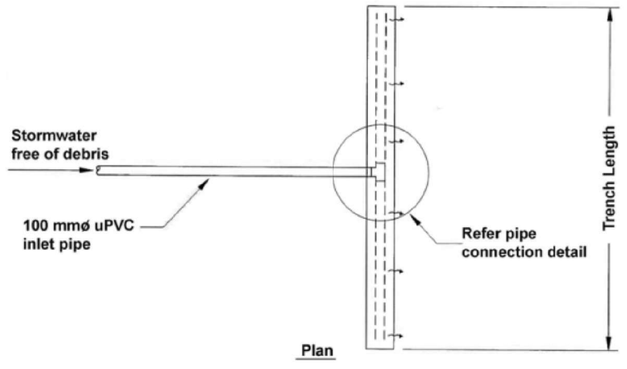


Stake Detail

Notes

1. Pin pipe and tee bar using 50x50 mm 114 treated stakes at 1200 mm centres. Level pipe and fix to stakes using down pipe clips.
2. Stakes to be driven 400 mm into ground. Tee bar to be no more than 150 mm above ground level at any point and to be constructed dead level across length of tee bar.

ABOVE GROUND FLOW DISPERSAL



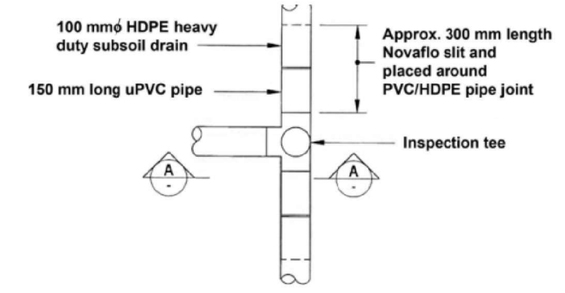
Plan

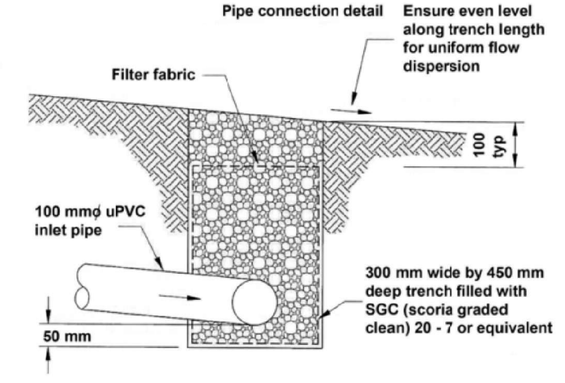
Keep dispersal trench 30 m clear of property boundary

Design Parameters

Effective catchment area drained (m^2)	Trench Length (m)
100	8
200	12
300	14
400	16
500	18
600	20

(Note: effective catchment area drained = impervious area + 0.72 x pervious area





FLOW DISPERSAL TRENCH

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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DATE: 28/05/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: ON-SITE STORMWATER FLOW DISPERSAL OPTIONS & SWALE DETAIL

DRAWING: C420 REV: 0
SCALE: NTS@A1
PROJECT: 15876
ISSUE: CONSENT

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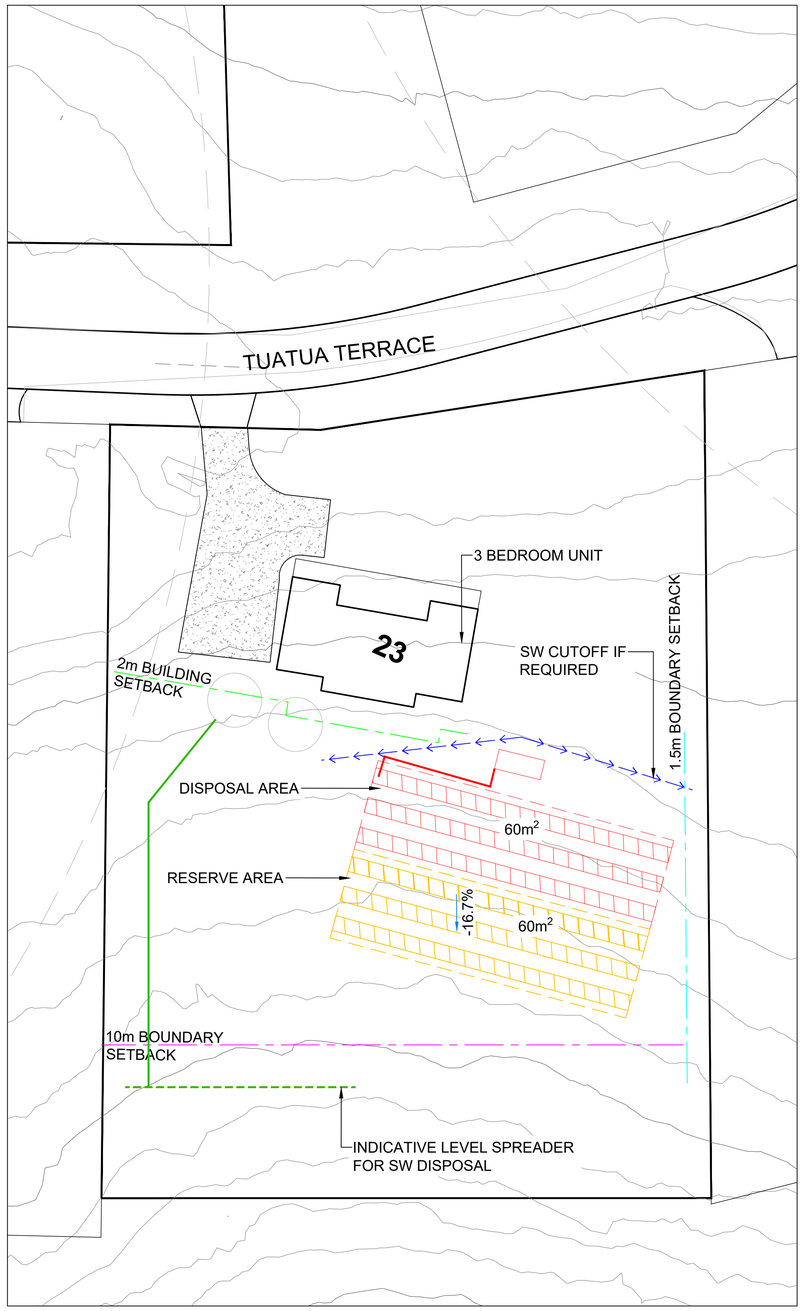
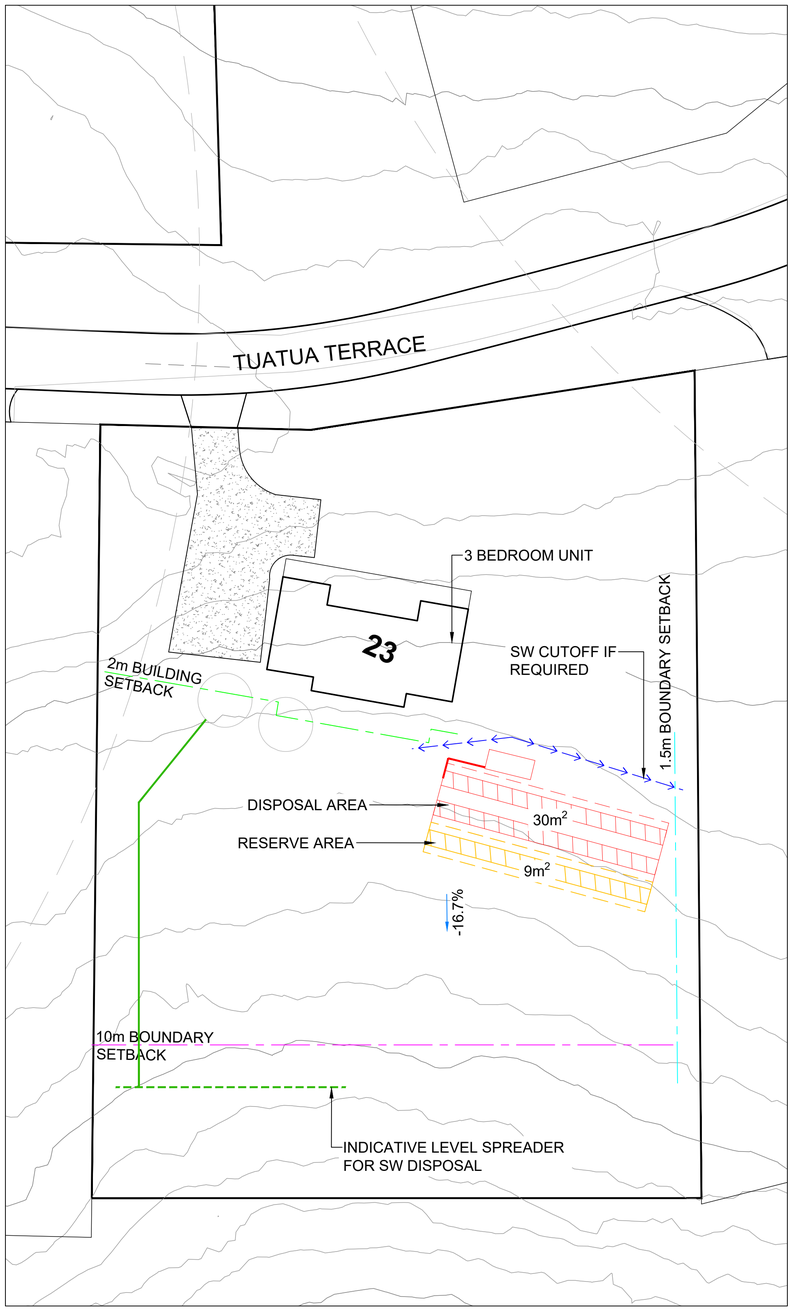
DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

WASTEWATER DISPOSAL LEGEND:

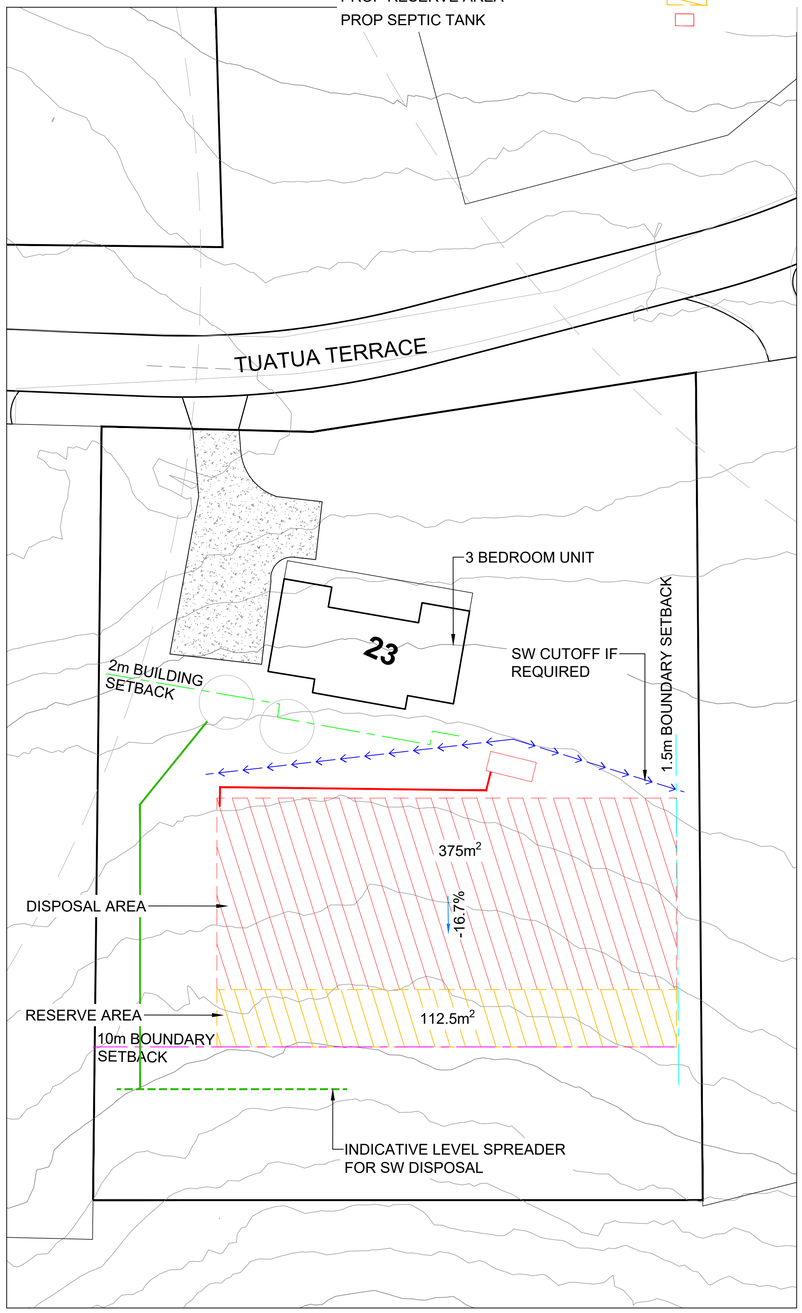
PROP DISPERSAL BED
PROP RESERVE AREA
PROP SEPTIC TANK



ON-SITE WASTEWATER SYSTEM WITH PRIMARY TREATMENT AND TRENCH DISPOSAL



ON-SITE WASTEWATER SYSTEM WITH SECONDARY TREATMENT AND TRENCH DISPOSAL



ON-SITE WASTEWATER SYSTEM WITH SECONDARY TREATMENT AND LPED DISPOSAL

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JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: ON-SITE WASTEWATER SYSTEM OPTIONS

DRAWING: C510 REV: 0
SCALE: 1:200 @ A1
PROJECT: 15876
ISSUE: CONSENT

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LEGEND:

- PROPOSED ROAD UPGRADE
- PROPOSED NEW ROAD
- EXISTING ROAD TO REMAIN

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

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CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: ROADING PLAN - SHEET 1 OF 5

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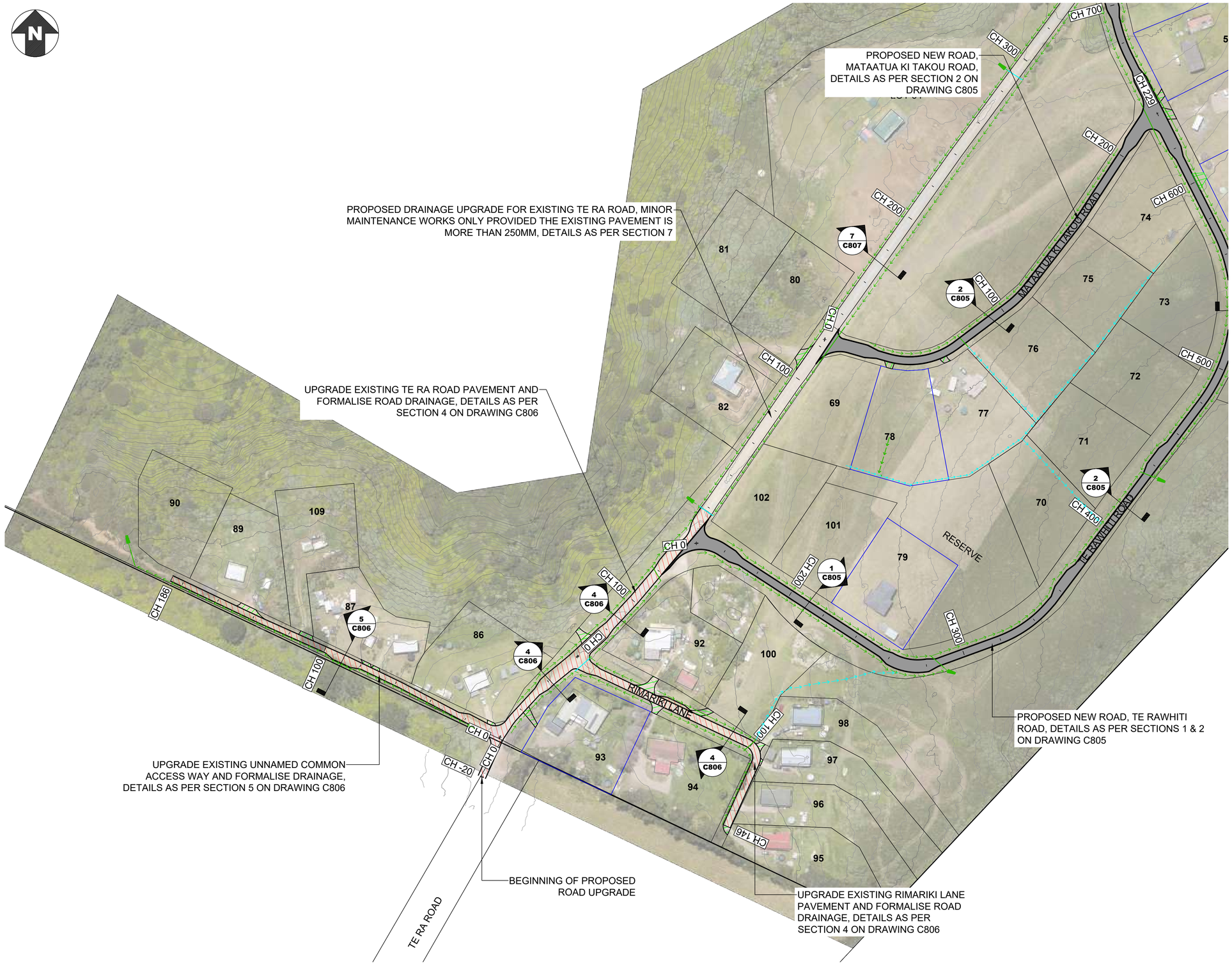

LEGEND:

- PROPOSED ROAD UPGRADE
- PROPOSED NEW ROAD
- EXISTING ROAD TO REMAIN

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

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PROPOSED TUATUA TERRACE ROAD UPGRADE, SUBSOIL DRAINAGE IS PROPOSED TO REPLACE SWALES TO MINIMISE DISRUPTION TO THE EXISTING FEATURES WITHIN ROAD RESERVE. DETAILS AS PER SECTION 3

FORMALISE DRAINAGE, PASSING WIDENING AND MINOR MAINTENANCE WORK ONLY, PROVIDED EXISTING PAVEMENT THICKNESS IS MINIMUM 250MM, DETAIL AS PER SECTION 7 ON DRAWING NO C806

UPGRADE EXISTING PAVEMENT AND FORMALISE DRAINAGE, DETAILS AS PER SECTION 4 ON DRAWING NO C806

PROPOSED NEW ROAD, MATAATUA KI TAKOU ROAD, DETAILS AS PER SECTION 2 ON DRAWING C805

PROPOSED NEW TE RAWHITI ROAD, DETAILS AS PER SECTIONS 1 ON DRAWING C805

TE RAWHITI ROAD

TUATUA TERRACE

MATAATUA KI TAKOU ROAD

CH 0
CH 100
CH 200
CH 300
CH 362
CH 400
CH 500
CH 600
CH 700
CH 800
CH 900
CH 1000
CH 229

6 C807
4 C806
3 C805
7 C807
2 C805
1 C805

LEGEND:

- PROPOSED ROAD UPGRADE
- PROPOSED NEW ROAD
- EXISTING ROAD TO REMAIN

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
- PROPOSED SWALE
- PROPOSED ROADSIDE SWALE
- PROPOSED SUBSOIL DRAIN
- PROPOSED SW PIPE
- EXISTING CULVERT
- PROPOSED CULVERT

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

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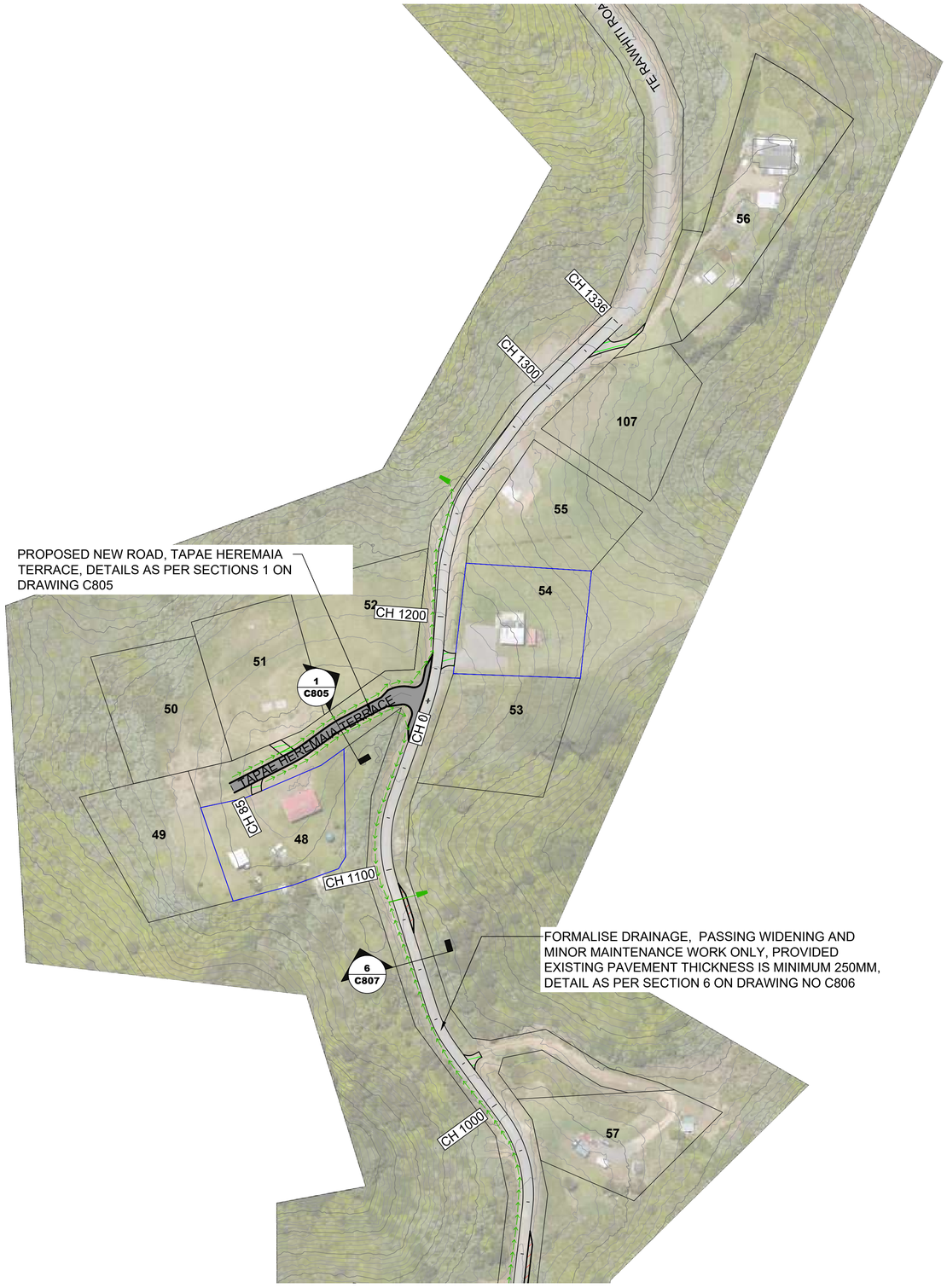

PROPOSED NEW ROAD, TAPAE HEREMAIA TERRACE, DETAILS AS PER SECTIONS 1 ON DRAWING C805

FORMALISE DRAINAGE, PASSING WIDENING AND MINOR MAINTENANCE WORK ONLY, PROVIDED EXISTING PAVEMENT THICKNESS IS MINIMUM 250MM, DETAIL AS PER SECTION 6 ON DRAWING NO C806

LEGEND:

- PROPOSED ROAD UPGRADE
- PROPOSED NEW ROAD
- EXISTING ROAD TO REMAIN

THREE WATER LEGEND:

- PROPOSED DISPERSAL BED
- PROPOSED RESERVE AREA
- PROPOSED SEPTIC TANK
- PROPOSED WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK
- OPTIONAL FIREFIGHTING WATER TANK SERVICE RADIUS 90M
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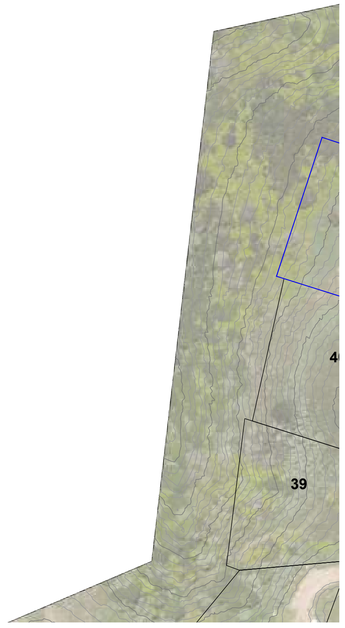

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LEGEND:

- PROPOSED ROAD UPGRADE
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THREE WATER LEGEND:

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DRAWING: C804 REV: 0
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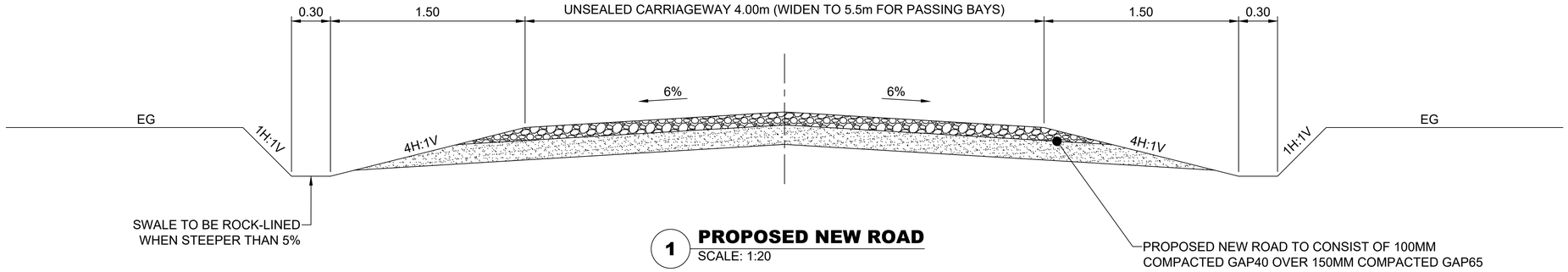
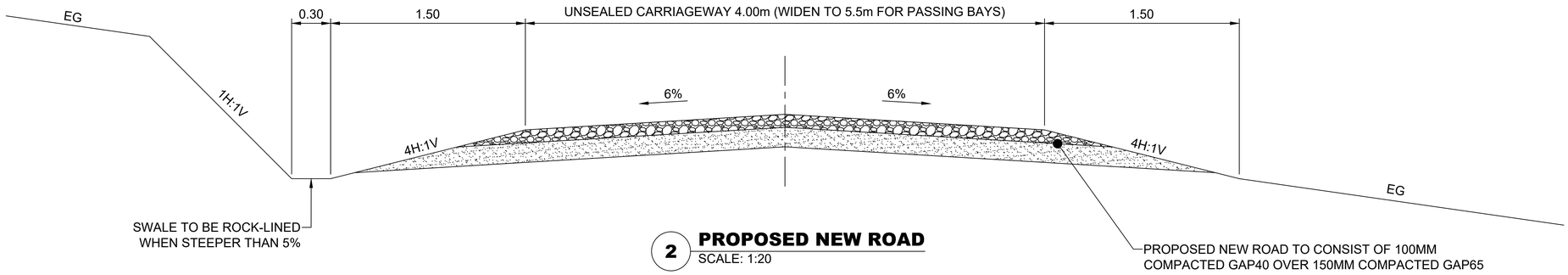
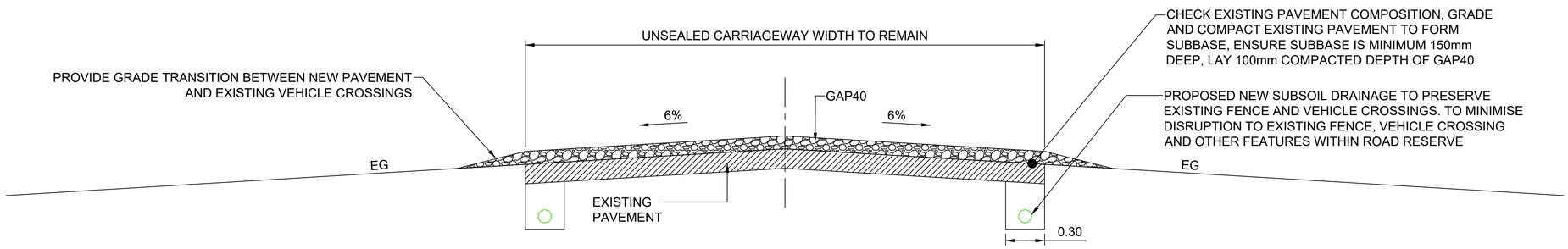


1 PROPOSED NEW ROAD
SCALE: 1:20



2 PROPOSED NEW ROAD
SCALE: 1:20



3 PAVEMENT REMEDIAL AND NEW SUBSOIL DRAINAGE
SCALE: 1:20

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:20 0 0.2 0.4 0.6 0.8 1 2

REV	DATE	AMENDMENTS	BY
0	28/05/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 28/05/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: ROAD CROSS SECTION DETAILS

DRAWING: C805 REV: 0
SCALE: 1:20 @ A1
PROJECT: 15876
ISSUE: CONSENT

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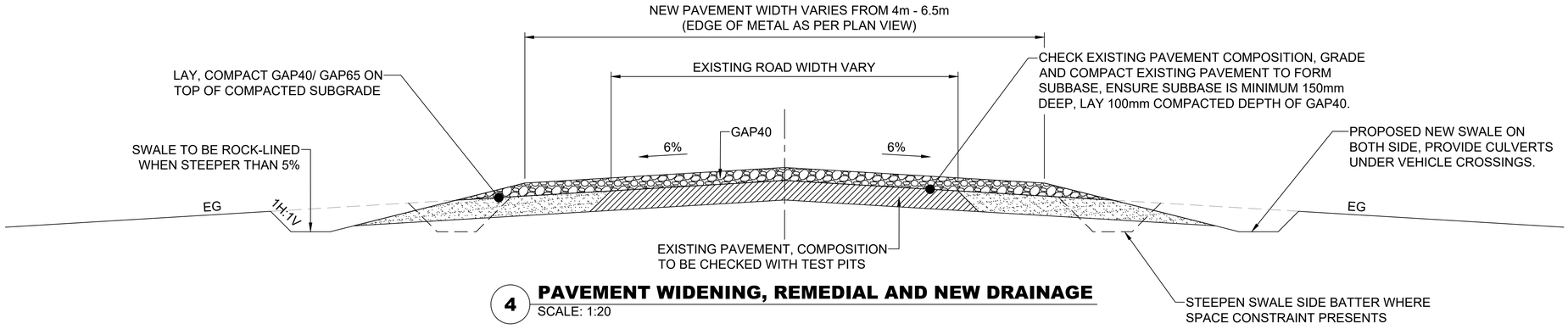
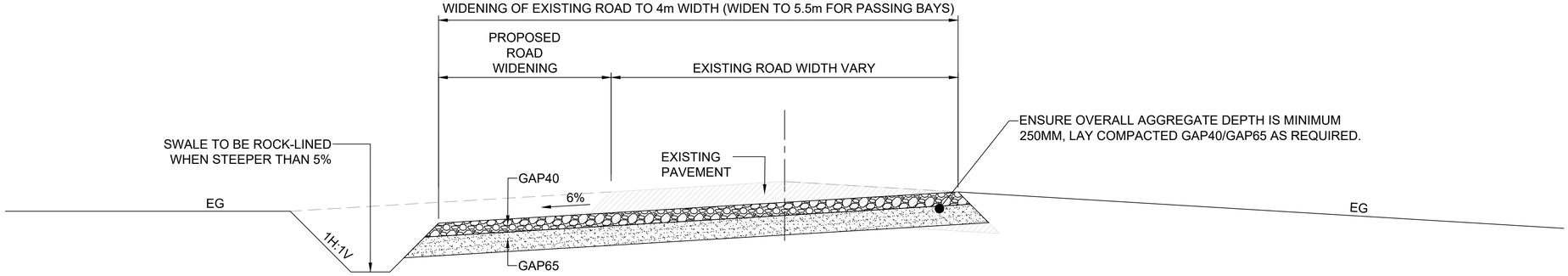
DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

C:\Users\SivatharsanSivashanm\Chester Consultants\Central Library - 15876 - Takou Bay Papakainga\3.0 Design\3.2 Civil\3.2.1 ACAD\DWG Layouts\15876-C-DWG-800.dwg 6/10/2025 2:17 pm LAST SAVED BY: SIVATHARSANSIVASHANM



4 **PAVEMENT WIDENING, REMEDIAL AND NEW DRAINAGE**
SCALE: 1:20



5 **PAVEMENT WIDENING, REMEDIAL AND NEW DRAINAGE**
SCALE: 1:20

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:20 0 0.2 0.4 0.6 0.8 1 2

REV	DATE	AMENDMENTS	BY
0	28/05/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 28/05/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: ROAD CROSS SECTION DETAILS

DRAWING: C806 REV: 0
SCALE: 1:20 @ A1
PROJECT: 15876
ISSUE: CONSENT

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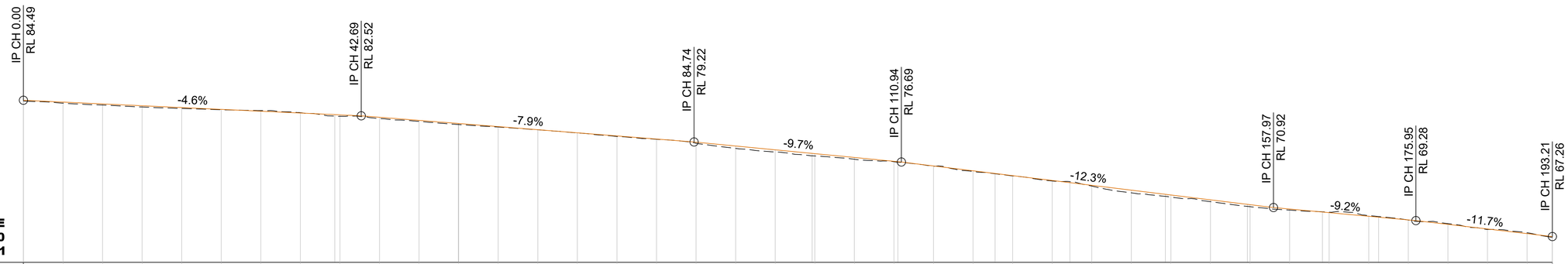

PIPITIA TERRACE
DATUM: 64.00
VERT. EXAGGERATION 1:1

CUT/FILL DEPTHS	0.35	0.34	0.30	0.27	0.17	0.06	-0.11	-0.12	0.07	0.07	0.16	0.28	0.15	0.05	0.01	0.01	-0.08	-0.03	0.19	0.19	0.25	0.22	0.09	0.10	0.20	0.19	0.26	0.22	0.31	0.07	0.11	0.28	0.24	0.03	-0.01	0.08	0.01	0.22	0.02	0.10
DESIGN LEVELS	84.74	84.47	84.19	83.91	83.64	83.36	83.08	82.81	82.53	82.26	81.98	81.70	81.26	80.81	80.37	79.93	79.48	79.04	78.59	78.15	77.70	77.26	76.81	76.26	75.69	75.12	74.55	73.86	73.09	72.32	71.79	71.31	70.84	70.37	69.90	69.43	68.91	68.37	67.76	67.26
EXISTING LEVELS	84.39	84.13	83.89	83.65	83.47	83.30	83.19	82.93	82.47	82.18	81.82	81.42	81.11	80.76	80.36	79.91	79.56	79.06	78.40	77.96	77.45	77.04	76.72	76.16	75.49	74.93	74.29	73.64	72.79	72.25	71.67	71.03	70.60	70.34	69.91	69.35	68.89	68.15	67.74	67.16
VERTICAL GEOMETRY	42.69m -4.6%									42.06m -7.9%									26.20m -9.7%					47.02m -12.3%									17.99m -9.2%				17.25m -11.7%			
CHAINAGE	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	193

TAPAE HEREMAIA TERRACE
DATUM: 80.00
VERT. EXAGGERATION 1:1

CUT/FILL DEPTHS	0.10	0.34	0.18	0.10	0.02	0.00	0.06	0.10	0.08	0.08	0.08	0.04	0.15	0.00	0.02	-0.03	-0.01	0.07
DESIGN LEVELS	83.84	84.10	84.36	84.62	84.89	85.16	85.43	85.69	85.85	86.00	86.16	86.32	86.51	86.97	86.80	86.37	85.93	85.52
EXISTING LEVELS	83.74	83.76	84.18	84.52	84.86	85.16	85.36	85.59	85.76	85.92	86.08	86.28	86.36	86.96	86.78	86.39	85.94	85.45
VERTICAL GEOMETRY	5.00m 0.4%	18.55m 7.2%				38.98m 3.8%								9.96m 0.2%		12.14m -9.3%		
CHAINAGE	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:300 0 3 6 9 12 15 30

REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: COMMON ACCESSWAY LONG SECTIONS

DRAWING: C809 REV: 0
SCALE: 1:300 @ A1
PROJECT: 15876
ISSUE: CONSENT

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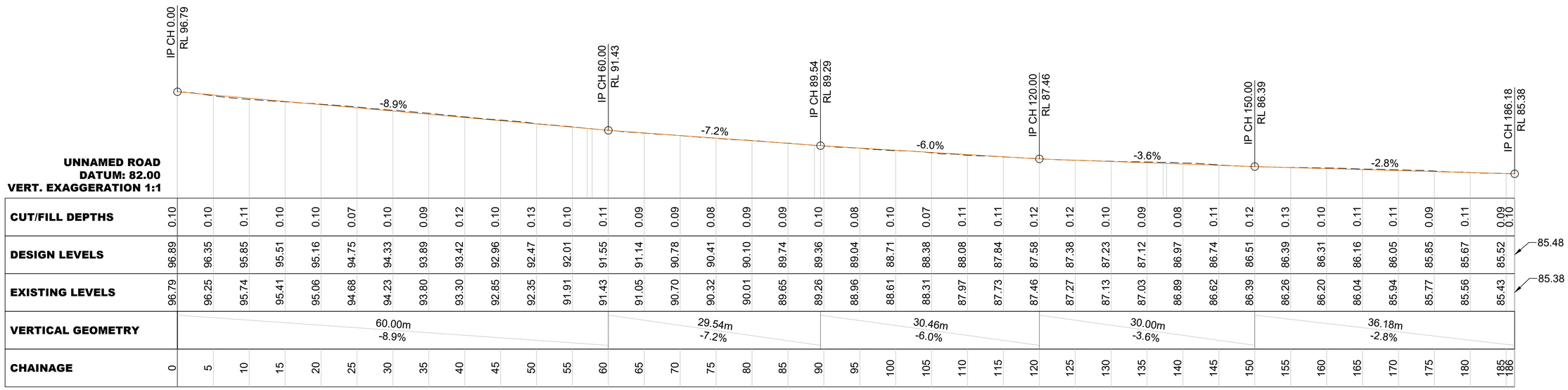
DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR



DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:300 0 3 6 9 12 15 30

REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
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DRAWING: C808 REV: 0
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PROJECT: 15876
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DRAWING SET TO A1 DIMENSIONS AND CONTAINS ELEMENTS PLOTTED IN COLOUR

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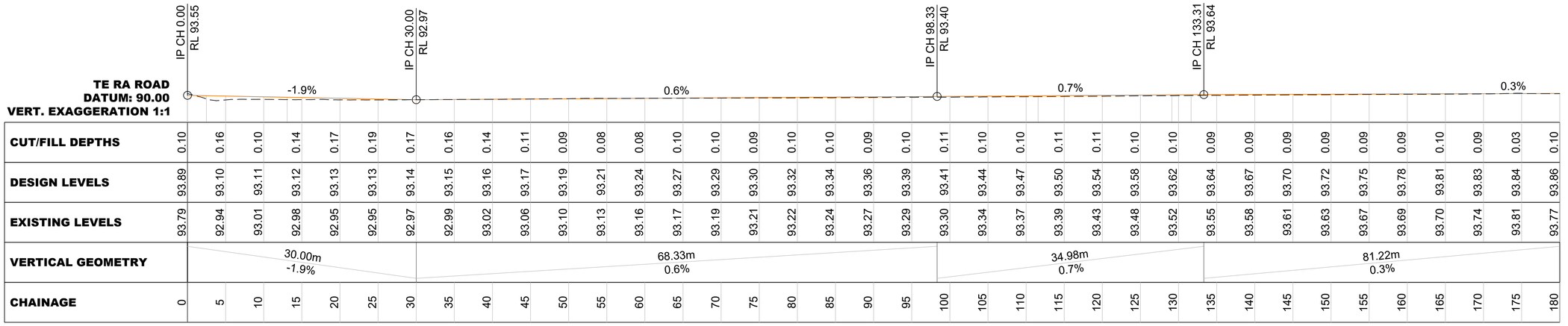

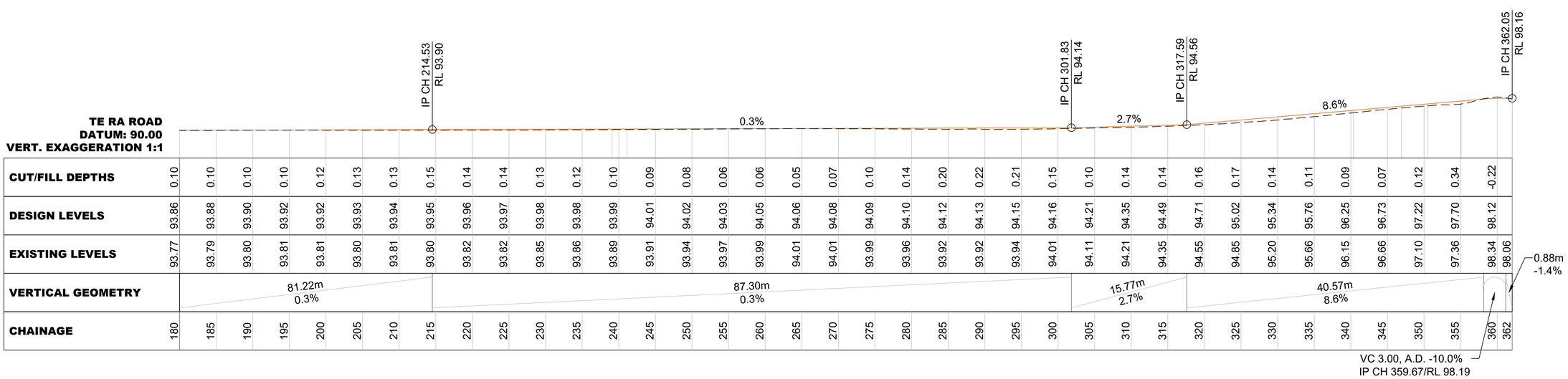

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1:300 0 3 6 9 12 15 30

REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: COMMON ACCESSWAY LONG SECTIONS

DRAWING: C810 REV: 0
SCALE: 1:300 @ A1
PROJECT: 15876
ISSUE: CONSENT

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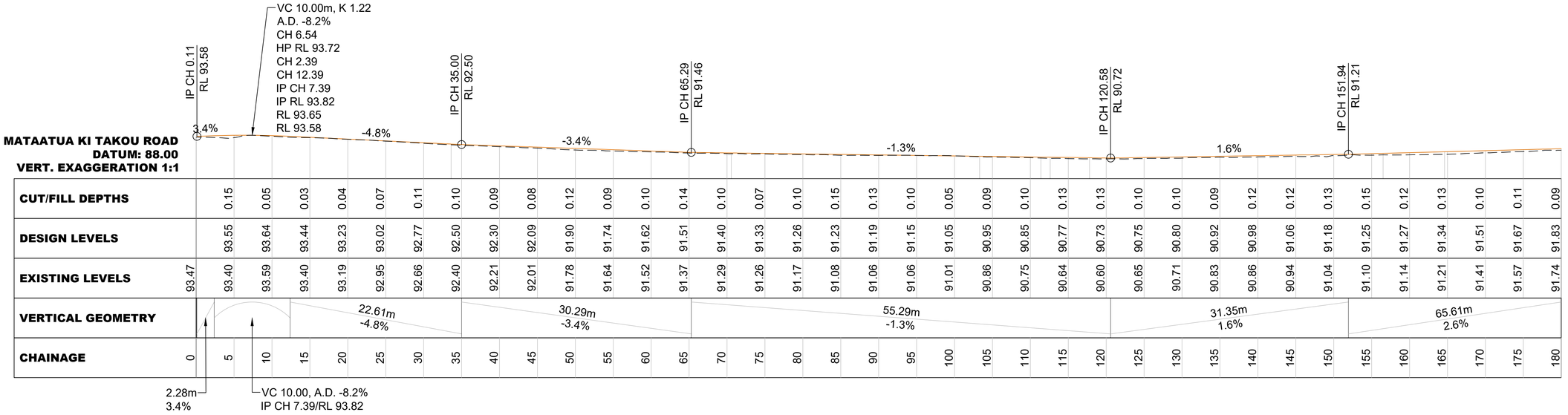
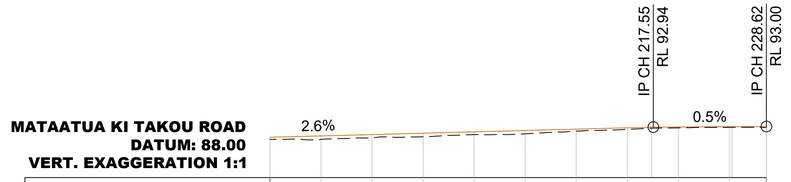


CHAINAGE	CUT/FILL DEPTHS	DESIGN LEVELS	EXISTING LEVELS
0			93.47
5	0.15	93.55	93.40
10	0.05	93.64	93.59
15	0.03	93.44	93.40
20	0.04	93.23	93.19
25	0.07	93.02	92.95
30	0.11	92.77	92.66
35	0.10	92.50	92.40
40	0.09	92.30	92.21
45	0.08	92.09	92.01
50	0.12	91.90	91.78
55	0.09	91.74	91.64
60	0.10	91.62	91.52
65	0.14	91.51	91.37
70	0.10	91.40	91.29
75	0.07	91.33	91.26
80	0.10	91.26	91.17
85	0.15	91.23	91.08
90	0.13	91.19	91.06
95	0.10	91.15	91.06
100	0.05	91.05	91.01
105	0.09	90.95	90.86
110	0.10	90.85	90.75
115	0.13	90.77	90.64
120	0.13	90.73	90.60
125	0.10	90.75	90.65
130	0.10	90.80	90.71
135	0.09	90.92	90.83
140	0.12	90.98	90.86
145	0.12	91.06	90.94
150	0.13	91.18	91.04
155	0.15	91.25	91.10
160	0.12	91.27	91.14
165	0.13	91.34	91.21
170	0.10	91.51	91.41
175	0.11	91.67	91.57
180	0.09	91.83	91.74



CHAINAGE	CUT/FILL DEPTHS	DESIGN LEVELS	EXISTING LEVELS
180	0.09	91.83	91.74
185	0.17	91.91	91.74
190	0.10	92.00	91.90
195	0.12	92.12	91.99
200	0.02	92.24	92.21
205	0.09	92.38	92.29
210	0.05	92.60	92.55
215	0.09	92.82	92.73
220	0.04	92.91	92.87
225	0.04	92.96	92.92
229	0.10	93.00	92.90

DRAWING NOTE: DRAWING SET TO BE DISTRIBUTED AND READ IN ITS ENTIRETY. REFER TO DRAWING C001 FOR DRAWING SCHEDULE. REFER TO DRAWING C002 FOR NOTES, LEGENDS, AND ABBREVIATIONS UNLESS OTHERWISE NOTED.

1:300 0 3 6 9 12 15 30

REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: COMMON ACCESSWAY LONG SECTIONS

DRAWING: C811 REV: 0
SCALE: 1:300 @ A1
PROJECT: 15876
ISSUE: CONSENT

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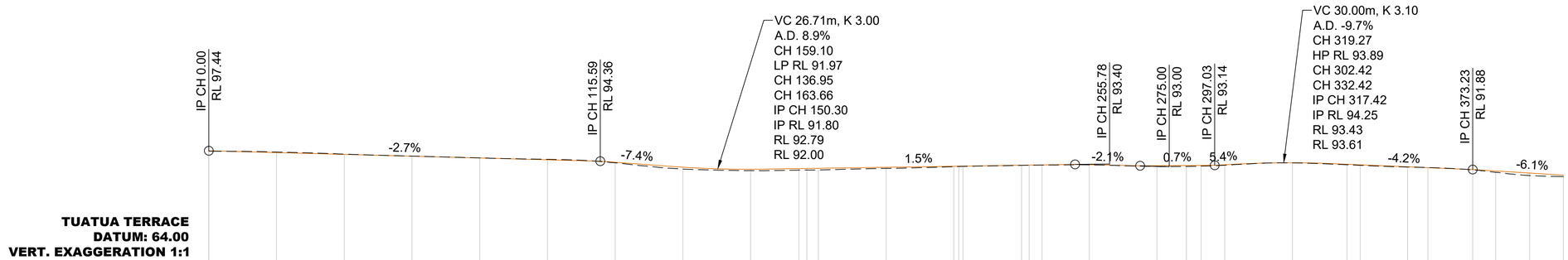
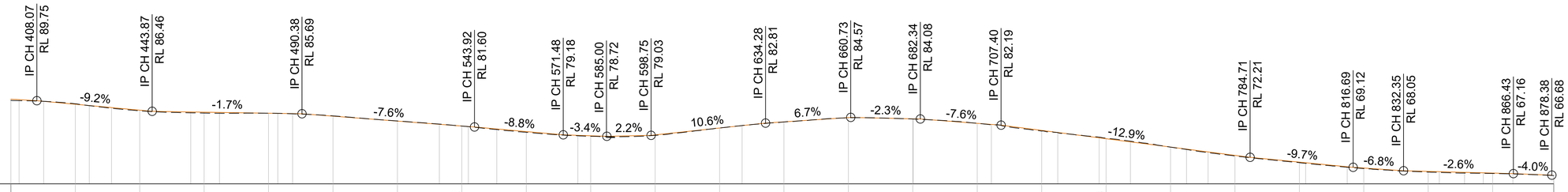


CUT/FILL DEPTHS	0.10	0.10	0.10	0.12	0.10	0.08	0.00	0.20	0.14	0.20	0.15	0.04	0.06	0.07	0.10	0.10	-0.10	0.11	0.11	0.19	0.14	
DESIGN LEVELS	97.44	97.16	96.55	95.98	95.45	94.99	93.88	92.22	91.72	91.98	92.38	92.77	93.18	93.35	92.91	93.27	93.76	93.25	92.58	91.25	89.96	
EXISTING LEVELS	97.34	97.06	96.45	95.86	95.34	94.91	93.88	92.02	91.59	91.78	92.23	92.73	93.12	93.28	92.81	93.17	93.86	93.14	92.47	91.06	89.82	
VERTICAL GEOMETRY		115.59m -2.7%					21.36m -7.4%			92.12m 1.5%				19.22m -2.1%	22.03m 0.7%			40.81m -4.2%		34.84m -6.1%		
CHAINAGE	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	

VC 26.71, A.D. 8.9%
IP CH 150.30/RL 91.80

5.39m
5.4%

VC 30.00, A.D. -9.7%
IP CH 317.42/RL 94.25



CUT/FILL DEPTHS	0.14	0.10	0.12	0.26	0.02	0.08	0.10	-0.02	0.15	0.22	0.21	0.08	0.06	0.06	0.06	0.11	0.09	-0.04	0.12	0.19	0.11	0.10	0.16	0.10	0.10	
DESIGN LEVELS	89.96	88.90	86.74	86.18	85.89	85.13	83.58	81.87	80.10	78.95	79.23	81.36	83.22	84.51	84.14	82.85	80.45	78.11	75.49	72.83	70.67	68.83	67.80	67.31	66.67	
EXISTING LEVELS	89.82	88.80	86.61	85.92	85.87	85.05	83.48	81.89	79.95	78.72	79.02	81.29	83.16	84.46	84.08	82.73	80.36	78.15	75.37	72.63	70.55	68.73	67.64	67.21	66.57	
VERTICAL GEOMETRY	34.84m -6.1%	35.80m -9.2%		46.51m -1.7%		53.55m -7.6%		27.56m -8.8%	13.52m -3.4%	13.75m 2.2%	35.53m 10.6%	26.45m 6.7%	21.61m -2.3%	25.06m -7.6%	77.31m -12.9%			31.98m -9.7%	15.66m -6.8%	34.09m -2.6%	11.95m -4.0%					
CHAINAGE	400	420	440	460	480	500	520	540	560	580	600	620	640	660	680	700	720	740	760	780	800	820	840	860	879	

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REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: COMMON ACCESSWAY LONG SECTIONS

DRAWING: C812 REV: 0
SCALE: 1:750 @ A1
PROJECT: 15876
ISSUE: CONSENT

1:750 0 7.5 15 22.5 30 37.5 75

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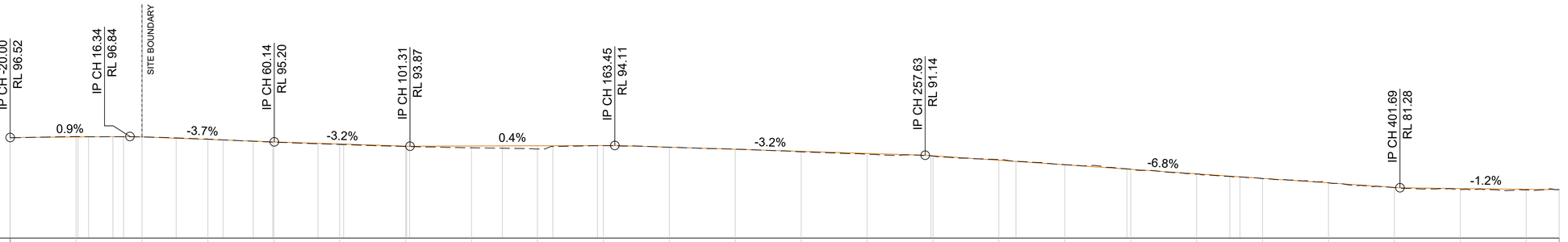
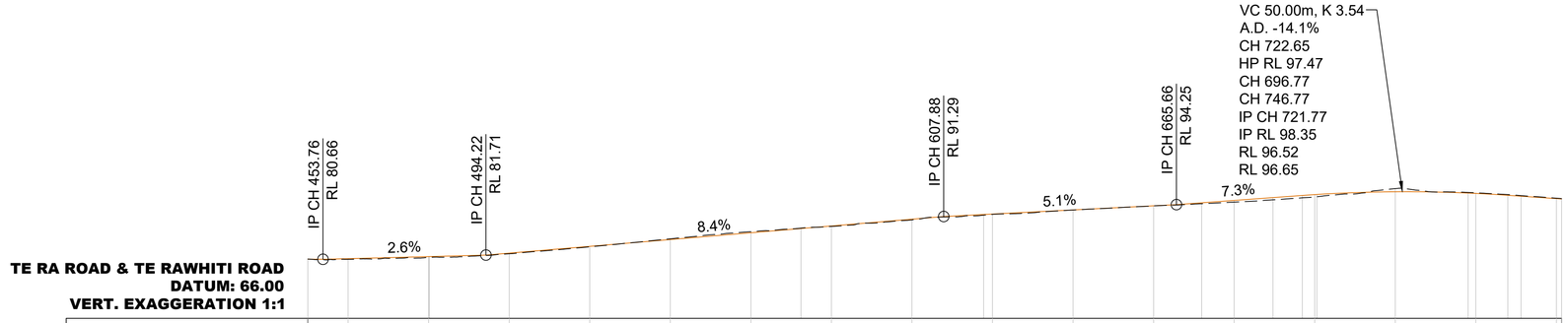


TE RA ROAD & TE RAWHITI ROAD
DATUM: 66.00
VERT. EXAGGERATION 1:1

CUT/FILL DEPTHS	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.16	0.02	0.09	0.02	0.18	0.10	0.07	0.06	0.22	0.10	0.10	0.06	0.00	-0.08	0.05	-0.11	-0.22
DESIGN LEVELS	96.52	96.92	96.80	96.15	95.21	94.53	93.90	93.53	93.19	94.10	93.65	93.01	92.36	91.55	90.96	89.93	88.50	87.03	85.53	84.10	82.77	81.24	80.80	80.52	80.50
EXISTING LEVELS	96.42	96.82	96.69	96.05	95.11	94.42	93.80	93.42	93.03	94.07	93.56	92.99	92.18	91.45	90.89	89.87	88.28	86.92	85.43	84.04	82.77	81.32	80.75	80.63	80.72
VERTICAL GEOMETRY		36.34m 0.9%		43.79m -3.7%		41.18m -3.2%		62.14m 0.4%		94.18m -3.2%					144.06m -6.8%								52.06m -1.2%		
CHAINAGE	-20	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	450



TE RA ROAD & TE RAWHITI ROAD
DATUM: 66.00
VERT. EXAGGERATION 1:1

CUT/FILL DEPTHS	-0.22	-0.01	0.03	0.14	0.24	0.15	0.07	0.24	0.06	-0.03	-0.04	0.00	0.23	0.26	-0.53	-0.52	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39	-0.39
DESIGN LEVELS	80.50	80.64	81.15	82.18	84.00	85.89	87.60	89.08	90.52	91.81	92.87	93.94	95.10	96.41	97.72	96.67	95.42	95.42	95.42	95.42	95.42	95.42	95.42	95.42	95.42
EXISTING LEVELS	80.72	80.65	81.11	82.04	83.76	85.74	87.53	88.84	90.46	91.84	92.91	93.94	94.87	96.15	98.25	97.19	95.81	95.81	95.81	95.81	95.81	95.81	95.81	95.81	95.81
VERTICAL GEOMETRY		40.46m 2.6%		113.66m 8.4%						57.78m 5.1%			31.11m 7.3%		VC 50.00, A.D. -14.1% IP CH 721.77/RL 98.35								-91.26m -6.8%		
CHAINAGE	450	460	480	500	520	540	560	580	600	620	640	660	680	700	720	740	760	760	760	760	760	760	760	760	760

52.06m
-1.2%

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REV	DATE	AMENDMENTS	BY
0	05/06/25	FOR CONSENT	SS

DRAFTER: S SIVA
DESIGNER: S SIVA
CHECKER: N JULL
DATE: 05/06/2025

JOB: CIVIL DESIGN - TAKOU BAY PAPAKAINGA
CLIENT: TE POUAHI O TE TAITOKERAU TRUST
ADDRESS: TE RA ROAD, KAEO, NORTHLAND
DRAWING: COMMON ACCESSWAY LONG SECTIONS

DRAWING: C813 REV: 0
SCALE: 1:750 @ A1
PROJECT: 15876
ISSUE: CONSENT

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HAWTHORN
Landscape Architects

Landscape and Visual Effects Assessment

Proposed Takou Bay Papakāinga

Te Ra Road

Takou Bay, Northland

Prepared For: Te Pouahi o Te Taitokerau Trust

Prepared By: Christine Hawthorn BLA (Hons)

Date: 5th June 2025

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APPENDICES:

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1. INTRODUCTION

Hawthorn Landscape Architects Ltd (HLA) have been engaged by Te Pouahi o Te Taitokerau Trust (hereafter referred to as 'Takou Trust' - the applicant) to assess the potential landscape and visual amenity effects anticipated from the development of a proposed Papakāinga development at their whenua located at 202A-F Tuaru Road, Kaeo – accessed off the end of Te Ra Road, Takou Bay, Northland.

This landscape assessment is to accompany a resource consent application for Integrated Development to the Far North District Council (FNDC) for a Papakāinga development within existing Licence to Occupy (LTO) areas. This includes twelve new dwellings, three existing dwellings (requiring retrospective consent), and the future ability to develop the remainder of the vacant LTO's (approximately 42 sites) to contain one papakāinga dwelling per LTO area.

The site is zoned Rural Production and General Coastal under the Operative Far North District Plan (OFNDP) and has no landscape overlay areas. Within the Proposed Far North District Plan (PFNDP) the site is zoned Māori Purpose – Rural, with the Coastal Environment Overlay. The coastal edge is identified as Outstanding Natural Landscape (none of the LOT's are located within the ONL).

This report will determine the potential impact of the proposed development upon the landscape, visual amenity and natural character values of the site and surrounding environment.

The report will provide the following:

a) An assessment of the character of the existing environment to assist with determining the ability of the landscape to visually absorb the proposal without generating undue adverse rural, natural character and visual amenity effects,

b) A landscape integration measures such a building design controls and landscaping that will assist with visually absorbing the proposed development into the landscape.

In undertaking this assessment, the author has visited the property to understand the nature of the site, its physical and visual relationship to adjacent properties as well as the context, character, visual catchment and viewing audiences from with the wider area.

2. METHODOLOGY

The following methodology was used in the preparation of this landscape and visual effects assessment.

- Desktop review of the relevant statutory documents (Regional and District Plan text and mapping);
- Site visits, and filed survey of the local area;
- Identification of the visual catchment and viewing audiences;
- Description of the site and existing landscape character, visual/aesthetic quality

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and amenity values of the surrounding environment;
- Identification and description of the nature of the proposed development;
- Assessment of anticipated character, landscape and visual effects;
- Ranking of landscape and visual effects;
- Review of the relevant planning documentation and reports;
- Identification of the proposed landscape and visual mitigation approach, options considered and recommendations.

To determine the overall nature and significance of the landscape and visual effects, an understanding of the sensitivity of the landscape and viewing audience has been combined with an assessment of the magnitude of the change resulting from the proposal in order to determine the overall significance of effects.

An outline of the effects ratings and definitions used in this assessment is provided in Supplement A. In summary, the significance of effects identified in this assessment are based on a seven-point scale which includes very low; low; low-moderate; moderate; moderate-high; high and very high ratings.

In relation to this proposal the assessment considers the effects of the proposed buildings and infrastructure along with associated visual amenity plantings on the existing character, landscape and visual amenity characteristics and qualities of the site and surrounding environment.

This assessment has been prepared by a qualified Landscape Architect and in accordance with the NZILA (New Zealand Institute of Landscape Architects) Code of Conduct and with reference to the Quality Planning Guidelines Note[1].

3.0 EXISTING ENVIRONMENT

3.1 Site Location

The application site is located at 202A-F Tuaru Road, Kaeo – accessed off the end of Te Ra Road, Takou Bay, Northland. It is located approximately 20km north of Kerikeri, and approximately 22km from Kaeo. The property is located along the coastline between Takou Bay, just to the west of the site, and Elliots Bay and then Tapuaetahi Beach to the southeast.

The application site (area of focus in this report) encompasses the areas of land generally either side of the private roading network within the areas that currently accommodate Papakainga housing. This includes the accessway (Te Rawhiti Road), which extends from Te Ra Road, through the site and down to Takou beach, with a small side road off this called Tapae Heremaia Terrace. Rimariki Lane is located just to the right as you enter off the end of Te Ra Road. Mataatua ki Takou Road is a small loop road off Te Rawhiti Road, near the Marae. Another road is Tuatua terrace which extends off Te Rawhiti Road, all the way to its northern eastern extremity overlooking the coastline. A small side road extends off this to the southeast, this road is called Pipitia Terrace and is one of the two roads that are closest to the coastal escarpment of the property. Refer to **Appendix 1 - Location Map and Figure 1, and the road names shown in Figure 2.**

[1] http://qualityplanning.org.nz/index.php/planning-tools/land/landscape

Figure 1: Property Location at the end of Te Ra Road, adjacent to Takou Bay

Road 1 = Te Rawhiti Road
Road 2 = Rimariki Lane
Road 3 = Mataatua Ki Takou Road
Road 4 = Tuatua Terrace
Road 5 = Tapae Heremaia Terrace
Road 6 = Pipitia Terrace

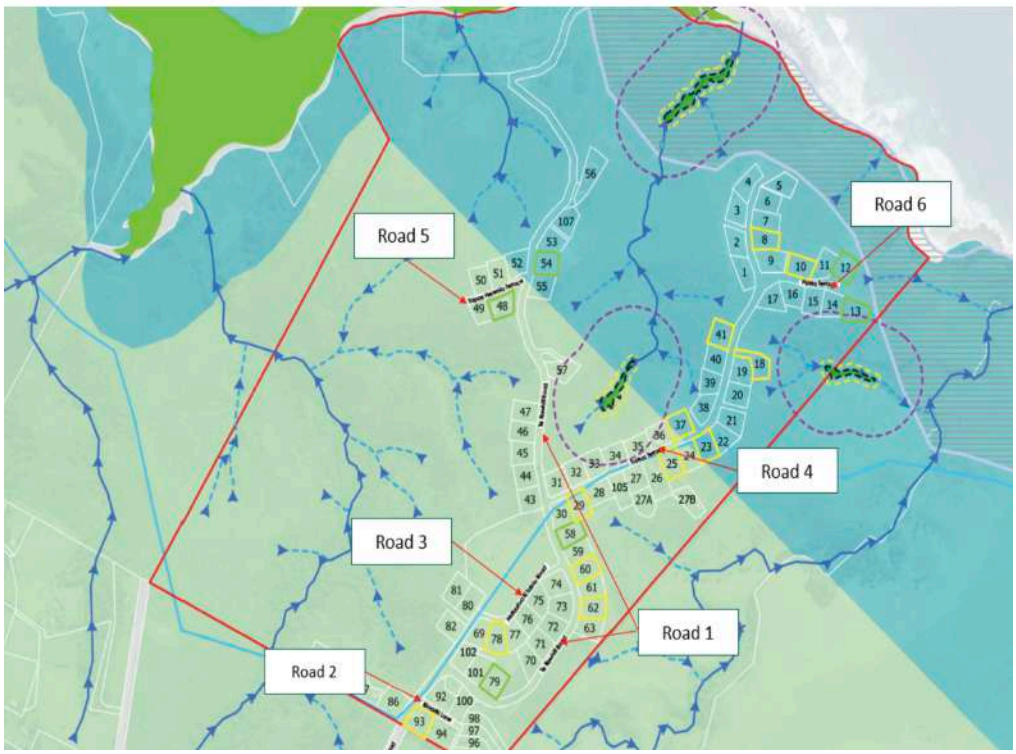

Figure 2: The site and road names

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3.2 Application Site

Te Pouahi o Te Taitokerau Trust (hereafter referred to as 'Takou Trust') own 332 hectares of Māori freehold land (made up of 5 allotments). The area that is the focus of this assessment is Part Otaha 4C5 Block, the parcel shown in **Figure 1** and will hereafter be referred to as the 'site'.

The site currently accommodates a number of existing papakainga dwellings and ancillary buildings, and a Marae as shown in **Figures 3 and 4**. These are accessed off the roads described in Section 1 above.

The contours of the site are gently sloping to steeply sloping into the gully floors. The flatter areas are located near the start of Te Rawhiti Road (off the end of Te Ra Road), and along the ridge crest of the hillslopes. These areas are mostly free of vegetation and are in grass, with a few specimen trees located around the building sites. Refer to the attached **Site Photographs in Appendix 3**.

The steeper side slopes are vegetated in a mix of weed infested scrub and regenerating native species. The gullies in places contain remnant native trees. The Ecological Report prepared by Wild Ecology provides a full description of the ecological values of the site. It is noted that no indigenous vegetation will be removed as part of the proposal.

Figure 3: Aerial view looking southwest, of the property showing the Rural Production zoned part of the site, and built development located just off the side of the main access roads.

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Figure 4: Aerial view of the property looking northeast, showing the General Coastal zoned part of the site.

Figure 5: View of the site from the water, showing the specimen Pohutukawa trees along the costal escarpment which is part of an Outstanding Natural Landscape.

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The view from the site takes in Takou Bay to the northwest, with The Lodge at Kauri Cliffs and associated golf course located beyond this. There are expansive sea view of the Pacific Ocean and the nearby Cavalli Islands. Inland views take in rural farmland and nearby horticultural activities with associated artificial shelter to the south of the site (refer to **Figure 3**).

The coastal escarpment of the site is bound by a rocky coastline, interspersed with sandy beaches. Backing the coastal edge the contour rises moderately steeply to the crest of the hillslopes above. The coastal escapement is vegetated in a mix of Kikuya grass, flax, gorse, pampas, tobacco weed and some young regeneration native species. The main native flora present are the remanet Pohutukawa trees, as shown in **Figure 5**.

3.3 Neighbourhood Character & Context

The site is surrounded by Rural Production and General Coastal zoned land, as shown in **Figure 6**. To the north there is the Kauri Cliffs Special Purpose zone. The landscape surrounding the site contains a mix of land uses, including farming, forestry and horticulture. In addition there is a cluster of lifestyle blocks located off Otaha, Te Ra, and Cavalli View Roads. This creates a rural residential settlement pattern, this in addition to the Papakainga settlement on the site creates a sense of community within this local area.

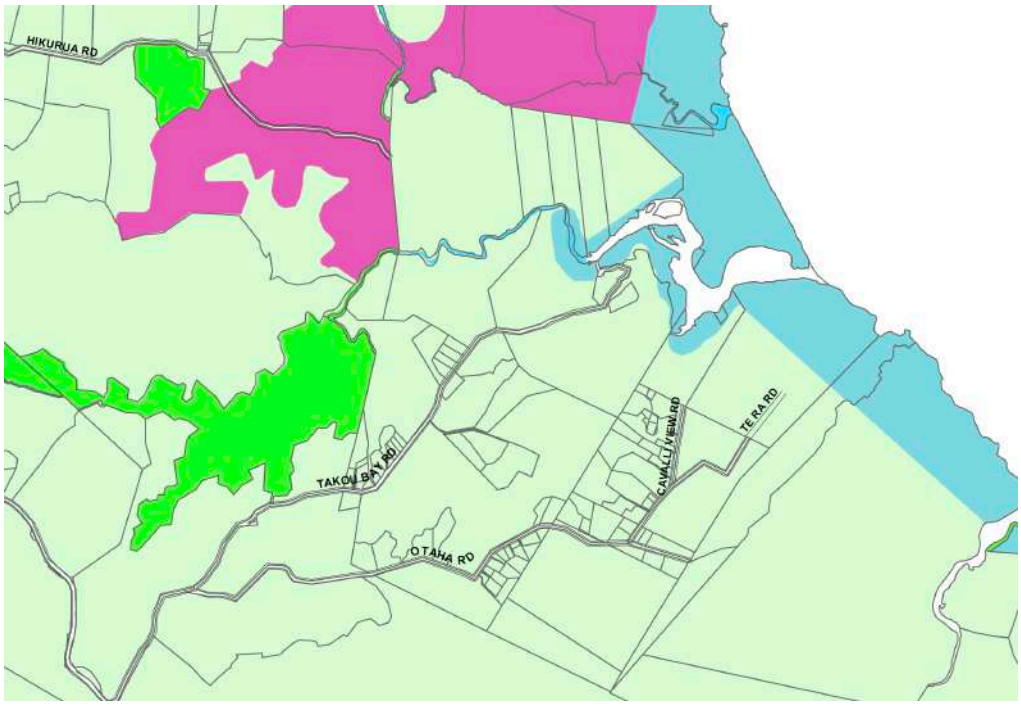

Figure 6: Settlement pattern and land zoning around the site.

To the north of the application site the Kauri Cliffs Special Purpose zone accommodates The Lodge and associated villa accommodation, set into the natural landscape, overlooking a manicured golf course, that is nestled along the cliff edged coastal escarpment which is an identified Outstanding Landscape, as shown in **Figure 7**.

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Figure 7: View of the southern end of Kauri Cliffs golf course, with the application site located beyond Takou beach.

Figure 8: View of the Takou Kauri Sanctuary in the foreground, located between the Takou River and Takou Beach.

The land just to the north of the application site, also owned by Takou Trust has been developed into a nursery for the propagation of Kauri trees. This is located adjacent to the Takou River as shown in **Figure 8**. This whole area around the Takou River mouth is very culturally significant, with the presence of Orongo Pa, Rangihamama Pa, and the resting place of the Mataatua waka.

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The Takou River and dune system has been identified as having High Natural Character values in the Northland Regional Policy Statement.

Further away to the south east of the site, approximately 4km away the small coastal settlement at Tapuaetahi is located along the beach frontage, adjacent to the estuary and nearby Taronui lagoon, as shown in **Figure 9**.

This small residential settlement and that found upon the application site at Takou Bay, and further north at other sites including Matauri Bay and Te Ngaere Bay form a characteristic pattern of small coastal residential nodes of development, that are all separated by large areas of rural land that contains little built form. This is a repeating pattern present all along the eastern coastline of the Far North District.

Figure 9: View of Tapuaetahi, with the lagoon and Takou Bay visible in the distance.

4.0 THE PROPOSAL

4.1 Proposed Papakāinga

The Operative Far North District plan defies the term 'Papakāinga' as meaning:

> *"The use of Māori multiple owned land, Māori ancestral land or land within the meaning of Te Ture Whenua Māori Act 1993 by a (the) shareholder(s) for (a) dwelling place(s)."*

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The application site is Māori freehold land and it is administered by the Te Pouahi o Te Taitokerau Trust on behalf of its shareholders, therefore the proposed development is in accord with the above definition of Papakāinga.

The application site is one of the three allotments held in the Takou Block and covers an area of approximately 136 hectares. The site contains 96 License to Occupy (LTO) areas. There are 94 LTO areas available for development, and they have a minimum area of 2,000m^2. The other 2 LTO areas are utilised for the Marae Reservation and reserve purposes.

The applicants propose to establish 94 LTO areas on the site which will subsequently be developed to accommodate one papakāinga dwelling per LTO area. Refer to **Figure 10** for the layout of the 96 LTO's.

Figure 10: Proposed development layout plan – Taiao Surveyors

The proposal includes the following:

- Construction of 12 new dwellings and three relocatable dwellings within 16 LTO areas (areas 8, 10, 18, 23, 25, 29, 37, 41, 60, 62, 78, 93, 48, 58, and 79);
- Provision for the other LTO areas to accommodate one papakāinga dwelling per LTO site. Where existing development is present on an LTO area there is the option for this to be this redeveloped in the future. This proposal is for up to one new papakāinga dwelling per LTO area.
- The formalisation and the construction of the internal roading network;

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- Completion of enabling earthworks as required to for the proposed development.

Architectural drawings have been prepared by Lamanata that illustrate the location and design of the proposed new dwellings. Refer to **Appendix 2** – Development Plans

The proposal is further detailed in the Assessment of Environmental Effects Report prepared by Barker & Associates. Detailed descriptions of the various aspects of the development, such as ecological, engineering, roading, servicing and architecture are also contained within the specialist reports and plans that accompany the application.

Following is a summary of the various aspects which have aspects that are related to landscape and visual amenity matters. This includes the architectural form and design of the dwellings and landscape integration proposals to minimise potential adverse effects upon landscape, visual amenity and natural character values.

4.2 Architectural Design

The Development Plans prepared by Laminata Architectural contained in **Appendix 2** illustrate the layout of the Papakainga LTO sites, roading networks and the location of the proposed new dwellings, and relocated dwellings. The building colour palette and Typologies are illustrated in **Figure 11**.

Figure 11: Building Typologies

The LTO's that will accommodate the new dwellings have individual site plans, that illustrate the house size, location and floor layout. The plans also locate the driveway and parking areas, water tanks, waste water system and disposal field. Elevation of the dwelling are also shown on these plans.

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The colour palette proposed for the dwellings located within the General Coastal zone LTO sites is Cinder Block Grey with a LRV of 14% for the exterior cladding. The roof colour will be Flaxpod with a LRV of 7%. The joinery will be Aluminium in Flaxpod.

The building colours for dwellings located in the Rural Production zoned part of the site will be a mix of the colour options and typologies shown in **Figure 11**. In addition to Cinder Block Grey and Flaxpod these include but are not limited to Tensile Grey (LRV 39%), Sandstone Grey (LRV 27%), Porcelain Blue (LRV 43%), and Grey Friars (LVR 10%).

The proposed building materials are Vertical Shiplap Weather Boards and Profiled Metal Cladding and Roofing. The building heights range between 3.5m and 4.27m.

4.3 Access & Earthworks

The property is currently accessed via a private metalled road that extends off the end of Te Ra Road. Within the property there are several metalled private roads that provide access to the existing dwellings as detailed in Section 3.1 of this report. These will be retained and upgraded as needed and several new roads added. The minimum carriage with will be 4m, with strategically placed passing bays. This will assist with retaining the rural character values of the property.

Chester Consultants Ltd have provided a Land Development Report that covers aspects such as earthworks, erosion control, water supply, wastewater, stormwater, and site access.

The report details that minimal earthworks are proposed across the site to create level building platforms, form access and widen existing roads and manage secondary flow. No significant retaining structures or batter slopes will be required due to the location of the proposed access being located upon topography that can accommodate roading easily.

Most of the works proposed are related to maintenance works of the existing roads and tracks, obtaining roading material for use of the same site and clearing of existing roadside drains.

4.4 Ecological Considerations

An Ecological assessment has been prepared by Wild Ecology Ltd. The indigenous vegetation pattern on the site is described as "*primarily confined to broadleaf forest remnants within the gullies, along with areas of regenerating kānuka–broadleaf scrub. Three individual wetlands are also present, located in natural topographic depressions deep within the gully systems. The broader transition zone between native vegetation and cleared or open areas is largely dominated by exotic scrubland. This is routinely managed and cleared to support low-intensity farming and to control invasive weed species—such as gorse and woolly nightshade—which are widespread across the site*".

The vegetation patterns of the site have been mapped and are shown in the following plan prepared by Wild Ecology.

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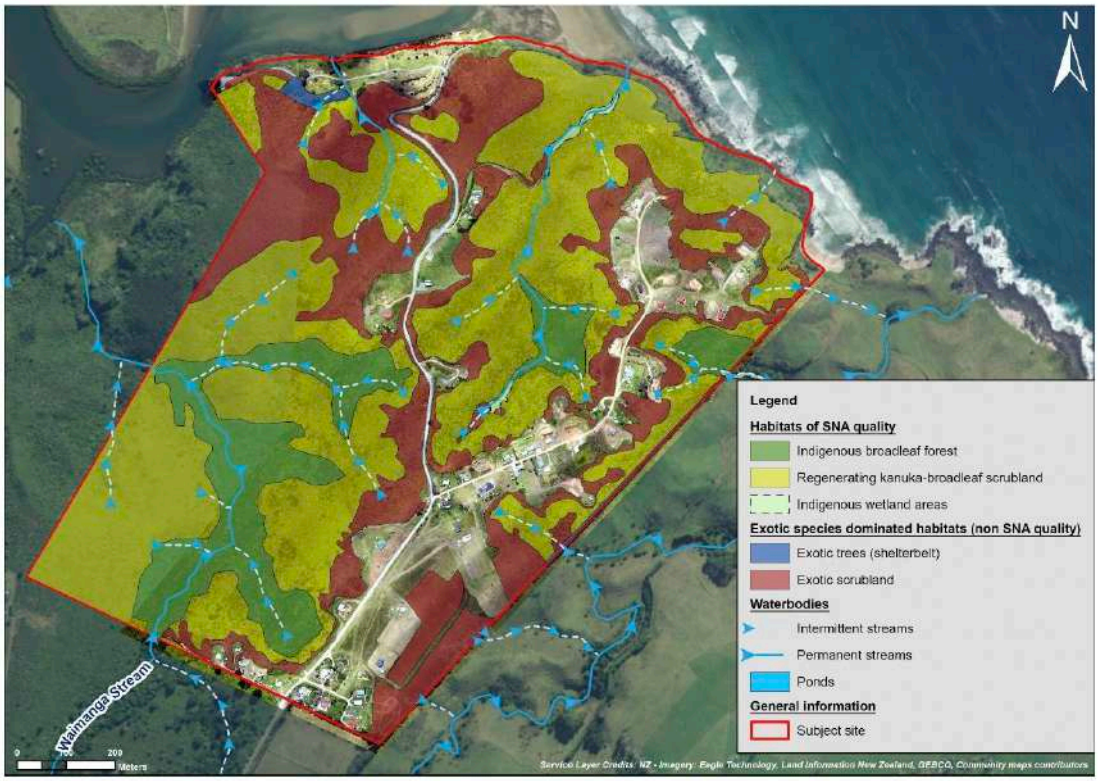

Figure 12: Showing the general hydrological patterns and ecological features as observed on site during site field visits

Figure 12: Wild Ecology Ecological Features

The Ecological assessment summarises the overall existing ecological significance to be "*generally as 'moderate-high' for the lesser disturbed habitats such as broadleaf forest and indigenous wetlands, 'moderate' for kanuka-broadleaf regenerating scrubland, and 'low' for the exotic species dominated scrubland areas*".

The actual or potential adverse effects on ecological values that may result from the proposed development was assessed by Wild Ecology as "*generally 'low' provided works are carried out in a manner that gives effect to the expert reporting and recommendations prepared for the proposal*".

4.4 Landscape Integration Methods

Landscape integration and enhancement plantings are proposed to provide a long term vegetated setting for built development to be set within. This will provide a vegetated backdrop when viewed from the CMA and other neighbouring properties. It will also enhance the visual amenity values within the development and retain rural character values.

When viewed from within the coastal environment the plantings will assist with visually integrating future built development into the landscape to protect natural character values.

Full details are provided in Section 7 of this report and illustrated on the Landscape Plans contained in **Appendix 5.**

Figure 13: An example of how individual specimen Pohutukawa trees can provide a long term effective vegetated setting for built development. This is located on LTO 28.

5.0 ASSESSEMNT OF VISUAL, LANDSCAPE & NATURAL CHARACTER EFFECTS

5.1 Introduction

In assessing effects on landscape there is a distinction made between landscape effects (effects on the character and amenity of a landscape, this may not be visible to the general public), and visual effects (the response of a viewing audience, principally from public viewing positions, but also surrounding privately owned properties).

These effects are assessed in terms of the degree of change brought about by a development. The degree of landscape and visual effects resulting from a development may be negative (adverse), or positive (beneficial), contributing to the visual character and quality of the environment.

Visual effects are generated through visual changes to the landscape as a result of a development, with the significance of the effects measured by the response of a particular viewing audience and is influenced by the degree of visibility, whether the proposal is the focal point or part of a wider view, whether the view is transient or permanent and the degree of contrast with the surrounding environment.

Landscapes effects can either be a result of landform or land-cover modification or be more subtle such as influencing the overall pattern of landscape. The significance of the effect is determined by the extent of the change, the significance and sensitivity of the landscape in question and the resilience or capacity of the landscape to absorb the change.

This assessment of visual effects examines the perceptual (visual) response that any of the identified changes to the landscape may induce. The visual sensitivity of the site is influenced by several factors including its visibility, the nature and extent of the viewing audience, the visual qualities of the proposal, and the ability to integrate any

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change within this landscape setting.

5.2 Visual Catchment & Viewing Audience

To evaluate the extent of visibility and assess the potential landscape and visual impact of the proposed Papakainga housing development on the surrounding area viewpoints were chosen that are representative of a range of private and publicly accessible visual catchments that afford views towards the site.

From each of the viewpoint's photographs were taken to illustrate the view of the property and the context of its setting. Refer to **Appendix 4** for the Off-Site Viewpoints and **Appendix 1** for their locations.

The visual catchments that enable views towards application site can be grouped into the following:

1. Distant views to the north of the site, southern boundary of Kauri Cliffs golf course the north of the site,
2. Takou beach to the north of the site,
3. Water viewing positions to the east of the site,
4. Foreshore to the east of the site,
5. Private farmland to the southeast of the site,
6. Distant views to the southeast on Purerua peninsula.

5.3 Visual Effects Assessment

The potential visual effects of the proposed development upon the viewer groups within the above visual catchments is assessed as follows:

VIEWS TO THE NORTH

Viewpoint 1 is located upon Orongo pa site, this is also Takou Trust land, as such this is private land and not public. This elevated position affords views across the Takou River mouth and dune system towards the site. The houses that are located along the main access roads are visible along the crests of the spur ridges. Due to the small scale of the dwelling and long focal lengths they only form small elements within the view. With future development upon the site there will be an increase in the number of dwellings visible.

As this is not a public viewing position, and as public access to Takou beach is limited to access over the surrounding private land, the viewer group who have the potential to view the site from this location are likely to be residents from the Takou Block.

Further north distant views (over 4km away from The Lodge at Kauri Cliffs) of the application site are afforded, as shown in **Figure 14**. The large area of white is the artificial shelter located on the neighbouring property to the south of the site, this being the dominant man-made built element visible in the distance. The Takou Block is just distinguishable. Due to the very long focal length, the addition of any future recessively coloured dwellings on the site will not adversely impact this viewer group, and the potential adverse visual effects will be very low. The focus of their view is to the northeast over the golf course and the ocean views beyond.

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Figure 14: View looking towards the application site from The Lodge at Kauri Cliffs.

VIEWS FROM TAKOU BEACH

Viewpoints 2 and 3 are representative of the view from Takou beach looking south towards the application site.

Once again, this area is not easily accessible to the public due to the lack of public land access to this coastline. The visitors to the beach will most likely be residents from Takou Block, or other nearby private properties.

The view of the site from the beach varies as you move about. Generally, there would only be a few houses visible at any one time. They will be located just beyond the present vegetation cover located along the coastal escarpments. Most of the current dwellings are small scaled and single story, so not very visible. Future development within the General Coastal zoned part of the site, which is the area viewed from the beach will be clad in recessive building colours and the planting of specimen Pohutukawa trees will provide a vegetated backdrop and setting for future buildings to be viewed within.

All these factors assist with visually mitigating and integrating future built form into the landscape so that the potential adverse visual effects of the development proposal will be low.

WATER VIEWS TO THE EAST

Viewpoints 4 – 12 are representative of the views of the site while out on the water to the north and around to the east of the site. The view takes in the coastal escarpment backing the foreshore, and the LTO sites that are located around the end of Tuatua Terrace and Pipitia Terrace. Some small view shafts afford views back inland towards Te Rawhiti Road as well.

Most of the site is not visible from these locations (between 500-800m offshore), as most of the LTO sites are located inland, and not on the land that slopes down towards the water's edge.

The LTO sites that are located around the end of Tuatua Terrace and Pipitia Terrace are the most visually sensitive due to their greater visibility from the water and they are often viewed on the skyline.

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The coastal escarpment that these LTO's are located next to has been identified in the Northland Regional Policy Statement as an Outstanding Natural Landscape.

To minimise the potential adverse visual and natural character effects of future dwellings of up to 8m tall, it is proposed to implement building and landscape design guidelines that will manage aspects such as building colour and recommend the planting of specimen Pohutukawa trees to assist with providing a vegetated setting for the dwellings, linking them into the landscape.

As this land is Māori freehold land that is intended for Papakainga housing, the clustering of built from is anticipated and by definition is expected. The intention of the building and landscape design guidelines is not to screen buildings from the CMA, but to visually integrate them into the natural surroundings, thus minimising potential effects upon coastal natural character values.

With the implementation of proposed integration strategies future built development on the LTO sites can be integrated into the surrounding landscape whilst lowering the potential adverse visual, landscape and natural character effects to a low-moderate level.

VIEWS FROM THE FORESHORE

Viewpoint 13 is representative of the view from the rocky foreshore to the southeast of the site. This view depicts what a viewer walking around the rocks from Takou Bay or the small beach below the site will have. Their view changing as they pass by. It is likely that this viewing audience will be limited to the two adjoining landowners and residents of the Takou Block.

Again, most of the LTO sites are not visible as they are located inland. The sites near the end of Pipitia Terrace and some that are located around Tuatua Terrace are visible. Future built development upon the currently undeveloped LTO sites will intensify the presence of built form visible within this part of the site. This will create a distinct node of residential development upon this small section of the coastline located between the coastal settlements of Tapuaetahi and Matauri Bay.

As discussed within Section 3.2 of this report, this settlement pattern along the east coast of the Far North District is characteristic of how local communities have over the years formed an association with the land and water. In the case of the application site, and the Takou Block whanau it is an ancestral connection with their whenua.

To minimise the potential adverse visual effects of the consolidation of development upon the undeveloped LTO sites that can be viewed form the foreshore to the east of the site it is proposed to implement building and landscape design guidelines that will manage aspects such as building colour and recommend the planting of specimen Pohutukawa trees.

Figure 15 illustrates a view of the existing single-story house on Lot 19 and how the surrounding trees integrate the dwelling into the landscape even though it is visible on the skyline. As future dwellings located within the General Coastal zoned part of the site will be coloured in darker recessive tones, they will blend with the dark green vegetation so that built form will be relatively unobtrusive. Depending upon the ultimate height of the dwellings positioned on the 17 LTO sites located off the end of Tuatua Terrace and Pipitia Terrace the potential adverse visual effects will range from low to low-moderate.

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Figure 15: View of the existing house on Lot 19 from the farmland to the southeast.

PRIVATE FARMLAND TO THE SOUTHEAST

The farmland to the southeast of the application site is contained within two main land holdings that are accessed off the end of Otaha Road. The land directly adjoining the application site is a long narrow strip of land, Lot 2 DP 334790 and is a vacant farm block.

The land to the east of this is a large land holding, and is made up of farmland, and an area of horticulture that is under artificial cover (this can be viewed from the application site as the white wind netting). This land extends to and includes the land adjacent to Elliots Beach and Tahoranui River. There are several farmhouses and utility buildings on this land, with the owner's two residences located overlooking Elliots Beach, and as such they do not directly view the application site.

The viewpoints 14 - 19 illustrate a selection of views from the northeastern parts of these properties.

The foreground view takes in the openness and undeveloped nature of the pastoral farmland; this then transitions along a lineal line of the property boundary into the scrub and bush on the application site. Beyond this the existing dwellings located on the application site are visible on the crest of the ridge spurs.

As previously discussed with the use of recessive building colours and the planting of specimen Pohutukawa trees the potential adverse visual effects of development upon the site will be low.

DISTANT VIEWS TO THE SOUTHEAST

The view illustrated in **Figure 16** represents the view of the site from Purerua Road approximately 4km away.

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The Takou Block sits within a rural landscape that is dominated by pastoral paddocks, bush clad gullies and areas of forestry. The adjoining coastline is made up of sandy beaches and rocky outcrops.

Figure 16: View of the site from Purerua Road.

The existing development upon the site is visible, as will future development. The site already has a known and accepted Papakainga settlement character. The proposal is to expend on this to enable future generation to live on their whenua. The proposal includes methods to minimise the potential adverse landscape, visual and character effects on the surrounding environment. Due to these aspects and the long focal length from Purerua peninsula the potential adverse visual effects of the development will be very low.

5.4 Landscape and Rural Character Effects

Landscape character is the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects combinations of geology, landform, soils, vegetation, land use and human settlement.

The significance of the landscape and rural character effects is determined by the extent of the change, the sensitivity of the landscape, its context, existing levels of development surrounding the site and the contour of the land. It will also be dependent upon the presence or absence of screening and/or backdrop vegetation, and the characteristics of the future activities associated with the development on the application site.

Landscape effects take into consideration both changes to the physical landscape (physical effects) and the impact upon amenity values. Assessments therefore investigate the likely nature and scale of changes to individual landscape elements and characteristics, the consequential effect on the landscape character, and the perceptual responses that the proposal evokes.

Assessing landscape effects requires a thorough understanding of the landscape character and importance or value of the landscape. Using this baseline, a determination of landscape sensitivity and the magnitude of change which results from the proposed development can be made to determine the overall significance of landscape effects.

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Comment:

The combination of the existing land use of the site and the underlying landform and vegetation patterns have created the present character of the Takou Block. It is a character that includes whanau living on their whenua in close association with each other within a rural and coastal setting. The traditional Papakainga accommodates multi-generational communities where they live closely together as one.

The LTO sites have been located upon a part of the site that is already modified, and not within any areas that have been identified as having sensitive or significant landscape or ecological values.

To assist with integrating the proposed development on the property and retain landscape and rural character values of the site and surrounding landscape, building and landscape design guidelines are proposed. These will see the planting of specimen Pohutukawa trees upon the LTO's adjacent future dwellings, to assist with blending them into the landscape and enhancing visual amenity and landscape character so that the potential adverse effects upon these will be low.

5.5 Natural Character Effects

The quality a landscape portrays and its resulting "natural" character is dependent upon the degree of cultural modification, and how well the natural processes are functioning.

Natural character is a term used to describe the naturalness of an environment. The degree or level of natural character within an area depends on:

- The extent to which natural elements, patterns and processes are functioning, and

- The nature and extent of modifications to the ecosystems and landscape/ riverscape

The highest degree of natural character occurs where there is least amount of modification. The effect of different types of modification upon the natural character of an area varies with the context and may be perceived differently by different individuals.

Natural elements relate to the presence of unmodified land and water bodies and the lack of built form, while natural patterns relate to the perceived naturalness of the appearance of a landscape, which appears to be a result of nature rather than being man made. Natural processes relate to the ecological workings of a landscape, and how well these processes are functioning to maintain a natural appearance to the landscape.

The Ecological Report prepared by Wild Ecology Ltd. has provided a thorough assessment of the natural elements and processes of the site. The report provides recommendations as to how works associated with the proposed development should be carried out so that potential effects on ecological values are "*generally*

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low". Thus protecting the natural patterns, processes and elements that contribute to the natural character values of the site and coastal environment.

It is only the coastal escarpment along the northeastern part of the property that has been identified as having any special landscape values. This area has been identified as an Outstanding Natural Landscape (ONL). It is part of a wider area that extends to the southeast of the site along the coastal edge. No development is proposed within this area and the proposal will have a low effect upon the ONL providing buildings are recessively coloured and Pohutukawa trees are planted to provide a vegetated backdrop to dwellings when viewed from the CMA.

6.0 STATUTORY CONTEXT

6.1 Operative Far North District Plan

Within the Operative Far North District Plan (OFNDP) the property is located within the Rural Production and General Coastal zones as shown in Figures **17 and 18**. There are no Outstanding Landscape Features or Outstanding Natural Features identified on the site.

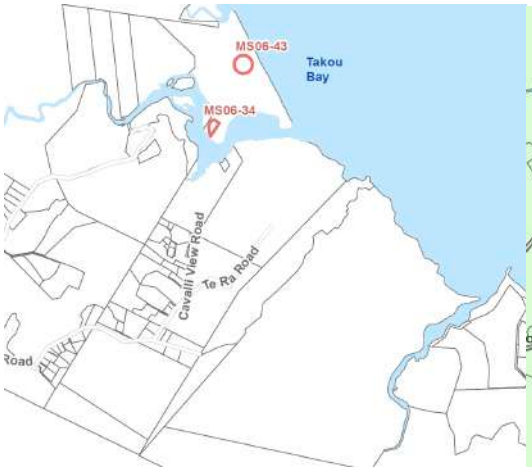

Figure 17: Resource Map

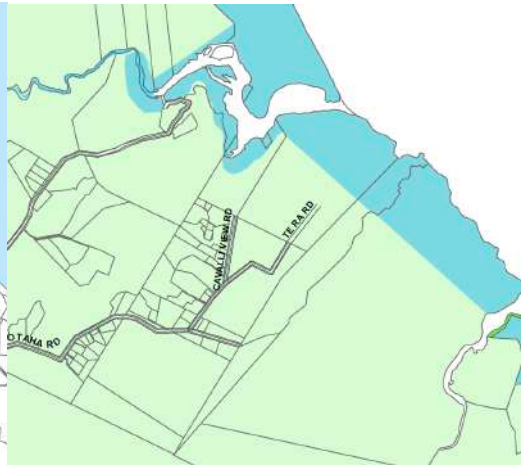

Figure 18: Zone Map

The expected environmental outcomes of development within the Rural Production Zone are an allowance of a wide range of activities providing the natural and physical resources are managed in a sustainable way. The zone also allows for the social, economic and cultural wellbeing of people and communities.

Following are the objectives and policies found in Chapter 8 - Rural Environment that have landscape and rural amenity relevance to this application.

CHAPTER 8 – RURAL ENVIRONMENT

8.3 Objectives

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

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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.

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

8.4 Policies

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

8.4.8 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.

CHAPTER 8.6 – RURAL PRODUCTION ZONE

8.6.3 Objectives

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

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

8.6.4 Policies

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

8.6.4.4 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.

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Comment:
The rural production zone is recognised as a dynamic rural environment, which is constantly changing to meet the needs of the district's communities. The zone allows for a wide range of activities to occur within it, the proposed Papakainga housing development is an appropriate development within the rural environment.

The development is of an appropriate intensity, scale and type within the Rural Production zone, it is not considered to be an incompatible use. This form of integrated development exists elsewhere within the Rural Production zone and can be accommodated whilst maintaining the rural character and visual amenity values of the wider rural environment.

This proposal facilitates integrated development of the site and enables people and communities to provide for their social, economic, and cultural well-being. The landscape integration plantings within the development will maintain and enhance rural amenity values and ensure adverse effects low.

8.6.5.2.2 PAPAKAINGA HOUSING

In considering an application under this provision, the Council will restrict the exercise of its control to the following matters:

(i) the number and location of dwellings;
(ii) the location and standard of access;
(iii) screening and planting

Comment:
The number and location of the dwellings is detailed in the previous sections of this report and plans prepared by Laminata. The location and standard of access is detailed in the Chester Consultants Ltd report and plans.

The proposed development will not be screened, however proposed plantings of Pohutukawa trees will provide a vegetated setting, and soften built development, which will enhance visual amenity and rural and coastal character values.

8.6.5.4.2 INTEGRATED DEVELOPMENT

(f) (vi) the extent to which areas of open space, reserves, natural vegetation and other amenities are already provided by the land-owning group or other whanau and hapu lands in the vicinity.

Comment:
The large scale of the property provides ample areas of open space; the Marae is located on a reserve and there are other reserves located within the development. The LTO's are surrounded by open space and areas of indigenous vegetation. The development has access to Takou Beach, Takou River and other land that is owned by Takou Trust.

Following are the relevant policies and objectives found in Chapter 10 that have relevance to this development.

CHAPTER 10 – COASTAL ENVIRONMENT

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10.3 Objectives

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

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

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

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

10.4 Policies

10.6.4.1That the Council only allows appropriate subdivision, use and development in the coastal environment. Appropriate subdivision, use and development is that where the activity generally:

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

10.6.4.2That sprawling or sporadic subdivision and development in the coastal environment be avoided through the consolidation of subdivision and development as far as practicable, within or adjoining built up areas, to the extent that this is consistent with the other objectives and policies of the Plan.

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

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(a)the siting of buildings relative to the skyline, ridges, headlands and natural features;
(b)the number of buildings and intensity of development;
(c)the colour and reflectivity of buildings;
(d)the landscaping (including planting) of the site;
(e)the location and design of vehicle access, manoeuvring and parking areas.

The following are the relevant objectives found under the 10.6 General Coastal Zone that are relevant to this development.

10.6 - GENERAL COASTAL ZONE

10.6.3.1To provide for appropriate subdivision, use and development consistent with the need to preserve its natural character.

10.6.3.2To preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development.

10.6.3.3To manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations.

Following are the relevant landscape policy's.

10.6.4.1That a wide range of activities be permitted in the General Coastal Zone, where their effects are compatible with the preservation of the natural character of the coastal environment.

10.6.4.2That the visual and landscape qualities of the coastal environment be protected from inappropriate subdivision, use and development.

10.6.4.3Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to S6 matters, and 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;

10.6.4.5 Māori are significant land owners in the General Coastal Zone and therefore activities in the zone should recognise and provide for the relationship of Māori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.

10.6.4.6The design, from, location and siting of earthworks shall have regard to the natural character of the landscape including terrain, landforms and

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indigenous vegetation and shall avoid, remedy or mitigate adverse effects on those features.

Comment:

The natural character of the coastal environment already accommodates the present settlement pattern located on the site; the proposed Papakainga development will expand on this.

The natural character values of the coastal environment will be maintained through the implementation of the ecological recommendations from Wild Ecology and the use of recessive building colours, as well as the planting of Pohutukawa trees around future dwellings on each LTO site.

6.2 Proposed Far North District Plan (PFNDP)

The PFNDP (PDP) was publicly notified by FNDC on 27th July 2022. The property is zoned Māori Purpose - Rural and has a Coastal Environmental Overlay, as shown in **Figure 19**.

The coastal escarpment of the site have been identified as Outstanding Natural Landscape.

Figure 19: Proposed District Plan Map

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"The Māori Purpose zone provides for the use and development of Māori land which can support the social, cultural and economic aspirations of tangata whenua and enable a range of activities to be undertaken, such as marae, papakāinga, and economic activities which reflect Māori customs and values, while enabling tangata whenua to exercise kaitiakitanga".

The Objectives and Policies for the Māori Purpose Zone are as follows.

Objectives	
MPZ-O1	The viability of the Māori Purpose zone is ensured for future generations.
MPZ-O2	The Māori Purpose zone enables a range of social, cultural and economic development opportunities that support the occupation, use, development and ongoing relationship with ancestral land.
MPZ-O3	Use and development in the Māori Purpose zone reflects the sustainable carrying capacity of the land and surrounding environment.

Policies	
MPZ-P1	Provide for the use and development of ancestral Māori land administered under Te Ture Whenua Māori Act 1993.
MPZ-P2	Enable a range of activities on Māori land in the Māori Purpose zone including marae, papakāinga, customary use, cultural and small-scale commercial activities where the adverse effects can be avoided, remedied or mitigated.
MPZ-P3	Provide for development on Māori land where it is demonstrated: a. it is compatible with surrounding activities; b. it will not compromise occupation, development and use of Māori land; c. it will not compromise use of adjacent land or other zones to be efficiently and effectively used for their intended purpose; d. it maintains character and amenity of surrounding area; e. it provides for community wellbeing, health and safety; f. it can be serviced by onsite infrastructure or reticulated infrastructure where this is available; and g. that any adverse effects can be avoided, remedied or mitigated.
MPZ-P4	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. consistency with the scale, density, design and character of the environment and purpose of the zone; b. the location, scale and design of buildings and structures; c. the positive effects resulting from the economic, social and cultural wellbeing provided by the proposed activity. d. at zone interfaces: i. any setbacks, fencing, screening or landscaping required to address potential conflicts; ii. managing reverse sensitivity effects on adjacent land uses, including the ability of surrounding properties to undertake primary production activities in a rural environment; e. the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity; f. the adequacy of roading infrastructure to service the proposed activity; g. managing natural hazards; h. any loss of highly productive land; i. adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and j. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

Comment:

This assessment has demonstrated that the proposed Papakainga use is compatible with surrounding activities and will not compromise the underlying zone. The development will maintain the character and amenity of the surrounding area.

The scale, density and design of the proposal has considered the character of the landscape it will be set within. The proposed new and relocated dwellings have been positioned where they can be assimilated into the landscape using landscape amenity plantings. The design of the development will not limit the use of the surrounding properties or adjoining land uses.

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The development will contribute to the economic, social, and cultural well-being of tangata whenua by enabling residential land use on Māori freehold land.

The proposal is consistent with the matters set out in objectives and policies of the Māori Purpose Zone.

6.3 Northland Regional Policy Statement (RPS)

In 2012, the Northland Regional Mapping Project ("Mapping Project") was undertaken by the Northland Mapping Group (on behalf of the NRC). The purpose of the Mapping Project was to determine the delineation of the Coastal Environment, and the natural heritage areas within the region comprising Outstanding Natural Landscapes ("ONL").

Within the RPS a large proportion of the application site has been mapped as being within the Coastal Environment. The land that is to the southwest of the main access road within the inland portion of the site has been excluded from the Coastal Environment, as shown on **Figure 20** below.

Figure 20: RPS map showing the extent of the Coastal Environment

An area along the northeastern coastal escarpment has been recorded as an Outstanding Natural Landscape (ONL) – Takou Bay Coast. This area extends from the lagoon at Taronui Bay to just northwest of the site upon Takou Beach, before the Takou River exists into the ocean.

The landscape characterisation of this ONL is "A *landscape unit that is especially focused upon the characteristics of the coastal margin and related pockets of indigenous vegetation. This portion of shore involves a more gentle and less elevated*

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flank than most of the adjacent areas. The coastal form contains a sequence of small estuaries / stream mouths; pocket beaches at Tapuwaitahi, Taronui and the mouth of the Tahoranui River; minor rocky headlands; and fringing reefs. The very distinctive lagoon at the northern end of Tapuwaitahi is a particularly unusual and evocative feature of this unit, particularly at low tide when its formation is most clearly expressed".

Policy 4.6.1 Managing effects on the characteristics and qualities natural character, natural features and landscape.

(1) In the coastal environment:

a) Avoid adverse effects of subdivision use and development on the characteristics and qualities which make up the outstanding values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes.

b) Where (a) does not apply, avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of subdivision, use and development on natural character, natural features and natural landscapes.

Methods which may achieve this include:

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

(ii) In areas of high natural character, minimising to the extent practicable indigenous vegetation clearance and modification (including earthworks/disturbance, structures, discharges and extraction of water) to natural wetlands, the beds of lakes, rivers and the coastal marine area and their margins; and

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

Comment:

Although the existing development on the site and the proposed Papakainga housing development is located outside of the ONL, the LTO sites on the northeastern side of Tuatua and Pipitia Terrace are located close to it, as shown in **Figure 21** below and in **Appendix 6** - Landscape Overlays.

The recommendations within the Wild Ecology report will protect the natural elements, landforms and processes of the site and ONL. The use of recessive building colours in the General Coastal zoned part of the site and the use of Pohutukawa trees upon the LTO's adjacent to bult form will provide a vegetated setting for the Papakainga development, so that there will be low effect upon the nearby ONL.

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Figure 21: View of the site around Tuatua and Pipitia Terrace, overlooking the ONL.

The following policy in Chapter 5.1 Regional Form has relevance to the proposal.

5 Policies and methods – Regional Form and Infrastructure

5.1.1 Policy – Planned and co-ordinated development

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

> *(g)Maintains or enhances the sense of place and character of the surrounding environment expect where changes are anticipated by approved regional or district council growth strategies and/or district or regional plan provisions.*

Comment:

The proposed development is for Papakainga housing located within an environment that already contains a similar settlement. Clustering of residential houses within this environment forms a key part of the present character of this landscape.

The proposed development will maintain the existing sense of place through the coordinated design approach and landscape integration plantings.

6.3 New Zealand Coastal Policy Statement

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The northern most 300m of the property is located within the General Coastal zone. As discussed above a large proportion of the site is located within the Coastal Environment, as shown in **Appendix 6** – Landscape Overlays.

The following policies are of relevance. Policy 6 - Activities in the coastal environment, Policy 13 - Preservation of natural character, and Policy 15 Natural features and natural landscapes.

Policy 6 Activities in the coastal environment
(1) In relation to the coastal environment:

(f) consider where development that maintains the character of the existing built development should be encouraged, and where development resulting in a change in character would be acceptable;
(i) set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment;

Policy 13 Preservation of natural character
(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and
(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes and patterns;
(b) biophysical, ecological, geological and geomorphological aspects;
(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;
(d) the natural movement of water and sediment;
(e) the natural darkness of the night sky;
(f) places or areas that are wild or scenic;
(g) a range of natural character from pristine to modified; and
(h) experiential attributes, including the sounds and smell of the sea; and their context or setting.

Policy 15 Natural Features and natural landscapes
To protect the natural features and natural landscapes (including Seascapes) of the coastal environment from inappropriate subdivision, use and development.

(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and
(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment;

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Comment:

As described in the above sections the proposal has been designed in a way so that it is an appropriate activity within the coastal environment and on this property. The ecological recommendations proposed recessive building colours in the General Coastal zoned part of the site, and use of Pohutukawa trees on each LTO site will ensure that the natural character values of the site and surrounding coastal environment are maintained.

7.0 LANDSCAPE INTEGRATION

7.1 Landscape Plantings

Landscape integration plantings are proposed to assist with integrating the proposed Papakainga into the landscape. This will maintain visual amenity, rural and natural character values and minimise any potential adverse visual and landscape effects.

The Landscape Plans contained in **Appendix 5** illustrate the proposed landscape plantings that will integrate the proposed 12 new dwellings and three relocatable dwellings within 16 LTO areas (Lots 8, 10, 18, 23, 25, 29, 37, 41, 60, 62, 78, 93, 48, 58, and 79).

Future papakainga development upon all the other undeveloped LTO sites, or LTO sites that are redeveloped (and which don't already contain specimen trees), the following shall apply:

The proposed landscape integration plantings for future development on the LTO sites within the Papakainga shall include:

A. Screening water tanks using plantings such as (but not limited to), Passionfruit Vine or Feijoa trees.
B. Planting of 4 to 6 Pohutukawa trees within the LTO area around any future dwellings placed on LTO sites 1 – 17,
C. Planting of 2 to 3 Pohutukawa trees within the LTO area around any future dwellings placed on all other LTO's.

7.2 Building Design Guidelines

The Development Plans contained within **Appendix 2**, prepared by Laminata detail the proposed building design guidelines, specifically the colours of the proposed new dwellings.

The colour palette proposed for the dwellings located upon the LTO sites within the General Coastal zone is Cinder Block Grey with a LRV of 14% for the exterior cladding. The roof colour will be Flaxpod with a LRV of 7%. The joinery will be Aluminium in Flaxpod.

Laminata have proposed the following building colours for dwellings located within the Rural Production zoned part of the site. They will be a mix of the colour options and typologies shown in **Figure 11 and Appendix 2**. In addition to Cinder Block Grey and Flaxpod these include but are not limited to Tensile Grey (LRV 39%), Sandstone Grey (LRV 27%), Porcelain Blue (LRV 43%), and Grey Friars (LVR 10%).

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The proposed colour pallets and Light Reflectance Values for future development on the yet to be developed LTO sites (or any redeveloped sites) within the General Coastal zoned part of the site shall be selected from the A and B Group of the BS 5252 colour chart (or similar) as follows:

- In the General Coastal zone, the light reflectance values for the exterior roof and walls colours shall not exceed 30%.

8. CONCLUSION

This assessment has provided an understanding of the existing landscape, visual amenity and natural character values of the site and surrounding landscape, and the visual components of the Papakainga development proposal.

The enabling earthworks associated with the proposal will generate low adverse landscape and visual effects.

The proposed dwellings are small scale, and appropriately coloured and located within a part so the site that is already modified. Landscape integration plantings are proposed that will provide a vegetated setting for the proposed dwellings and the future placement of dwellings on the other yet to be developed LTO sites.

The overall character and use of the of the site will not change, and there will be no indigenous vegetation removal associated with the proposal, with no development located within the ONL area. Landscape and rural character effects of the proposed papakainga are assessed as low. The potential effect upon the natural character values of the coastal environment is assessed as low.

Most of the proposed papakainga development is not very visible due to the lack of easy access to the surrounding coastline by the public. This greatly limits the number of potential viewers who can see the development.

The viewing audience who can see the proposal will view the proposed development from longer focal lengths and within the setting of an established settlement papakainga pattern.

Potential visual effects from Takou beach are assessed as low. Potential visual effects from the neighbouring land to the east and southeast are assessed as low, as there is already an established character of the site, and there are no neighbouring dwellings close by that directly overlook the application site.

Generally, the visual effects of the proposed papakainga development will be low. Within the areas located off the end of Tuatua and Pipitia Terraces the potential adverse visual effects have been assessed as low-moderate. This area is viewed from a visual catchment that is located along the foreshore to the southeast and from the water to the east of the site (while located close in and within 500m of the shoreline).

As there is the potential for buildings to be up to 8m tall, and as the land slopes down towards the foreshore this increases the visibility of future built form placed on these lots and the likelihood of them being viewed on the skyline. As such future development within this area when viewed from that visual catchment has the potential to generate low-moderate adverse visual effects if buildings are 8m tall.

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To assist with the integration of future development upon the undeveloped LTO sites within the Takou Bay papakainga building and landscape design guidelines are proposed. This assists with keeping the potential landscape, visual, rural and natural character effects at a low level.

The development is consistent with the intent of the relevant landscape objectives and policies of the OFNDP, PFNPD, RPS and NZCPS.

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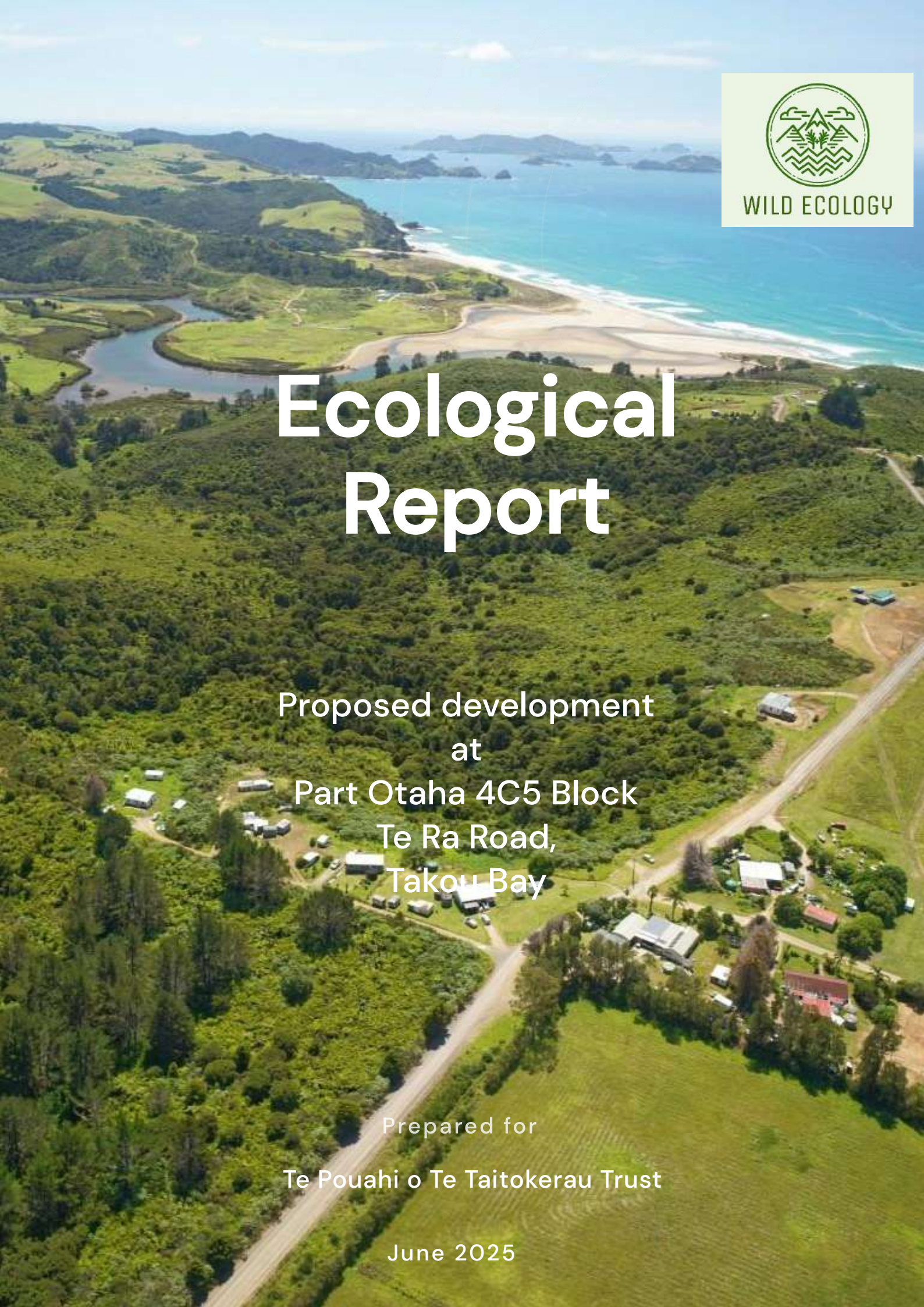

WILD ECOLOGY

Ecological Report

Proposed development
at
Part Otaha 4C5 Block
Te Ra Road,
Takou Bay

Prepared for

Te Pouahi o Te Taitokerau Trust

June 2025

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CONTENTS

1.0 INTRODUCTION

1.1. Background and project description

Te Pouahi o Te Taitokerau Trust ('the Applicant') engaged Wild Ecology to prepare an Ecological Report for a proposed development of a site located at Te Ra Road, Takou Bay (Part Otaha 4C5 Block) ('the site') under the provisions of the Far North District Plan (Operative).

The proposal seeks to establish 94 Licence to Occupy (LTO) areas, each allowing for the development of one papakāinga dwelling (see proposed Site Plan prepared by Laminata under Figure 1 with relevant ecological overlays included by Wild Ecology). This includes:

- The construction of 12 new dwellings and the placement of three relocatable dwellings across 15 specific LTO areas (areas 8, 10, 18, 23, 25, 29, 37, 41, 60, 62, 78, 93, 48, 58, and 79).
- In the remaining LTO areas, provision will be made for the construction of one papakāinga dwelling per area. Where existing developments are present, this consent enables future redevelopment to include up to one new papakāinga dwelling per LTO area.
- The formalisation and construction of internal private roads.
- Completion of enabling earthworks required to support the above development.

The layout of the proposed development has been comprehensively designed in consultation with Wild Ecology to ensure that the development avoids, minimises or mitigates potential adverse effects on the indigenous habitats and species present within the site boundaries and wider surrounds. This is accomplished through sensitive development design, utilizing historically cleared areas and steering development away from high ecological value areas which are deemed to be on Significant Natural Area (SNA) value. Landscape/amenity planting is proposed to connect and expand natural features as described within the Landscape Plan prepared by Hawthorn Landscape Architects.

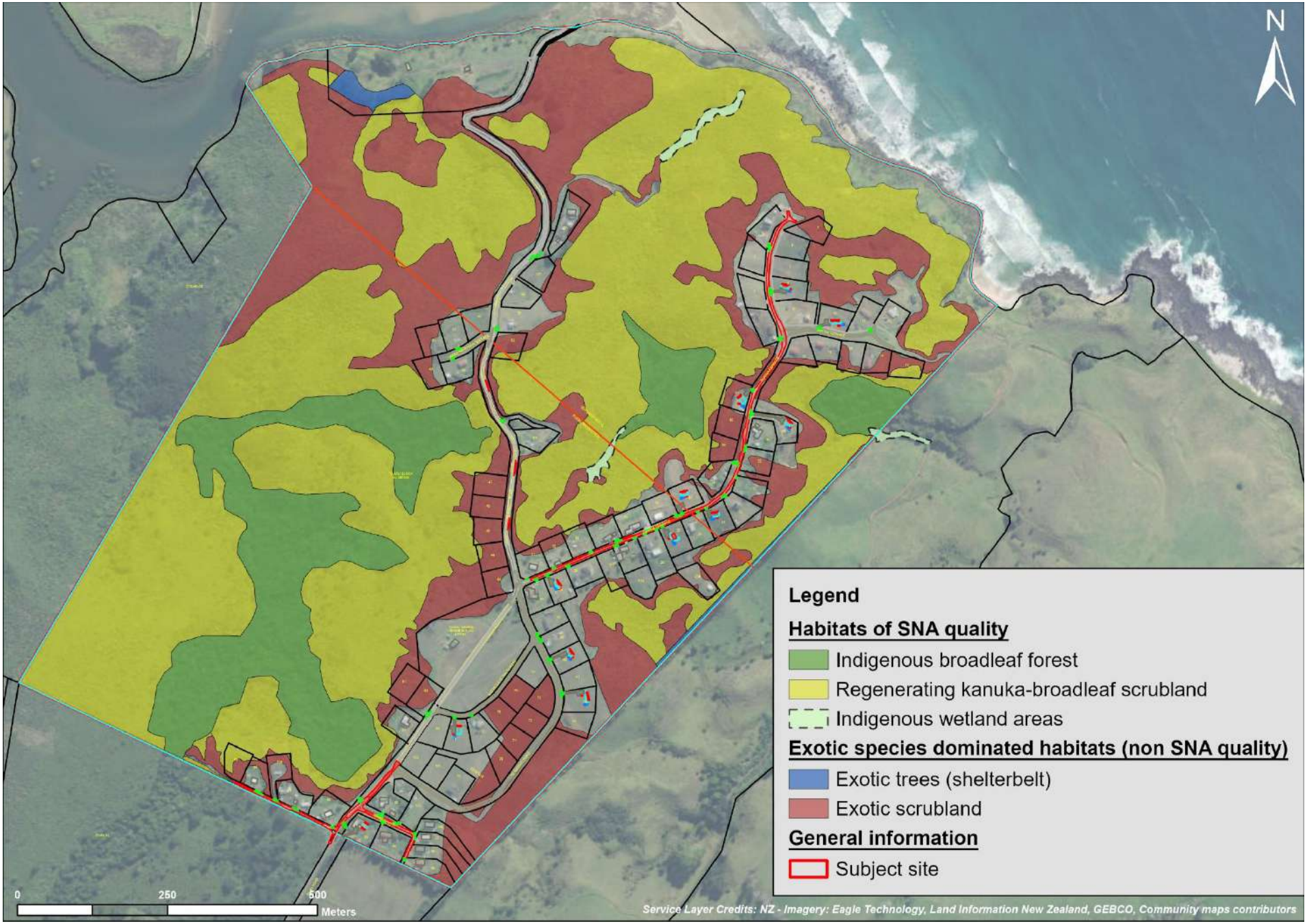

Figure 1: Showing proposed site development plan prepared by Laminata with relevant ecological overlays by Wild Ecology

1.2. Purpose and Scope

The purpose of this Report is to provide a baseline assessment of the ecological features contained within the proposed development site boundaries and immediate surrounds. This report also considers whether the future intensified development of the site can occur in a manner consistent with the relevant ecological provisions in relation to local, regional and national plans, policy statements and regulations associated with the preservation of indigenous habitats and species.

This report identifies the potential adverse effects of the proposed development on ecological values and the degree to which significant adverse effects can be avoided, remedied, mitigated or offset. Both constraints and opportunities relating to the site's ecological values are identified and discussed.

2.0 METHODOLOGY

2.1. Desktop Review

The desktop investigation included a review of scientific literature (published and unpublished), the Far North District Plan and associated ecological site information, and relevant websites. Ecological databases were also accessed. These included:

- Retrolens historic aerial imagery
- DOC Bio-web Herpetofauna database;
- DOC Bat database;
- iNaturalist New Zealand;
- LENZ Threatened Environments Classification;
- Land Use Classification;
- Baseline Highly Productive Land – Manaaki Whenua;
- Wilderlab eDNA dababase;
- New Zealand Freshwater Fish Database (NZFFD).

2.2. Site Investigation

The site and surrounding areas were visited on the 6th March 2025 and a general walkover was conducted over the entire site with terrestrial and aquatic features identified. The natural features were surveyed and recorded using a GPS unit (Trimble DA2).

Vegetation was recorded and classified in general accordance with Singers *et al.* (2017). Watercourses on site and immediate surrounds were classified in general accordance with criteria outlined in the Proposed Regional Plan for Northland (February 2024). Wetland delineation was carried out during a site visit on 6th March 2025 in general accordance with the Ministry for the Environment (MfE) Wetland delineation protocols (2022). There were no rainfall events within the 48 hours prior to the 6th March 2025.

The following fauna surveys were conducted:

- Opportunistic bird surveys were conducted at various parts of the site to record avifauna (bird) present on site.
- eDNA stream survey using a Wilderlab peg-mount passive sampling kit;
- Basic assessment of habitat values for native lizards (skinks and geckos) and bats.

2.3. Evaluation of Ecological Value (NRPS)

Rule 12.2.5.6 of the Far North District Plan (Operative) requires that significance of indigenous vegetation and habitats is assessed by reference to policy 4.4.1 and the significance criteria as outlined under Appendix 5 of the Northland Regional Policy Statement (NRPS (2016)).

2.4. Evaluation of Ecological Effects

As a part of the ecological assessment, potential ecological effects associated with the subdivision consent and subsequent site development on both terrestrial and aquatic values on site were described and assessed. Where necessary, mitigation measures have been outlined to ensure that the site's active development does not result in adverse effects on the environment. The format of this generally follows that of Ecological Impact Assessment (EcIA) Guidelines (EIANZ 2018).

3.0 SITE DESCRIPTION

3.1. Site description and location

The site is located approximately 20km north of Kerikeri (Figure 2). It is zoned as part "Rural Production' and part 'General Costal' under Far North District Plan (Operative) (Figure 3) and Māori Purpose – Rural under the proposed Far North District Plan (Figure 4). The site spans around 135.53 hectares and features a mix of exotic pastureland on the flatter, elevated ridgelines, remnant forest in the gullies, native regenerating scrubland along the slopes, and exotic vegetation typically found at the edges, on the interface between where indigenous habitats meet the exotic pastureland (Figure 5).

Figure 2: Showing the site's location in relation to Kerikeri

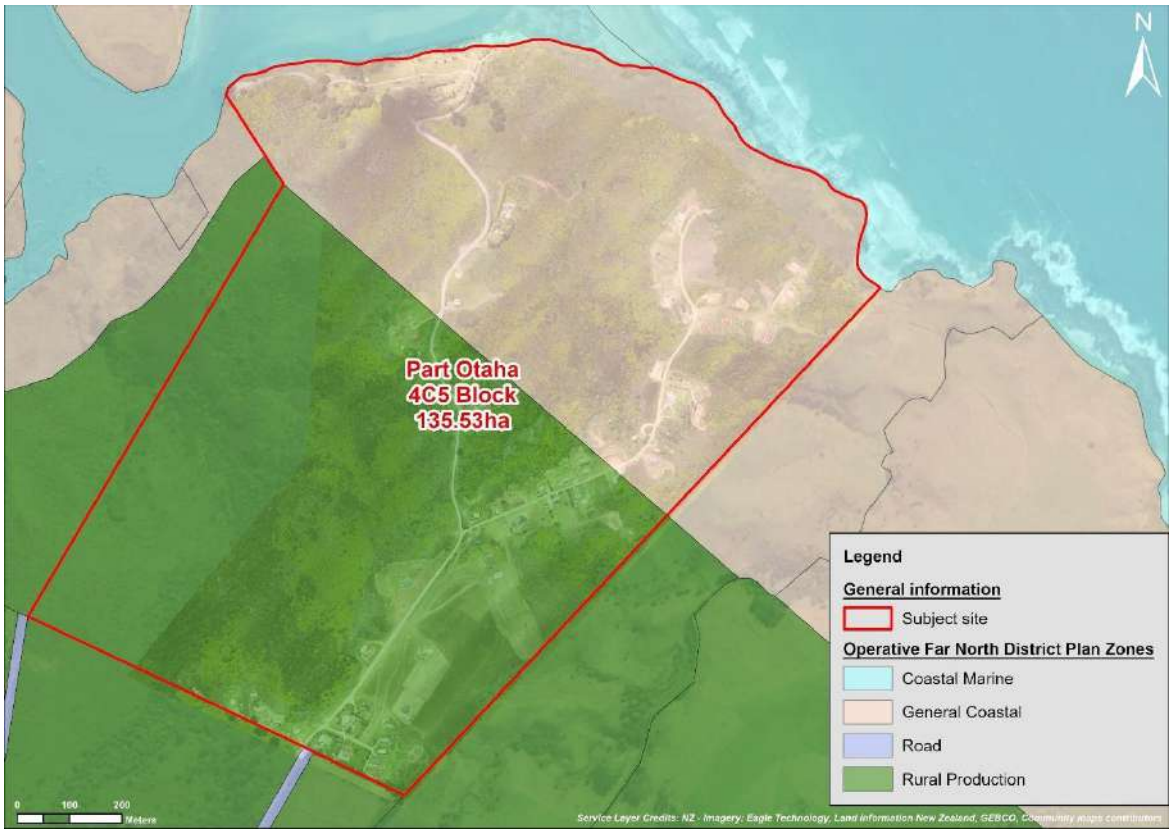

Figure 3: Showing the subject site with oFNDP zoning overlay

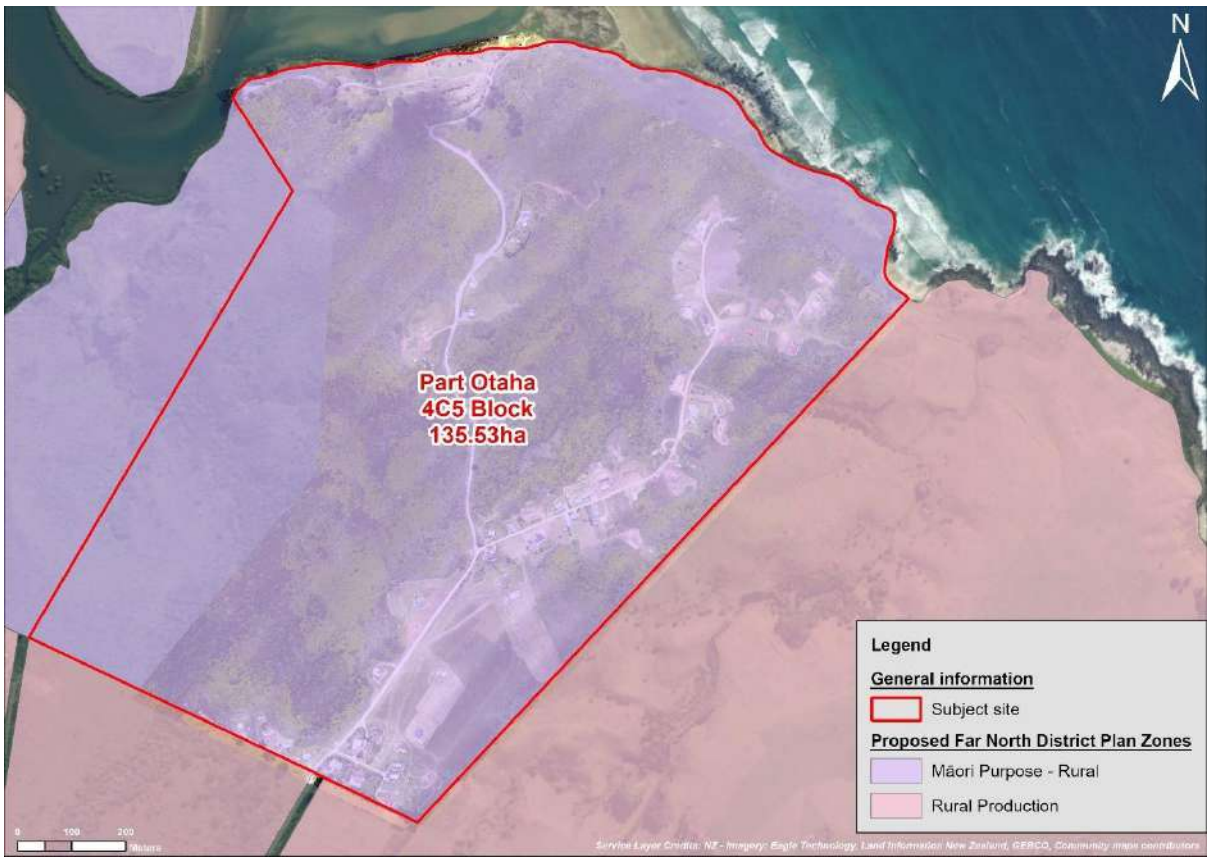

Figure 4: Showing the subject site with the proposed FNDP zoning overlay

Figure 5: Showing the general characteristics of the site – site generally slopes in a northerly direction towards Takou Bay

3.2. Historic land use

Originally the vegetation cover on site and the surrounding area would have been a continuation of the Takou Bay ecotone transitional area between marine and terrestrial environments.

While the site at current day contains some modified tracts of terrestrial and aquatic habitats, the sites vegetation cover historically would have been best represented by kauri, podocarp, broadleaved forest (WF11) along the sites more elevated southern aspect and taraire, tawa podocarp forest (WF9) along the majority of the remainder of the site grading into spinifex, pingao grassland/sedgeland (DN2) immediately north to the site (Singers (2018) (Figure 6).

Anthropogenic land use activities have significantly modified and reduced the extent and quality of the original ecosystem types that would have likely once extended over the area, through conversion into pastoral land, with only modified indigenous vegetation types present on site and immediate surrounds at current day, largely constrained to the steeper gully systems and steep slopes which are not suitable for agricultural use or dwellings.

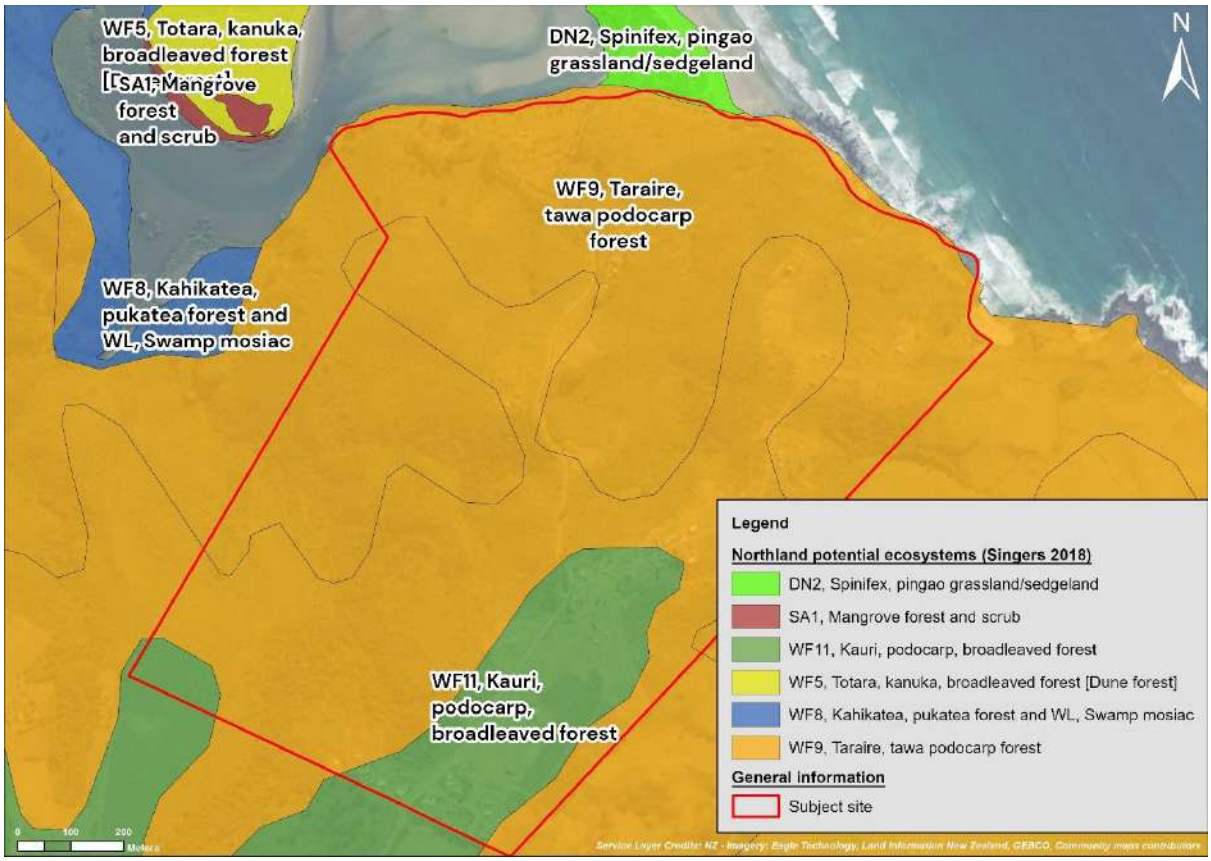

Figure 6: Northland potential ecosystem classification (Singers 2018)

The earliest available historical aerial imagery from 1950 (Figure 7), sourced from Retrolens, shows that most of the site's upper, flatter ridgelines and surrounding land were cleared, likely for agricultural purposes. However, patches of indigenous remnant vegetation are visible in the steeper, less accessible gully systems. Distinct drainage patterns can also be seen, flowing through the central area of the site towards Takou Bay.

Between 1950 and 1979, it is possible that the site had been left in fallow, as vegetation cover appears to increase on site, albeit it is likely the site is still actively farmed (Figure 8). Between

1979 and 2000 (Figure 9), the ongoing decline in agricultural activity seems to have allowed the site to remain fallow, leading to the extensive re-establishment of both indigenous and exotic vegetation. During this period, several units were also established on the site.

This trend persists from 2000 to 2023-2024, with overall vegetation cover (both indigenous and exotic) continuing to expand, now covering the majority of the site. Additionally, new dwellings are visible, having been established on the site (Figure 10).

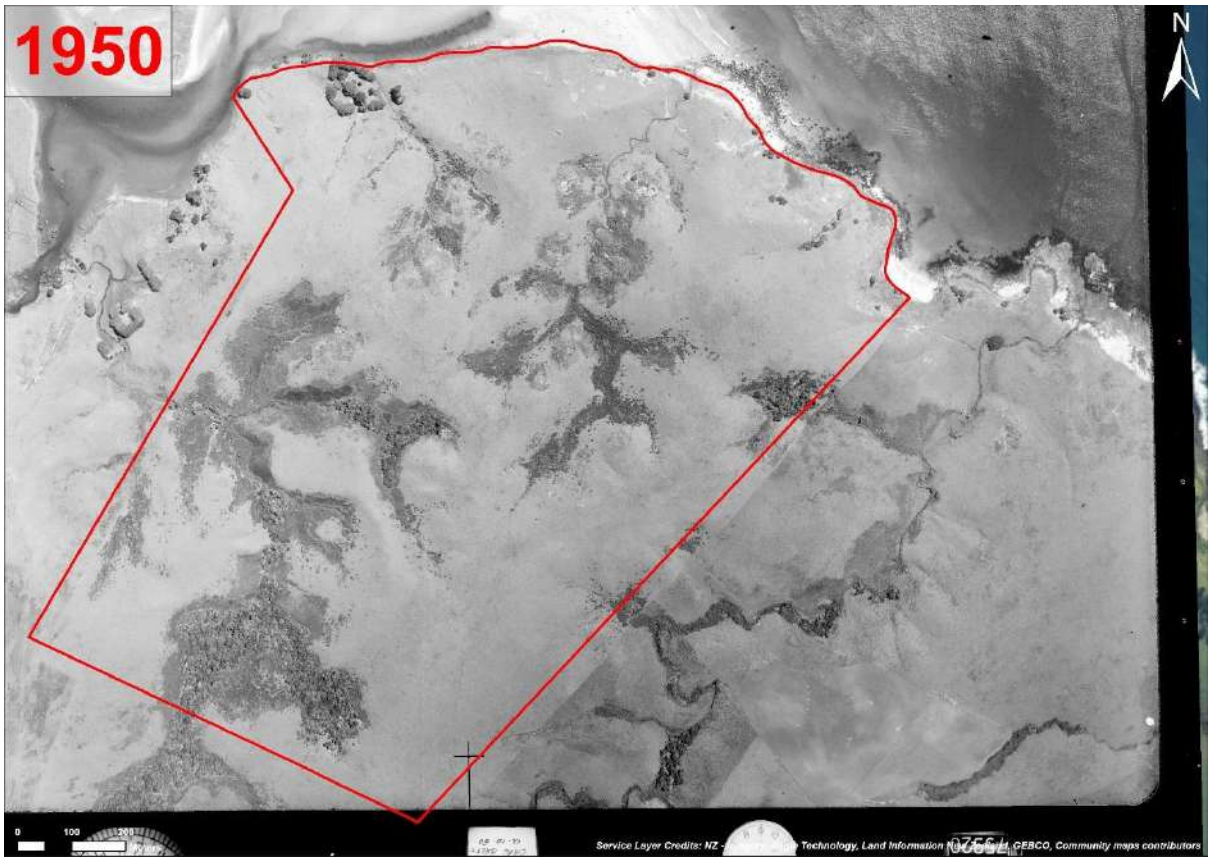

Figure 7: Showing the site and surrounds in 1950 (Source: Retrolens)

Figure 8: Showing the site and surrounds in 1979 (Source: Retrolens)

Figure 9: Showing the site and surrounds in 2000 (Source: LINZ)

Figure 10: Showing the site and surrounds in the most recent aerial imagery from 2023-2024 (Source: LIDAR and drone imagery)

3.3. Site characteristics

3.3.1. General

The site generally has a rolling topography and falls roughly in a northerly direction from the site's southern aspect towards Takou Bay. The geology of the site is characterised by Kerikeri Volcanic Group Late Miocene basalt of Kaikohe - Bay of Islands Volcanic Field of basalt lava, volcanic plugs and minor tuff (GNS 2025).

A mixture of pungaere gravelly friable clay (PG) and okaihau gravelly friable clay (OK) soil extends over the site (Figure 11). These soils tend to have friable topsoils that are highly susceptible to leaching, which can strip nutrients and result in a challenging environment for plant growth. While these soils tend to drain freely and require few drainage improvements, their fertility is often limited, and they can be prone to drought due to shallow root systems and the presence of toxic subsoils. The friable, brittle nature of these soils means they are at risk of compaction and erosion, particularly under cultivation or livestock pressure. Erosion types, such as shallow slipping, sheet erosion, and rill erosion, are common, especially on slopes where water runoff exacerbates soil loss. Management practices such as careful crop rotation, liming, and controlling grazing are crucial for maintaining soil health and preventing further degradation. Additionally, erosion control measures, such as planting on contour and mulching, can help mitigate these risks, ensuring that the land remains productive while preserving its structure.

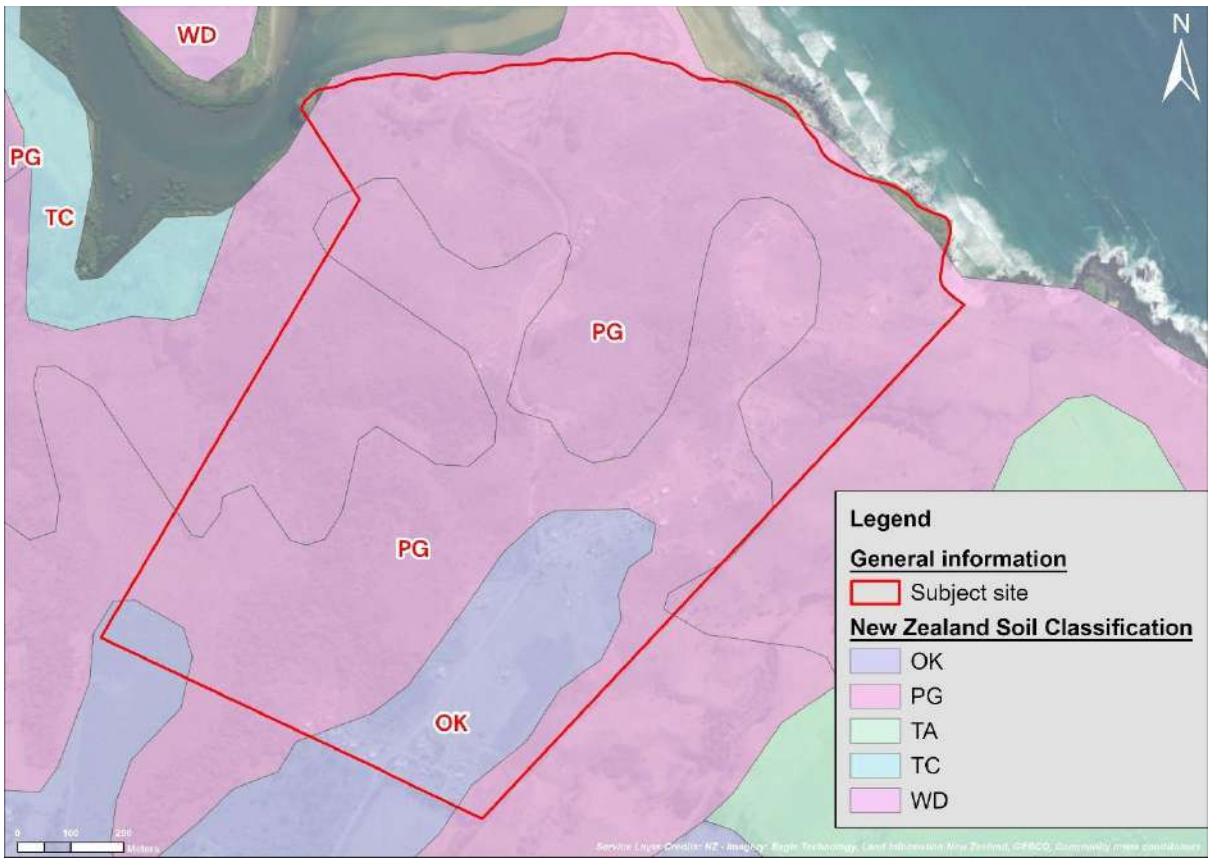

Figure 11: The site generally consists of gravelly friable clay soils which are typically prone to erosion

3.3.2. Vegetation

The indigenous vegetation on the site is primarily confined to broadleaf forest remnants within the gullies, along with areas of regenerating kānuka–broadleaf scrub. Three individual wetlands are also present, located in natural topographic depressions deep within the gully systems. The broader transition zone between native vegetation and cleared or open areas is largely dominated by exotic scrubland. This is routinely managed and cleared to support low-intensity farming and to control invasive weed species—such as gorse and woolly nightshade—which are widespread across the site.

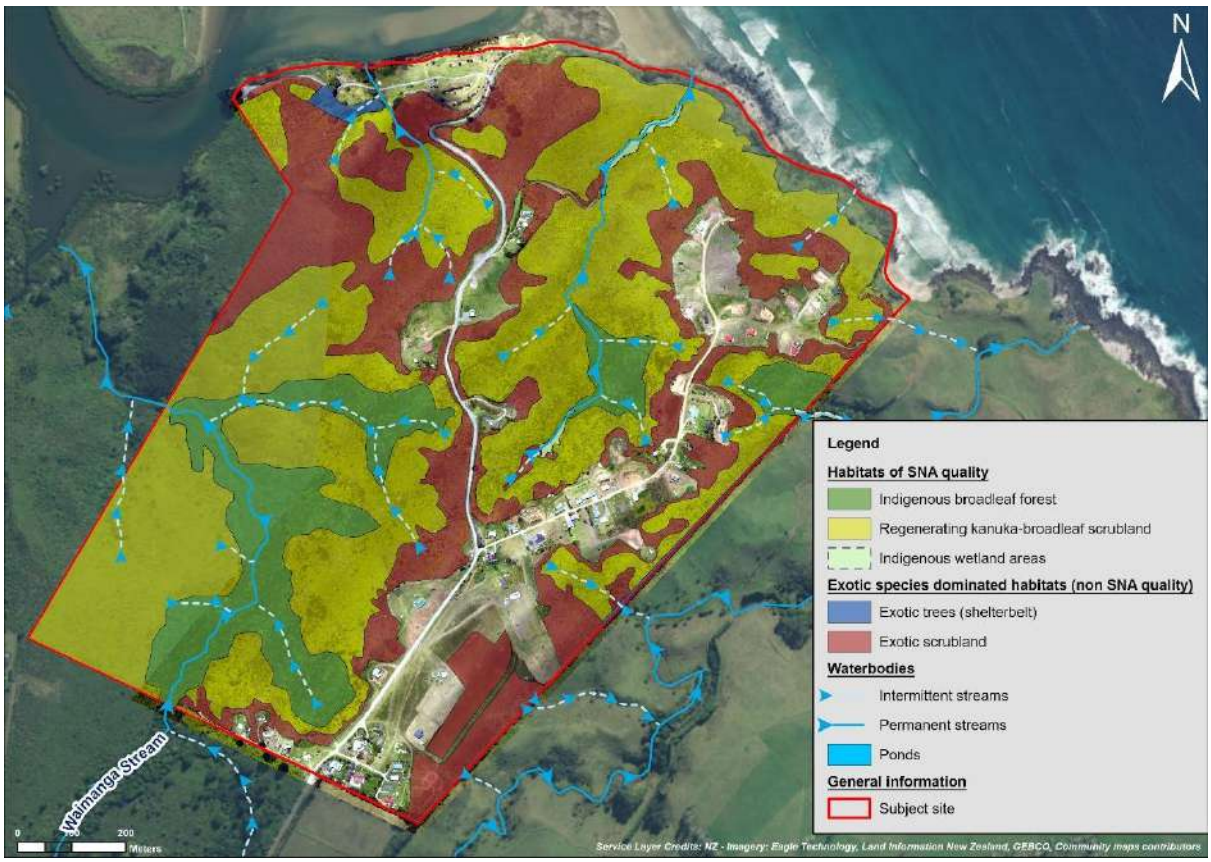

Figure 12: Showing the general hydrological patterns and ecological features as observed on site during site field visits

3.3.3. Aquatic

The site contains a network of both intermittent and permanent streams, which predominantly flow toward Takou Bay (Figure 13). These watercourses generally follow natural drainage patterns and have experienced minimal modification, aside from a few isolated areas in the northern part of the site where culverts have been installed to provide access to the beach and boat ramp. Overall, the freshwater ecosystems within the site are considered to be of high ecological value and in good condition.

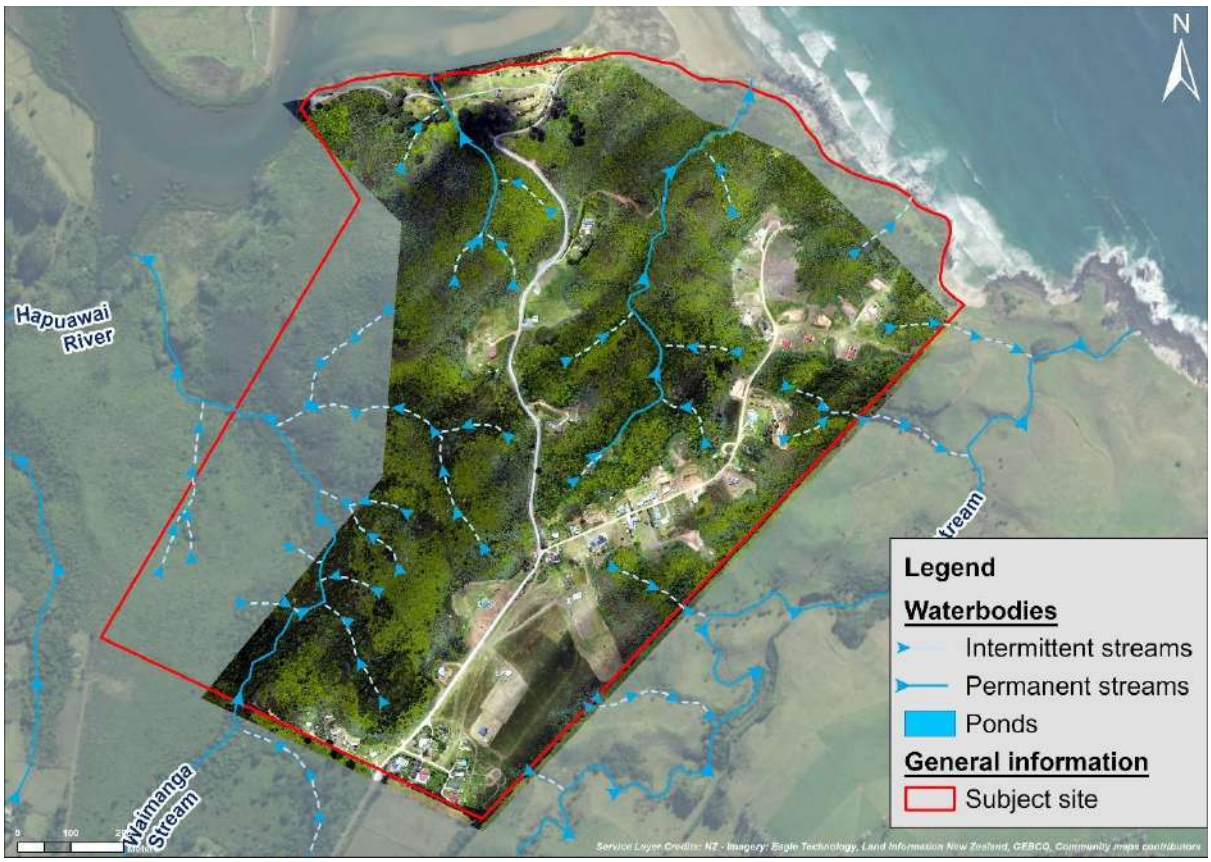

Figure 13: Showing the general hydrological patterns

3.3.4. Wider ecological context

The site is situated within the Kerikeri Ecological District. A pocket of indigenous bush extending along the western valley of the site is classified as a Protected Natural Area (PNA) Waimanga Stream (P04/089) (Figure 14). P04/089 is described by Booth (2005) remnants of forest in which taraire, totara and towai are common. Rimu, kahikatea, puriri, karaka, nikau and rewarewa are also present. According to Booth (2005) the site supports a number of 'At Risk' flora and fauna including but not limited to NI brown kiwi. The proposed Significant Natural Area (SNA) for the Waimanga Stream covers a more limited portion of existing vegetation within the site boundaries compared to the existing Protected Natural Area (PNA) mapping. Notably, the proposed SNA does not appear to include other areas on site that are also likely to meet SNA criteria. Overall, while both the existing PNA and proposed SNA overlays capture some areas of ecological significance, they fall short of identifying all areas on the site and in its immediate surroundings that are likely to meet the threshold for SNA classification.

The site is adjacent to PNA Takou Bay Estuary & Environs (Q05/004), a highly diverse ecological area supporting a range of habitats including tōtara–kānuka and pūriri–taraire forest, mānuka shrubland, raupō wetland, saltmarsh, mangrove forest, and dune ecosystems with spinifex and pīngao. The estuary and wetlands provide important breeding and foraging grounds for threatened bird species such as the NZ dotterel, Australasian bittern, and NI fernbird. The area also supports threatened fauna like the kauri snail and lies within the known range of the NI brown kiwi. Q05/004 is regionally significant for its intact habitat diversity, rare vegetation types, and strong connectivity between forest, wetland, and estuarine systems.

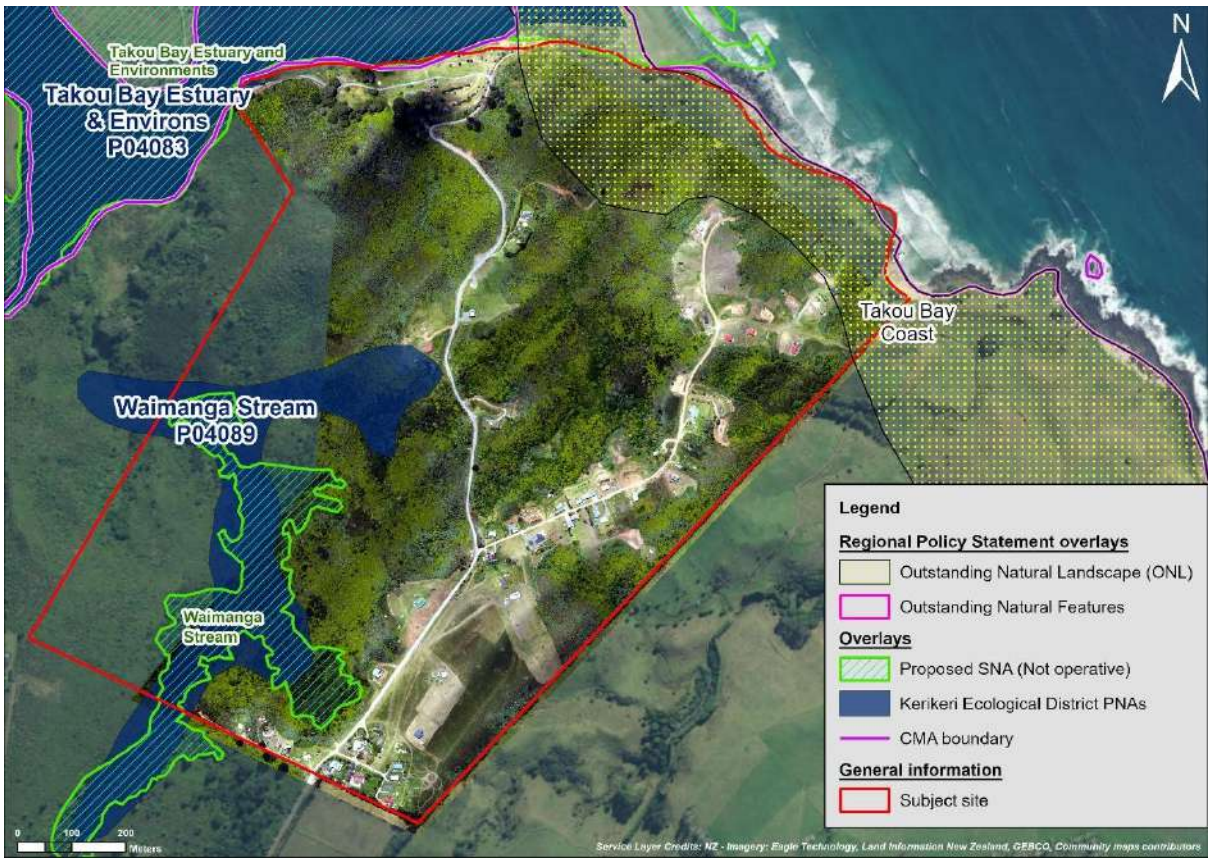

Figure 14: Showing the existing PNA and proposed SNA overlays on site and immediate surrounds

Under Land Environments of New Zealand (LENZ) the majority of the site and immediate surrounds is contained within the 'Category 5 Threatened Land Environment', where there is >30% indigenous cover left and >20% is protected (Figure 15). While much of the site is comprised of indigenous vegetation much of which is still in regeneration phase following initial land clearance, it currently lacks formal legal protection. However, identifying and confirming areas that meet Significant Natural Area (SNA) criteria will provide a positive baseline for future development, helping to ensure that ecologically significant areas are appropriately recognised and safeguarded.

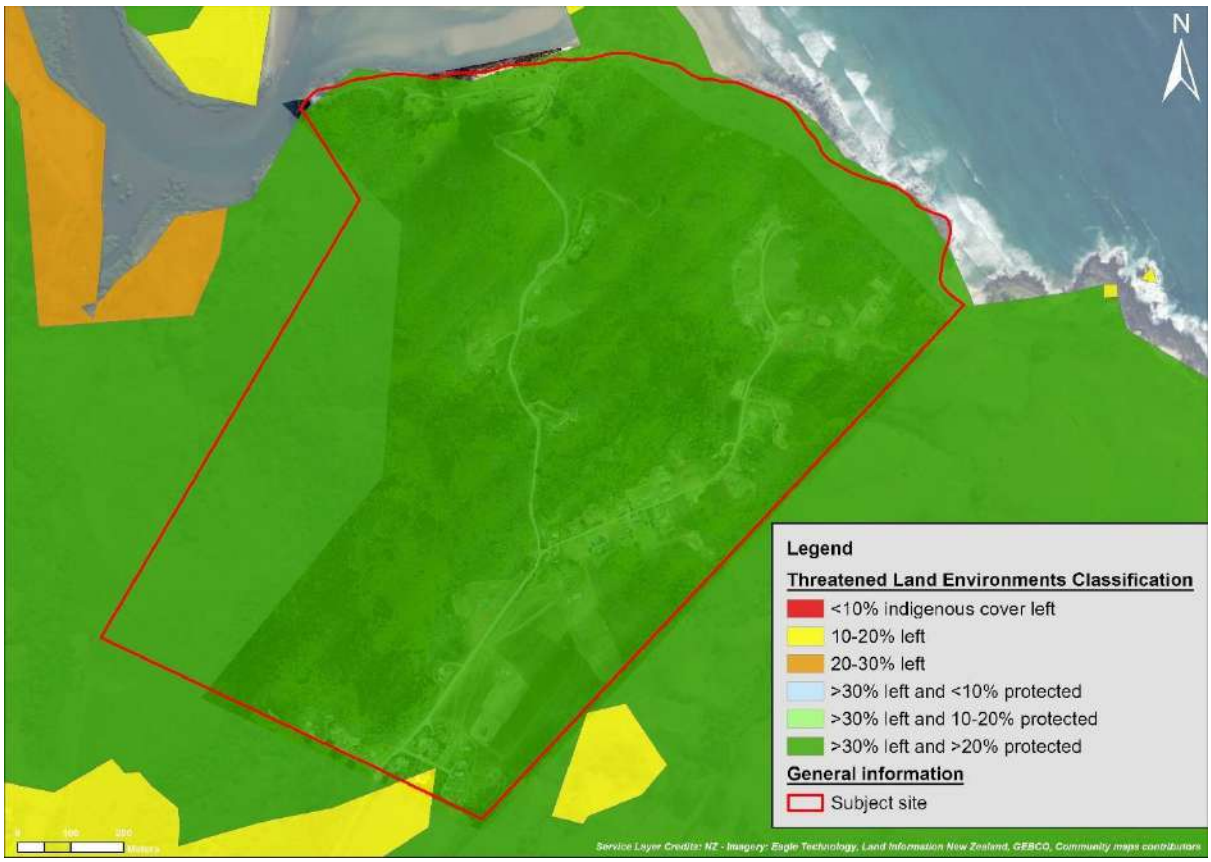

Figure 15: Showing the site and Threatened Environment Classification for New Zealand (2012)

4.0 ECOLOGICAL SURVEY RESULTS

4.1. Terrestrial

Field surveys were carried out in March 2025 to assess the vegetation types present on-site, as well as in the areas directly adjacent to the east, west, and south. The identified habitats both within and surrounding the site are illustrated in Figure 14. A general overview of the species observed within these areas is provided in the following sections.

It should be noted that the extent of exotic scrubland on-site may vary depending on the time elapsed between the field visit and the finalisation of this report. Exotic scrubland is understood to be routinely and progressively cleared as part of the site's ongoing agricultural use and weed management practices, which are expected to continue.

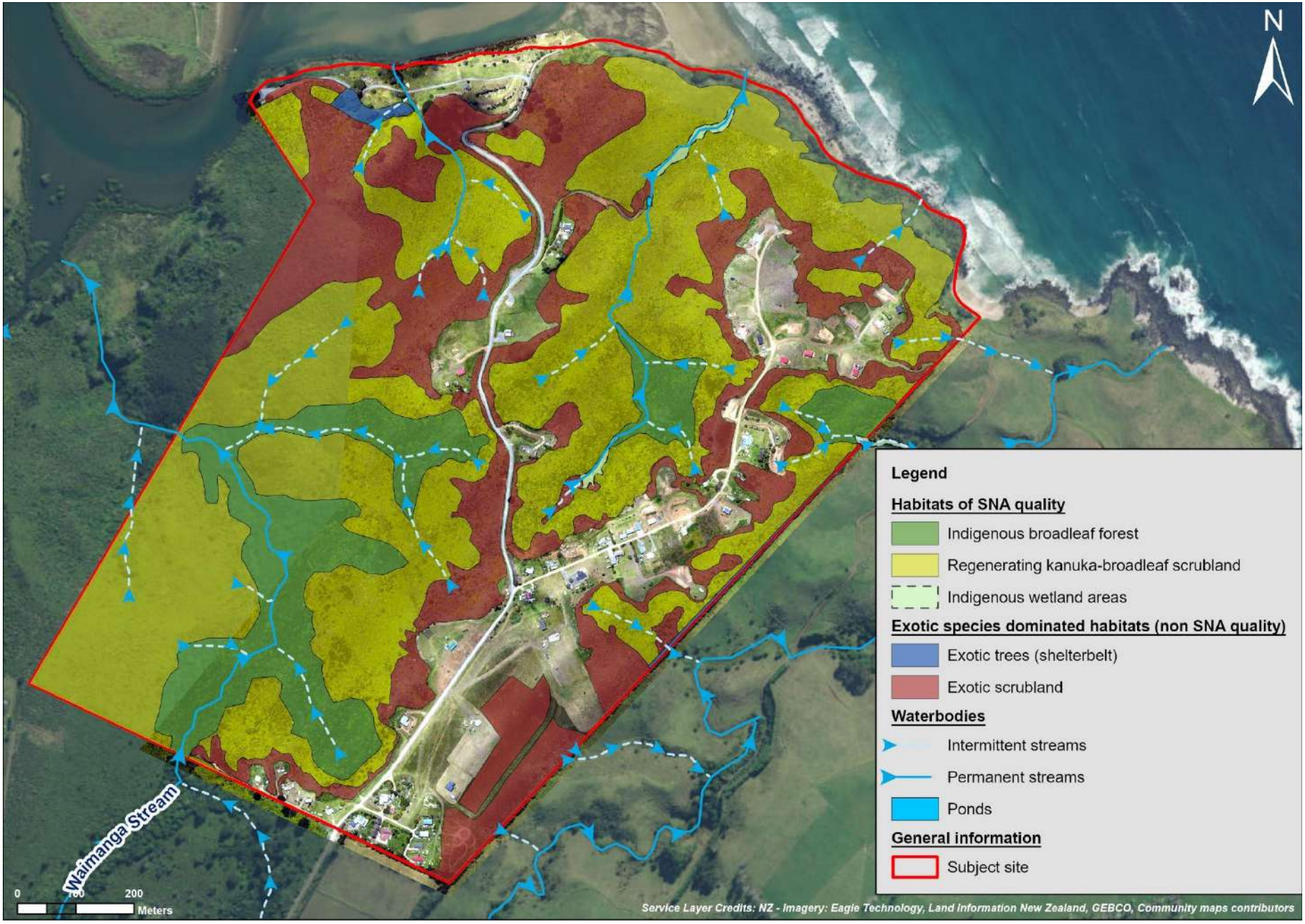

Figure 16: Showing general habitat types noted during field surveys in March 2025

4.1.1. Indigenous broadleaf forest

Areas of indigenous broadleaf forest are present on-site, primarily confined to the steep, inaccessible gullies that align with the site's watercourses. These forest remnants are largely dominated by emergent tōtara (*Podocarpus totara*), which forms the upper canopy across much of the remaining native vegetation. The forest is representative of a mixed broadleaf–podocarp type, with taraire (*Beilschmiedia tarairi*), tōtara (*Podocarpus totara*), and tōwai (*Weinmannia sylvicola*) commonly occurring as co-dominant species.

The mid and lower canopy layers, particularly within the more sheltered gully systems, host a diverse assemblage of native species including rimu (*Dacrydium cupressinum*), kahikatea (*Dacrycarpus dacrydioides*), pūriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*), nīkau palm (*Rhopalostylis sapida*), and rewarewa (*Knightia excelsa*).

This composition reflects a relatively mature and ecologically valuable forest community typical of the Northland lowland ecological zone, with strong structural and floristic diversity that provides important habitat for a variety of native fauna. It is considered this habitat type meets the significance criteria as outlined under Appendix 5 of RPS for Northland.

Figure 17: Showing the indigenous broadleaf forest along the sites southwestern boundary forming part of the PNA Waimanga Stream

Figure 18: Showing indigenous broadleaf forest along the sites northeastern boundary

4.1.2. Kanuka scrub/forest (VS2)

The slopes generally extending along the margins of the indigenous broadleaf forest are best described as regenerating kanuka-broadleaf forest characterised by kanuka (*Kunzea robusta)* with a thick understory and shrub layer was developing, dominated by species such as ponga (*Cyathea dealbata*), twiggy coprosma (*Coprosma rhamnoides*), hangehange (*Geniostoma ligustrifolium*), mahoe (*Melicytus ramiflorus*), mapou (*Myrsine australis*), putaputaweta (*Carpodetus serratus*), ti kouka (*Cordyline australis*), soft mingimingi (*Leucopogon fasciculatus*) and lancewood (*Pseudopanax crassifolius*) (Figure 19). It is considered this habitat type meets the significance criteria as outlined under Appendix 5 of RPS for Northland. While likely historically cleared, it is considered that his habitat type is representative of a regenerating forest ecosystem with a trajectory to reach kauri, podocarp forest (WF11) ecosystem type in the future.

During a site visit, it was observed that the kānuka-broadleaf forest areas had a high presence of pest plant species, including woolly nightshade (*Solanum mauritianum*), gorse (*Ulex europaeus*), pampas (*Cortaderia selloana*), Chinese and tree privet (*Ligustrum* spp.), and wilding pine (*Pinus* spp.). While it is expected that, over time, the indigenous vegetation will outcompete these weedy species, it is recommended that species like wilding pine be eradicated where feasible to prevent their spread along the coastline.

Figure 19: Showing general composition of regenerating kanuka-broadleaf scrubland on site – forming a gradual extension from the core indigenous broadleaf forest on site

4.1.3. Wetlands

The site contains three wetland areas two of which are located along the central stream margins and one which extends to the north-east of the subject site (identified under Figure 16).

The three wetland areas are largely similar in their vegetative composition being dominated by swamp millet (*Isachne globosa*), tangle fern (*Gleichenia dicarpa*), swamp kiokio (*Parablechnum minus*), *Baumea articulata,* and *Eleocharis sphacelata*. The wetland areas were interspersed with sharp spike sedge (*Eleocharis acuta*), kuawa (*Schoenoplectus tabernaemontani*), harakeke (*Phormium tenax*), manuka (*Leptospermum scoparium*), purei (*Carex secta*), rautahi (*Carex lessoniana*), orange nut sedge (*Machaerina rubignosa*), giant umbrella sedge (*Cyperus ustulatus*). Exotic species were contained throughout and included Mexican devil (*Ageratina adenophora*), soft rush and mercer grass.

It is considered all indigenous wetland areas on site meet the significance criteria as outlined under Appendix 5 of RPS for Northland.

Figure 20: Showing one of the wetland areas on site extending along the central stream

4.1.4. Exotic scrubland and exotic trees

The interface between indigenous vegetation-dominated habitats and the surrounding pastoral environment is largely characterized by a thick band of exotic species-dominated scrubland, primarily consisting of woolly nightshade (*Solanum mauritianum*), gorse (*Ulex europaeus*), pampas (*Cortaderia selloana*), and privet (*Ligustrum* spp.). It is understood that this vegetation is routinely cleared to reclaim parts of the site for agricultural production and to facilitate better land use.

Some smaller areas of mature exotic trees are also present – primarily comprised of a small group of macrocarpa (*Cupressus* sp.) along the site's northern boundary and an exotic shelterbelt extending along the site's eastern boundary.

This vegetation type is of negligible ecological value and does not meet any significance criteria as outlined under Appendix 5 of RPS for Northland.

Figure 21: Exotic scrubland covers extensive areas on the site - generally forming an interface between indigenous dominated vegetation and the wider pastoral environment on site

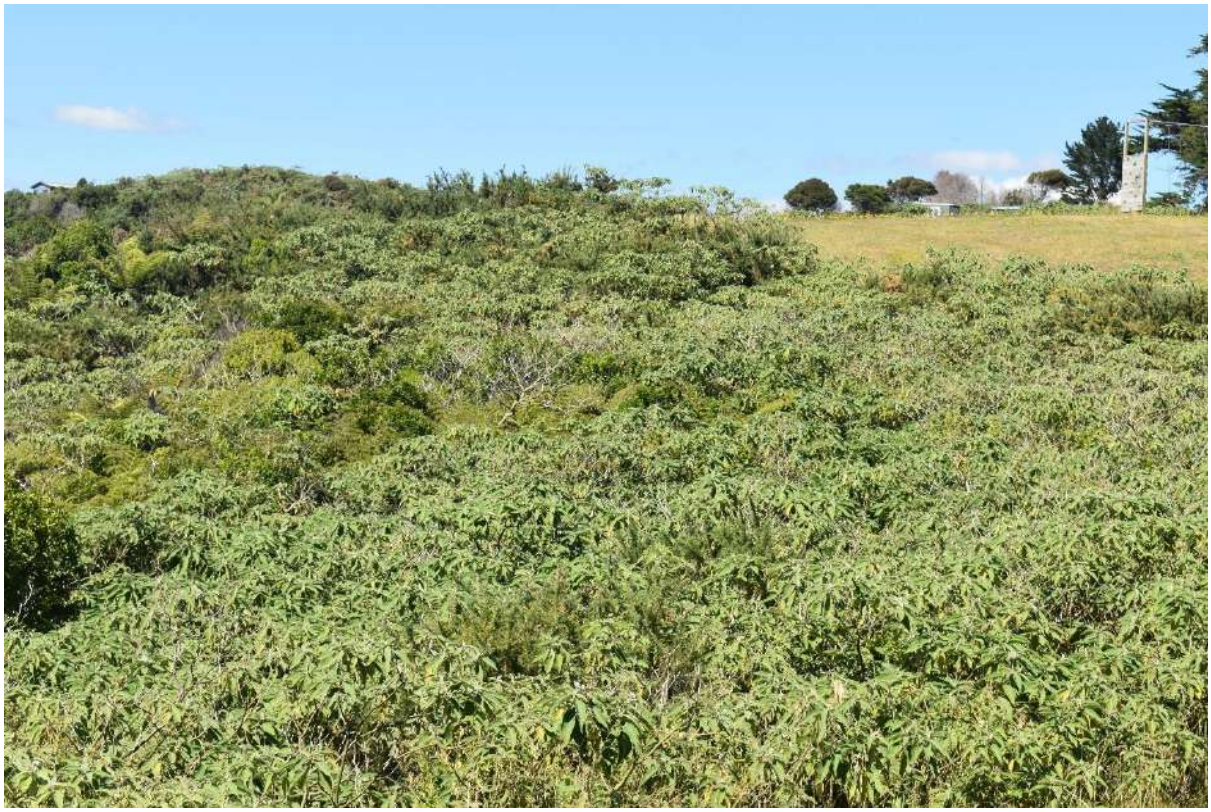

Figure 22: Showing an area of exotic vegetation grading out from kanuka-broadleaf forest towards existing pasture

4.2. Aquatic

4.2.1. Freshwater habitats

The watercourses on site (Figure 23) comprise of intermittent and permanent streams, which predominantly flow toward Takou Bay. These watercourses generally follow natural drainage patterns and have experienced minimal modification, aside from a few isolated areas in the northern part of the site where culverts have been installed to provide access to the beach and boat ramp. Overall, the freshwater ecosystems within the site are considered to be of high ecological value and in good condition.

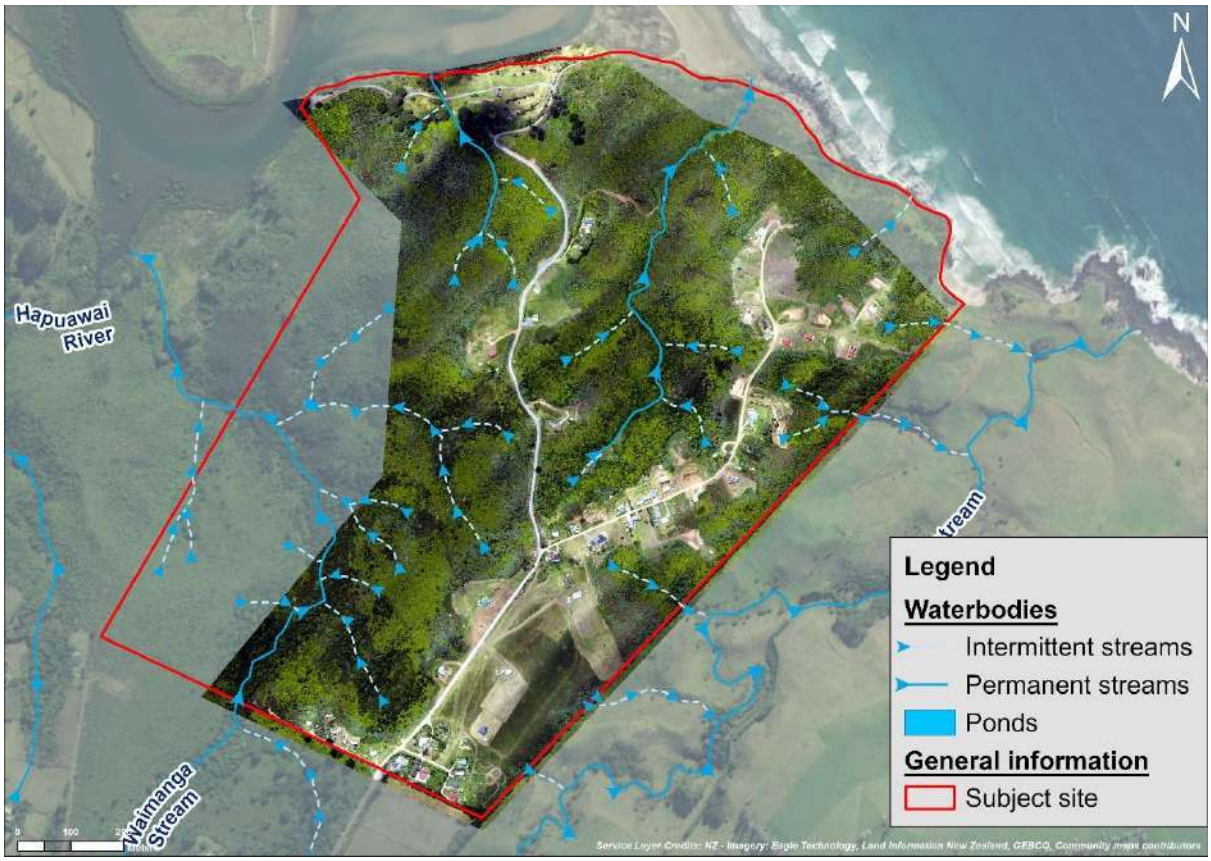

Figure 23: Showing the general hydrological patterns of the subject site

4.2.2. Aquatic diversity

An aquatic diversity survey was undertaken utilising eDNA surveys utilising WilderLab test kit for multi-species analysis by DNA metabarcoding (WilderLab 2025) during a site visit in March 2025 within the central on-site stream to establish a baseline of fish species present on site. The results of the eDNA survey can be found in Table 1.

The presence of several endemic species (*Anguilla australis*, *Galaxias fasciatus*, *Gobiomorphus huttoni*, *Paranephrops sp.*) indicates that the stream retains a relatively high level of ecological integrity and supports species adapted to the local environment. These species are important indicators of a healthy stream ecosystem and suggest that the stream is functioning to some extent as a habitat for native biodiversity.

Table 1: Freshwater fish and invertebrate species recorded within the central on-site stream

Scientific name	Common name	Conservation status

Anguilla australis	Shortfin eel	Endemic and Not Threatened
Anguilla dieffenbachii	Longfin eel	Native & Declining (At risk)
Galaxias fasciatus	Banded kokopu	Endemic and Not Threatened
Gobiomorphus huttoni	Redfin bully	Endemic and Not Threatened
Paranephrops sp.	Koura	Endemic and Not Threatened

4.3. Avifauna

Avifauna species were observed on the site via opportunistic observations during site visits in March 2025, with a comprehensive bird species list outlined in Table 4. Overall, the diversity of birds observed/recorded was moderate, with 11 native/endemic and 4 introduced species.

The bird species identified on-site reflect the characteristics of the modified ecotone transitional zone. Common species observed include the New Zealand fantail (*Rhipidura fuliginosa*), sacred kingfisher (*Todiramphus sanctus*), pukeko (*Porphyrio melanotus*), and paradise shelduck (*Tadorna variegata*). Mallards (*Anas platyrhynchos*), along with their young, were seen in the wetland area. In addition, red-billed gulls (*Chroicocephalus novaehollandiae*) and swamp harriers (*Circus approximans*) were spotted flying overhead. Notably, the NI fernbird (*Poodytes punctatus vealeae*) was recorded within wetland area W1, which extends along the central watercourse on the site.

Table 2: Bird species recorded on the site during site visits in November 2022

Scientific name	Common name	Conservation status
Acridotheres tristis	Myna	Introduced & Naturalised
Anas platyrhynchos	Mallard	Introduced & Naturalised
Bowdleria punctata subsp. vealeae	Fernbird	Native & At Risk-Declining
Carduelis carduelis	European goldfinch	Introduced & Naturalised
Circus approximans	Swamp harrier	Native & Not Threatened
Chroicocephalus novaehollandiae	Red billed gull	Native and Declining
Gerygone igata	Grey warbler	Endemic & Not Threatened
Hirundo neoxena	Welcome swallow	Native & Not Threatened
Passer domesticus	House sparrow	Introduced & Naturalised
Porphyrio melanotus	Pukeko	Native & Not threatened
Rhipidura fuliginosa	New Zealand fantail	Endemic & Not Threatened
Tadorna variegata	Paradise shelduck	Endemic & Not Threatened
Todiramphus sanctus	Sacred kingfisher	Native & Not Threatened
Vanellus miles	Spur-winged plover	Native & Not Threatened
Zosterops lateralis	Silvereye	Native & Not Threatened

The site occurs within a designated kiwi zone, and North Island brown kiwi (*Apteryx mantelli*) have been previously recorded within the wider area according to Department of Conservation kiwi distribution mapping. While not recorded on site during site surveys, kiwi use of the bush area and riparian corridors within the site boundaries and immediate surrounds is likely. The

wider area is a known to be a stronghold of the Northland kiwi population due to the extensive forest habitat present in the area and extensive pest control operation.

The majority of avifauna recorded on site is deemed as common, however the presence of NI fernbird indicates that the wetland area on site is utilised by at least one 'At Risk' avifauna species. While not recorded during site visits, given that the site abounds extensive saltmarsh and estuarine ecotone transitional area, it is possible that banded rail (*Gallirallus philippensis),* Australasian bittern (*Botaurus poiciloptilus*) may periodically be present within the on-site wetland areas or adjoining saltmarsh.

4.4. Lizards

A visual inspection and habitat suitability assessment were carried out during site visits in March 2025 to identify areas that could be used by native lizards for shelter or foraging, such as beneath logs, boulders, and manmade objects. The site offers high-quality habitat for indigenous lizard species. Although no lizards were observed during the March 2025 survey, the broadleaved forest and kanuka-broadleaved scrubland areas on-site are likely to provide suitable environments for species such as the elegant gecko (*Naultinus elegans*), Northland green gecko (*N. greyii*), and copper skink (*Oligosoma aeneum*).

Table 3 below outlines the species likely to occur within the wider area and their corresponding conservation status. The current ecological value of on-site habitats for native lizards is considered to be moderate-high due presence the quality and quantity of suitable habitat and the number of 'At-Risk' species that are potentially present.

Table 3: Herpetofauna likely to be present with the surrounding area, inbuilding latest Threat Status (Hitchmough et al. 2021)

Common name	Latin name	Threat status	Suitable habitat on site or adjacent?
Pacific gecko	*Dactylocnemis pacificus*	Not threatened	Suitable habitat in the adjacent Takou Bay Estuary & Environs (Q05/004)
Rainbow/plague skink	*Lampropholis delicata*	Unwanted organism	Likely present on site and surrounds.
Green and golden bell frog	*Ranoidea aurea*	Exotic species	Likely present on site and surrounds.
Forest gecko	*Mokopirirakau granulatus*	At Risk - Declining	Suitable habitat on site within the indigenous broadleaf forest and kanuka-broadleaved scrubland areas
Elegant gecko	*Naultinus elegans*	At Risk - Declining	Suitable habitat on site within the indigenous broadleaf forest and kanuka-broadleaved scrubland areas
Northland green gecko	*Naultinus greyii*	At Risk - Declining	Suitable habitat on site within the indigenous broadleaf forest and kanuka-broadleaved scrubland areas

Copper skink	*Oligosoma aeneum*	At Risk - Declining	Suitable habitat on site within the indigenous broadleaf forest and kanuka-broadleaved scrubland areas
Ornate skink	*Oligosoma ornatum*	At Risk - Declining	Suitable habitat in the adjacent Takou Bay Estuary & Environs (Q05/004).
Shore skink	*Oligosoma smithi*	At Risk - Declining	Suitable habitat in the adjacent Takou Bay Estuary & Environs (Q05/004)

4.5. Bats

New Zealand has two native bat species, being the long-tailed bat (*Chalinolobus tuberculatus*: Threatened-Nationally Critical) and the lesser short-tailed bat (*Mystacina tuberculata*: Threatened-Nationally Vulnerable). Native bats are 'absolutely protected' under the Wildlife Act (1953).

A search of DOC BioWeb (2025) database shows that the closest confirmed long-tailed bat record is approximately 1.5km to the west of the site, with a single record in 2021 (Figure 24). More extensive records, including short-tailed bat records are located approximately 16 km west in their stronghold at Puketi Forest. Bats are highly mobile fauna and can travel up to 20km or more in a single night. They have large territories and are listed on the NPSIB's highly mobile fauna list.

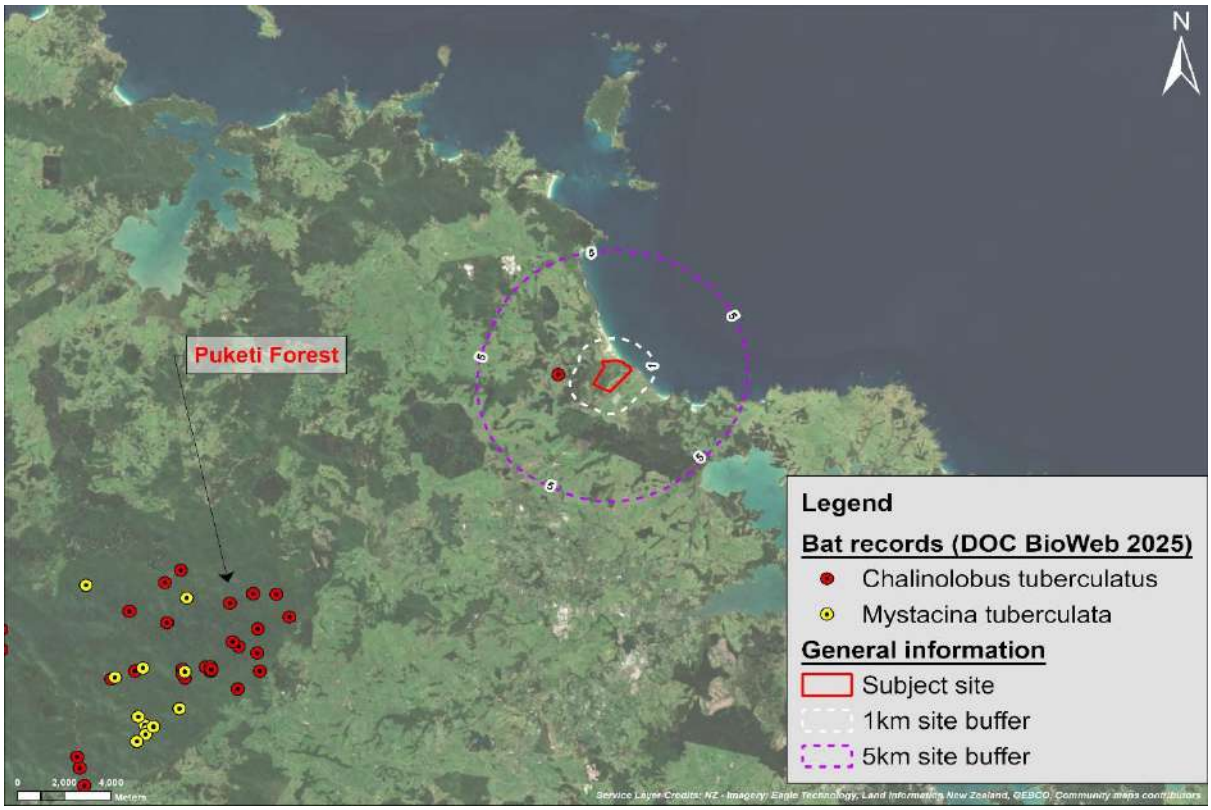

Figure 24: Showing existing bat records nearby the site (Source: DoC BioWeb)

During the site visit in March 2025, a visual assessment for potential roost sites was undertaken. It was deemed that the site contains large mature trees which had features that could potentially form suitable roost trees for long-tailed bats. In addition, given that a previous record in 2021 confirmed their presence within 1.5km of the site, it is likely that bats periodically may use the riparian corridors within the site boundaries for foraging.

It is highlighted that no mature trees are proposed to be removed as part of the proposal, so bat roost potential on site will not be affected. The mature trees are located within the less accessible gullies of the site which will not be affected by the proposed development. While it is recommended that any residual wilding pines or macrocarpa within the existing kanuka bush areas on site are controlled, it is recommended that drill & fill technique is used to avoid any potential impacts on any roosting bats. This will allow for the pine trees or macrocarpa to decay over time, retaining and creating new deadwood habitat for bat species.

The nature of the site development proposal is unlikely to have any effect on any potential bat populations utilising the area.

4.6. Summary of values

Method 12.2.5.6 of FNDP requires that in assigning ecological significance to habitats and species noted on site, the ecological matters of Representativeness, Rarity/Distinctiveness, Diversity and Pattern, and Ecological Context have to be considered. This is based on criteria outlined under Appendix 5 of Regional Policy Statement for Northland. Table 4 below outlines the ecological values assigned to the identified ecological features on site.

The overall existing ecological significance is generally as 'moderate-high' for the lesser disturbed habitats such as broadleaf forest and indigenous wetlands, 'moderate' for kanuka-broadleaf regenerating scrubland, and 'low' for the exotic species dominated scrubland areas.

Table 4: Assessment of significance of habitats contained within the site boundaries based on Appendix 5 of RPS for Northland

Criteria	Regenerating kanuka-broadleaved shrubland	Regenerating podocarp forest	Indigenous wetlands	Exotic scrubland
(a) whether the area contains critical, endangered, vulnerable or rare taxa, or taxa of indeterminate threatened status (in the context of this clause, taxa means species and subspecies);	No 'Threatened' endemic flora or fauna was noted within this habitat type.	Representative remnant of primary forest. Little disturbance due to its inaccessible nature. Area likely supports NI kiwi and a range of 'At Risk' herpetofauna and avifauna with the potential to support long-tailed bats 'Threatened – Nationally Critical'	Confirmed records of 'At Risk' NI fernbird, and likely supports a range of other 'Threatened' avifauna including Australasian bittern and banded rail. Supports a number of 'At Risk' fish species including long-fin eel.	Exotic scrubland has no conservation or threat status (Singers *et al.* 2017). No critical, endangered, vulnerable or rare taxa, or taxa of indeterminate threatened status were noted within this habitat type during site visits in March 2025.
(b) whether the area contains indigenous or endemic taxa that are threatened or rare in Northland;	No 'Threatened' endemic flora or fauna was noted within this habitat type.	As above	As above	No 'Threatened' endemic flora or fauna was noted within this habitat type.
(c) whether the area contains representative examples in an ecological district of a particular habitat type;	Representative of its habitat type.	Representative of its habitat type.	Representative of its habitat type.	Representative of its habitat type.
(d) whether the area has a high diversity of taxa or habitat types for the ecological district;	The site supports the expected habitat types and faunal diversity associated with the range of habitat types present on site.	The site supports the expected habitat types and faunal diversity associated with the range of habitat types present on site.	The site supports the expected habitat types and faunal diversity associated with the range of habitat types present on site.	The site supports the expected habitat types and faunal diversity associated with the range of habitat types present on site.
(e) whether the area forms an ecological buffer, linkage or corridor to	Part of this habitat type forms part of the Protected Natural Area (PNA)	Part of this habitat type forms part of the Protected Natural Area (PNA)	Forms a freshwater transitional zone with a linkage to Takou Bay.	This habitat type is of low ecological value and does not

other areas of significant vegetation or significant habitats of indigenous fauna;	Waimanga Stream (P04/089).	Waimanga Stream (P04/089).		form any notable buffer, linkage or corridor features.
(f) whether the area contains types that are rare in the ecological district;	This habitat type is common in the ecological district.	This habitat type is common in the ecological district.	This habitat type is not classified as rare in the ecological district; however freshwater wetlands are considered nationally important.	This habitat type is common in the ecological district.
(g) whether the area supports good populations of taxa which are endemic to the Northland or Northland-Auckland regions;	No endemic flora or fauna was noted within this habitat type on site.	Area likely supports NI kiwi and a range of 'At Risk' herpetofauna and avifauna with the potential to support long-tailed bats 'Threatened – Nationally Critical'	No endemic flora was noted within this habitat type on site. NI fernbird recorded in W1.	No endemic flora or fauna was noted within this habitat type on site.
(h) whether the area is important for indigenous or endemic migratory taxa;	No indigenous migratory taxa were recorded within this habitat type.	No indigenous migratory taxa were recorded within this habitat type. Possible use of the area by long-tailed bats.	Long-fin eel recorded within the stream system flowing through the site. Possibly utilised by Australasian bittern.	No indigenous migratory taxa were recorded within this habitat type.
(i) whether the area supports viable populations of species, which are typical of that type of habitat within an ecological district and retain a high degree of naturalness	The site was observed to support taxa which are typical of regenerating kanuka-broadleaf shrubland however it does not retain a high degree of naturalness due to historic vegetation clearance.	Supports viable population of flora and fauna typical of its habitat type and assessed as maintaining moderate-high degree of naturalness.	Supports viable population of flora and fauna typical of its habitat type and assessed as maintaining moderate degree of naturalness.	This habitat type was observed to support taxa which are typical of exotic scrubland
Overall	Moderate	Moderate-High	Moderate-High	Low

5.0 POTENTIAL ECOLOGICAL EFFECTS AND MITIGATION

The following sections describe potential ecological effects based on the general layout and location plan and associated services as shown within the proposed Site Plan prepared by Laminata and Engineering Drawings prepared by Chester. The proposed development areas have been selected in consultation with Wild Ecology to ensure that development footprint is contained, as far as feasible and practicable, within areas that are relatively free of ecological constraints and thus potential effects are localised and minimised. A brief assessment of potential ecological effects and mitigation measures is provided under Table 5.

Generally, the potential adverse effects associated with the site development on ecological values are:

- Potential loss of habitat for indigenous fauna;
- Potential for injury / mortality to indigenous fauna;
- Potential introduction of plant pathogens;
- Increased presence of pet animals on site;
- Change in flow regime due to increased site imperviousness.

Overall, the actual or potential adverse effects on ecological values that may result from the proposed development will be generally 'low' provided works are carried out in a manner that gives effect to the expert reporting and recommendations prepared for the proposal. It is therefore deemed that the development can be carried out in a manner that will not adversely affect the ecological values on site.

Table 5: Magnitude and level of impact for proposed development before and after mitigation

Effect/activity	Potential habitat or species impacted	Ecological value	Magnitude of effect (no mitigation)	Comment	Recommended mitigation/management measures	Level of effect (with management in place)
Earthworks and sedimentation, smothering bed	All aquatic habitats	High	High	Earthworks associated with the active development of the site have the potential to result in sediment runoff into the on-site and adjacent watercourses and wetland areas.	The ecological effect associated with earthworks is assessed as low should these be carried out in accordance with accordance with Auckland Council Guideline Documents 2016/005: Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region as required under Section C.8.3 of the NRC Proposed Regional Plan for Northland (February 2024).	Low
Stormwater infrastructure and management	Aquatic habitats	High	High	The development of pasture into additional dwellings and servicing can result in alteration to natural drainage patterns and increased catchment imperviousness that can alter hydrology and water quality in the downstream environment.	The proposed stormwater infrastructure construction, management, and dispersal are not expected to adversely affect the hydrology, habitat quality, or water quantity of the aquatic habitats on site and in the immediate surroundings, provided they are constructed and maintained in accordance with recommendations made within the associated expert reporting prepared for the proposed development.	Low
Wastewater infrastructure and management	Aquatic habitats	High	Moderate	Each LTO will require on-site wastewater disposal.	All wastewater infrastructure and dispersal fields will be designed by a qualified engineer in accordance with best practices. Wherever feasible and practicable, the design will adhere to the setback requirements outlined in the PRPN (February 2024). If these setback requirements cannot be met, alternative distances will be established through consultation with the Northland Regional Council (NRC). It is recommended that primary wastewater fields are planted with low-growing native species to enhance	Low

Effect/activity	Potential habitat or species impacted	Ecological value	Magnitude of effect (no mitigation)	Comment	Recommended mitigation/management measures	Level of effect (with management in place)
					system performance, promote nutrient absorption, and help manage surface water flow. Provided the wastewater disposal systems are installed and maintained according to the recommendations in the associated technical reports and those outlined above, no adverse effects on freshwater habitats from the new effluent disposal fields are anticipated.	
Impacts on natural inland wetland areas	Wetland habitats	High	Low	No natural inland wetlands are to be reclaimed or adversely affected on as part of the proposal. Some minor earthworks and stormwater discharges may be required to take place within a 100m setback of natural inland wetland(s), but outside a 10m setback.	Where any earthworks or stormwater discharges are required to take place within a 100m setback of a natural inland wetland appropriate sediment and erosion controls are to be implemented in accordance with Proposed Erosion and Sediment Control Overall Plan produced by Chester.	Low
Fire risk	Terrestrial habitat	High	Moderate	Introduction of new buildings near areas of existing bush has the potential for increasing fire risk.	Any planting (including landscape and amenity planting) within a 20m setback of all dwellings is to be native low-flammability species only to from a buffer between the dwellings and the existing more flammable kanuka dominated habitats. Ongoing flammable weed management (e.g. gorse) within a 20m setback of all dwellings to ensure fire risk is minimized.	Low
Construction effects	Avifauna habitat	High	Low	The onsite or adjacent bush and wetland habitats provide	No adverse effect on avifauna anticipated as no indigenous vegetation clearance is proposed to take	Low

Effect/activity	Potential habitat or species impacted	Ecological value	Magnitude of effect (no mitigation)	Comment	Recommended mitigation/management measures	Level of effect (with management in place)
				habitat for NI kiwi, NI fernbird and possibly Australasian bittern. While no susceptible fauna was noted within the immediate development footprint itself, works should be minimized as far as feasible and practicable to reduce disturbance.	part of the development. The only clearance that may potentially be require is that of exotic scrubland primarily comprising of gorse which is routinely cleared throughout the site as part of the current site agricultural land use.	
Construction effects	Lizard habitat	High	Low	Lizard habitat limited to the indigenous broadleaf forest and regenerating kanuka scrub/forest which will not be impacted on by the proposed development.	No adverse effects on herpetofauna are anticipated, as no indigenous vegetation clearance is proposed. Exotic vegetation clearance, where required, forms part of the existing baseline and is understood to occur routinely, primarily involving manual or low-impact methods.	Low
Construction effect	Bat habitat	High	Low	Previous long-tail bat records within 1.5km of the site. Suitable foraging and roosting habitat is present on site.	No adverse effect on bats anticipated. No mature tree clearance (exotic or indigenous) is required to facilitate development.	Low

6.0 RELEVANT PLANNING CONSIDERATIONS

The following section summarises the ecological considerations in relation to local, regional and national policy statements and regulations associated with the preservation and mitigation of effects related to potential development of the site. In respect to the proposal, it is considered that the following are applicable:

- Far North District Plan (FNDP) (Operative) 2009 – Rule 12.7.6.1.1. and Rule 12.4.6.1.2
- National Policy Statement for Indigenous Biodiversity (NPS-IB) (2023)
- National Policy Statement for Freshwater Management (NPS-FM) 2020
- Resource Management (National Environmental Standards for Freshwater) Regulations (NES-FW) (2020)

Policies and regulations relating to each of the specific plans are further outlined in sections below.

6.1. FNDP Rule 12.7.6.1.1 – Setbacks from Wetlands

Under Rule 12.7.6.1.1 of the Operative Far North District Plan (oFNDP), any building or impermeable surface must be set back a minimum of 30 metres from the edge of any wetland that is 1 hectare or more in area.

No wetlands present on the site exceed 1 hectare in size. Furthermore, no dwellings or associated impermeable surfaces are proposed within 30 metres of any identified wetland habitat on the site. As such, the provisions of Rule 12.7.6.1.1 do not apply to the proposed development.

In ecological terms, the development has been designed to avoid encroachment within 30m wetland setbacks, thereby preserving the integrity and function of these sensitive environments. By maintaining adequate spatial separation from all identified wetlands—regardless of size—the proposal ensures that potential adverse effects such as sedimentation, hydrological alteration, or disturbance to wetland-associated flora and fauna are avoided altogether. As a result, the potential ecological impact on wetland habitats on site is assessed as negligible.

6.2. FNDP Rule 12.4.6.1.2 – Fire risk to residential units

Rule 12.4.6.1.2. requires that residential units shall be located at least 20m away from the drip line of any trees in a naturally occurring or deliberately planted area of scrub or shrubland, woodlot or forest. It is understood that a number of dwellings are likely to be located within a 20m setback of the existing onsite kanuka scrub. Where feasible and practicable it recommended that any landscape or amenity planting within 20m setback of all dwellings is to be native low-flammability species only to from a buffer between the dwellings and the existing more flammable kanuka dominated habitats. Ongoing flammable weed management (e.g. gorse) within a 20m setback of all dwellings is recommended to ensure fire risk is minimized.

6.3. Exotic vegetation clearance

Some limited vegetation clearance may be required to facilitate the construction of dwellings and associated infrastructure within the development area. This clearance is expected to be isolated in nature and confined to areas dominated by exotic scrubland.

The removal of exotic vegetation—primarily consisting of regenerating gorse—is a permitted activity under the Operative Far North District Plan (oFNDP). Such clearance typically occurs progressively throughout the year and is carried out in a controlled manner as part of general land management practices on site.

Given that the vegetation proposed for removal is predominantly exotic, lacks significant ecological value, and does not provide critical habitat for indigenous flora or fauna, the ecological effects associated with its clearance are considered negligible. The targeted removal of low-value exotic species, such as gorse, is unlikely to impact the integrity of surrounding indigenous vegetation or ecological management areas.

In summary, the proposed exotic vegetation clearance is compliant with planning provisions, limited in scale, and of negligible ecological impact.

6.4. National Policy Statement for Freshwater Management (2020)

New Zealand has historically lost most of its wetland extent. Those remaining are rare and valuable ecosystems. The core intent of the policies in the NPS-FM (2020) is to provide stronger protection for freshwater bodies and wetlands. It also places a statutory responsibility on territorial and consenting authorities to give effect to Te Mana o te Wai by prioritizing the health and wellbeing of our waterways. With respect to Te Mana o te Wai, the hierarchy of obligations for consenting authorities are;

1. first, to prioritise the health and well-being of water bodies and freshwater ecosystems;
2. second, the health needs of people (such as drinking water); and
3. third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

In relation to the proposed development of the site, the application demonstrates a commitment to upholding the hierarchy of obligations outlined in the NPS-FM (2020). The primary objective has been to avoid any potential adverse effects on the identified natural inland wetland areas located on the site and immediate surrounds.

6.5. National Environmental Standards for Freshwater Management (2020)

The proposed development (please refer to the Site Plan by Laminata and Civil Engineering Drawings prepared by Chester) has been designed with the input of the results of the habitat classification and delineation provided by Wild Ecology, with the proposed built development to be placed as far as practicable from sensitive receiving environments.

Having reviewed the proposed site development plans, including stormwater, earthworks and wastewater management plan, it is understood that no earthworks, vegetation clearance or stormwater discharges shall take place within a 10m setback of an identified natural inland wetland areas (Figure 25). Wastewater discharges will be to land only (not water) and therefore do not require a consent under NES-FW. It is noted that the buildings and associated structures (such as stormwater and wastewater) within the LTOs that are in the 100m wetland setback LTO 33-36, 57, and 14) are existing and not proposed for construction under this consent, apart from LTO 13 and 15.

For any earthworks, water take, use, damming, or diversion activities occurring outside the 10m wetland setback but within the wider 100m buffer, mitigation measures have been recommended. These include the implementation of comprehensive sediment and erosion control measures to be implemented before and during construction. While the 100m setback acts as an extended buffer, it is anticipated that, with appropriate sediment and erosion controls in place, any construction or water diversion or discharge activities within a 100m wetland setback will avoid any adverse effects on the wetland ecosystem and will not lead to the complete or partial drainage of the natural inland wetland(s). With mitigation in place the overall effects associated with construction within 100m wetland setbacks are assessed as 'low'.

Based on the assessment, it is concluded that the proposed development, with the outlined mitigation measures and restoration initiatives, is appropriately designed to avoid significant adverse effects on natural inland wetlands. The proposal is consistent with the relevant regulatory requirements, and the overall ecological impacts are assessed as 'low'.

7.4.1 Stormwater management

The Chester Land Development Report proposes that stormwater management for the site will follow existing hydrological patterns, with all runoff directed through natural flow paths to the existing stream network. This approach aims to closely replicate pre-development drainage conditions. To achieve this, a mix of engineered and natural systems will be employed, including roadside swales, vegetated swales, subsoil drains, and landscaped flow paths. These features are designed to convey and treat runoff by slowing flow, promoting infiltration, and improving water quality through natural filtration. In areas where open drainage is not feasible—such as narrow road corridors and accessways—subsoil drains and culverts will be used to ensure efficient flow conveyance.

The design maintains the site's current runoff regime in terms of both direction and volume. This reduces downstream impact, limits the need for extensive infrastructure, and helps meet stormwater quality and quantity standards. Discharges will occur via outlets to existing low-lying areas, including roadside drains, natural and artificial watercourses, and ponds.

Importantly, the construction and management of the stormwater network will not involve any earthworks within 10 metres of any mapped natural inland wetland. Based on the measures outlined in the Chester report, potential effects on these wetland features are considered to be low, and can be effectively avoided, mitigated, or managed.

7.4.2 Building setbacks

Existing buildings on LTOs 33-36, 57, and 14 which are located within a 100m setback from an identified natural inland wetland are set back minimum 78m from the wetland edge (Figure 25). Only LTO 13 and 15 are vacant and future building platforms may require encroachment into the 100m setback, albeit the encroachment will likely be minimal. For the purpose of this assessment, it is considered that all proposed LTOs are able to accommodate building platforms and associated infrastructure without adverse effect on the wetland areas should sufficient sediment and erosion control measures be implemented during active earthworks on site.

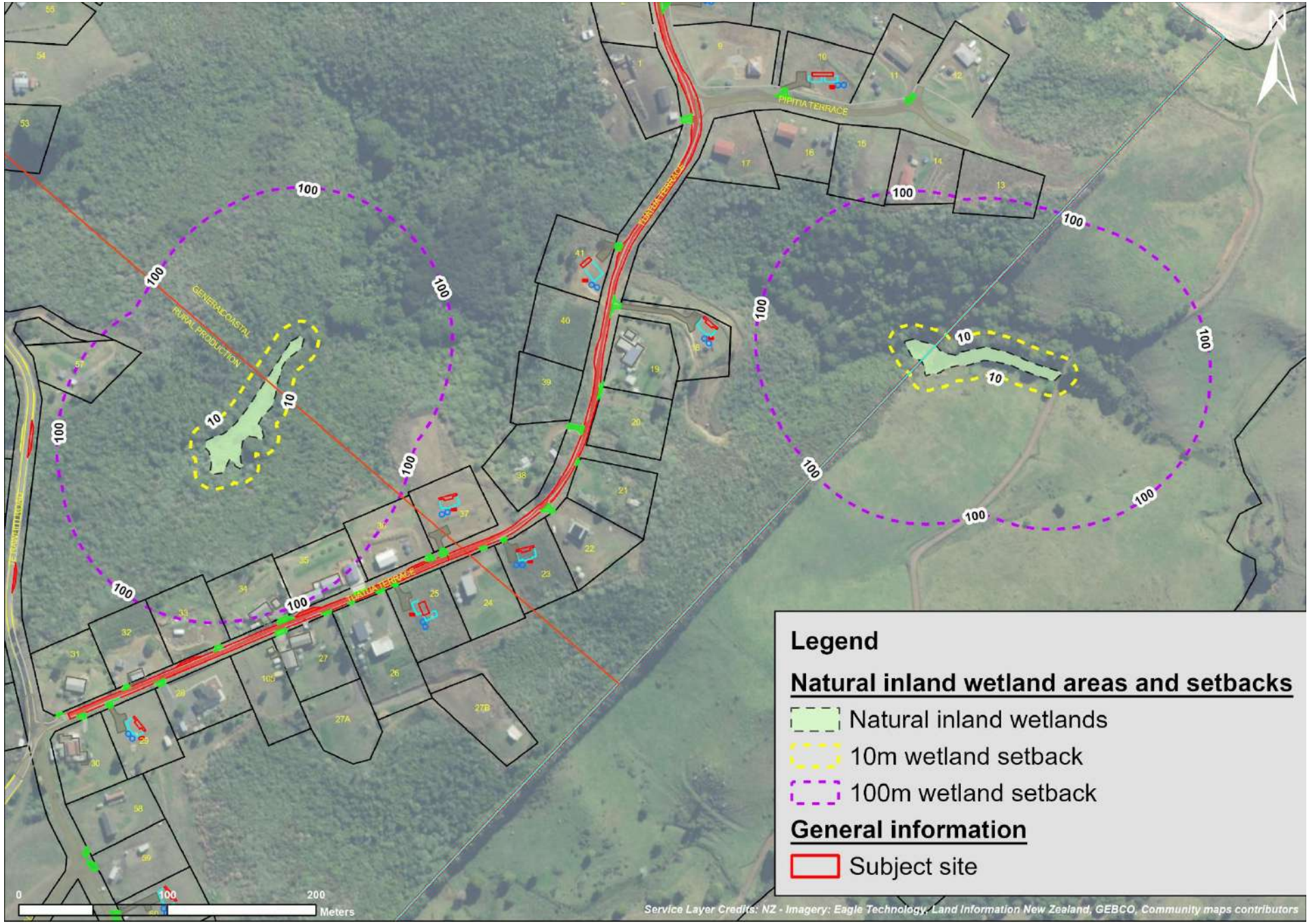

Figure 25: Showing the proposed development layout prepared by Laminata with natural inland wetland areas and associated 10m and 100m setbacks overlay

6.6. National Policy Statement for Indigenous Biodiversity (NPS-IB) (2023)

National Policy Statement for Indigenous Biodiversity (NPS-IB) came into force on August 4th, 2023 (commencement date) and applies to indigenous biodiversity in the terrestrial environment throughout Aotearoa New Zealand. The objective of NPS-IB is to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date.

It is deemed that the proposal gives effect to the objectives and policies of NPS-IB through

(a) Having been shaped by a careful design-led approach to development that integrates the necessary infrastructure of the proposal with the existing ecological and landscape context and demonstrates a strong commitment to sustainable development principles.
(b) Applies the effects management hierarchy by avoiding or minimising potential adverse effects in the first instance through development design..
(c) Avoiding or mitigating potential adverse ecological effects through utilising previously cleared areas of vegetation (i.e. existing pasture or cleared areas) or areas of exotic scrubland to facilitate access and site development. No indigenous vegetation clearance will be required to facilitate the site development.
(d) Where any earthworks are to take place near sensitive terrestrial or aquatic environments, earthworks controls have been put in place to ensure that the feature is appropriately protected.

7.0 CONCLUSION AND RECOMMENDATIONS

The proposed development has been designed through a comprehensive ecological mapping process. This approach has directed the development to areas within the site that possess lower ecological value and significance. By concentrating site development within these less sensitive areas, the proposal aims to facilitate the development of LTOs, which is essential for meeting the needs of the local community. This strategy also minimizes potential adverse ecological impacts, which can be effectively managed and mitigated through well-defined ecological management principles.

The proposed management actions described within the body of this report will avoid or minimise potential adverse ecological effects associated with the development proposal on the habitats and species likely present on site and immediate surrounds. It is acknowledged that the onsite indigenous vegetation is of moderate-high ecological value, however any actual and potential adverse effects have been managed through development design and proposed mitigation measures outlined under Table 5 above. Provided that they are implemented successfully, adverse effects on the environment would be low.

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Rules Assessment

Proposal: Takou Bay Papakāinga – Landuse consent is sought to construct up to 94 papakāinga units with supporting infrastructure, accessways and landscape planting.

Address: 202A-F Te Rawhiti Road, Kaeo

Site Details	
Operative Far North District Plan	
Zone	Rural Production Zone General Coastal Zone
Overlays/Controls	MS06-34 and MS06-43 (located within Takou East Block)
Designations	N/A
Proposed Far North District Plan	
Zone	Māori Purpose – Rural
Overlays/Controls	Coastal environment
Northland Regional Policy Statement	
Overlays	Coastal Environment Outstanding Natural Environment

Rule	Compliance	Non-Compliance
OPERATIVE FAR NORTH DISTRICT PLAN		
RURAL PRODUCTION ZONE		
8.6.5.1 PERMITTED ACTIVITIES		
8.6.5.1.1 RESIDENTIAL INTENSITY Residential development shall be limited to one unit per 12ha of land. In all cases the land shall be developed in such a way that each unit shall have at least 3,000m² for its exclusive use surrounding the unit plus a minimum of 11.7ha elsewhere on the property. Except that this rule shall not limit the use of an existing site, or a site created pursuant to Rule 13.7.2.1 (Table 13.7.2.1) for a single residential unit for a single household, provided that all other standards for permitted activities are complied with.	N/A – the standards for residential intensity do not apply to papakāinga housing under Rule 8.6.5.2.2.	
8.6.5.1.2 SUNLIGHT No part of any building shall project beyond a 45 degree recession plane as measured inwards from any point 2m vertically above ground level on any site boundary	Complies – all proposed papakāinga will be located over 20m from the site boundaries. Future development will be required to comply with the relevant controls of the District Plan.	

Rule	Compliance	Non-Compliance
8.6.5.1.3 STORMWATER MANAGEMENT The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.	Complies – the proposed impermeable surface coverage will be less than 3% across the site.	
8.6.5.1.4 SETBACK FROM BOUNDARIES No building shall be erected within 10m of any site boundary; with the following exceptions; (a) no accessory building shall be erected within 3m of boundaries other than road boundaries, on sites less than 5000m2; (b) no crop protection structures shall be located within 3m of boundaries; hapū no building shall be erected within 12m of any road boundary with Kerikeri Road on properties with a road frontage with Kerikeri Road between its intersection with SH10 and Cannon Drive; (d) no building for residential purposes shall be erected closer than 100m from any zone boundary with the Minerals Zone; hapū no building shall be erected within the building line restriction area as marked in Appendix 6C, located immediately north of the Te Waimate Heritage Precinct. Any proposed building to be erected within this building line restriction area shall be deemed a discretionary activity and the Heritage New Zealand Pouhere Taonga will be considered an affected party to any such application made under this rule.	Complies – all proposed papakāinga will be located over 10m from the sit boundaries. Future development will be required to comply with the relevant controls of the District Plan.	
8.6.5.1.5 TRANSPORTATION Refer to Chapter 15 – Transportation for Traffic, Parking and Access rules	Refer to Transportation section below.	
8.6.5.1.6 KEEPING OF ANIMALS	N/A	
8.6.5.1.7 NOISE (a) All activities except Temporary Military Training Activities shall be so conducted as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any other site in this zone, or at any site in the Residential, Coastal Residential or Russell Township Zones, or at or within the notional boundary of any dwelling in any other rural or coastal zone:	Compliance anticipated, the proposal is for a residential activity.	

Rule	Compliance	Non-Compliance
0700 to 2200 hours 65 dBA L10 2200 to 0700 hours 45 dBA L10 and 70 dBA Lmax		
8.6.5.1.8 BUILDING HEIGHT The maximum height of any building shall be 12m	Complies – the proposal includes single storey dwellings. The maximum height of the new dwellings will be 4.2m (Matauri typology within LTO areas 41, 78, 93). Future development will be required to comply with the relevant controls of the District Plan.	
8.6.5.1.9 HELICOPTER LANDING AREA	N/A	
8.6.5.1.10 BUILDING COVERAGE Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 12.5% of the gross site area.	Complies – the proposed building coverage will be less than 1% across the site.	
8.6.5.1.11 SCALE OF ACTIVITIES For activities other than those provided for in the exemptions below, the total number of people engaged at any one period of time in activities on a site, including employees and persons making use of any facilities, but excluding people who normally reside on the site or are members of the household shall not exceed i. For activities ancillary to farming or plantation forestry activities, 8 persons per site or 2 person per 1 hectare of net site area, whichever is the greater ii. For all other activities, 4 persons per site or 1 person per 1 hectare of net site area, whichever is the greater. Provided that: (a) this number may be exceeded for a period totalling not more than 60 days in any 12 month period where the increased number of persons is a direct result of activities ancillary to the primary activity on the site; or (b) this number may be exceeded where persons are engaged in constructing or	N/A – only residential units are proposed intended for people who will normally reside on the site.	

Rule	Compliance	Non-Compliance
establishing an activity (including environmental enhancement) on the site; or hapū this number may be exceeded where persons are visiting marae		
8.6.5.1.12 TEMPORARY EVENTS Note 1:	N/A	
8.6.5.1 CONTOLLED ACTIVITIES		
8.6.5.2.2 PAPAKĀINGA HOUSING Papakāinga housing is a controlled activity in the Rural Production Zone provided that: (a) it complies with all the standards for permitted activities in this zone and in Part 3 – District Wide Provisions, except for the standards for residential intensity; and (b) each residential unit has at least 3,000m² surrounding the unit for its exclusive use; provided that the amount of land elsewhere on the site, in addition to the 3,000m² surrounding the unit, is not less than that required for the discretionary activity residential intensity standard (refer to Rule 8.6.5.4.1).		(a) Does not comply – the proposal does not comply with the District Wide matters identified below. (b) Does not comply – the residential units are located within lots generally sized 2000m^2 – 2100m^2 Accordingly, the proposal is for Integrated Development which is a **discretionary activity** pursuant to Rule 8.6.5.4.2.
8.6.5.4 DISCRETIONARY ACTIVITIES		
8.6.5.4.1 RESIDENTIAL INTENSITY Residential development shall be limited to one unit per 2ha of land. In all cases the land shall be developed in such a way that each unit shall have at least 2,000m² for its exclusive use surrounding the unit plus a minimum of 1.8ha elsewhere on the property.	N/A – the standards for residential intensity do not apply to papakāinga housing.	
8.6.5.4.2 INTEGRATED DEVELOPMENT Notwithstanding the rules in this zone relating to the management of the effects of activities, an application for integrated development of activities only on Māori freehold land and Māori customary land and Crown land reserved for Māori (as defined in Te Ture Whenua Act 1993) may be made where the proposed development does not comply with one or more of the rules. This rule applies to Māori customary land, Māori freehold land and Crown land reserved for Māori for activities including papakāinga	As the proposal does not comply with Rule 8.6.5.2.2(a) and (b), and is located on Māori freehold land, resource consent for integrated development is sought under Rule 8.6.5.4.2. A management plan is provided throughout this application and accompanying specialist reports. Discretionary activity	

Rule	Compliance	Non-Compliance
housing and marae and associated buildings.		
GENERAL COASTAL ZONE		
10.6.5.1 PERMITTED ACTIVITIES		
10.6.5.1.1 VISUAL AMENITY The following are permitted activities in the General Coastal Zone: (a) any new building(s) not for human habitation provided that the gross floor area of any new building permitted under this rule, does not exceed 50m² or for human habitation provided that the gross floor area does not exceed 25m^2; and (b) the exterior is coloured within the BS5252 standard colour palette range with a reflectance value of 30% or less or are constructed of natural materials which fall within this range; or (c) any alteration/addition to an existing building which does not exceed 50m2 , provided that any alteration/ addition does not exceed the height of the existing building and that any alteration/addition is to a building that existed at 28 April 2000; or (d) renovation or maintenance of any building.	(b) Complies – proposed papakāinga in the General Coastal Zone will have a reflectance value of less than 30%. (c) N/A – the proposal does not include alterations or additions (d) N/A the proposal does not include renovation or maintenance.	(a) Does not comply – the proposal includes buildings for human habitation with gross floor areas exceeding 25m^2 Accordingly, the proposal is for Integrated Development which is a **discretionary activity** pursuant to Rule 10.6.5.4.4.
10.6.5.1.2 RESIDENTIAL INTENSITY Residential development shall be limited to one unit per 20ha of land. In all cases the land shall be developed in such a way that each unit shall have at least 3,000m² for its exclusive use surrounding the unit plus a minimum of 19.7ha elsewhere on the property.	N/A – the standards for residential intensity do not apply to papakāinga housing under Rule 10.6.5.2.1.	
10.6.5.1.3 SCALE OF ACTIVITIES The total number of people engaged at any one period of time in activities on a site, including employees and persons making use of any facilities, but excluding people who normally reside on the site or are members of the household shall not exceed 4 persons per site or 1 person per 1ha of net site area whichever is the greater. Provided that: (a) this number may be exceeded for a period totalling not more than 60 days in any 12 month period where the increased number of persons is a direct	N/A – only residential units are proposed intended for people who will normally reside on the site.	

Rule	Compliance	Non-Compliance
result of activities ancillary to the primary activity on the site; and (b) this number may be exceeded where persons are engaged in constructing or establishing an activity (including environmental enhancement) on the site; and (c) this number may be exceeded where persons are visiting marae.		
10.6.5.1.4 BUILDING HEIGHT The maximum height of any building shall be 8m.	Complies – the proposal includes single storey dwellings. The maximum height of the new dwellings will be 3.4m (Awanui typology within LTO areas 8, 18, and 23) Future development will be required to comply with the relevant controls of the District Plan.	
10.6.5.1.5 SUNLIGHT No part of any building shall project beyond a 45 degree recession plane as measured inwards from any point 2m vertically above ground level on any site boundary	Complies – all proposed papakāinga will be located over 50m from the sit boundaries. Future development will be required to comply with the relevant controls of the District Plan.	
10.6.5.1.6 STORMWATER MANAGEMENT The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 10%.	Complies – the proposed impermeable surface coverage will be less than 3% across the site.	
10.6.5.1.7 SETBACK FROM BOUNDARIES (a) no building shall be erected within 10m of any site boundary, except that on any site with an area of less than 5,000m², this setback shall be 3m from any site boundary; (b) no building for residential purposes shall be erected closer than 100m from the boundary of the Minerals Zone.	Complies – all proposed papakāinga will be located over 50m from the sit boundaries. Future development will be required to comply with the relevant controls of the District Plan.	
10.6.5.1.8 TRANSPORTATION Refer to Chapter 15 – Transportation for Traffic, Parking and Access rules.	Refer to Transportation section below.	
10.6.5.1.9 KEEPING OF ANIMALS	N/A	
10.6.5.1.10 NOISE All activities shall be so conducted as to ensure that noise from the site shall not	Compliance anticipated, the proposal is for a residential activity.	

Rule	Compliance	Non-Compliance
exceed the following noise limits at or within the boundary of any other site in this zone, or at any site zoned Residential, Russell Township or Coastal Residential, or at or within the notional boundary of any dwelling in any other rural or coastal zone: 0700 to 2200 hours 55 dBA L10 2200 to 0700 hours 45 dBA L10 and 70 dBA Lmax		
10.6.5.1.11 HELICOPTER LANDING AREA	N/A	
10.6.5.2 CONTROLLED ACTIVITIES		
10.6.5.2.1 PAPAKAINGA HOUSING Papakāinga housing is a controlled activity in the General Coastal Zone provided that: (a) it complies with all the standards for permitted activities in this zone and in Part 3 of the Plan - District Wide Provisions, except for the standards for visual amenity and residential intensity; and (b) each residential unit has at least 3,000m² surrounding the unit for its exclusive use. Provided that the amount of land elsewhere on the site, in addition to the 3,000m² surrounding the unit, is not less than that which is required for the discretionary activity residential intensity standard (refer to Rule 10.6.5.4.1 below).		(a) Does not comply – the proposal does not comply with the District Wide matters identified below. (b) Does not comply – the residential units are located within lots generally sized 2000m^2 – 2100m^2 Accordingly, the proposal is for Integrated Development which is a **discretionary activity** pursuant to Rule 10.6.5.4.4.
10.6.5.4 DISCRETIONARY ACTIVITIES		
10.6.5.4.1 RESIDENTIAL INTENSITY Residential development shall be limited to one unit per 6ha of land. In all cases the land shall be developed in such a way that each unit shall have at least 2,000m² for its exclusive use surrounding the unit, plus a minimum of 5.8ha elsewhere on the property.	N/A – the standards for residential intensity do not apply to papakāinga housing	
10.6.5.4.4 INTEGRATED DEVELOPMENT Notwithstanding the rules in this zone relating to the management of the effects of activities, an application for integrated development of activities only on Māori freehold land and Māori customary land and Crown land reserved for Māori (as defined in Te Ture Whenua Act 1993)	As the proposal does not comply with Rules 10.6.5.1.1(a) and 10.6.5.2.1(a) and (b), and is located on Māori freehold land, resource consent for integrated development is sought under Rule 10.6.5.4.4.	

Rule	Compliance	Non-Compliance
may be made where the proposed development does not comply with one or more of the rules. This rule applies to Māori customary land, Māori freehold land and Crown land reserved for Māori for activities including papakāinga housing, marae and associated buildings. Integrated development plans will be considered in the context of other whanau and hapu lands in the vicinity, including an acknowledgement of areas of open space, reserves, natural vegetation and other amenities already provided by the land owning groups concerned.	A management plan is provided throughout this application and accompanying specialist reports. **Discretionary activity**	
DISTRICT WIDE PROVISIONS		
CHAPTER 12 – NATURAL AND PHYSICAL RESOURCES		
Section 1 – Landscape and Natural Features	N/A – the proposed development is outside of the Outstanding Landscape as shown on the Resource Maps.	
Section 2 - Indigenous Flora and Fauna	N/A – no indigenous vegetation clearance is proposed.	
Section 3 – Soils and Minerals		The estimated earthworks volume in the Rural Production Zone is 12,900m^3 **Restricted discretionary** activity pursuant to Rule 12.3.6.2.3. The estimated earthworks volume in the General Coastal Zone is 5,530m^3 and exceeds the restricted discretionary activity quantity of 2,000m^2. **Discretionary** activity pursuant to Rule 12.3.6.3.
Section 4 – Natural Hazards	Complies – all papakāinga dwellings are located at least 20m away from the drip line of any trees in areas of existing scrubland.	A number of LTO areas will accommodate existing buildings and future building platforms located closer than 20m to the dripline of trees within existing areas of scrubland. **Discretionary** activity pursuant to Rule 12.4.6.3.

Rule	Compliance	Non-Compliance
Section 5 – Heritage	N/A – not relevant to the proposal.	
Section 6 – Air	N/A – deleted subject to Plan Change 14.	
Section 7 – Lakes, Rivers, Wetlands and the Coastline	Complies – all proposed buildings, impervious areas, and wastewater treatment and disposal systems are located over 30m from existing rivers and wetlands.	
Section 8 – Hazardous Substances	Private way construction is a **permitted activity** pursuant to Rule 12.8.6.1(i).	
Section 9 – Renewable Energy and Energy Efficiency	N/A – not relevant to the proposal.	
CHAPTER 13 - SUBDIVISION		
13.6-13.11	N/A – no subdivision is proposed.	
CHAPTER 15 – TRANSPORTATION		
15.1.6A Traffic		
15.1.6A.2-6 Traffic Intensity		Appendix 3A of the ODP calculates traffic generation 5 TIF for papakāinga housing. The proposal is for up 94 papakāinga dwellings: • 60 in the Rural Production Zone = 300 TIF; and • 34 in the General Coastal Zone = 170 TIF Overall, the proposal is a **discretionary** activity with respect to that part of the site zoned Rural Production and **non-complying** activity with respect to that part of the site zoned General Coastal pursuant to Rule 15.1.6A.4.1.
15.1.6B Parking		
15.1.6B.1.1 On-Site Car Parking Spaces	Complies – each LTO area will be provided with at least 1 parking space.	
15.1.6B.1.2 Williams Road On-Site Car Parking Spaces	N/A – not relevant to the proposal.	
15.1.6B.1.3 Kerikeri Road On-Site Car Parking Spaces	N/A – not relevant to the proposal.	

Rule	Compliance	Non-Compliance
15.1.6B.1.4 Accessible Car Parking Spaces	N/A – dwellings are excluded from this standard.	
15.1.6B.1.5 Car Parking Space Standards	Will comply.	
15.1.6B.1.6 Loading Spaces	N/A – the site is not within the Commercial or Industrial Zone.	
15.1.6B.2.1 Cycling Facilities	N/A – the site is not within the Commercial Zone.	
15.1.6B.2.2 Green Space	N/A – the site is not within the Commercial Zone.	
15.1.6B.3.1 Any Activity on Williams Road Car Park, Paihia	N/A – not relevant to the proposal.	
15.1.6C Access		
15.1.6C.1.1 Private Accessway in All Zones		Does not comply – the proposal includes private accessways serving more than the maximum permitted threshold of 8 household. Discretionary activity pursuant to Rule 15.1.6C.2.
15.1.6C.1.2 Private Accessways in Urban Zones	N/A – not relevant to the proposal.	
15.1.6C.1.3 Passing Bays on Private Accessways in All Zones	Complies	
15.1.6C.1.4 Access Over Footpaths	N/A – there are not footpaths on Te Ra Road	
15.1.6C.1.5 Vehicle Crossing Standards in Rural and Coastal Zones	N/A – no new vehicle crossings will be constructed onto public roads.	
15.1.6C.1.6 Vehicle Crossing Standards in Urban Zones	N/A – not relevant to the proposal.	
15.1.6C.1.7 General Access Standards	Complies	
15.1.6C.1.8 Frontage to Existing Roads	N/A – subdivision is not proposed.	
15.1.6C.1.9 New Roads	N/A – new roads are not proposed.	
15.1.6C.1.10 Service Lanes, Cycle and Pedestrian Accessways	N/A – not proposed	
15.1.6C.1.11 Road Designations	N/A – not relevant to the proposal.	
PROPOSED FAR NORTH DISTRICT PLAN – RULES AND STANDARDS WITH IMMEDIATE LEGAL EFFECT		
Part 2 – District Wide Matters / Natural Environment Values / Ecosystems and Indigenous Biodiversity		

Rule	Compliance	Non-Compliance
Indigenous vegetation clearance and any associated land disturbance within a Significant Natural Area for papakāinga in the Māori Purpose Zone **Activity status: Permitted** **Where:** **PER-1** It does not exceed: 1. 1,500m^2 for a marae complex, including associated infrastructure and access; and 2. 500m^2 per residential unit. ***Note:*** *Rules MPZ-R5 and RPROZ-R20 include specific land use rules that also apply to papakāinga in the Māori Purpose zone, Treaty Settlement Land overlay and Rural Production zones.*	Complies – all LTO areas are clear of indigenous vegetation – refer to the Ecological Impact Assessment at **Appendix 8**. Any vegetation removal required will be less than 500m^2 per residential unit.	
Part 2 – District Wide Matters / General District Wide Matters / Earthworks		
EW-R12 Earthworks and the Discovery of Suspected Sensitive Material **Activity status: Permitted** **Where:** **PER-1** The earthworks complies with standard EW-S3 - Accidental Discovery Protocol.	Will comply.	
EW-R13 Earthworks and Erosion and Sediment Control **Activity status: Permitted** **Where:** **PER-1** The earthworks complies with standard EW-S5 Erosion and sediment control.	Complies – refer to Land Development Report and Drawings at **Appendix 4** and **Appendix 5**.	
PROPOSED REGIONAL PLAN FOR NORTHALND – APPEALS VERSION		
C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity	Complies – refer to Land Development Report and Drawings at **Appendix 4** and **Appendix 5**.	

TRAFFIC PLANNING CONSULTANTS LTD

PROPOSED PAPAKAINGA DEVELOPMENT
TRANSPORT ASSESSMENT

TAKOU BAY PAPAKĀINGA
KAEO, NORTHLAND

Project Information:

Client	Takou Trust Ahu Whenua Trust
Job Number	240692
Title	Proposed Papakāinga Development, Takou Bay, Kaeo Northland
Prepared By	Peter Kelly
Date	June 2025
Report Status	Final

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1.0 INTRODUCTION

The proposal consists of establishing a Papakāinga dwellings within 94 Licence to Occupy (LTO) areas on the Point Takou Block. The site is located approximately 7 kilometres east of State Highway 10, and will be accessed via connections with Takou Bay Road, Otaha Road, and Te Ra Road. **Figure 1** displays the subject site location, relative to the surrounding public road network. The site is zoned as Rural Production under the Far North District Plan (FNDP).

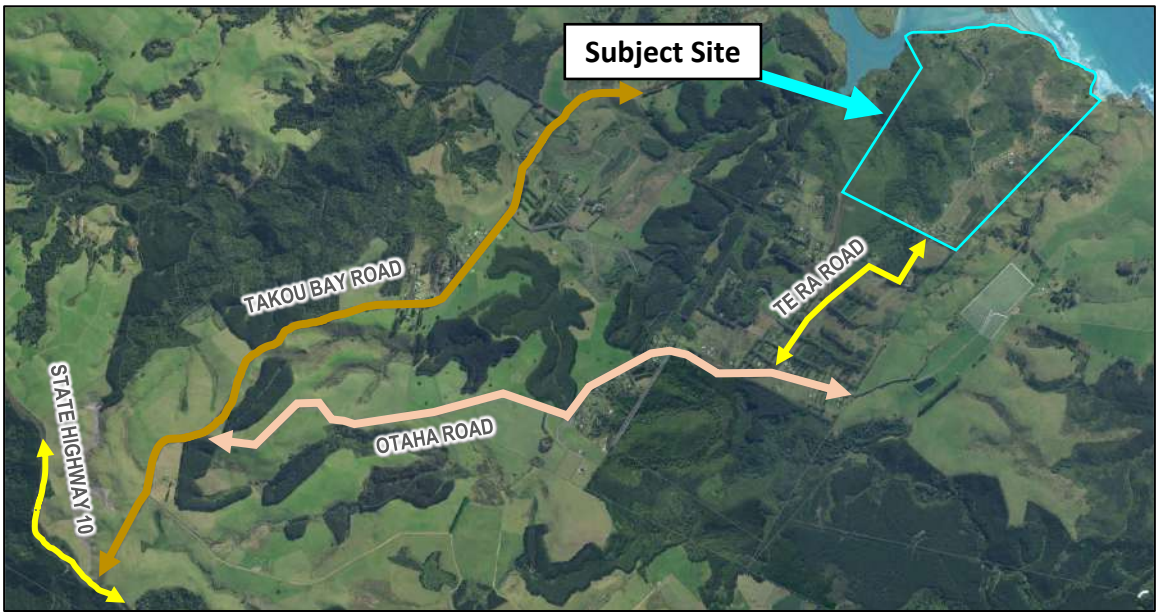

Figure 1: Site Location
Image Source: Far North District Council Maps

2.0 EXISTING TRANSPORT ENVIRONMENT

2.1 Road Network

2.1.1 Te Ra Road

Te Ra Road is a rural, unsealed local road that runs in a general north-south direction. It forms an intersection with Otaha Road at its southern end and terminates at its northern end. It has a carriageway width of approximately 7 metre, providing two-way flow. On-street parking is technically permitted on both sides of the carriageway, but it unlikely to be utilised given the nature of the road and it's surrounds. Footpaths are not provided on either side of the road. There is no traffic count data available for Te Ra Road. However, information from Mobileroad suggests that Te Ra Road had an ADT of 230 vehicles per day, which indicates a peak hour traffic volume of approximately 23 vehicles.

2.1.2 Otaha Road

Otaha Road is a rural local road that runs in a general east-west direction. It forms an intersection with Takou Bay Road at its western end, and it terminates at its eastern end. It has a carriageway width of approximately 7.0 metres providing one traffic lane in each direction. Footpaths are not provided on either side of the road. There is no traffic count data available for Otaha Road however, information from Mobileroad suggests that Otaha Road had an ADT of 355 vehicles per day which indicates a peak hour traffic volume of approximately 36 vehicles.

2.1.3 Takou Bay Road

Takou Bay Road is a rural local road that runs in a general north-south direction. It forms an intersection with State Highway 10 at its intersection, and it terminates at its northern end. It has a carriageway width of some 7.0 metres providing one traffic lane in each direction. Footpaths are not provided on either side of the road. There are no traffic count data available for Takou Bay Road however, information from Mobileroad suggests that Takou Bay Road had an ADT of 500 vehicles per day which indicates a peak hour traffic volume of approximately 50 vehicles.

2.1.4 State Highway 10

State Highway 10 (SH10) is controlled by the New Zealand Transport Agency – Waka Kotahi (NZTA-WK) which provides the primary link between Pakaraka and Awanui. Close to Takou Bay Road, SH10 has a carriageway width of approximately 10 metres, providing one traffic lane in each direction. Sealed shoulders are present on both sides of SH10 towards the east of the Takou Bay Road and along the southern side of SH 10 towards the west of the Takou Bay Road. It has a speed limit of 100 km/h. There are no footpath provisions on either side of the road.

Data from NZTA-WK indicated an average daily traffic volume of 5,513 vehicles on the section of SH10, some 1.2 km south of its intersection with Takou Bay Road, with approximately 7.10% heavy vehicles. From this information, the daily peak hour trip generation is estimated to be 550 vehicles per hour.

2.2 Public Transport

The area is not currently serviced by any public transport networks. Given the site's location and relatively low population density, it is unlikely that any public transport routes will be developed to service this area in the foreseeable future.

2.3 Crash History

A review of crash data along the route to the site from State Highway 10, using Takou Bay Road, Otaha Road, and Te Ra Road, inclusive of any intersections for the most recent 10-year period, January 2015 to 2025, (2025 data subject to reporting delays) has reported nine crashes. Figure 2 displays the location of the reported crashes. The crashes are summarised as:

- November 2015: State Highway 10, 10 metres south of Takou Bay Road – driver under the influence of alcohol lost control due to speed and entered ditch. A minor injury was reported.
- November 2015: Otaha Road, 1km east of Takou Bay Road – driver under the influence of alcohol lost control when turning through bend. No injuries were reported.
- July 2016: Otaha Road, 440 metres north of Te Ra Road – driver lost control and left road when trying to avoid animal in the road. No injuries were reported.
- February 2017: Intersection of Te Ra Road and Otaha Road – driver cutting corner while turning through bend, hit approaching vehicle head on. A minor injury was reported.
- March 2017: Intersection of SH10 and Takou Bay Road – driver failed to give-way to oncoming southbound vehicle when turning from side street. No injuries were reported.
- July 2017: Intersection of Te Ra Road and Te Ra Road Extension – driver travelling at excessive speed swerved to avoid dog in road, lost control and left carriageway. No injuries were reported.
- September 2018: Takou Bay Road, 230 metres east of Otaha Road – driver travelling at excessive speed through bend lost control and hit fence. No injuries were reported.
- May 2020: State Highway 10, 61 metres north of Takou Bay Road – driver travelling on wet road conditions, lost control and entered ditch. No injuries were reported.
- August 2020: State Highway 10, 31 metres east of Takou Bay Road – driver lost control of vehicle when turning through bend and went over a bank. Minor injuries were reported.

From the available crash data, there is no evidence to suggest any existing road safety concerns with respect to the built environment.

Figure 2: Area Crash Map

Image Source: Waka Kotahi Crash Analysis System

3.0 THE PROPOSAL

The proposal establishing a total of 94 papakāinga dwellings on the property (inclusive of the existing 40 occupied LTO sections). The plan used for the basis of this assessment is shown in **Figure 3**.

Figure 3: Proposed Development Plan
Image Source: Chesters

3.1 Trip Generation and Distribution

Under the FNDP, Papakainga residential units have a Traffic Intensity Factor (TIF) of 5 daily one-way vehicle movements. As a result of the site's 94 LTO sections, the site is expected to service 470 daily one-way vehicle movements. Given the site's location, being relatively remote from urban centres and trip attraction generators (schools, shopping, entertainment, and workplaces), drivers from the site are likely to combine trips as it would be a more efficient for residents (such as grocery shopping on way home from work, dropping kids at school on way to work, etc). While this may not always be the case, it is likely that on average daily vehicle trips from the site would be less than 5 / LTO section.

With 94 LTO sections proposed for the site (TIF of 470), the site will have a total TIF of 470 across the unsubdivided parent lot. As such, the site will have a TIF greater than 200. Therefore, the site's traffic intensity is identified as a Discretionary Activity under the FNDC standard. Assessment on the effect of the non-compliance is included later within this report.

With a daily TIF of 470 vehicle movements, it is estimated that the site will see approximately 47 peak hour vehicle movements. Being a residential site, vehicle movements to/from the site are expected to be tidal, with vehicles departing in the AM and returning in the PM. As such, 80% of peak hour vehicle movements are forecast to be travelling in the same direction. The resultant 38-9 peak hour vehicle split between inbound/outbound vehicle movements helps to reduce the potential for opposing two-way vehicle movement.

Vehicle trips to and from the site and anticipated to be predominantly to/from the west due to the connection to SH10, and then to the south (towards Kerikeri/Waipapa), which provides connection to more developed areas, schools, and services. As such vehicle trips to/from the site at the SH10 intersection with Takou Bay Road are expected to be predominantly right turns in, and left turns out.

3.2 Site Access

3.2.1 Vehicle Access

The existing site is currently served by a connection onto Te Ra Road. As part of the proposal, no changes will be made to the existing formation of public roads; Te Ra Road, Otaha Road, or Takou Bay Road.

Within the site, several private roads are already provided to service the Papakāinga, which will be upgraded as part of the proposal. In addition, two new private roads which will be provided to service the site (Te Rawhiti Road and Mataatua Ki Takou Road). **Figure 4** displays the roads within the Papakāinga.

The private roads/shared accesses will serve a total of 94 LTO sections and the existing marae. Under the FNDP, shared accesses are not permitted to service more than eight household units, otherwise a public road is to be provided. Assessment on the effect of this non-compliance is included later within this report.

Existing private roads will be upgraded to have passing bays provided at intervals between 70-100 metre, where the passing bay will be at least 5.5 metres wide and 15-20 metres long inclusive of tapers, along with localised widening to provide a carriageway width of 4 metres. New private roads will be constructed to have a similar formation to the existing roads, with 4-metre-wide carriageways and passing bays (5.5 metres wide) provided at 70-100 metre intervals.

With the site having a TIF of 470, it is estimated that the site will see approximately 47 peak hour vehicle movements. With this volume of vehicle movement and the regular provision of passing bays along the respective private roads/shared accesses, the internal roading network will be able

to suitably accommodate the likely volumes of vehicle movements associated with the proposed 94 LTO sections.

The accesses within the site will be formed with gradients, no steeper than of 1 in 8 (12.5%), which is considered suitable for the scale of the proposed development and the context of the surrounding environment. Under the FNDP, private accesses are permitted to be at steep as 1 in 4 (25%), as such the proposal complies with this standard.

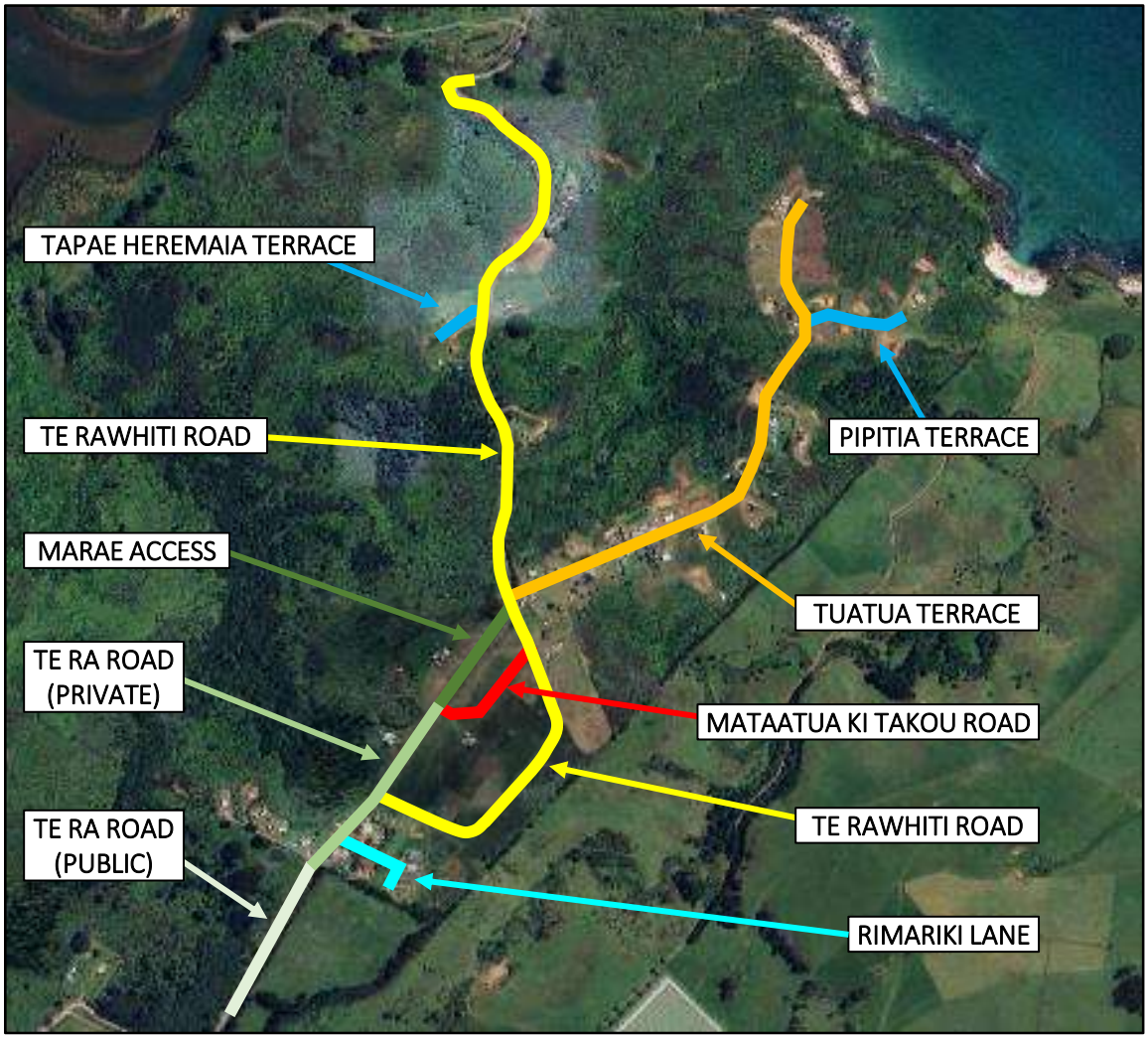

Figure 4: Papakāinga Private Roading
Image Source: Traffic Planning Consultants Ltd.

3.2.2 Pedestrian Access

Within the site, pedestrian access will be shared within the respective private roads/shared accesses. With a formed width of at least 4.0 metres provided, there is sufficient width available for a pedestrian and vehicle to utilise the access at the same time. With a design vehicle having a width of approximately 1.9 metres, allowing for 0.5 metre clearance on both sides of the vehicle, leaves a width of 1.1 metres available for pedestrian use. Within this context of the site and the likely vehicle/pedestrian volumes, this is considered acceptable. Additionally, the private roads within the site will be provided with a legal width of at least 10 metres, with associated unformed shoulders. As such, should a pedestrian watch additional clearance from a passing vehicle, they will be able to utilise the landscaped area to stand further from the vehicle. Within the passing bays, there would be insufficient width for two vehicles and a pedestrian to all utilise the 5.5 metre width

area. This event is considered very rare, and if it occurred, drivers would likely give-way to any pedestrians before proceeding. With good sightlines provided along the respective accesses and the low-speed environment, this operation can be completed safely.

3.3 Sight Distance

3.3.1 Internal Accesses

Within the site new private road intersections enable two-way vehicle movement through localised road widening at intersection locations. Additionally, at intersection locations, sightlines extend at least 50 metres in each direction allowing for drivers to suitably check for oncoming vehicles before turning. Similarly individual LTO section access points are likely to have sightlines in excess of 30 metres in both directions.

With the site being a low-volume and low speed environment, the available sightlines for the respective intersections and LTO section access points are considered acceptable.

3.3.2 Connection to Site

Along the existing public road route to the subject site, the existing roads and intersections were found to have generally good visibility along its length. One location along Te Ra Road (approximately 550 metres west of the subject site), near No. 95 Te Ra Road, was found to have overgrown vegetation on the southern corner, restricting visibility through this corner. Combined with a formed width of 5.0-6.0 metres, there is the potential for opposing two-way vehicles to conflict with each other through this corner. Figure 5 illustrates the sightline obstruction. As part of establishing the 94 LTO sections within the subject site, this vegetation should be removed to enable to the safe operation of the adjoining public road network. It is noted that the vegetation is located within the public road reserve. Vegetation should be cleared such that there is no growth in excess of 0.5 metres in height within the road reserve within 20 metres of the corner.

Figure 5: Te Ra Road Corner Visibility Obstruction
Image Source: Traffic Planning Consultants Ltd.

3.4 Parking Design

Details with respect to the on-site parking for the LTO sections are unknown at this time and would be established in the future as part of establishing dwellings on the LTO section. Given the size of the respective lots and developable area available, parking areas are expected to comply with the formed dimensions and gradients. Further to minimise increases to impervious coverage within the site as a whole, it is anticipated that vehicles will reverse either to/from the respective LTO section onto the adjoining private access. As the respective private accesses will be low-speed, low-volume environments, with good forward visibility, reversing to/from the individual LTO sections can be safely accommodated within the site.

3.5 Refuse Collection and Deliveries

The proposal is expected to be serviced predominantly on-site by either public refuse collection (via a private on-site servicing agreement), or private refuse collection on a regular basis and to a lesser extent by larger trucks shifting furniture to and from the residential dwellings or performing deliveries.

Larger trucks serving the site are anticipated to either enter the respective LTO section, stop temporarily along the access utilising the landscaped shoulder, or park temporarily within a provided passing bay. Any deliveries to the site can be accommodated in a similar fashion.

Larger vehicles to the site will be able to turn around utilising the network of private accesses provided, or by completing a multi-point turn within one of the private access intersections.

As the site will serve a low volume of peak hour vehicle movements and have good visibility, trucks will be able to access and serve the site with less than minor effects.

4.0 FAR NORTH DISTRICT PLAN REQUIREMENTS

Chapter 15 – Transportation, Section 1 – Traffic, Parking and Access of the Far North District Council – Operative Plan (FNDP) sets out the objectives, policies, and rules relating to transportation within the context of this development. The transportation objectives of the FNDP are:

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

The transportation policies of the FNDP are:

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

Table 1 lists the relevant standards that apply to this development and comments on compliance. Where there is non-compliance, further assessment has been undertaken against the criteria set out in the FNDP.

Table 1: Transport Development Standards

Development Standard	Requirement/Details	Comment
15.1.6A Traffic	Sets the threshold for when activities are classified as permitted (P), controlled (C), Restricted Discretionary (RC), or Discretionary (D), and the associated assessment criteria.	The site will see a total of 94 LTO sections, with a TIF of 470 within the rural production zone and general coastal zone – Non-Complying Activity
15.1.6B.1.1 On-Site Car Parking Spaces	Defines the number of parking spaces required for new developments.	Details of car parking areas are unknown at this stage of development, but are anticipated to comply with the relevant standards – **does not form part of this consent**
15.1.6B.1.4 Accessible Car Parking Spaces	Defines the number and dimensions of accessible parking spaces required for new developments.	The site will be residential in nature – **does not apply**
15.1.6B.1.5 Car Parking Space Standards	Defines the size and layout requirements for new parking spaces.	Details of car parking areas are unknown at this stage of development, but are anticipated to comply with the relevant standards – **does not form part of this consent**
15.1.6B.1.6 Loading Spaces	Defines the number and dimensions of loading spaces required for new developments.	The site is located within a Rural Production zone, where loading spaces are not required – **does not apply**
15.1.6B.2.1 Cycling Facilities	Defines the cycling facility requirements in lieu of car parking.	The site is located within a Rural Production zone – **does not apply**
15.1.6B.2.2 Green Space	Defines the green space requirements in lieu of car parking.	The site is located within a Rural Production zone – **does not apply**
15.1.6C.1.1.a Private Access Widths	Defines the minimum access widths.	The private accesses serving the site will be formed as at least 4.0 metres wide, with a legal width of at least 10 metres – does not comply
15.1.6C.1.1.b Private Access Gradients	Defines the minimum access gradients.	The private accesses will be no steeper than 1 in 4 (25%) – **complies**
15.1.6C.1.1.c Number of Dwellings Served by Private Access	Defines the number of sites permitted to be served by a private access.	The shared accesses will service more than eight household equivalents – does not comply
15.1.6C.1.1.d Public Road Provision	Defines when a public road should be provided as part of subdivision.	There is no subdivision as part of the proposal – **does not apply**
15.1.6C.1.1.e Private Accessway Location	Defines the suitable locations for private access.	The site will access onto a local road – **complies** The site access onto the public road network will be more than 100 metres

Development Standard	Requirement/Details	Comment
		from any public road intersection – **complies**
15.1.6C.1.3 Passing Bays on Private Accessways	Defines the requirements for passing bay dimensions and spacing.	The private accesses will maintain a width of 4.0 metres and will increase to 5.5 metres in width to facilitate two-way vehicle movement approximately every 80 metres – **complies**
15.1.6C.1.4 Access Over Footpaths	Defines the number of and width of vehicle crossings, where formed across a footpath.	There are no footpaths which cross over the respective access – **does not apply**
15.1.6C.1.5 Vehicle Crossing Standards in Rural Zones	Defines the structural and surfacing requirements for vehicle crossings.	No new vehicle crossings will be constructed onto public roads, the existing access will be retained in its current form – **does not apply**
15.1.6C.1.7 General Access Standards	Defines access requirements with respect to vehicle circulation and on-site manoeuvring.	Vehicles will only be required to reverse onto private accesses, were serving four or fewer parking spaces – **complies** Movement to and from the public road network will be in a forward direction for all vehicles – **complies**
15.1.6C.1.8 Frontage to Existing Roads	Defines the requirements for public road improvements as a result of site development.	The site will access onto Te Ra Road and no changes are proposed to the site frontage **– complies**
15.1.6C.1.11 Road Designations	Defines the requirements for a site where the frontage road is subject to a road designation.	Te Ra Road and the subject site are not subject to any designations, as per Zone Map 22 – **does not apply**

4.1 Assessment of Non-Compliance: 15.1.6A – Traffic

The reason for consent under this standard relates to the proposed development having a Traffic Intensity Factor of 510. As the site is located within a Rural Production zone, activities with a TIF over 200 are Discretionary. Under Section 15.1.6A.7 the assessment criteria are outlined for this standard as follows:

a) The extent by which the expected traffic intensity for a proposed activity exceeds the assumed value set by the Traffic Intensity Factor contained in Appendix 3A in Part 4 of the Plan.

b) The time of day when the extra vehicle movements will occur.

c) The distance between the location where the vehicle movements take place and any adjacent properties.

d) The width and capability of any street to be able to cope safely with the extra vehicle movements.

e) The location of any footpaths and the volume of pedestrian traffic on them.

f) The sight distances associated with the vehicle access onto the street.

g) The existing volume of traffic on the streets affected.

h) Any existing congestion or safety problems on the streets affected.

i) With respect to effects in local neighbourhoods, the ability to mitigate any adverse effects through the design of the access, or the screening of vehicle movements, or limiting the times when vehicle movements occur.

j) With respect to the effects on through traffic on arterial roads, strategic roads and State Highways, any measures such as right-turn bays, flush medians, left turn deceleration tapers, etc. proposed to be installed on the road as part of the development to accommodate traffic turning into and out of the site.

k) The extent to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment.

l) Whether providing or having access to bicycle parking, shower/changing facilities or alterative transportation would reduce the number of vehicle movements associated with the proposed activity.

m) the provision of safe access for pedestrians moving within or exiting the site.

The following is provided with respect to the identified assessment criteria with the FNDP:

- The accesses will serve a total of 94 LTO sections. As such, at the busiest location a total of 470 daily vehicle movements and 47 peak hour vehicle movements are forecast. In practicality, it is likely that these volumes would be less, due to the site's overall proximity to retail and employment areas. As such, drivers are likely to consolidate vehicle trips to work/shopping/etc, so to minimise additional unnecessary driving.
- Presently, 40 LTO sections are presently occupied within the subject site. As such the further 54 LTO sections once occupied would see approximately 270 additional vehicles along the road network per day based on a TIF of 5.
- In practicality, it is likely that these volumes would be less, due to the site's overall proximity to retail, education, and employment areas. As such, drivers are likely to consolidate vehicle trips to work/shopping/etc, so to minimise additional unnecessary driving.

- Surrounding sealed local roads are estimated to carry upwards of 500 vehicles per day with 50 peak hour vehicle movements. Unsealed roads (Otaha Road and Te Ra Road) carry upwards of 355 vehicles per day with 30 peak hour vehicle movements. SH10 is estimated to carry upwards of 5,500 vehicles per day with 550 vehicle movements during peak hours.
- The proposal will increase the number of vehicle movements along the respective roads by approximately 290 vehicles per day and 29 vehicles during peak hours. This increase in vehicle movements can be accommodated without adverse operational or safety effects to the surrounding environment.
- With 645 daily vehicle movements estimated along busiest sections of Otaha Road following the complete development of the LTO areas, the road (in part) approaches the threshold for investigation and monitoring on the road to identify if the upgrading to a sealed road would be appropriate. Any such upgrades would likely be limited to the section of road between Takou Bay Road and the existing sealed section approximately 2.5 kilometres to the east. The timing of this upgrade would be dependent on observed traffic volumes along the road in the future and the proportion of heavy vehicles which damage metalled roads more quickly compared to passenger vehicles.
- The majority of vehicle movements to and from the site will occur on weekdays between 07:00 and 09:00, and 15:00 and 18:00. The peak hours of the site's trip generation coordinate with the typical peaks of the surrounding road network.
- The vehicle crossing point for the site has no adjacent vehicle crossings and is located at the end of the public section of Te Ra Road.
- The vehicle access, where connecting to Te Ra Road will have good visibility along the public road.
- The area roads are all formed as two-way with basic intersection treatments. Based on the likely volumes of vehicle movements to/from the site and the existing traffic volumes, no auxiliary turning lanes are required to safely service the site.
- Currently there are no footpath provided in the surrounding area, and the proposal will see pedestrian movement shared within the vehicle access. As the surrounding area is a low-volume environment, sharing of pedestrian movement within the road is common for rural areas. Combined with very low pedestrian volumes, and generally good sightlines, this can be safely managed.

Considering these points, the proposed site's trip generation will have less than minor effects onto the safety, functionality, and amenity of the surrounding environment and therefore is acceptable.

4.2 Assessment of Non-Compliance: 15.1.6C.1.1.a –Private Access Widths

The reason for consent under these standards relates to private accesses being formed with a width of 4.0 metres, plus passing bays throughout. Under the Standard 15.1.6C.1.1a there is no formation requirement which relates to the number of LTO sections provided within the proposal, as such the largest permitted dimension was assessed as a baseline. Section 15.1.6C.4.1 outlines the assessment criteria where there is a non-compliance for access standards. These are:

a) *Adequacy of sight distances available at the access location.*

b) *Any current traffic safety or congestion problems in the area.*

c) *Any foreseeable future changes in traffic patterns in the area.*

d) *Possible measures or restrictions on vehicle movements in and out of the access.*

e) *The adequacy of the engineering standards proposed and the ease of access to and from, and within, the site.*

f) *The provision of access for all persons and vehicles likely to need access to the site, including pedestrian, cycle, disabled and vehicular.*

g) *The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.*

h) *For sites with a road frontage with Kerikeri Road between its intersection with SH10 and Cannon Drive:*

   i. *the visual impact of hard surfaces and vehicles on the natural character;*

   ii. *the cumulative effects of additional vehicle access onto Kerikeri Road and the potential vehicle conflicts that could occur;*

   iii. *possible use of right of way access and private roads to minimise the number of additional access points onto Kerikeri Road;*

   iv. *the vehicle speed limit on Kerikeri Road at the additional access point and the potential vehicle conflicts that could occur.*

i) *The provisions of the roading hierarchy, and any development plans of the roading network.*

j) *The need to provide alternative access for car parking and vehicle loading in business zones by way of vested service lanes at the rear of properties, having regard to alternative means of access and performance standards for activities within such zones.*

k) *Any need to require provision to be made in a subdivision for the vesting of reserves for the purpose of facilitating connections to future roading extensions to serve surrounding land; future connection of pedestrian accessways from street to street; future provision of service lanes; or planned road links that may need to pass through the subdivision; and the practicality of creating such easements at the time of subdivision application in order to facilitate later development.*

l) *Enter into agreements that will enable the Council to require the future owners to form and vest roads when other land becomes available (consent notices shall be registered on such Certificates of Title pursuant to Rule 13.6.7).*

m) *With respect to access to a State Highway that is a Limited Access Road, the effects on the safety and/or efficiency on any SH and its connection to the local road network and the provision of written approval from the New Zealand Transport Agency.*

The following points are made in regard to the proposal:

- The accesses will serve a total of 94 LTO sections. As such, at the busiest location a total of 470 daily vehicle movements and 47 peak hour vehicle movements are forecast. In practicality, it is likely that these volumes would be less, due to the site's overall proximity to retail, education, and employment areas. As such, drivers are likely to consolidate vehicle trips to work/shopping/etc, so to minimise additional unnecessary driving.

- The accesses within the site are provided with passing bays, 5.5 metres wide, along the length of the accesses, as well as localised widening to 6.5 metres where intersections between private accesses occurs.
- The area surrounding the site is not considered to have any existing traffic safety or congestion concerns.
- There are no anticipated significant changes to the traffic patterns within the surrounding area.
- The provision of a narrower access has a positive traffic calming effect by applying increased side friction. As such, drivers through the site are likely to travel at lower speeds, compared to that of a wider vehicle access.
- The accesses will be metaled and as such will see generally low operating speeds within the site of approximately 30-40 km/h.
- With a low volume of pedestrian and vehicle movements within the site during peak hours and generally low vehicle operating speeds, pedestrians will be able to safely share use of the access. This treatment is consistent with many rural communities.
- Based on the likely volumes, there is a low probability that two opposing vehicles and a pedestrian will meet at the same location along the access. In practice, when a pedestrian encounters a vehicle, the driver will utilise the side of the access not in use by the pedestrian, affording the pedestrian approximately 1.1-3.6 metres of width.
- In the rare event that two opposing vehicles encounter each other and a pedestrian, the access is provided with suitable visibility which would allow drivers to give-way to each other and allow the pedestrian to clear the area before proceeding. Further as the site will be an integrated Papakāinga, the majority of site users will know each other and be familiar with how the access will operate.
- Signage (Figure 4) indicating that the accesses will be a shared space should be provided on both sides of Te Ra Road, approximately 10 metres into the private site to inform drivers that they should expect a range of users within the accesses.
- The site has been designed to safely accommodate all anticipated user groups associated with the site.

Considering these points, the proposed access width within the site is acceptable and forecast to operate safely and efficiently.

Figure 4: Indicative Signage

4.3 Assessment of Non-Compliance: 15.1.6C.1.1.c – Number of Dwellings Served by Private Access

The reason for consent under these standards relates to private accesses being provided, where serving 94 LTO sections. Under the Standard 15.1.6C.1.1c where a private access is not permitted to service more than eight dwellings. Section 15.1.6C.4.1 outlines the assessment criteria where there is a non-compliance for access standards. These are:

n) Adequacy of sight distances available at the access location.

o) Any current traffic safety or congestion problems in the area.

p) Any foreseeable future changes in traffic patterns in the area.

q) Possible measures or restrictions on vehicle movements in and out of the access.

r) The adequacy of the engineering standards proposed and the ease of access to and from, and within, the site.

s) The provision of access for all persons and vehicles likely to need access to the site, including pedestrian, cycle, disabled and vehicular.

t) The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.

u) For sites with a road frontage with Kerikeri Road between its intersection with SH10 and Cannon Drive:

i. the visual impact of hard surfaces and vehicles on the natural character;

ii. the cumulative effects of additional vehicle access onto Kerikeri Road and the potential vehicle conflicts that could occur;

iii. possible use of right of way access and private roads to minimise the number of additional access points onto Kerikeri Road;

iv. the vehicle speed limit on Kerikeri Road at the additional access point and the potential vehicle conflicts that could occur.

v) The provisions of the roading hierarchy, and any development plans of the roading network.

w) The need to provide alternative access for car parking and vehicle loading in business zones by way of vested service lanes at the rear of properties, having regard to alternative means of access and performance standards for activities within such zones.

x) Any need to require provision to be made in a subdivision for the vesting of reserves for the purpose of facilitating connections to future roading extensions to serve surrounding land; future connection of pedestrian accessways from street to street; future provision of service lanes; or planned road links that may need to pass through the subdivision; and the practicality of creating such easements at the time of subdivision application in order to facilitate later development.

y) Enter into agreements that will enable the Council to require the future owners to form and vest roads when other land becomes available (consent notices shall be registered on such Certificates of Title pursuant to Rule 13.6.7).

z) With respect to access to a State Highway that is a Limited Access Road, the effects on the safety and/or efficiency on any SH and its connection to the local road network and the provision of written approval from the New Zealand Transport Agency.

The following points are made in regard to the proposal:

- The site will retain under ownership of the Takou Trust Ahu Whenua Trust, with housing provided being papakāinga in nature. The Takou Trust Ahu Whenua Trust will be responsible for the ongoing maintenance and repair of roads within the papakāinga.
- Providing a public road to service the site is considered unnecessary, as the site is not proposed to be subdivided. As such providing a public road connection through an area, which is bound all by a single lot would be considered a poor outcome as it would install a

public asset which technically services one public user group, which is the ultimate owner of the Lot.

- Providing a public road through the site, which is a combined Marae and papakāinga area, would detract from the overall intent of the area being a shared but ultimately private housing area.
- Providing public roads with an increased legal width would reduce the amount of on-site amenity for the individual dwellings (both already establish and proposed) and likely result in a reduction in development yield.
- The proposed access arrangements for the site can suitably accommodate the likely traffic volumes associated with the papakāinga housing and provides for good roading safety, functionality and amenity.
- The access has been designed to accommodate the required civil engineering infrastructure as identified by Chesters within the associated drawing sets.

Considering these points, the proposal to service the site via private accesses is appropriate and can be safely accommodated within the site.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the assessment described in this report, the following conclusions and recommendations can be made in respect of the proposal to establish a total of 94 LTO area within a Papakāinga development on the Point Takou Block:

Recommendations:

- The existing vegetation within the road reserve near No. 95 Te Ra Road be removed to increase visibility along the road through the bend.
- Signage be installed along Te Ra Road (private) to indicate that the access environment is to be shared between all users.
- Otaha Road has its road volumes (specifically heavy vehicles) monitored in the future by Council to identify if the road should be given a chip-seal treatment to better manage ongoing maintenance costs.

Conclusions:

- A review of the proposal has identified four items which require consent under the following Far North District Plan standards:
  - 15.1.6A – Traffic
  - 15.1.6C.1.1.a – Private Access Widths
  - 15.1.6C.1.1.c – Number of Dwellings Served by Private Access
- Vehicle access to the site is designed to a suitable standard such that the proposal will have less than a minor effect on the surrounding road network.

Overall, it is considered that the traffic engineering effects of the proposal can be accommodated on the road network without compromising its function, capacity, or safety.

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