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

HE ARA TĀMATA
CREATING GREAT PLACES
Supporting our people

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Application for resource consent

Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Form 9).
Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement discussion

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

Have you consulted Council's Infrastructure Officer regarding infrastructure capacity to service the development?
☐ **Yes** ☑ **No** ☑ **N/A**

Have you consulted the Roading Officer regarding any road to vest or departure from District Plan / Engineering standards?
☐ **Yes** ☑ **No** ☑ **N/A**

**Contact details of who and how to engage in pre lodgement discussions can be found on the Resource Consent pages of the FNDC website.*

2. Type of consent being applied for

(more than one circle can be ticked):

☑ **Land Use**
☐ **Fast Track (Land Use - Controlled Activity)**
☐ **Change of Consent Notice (s.221(3))**
☐ **Certificate of Compliance (s.139)**
☐ **Extension of time (s.125)**

☐ **Discharge:** Total voume = _____ m³
Note; volumes >3m³ requires NRC Consent 3m³
☐ **Subdivision**
☐ **Existing Use Certificate (s.139A)**
☐ **Consent under National Environmental Standard**
(e.g. Assessing and Managing Contaminants in Soil)

☐ **Other (please specify)** _____

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?	Te Runanga o Te Rarawa and Ahipara Takiwa
Who else have you consulted with?	Roading Department, HNZPT, affected neighbours, Te Kohanga Trust

For any questions or information regarding iwi/hapū consultation, please contact:
The Resource Consents Planning Technicians, **planning_technicians@fndc.govt.nz**

5. Applicant details

Name/s:	Henri (Harry) and Meredith Burkhardt
Email:	[redacted]
Phone number:	
Postal address: (or alternative method of service under section 352 of the act)	

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

If yes, please provide details:

6. Address for correspondence

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

Name/s:	Logiplan Limited C/- Nina Pivac
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: H & M Burkhardt

Property address/ location: [redacted]

8. Application site details

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

Name/s: H & M Burkhardt

Site address/ location: [redacted]

Legal description:

Certificate of title:

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

Site visit requirements:

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

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

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

9. Description of the proposal

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

To construct new dwelling, detached shed/self-contained unit (NES-DMRU) and undertake associated earthworks in RPZ and Coastal Environment Overlay. See AEE for full description of proposal.

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.

The proposal has been prepared in accordance with the following version of the FNDC Engineering Standards:

☑ **2009** ◯ **2023**

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):

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

13. Natural hazards (National Policy Statement for Natural Hazards 2025)

Is the site subject to known or potential natural hazards (for example, flooding, coastal inundation, erosion, or unstable land), as contemplated by the National Policy Statement for Natural Hazards 2025? ◯ **Yes** ✔ **No**

If yes, please identify the relevant natural hazard(s) by ticking the applicable box(es) below:

- [ ] **Flooding**
- [ ] **Landslips**
- [ ] **Coastal Erosion**
- [ ] **Coastal Inundation**
- [ ] **Active Faults**
- [ ] **Liquefaction**
- [ ] **Tsunami**

Please ensure all relevant technical reports are submitted with the application.

14. 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**

15. Draft conditions:

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

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

16. 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) As per applicant details

Email:

Phone number: Work Home

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

Postcode

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) Harry Burkhardt

Signature:
(signature of bill payer)

[redacted]

Date 12-Nov-2026

MANDATORY

17. 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.

18. Declaration

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

Name (please write in full) Nina Pivac

Signature

[redacted]

Date 12-Nov-2026

A[redacted]ion is made by electronic means

See overleaf for a checklist of your information...

Checklist of your information

Please tick if information is provided

- [x] Payment (cheques payable to Far North District Council)
- [x] A current Certificate of Title (Search Copy not more than 6 months old)
- [x] Details of your consultation with Iwi and hapū
- [x] Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- [x] Applicant / agent / property owner / bill payer details provided
- [x] Location of property and description of proposal
- [x] Assessment of Environmental Effects
- [x] Written approvals / correspondence from consulted parties
- [x] Reports from technical experts (if required)
- [ ] Copies of other relevant consents associated with this application
- [x] Location and site plans (land use) AND/OR
- [ ] Location and scheme plan (subdivision)
- [x] 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



LANDUSE RESOURCE CONSENT APPLICATION
TO CONSTRUCT NEW DWELLING AND UNDERTAKE ASSOCIATED EARTHWORKS

380 FORESHORE ROAD, AHIPARA
LOT 4 DP 210535

ASSESSMENT OF ENVIRONMENTAL EFFECTS

PREPARED FOR:
HENRI & MEREDITH BURKHARDT

Rev A
11 November 2026

logiplan

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Appendix B – Certificate of Title and Interests
Appendix C – Landscape Assessment
Appendix D – TP58 Report
Appendix E – Site Suitability Report
Appendix F – Written Approvals
Appendix G – Evidence of Iwi Consultation

1.0 THE APPLICANT AND PROPERTY DETAILS

To:	Far North District Council
Site address:	380 Foreshore Road, Ahipara
Applicant's name:	Henri (Harry) and Meredith Burkhardt
Address for service:	Logiplan Limited Attn: Nina Pivac 50-64 Commerce Street Kaitaia 0410
Legal description:	Lot 4 DP 210535
Site area:	3996m2
Site owner/s:	Henri Jacques Burkhardt Meredith Ann Burkhardt Craig Anthony Pellett
Operative zoning/overlays	General Coastal Zone NRC Coastal Environment
Proposed zoning/overlays:	Rural Production Zone Coastal Environment Overlay Treaty Settlement Area of Interest: Te Rarawa
Brief description of proposal:	To construct new dwelling, detached shed/sleepout, and undertake associated earthworks. Resource consent is required under the following PDP-AV rules: • RPROZ-R1 New buildings or structures and relocated buildings or extensions or alterations to existings buildings or structures • RPROZ-R2 Impermeable surface coverage • CE-R1 New buildings or structures and relocated buildings and extensions or alterations to existing buildings or structures • CE-R2 Earthworks or indigenous vegetation clearance
Summary of reasons for consent:	Overall, resource consent is sought as a **Restricted Discretionary Activity** under the Proposed Far North District Plan (PDP-AV).

AUTHOR



Nina Pivac
Director l BAppSC l PGDipPlan l Assoc. NZPI

Date: 12 November 2026

2.0 DESCRIPTION OF PROPOSAL

The applicants, Harry and Meredith Burkhardt, propose to construct a 221.64m² dwelling and a detached 108m² garage incorporating a 37.08m² minor residential unit (under the NES-DMRU) at 380 Foreshore Road, Ahipara. The proposal also includes associated earthworks and the construction of retaining walls to establish suitable building platforms to accommodate the proposed development.

Resource consent is required under the following PDP-AV rules:

- **RPROZ-R1** New buildings or structures and relocated buildings or extensions or alterations to existings buildings or structures
- **RPROZ-R2** Impermeable surface coverage
- **CE-R1** New buildings or structures and relocated buildings and extensions or alterations to existing buildings or structures
- **CE-R2** Earthworks or indigenous vegetation clearance

Several technical reports have been provided in support of the application. These include the following:

- **Appendix C –** Landscape Assessment (prepared by Studio North Landscape Ecology)
- **Appendix D –** TP58 Report (prepared by Waterflow NZ Limited)
- **Appendix E –** Site Suitability Report (prepared by FNR Consulting)

Consultation has been undertaken with all potentially affected parties, with written approvals obtained and included in **Appendix F.** Consultation has also been undertaken with the relevant iwi authorities, Te Rūnanga o Te Rarawa and Ahipara Takiwā, with evidence of this consultation provided in **Appendix G.**

Comments from FNDC's Roading Department (C/- Aimee Page) and Heritage New Zealand Pouhere Taonga (HNZPT) have also been sought. While no response had been received at the time of lodgement, it is anticipated that the application will be circulated to all relevant interested parties by Council.

This Assessment of Environmental Effects (AEE) has been prepared in accordance with section 88 and Schedule 4 of the Resource Management Act 1991 (RMA), as amended, which continues to govern resource consent applications under the transitional provisions of the Planning Act 2026. The assessment considers the relevant provisions of the Far North Proposed District Plan – Appeals Version (PDP-AV).

3.0 SITE CONTEXT

The subject site is located at 380 Foreshore Road, Ahipara and is legally described as Lot 4 DP 210535. The relevant certificate of title and interests are attached as **Appendix B.**

It is noted that the site is subject to Consent Notice 5301250.2 with conditions relating to earthworks and stormwater disposal. As per the assessment of effects below, the proposal has been designed to comply with these conditions.



Figure 1: Map showing subject site (Premise)

The irregular-shaped, approximately 3,996 m² site occupies elevated coastal land between the Ahipara foreshore and Shipwreck Bay, with expansive views along Ninety Mile Beach. The property is predominantly undeveloped pasture and falls generally northward from approximately RL 59 near Foreshore Road to RL 44 at the northern corner.

The surrounding environment includes established rural-coastal and residential development, coastal vegetation and the wider coastal landscape.

Legal access is via an existing right-of-way from Foreshore Road. No new road crossing is proposed.

Under the PDP-AV, the site is zoned Rural Production and is subject to the Coastal Environment and Treaty Settlement Area of Interest overlays.

4.0 OPERATIVE FAR NORTH DISTRICT PLAN (ODP) ASSESSMENT

An assessment of the Operative Far North District Plan (ODP) has been undertaken to determine the extent to which its provisions remain applicable to the proposed development.

Pursuant to section 86B(1) of the Resource Management Act 1991 (RMA), the rules of the Proposed Far North District Plan – Appeals Version (PDP-AV) obtained legal effect following the notification of decisions on submissions on 30 June 2026.

Furthermore, section 86F(1) of the RMA provides that where the period for lodging appeals has expired and no appeals remain outstanding in respect of a particular rule, that rule must be treated as fully operative, with any corresponding previous rule becoming inoperative.

A review of the PDP-AV planning maps and relevant provisions indicates that the Rural Production Zone (RPZ) and Coastal Environment overlay provisions applicable to the subject site are not subject to appeal. Accordingly, the relevant rules are treated as operative pursuant to section 86F(1) of the RMA, superseding the equivalent provisions of the ODP.

On this basis, the corresponding ODP provisions, including the relevant General Coastal Zone and earthworks rules, are considered inoperative to the extent that they have been replaced by by

equivalent PDP-AV rules. The assessment of the proposed development has therefore been undertaken primarily against the applicable provisions of the PDP-AV.

5.0 PROPOSED FAR NORTH DISTRICT PLAN (PDP-AV) ASSESSMENT

RURAL PRODUCTION ZONE (RPZ)		
RPROZ Provision	**Permitted Standards**	**Compliance**
RPROZ-R1 – Buildings and structures	**PER-1:** New buildings or structures, relocated buildings, and extensions or alterations to existing buildings or structures. **PER-2:** Compliance with RPROZ-S1 to RPROZ-S10. **PER-3:** Buildings or structures within mapped airport protection surface areas must not penetrate the surfaces identified in APP4.	See assessment against relevant performance standards below. **Restricted Discretionary Activity**
RPROZ-R2 – Impermeable surface coverage	**PER-1:** Maximum impermeable surface coverage of 10% of site area.	Total impermeable surfaces equate to 28.65% which exceeds the permitted threshold. **Restricted Discretionary Activity**
RPROZ-R3 – Residential activity	**PER-1:** Minimum 40ha per residential unit, except for a single residential unit on a site smaller than 40ha. **PER-2:** Maximum six residential units per site. Detached minor residential units established under the NES-DMRU are excluded from PER-1 and PER-2.	The site will accommodate a primary dwelling and a minor residential unit attached to the proposed shed. The minor residential unit complies with the relevant permitted activity standards under the National Environmental Standards for Detached Minor Residential Units (NES-DMRU) and is therefore considered a permitted activity under the NES-DMRU. This is discussed in further detail below. **Permitted Activity**
RPROZ-R4 – Visitor accommodation	**PER-1:** Located within a residential unit, accessory building or minor residential unit. **PER-2:** Maximum 10 guests per night. **PER-3:** No shared site access. **PER-4:** Minimum 20m setback from boundaries of sites under different ownership.	n/a
RPROZ-R5 – Home business	**PER-1:** Within a residential unit, minor residential unit or accessory building not exceeding 40m² GFA. **PER-2:** Maximum two off-site-resident full-time equivalent workers. **PER-3:** Manufacturing and processing indoors or screened from adjoining residential units. PER-4: Public opening hours 7am–8pm weekdays and 8am–8pm weekends/public holidays.	n/a
RPROZ-R23 – Papakāinga housing	**RDIS-1:** Maximum 10 residential units per site.	n/a

RURAL PRODUCTION ZONE (RPZ)		
RPROZ Provision	**Permitted Standards**	**Compliance**
	RDIS-2: Legal mechanism securing communal ownership and continued ancestral cultural use. **RDIS-3:** Not located on highly productive land.	
RPROZ-R6 to R22 and R24 to R41 – Other activities	Provisions relating primarily to non-residential activities, including farming, forestry, rural industry, mineral extraction, tourism and commercial activities. Not directly applicable to conventional residential development.	n/a

RURAL PRODUCTION ZONE STANDARDS		
RPROZ Provision	**Permitted Standards**	**Compliance**
RPROZ-S1 – Maximum height	Maximum building or structure height of 12m above ground level. Exemptions apply to specified solar/water heating components, chimneys and architectural features within prescribed dimensions.	The proposed buildings will be less than 12m in height. **Complies**
RPROZ-S2 – Height in relation to boundary	Buildings and structures must comply with recession planes measured inwards from site boundaries, originating 2m above ground level: Northern boundary 55°; eastern and western boundaries 45°; southern boundary 35°. Specified exemptions apply.	As per the elevation plans, the proposed dwelling encroaches the recession plane as measured from the western, northern and eastern boundaries. All affected parties have provided their written approvals, see **Appendix F.** **Resricted Discretionary Activity**
RPROZ-S3 – Setbacks	Minimum 10m from all site boundaries, except: accessory buildings on sites smaller than 5,000m² may be set back 3m from non-road boundaries; habitable buildings must be set back 20m from unsealed road boundaries and 30m from boundaries of sites containing commercial forests. Exemptions apply to specified fences, walls, decks, wastewater infrastructure and water tanks.	As per the site plan, the proposed development encroaches the 10m setback on the southern and western boundaries. **Restricted Discretionary Activity**
RPROZ-S4 – Building or structure coverage	Maximum 15% of site area.	Total building coverage equates to 13.47% which falls well within the permitted threshold.
RPROZ-S6 – Sensitive activities setback from Mineral Extraction Zone	Minimum 100m from the Mineral Extraction Zone boundary, excluding non-habitable accessory buildings.	n/a
RPROZ-S7 – Sensitive activities setback from intensive primary production	Minimum 300m from associated hardstand areas, treatment systems, animal housing and other structures on adjoining sites under separate ownership.	n/a
RPROZ-S8 – Sensitive activities setback from stock buildings	Minimum 100m from buildings or structures used to house, milk or feed stock on adjoining sites under separate ownership, excluding intensive primary production facilities.	n/a
RPROZ-S9 – Sensitive activities setback from Heavy Industrial Zone	Minimum 100m from the Heavy Industrial Zone boundary, excluding non-habitable accessory buildings.	n/a
RPROZ-S10 – Sensitive activities setback from Horticulture Precinct	Minimum 20m from the Horticulture Precinct boundary, excluding non-habitable accessory buildings.	n/a

RURAL PRODUCTION ZONE STANDARDS		
RPROZ Provision	**Permitted Standards**	**Compliance**
RPROZ-S5 – Buildings used to house, milk or feed stock	Not directly applicable to residential development. This standard regulates agricultural buildings and structures.	n/a

EARTHWORKS (EW)		
EW Provision	**Permitted Standards**	**Compliance**
EW-R1 – Earthworks	**PER-1:** Earthworks must comply with EW-S1 to EW-S9. Excludes placement of aggregate and specified biosecurity-related earthworks.	See comments below.
EW-R2 – National Grid Yard and Top Energy Transmission Lines	Earthworks within specified distances of 110kV and 66kV transmission lines must comply with depth restrictions, electrical clearances and infrastructure protection requirements. Specified exemptions apply.	n/a
EW-R3 – Critical Electricity Lines	**PER-1:** Earthworks within 10m must not occur directly above underground cables, reduce required overhead clearances or breach NZECP 34:2001. **PER-2:** Alternative compliance provisions apply, including notification and statutory requirements.	n/a
EW-R4 – Land Drainage Area of Benefit	Restricted discretionary activity where earthworks within a mapped Land Drainage Area of Benefit may obstruct, divert or attenuate catchment flows or adversely affect drainage scheme operations.	n/a
EW-S1 – Maximum earthworks thresholds	Rural Producion Zone: maximum 5000m³ volume and 2,500m² area per site within a calendar year. Specified exemptions apply.	As per the Cut/Fill plan, the total earthworks volume equates to 2033m³, and will cover an area of less than 2500m². **Complies**
EW-S2 – Maximum depth	Maximum cut depth or fill height: • 1.5m; or • 3m where retained by an engineered retaining wall with building consent. Specified exemptions apply.	The proposal involves a maximum cut height of 4m, and fill height of 3m (total cut/fill face height of 9.7m). **Restricted Discretionary Activity**
EW-S3 – Accidental discovery protocol	If suspected sensitive material is discovered: • Cease works within 20m and secure the area. • Notify relevant authorities within 24 hours. • Do not recommence until relevant inspection, approvals and requirements are satisfied.	The applicant has offered to implement the Accidental Discovery Protocol (ADP). **Complies**
EW-S4 – Site reinstatement	Within six months of commencing works, earthworked areas must be appropriately reinstated, recontoured and revegetated or otherwise finished as permitted by the standard.	The site will be reinstated within six months of commencing works. **Complies**

EARTHWORKS (EW)		
EW Provision	**Permitted Standards**	**Compliance**
EW-S5 – Erosion and sediment control	Earthworks must comply with Auckland Council GD2016/005 erosion and sediment control guidelines to minimise sediment entering stormwater systems, overland flow paths and roads.	The prosal will compl with Auckland Council GD2016/005 erosion and sediment control guidelines. **Complies**
EW-S6 – Setbacks	Minimum boundary setbacks: • 1.5m where supported by engineered retaining walls. • 3m where not supported by engineered retaining walls. Exemptions apply to land disturbance, utility connections/infrastructure and approved driveways/crossings.	All earthworks will be setback at least 3m from all boundaries. **Complies**
EW-S7 – Land stability	Earthworks must not cause instability of land at or beyond the site boundary.	Earthworks have been carefully designed to comply with this rule. See attached Site Suitability Report. **Complies**
EW-S8 – Nature of filling material	Fill must: • Be free of putrescible, pollutant, inflammable or hazardous components. • Comprise only permitted materials, including soil, rock, aggregate, gravel, sand, silt or demolition material. • Contain no more than 5% vegetation by volume.	Not applicable. No imported fill required. **Complies**
EW-S9 – Flood and coastal hazards	Earthworks must not: • Increase flood or coastal inundation hazards beyond the site boundaries. • Reduce flood storage within a flood hazard area unless equivalent storage is provided.	Earthworks have been carefully designed to avoid this. See attached Site Suitability Report. **Complies**

COASTAL ENVIRONMENT (CE)		
CE Provision	**Permitted Standards**	**Compliance**
CE-R1 – Buildings and structures	**PER-1:** New buildings in specified zones (including GRZ): • Maximum 300m² (subject to specified exceptions). • Outside high or outstanding natural character areas. • Compliance with CE-S1, CE-S2 and CE-S4. PER-2: Buildings in other zones subject to activity, size and standards requirements. **PER-3:** Extensions/alterations to lawfully established buildings: maximum 20% of existing GFA and compliance with CE-S1.	See comments below.

COASTAL ENVIRONMENT (CE)		
CE Provision	**Permitted Standards**	**Compliance**
	PER-4: Specified fencing and network utility works.	
CE-R2 – Earthworks or indigenous vegetation clearance	**PER-1:** Minimum earthworks/clearance necessary for specified maintenance, safety, biosecurity and other exempt activities. **PER-2:** Other earthworks/clearance must comply with CE-S3.	See comments below.
CE-R3 – Farming	**PER-1:** Existing lawfully established farming activities. **PER-2:** New farming activities outside high or outstanding natural character areas.	n/a
CE-R4 – Commercial forestry afforestation	Discretionary activity where located outside outstanding natural character areas.	n/a
CE-R5 – Mineral extraction extensions	Discretionary activity for extensions to lawfully established mineral extraction outside outstanding natural character areas.	n/a
CE-R6 – New mineral extraction	Prohibited activity.	n/a
CE-R7 – Landfill, managed fill or cleanfill	Prohibited activity.	n/a
CE-S1 – Maximum height	• New buildings/structures: maximum 5.5m above ground level. • Extensions: must not exceed existing building height. Specified exemptions apply.	As per the elevation plans, the maximum building height will exceed the 5.5m permitted threshold. **Restricted Discretionary Activity**
CE-S2 – Colours and materials	Exterior surfaces of new buildings must: • Be constructed of natural materials; or • Have a reflectance value no greater than 30%. • Where painted, comply with BS5252 Groups A, B or C (or equivalent). Specified exemptions apply.	The proposal is able to comply with this rule **Complies**
CE-S3 – Earthworks or indigenous vegetation clearance	Earthworks: • Not within outstanding natural character areas. • Maximum 50m²/year in high natural character areas or 100m²/year elsewhere. • Maximum cut height/fill depth of 1m (1.5m for telecommunications facilities). • Screen exposed faces visible from public places. Indigenous vegetation clearance: • Not within outstanding natural character areas. • Maximum 50m²/10 years in high natural character areas or 400m²/10 years elsewhere.	As stated above, the proposal involves a cut/ fill face which exceeds 1m in height. **Restricted Discretionary Activity**
CE-S4 – Setbacks from MHWS	• Minimum 30m in specified rural zones.	n/a

COASTAL ENVIRONMENT (CE)		
CE Provision	**Permitted Standards**	**Compliance**
	• Minimum 26m in all other zones, including GRZ. Specified exemptions apply, including where a legally formed and maintained road separates the property from MHWS.	

Overall Activity Status

Overall, the proposal has been assessed as a **Restricted Discretionary Activity** under the PDP-AV.

6.0 NES CONTAMINATED SOILS (NESCS)

The NES for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) applies where specified activities are undertaken on land on which an activity or industry described on the HAIL is, has been, or is more likely than not to have been undertaken. No information provided with this application identifies a HAIL activity affecting the proposed building area. On that basis, the NESCS is not considered to be triggered by the proposal.

A review of Council's records has been undertaken, with no evidence identified to indicate that any HAIL activities have occurred on the subject site. Accordingly, the NESCS is not considered to apply to the proposal.

7.0 NES FRESHWATER (NESFW)

No works affecting a natural inland wetland have been identified in the plans or supporting technical information provided for this application. On the information presently available, no further assessment under the NES Freshwater is considered necessary.

8.0 NES DEEMED MINOR RESIDENTIAL UNITS (NES-DMRU)

The proposal includes the construction of a primary dwelling and a detached minor residential unit (DMRU), comprising a 37.08m² sleepout attached to the proposed garage/shed. For the purposes of this assessment, the sleepout is treated as a separate residential unit, distinct from the adjoining garage/shed. The proposed DMRU complies with the permitted activity standards prescribed under Regulation 6 of the Resource Management (National Environmental Standards for Detached Minor Residential Units) Regulations 2025 (NES-DMRU). Specifically, the residential unit has a floor area of 37.08m², which is below the maximum 70m² threshold under Regulation 6(1)(a). The proposal also complies with the applicable building coverage requirements under Regulation 6(1)(b), the minimum 2m separation from the principal dwelling under Regulation 6(1)(c), and the relevant boundary setback requirements under Regulation 6(1)(d). Furthermore, the proposal satisfies the applicable district and regional planning requirements under Regulations 7 and 8. Accordingly, the proposed DMRU is considered to comply with the relevant permitted activity standards and is a permitted activity pursuant to Regulation 5(1) and (2) of the NES-DMRU.

9.0 NPS INDIGENOUS BIODIVERSITY (NPS-IB)

No significant indigenous vegetation clearance or works affecting identified significant indigenous biodiversity are proposed. The proposal is concentrated within the existing developed and modified frontage of the property.

10.0 NOTIFICATION

Public Notification

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.

Step 1: Mandatory public notification is required in certain circumstances

Under Section 95A(3) an application must be publicly notified if:

a) *the applicant has requested that the application be publicly notified;*
b) *public notification is required under Section 95C.*

The applicant is not requesting public notification under clause (a). Clause (b) provisions relate to where an applicant does not provide further information formally requested under Section 92, which is not applicable in this case.

Public notification is not required and therefore Step 2 must be considered.

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

Under Section 95A (4) an application must not be publicly notified if:

a) *the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification;*
b) *the application is for a resource consent for 1 or more of the following, but no other, activities:*
    i. *a controlled activity;*
    ii. *a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:*

None of the above criteria apply, therefore public notification is not precluded in this instance. Step 3 must be considered.

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

Under Section Under Section 95A(7), public notification is required if:

a) *the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:*
b) *the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.*

Clause (a) does not apply in this situation.

The assessment of environmental effects in Section 11.0 concludes that the adverse effects of the proposal will be less than minor. Public notification is therefore not considered necessary.

Step 4: Public notification in special circumstances
Section 95A(9) sets out that 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.*

There are no special circumstances identified that warrant public notification of this application.

Public Notification Conclusion
Based on the above, it is considered that this application can be processed without public notification.

Limited Notification
Under Section 95B, if an application is not publicly notified, the Council must decide if there are any 'affected persons' and undertake limited notification to those persons. Under Section 95E(1) a person is considered 'affected' if the adverse effects of the activity on that person are 'minor or more than minor'. If the application is not publicly notified, the consent authority must follow the following steps to determine whether to give limited notification of an application.

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.
No affected protected customary rights group, customary marine title group or statutory acknowledgement party has been identified from the information available for this application.

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 NES preclude limited notification; or the application is for a controlled activity (other than the subdivision of land) or a prescribed activity under section 360H(1)(a)(ii).
None of the above apply in this instance.

Step 3: if not precluded by step 2, certain other affected persons must be notified
In the case of a boundary activity, Council shall determine in accordance with section 95E whether an owner of an allotment with an infringed boundary is an affected person.

In the case of any other activity, Council shall determine whether a person is an affected person in accordance with section 95E.

If yes to any of the above, Council shall notify each affected person identified under subsections (7) and (8) of the application.

Written Approvals

As per **Appendix F**, written approvals have been provided by the following potentially affected parties:

Name/s	Address
Janine & Dean Williams	366 Foreshore Road, Ahipara
Te Kohanga 27 Trust	400 Foreshore Road, Ahipara

Any potential adverse effects on these parties can therefore be disregarded.



Figure 2: Map showing potentially affected parties (yellow star)

Consultation has been undertaken with all potentially affected parties, with written approvals obtained and included in **Appendix F.** Consultation has also been undertaken with the relevant iwi authorities, Te Rūnanga o Te Rarawa and Ahipara Takiwā, with evidence of this consultation provided in **Appendix G.**

Comments from FNDC's Roading Department (C/- Aimee Page), and HNZPT, have also been sought. While no response had been received at the time of lodgement, it is anticipated that the application will be circulated to all relevant interested parties by Council.

Based on the assessment of environmental effects provided below, it is considered that no other parties will be adversely affected by the proposal to a minor or more than minor extent. Accordingly, no further written approvals are considered necessary.

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.

As previously discussed, special circumstances are not considered to apply to this proposal.

Limited Notification Conclusion

Having undertaken the s95B limited notification tests, it is considered that this application can be processed without limited notification.

11.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

In accordance with section 88(2)(b) of the RMA and clause 1(d) of Schedule 4, this assessment has been prepared at a level of detail corresponding to the scale and significance of the actual and potential effects of the proposal. As a Restricted Discretionary Activity, matter of discretion have been limited to:

Height in Relation to Boundary

As illustrated on the elevation plans submitted with the application, the proposed dwelling will infringe the recession plane requirements along the western and northern boundaries. The adjoining properties affected by these infringements are identified below. Written approvals have been obtained from the relevant property owners and are included in Appendix F. Accordingly, pursuant to Section 104(3)(a)(ii) of the Resource Management Act 1991, any adverse effects on these parties must be disregarded when assessing the application.



Figure 3: Map showing potentially affected parties (yellow star)

Name/s	Address
Janine & Dean Williams	366 Foreshore Road, Ahipara
Te Kohanga 27 Trust	400 Foreshore Road, Ahipara

Setback from Boundaries

As per the site plan provided with the application **(Appendix A)**, the proposed dwelling encroaches the 10m setback on the western and southern (road) boundaries, while the proposed shed encroaches the 10m setback on the southern (road) boundary. As discussed earlier in the report, written approval has been provided by the owners/authority of the adjoining property to the west. Any potential adverse effect on this property can therefore be disregarded. Pre-consultation has also been undertaken with FNDC's Roading Department, including a phone conversation with Aimee Page (Roading Development Lead) on Wednesday 11 November 2026. Formal comments had not yet been received at the time of lodging the application. However, it is anticipated that the application will be circulated to interested parties by FNDC upon lodgement.

All relevant matters of discretion have been discussed below:

Matters of Discretion	Comment
a. the character and amenity values of the surrounding area;	The subject site is located within an area predominantly characterised by coastal-residential development. The subject site and surrounding allotments were created in 2002 under subdivision consent RC 2000931, which anticipated the establishment of residential development. Consequently, the surrounding environment has been substantially modified for residential purposes, with a number of existing buildings located within the 10m setback, including those on properties legally described as Ahipara 73B2B2B and Ahipara 73B2B2A Block. The proposed development has been carefully designed to respond to the site's coastal setting and integrate with the surrounding environment. In particular, the irregular building footprint and varied rooflines help to reduce the perceived bulk and scale of the dwelling, while complementing the natural contours of the site. The incorporation of natural materials, recessive colours and low-reflectivity finishes will further assist in visually integrating the built form into the coastal landscape. In addition, extensive landscaping is proposed to soften the appearance of the development, enhance its integration with the surrounding landscape and provide a degree of visual screening from adjoining properties and the coastal marine area (CMA). Having regard to the established residential character of the surrounding environment, the design and appearance of the proposed dwelling, and the proposed landscaping measures, it is considered that the development will be compatible with the existing character and amenity values of the surrounding area. Any associated adverse visual and amenity effects are therefore considered to be less than minor.
b. screening, planting and landscaping on the site;	A Landscape Assessment has been provided in support of the application (see **Appendix C**). In summary, this report concludes that *"subject to the landscape framework being carried forward through detailed design and implementation, the development can establish a coherent and resilient relationship with its Ahipara coastal setting"*. The applicant accepts that the lanscape concept plan and report will form a condition of consent.
c. the design and siting of the building or structure with respect to privacy and shading;	With respect to the setback infringement along the southern (road) boundary, the subject site is situated at a lower elevation than Foreshore Road. Given this topographical relationship, the proposed development is unlikely to result in any adverse shading effects on the road reserve. Regarding the shed's setback infringement along the eastern boundary, this boundary adjoins an accessway serving Lot 1 DP 411685, rather than an established residential living area. Accordingly, the infringement is not anticipated to give rise to any adverse privacy or shading effects on the adjoining property. On this basis, any adverse effects associated with these setback infringements are considered to be less than minor, and written approvals from the respective adjoining property owners are not considered necessary.
d. natural hazard mitigation and site constraints;	Natural hazard mitigation has been comprehensively described in the Site Suitability Report attached as **Appendix E.** In terms of site constraints, the subject site is irregular in shape, comprising a relatively level plateau at the upper portion of the site before sloping steeply towards the CMA, with the northern

Matters of Discretion	Comment
	boundary forming an apex. These topographical constraints, together with the underlying soil characteristics, have influenced the siting and design of the proposed dwelling and shed. The proposed building platforms have therefore been carefully considered to respond to these constraints, with limited practical alternatives available that would enable the development to fully comply with the setback requirements.
e. the effectiveness of the proposed method for controlling stormwater;	Stormwater management has been comprehensively discussed in the Site Suitability Report attached as **Appendix E.**
f. the safety and efficiency of the current or future access, egress on site and the roading network;	The site is accessed via an existing vehicle crossing from Foreshore Road, which has been formed to an appropriate standard and provides adequate sight distances. Internal vehicle access was already established at the time the property was purchased and will be further upgraded and reinforced to provide suitable parking and manoeuvring areas for the proposed development. The identified setback infringements will not compromise vehicle access, parking or manoeuvring within the site.
g. the impacts on existing and planned public walkways, reserves and esplanades;	n/a
h. the health and amenity impacts of dust from unsealed roads on habitable buildings;	Not applicable. The site gains access from a sealed road.
i. The location and design of the building as it relates to the ability to safely use, access and maintain buildings without requiring access on, above or over the rail corridor; and	n/a
j. The safe and efficient operation of the rail network.	n/a

Stormwater Management

For the purpose of avoiding repetition, please refer to the Site Suitability Report attached as **Appendix E** which discussed proposed stormwater disposal arrangements in detail. In summary, the report concludes that any adverse effects in relation to stormwater management will be less than minor subject to the implementation of those recommendations outlined in the report.

Earthworks in Coastal Environment

Matters of Discretion	Comment
a. the presence or absence of buildings, structures or infrastructure;	The site is currently vacant and does not contain any infrastructure. The proposed earthworks are required in order to create a suitable building platform and install associated infrastructure including stormwater and wastewater disposal systems.
b. the temporary or permanent nature of any adverse effects, including any cumulative effects;	As outlined above, the proposed earthworks are necessary to establish suitable building platforms for the dwelling and shed, as well as to accommodate associated services. Temporary effects associated with the earthworks will primarily relate to visual amenity and general construction activities, which are typical of residential development. These effects will be short-term and will be progressively mitigated through the completion of construction

Matters of Discretion		Comment
		works and implementation of the proposed landscaping as soon as practicable. Permanent effects will include modifications to the existing site contours. However, as outlined in the Site Suitability Report, these changes will be appropriately managed through careful excavation, engineered earthworks and the implementation of suitable erosion and sediment control measures. On this basis, any adverse effects associated with the proposed earthworks are considered to be less than minor.
c.	the location, scale and design of any proposed development;	The proposed building and excavation areas have been carefully selected having regard to the underlying soil characteristics and physical constraints of the site. The bulk and scale of the proposed development are considered to be compatible with the established pattern of residential development in the immediate surrounding environment.
d.	any means of integrating the building, structure or activity into the wider landscape;	Refer to criteria (b) above, along with the Landscape Assessment attached as **Appendix C.**
e.	the ability of the environment to absorb change;	As above.
f.	the need for and location of earthworks or indigenous vegetation clearance and proposed mitigation measures;	No vegetation clearance is required as part of the proposal. The proposed earthworks are necessary to establish suitable building platforms and accommodate associated services. Extensive landscaping is proposed to soften the visual effects of the development and assist with long-term site stabilisation. In addition, appropriate erosion and sediment control measures will be implemented in accordance with the recommendations of the Site Suitability Report to minimise potential adverse effects during construction.
g.	the operational or functional need of any infrastructure to be sited in the particular location;	All infrastructure has been carefully designed by suitably qualified engineers in accordance with all relevant engineering standards.
h.	any viable alternative locations or methods for the activity or development where significant adverse effects may arise;	See Site Suitability Report attached as **Appendix E.**
i.	any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6;	Consultation has also been undertaken with the relevant iwi authorities, Te Rūnanga o Te Rarawa and Ahipara Takiwā, with evidence of this consultation provided in **Appendix G.** Comments from HNZPT have also been sought. While no formal comments had been received at the time of lodging this application, it is anticipated that the application will be circulated to all interested parties by FNDC.
j.	the likelihood of the activity exacerbating natural hazards;	See Site Suitability Report attached as **Appendix E,** which concludes that natural hazards will not be exacerbated.
k.	the opportunity to enhance public access and recreation;	Not relevant. The site does not adjoin the CMA nor contain any recreational value.
l.	potential effects of land use and subdivision on the coastal marine area and the overall quality of coastal waters;	As per the Site Suitability Report **(Appendix E)**, adequate mitigation measures will be implemented to avoid affecting the overall quality of the CMA and coastal waters.

Matters of Discretion		Comment
m.	any positive contribution the development has on the characteristics and qualities, including restoration and enhancement;	The proposal incorporates extensive landscaping, as detailed in **Appendix C**, which will enhance the visual amenity of the subject site and surrounding environment. Given that the site currently comprises predominantly bare pasture, the proposed planting will provide a positive contribution to the landscape character and amenity values of the area.
n.	the effects on the characteristics, qualities and values of the coastal environment, including natural character and natural landscape values and the quality and extent of indigenous biodiversity;	See Landcape Assessment attached as **Appendix C.**
o.	the extent to which the land use and subdivision complements activities in the coastal marine area; and	n/a
p.	whether the activity is on a previously approved building platform	Not applicable. The site does not contain an approved building platform.

12.0 SECTION 104 ASSESSMENT

Positive Effects

Section 104(1)(a) of the RMA requires consideration of the actual and potential environmental effects of the proposal, as assessed above. Overall, adverse effects are considered to be less than minor, having regard to the siting and design of the proposed dwelling, garage and sleepout, the findings of the supporting technical assessments, and the proposed mitigation measures addressing the site's topography, stability and coastal landscape values.

Positive effects include enabling the applicants to make efficient use of their property, providing additional residential accommodation and supporting their social and economic wellbeing.

National and Regional Planning Documents

The relevant higher-order direction is reflected through the district plan provisions assessed below. No separate national environmental standard or regional rule infringement has been identified from the information provided for this application.

Operative District Plan – Objectives and Policies Assessment

The relevant objectives and policies of the Operative District Plan (ODP) have been superseded by those of the Proposed District Plan – Appeals Version (PDP-AV), which now provides the applicable statutory planning framework for assessing the proposal.

Proposed District Plan – Objectives and Policies Assessment

The proposal is considered to be generally consistent with the relevant objectives and policies of the PDP-AV, particularly those relating to the Rural Production Zone and Coastal Environment.

With respect to the Rural Production Zone, the proposal is consistent with the policy direction established under RPROZ-O3, RPROZ-O4, RPROZ-P3, RPROZ-P4 and RPROZ-P7, which collectively seek to protect the productive capacity of rural land, manage reverse sensitivity effects, and maintain rural character and amenity values. While the site is zoned Rural Production, neither the subject site nor the surrounding environment is currently utilised for primary production activities. Accordingly, the proposal is not anticipated to give rise to reverse sensitivity effects or constrain the operation of existing primary production activities. The proposed development is considered compatible with the existing character and pattern of development in the locality, while its siting and design respond appropriately to the site's physical characteristics and constraints.

In relation to the Coastal Environment, the relevant objectives and policies seek to preserve coastal natural character and manage the location, scale and design of development to avoid, remedy or mitigate adverse effects on coastal values. The proposal has been designed in response to the site's sloping topography and coastal setting, with the proposed buildings and associated earthworks representing an appropriate scale of development within the wider landscape. Having regard to the existing pattern of development and proposed mitigation measures, the development is not anticipated to result in significant adverse effects on coastal natural character, landscape values or the amenity of the surrounding environment.

Overall, having regard to the nature and scale of the proposal, the characteristics of the site and surrounding environment, and the assessment of environmental effects undertaken, the development is considered to be generally consistent with the relevant objectives and policies of the PDP-AV. Overall, as a Restricted Discretionary Activity, the proposal is considered to be generally consistent with the policy direction of the Rural Production Zone and Coastal Environment provisions of the PDP-AV.

District Plan Weighting Summary

In accordance with section 104(1)(b) of the RMA, regard has been had to the relevant provisions of both the Operative District Plan (ODP) and the Proposed District Plan – Appeals Version (PDP-AV). The PDP-AV has progressed through Council decisions, with the relevant provisions now having legal effect and carrying greater statutory weight than the corresponding ODP provisions. Accordingly, greater weight has been afforded to the PDP-AV in assessing the proposal, particularly where the relevant ODP provisions have been superseded and are no longer subject to consideration. The PDP-AV therefore provides the primary planning framework against which the proposal has been assessed.

Other Matters

<u>Out of Scope Effects (Section 104(1A))</u>

Section 104(1A) of the RMA requires consent authorities to disregard certain effects when assessing district land use activities.

In this instance, the following matters are considered to be out of scope under s104(1A):

- Outdoor living space – s104(1A)(a)(iii).
- Size of landscaped areas – s104(1A)(a)(vi), except where these relate to permeability.

Accordingly, Council must disregard any effects associated with these matters when considering the environmental effects of the proposal, notwithstanding any corresponding provisions within the Operative District Plan or Proposed District Plan – Appeals Version.

13.0 PART 2 ASSESSMENT

A separate assessment under Part 2 of the RMA is not considered necessary, as the relevant planning instruments provide a coherent and comprehensive framework for assessing the proposal. The applicable provisions of the ODP and PDP-AV adequately address the relevant environmental effects, and no material gaps or uncertainties have been identified that would warrant further consideration under Part 2.

14.0 OVERALL CONCLUSION

The applicants, Harry and Meredith Burkhardt, propose to construct a new dwelling, detached shed/sleepout, and to undertake associated earthworks at 380 Foreshore Road, Ahipara.

Resource consent is required under the following PDP-AV rules:

- RPROZ-R1 New buildings or structures and relocated buildings or extensions or alterations to existings buildings or structures
- RPROZ-R2 Impermeable surface coverage
- CE-R1 New buildings or structures and relocated buildings and extensions or alterations to existing buildings or structures
- CE-R2 Earthworks or indigenous vegetation clearance

Overall, the proposal is assessed as a **Restricted Discretionary Activity** for the purposes of this application.

Based on the assessment above, any actual or potential adverse effects on the environment and surrounding persons are considered to be less than minor. The proposal appropriately manages the identified natural hazard risk and is consistent with the relevant objectives and policies of the applicable planning framework.

It is therefore considered that the application can be granted on a non-notified basis, subject to appropriate conditions of consent.

AUTHOR



Nina Pivac
Director l BAppSC l PGDipPlan l Assoc. NZPI

Date: 12 November 2026

Appendix A – Architectural Plans



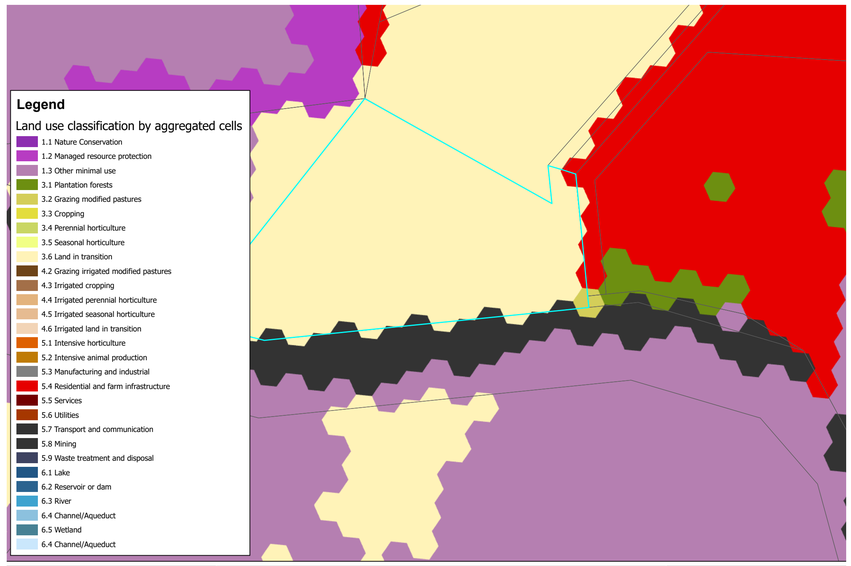
Proposed Dwellings for Burkhardt at 380 Foreshore Rd Lot 4 DP 210535 Ahipara

Job Number 26741-N

Sheet Index RC	
Layout ID	**Layout Name**
01	Cover Sheet
02	Visual Images
03	Visual Images
04	Site Earthworks
05	Existing Site Plan
06	Site Plan
07	Site: Unitary Plan Check
08	Ground Floor Plan
09	Roof Plan
10	Elevations
11	Elevations
12	Shed/Sleepout Elevations

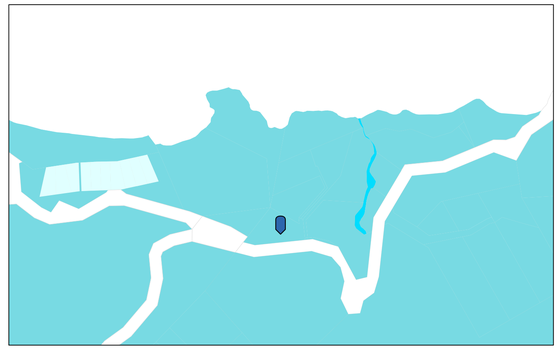


Aerial Map - Auckland Council GeoMaps



NRC Plan Map

Far North Operative Plan



FAR NORTH OPERATIVEN MAP

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Client:
Burkhardt

Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Cover Sheet

Date:	15/10/2026
Scale at A1:	
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
1) All dimensions and underground service locations to be checked prior to construction.
2) Do not scale from drawings. If in doubt please ask the designer.
3) Construction and method of construction to be in accordance with the specification, the NZBC and with local bylaws.
4) These drawings are subject to copyright and remain the property of Long Term Design LTD.

Drawing Issue:
RESOURCE CONSENT

Page No.	No. of Pages
01	12



VIEW OF PROPOSED DEVELOPMENT & PROPERTY FROM AHIPARA BEACH



VIEW OVER DEVELOPMENT FROM PROPERTY BOUNDARY ALONG FORESHORE ROAD

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Client:
Burkhardt

Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

Date:	15/10/2026
Scale at A1:	
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
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3) Construction and method of construction to be in accordance with the specification, the NZBC and with local bylaws.
4) These drawings are subject to copyright and remain the property of Long Term Design LTD.

Drawing Issue:
RESOURCE CONSENT



VIEW TO OUTDOOR LIVING AREAS FROM NORTH



VIEW OF SERVICE AREA BELOW FORESHORE ROAD BOUNDARY

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Client:
Burkhardt

Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

Date:	15/10/2026
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Drawing Issue:
RESOURCE CONSENT

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EARTHWORKS NOTES (12.3.6.1.2)

EARTHWORKS DEPTHS
Actual max cut height = 4.0m
Actual max fill height = 3.0m
Actual max cut & fill face height = 9.7m

EARTHWORKS VOLUMES
TOP SOIL EXCAVATED MATERIAL
1215m² x 0.1 = **122m³**

GOOD GROUND CUT = **270m³**

GOOD GROUND FILL = **1305m³**

TOTAL = **1697m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

KEY

CUT

FILL

EARTHWORKS NOTES (12.3.6.1.2)

Max volume: 300m³
Max Cut or Fill face Height: 1.5m
Max Cut and Fill face Height: 3.0m

EARTHWORKS AREAS
Main Dwelling = **1215m²**
Shed Accomodation = **355m²**

TOTAL = **1570m²**

EARTHWORKS VOLUMES
Main Dwelling = **1697m³**
Shed Accomodation = **336m³**

TOTAL = **2033m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

Restricted Discretionary Activity 12.3.6.2.1
2000m³ Max permited
1.5m max height

EARTHWORKS NOTES SHED/ACCOM. (12.3.6.1.2)

EARTHWORKS DEPTHS
Actual max cut height = 1.2m
Actual max fill height = 0.6m
Actual max cut & fill face height = 3.0m
Actual max cut or fill face height = 2.2m

EARTHWORKS VOLUMES
TOP SOIL EXCAVATED MATERIAL
355m² x 0.1 = **36m³**

GOOD GROUND CUT
185m² X 1.1 x 0.5 = 102m³

GOOD GROUND FILL
170m² X 0.7 x 0.5= 60m³

WATERTANK CUT
46m² X 3.0 = 138m³

TOTAL = **336m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

KEY

CUT

FILL

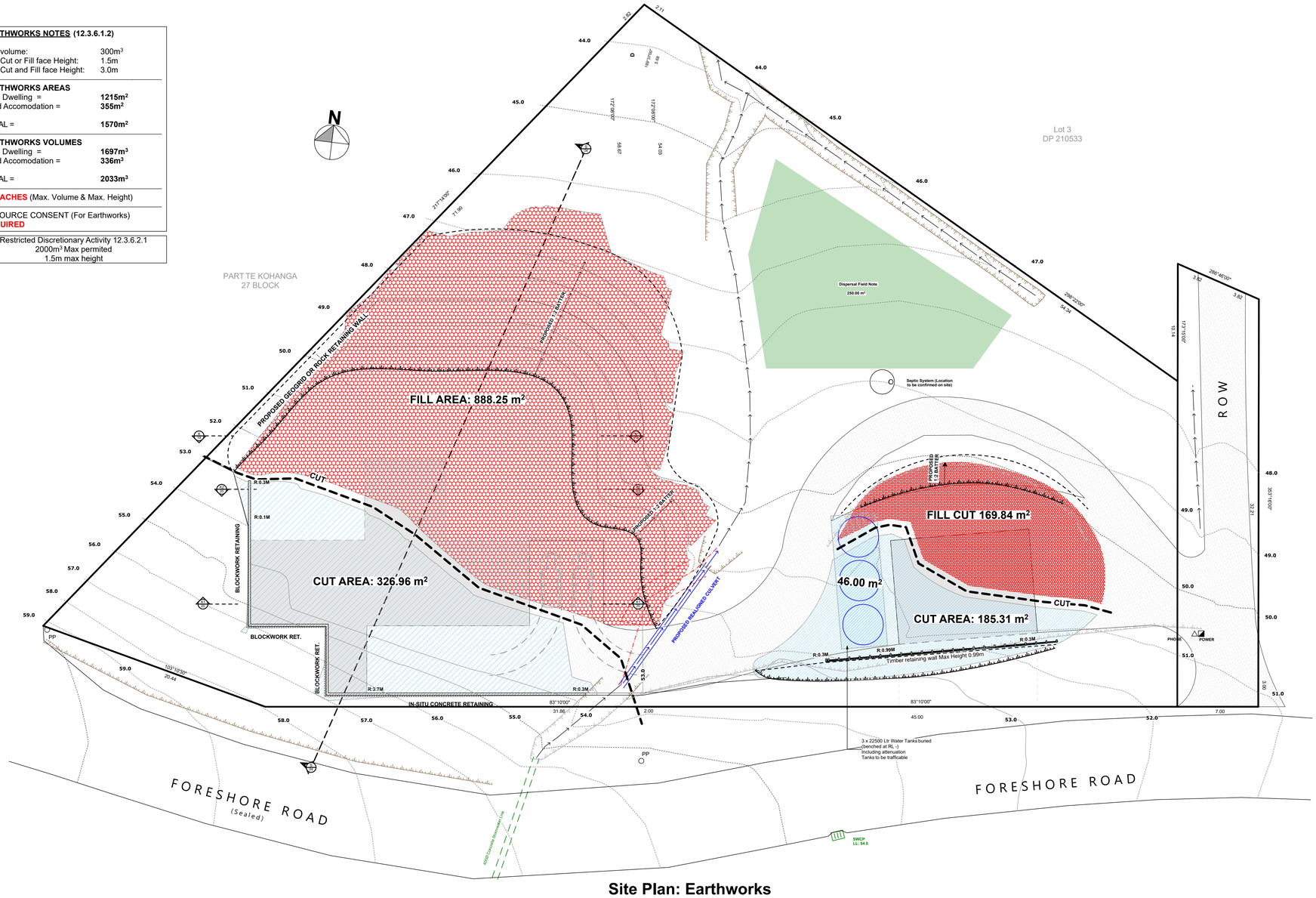
EARTHWORKS

Suitable excavated material to be reused on site (where possible)

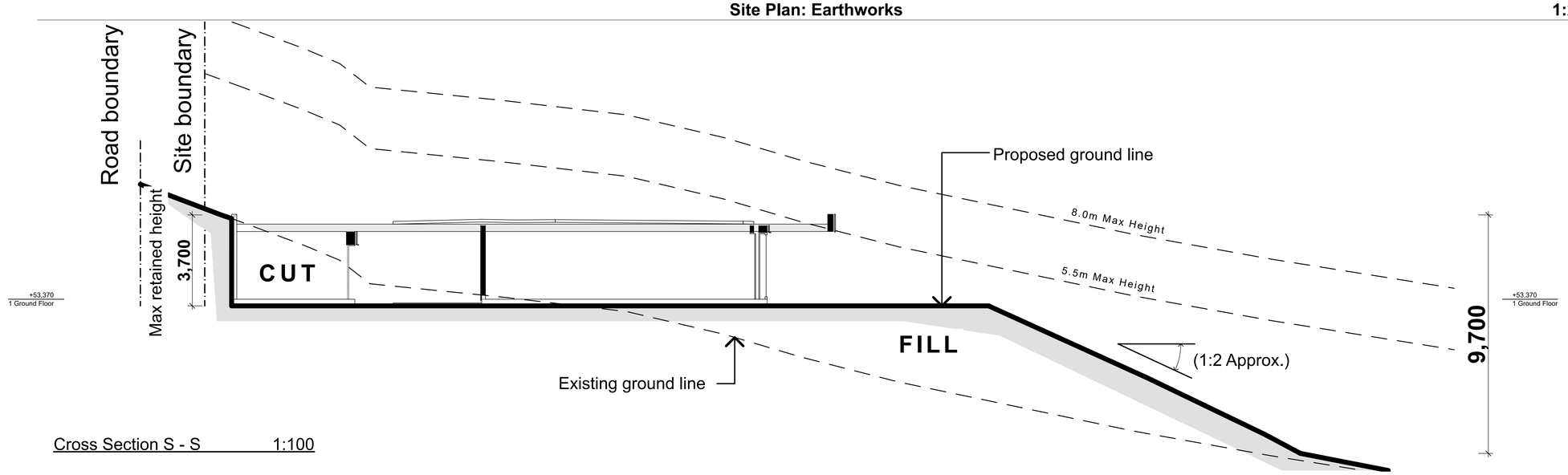
All building debris and excavated spoil which is surplus to requirements should be removed from the site.

Prior to any filling being placed it will be necessary to undercut all topsoil and existing fill down to competent inorganic natural ground and slopes will need to be benched.

The Engineer should be given every opportunity to inspect all materials prior to placement, and also to ensure adequate compaction is being achieved throughout the works.



Site Plan: Earthworks **1:200**



Cross Section S - S 1:100

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AUCKLAND

Client: Burkhardt

Project: 380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site Earthworks

Date:	15/10/2026
Scale at A1:	1:200
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
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Drawing Issue: RESOURCE CONSENT

TE AWAPATIKI BLOCK

LOT 3
DP 210535

LOT 2 DP 411685
LOT 1 DP 411685
AHIPARA 73B2B2A BLK

N

PART TE KOHANGA
27 BLOCK

RIGHT OF WAY CREATED BY 5301250.5 &
RIGHT (IN GROSS) TO SUPPLY ELECTRICITY
CREATED BY 5301250.6 &
RIGHT (IN GROSS) TO CONVEY
TELECOMMUNICATIONS CREATED BY 5301250.7

SUBJECT TO AN ELECTRICITY
RIGHT CREATED BY C210969.1

LOT 4
DP 210535

AHIPARA
73B2B2C BLOCK

IL: 51.57

CIVILBOSS
375mmØ
IL: 52.31

IL: 55.26

CONCRETE
375mmØ

IL: 56.39

SWCP
LL: 54.5

FORESHORE ROAD
SEALED FORMATION, 20.12m WIDE

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Client:
Burkhardt

Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Existing Site Plan

Date:	15/10/2026
Scale at A1:	
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
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Drawing Issue:
RESOURCE CONSENT

Page No.	No. of Pages
05	12

LEGAL DESCRIPTION
LOT 4
DP 210535
AREA 3996m²

District Plan Zone: **General Coastal**
Wind Zone: **Very High BRANZ**
Exposure Zone: **D**

GENERAL SITE NOTES

Contour Interval is 1.0m levels are in terms of Local datum

Levels are in terms of New Zealand Vertical Datum 2016

Building platform level may vary to make best use of the cut and fill

Building Platform Legend
Platform RL - Underslab Platform Level (Top of compacted Metal)
FFL - Finish Slab/Structure Level

All stormwater and sewer drainage to be layed minimum 1m away from house

Location of house to be confirmed by client on site with site supervisor prior to building setout

N

PART TE KOHANGA 27 BLOCK

Lot 3 DP 210533

LOT 2 DP 411685

LOT 1 DP 411685

AHIPARA 73B2B2A BLK

73B2B2C BLOCK

Electricity Easement

D

LOT 4
DP 210535
3996m²

Dispersal Field Note
250.00 m²

Septic System (Location to be confirmed on site)

Existing Driveway

PROPOSED GEOGRID OR ROCK RETAINING WALL

PROPOSED 1:2 BATTER

CUT

Platform RL 53.00
F.F.L. --

R:0.3M

R:0.1M

GUEST WING

HOUSE

Building Coverage: 430.25 m²

BLOCKWORK RETAINING

BLOCKWORK RET.

IN-SITU CONCRETE RETAINING

R:3.7M

R:0.3M

PROPOSED 1:2 BATTER

PROPOSED REALIGNED CULVERT

Driveway

SHED & ACCOM.

F.F.L. 51.10

CUT

R:0.3M

R:0.99M

R:0.3M

Timber retaining wall Max Height 0.99m

PHONE POWER

ROW

3 x 22500 Ltr Water Tanks buried
(benched at RL -)
Including attenuation
Tanks to be trafficable

FORESHORE ROAD (Sealed)

FORESHORE ROAD

400Ø Concrete Stormwater Line

SWCP
LL: 54.5

SW
II: 56.39

PP

S 04

44.0 | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 | 50.0 | 51.0 | 52.0 | 53.0 | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0

2.82 | 2.11 | 189°37'00" | 5.68 | 172°08'00" | 54.03 | 172°08'00" | 58.67 | 217°14'00" | 71.90 | 298°22'00" | 54.34 | 286°46'00" | 3.82 | 3.82 | 10.14 | 173°15'00" | 32.21 | 353°16'00" | 103°10'30" | 20.44 | 31.86 | 83°10'00" | 2.00 | 83°10'00" | 45.00 | 7.00

Full Site Plan **1:200**

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Client: Burkhardt

Project: 380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site Plan

Date:	15/10/2026
Scale at A1:	1:200
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
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Drawing Issue: RESOURCE CONSENT

Page No. 06 | No. of Pages 12

Rural Production Zone

HEIGHT IN RELATION TO BOUNDARY
Northern Boundary - 2.0m plus 55°
Eastern & Western Boundary - 2.0m plus 45°
Southern Boundary - 2.0m plus 35°
BREACHES (Eastern boundary only)

YARD SETBACKS (Site less than 5,000m²)
Site Yards: 10m **BREACHES**

BUILDING COVERAGE
3996 x 15% = 599.4m² max
Actual Impermeable Surfaces
Proposed House Area: 430.25m²
Proposed Shed Roof Area: 108.00m²
TOTAL AREA: **538.25m²**
13.47%

COMPLIES

IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max
Actual Impermeable Surfaces
Proposed House Roof Area: 431.85m²
Proposed Shed Roof Area: 115.90m²
Metal Drive: 597.11m²
TOTAL AREA: **1144.86m²**
28.65%

BREACHES

Coastal Environments

MAXIMUM BUILDING HEIGHT
5.5m max.
BREACHES

COLOUR SCHEME/MATERIALS
Refer to coloured elevations
COMPLIES

General Coastal
Chapter 10

MAXIMUM BUILDING HEIGHT (10.6.5.1.4)
8m max.
COMPLIES

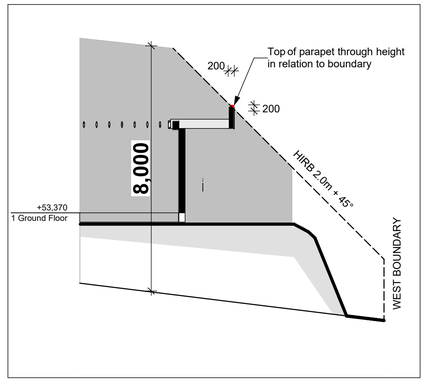
HEIGHT IN RELATION TO BOUNDARY
(10.6.5.1.5)
2.0m plus 45 degrees
BREACHES (Eastern boundary only)

YARD SETBACKS (10.6.5.1.7)
Site Yards: 3m **BREACHES**

IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max (Permitted activity 10.6.5.1.6)
3996 x 15% = 599.4m² max (Controlled activity 10.6.5.2.3)
Actual Impermeable Surfaces
Proposed House Roof Area: 431.85m²
Proposed Shed Roof Area: 115.90m²
Metal Drive: 597.11m²
TOTAL AREA: **1144.86m²**
28.65%

BREACHES

RESOURCE CONSENT
REQUIRED
10.6.5.1.1 Visual amenity
10.6.5.1.2 One unit per 20ha of land,
10.6.5.1.5 Height in relation to boundary
10.6.5.4.1 DA one unit per 6ha of land
Yard setback
Impermeable area



B1 **Section B1-B1** **1:100**

N

B1
07

Electricity Easement

Western boundary 2m + 45°

PROPOSED GEOGRID OR ROCK RETAINING WALL

3m Yard

10m Yard

PROPOSED 1:2 BATTER

Impermeable paving
62.12 m²

Impermeable Paving
75.47 m²

Platform RL 53.00
F.F.L. --

GUEST WING

HOUSE

Roof Coverage: 431.85 m²
Building Coverage: 430.25 m²

PROPOSED REALIGNED CULVERT

Driveway area
(outside roof)
597.11 m²

Driveway

LOT 4
DP 210535
3996m²

Existing Driveway

SHED & ACCOM.
F.F.L. 51.10

Roof Coverage: 115.90 m²
Building Coverage: 108.00 m²

3 x 22500 Ltr Water Tanks buried
(benched at RL -)
Including attenuation
Tanks to be trafficable

ROW

LOT 2 DP 411685
LOT 1 DP 411685
AHIPARA 73B2B2A BLK

73B2B2C BLOCK

FORESHORE ROAD
(Sealed)

FORESHORE ROAD

400Ø Concrete Stormwater Line

SW
II: 56.39

SWCP
LL: 54.5

103°10'30" 20.44
217°14'00" 71.90
298°22'00" 54.34
286°46'00" 3.82
353°16'00" 32.21
189°37'00" 5.68
172°08'00" 58.67
172°08'00" 54.09
173°15'00" 10.14
2.82
2.11
6.902
5.056
6.000
5.395
6.385
3.82
3.00
1.000
1.000
83°10'00" 31.86
2.00
83°10'00" 45.00
7.00

Town Planning Plan **1:200**

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Client:
Burkhardt

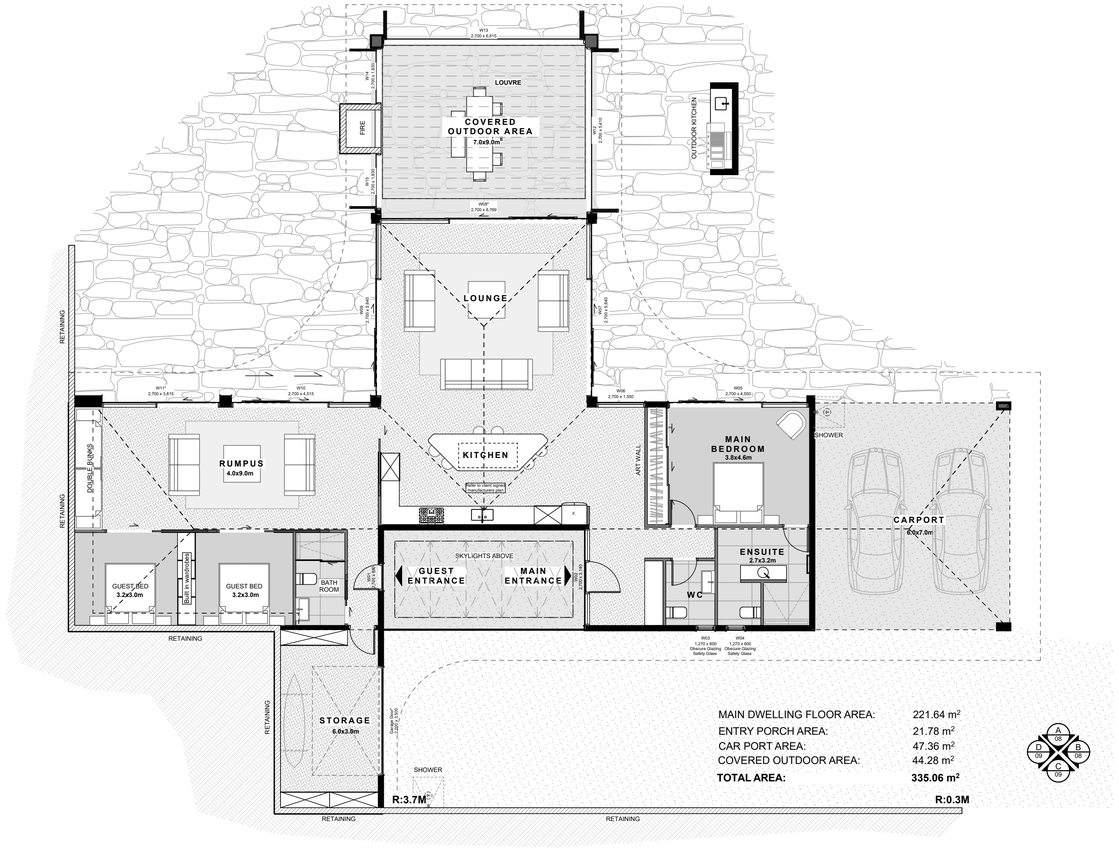
Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site: Unitary Plan Check

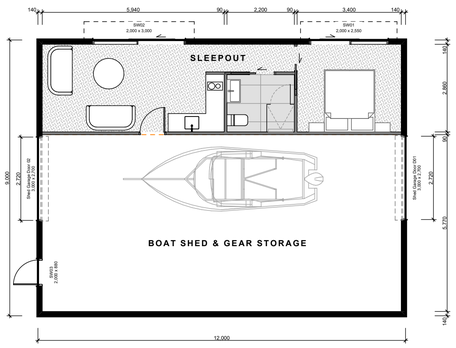
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Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

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Drawing Issue:
RESOURCE CONSENT



MAIN DWELLING FLOOR AREA:	221.64 m²
ENTRY PORCH AREA:	21.78 m²
CAR PORT AREA:	47.36 m²
COVERED OUTDOOR AREA:	44.28 m²
TOTAL AREA:	**335.06 m²**



Sleepout 37.08 m²
Total Floor Area 108.00 m²

Ground Floor Plan **1:100**

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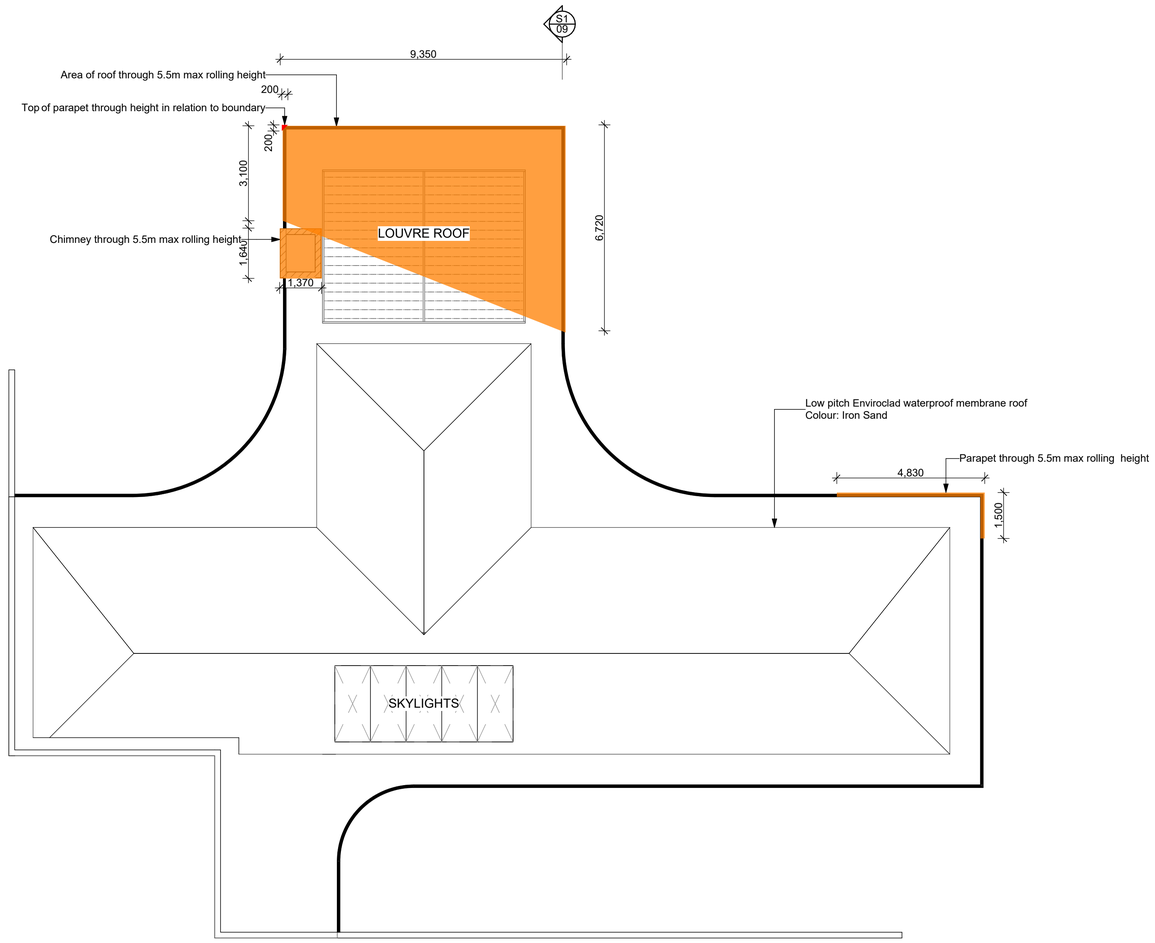
Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

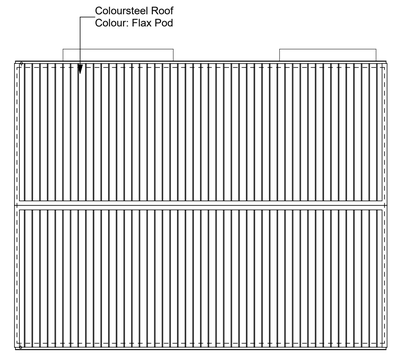
Ground Floor Plan

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Scale at A1:	1:100
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

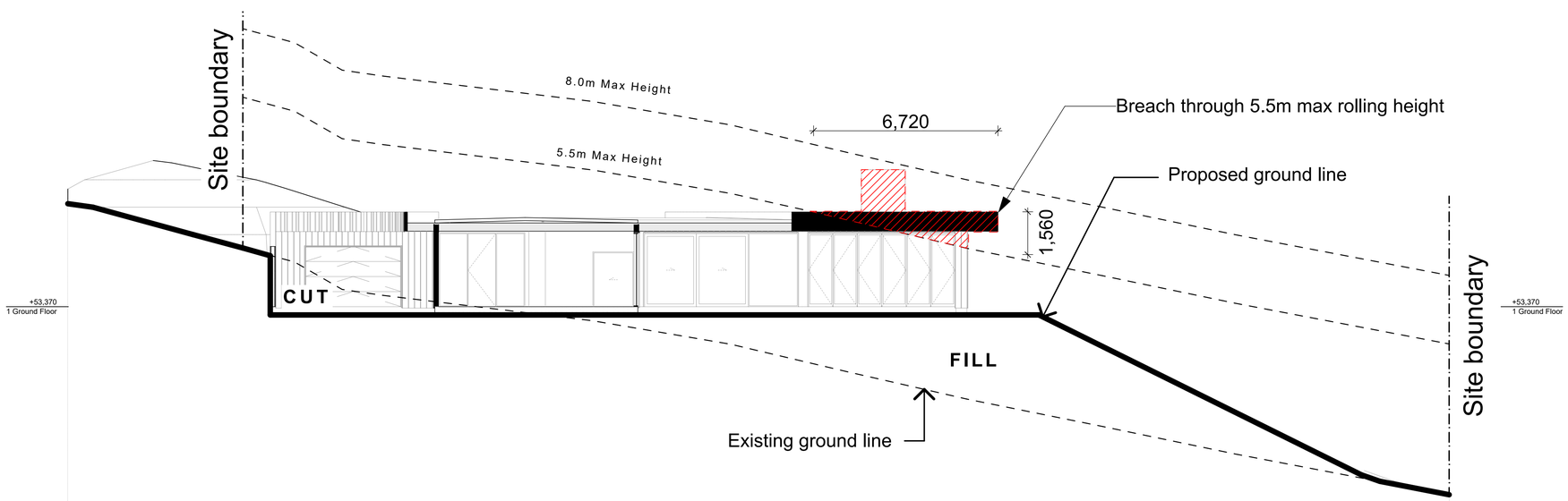
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Drawing Issue:
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Roof Plan **1:100**



S1 **Section S1-S1** **1:100**

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Ahipara

Roof Plan

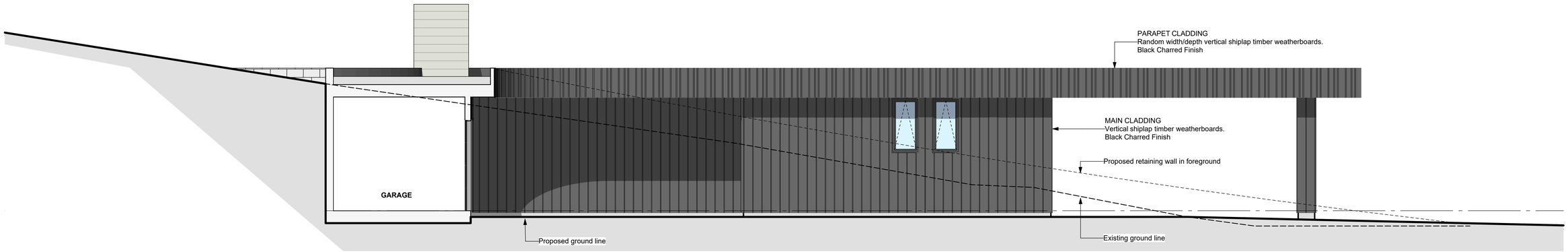
Date:	15/10/2026
Scale at A1:	1:100
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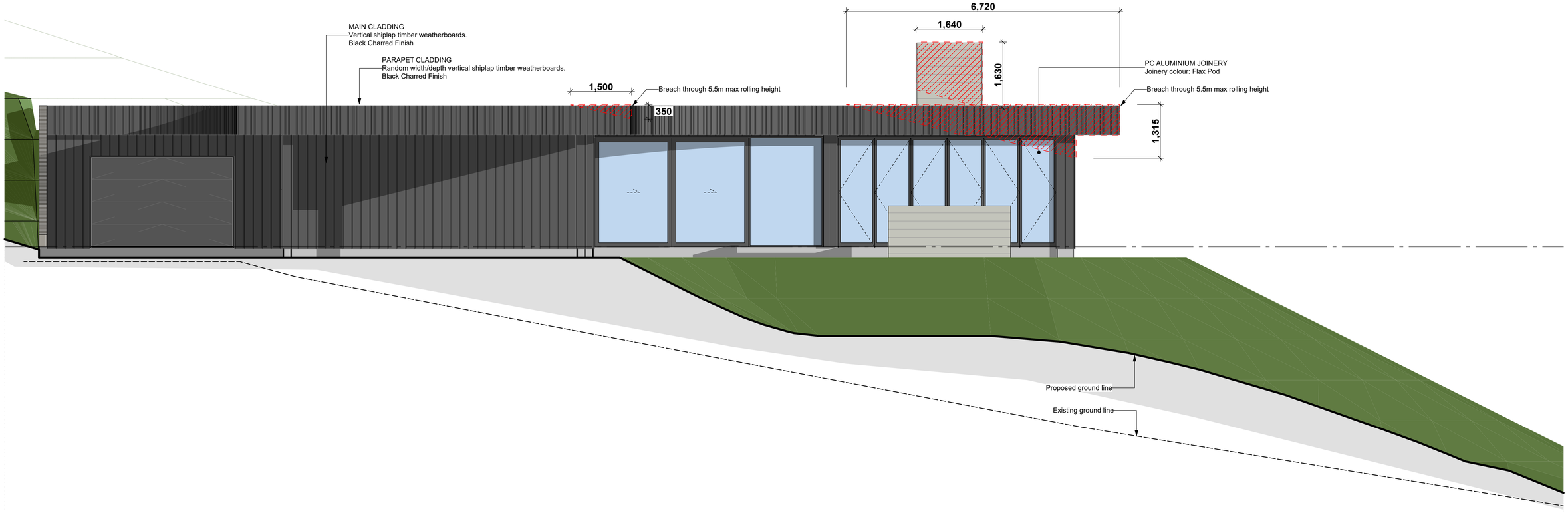
Drawing Issue:
RESOURCE CONSENT

COLOURS : LRV less than 30%

Parapet Walls - Vertical random width/depth timber weatherboards - Charred/burnt finish
Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish.
In-situ Concrete retaining walls & chimney- Natural Concrete
Colour steel roof, walls, downpipes and gutters - Colorsteel FlaxPod
Window and door joinery - PC aluminium joinery - FlaxPod
Waterproof Membrane Roof- Enviroclad - Iron Sand (9% L.R.V)



C **South Elevation** **1:50**



B **East Elevation** **1:50**

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Client:
Burkhardt

Project:
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Elevations

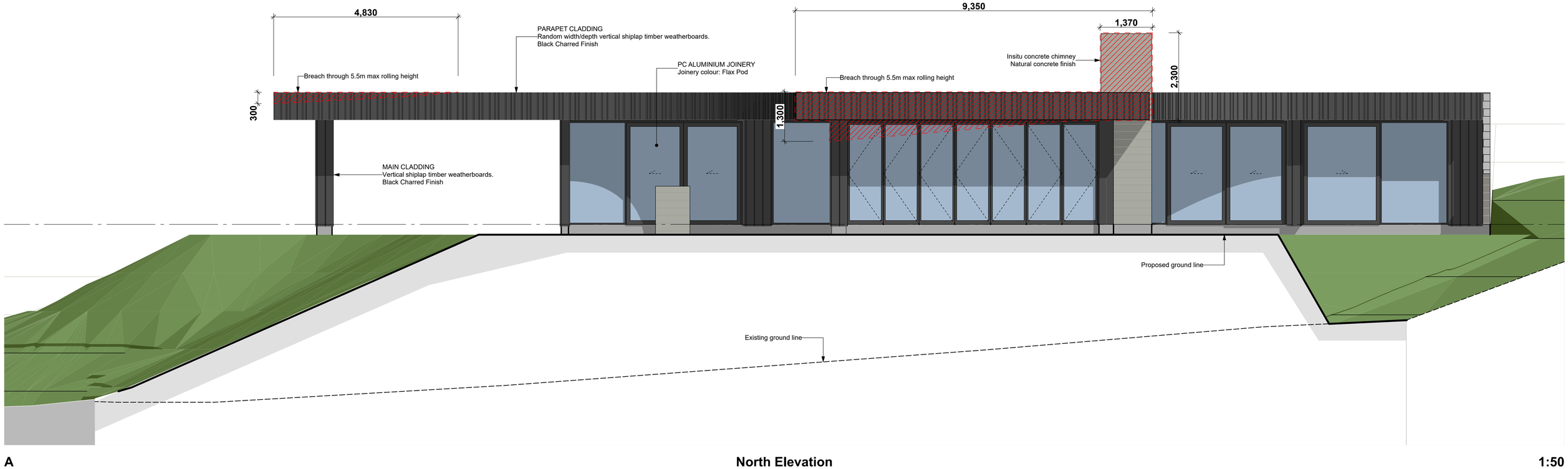
Date:	15/10/2026
Scale at A1:	1:50
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

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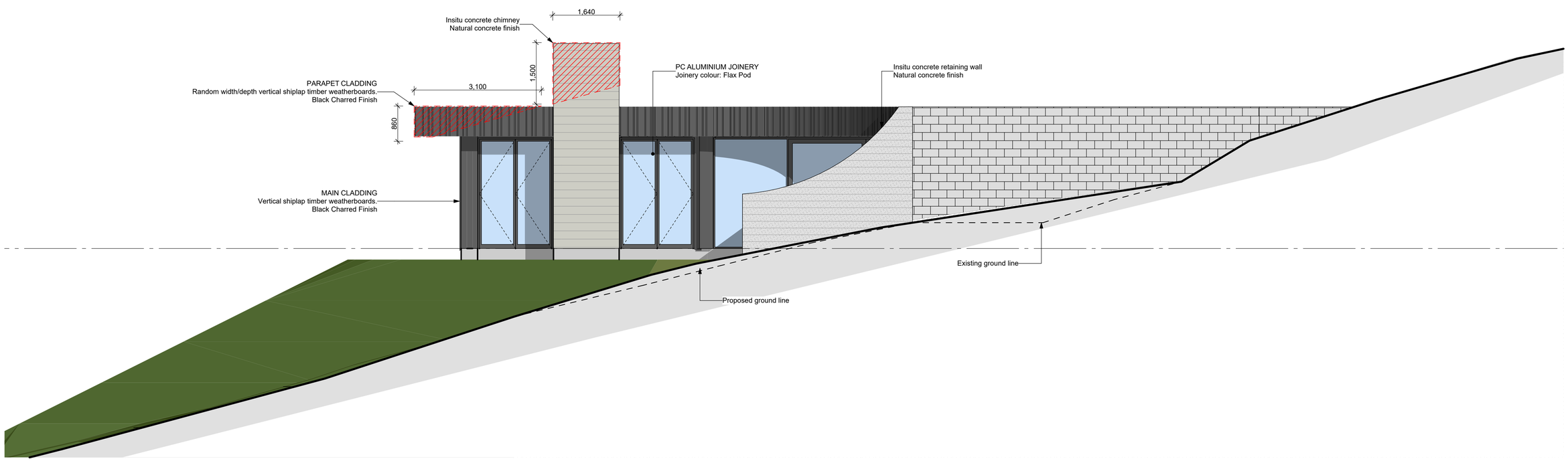
Drawing Issue:
RESOURCE CONSENT

COLOURS : LRV less than 30%

Parapet Walls - Vertical random width/depth timber weatherboards - Charred/burnt finish
Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish.
In-situ Concrete retaining walls & chimney- Natural Concrete
Colourseel roof, walls, downpipes and gutters - Colorsteel FlaxPod
Window and door joinery - PC aluminium joinery - FlaxPod
Waterproof Membrane Roof- Enviroclad - Iron Sand (9% L.R.V)



A **North Elevation** **1:50**



D **West Elevation** **1:50**

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Project:
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Lot 4 DP 210535
Ahipara

Elevations

Date:	15/10/2026
Scale at A1:	1:50
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

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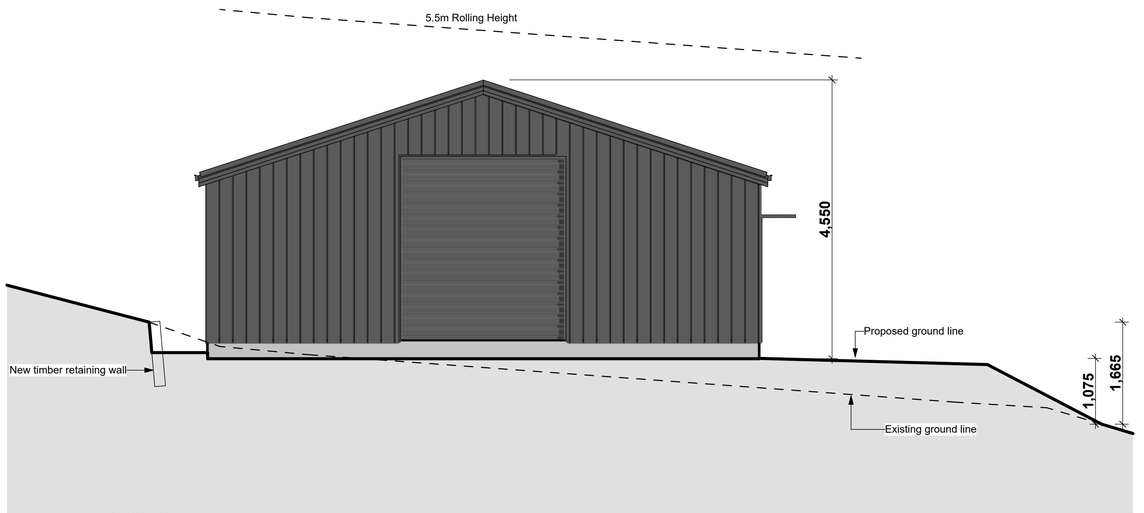
Drawing Issue:
RESOURCE CONSENT

COLOURS : LRV less than 30%

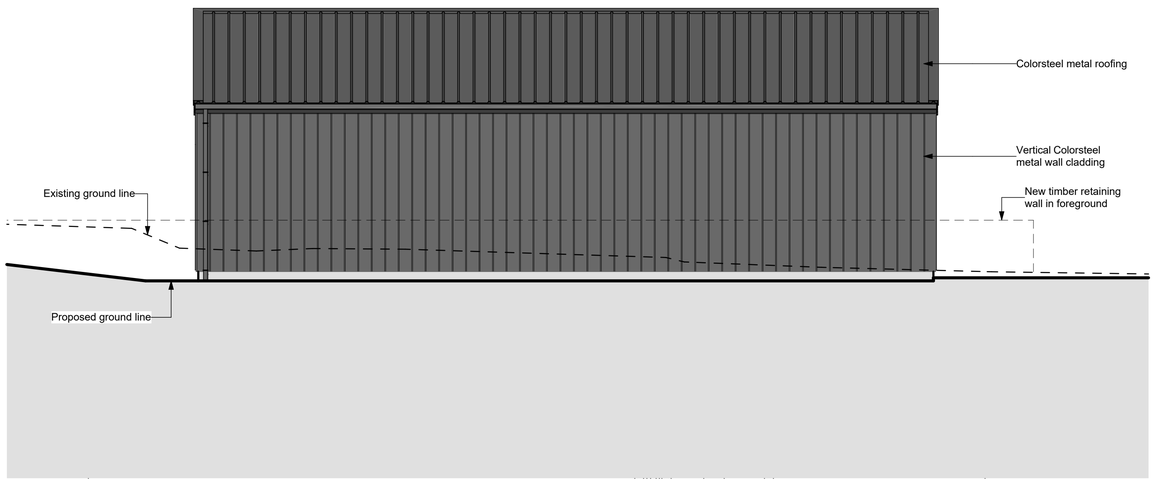
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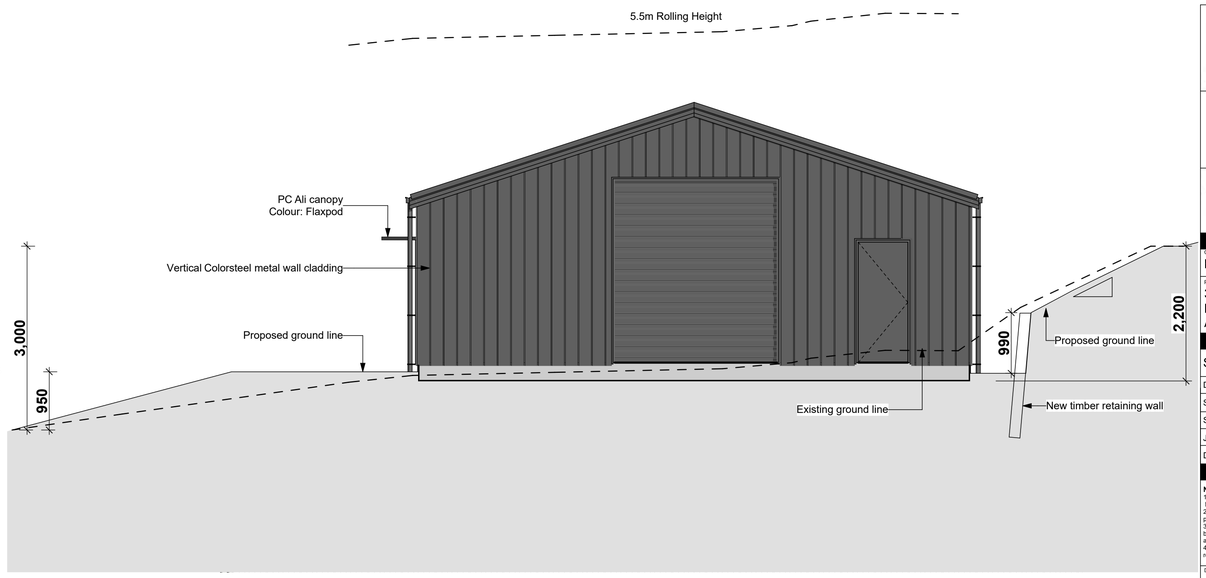
A1 **North Elevation** 1:50



East Elevation 1:50



South Elevation 1:50



West Elevation 1:50

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Shed/Sleepout Elevations

Date:	15/10/2026
Scale at A1:	1:50
Scale at A3:	half of A1 scale
Job No:	26741-N
Drawn by:	AM

NOTES:
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Drawing Issue:
RESOURCE CONSENT

Appendix B – Certificate of Title and Interests

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

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

R.W. Muir
Registrar-General
of Land

Identifier **NA138C/102**

Land Registration District **North Auckland**

Date Issued 31 July 2002

Prior References
NA70A/507

Estate Fee Simple

Area 3996 square metres more or less

Legal Description Lot 4 Deposited Plan 210535

Registered Owners

Henri Jacques Burkhardt, Meredith Ann Burkhardt and Craig Anthony Pellett

---

Interests

Subject to an electricity right over part marked D on Plan 210535 created by Transfer C210969.1 - 12.11.1990 at 1.32 pm

5301250.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 31.7.2002 at 3:58 pm

Subject to a right of way over part marked A on DP 210535 specified in Easement Certificate 5301250.5 - 31.7.2002 at 3:58 pm

The easements specified in Easement Certificate 5301250.5 are subject to Section 243 (a) Resource Management Act 1991

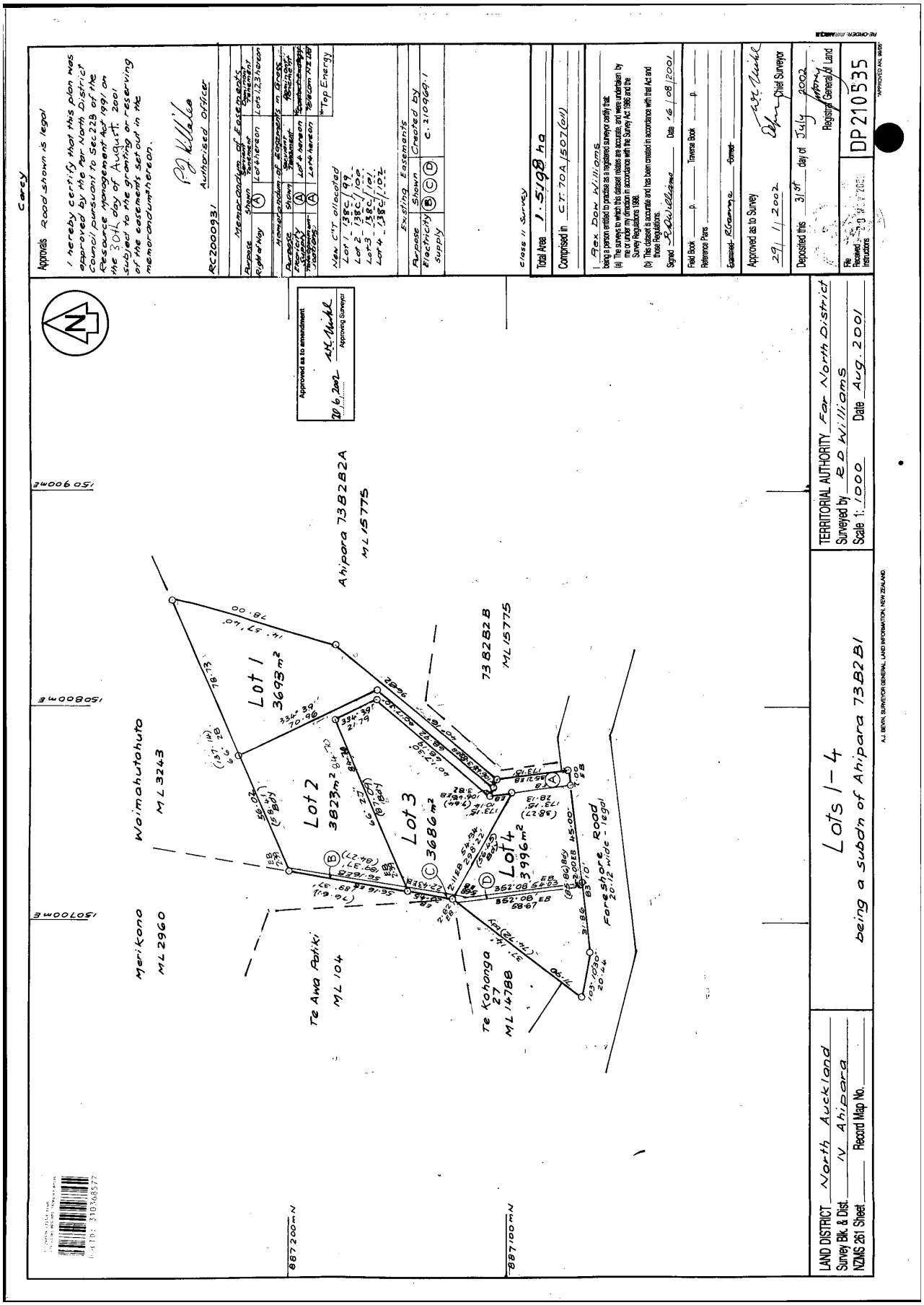
Subject to a right (in gross) to supply electricity over part marked A in favour of Top Energy Limited created by Transfer 5301250.6 - 31.7.2002 at 3:58 pm

The easements created by Transfer 5301250.6 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunications easement (in gross) over part marked A on DP 210535 in favour of Telecom NZ Limited created by Transfer 5301250.7 - 31.7.2002 at 3:58 pm

The easements created by Transfer 5301250.7 are subject to Section 243 (a) Resource Management Act 1991

Land Covenant in Transfer 7009535.1 - 30.8.2006 at 9:00 am


Carey
Approvals Road shown is legal
I hereby certify that this plan was approved by the Far North District Council pursuant to Sec 219 of the Resource Management Act 1991 on the 30th day of August 2001 subject to the granting or reserving of the easements set out in the memorandum thereon.
Authorised officer
RC2000931
Memorandum of Easements
Purpose Shown Servient Tenement Dominant Tenement
Right of Way A Lot 1 Lot 2,3 Hereon
Memorandum of Easements in Gross
Purpose Shown Servient Tenement Dominant Tenement
Electricity A Lots 1 Hereon Telecom NZ Ltd
Supply A Lots 1 Hereon *Top Energy
New CT allocated
Lot 1 138C/99
Lot 2 138C/100
Lot 3 138C/101
Lot 4 138C/102
Existing Easements
Purpose Shown Created by
Electricity B C D c.310969.1
Supply
Class II Survey
Total Area 1.5198 ha
Comprised in CT 70A/1507(Gaz)
Rex Dow Williams
being a person entitled to practise as a registered surveyor certify that:
(a) The survey to which this dataset relates are accurate, and were undertaken by me or under my direction in accordance with the Survey Act 1986 and the Survey Regulations 1998.
(b) This dataset is accurate and has been created in accordance with that Act and those Regulations.
Signed Date 16/08/2001
Field Book p Traverse Book p
Reference Plans
Examined Correct
Approved as to Survey
29/11/2002 Chief Surveyor
Deposited this 31st day of July 2002
Registrar General of Land
File Received 5 Dec 2002
Instructions
DP210535
*APPROVED AS L 9035
Approved as to amendment
10 6 2002 Approving Surveyor
Lot 1 3693 m²
Lot 2 3823 m²
Lot 3 3686 m²
Lot 4 3996 m²
Ahipara 7382824
ML 15775
7382828
ML 15775
Waimahutahuta
ML 3243
Merikono
ML 2960
Te Ana Pariki
ML 104
Te Kohanga 27
ML 14788
Foreshore Road
20.12 wide - legal
1507000mE
1508000mE
887200mN
887100mN
TERRITORIAL AUTHORITY Far North District
Surveyed by R D Williams
Scale 1:1000 Date Aug. 2001
Lots 1-4
being a subdn of Ahipara 7382B1
A.J. BEVIN, SURVEYOR-GENERAL, LAND INFORMATION, NEW ZEALAND
LAND DISTRICT North Auckland
Survey Blk. & Dist. IV Ahipara
NZMS 261 Sheet Record Map No.
I.D.: 3107685?

COMO 5381250.2 CONSENT UNDER S22
CPY-01/01.PGS-001.01/08/02.08:51
DocID: 310491030

FAR NORTH DISTRICT COUNCIL

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221 : CONSENT NOTICE

REGARDING RC 2000931
The subdivision of
AHIPARA 73B2B1
North Auckland Registry.

PURSUANT to Section 221 for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the FAR NORTH DISTRICT COUNCIL to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and is to be registered on the appropriate titles of DP 201535.

SCHEDULE

Lots 1-4

1. Any earthworks within the subdivision (development) which exceeds 50 cubic metres in total, or exceeds a 1.2metre high cut and/or fill face, or is closer than 20 metres to any water course shall only be commenced with the approval of Council, given on the application. Such approval may require the submission to Council of technical/professional plans and/or advice as to the works required and its suitability. Such requirement herein is to be, where applicable, in addition to the provisions of Council's General bylaws.
2. Stormwater generated from water tank overflow and impermeable (sealed) surfaces, as a result of development is to be controlled so as not to cause erosion or any nuisance condition on the site or on any adjoining properties.

Lots 1 & 2

1. No building shall be erected without the prior approval of the Council to specific designs for foundations, prepared by a registered engineer with geotechnical expertise.

Lots 2 & 3

1. The existing vegetation as defined on the attached plan is to be retained in perpetuity for the purpose of erosion control and site suitability. Clearance can only be undertaken for the purpose of providing for the planting of suitable native species.

SIGNED: P J Killalea

by the FAR NORTH DISTRICT COUNCIL
under delegated authority:
RESOURCE CONSENTS MANAGER

DATED at **KAIKOHE** this 16th day of May 2002

RC 2000931
SRM\CERT\3carey221

Appendix C – Landscape Assessment

STUDIO NORTH LANDSCAPE ECOLOGY

STAGE 1 FINAL DOCUMENT

Landscape Concept Plan & Consent Support Statement

380 Foreshore Road, Ahipara

27 October 2026 (Revision B)



PROJECT INFORMATION

Project:	Landscape Concept Plan and Consent Support Statement
Site:	380 Foreshore Road, Ahipara
Legal description:	Lot 4 DP 210535
Site area:	Approximately 3,996 m2
Client:	Harry Burkhardt
Purpose:	Resource consent support
Issue status:	Resource consent issue
Date:	27/10/2026
Revision:	Revision B

PREPARED BY

Studio North Landscape Ecology
David McDermott - Landscape Architect
Miriam Hafner - Ecologist
www.studionorth.co.nz

DOCUMENT PURPOSE & SCOPE

This document presents a landscape concept for the proposed development at 380 Foreshore Road, Ahipara. It has been prepared to support the project's resource consent application to Far North District Council and to assist coordination between the client, architect, planner and engineering consultants.

The document addresses the landscape integration of the proposed buildings, access, outdoor-use areas, earthworks, stormwater and wastewater infrastructure. It also provides indicative planting direction appropriate to the site's exposed coastal setting.

INFORMATION REVIEWED

The concept has been prepared with reference to:
- architectural drawings provided by the project architect;
- available survey and site-layout information;
- Far North Roading three-waters concept;
- wastewater design report and Producer Statement PS1;
- resource consent planning scope of works;
- FNDC District Plan - Coastal Environment Chapter: Appendix 6 — Coastal Colours BS 5252;
- stormwater-flow video recorded during the August 2025 weather event;
- observations and photographs from the Studio North site visit;
- discussions with the client and project consultants;
- Natural Areas of Ahipara Ecological District (DOC)

RELIANCE & LIMITATIONS

This is a landscape concept document prepared for resource consent purposes. It is not a construction drawing, detailed planting plan or engineering design.

The concept relies on information supplied by the client and project consultants. Property boundaries, levels, building locations, services, earthworks, stormwater infrastructure and wastewater areas are to be verified against the current survey and relevant consultant documentation before detailed design or construction.

Civil, structural, geotechnical, stormwater, wastewater and retaining-wall design remain the responsibility of the relevant qualified consultants. Final architectural materials, BS 5252 colour codes, reflectance values and proprietary finishes are to be confirmed by the project architect.

Detailed plant schedules, quantities, grades, spacing, material specifications and implementation requirements will be developed during Stage 2.

Revision	Date	Purpose	Prepared by
A	19/10/2026	Draft for client and consultant review	DM / MH
B	27/10/2026	Resource consent issue	DM / MH

THE PROPOSAL

The proposal is for a residential development at 380 Foreshore Road, Ahipara, comprising a new dwelling, guest accommodation, boatshed, vehicle access, outdoor living areas and associated servicing infrastructure.

Development of the site will involve earthworks, changes to site levels, stormwater management and the establishment of an on-site wastewater treatment and land-disposal system. The landscape concept has therefore been developed in coordination with the available architectural, civil, geotechnical, stormwater and wastewater information.

The concept focuses primarily on the development envelope and its immediate relationship with the wider property. It establishes the intended landscape structure, planting character and integration measures required to support the resource consent application. Detailed planting and material specifications will follow during Stage 2.

CONSENT CONTEXT

The site is located within Ahipara's coastal environment, where the relationship between built development, landform, vegetation and the wider coastal landscape requires careful consideration.

The landscape response supports the consent application by demonstrating how proposed buildings, access, earthworks and infrastructure can be visually integrated through appropriate siting, recessive materials and colours, retention of existing vegetation and the establishment of coastal-tolerant planting.

Architectural colours are anticipated to comply with FNDC District Plan - Coastal Environment Chapter Appendix 6 — Coastal Colours BS 5252, with final colour selections and reflectance values to be confirmed by the project architect.

LANDSCAPE OBJECTIVES

1. Integrate the development

Reduce the visual prominence of buildings, access and associated infrastructure within the coastal setting.

2. Reinforce coastal character

Use landform-responsive design and a predominantly native, coastal-tolerant planting framework suited to Ahipara's wind and salt exposure.

3. Retain valued views

Balance screening and shelter with the retention of important views from the dwelling and outdoor living areas.

4. Soften earthworks and structures

Use planting to integrate cut-and-fill batters, retaining elements, driveways, service areas and building edges.

5. Coordinate site infrastructure

Ensure the landscape response works with stormwater flow paths, drainage infrastructure and the wastewater treatment, disposal and reserve areas.

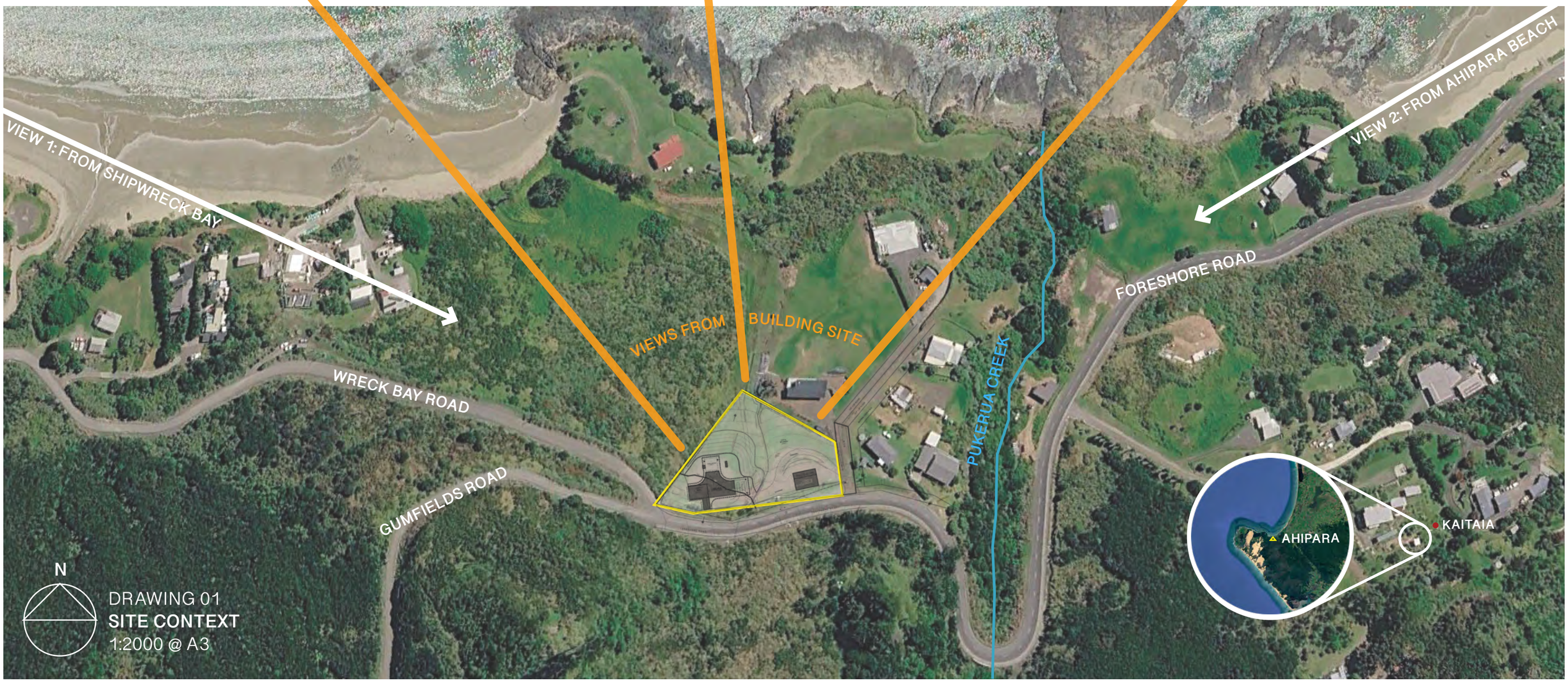
6. Establish a resilient landscape

Create a practical landscape framework that can be implemented progressively and developed into a detailed planting programme during Stage 2.

Landscape intent: *To establish a resilient coastal landscape that anchors the development within its setting, softens built form and infrastructure, and becomes increasingly integrated as planting matures.*



STUDIO NORTH LANDSCAPE ECOLOGY



DRAWING 01
SITE CONTEXT
1:2000 @ A3

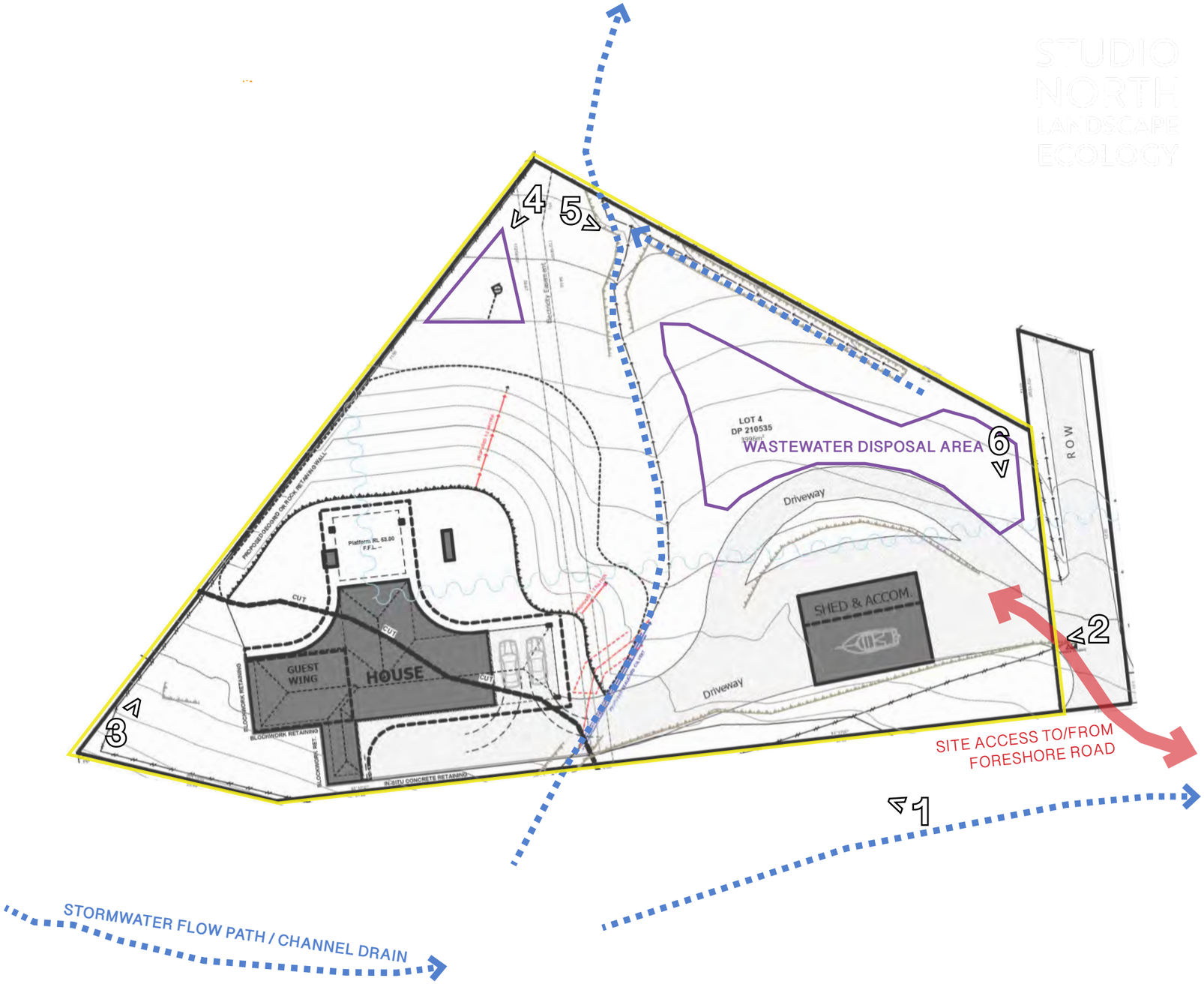
SITE CONTEXT - 380 FORESHORE ROAD

The approximately 3,996 m2 property is located within the established coastal settlement of Ahipara. Its character is strongly influenced by proximity to the coast, exposure to wind and salt, strong maritime light and periodic heavy rainfall. Foreshore Road forms the principal public interface and provides access to the property.

The surrounding context includes residential development, local roads, scattered coastal vegetation and the wider coastal landscape. The landscape response seeks to integrate the proposed buildings, access and associated infrastructure into this setting, while maintaining valued coastal outlooks, respecting neighbouring properties and reinforcing the established coastal landscape character.


VIEW 1: FROM SHIPWRECK BAY

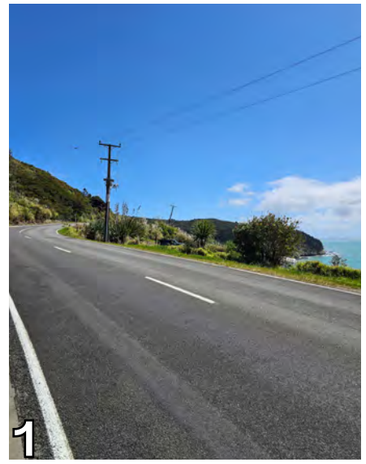

VIEW 2: FROM AHIPARA BEACH



SITE CONDITIONS - 380 FORESHORE ROAD

The site is predominantly open and exposed, with limited established vegetation available to provide shelter or visual integration. Existing landform, drainage patterns and neighbouring interfaces will influence the location, height and character of proposed planting.

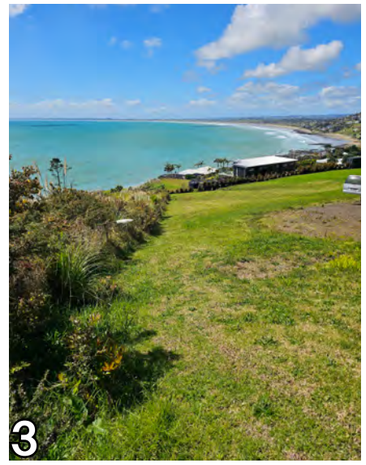
Stormwater movement across the property is a key consideration, particularly during significant rainfall events. Landscape treatment must remain coordinated with the civil design and avoid obstructing overland-flow paths, drains and access to infrastructure.. The proposed wastewater disposal and reserve areas also place constraints on plant selection, root characteristics, construction activity and future maintenance access.



VIEW FROM FORESHORE RD ACROSS TO SOUTHERN SITE BOUNDARY



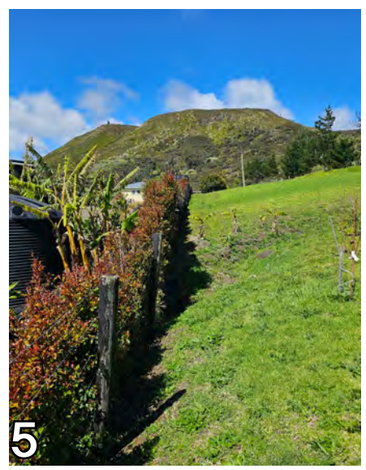
VIEW FROM SITE ENTRANCE, LOOKING ALONG SOUTHERN BOUNDARY (BELOW ROAD)



LOOKING ALONG WESTERN BOUNDARY LINE TO NEIGHBOURING HOMES BELOW



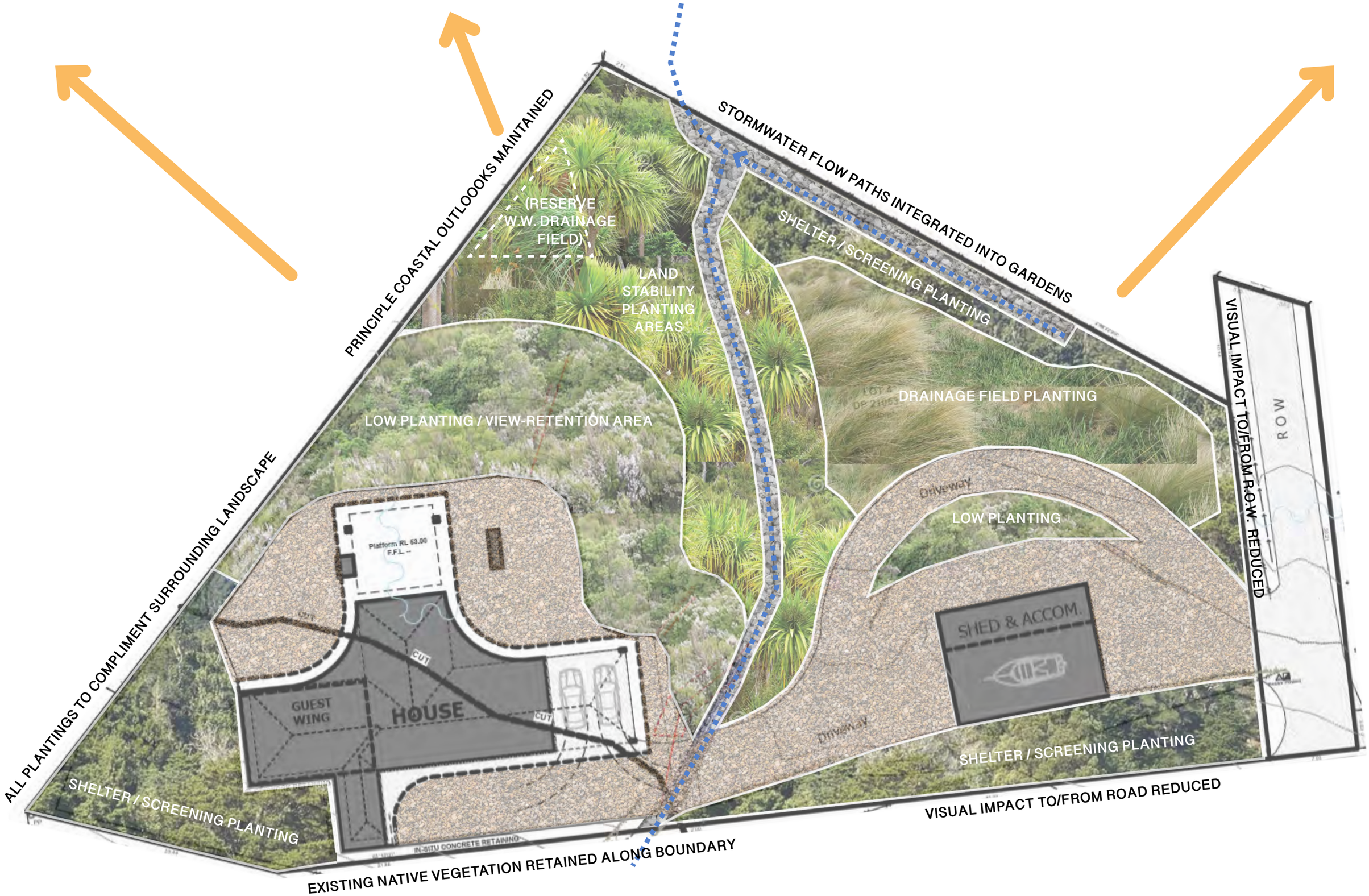
VIEW FROM NORTH CORNER OF SITE, LOOKING SOUTH-WEST ALONG BOUNDARY



VIEW FROM NORTH CORNER, LOOKING SOUTHEAST ALONG BOUNDARY



LOOKING SOUTH ALONG EASTERN BOUNDARY, NEXT TO RIGHT-OF-WAY


PRINCIPLE COASTAL OUTLOOKS MAINTAINED
STORMWATER FLOW PATHS INTEGRATED INTO GARDENS
VISUAL IMPACT TO/FROM R.O.W. REDUCED
ALL PLANTINGS TO COMPLIMENT SURROUNDING LANDSCAPE
EXISTING NATIVE VEGETATION RETAINED ALONG BOUNDARY
VISUAL IMPACT TO/FROM ROAD REDUCED
(RESERVE W.W. DRAINAGE FIELD)
LAND STABILITY PLANTING AREAS
SHELTER / SCREENING PLANTING
DRAINAGE FIELD PLANTING
LOW PLANTING / VIEW-RETENTION AREA
LOW PLANTING
SHELTER / SCREENING PLANTING
SHELTER / SCREENING PLANTING
ROW
Platform RL 63.00
F.F.L. --
CUT
CUT
CUT
GUEST WING
HOUSE
SHED & ACCOM.
Driveway
DRIVEWAY
IN-SITU CONCRETE RETAINING

PLANTING ZONES & ESTABLISHMENT STRATEGY - 380 FORESHORE ROAD

The landscape concept establishes a resilient coastal planting framework that integrates the proposed development with its setting, retains valued coastal outlooks and responds to local landscape character, exposure, drainage and servicing constraints.

- Coastal species framework
Broad native planting will soften the development and reinforce coastal character.

- Shelter and screening
Strategic planting will provide wind protection, privacy and visual softening.

- Retained outlooks
Low planting and open areas will maintain important coastal views.

- Built-form integration
Planting will reduce the prominence of buildings, access and service infrastructure.

- Infrastructure coordination
Landscape treatment will recognise stormwater and wastewater requirements.

- Ground reinstatement
Disturbed slopes and construction areas will be revegetated following earthworks.



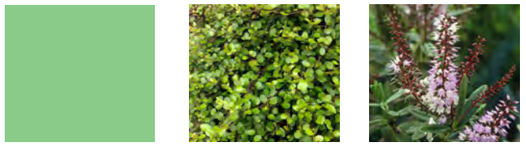
INDICATIVE PLANTING STRATEGY

SHELTER / SCREENING PLANTING



- Locally sourced and eco-sourced plants where practicable
- Robust nursery grades appropriate to coastal exposure
- Season-aligned planting & maintenance schedule

LOW PLANTING / VIEW-RETENTION



- Site-sourced topsoil reinstated
- Weed control before planting
- Organic mulch generally 75–100 mm deep

LAND STABILITY / VALLEY PLANTING



- Temporary establishment watering where required
- Replacement of plant losses during establishment
- Fertiliser tabs & tree stakes to support establishment

DRAINAGE FIELD PLANTING



The plant palette is indicative and is intended to establish the proposed landscape character and functional planting approach. Final selections will respond to confirmed levels, soil and moisture conditions, infrastructure requirements, nursery availability and detailed design.



CONSENT-SUPPORTING LANDSCAPE STATEMENT

The landscape concept provides an integrated response to the site's coastal setting and proposed residential development, recognising the distinctive coastal character and prominent natural backdrop as key elements of the site's natural and cultural context. Planting, landform treatment, view corridors and infrastructure will be coordinated to enhance the relationship between the built environment and its surroundings, enabling the buildings and associated works to become progressively integrated into the wider landscape.

1. Building integration

The proposed landscape treatment will work in conjunction with the building's recessive external material and colour palette to reduce the visual prominence of the development within the coastal setting. Architectural colours are to be selected in accordance with *Appendix 6 - Coastal Colours BS 5252*, using colours with reflectance values not exceeding 30%. Proposed planting around the buildings, outdoor areas and site edges will further soften built form and assist its progressive integration into the coastal landscape. Taller planting is concentrated where shelter or screening is required, while lower planting is used where coastal outlooks are to be retained.

2. Earthworks and landform

Proposed planting will assist in integrating disturbed ground, batters and retaining elements following completion of earthworks. Planting patterns will respond to the final landform rather than create visually rigid or continuous boundary treatments.
Final batter gradients, retaining requirements and ground-stability measures remain subject to civil, structural and geotechnical design.

3. Access, services and screening

The entrance, driveway, parking areas, boatshed and service infrastructure will be softened through strategically located planting. Screening will focus on reducing the prominence of vehicles, tanks and utility areas while maintaining access, safety and practical servicing requirements.

4. Coastal character and views

The proposed planting palette draws primarily on robust native coastal species suited to Ahipara's exposed conditions, with forms, colours and textures selected to establish a coherent relationship between the developed site and its natural surroundings. The proposed landscape approach will aim to reinforce existing coastal vegetation patterns, support local biodiversity and strengthen the site's distinctive coastal character.
Informal planting groups will be used to create a natural landscape character, avoiding an overly suburban or ornamental appearance. Important coastal outlooks will be retained through careful consideration of mature planting height and plant placement.

5. Stormwater interface

Planting will respond to existing drainage patterns and the final stormwater design. Overland-flow paths, drains, culverts and maintenance routes are to remain unobstructed. Native, moisture-tolerant groundcovers will be used to integrate stormwater infrastructure into the surrounding landscape while maintaining its functionality and accessibility.

6. Wastewater interface

Planting within the wastewater disposal and reserve area will be low-growing and fibrous-rooted species, selected in accordance with best practice specifications. Planting will assist with uptake of excess moisture and nutrients, erosion control and efficient functioning of the wastewater disposal system. Vehicle access, soil compaction and activities that could damage the disposal field are to be avoided.

Landscape outcome

As planting establishes, the development will sit within a more coherent coastal landscape framework that provides shelter, privacy and visual softening while retaining valued outlooks and maintaining the functional requirements of site infrastructure.

IMPLEMENTATION PATHWAY

These implementation phases describe the anticipated sequence of physical work on site. They are separate from Studio North's three contractual service stages.

PHASE A - BEFORE CONSTRUCTION

- Review approved consent plans and landscape-related conditions.
- Confirm current architectural, engineering, stormwater and wastewater information.
- Identify vegetation, infrastructure and ground requiring protection.

Outcome: Landscape requirements are understood before site disturbance.

PHASE B - SITE FORMATION & CONSTRUCTION

- Protect retained vegetation and infrastructure areas.
- Establish final levels, access, drainage, batters and retaining.
- Protect topsoil and avoid unnecessary compaction within future planting areas.

Outcome: The site is ready for landscape works without avoidable rework.

PHASE C - LANDSCAPE INSTALLATION

- Confirm the detailed landscape and planting plan.
- Complete soil preparation and plant procurement.
- Undertake planting, mulching and any required plant protection.

Outcome: Landscape works reflect the consented landscape intent.

PHASE D - ESTABLISHMENT

- Water, weed and maintain mulch during establishment.
- Replace failed or damaged plants.
- Maintain access to stormwater and wastewater infrastructure.

Outcome: Planting is healthy and progressing toward the intended landscape outcome.

STUDIO NORTH SERVICE STAGES:

Stage 1 — Current: Consent-stage landscape concept and supporting statement

Stage 2 — Future Detailed landscape and planting documentation

Stage 3 — Future Procurement and agreed implementation oversight

The implementation phases are project activities and do not confirm that Studio North has been commissioned for work beyond Stage 1.

CONCLUSION

Studio North Landscape Ecology considers that the proposed landscape concept provides an appropriate and achievable response to the scale, location and coastal setting of the development.
The concept provides a clear basis for integrating the proposed works within the site and for coordinating the landscape response with the architectural, planning and engineering information submitted as part of the resource consent application.
Subject to the landscape framework being carried forward through detailed design and implementation, the development can establish a coherent and resilient relationship with its Ahipara coastal setting.

This document has been prepared to support the resource consent application and should be read alongside the other consultant plans and reports submitted for the proposal.

Prepared by Studio North Landscape Ecology

David McDermott
Landscape Architect

Miriam Hafner
Ecologist

Date: 27/10/2026
Revision B: Resource Consent Issue

www.studionorth.co.nz



Appendix D – TP58 Report

STATEMENT OF DESIGN - PS1

Issued by: Matt Riddell
To: Manu Burkhardt
Copy to be supplied to: Far North District Council
In Respect of: Econotreat Domestic Onsite Wastewater and Sewage System Design
At: 380 Foreshore Road, Ahipara
Legal Description: Lot 4 DP 210535

Waterflow NZ Ltd has been engaged by Manu Burkhardt to provide the technical design services and details in respect of the requirements of G13/VM4 and B2 Durability of the Building Code 2004, for an Onsite Wastewater and Sewage System for their building at the above location.

The Design has been carried out in accordance with AS/NZS 1547/2012 and Clause B2, G13 and G14 of the Building Regulations 2004.

The proposed building work covered by this producer statement is described on the drawings titled: Manu Burkhardt Onsite Wastewater Design Report, and numbered 1-42 together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:
(i) Site verification of the following design assumptions: correct installation of the system and drainage fields
(ii) All proprietary products meeting their performance specification requirements;

As an independent design professional covered by a current policy for Professional Indemnity Insurance, no less than $200,000*, I **believe on reasonable grounds** the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code.

Signed by: Matt Riddell - PS Author '2384' Auckland Council, NZQA Onsite Wastewater Training/Opus, Approved Designer

Date: 01/09/2026

Signature: 

Waterflow NZ Ltd
4/525 Great South Road
Penrose, Auckland 1061

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000.*

WaterFlow
Bringing Clarity to Wastewater

2026

Waterflow NZ Ltd
Certified Designer

Manu Burkhardt
380 Foreshore Road
Ahipara
Lot 4 DP 210535

Reference Number: WF26569

Issued 01/09/2026

ONSITE WASTEWATER DESIGN REPORT

Onsite Wastewater Design Report by Waterflow NZ Ltd – Copyright 2026

Limitations / Disclaimer

This document has been prepared by Waterflow NZ Ltd specifically for the commissioning client and for the project described. It should not be used, copied, or relied upon by any other party without written confirmation from Waterflow NZ Ltd that the report is appropriate for their intended purpose.

The design and recommendations presented are based on the site information, test results, and reference material made available at the time the assessment was undertaken. Any assumptions or data provided by others are considered correct unless clearly stated otherwise. Waterflow NZ Ltd cannot accept responsibility for the consequences of relying on information that is later found to be incomplete or inaccurate.

Site conditions, development plans, or client requirements may change over time. If this occurs, the conclusions and design in this report may no longer be suitable. It is the client's responsibility to seek a review of this report if new information emerges or if the project scope is amended.

This report focuses on wastewater treatment and disposal design. It does not include a geotechnical stability assessment. Waterflow NZ Ltd are not Geotechnical Engineers and make no representations regarding slope stability, ground settlement, or subsurface hazards. Where ground stability or geotechnical risk is a concern, a separate assessment by a suitably qualified professional is required.

The successful performance of any wastewater system depends on correct installation. Installers must follow all manufacturer instructions and Waterflow NZ Ltd design details. Any proposed departures from the design must be approved by the property owner, Waterflow NZ Ltd, and the relevant Council before the work proceeds.

Compliance with regional and district rules, consent conditions, and relevant legislation remains the responsibility of the property owner. Routine servicing, monitoring, and desludging of the system are essential to maintain performance and minimise environmental effects. Failure to undertake required maintenance may result in system malfunction or regulatory non-compliance, for which Waterflow NZ Ltd cannot be held liable.

WaterFlow
Bringing Clarity to Wastewater

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PART E: LAND DISPOSAL METHOD 10

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DECLARATION 14

SITE LAYOUT PLAN: 15

Attachments

- **PS1**
- **Land Application System Schematics**
- **Pump Specification**
- **Electrical Diagram**
- **Assessment of Environmental Effects**
- **System & Installation Specifications**
- **Home Owners Care Guide**

Disclaimer

The design presented herein is based on the information available at the time of preparation and reflects the conditions known at that time.

If additional information comes to light or if there are significant changes in site conditions or circumstances, the design may no longer be valid. In such cases, the design must be reassessed and potentially revised by the designer to ensure its continued suitability.

The designer(s) disclaim any responsibility for the design's applicability or effectiveness under new or altered conditions and recommend a review before implementation if any such changes occur.

PART A: CONTACT AND PROPERTY DETAILS

A 1. Consultant / Evaluator

Name:	Alexandra Sabath
Company/Agency:	Waterflow New Zealand Ltd
Address:	1160 State Highway 12, Maungaturoto 0520
Phone:	09 431 0042
Fax:	
Email Address:	sandra@waterflow.co.nz

A 2: Applicant Details

Applicant Name:	Manu Burkhardt
Company Name:	
Property Owner:	Manu Burkhardt
Owner Address:	380 Foreshore Road, Ahipara
Phone:	021 711 383
Mobile:	
Email Address:	Manu@fnr.nz

A 3: Site Information

Sited Visited by:	Caleb Pirini		**Date:**	Thursday, 20 August 2026			
Physical Address:	380 Foreshore Road, Ahipara						
Territorial Authority:	Far North District Council						
Regional Council:	Northland Regional Council						
Regional Rule	C.6.1.3						
Legal Status of Activity:	**Permitted:**	**x**	**Controlled:**		**Discretionary:**		
Total Property Area (m^2):	3996m^2						
Map Grid Reference:							
Legal Description of Land (as on Certificate of Title):							
Lot No:	4						
DP No:	210535						
CT No:	NA138C/102						

A 4: Are there any previous existing discharge consents relating to this proposal or other waste discharge/disposal on the site?

Yes:		**No:**	**x**

If yes, give reference No's and description:

A 5: Dwelling(s) for which on-site wastewater service is to be provided

Status of dwelling(s) to be serviced:		**New**	**x**	**Existing**		**Multiple**	
How many dwellings on the property?		2					
Capacity of dwellings:	**Dwelling 1**	3 bedroom dwelling					
(or number of bedrooms)	**Dwelling 2**	1 bedroom sleepout					
	Dwelling 3						
	Other:						
Notes:							

PART B: SITE ASSESSMENT - SURFACE EVALUATION

B 1: Site Characteristics

Performance of adjacent systems:	**(Unknown)**			
Estimated annual rainfall (mm):	1250 - 1500 **(as per NIWA statistics)**			
Seasonal variation (mm):	300-400mm			
Vegetation cover:	Grass			
Slope shape:	Linear Planar			
Slope angle:	8 - 10 °			
Surface water drainage characteristics:	Surface drains			
Flooding potential?	**Yes:**		**No:**	**x**
If Yes, specify relevant flood levels relative to disposal area:				
Site characteristics:	380 Foreshore Road in Ahipara is an undeveloped property of 3996m2. The property is covered in grass and gently sloping towards the north. The owner is proposing a new three bedroom residential dwelling and a boatshed with a sleepout. The property will require an onsite wastewater management system.			

B 2: Slope Stability

Has a slope stability assessment been carried out on the site?

Yes:		**No:**	**x**

If no, why not?

Low slope:	**x**	**No signs of instability:**	**x**	**Other:**

If yes, give brief details of report:

Details:	
Author:	
Company/Agency:	
Date of report:	

B 3: Site Geology

B 4: Slope Direction

What aspect does the proposed disposal system face?

North	x	West	
North-West		South-West	
North-East		South-East	
East		South	

B 5: Site Clearances if applicable (also on site plan)

	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)
Boundaries:	>1.5	>1.5
Surface Water:	>15	>15
Ground Water:	>1.2	>1.2
Stands of Trees / Shrubs:	n/a	n/a
Wells/Water Bores:	>20	>20
Embankments / Retaining Walls:	>3	>3
Buildings:	>3	>3
Other:		

B 6: Please identify any site constraints applicable for this property, and indicate how the design process is to deal with these.

Constraints	Explain how constraints are being dealt with
1 Site constraints:	n/a

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PART C: SITE ASSESSMENT - SOIL INVESTIGATION

C 1: Soil Profile Determination Method

Test pit:		Depth (mm):		No. of Test pits:	
Bore hole:	x	Depth (mm):	1200	No. of Bore holes	2
Other:					

C 2: Fill Material

Was fill material intercepted during the subsoil investigation?

Yes:		No:	x

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

C 3: Permeability Testing

Has constant head Permeability Testing (Ksat) been carried out?

Yes:		No:	x

If yes, please indicate the details (test procedure, number of tests):

Test report attached?

Yes:		No:	x

C 4: SURFACE WATER CUT OFF DRAINS

Are surface water interception/diversion drains required?

Yes:		No:	x

C 5: DEPTH OF SEASONAL WATER TABLE:

Winter (m):	>1.2
Summer (m):	>1.2

Was this:

Measured:	✓ no sign of ground water or mottling in bore holes
Estimated:	

C 6: SHORT CIRCUITS

Are there any potential short circuit paths?

Yes:		No:	x

If yes, how have these been addressed?

C 7: SOIL CATEGORY

Is topsoil present?

Yes:	x	**No:**	

If yes, what is the topsoil depth & soil description?

300mm silty topsoil over silty clay loam

Indicate the disposal field soil category (as per AS/NZS 1547:2012 Table E1)

Category	Description	Drainage	(x)
1	Gravel, coarse sand	Rapid draining	
2	Loamy sand, sandy loam	Free draining	
3	Medium-fine sandy loam, loam & silt loam	Good draining	
4	Sandy clay-loam, clay loam & silty clay-loam	Moderate draining	
5	Sandy clay, light clay, silty clay	Moderate to slow draining	x
6	Medium to Heavy Clays	Slow draining	

Reason for placing in stated category:

Result of bore hole/test pit sample	x
Profile from excavation	
Geotech report	
Other:	

C 8: SOIL STRUCTURE

Based on results of the in-situ soil profile investigation above (C7) please indicate the disposal (land application) field soil structure:

Massive	
Single grained	
Weak	
Moderate	x
Strong	

C 9: As necessary, provide qualifying notes on the relationship of Soil Category (C7) to Soil Structure (C8) and the effect this relationship will have on design loading rate selection:

PART D: DISCHARGE DETAILS

D 1: Water supply source for the property:

Rain water (roof collection)	x
Bore/well	
Public supply	

D 2: Are water reduction fixtures being used?

Yes:		No:	x	(according to our knowledge at time of design report)

If 'yes' Please state:

Standard Fixtures include dual flush 11/5.5 or 6/3 litre toilet cisterns, and includes standard automatic washing machine, but a low water use dishwasher, no garbage grinder.

D 3: Daily volume of wastewater to be discharged:

No. of bedrooms/people:	1:	3 Bedroom
	2:	1 Bedroom
	3:	
Design occupance (people):	1:	5 People
(as per AC TP-58, Table 6.1)	2:	2 People
	3:	
		Black / Grey water
Per capita wastewater production (litres/person/day):	1:	145 L/day
(as per AS/NZS 1547:2012 Table H3, Note 2)	2:	145 L/day
	3:	
Total daily wastewater production (litres per day):		1015 L/day
Notes:		

D 4: Is daily wastewater discharge volume more than 2000 litres?

Yes:		No:	x

D 5: Gross lot area to discharge ratio:

Gross lot area:	3996 m²
Total daily wastewater production (litres/day):	1015 L
Lot area to discharge ratio:	3.94

D 6: Net Lot Area

Area of lot available for installation of the disposal (land application) field and reserve area:

Net lot area (m²):	2996 m²	
Reserve area (m²):	30%	101.5m²

PART E: LAND DISPOSAL METHOD

E 1: Indicate the proposed loading method:

	Black / Grey Water
Gravity Dose:	
Dosing Siphon:	
Pump:	Davy D42A-B

E 2: If a pump is being used please provide following information:

Total Design Head (m):	32
Pump Chamber Volume (litres):	1600
Emergency Storage Volume (litres):	2120

Is a high water level alarm being installed in pump chambers?

Yes:	**x**	**No:**	

E 3: Identify the type(s) of Land Disposal method proposed for this site:

	Black / Grey Water
P.C.D.I. Dripper Irrigation:	PCDI surface laid and mulched
L.P.E.D. System:	
Evapo-Transpiration Beds:	
Other:	
	(as per Schematics attached)

E 4: Identify the Loading Rate proposed for option selected in E3:

as per AS/NZS 1547:2012 Table L1 & M1	**Black / Grey Water**
Loading Rate (litres/m²/day):	3
Disposal Area Basal (m²):	
Areal (m²):	338

E 6: Details and dimensions of the disposal (land application) field:

Length (m):	33.8	**No. Lines:**	10	**Hole Size:**	N/A
Width (m):	10.0	**Spacing (m):**	1.0	**Hole Spacing:**	N/A

Notes:	**338sqm of Surface laid PCDI dripline pinned at 1m centers and covered with a minimum covering of 100mm mulch. See schematic drawing attached.**

PART F: PROPOSED WASTEWATER TREATMENT SYSTEM

A Econotreat ET32P System, fed through surface laid PCDI dripline is suitable for this site. The ET32P System has enough capacity to accommodate 1600ltr per day, so will be well within its capacity. The land application system is designed to discharge a maximum volume of 1015ltrs per day and if this is exceeded it could cause failure resulting in environmental and public harm.

PART G: OPERATION AND MAINTENANCE OF SYSTEM

The operation of this complete system will be explained verbally to the owner by the Installer or Agent on Completion of Installation; also provided with Waterflow's Home Owner's Manual.

Waterflow NZ Ltd encourages the Home Owner to monitor and care for your Econotreat system yourself, with our backing and support, and by doing so you will learn how your system works and operates and how to keep it in top working order.

It is also recommended that a Maintenance Program contract is in place at all times to ensure this system is maintained at top performance at all times.

All on site wastewater systems require regular maintenance; in this case once annually is sufficient and may be specified within the consent process by the Building Department of Far North District Council. This Maintenance will be recorded on hard copy and supplied to both the Owner and Far North District Council Compliance Officer if requested.

NOTE TO OWNER: All written records pertaining to the wastewater system should be retained in a safe place. When a change of ownership occurs, a full and complete history is able to be passed to the new owners.

Animals are to be physically excluded from the installed effluent field to avoid damage, and to reduce the risk of soil compaction in the vicinity of the bed.

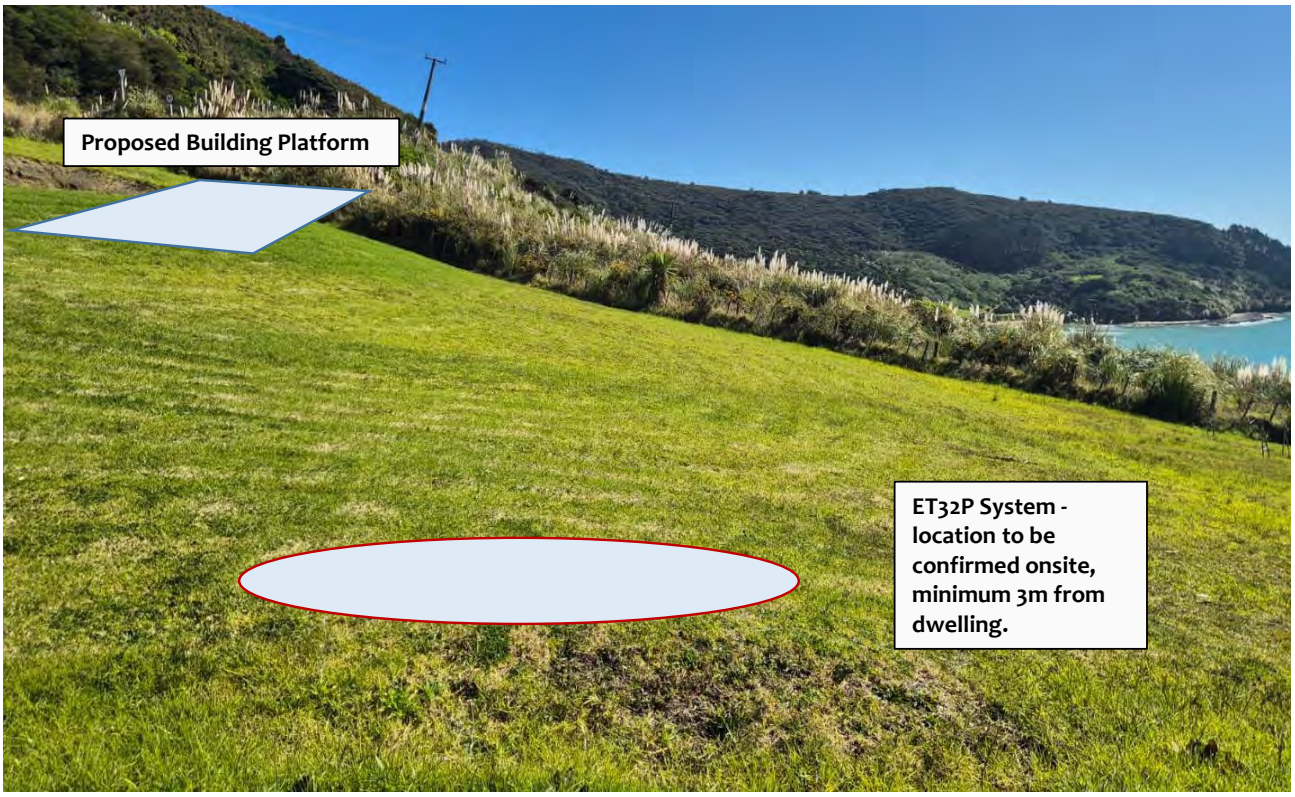
Planting within this area is encouraged to assist with evapotranspiration by plants.

PART H: SOIL LOG PROFILE



300mm silty topsoil over silty clay loam. Soil Category 5, (as per AS/NZS 1547:2012 Table E1)

PART I: SITE IMAGES





DECLARATION

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

Prepared By:	
Name:	**Alexandra Sabath - NZQA Onsite Wastewater Training/Opus, Approved Designer**
Signature:	
Date:	1/09/2026

Designed By:	
Name:	**Matt Riddell - PS Author '2384' Auckland Council, NZQA Onsite Wastewater Training/Opus, Approved Designer**
Signature:	
Date:	1/09/2026

NOTE: The Waterflow Systems are to be installed by a registered drainlayer to the designs supplied by Waterflow NZ Ltd. All work to comply with Regional Council Water and Soil Plans.

Comments/Summary:

The disposal field will need to be protected from traffic and animal grazing. Planting this area is recommended to increase Evapotranspiration.

Suitable plants for the disposal field can be found on our website www.waterflow.co.nz

Waterflow Treatment systems to be installed by accredited installer unless other arrangements have been made by Waterflow NZ Ltd

For more information do not hesitate to contact the team at Waterflow NZ Ltd on 0800 628 356



WaterFlow
Bringing Clarity to Wastewater

SITE LOCATION PLAN:

Manu Burkhardt
380 Foreshore Road
Ahipara
Lot 4DP 210535
0.3996HA

SCALE:

1 : 4400

@ A3

DESIGN FLOW = 1015 LITRES PER DAY

CATEGORY 5 SOILS:
DLR = 3mm/DAY
MINIMUM DISPOSAL AREA = 338m2
MINIMUM RESERVE DISPOSAL AREA = 102m2 (30%)

MINIMUM 1.5m FROM PROPERTY BOUNDARIES
MINIMUM 3.0m FROM HABITABLE BUILDINGS
MINIMUM 5m FROM OPEN DRAINS
MINIMUM 15m FROM OTHER SURFACE WATER

PROPOSED LAND DISPOSAL AREA:

338m2 DISPOSAL AREA CONSISTING OF
338 LINEAL METRES OF PRESSURE COMPENSATING DRIPLINE.

TO BE INSTALLED SURFACE PINNED & COVERED WITH MULCH

DRIPLINE TO BE INSTALLED AT AN AVERAGE OF NO LESS THAN 1.0m ROW SPACING. THE RECOMMENDED SPEC FOR THE DELIVERY PIPELINE IS 32mm DIAMETER LOW DENSITY PE

DRIPLINE LATERALS TO BRANCH OFF DELIVERY PIPELINE.
e.g. 5 x 67.7m LATERALS
EACH LATERAL TO TERMINATE IN A NORMALLY CLOSED FLUSH VALVE.

ESERVE DISPOSAL
AREA 102m2 (~30%)

RESERVE DISPOSAL
AREA 102m2 (~30%)

32mm MDPE
FEEDLINE

LAND APPLICATION SYSTEM:
338sqm OF SURFACE LAID PCDI DRIPLINE
5 x 67.7m PINNED AT 1m CENTRES & COVERED WITH A MINIMUM 100mm LANDSCAPE MULCH.
TO BE LAID ALONG CONTOURS.
SEE SCHEMATIC DRAWING ATTACHED

SOIL ASSESSMENT
BOREHOLES

>5m FROM
OPEN
DRAIN

>5m FROM
OPEN
DRAIN

>1.5m FROM
PROPERTY
BOUNDARIES

PROPOSED
3-BEDROOM
DWELLING

PROPOSED
BOATHOUSE/
SLEEPOUT

WATER
TANKS

ECONOTREAT ET32P
WASTEWATER TREATMENT
LOCATION TO BE CONFIRMED
MINIMUM 3m FROM DWELLING

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PO Box 24
Maungaturoto
www.waterflow.co.nz

CLIENT

MANU BURKHARDT

PROJECT

380 FORESHORE ROAD
AHIPARA
ON-SITE WASTEWATER
TREATMENT AND DISPOSAL

TITLE

PROPOSED ONSITE
WASTEWATER LAYOUT

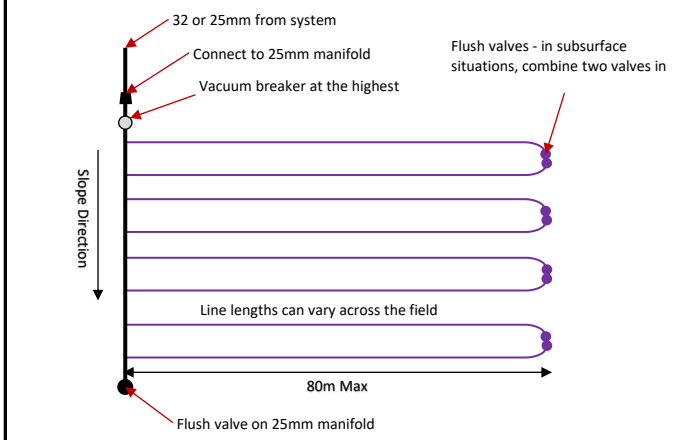
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DRAWN	*MR*	
DESIGN	*MR*	
CHECKED	*CP*	

JOB No.	SCALE.
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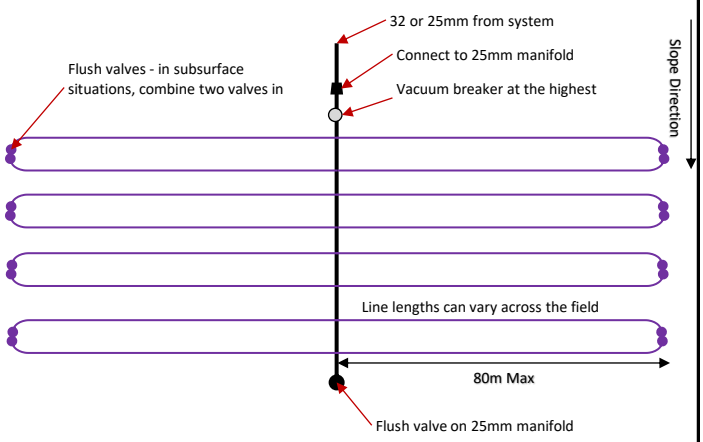
DWG No.	REV.
WF26569-01	*A*

Common PCDI Layouts

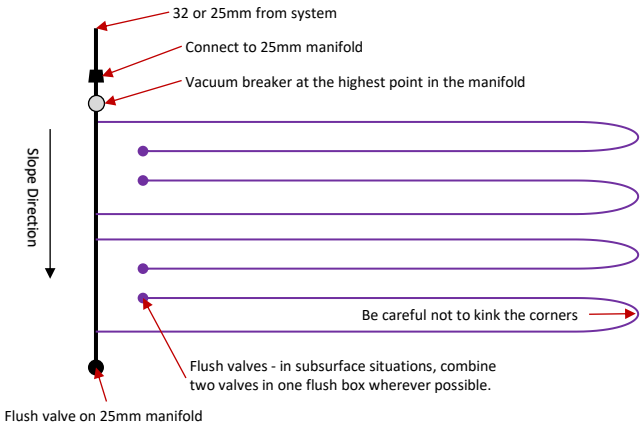
Single Side Manifold - straight



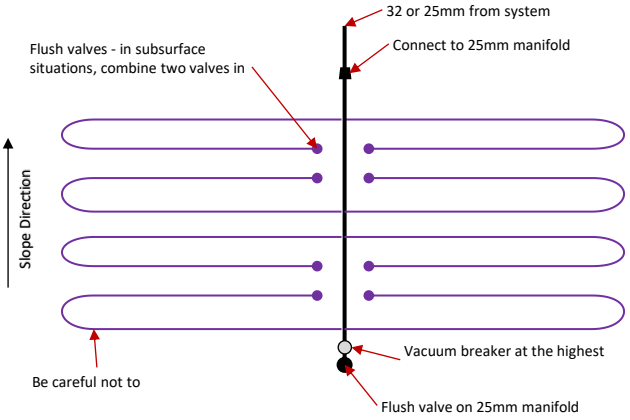
Single Center Manifold - straight



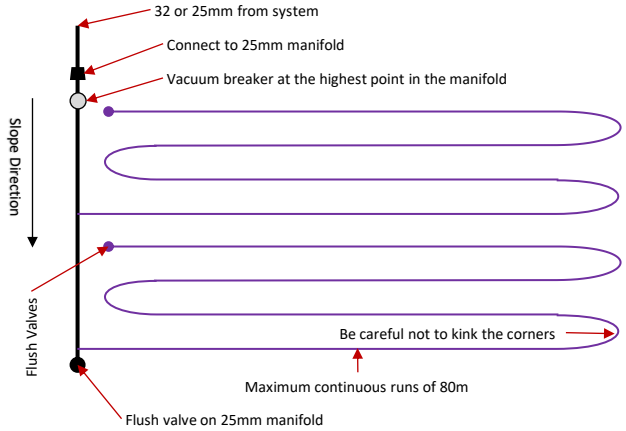
Single Side Manifold - curled



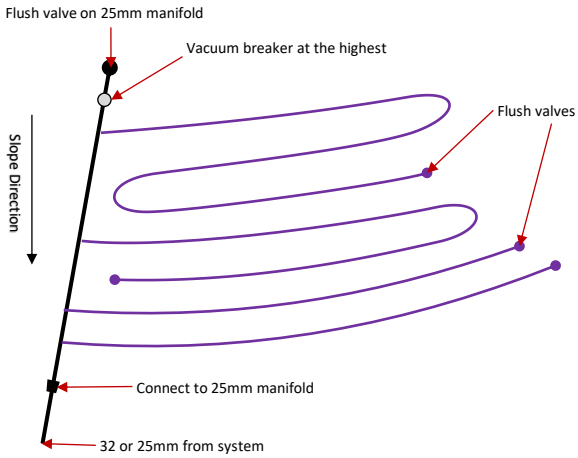
Single Center Manifold - curled



Long Single Runs



Custom Layout

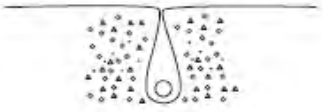


Cross Sections of PCDi installation

150mm Mulch or Leaf Litter



Subsoil Buried @ 100-150mm





METZERPLAS

ADI

Cylindrical PC (Pressure Compensated) dripper.

- Cylindrical PC dripper, with unique regulating labyrinth with self-flushing operation at the beginning and the end of each irrigation cycle.
- Triple inlet filter with filtering area 10 times larger than any other dripper.
- High clog resistance.
- Suitable for poor quality and effluent water.
- Large pressure compensation range up to 4.3 bars.
- Dripline diameter: 16, 18 and 20 mm.
- Dripper flow rate: 1.6, 2.2 and 3.5 l/h.
- *Rootguard*® configuration available for extra root protection in SDI (Subsurface Drip Irrigation).





ADI Dripline Technical Data:

Model	Inside Diameter (mm)	Wall Thickness (mm)	Min. Working Pressure (bars)	Max. Working Pressure (bars)	KD
ADI 16	13.8	0.9	0.8	3.5	1.12
		1.15	0.8	4.3	0.95
ADI 18	15.8	1.2	0.8	4.3	0.95
ADI 20	17.4	1.0	0.8	3.5	0.85
		1.25	0.8	4.3	0.6

METZERPLAS IRRIGATION SYSTEMS

Kibbutz Metzer M.P. Heffer 38820 ISRAEL Tel: 972-4-6387001 Fax: 972-4-6385385
info@metzerplas.com • www.metzerplas.com



METZERPLAS

ADI

Cylindrical PC (Pressure Compensated) dripper.

ADI 16 mm. Maximum lateral length (I.D. 13.8 mm, W.T 0.9 mm, Inlet pressure 2.5 bars):

Nom. Flow Rate (l/h)	Spacing Between Drippers (m)						
	0.20	0.30	0.40	0.50	0.60	0.75	1.00
1.6	86	122	156	188	218	260	324
2.2	72	103	131	157	182	216	269
3.5	51	73	94	113	131	156	195

ADI 18 mm. Maximum lateral length (I.D. 15.8 mm, W.T 1.2 mm, Inlet pressure 2.5 bars):

Nom. Flow Rate (l/h)	Spacing Between Drippers (m)						
	0.20	0.30	0.40	0.50	0.60	0.75	1.00
2.0	93	134	171	205	238	284	355
3.5	65	92	118	142	166	198	247

ADI 20 mm. Maximum Lateral length (I.D. 17.4 mm, W.T 1.0 mm, Inlet pressure 2.5 bars):

Nom. Flow Rate (l/h)	Spacing Between Drippers (m)						
	0.20	0.30	0.40	0.50	0.60	0.75	1.00
1.6	128	182	234	281	325	388	484
2.2	113	159	202	242	279	331	409
3.5	76	109	140	168	196	233	291

For additional tables and data please contact Metzerplas Technical Department or visit our website: www.metzerplas.com

Packaging Data

Model	Roll Length (m)	Quantity Per Container (Rolls)		
		20	40	40 h
ADI 16	400	150	300	350
ADI 18	300	150	300	333
ADI 20	300	133	266	300

METZERPLAS IRRIGATION SYSTEMS

Kibbutz Metzer M.P. Heffer 38820 ISRAEL Tel: 972-4-6387001 Fax: 972-4-6385385
info@metzerplas.com • www.metzerplas.com

SUBMERSIBLE DRAINAGE PUMPS
Model Numbers: D42A, D42M, D42A/B, D53A/B

DEPEND ON DAVEY

WATER PRODUCTS



D42A, D42M



D42A/B, D53A/B

SUMP PUMPS

PRODUCT DESCRIPTION

Submersible sump pump with two and three impeller designs for higher pressure, up to 45m head

APPLICATIONS

- Lawn & garden irrigation
- Sump emptying to higher heads
- Treated effluent disposal
- Water transfer from wells
- A/B models are specially designed for non potable rainwater applications

"A" suffix models equipped with present length automatic float switch fitted for automatic operation.

FEATURES & BENEFITS

Double mechanical seal, one in oil bath on motor and extra mechanical seal on pump
- Superior reliability
- Long service life

Corrosion resistant 304 stainless steel shaft, motor shell and fasteners
- Long service life

D42A/B & D53A/B have cast 316 stainless steel motor caps and super tough engineered thermo plastic pump casing
- Outstanding corrosion resistance
- Long life

Centrifugal multistage 2 & 3 impeller designs
- Higher pressures & increased efficiency

Closed vane impellers with long engagement "D" drives
- Positive operation
- Long service life

D42A & D42M have labyrinth impeller neck rings
- Maintain pump performance
- Less susceptible to wear

D42A/B & D53A/B have patented independently floating neck rings
- Outstanding pump performance
- Long pump life

Corrosion resistant hard wearing polycarbonate impellers
- Long service life

Corrosion resistant stainless steel fine mesh suction strainer with large surface area
- Prevents blockages of the pump by solids

In-built automatic thermal overload
- Protects the motor in the event of blockage or voltage supply problems

HO7RNF oil resistant leads, 10 metres long with 3 pin power plug
- Easy to connect to power supply
- Longer life in dirty water

OPERATING LIMITS

	D42A,M	D42A/B, D53A/B
Capacities to	110 lpm	130 lpm
Max. total head	26m	32m, 45m
Max. submergence	12m	
Max. pumped water temperature	40°C	
Max. soft solids	1.9mm O.D.	
Outlet size (BSP)	1" F	

Suitable Fluids
Clean water of neutral pH containing up to 1% small solids. Some wear should be expected while pumping hard solids in suspension.

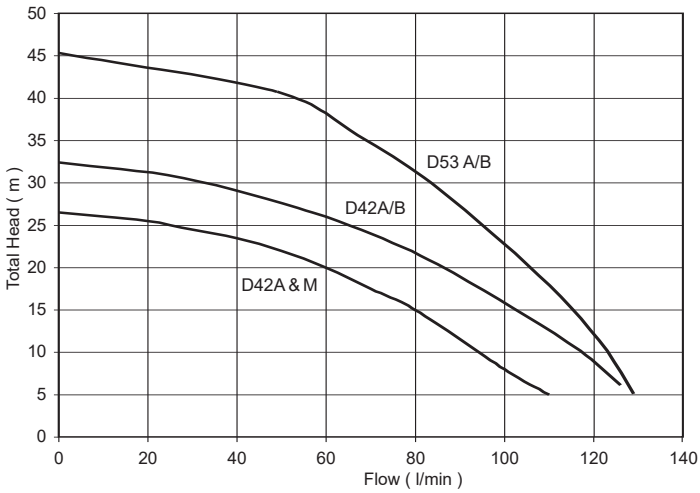
H/O & MFG SCORESBY Quality System™
Quality Endorsed Company
ISO 9001 Lic 10636

TECHNICAL SPECIFICATIONS

MATERIALS OF CONSTRUCTION

PART	MATERIAL
Impeller	Glass filled polycarbonate
Lock nut	304 stainless steel
Pump casing	Cast iron - FC200 (D42A&M) Glass filled polycarbonate (D42A/B), (D53A/B)
Diffuser and blanking ring	Glass filled noryl
Mechanical seal - pump	Carbon/ceramic
Mechanical seal - motor	Silicon carbide/ceramic in oil bath
Shaft seal elastomer	Nitrile rubber
Pump shaft	304 stainless steel
Orings	Nitrile rubber
Motor shell	304 stainless steel
Bottom bearing housing	Cast iron - FC200 (D42A&M) Cast 316 stainless steel (D42A/B), (D53A/B)
Upper motor cover	Cast iron - FC200 (D42A&M) Cast 316 stainless steel (D42A/B), (D53A/B)
Handle	304 stainless steel
Fasteners	304 stainless steel
Float & power supply leads	HO7RN-F oil resistant

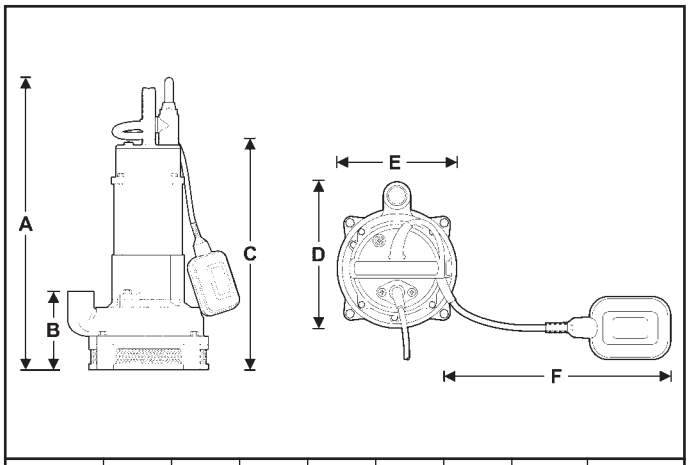
HYDRAULIC PERFORMANCE



ELECTRICAL DATA

	D42, D42A/B	D53A/B
Supply voltage	220-240V	
Supply frequency	50Hz single phase	
Speed	2 pole, 2850rpm	
Full load current	4.0A	5.7A
Locked rotor current	14A	
Input power (P_1)	0.94kW	1.31kW
Output power (P_2)	0.60kW	0.84kW
IP rating	X8	
Insulation class	Class F	
Starting	P.S.C.	
Lead	10m long	

DIMENSIONS



Model	A	B	C	D	E	F	Outlet B.S.P.	Net Weight (kg)
D42A	475	130	370	235	195	330	1"F	20
D42M	475	130	370	235	195	330	1"F	19.5
D42A/B	475	130	370	235	195	330	1"F	18.5
D53A/B	535	170	430	235	195	330	1"F	19.5

All dimensions in mm unless otherwise stated.

INSTALLATION & PRIMING

Use a rope to position and retrieve the pump. Do not lower or retrieve the pump using the power lead as this may damage the cable entry seals, causing water leaks and unsafe operation.
Don't use this product for recirculating or filtering swimming pools, spas, etc. While these pumps are built to high safety standards, they are not approved for installations where people will be in the water while they are operating.
Don't pump abrasive materials. Sand and grit in the water being pumped will accelerate wear, causing shortened pump life.
Keep your pump clean, particularly in situations where lint, hair or fibrous materials may get bound around the pump shaft. Regular inspection and cleaning will extend pump life.
Make room for the float switch to operate. Automatic models have a float switch to turn them on when the water level rises and turn them off again when it has been pumped down to the safe operating level of the pump. If the float switch is not free to rise and fall, correct pump operation may not be possible.
Don't run your pump dry. Non-automatic models must be switched off manually or by way of an external float/level switch when the water level is reduced to the top of the pump housing.

DEPEND ON DAVEY
WATER PRODUCTS

Davey Water Products Pty Ltd
Member of the GUD Group
ABN 18 066 327 517

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Scoresby, Australia 3179
Ph: +61 3 9730 9222
Fax: +61 3 9753 4100
Website: davey.com.au

Customer Service Centre
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Penrose, Auckland 1061
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Fax: +61 3 9753 4248
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Website: davey.com.au

HSQ & MFG SCORESBY Certified System ™ Quality ISO 9001
HSQ & MFG SCORESBY Certified System ™ Environment ISO 14001

This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product Installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.
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DPM128-4a Web /0313

Assessment of Environmental Effects

Manu Burkhardt of 380 Foreshore Road, Ahipara
Lot 4 DP 210535

1.1 Description of Proposal

The owners of this site propose the construction of a new 3 bedroom residential dwelling & a 1 bedroom sleepout/boatshed.

1.2 Site Description

380 Foreshore Road in Ahipara is an undeveloped property of 3996m2. The property is covered in grass and gently sloping towards the north. The owner is proposing a new three bedroom residential dwelling and a boatshed with a sleepout. The property will require an onsite wastewater management system.

1.3 Wastewater Volume

In calculating the wastewater flows we have allowed for a maximum occupancy of 7 persons, based on the proposed 3 bedroom main dwelling and 1 bedroom sleepout/boatshed (as per Auckland Council TP-58, Table 6.1). Total wastewater production is based on an allowance of 145 litres per person per day (as per AS/NZS 1547:2012 , Table H3), which is conservative given that water supply is roof collected rain water and standard water fixtures will be used throughout the house.

1.4 Wastewater Volume

The ET32P system that is proposed will treat the wastewater to a high standard prior to dispersal using a PCDI drip line, into a purpose-designed disposal field, where the removal of nutrient will continue, both in the receiving soils and by plant uptake.

The system will be capable of producing reductions in Biochemical Oxygen Demand, Total Suspended Solids, Nitrogen, and Coliforms to a standard that meets the requirements (see details below). The system will cater for the wastewater requirements of the private dwellings (domestic wastewater) and will not service any commercial or trade waste sources. Risk Minor to Nil.

1.5 Proposed Treatment System

The objective of the treatment system is to reduce and remove much of the contaminants from the wastewater prior to discharge into the receiving soil. This will improve the long-term performance of the disposal field as well as reducing the risk to the receiving environment. The system will consist of:

- Septic Tank Module
- ET32P
- Land Application System

The system is constructed using plastic injection molded tanks. The system produces treated effluent with BOD <20mg/l, Suspended solids <20mg/l.

1.6 Land Application System

The proposed irrigation system uses pressure-compensating dripper lines ensuring an even delivery of moisture over the entire irrigation field and a conservative DLR of 3mm. We propose the use of Metzerplas unibioline ADI16/3.5 @ 0.6m/c with the Dripline laid out at 1m centres. This Dripline will then be covered by 100mm landscape mulch. Densely planting this area will greatly enhance evapo-transpiration and be very beneficial especially in the wetter months of the year. This irrigation can be installed in conjunction with existing or proposed landscaping.

1.7 Surface & Ground Water

It is proposed to treat the water to a high standard prior to discharge and the proposed irrigation system will introduce the water into the topsoil horizon using PCDI irrigation. A low application rate of treated effluent into the topsoil will significantly reduce the likelihood of, any breakout or runoff or any risk of surface water contamination. With the ground water levels being >1.2m this conservative DLR also means the risk of ground water contamination is virtually nil. A majority of the undeveloped areas of this site are suitable for a PCDI disposal field when the necessary setbacks are observed. Risk Minor to Nil.

1.8 Air Quality

The proposed ET32P system will produce no noticeable odour when functioning correctly. Any odour will be contained within the tanks. The PCDI irrigation system will load the soil at a rate that should not cause ponding, spraying or aerosol of the effluent that could potentially cause odours. Risk Minor to Nil.

1.9 Visual Impact

The tanks are installed wholly below ground level with only the lids being visible. The lids will protrude approximately 100mm to prevent egress of storm water into the system. The disposal field will be located in a purpose designed mulched and intensively planted disposal area. Warning signs may be installed to indicate the presence of the disposal area, although probably not necessary in a domestic situation, also the area may be fenced to restrict access.

1.10 Environmental Risks

Risks are associated with this proposal are minor. The treatment system will be automated, and the Home Owner will be given a 'Home Owners Care Guide' which explains the necessary visual checks to ensure no issues arise with the system, specifically – solids build-up - high water level – discharge failure – filter blockage.

Peak flow into the system are not expected to be significant and the system includes a large emergency storage volume.

1.11 Maintenance Requirements

The maintenance requirement of this system is minimal, with the system fully automated. The system requires little input from the operator apart from the regular cleaning of the outlet filter between the treatment system and the Dripline field. All other maintenance interventions must be carried out by service persons familiar with the operation of the system and approved by the manufacturer. Maintenance may include checking of the dissolved oxygen levels, cleaning of effluent outlet filter, removal of excess sludge volume, checking of control panel function, etc.…

The disposal field is quite possibly the most important and sensitive part of the treatment system and requires a reasonable amount of maintenance to keep it functioning well. Any leaking or damaged Dripline must be fixed quickly using the appropriate materials, the planting must be maintained, weeds removed and grass kept cut. The Dripline should be kept covered with a suitable bark, mulch, or topsoil.

Warning signs such as ponding, odours, and signs of excessive growth act as an indicator to possible problems. A disk filter s fitted to help prevent blockage of the drippers and to protect the Dripline. This filter will require cleaning during servicing of the system.The owners will be verbally informed at the commissioning of this system of all maintenance requirements and strongly advised to have a service contract in place prior to final sign off of the system installation.

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ET32P



System Specificatons & Installation Instructions

ET-32P-SpecInstall-250516

ET32P

System Specificatons & Installation Instructions



Compliance Requirements

All Waterflow Septic Tanks and Treatment Modules meet the requirements of the New Zealand Building Code G13-VM4, Clause B1 - Structure, and Clause B2 Durability. As stated in the AS/NZS 1546.1:2008 Standard, 1.5.2.1, all septic tanks constructed to this Standard meet the requirements of the New Zealand Building Code for Clause B1 - Structure and Clause B2 Durability.

The design and specifications of the septic tank are fully compliant with the AS/NZS1546.1:2008 Standard, including but not limited to:

Structural Integrity: The tank is designed using Polymer suitable for the manufacturing method as per 9.4.1 AS/NZS1546.1:2008, with all exposed lids being UV protected, with appropriate foot anchors and reinforcement, ensuring it meets the structural requirements specified in the standard.
Material Specifications: All materials used, including the Polymer composition, comply with the necessary standards for durability and suitability in septic tank applications.
Capacity and Dimensions: The tank's dimensions and baffle placements align with the standard's guidelines, ensuring proper functionality and waste management.
Access and Maintenance Provisions: The design includes provisions for easy access, necessary for regular inspection, cleaning, and maintenance in accordance with the standard.

Please feel free to ask for a copy of this complete document, if required.

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System Specificatons & Installation Instructions

Treatment Process

SAFF is a cost-effective method of wastewater treatment and sewage sanitation that is primarily used in residential and commercial complexes particularlyfor small to medium sized treatment plants where available land is limited, and where full-time operational manning would be uneconomical. A well designed Submerged Aerobic Fixed Film (SAFF) plant has no moving parts within its process zones, any serviceable items will be positioned to access easily without disrupting the ongoing treatment.

Primary Septic Tank
Influent enters this chamber from the source whereby larger solids settle into the bottom of the primary tank and are removed periodically as sludge, and where other buoyant material (oils and fats) float upward to form a 'crust' that is essential to trap and retain septic odours. The primary tank is a simple settling and scum retention module in which the accumulating sludge in the base of the tank biodegrades and consolidates slowly under the action of facultative and anaerobic microorganisms. The primary tank module is fitted with an outlet filter which is a very effective and relatively low-cost filter that is fitted to the outlet of the primary tank and leads to a considerable improvement in the performance of the whole wastewater treatment system.

Aeration Module
Influent enters from the Primary Chamber where the excess biodegradable Organic Matter is degraded by the biomass on the SAFF media. Air is introduced into this chamber via an air blower to create an environment for aerobic bacteria to multiple and flourish. SAFF reactor is a type of aerobic attached growth treatment process with a small footprint area, stable process, lesser sludge production and modular installations which are the key features of the SAFF process. Essentially SAFF system is a hybrid reactor where attached growth and suspended growth activity takes place simultaneously.

Clarification Chamber
Is essentially a quiescent zone where the activated sludge is 'settled out' and returned to the primary tank via a sludge return system. These particles aid in further biological reduction, denitrification and provides a constant food supply rich in microbes supporting the system through periods of limited flows.

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System Specificatons & Installation Instructions

Effluent Quality

The Econotreat ET32P Series wastewater treatment system generates advanced secondary treated effluent of the following quality provided that there are no inhibitory or toxic substances within the wastewater that will impair the biological performance of the system:

- 5-day Biochemical Oxygen Demand (BOD5) 15 mg/L
- Suspended solids 15 mg/L

Note: Please read Guidelines on how to care for your EconoTreat wastewater system which are to be adhered to at all times.

The treated wastewater will usually be disposed of via a land application system, designed accordingto AS/NZS 1547:2012which describes various land application systems for primary treated effluent. Disposal systems must also comply with the relevant Regional Authority rules, and these should be consulted.

Loading Rates

• Total Daily Flow Rate	2000 L per day
• Organic loading as BOD5	700g per day
• Suspended solids loading	700g per day

Important: the actual maximum loading of an installed EconoTreat EP32P System is limited to the capacity of the land application system it discharges to. For example if the land application system is designed with a capacity of 800L per day, then the EP32P System must not be loaded at more then 800L per day.

Dual Chamber Septic Tank

3200L Nominal Capacity
2000mm Diameter
2038mm High

Aeration Tank

3200L Nominal Capacity
2000mm Diameter
2038mm High

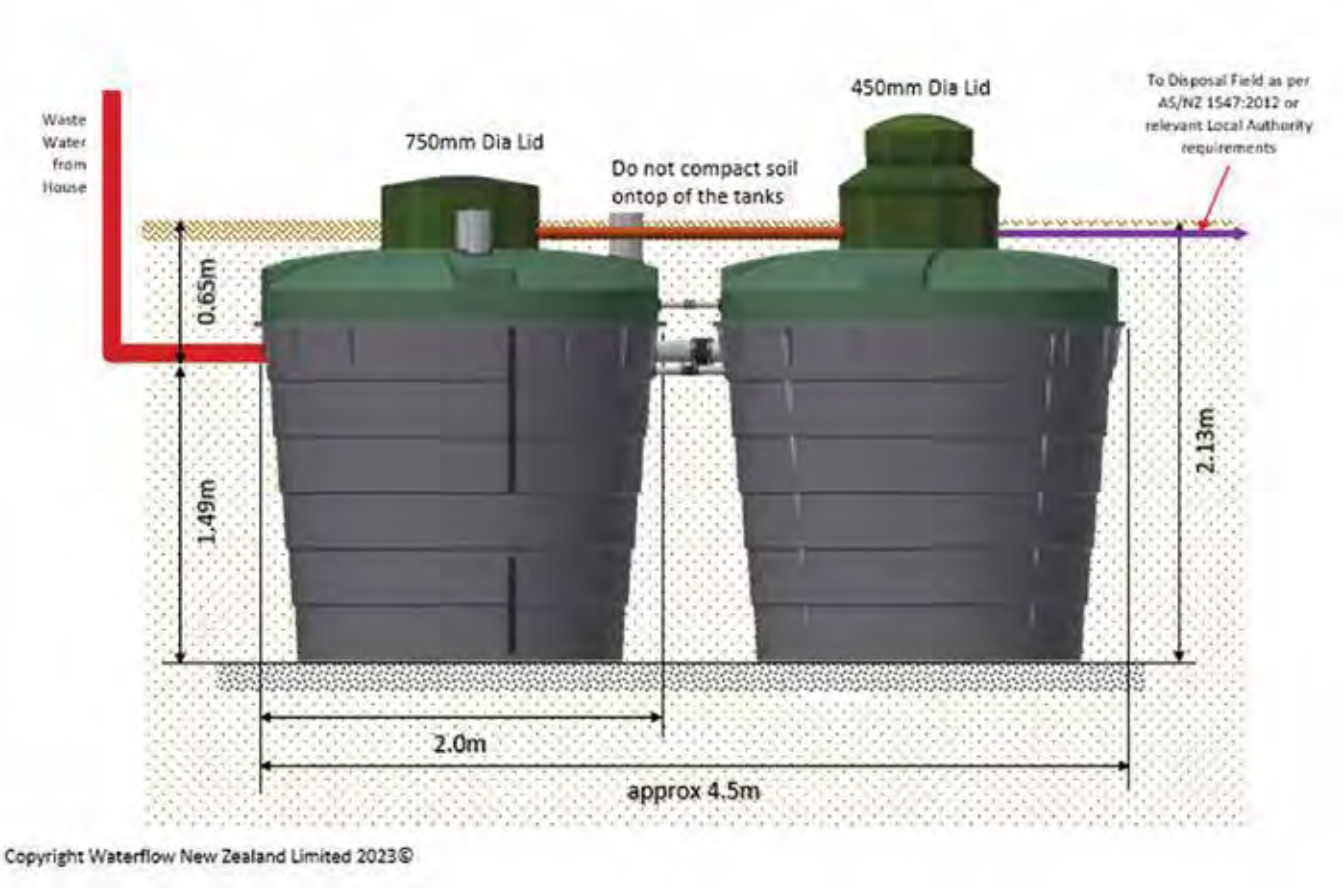
Pump Chamber

780mm Diameter
1200mm High
350L Nominal Capacity

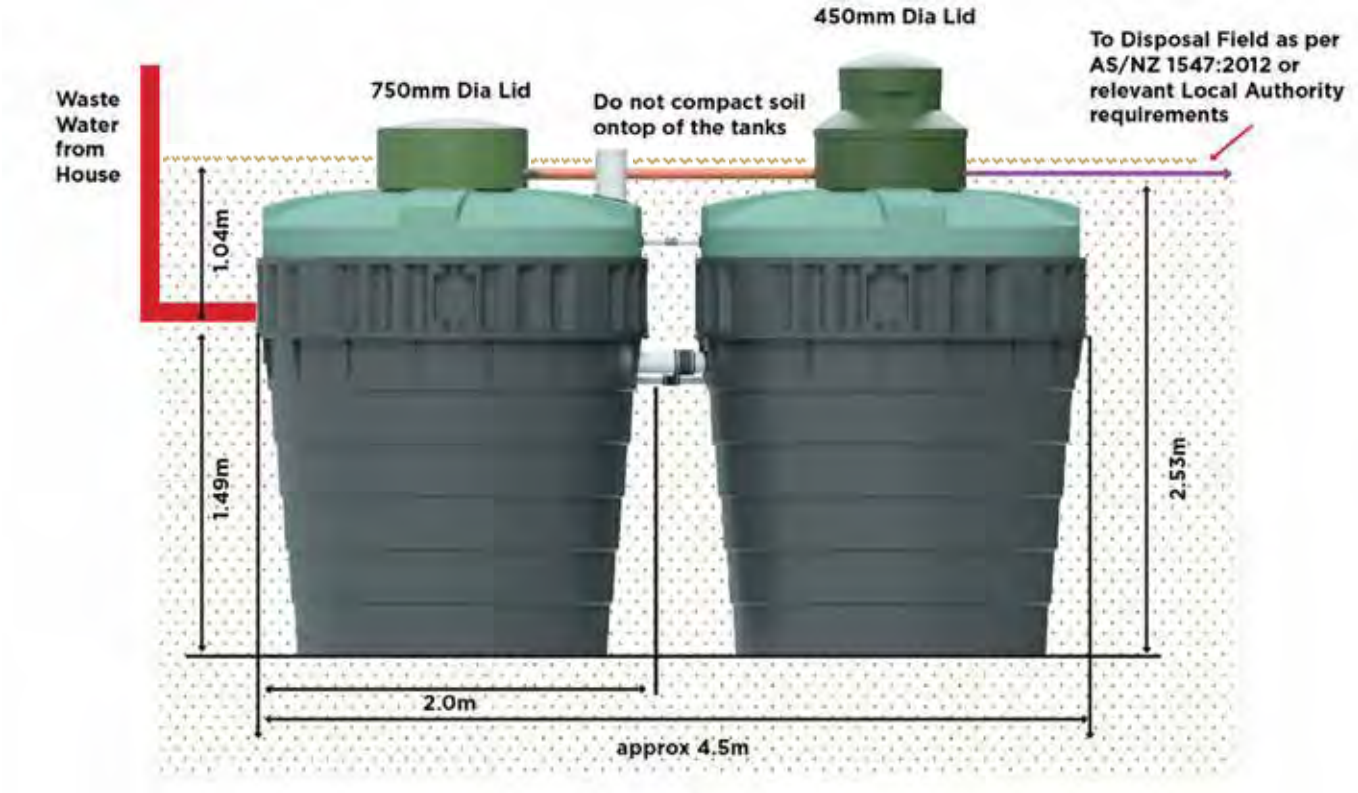
(Located in the center of the Septic Tank)

ET32P

Schematic Drawings



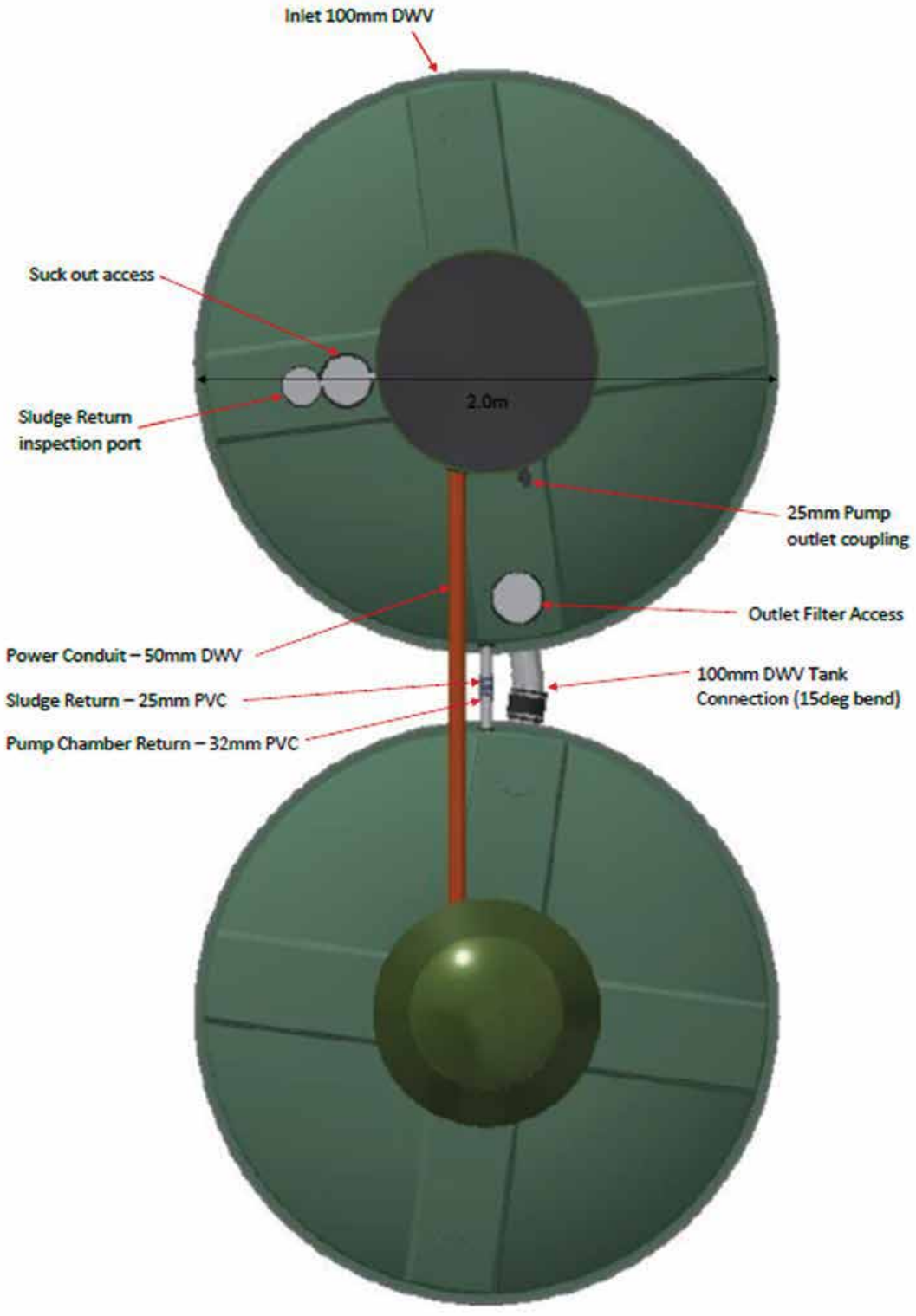
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ET32P

Schematic Drawings

Top View



ET32P

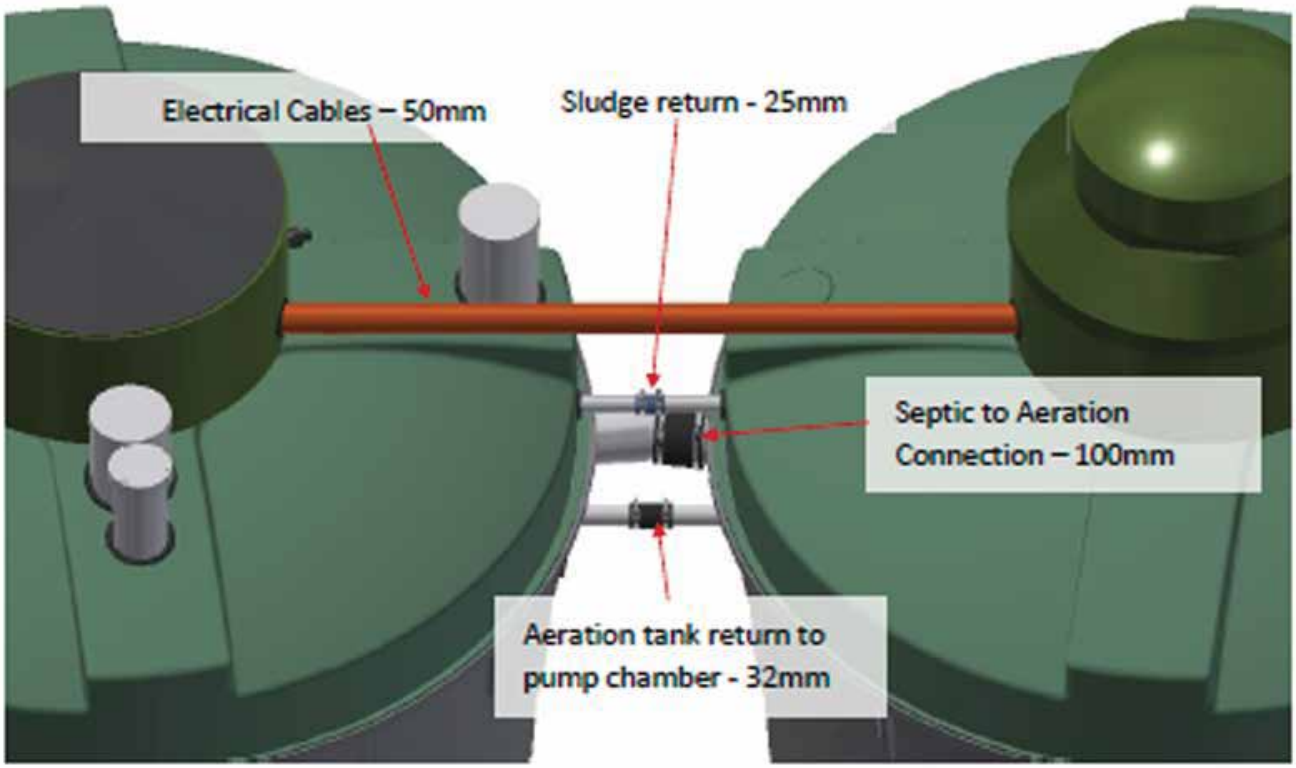
Instructions for Installation

The EconoTreat system is to be installed or signed off by a registered Drain layer to the design specified by Waterflow NZ Ltd. The following installation instructions and procedures followed correctly will ensure System performance is not compromised in any way.

1. Excavate two 2.5m x 2.5m level platforms at an appropriate depth to ensure adequate fall for inlet pipe from the source or dwelling. This has to be installed on virgin ground. The two platforms need to be on the same level and close to each other.

2. Where possible excavate a trench away from the System and lay a drain coil and drainage metal at the base of the System to drain away any surface or ground water.

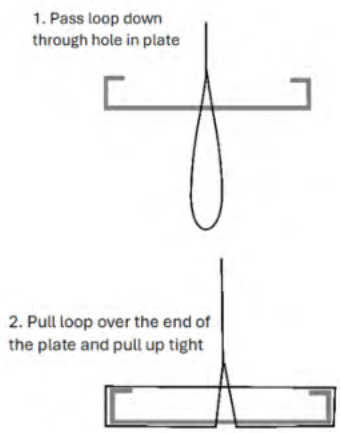
3. Move the tanks close together so all the pipes meet. Connect each pipe using the rubber couplings supplied and take a photo of them. See diagram below for identification of each pipe.



4. Install 4 anti-floatation plates to hold the modules securely in the ground. Wires should be hanging tight as they are designed to hold the plates 50 - 100mm above the bottom of the tank, as per below image. Take a photo of this before backfilling for Waterflow sign off.

ET32P

Instructions for Installation



3. Four plates evenly spaced



5. Connect the risers with 50mm DVW. There will be holes already drilled and uniseals supplied.

6. Draw the cables from the pump chamber through to 50mm DWV to the treatment tank. The cables are coiled inside the septic tank.

7. Trench from Dose Chamber outlet to disposal field and lay the 25mm alkathene feed line.

8. Backfill the excavation from the base of the tank with a GAP/PAP 20 metal, dry mixed with cement to form a solid mass, to a minimum of 400mm above the anchor plates. Then continue with metal, clean unsaturated soils or spoil from the excavation, (if suitable i.e. up to Class 4 as per AS/NZS 1547:2012) in approximately 200mm layers. Compact each layer evenly with a mechanical compactor to minimise subsidence and back fill to the level of the invert pipe.

9. Backfill around the pipe work with compacted clean sand/fines then complete back filling up to the maximum level of the backfill lines indicated on the shoulder of the tank or in the product specification sheet supplied.

10. Ensure the area around the tank is free draining and sloping away in all directions, to ensure that any rain or surface runoff will not pond on or near the tank.

11. Do not cover the top of the System with heavy soils but you can cover with a layer of topsoil, bark mulch or similar media material.

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System Specificatons & Installation Instructions

Installation Location and Certification

These tanks are not designed for vehicle loads and shall be located no closer than 2m to a driveway, road frontage or a building. If for any reason the tank is located where vehicle traffic may drive over the tank or approach closer than 2m, or where it may be trampled on by farm stock then the tank should be protected by a concrete slab designed to support these loads. Surface water must also be diverted from flowing into the installation.

Installation must be certified to AS/NZS 1547:2012, the certificate to be issued and held by the regulatory authority.

High Water Table Installations

All tanks have been engineered and designed for maximum strength, in accordance with the NZC 3604. Clauses B1 and B2 for structure and durability, to withstand any hydraulic pressures, both lateral and uplift, created by high water table conditions.

In high water table installations, it is important to fill the tanks with water. This removes the hydraulic uplift and simplifies the installation. In extremely high-water tables, cement can be added to fine metal to create a mass around the dead men anchors secured to the tanks (alternately concrete could be used). Waterflow must be made aware of this early on in vies of supplying a tank that is fit for purpose.

Plumbing Pipes and Fittings

All internal plumbing is done with PVC pipes with appropriate connections according to AS/NZS 1260 and AS/NZS 4130.

Alarm System

The VBB-P-2000 System is equipped with an AS/NZS 1546.3 compliant audible and visual alarm with a mutable alarm signal and alarm light. The alarm panel must be mounted in a location that is readily visible within the dwelling.

Alarm is triggered by a high-level float switch in the pump well.

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System Specificatons & Installation Instructions



Backfill and Bedding

Backfill the excavation from the base of the tank with a GAP/PAP 20 metal, dry mixed with cement to form a solid mass, to a minimum of 400mm above the anchor plates. Then continue with metal, clean unsaturated soils or spoil from the excavation, (if suitable i.e. up to Class 4 as per AS/NZS 1547:2012) in approximately 200mm layers. Compact each layer evenly with a mechanical compactor to minimise subsidence and back fill to the level of the invert pipe.

Electrical

Where a pump is required to dose the Land Application System, all electrical connections must be installed according to AS/NZS 3000. The electrical connections are housed in an enclosure on the top of the tank. Please see separate Electrical Guide for more details.

Warranty

WATERFLOW NZ LTD warrants that all Treatment Systems manufactured by WaterFlow NZ Ltd will be free from defects in materials and workmanship for the following periods from the date of installation, under the following conditions:

1. Plastic-Moulded tanks: 15 years

2. Concrete Tanks: 15 years

3. Filter Media: 5 years

4. Dosing float: 2 years

5. Electrical Components and Pump: 2 years

WATERFLOW NZ LTD will, at its discretion, repair or replace any defective components with the same or equivalent part at no charge to the consumer, in accordance with the following terms and conditions laid out in the WaterFlow NZ's Warranty Certificate. Full text warranty available on request.

1st June 2025
Dean Hoyle
Managing Director



WaterFlow

Bringing Clarity to Wastewater

Our team of wastewater experts are here to help.
Let's see if Econotreat could be right for your backyard.

Smarter wastewater and sewage systems, for a cleaner New Zealand.

0800 628 356
www.waterflow.co.nz
sales@waterflow.co.nz

ET-32P-SpecInstall-250516

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Advanced Secondary Treatment Aerated Wastewater System



Owner's Manual

EconoTreat Wastewater Systems

Owner's Manual

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EconoTreat Wastewater Systems

Owner's Manual

To the Owner

Thank you for choosing an EconoTreat System to treat and care for your on-site sewage and wastewater.

Your EconoTreat System is fully automatic in operation and requires little owner intervention to ensure years of service. It is useful that the owner/operator of the system understand some of the broad concepts of the system operation. This manual has been written to provide this simple explanation and to serve as a future reference so that you can ensure that the system is operating effectively at all times.

We encourage you to monitor and care for your EconoTreat system with our backing and support. By doing so you will learn how your system works and operates and how to keep it in top working order. WaterFlow promises consistent results year after year.

Kind regards,
The Waterflow Team

WaterFlow NZ Ltd Warranty

WATERFLOW NZ LTD warrants that the Waterflow NZ System will be free from defects in materials and workmanship for the following periods from the date of installation, under the following conditions:

1. Plastic-Moulded tanks: 15 years
2. Concrete Tanks: 15 years
3. Filter media: 5 years
4. Dosing float: 2 years
5. Electrical components and Pump: 2 years

WATERFLOW NZ LTD will, at its discretion, repair or replace any defective components with the same or equivalent part at no charge to the consumer, in accordance with the full terms.

Note: Full warranty document available at your request.

EconoTreat Wastewater Systems

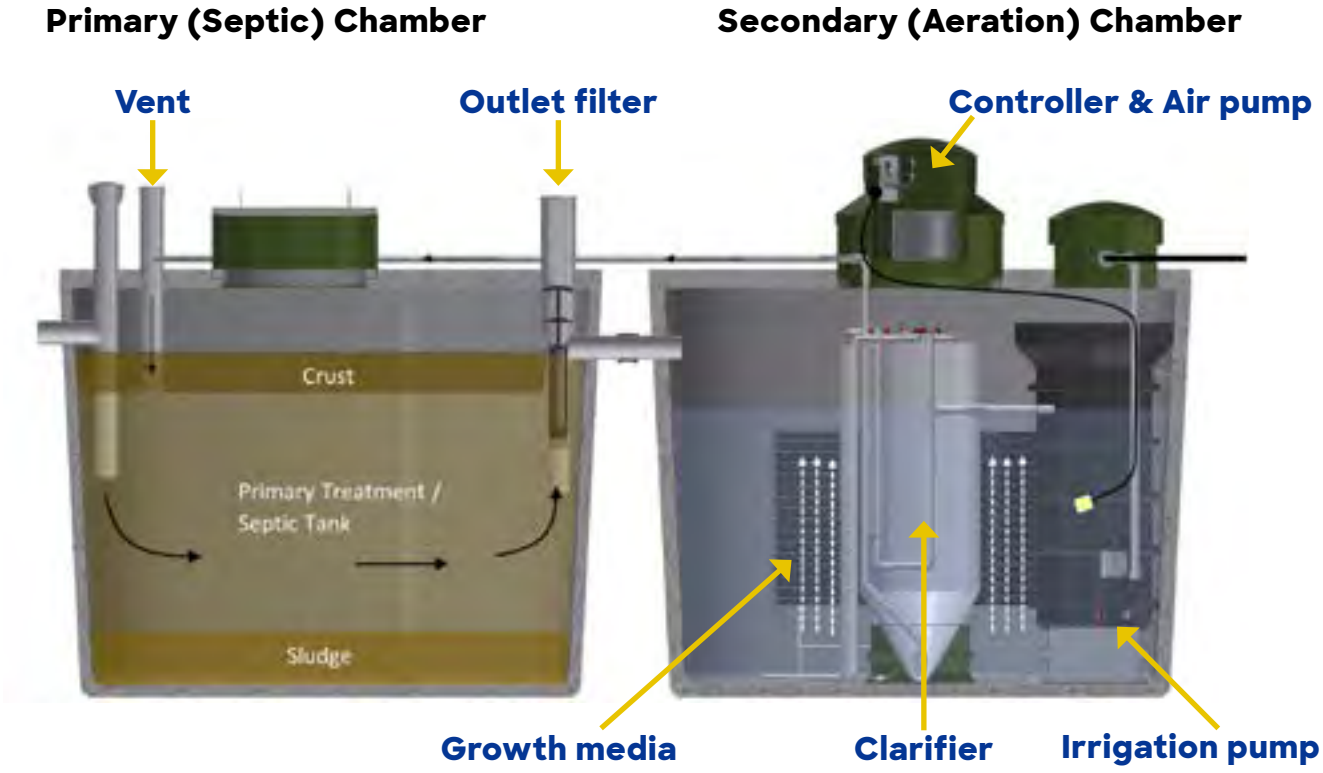
Owner's Manual

Components of Your Wastewater Septic System

Primary Chamber / Tank
Influent enters the chamber via the source whereby scum and solids capable of settling are separated from the raw influent. Primary treated effluent flows through a transfer port to the aeration tank. This primary tank will also act as a storage chamber for sludge returned from the Clarification Chamber.

Aeration Chamber
Water enters from the Primary Chamber. Air is introduced into this chamber via an air blower to create an environment for aerobic bacteria and other helpful organisms to consume the organic matter present. The aeration tank is designed in a manner to help prevent short circuiting of the wastewater to ensure extended aeration. Media is present in the tank to support the growth of bacteria.

Clarification Chamber
The Clarification chamber is essentially a quiescent zone where suspended particles/solids are settled out of the water. These particles are returned to the Primary chambers via a sludge return which aids in further biological reduction, denitrification and providing a constant food supply rich in microbes supporting the system through periods of limited flows.



Service Agent Role

Your EconoTreat System requires annual service and maintenance inspections unless otherwise specified by local regulations. This will need to be done by our trained technicians. We will phone to arrange a suitable time to attend to your servicing needs. Servicing done by technicians who are not approved by WaterFlow will void your Warranty.

A record sheet (in duplicate) will be completed by our technician at the time of service. One copy is for you the customer and available upon payment, the other copy will be retained for our records.

Please call our office for the cost of servicing after the initial 12-month period.

Servicing includes:

1. A general inspection of tank area, irrigation and drainage.
2. Inspection of electrical equipment including timer, Low powered Blower, irrigation pump, warning lights and connections.
3. Inspection of Pump-out Chamber and septic tank, checking air lines, adjusting air supply (if necessary), operating de-sludging unit, resetting air control, operating submersible switch, checking bio-mass growth, checking sludge level.
4. Inspection of irrigation including lines, jets and outlets. Between 4 - 9 years the tank will need to be de-sludged (pumped out) as with any septic tank. We will notify you of this requirement, as the service technicians will be monitoring sludge depth annually.

EconoTreat Wastewater Systems

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Owner Care Role

Did you know...
...that as a homeowner you're responsible to make sure your wastewater system gets the required maintenance needed to protect the investment in your home? This guide will help you care for your wastewater system. It will help you understand how your system works and what steps you can take as a homeowner to ensure your system will work efficiently.

The owner is greatly encouraged to maintain a monthly visual check of the operation of their system and to make sure their land application systems are maintained in good condition.

1. Industry recommendation is to have a maintenance contract in place at all times
2. Visual check of treatment system
3. Visual check of land application system
4. Notify your approved service provider of any issues

Intermittent Use
There are no precautions to take. Your EconoTreat can be left to function automatically for 6 to 12 months. However, if you are likely to be away from home for more than six months you may like to contact our office, so we can make a routine check.

Efficient Water Use - it really does make a difference
Average indoor water use in the typical single-family home is approximately 180ltrs per person per day. The more water a household conserves, the less water enters the septic system. Efficient water use can improve the operation of the wastewater system and reduce any risk of disposal field overload.

Washing machines
By selecting the proper load size, you'll reduce wastewater. Washing small loads of laundry on the large-load cycle wastes precious water and energy. If you can't select load size, run only full loads of laundry. N.B. A new Energy Star washing machine uses 35 percent less energy and 50 percent less water than a standard model.

EconoTreat Wastewater Systems

Owner's Manual



Inspection Checklist

When checking the system operation, take particular note of;

1. Remove and clean outlet filter every 3-4 months.
2. Field performance, particularly looking for any undue odours or effluent breakout (flush field lines 2-3 monthly).
3. All electrical parts (if applicable). Ensure all pump alarms are working.
4. Clean disc filter 2–3 monthly (if applicable)

EconoTreat Wastewater Systems

Owner's Manual

Care for your Land Application System (LAS / Disposal Field)
Your disposal field is an important part of your wastewater system. Here are a few things you should do to maintain it:

- Flush driplines regularly – every 3 months recommended
- Mow your disposal field and maintain plantings regularly to ensure access to flushpoints etc.
- Plant only recommended wetland plants over and near your wastewater system. Roots from nearby trees or shrubs might clog and damage the disposal field
- Protect both the treatment system and the disposal field from vehicle traffic, including livestock to avoid damage to the pipes, tank, or other septic system components.
- Do not build any structures over it or seal it with concrete, asphalt etc
- Keep roof drains, basement sump pump drains, and other rainwater or surface water drainage systems away from the disposal field. Flooding the disposal field with excessive water slows down or stops treatment processes and can cause plumbing fixtures to back up
- Trees with very aggressive roots, such as willows, should be kept well away from the disposal field
- A soggy disposal field won't absorb and neutralise liquid waste. Plan landscaping, roof gutters and foundation drains so that excess water is diverted away from the disposal field



Effects of Household Cleaning Chemicals

Use of many cleaning chemicals in facilities served by on-site disposal systems, can result in high concentrations of the constituents in those cleaning agents being discharged into the receiving soils. These chemicals and constituents can have a massive impact on the quality and condition of the receiving soils over time.

Many of the chemicals can disrupt soil structure and decrease hydraulic conductivity while others can act as bactericides, destroying the essential micro-organisms required to achieve the high level of biodegradation in the treatment and disposal systems.

The following matters need to be considered when using cleaning agents in a domestic situation:

- Laundry powders are often extremely high in sodium which will destroy the salt balance in the soils. Check the labels for low sodium and phosphorous contents.
- Wastewater flow from dishwashing machines can have an impact on wastewater treatment systems, in terms of the strong cleaning chemicals used, so check labels for low sodium products
- Highly corrosive cleaners (such as toilet and drain cleaners) that have precautionary labels warning users to minimise direct contact, are an indication that they can adversely affect the wastewater treatment system. Up to 1 cup of bactericides such as bleach can be sufficient to impact on all the micro-organisms/bugs in a septic system.

Substitutes For Household Cleaning Chemicals

Use of the following readily biodegradable substitutes for common potentially harmful household cleaning chemicals will reduce the stress on any wastewater system, significantly enhance the performance of the whole system and increase the life of the land application system, while reducing the potential effects of the receiving soils.

General Cleaners
Use soft soap cleaners and bio-degradable cleaners and those low in chlorine levels. Contact us for a new biological cleaner that will help you system.

Ammonia-Based Cleaners
Instead sprinkle baking soda on a damp sponge.

Disinfectants
In preference use Borax (sold in most Bin Inn stores): ½ cup in 4-litres of water.

Drain De-Cloggers
Avoid using de-clogging chemicals. Instead use a plunger or metal snake, or remove and clean trap. Contact us for very effective, worm friendly, drain cleaning products.

Scouring Cleaners and Powders
Instead sprinkle baking soda on a damp sponge or add 4-Tbs baking soda to 1-Litre warm water. It's cheaper and won't scratch.

Toilet Cleaners
Sprinkle on baking soda, then scrub with toilet brush.

Laundry Detergent
Choose one with a zero phosphate content and low in alkaline salts (in particular, a low sodium level) and no chlorine.

EconoTreat Wastewater Systems

Owner's Manual

Do's and don'ts

DO

- If your system requires power supply make sure this remains on continuously
- Wipe and bin your fats and frying oils rather than rinsing them down the drain
- Check faucets and toilets for leaks; make repairs if necessary
- Use low flush toilets where possible
- Use a 'displacer' to reduce the amount of water needed to flush older toilets
- Use aerators on faucets and flow reducer nozzles on showers to help lower water consumption
- Reduce water levels for small loads of laundry
- Wait until the dishwasher is full to run it
- Perform regular monthly visual checks of your system and field
- Keep records of all maintenance undertaken on the wastewater systems

DO NOT

- Switch off power unless servicing
- Use cleaners high in chlorine, phosphorous or ammonia in toilets or kitchen sink
- Pour any toxic/strong chemicals (paint, oil, grease, paint thinners or pesticides) down any drains
- Pour strong or large volumes of acid down any drains. These include: vinegar, brine, lemon juice.
- Flush down your toilet – Dental floss, feminine hygiene products, diapers, wipes, cotton swabs, cigarette butts, cat litter, dog poo, and other kitchen and bathroom items. Flushing household chemicals, gasoline, oil, pesticides, antifreeze, and paint can also stress or destroy the biological treatment taking place in the system or might contaminate surface or ground waters.
- Discard any drugs down the sink or toilet
- Alter or add any part of your system without Waterflow NZ LTD's approval

Troubleshooting

To ensure the most effective operation of your EconoTreat System you should familiarise yourself with the contents of this manual. The system has a high-water level and air failure alarm that can be muted as per AS/NZS 1546.3:2008. The mute function will automatically reset to audible in 24hrs. The EconoTreat has been designed to include additional safety margins and minor mishaps and normal household usage will not usually affect the operation of the system.

However, if the alarm sounds or strong odours persist, please call your service

Problem	Potential Cause(s)	Remedial Action(s)
Alarm sounds (will indicate air or water alarm)	Irrigation pump not working Air supply not working No power at the tank Blocked Septic filter	Check power source and wriggle pipe from pump to ensure float is not stuck Check water levels Listen for the air compressor Clean septic outlet filter Check your fuse board Open the taps on your drip field to assist water exiting faster High level float switch in the pump well may be triggered – the alarm will reset after the water level in the sump subsides If your system has a disc filter, remove and clean it If everything all looks to be ok, it may be a faulty alarm sensor (mute alarm and contact your service provider.
Water around tank	System overflowing Blocked outlet filter Storm/Surface water	Check there is power on at the system Remove and clean outlet filter Divert Storm/Surface water away from the system
Excessive foaming	Too much laundry detergent Too many washes	Use recommended quantities Spread wash loads over different days

EconoTreat Wastewater Systems

Owner's Manual

Problem	Potential Cause(s)	Remedial Action(s)
Persistent odours	Too much water usage Excessive chemicals in use Gully traps dried out or non-existent (if the bathroom does not get used often, the water can evaporate out of a gully trap allowing odour to escape into the house).	Add biologic starter pack Install water saving devices Stop fats, oils, and grease going down the drain Reduce water usage or install water saving devices Avoid using nasty chemicals (Eco store, Earthwise, Ecobeings and Dishpod are great options) Run water down drain to ensure gully trap is blocking odour System will recover
Irrigation system not working	Irrigation pump not working Irrigation lines kinked or blocked Saturated areas at the end of the irrigation field	Check power source and wriggle pipe from pump to ensure float is not stuck Locate all flush valves, check if water is exiting Flush irrigation line and remove kinks or blockages Turn flush valves off to avoid further saturation Check if any large machinery has driven over / near it
Water ponding on irrigation field	Storm/Surface water Irrigation line blocked Excessive water use	Install water saving devices Repair irrigation pipe Redirect any surface water away from the irrigation field
Household drains gurgling	Blocked drain to the tank Check your main switchboard that the power to the system is on Check water levels, if flooded then a technician may be needed to investigate further	Check and make sure you can see the inlet into the tank. If you can you have a drainage issue. Send pictures of the inside of the tank to **service@waterflow.co.nz** to arrange an inspection Please limit water usage until we can come to site Stop and fats, oils, or grease going down the drain

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Need a hand? We're here to help.

0800 628 356

www.waterflow.co.nz

sales@waterflow.co.nz



WaterFlow

Appendix E – Site Suitability Report

2 Te Paia Lane, Kaitaia
Phone (09) 408 0979
PO Box 62, Awanui 0451

380 Foreshore Road, Ahipara

Site Suitability Report

Prepared for Harry Burkhardt



Job No.	FNR015, Final
Report Author	Tess Allen
Report Reviewer	Manu Burkhardt Macrae
Date	11/11/26

	Document Approval			
Action	Name	Qualification	Signed	Date
Author	Tess Allen	BE (Hons) Civil Engineering		23/09/2026
Reviewer	Manu Burkhardt Macrae	BE Environmental Engineering, CPENG NZ, 253797		11/11/2026

Limitations

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Executive Summary

FNR Consulting Ltd has been engaged by Harry Burkhardt to assess the engineering suitability of Lot 4 DP 210535, 380 Foreshore Road, Ahipara, for a new dwelling with guest wing, a sleepout and a boatshed/gear storage building, and to provide the engineering input to the land use resource consent application being prepared by Logiplan. The key findings are:

- **Natural hazards** – the site lies outside the FNDC mapped coastal erosion, coastal flood and regional flood hazard areas, and within the "Unlikely" liquefaction category. The only site-specific hazard is the watercourse and overland flow path crossing the site, which is assessed and managed in this report.
- **Geotechnical and earthworks** – FNR testing in 2024 found slightly reactive (Class S) clay soils, NZS 3604 good ground at 0.2–1.85 m depth, and no signs of slope instability. The building platform (RL 53.0) together with the shed/sleepout platform and tank excavation, involves up to 4.0 m of cut and 3.0 m of fill, totalling approximately 2,033 m³ over 1,570 m² (510 m³ cut, 1,365 m³ fill and 158 m³ topsoil strip), exceeding the permitted earthworks standards. Northland Geotechnical Specialists Ltd are preparing the geotechnical assessment for the platform, retaining walls and foundations (Appendix D), and their recommendations take precedence.
- **Erosion and sediment control** – earthworks are to be managed in accordance with GD05, using a stabilised entrance, super silt fences, separation of clean water, staged works and progressive stabilisation, as shown on drawing FNR015-ESC-01 (Appendix E).
- **Stormwater** – runoff from 878 m² of roof and hardstand (22.0% of the site) is attenuated in three 25,000 L tanks, providing 35.2 m³ of detention storage and limiting the 10% AEP discharge to no more than 3.08 L/s (80% of the pre-development peak) through a 36 mm orifice.
- **Overland flow path** – flow from the external catchment above Foreshore Road, together with the site discharge, is to be conveyed in a realigned 600 mm culvert and the existing watercourse. The channel carries the 1% AEP flow (approximately 0.93 m³/s) with at least 0.3 m freeboard, and the buildings are clear of the flow path.
- **Water supply** – roof water is collected and stored on site, giving approximately 39.7 m³ of effective potable storage after the attenuation allowance. This is about 28 days of supply at a design occupancy of eight.
- **Wastewater** – on-site secondary treatment (Econotreat ET32P) with 338 m² of PCDI dripline, designed by Waterflow NZ Ltd for 1,015 L/day and assessed by the designer as a permitted activity under the Proposed Regional Plan for Northland (Appendix G). The Waterflow design is to be reissued for a design occupancy of eight (1,160 L/day, approximately 387 m² of dripline plus reserve), with the field located at least 15 m from the watercourse.

- **Power and telecommunications** – mains power is available at the boundary, and telecommunications will be provided by Starlink satellite broadband.

Subject to the recommendations of this report and of the Northland Geotechnical Specialists report, the site is considered suitable for the proposed development from an engineering perspective.

Site Description

The subject site is legally described as Lot 4 DP 210535, located at 380 Foreshore Road, Ahipara, Northland, and has an area of approximately 3,996 m². The site is owned by Harry Burkhardt.

The site occupies an elevated coastal position between the Ahipara foreshore and Shipwreck Bay, with panoramic views along Ninety Mile Beach. The land falls to the north from approximately RL 59 m along Foreshore Road to RL 44 m at the northern corner (NZVD2016), at a gradient generally less than 20°. The site is currently undeveloped pasture, and soils are mapped as Awapuka clay loam.

This development proposes the construction of a new dwelling (221.64 m² floor area) together with a sleepout (37.08 m²), a shed/boat shed and gear storage building, a guest wing, and covered outdoor and carport areas. The dwelling is to be located on the building platform, formed by cutting into the slope along Foreshore Road and filling downslope to the north, and retained by a combination of blockwork retaining, in-situ concrete retaining, and geogrid/rock retaining walls on 1:2 batters. Structural design of the retaining walls is being provided separately by T&A Structures Ltd. A geotechnical assessment of the site is also being carried out to support the earthworks and building platform design which is being completed by Northland Geotechnical Specialists.

Legal access to the site is via a right of way easement off Foreshore Road, with physical access provided by an existing driveway. An electricity easement crosses the site. The surrounding area comprises a mix of coastal residential and rural-coastal lots, including Lot 1 DP 411685, Lot 2 DP 411685, and Lot 3 DP 210533.

Under the Operative Far North District Plan the site is zoned General Coastal. Under the Proposed District Plan (Decisions Version, notified 30 June 2026) it is zoned Rural Production within the Coastal Environment overlay, and both plans apply until the appeals are resolved. The planning assessment, including the earthworks, impermeable surface, height, setback and colour standards, is provided separately by Logiplan.

Environmental constraints

Flooding and Overland flow paths

The Far North District Council's coastal hazard viewer maps Coastal Erosion Hazard Zones (CEHZ 1–3) and Coastal Flood Hazard Zones (Zone 0 – current, through to

Zone 3 – 100 years plus rapid sea level rise) as concentrated along the immediate shoreline and cliff base fronting Ahipara and Shipwreck Bay. The subject site (380 Foreshore Road) sits set back from this mapped band, on the elevated ground above the coastal margin, and does not fall within any of the mapped CEHZ or coastal flood hazard zones shown on the viewer.

The Council's regional flood hazard viewer, which models fluvial flooding from priority rivers and regionwide catchments at the 10-year, 50-year, and 100-year (climate change) extents, similarly shows the mapped flood extents concentrated along watercourses closer to the coastline and at an isolated catchment near Wreck Bay Road, both of which lie clear of the subject site's parcel boundary. The hazard maps are included in Appendix B.

Notwithstanding this, the site plan for the proposed dwelling shows an existing watercourse crossing the property, which is proposed to be realigned via a new culvert. This is a site-specific overland flow path that is not resolved at the scale of the regional flood models.

The overland flow path across the site is assessed in the Stormwater Management section of this report (Secondary Flow Path – Watercourse).

The building platforms are clear of the overland flow path in a 1% AEP rainfall event, provided the realigned culvert, channel and secondary flow route are constructed as recommended in this report.

Liquefaction risk

The FNDC liquefaction vulnerability viewer (FNDC/Vision Consulting Ltd assessment) maps the subject site within the "Unlikely" category. The "Undetermined" classification is limited to a band along the immediate coastal margin above the site, and the "Possible" classification is confined to an isolated area further inland, away from the subject property. On this basis, liquefaction risk to the proposed dwelling and associated structures is considered low (refer Appendix B).

Geotechnical & Earthworks

FNR Consulting carried out a good ground investigation on 19 February 2024, consisting of five Scala penetrometer tests (Good Ground Report, 28 March 2024, Appendix C). Site soils are consistent with the NZ Land Resource Inventory mapping of Awapuka clay loam and are classified as Class S (slightly reactive clay) in accordance with AS 2870. NZS 3604 good ground was reached between 0.2 m and 1.85 m below existing ground level, and there were no visual signs of slope instability. That investigation was carried out for an earlier, smaller layout requiring only minor earthworks. It confirms the general ground conditions but does not cover the current platform design.

The current design forms a single building platform at RL 53.0 by cutting into the slope along Foreshore Road and filling downslope to the north. From the LTD Architectural earthworks plan (17/07/2026), the earthworks for the dwelling platform comprise:

Item	Quantity
Topsoil strip (1,215 m² × 0.1 m)	≈ 122 m³
Cut (area 327 m²)	≈ 270 m³
Fill (area 888 m²)	≈ 1,305 m³
Total earthworks volume (dwelling platform)	≈ 1,697 m³
Maximum cut height (retained, road boundary)	4.0 m
Maximum fill height (1V:2H batters / geogrid or rock wall, western boundary)	3.0 m

The shed/sleepout platform and the water tank excavation add a further 336 m³ over 355 m² (36 m³ topsoil strip, 102 m³ cut, 60 m³ fill and 138 m³ tank excavation), giving a total of approximately 2,033 m³ over 1,570 m². The LTD plan also records a maximum combined cut and fill face height of 9.7 m. These volumes and heights exceed the permitted earthworks standards of both district plans, and resource consent is sought for them. The earthworks are in fill deficit by approximately 855 m³ (more if any of the cut is unsuitable for reuse as engineered fill), which will need to be imported as engineered fill from a consented source.

Northland Geotechnical Specialists Ltd (NGS) have been engaged to prepare a geotechnical assessment covering slope stability, foundations and retaining wall design. Five test pits have been located to inform that assessment (NGS Figure 1, 30/09/2026): two for the retaining walls along Foreshore Road, one downslope of the dwelling, one downslope of the fill extent, and one near the western boundary, where retaining may be required. The NGS report will be included as Appendix D. Its recommendations take precedence over the general recommendations below, which apply until it is received:

- Strip topsoil and unsuitable material from the fill footprint, and bench the fill into competent natural ground.
- Place, compact and test engineered fill in accordance with NZS 4431:2022 under engineering supervision, with a completion report issued at the end of the works.
- Install subsoil drainage behind all retaining walls, and at the base of the fill wherever seepage is encountered, discharging to the stormwater system or the overland flow path channel.
- Fill batters are not to be steeper than 1V:2H unless confirmed by NGS, and are to be topsoiled and vegetated promptly.
- Install the realigned culvert before any fill is placed over the existing watercourse alignment. No fill is to be placed in the overland flow path channel, and the fill toe adjacent to the channel is to be protected by the channel rock lining.

- The fill platform extends into the electricity easement. Works within the easement require the written consent of the easement holder and must comply with NZECP 34:2001.
- Confirm good ground on both cut and fill areas at building consent stage, as recommended in the 2024 report.

Erosion and Sediment Control

The earthworks will expose approximately 0.15–0.20 ha of clay soils on slopes of 10–20%, immediately upslope of the watercourse that crosses the site and discharges to the downstream property. Fine clay particles settle slowly once suspended, so the approach focuses on preventing erosion, by limiting the area and duration of exposure, rather than relying on sediment treatment alone. The erosion and sediment control (ESC) measures are shown on drawing FNR015-ESC-01 (Appendix E).

Standards and guidance

- Auckland Council Guidance Document GD05 (2016), Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region – the design guideline applied by Northland Regional Council and FNDC.
- Far North District Council Engineering Standards (2023), including the ESC requirements for earthworks.
- Proposed Regional Plan for Northland – earthworks and sediment discharge rules.
- Heritage New Zealand Pouhere Taonga Act 2014 – accidental discovery requirements.

Methodology and staging

The works are to be carried out in the following stages, so that controls are in place before soil is disturbed and each area is stabilised as soon as it reaches final level:

- **Stage 1 – Establishment:** stabilised construction entrance, super silt fences and a temporary bund along the top of the road-boundary cut. All measures are to be inspected and approved by FNR Consulting before any bulk earthworks begin.
- **Stage 2 – Clean water diversion:** in dry weather, install the realigned culvert, headwalls and outlet rock apron, bypassing the watercourse flow by temporary pipe or pump, before the existing watercourse alignment is filled.
- **Stage 3 – Bulk earthworks:** strip and stockpile topsoil, excavate the cut and retaining walls, and place engineered fill in layers. Leave the fill surface shaped with contour bunds at the end of each day, so that runoff is directed to the silt fences and does not run over the batters in a concentrated flow.
- **Stage 4 – Channel works:** re-form and rock line the watercourse channel in dry weather, working from downstream to upstream.

- **Stage 5 – Stabilisation:** topsoil, seed or hydroseed, and mulch or erosion control matting on the batters, progressively as areas are completed, followed by permanent planting to the landscape plan (Studio North Landscape Ecology). ESC measures are to be removed only when the site is stabilised and the engineer has approved their removal.

Erosion and sediment control measures

- **Stabilised construction entrance** – at least 10 m long by 4 m wide, of 50–150 mm aggregate, 150 mm thick on geotextile, at the site entry from the right of way, to prevent material being tracked onto the access and Foreshore Road.
- **Clean water separation** – flow from the Foreshore Road culvert and the external catchment is to pass through the works in the realigned culvert and must not mix with runoff from disturbed areas. Road runoff is to be kept out of the excavation by a temporary bund or sandbags along the top of the cut. Any work in the road reserve requires an FNDC corridor access approval.
- **Super silt fences** – along the downslope toe of the fill on its northern and eastern sides, between the fill and the watercourse, offset 1–2 m from the toe, with J-hook returns at no more than 20 m spacing. They are to be installed in accordance with GD05. Because the disturbed catchment is small (about 0.2 ha) and the fill extends close to both the boundary and the watercourse, super silt fences are adopted as the primary sediment control, supported by limiting the exposed area and stabilising it progressively.
- **Stockpiles** – topsoil is to be stockpiled no more than 2 m high, away from the watercourse and outside the wastewater disposal area, with a silt fence on the downslope side, and covered when not in use.
- **Watercourse and outlet protection** – rock outlet apron at the culvert outlet, and rock lining of the channel as set out in the Stormwater Management section. No stockpiling, refuelling or parking of plant within the overland flow path.
- **Stabilisation** – no area is to be left without cover for more than 14 days without works occurring. Batters steeper than 1V:3H are to be covered with biodegradable erosion control matting until vegetation is established.
- **Dust** – dust is to be controlled by water cart or sprinklers during dry, windy conditions.

Monitoring and management

All measures are to be inspected daily and after every rain event, repaired immediately, and cleared of sediment when it reaches 20% of their capacity. The contractor is to check the weather forecast daily and secure the works before heavy rain is forecast. Where practicable, bulk earthworks should not be carried out during the winter months. If discharges of sediment-laden water are observed, works are to stop and further measures are to be installed, which may include chemical treatment of ponded water. These measures are to be agreed with FNR Consulting.

The site is within the Coastal Environment, and no archaeological assessment was provided at the time of the original subdivision. Earthworks are therefore to be carried out under an Accidental Discovery Protocol prepared in consultation with Te Rūnanga o Te Rarawa and in accordance with Heritage New Zealand Pouhere Taonga guidance. If taonga, kōiwi or archaeological material is uncovered, works are to stop, the area is to be secured, and the appropriate parties are to be notified. Any archaeological authority or cultural monitoring requirements identified through the consent process are to be in place before earthworks begin.

Access and Vehicle Movement

The site has an established access that will remain unchanged and is suitable for the proposed development.

During construction, importing approximately 855 m³ (compacted) of fill will require in the order of 70–110 truckloads, or 140–220 truck movements, depending on truck size. These are to use the existing access with the stabilised construction entrance in place. No new vehicle crossing onto Foreshore Road is proposed.

Stormwater Management

Site and Proposal

The site at 380 Foreshore Road, Ahipara (Lot 4 DP 210535) is a 3,996 m² coastal lot zoned General Coastal under the Operative District Plan (Rural Production with Coastal Environment overlay under the Proposed District Plan). The proposed development comprises a dwelling and guest wing, sleepout, carport, covered outdoor deck, a boatshed/gear storage building, and an associated sealed driveway. Site soils are poorly draining clay (AS/NZS 1547 Category 5) with correspondingly low soakage potential, so on-site soakage disposal is not viable. Stormwater is instead attenuated and discharged to the existing watercourse on the site. The total impervious area of 878 m² (22.0% of the site) exceeds the permitted impermeable surface standard, and the attenuation design below is the mitigation proposed for that infringement.

Design Standard and Methodology

The stormwater design has been undertaken in accordance with Auckland Council TP10 (Chapter 11), the Far North District Council Engineering Standards (2023), and NZBC E1. Peak flows have been derived using the Rational Method, with rainfall intensities taken from NIWA HIRDS v4. In accordance with the FNDC Engineering Standards, present-day (historical) rainfall has been adopted for the pre-development case and climate-change-adjusted rainfall (RCP8.5, 2081–2100) for the post-development case.

Hydraulic neutrality has been adopted as the design objective, with the post-development peak discharge limited to 80% of the pre-development peak flow. The 10% AEP (1-in-10-year) event has been adopted as the design storm; this is

conservative and envelopes the FNDC 50% and 20% AEP flow-attenuation requirements. Flood control of the 1% AEP event is not required, as there is no downstream flooding hazard and discharge is to an existing watercourse.

Contributing Catchment

The impervious area contributing to the attenuation system is as follows:

Surface	Area (m²)
Dwelling incl. guest wing, porch, carport and covered deck (LTD building coverage)	430.3
Boatshed / gear storage and sleepout	108.0
Sealed concrete driveway / hardstand	340.0
Total impervious	**878.3**

A post-development runoff coefficient of 0.9 has been applied to the impervious area. A pre-development coefficient of 0.4 has been adopted, representing the existing grassed pasture on poorly draining clay soils. The pre-development peak has been assessed on the 60-minute minimum duration required by the FNDC Engineering Standards.

The dwelling roof catchment has been taken as the building coverage of 430.25 m² shown on the LTD site plan, which is greater than the sum of the areas scheduled on the floor plan (335.1 m²) and is adopted as the conservative roof area.

Attenuation System and Design

Parameter	Value
Pre-development peak flow (10% AEP)	3.84 L/s
Allowable release (80% of pre-development)	3.08 L/s
Post-development peak flow (10% AEP)	25.7 L/s
Critical storm duration	120 min
Required attenuation storage	35.2 m³

The critical storage volume of 35.2 m³ is required to attenuate the post-development peak of 25.7 L/s to the permitted release rate of 3.08 L/s.

Attenuation is provided within three 25,000 L Duracrete underground trafficable tanks, which also serve as the potable rainwater supply for the development. The tanks are benched at a common level and interconnected by 100 mm balance pipes so that they operate hydraulically as a single storage. Two tanks are located adjacent to the dwelling and one adjacent to the shed, all connected to the common outlet. The LTD site plan (13/08/2026) currently shows three 22,500 L tanks adjacent to the shed and is to be amended to match this design.

The upper 1.11 m of each tank forms the dedicated attenuation zone, providing 11.8 m³ per tank (35.3 m³ total) of live detention storage above the potable supply volume remained below. In accordance with TP10, the potable (reuse) storage is assumed full at the commencement of the design storm and contributes no attenuation.

Controlled discharge is provided by a single 36 mm diameter orifice set at the base of the attenuation zone (1.11 m below overflow level), which limits the discharge to

2.95 L/s at the design head (Cd = 0.62) — within the permitted release rate of 3.08 L/s. A separate high-level emergency overflow is provided to convey flows more than the design event directly to the watercourse.

Stormwater management hierarchy

The proposed stormwater design follows the management hierarchy set out in Section 4.1.8 of the Far North District Council Engineering Standards (2023), under which each option is assessed in order of preference and stormwater is managed as close to the point of origin as practicable. The first principal retention for reuse has been adopted as the primary measure: all roof runoff is directed to three 25,000 L underground tanks that supply the development's potable water, reducing the net volume of stormwater discharged from the site. The second principal recharge of groundwater and base flow through soakage has been considered but is not feasible here, as the site comprises poorly draining Category 5 clay soils with correspondingly low soakage capacity, so infiltration cannot be relied upon.

The design therefore progresses to the third principle treatment, detention and controlled release under which the residual runoff, over and above the reuse volume, is detained within the dedicated attenuation storage in the tanks and released at a controlled rate of no more than 3.08 L/s, being 80% of the pre-development peak, to the existing watercourse on the site. Stormwater is managed close to source, with the tanks located adjacent to the buildings and hardstand they serve. The proposed approach is therefore consistent with the FNDC stormwater management hierarchy, prioritising reuse, ruling out higher-order disposal only where ground conditions genuinely constrain it, and ensuring the controlled discharge does not increase peak flows to the receiving environment.

Secondary Flow Path – Watercourse

An existing watercourse crosses the site from south to north. It receives flow from an external catchment on the hillside above Foreshore Road through an existing 400 mm concrete road culvert (inlet IL 56.39), which discharges at the southern boundary. From there it flows north for approximately 50 m in a shallow grassed channel to the northern corner of the lot (approximately RL 44.5), where it is joined by the drain along the north-eastern boundary and leaves the site onto the downstream property.

The platform fill and driveway occupy the upper reach of the watercourse. This reach is therefore to be realigned into a new culvert along the eastern edge of the platform, discharging to the existing channel at approximately RL 50.0. The existing channel downstream of the culvert outlet is retained as the overland flow path (OLFP). It will carry both the external catchment flow and the site discharge, which comprises the controlled orifice flow, the tank overflows and runoff from the remaining pervious area.

Design flows. Peak flows have been calculated by the Rational Method using HIRDS v4 RCP8.5 (2081–2100) rainfall at a 10-minute duration (10% AEP 117 mm/hr; 1% AEP 178 mm/hr). The 10-minute duration is the minimum time of concentration and is conservative for this short, steep catchment. Runoff coefficients of 0.45 (10% AEP) and 0.54 (1% AEP, increased by a factor of 1.2) have been adopted for the pasture and scrub on clay soils, and 1.0 for impervious surfaces in the 1% AEP event, with the tanks assumed full.

The external catchment has been estimated rather than delineated from LiDAR. The existing 400 mm road culvert passes approximately 0.30 m³/s at 1.0 m headwater, which corresponds to a 10% AEP catchment of about 1.5–2 ha. A catchment of 3.0 ha has therefore been adopted as a conservative upper estimate. All of its flow is assumed to reach the site, with no allowance for overtopping flow being carried away along Foreshore Road.

Catchment	Area (m²)	C (10% / 1%)	Q 10% AEP (L/s)	Q 1% AEP (L/s)
External (above Foreshore Road)	30,000	0.45 / 0.54	439	801
Site impervious (via tanks)	878	orifice / 1.00	2.9	43.4
Site pervious remainder	3,118	0.45 / 0.54	46	83
Total at OLFP outfall			**488**	**928**

Channel capacity. The existing channel is to be re-formed to a trapezoidal section with a 0.5 m base, 1V:2H side slopes and a depth of 0.65 m, lined with rock (D50 300 mm, Manning's n = 0.045). The channel grade, scaled from the LTD earthworks plan, varies from about 9% (which governs flow depth) to 13% (which governs velocity and shear). Capacity has been checked using Manning's equation:

Grade	Event	Flow (m³/s)	Depth (m)	Velocity (m/s)	Shear (Pa)	Freeboard (m)
9%	10% AEP	0.49	0.25	1.93	137	0.40
9%	1% AEP	0.93	0.34	2.28	177	0.31
13%	10% AEP	0.49	0.23	2.21	184	0.42
13%	1% AEP	0.93	0.31	2.61	238	0.34

The channel carries the 1% AEP flow with at least 0.31 m freeboard. Its bank-full capacity of 3.8 m³/s is 4.1 times the 1% AEP flow, and 0.3 m freeboard is retained for external catchments of up to approximately 3.2 ha. The design is therefore robust to the uncertainty in the catchment estimate.

Flow in the channel is supercritical (Froude number 1.5–1.9), with velocities of 1.9–2.6 m/s and bed shear of 140–240 Pa. These exceed the permissible limits for a grassed channel. A rock lining is therefore required: D50 300 mm rock (from the Shields criterion, D50 = 0.31 m at the steeper reach), at least 450 mm thick on non-woven geotextile, with a rock outlet apron where the culvert discharges at the toe of the fill.

Realigned culvert. The culvert has been checked for inlet control in accordance with FHWA HDS-5. A 600 mm RCRRJ culvert with headwalls at both ends passes

the 10% AEP flow (0.49 m³/s) with a headwater of 0.73 m (HW/D = 1.2). The 450 mm and 525 mm sizes give unacceptable headwater and have been rejected. The 600 mm pipe is larger than the upstream road culvert, so it will not be the limiting element, and it provides a margin against blockage.

Flows above the culvert capacity, or the full flow if the culvert is blocked, are to be carried over the culvert alignment in a defined secondary swale (1.0 m base, 1V:4H sides). In the 1% AEP event the swale flows approximately 0.17 m deep at about 3.1 m/s, so it is to be rock lined or lined with turf reinforcement mat. Because the platform (RL 53.0) sits below the ground at the culvert inlet (approximately RL 54.5), the driveway and carport levels adjacent to the inlet must be shaped so that the secondary flow is directed away from the platform. The threshold is to be set at least 0.3 m above the secondary flow level. This is to be confirmed on the architectural and driveway drawings at building consent stage. Works at the road culvert outlet within the road reserve require FNDC approval.

Effect on downstream property. The external flow is unchanged in both magnitude and route, and the outfall remains at the existing location at the northern corner. In the 10% AEP event the discharge from impervious areas is attenuated to 80% of the pre-development peak. In the 1% AEP event, with the tanks assumed full, the site contribution increases from 107 L/s to 127 L/s. This 20 L/s increase is 2.2% of the total flow at the outfall, so flood risk to the downstream property does not change materially. A rock apron is to be provided at the outfall to dissipate energy before flow leaves the site.

Buildings. The platform (RL 53.0) is 2–3 m above the channel invert alongside it (RL 50–45). Subject to the threshold detail at the culvert inlet, finished floor levels will be more than 500 mm above the 1% AEP flow level, so NZBC E1.3.2 is satisfied. The shed/sleepout (FFL 51.10) is cut into the slope east of the driveway; the driveway and secondary flow route are to be graded so that flow cannot be directed towards it, and its floor level is to be confirmed as at least 0.3 m above the adjacent secondary flow level at building consent. The OLFP, culvert inlet and outlet are to be kept free of structures, fences, stockpiles and dense planting, and maintained by the owner. It is recommended that the OLFP be protected by a condition of consent. The calculations are included in Appendix F.

100-year Storm Event

The attenuation system is sized for the 10% AEP design storm, and flood control of the 1% AEP event is not required at this site as there is no identified downstream flooding hazard (FNDC Engineering Standards, Table 4-1). In a 1% AEP event the post-development peak inflow is approximately 43.4 L/s (C = 1.0, consistent with the overland flow path assessment); the attenuation storage fills to capacity and the orifice continues to discharge at its controlled rate of approximately 2.9 L/s, with the excess of approximately 40 L/s conveyed by the tank high-level emergency overflows, which are piped to the overland flow path channel described above. This

is consistent with the FNDC requirement that the secondary system safely convey flows up to the 1% AEP event without risk to people or property. Because the overflows are piped directly to the channel, surcharge during events larger than the design storm cannot pond against or enter the buildings. The overflow outlet at the channel is to be protected with rock against scour. As the excess discharges to the same watercourse that receives the controlled flow, the residual effect of events beyond the design storm is limited to the receiving environment and does not increase flooding risk to adjoining properties.

Water Supply

Potable water for the development will be sourced entirely from on-site rainwater collection, with no reticulated water supply available to the site. Water is collected from the roof catchment of the main dwelling and shed/accommodation building and stored in three 25,000 L Duracrete underground trafficable tanks (two tanks adjacent to the main dwelling and one adjacent to the shed), as described further in the Stormwater Management section. The tanks are benched at a common level and interconnected by 100 mm balance pipes, operating hydraulically as a single storage system, and are fitted with anti-flotation devices given the potential for perched water in the clay soils.

Combined, the three tanks provide 75,000 L of physical storage capacity. However, the upper 1.11 m of each tank (11.8 m³ per tank, 35.3 m³ total) is a dedicated stormwater attenuation zone, held clear above the potable supply volume in accordance with the Stormwater Management design (refer that section for the attenuation design basis). The potable supply is assumed full at the commencement of a design storm and contributes no attenuation capacity, consistent with the TP10 methodology applied. On that basis, the effective volume available for potable water supply is approximately 39,700 L, not the full 75,000 L combined capacity.

The roof catchment area serving the tanks, taken from the architectural floor plans, comprises the dwelling, including the guest wing, entry porch, carport and covered outdoor deck (430.25 m² building coverage), and the shed/boat shed, gear storage, and sleepout building (108.0 m² combined). Roof water is directed from these roof areas to the tanks, with potable water reticulated back to the dwelling and separately to the shed.

The dwelling comprises a main bedroom, two guest bedrooms and a bunk room, together with a separate sleepout, so peak occupancy could be relatively high, as is typical of a coastal holiday home. Using a design occupancy of eight (six in the dwelling, counting the bunk room as a fourth bedroom, and two in the sleepout) and the standard allowance of 180 L/person/day used in FNR's other site suitability assessments, the demand is approximately 1,440 L/day. The effective potable storage of approximately 39,700 L therefore provides about 28 days of supply without rainfall, or about 22 days at a peak holiday occupancy of ten. This is

considered adequate for a rural roof-water supply. Supply may need to be topped up by water tanker during extended dry periods.

Water collected in the tanks will be maintained to potable standard through filtration systems prior to use.

The potable storage above does not include a firefighting reserve. If a dedicated firefighting water supply in accordance with SNZ PAS 4509:2008 is required under the District Plan (to be confirmed by Logiplan), it is to be provided in addition to the attenuation and potable volumes, in a separate tank or dedicated additional storage.

Wastewater Disposal

Wastewater from the dwelling and the sleepout/boatshed building will be treated and disposed of on site. The on-site wastewater design has been prepared by Waterflow NZ Ltd (Onsite Wastewater Design Report and PS1, 1 September 2026, Appendix G), in accordance with AS/NZS 1547:2012 and Auckland Council TP58. In summary:

- Design flow of 1,015 L/day: a three-bedroom dwelling (five people) and a one-bedroom sleepout (two people) at 145 L/person/day.
- Econotreat ET32P secondary treatment system (capacity 1,600 L/day), with a pump chamber, high-level alarm and 2,120 L of emergency storage.
- Land application by 338 m² of surface-laid, mulched PCDI dripline (10 lines × 33.8 m) at a design loading rate of 3 L/m²/day on Category 5 soils (silty topsoil over silty clay loam), with a 30% reserve area.
- Separation distances of more than 15 m to surface water, 1.5 m to boundaries, and 3 m to buildings and retaining walls. No groundwater was encountered within 1.2 m of the surface.

Waterflow have assessed the discharge as a permitted activity under Rule C.6.1.3 of the Proposed Regional Plan for Northland, so a separate Northland Regional Council discharge consent is not expected to be required. The Waterflow design requires amendment in three respects and is to be reissued by Waterflow before building consent:

- **Occupancy** – the design is based on a three-bedroom dwelling. The current floor plan includes a main bedroom, two guest bedrooms and a double-bunk room, which FNR considers should be counted as a fourth bedroom. On that basis the design occupancy is eight (six in the dwelling and two in the sleepout), the design flow is 1,160 L/day, and the land application area at 3 L/m²/day is approximately 387 m² plus a 30% (116 m²) reserve area. The ET32P treatment capacity (1,600 L/day) remains adequate.
- **Separation from the watercourse** – Waterflow's layout (WF26569-01 Rev A) treats the watercourse as an open drain with a 5 m setback, and the LTD site plan shows the field approximately 2 m from it. The watercourse conveys flow from an external catchment of up to 3 ha through the Foreshore Road culvert

and is considered to be an intermittent stream, so the 15 m separation to surface water applies.

- **Layout** – Waterflow's layout is based on a superseded dwelling footprint, and its western reserve area lies within the proposed fill platform.

The disposal field and reserve area are to be located at least 15 m from the watercourse and overland flow path, at least 5 m from the open drain along the north-eastern boundary, and clear of the fill batters, and shown on co-ordinated LTD and Waterflow plans. The permitted activity status assessed by Waterflow relies on these separation distances being achieved.

Electricity and Telecommunications

Power

Mains electricity is available at the site boundary from the Top Energy network, and a temporary builder's supply has been established. The permanent supply will be reticulated underground from the boundary to the dwelling and to the boatshed/sleepout building. The connection is to be arranged with Top Energy and an electricity retailer at building consent stage. An electricity easement crosses the northern part of the site. Earthworks or structures within the easement require the written consent of the easement holder and must comply with NZECP 34:2001.

Telecommunications

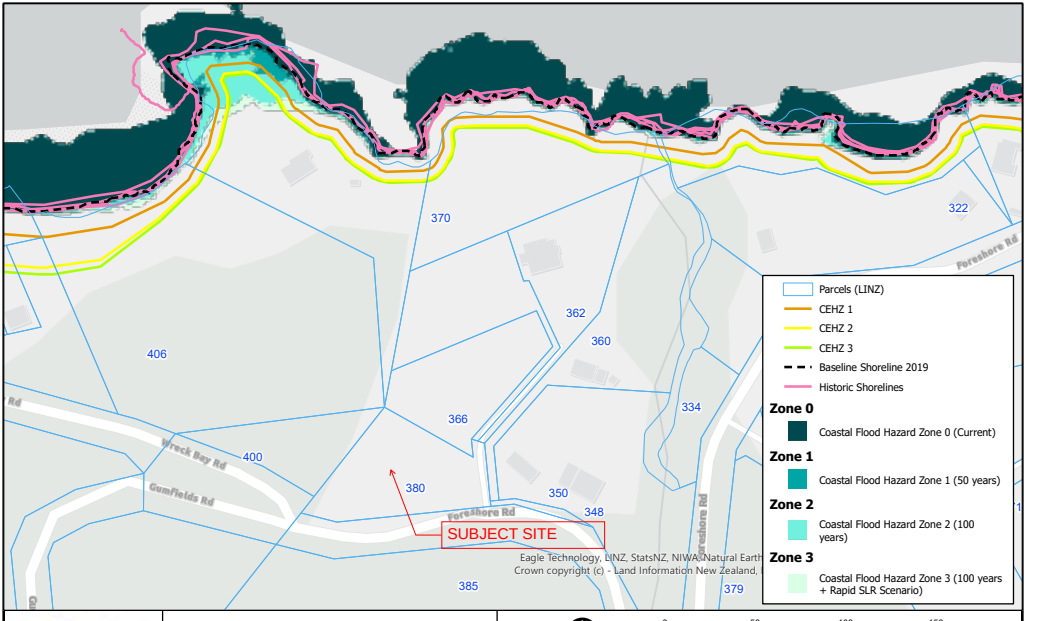
Fibre does not reach this boundary, so telecommunications will be provided by Starlink satellite broadband. It is recommended that a lead-in duct be laid from the road boundary to the dwelling while the services trenches are open, to allow a future fibre connection.

Appendix A
Architectural Site Plans

LTD Architectural Design Studio, Job 26741-N – Site Plan and three-waters layout (13/08/2026), Site Earthworks plan (17/07/2026) and Ground Floor Plan.

Appendix B
Natural Hazard Maps

Far North District Council hazard viewers – coastal hazard (erosion and flood), regional flood hazard, and liquefaction vulnerability.



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

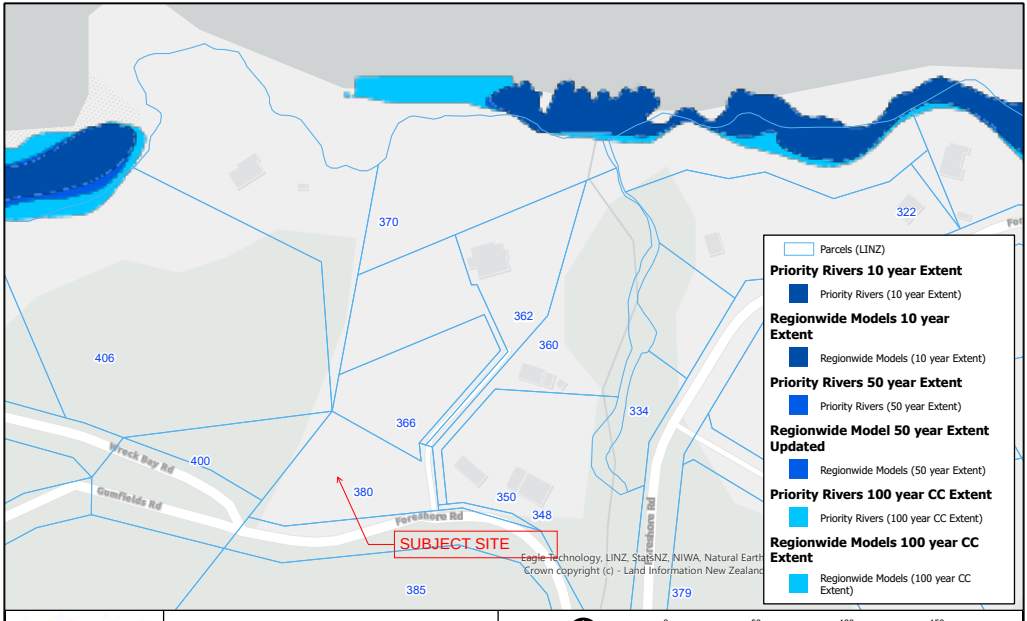
Far North Maps

0 50 100 150 m

Projection NZTM2000. Datum NZGD2000. Scale:1:2,036

DISCLAIMER:
While the Far North District Council strives to keep the data in this service current, it may not be the most recent or most accurate data available. No reliance on the information contained on this map by any person is permitted. FNDC will not be liable for any omissions or errors of information contained on this map. FNDC recommends that persons seek specific advice on individual properties from FNDC and other specialist organisations which may hold more up to date or accurate information.

Created: 31/08/2026



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

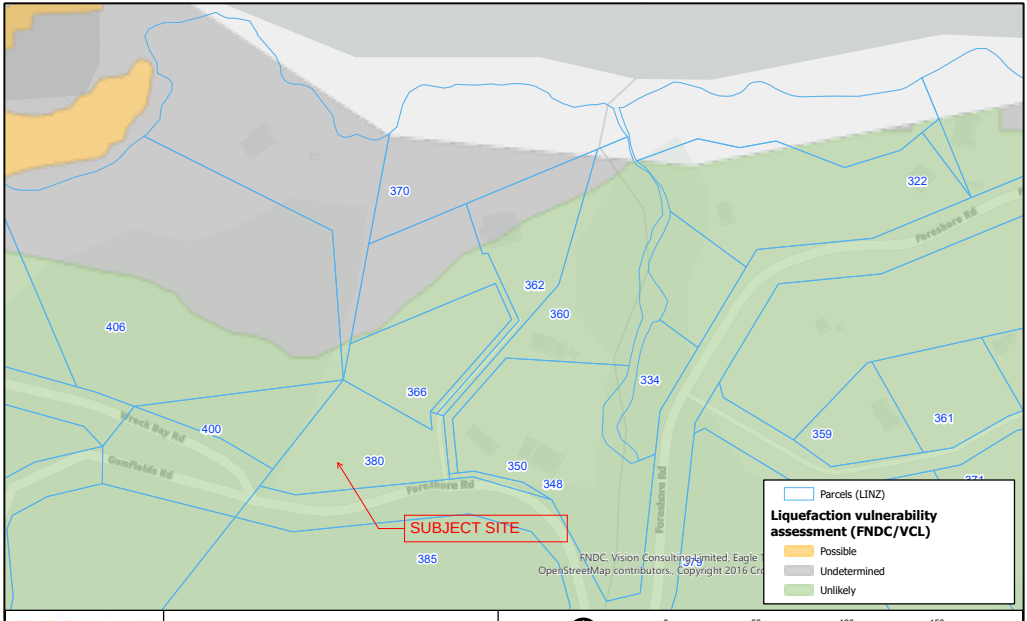
Far North Maps

0 50 100 150 m

Projection NZTM2000. Datum NZGD2000. Scale:1:2,036

DISCLAIMER:
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Created: 31/08/2026



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

Far North Maps

0 50 100 150 m

Projection NZTM2000. Datum NZGD2000. Scale:1:2,036

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Created: 31/08/2026

Appendix C
Good Ground Report and Scala Penetrometer Results

FNR Consulting Ltd, Good Ground Report for Proposed Development at 380 Foreshore Road, Ahipara, 28 March 2024 – site plan, test locations, photographs and Scala penetrometer test reports.

2 Te Paia Lane, Kaitaia
Phone (09) 408 0979
PO Box 62, Awanui 0451
GST No: 107-240-918

28th March 2024

To Whom it may Concern

Good Ground Report for Proposed Development at 380 Foreshore Road, Ahipara.

As requested, FNR Consulting have carried out a series of scala penetrometer tests for a proposed new development which includes two 60m^2 cabins, a shed, and water tanks. A total of five scala penetrometer tests were conducted.

Testing was carried out in general accordance with the requirements of NZS 3604 and NZS 4402.

The test locations are shown in the attached plan and photographs, with the test results also attached to this document.

The NZLI Soils Map describes the soils in this area as: **Awapuka clay loam.**

Observations

The site soils were observed to be consistent with the NZLI Soils Map description.

The site is sloping towards 90 Mile Beach to the North at a gradient < 20°.The site has not been levelled, and the tests were performed in the undisturbed natural ground (not fill material). Minor earthworks will be required to level the two main building sites and driveway.

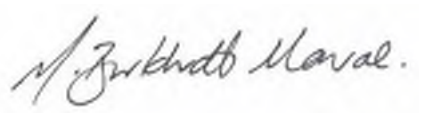
There are no visual signs of slope instability in the vicinity of the building site and the proposed position of the building relative to this slope is appropriate and does not pose a risk in terms of slope stability.

The site classification based on site reactivity in accordance with AS2870-2011 Table 2.1 is **Class S – Slightly reactive CLAY soils, which may only experience slight ground movement from moisture changes**.

Results

The penetrometer testing (attached below) indicated that the in-situ soils were variable across the site, with "Good Ground" (as per the NZS 3604 definition) achieved between 0.2m and 1.85m below the existing ground level. Each building site will need further testing and another Geotechnical Report after earthworks have been carried out to meet building consent conditions.

Yours Sincerely



Manu Burkhardt Macrae
BE, CMEngNZ, CPEng, 253797
Attachments:

- *Site Plan and Test Locations; Photos; Scala Test Reports.*

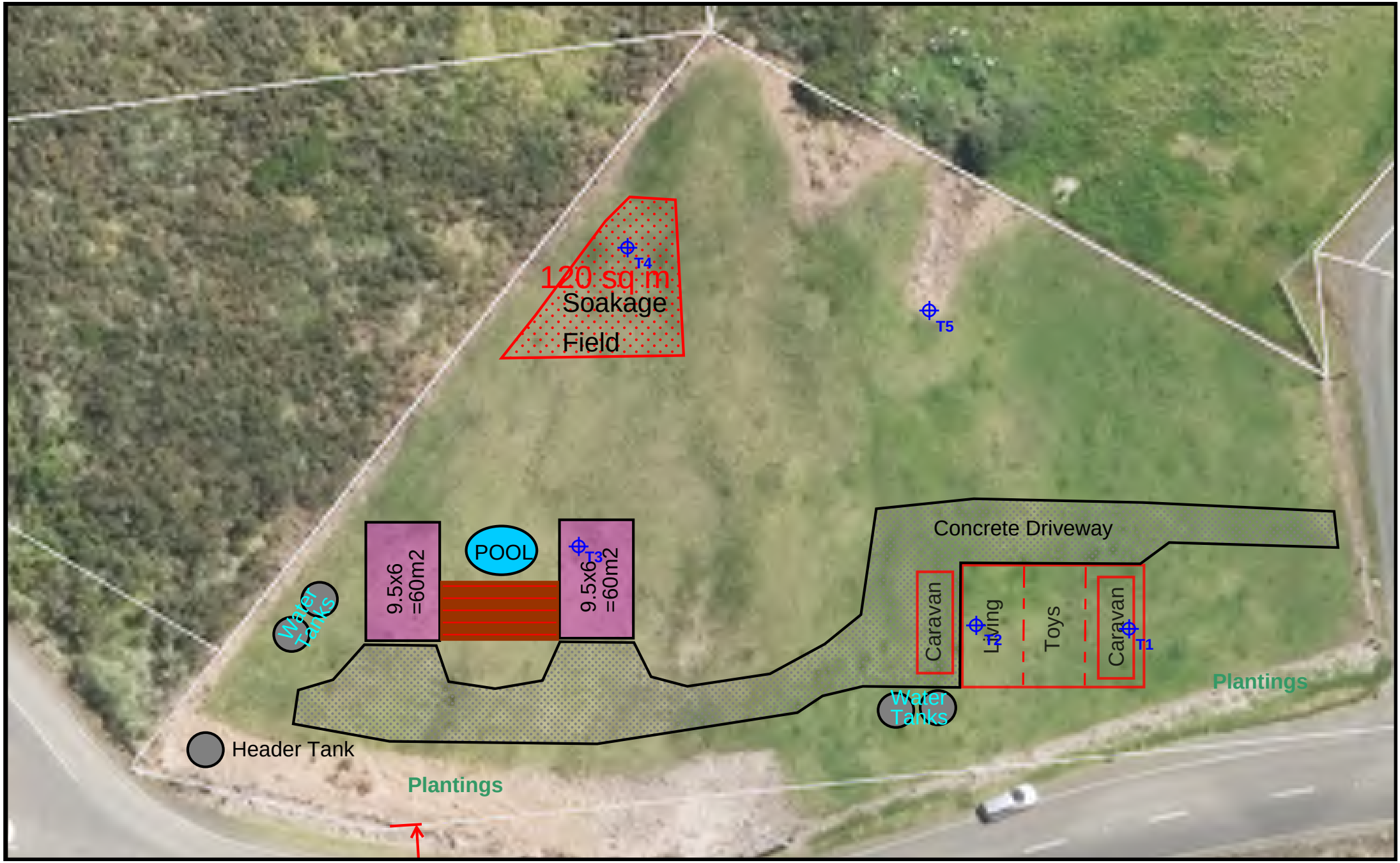


FNR LTD CONSULTING

Title:

SITE PLAN

Client: HARRY BURKHARDT			
Location: 380 FORESHORE ROAD, AHIPARA			
Project Name: PROPOSED DEVELOPMENT		Project Number:	
Drawn: ANDREW VAN DER LINDEN	Date: 28/03/2024	Sheet: 1 OF 2	Version: V0



FNR LTD CONSULTING

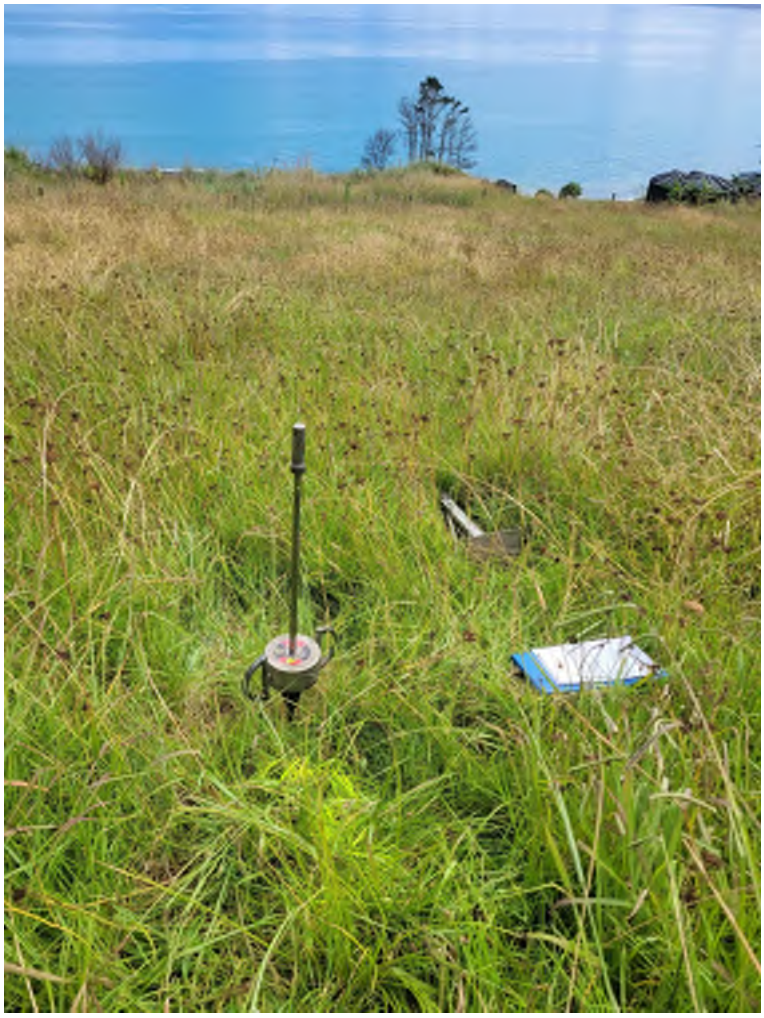
Title:

SCALA TEST LOCATIONS

Client: HARRY BURKHARDT			
Location: 380 FORESHORE ROAD, AHIPARA			
Project Name: PROPOSED DEVELOPMENT		Project Number:	
Drawn: ANDREW VAN DER LINDEN	Date: 28/03/2024	Sheet: 2 OF 2	Version: V0









Scalar Test Locations 1 to 4



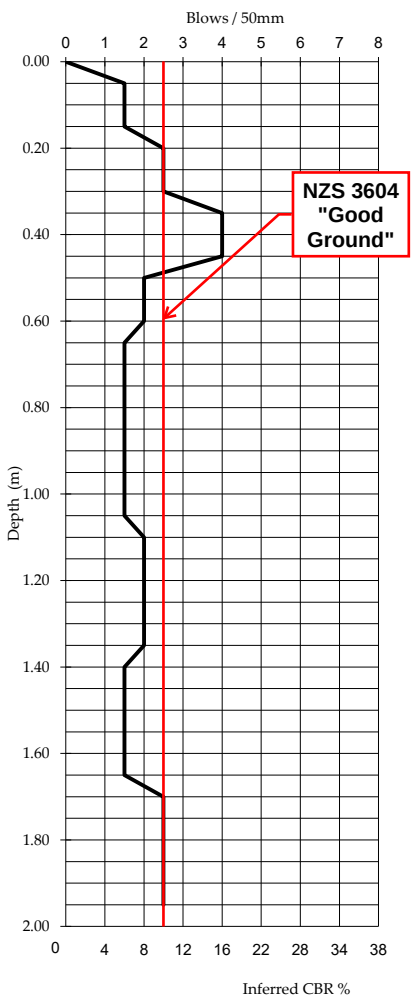
Scalar Test Location 5

SCALA PENETROMETER
TEST REPORT

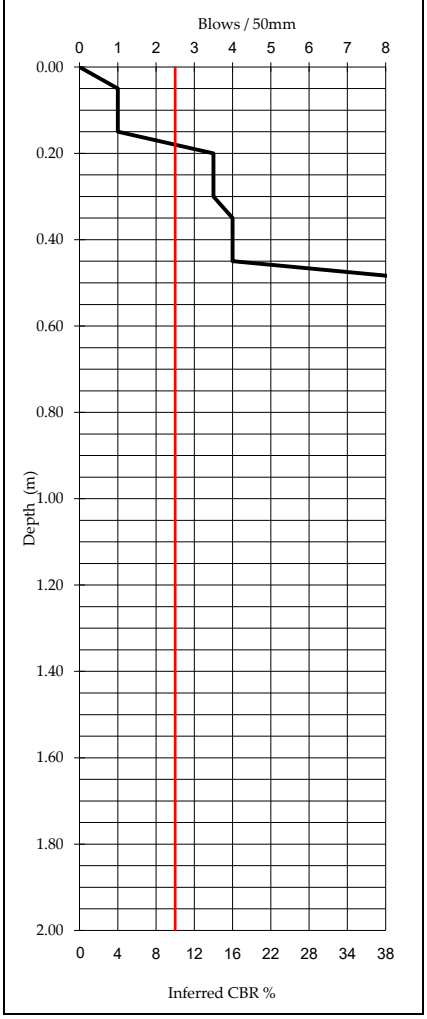
Project :	Proposed development
Location :	380 Foreshore Road, Ahipara
Client :	Harry Burkhardt
Contractor :	N/A

Test number :	1	Test number :	2	Test number :	3
Water level :	N/A	Water level :	N/A	Water level :	N/A
Reduced level :	Ex. GL	Reduced level :	Ex. GL	Reduced level :	Ex. GL

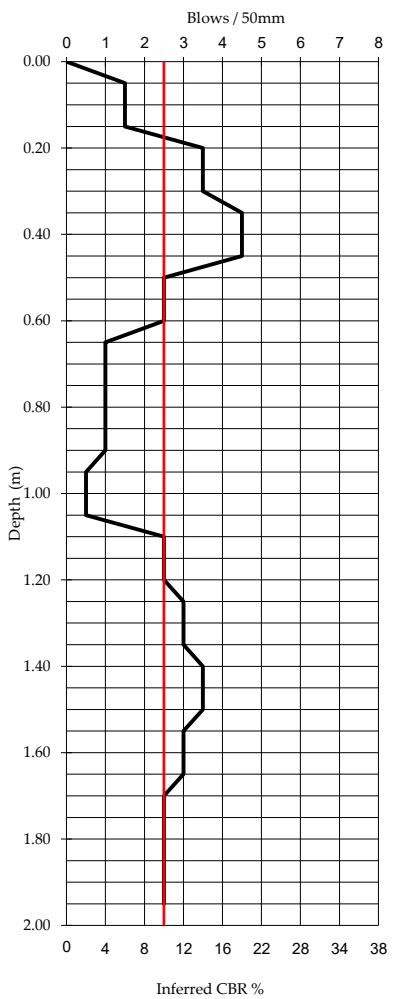
Scala Penetrometer



Scala Penetrometer



Scala Penetrometer



Test Methods

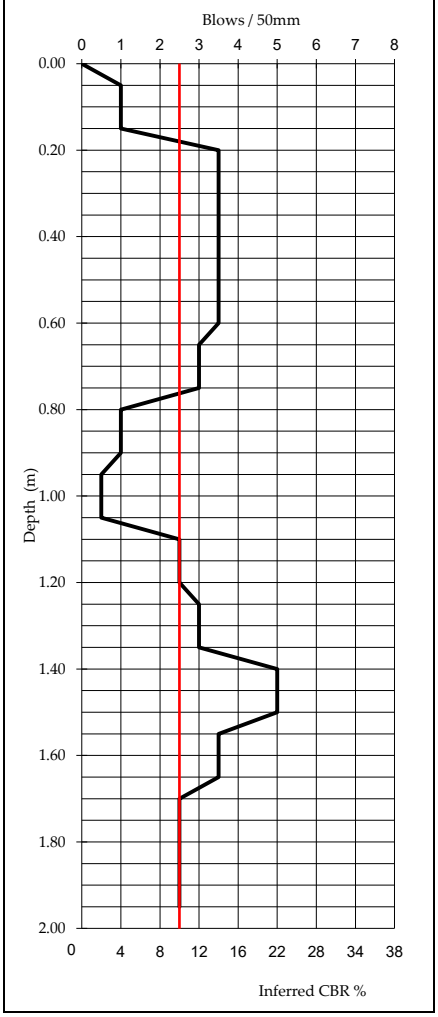
Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2
Inferred CBR values taken from Austroads Pavement Design Manual 2004

Date tested :	19/02/24	Tested by:	AVDL
Date reported :	28/03/24	Reported by:	AVDL

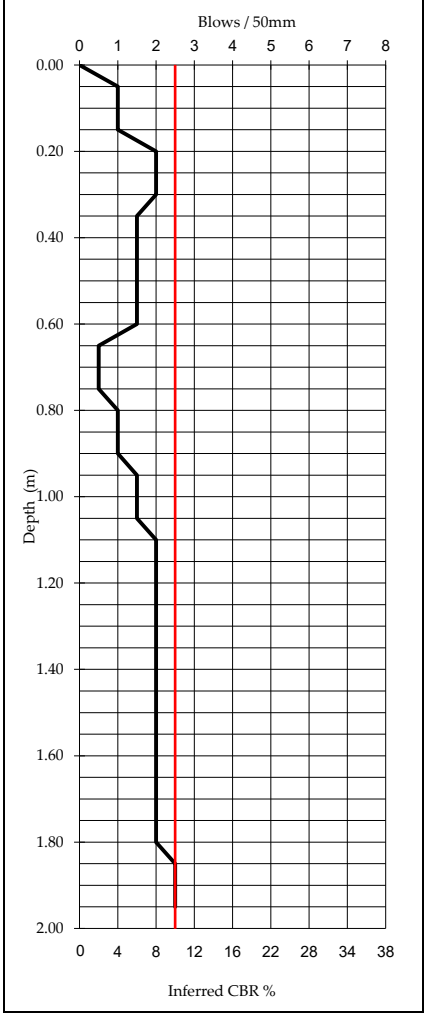
SCALA PENETROMETER
TEST REPORT

Project :	Proposed development				
Location :	380 Foreshore Road, Ahipara				
Client :	Harry Burkhardt				
Contractor :	N/A				
Test number :	4	Test number :	5	Test number :	N/A
Water level :	N/A	Water level :	N/A	Water level :	N/A
Reduced level :	Ex. GL	Reduced level :	Ex. GL	Reduced level :	N/A

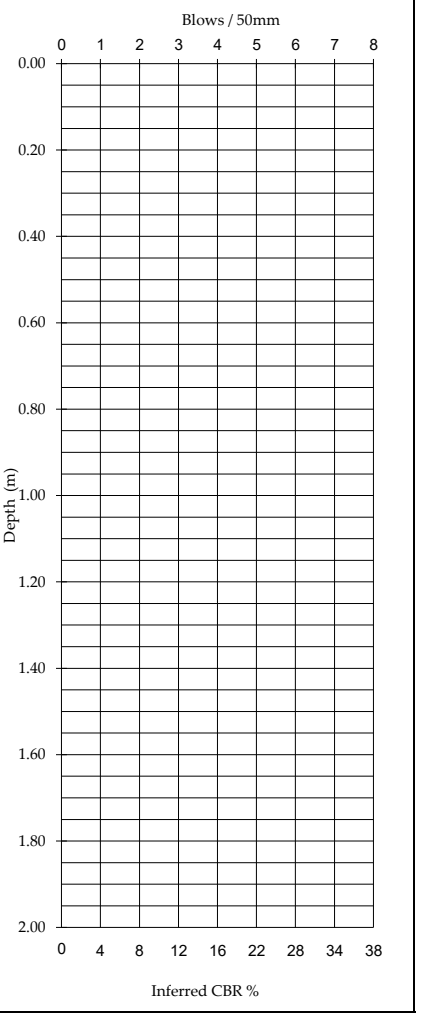
Scala Penetrometer



Scala Penetrometer



Scala Penetrometer



Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2
Inferred CBR values taken from Austroads Pavement Design Manual 2004

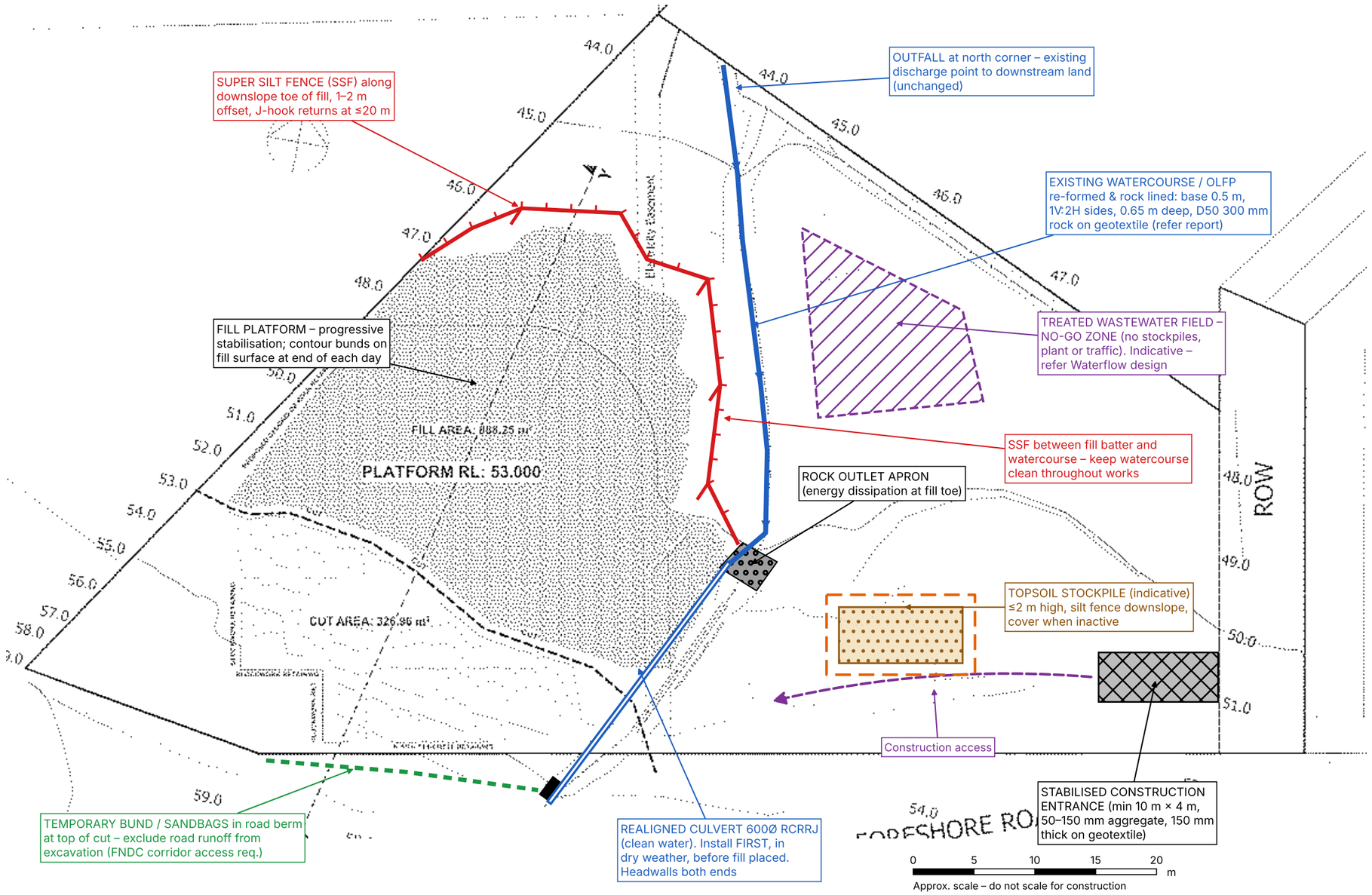
Date tested :	19/02/24	Tested by:	AVDL
Date reported :	28/03/24	Reported by:	AVDL

Appendix D
Geotechnical Assessment Report

Northland Geotechnical Specialists Ltd – geotechnical assessment for the building platform, retaining walls and foundations (Project 0505). Report to be appended on receipt.

Appendix E
Erosion and Sediment Control Plan

FNR Consulting Ltd, drawing FNR015-ESC-01 Rev A, Erosion and Sediment Control Plan, 15/10/2026.



LEGEND

- Super silt fence (SSF)
- Standard silt fence
- Temporary bund / sandbags (road runoff)
- Realigned 600Ø culvert (clean water)
- Watercourse / OLFP channel (clean water)
- Stabilised construction entrance
- Rock outlet apron
- Topsoil stockpile
- Wastewater field no-go zone
- Construction access route

ESC NOTES

1. All erosion and sediment control (ESC) measures to be designed, installed, maintained and decommissioned in accordance with Auckland Council GD05 (2016) Erosion and Sediment Control Guide for Land Disturbing Activities, as adopted by NRC and FNDC.
2. Measures to be installed and inspected by FNR Consulting BEFORE any bulk earthworks commence.
3. Disturbed area ≈ 0.15–0.20 ha (cut 327 m², fill 888 m², plus driveway, tanks, services and channel works). Topsoil ≈ 122 m³, cut ≈ 270 m³, fill ≈ 1,305 m³ (balance imported).
4. Clean water (road culvert / watercourse) to be kept separate from disturbed areas at all times.
5. Exposed surfaces to be stabilised progressively (topsoil + seed/ hydroseed + mulch, or erosion matting on batters) as each area reaches final level. No area to remain unstabilised >14 days without works occurring. Final planting per landscape plan.
6. Inspect all measures daily and after every rain event; repair immediately; remove sediment when 20% of capacity is reached.
7. Check weather forecast daily; stabilise/secure works before forecast heavy rain. Avoid bulk earthworks in winter months where practicable.
8. Dust to be controlled by water cart / sprinklers as required.
9. Accidental Discovery Protocol (HNZPT / Te Rarawa) applies – stop works, secure area and notify if taonga, kōiwi or archaeological material is uncovered.
10. Measures to remain until the site is fully stabilised and removal is approved by the engineer.

CONSTRUCTION SEQUENCE

1. Stabilised entrance, SSF / silt fences, road-runoff bund.
2. Install realigned culvert, headwalls & outlet apron (dry weather, temporary pump/pipe bypass of flow); then decommission old path.
3. Strip & stockpile topsoil; bulk cut & retaining excavation.
4. Place & compact engineered fill in layers, benched into slope.
5. Re-form & rock line the watercourse channel in dry weather, working downstream to upstream.
6. Retaining walls, tanks, services, driveway.
7. Topsoil, seed/mulch, planting; remove ESC once stabilised.

Base plan: LTD Architectural Design Studio, 'Site Earthworks', Job 26741-N, 17/07/2026. Contours 1.0 m (NZVD2016). Read with FNR015 Site Suitability Report.

FNR CONSULTING
2 Te Paia Lane, Kaitāia
Ph (09) 408 0979

Client: Harry Burkhardt
Project: Proposed Dwelling – 380 Foreshore Road, Ahipara (Lot 4 DP 210535)

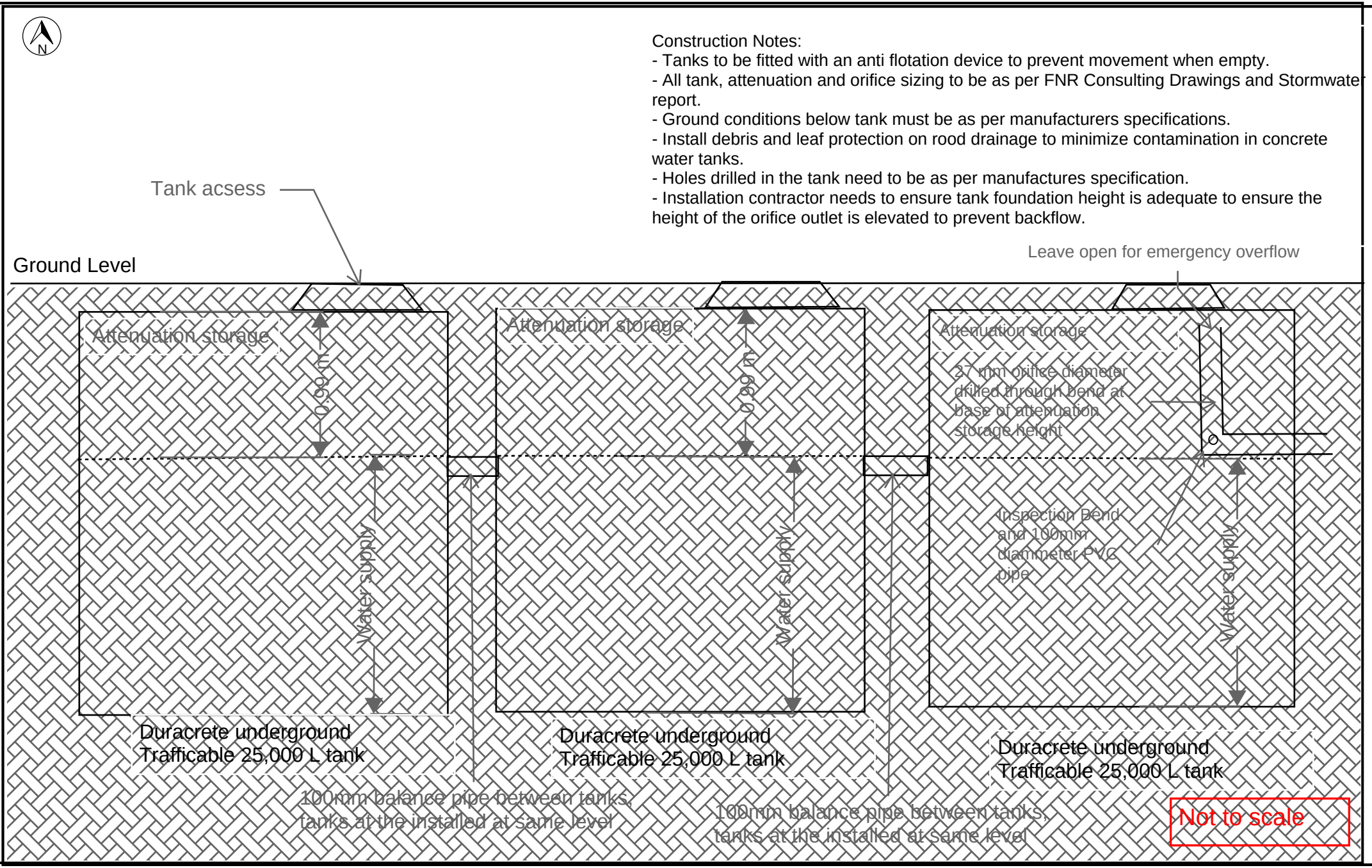
EROSION AND SEDIMENT CONTROL PLAN

Drawing No.	Revision
FNR015-ESC-01	A – For Resource Consent
Date: 15/10/2026 Scale: as shown (A3)	Drawn: FNR Checked: MBM Approved: _____

Appendix F
Stormwater and Overland Flow Path Calculations

FNR Consulting Ltd – pre- and post-development runoff and attenuation calculations, stormwater tank and attenuation detail, and overland flow path and realigned culvert calculations.

Construction Notes:
- Tanks to be fitted with an anti flotation device to prevent movement when empty.
- All tank, attenuation and orifice sizing to be as per FNR Consulting Drawings and Stormwater report.
- Ground conditions below tank must be as per manufacturers specifications.
- Install debris and leaf protection on rood drainage to minimize contamination in concrete water tanks.
- Holes drilled in the tank need to be as per manufactures specification.
- Installation contractor needs to ensure tank foundation height is adequate to ensure the height of the orifice outlet is elevated to prevent backflow.



FNR LTD CONSULTING

Title: **Stormwater Tank and Attenuation Detail**

Client: **Harry Burkhardt**			
Location: **380 Foreshore Road, Ahipara**			
Project Name: **Stormwater Management design**		Project Number:	
Drawn: **TA**	Date: **23/09/2026**	Sheet: **1 OF 1**	Version: **V0**

Overland Flow Path (OLFP) and Realigned Culvert Calculations

FNR015 – 380 Foreshore Road, Ahipara (Lot 4 DP 210535) | Date: 15/10/2026 | Rev A

1. Design basis

Rational Method Q = C·i·A/3600 (Q L/s, i mm/hr, A m²). Rainfall: NIWA HIRDS v4 at the site (−35.1808, 173.1257), RCP8.5 2081–2100, 10-minute duration (minimum time of concentration – conservative for a short, steep catchment). 10% AEP i = 117 mm/hr; 1% AEP i = 178 mm/hr. Runoff coefficients increased by ×1.2 for the 1% AEP event (capped at 1.0). External catchment upstream of the Foreshore Road culvert assumed at 3.0 ha (conservative – see Note A). Attenuation tanks assumed full (no attenuation benefit) for the 1% AEP case.

2. Design flows

Catchment	Area (m²)	C (10%)	Q10 (L/s)	C (1%)	Q100 (L/s)
External (above Foreshore Rd)	30,000	0.45	439	0.54	801
Site impervious (via tanks)	783	orifice	2.7	1.00	38.7
Site pervious remainder	3,213	0.45	47.0	0.54	85.8
Total at OLFP outfall			488		926

Site-only 1% AEP contribution: pre-development 107 L/s (whole lot, C = 0.54) vs post-development 125 L/s with tanks assumed full – an increase of 18 L/s, i.e. 1.9% of the total 1% AEP flow at the outfall.

3. OLFP channel capacity – Manning's equation

Trapezoidal section: base b = 0.5 m, side slopes 1V:2H, depth 0.65 m, rock lined (D50 300 mm), n = 0.045. A = bd + zd², P = b + 2d√(1+z²), R = A/P, V = (1/n)R^(2/3)S^(1/2). Grades measured from the LTD earthworks plan (culvert outlet RL ≈ 50.0 to north boundary RL ≈ 44.5 over ≈ 50 m): 9% (flatter reach – governs depth) and 13% (steeper reach – governs velocity/shear).

Grade S	Event	Q (m³/s)	Depth (m)	Velocity (m/s)	Froude	Bed shear (Pa)	Freeboard (m)
9%	10% AEP	0.488	0.25	1.93	1.50	137	0.40
9%	1% AEP	0.926	0.34	2.28	1.56	176	0.31
13%	10% AEP	0.488	0.23	2.21	1.79	184	0.42
13%	1% AEP	0.926	0.31	2.61	1.86	237	0.34

Bank-full capacity at 9%: 3.83 m³/s = 4.1 × design 1% AEP flow. With 0.30 m freeboard retained, the channel carries 0.97 m³/s – equivalent to an external catchment of 3.2 ha; bank-full equates to ≈ 14 ha.
Rock sizing: Shields, D50 = τ/(0.047(ρs−ρ)g) = 237/(0.047 × 1650 × 9.81) = 0.31 m at the steeper reach (1% AEP); Abt & Johnson steep-slope method gives D50 ≈ 0.18 m (incl. 1.2 concentration factor). Adopt D50 = 300 mm, lining thickness ≥ 450 mm on non-woven geotextile. Velocities of 1.9–2.6 m/s and shear of 140–240 Pa exceed the permissible limits for a grassed channel, so rock lining is required.

4. Culverts – inlet control (FHWA HDS-5, concrete pipe, square edge with headwall)

Culvert	Flow (m³/s)	Headwater (m)	HW/D	Comment
Existing 400Ø road culvert	0.30	1.00	2.5	Capacity at 1.0 m headwater (IL 56.39)
Realigned 450Ø	0.49 (10%)	1.49	3.3	Excessive headwater – reject
Realigned 525Ø	0.49 (10%)	0.96	1.8	Marginal
Realigned 600Ø (adopted)	0.49 (10%)	0.73	1.2	OK – HW/D ≤ 1.5
Realigned 600Ø (adopted)	0.93 (1%)	1.74	2.9	Exceeds – secondary overland path

1% AEP / blockage case: the full 1% AEP flow (0.93 m³/s) is to be conveyed over the culvert alignment in a defined secondary swale (base 1.0 m, 1V:4H, ≈20% grade): depth ≈ 0.17 m, velocity ≈ 3.1 m/s – rock or turf-reinforcement-mat lined, kept clear of the building platform and fill batter crest, with the driveway/carport threshold set ≥ 0.3 m above the secondary flow level.

Notes

A. The external catchment has not yet been delineated from LiDAR. The existing 400Ø road culvert passes only ≈ 0.30 m³/s at 1.0 m headwater, which would ordinarily correspond to a 10% AEP catchment of ≈ 1.5–2 ha; 3.0 ha has therefore been adopted as a conservative upper estimate, and all flow is assumed to reach the site (no allowance for road overtopping being carried away along Foreshore Road). The channel retains 0.3 m freeboard for catchments up to ≈ 3.2 ha. To be confirmed against NRC LiDAR at detailed design.
B. Grades and alignment scaled from LTD Architectural 'Site Earthworks' (Job 26741-N, 17/07/2026). Final channel long-section, culvert invert levels and outlet apron to be detailed for building consent.

10% AEP (1 in 10 Yr)

Full Area Catchment - 380 Foreshore Road

Date 23-Aug-26

Calc's By Tess Allen

Impervious Catchment Area (m^2)	783	m^2
Run-off coefficient	0.4	Medium soakage soil types:
Total effective C x A	**313**	

Storage Calculation **Design Storm=** **10** **yr. ARI**

Rainfall intensities (mm/hr) :: Historical Data

Time (min)	Rainfall Intensity (mm/hr)	Runoff (L)	Runoff (L/min)	Runoff (L/sec)
10	87.40	4,563	456	7.6
20	65.80	6,870	344	5.7
30	54.90	8,598	287	4.8
60	39.40	12,341	206	3.4
120	27.40	17,165	143	2.4
360	14.40	27,063	75	1.3
720	9.26	34,805	48	0.8
1440	5.76	43,300	30	0.5
2880	3.48	52,321	18	0.3
4320	2.55	57,508	13	0.2

Rainfall intensities (mm/hr) :: Historical Data

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	53.1	39.9	33.2	23.8	16.5	8.64	5.53	3.43	2.06	1.51	1.2	1
2	0.5	58.1	43.6	36.3	26	18	9.46	6.06	3.76	2.26	1.66	1.32	1.1
5	0.2	74.9	56.3	47	33.6	23.4	12.3	7.89	4.9	2.96	2.17	1.73	1.44
10	0.1	87.4	65.8	54.9	39.4	27.4	14.4	9.26	5.76	3.48	2.55	2.03	1.7
20	0.05	100	75.6	63.1	45.3	31.5	16.6	10.7	6.66	4.02	2.95	2.36	1.97
30	0.033	108	81.5	68.1	48.9	34	18	11.6	7.21	4.35	3.2	2.55	2.13
40	0.025	114	85.7	71.7	51.5	35.8	19	12.2	7.6	4.6	3.37	2.69	2.25
50	0.02	118	89.1	74.5	53.5	37.3	19.7	12.7	7.91	4.78	3.51	2.81	2.35
60	0.017	122	91.8	76.8	55.2	38.4	20.4	13.1	8.17	4.94	3.63	2.9	2.42
80	0.013	127	96.2	80.4	57.8	40.3	21.4	13.7	8.58	5.19	3.81	3.05	2.55
100	0.01	132	99.6	83.3	59.9	41.8	22.1	14.3	8.9	5.39	3.96	3.16	2.65
250	0.004	150	114	95.2	68.5	47.8	25.4	16.4	10.2	6.2	4.56	3.65	3.05

10% AEP (1 in 10 Yr)

Full Area Catchment - 380 Foreshore Road

Date 23-Aug-26

Calc's By Tess Allen Catchment Size 0.3996 Ha 3996 m2

Impervious Catchment Area (m^2)	783	m^2	
Main dwelling	221.6	m^2	
Porch area	22	m^2	
Car port	47	m^2	
Covered outdoor deck	44	m^2	
Boat shed gear storage and sleepout	108	m^2	
Tanks	0	m^2	Underground Trafficable tanks
Driveway hardstand sealed concrete	340		
Run-off coefficient	0.9		
Total effective	704.754		

Impervious Catchment Area (m^2)	3213	
Run-off coefficient	0.45	not included as remainder unchange
Total effective	1445.823	

Total effective C x A **704.75**

Storage Calculation **Design Storm=** **10** **yr. ARI**

Rainfall intensities (mm/hr) :: RCP8.5 for the period 2081-2100

Time (min)	Rainfall Intensity (mm/hr)	Runoff (L)	Runoff (L/min)	Runoff (L/sec)
10	117.00	13,743	1,374	22.9
20	88.00	20,673	1,034	17.2
30	73.50	25,900	863	14.4
60	52.70	37,141	619	10.3
120	36.30	51,165	426	7.1
360	18.50	78,228	217	3.6
720	11.50	97,256	135	2.3
1440	6.97	117,891	82	1.4
2880	4.11	139,034	48	0.8
4320	2.98	151,212	35	0.6

Rainfall intensities (mm/hr) :: RCP8.5 for the period 2081-2100

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	69.5	52.1	43.4	31	21.2	10.7	6.67	4.05	2.37	1.71	1.35	1.12
2	0.5	76.3	57.3	47.8	34.2	23.4	11.9	7.38	4.46	2.62	1.89	1.49	1.24
5	0.2	99.6	74.9	62.5	44.8	30.8	15.6	9.76	5.89	3.47	2.51	1.98	1.64
10	0.1	117	88	73.5	52.7	36.3	18.5	11.5	6.97	4.11	2.98	2.35	1.95
20	0.05	135	102	84.8	60.8	41.9	21.4	13.4	8.07	4.77	3.46	2.73	2.27
30	0.033	145	110	91.6	65.8	45.4	23.2	14.5	8.75	5.18	3.75	2.97	2.46
40	0.025	153	115	96.4	69.3	47.8	24.5	15.3	9.25	5.46	3.97	3.13	2.6
50	0.02	159	120	100	72.1	49.8	25.5	15.9	9.63	5.7	4.13	3.27	2.71
60	0.017	164	124	104	74.4	51.3	26.3	16.5	9.96	5.88	4.28	3.38	2.8
80	0.013	172	130	109	78.1	53.9	27.6	17.3	10.5	6.2	4.49	3.55	2.95
100	0.01	178	135	113	80.9	55.9	28.7	18	10.9	6.43	4.66	3.69	3.06
250	0.004	203	154	129	92.5	64	32.9	20.6	12.5	7.4	5.38	4.26	3.53

Attenuation and Orifice Calculations - 380 Foreshore Road

Calcs by: Tess Allen 10/08/2026

DESIGN INPUTS			
Design intensity i (10 yr, tc = 10 min)	117	*mm/hr*	HIRDS RCP8.5 2081–2100
1% AEP intensity i (100 yr, 10 min)	178	*mm/hr*	HIRDS – for overflow check
Tank internal diameter	3.675	*m*	
Tank capacity (total)	75,000	*L*	
Tank cross-sectional area (π/4·d²)	10.607	*m²*	
Discharge coefficient (Cd)	0.62	–	TP10 Ch.11 – sharp-edged orifice
Gravitational accel. (g)	9.81	*m/s²*	
Design head (H)	2.960	*m*	
Post development runoff	704.75		

Pre and post development flows

Pre-development peak Q10 = C·A·i / 3600 (including 8C	2.74	*L/s*	*FNDC factor include 80% 0f predevlopment rate*
Post-development peak Q10 = C·A·i / 3600	22.90	*L/s*	
Peak to attenuate	20.16	*L/s*	
Allowable roof release Q_allow = Q pre development pe	2.74	*L/s*	
Allowable release Q_allow	0.003	m3/s	

Orifice Sizing

Q = Cd × A × √(2gH) → A = Q ÷ (Cd × √(2gH))

Adopted controlled discharge rate:	2.74	*L/s*	

Step	Formula	Result	Unit
Calculate 2gH	*2 × g × H = 2 × 9.81 × H*	58.075	m²/s²
Calculate √(2gH)	*√(2gH)*	7.621	m/s
Orifice area (A)	*Q ÷ (Cd × √(2gH))*	0.000580	m²
Orifice diameter (d)	*√(4A ÷ π)*	0.0272	m
Diameter (mm)	*d × 1000*	27.2	mm
Diameter (mm) choosen	*d × 1000*	27.0	mm

→ Calculated diameter = 27.2 mm → ADOPT 27 mm diameter orifice

Check – release at adopted d & H	2.71	*L/s*	
Check	**OK ≤ allowable**		

Attenuation size (10 Year strom)

V in(L)	Outflow (L)	Vin-Vout
13742.70	1645.47	12097.23
20672.78	3290.94	17381.84
25899.71	4936.41	20963.30
37140.54	9872.82	27267.72
51165.14	19745.64	31419.50
78227.69	59236.92	18990.77
97256.05	118473.85	-21217.79
117891.25	236947.69	-119056.44
139033.87	473895.38	-334861.51
151212.02	710843.07	-559631.06

CRITICAL STORAGE VOLUME & ATTENUATION DEPTH (1 Attenuation Tank)			
Critical storage volume	*MAX of net storage col*	31,419	L
Critical storage volume	*vol / 1000*	31.419	m³
Detention depth required in tank	*storage / tank area*	2.962	m

Appendix G
Onsite Wastewater Design

Waterflow NZ Ltd – Onsite Wastewater Design Report and Producer Statement PS1 (Design), 1 September 2026.

Appendix F – Written Approvals

Far North District Council

NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Henri & Meredith Burkhardt; and Craig Pellet
Address of proposed activity:	380 Foreshore Road Ahipara
Legal description:	Lot 4 DP 210535
Description of the proposal (including why you need resource consent):	To construct new dwelling in RPZ and Coastal Environment breaching rules relating to setbacks, height in relation to boundary, visual amenity, stormwater management and earthworks.
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1. Site, floor and elevation plans 2. 3. 4. 5. 6.

Notes to Applicant:

1. Written approval must be obtained from all registered owners and occupiers.
2. The **original copy** of this signed form and **signed plans and accompanying documents** must be supplied to the Far North District Council.
3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

- PLEASE PRINT THIS PAGE

PART B – To be completed by Parties giving approval

Notes to the party giving written approval:

1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
2. You should only sign in the place provided on this form and accompanying plans and documents if you **fully understand** the proposal and if you **support** or have **no opposition** to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval **before** a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Full name/s of party giving approval:	~~Te Kohanga 27 Trust~~ Janine & Dean Williams
Address of affected property including legal description	~~400 Foreshore Road Ahipara~~ 366 Foreshore Road Ahipara
Contact Phone Number/s and email address	Daytime: 021433840 email: whangasurfshop@gmail.com

I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

*Please note: in most instances the approval of **all** the legal owners and the occupiers of the affected property will be necessary.*

1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.
2. I/We have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form).
3. I/We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Consent Authority may refuse to grant the application.
4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.

Signature		Date	3/11/2026
Signature		Date	3/11/2026
Signature		Date	
Signature		Date	

EARTHWORKS NOTES (12.3.6.1.2)

EARTHWORKS DEPTHS

Actual max cut height =	4.0m
Actual max fill height =	3.0m
Actual max cut & fill face height =	8.7m

EARTHWORKS VOLUMES

TOP SOIL EXCAVATED MATERIAL
1215m² x 0.1 = **122m³**

GOOD GROUND CUT = **270m³**

GOOD GROUND FILL = **1305m³**

TOTAL = **1697m³**

BREACHES (Min. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

KEY

CUT

FILL

EARTHWORKS NOTES (12.3.6.1.2)

Max volume	300m³
Max Cut or Fill face Height	1.5m
Max Cut and Fill face Height	3.0m

EARTHWORKS AREAS

Main Dwelling =	**1215m²**
Shed Accomodation =	**355m²**
TOTAL =	**1570m²**

EARTHWORKS VOLUMES

Main Dwelling =	**1697m³**
Shed Accomodation =	**336m³**
TOTAL =	**2033m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

Restricted Discretionary Activity 12.3.6.2.1
2000m³ Max permitted
1.5m max height

EARTHWORKS NOTES SHED/ACCOM. (12.3.6.1.2)

EARTHWORKS DEPTHS

Actual max cut height =	1.2m
Actual max fill height =	0.6m
Actual max cut & fill face height =	3.0m
Actual max cut or fill face height =	2.2m

EARTHWORKS VOLUMES

TOP SOIL EXCAVATED MATERIAL
305m² x 0.1 = **30m³**

GOOD GROUND CUT
185m² X 1.1 x 0.5 = 102m³

GOOD GROUND FILL
170m² X 0.7 x 0.5= 60m³

WATERTANK CUT
46m² X 3.0 = 138m³

TOTAL = **336m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks)
REQUIRED

KEY

CUT

FILL

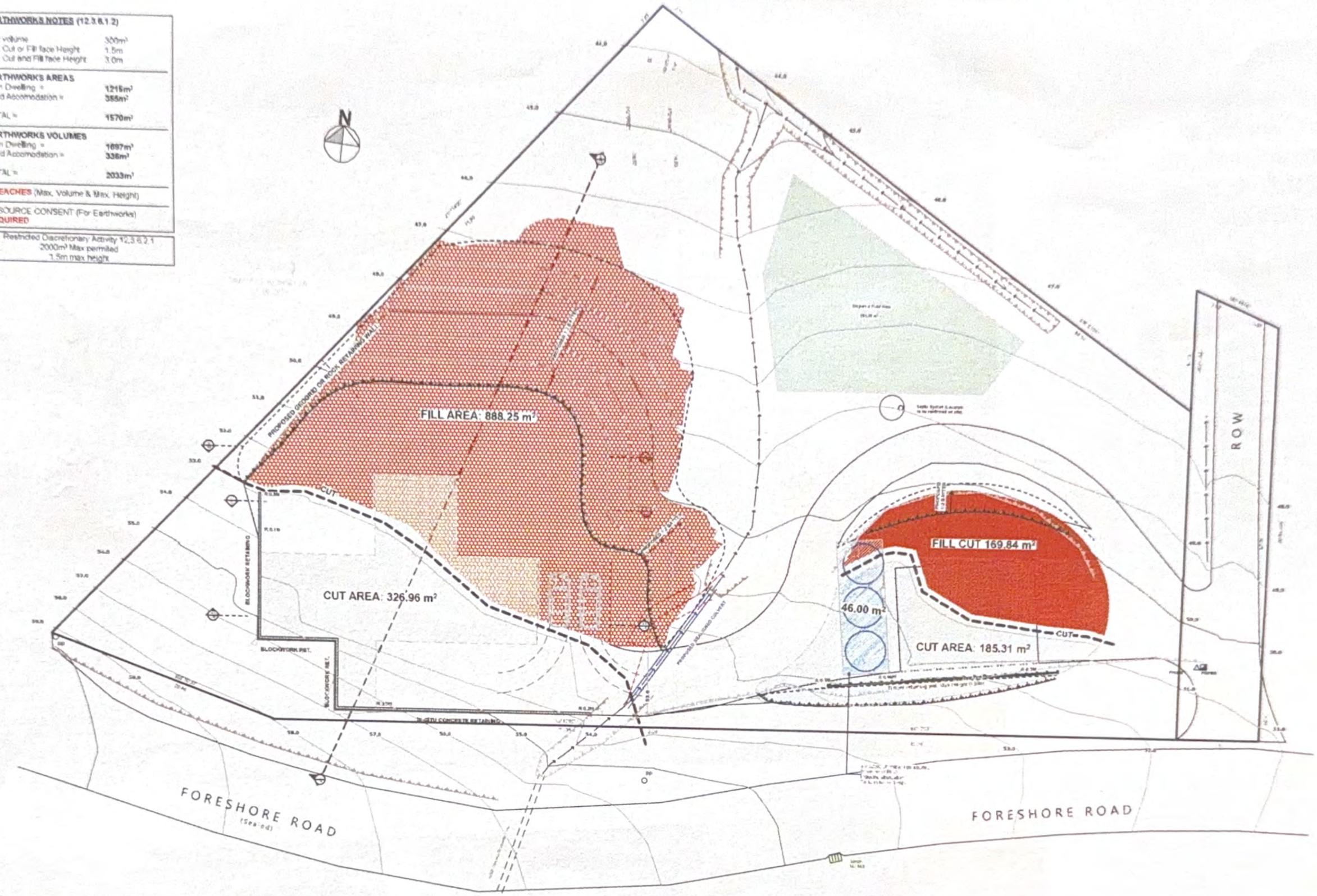
EARTHWORKS

Suitable excavated material to be reused on site (where possible)

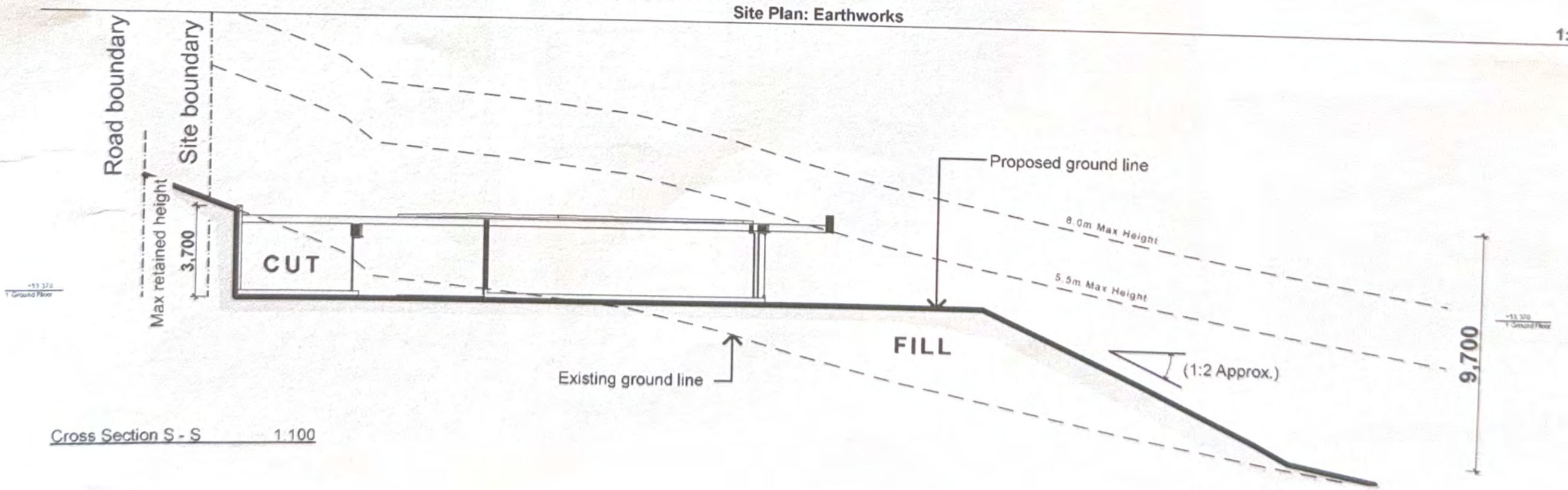
All building debris and excavated spoil which is surplus to requirements should be removed from the site.

Prior to any filling being placed it will be necessary to undercut all topsoil and existing fill down to competent in-situ/or natural ground and slopes will need to be benched.

The Engineer should be given every opportunity to inspect all materials prior to placement and also to ensure adequate compaction is being achieved throughout the works.



Site Plan: Earthworks 1:200



Cross Section S - S 1:100

ltd

Bunkhardt
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site Earthworks

04 | 12



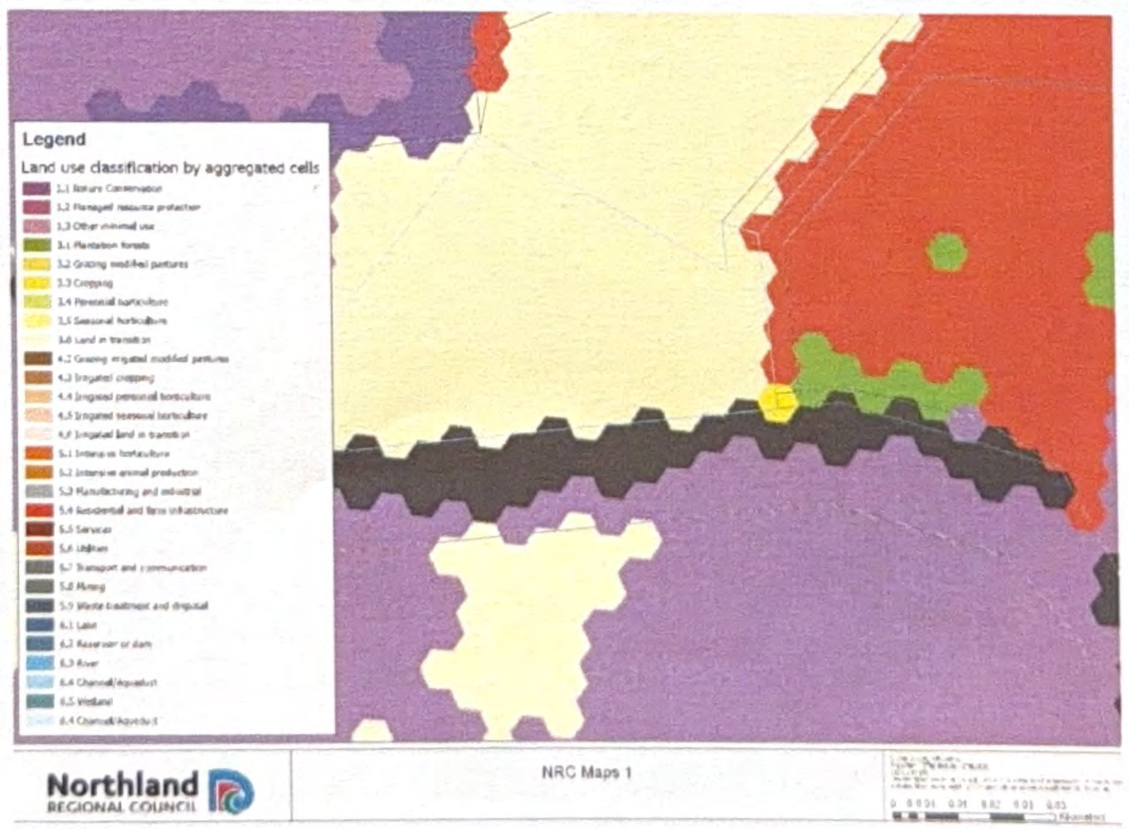
Proposed Dwellings for Burkhardt at 380 Foreshore Rd Lot 4 DP 210535 Ahipara

Job Number 26741-N

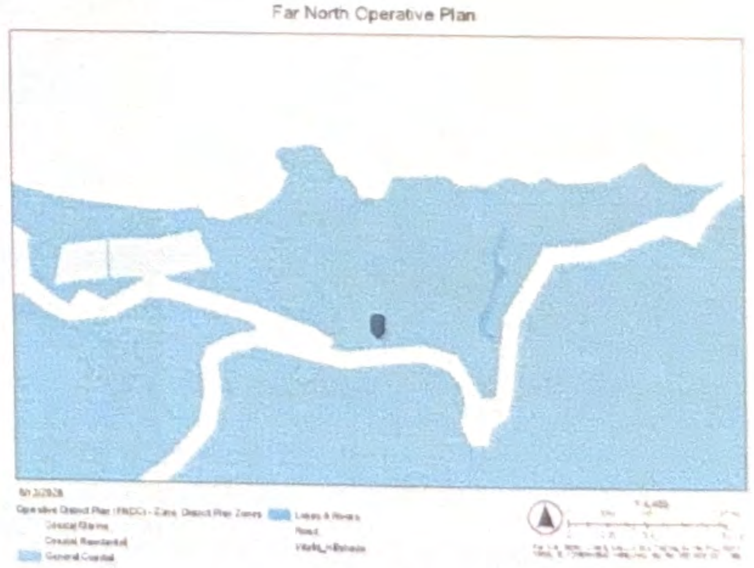
Sheet Index RC	
Layout ID	Layout Name
01	Cover Sheet
02	Visual Images
03	Visual Images
04	Site Earthworks
05	Existing Site Plan
06	Site Plan
07	Site: Unitary Plan Check
08	Ground Floor Plan
09	Roof Plan
10	Elevations
11	Elevations
12	Shed/Sleepout Elevations



Aerial Map - Auckland Council GeoMaps



NRC Plan Map



FAR NORTH OPERATIVEN MAP

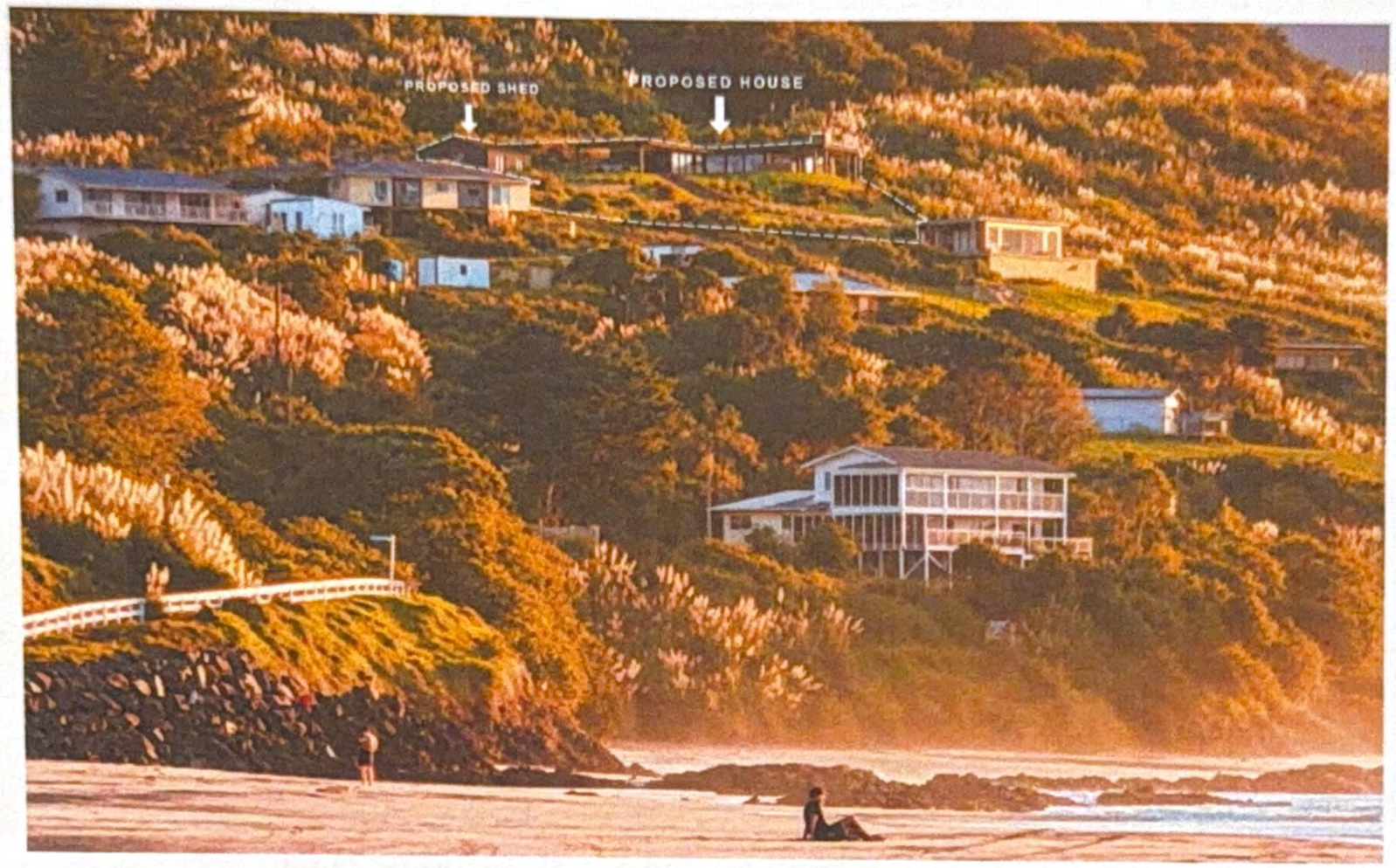
Ltd

Burkhardt

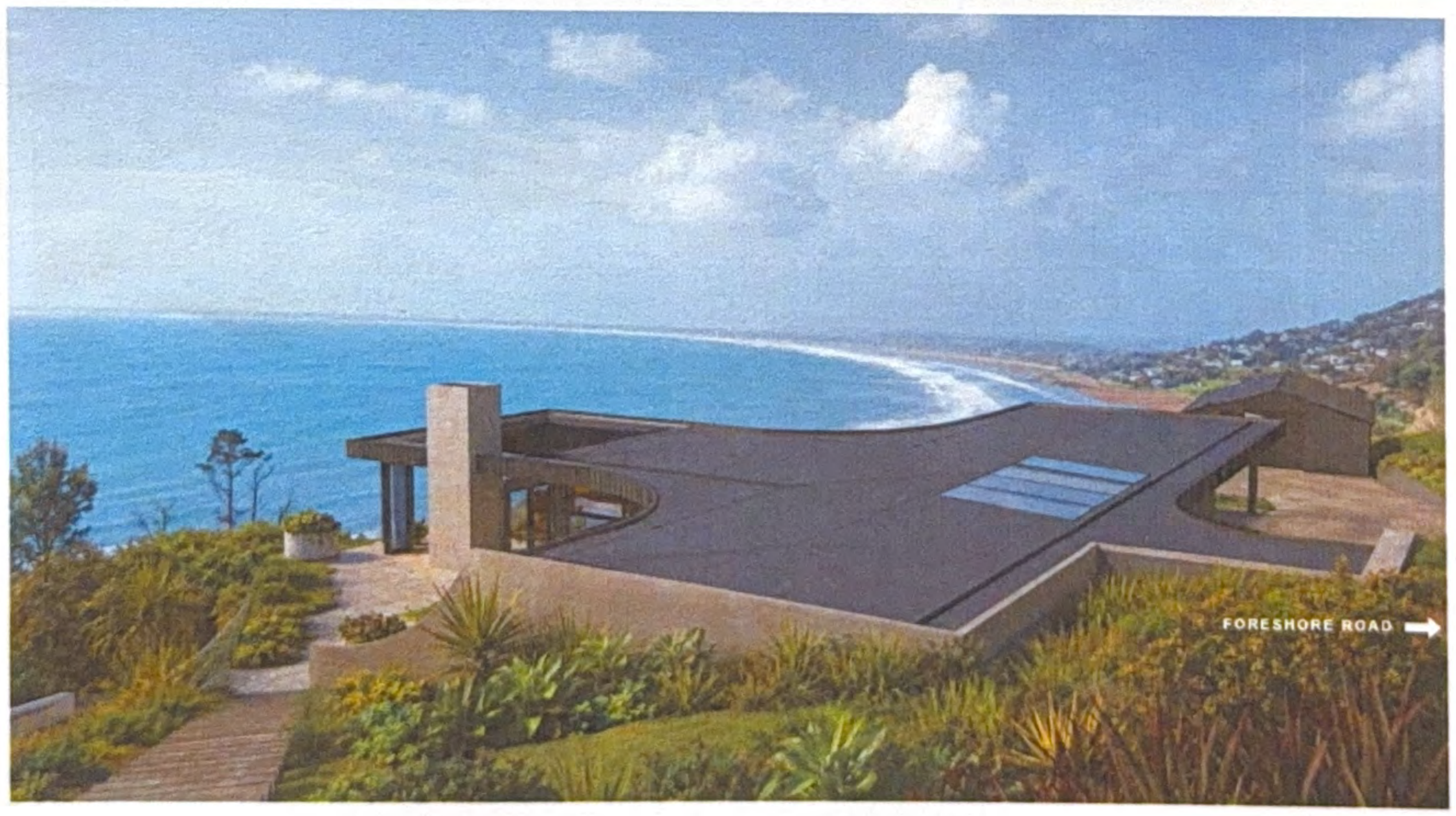
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Cover Sheet

01 12



VIEW OF PROPOSED DEVELOPMENT & PROPERTY FROM AHIPARA BEACH



VIEW OVER DEVELOPMENT FROM PROPERTY BOUNDARY ALONG FORESHORE ROAD

ltd

Bukhardt

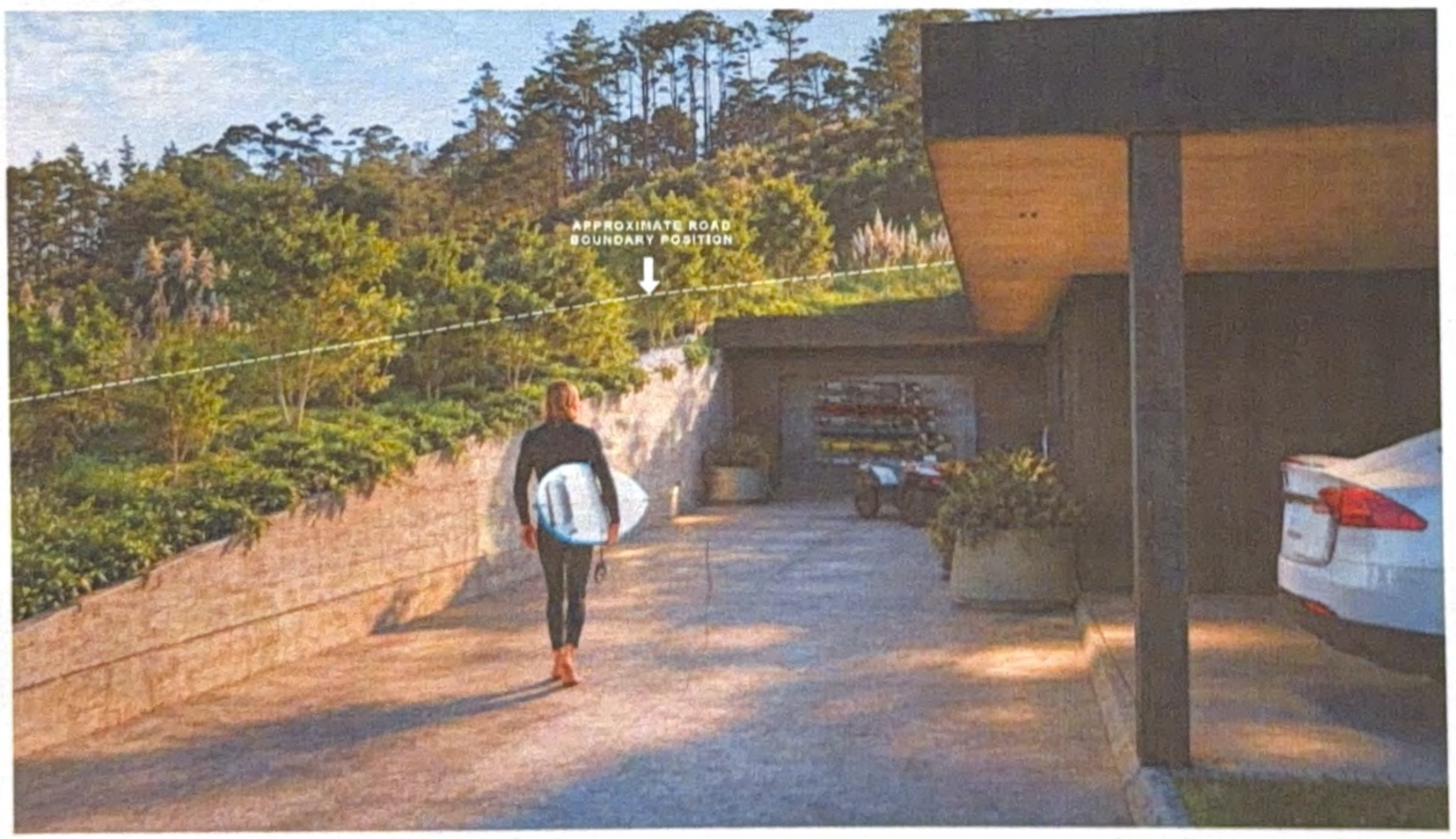
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

02 | 12



VIEW TO OUTDOOR LIVING AREAS FROM NORTH



VIEW OF SERVICE AREA BELOW FORESHORE ROAD BOUNDARY

ltd

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

03

TE AWAPATIKI BLOCK

LOT 3
DP 210535

LOT 2 DP 411685
LOT 1 DP 411685
AHIPARA 73B2B2A BLK

PART TE KOHANGA
27 BLOCK

SUBJECT TO AN ELECTRICITY
RIGHT CREATED BY C210969.1

RIGHT OF WAY CREATED BY 5301250.5 &
RIGHT (IN GROSS) TO SUPPLY ELECTRICITY
CREATED BY 5301250.6 &
RIGHT (IN GROSS) TO CONVEY
TELECOMMUNICATIONS CREATED BY 5301250.7

LOT 4
DP 210535

AHIPARA
73B2B2C BLOCK

IL: 51.57

CIVILBOSS
375mmØ
IL: 52.31

IL: 55.26

CONCRETE
375mmØ

SWCP
LL: 54.5

IL: 56.39

FORESHORE ROAD
SEALED FORMATION, 20.12m WIDE

Burkhardt
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Existing Site Plan

05 | 12

LEGAL DESCRIPTION
LOT 4
DP 210535
AREA 3996m²

District Plan Zone: General Coastal
Wind Zone: Very High B/ANZ
Exposure Zone: D

GENERAL SITE NOTES

Contour interval is 1.0m levels are in terms of Local Datum

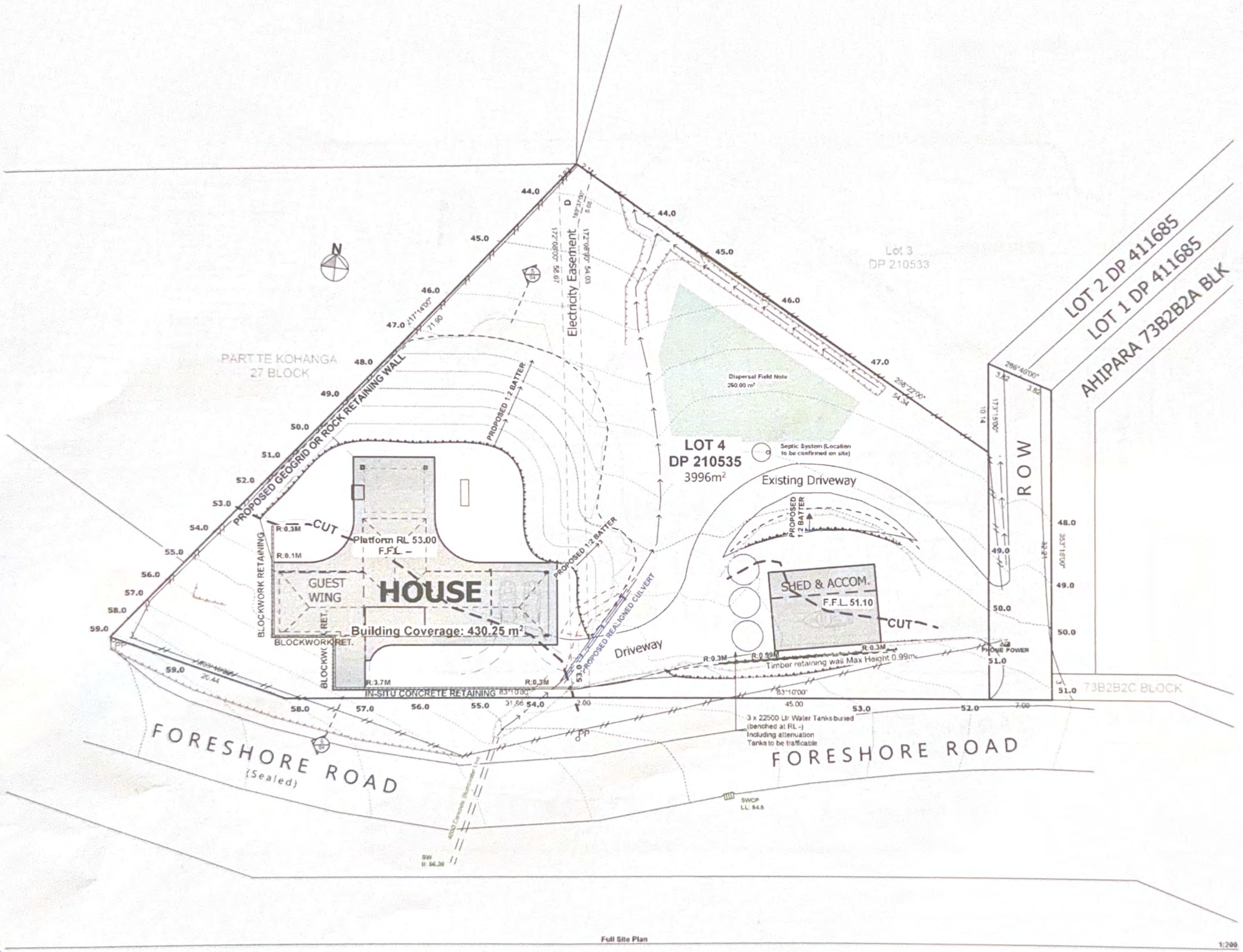
Levels are in terms of New Zealand Vertical Datum 2016

Building platform level may vary to make best use of the cut and fill

Building Platform Legend
Platform RL = Underslab / Platform Level / Base of imported Metal
FFL = Finish Slab/Structure Level

All stormwater and sewer drainage to be beyond minimum 1m away from house

Location of house to be confirmed by client on site with site supervisor prior to building setout



Full Site Plan 1:200

ltd

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site Plan

Date:	15/04/2026
Scale @ A3:	1:200
Scale @ A2:	Refer to A3 scale
Job No:	3674-01
Drawn by:	KNJ

NOTES:

RESOURCE CONSENT

06 | 12

Rural Production Zone

HEIGHT IN RELATION TO BOUNDARY
Northern Boundary - 2.0m plus 35°
Eastern & Western Boundary - 2.7m plus 45°
Southern Boundary - 2.0m plus 35°
BREACHES (Eastern boundary only)

YARD SETBACKS (Site less than 5,000m²)
Site Yards 10m **BREACHES**

BUILDING COVERAGE
3996 x 15% = 599.4m² max
Actual Impermeable Surfaces
Proposed House Area 430.25m²
Proposed Shed Roof Area 108.00m²
TOTAL AREA 538.25m²
13.47%
COMPLIES

IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max
Actual Impermeable Surfaces
Proposed House Roof Area 431.85m²
Proposed Shed Roof Area 115.90m²
Metal Drive 597.11m²
TOTAL AREA 1144.86m²
76.65%
BREACHES

Coastal Environments

MAXIMUM BUILDING HEIGHT
6.5m max.
BREACHES

COLOUR SCHEME/MATERIALS
Refer to coloured elevations
COMPLIES

General Coastal
Chapter 10

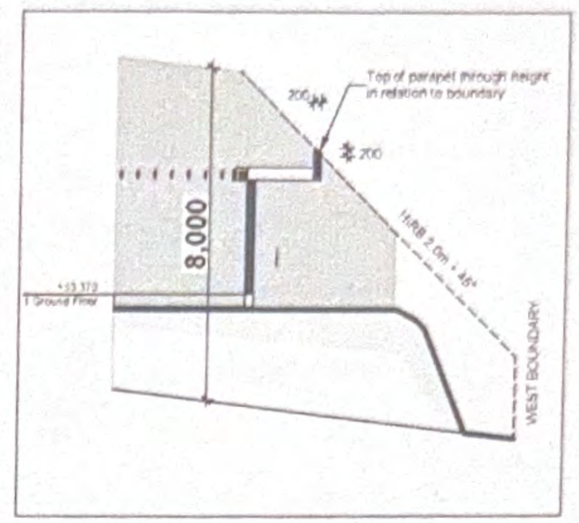
MAXIMUM BUILDING HEIGHT (10.6.5.1.4)
8m max.
COMPLIES

HEIGHT IN RELATION TO BOUNDARY
(10.6.5.1.5)
2.0m plus 45 degrees
BREACHES (Eastern boundary only)

YARD SETBACKS (10.6.5.1.7)
Site Yards 3m **BREACHES**

IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max (Permitted activity 10.6.5.1.6)
3996 x 15% = 599.4m² max (Controlled activity 10.6.5.2.3)
Actual Impermeable Surfaces
Proposed House Roof Area 431.85m²
Proposed Shed Roof Area 115.90m²
Metal Drive 597.11m²
TOTAL AREA 1144.86m²
28.65%
BREACHES

RESOURCE CONSENT
REQUIRED
10.6.5.1.1 Visual amenity
10.6.5.1.2 One unit per 20ha of land
10.6.5.1.3 Height in relation to boundary
10.6.5.4.1 DA one unit per 4ha of land
Yard setback
Impermeable area



B1 Section B1-B1 1:100

N

B1 / 07

Western boundary 2m + 45°

217°14'00"

71.90

PROPOSED GEOGRID OR ROCK RETAINING WALL

Electricity Easement

172°08'00" 54.08

172°08'00" 54.67

3m Yard

10m Yard

PROPOSED 1:2 BATTER

298°22'00"

54.34

LOT 4
DP 210535
3996m²

Existing Driveway

Impermeable paving
62.12 m²

Impermeable Paving
75.47 m²

6.902

Platform RL 53.00
F.F.L. –

GUEST WING

HOUSE

Roof Coverage: 431.85 m²
Building Coverage: 430.25 m²

PROPOSED 1:2 BATTER

PROPOSED REALIGNED CULVERT

10m Yard

Driveway area
(outside roof)
597.11 m²

Driveway

3m Yard

SHED & ACCOM.
F.F.L. 51.10

Roof Coverage: 115.90 m²
Building Coverage: 108.00 m²

3m Yard

6.000

6.385

5.399

103°10'30"
20.44

1.000

1.000

83°10'00"
31.60

2.00

83°10'00"
45.00

7.00

3 x 22500 Ltr Water Tanks buried
(benched at RL –)
Including attenuation
Tanks to be trafficable

FORESHORE ROAD
(Sealed)

FORESHORE ROAD

SWCP
LL: 54.5

450Ø Concrete Stormwater Line

SW
IL: 56.39

LOT 2 DP 411685
LOT 1 DP 411685
AHIPARA 73B2B2A BLK

286°46'00"

3.82

3.82

10.14

173°15'00"

R O W

363°16'00"

26.24

3.00

73B2B2C BLOCK

Town Planning Plan

1:200

ltd

T: 09 424 0966
E: info@ldarch.co.nz
W: www.ldarch.co.nz
A: 18 Poseley Rise, Silverdale 0944
NORTH AUCKLAND

Bunkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Site, Unitary Plan Check

Date	15/10/2020
Scale at A1	1:200, 1:100
Scale at A3	half of A1 scale
Job No.	2574-N
Drawing No.	A00

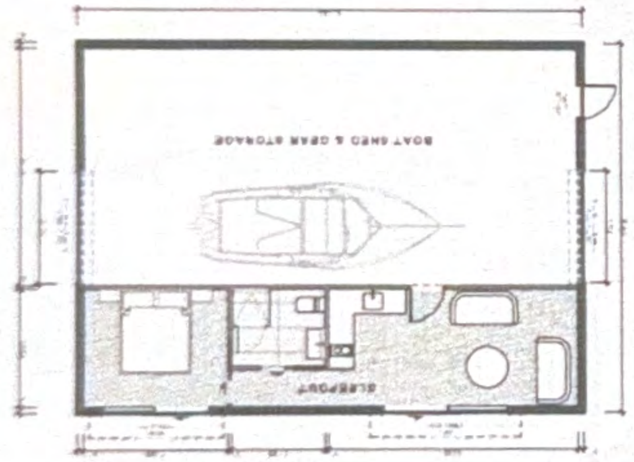
Notes:

RESOURCE CONSENT

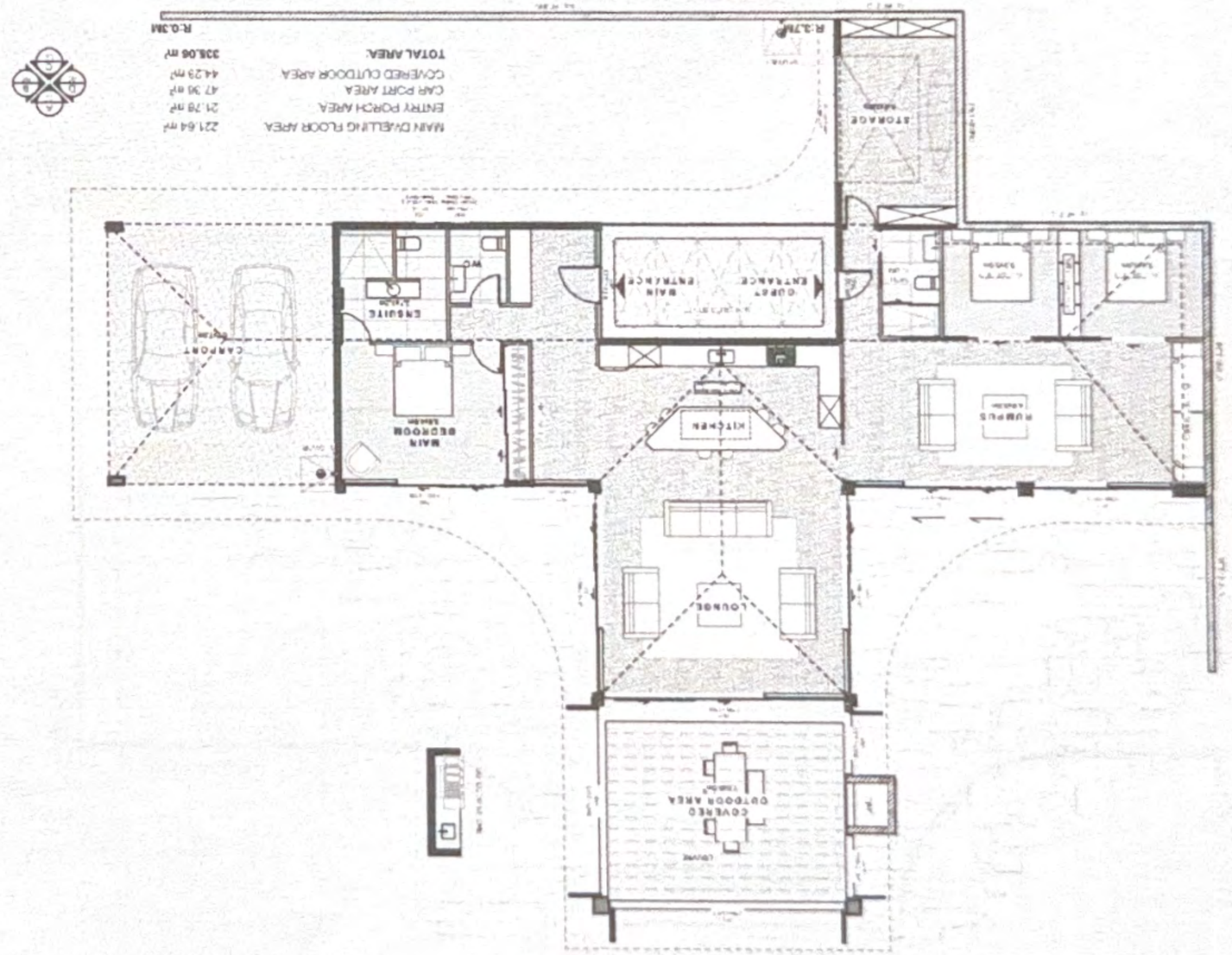
07 | 12

Ground Floor Plan

1:100



Sleepout 27.08 m²
Total Floor Area 138.00 m²



MAIN DWELLING FLOOR AREA:	221.64 m²
ENTRY PORCH AREA:	21.78 m²
CAR PORT AREA	47.36 m²
COVERED OUTDOOR AREA	44.23 m²
TOTAL AREA:	335.06 m²

R.0.3M

R.3.7M

Client	Sunblandt
Site	380 Fitzstone Rd, Lot 4 DP 213535 Alpyara
Drawing	Ground Floor Plans
Date	17/02/2023
Scale @ A3	1:100
Scale @ A1	1:50
Job No	2214AL
Drawing No	A01

NOTES:
- Dimensions are in millimetres unless noted otherwise.
- Do not scale drawings.
- Refer to Specifications for all construction details.
- All dimensions to be verified on site before commencement of any work.

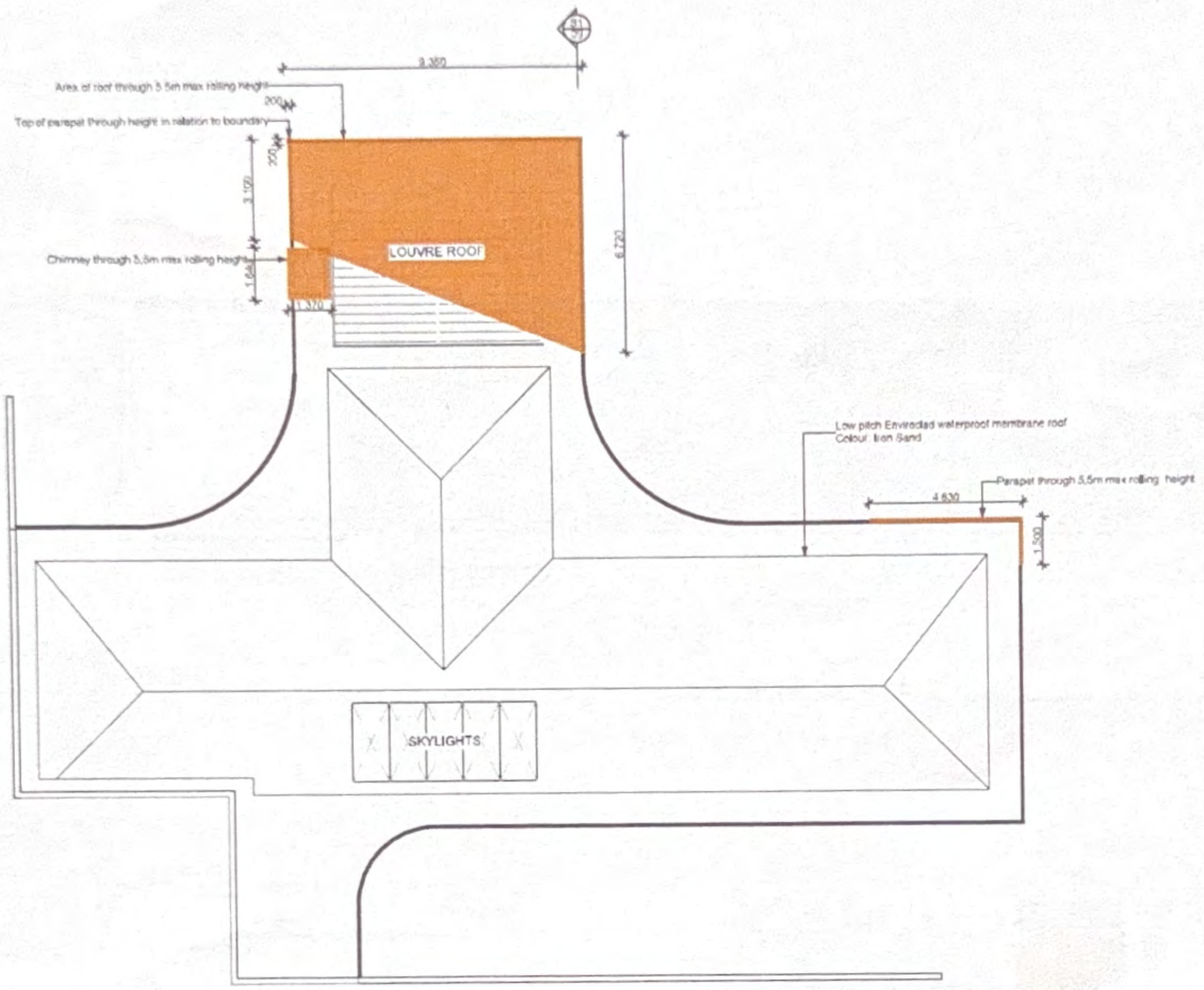
ALTERATIONS / ISSUED

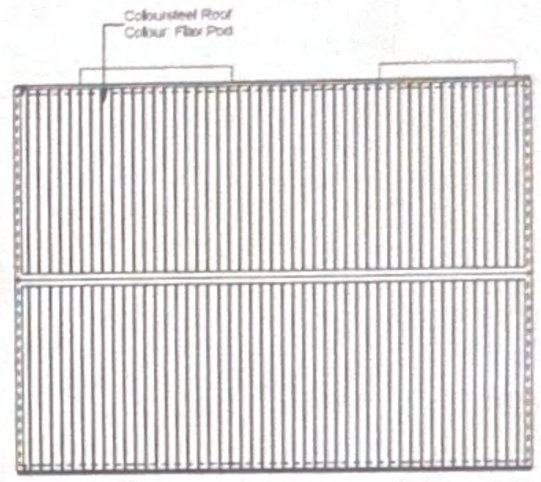
No.	Date
00	12

ltd

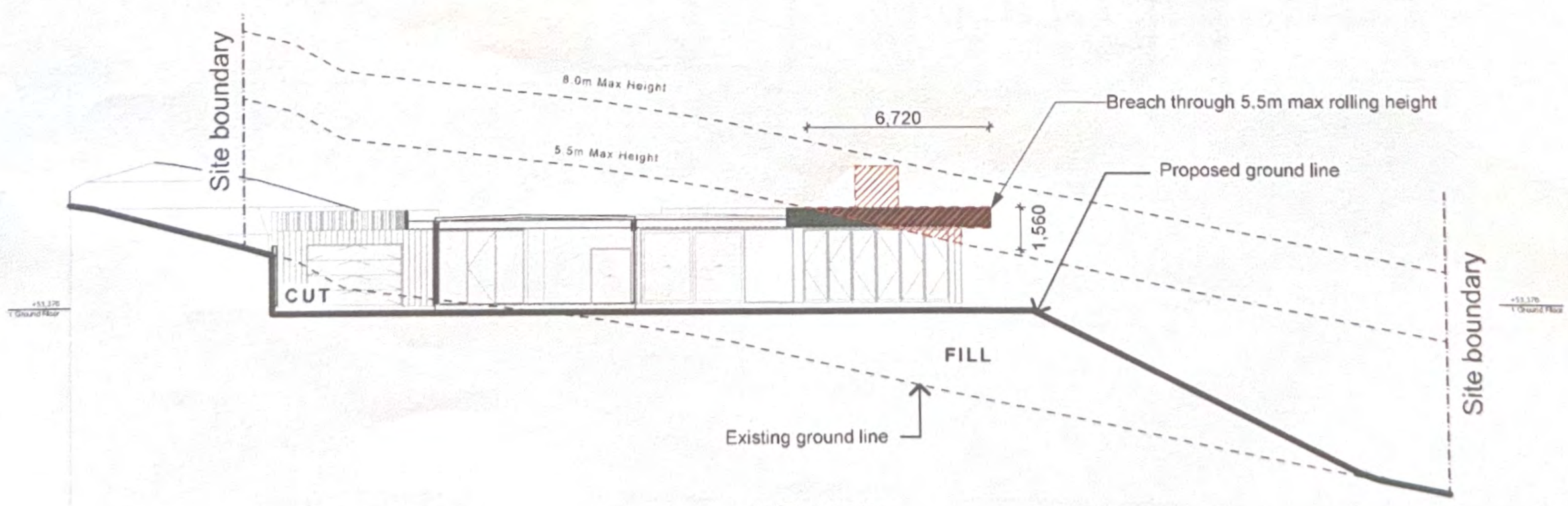
E: info@ltdarch.co.nz
W: www.ltdarch.co.nz
A: 12A Phoenix Place, Grosvenor Close
AUCKLAND

AP NZ





Roof Plan 1:100



S1 Section S1-S1 1:100

ltd

Burkhardt

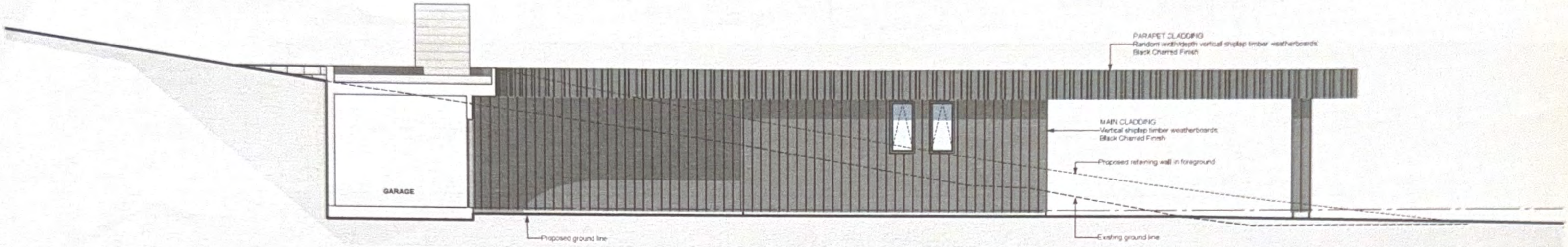
380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Roof Plan

09 12

COLOURS : LRV less than 30%

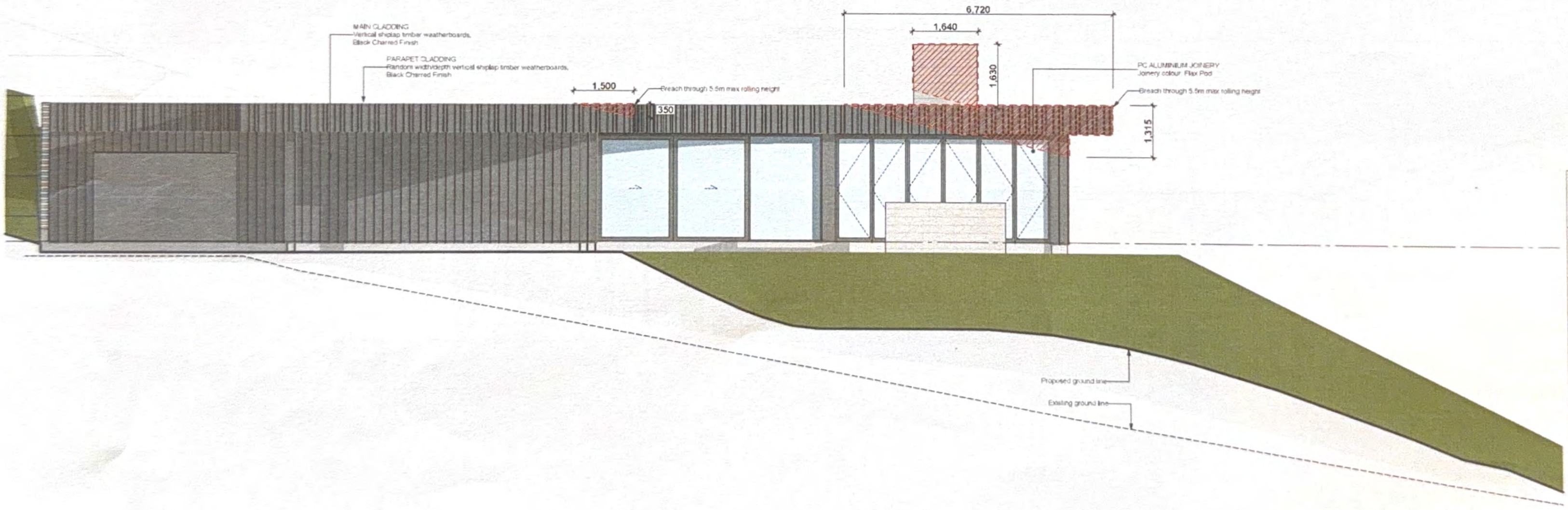
Parapet Walls - Vertical random width/depth timber weatherboards - Charred/Burnt finish
Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish
In-situ Concrete retaining walls & chimney - Natural Concrete
Corrugated roof, walls, downpipes and gutters - Colorsteel Flax/Pod
Window and door joinery - PC aluminium joinery - Flax/Pod
Waterproof Membrane Roof- Envirodek - Iron Sand (PVC_P_V)



C

South Elevation

1:50



B

East Elevation

1:50

ltd

Bunkhardt

380 Forensore Rd
Lot 4 DP 210535
Ahipara

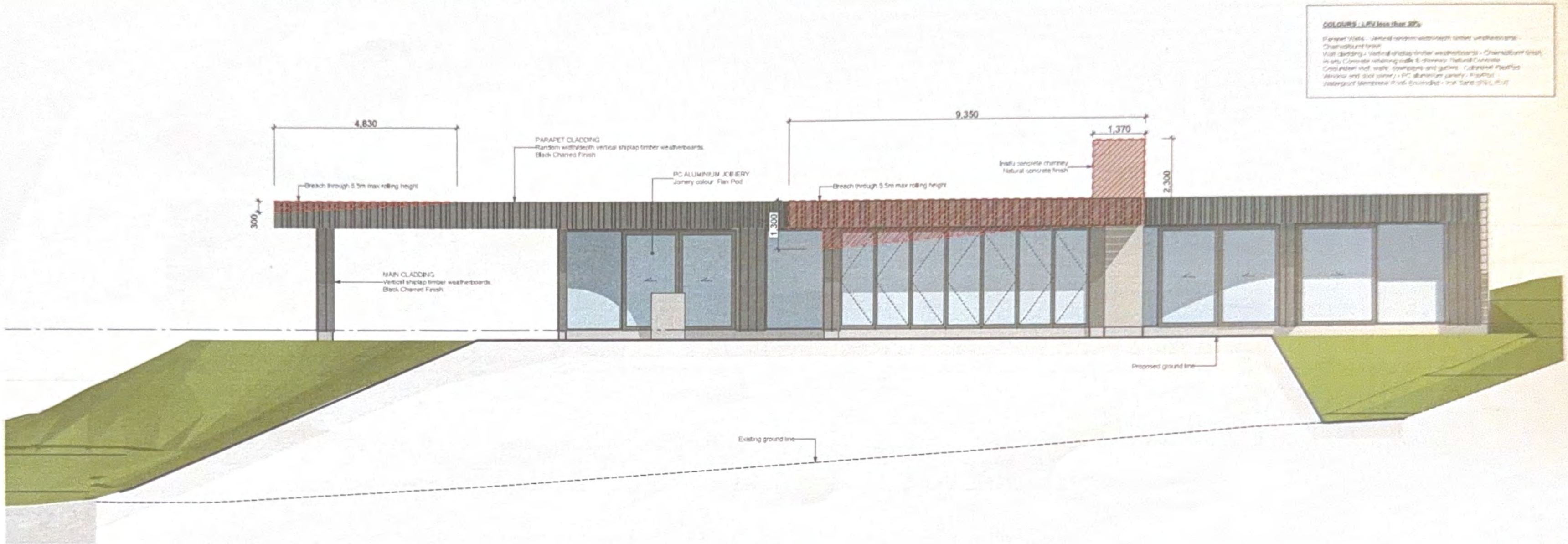
Elevations

Date	15/10/2020
Scale @ A3	1:50
Scale @ A1	Half of A1 scale
Job No.	2021-14
Drawn by	AM

NOTES:

RESOURCE CONSENT

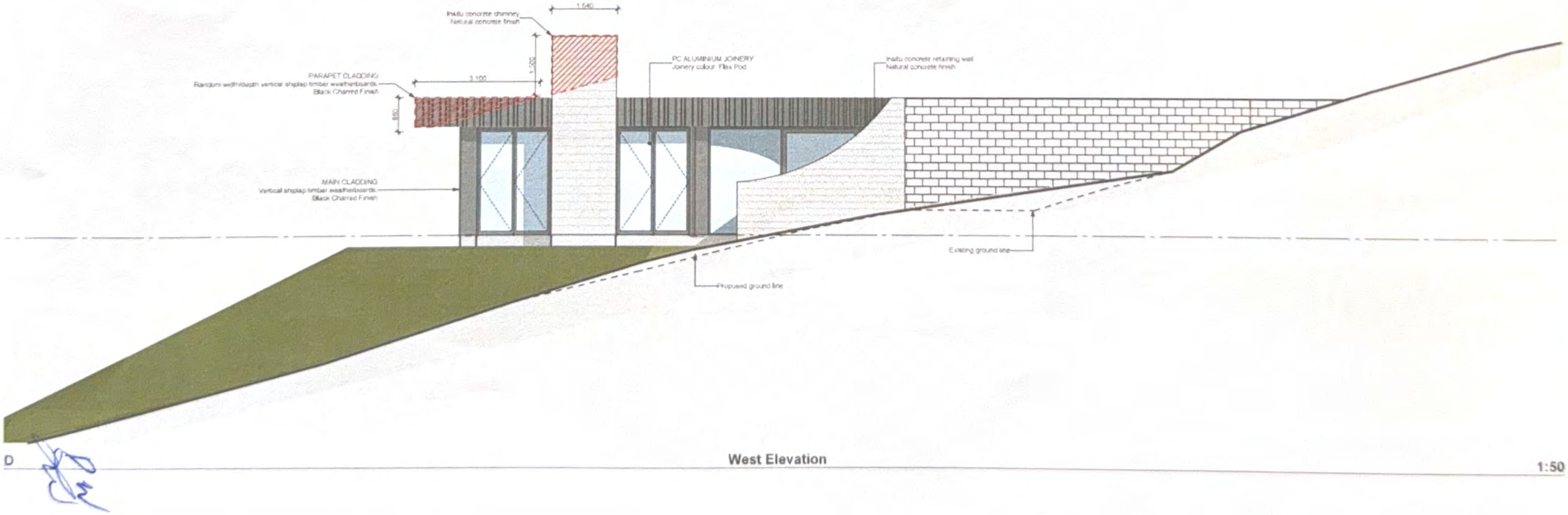
Sheet No.	Revision No.
10	12



A

North Elevation

1:50



D

West Elevation

1:50

ltd

Bundhardt

380 Foresmore Rd
Lot 4 DP 310535
Ahipara

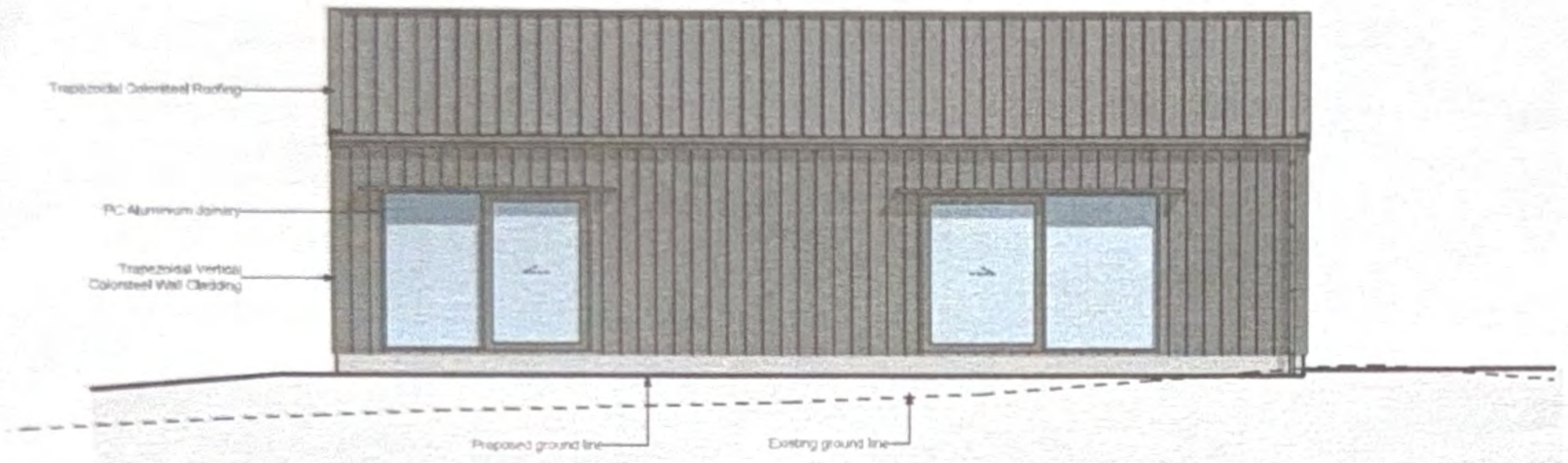
Elevations

RESOURCE CONSENT

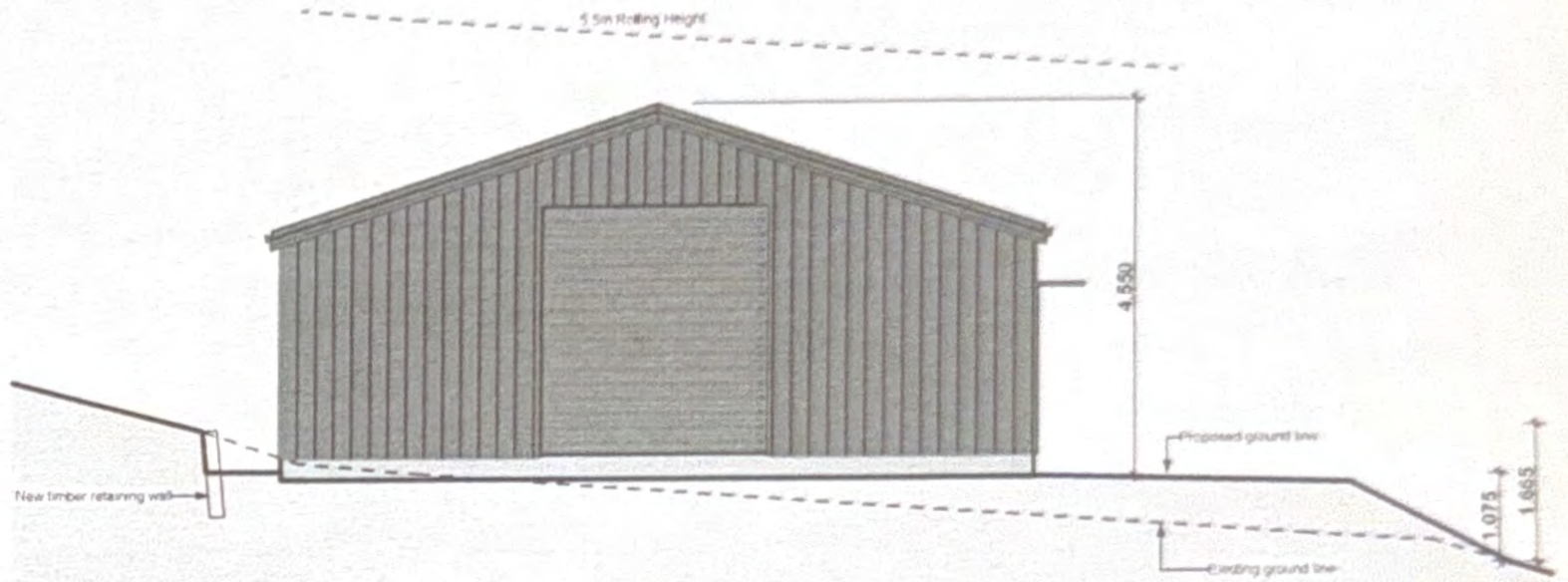
11 | 12

COLOURS - LRV less than 37%

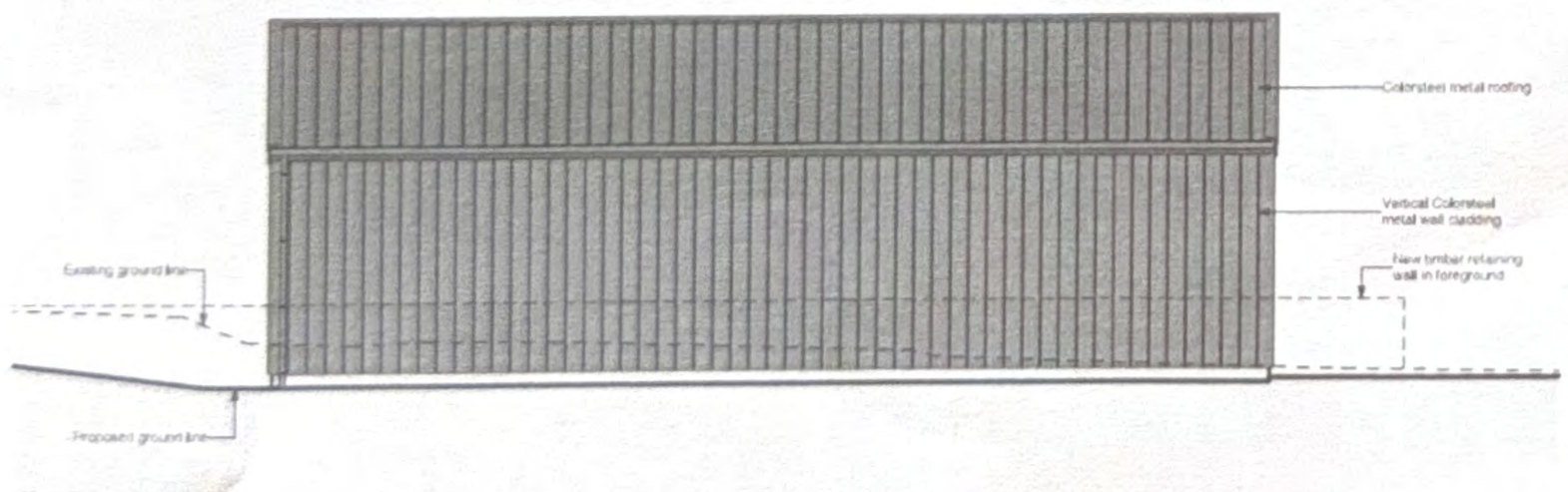
Pergola Walls - Vertical cedar with kwila timber weatherboards - Chemfinish matt finish
Wall cladding - Vertical shiplap timber weatherboards - Chemfinish matt finish
Inlaid Concrete retaining walls & chimney: Natural Concrete
Colorsteel roof, walls, downpipes and gutters - Colorsteel Flaxpod
Window and door joinery - PC aluminium joinery - Flaxpod
Waterproof Membrane Roofs Enviroblak - Iron Sand (PA LRV 9)



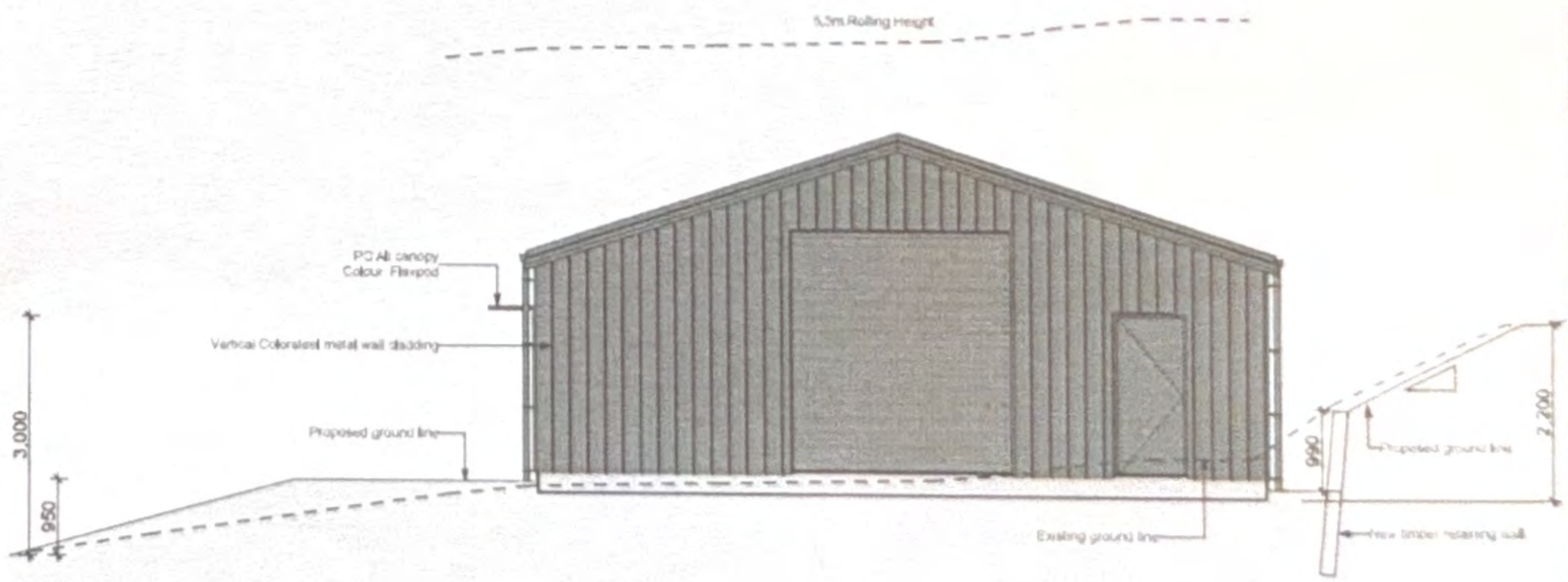
A1 **North Elevation** 1:50



East Elevation 1:50



South Elevation 1:50



West Elevation 1:50

ltd

Burkhardt

360 Kaiaua Rd
Lot 4 DP 210535
Ahipara

Shed, Sleepout Elevations

12 | 12

Far North District Council

NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Henri & Meredith Burkhardt; and Craig Pellet
Address of proposed activity:	380 Foreshore Road Ahipara
Legal description:	Lot 4 DP 210535
Description of the proposal (including why you need resource consent):	To construct new dwelling in RPZ and Coastal Environment breaching rules relating to setbacks, height in relation to boundary, visual amenity, stormwater management and earthworks.
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1. Site, floor and elevation plans 2. 3. 4. 5. 6.

Notes to Applicant:

1. Written approval must be obtained from all registered owners and occupiers.
2. The **original copy** of this signed form and **signed plans and accompanying documents** must be supplied to the Far North District Council.
3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PART B – To be completed by Parties giving approval

Notes to the party giving written approval:

1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
2. You should only sign in the place provided on this form and accompanying plans and documents if you **fully understand** the proposal and if you **support** or have **no opposition** to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval **before** a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Full name/s of party giving approval:	Te Kohanga 27 Trust
Address of affected property including legal description	400 Foreshore Road Ahipara
Contact Phone Number/s and email address	Daytime: 021848653 email: maui.2@icloud.com

~~I am/~~we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

*Please note: in most instances the approval of **all** the legal owners and the occupiers of the affected property will be necessary.*

1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.
2. I/We have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form).
3. I/We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Consent Authority may refuse to grant the application.
4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.

Signature	Chairperson,	Date	02 November 26
Signature	Hare Patau Hoffepa Tepania,	Date	
Signature		Date	
Signature		Date	



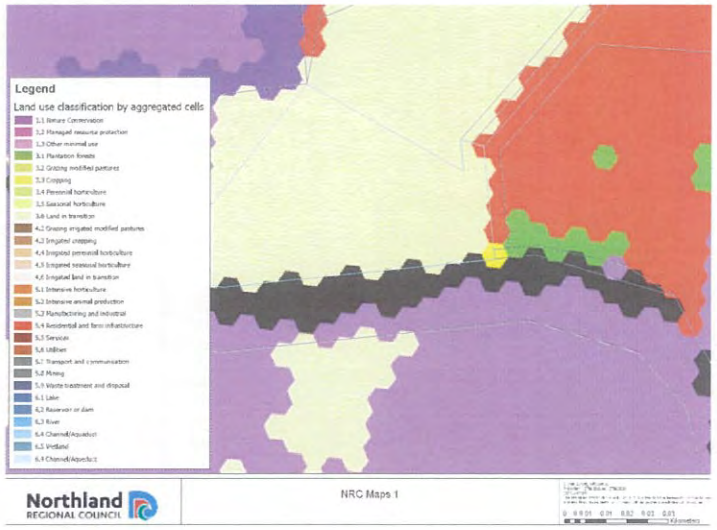
Proposed Dwellings for Burkhardt at 380 Foreshore Rd Lot 4 DP 210535 Ahipara

Job Number 26741-N

Sheet Index RC	
Layout ID	Layout Name
01	Cover Sheet
02	Visual Images
03	Visual Images
04	Site Earthworks
05	Existing Site Plan
06	Site Plan
07	Site: Unitary Plan Check
08	Ground Floor Plan
09	Roof Plan
10	Elevations
11	Elevations
12	Shed/Sleepout Elevations



Aerial Map - Auckland Council GeoMaps



NRC Plan Map



FAR NORTH OPERATIVEN MAP

Ltd

T 09 424 0066
E info@3darch.co.nz
W www.3darch.co.nz
A 18 Polarity Rise, Silverdale 0944
AUCKLAND

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

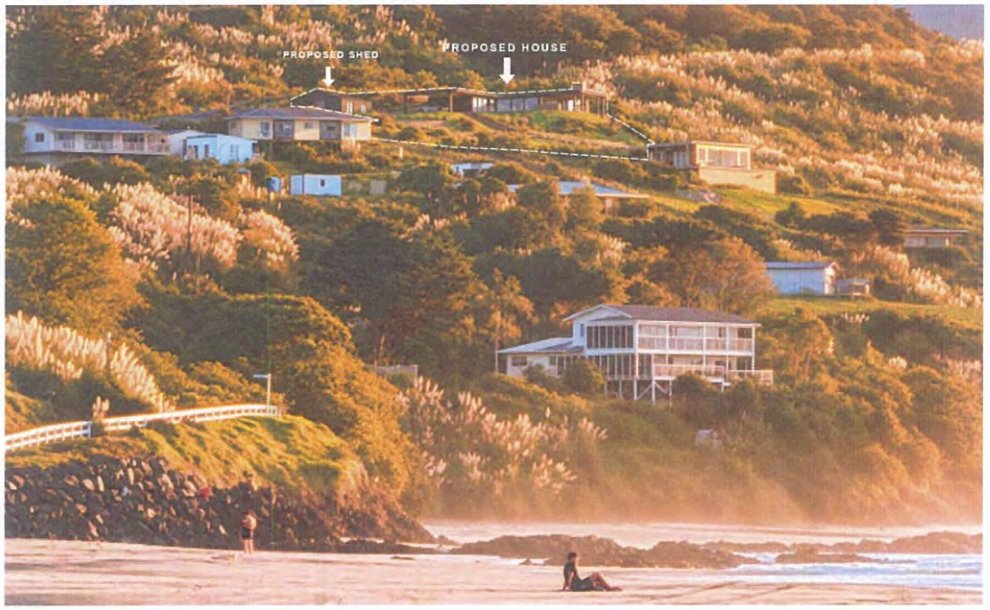
Cover Sheet

Date 15/10/2020
Scale at A1
Scale at A3 half of A1 scale
Job No 26741-N
Drawn by AM

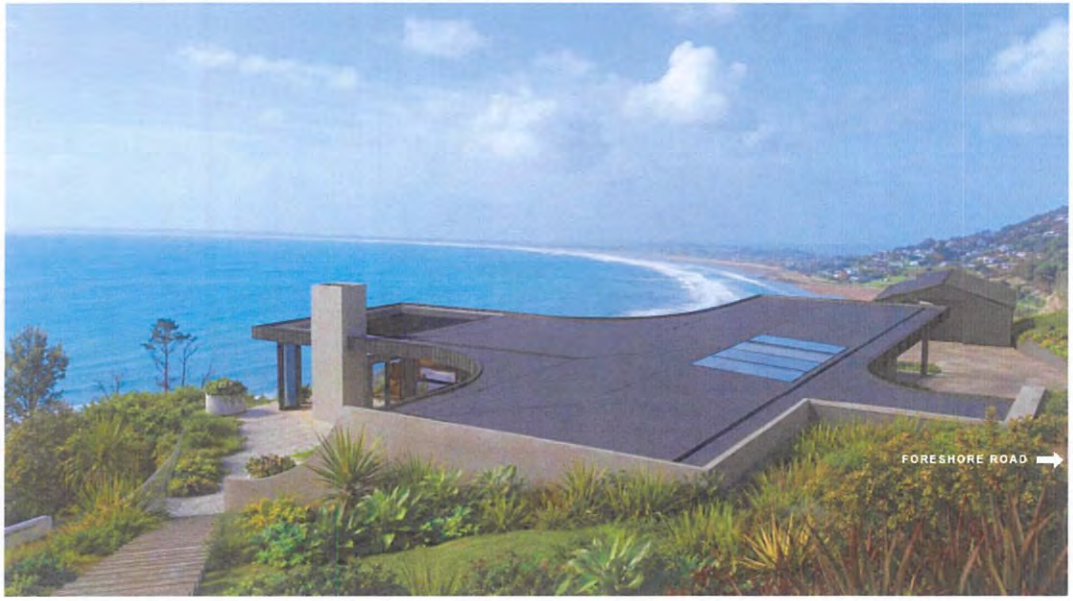
NOTES:

RESOURCE CONSENT

01 | 12



VIEW OF PROPOSED DEVELOPMENT & PROPERTY FROM AHIPARA BEACH



VIEW OVER DEVELOPMENT FROM PROPERTY BOUNDARY ALONG FORESHORE ROAD

ltd

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

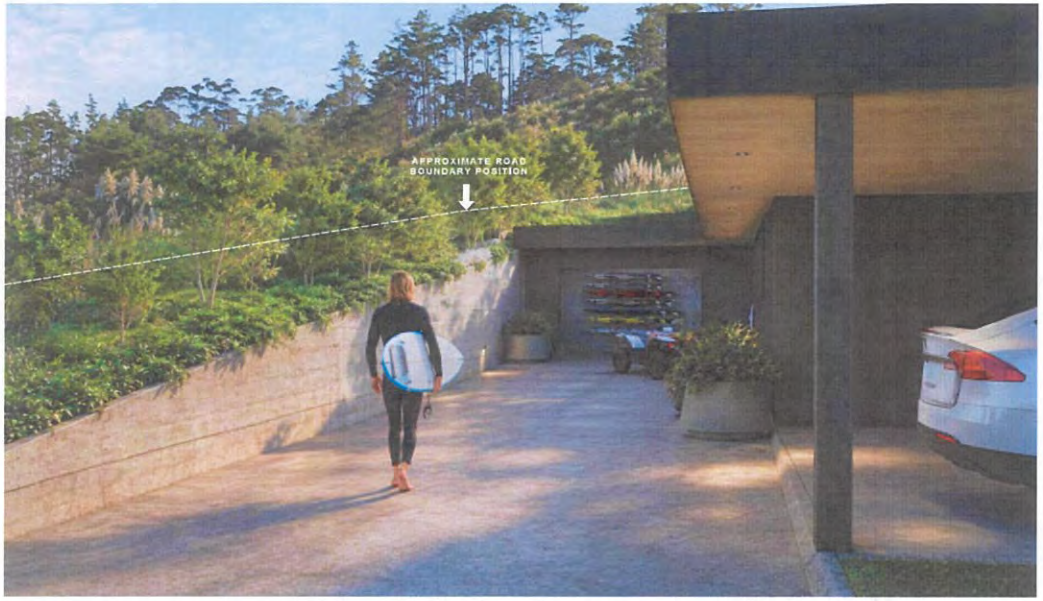
Date	15/02/2018
Scale at A1	
Scale at A3	half of A1 scale
Job No	2674-N
Drawn by	AM

RESOURCE CONSENT

02 | 12



VIEW TO OUTDOOR LIVING AREAS FROM NORTH



VIEW OF SERVICE AREA BELOW FORESHORE ROAD BOUNDARY

ltd
T 09 424 3066
E info@ltdarch.co.nz
W www.ltdarch.co.nz
A 1B Polarity Rise, Silverdale 0944
AUCKLAND

Burkhardt

360 Foreshore Rd
Lot 4 DP 210535
Ahipara

Visual Images

Date	11/10/2020
Scale at A1	
Scale at A3	Half of A1 scale
Job No.	2674-N
Drawn by	AM

NOTES:

RESOURCE CONSENT

03 | 12

EARTHWORKS NOTES (12.3.6.1.2)

EARTHWORKS DEPTHS
Actual max cut height = 4.0m
Actual max fill height = 3.0m
Actual max cut & fill face height = 9.7m

EARTHWORKS VOLUMES
TOP SOIL EXCAVATED MATERIAL
1215m² x 0.1 = **122m³**

GOOD GROUND CUT = **270m³**

GOOD GROUND FILL = **1305m³**

TOTAL = **1697m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks) **REQUIRED**

KEY

CUT

FILL

EARTHWORKS NOTES (12.3.6.1.2)

Max volume 305m³
Max Cut or Fill face Height 1.5m
Max Cut and Fill face Height 3.0m

EARTHWORKS AREAS
Main Dwelling = **1215m²**
Shed Accomodation = **355m²**

TOTAL = **1570m²**

EARTHWORKS VOLUMES
Main Dwelling = **1697m³**
Shed Accomodation = **336m³**

TOTAL = **2033m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks) **REQUIRED**

Restricted Discretionary Activity 12.3.6.2.1
2000m² Max permited
1.5m max height

EARTHWORKS NOTES SHED/ACCOM. (12.3.6.1.2)

EARTHWORKS DEPTHS
Actual max cut height = 1.3m
Actual max fill height = 0.6m
Actual max cut & fill face height = 3.0m
Actual max cut or fill face height = 2.2m

EARTHWORKS VOLUMES
TOP SOIL EXCAVATED MATERIAL
355m² x 0.1 = **36m³**

GOOD GROUND CUT
185m³ X 1.1 x 0.5 = 102m³

GOOD GROUND FILL
170m³ X 0.7 x 0.5= 60m³

WATER TANK CUT
46m³ X 3.0 = 138m³

TOTAL = **336m³**

BREACHES (Max. Volume & Max. Height)

RESOURCE CONSENT (For Earthworks) **REQUIRED**

KEY

CUT

FILL

EARTHWORKS

Suitable excavated material to be reused on site (where possible).

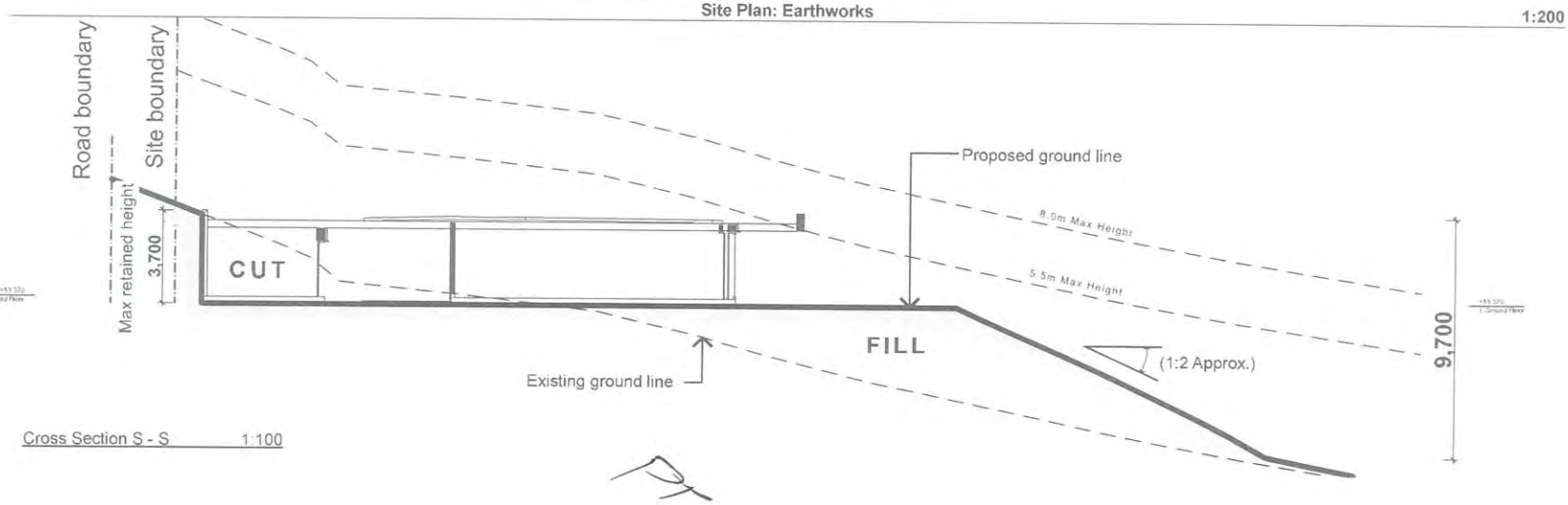
All building debris and excavated spoil which is surplus to requirements should be removed from the site.

Prior to any filling being placed it will be necessary to undercut all topsoil and existing fill down to competent inorganic natural ground and slopes will need to be benched.

The Engineer should be given every opportunity to inspect all materials prior to placement and also to ensure adequate compaction is being achieved throughout the works.



Site Plan: Earthworks 1:200



Cross Section S - S 1:100

ltd.

T 09 424 3684
E info@ltdarch.co.nz
W www.ltdarch.co.nz
A 19 Polarity Rise Silverdale 0944 AUCKLAND

ARNZ

Burkhardt

360 Foreshore Rd
Lot 4 DP 210535
Ahipara

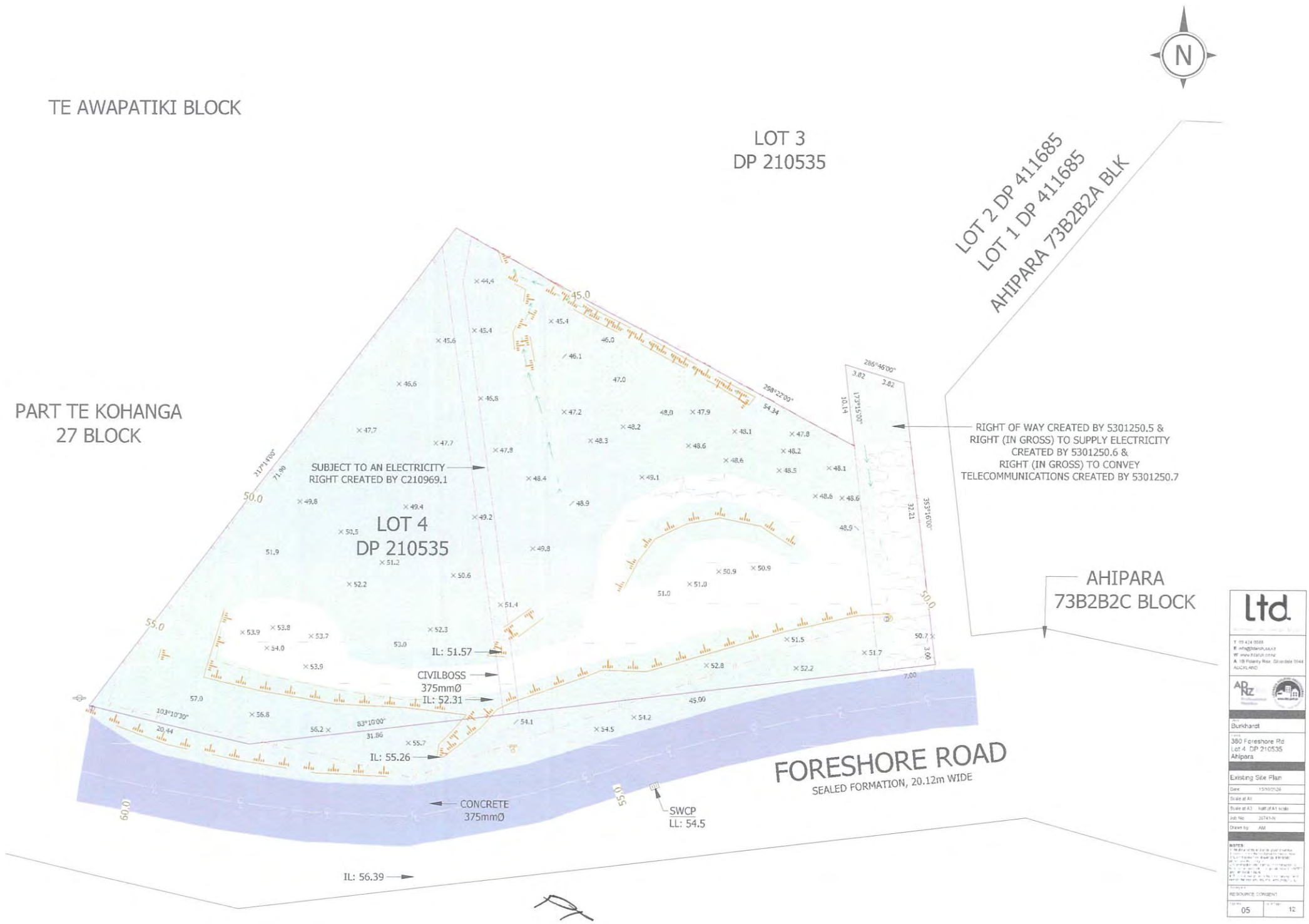
Site Earthworks

Date	15/10/2020
Scale at A1	1:200
Scale at A3	half of A1 scale
Job No	2074.5.01
Drawn by	AM

NOTES:

RESOURCE CONSENT

Sheet No	Issue
04	12



ltd.

T: 09 424 0068
E: info@ltdarch.co.nz
W: www.ltdarch.co.nz
A: 19 Polarity Rise, Silverdale 0944
AUCKLAND

ARNZ Professional Member

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

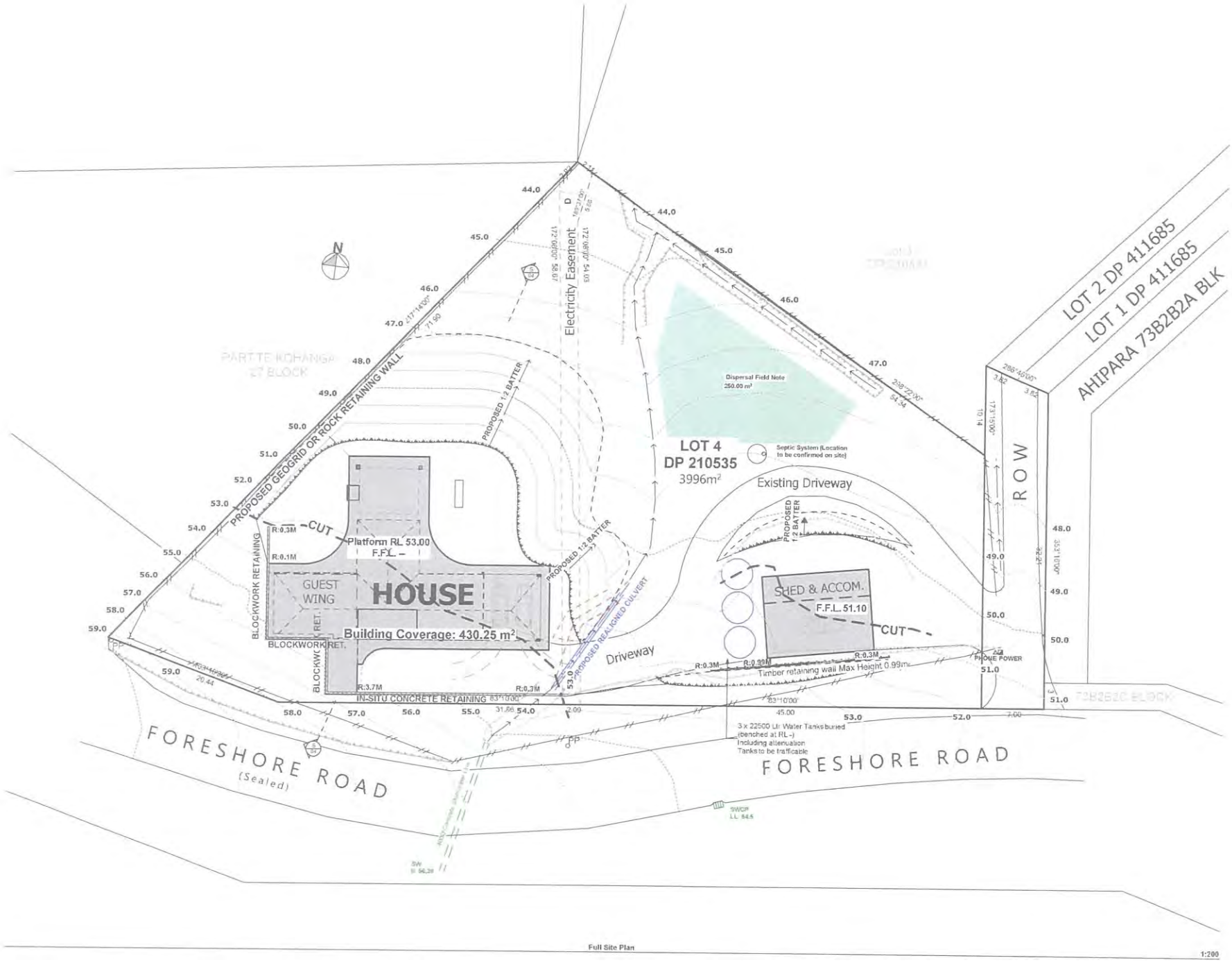
Existing Site Plan

Date	15/10/2020
Scale at A1	
Scale at A3	Half of A1 scale
Job No.	20741-N
Drawn by	AM

NOTES:

RESOURCE CONSENT

05 | 12



LEGAL DESCRIPTION	
LOT	4
DP	210535
AREA	3996m²

District Plan Zone: **General Coastal**
Wind Zone: **Very High BRANZ**
Exposure Zone: **D**

GENERAL SITE NOTES

Contour interval is 1.0m levels are in terms of Local datum

Levels are in terms of New Zealand Vertical Datum 2016

Building platform level may vary to make best use of the cut and fill

Building Platform Legend
Platform RL - Underslab Platform Level (Top of compacted Metal)
FFL - Finish Slab/Structure Level

All stormwater and sewer drainage to be layed minimum 1m away from house

Location of house to be confirmed by client on site with site supervisor prior to building setout

ltd.

T 09 424 0666
E info@ltdakl.co.nz
W www.ltdakl.co.nz
A 18 Poletty Rise, Silverdale 0944
AUCKLAND

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

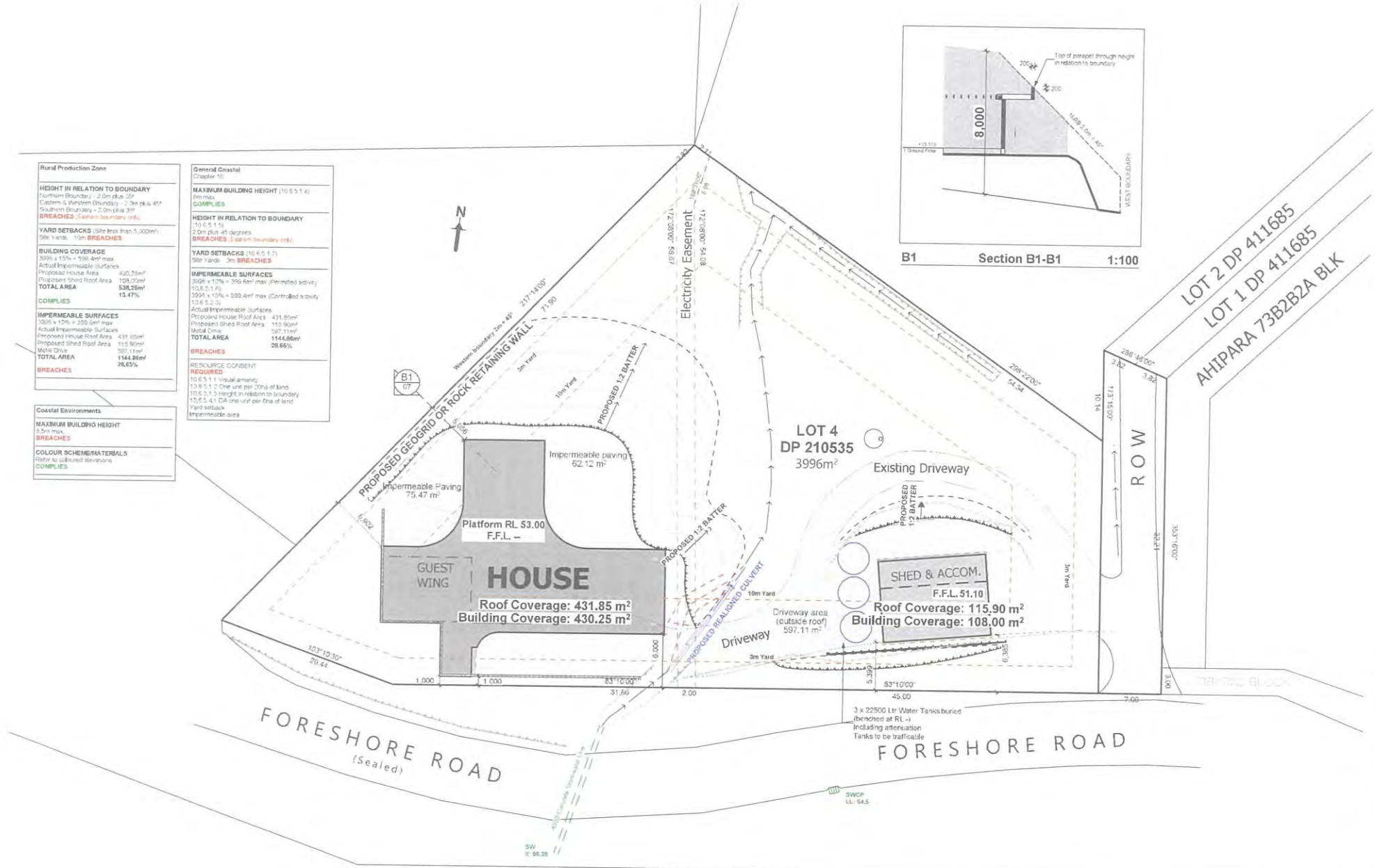
Site Plan

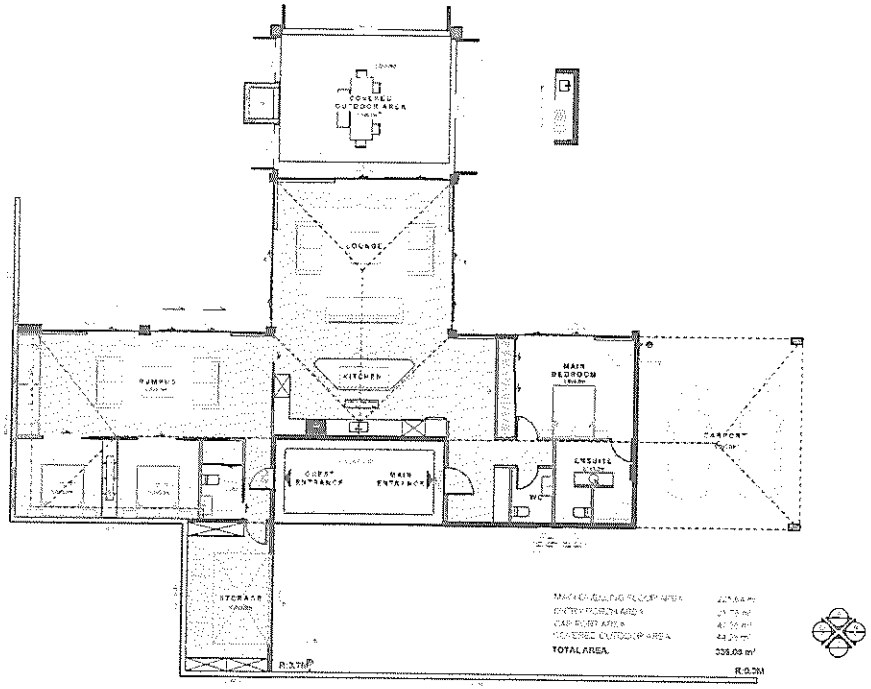
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Job No	2074-20
Drawn by	AM

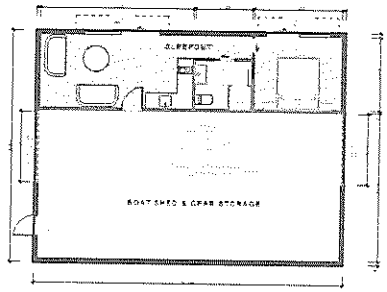
NOTES

RESOURCE CONSENT

06	12


Rural Production Zone
HEIGHT IN RELATION TO BOUNDARY
Northern Boundary - 2.0m plus 35°
Eastern & Western Boundary - 2.0m plus 45°
Southern Boundary - 2.0m plus 34°
BREACHES (Eastern boundary only)
YARD SETBACKS (Site less than 5,000m²)
Site Yards - 10m BREACHES
BUILDING COVERAGE
3996 x 15% = 599.4m² max
Actual Impermeable Surfaces
Proposed House Area 430.25m²
Proposed Shed Roof Area 108.00m²
TOTAL AREA 538.25m²
13.47%
COMPLIES
IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max
Actual Impermeable Surfaces
Proposed House Roof Area 431.85m²
Proposed Shed Roof Area 115.90m²
Metal Drive 597.11m²
TOTAL AREA 1144.86m²
28.65%
BREACHES
General Coastal
Chapter 10
MAXIMUM BUILDING HEIGHT (10.6.5.1.4)
8m max
COMPLIES
HEIGHT IN RELATION TO BOUNDARY
(10.6.5.1.5)
2.0m plus 45 degrees
BREACHES (Eastern boundary only)
YARD SETBACKS (10.6.5.1.7)
Site Yards - 3m BREACHES
IMPERMEABLE SURFACES
3996 x 10% = 399.6m² max (Permitted activity 10.6.5.1.6)
3996 x 15% = 599.4m² max (Controlled activity 10.6.5.2.3)
Actual Impermeable Surfaces
Proposed House Roof Area 431.85m²
Proposed Shed Roof Area 115.90m²
Metal Drive 597.11m²
TOTAL AREA 1144.86m²
28.65%
BREACHES
RESOURCE CONSENT
REQUIRED
10.6.5.1.1 Visual amenity
10.6.5.1.2 One unit per 20ha of land
10.6.5.1.3 Height in relation to boundary
10.6.5.4.1 DA one unit per 8ha of land
Yard setback
Impermeable area
Coastal Environments
MAXIMUM BUILDING HEIGHT
5.5m max
BREACHES
COLOUR SCHEME/MATERIALS
Refer to coloured elevations
COMPLIES
Top of parapet through height in relation to boundary
8.000
B1 Section B1-B1 1:100
N
Western boundary 2m + 45°
Electricity Easement
PROPOSED GEOGRID OR ROCK RETAINING WALL
PROPOSED 1:2 BATTER
3m Yard
10m Yard
LOT 4
DP 210535
3996m²
Existing Driveway
Impermeable paving
62.12 m²
Impermeable Paving
75.47 m²
Platform RL 53.00
F.F.L. –
GUEST WING
HOUSE
Roof Coverage: 431.85 m²
Building Coverage: 430.25 m²
SHED & ACCOM.
F.F.L. 51.10
Roof Coverage: 115.90 m²
Building Coverage: 108.00 m²
Driveway area
(outside roof)
597.11 m²
Driveway
PROPOSED REALIGNED CULVERT
ROW
LOT 2 DP 411685
LOT 1 DP 411685
AHIPARA 73B2B2A BLK
FORESHORE ROAD
(Sealed)
FORESHORE ROAD
3 x 22500 Ltr Water Tanks buried
(benched at RL –)
Including attenuation
Tanks to be trafficable
SWCP
LL: 54.5
SW
IE: 56.38
Town Planning Plan
1:200
ltd
Burkhardt
380 Foreshore Rd
Lot 4 DP 210535
Ahipara
Site Unitary Plan Check
RESOURCE CONSENT
07
12





Ground Floor Plan 1:100

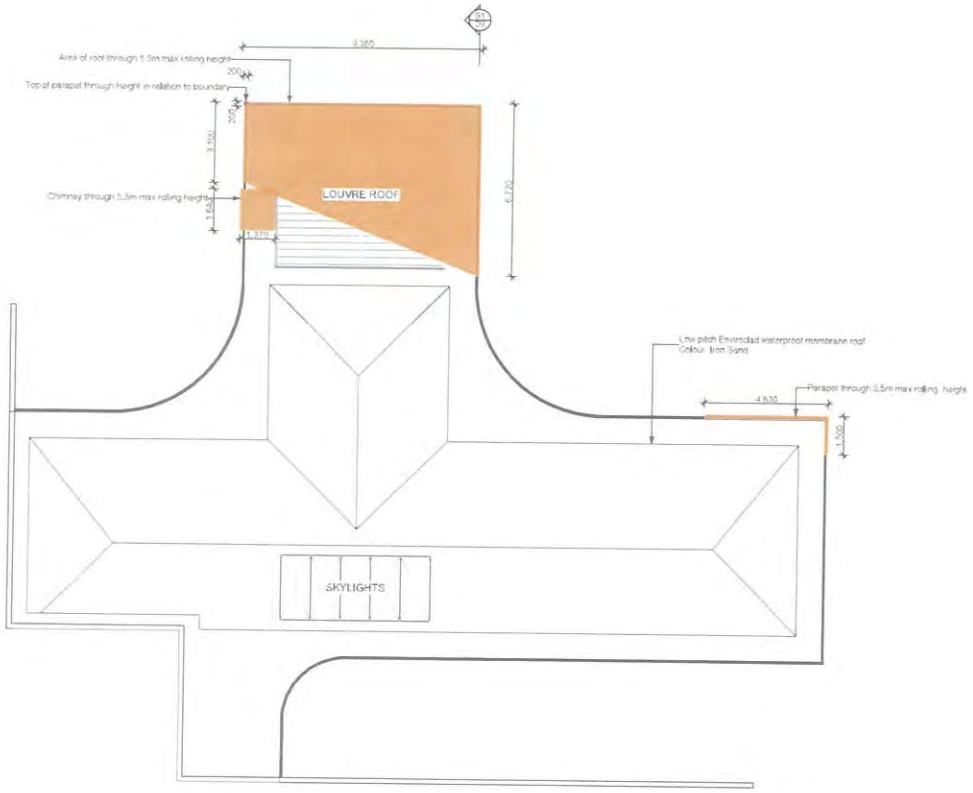
Ltd.

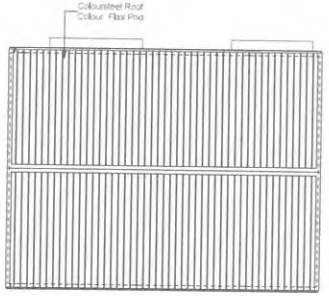
Burkhardt

380 Forestshore Rd
Lot 4 SP 210535
Ahipara

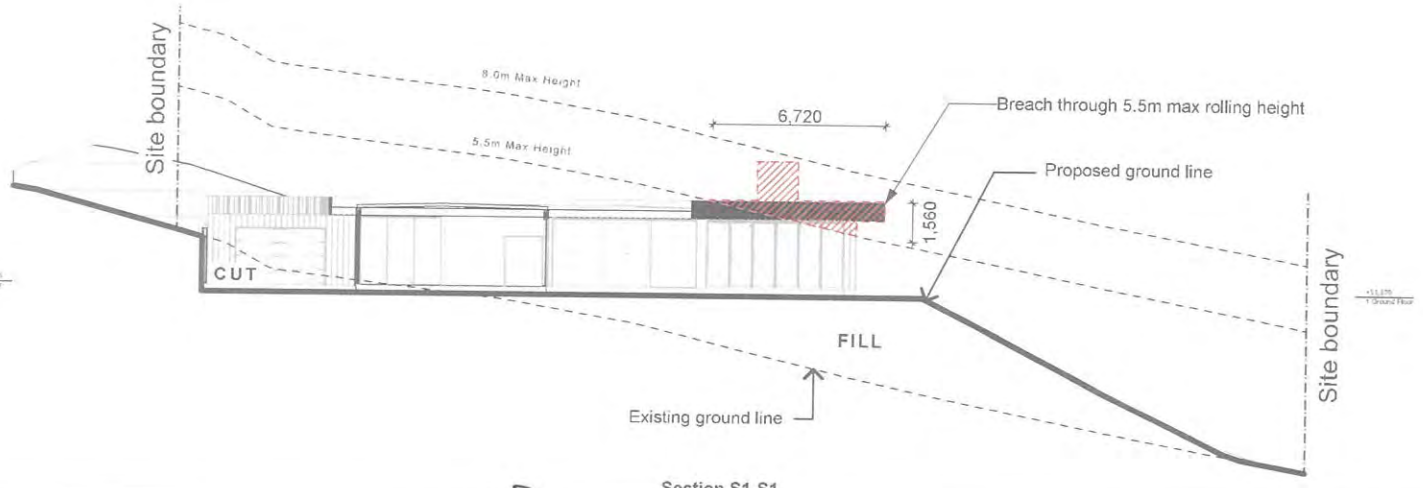
Ground Floor Plan

08





Roof Plan 1:100



S1

Section S1-S1 1:100

ltd

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Roof Plan

DWG	15/10/2018
Scale at A1	1:100
Scale at A3	half of A1 scale
Job No.	2074-15
Drawn by	AM

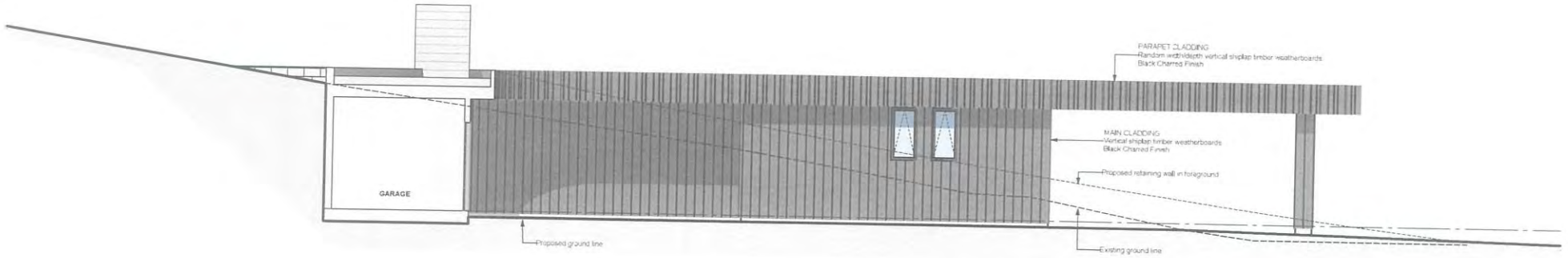
NOTES:

RESOURCE CONSENT

09 12

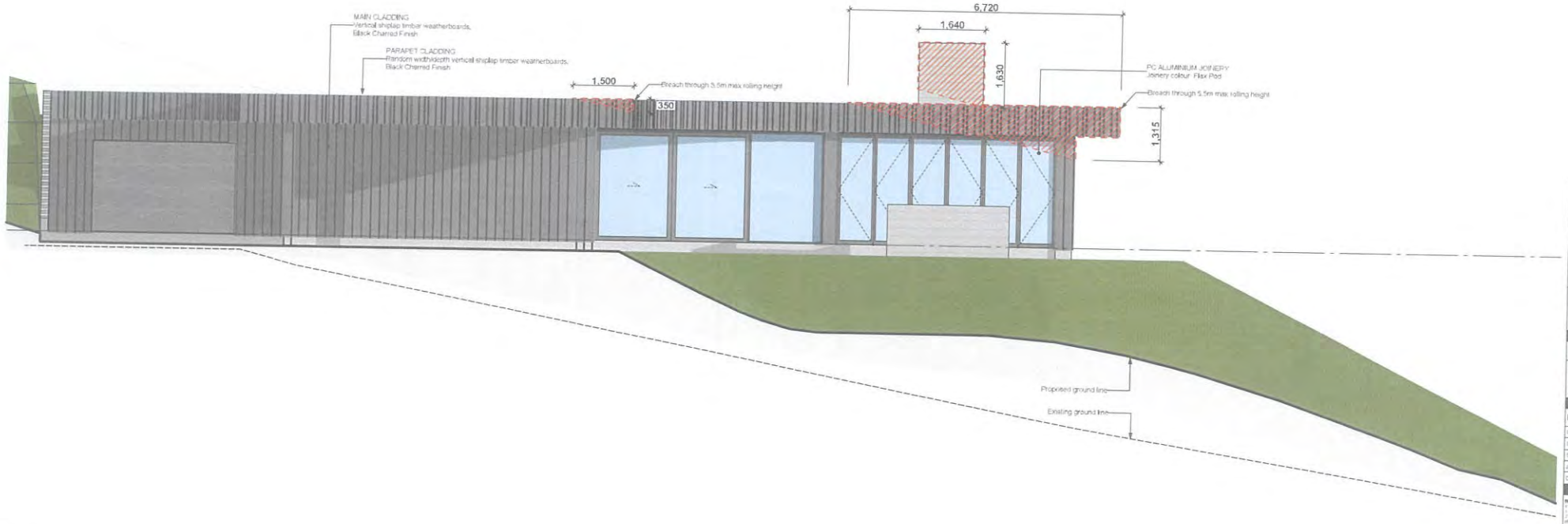
COLOURS : LRV less than 30%

Parapet Walls - Vertical random width/depth timber weatherboards - Charred/burnt finish
Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish.
In-situ Concrete retaining walls & chimney - Natural Concrete
Coloursteel roof, walls, downpipes and gutters - Colorsteel FlaxPod
Window and door joinery - PC aluminium joinery - FlaxPod
Waterproof Membrane Roof- Envirodisk - Iron Sand (9% L.R.V)



C

South Elevation 1:50



B

East Elevation 1:50

PT

ltd

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AUCKLAND

ARNZ

Burkhardt

380 Foreshore Rd
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Ahipara

Elevations

Date	15/10/2020
Scale at A1	1:50
Scale at A3	Half of A1 scale
Job No	2674-19
Drawn by	AM

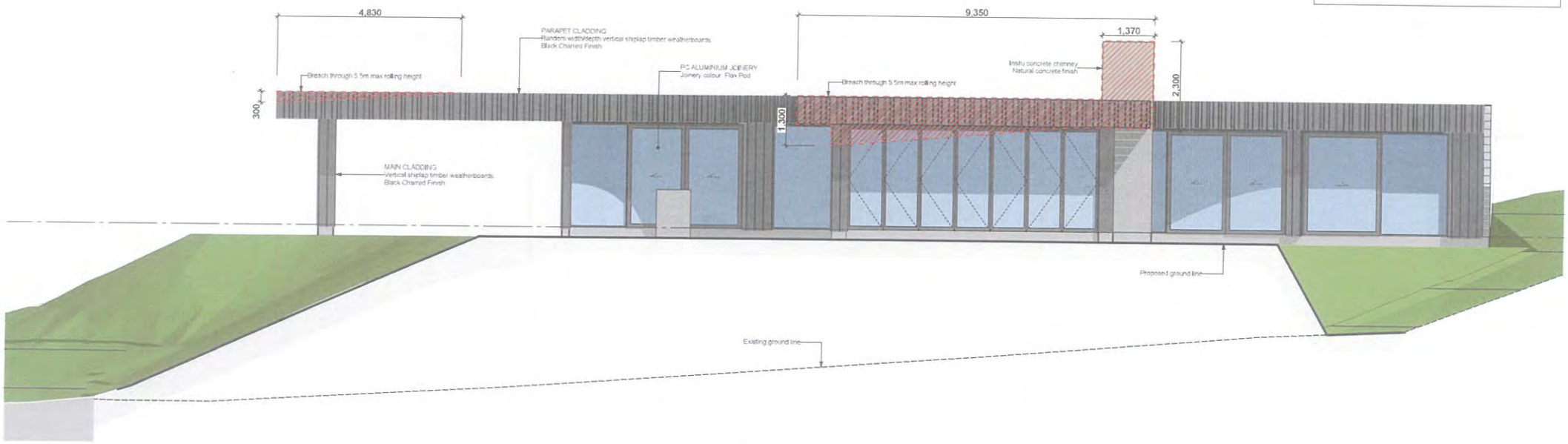
NOTES:

RESOURCE CONSENT

10 | 12

COLOURS : LRV less than 30%

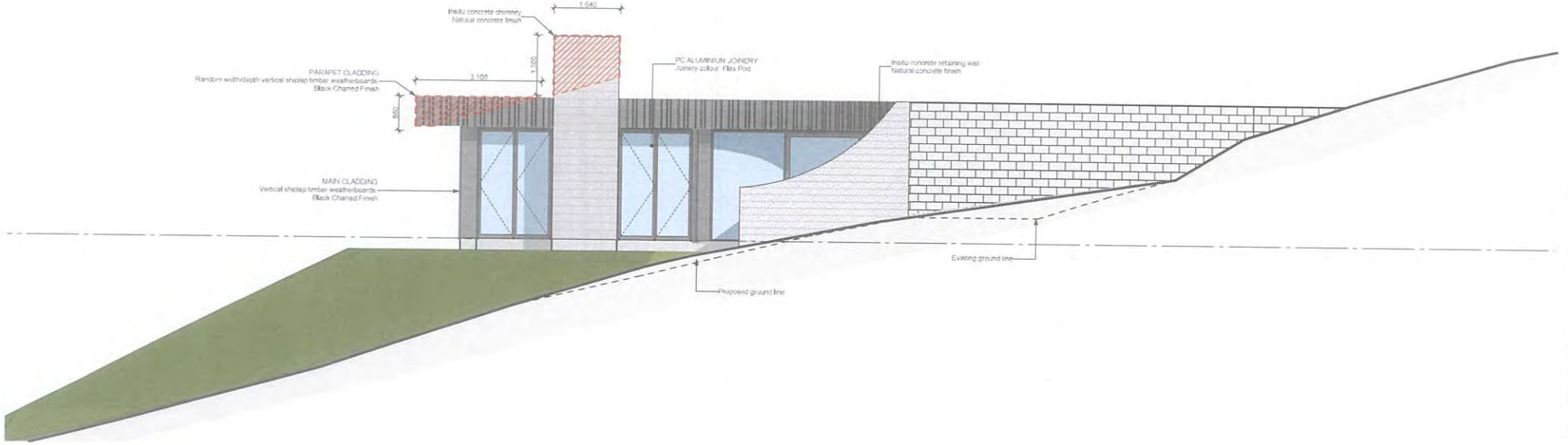
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Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish
In-situ Concrete retaining walls & chimney - Natural Concrete
Coloursteel roof, walls, downpipes and gutters - Coloursteel FlaxPod
Window and door joinery - PC aluminium joinery - FlaxPod
Waterproof Membrane Roof- Envirodiad - Iron Sand (9% LRV)



A

North Elevation

1:50



D

West Elevation

1:50

ltd

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AUCKLAND

ARNZ

Client: Burkhardt

Address: 380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Elevations

Date:	13/10/2026
Scale at A1:	1:50
Scale at A3:	half of A1 scale
Job No:	2074-N
Drawn by:	AM

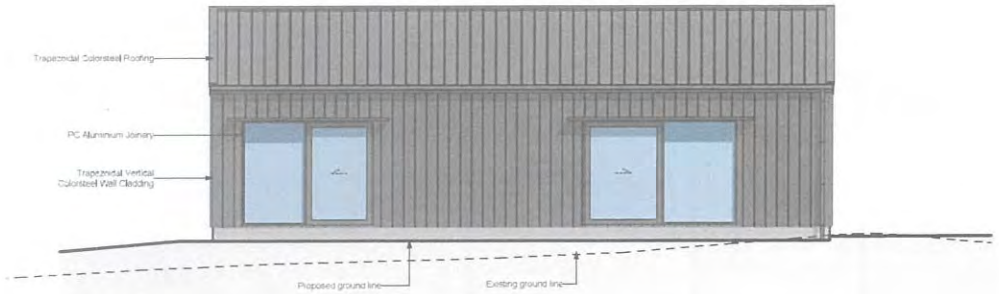
NOTES:

RESOURCE CONSENT

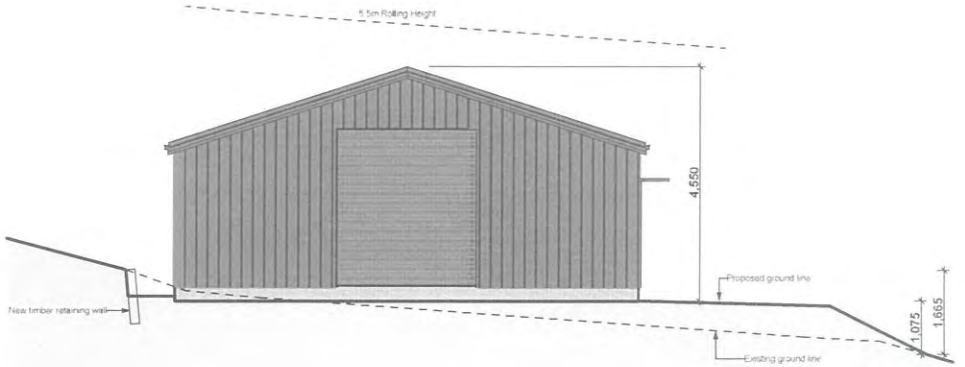
11	12

COLOURS : LRV less than 30%

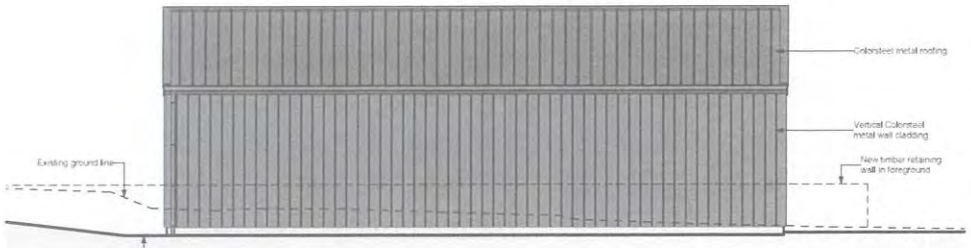
Parapet Walls - Vertical random width/depth timber weatherboards - Charred/burnt finish
Wall cladding - Vertical shiplap timber weatherboards - Charred/burnt finish.
In-situ Concrete retaining walls & chimney- Natural Concrete
Colorsteel roof, walls, downpipes and gutters - Colorsteel Flax/Pod
Window and door joinery - PC aluminium joinery - Flax/Pod
Waterproof Membrane Roof- Envirodiad - Iron Sand (9% L.R.V.)



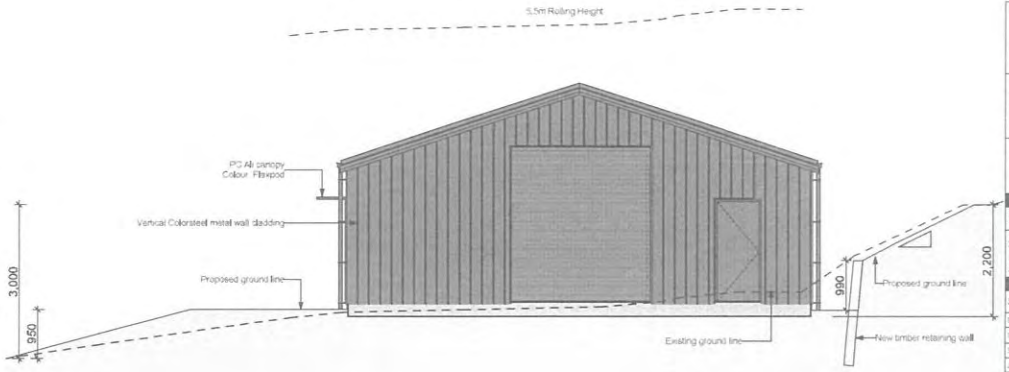
A1 **North Elevation** 1:50



East Elevation 1:50



South Elevation 1:50



West Elevation 1:50

ltd

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AUCKLAND

Burkhardt

380 Foreshore Rd
Lot 4 DP 210535
Ahipara

Shed/Sleepout Elevations

Date	15/12/2020
Scale at A1	1:50
Scale at A3	half of A1 scale
Job No	2074-Ah
Drawn by	AM

NOTES

RESOURCE CONSENT

12 | 12

Appendix G – Evidence of Iwi Consultation

Engagement Agreement	
Between:	Ahipara Takiwa (Consultant)
And:	H and M Burkhardt
Referred to individually as a 'Party' and collectively as the 'Parties'	
RMA # - RC application still to be lodged	**Location:** 380 Foreshore Road, Ahipara

Scope and nature of the services:

The Consultant will provide a Cultural Impact Assessment Report (CIA) Report which will include the determination of issues and recommendations in respect to the lands proposal described in the application referred to above.

The outcomes of the report may include:

- Full support of the proposal;
- Conditional support for the proposal subject to conditions e.g: effects mitigation and / or reduction; monitoring regime; cultural monitoring of earthworks;
- Rejection of the proposal.

Programme for the services:

The consultant will carry our the following services -

- Initial assessment of the proposal;
- Site visit;
- Prepare draft CIA report;
- Review draft CIA report;
- Update draft as required;
- Final report signed off by Marae chairs;
- Submit final report.

The timeframe for carrying out the service described above is as soon as practicable from the signing of this agreement.

Fees & timing of payments:

The consultant fee schedule is a flat rate of $500.00.

An invoice for the services described above will be provided at the time of the provision of the final CIA report with the payment as per the Conditions of Engagement below.

Information or services to be provided to the Client:

The Client engages the Consultant to provide the Services described above and the Consultant agrees to perform the Services for the remuneration provided above. Both Parties agree to be bound by the provision of the Short Form Model Conditions of Engagement (overleaf), including clauses 2, 11 and 12 and any variations noted below. Once signed, this agreement, together with the conditions overleaf and any attachments, will replace all or any oral agreement previously reached between the Parties

Variations to the Conditions of Engagement (overleaf)

11. Where the Consultant breaches this Agreement, the Consultant is liable to the Client for reasonably foreseeable claims, damages, liabilities, losses or expenses caused directly by the breach. The Consultant shall not be liable to the Client under this Agreement for the Client's indirect, consequential or special loss, or loss of profit, however arising, whether under contract, in tort or otherwise.

12. The maximum aggregate amount payable, whether in contract, tort or otherwise, in relation to claims, damages, liabilities, losses or expenses, shall be five times the fee (exclusive of GST and disbursements) with a minimum of $100,000 and a maximum limit of $NZ500,000.

13. Without limiting any defences, a Party may have under the Limitation Act 2010, neither Party shall be considered liable for any loss or damage resulting from any occurrence unless a claim is formally made on a Party within 6 years from completion of the Services.

14. The Consultant shall take out and maintain for the duration of the Services a policy of Professional Indemnity insurance for the amount of liability under clause 12. The Consultant undertakes to use all reasonable endeavours to maintain a similar policy of insurance for six years after the completion of the Services.

15. If either Party is found liable to the other (whether in contract, tort or otherwise), and the claiming Party and/or a Third Party has contributed to the loss or damage, the liable Party shall only be liable to the proportional extent of its own contribution.

16. Intellectual property prepared or created by the Consultant in carrying out the Services, and provided to the Client as a deliverable, ("New Intellectual Property") shall be jointly owned by the Client and the Consultant. The Client and Consultant hereby grant to the other an unrestricted royalty-free license in perpetuity to copy or use New Intellectual Property. The Clients' rights in relation to this New Intellectual Property are conditional upon the Client having paid all amounts due and owing to the Consultant in accordance with clauses 7 and 8. Intellectual property owned by a Party prior to the commencement of this Agreement (Pre-existing Intellectual Property) and intellectual property created by a Party independently of this Agreement remains the property of that Party. The Consultant accepts no liability for the use of New Intellectual Property or Pre-existing Intellectual Property other than to the extent reasonably required for the intended purposes.

17. The Consultant has not and will not assume any duty imposed on the Client pursuant to the Health and Safety at Work Act 2015 ("the Act") in connection with the Agreement.

18. The Client may suspend all or part of the Services by notice to the Consultant who shall immediately make arrangements to stop the Services and minimise further expenditure. The Client and the Consultant may (in the event the other Party is in material default that has not been remedied within 14 days of receiving the other Party's notice of breach) either suspend or terminate the Agreement by notice to the other Party. If the suspension has not been lifted after 2 months the Consultant has the right to terminate the Agreement and claim reasonable costs as a result of the suspension. Suspension or termination shall not prejudice or affect the accrued rights or claims and liabilities of the Parties.

19. The Parties shall attempt in good faith to settle any dispute themselves and failing that by mediation.

20. This Agreement is governed by the New Zealand law, the New Zealand courts have jurisdiction in respect of this Agreement, and all amounts are payable in New Zealand dollars.

Notes: (1) The fees set in this above schedule are exclusive of GST. (2) Travel time will be charged in accordance with the service provided. (3) This Agreement for Engagement must be signed by the applicant, land-owner or their agent.

Conditions of Engagement

1. The Consultant shall perform the Services as described in the agreement for engagement.

2. The Consultant and the Client agree that where all or any of, the Services are acquired for the purposes of a business the provisions of the Consumer Guarantees Act 1993 are excluded in relation to those Services. However, nothing in this Agreement shall restrict, negate, modify or limit any of the Client's rights under the Consumer Guarantees Act 1993 where the Services acquired are of a kind ordinarily acquired for personal, domestic or household use or consumption and the Client is not acquiring the Services for the purpose of a business.

3. In providing the Services, the Consultant must use the degree of skill, care and diligence reasonably expected of a professional consultant providing services similar to the Services.

4. The Client shall provide to the Consultant, free of cost, as soon as practicable following any request for information, all information in the Client's power to obtain which may relate to the Services. The Consultant shall not, without the Client's prior consent, use information provided by the Client for purposes unrelated to the Services. In providing the information to the Consultant, the Client shall ensure compliance with the Copyright Act 1994 and shall identify any proprietary rights that any other person may have in any information provided.

5. As soon as either Party becomes aware of anything that will materially affect the scope or timing of the Services, the Party must notify the other Party in writing and where the Consultant considers a direction from the Client or any other circumstance is a variation the Consultant shall notify the Client accordingly.

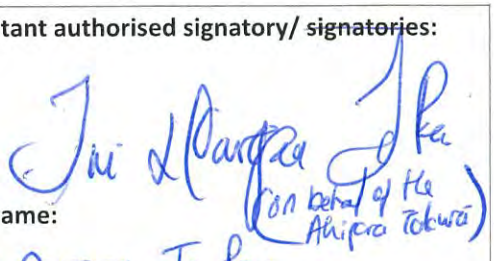
6. The Client may order variations to the Services in writing or may request the Consultant to submit proposals for variations to the Services.

7. The Client shall pay the Consultant for the Services the fees and expenses at the times and in the manner set out in the attached documents. Where this Agreement has been entered by an agent (or a person purporting to act as agent) on behalf of the Client, the agent and Client shall be jointly and severally liable for payment of all fees and expenses due to the Consultant under this Agreement.

8. All amounts payable by the Client shall be due on receipt of issue of each GST Invoice or at such other timing as stated elsewhere in this Agreement. If the Client fails to make the payment that is due and payable and that default continues for 14 days, the Consultant may provide written notice to the Client specifying the default and requiring payment within 7 days from the date of the notice. Unless payment has been made by the Client in full, the Consultant may suspend performance of the Services any time after expiration of the notice period. The Consultant must promptly lift the suspension after the Client has made the payment. Regardless of whether or not the Consultant suspends the performance of the Services in accordance with this clause, the Consultant may charge interest on overdue amounts from the date payment falls due to the date of payment at the rate of the Consultant's overdraft rate plus 2% and in addition the costs of any actions taken by the Consultant to recover the debt.

9. Where the nature of the Services is such that it is covered by the Construction Contracts Act 2002 (CCA) and the Consultant has issued a payment claim in accordance with the CCA, the provisions of the CCA shall apply. In all other cases, if the Client, acting reasonably, disputes an invoice, or part of an invoice, the Client must promptly give the reasons for withholding the disputed amount and pay any undisputed amount in accordance with clause 8.

10. Where Services are carried out on a time charge basis, the Consultant may purchase such incidental goods and/or Services as are reasonably required for the Consultant to perform the Services as agreed by the Client. The cost of obtaining such incidental goods and/or Services shall be payable by the Client. The Consultant shall maintain records which clearly identify time and expenses incurred.3

Client authorised signatory/ signatories:	Consultant authorised signatory/ signatories:
 **Print name:** Harry Burkhardt **Date:** 4 November 2026	 **Print name:** Tui Qavqav Te Pou **Date:** 8/11/2026.