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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

3. Would you like to opt out of the Fast Track Process?

◯ **Yes** ✔ **No**

4. Consultation

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

If yes, which groups have you consulted with?	
Who else have you consulted with?	

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

5. Applicant Details

Name/s: Burgess Lockley Family Trust [Tim Burgess & Rochelle Lockley] and KTP No 1 Trust [Peter

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: Steven Sanson - Bay of Islands Planning

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: Refer RoT attached

Property Address/ Location: [redacted]

Postcode

8. Application Site Details

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

Name/s: Refer RoT

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.

New dwelling on Lot 1 DP 594744

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

10. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

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

(more than one circle can be ticked):

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

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

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

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

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

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

13. Assessment of Environmental Effects:

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

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

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full) Tim Burgess

Email: [redacted]

Phone number: [redacted]

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

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) Timothy Burgess

Signature:
(signature of bill payer [redacted]

15. Important Information:

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

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

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

15. Important information continued...

Declaration

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

Name: (please write in full) Steven Sanson

Signature: [redacted]

Checklist (please tick if information is provided)

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

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

BAY OF ISLANDS PLANNING (2022) LIMITED

Kerikeri House
Suite 3, 88 Kerikeri Road, Kerikeri

Email – office@bayplan.co.nz Website - www.bayplan.co.nz

28 August 2025

Application for Land Use Consent – 137 Tiromoana Way, Ahipara

Please find below a resource consent application for a dwelling at 137 Tiromoana Way, Ahipara. The site is zoned General Coastal Zone of the Operative District Plan [**ODP**], and Rural Production Zone under the Proposed Far North District Plan [**PDP**].

Resource Consent is required as the dwelling exceeds the permitted threshold of 25m^2 for a building under the visual amenity rule. No consents are required under the PDP.

Overall, the application is a **Controlled Activity**.

The application is supported by the following:

- Appendix A – Title and consent notices
- Appendix B – Architectural Drawings by Lindholm Design and Modular Dwellings Limited
- Appendix C – On-site Effluent Disposal Report by Wilton Joubert
- Appendix D – Geotechnical Assessment Report by Wilton Joubert
- Appendix E – LVIA & Landscape Plans
- Appendix F – FENZ Consultation

Should you require any further information please do not hesitate to contact me.

Yours sincerely,

Steven Sanson
Consultant Planner

SITE DETAILS

Applicant	Tim Burgess and Rochelle Lockley – Burgess Lockley Family Trust and Peter Hunt and Kate Dillon – KTP No 1 Trust
Address for Service	Bay of Islands Planning Limited PO Box 318 PAIHIA 0247 C/O – Steven Sanson steve@bayplan.co.nz 021-160-6035
Legal Description	Lot 1 DP 594744 Lot 17 DP 594744 [1/17th share] Lot 21 DP 594744 [1/17th share]
Record Of Title [RoT]	1150142
Physical Address	137 Tiromoana Way, Ahipara
Site Area	1.6846ha
Owner of the Site	Timothy William Burgess, Rochelle Ann Lockley and CLM Trustees Limited as to a 1/2 share Peter John Lindsay Hunt, Katherine Bridget Dillon and KTP Trustee Services Limited as to a 1/2 share
District Plan Zone	General Coastal [ODP] Rural Production [PDP]
District Plan Features	Coastal Environment [PDP] Coastal Flood Hazard [PDP]
NRC RPS Overlays	Nil
Soils	Class 7 and 8
Flora / Fauna	Nil
HAIL	Nil
Wetlands	Nil

Schedule 1

1.0 INTRODUCTION & PROPOSAL

The applicant seeks resource consent for a dwelling on the property at 137 Tiromoana Way, Ahipara.

The site is a 1.6846ha lifestyle lot approved as part of the subdivision at 1000 Sandhills Rd. A copy of the Record of Title is attached within **Appendix A**.

The site currently accommodates a small utility shed and access is by way of a jointly owned gravel driveway from Sandhills Road.

The applicant wishes to place a dwelling on the property, which consists of two bedrooms, a living room, kitchen and bathroom/laundry. The development also includes an extensive deck which will be partly covered. The dwelling is 55.18m^2 in size.

Figure 1 – Building Concepts [Source: Lindholm Design]

The application is supported by architectural plans which are attached at **Appendix B**.

On-site effluent disposal will be prepared in accordance with the On-site Effluent Disposal Report prepared by Wilton Joubert - refer **Appendix C**.

Geotechnical conditions have been considered by Wilton Joubert as well and this is provided in **Appendix D**.

Christine Hawthorn has provided an LVIA and Landscape Plans in **Appendix E** to support the proposal.

Consultation has been undertaken with FENZ as found in **Appendix F**.

The development will require resource consent under the ODP.

2.0 DESCRIPTION OF THE SITE & SURROUNDS

The property is located at the northwestern extent of the subdivision and is approximately 6km to the north of Ahipara, and 15km to the west of Kaitaia.

Figure 2 – Site Aerial [Source: Prover]

Figure 3 – Site Aerial [Source: Prover]

The site is currently free of development, save for a utility shed, gaining access from Tiromoana Way via a 1.7km long jointly owned gravel driveway. The building platform has been levelled off as part of the subdivision process and all earthworks associated with that re-grassed.

The site is zoned General Coastal in the ODP and Rural Production in the PDP, with the site also considered to be located within the Coastal Environment overlay.

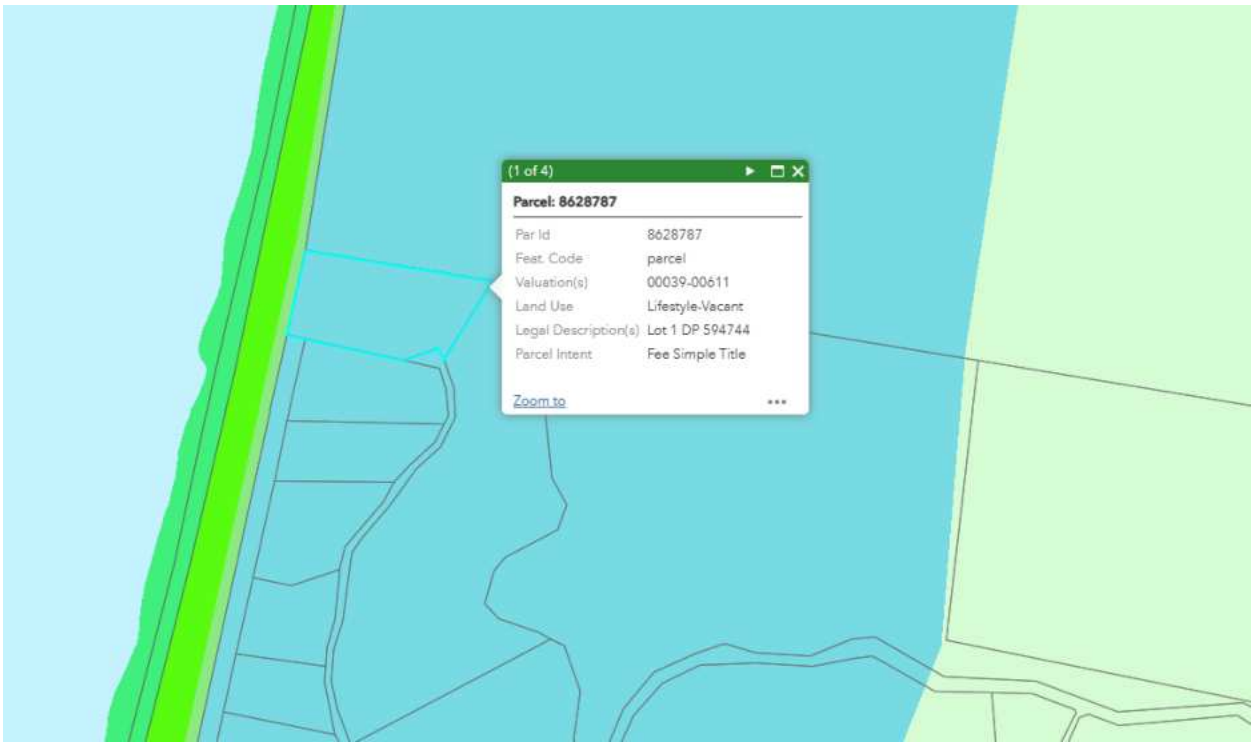

Figure 4 – General Coastal Zone ODP [Source: Far North Maps]

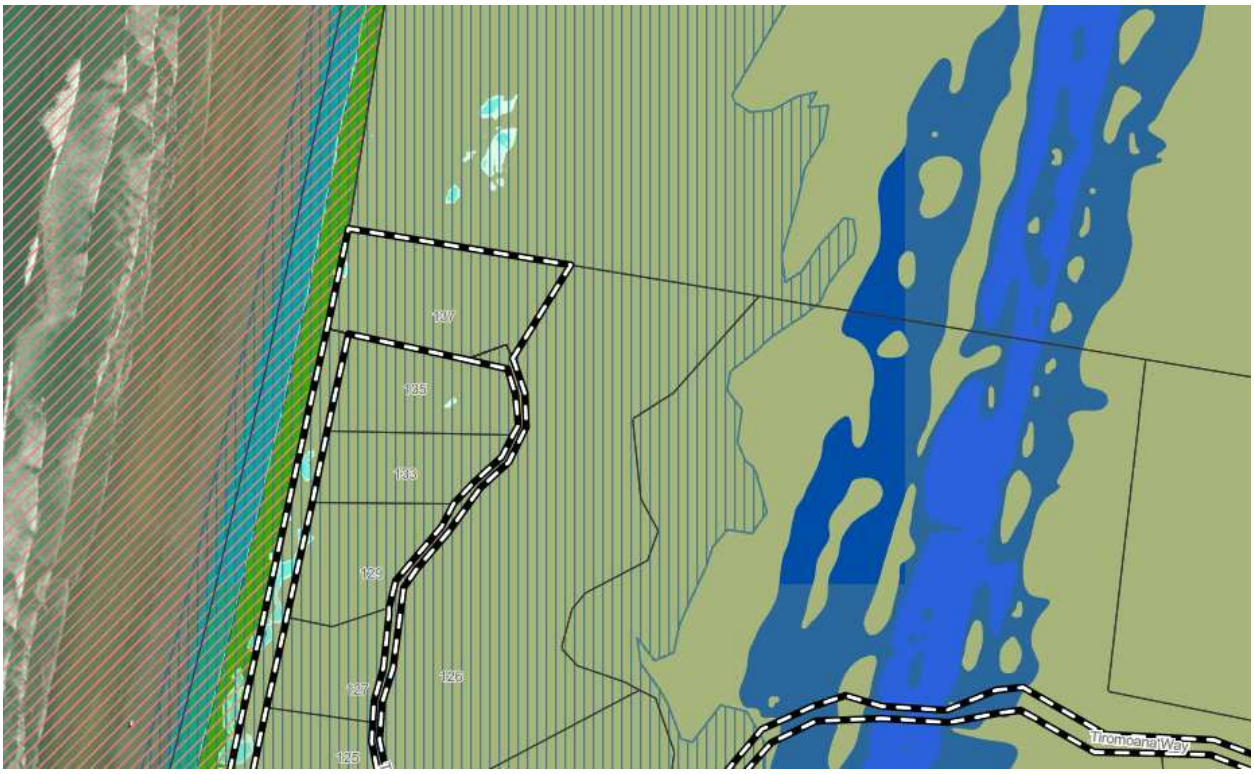

Figure 5 – Rural Production Zone PDP [Source: Far North Maps]

Northland Regional Council [NRC] maps show no known wetlands on the site and immediate surrounds. The site is not near or known as having an activity located on the hazardous activities or industries list [HAIL].

Soils for the site are known to be Class 7 and 8. NRC has also mapped the site as containing erosion prone land, subject to tsunami and a small portion of the site being subject to coastal flooding.

3.0 RECORD OF TITLE, CONSENT NOTICES AND LAND COVENANTS

The Record of Title is attached at **Appendix A**. There are existing consent notices applicable to the site. There are also several private covenants that apply to the site, although these are not a consideration for Council.

CN 13153773.3

Lots 1 to 16 & Lots 18 to 20 DP 594744

i) The Lot is subject to the Sandhills Estate Master Plan, and the individual Allotment Management Plan applying to each Lot which addresses scale, siting and design of buildings, landscape development and planting, activities in covenanted areas, revegetation, weed and pest management, stormwater and wastewater management.

The Sandhills Estate Master Plan and the individual Allotment Management Plan relative to each of the above Lots shall be observed and continued and shall not cease without the express permission of Council.

Lot 1 to 12 DP 594744

ii) A 'Coastal hazard assessment' prepared by Tonkin and Taylor, job number 31461.v1, dated April 2016 (submitted in support of RC2160143), considers the effects of coastal inundation, coastal erosion and tsunami on the lot. The report sets minimum floor levels at 4.8 metres One Tree Point Vertical Datum 1964. No habitable building shall be constructed with finished floor levels below this.

Lots 1 to 16, 18, 19 and 20 DP 594744

iii) Future owners of the Lot shall be aware of the cultural significance of the sites identified in the 'Cultural Impact Assessment, Sandhills Estate' submitted in support of RC2160143. Future owners of the Lot are required to give effect to any requirements outlined in the Cultural Impact Assessment. The intent of the 'Cultural Impact Assessment is to inform future landowners about the importance of respecting and acknowledging the cultural values and the purpose of the adjoining conservation reserve to protect the waahi tapu and to avoid accidental transgressions on any tapu.

Lots 1 to 16 and Lots 18, 19, 20 DP 594744

v) No owner, occupier, or visitor shall keep or introduce to the Lots or any part of the Sandhills Estate carnivorous or omnivorous animals (such as, but not limited to, cats, dogs, or mustelids) which have the potential to be predators of kiwi or other vulnerable fauna.

Lots 1 to 16 and Lots 18, 19, 20 DP 594744

vi) No earthworks shall be carried out or building erected on any Lot without the prior approval of Council's Resource Consent Manager, or Delegated Officer, to the specific design for cut and fill batters, retaining walls and building foundations.

Lots 1 to 16 and 18, 19, 20 DP 594744

viii) No further subdivision may occur on the Lot.

Condition i)
The application has been designed to be consistent with the requirements of the Master and Allotment Management Plan.

Condition ii)
The Coastal Hazard Assessment referenced was the basis for the building envelopes on each site and the Geotech Report in 2.4 considers that the development is at 17 – 18m NZVD, which is well above the consent condition requirement.

Condition iii)
The location of the dwelling, inside the approved building envelope which considered cultural and archaeological matters, does not impact any of the matters within the Cultural Impact Assessment prepared for Sandhills Estate.

Condition v)
No carnivorous or omnivorous animals are proposed to be introduced.

Condition vi)
No earthworks are proposed as driven foundations and a timber framed floor structure above existing ground structure is proposed.

Condition viii)
Subdivision is not proposed.

4.0 RESOURCE CONSENT REQUIREMENTS

The relevant zoning, resource features, and other critical information required to determine the consenting requirements for the proposal have been considered above.

The Tables below provide an assessment against the relevant ODP and PDP standards and identifies the reasons for resource consent.

Table 1 – General Coastal Zone

Rule	Assessment
Rule 10.6.5.1.1 Visual Amenity	The proposed dwelling exceeds 50m^2, but is located entirely within the approved Building Envelope. **Controlled Activity**
Rule 10.6.5.1.2 Residential Intensity	There is one dwelling on the site. **Complies**
Rule 10.6.5.1.3 Scale of Activities	Not applicable as residential use. **Complies**
Rule 10.6.5.1.4 Building Height	All buildings are under 8m in height. **Complies**
Rule 10.6.5.1.5 Sunlight	All buildings are sufficiently away from the site boundaries. **Complies**
Rule 10.6.5.1.6 Stormwater Management	Total impermeable surfaces will be 409m^2 [2.4%]. **Complies**
Rule 10.6.5.1.7 Setback from Boundaries	All buildings are sufficiently away from the site boundaries. **Complies**
Rule 10.6.5.1.9 Keeping of Animals	Not applicable **Complies**
10.8.5.1.10 Transportation	See below **Complies**
Rule 10.6.5.1.9 Noise	To be complied with as residential use.

	Complies
Rule 10.6.5.1.11 Helicopter Landing	Not applicable **Complies**

Table 2 – District Wide Rules

Rule	Assessment
12.1 Landscapes & Natural Features	There are no landscapes or natural features identified on the site. **Complies**
12.2 Indigenous Flora & Fauna	No indigenous vegetation clearance is required. **Complies**
12.3 Soils & Minerals	No earthworks are required as per **Appendix B**. **Complies**
12.4 Natural Hazards	No development is proposed in the vicinity of any identified natural hazards. **Complies**
12.5 Heritage	There are no notable trees present on the site. There are no historic sites, buildings or objects relevant to the site. **Complies**
12.7 Lakes, Rivers and Wetlands	The dwelling is setback further than 30m from the coast. **Complies**
12.8 Hazardous Substances	Not relevant. **Complies**
12.9 Renewable Energy & Energy Efficiency	Not relevant. **Complies**
13 Subdivision	No subdivision is proposed.

	Complies
14 Financial Contributions	Not relevant. **Complies**
15 Transportation	Traffic: Only 1 residential unit - exempt. **Complies** The site can easily accommodate 2 x car parks for residential use. **Complies** The existing consented access to the site will not change. **Complies**
16 Signs and Lighting	Not relevant. **Complies**
17 Designation	Not relevant. **Complies**
18 Special Areas	Not relevant. **Complies**
19 GMO's	Not relevant. **Complies**

In terms of the Operative Plan, the land use component is a **Restricted Discretionary Activity**.

FNDC Proposed District Plan

These comprise relevant rules that have immediate effect under the PDP.

Table 3 – Proposed District Plan

Rule	Assessment
Hazardous Substances	Not relevant as no such substances proposed. **Complies**

Heritage Area Overlays	Not indicated on Far North Proposed District Plan. **Complies**
Historic Heritage	Not indicated on Far North Proposed District Plan. **Complies**
Notable Trees	Not indicated on Far North Proposed District Plan. **Complies**
Sites and Areas of Significance to Māori	There are no mapped SASM. **Complies**
Ecosystems and Indigenous Biodiversity	No Indigenous Vegetation clearance is required. **Complies**
Activities on the Surface of Water	Not indicated on Far North Proposed District Plan **Complies**
Earthworks	No earthworks are required as per **Appendix B**. **Complies**
Signs	Not indicated on Far North Proposed District Plan **Complies**
Orongo Bay Zone	Not indicated on Far North Proposed District Plan **Complies**
Subdivision	No subdivision is proposed. **Complies**

No consents are required under the PDP.

5.0 STATUTORY CONSIDERATIONS

Section 104A governs the determination of applications for Controlled Activities.

104A Determination of applications for controlled activities

After considering an application for a resource consent for a controlled activity, a consent authority—

(a) must grant the resource consent, unless it has insufficient information to determine whether or not the activity is a controlled activity; and

(b) may impose conditions on the consent under section 108 only for those matters—

(i) over which control is reserved in national environmental standards or other regulations; or

(ii) over which it has reserved its control in its plan or proposed plan.

Section 104A: inserted, on 1 August 2003, by section 44 of the Resource Management Amendment Act 2003 (2003 No 23).

Section 104A(a): replaced, on 10 August 2005, by section 60 of the Resource Management Amendment Act 2005 (2005 No 87).

Section 104A(b): replaced, on 1 October 2009, by section 84 of the Resource Management (Simplifying and Streamlining) Amendment Act 2009 (2009 No 31).

When considering an application for resource consent, a consent authority must have regard only to those matters over which it has restricted the exercise of its discretion in its plan or proposed plan, as well as any national environmental standards or other regulations.

Section 104 of the RMA sets out matters to be considered when assessing an application for a resource consent.

104 Consideration of applications

(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to–

(a) any actual and potential effects on the environment of allowing the activity; and

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

(b) any relevant provisions of—

(i) a national environmental standard:

(ii) other regulations:

(iii) a national policy statement:

(iv) a New Zealand coastal policy statement:

(v) a regional policy statement or proposed regional policy statement:

(vi) a plan or proposed plan; and

(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The following assessment addresses all of the relevant considerations under s104 of the RMA.

The RMA definition of 'Environment' includes:

(a) Ecosystems and the constituent parts, including people and communities; and

(b) All natural and physical resources; and

(c) Amenity values; and

(d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.

The definition of 'Environment' includes the concept of a 'future state of the environment' where the environment as it currently exists might be modified by permitted activities and by resource consents that have been granted, and where it appears likely that those consents will be implemented.

Section 104(2) of the RMA states that:

> *"when forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect."*

This is referred to as the "permitted baseline" which includes effects on the environment arising from permitted standards that form part of a District Plan.

In the context of this application, the permitted baseline includes the permitted residential activities standards for the General Coastal zone and the relevant district wide rules. Any adverse effects associated with these activities are deemed to be acceptable to the extent that they are permitted and may be disregarded in accordance with Section 104(2).

Within the General Coastal Zone, the level of permitted activities is small due to the imposition of the visual amenity rule. This effectively only provides built development at 25m^2 for human habitation.

The RMA meaning of 'effect' includes:

3 Meaning of effect

In this Act, unless the context otherwise requires, the term **effect** includes—

(a) any positive or adverse effect; and

(b) any temporary or permanent effect; and

(c) any past, present, or future effect; and

(d) any cumulative effect which arises over time or in combination with other effects—

regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

(e) any potential effect of high probability; and

(f) any potential effect of low probability which has a high potential impact.

For this application, the potential adverse effects to be assessed are those arising from aspects of the proposal that have been identified as requiring a resource consent in the ***Tables*** above. Specifically, those in relation to the identified matters of discretion applying to visual amenity.

Section 104(1)(a) Assessment of Effects on the Environment

Visual Amenity

The report prepared by Christine Hawthorn is a landscape and visual effects assessment for a proposed new dwelling. The purpose of the assessment is to evaluate the potential visual and landscape impacts of the dwelling and to ensure it complies with the Far North District Plan and the Sandhills Estate Allotment Management Plan.

Key aspects of the proposal and site include:

- **The Dwelling:** The proposed dwelling is a small, 55.18m^2 structure composed of three interconnected "pods"[3]. It will feature dark, recessive colors (dark grey and brown stain) and materials to minimize its visual presence. The building is designed to be responsive to the natural contours of the land and is located within a low point between dunes, avoiding placement on prominent ridgelines.
- **The Site:** The 1.6846ha property is a coastal lot within the Sandhills Estate, situated approximately 130m east of Ninety Mile Beach. The surrounding landscape is characterized by a rolling pastoral dune system. The site has no outstanding landscape or natural character designations under the District or Regional plans.
- **Mitigation:** A key mitigation measure is the implementation of a landscape plan. This plan involves planting native species such as Pohutukawa, Ngaio, Pittosporum, and Flax around the dwelling to help integrate it into the natural environment and soften its appearance.

Conclusions on the Level of Effects

Christine Hawthorn concludes that the overall adverse effects of the proposed dwelling will be **low (less than minor)**.

This conclusion is based on the following key findings:

- **Physical Landscape Effects:** The potential physical landscape effects are assessed as **low**. This is because the earthworks will be minimal, and no vegetation removal is required, meaning the proposal will not significantly alter the landform or existing vegetation patterns.
- **Visual Amenity Effects:** The potential adverse visual amenity effects are also determined to be **low (less than minor)**. The dwelling's small scale, recessive coloring, and placement within a low point between dunes, combined with the landscape planting, will ensure it is not visually prominent and blends into the surrounding landscape.
- **Landscape Character Effects:** The effect on the wider landscape character is considered **less than minor**. The report finds that the modest building height and recessive design, along with the proposed planting, will absorb the dwelling into the landscape without adversely affecting the area's character values.

In summary, the assessment concludes that the development is appropriate for the site and is consistent with the relevant rules and assessment criteria of the Far North District Plan, the New Zealand Coastal Policy Statement, and the Regional Policy Statement.

Section 104(1)(ab) Any measures to achieve positive effects

Positive effects arising from the application include enabling the efficient use of land in the General Coastal zone in accordance with the consent notices that apply to the site. The built development proposed on the applicant's site is anticipated through a previously approved subdivision consent.

Section 104 (b)(i) and (ii) National Environmental Standards & Other Regulations

There are no applicable National Environmental Standards. It is concluded that the site is not a HAIL site and that the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health does not apply to this proposal. Furthermore, the activity is not affected by the NES – Freshwater due to separation distances from existing wetlands.

Section 104 (b)(iii) National Policy Statement(s)

In terms of relevant National Policy Statements [**NPS**], the NPS for Highly Productive Land does not apply to this site.

No indigenous vegetation is proposed for removal so the NPS for Indigenous Biodiversity is not relevant.

Section 104 (b)(iv) New Zealand Coastal Policy Statement [NZCPS]

The polices in the NZCPS relevant to this application address activities in the coastal environment and the preservation of natural character. The underlying Sandhills Estate subdivision consent has addressed these matters in the NZCPS through the provision of 16 building lots upon the 75.85ha site. Each Lot, including the subject site, is subject to the Sandhills Estate Master Plan and Management Plan.

For the reasons above, the proposal is considered consistent with the NZCPS.

Section 104 (b)(v) Regional Policy Statement or Proposed Regional Policy Statement (RPS)

With respect to any identified features, the site is located within the Coastal Environment. The site is located outside areas of outstanding or high natural character and does not contain any outstanding natural landscapes or features. As such the framework looks to ensure that significant adverse effects are avoided and all other effects are avoided, remedied or mitigated.

The underlying Sandhills Estate subdivision consent has addressed these matters in the RPS through the provision of 16 building lots on the 75.85ha site. Each Lot, including the subject site, is subject to the Sandhills Estate Master Plan and Management Plan.

The landscape assessment concludes that the proposal is consistent with Regional Policies.

Public access is not affected by the proposal.

There are no identified archaeological sites or features on the property, however a standard accidental archaeological discovery protocol condition can be put in place throughout the project.

There are not considered to be any other relevant matters that pertain to this application that requires consideration over and above what is already considered by way of the ODP / PDP consideration above.

Overall, it is considered that the proposal would not be inconsistent with the Northland Regional Policy Statement.

Section 104 (b)(vi) Plans or Proposed Plans

This application is subject to the provisions of the ODP and is subject to consideration (limited weight) of the PDP objectives and policies. The site is zoned General Coastal in the ODP and Rural Production in the PDP. In terms of the ODP it is to be assessed in terms of the objectives and policies for the Coastal Environment and the General Coastal Zone.

Operative District Plan

Table 4 – Coastal Environment Assessment

Matter	Assessment
10.3.1 To manage coastal areas in a manner that avoids adverse effects from subdivision, use and development. Where it is not practicable to avoid adverse effects from subdivision use or development, but it is appropriate for the development to proceed, adverse effects of subdivision use or development should be remedied or mitigated.	The proposition is that this application aligns with the consent notice applied to the site and avoids adverse effects whilst mitigating localised effects resulting from the built development proposed. This aligns with the objective.

Matter	Assessment
10.3.2 To preserve, and where appropriate in relation to other objectives, to restore, rehabilitate protect or enhance: ▪ the natural character of the coastline and coastal environment; ▪ areas of significant indigenous vegetation and significant habitats of indigenous fauna; ▪ outstanding landscapes and natural features; ▪ the open space and amenity values of the coastal environment; ▪ water quality and soil conservation (insofar as it is within the jurisdiction of the Council).	As above, these are largely met through complying with the consent notices that apply to the site and the implementation of the Landscape Design.
10.3.3 To engage effectively with Māori to ensure that their relationship with their culture and traditions and taonga is identified, recognised and provided for.	The proposal does not impact on Māori or their relationship with their culture and traditions and taonga.
10.3.4 To maintain and enhance public access to and along the coast whilst ensuring that such access does not adversely affect the natural and physical resources of the coastal environment, including Maori cultural values and public health and safety.	The application in no way affects the publics ability to access the coastline.
10.3.5 To secure future public access to and along the coast, lakes and rivers (including access for Maori) through the development process and specifically in accordance with the *Esplanade Priority areas* maps in the District Plan.	Not relevant.
10.3.6 To minimise adverse effects from activities in the coastal environment that cross the Coastal Marine Area boundary.	Not relevant.

Matter	Assessment
10.3.7 To avoid, remedy or mitigate adverse effects on the environment through the provision of adequate land-based services for mooring areas, boat ramps and other marine facilities.	Not relevant.
10.3.8 To ensure provision of sufficient water storage to meet the needs of coastal communities all year round.	Sufficient water will be provided to the proposed dwelling.
10.3.9 To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development.	Not relevant.
10.4.1 That the Council only allows appropriate subdivision, use and development in the coastal environment. Appropriate subdivision use and development is that where the activity generally: (a) recognises and provides for those features and elements that contribute to the natural character of an area that may require preservation, restoration or enhancement; and (b) is in a location and of a scale and design that minimises adverse effects on the natural character of the coastal environment; and (c) has adequate services provided in a manner that minimises adverse effects on the coastal environment and does not adversely affect the safety and efficiency of the roading network; and *Continued .....*	Appropriate use and development have been determined through a previous consent and consent notices applied to ensure that appropriate development is undertaken. This application accords with the consent notices that apply to the site. The location, scale and design of the building platforms have been assessed as appropriate and relates to less than minor effects to natural character of the coastal environment (visual amenity). Adequate services exist, this application does nothing to change the status quo in this respect.
10.4.2 That sprawling or sporadic subdivision and development in the coastal environment be avoided through the consolidation of	This application accords with the consent notices that apply to the site.

Matter	Assessment
subdivision and development as far as practicable, within or adjoining built up areas, to the extent that this is consistent with the other objectives and policies of the Plan.	
10.4.3 That the ecological values of significant coastal indigenous vegetation and significant habitats are maintained in any subdivision, use or development in the coastal environment.	The proposed development does not encroach on any areas of indigenous vegetation, or any areas identified as containing High Natural Character.
10.4.4 That public access to and along the coast be provided, where it is compatible with the preservation of the natural character, and amenity, cultural, heritage and spiritual values of the coastal environment, and avoids adverse effects in erosion prone areas;	Local iwi have a reserve on the seaward side of the site.
10.4.5 That access by tangata whenua to ancestral lands, sites of significance to Maori, maahinga mataitai, taiapure and kaimoana areas in the coastal marine area be provided for in the development and ongoing management of subdivision and land use proposals and in the development and administration of the rules of the Plan and by non-regulatory methods. Refer *Chapter 2*, and in particular *Section 2.5*, and Council's *Tangata Whenua Values and Perspectives(2004)*.	Local iwi have a reserve on the seaward side of the site.
10.4.6 That activities and innovative development including subdivision, which provide superior outcomes and which permanently protect, rehabilitate and/or enhance the natural character of the coastal environment, particularly through the establishment and ongoing management of indigenous vegetation and habitats, will be encouraged by the Council.	The site is subject to the Sandhills Estate Master Plan and Management Plan.

Matter	Assessment
10.4.7 To ensure the adverse effects of land-based activities associated with maritime facilities including mooring areas and boat ramps are avoided, remedied or mitigated through the provision of adequate services, including where appropriate: (a) parking (b) rubbish disposal (c) waste disposal (d) dinghy racks	Not relevant.
10.4.8 That development avoids, remedies or mitigates adverse effects on the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.	The development is not considered to incur any effects in this regard.
10.4.9 That development avoids, where practicable, areas where natural hazards could adversely affect that development and/or could pose a risk to the health and safety of people.	The development avoids the mapped natural hazard which located to the west.
10.4.10 To take into account the need for a year-round water supply, whether this involves reticulation or on-site storage, when considering applications for subdivision, use and development.	Services are proposed on site to service the dwelling.
10.4.11 To promote land use practices that minimise erosion and sediment run-off, and storm water and wastewater from catchments that have the potential to enter the Coastal Marine Area.	This can be conditioned at time of development.

Matter	Assessment
10.4.12 That the adverse effects of development on the natural character and amenity values of the coastal environment will be minimised through: (a) the siting of buildings relative to the skyline, ridges, headlands and natural features; (b) the number of buildings and intensity of development; (c) the colour and reflectivity of buildings; (d) the landscaping (including planting) of the site; (e) the location and design of vehicle access, manoeuvring and parking areas.	The Landscape Assessment provided in **Appendix E** concludes that the effects will be less than minor.

Table 5 – General Coastal Zone Assessment

Matter	Assessment
10.6.3.1 To provide for appropriate subdivision, use and development consistent with the need to preserve its natural character.	The proposal is considered to represent appropriate development incurring effects that are less than minor in accordance with the consent notices that apply to the site, approved under a previous subdivision consent.
10.6.3.2 To preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development.	As above for 10.6.3.1 and matters assessed in Table 4.
10.6.3.3 To manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations.	The proposal is considered to be good use of natural and physical resources. Development of this nature is anticipated under the previous subdivision consent.
10.6.4.1 That a wide range of activities be permitted in the General Coastal Zone, where their effects are compatible with the preservation of the natural character of the coastal environment.	The activities which will be residential in nature have been assessed as being appropriate and compatible on the proposed site through the approved subdivision consent. Further, it is in accordance with the consent notices that apply to the site.

Matter	Assessment
10.6.4.2 That the visual and landscape qualities of the coastal environment be protected from inappropriate subdivision, use and development.	The Landscape Assessment provided in **Appendix E** concludes that the effects will be less than minor.

Matter	Assessment
10.6.4.3 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to s6 matters, and shall avoid adverse effects as far as practicable by using techniques including: (a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns; (b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area; (c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas; (d) through siting of buildings and development, design of subdivisions and provision of access, that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District. (Refer Chapter 2 and in particular Section 2.5 and Council's "Tangata Whenua Values and Perspectives (2004)"; (e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests; (f) protecting historic heritage through the siting of buildings and development and design of subdivisions.	There is only one dwelling on the site proposed. Visual impact is mitigated by way of landscape solutions. A reserve already exists on the seaward boundary of the site. The applicant has considered effects that may be associated with Māori relationships with their culture and traditions and taonga. The development is not considered to incur any effects in this regard.

Matter	Assessment
10.6.4.4 That controls be imposed to ensure that the potentially adverse effects of activities are avoided, remedied or mitigated as far as practicable.	Consent notices are applied to the site to ensure appropriate development. The Landscape Assessment provided in **Appendix E** concludes that the effects will be and less than minor.
10.6.4.5 Maori are significant landowners in the General Coastal Zone and therefore activities in the zone should recognise and provide for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.	The applicant has considered effects that may be associated with Māori relationships with their culture and traditions and taonga. The development is not considered to incur any effects in this regard.
10.6.4.6 The design, form, location and siting of earthworks shall have regard to the natural character of the landscape including terrain, landforms and indigenous vegetation and shall avoid, remedy or mitigate adverse effects on those features.	Earthworks are not a critical component of this application outside of the preparation of the building platform.

Overall, it is considered that the proposed dwelling would not be contrary to any applicable District Plan objective or policy.

Proposed District Plan

The relevant objectives are those associated with the Coastal Environment and Rural Production Zone of the PDP. These are addressed below.

Table 7 – Coastal Environment Overlay

Matter	Assessment
CE-O1 - The natural character of the coastal environment is identified and managed to ensure its long-term preservation and protection for current and future generations.	The coastal environment is identified with associated rules within the PDP.
CE-O2 - Land use and subdivision in the coastal environment:	The proposed dwelling is anticipated to fit within the coastal environment with minimal

a. preserves the characteristics and qualities of the natural character of the coastal environment; b. is consistent with the surrounding land use; c. does not result in urban sprawl occurring outside of urban zones; d. promotes restoration and enhancement of the natural character of the coastal environment; and e. recognises tangata whenua needs for ancestral use of whenua Māori.	adverse effects given the mitigation measures proposed.
CE-O3 - Land use and subdivision in the coastal environment within urban zones is of a scale that is consistent with existing built development.	The site is not within an urban zone.
CE-P1 - Identify the extent of the coastal environment as well as areas of high and outstanding natural character using the assessment criteria in APP1- Mapping methods and criteria.	This is done within the PDP maps.
CE-P2 - Avoid adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment identified as: a. outstanding natural character; b. ONL; c. ONF.	The site does not contain any of these features.
CE-P3 - Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment not identified as: a. outstanding natural character; b. ONL; c. ONF.	The Landscape Assessment provided in **Appendix E** concludes that the effects will be less than minor.
CE-P4 - Preserve the visual qualities, character and integrity of the coastal environment by: a. consolidating land use and subdivision around existing urban centres and rural settlements; and	The proposal is for a dwelling which was anticipated for the site through the approved subdivision consent.

b. avoiding sprawl or sporadic patterns of development.	These are not anticipated to adversely affect the visual qualities and character associated with the coastal environment.
CE-P5 - Enable land use and subdivision in urban zones within the coastal environment where: a. there is adequacy and capacity of available or programmed development infrastructure; and b. the use is consistent with, and does not compromise the characteristics and qualities.	The site is not within an urban zone.
CE-P6 – Enable farming activities within the coastal environment where: a. the use forms part of the values that established natural character of the coastal environment; or b. the use is consistent with, and does not compromise the characteristics and qualities.	The proposal does not relate to farming.
CE-P7 - Provide for the use of Māori Purpose zoned land and Treaty Settlement land in the coastal environment where: a. the use is consistent with the ancestral use of that land; and b. the use does not compromise any identified characteristics and qualities.	The site does not relate to Māori Purpose zoned land and Treaty Settlement land.
CE-P8 - Encourage the restoration and enhancement of the natural character of the coastal environment.	Consent conditions / mitigation measures in **Appendix E** will meet this policy.
CE-P9 - Prohibit land use and subdivision that would result in any loss and/or destruction of the characteristics and qualities in outstanding natural character areas.	The site is not within an outstanding natural character area.
CE-P10 - Manage land use and subdivision to preserve and protect the natural character of the coastal environment, and to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:	These aspects are covered within the application above, all with effects that are less than minor in nature.

a. the presence or absence of buildings, structures or infrastructure; b. the temporary or permanent nature of any adverse effects; c. the location, scale and design of any proposed development; d. any means of integrating the building, structure or activity; e. the ability of the environment to absorb change; f. the need for and location of earthworks or vegetation clearance; g. the operational or functional need of any regionally significant infrastructure to be sited in the particular location; h. any viable alternative locations for the activity or development; i. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6; j. the likelihood of the activity exacerbating natural hazards; k. the opportunity to enhance public access and recreation; l. the ability to improve the overall quality of coastal waters; and m. any positive contribution the development has on the characteristics and qualities.	

Table 8 – Rural Production Zone

Matter	Assessment
RPROZ-O1 - The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.	The proposed zoning is not entirely appropriate in terms of the sites ability to undertake viable rural production activities given its size.
RPROZ-O2 - The Rural Production zone is used for primary production activities, ancillary activities that support primary production and	As above.

other compatible activities that have a functional need to be in a rural environment.	
RPROZ-O3 - Land use and subdivision in the Rural Production zone: a) protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production; b) protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation; c) does not compromise the use of land for farming activities, particularly on highly productive land; d) does not exacerbate any natural hazards; and e) is able to be serviced by on-site infrastructure.	The land is not identified as highly productive. Most surrounding activities are residential / lifestyle in nature. Farming is not a predominant activity. Natural hazards are only present on a small portion of the site away from proposed development.
RPROZ-O4 - The rural character and amenity associated with a rural working environment is maintained.	The Landscape Assessment provided in **Appendix E** concludes that the effects will be less than minor.
RPROZ-P1 Enable primary production activities, provided they internalise adverse effects onsite where practicable, while recognising that typical adverse effects associated with primary production should be anticipated and accepted within the Rural Production zone.	As above, this would not be viable in this context.
RPROZ-P2 - Ensure the Rural Production zone provides for activities that require a rural location by: a) enabling primary production activities as the predominant land use; b) enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail,	Noted, however these are not proposed as the predominant land use.

visitor accommodation and home businesses.	
RPROZ-P3 - Manage the establishment, design and location of new sensitive activities and other non-productive activities in the Rural Production Zone to avoid where possible, or otherwise mitigate, reverse sensitivity effects on primary production activities.	Not relevant.
RPROZ-P4 - Land use and subdivision activities are undertaken in a manner that maintains or enhances the rural character and amenity of the Rural Production zone, which includes: a) a predominance of primary production activities; b) low density development with generally low site coverage of buildings or structures; c) typical adverse effects such as odour, noise and dust associated with a rural working environment; and d) a diverse range of rural environments, rural character and amenity values throughout the District.	The overall proposal has considered these matters with an overall conclusion that the approach is acceptable.
RPROZ-P5 - Avoid land use that: a) is incompatible with the purpose, character and amenity of the Rural Production zone; b) does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone; c) would result in the loss of productive capacity of highly productive land; d) would exacerbate natural hazards; and e) cannot provide appropriate on-site infrastructure.	The proposal is compatible with the surrounds which are more residential/lifestyle than rural in nature. Residential use has a functional need to be located in the coastal environment as people have been habituating these areas for generations. The site will accommodates a dwelling, this is anticipated through the consent notice that applies to the site. The site is not highly productive. The site is not impacted by natural hazards that would limit the proposal.

	Appropriate infrastructure servicing to the dwelling will be implemented.
RPROZ-P6 – Avoid subdivision that: a) results in the loss of highly productive land for use by farming activities; b) fragments land into parcel sizes that are no longer able to support farming activities, taking into account: c) the type of farming proposed; and d) whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land. e) provides for rural lifestyle living unless there is an environmental benefit.	No subdivision is proposed.
RPROZ-P7 - Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application: a) whether the proposal will increase production potential in the zone; b) whether the activity relies on the productive nature of the soil; c) consistency with the scale and character of the rural environment; d) location, scale and design of buildings or structures; e) for subdivision or non-primary production activities: f) scale and compatibility with rural activities; g) potential reverse sensitivity effects on primary production activities and existing infrastructure; h) the potential for loss of highly productive land, land sterilisation or fragmentation i) at zone interfaces:	These matters have been addressed within the application.

j) any setbacks, fencing, screening or landscaping required to address potential conflicts; k) the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable; l) the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer; m) the adequacy of roading infrastructure to service the proposed activity; n) Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity; o) Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.	

Section 104 (c) Other Matters

There are no other matters that are considered relevant.

Section 88A(2) provides that "any plan or proposed plan which exists when the application is considered must be had regard to in accordance with section 104(1)(b)." This requires applications to be assessed under both the operative and proposed objective and policy frameworks from the date of notification of the proposed district plan.

In the event of differing directives between objective and policy frameworks, it is well established by case law that the weight to be given to a proposed district plan depends on what stage the relevant provisions have reached, the weight generally being greater as a proposed plan move through the notification and hearing process.

In Keystone Ridge Ltd v Auckland City Council, the High Court held that the extent to which the provisions of a proposed plan are relevant should be considered on a case by case basis and might include:

- The extent (if any) to which the proposed measure might have been exposed to testing and independent decision making;
- Circumstances of injustice; and
- The extent to which a new measure, or the absence of one, might implement a coherent pattern of objectives and policies in a plan.

In my view the PDP has not gone through the sufficient process to allow a considered view of the objectives and policies for the Rural Production Zone with a Coastal Environment overlay however this has been provided.

The assessment of the relevant objectives and policies from the ODP and the PDP has concluded these can be meet by the proposal.

7.0 PART II - RMA

Section 5 - Purpose of the RMA

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

It is considered that proposal represents Part 2, Section 5 of the RMA.

Section 6 - Matters of National Importance

In achieving the purpose of the Act, a range of matters are required to be recognised and provided for. This includes:

> a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
>
> b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

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

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

e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga:

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

g) the protection of protected customary rights:

h) the management of significant risks from natural hazards.

In context, the relevant items to the proposal and have been recognised and provided for.

Section 7 - Other Matters

In achieving the purpose of the RMA, a range of matters are to be given particular regard. This includes:

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:

(ba) the efficiency of the end use of energy:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(e) [Repealed]

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(h) the protection of the habitat of trout and salmon:

(i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

These matters have been given particular regard through the design of the proposal.

Section 8 - Treaty of Waitangi

The Far North District Council is required to take into account the principles of the Treaty of Waitangi when processing this consent. This consent application may be sent to local Iwi and hapū who may have an interest in this application.

8.0 CONCLUSION

A Controlled Activity resource consent is sought from the Far North District Council to carry out the land use activity proposed.

The proposal is considered to result in less than minor effects on the environment.

The proposal is consistent with the objectives and policies of the Far North District Plan, the Regional Policy Statement for Northland, and achieves the purpose of the RMA.

Relevant NPS' and NES' have been considered with the proposal finding consistency with their general aims and intent.

We look forward to receiving acknowledgment of the application and please advise if any additional information is required.

Steven Sanson
Consultant Planner

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 **1150142**
Land Registration District **North Auckland**
Date Issued 13 November 2024

Prior References
NA78D/2

Estate Fee Simple
Area 1.6846 hectares more or less
Legal Description Lot 1 Deposited Plan 594744
Registered Owners
Timothy William Burgess, Rochelle Ann Lockley and CLM Trustees Limited as to a 1/2 share
Peter John Lindsay Hunt, Katherine Bridget Dillon and KTP Trustee Services Limited as to a 1/2 share

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Estate Fee Simple - 1/17 share
Area 2.7940 hectares more or less
Legal Description Lot 17 Deposited Plan 594744
Registered Owners
Timothy William Burgess, Rochelle Ann Lockley and CLM Trustees Limited as to a 1/2 share
Peter John Lindsay Hunt, Katherine Bridget Dillon and KTP Trustee Services Limited as to a 1/2 share

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Estate Fee Simple - 1/17 share
Area 1.7641 hectares more or less
Legal Description Lot 21 Deposited Plan 594744
Registered Owners
Timothy William Burgess, Rochelle Ann Lockley and CLM Trustees Limited as to a 1/2 share
Peter John Lindsay Hunt, Katherine Bridget Dillon and KTP Trustee Services Limited as to a 1/2 share

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Interests

Subject to Section 241(2) Resource Management Act 1991 (affects DP 594744)

13153773.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744)

Appurtenant to Lot 1 DP 594744 herein is a right of way (Pedestrian) created by Easement Instrument 13153773.5 - 13.11.2024 at 4:13 pm

Subject to a right (in gross) to convey telecommunications over Lot 17 DP 594744 marked B on DP 594744 in favour of Chorus New Zealand Limited created by Easement Instrument 13153773.6 - 13.11.2024 at 4:13 pm

The easements created by Easement Instrument 13153773.6 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right (in gross) to convey electricity and telecommunications over Lot 17 DP 594744 marked B on DP 594744 in favour of Top Energy Limited created by Easement Instrument 13153773.7 - 13.11.2024 at 4:13 pm

The easements created by Easement Instrument 13153773.7 are subject to Section 243 (a) Resource Management Act 1991

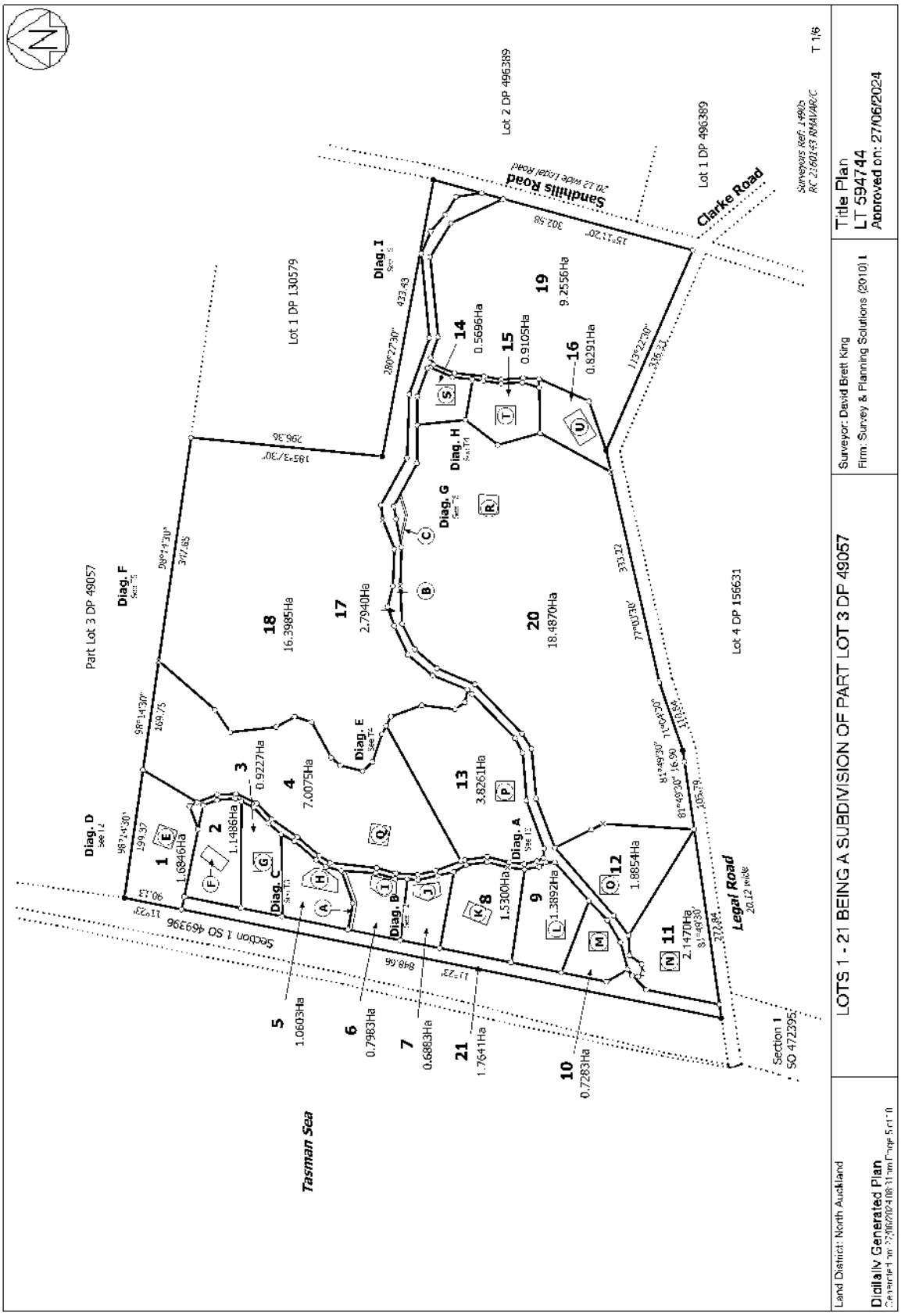
Land Covenant in Covenant Instrument 13153773.8 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744 and Lot 17 DP 594744)

Land Covenant in Covenant Instrument 13153773.9 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744 and Lot 21 DP 594744)

Land Covenant in Covenant Instrument 13153773.10 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744)

Land Covenant in Covenant Instrument 13153773.11 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744 and Lot 21 DP 594744)

Land Covenant (in gross) in favour of One Thousand Sandhills Limited created by Covenant Instrument 13153773.12 - 13.11.2024 at 4:13 pm (Affects Lot 1 DP 594744)


LOTS 1 - 21 BEING A SUBDIVISION OF PART LOT 3 DP 49057
Title Plan
LT 594744
Approved on: 27/06/2024
Surveyor: David Brett King
Firm: Survey & Planning Solutions (2010) L
Land District: North Auckland
Digitally Generated Plan
Part Lot 3 DP 49057
Lot 1 DP 130579
Lot 2 DP 496389
Lot 1 DP 496389
Lot 4 DP 156631
Sandhills Road
Clarke Road
Legal Road
Tasman Sea
Section 1 SO 472395
Section 1 SO 469396
Diag. A
Diag. B
Diag. C
Diag. D
Diag. E
Diag. F
Diag. G
Diag. H
Diag. I
1 1.6846Ha
2 1.1486Ha
3 0.9227Ha
4 7.0075Ha
5 1.0603Ha
6 0.7983Ha
7 0.6883Ha
8 1.5300Ha
9 1.3892Ha
10 0.7283Ha
11 2.1470Ha
12 1.8854Ha
13 3.8261Ha
14 0.5696Ha
15 0.9105Ha
16 0.8291Ha
17 2.7940Ha
18 16.3985Ha
19 9.2556Ha
20 18.4870Ha
21 1.7641Ha

View Instrument Details

Instrument No	13153773.3
Status	Registered
Lodged By	Warner, Nicole Judith
Date & Time Lodged	13 Nov 2024 16:13
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Records of Title	**Land District**
1150142	North Auckland
1150143	North Auckland
1150144	North Auckland
1150145	North Auckland
1150146	North Auckland
1150147	North Auckland
1150148	North Auckland
1150149	North Auckland
1150150	North Auckland
1150151	North Auckland
1150152	North Auckland
1150153	North Auckland
1150154	North Auckland
1150155	North Auckland
1150156	North Auckland
1150157	North Auckland
1150158	North Auckland

Annexure Schedule	Contains 3 Pages

Signature

Signed by Nicole Judith Warner as Territorial Authority Representative on 07/08/2024 04:17 PM

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

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Far North District Council
Te Kaunihera o Tai Tokerau ki te Raki

HE ARA TĀMATA
CREATING GREAT PLACES
Supporting our people
Private Bag 752, Kaikohe 0440, New Zealand
ask.us@fndc.govt.nz
0800 920 029
fndc.govt.nz

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING **RC 2160143-RMAVAR/C**
Being the Subdivision of PT LOT 3 DP 49057 BLK II AHIPARA SD
North Auckland Registry

PURSUANT to Section 221 and for the purpose of Section 224 (c) (ii) 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 these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lots 1 to 16 & Lots 18 to 20 DP 594744

i) The Lot is subject to the Sandhills Estate Master Plan, and the individual Allotment Management Plan applying to each Lot which addresses scale, siting and design of buildings, landscape development and planting, activities in covenanted areas, revegetation, weed and pest management, stormwater and wastewater management.

The Sandhills Estate Master Plan and the individual Allotment Management Plan relative to each of the above Lots shall be observed and continued and shall not cease without the express permission of Council.

Lot 1 to 12 DP 594744

ii) A 'Coastal hazard assessment' prepared by Tonkin and Taylor, job number 31461.v1, dated April 2016 (submitted in support of RC2160143), considers the effects of coastal inundation, coastal erosion and tsunami on the lot. The report sets minimum floor levels at 4.8 metres One Tree Point Vertical Datum 1964. No habitable building shall be constructed with finished floor levels below this.

Lots 1 to 16, 18, 19 and 20 DP 594744

iii) Future owners of the Lot shall be aware of the cultural significance of the sites identified in the 'Cultural Impact Assessment, Sandhills Estate' submitted in support of RC2160143. Future owners of the Lot are required to give effect to any requirements outlined in the Cultural Impact Assessment. The intent of the 'Cultural Impact Assessment is to inform future landowners about the importance of respecting and acknowledging the cultural values and the purpose of the adjoining conservation reserve to protect the waahi tapu and to avoid accidental transgressions on any tapu.

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Lots 18, 19 and 20 DP 594744

iv) Future owners of the Lot shall ensure that the planting in Appendix B of the Sandhills Estate Master Plan (entitled 'Landscape Plan & Requirements') is maintained and managed for a period of five (5) years from the date of deposit of plan 594744 in accordance with the methodologies set out in that document (particularly the Planting Notes). If, during the five (5) year period, any part of the initial planting is lost by more than 10%, then the amount exceeding 10% shall be replaced at the owner's expense with the same species or equivalent as approved by Council's Resource Consent Manager, or Delegated Officer.

The owners of the Lot 18, 19 and 20 on DP 594744 shall:

(a) engage a suitably qualified contractor to carry out the maintenance programme set out above for the requisite five (5) year period; and

(b) shall arrange for the maintenance programme to be reviewed by an independent and suitably qualified person annually on the anniversary of the deposit of plan 594744 for the five (5) year period and provide a report to Council on progress.

This Consent Notice will be cancelled on the expiry of five (5) years from the date of deposit of plan 594744 (at the Lot owners expense) provided that Council has received satisfactory annual reports for the five years prior.

Lots 1 to 16 and Lots 18, 19, 20 DP 594744

v) No owner, occupier, or visitor shall keep or introduce to the Lots or any part of the Sandhills Estate carnivorous or omnivorous animals (such as, but not limited to, cats, dogs, or mustelids) which have the potential to be predators of kiwi or other vulnerable fauna.

Lots 1 to 16 and Lots 18, 19, 20 DP 594744

vi) No earthworks shall be carried out or building erected on any Lot without the prior approval of Council's Resource Consent Manager, or Delegated Officer, to the specific design for cut and fill batters, retaining walls and building foundations.

Lots 18, 19, 20 DP 594744

vii) Residential development on the amalgamated area of Lots 18, 19 and 20 is limited to one residential unit and one worker's cottage. In respect of any residential unit that is developed, this shall be located on the building platform identified 'R' on Lot 20.

Lots 1 to 16 and 18, 19, 20 DP 594744

viii) No further subdivision may occur on the Lot.

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SIGNED: _____

Ms Nicola Cowley - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE CONSENTS

DATED at **KERIKERI** this 24th day of July 2024.

View Instrument Details

Instrument No	13153773.3
Status	Registered
Lodged By	Warner, Nicole Judith
Date & Time Lodged	13 Nov 2024 16:13
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Records of Title	**Land District**
1150142	North Auckland
1150143	North Auckland
1150144	North Auckland
1150145	North Auckland
1150146	North Auckland
1150147	North Auckland
1150148	North Auckland
1150149	North Auckland
1150150	North Auckland
1150151	North Auckland
1150152	North Auckland
1150153	North Auckland
1150154	North Auckland
1150155	North Auckland
1150156	North Auckland
1150157	North Auckland
1150158	North Auckland

Annexure Schedule	Contains 3 Pages

Signature

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SIGNED: _____

Ms Nicola Cowley - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE CONSENTS

DATED at **KERIKERI** this 24th day of July 2024.

NEW TRANSPORTABLE DWELLING at LOT 1 DP 594744 , 137 TIROMOANA WAY, AHIPARA for CLM TRUSTEES LTD & KTP TRUSTEE SERVICES LTD

ARTISTIC IMPRESSION ONLY

ARCHITECTURAL DRAWINGS

Sheet	Layout Name	REV
A00	COVER	BC-C-3
A01	OVERALL SITE	BC-C-3
A02	PART SITE PLAN	BC-C-3
A03	REFERENCE FLOOR PLAN	BC-C-3
A04	FLOOR PLAN - POD 1 & 2	BC-C-3
A05	FLOOR PLAN - POD 3	BC-C-3
A06	ELEVATIONS - SHEET 1	BC-C-3
A07	ELEVATION - SHEET 2	BC-C-3
A08	SECTION A-A	BC-C-3
A09	SECTION B-B & C-C	BC-C-3
A10	FOUNDATION & PILE LAYOUT	BC-C-3
A11	DECK PILE & FRAMING LAYOUT	BC-C-3
A12	FLOOR FRAMING PLAN - POD 1 & 2	BC-C-3
A13	FLOOR FRAMING PLAN - POD 3	BC-C-3
A14	DRAINAGE & SERVICES PLAN	BC-C-3
A15	LINTEL & WALL FRAMING PLAN - POD 1 & 2	BC-C-3
A16	LINTEL & WALL FRAMING PLAN - POD 3	BC-C-3
A17	BRACING PLAN	BC-C-3
A18	ROOF PLAN	BC-C-3
A19	ROOF FRAMING PLAN - POD 1 & 2	BC-C-3
A20	ROOF FRAMING PLAN - POD 3	BC-C-3
A21	POLYCARBONATE ROOF FRAMING PLAN	BC-C-3
A22	POLYCARBONATE ROOF KEY	BC-C-3
A23	WINDOW & DOOR SCHEDULE - SHEET 1	BC-C-3
A24	WINDOW & DOOR SCHEDULE - SHEET 2	BC-C-3
A25	TYPICAL FRAMING CONNECTIONS - SHEET 1	BC-C-3
A26	TYPICAL FRAMING CONNECTIONS - SHEET 2	BC-C-3
A27	TYPICAL FRAMING CONNECTIONS - SHEET 3	BC-C-3
A28	TYPICAL FRAMING CONNECTIONS - SHEET 4	BC-C-3
A29	DECK CONNECTION DETAILS	BC-C-3
A30	EXTERNAL STAIR & HANDRAIL DETAILS	BC-C-3
A31	TYPICAL CLADDING DETAILS	BC-C-3
A32	PLY CLADDING JOINERY DETAILS	BC-C-3
A33	PLY CLADDING DETAILS - SHEET 1	BC-C-3
A34	PLY CLADDING DETAILS - SHEET 2	BC-C-3
A35	CORRUGATE JOINERY DETAILS	BC-C-3
A36	CORRUGATE CLADDING DETAILS	BC-C-3
A37	CLADDING JUNCTION & FLASHING DETAILS	BC-C-3
A38	TYPICAL ROOF DETAILS	BC-C-3
A39	PLUMBING SCHEMATIC	BC-C-3
A40	E3/AS1 INTERNAL DETAILS	BC-C-3
A41	PLUMBING & DRAINAGE DETAILS	BC-C-3

ACCOMPANYING DOCUMENTS

Certificate of Title 1150142
Consent Notice 13153773.3
Land Covenants
Company Extract/s

CODW Designer
CODW Engineer

Engineers Drawings

Engineers PS1 & Calcs - rebated studs for bracingGIB EZYBrace Schedule H1 Compliance - BRANZ Calculation method
DesignIT Schedule & PS1
GIB EzyBrace Bracing schedules

Project Specification

Product Specifications & Manufacturers Literature

BC-C-3 18/08/2025

REVISION

BUILDING CONSENT

Lindholmdesign ARCHITECTURAL SERVICES

P.0 Box 960, 0245 Kerikeri
ph/fax: (09) 407 3037 , mob: 021 407390
email:karin@lindholmdesign.co.nz
web: www.lindholmdesign.co.nz
Karin Lindholm Andreassen
LBP: Design 2: 107526

MODULAR DWELLINGS LIMITED

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NORTHPOINT

SITE DESCRIPTION:

LOT 1 DP 594744

SITE AREA: 1.6846ha more or less

WIND ZONE CALCULATION:
to BRANZ MAPS & NZS3604 Table 5.4:
VERY HIGH
TERRAIN: Open
SITE EXPOSURE: Exposed
TOPOGRAPHICAL CLASS: T2
- Outer Zone
- Moderate Gradient) = 0.16
Note: BRANZ MAPS indentify site within Very High Wind Zone

DISTRICT PLAN COMPLIANCE:
GENERAL COASTAL ZONE (Operative Plan)

VISUAL AMENITY: New Building area
Total Permitted:= New building for human habitation ≤ 25m2
Total Proposed: Proposed Dwelling Floor area =55.18m2 TOTAL
= RESOURCE CONSENT REQUIRED

RESIDENTIAL INTENSITY: Permitted 1 unit/20ha = COMPLIES

BUILDING HEIGHT:
Permitted: = 8m max
Proposed: = 4.1m max to apex = COMPLIES

SUNLIGHT: = COMPLIES

STORMWATER MANAGEMENT:
Proposed Total Roof Area: =94.70m2 (incl verandah)
Existing Driveway from survey measured: = 204.3m2 approx
Proposed Driveway (extended): = 110m2 approx (Extent to be confirmed on site)
Total Permitted: =10% max
Total Proposed: =409m2 approx =2.4% approx.
= COMPLIES

SETBACKS to BOUNDARIES:
Permitted =10m min
Proposed = >10m
= COMPLIES

EARTHWORKS VOLUME: Operative Plan
Total Permitted: = 300m3 max permitted in any 12month period
Proposed:
No earthworks proposed. Driven foundations and timber framed floor strucutre above extg ground level. Scrape to remove organic material under fottprint only.
Total Cut and Fill Proposed within 12mth period = COMPLIES

CUT/FILL FACE:
Permitted = ≤1.5m max cut face
Proposed: no cut or fill proposed = COMPLIES

EARTHWORKS PERMIT: NOT REQUIRED :
Earthworks less than han 500mm in depth and less than 50m3 as defined by Earthworks bylaw

HAIL/NES : NOT REQUIRED Not a HAIL site & soil disturbance less than 25m3 per 500m2 of site area.

1 Overall Site Plan 1:1000

2 Location Plan 1:12500

NOTES

1) All Services locations and connections shown indicative only.

2) Drainage to comply with AS/NZS3500

3) Drainage runs and services locations shown indicative only - all extg. services locations, invert levels, cable and drainage runs to be established on site by contractor prior to excavating for new building and or services.

4. Contours from Survey.

5. Floor level RL to be confirmed on site.

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
EQ ZONE: 1
SOIL CLASS: A - Refer to Geotech report
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
ROOF PITCH: 10
CLADDING WEIGHT: Light

BUILDING CONSENT

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Karin Lindholm Andreassen
LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
OVERALL SITE

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:1000, 1:12500
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

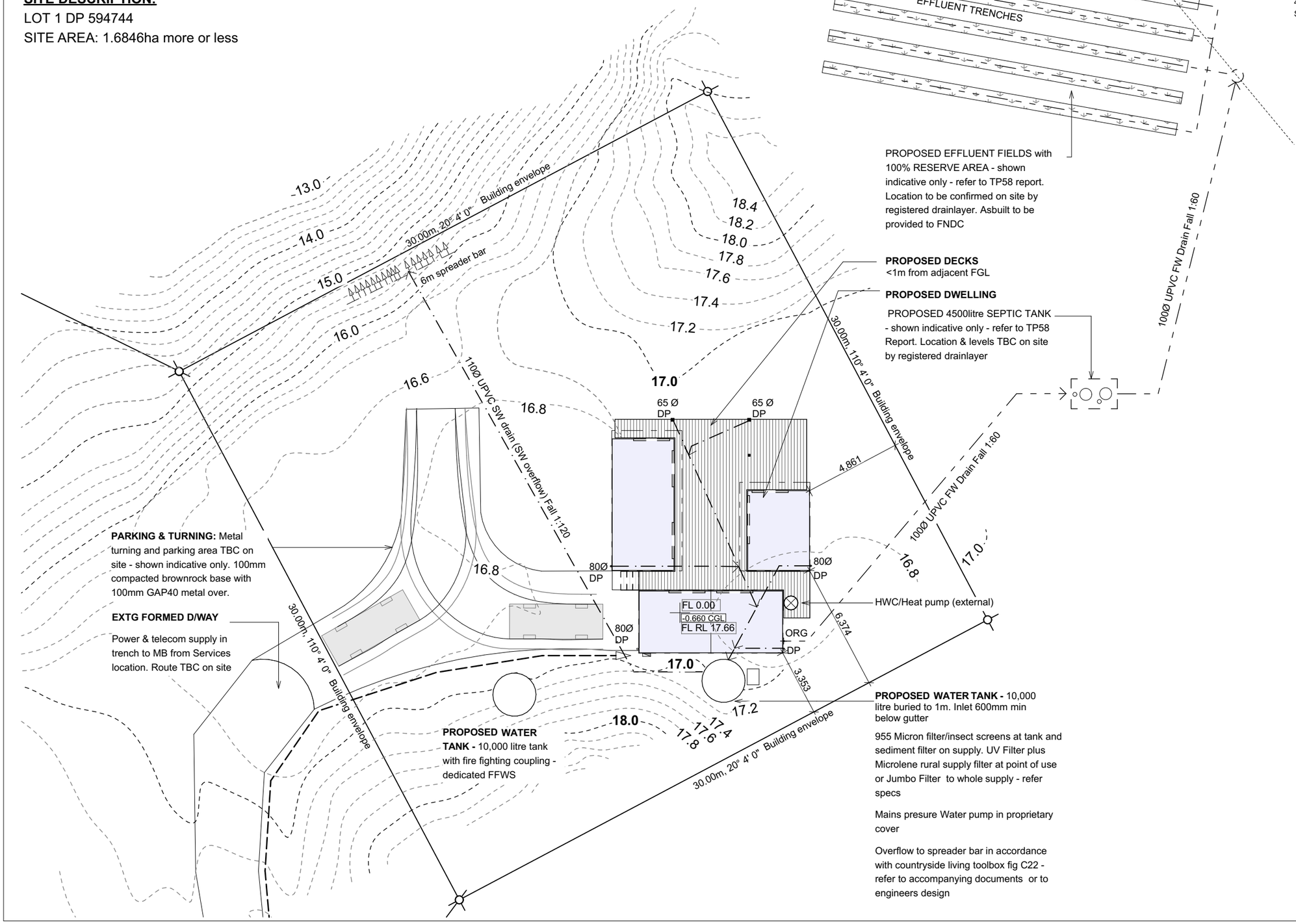
SHEET **A01**
REVISION NO. **BC-C-3**

NORTHPOINT

SITE DESCRIPTION:

LOT 1 DP 594744

SITE AREA: 1.6846ha more or less



NOTES

1) All Services locations and connections shown indicative only.

2) Drainage to comply with AS/NZS3500

3) Drainage runs and services locations shown indicative only - all extg. services locations, invert levels, cable and drainage runs to be established on site by contractor prior to excavating for new building and or services.

4. Contours indicative only from SURVEY drawing provided by Von Sturmers surveyors , Kaitaia (one tree point datum 1964)

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NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
PART SITE PLAN

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:200
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A02**

REVISION NO. **BC-C-3**

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: **VERY HIGH**
EXPOSURE ZONE: Designed to exposure **D**
SUBSOIL CLASSIFICATION: C - Refer to Geotech report**SOIL CLASS**: A - Refer to Geotech report
ROOF PITCH: 10 degrees
ROOF WEIGHT: LIGHT
CLADDING WEIGHT:LIGHT

PLAN AREAS: approx
POD 1 FLOOR AREA= 20.46m2 POD 1
POD 2 FLOOR AREA=12.40m2 POD 2
POD 3 FLOOR AREA =22.32m2 POD 3
TOTAL FLOOR AREA: =55.18m2 TOTAL

POD 1 ROOF AREA =24.80m2 POD 1
POD 2 ROOF AREA=15.62m2 POD 2
POD 3 ROOF AREA =22.95m2 POD 3
TOTAL ROOF AREA =94.70m2 (incl verandah)

KEY:

External Cladding 1: 12mm H3.1 PLY cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

Typical timber walls: H1.2 SG8 timber framing

W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

Roof line

Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1

INSULATION: Minimum requirements to habitable spaces comply to with NZBC H1: 5th Edition (Refer to BRANZ Calculation Method in accompanying documents)

POD 1 & 2: R4.5 min insulation to rafter depth
POD 3: R3.6 min insulation to rafter depth
R2.6 min insulation to exterior walls
R2.6min insulation to timber floors
IGU to exterior windows/doors - refer to window schedule

PLY to ceilings and PLASTERBOARD to walls

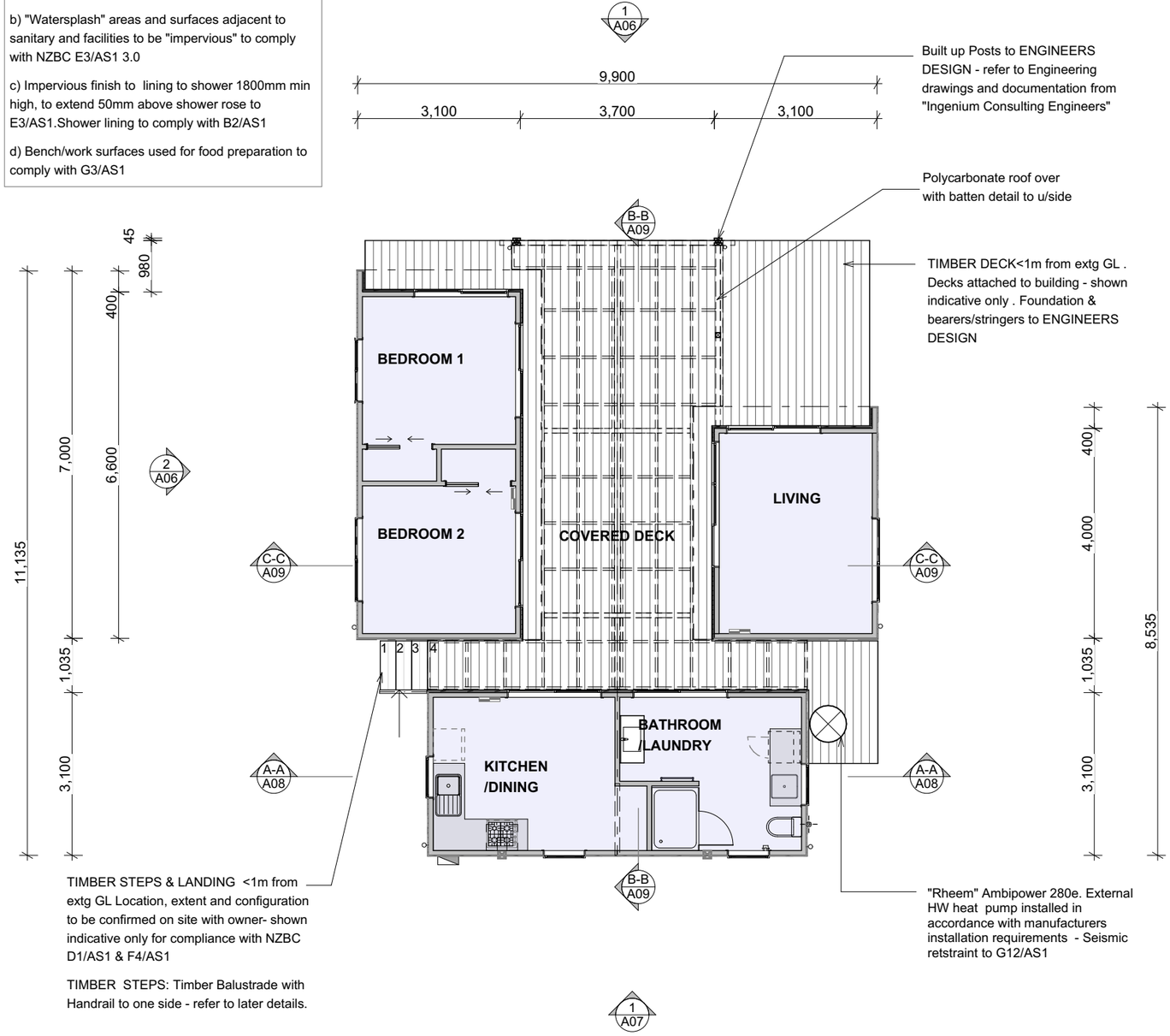
INTERIOR FINISHES: to comply with E3/AS1

a) Seal around all penetrations and at junctions of wall/floor finishes with approved mould resistant silicone sealant to all water splash areas and kitchen benches and between vinyl flooring and pre-primed timber skirting.

b) "Watersplash" areas and surfaces adjacent to sanitary and facilities to be "impervious" to comply with NZBC E3/AS1 3.0

c) Impervious finish to lining to shower 1800mm min high, to extend 50mm above shower rose to E3/AS1.Shower lining to comply with B2/AS1

d) Bench/work surfaces used for food preparation to comply with G3/AS1



NORTHPOINT

NOTES

1) All construction to be in accordance with NZS3604:2011 & the NZBC Acceptable Solutions unless Specifically designed or Alternative Solution approved by BCA .

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Setout dimensions are to timber framing.

4) Timber wall framing to be H1.2 SG8 unless specified otherwise. Nogs at 800mm max ctrs typically or as required by cladding manufacturer.

5)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, WC Cistern, towel rails, toilet roll holders, etc as required

6)External window & Door dimensions are nominal frame sizes. Refer to joinery manufacturers schedule for trim sizes.

7) Internal Doors are leaf sizes. Framing to allow for door frame and tolerances.

8) All recessed light fixtures to be CA rated to comply with AS/NZS 605982.2 (Insulation to comply with AS/NZS 60695.11.5)

9) All electrical work by registered electrician to comply with Electricity regulations, NZ Standards, NZBC and LA requirements. Electrician to provide compliance certificate.

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NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
REFERENCE FLOOR PLAN

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:100, 1:200
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A03**
REVISION NO. **BC-C-3**

KEY:

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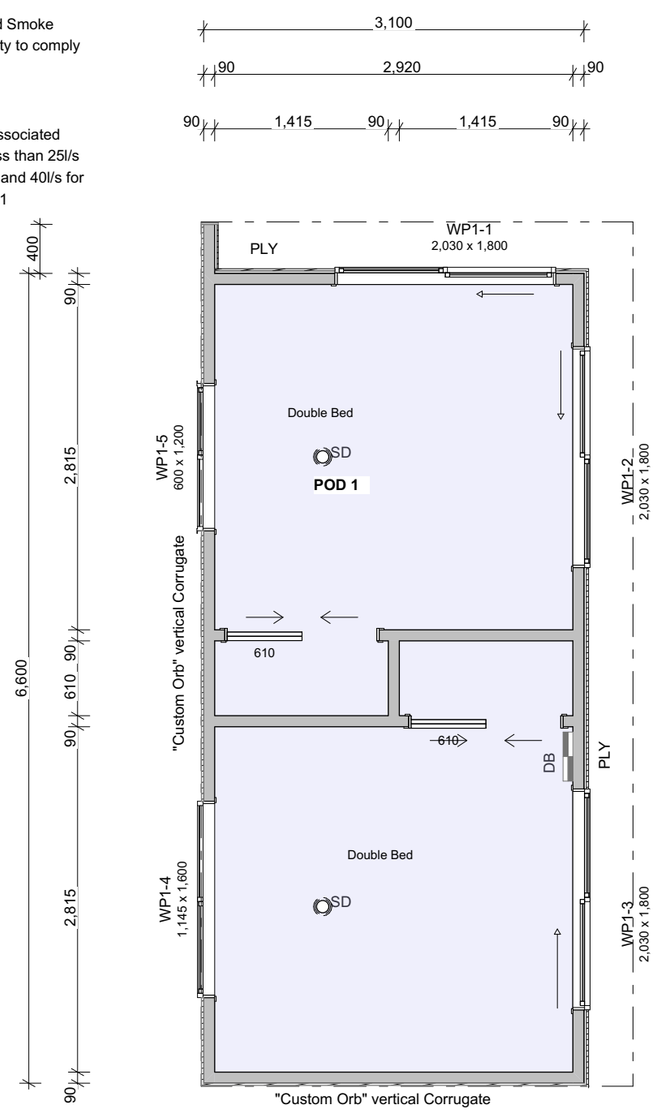
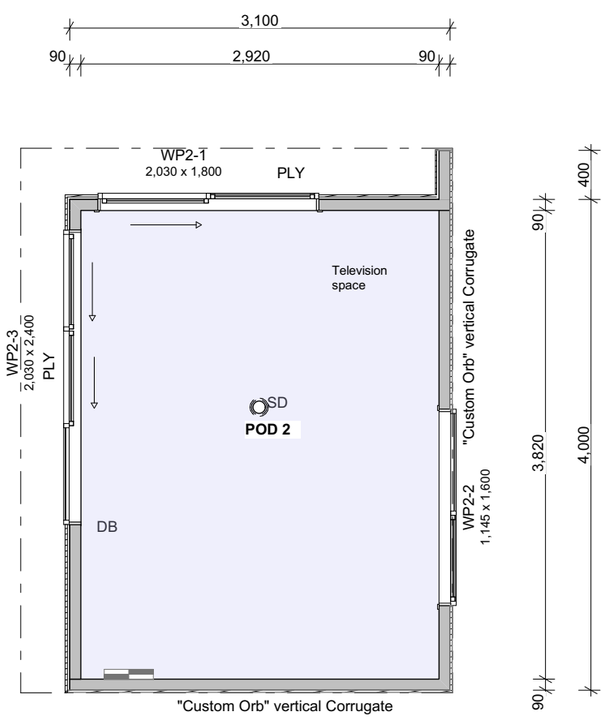
Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1





NOTES

1) Refer to A03 for notes

BUILDING CONSENT

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Karin Lindholm Andreassen
LBP: Design 2: 107526

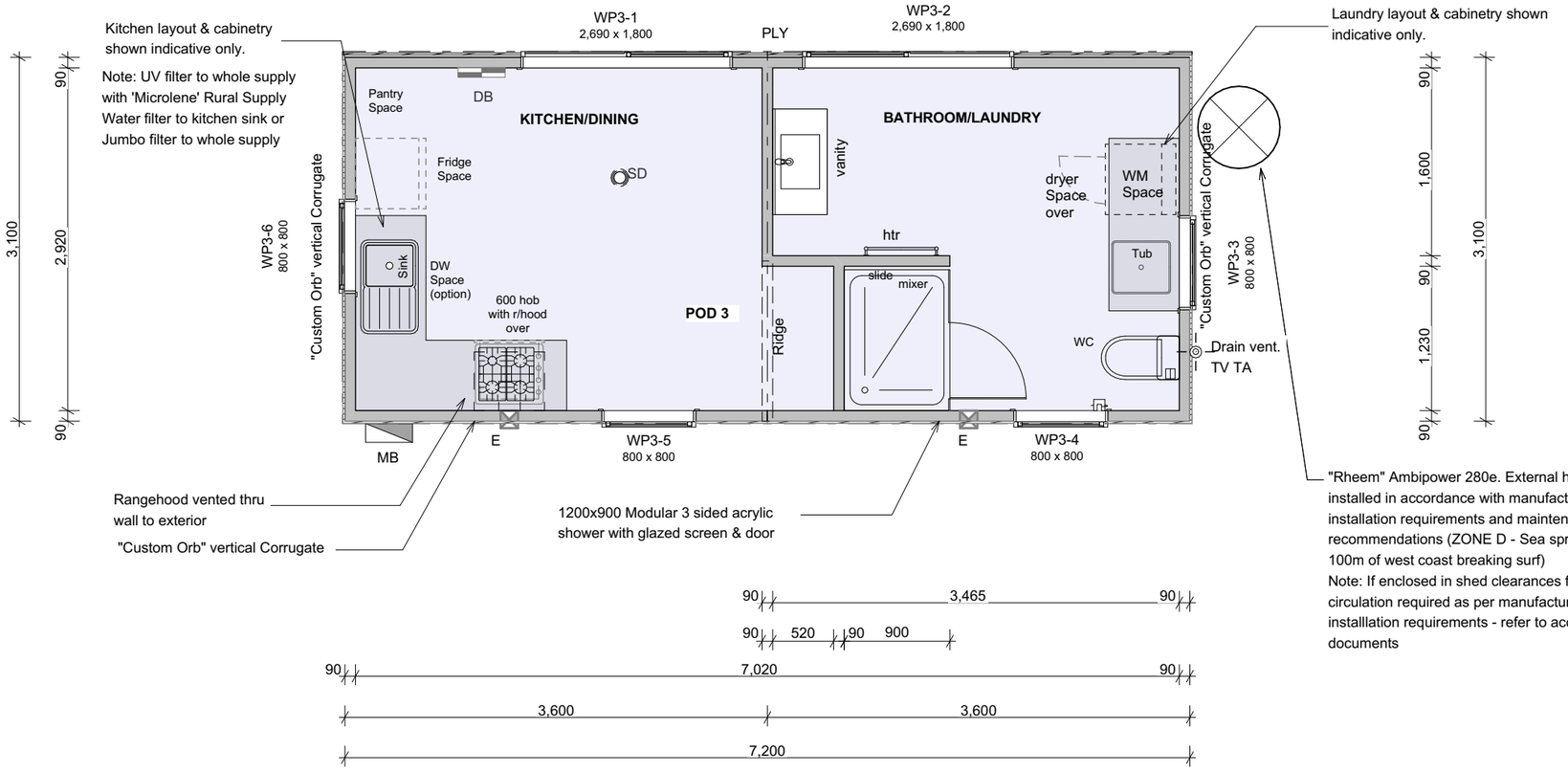
NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
FLOOR PLAN - POD 1 & 2

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A04**

REVISION NO. **BC-C-3**



NOTES

1) Refer to A03 for notes

KEY:

External Cladding 1: 12mm H3.1 PLY cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

Typical timber walls: H1.2 SG8 timber framing

W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

Roof line

Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1

BUILDING CONSENT

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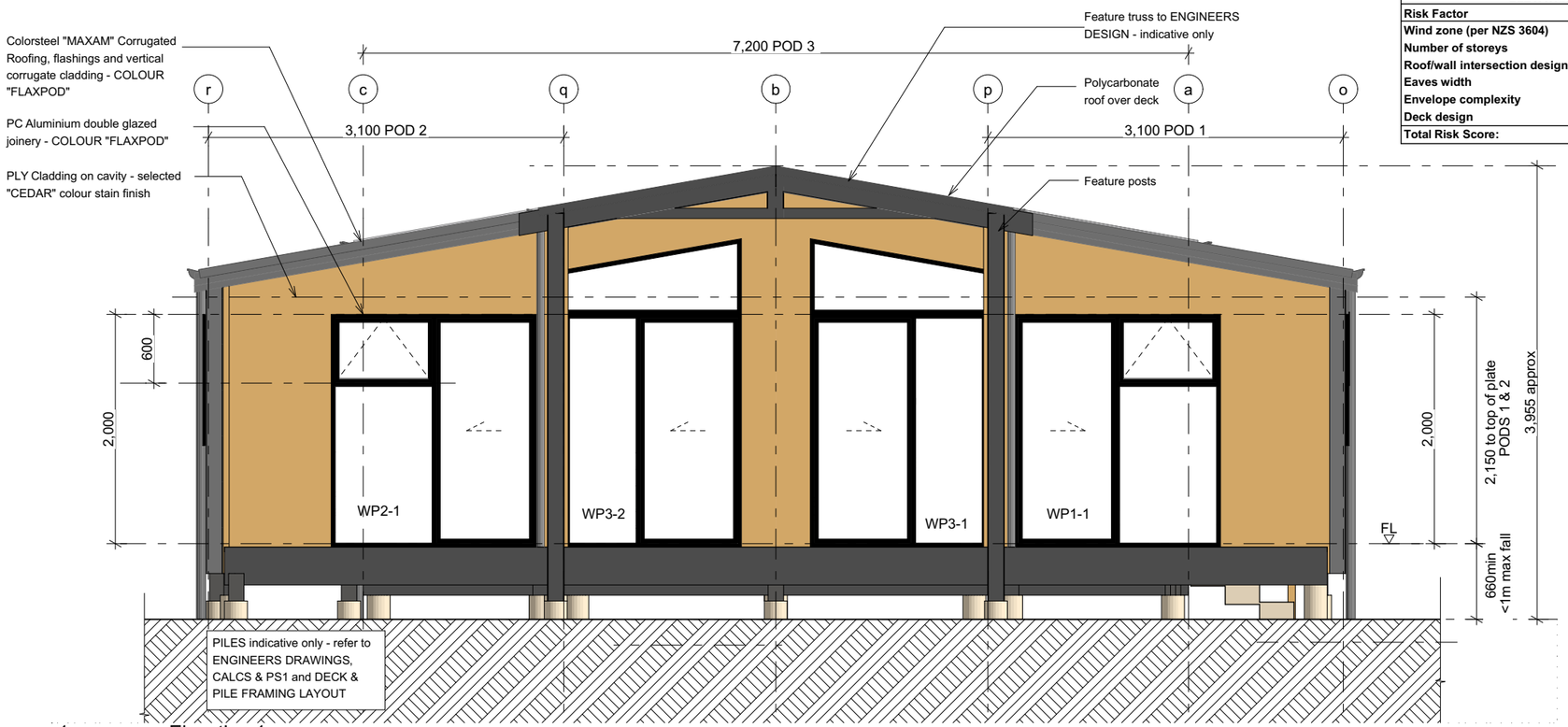
LOT 1 DP 594744

SHEET TITLE
FLOOR PLAN - POD 3

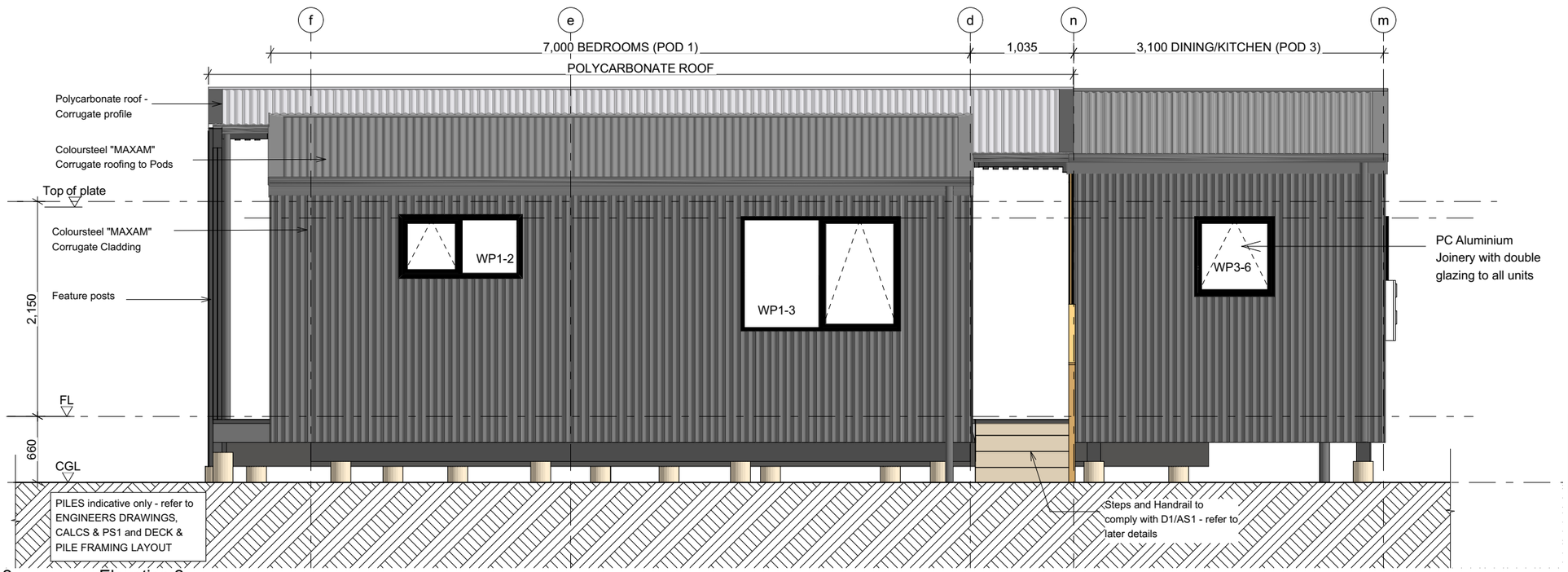
PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A05**

REVISION NO. **BC-C-3**



1 Elevation 1



2 Elevation 2

BUILDING ENVELOPE RISK MATRIX		
ELEVATIONS 1& 2		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	Very high risk	2
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		**9**

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3)External joinery shown indicative - refer to window manufacturers schedule for configurations.

4) Ground levels shown indicative

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
SOIL CLASS: A - Refer to Geotech report
ROOF PITCH: Typical 10 degrees
CLADDING WEIGHT:LIGHT

BUILDING CONSENT

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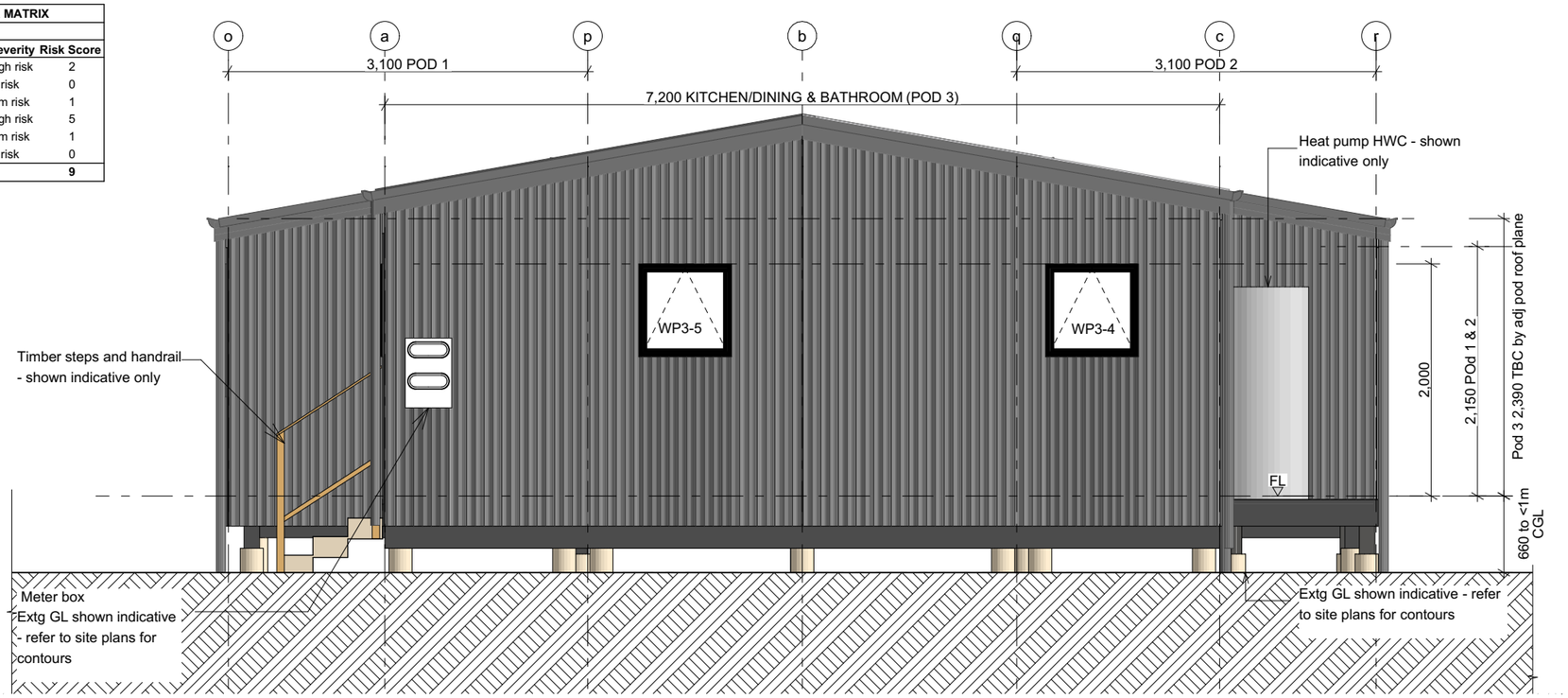
SHEET TITLE
ELEVATIONS - SHEET 1

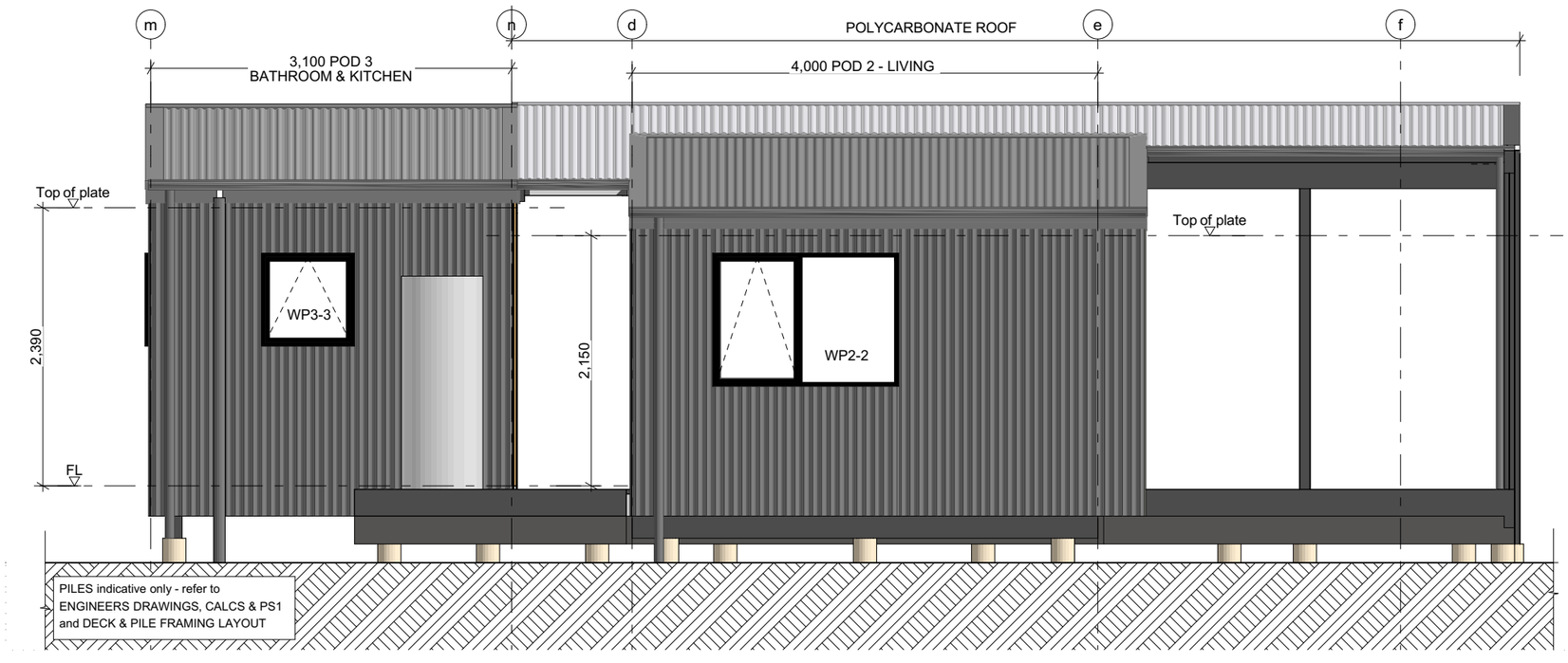
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A06**
REVISION NO. **BC-C-3**

BUILDING ENVELOPE RISK MATRIX		
ELEVATIONS 3 & 4		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	Very high risk	2
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		**9**



1 Elevation 3



2 Elevation 4

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3)External joinery shown indicative - refer to window manufacturers schedule for configurations.

4) Ground levels shown indicative

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
SOIL CLASS: A - Refer to Geotech report
ROOF PITCH: Typical 10 degrees
CLADDING WEIGHT:LIGHT

BUILDING CONSENT

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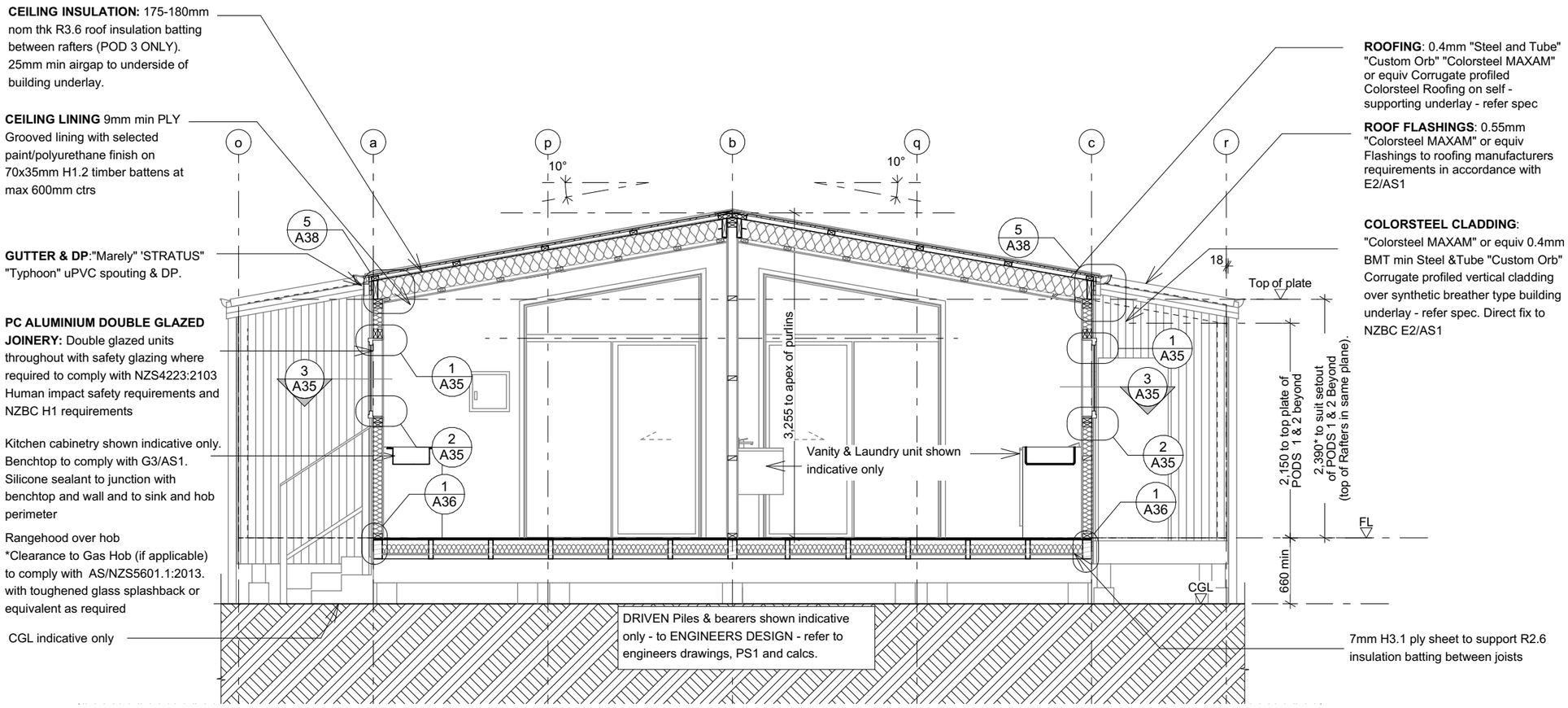
SHEET TITLE
ELEVATION - SHEET 2

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A07**
REVISION NO. **BC-C-3**



1 Section A-A 1:50

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC approved documents unless specifically designed.

2) Enclosed Timber wall & roof framing to be H1.2min SG8 unless specified otherwise. Exposed and Sheltered timber subject to rain wetting to be H3.2 SG8 min

3)H1.2 SG8 Nogs at 800mm typically or as required for cladding fixing - refer later details

4)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, wall mounted rangehood, WC Cistern, towel rails, toilet roll holders, wall mounted air conditioning units as required

5) Refer to Lintel & Wall Framing plan for lintel sizes

6)Cladding to be installed in accordance with cladding manufacturers requirements

7) All water splash areas to be provided with impervious finishes as required by E3/AS1

8) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

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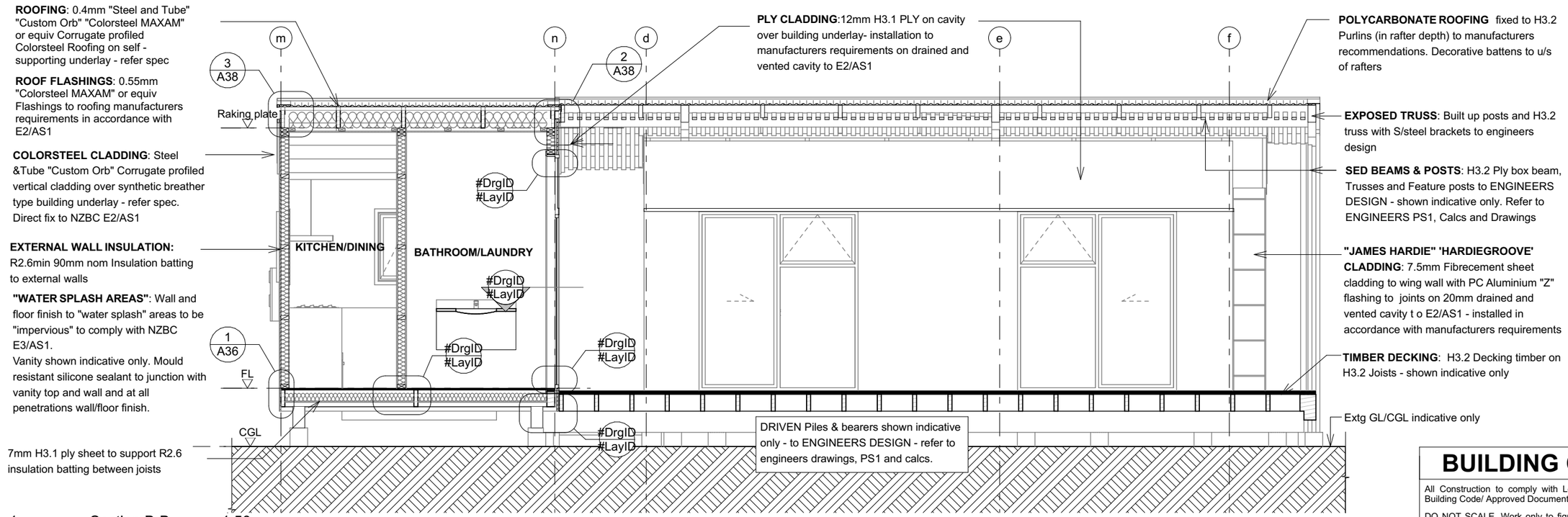
SHEET TITLE
SECTION A-A

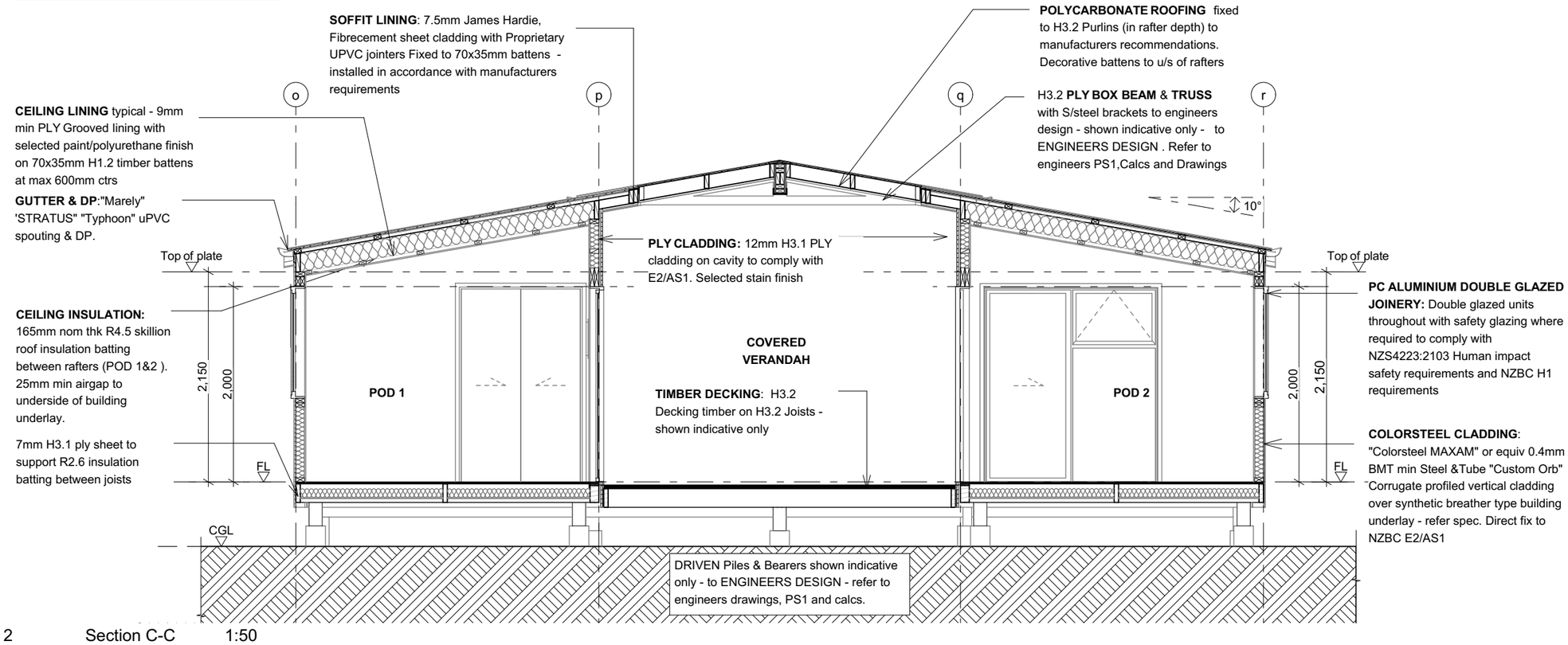
PROJECT No:	MD-25 SANDHILLS	SHEET **A08**
SHEET SIZE:	A3	
SCALE:	1:50	REVISION NO. **BC-C-3**
DRAWN:	Karin Lindholm Andreassen	
DATE:	18/08/2025	

NOTES

1) Refer to A08 for notes



1 Section B-B 1:50



2 Section C-C 1:50

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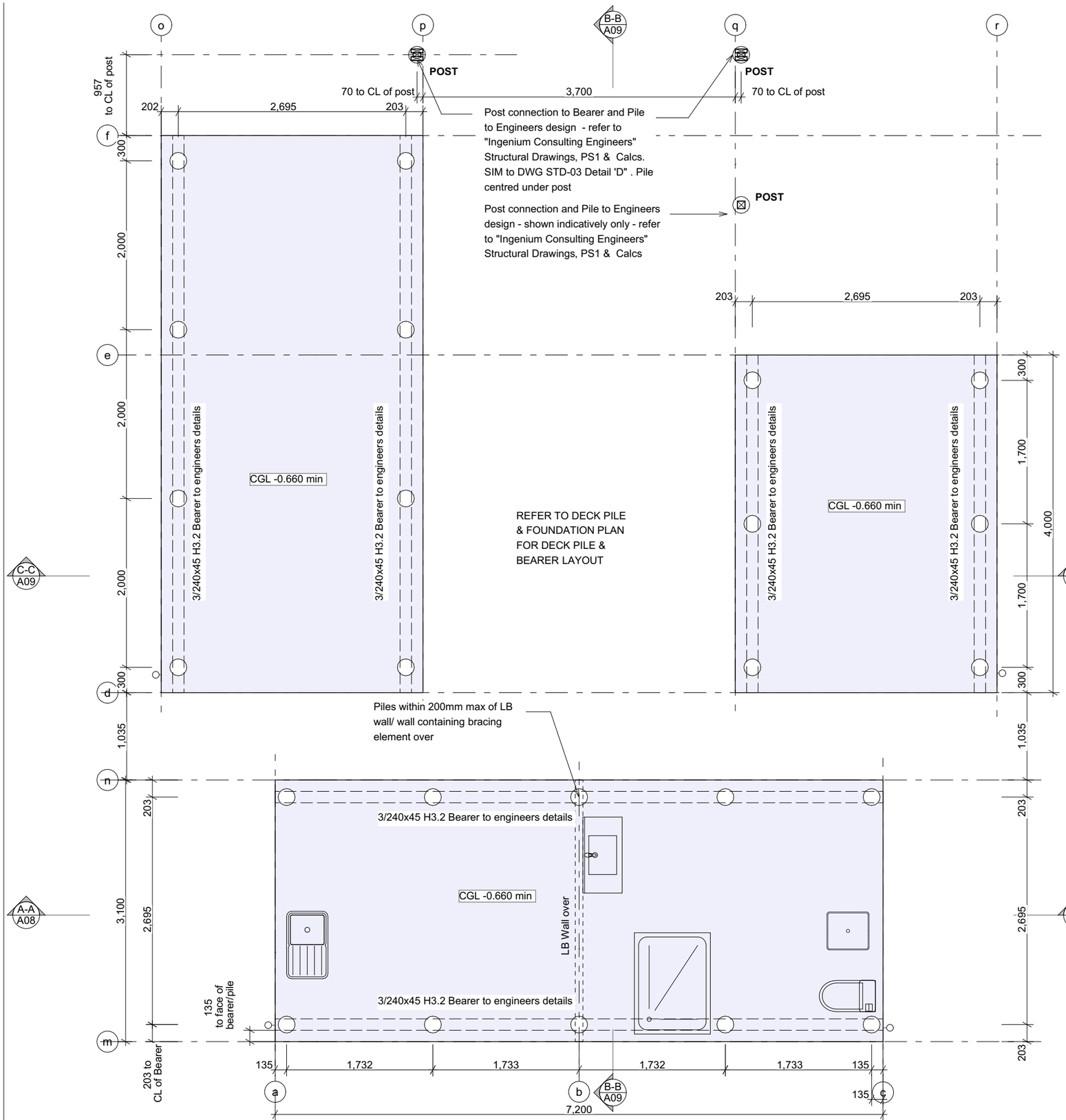
SHEET TITLE
SECTION B-B & C-C

PROJECT No:MD-25 SANDHILLS	SHEET **A09**
SHEET SIZE: A3	
SCALE: 1:50	REVISION NO. **BC-C-3**
DRAWN: Karin Lindholm Andreassen	
DATE: 18/08/2025	



KEY:

Pile Footings supporting single storey dwelling or deck, to comply with NZS3604:2011 Table 6.1 and ENGINEERS REQUIREMENTS

DRIVEN PILE: to dwelling and decks: 200Ø H5 timber driven piles to ENGINEERS DESIGN

Mitek 6KN Alternative pile fixing solution

ROOF POST to PILE: to ENGINEERS DESIGN - refer to engineers drawings for pile and connection details

BEARERS 3/190 x45 H3.2min SG8 Bearers to to ENGINEERS DESIGN DPC Between pile and bearer within 300mm of GL (max LD 2.8m) max span 2.25m
Note: 300 overhang max past pile.
SED piles centered on bearers

Note:
a)All sheltered and exposed fixings (other than nails and screws) within 600mm of FGL to be type 304 s/steel.
b) 100mm min concrete below piles
c)PILE TO BEARER FIXINGS: Piles fixed to bearers with "Lumberlok" proprietary S/steel pile fixings.
d)Floor framing plan to be read in conjunction with drainage and services plan.
e) All timber to be SG8 min unless otherwise noted
f) Geotech engineer to inspect foundations prior to pouring concrete as required by LA

All redundant services, extg. tree roots, tree stumps organic material, uncertified fill and topsoil to be removed from under proposed foundations and from building perimeter as required by GEOTECH ENGINEER

DECK KEY:

190x45 H3.2 SG8 Deck Stringer (in joist depth) to NZS3604:2011 Table 6.5. B
Bolt spacing 1.6m max (supporting joists with 3m max span). First bolt within 300mm of end of stringer. Pack off cladding 12mm min

190x45 min H3.2 SG8 Joists at 400mm centres to NZS3604:2011 Table 7.1. (b)(max span 3.45m)

B1: 2/290x45 H3.2 Bearer/Joists to Engineers Design

B2: 3/290x45 H3.2 Bearer/Joists to Engineers Design

B3: 3/240x45 H3.2 Bearers to Engineers Design - cantilever 400mm past CL of pile. Bearer not connected to B2

B4: 2/190x45 H3.2 Bearers to Engineers Design

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC Acceptable solutions unless specifically designed or Alternative solution approved by BCA

2) Contractor to check all dimensions, existing drain & services locations prior to commencing works

3) All construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

4) Do not build on uncertified fill

5) Remove all organic material, fill and topsoil from under pile footings/foundations

6) Engineer to inspect and certify foundations as required

7) All timber to be SG8 unless specified otherwise

8) treatment to timber to be a minimum treatment of:
H5 for timber embedded in concrete or ground,
H4 for timber in contact with ground and
H3.2 for timber exposed to weather and
H1.2 for enclosed timber

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

BUILDING CONSENT

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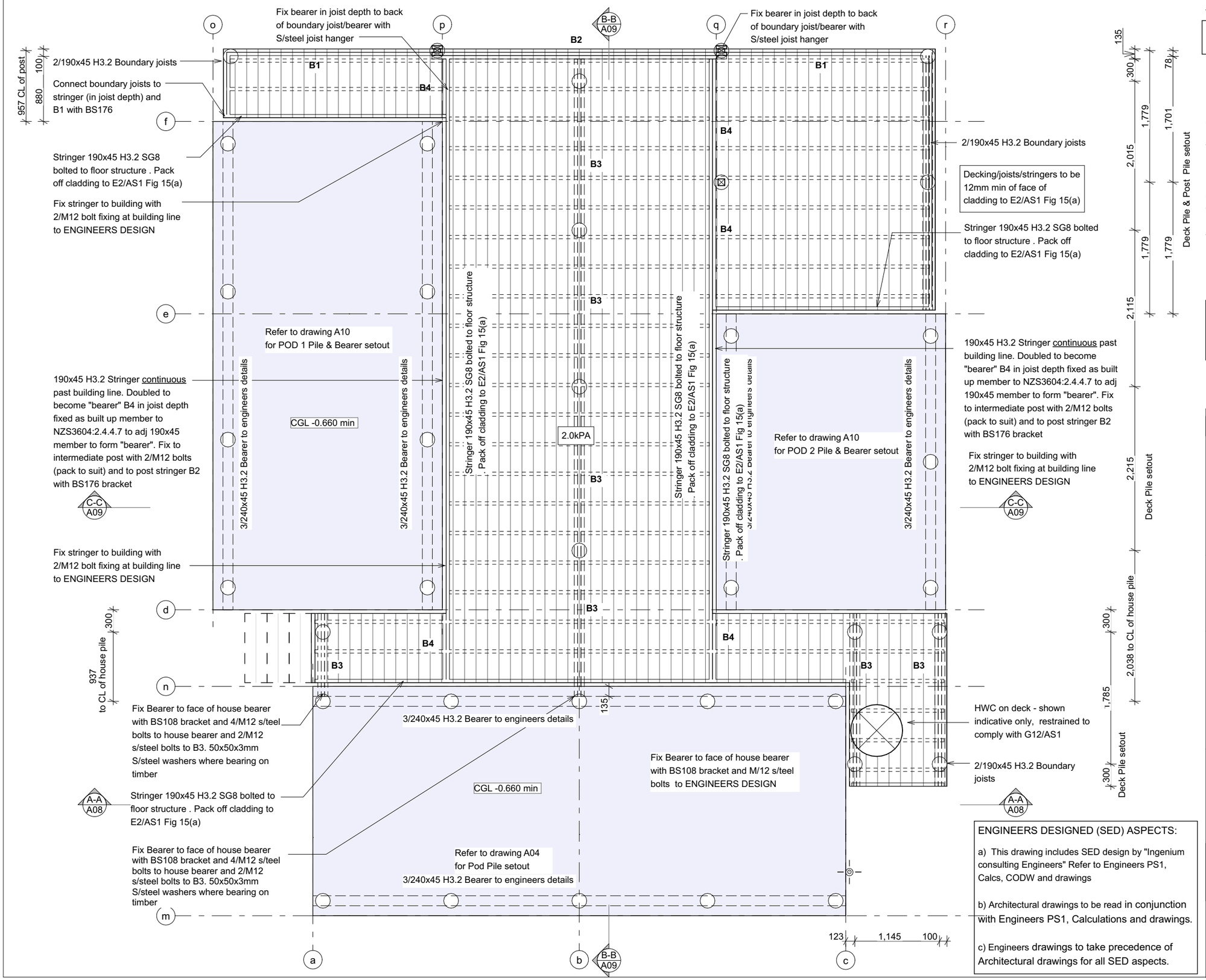
SHEET TITLE
FOUNDATION & PILE LAYOUT

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A10**

REVISION NO. **BC-C-3**



NOTES

Refer to drawing A10 for Pile and Footing Key and notes.

DECK FRAMING NOTES:

1)Deck framing to comply with NZS3604:2011 Section 7.

2)Joints in joists to be made over supports (excluding cantilever joists) in accordance with 7.1.1.6 & 7.1.1.7 and fig 7.1. with 32mm min bearing on support .

3) Lateral support to be provided within 300mm of line of subfloor support by a continuous boundary joist at the end of joist or full depth solid blocking at 1.8m max ctrs to comply with NZS3604:7.1.2.4

4) Provide blocking at mid-span to comply with NZS3604:2011 7.1.2.3

5) Deck Fixings to comply with NZS3604:2011 Table 7.5

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

BUILDING CONSENT

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SHEET TITLE
DECK PILE & FRAMING LAYOUT

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A11**

REVISION NO. **BC-C-3**

KEY : Floor framing plan key

+0.000 Proposed FLOOR LEVEL

TIMBER FLOOR: Floor structure to comply with NZS3604:2011: 19mm untreated EcoPLY strucutral PLY T&G flooring on 190x45 H1.2 min SG8 joists at 600mm max ctrs to NZS3604:2011 (max span 3.15m) Floor Fixing to manufacturers requirements

19mm EcoPLY H3.1 min structural PLY T&G sheet flooring under shower location to comply with B2/AS1. Nog for sheet fixings as required.

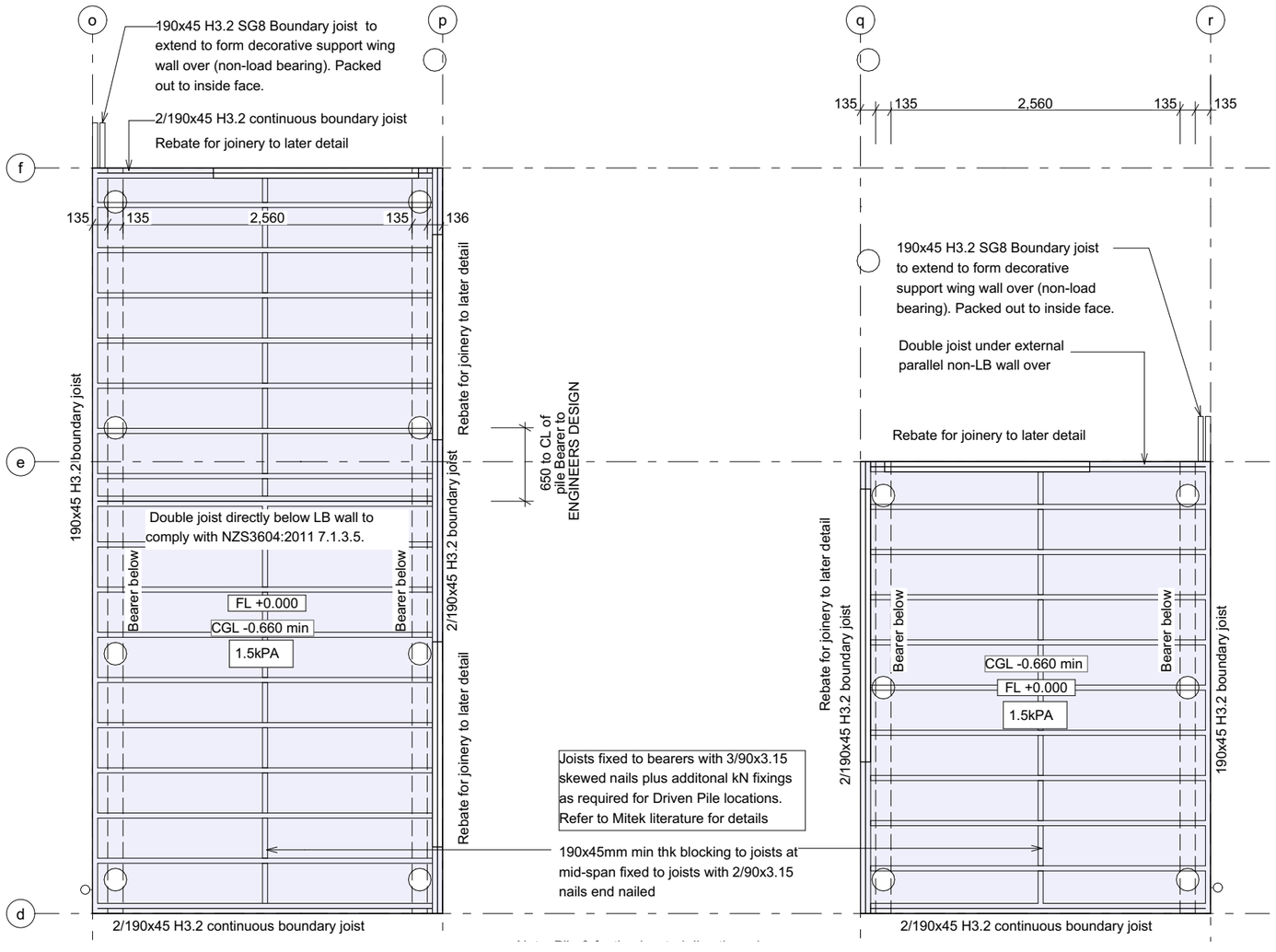
BEARERS H3.2min SG8 Bearers to ENGINEERS DESIGN. - refer to subfloor framing plans

Note:
a)PILE TO BEARER FIXINGS: to ENGINEERS SPECIFICATIONS
b) Floor framing plan to be read in conjunction withand Drainage and services plan.
c) All timber to be SG8 min unless otherwise noted

NOTE: DURABILITY ZONE D:
to comply with NZS3604:2011 Section 4

a) All structural fixings and fastenings in EXPOSED & SHELTERD situations to be type 304 S/steel to comply with NZS3604:2011 Durability Table 4.1

b)All nails and screws within 600mm of FGL and all nails and screws to exposed framing to table 4.3 or in contact with timber treated to H3.2 or above to be type 304 s/steel



NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC approved documented unless specifically designed or Alternative Solution approved by BCA

2) All construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

4)Floor framing to comply with NZS3604:2011 Section 7.

5)Joints in floor joists to be made over supports (excluding cantilever joists) in accordance with 7.1.1.6 & 7.1.1.7 and fig 7.1. with 32mm min bearing on support .

6) Lateral support to be provided within 300mm of line of subfloor support by a continuous boundary joist at the end of joist or full depth solid blocking at 1.8m max ctrs to comply with NZS3604:7.1.2.4

7) Provide blocking at mid-span to comply with NZS3604:2011 7.1.2.3

8) Fixings to floor framing to comply with NZS3604:2011 Table 7.5

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

BUILDING CONSENT

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LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
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KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
FLOOR FRAMING PLAN - POD 1 & 2

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A12**

REVISION NO. **BC-C-3**

KEY : Floor framing plan key

+0.000 Proposed FLOOR LEVEL

TIMBER FLOOR: Floor structure to comply with NZS3604:2011: 19mm untreated EcoPLY strucutral PLY T&G flooring on 190x45 H1.2 min SG8 joists at 600mm max ctrs to NZS3604:2011 (max span 3.15m) Floor Fixing to manufacturers requirements

19mm EcoPLY H3.1 min structural PLY T&G sheet flooring under shower location to comply with B2/AS1. Nog for sheet fixings as required.

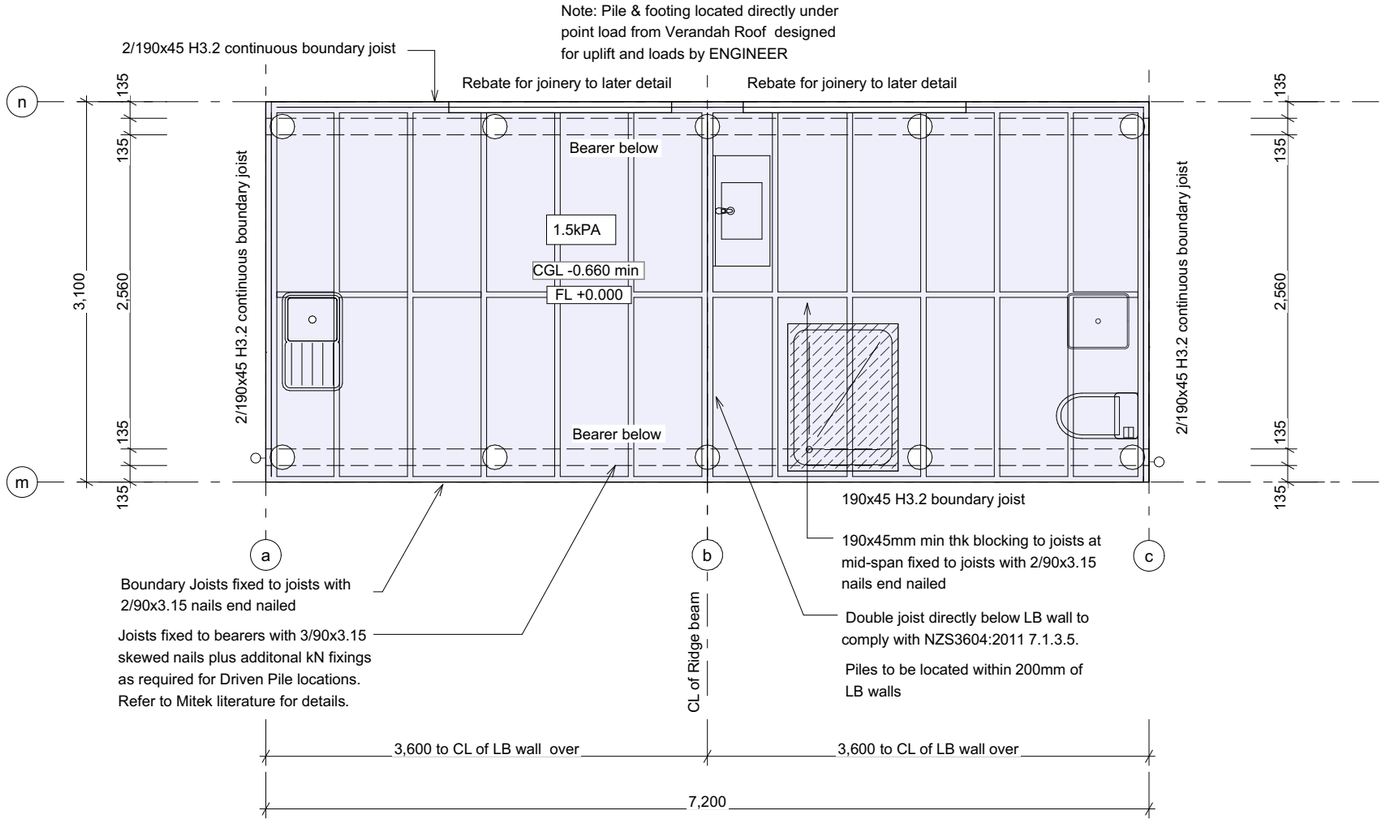
BEARERS H3.2min SG8 Bearers to ENGINEERS DESIGN. - refer to subfloor framing plans

Note:
a)PILE TO BEARER FIXINGS: to ENGINEERS SPECIFICATIONS
b) Floor framing plan to be read in conjunction withand Drainage and services plan.
c) All timber to be SG8 min unless otherwise noted

NOTE: DURABILITY ZONE D:
to comply with NZS3604:2011 Section 4

a) All structural fixings and fastenings in EXPOSED & SHELTERD situations to be type 304 S/steel to comply with NZS3604:2011 Durability Table 4.1

b)All nails and screws within 600mm of FGL and all nails and screws to exposed framing to table 4.3 or in contact with timber treated to H3.2 or above to be type 304 s/steel



NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC approved documented unless specifically designed or Alternative Solution approved by BCA

2) All construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

4)Floor framing to comply with NZS3604:2011 Section 7.

5)Joints in floor joists to be made over supports (excluding cantilever joists) in accordance with 7.1.1.6 & 7.1.1.7 and fig 7.1. with 32mm min bearing on support .

6) Lateral support to be provided within 300mm of line of subfloor support by a continuous boundary joist at the end of joist or full depth solid blocking at 1.8m max ctrs to comply with NZS3604:7.1.2.4

7) Provide blocking at mid-span to comply with NZS3604:2011 7.1.2.3

8) Fixings to floor framing to comply with NZS3604:2011 Table 7.5

9) Subfloor bracing shown at 5m max to NZS3604:2011, TBC by site conditions - separate consent

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

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SHEET TITLE
FLOOR FRAMING PLAN - POD 3

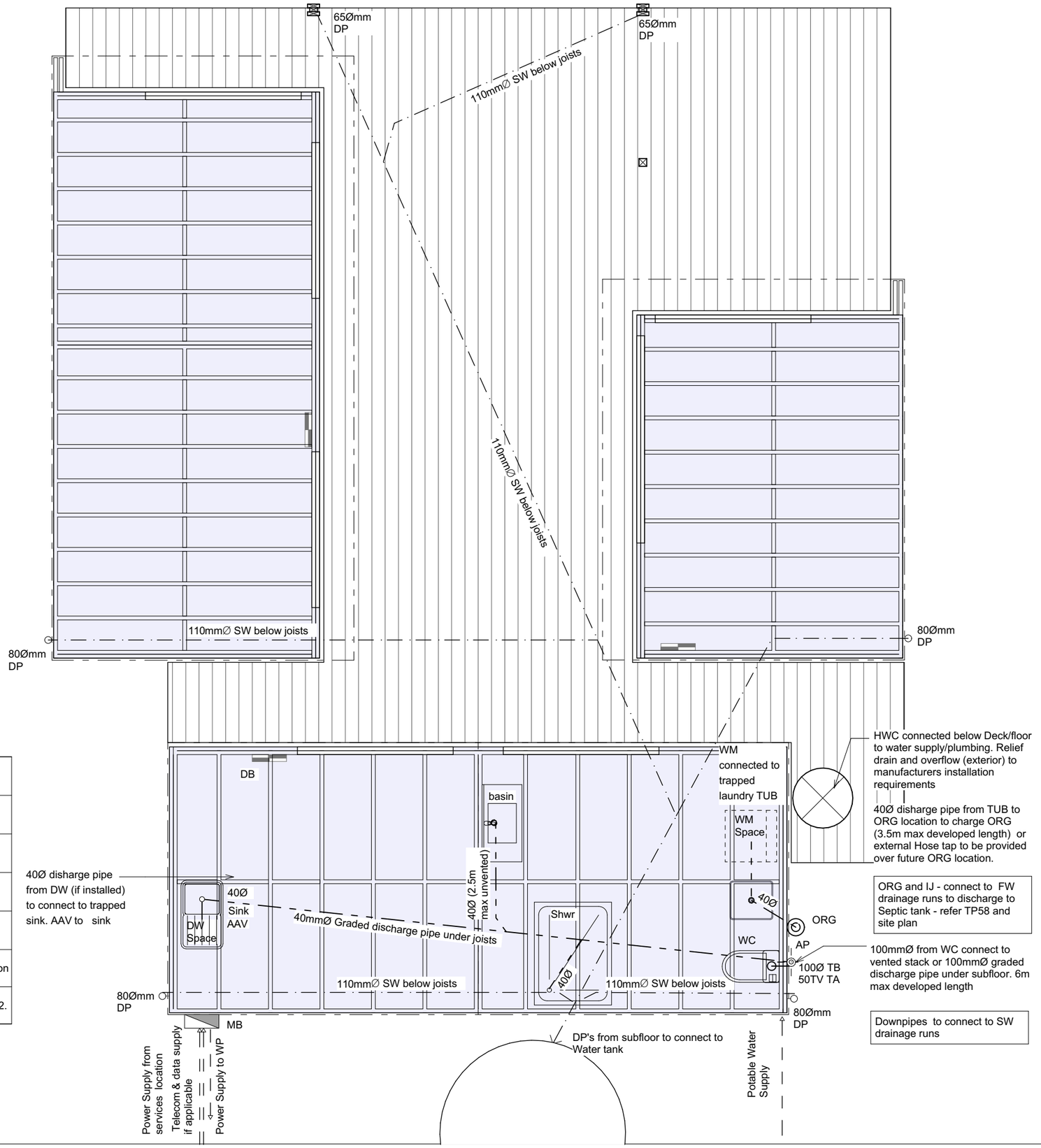
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A13**

REVISION NO. **BC-C-3**

FW Discharge & Drain pipe gradients (min)	
DN40Ø	1:40min
DN65Ø	1:40min
DN100Ø	1:60min
Discharge pipes DN40mmØ min from waste water fixtures and DN100mmØ min from WC's	
Discharge pipes/Drains under slab from waste water fixtures DN65mmØ and DN100mmØ min from WC's	
Main vented drain DN100mmØ min	
External drains to run in trenches to comply with NZBC G13/AS2 & E1/AS1. Fall external DN100Ø FW Drains at 1:60 typ and External DN110ØSW drains 1:120min	

Vent Pipes:
Vent pipes to terminate;
a) 600mm min above the head of an opening or 3m min away horizontally
b) 150mm min above roofline and 600mm min above eaves
c) 5m from any air intake.



KEY:

- —— – →	100mmØ UPVC FW Drain
← · — · —	110mmØ UPVC SW Drainage/Pipe
AP	Access point at base of stack
TV	Stack/Drain Vent/Terminal Vent
ORG	ORG
IJ & IP/IB	Inspection junction/Inspection point/Inspection Bend. Access points on drains to comply with AS/NZS 3500:2.
AAV	Air admittance valve to AS/NZS 3500:2.

NOTES

1) All plumbing & drainage to comply with NZS3500:2 & NZBC G13/AS2 & G12/AS1

2) Plumbing& Drainage shown schematic only. All plumbing and drainage by registered plumber & drainlayer. Drainlayer and plumber to PROVIDE ABUILTS to LA

3) Surface stormwater to comply with E1/AS1 and LA requirements.

4) Inspection & access points to be provided on drains to comply with NZS3500:2

5) Ventilation pipes to terminate in accordance with AS/NZS3500:2

6) Water supply plumbing to comply with ASNZS3500:4. Hot & Cold water reticulation pipes 15-20mmØ to achieve flow rate to comply with G12/AS1. Materials to comply with NZBC G12/AS1

7) Provide isolating valves to WC's, appliances and pressure limiting valves and back flow prevention devices to comply with NZBC G13/AS1

8) Plumber to check specifications and confirm locations of all fittings/fixtures & outlets prior to commencing works.

9)40mmØ drain to wall hung vanity locations, where applicable, to be centered on adj wall.

11) Delivered hot water to sanitary fixtures as specified by G12/AS1 shall not exceed 50°

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SHEET TITLE
DRAINAGE & SERVICES PLAN

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A14**
REVISION NO. **BC-C-3**

KEY:

Typical Wall framing: to NZS3604:2011 Table 8.2 & Table 8.4

Non-LB External Wall :
90x45 studs at 400mm ctrs typ ≤ 2.7 typ
90x90 studs at 400mm ctrs ≤ 3.3

Non-LB Internal Wall :
90x45 studs at 600mm ctrs typ ≤ 3.0 typ

LB External Wall:
S1: ≤ 2.7m max stud LB walls (not containing bracing elements) to DesignIT Schedule - 90x45 studs at 400mm max ctrs
Braced Walls: Rebated studs in walls containing bracing elements to engineers design

Lintels: **H1.2 SG8** Lintels to NZS3604:2011 Table 8.9

Lintel Fixing to "Lumberlok" Lintel fixing schedule alternative to NZS3604: Table 8.14 & Fig 8.12

(Type E)	1.4kN
(Type F)	4.0kN
(Type G)	7.5kN
(Type H)	13.5kN

Typical Trimmer/Jamb studs: to comply with NZS3604:2011 table 8.5 (refer to "Typical Framing Connections - SHEET 1) unless noted below

*Gable end walls within 1.2m of adjoiing rafters shall be regarded as "non-loadbearing" in accordance with NZS3604:2011 8.5.1.1(b)

BS1: Built up studs supporting point load to engineers design Refer to "Ingenium Consulting Engineers" drawings, PS1 & Calcs. Shown indicative only

BS2: Built up studs to NZS3604:2011 under Lintel at 90 degrees to wall. 2 x 90x45 understud plus 1 x 90x45 trimmer stud each side fixed with 1/M12 bolt thru beam & studs to NZS3604:Fig 10.8 and table 10.2 (or 8.5kN min equiv fixing) . Base connection to 12kN detail (GIB Handibrac)

BS3: Additional stud required at truss location - refer to engineers drawings for top plate to stud fixings

Additional studs required for bracing fixings to engineers design - shown indicative only - refer to ENGINEERING DRAWINGS, PS1 & CALCS

Reduce stud spacings and provide fixings at bracing element locations in accordance with ENGINEERS REQUIREMENTS

Typical studs not indicated - to NZS3604:2011 or DesignIT Schedule & PS1.

Lintel and Wall Framing Plan to be read in conjunction withFLOOR PLAN, FLOOR FRAMING PLAN, ROOF FRAMING PLAN, BRACING PLAN and Engineers and documentation

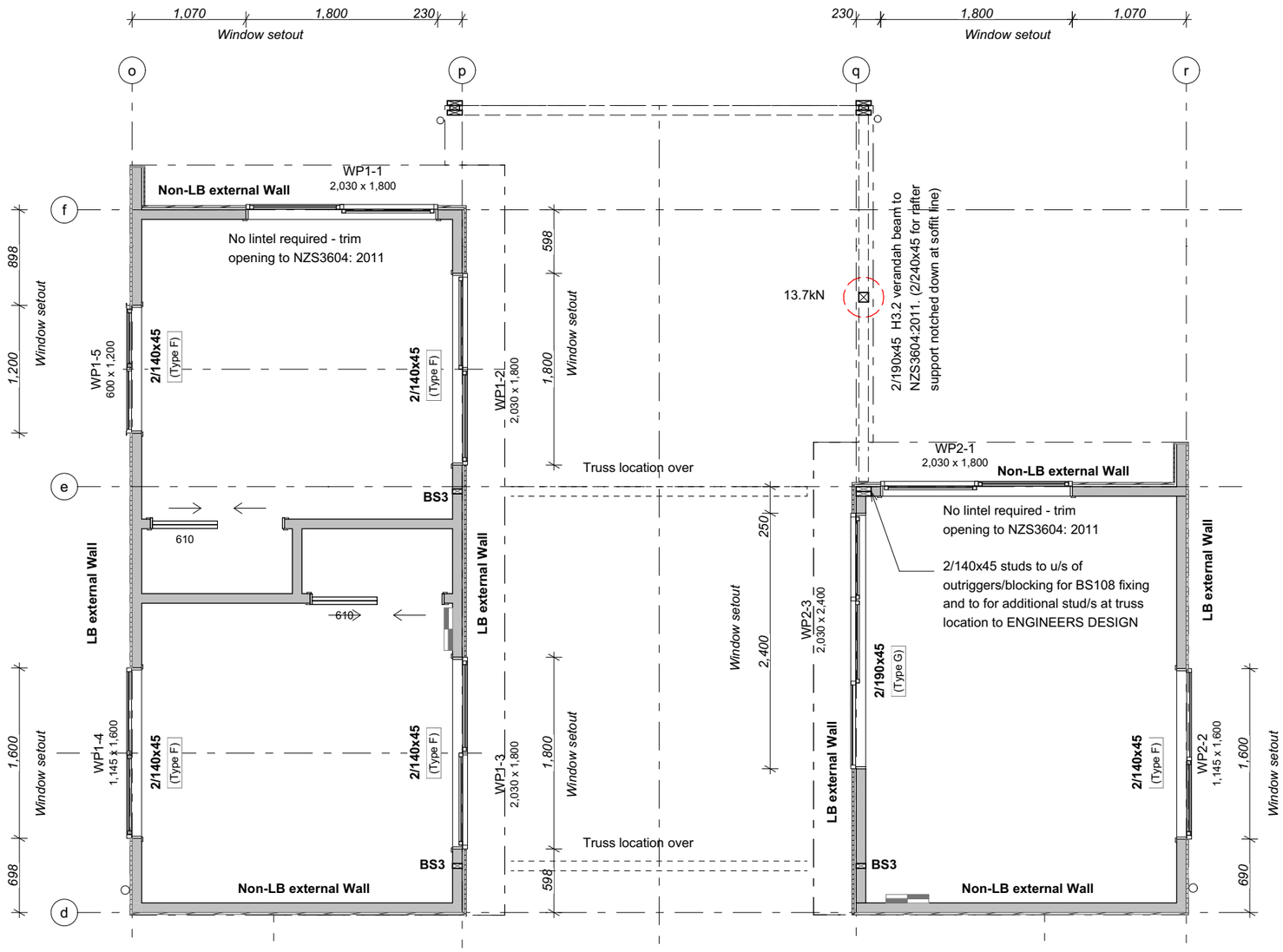
ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL



NOTES

1) Dimensions are nominal window dimensions. Allow for tolerances to joinery manufacturers requirements -Refer to joinery manufacturers schedule for trim openings.

2) Timber wall framing to be H1.2 SG8 unless specified otherwise. 2 rows of nogs typically or as required by cladding manufacturer - refer to cladding manufacturers installation requirements

4)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, wall mounted rangehood, WC Cistern, towel rails, toilet roll holders, wall mounted air conditioning units & Garage Door components as required

5)External window & Door dimensions are nominal frame sizes. Refer to Lintel & Wall Framing plan and later details for trim sizes.

6) Internal Doors are leaf sizes. Framing to allow for door frame and tolerances

7) Refer to DesignIT Schedule for Stud spacings and Jamb studs where noted

8) All construction to be in accordance with NZS3604:2011 the NZBC approved documents unless specifically designed or Alternative Solution approved by BCA .

9) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

BUILDING CONSENT

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SHEET TITLE
LINTEL & WALL FRAMING PLAN - POD 1 & 2

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A15**

REVISION NO. **BC-C-3**

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

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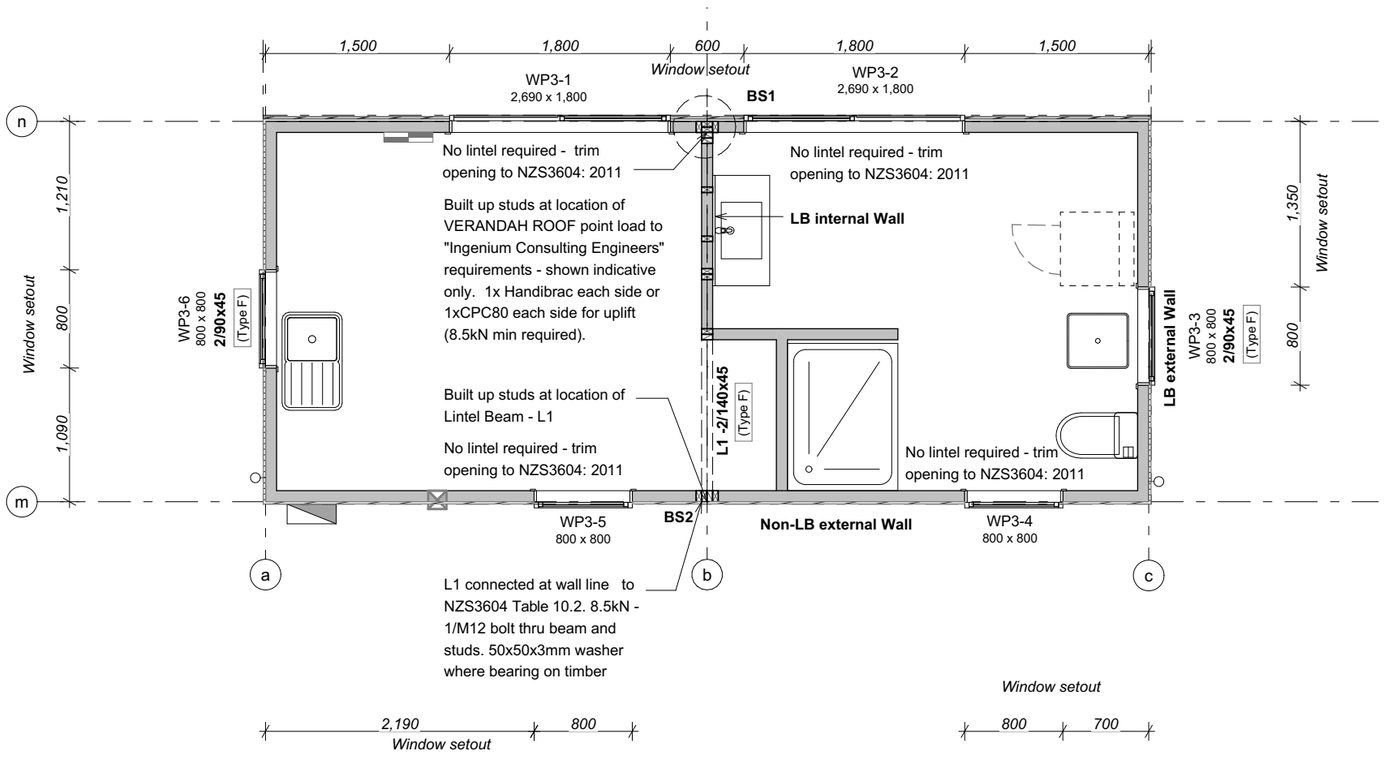
c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

NOTES

1) Refer to A15 for notes and KEY



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SHEET TITLE
LINTEL & WALL FRAMING PLAN - POD 3

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

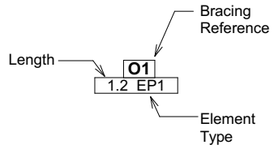
SHEET
A16

REVISION NO.
BC-C-3

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
EQ ZONE: 1
SOIL CLASS:A - Refer to Geotech report
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
ROOF PITCH: 10 degrees
CLADDING WEIGHT: Light

BRACING KEY:

Bracing Element



EP1 7mm min ply on internal face installed in accordance with "CHH" "Ecoply Bracing manual" with additional fixings and stud spacings for rebated stud detail to ENGINEERS DESIGN - Refer to "INGENIUM Consulting Engineers " PS1 & Calcs and GIB EZYBrace Schedule

GS1-N 10mm thk "GIB standard plasterboard" (0.4m min length) fixed one side in accordance with GIB EZYBrace Systems August 2016

BL1-H 10mm thk GIB Braceline" fixed one side (0.4m min length) in accordance with GIB EZYBrace Systems August 2016

BRACING PLAN to be read in conjunction with
-FLOOR FRAMING PLAN
- LINTEL & WALL FRAMING PLAN,
- ROOF FRAMING PLAN and
- ENGINEERS Documentation for SED BRACING ELEMENTS

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2) 1) All bracing elements to be installed to manufacturers requirements - refer to GIB EzyBrace Systems manual for GIB Bracing and ECOPLY Installation and Specification guide for Ecocoply bracing installation

3) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1 min.

4) ALL EXPOSED & SHELTERED BRACKETS, BOLTS & SCREWS to be S/Steel 304 within 600mm of FGL

5) Builder to co-ordinate with Electrician and plumber for services penetrations in bracing elements. Electrician to check location of bracing elements and offset flush boxes 90mm min from sheet edge if necessary.

6) Bracing lines at 6m max ctrs

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

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SHEET TITLE
BRACING PLAN

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A17
REVISION NO.
BC-C-3

GENERAL NOTES:
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
ROOF PITCH: 10 degrees
TOTAL PLAN ROOF AREA =94.70m2 (incl verandah)

DOWNPIPES:
Downpipes to be provided in accordance with NZBC E1/AS1 Table 5 and manufacturers requirements.
1x80mm downpipe per 85m2 roof plan area min:
= 2x80mmØ Downpipes required
= 4x 80mmØ downpipes provided
plus 2x 65mmØ to polycarbonate roof
(Note Marley Stratus Typhoon spouting requires 1x DP per 44m2 of roof area for rainfall intensity of 120mm/hr)

TYPICAL ROOFING: 0.40mm long run 'Colorsteel' "MAXAM" Corrugate profiled roofing on selected self-supporting roofing underlay, - refer to spec.

Roof flashings, fixings and sealant and junctions to roof manufacturers recommendations in accordance with NZBC E2/AS1 & The Metal Roofing & Cladding Assoc. Code of Practice.

ROOF BRACING: Roof plane Diagonal brace - diagonally opposing 2/25x1mm ms galv straps (4kN capacity each) per 50m2 roof area to comply with NZS3604:2011. Fixings to manufacturers spec.

GUTTER : "Marley" "STRATUS" UPVC half round "typhoon" profile Gutter with 80mmØ DPs

EAVES FLASHING TYP: 0.55mm colorsteel Eaves apron flashing with anti-capillary hem and proprietary perforated foam filler to roofing manufacturers recommendations - to comply with E2/AS1 fig 45(a) only required where all of the following:
a) Roof pitch <10 degrees and
b) Soffit width less than or equal to 100mm and
c) Wind zone is Very High or greater.
or if required by cladding manufacturer or
as recommended at junction of metal roofing and metal cladding with no eaves - as noted on plan

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

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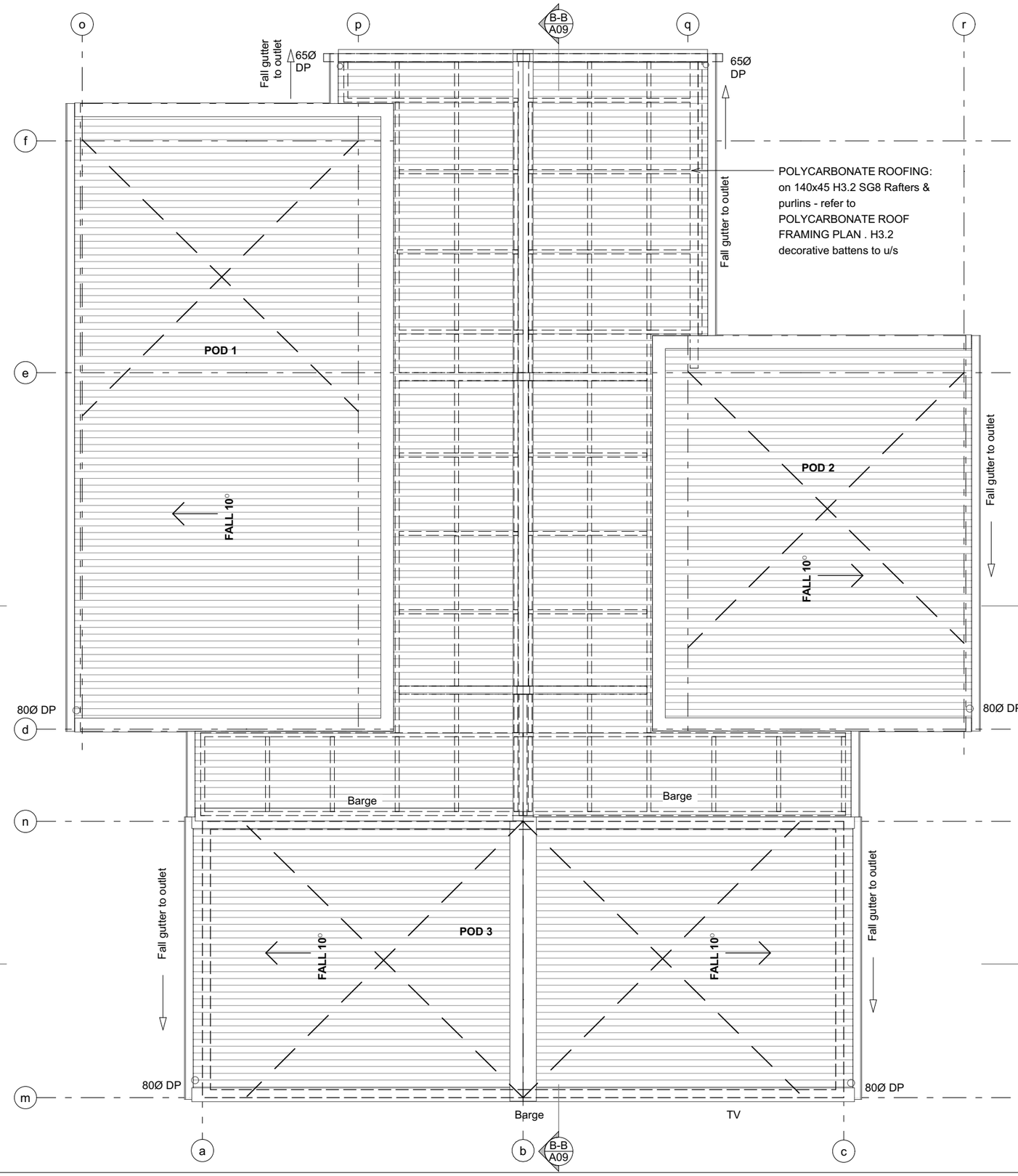

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2)All construction materials, fixings and fastenings to comply with NZS3604:2011:Part 4 'Durability'and the NZBC B2

3) Roof Cladding to be installed to manufacturers requirements in accordance with E2/AS1

4) Roof Plan to be read in conjunction with Roof Framing, Wall Framing and Lintel Plans and later details

5) Refer to detail drawings for roof flashing and junction details. All flashings, cappings and sealant to be in accordance with NZBC E2/AS1 and roofing manufacturers requirements

6) Roofing by Licensed Roofer in accordance with E2/AS1, the NZ Metal Roofing & Cladding Association Code of Practice & Manufacturers requirements.

7)Built up members to comply with NZS3604:2011 Section 2.4.4.7

8). Refer to Lintel & Wall Framing plan for lintel sizes

9) Refer to DesignIT Schedule for elements to specific design by Futurebuild DesignIT

BUILDING CONSENT

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SHEET TITLE
ROOF PLAN

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A18**
REVISION NO. **BC-C-3**

GENERAL NOTES:
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
ROOF PITCH: 10 degrees
TOTAL PLAN ROOF AREA =94.70m2 (incl verandah)

Wind Zone: VERY HIGH	Fixing	Capacity
TYPICAL PURLINS: 70x45 H1.2 Purlins on flat at max 900 mm crs fixed to rafters at 900mm max ctrs	1/80x10g self-drilling screw or Alternative fixing: 1 "Blue screw" (80mmx10g Lumberlok blue screw)	2.4kN

Purlins fixings to comply with NZS3604:2011 or Mitek Purlin and batten fixing chart alternative to NZS3604:2011 table 10.10

KEY:

R1: 190x45 H1.2 SG8 Rafters at 900mm max ctrs - refer to DesignIT Schedule & PS1

RAFTER CONNECTIONS Rafters connected at supports with to comply with NZS3604:2011 fig 10.6

7.0kN 1x "Lumberlok" CT600 Cyclone tie" or 1x pair "Lumberlok CT200 ceiling ties" fixed with 4/30x3.15 galv product nails each ends 10.5kN uplift (7.0kN min fixing for uplift) or Alternative fixing of equal or greater capacity

Alternative 7kN min FIXING RAFTER: Fix rafters to top plate with 1x Lumberlok CPC40 each side. Fix with 4/30x3.25 Lumberlok product nails into rafters and 2/17-14gx35 hex head screws into plate

FIXING RAFTER to Ribbon Board: Fix rafters to ribbon boards on proprietary joist hangers or with 1 x Lumberlok Multigrip each side of rafter all holes nailed with 30x3.15 product nails.

BOTTOM CHORD RESTRAINT to rafters to NZS3604:2011 13.2: 70x35mm timber ceiling battens at 600mm max ctrs nailed to u.s of joists and rafters with 2/75x3.15 nails per joist/rafter

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2)All construction materials, fixings and fastenings to comply with NZS3604:2011:Part 4 'Durability'and the NZBC B2

3) Roof Cladding to be installed to manufacturers requirements in accordance with E2/AS1

4) Roof Plan to be read in conjunction with Roof Framing, Wall Framing and Lintel Plans and later details

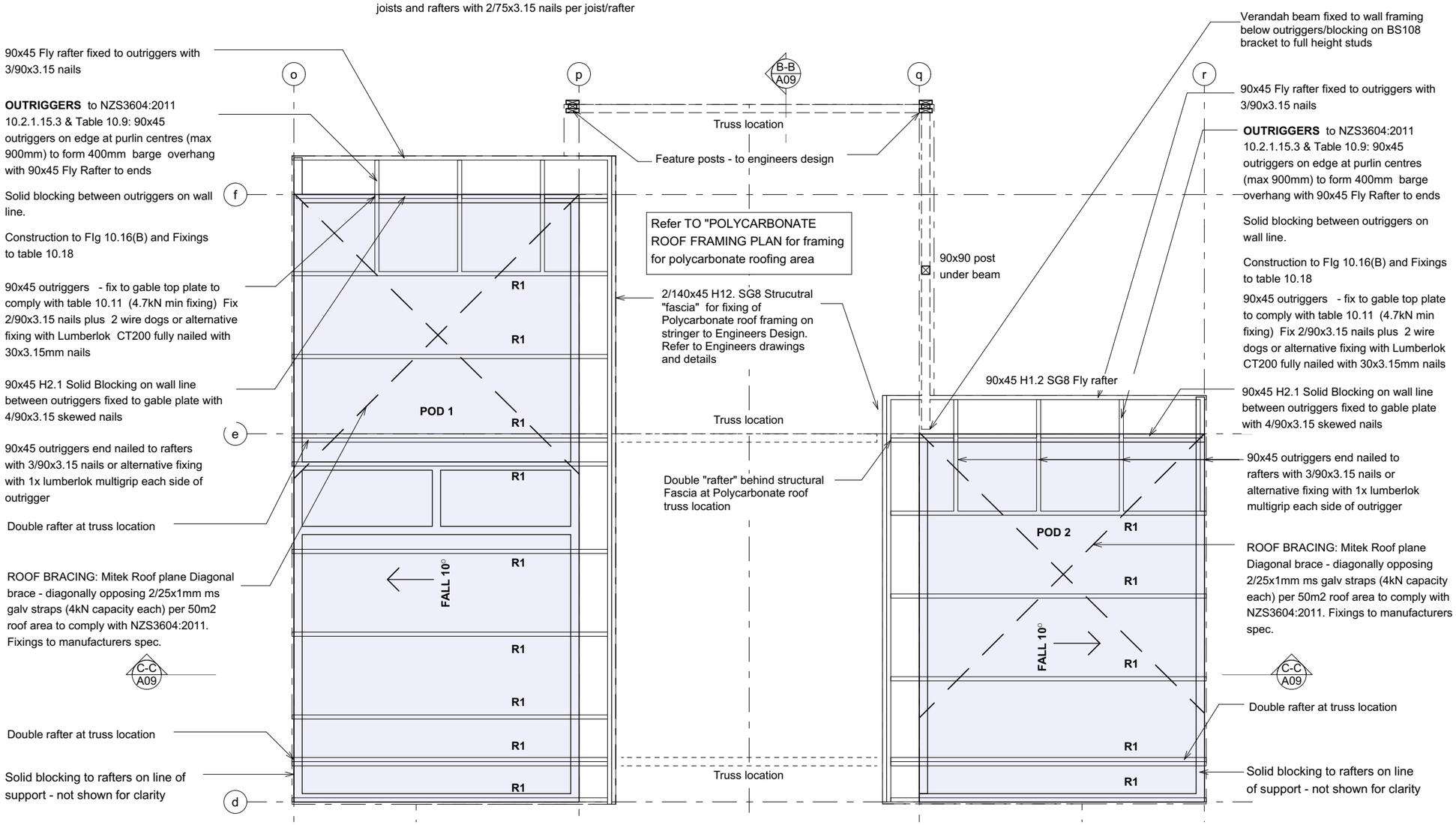
5) Refer to detail drawings for roof flashing and junction details. All flashings, cappings and sealant to be in accordance with NZBC E2/AS1 and roofing manufacturers requirements

6) Roofing by Licensed Roofer in accordance with E2/AS1, the NZ Metal Roofing & Cladding Association Code of Practice & Manufacturers requirements.

7)Built up members to comply with NZS3604:2011 Section 2.4.4.7

8). Refer to Lintel & Wall Framing plan for lintel sizes

9) Refer to DesignIT Schedule for elements to specific design by Futurebuild DesignIT



BUILDING CONSENT

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Karin Lindholm Andreassen
LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
ROOF FRAMING PLAN - POD 1 & 2

PROJECT No:MD-25 SANDHILLS	SHEET A19
SHEET SIZE: A3	
SCALE: 1:50	
DRAWN: Karin Lindholm Andreassen	REVISION NO. BC-C-3
DATE: 18/08/2025	

GENERAL NOTES:
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
ROOF PITCH: 10 degrees
TOTAL PLAN ROOF AREA =94.70m2 (incl verandah)

Wind Zone: VERY HIGH	Fixing	Capacity
TYPICAL PURLINS: 70x45 H1.2 Purlins on flat at max 900 mm crs fixed to rafters at 900mm max ctrs	1/80x10g self-drilling screw or Alternative fixing: 1 "Blue screw" (80mmx10g Lumberlok blue screw)	2.4kN

Purlins fixings to comply with NZS3604:2011 or Mitek Purlin and batten fixing chart alternative to NZS3604:2011 table 10.10

KEY:

R1: 190x45 H1.2 SG8 Rafters at 900mm max ctrs - refer to DesignIT Schedule & PS1

RAFTER CONNECTIONS Rafters connected at supports with to comply with NZS3604:2011 fig 10.6

7.0kN 1x "Lumberlok" CT600 Cyclone tie" or 1x pair "Lumberlok CT200 ceiling ties" fixed with 4/30x3.15 galv product nails each ends 10.5kN uplift (7.0kN min fixing for uplift) or Alternative fixing of equal or greater capacity

Alternative 7kN min FIXING RAFTER: Fix rafters to top plate with 1x Lumberlok CPC40 each side. Fix with 4/30x3.25 Lumberlok product nails into rafters and 2/17-14gx35 hex head screws into plate

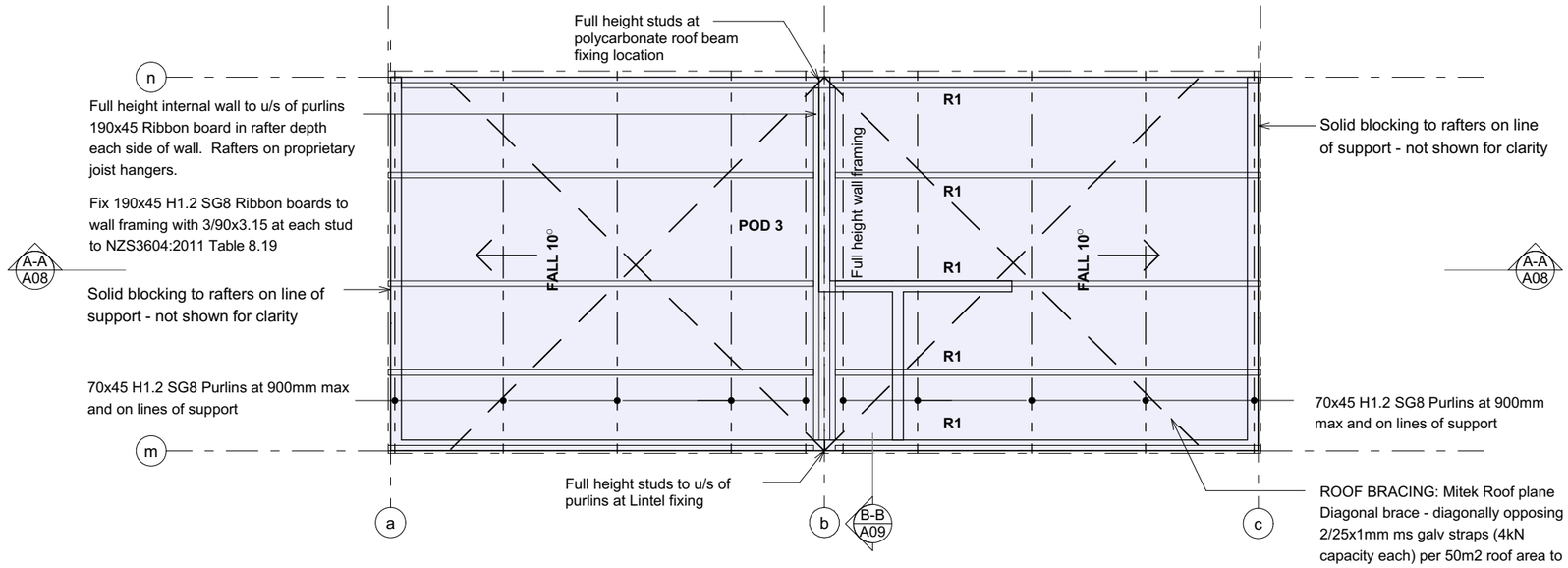
FIXING RAFTER to Ribbon Board: Fix rafters to ribbon boards on proprietary joist hangers or with 1 x Lumberlok Multigrip each side of rafter all holes nailed with 30x3.15 product nails.

BOTTOM CHORD RESTRAINT to rafters to NZS3604:2011 13.2: 70x35mm timber ceiling battens at 600mm max ctrs nailed to u.s of joists and rafters with 2/75x3.15 nails per joist/rafter

ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

NOTES

1) Refer to sheet A19 for notes



BUILDING CONSENT

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LBP: Design 2: 107526

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SHEET TITLE
ROOF FRAMING PLAN - POD 3

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A20**
REVISION NO. **BC-C-3**

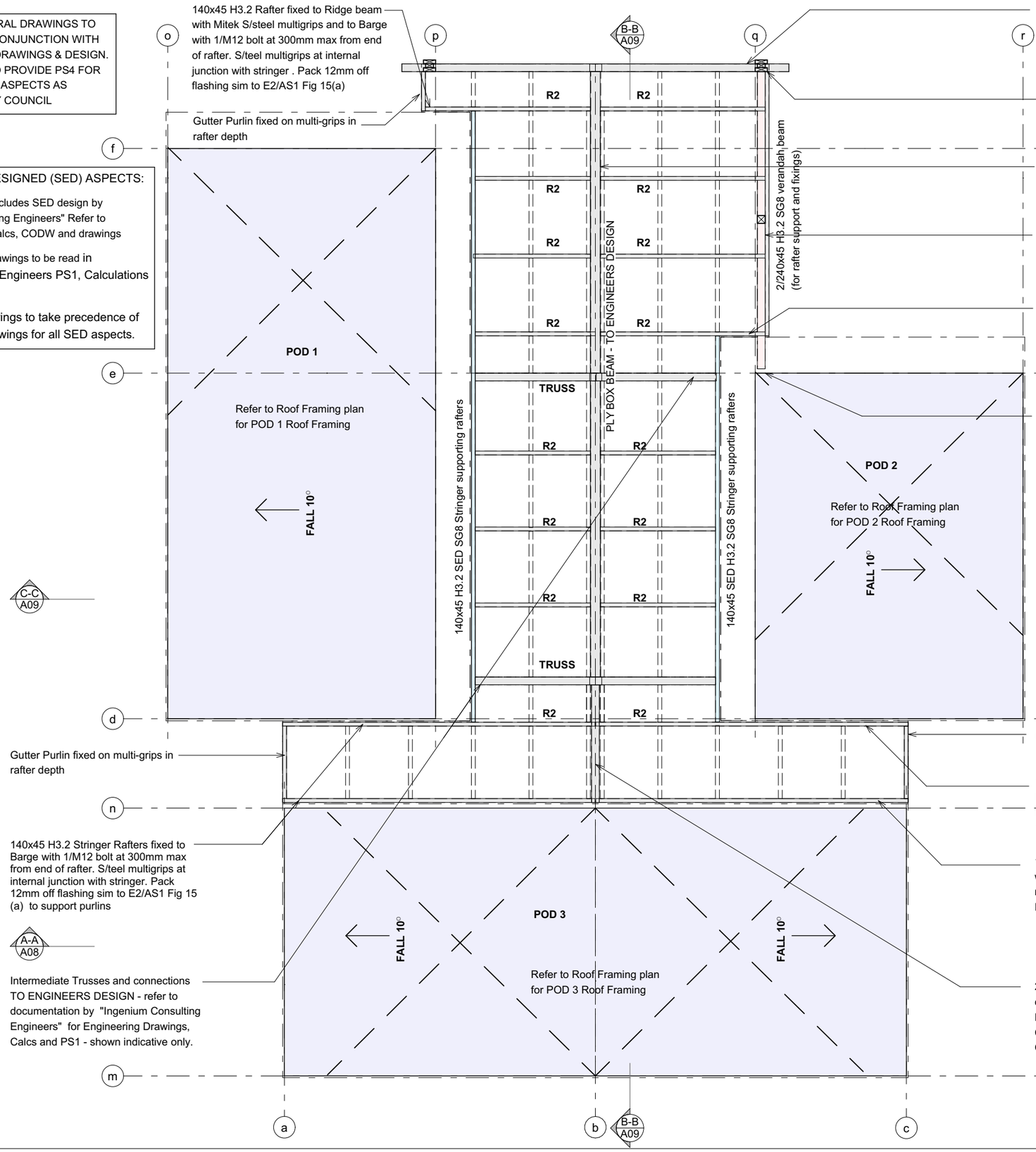
ARCHITECTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ENGINEERS DRAWINGS & DESIGN. ENGINEER TO PROVIDE PS4 FOR ENGINEERED ASPECTS AS REQUIRED BY COUNCIL

ENGINEERS DESIGNED (SED) ASPECTS:

a) This drawing includes SED design by "Ingenium consulting Engineers" Refer to Engineers PS1, Calcs, CODW and drawings

b) Architectural drawings to be read in conjunction with Engineers PS1, Calculations and drawings.

c) Engineers drawings to take precedence of Architectural drawings for all SED aspects.



NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2)All construction materials, fixings and fastenings to comply with NZS3604:2011:Part 4 'Durability'and the NZBC B2

3) Roof Cladding to be installed to manufacturers requirements in accordance with E2/AS1

4) Roof Plan to be read in conjunction with Roof Framing, Wall Framing and Lintel Plans and later details

5) Refer to detail drawings for roof flashing and junction details. All flashings, cappings and sealant to be in accordance with NZBC E2/AS1 and roofing manufacturers requirements

6) Roofing by Licensed Roofer in accordance with E2/AS1, the NZ Metal Roofing & Cladding Association Code of Practice & Manufacturers requirements.

7)Built up members to comply with NZS3604:2011 Section 2.4.4.7

8). Refer to Lintel & Wall Framing plan for lintel sizes

9) Refer to DesignIT Schedule for elements to specific design by Futurebuild DesignIT

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LBP: Design 2: 107526

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SHEET TITLE
POLYCARBONATE ROOF FRAMING PLAN

PROJECT No:MD-25 SANDHILLS	SHEET A21
SHEET SIZE: A3	
SCALE: 1:50	
DRAWN: Karin Lindholm Andreassen	REVISION NO. BC-C-3
DATE: 18/08/2025	

KEY:

Purlins in rafter depth shown dashed.
Fixed to rafters on s/steel multigrips

R2

R2: 140x45 min H3.2 Rafters at 900mm max ctrs fixed to Ridge beam and stringer with Mitek s/steel multigrips each side of rafter

140x45 stringer bolted to monoridge with 1/M12 bolt at 1.6m max . !st ffixing within 300mm max from end of stringer. Pack 12mm off flashing sim to E2/AS1 Fig 15(a)

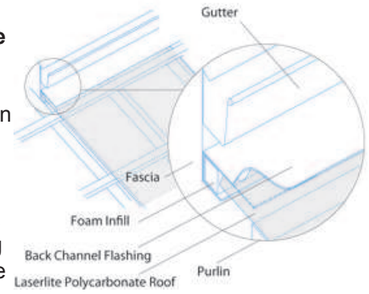
Notes for Polycarbonate roof structure:

a) All treated timber to be separated from metal flashings with flashing tape or building underlay.
b) EDPM washers to all bolt fixings for stringers or rafters where packed off building
c) Fixings to Polycarbonate roofing to manufacturers installation requirements - refer to accompanying literature
d) All framing **H3.2** SG8 unless otherwise noted
e) Decorative Battens to u/s of rafters and purlins not shown for clarity - in line with rafters - refer to roof plan
f) All fixings to be s/steel (Zone D)

POLYCARBONATE ROOF FRAMING PLAN to be read in conjunction with Engineers drawings and documentation

FIXING SPACINGS

In normal conditions, use the fixing spacings shown in **the table below.** As a guide, you will need approximately 7 fixings per lineal metre. This depends on your purlin spacings and wind conditions.
In high wind areas fix Corrugate and Greca on every second corrugation on each purlin/batten.
It is suggested that barge capping be used. Fix the sheet through the crests for roofing and through the valleys for walls.



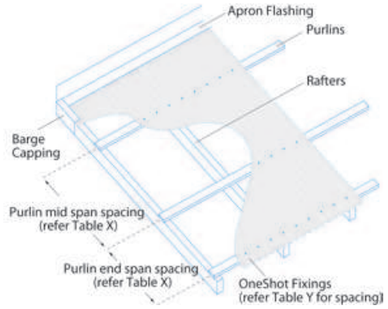
Use 65mm fixings for 5-Rib and 55mm fixings for Greca/Corrugate.

For **roof laying**, start with the lower sheets first, keeping side laps away from prevailing wind. Allow an overhang of 50mm.

Profile	End Purlins	Mid Purlins
Corrugate	Every 2nd crest	Every 3rd crest
Greca	Every 2nd crest	Every 3rd crest
5-Rib	Every crest	Every crest

MAXIMUM PURLIN SPACINGS

For roofing, purlin/batten spacings should be no more than those shown in the table below**.** For curved structures, the maximum purlin spacing should be 750mm and a minimum radius of 6000mm for Corrugate and Greca profile and 14000mm for 5-Rib profile. For walls, nogging spacings should be no more than 1200mm.



Use **Noise Stop Tape** on all battens, purlins or noggings to minimise the noises associated with expansion and contraction.

Profile	End Span	Mid Span
Corrugate	800mm	1000mm
Greca	900mm	1200mm
5-Rib	900mm	1200mm

NOTES

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137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
POLYCARBONATE ROOF KEY

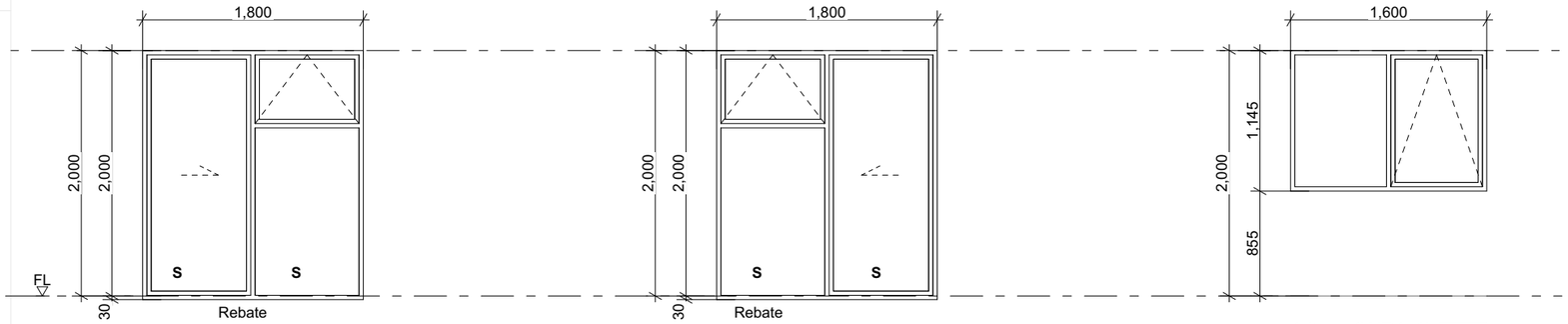
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A22
REVISION NO.
BC-C-3

GENERAL NOTES:
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
EQ ZONE: 1

KEY:

S Safety glazing to comply with NZS4223:2016 Human impact safety requirements



2 items (WP1-1, WP1-3) R0.45

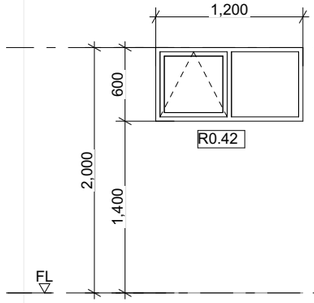
BEDROOMS
RANCHSLIDER: PC aluminium framed "LEVELSTEP" ranchslider
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear safety glazing to exterior pane & interior pane
HARDWARE: Refer to Manufacturers schedule
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.

2 items (WP1-2, WP2-1) R0.45

BEDROOM & LIVING
RANCHSLIDER: PC aluminium framed "LEVELSTEP" ranchslider
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear safety glazing to exterior pane & interior pane
HARDWARE: Refer to Manufacturers schedule
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.

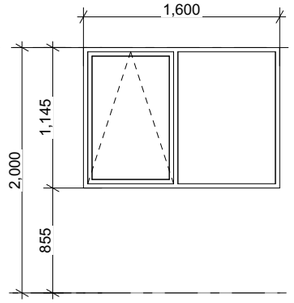
1 item (WP1-4) R0.50

BEDROOM 2
AWNING WINDOW: PC aluminium framed window suite with awning window as shown.
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear
HARDWARE: Wedgeless opener
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



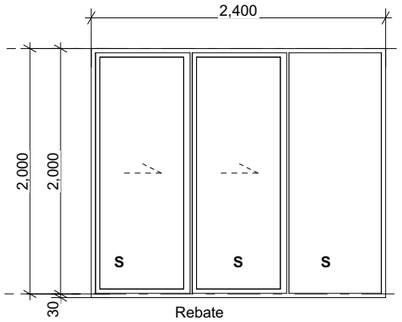
1 item (WP1-5)

BEDROOM 1
AWNING WINDOW: PC aluminium framed window suite with awning window as shown.
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear
HARDWARE: Wedgeless opener
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



1 item (WP2-2) R0.50

LIVING
AWNING WINDOW: PC aluminium framed window suite with awning window as shown.
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear
HARDWARE: Wedgeless opener
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



1 item (WP2-3) R0.51

LIVING
RANCHSLIDER: PC aluminium framed "LEVELSTEP" Multi-slider
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear safety glazing to exterior pane & interior pane
HARDWARE: Refer to Manufacturers schedule
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.

ALL UNITS: DOUBLE GLAZED in PC Aluminium frames to achieve construction R-Value to meet or exceed H1/AS1 5th Edition Amendment 1, Table E.1.1.1 or to window manufacturers schedule to comply with H1 calculations (BRANZ Calculation method). Refer to accompanying documents for Compliance schedule. R values shown are minimum to achieve compliance

NOTES

1) Window sizes shown are nominal frame sizes

2) Refer to window manufacturers schedule for trim opening requirements

3)All dimensions are to be checked on site by joinery manufacturer prior to commencing manufacture. Discrepancies to be reported to MODULAR DWELLINGS LIMITED

4) All glazing to comply with NZS4223 Part 3: Human impact safety requirements - refer to joinery manufacturers schedule.

5) All fixings and fastenings to comply with NZS3604:2011 Part 4: "Durability"and NZBC B2

5) Window installation to comply with E2/AS1 and joinery manufacturers requirements

6) Profiles shown indicative only - refer to joinery manufacturers schedule

7) Sill support bars to be provided to all external windows & doors to comply with E2/AS1 & WANZ evaluation method EM6

8) Window and Doors to comply with NZS4211 and NZBC B1/AS1

9) 5% opening area/m2 to habitable spaces to achieve ventilation in accordance with NZBC G4/AS1

BUILDING CONSENT

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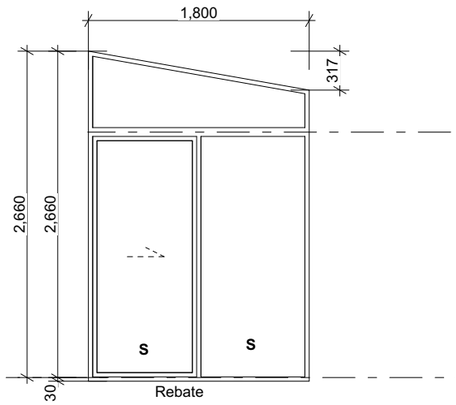
LOT 1 DP 594744

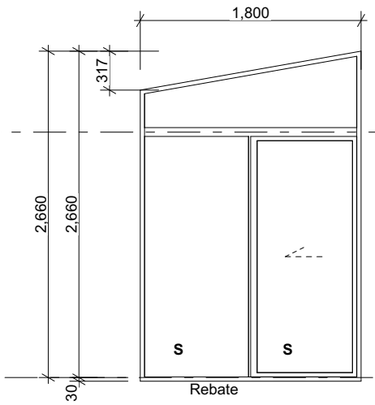
SHEET TITLE
WINDOW & DOOR SCHEDULE - SHEET 1

PROJECT No:MD-25 SANDHILLS	SHEET **A23**
SHEET SIZE: A3	
SCALE: 1:50	REVISION NO. **BC-C-3**
DRAWN: Karin Lindholm Andreassen	
DATE: 18/08/2025	



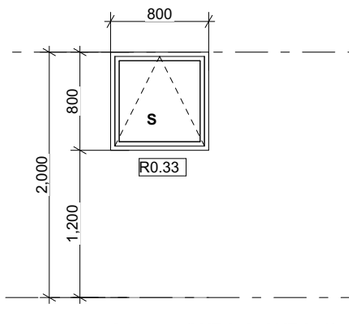
1 item (WP3-1) R0.42

KITCHEN & DINING
RANCHSLIDER: PC aluminium framed
"LEVELSTEP" Ranchslider
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear safety glazing to exterior pane & interior pane, anneal glazing to fixed toplight
HARDWARE: Refer to Manufacturers schedule
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



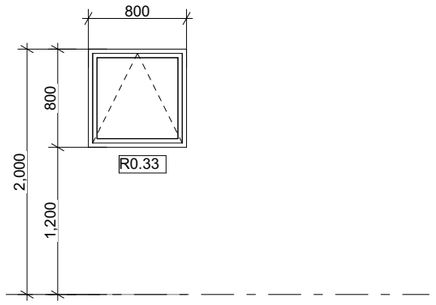
1 item (WP3-2) R0.42

BATHROOM & LAUNDRY
RANCHSLIDER: PC aluminium framed
"LEVELSTEP" Ranchslider
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear safety glazing to exterior pane & interior pane, anneal glazing to fixed toplight
HARDWARE: Refer to Manufacturers schedule
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



2 items (WP3-3, WP3-4)

BATHROOM & LAUNDRY
AWNING WINDOW: PC aluminium framed window suite with awning window as shown.
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: - Clear or selected obscure glazing with safety glazing to interior pane
HARDWARE: Wedgeless opener
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.



2 items (WP3-5, WP3-6)

KITCHEN
AWNING WINDOW: PC aluminium framed window suite with awning window as shown.
PC COLOUR: "Flaxpod"
DOUBLE GLAZING: Clear
HARDWARE: Wedgeless opener
HARDWARE FINISH: PC "Black"
REVEALS:19mm H3.1 PQ FJ liners to suit architraves.

GENERAL NOTES:
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
EQ ZONE: 1

KEY:

S Safety glazing to comply with NZS4223:2016 Human impact safety requirements

NOTES

1) Window sizes shown are nominal frame sizes

2) Refer to window manufacturers schedule for trim opening requirements

3)All dimensions are to be checked on site by joinery manufacturer prior to commencing manufacture. Discrepancies to be reported to MODULAR DWELLINGS LIMITED

4) All glazing to comply with NZS4223 Part 3: Human impact safety requirements - refer to joinery manufacturers schedule.

5) All fixings and fastenings to comply with NZS3604:2011 Part 4: "Durability"and NZBC B2

5) Window installation to comply with E2/AS1 and joinery manufacturers requirements

6) Profiles shown indicative only - refer to joinery manufacturers schedule

7) Sill support bars to be provided to all external windows & doors to comply with E2/AS1 & WANZ evaluation method EM6

8) Window and Doors to comply with NZS4211 and NZBC B1/AS1

9) 5% opening area/m2 to habitable spaces to achieve ventilation in accordance with NZBC G4/AS1

ALL UNITS: DOUBLE GLAZED in PC Aluminium frames to achieve construction R-Value to meet or exceed H1/AS1 5th Edition Amendment 1, Table E.1.1.1 or to window manufacturers schedule to comply with H1 calculations (BRANZ Calculation method). Refer to accompanying documents for Compliance schedule. R values shown are minimum to achieve compliance

BUILDING CONSENT

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LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
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KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
WINDOW & DOOR SCHEDULE - SHEET 2

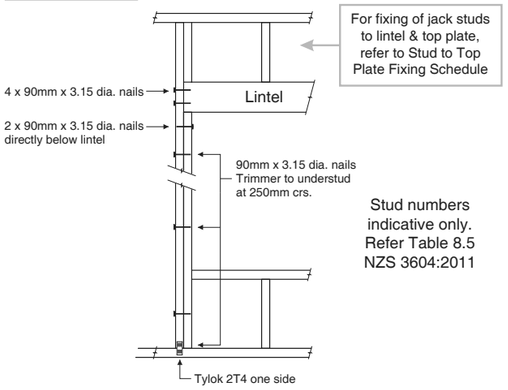
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A24

REVISION NO.
BC-C-3

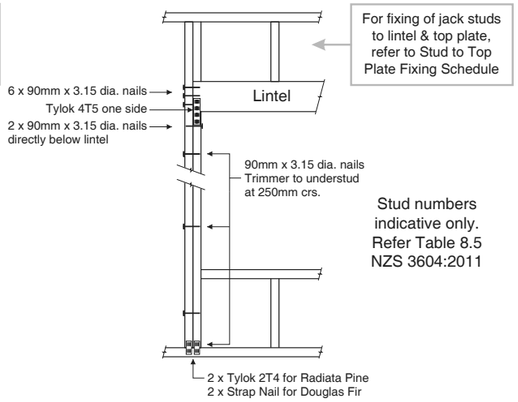
LINTEL FIXING OPTIONS

TYPE E 1.4kN



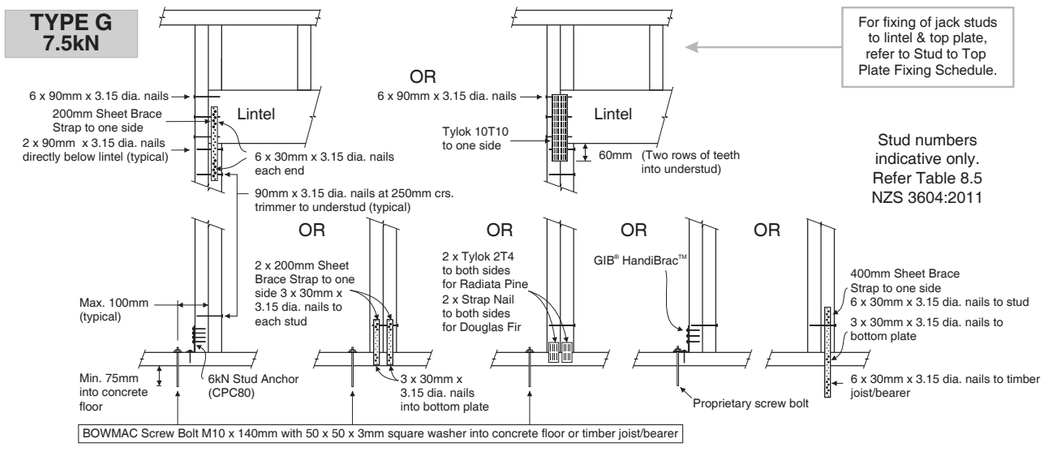
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE F 4.0kN



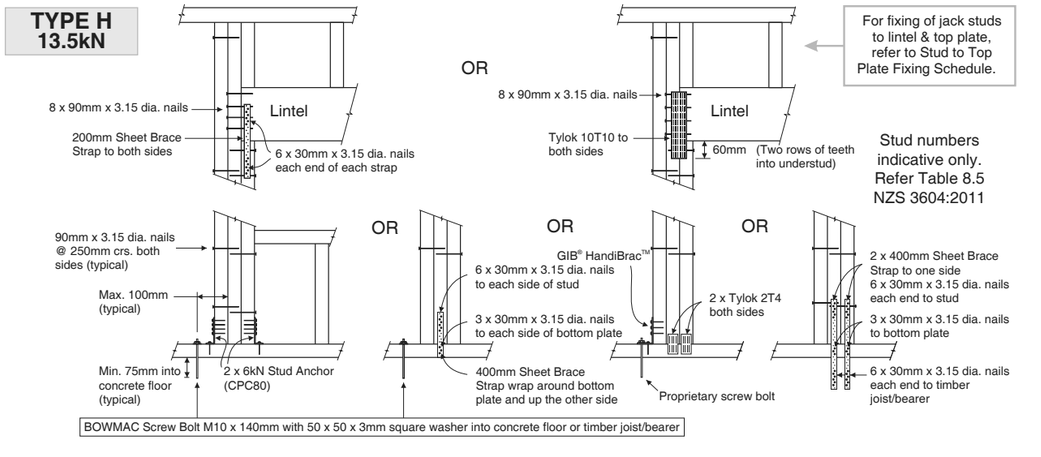
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE G 7.5kN



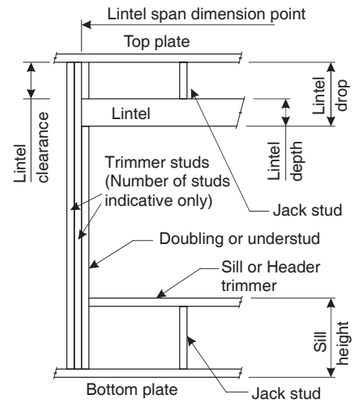
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE H 13.5kN



Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

1 Mitek Lumberlok Lintel Fixing - alternative to NZS3604:2011



i) Mitek Lintel Fixing Schedule Alternative to Table 8.14 & Figure 8.12 NZS3604:2011.

ii) Refer to Mitek current literature for updates to Lintel Fixings Schedule shown.

Typical Trimmer/Jamb studs: to NZS3604:2011 table 8.5

Maximum clear width of opening (span of lintel)	Stud thickness required for 600 mm spaced studs	Thickness of trimming studs*
(a) Single storey, top storey or non-loadbearing walls		
(m)	(mm)	(mm)
1.8	35 45 70 90	45 45 90 115
3.0	35 45 70 90	45 70 90 135
3.6	35 45 70 90	70 90 140 180
4.2	35 45 70 90	105 135 210 270
(b) Any other location		
0.9	35 45 70 90	45 70 90 135
1.8	35 45 70 90	70 70 115 135
3.0	35 45 70 90	70 90 140 180

* For brick veneer openings add extra stud for fixing veneer ties.

NOTE – To use this table:

(1) Enter the row corresponding to the lintel span being considered.

(2) From the second column, select the thickness of the studs required for the body of the wall, assuming that they are spaced at 600 mm.

(3) Read the trimming stud thickness from the right side column.

Sill & Head Trimmers to comply with NZS3604:2011 table 8.15

Maximum clear width of opening	Minimum thickness of sill and header trimmers
(m)	(mm)
2.0	35
2.4	45
3.0	90 (or 2/45 mm)
3.6	135 (or 3/45 mm)
4.2	SED

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Refer to wall framing & lintel plan for lintel sizes

4) All window and door openings to be checked on site prior to manufacture. Any discrepancies to be reported to designer

5) Provide additional nogs for cladding fixings as required

6)Fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, wall mounted rangehood, WC Cistern, towel rails, toilet roll holders, wall mounted air conditioning units as required

7) Timber wall framing to be H1.2 SG8 unless specified otherwise. Nogs at 800mm max ctrs typically or as required by cladding manufacturer.

8)Built up members to comply with NZS3604:2011 Section 2.4.4.7

9) Refer to Mitek current literature for updates to Lintel Fixings Schedule shown.

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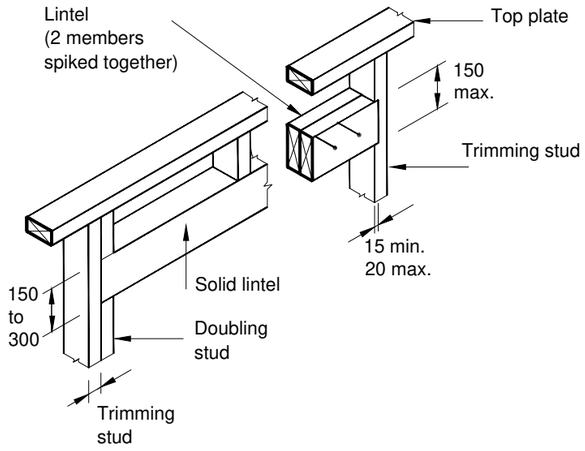
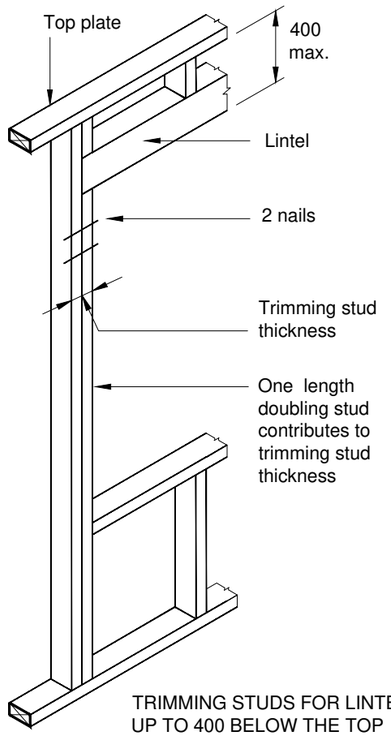
SHEET TITLE
TYPICAL FRAMING CONNECTIONS - SHEET 1

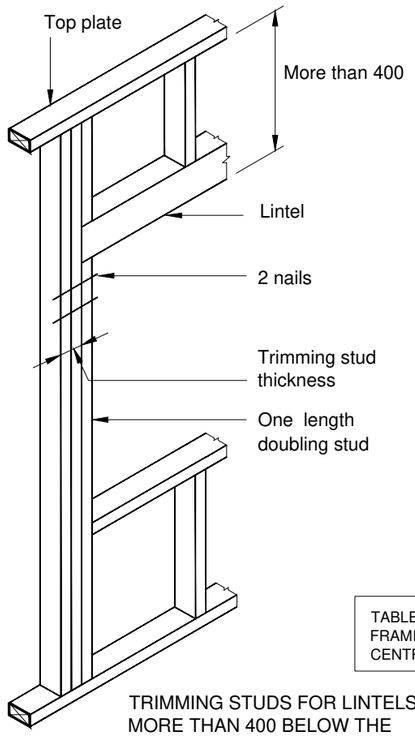
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:100
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A25**
REVISION NO. **BC-C-3**

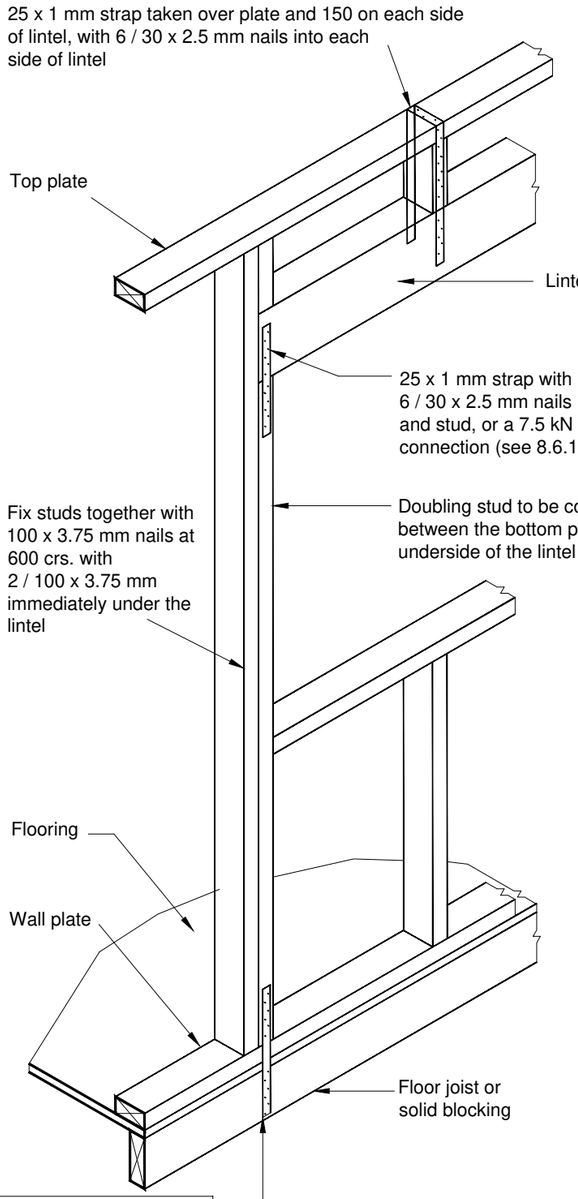




TRIMMING STUDS FOR LINTELS UP TO 400 BELOW THE TOP PLATE

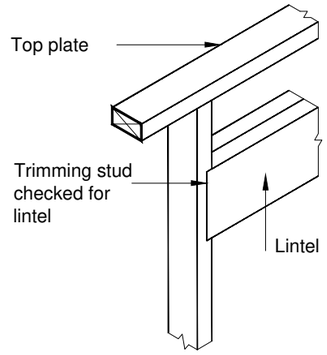


TRIMMING STUDS FOR LINTELS MORE THAN 400 BELOW THE TOP PLATE



(A) DOUBLING STUD

TABLE 8.19 FIXING BOTTOM PLATE TO FLOOR FRAMING WITH 3 / 3.15 x 100 NAILS @ 600mm CENTRES



(B) CHECKED STUD

NOTES

1) Refer to sheet A25 for typical framing notes

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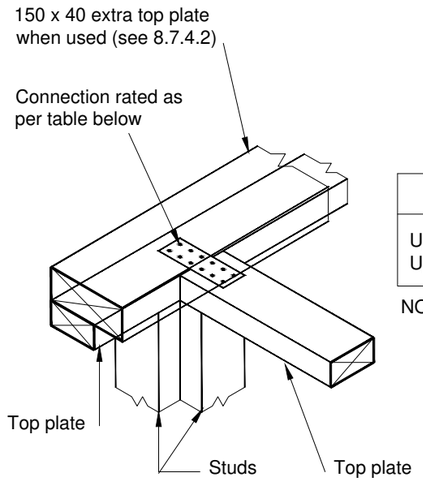
SHEET TITLE
TYPICAL FRAMING CONNECTIONS - SHEET 2

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A26
REVISION NO.
BC-C-3

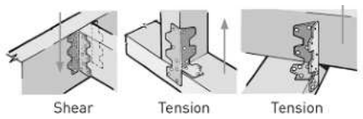


Capacities of metal plate joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side

NOTE - See section 4 for durability requirements.

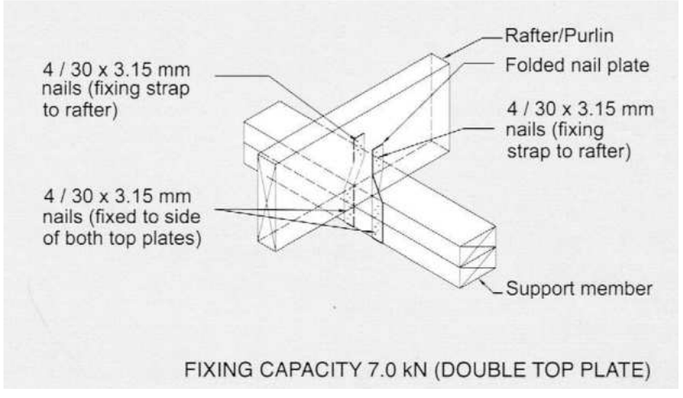
(A) BUTT JOINT

1 Top plate fixing

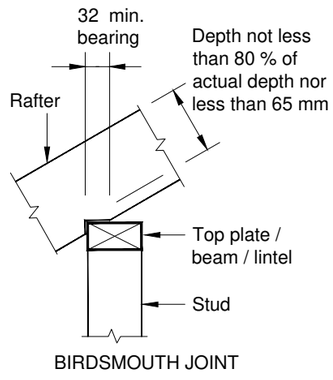


MULTIGRIP		
Characteristic Load		
Fixings	Nails: All holes filled with 30mm x 3.15 dia.	Screws: 3 x Type 17-14g x 35mm per flange
Shear	11.9 kN / pair	10.9 kN / pair
Tension	4.0 kN / each	-

7 Alternative Rafter fixing Detail using Mitek Multi-grips



6 NZS3604:2011 7.0kN Rafter Fixing



BIRDSMOUTH JOINT

5 Rafter Birdsmouth at supports

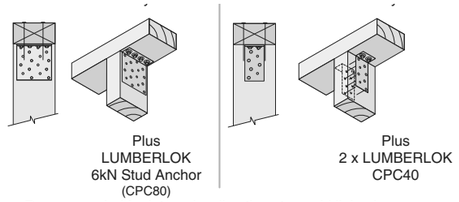
Top Plates at Right Angles

Connection capacity	LUMBERLOK Connector
6 kN	Tylok 6T10 **OR** 2 x Strap Nails
12 kN	2 x Sheet Brace Straps fixed with 6 x LUMBERLOK Product Nails 30mm x 3.15 dia. per end per strap (24 nails total)

Top Plates in Line

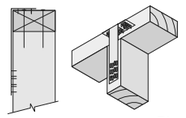
Connection capacity	LUMBERLOK Connector
3 kN	Tylok 6T5 **OR** Strap Nail
6 kN	Tylok 6T10 **OR** 2 x Strap Nails

2 Top plate jointing N.T.S



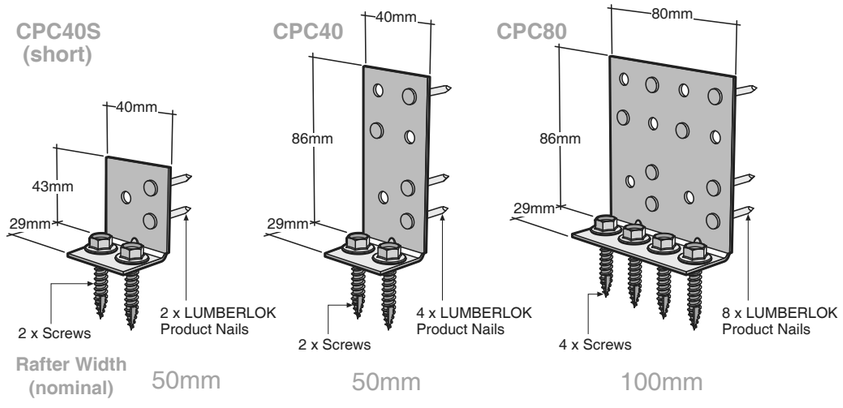
Recommended for internal wall options to avoid lining issues

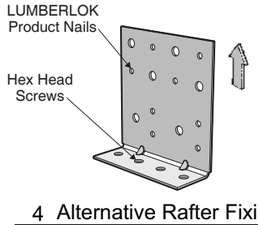
2 x 90mm x 3.15 dia. plain steel
wire nails driven vertically into stud.



Note:
To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

3 Stud to top plate fixing N.T.S





Uplift Direction	CPC40S	CPC40	CPC80
Characteristic Load	-	8kN/pair	16kN/pair
Fix as shown with: LUMBERLOK Product Nails 30mm x 3.15 dia. Type 17-14g x 35mm Hex Head Screws*			

4 Alternative Rafter Fixing : Lumberlok Concealed purlin cleat

a) Stud to top plate fixing to loadbearing walls to comply with "Mitek" "Stud to top plate fixing schedule"

b) Stud to top plate fixings to non loadbearing walls to NZS3604:2011 Table 8.19. 4/75x3.06 (skewed) plus 90x3.15 (end nailed) power driven nails or equiv

c) Double top plate to be fixed together with 2/100x3.75mm nails at 500mm ctrs to comply with NZS3604:2011 Table 8.19

d)Joints in top plates to be fixed in accordance with NZS3604:2011 8.7.3.

e) Joints shall only be made over supports being either a stud or blocking.

f)Connections to "Lumberlok" "Top plate jointing"

g) 3kN min (6kN to walls supporting ceiling diaphragms)

h) Refer to Bracing plan for walls containing bracing elements.

I) Refer to bracing manufacturers requirements for fixings to walls containing bracing elements.

NOTES

1) Refer to sheet A25 for typical framing notes

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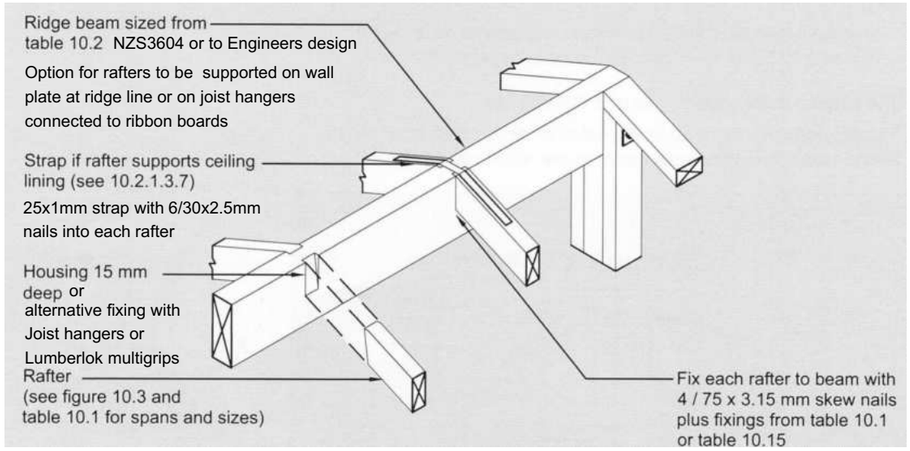
SHEET TITLE
TYPICAL FRAMING CONNECTIONS - SHEET 3

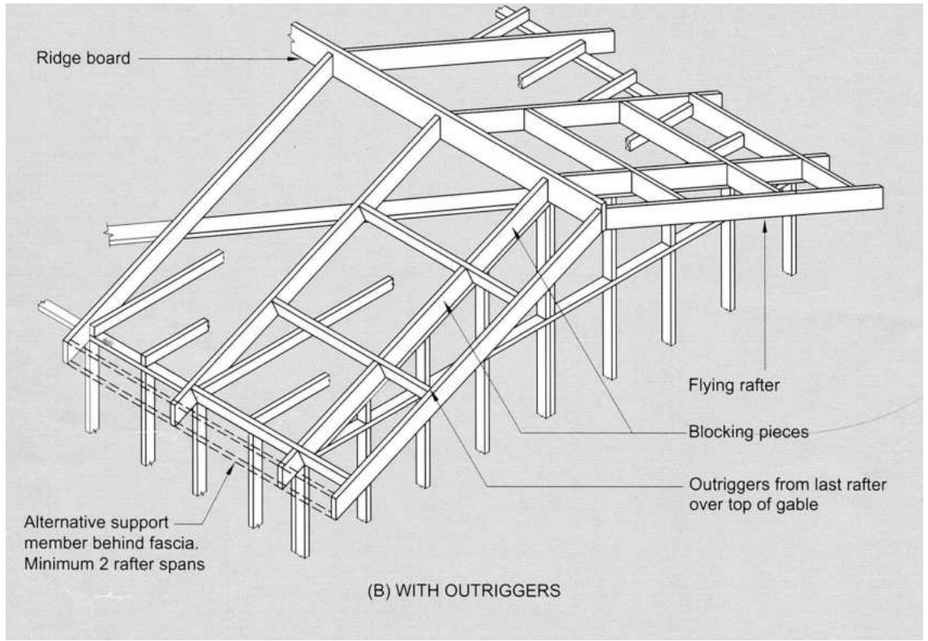
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A27**
REVISION NO. **BC-C-3**



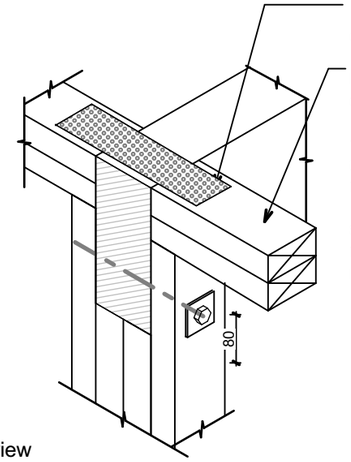
1 Ridge connection sim to NZS3604:2011 Fig 10.5 (b)

or alternative fixing of equal or greater capacity



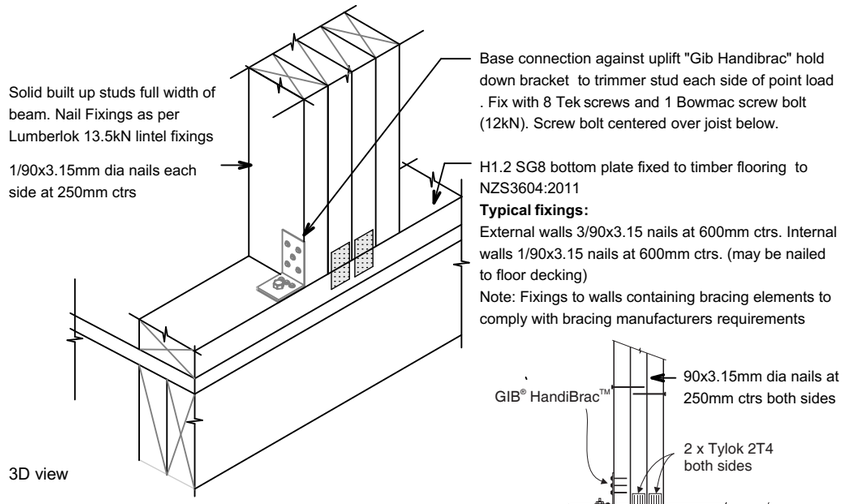
2 NZS3604:2011 Fig 10.16

Overhang formed with outriggers



3D view

4 Beam to wall connection at 90 degrees 1:10



3D view

Typical bottom plate to timber floor fixings and 12kN Base connection fixing at point loads / Beam locations (and at brace-line elements)

Mitek 13.5Kn fixing

3 Base connection at Timber Floor & Built up studs 1:10

NOTES

1) Refer to sheet A25 for typical framing notes

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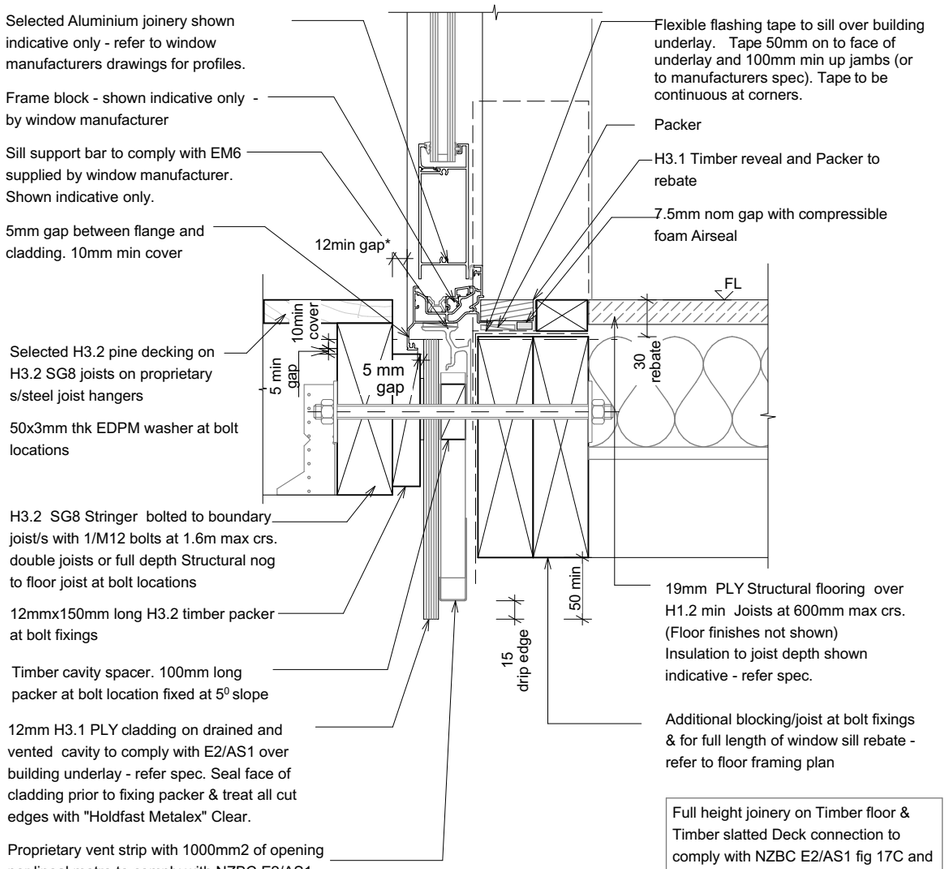
SHEET TITLE
TYPICAL FRAMING CONNECTIONS - SHEET 4

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:10
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

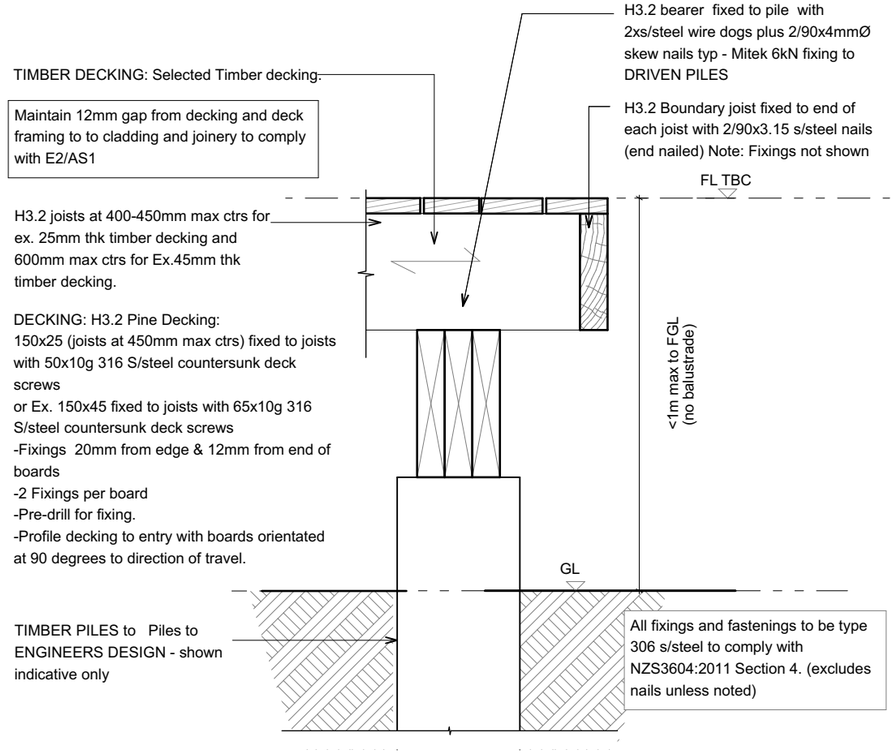
SHEET **A28**

REVISION NO. **BC-C-3**

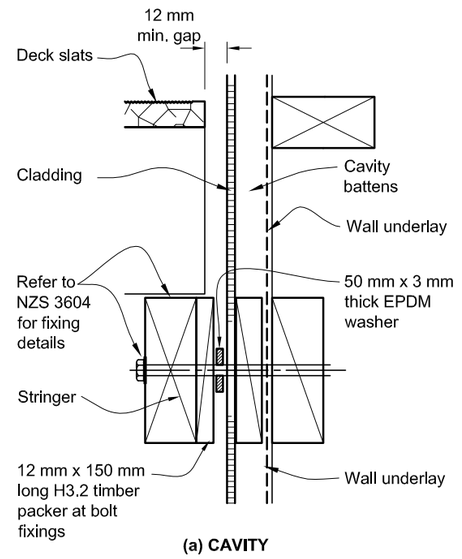


1 Full height joinery and deck stringer connection 1:5

Full height joinery on Timber floor & Timber slatted Deck connection to comply with NZBC E2/AS1 fig 17C and Fig 15(a) and cladding manufacturers requirements. - refer to later details



2 Typical Deck Detail 1:10



(a) CAVITY

NOTE:
(1) Not suitable for *stucco*, *EIFS* or profiled metal.
(2) The top of the *deck* slats may be level with the interior threshold.
(3) The same stringer to wall junction applies when joist hangers are used.

3 NZBC E2/AS1 Fig 15

NOTE: DURABILITY ZONE D:
to comply with NZS3604:2011 Section 4

a) All structural fixings and fastenings in EXPOSED & SHELTERD situations to be type 304 S/steel to comply with NZS3604:2011 Durability Table 4.1

b)All nails and screws within 600mm of FGL and all nails and screws to exposed framing to table 4.3 or in contact with timber treated to H3.2 or above to be type 304 s/steel

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC Acceptable Solutions unless specifically designed or approved as Alternative Solution by BCA

2) All construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

3) Timber framing to be SG8 unless specified otherwise.

4) treatment to be:
H5 for timber embedded in concrete or ground,
H4 for timber in contact with ground and
H3.2 for timber exposed to weather and
H1.2 for enclosed timber

5)Built up members to comply with NZS3604:2011 Section 2.4.4.7

6) Refer to wall framing & lintel plan for lintel sizes

7) All window joinery to comply with NZS4211

8) All glazing to comply with NZS4223:2016 Human impact safety requirements

9) All window and door openings to be checked on site prior to manufacture. Any discrepancies to be reported to Designer

10) PLY Cladding on cavity to comply with E2/AS1 and manufacturers details. Refer to accompanying literature for cladding manufacturers installation details and manufacturers specifications.

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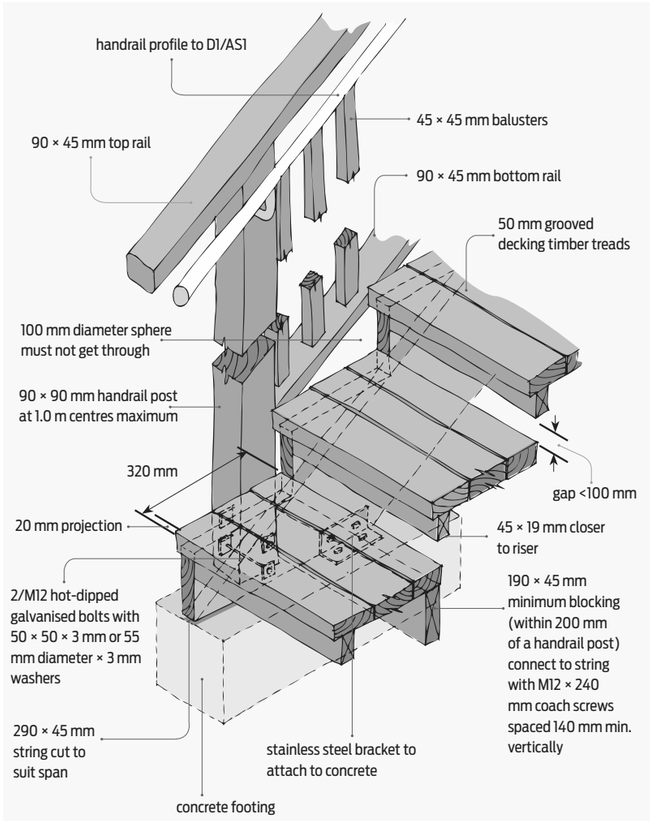
Karin Lindholm Andreassen
LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
DECK CONNECTION DETAILS

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:5, 1:10
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A29**
REVISION NO. **BC-C-3**



TYPICAL EXTERNAL STAIR

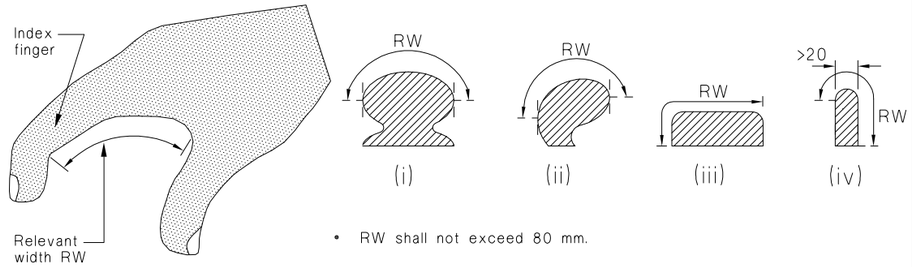
From BRANZ "BUILD RIGHT" External stairs for houses"

1 External Stair construction NTS

EXTERNAL STEPS : to comply with NZBC D1/AS1 Main Private stairway requirements:
Riser: 190mm max
Tread: 280mm min
Max Pitch 37^0

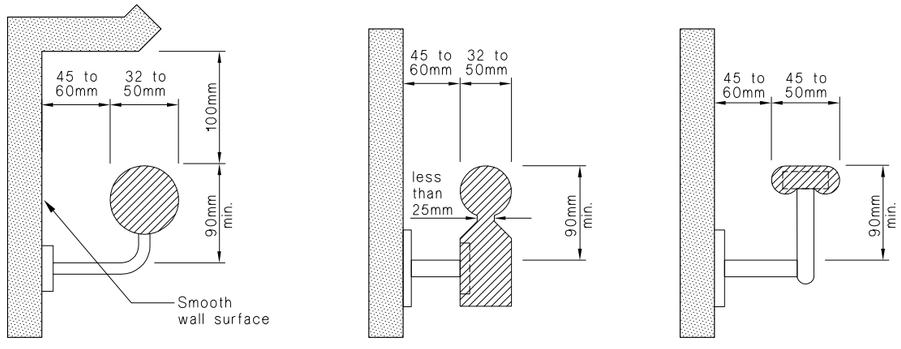
NOTES:
a) Handrail to be provided to one side for stairways of more than 3 risers to comply with D1/AS1
b) Slip resistance to main accessway to comply with D1/AS1 Table 2 (profiled timber at right angles to direction of travel)
c) *Stair on main entry access to have closed risers. Close off riser with decking timber or solid timber to riser depth. All other stair locations to have riser <100mm gap with closing bar as shown.
d) Balustrade shown as timber. Balustrading required where fall >1m to comply with F4/AS1. Posts and Handrail only required to stair where <1m fall to adjacent GL
e) 90mm min stringer to side of stair if timber balustrade is connected.
f) Proprietary handrail and bracket connections to manufacturers requirements
g) ALL FIXINGS WITHIN 600mm of FGL to be Grade 304 S/steel min
h) bracket fixing to concrete footing to be "BOWMAC" BS175 S/steel angle Bracket or equiv with 2/M12 S/steel bolts into concrete and 2/M12 S/steel Bolts into stringer. 50x50x3mm S/steel washers where bearing on timber
h) Extent of stair and location to be confirmed on site with owner

Figure 26: Handrail Profiles and Clearances
Paragraphs 6.0.8 and 6.0.9



- RW shall not exceed 80 mm.
- RW (relevant width) is measured around the upper surface perimeter of the handrail section between the vertical tangents on either side.
- Variations in shape are acceptable provided the effective grip is not reduced. For example, the side faces shown as vertical in details (iii) and (iv) are still acceptable even if slightly curved or sloped up to 5° from vertical.
- See fig. 26 (b) for wall clearances.

(a) Determination of relevant width for private and common stairways



The profiles shown comply with the provisions for accessible handrails.

The clearances apply to all handrails and the maximum dimension must be used for rough textured wall surfaces.

(b) Acceptable profiles and clearances for accessible stairways

3 Handrail Profile to D1/AS1

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC Acceptable Solutions unless specifically designed or approved as Alternative Solution by BCA

2)Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Fixings and installation of proprietary elements to be in accordance with manufacturers requirements & design details & PS1. Builder to provide additional nogging and framing timber for fixings as required

4) Installer of proprietary elements to provide a PS3 to builder/owner for CCC.

5) Timber wall framing to be SG8 unless specified otherwise.

6) treatment to be:
H5 for timber embedded in concrete or ground,
H4 for timber in contact with ground and
H3.2 for timber exposed to weather and
H1.2 for enclosed timber

7)Built up members to comply with NZS3604:2011 Section 2.4.4.7

8) Do not build on uncertified fill

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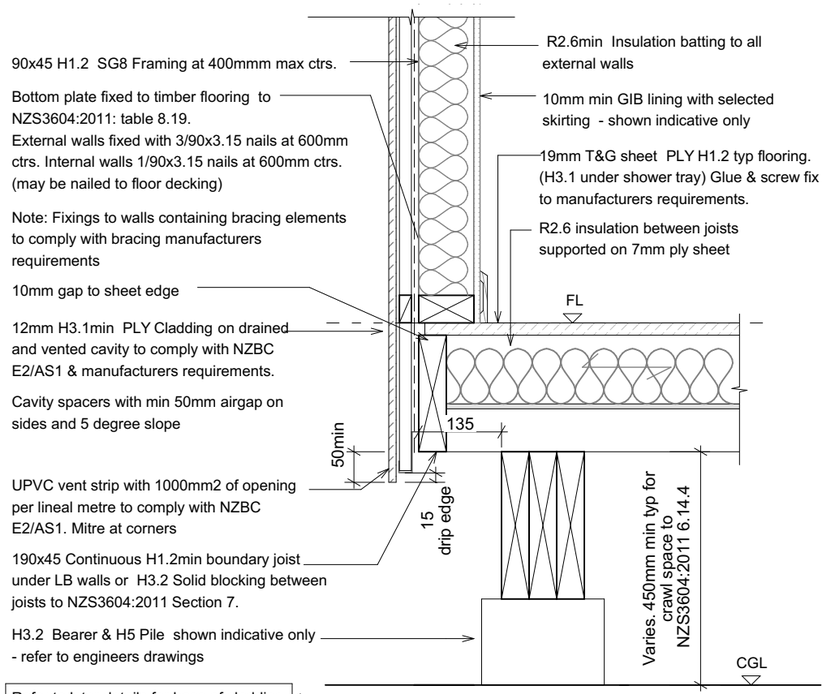
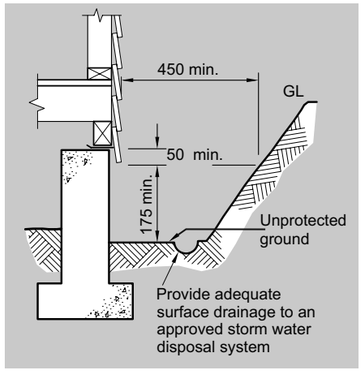
SHEET TITLE
EXTERNAL STAIR & HANDRAIL DETAILS

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:10
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A30**
REVISION NO. **BC-C-3**

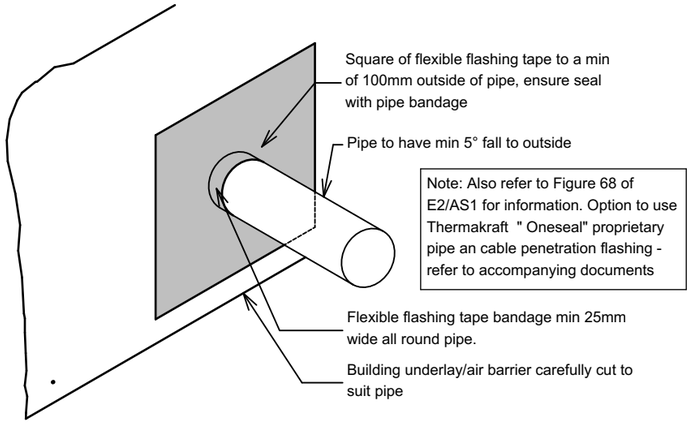


4 Typical Base of cladding detail



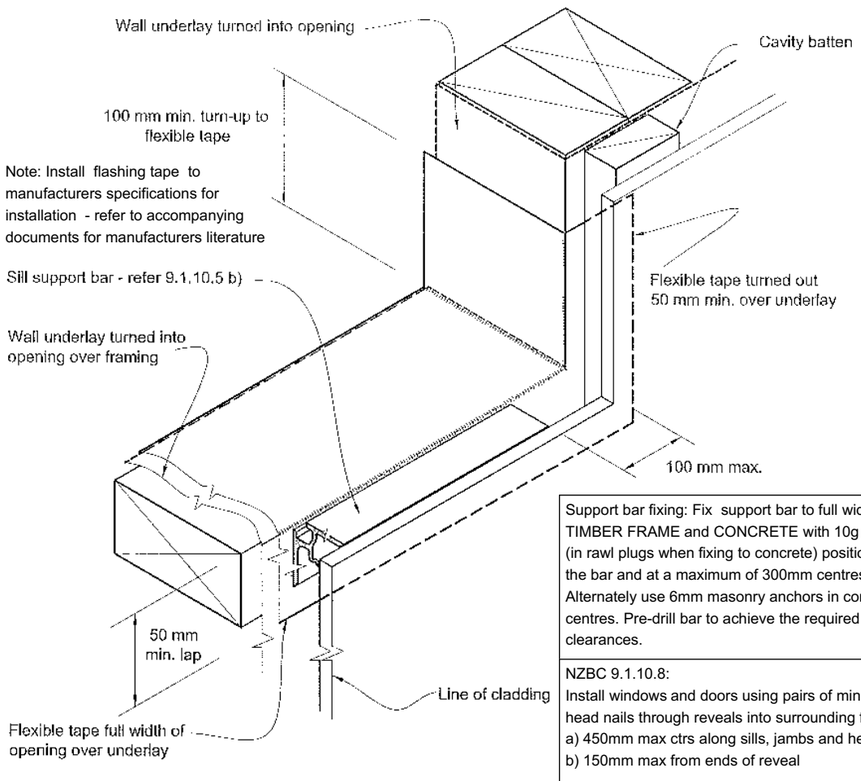
1 NZS36042011 Fig 6.21

Clearance between cladding and adjacent ground



Note: Also refer to Figure 68 of E2/AS1 for information. Option to use Thermakraft " Oneseal" proprietary pipe an cable penetration flashing - refer to accompanying documents

2 Typical Pipe penetration detail - all claddings 1:10



3 NZBC Fig 72B

Support bar fixing: Fix support bar to full width of opening to TIMBER FRAME and CONCRETE with 10g x 50mm SS screws (in rawl plugs when fixing to concrete) positioned at each end of the bar and at a maximum of 300mm centres between. Alternately use 6mm masonry anchors in concrete, at the same centres. Pre-drill bar to achieve the required 55mm edge clearances.

NZBC 9.1.10.8:
Install windows and doors using pairs of min 75x3.15 galv jolt head nails through reveals into surrounding framing at:
a) 450mm max ctrs along sills, jambs and heads, and
b) 150mm max from ends of reveal

Install packers between reveals and framing at all fixing points, except between head reveals and lintels.

NOTES
1) All construction to be in accordance with NZS3604:2011 the NZBC approved documents unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Timber wall & roof framing to be H1.2 SG8 unless specified otherwise.

4) H1.2 SG8 Nogs at 800mm typically or as required for cladding fixing - refer later details

5)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, wall mounted rangehood, WC Cistern, towel rails, toilet roll holders, wall mounted air conditioning units as required

6) Refer to Lintel & Wall Framing plan for lintel sizes

7) All water splash areas to be provided with impervious finishes as required by E3/AS1

8) Refer to wall framing & lintel plan for lintel sizes

9) All window joinery to comply with NZS4211

10) All glazing to comply with NZS4223:2016 Human impact safety requirements

11) All window and door openings to be checked on site prior to manufacture. Any discrepancies to be reported to Designer

12) PLY Cladding on cavity to comply with E2/AS1 and manufacturers details. Refer to accompanying literature for cladding manufacturers installation details and manufacturers specifications.

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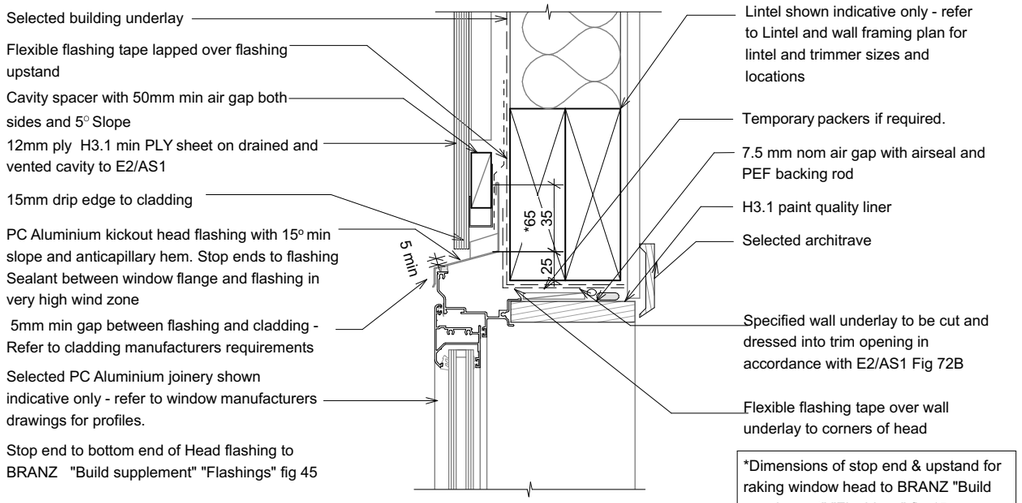
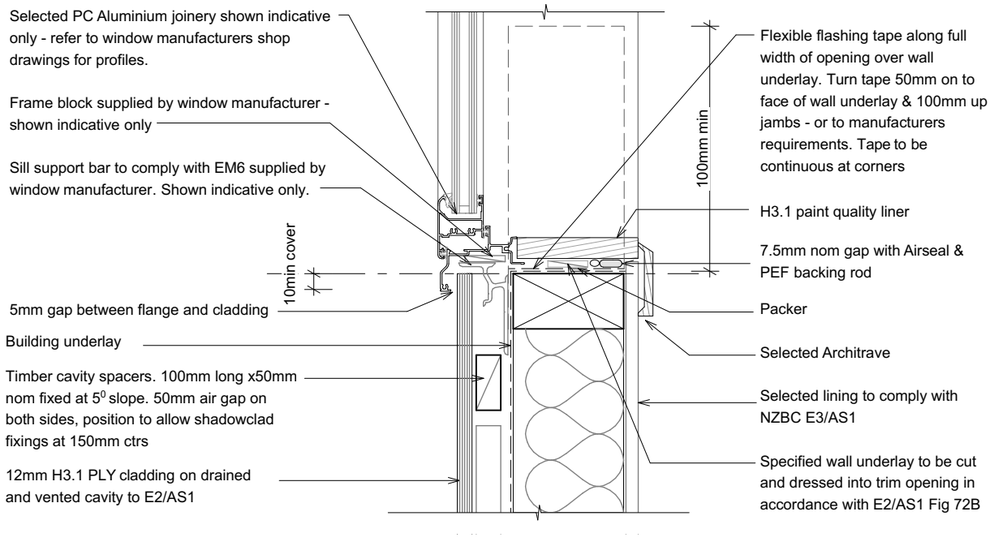
SHEET TITLE
TYPICAL CLADDING DETAILS

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:10
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

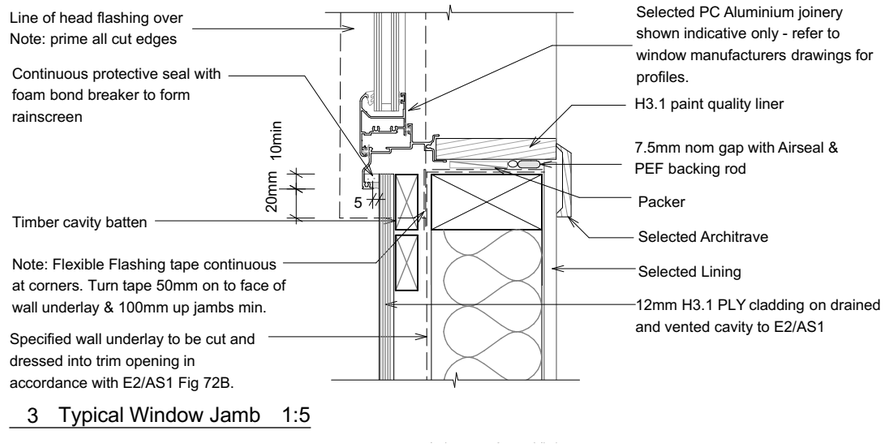
SHEET **A31**
REVISION NO. **BC-C-3**



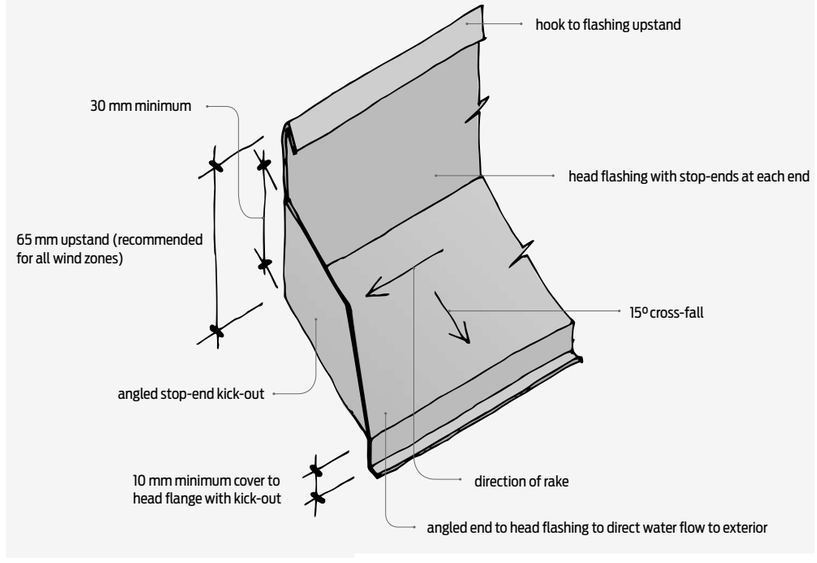
1 Typical Window Head Detail 1:5



2 Typical Window sill 1:5



3 Typical Window Jamb 1:5



PLY cladding on drained and vented cavity to E2/AS1. Neatly notch out for stop end and seal around stopend at cladding

4 BRANZ recommended Raking head flashing - at bottom of rake

NOTES

1) Refer to Sheet A31 for notes

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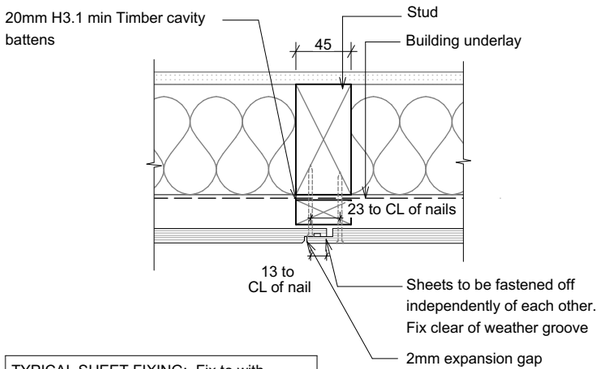
SHEET TITLE
PLY CLADDING JOINERY DETAILS

PROJECT No:	MD-25 SANDHILLS	SHEET	**A32**
SHEET SIZE:	A3		
SCALE:	NTS	REVISION NO.	**BC-C-3**
DRAWN:	Karin Lindholm Andreassen		
DATE:	18/08/2025		

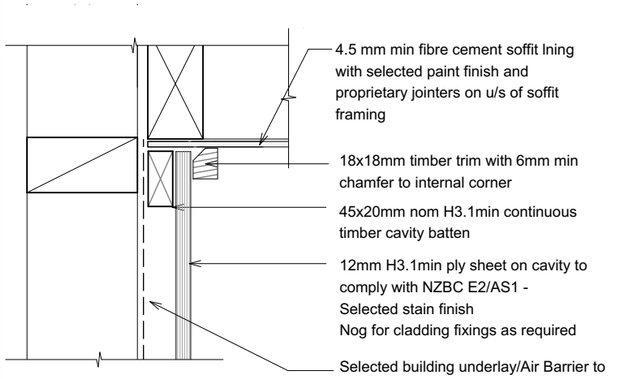


TYPICAL SHEET FIXING: Fix to with 60x2.8 crown Type 316 S/steel nails at 150mm centres to sheet edges and to all studs/nogs at 300mm ctrs typically.

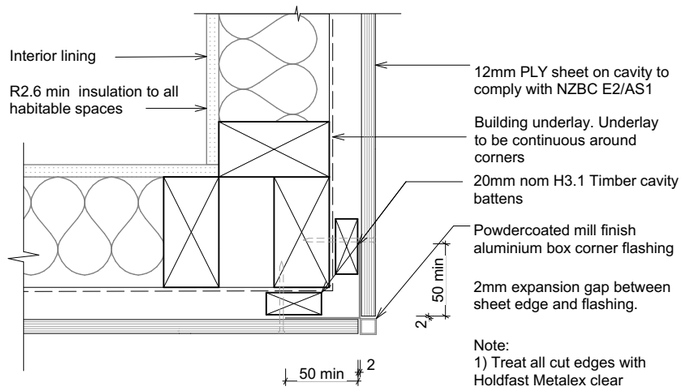
Note:

1.) Do not nail through weather grooves
2) Treat all cut edges with "Metalex" clear

1 Vertical T&G Junction 1:5

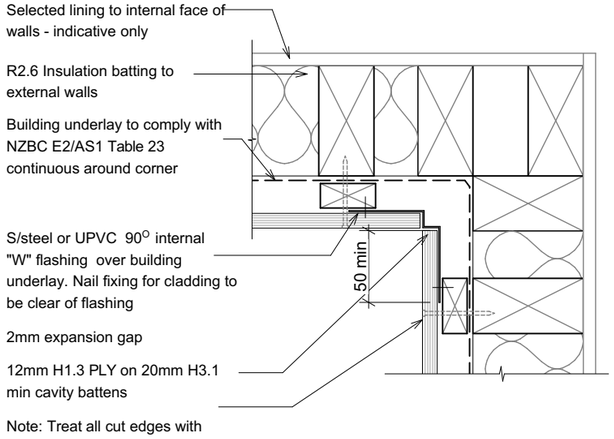


2 Soffit Junction 1:5



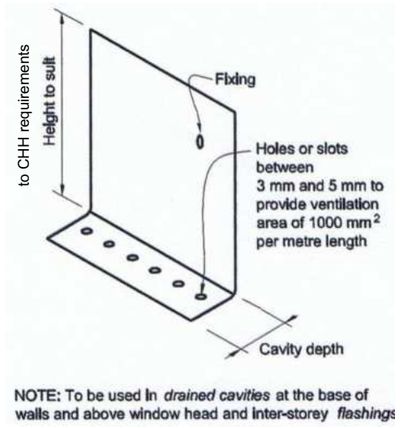
Note:
1) Treat all cut edges with Holdfast Metalex clear

3 PLY Cladding externla corner 1:5



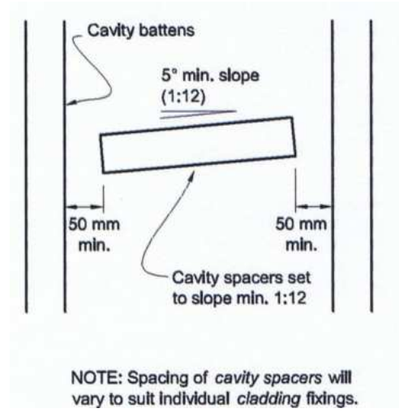
Junction with Ply Cladding and fibrecement sheet cladding sim.

4 PLY Cladding internal corner 1:5



NOTE: To be used in *drained cavities* at the base of walls and above window head and inter-storey *flashings*

5 Cavity base closer to E2/AS1 Fig 66



NOTE: Spacing of *cavity spacers* will vary to suit individual *cladding* fixings.

6 Cavity spacers to E2/AS1 Fig 67

NOTES

1) Refer to Sheet A31 for notes

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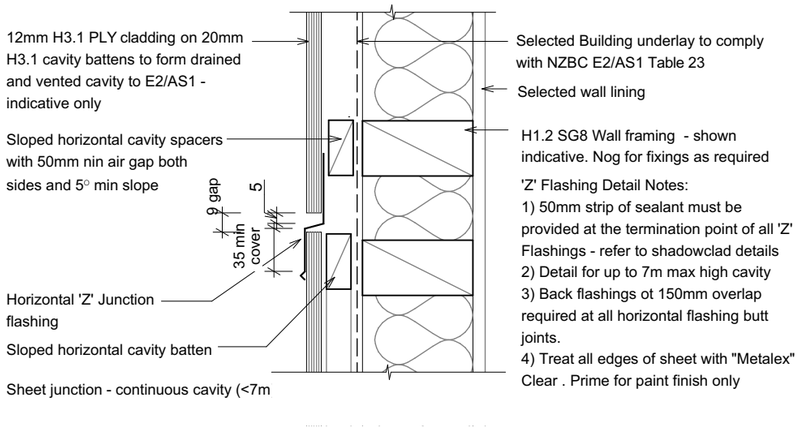
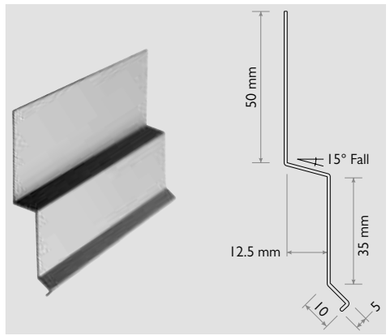
SHEET TITLE
PLY CLADDING DETAILS - SHEET 1

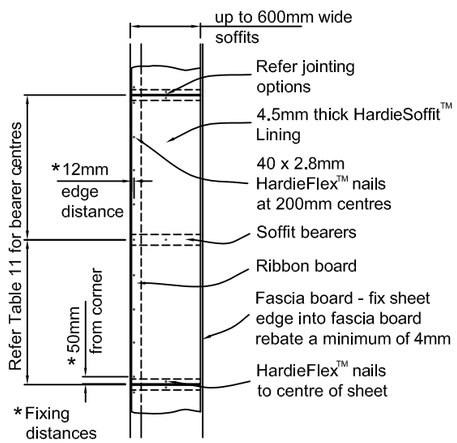
PROJECT No:	MD-25 SANDHILLS	SHEET	**A33**
SHEET SIZE:	A3		
SCALE:	1:5 NTS	REVISION NO.	**BC-C-3**
DRAWN:	Karin Lindholm Andreassen		
DATE:	18/08/2025		



1 PLY Cladding Horizontal junction 1:5

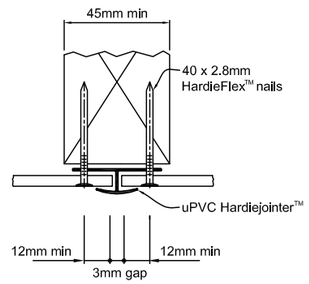


2 Horizontal junction flashing N.T.S

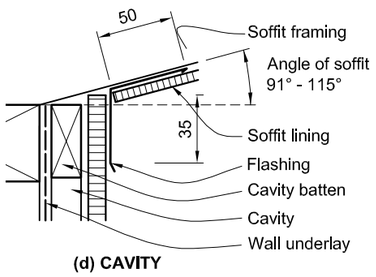


Notes
1. HardieFlex™ nails are the usual fixing method for HardieSoffit™ Lining. The fastfix method can also be used as an alternative.
2. When fastfix fastenings are used refer to Table 7 and Figure 8 and 9.

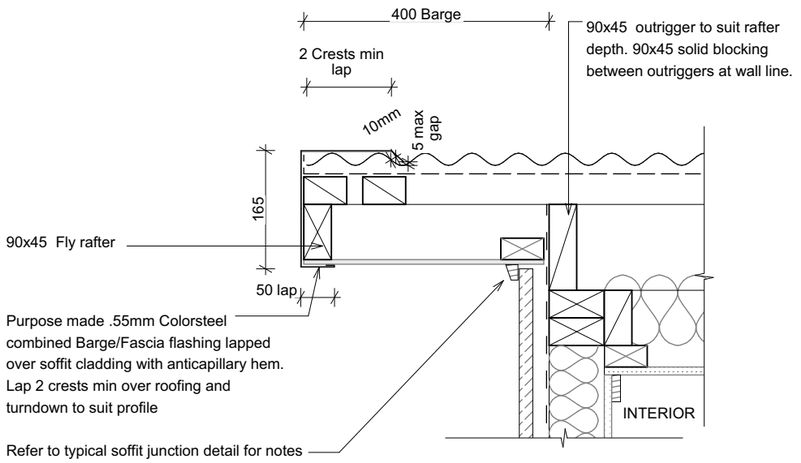
3 "James Hardie" Eaves Framing & Soffit Fixing Detail n.t.s



4 "James Hardie" Soffit Jointing Detail n.t.s

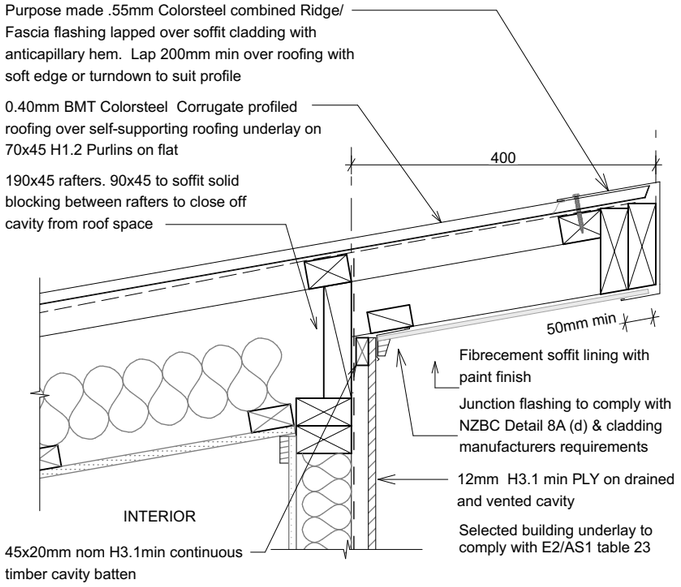


7 NZBC E2/AS1 Detail 8A (d)



Refer to later details for typical Barge with no overhang and roofing notes

5 Typical Barge with 400 wide Soffit 1:10



6 Typical Mono-ridge with 400 wide Soffit 1:10

NOTES

1) Refer to Sheet A31 for notes

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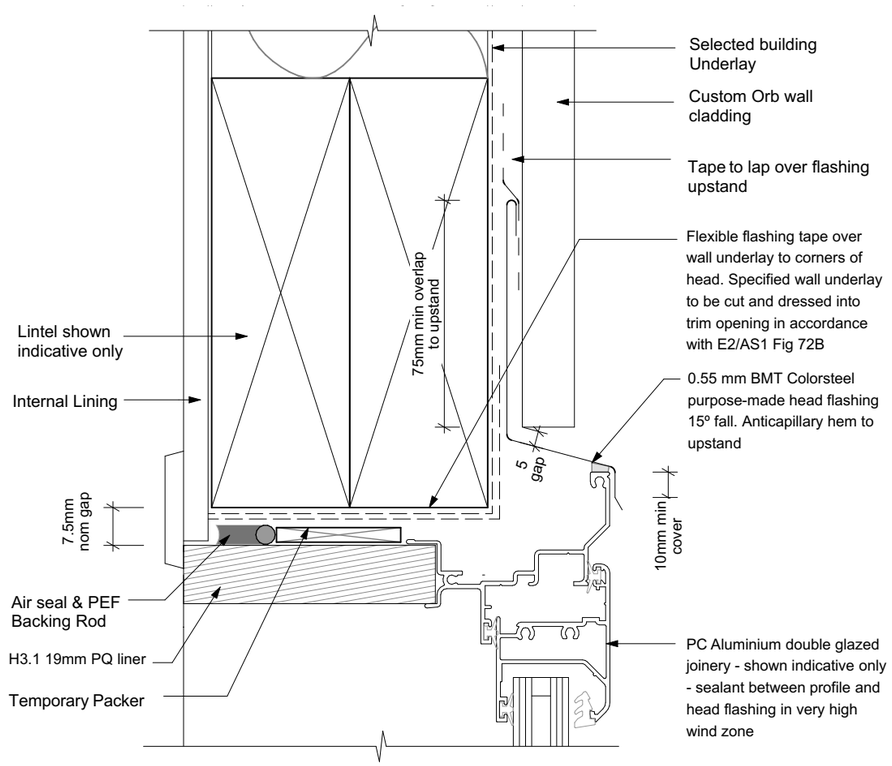
SHEET TITLE
PLY CLADDING DETAILS - SHEET 2

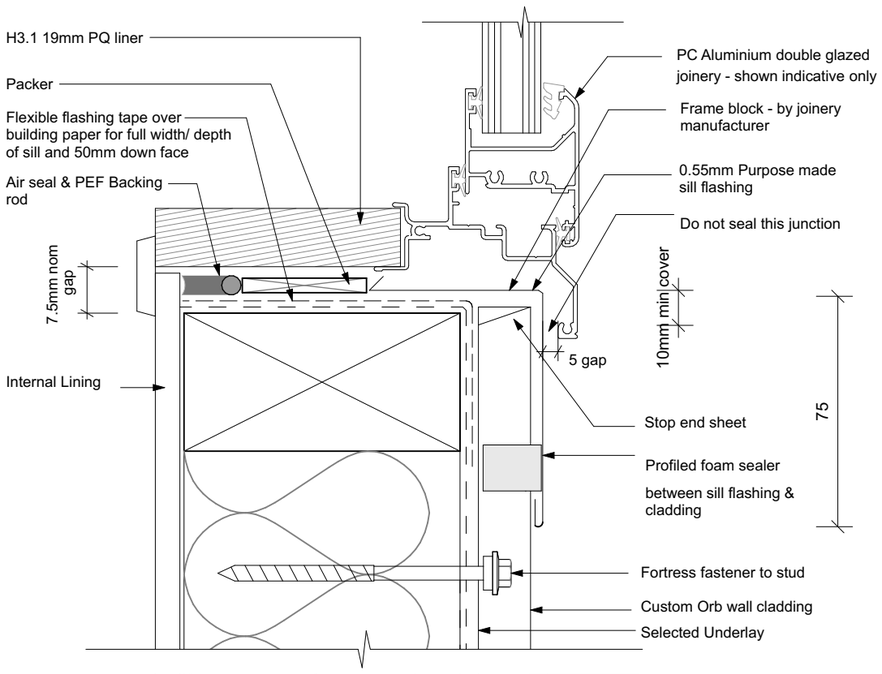
PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:5, 1:10
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A34**

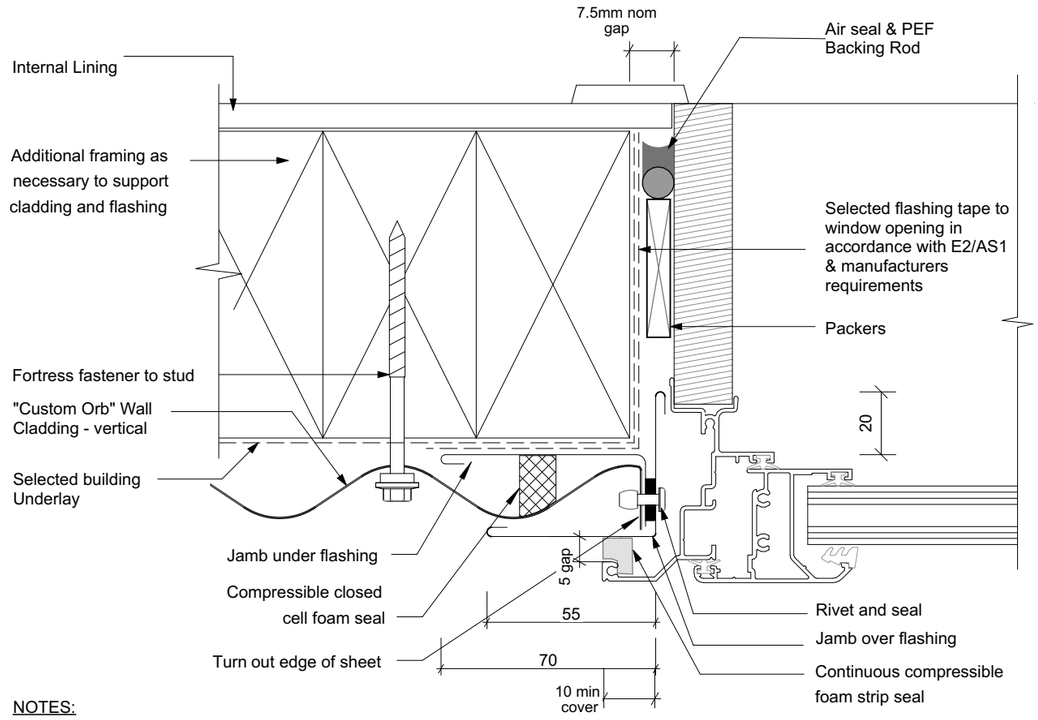
REVISION NO. **BC-C-3**



1 Custom Orb Head Flashing Detail 1:2



2 Custom Orb Sill Flashing Detail 1:2



NOTES:

1. Window profile to be selected to achieve cover shown in details.
2. Architraves are shown indicative only

3 Custom Orb Jamb Flashing Detail 1:2

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC approved documents unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Timber wall & roof framing to be H1.2 SG8 unless specified otherwise.

4) H1.2 SG8 Nogs at 800mm typically or as required for cladding fixing - refer later details

5)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, wall mounted rangehood, WC Cistern, towel rails, toilet roll holders, wall mounted air conditioning units as required

6) Refer to Lintel & Wall Framing plan for lintel sizes

7) All water splash areas to be provided with impervious finishes as required by E3/AS1

8) Refer to wall framing & lintel plan for lintel sizes

9) All window joinery to comply with NZS4211

10) All glazing to comply with NZS4223:2016 Human impact safety requirements

11) All window and door openings to be checked on site prior to manufacture. Any discrepancies to be reported to Designer

12) Profiled metal cladding to be installed in accordance with E2/AS1 and the 'Metal Roofing and Cladddding association Code of Practice' and manufacturers requirements. Installation by licenced Roofing and Cladding installer.

BUILDING CONSENT

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Karin Lindholm Andreassen
LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
CORRUGATE JOINERY DETAILS

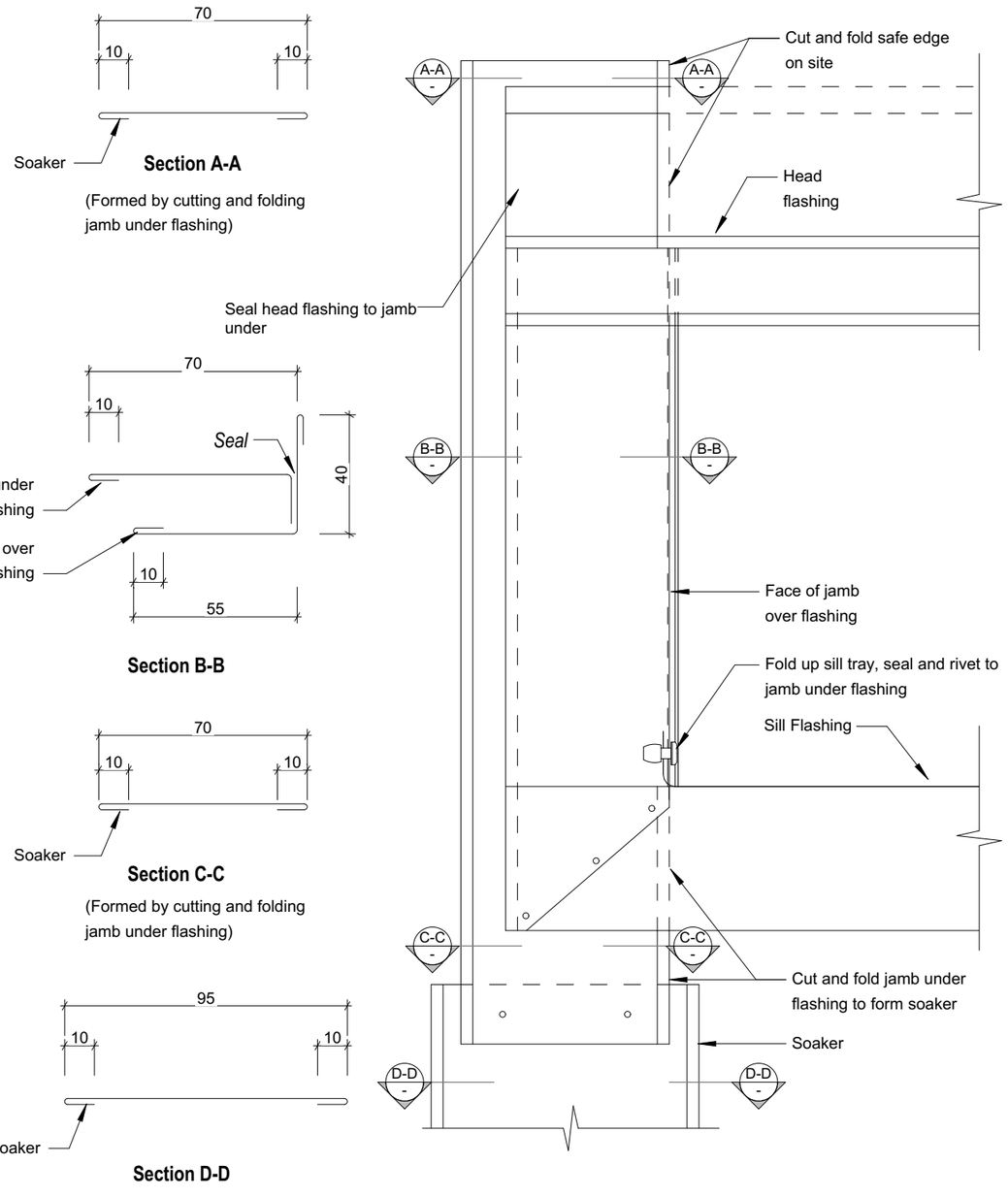
PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:2
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A35**

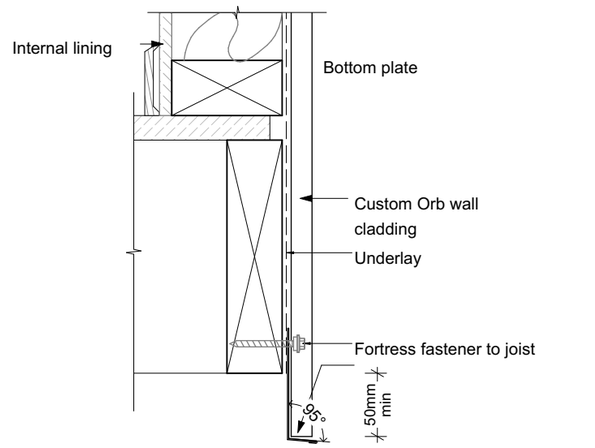
REVISION NO. **BC-C-3**

NOTES

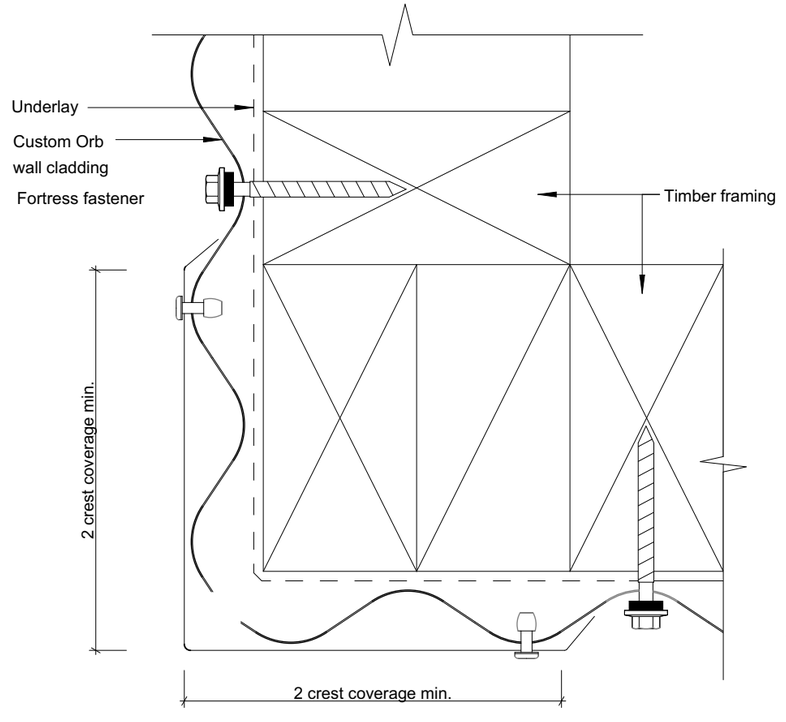
1) Refer to detail sheet A35 for typical notes



3 Window Flashing Elevation NTS



1 Base of Corrugate cladding detail 1:5



2 Corrugate cladding External Corner Detail 1:2

BUILDING CONSENT

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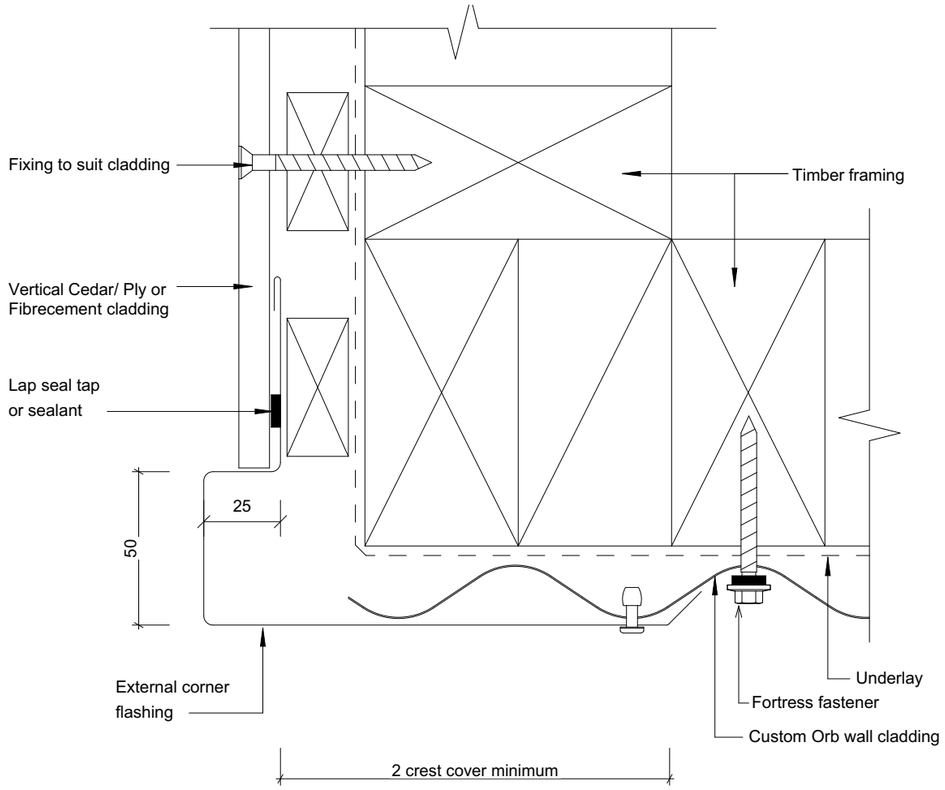
LOT 1 DP 594744

SHEET TITLE
CORRUGATE CLADDING DETAILS

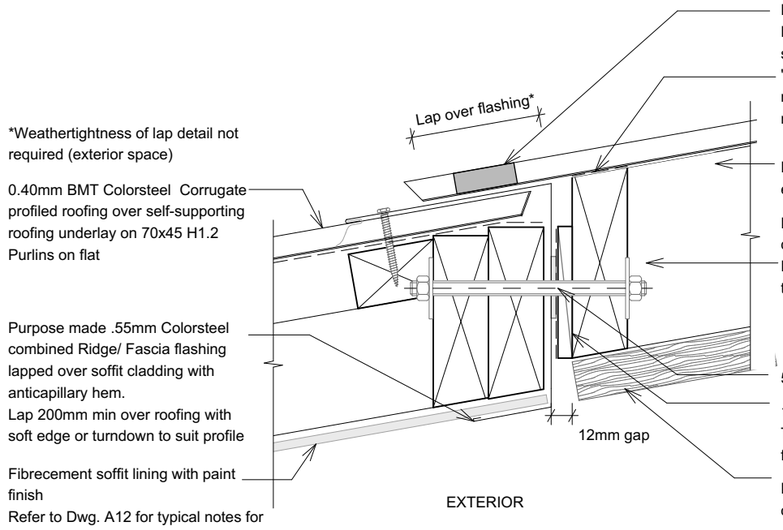
PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:5, 1:2 & NTS
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A36**

REVISION NO. **BC-C-3**



1 Junction detail with PLY cladding 1:2



2 Junction of Polycarbonate roofing at Monoridge 1:5

NOTES

1) Refer to detail sheet A31 & A35 for typical notes

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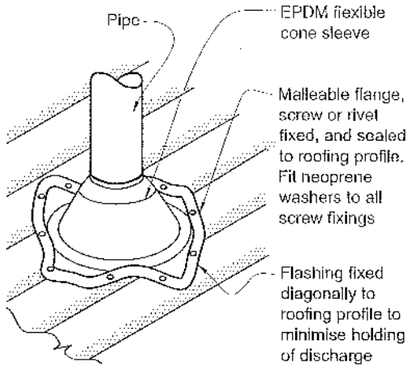
SHEET TITLE
CLADDING JUNCTION & FLASHING DETAILS

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:2
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A37**

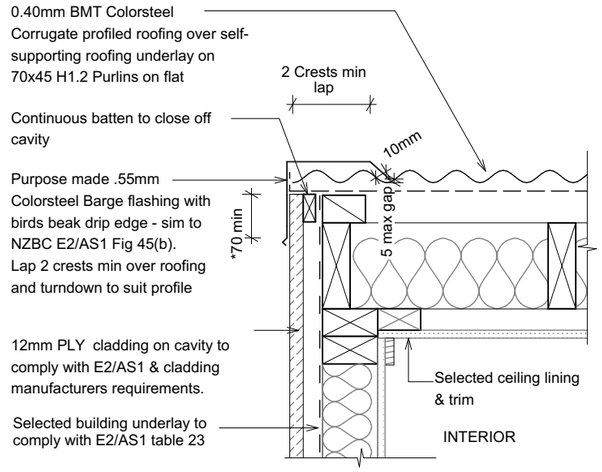
REVISION NO. **BC-C-3**



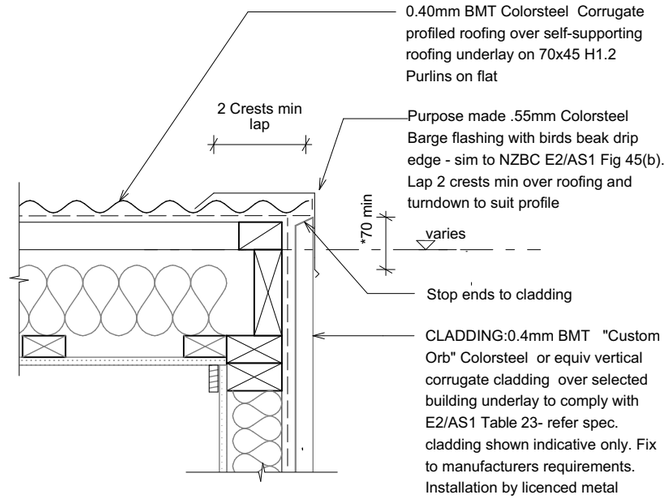
NOTE:
(1) Max. roof pitch for this flashing 45°, minimum pitch 10° if base of flange covers one or more complete troughs.
(2) For pipes up to 85 mm diameter.

NZBC E2/AS1 Fig 53. Penetration flashing

1 Pipe Penetration Flashing Detail 1:10



2 Barge Flashing Detail - Cedar 1:10



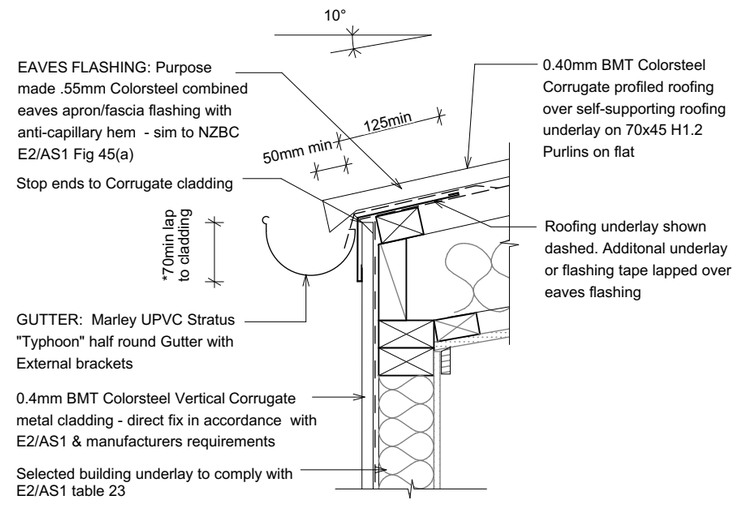
3 Barge Flashing Detail - Corrugate 1:10

* Flashing cover to cladding (excluding drip edge) in VERY HIGH wind Zone, Pitch <10° to NZBC E2/AS1 table 7

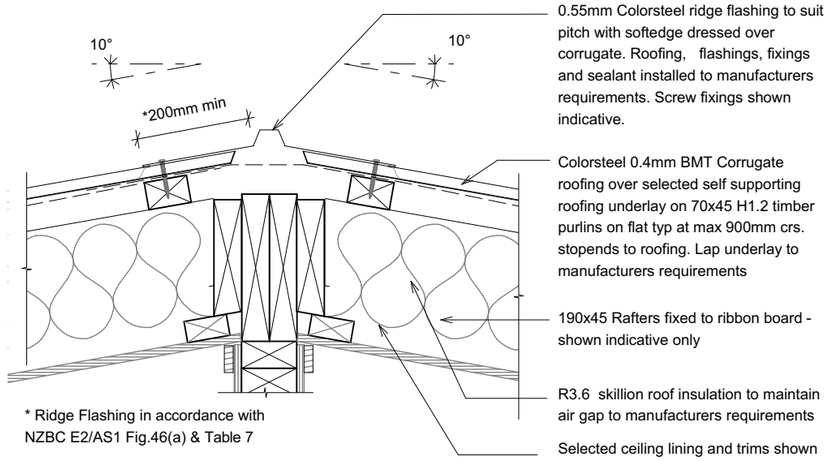
Note: Separate CCA timber from flashings & cladding with absorbent EDPM separation strip or tape to manufacturers requirements

Birds beak Flashing
scale 1:5

4 Typical Brids Beak Flashing 1:10



5 Eaves with Gutter Detail 1:10



* Ridge Flashing in accordance with NZBC E2/AS1 Fig.46(a) & Table 7

6 Ridge Detail 1:10

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC unless specifically designed

2) Durability of all construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2

3) Refer to wall framing & lintel plan for lintel sizes

4) Truss designer to provide producer statement for truss design and connections to top plate

5) Cladding fixings and installation in accordance with cladding manufacturers requirements. Provide additional nogs for cladding fixings as required

6) Timber wall framing to be H1.2 SG8 unless specified otherwise. Nogs at 800mm max ctrs typically or as required by cladding manufacturer.

7) Refer to wall framing & lintel plan for lintel sizes

8) All window and door openings to be checked on site prior to manufacture. Any discrepancies to be reported to LINDHOLM DESIGN LTD

9) Roofing by Licensed Roofer in accordance with E2/AS1, the NZ Metal Roofing & Cladding Association Code of Practice & Manufacturers requirements.

BUILDING CONSENT

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LBP: Design 2: 107526

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137 TIROMOANA WAY, AHIPARA,
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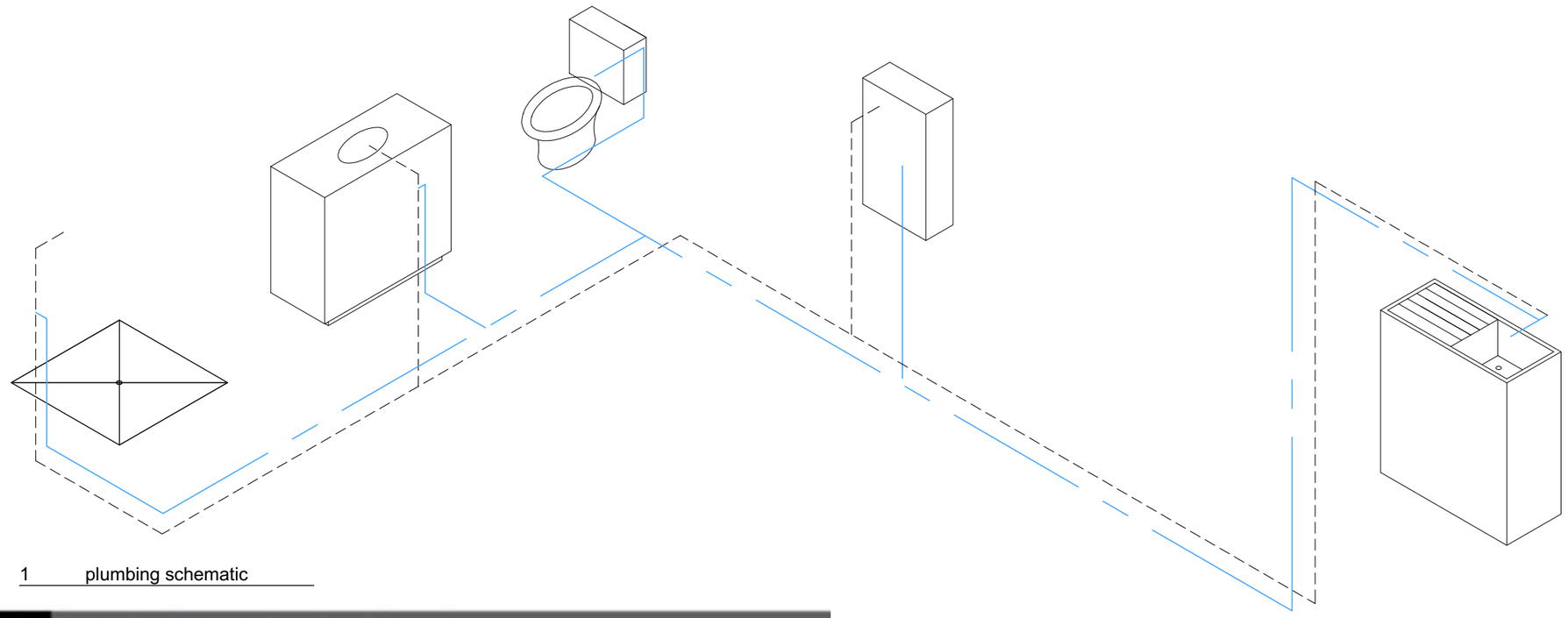
SHEET TITLE
TYPICAL ROOF DETAILS

PROJECT No:MD-25 SANDHILLS	SHEET **A38**
SHEET SIZE: A3	
SCALE: 1:10	
DRAWN: Karin Lindholm Andreassen	REVISION NO. **BC-C-3**
DATE: 18/08/2025	



1 plumbing schematic

Table 4: Tempering Valve and Nominal Pipe Diameters
Paragraphs 5.3.1 and 6.12.1

	Low pressure (i.e. header tank supply or low pressure)	Low and medium pressure unvented (valve vented) and open vented	Mains pressure
Pressure of water at tempering valve (kPa)	20 – 30	30 – 120	over 300
Metres head (m)	2 – 3	>3 – 12	over 30
Minimum tempering valve size	25 mm	20 mm	15 mm
Pipes to tempering valve	25 mm (see **Note 3**)	20 mm	20 mm (15 mm optional) (see **Note 1**)
Pipes to shower	20 mm	20 mm (see **Note 4**)	20 mm (see **Note 5**) (15 mm optional) (see **Note 1**)
Pipes to sink/laundry (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to bath (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to basins (see **Note 2**)	15 mm	15 mm	10 mm

Notes:
1. If supplied by separate pipe from *storage water heater* to a single outlet.
2. This table is based on maximum pipe lengths of 20 metres.
3. 2 m maximum length from *water heater* outlet to tempering valve.
4. 15 mm if dedicated line to shower.
5. 10 mm if dedicated line to shower.
6. Table 3 pipe sizes have been calculated to deliver water simultaneously to the kitchen sink and one other *fixture*.

3 Table 4 NZBC G12/AS1

Table 3: Acceptable Flow Rates to Sanitary Fixtures
Paragraph 5.3.1

Sanitary fixture	Flow rate and temperature l/s and °C	How measured
Bath	0.3 at 45°C	Mix hot and cold water to achieve 45°C
Sink	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Laundry tub	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Basin	0.1 at 45°C	Mix hot and cold water to achieve 45°C
Shower	0.1 at 42°C	Mix hot and cold water to achieve 42°C

* The temperatures in this table relate to the temperature of the water used by people in the daily use of the *fixture*.

Note:
The flow rates required by Table 3 shall be capable of being delivered simultaneously to the kitchen sink and one other *fixture*.

2 Table 3 NZBC G12/AS1

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC unless specifically designed

2) All plumbing and drainage to NZBC by registered plumber/drainlayer. External drainage to E1/AS1 & G13/AS2

3) Contractor to establish location of existing services & drainage runs prior to excavating for new works.

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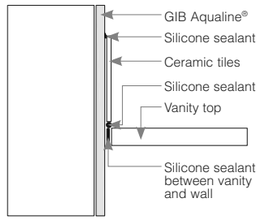
SHEET TITLE
PLUMBING SCHEMATIC

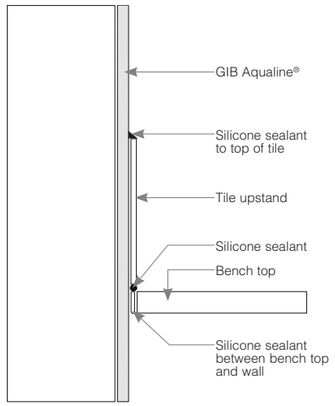
PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: NTS
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A39

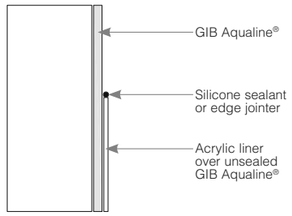
REVISION NO.
BC-C-3



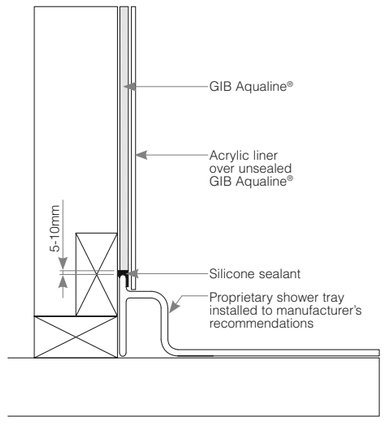
5 Vanity Junction



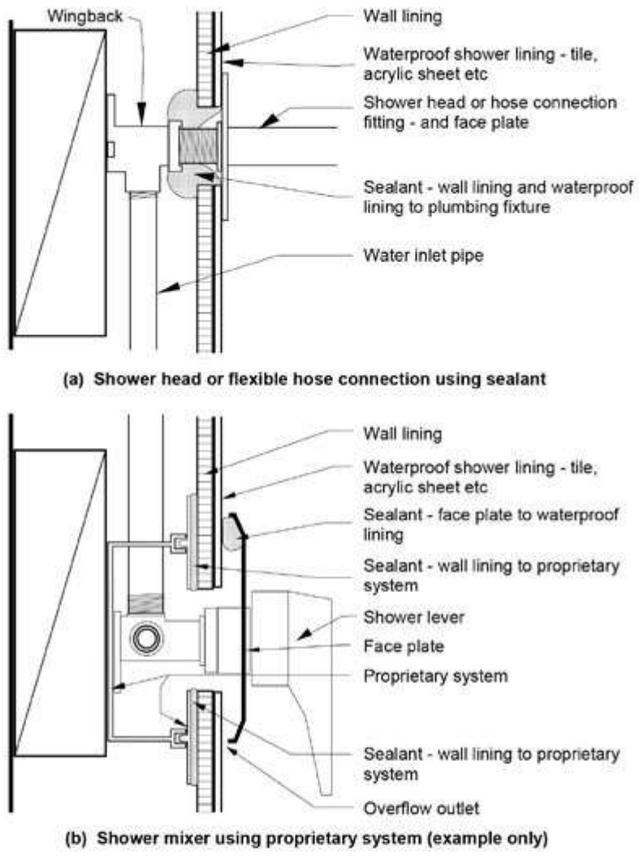
2 Kitchen and Laundry



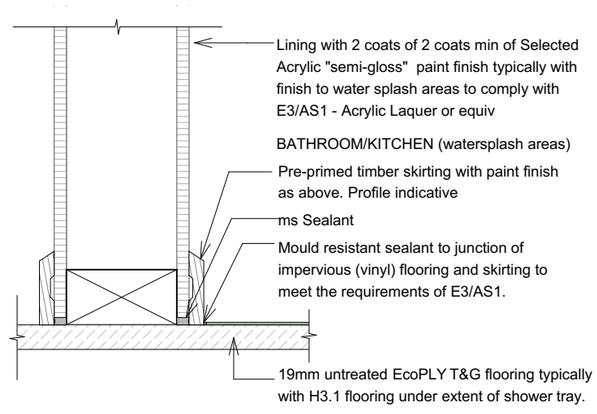
4 Top of Acrylic liner



3 Shower - Acrylic Liner and Base



1 Shower connections thru lining E3/AS1 Fig 6



6 Water splash zone: wall junction detail 1:5

Note:
1) Seal around all penetrations and at junctions of wall/floor tiles/ finishes with approved mould resistant silicone sealant

2) "Watersplash" areas and surfaces adjacent to sanitary and laundering facilities to be "impervious" to comply with NZBC E3/AS1 3.0

3) Impervious finish to lining to shower 1800mm high, to extend 50mm above shower rose to E3/AS1.Shower lining to comply with B2/AS1

4) Kitchen bench/work surfaces to comply with G3/AS1 if applicable

5) Floor tiles to wet areas to have a slip resistance to comply with D1/AS1 table Table 2 max coefficient of 0.4 when wet

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC acceptable solutions unless specifically designed or approved as an alternative solution by BCA

2) All construction materials, fixing and fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

3) Plumbing by registered plumber in accordance with NZS3500 and NZBC G12 & G13/AS1

4) Builder to refer to manufacturers requirements for framing/nogging requirements and installation details for all fixtures and fittings.

5) All wet/water splash areas to be provided with impervious finishes/ water proof membrane as required by E3/AS1 & E3/AS2

6) lining to water splash areas to be coated with 2 coats min of Selected Acrylic "semi-gloss" Acrylic Laquer paint finish or equiv finish to comply with E3/AS1

7) Builder to refer to manufacturers requirements for framing/nogging requirements and installation details for all fixtures and fittings.

8) Refer to GIB Aqualine Wet Area Systems for manufacturers installation requirements for GIB lining.

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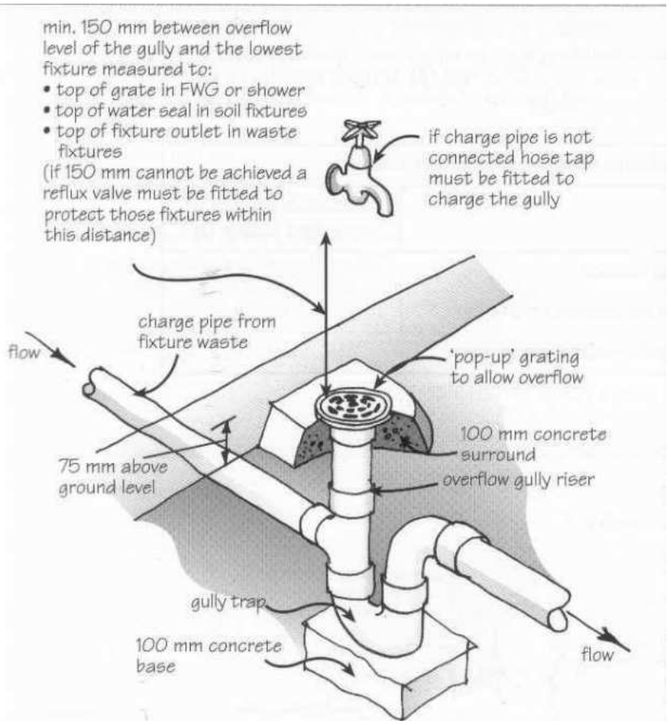
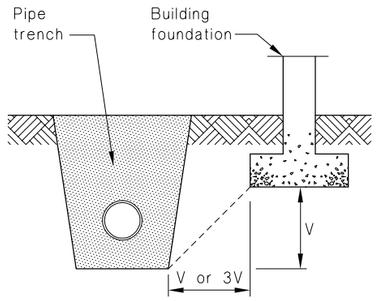
SHEET TITLE
E3/AS1 INTERNAL DETAILS

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:1
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A40**
REVISION NO. **BC-C-3**



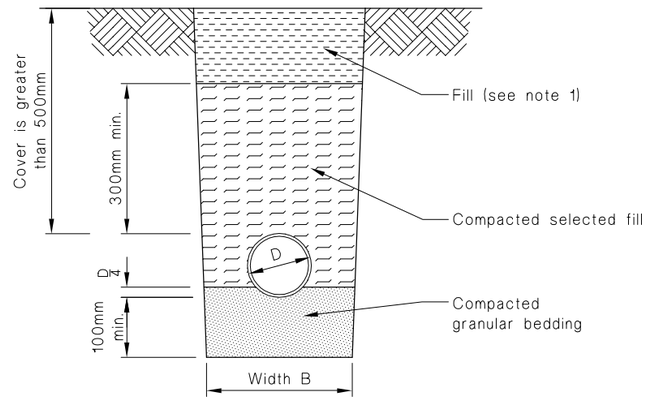
1 "BRANZ" "Plumbing & Drainage Guide" Fig. 6 Overflow Relief Gully



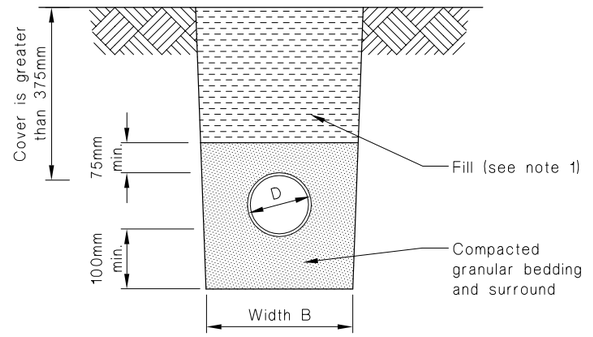
Minimum horizontal seperation shall be V or 3V dependant on length of time trench open,

Where the trench is to remain open for periods longer than 48 hours the minimum horizontal separation shall increase to 3V in all ground except rock.

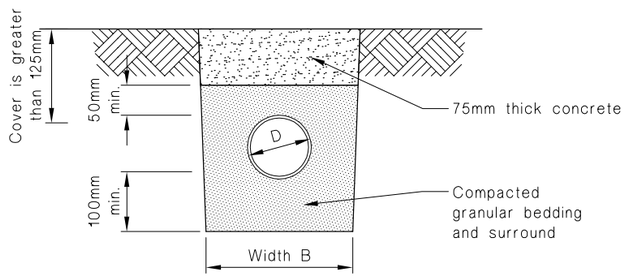
3 NZBC G13/AS2 Fig 8



(a) Cover greater than 500 mm
Bedding type 'B' of NZS 4452



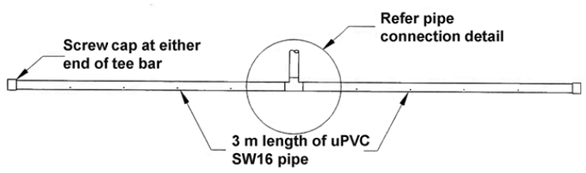
(b) Cover greater than 375 mm
Bedding type 'D' of NZS 4452



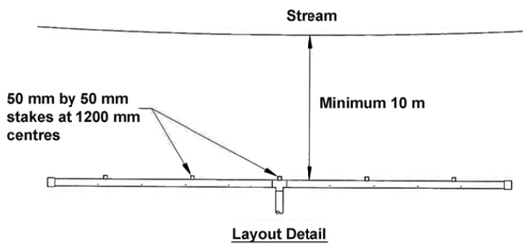
(c) Cover greater than 125 mm

1. Fill shall be:
-Ordinary fill where drains are located below gardens and open country.
-Compacted selected fill where the drains are located below residential driveways and similar areas subjected to light traffic.

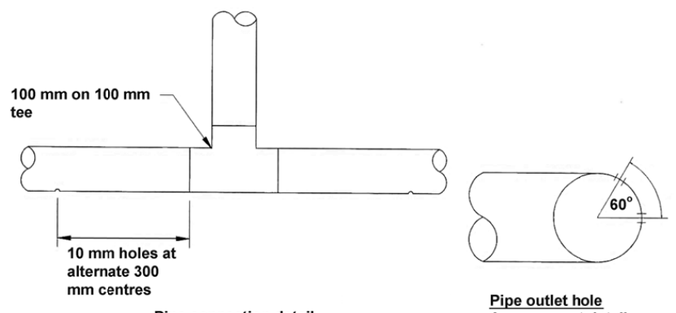
2 NZBC E1/AS1 Fig 13 & G13 Fig 7 Bedding & backfilling of drainage



Plan

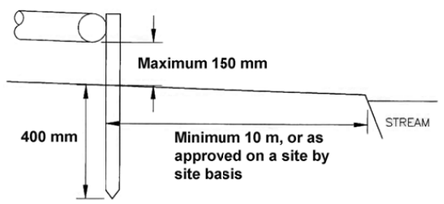


Layout Detail



Pipe connection detail

Pipe outlet hole Arrangement detail



Stake Detail

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

Figure C22 Above Ground Flow Dispersal

4 Country side Living Toolbox - Detail C22

NOTES

1) All works to be done in accordance with NZS3604:2011 and the NZBC unless specifically designed

2) All plumbing and drainage to AS/NZS 3500 & NZBC E1/AS1 & G13/AS2 by registered plumber/drainlayer

3) Contractor to establish location of existing services & drainage runs prior to excavating for new works.

4) SW Overflow from Water tanks to comply with "Countryside Living Toolbox indicative Stormwater Management Device Design Details" FigC22 for above ground dispersal - refer to accompanying documents

BUILDING CONSENT

All Construction to comply with Local Authority requirements, NZ Building Code/ Approved Documents and NZStandards.

DO NOT SCALE. Work only to figured dimensions. All Dimensions and levels are to be checked by contractor before commencement of work. Contractor to report any discrepancy.

These drawings and design remain the property of Modular Dwellings (2016) Limited. Drawings are not to be distributed or copied without prior approval from Modular Dwellings (2016) Limited.

These drawings and accompanying documents are not to be used for construction purposes until issued for Building Consent and stamped "approved documents" by the local authority.

MODULAR DWELLINGS LIMITED

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LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
PLUMBING & DRAINAGE DETAILS

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE:
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A41**
REVISION NO. **BC-C-3**

Wilton Joubert Limited
09 527 0196
PO BOX 11-381
Ellerslie
Auckland 1524

SITE	137 Tiromoana Way, Ahipara
LEGAL DESCRIPTION	Lot 1 DP 594744
PROJECT	Proposed Transportable Dwelling
CLIENT	Tim Burges & Peter Hunt
REFERENCE NO.	141241
DOCUMENT	On-site Effluent Disposal Report
STATUS/REVISION No.	03
DATE OF ISSUE	05 August 2025

Report Prepared For	Email
Tim Burges & Peter Hunt	tim@goodcopy.co.nz; peter.hunt@mcelroys.co.nz

Authored by	**G.Brant** *(BE(Hons) Civil)*	Civil Design Engineer	Gustavo@wjl.co.nz	
Reviewed & Approved by	**B. Steenkamp** *(CPEng, BEng Civil, CMEngNZ, BSc (Geology))*	Senior Civil Engineer	BenS@wjl.co.nz	

1. EXECUTIVE SUMMARY

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

Legal Description:	Lot 1 DP 594744
Site Area:	16,840m²
Overall Site Gradient within Disposal Area:	~6°
Geology Encountered:	OIS1 (Holocene) active dune deposits of Karioitahi Group
Site Soil Category (AS/NZS 1547:2012):	Category 2 – Fine SAND
Daily Application Rate:	15mm/day (Conservative Rate)
Number of Bedrooms:	2
Max Dwelling Occupancy:	4
Water Source:	Reticulated Water Supply (200l/pp/pd)
Daily Wastewater Production:	800L/day
Effluent Treatment Level:	Primary Septic Tank (<BOD_5 30 mg/L, TSS 45 mg/L)
Application Method:	Conventional Trenches
Required Total Trench Length:	89m (@0.6m wide)
Disposal Area:	Basal: 54m²
Reserve Area:	Basal: 54m² (100%)

2. INTRODUCTION

2.1 SCOPE OF WORK

Wilton Joubert Ltd was engaged by the clients, KTP No 1 Trust and Burgess Lockley Family Trust, to undertake an effluent disposal assessment at the above site, where we understand, it is proposed to relocate a residential dwelling.

At the time of report writing, we have been supplied the following documents:

- Concept Plan Set by Lindholm Design Architecture Services, including floor plans and elevations (dated: 18.06.2025)
- Site Plan by Lindholm Design Architecture Services, (dated: 29.07.2025)
- As-Built Plan Set by Haigh Workman Ltd (Ref No: 21 050, dated: 31.07.2023)

Any revision of drawings and/or development proposals with implications on the wastewater design should be referred back to WJL for review.

3. SITE DESCRIPTION

The subject 1.6486ha property is legally described as Lot 1 DP 594744 and is accessed at its southeastern boundary corner, off the northern end of newly formed Tiromoana Way, approximately 1.8km northwest of the Sandhills Road intersection.

Ground cover on-site consists predominantly of pasture besides an existing shed and metalled driveway. Topographically speaking, land in proximity to the proposed dwelling location generally falls to the west at gentle to moderate grades.

The Far North District Council (FNDC) on-line GIS Water Services Map indicates that the property is not serviced by public wastewater or stormwater connections. As-Built plans prepared by Haigh Workman Ltd (Ref No: 21 050, dated: 31.07.2023) indicates that the property is serviced by a reticulated water connection.

Figure 1: Aerial Snip from FNDC Maps Showing Parent Lot Site Boundaries (cyan)

Figure 2: Site photograph looking south-westerly towards the proposed building site (outlined by orange cones).

4. DEVELOPMENT PROPOSALS

The development proposal, obtained from the client, is to relocate a 2-bedroom residential dwelling on-site, as depicted in the plan set by Lindholm Design Architecture Services (dated: 18.06.2025).

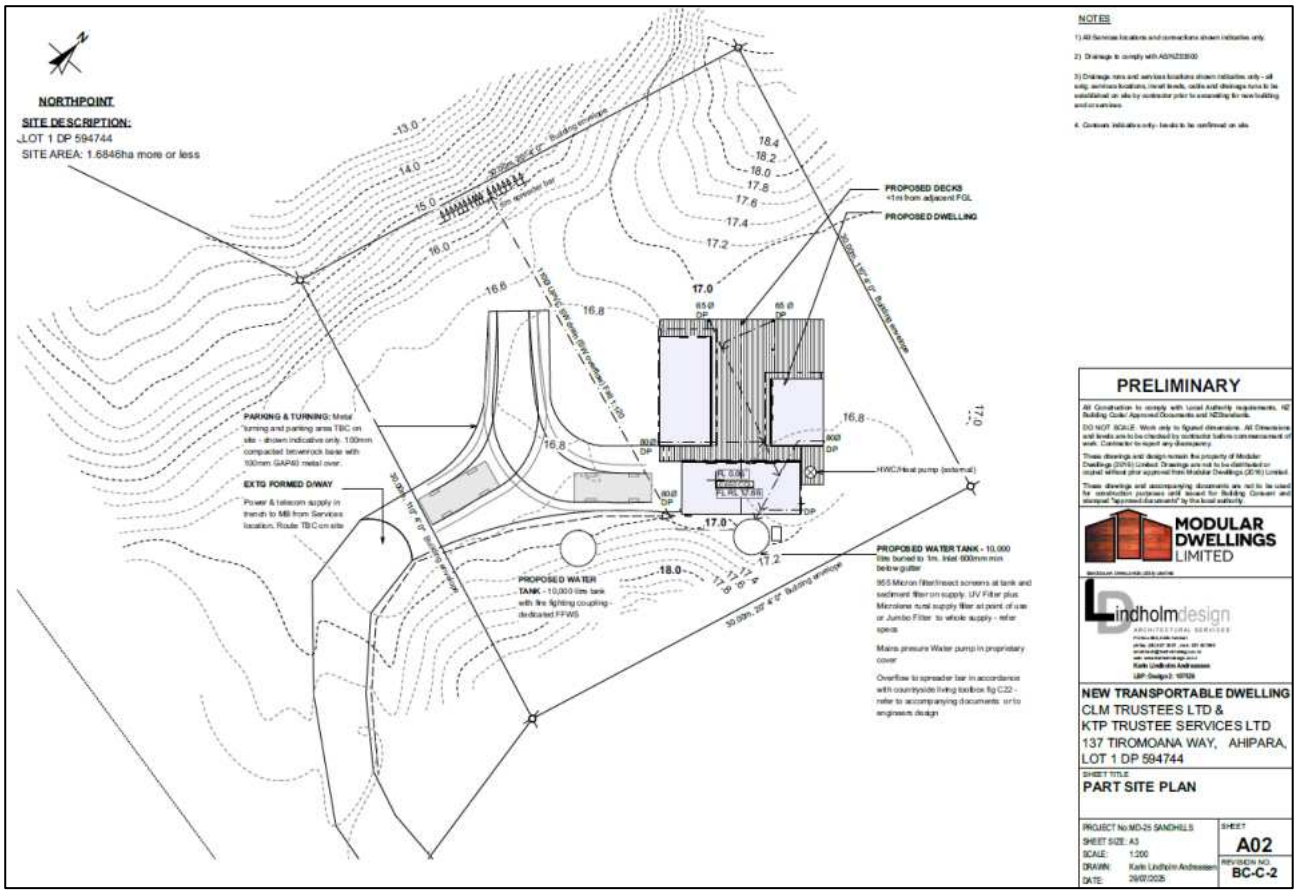


Figure 3: Snip of Proposed Site Plan by Lindholm Design Architecture Services (dated: 29.07.2025)

The principal objectives of our investigation were to investigate the soil profile, variability, relative density, and strength of soils together with any observed groundwater levels, other water sources and potential short-circuiting pathways within the proposed effluent disposal area.

5. MAPPED GEOLOGY & SOIL ASSESSMENT

Local geology across the property and surrounding influential land is noted on the GNS Science New Zealand Geology Web Map, Scale 1:250,000, as; **OIS1 (Holocene) active dune deposits of Karioitahi Group**, described as; "*Loose sand in mobile dunes.*" (ref: GNS Science Website).

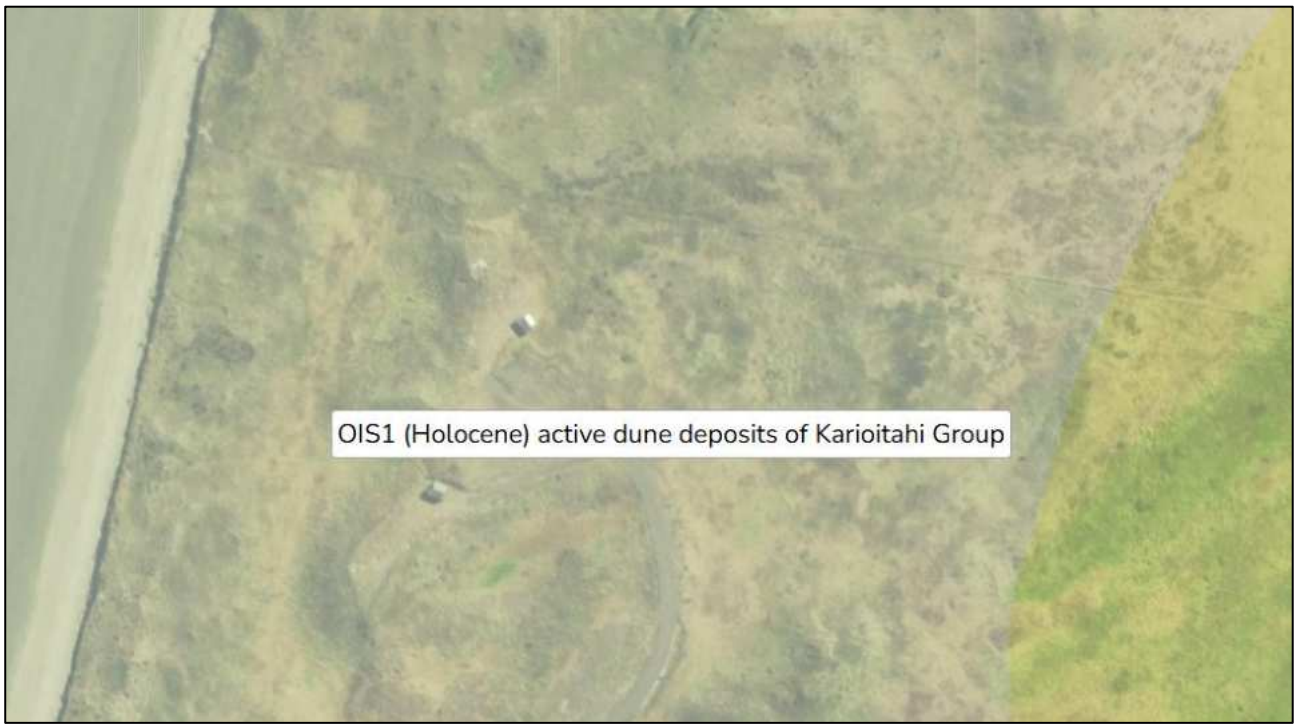


Figure 4: Screenshot from New Zealand Geology Web Map hosted by GNS Science

In addition to the above, geotechnical hand auger testing was completed by WJL (Ref No: 141238) at the subject site in June 2025.

In general terms, the subsoils encountered on-site consisted predominantly of Fine SAND, approximately 100mm-200mm of TOPSOIL was overlying the investigated area. Refer to the appended 'HA Logs'.

Given the above information, the site's soils have been classified as **Category 2** in accordance with AS/NZS 1547:2012. Based on our investigation, and provided that all report recommendations are following, WJL consider that there should be no wastewater disposal stability problems associated with the site.

6. ASSESSMENT CRITERIA

Compliance with Section C.6.1.3 of the PRPN is as follows:

C.6.1.3 Other on-site treated domestic wastewater discharge– permitted activity			
The discharge of domestic type wastewater into or onto land from an on-site system and the associated discharge of odour into air from the on-site system are permitted activities, provided:			
#	Rule	✓/x	Explanation
1	The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012) and	✓	Design has been carried out in accordance with AS/NZS 1547:2012
2	The volume of wastewater discharged does not exceed two cubic metres per day, and	✓	Total proposed discharge = 800L
3	The discharge is not via a spray irrigation system or deep soakage system, and	✓	Conventional trenches proposed
4	The slope of the disposal area is not greater than 25 degrees, and	✓	Disposal area slope ~6°
5	The wastewater has received secondary or tertiary treatment and is discharged via a trench or bed in soil categories 3 to 5 that is designed in accordance with Appendix L of Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012); or is via an irrigation line system that is:		
	a) dose loaded, and	✓	Dose loading proposed
	b) covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	✓	Trenches buried in ground
6	For the discharge of wastewater onto the surface of slopes greater than 10 degrees:		Disposal area slope ~6°
	a) the wastewater, excluding greywater, has received at least secondary treatment, and	n.a	n.a
	b) the irrigation lines are firmly attached to the disposal area, and	n.a	n.a
	c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and	n.a	n.a
	d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and	n.a	n.a
	e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or	n.a	n.a
	f) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and	n.a	n.a
7	the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and setback	✓	From on-site investigation the field positions comply with Table 9

	distances for on-site domestic wastewater systems, and		
8	for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and	n.a	
9	the following reserve disposal areas are available at all times:		
	a) 100 percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or	✓	100% reserve area provided
	b) 30 percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment, and	✓	100% reserve area provided
10	the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and	n.a	
11	the discharge does not contaminate any groundwater water supply or surface water, and	✓	Groundwater was not encountered during hand auger testing to a depth of 3.2m below ground level. Appropriate offsets, and conservative loading rates applied to avoid adverse effects on water sources.
12	there is no surface runoff or ponding of wastewater, and	✓	Appropriate offsets supplied to all sources to avoid adverse effects on water sources.
13	there is no offensive or objectionable odour beyond the property boundary.	✓	WJL anticipates compliance as long as all recommendations within this report are adhered to.

7. REQUIRED SETBACK DISTANCES

As per Point 7 above, the disposal and reserve areas must be situated outside the relevant exclusion areas and setbacks described within Table 9 of the PRPN: Exclusion areas and setback distances for on-site domestic wastewater systems:

Table 2: "Table 9" of the PRPN (Proposed Regional Plan for Northland).

Feature	Primary treated domestic wastewater	Secondary treated domestic wastewater	Greywater
Exclusion areas			
Floodplain	5% AEP	5% AEP	5% AEP
Horizontal setback distances			
Identified stormwater flow paths (downslope of disposal area)	5 meters	5 meters	5 meters
River, lake, stream, pond, dam or wetland	20 meters	15 meters	15 meters
Coastal marine area	20 meters	15 meters	15 meters
Existing water supply bore	20 meters	20 meters	20 meters
Property boundary	1.5 meters	1.5 meters	1.5 meters
Vertical setback distances			
Winter groundwater table	1.2 meters	0.6 meters	0.6 meters

In compliance with above:

- The disposal area and reserve area are outside of any mapped flood zones within the subject site.
- No overland flow paths were identified in proximity to the proposed disposal area.
- The disposal and reserve area outside of a coastal marine area.
- Ground water bore sources were not identified within the property or anticipated to exist within proximity to the property's boundaries given a review of NRC bore location maps.
- Groundwater was not encountered during hand auger testing to a depth of 3.2m below ground level. Appropriate offsets, and conservative loading rates applied to avoid adverse effects on water sources.

The disposal and reserve areas are proposed to be situated to the north of the proposed building platform with appropriate offsets to the property's boundary (>1.5m) and the proposed dwelling (>3.0m).

8. DISCHARGE DETAILS

Water supply for the proposed dwelling will be sourced from a reticulated supply. A per capita flow allowance of 200 litres/person/day was used in the calculations as outlined in Table 3 below.

Table 3: Design flows for proposed dwelling

Existing Development	2 bedrooms
Combined Occupancy Allowance	4-person peak occupancy
Water Reduction	*no*
Daily Flow Allowances	200L / person / day
Design Flow Rate	800L / day
Water Meter	None required.
Other Notes	No garbage grinder

Notes: Additional Occupancy Allowance takes account of additional rooms above and beyond any marked as 'dining', 'lounge' or 'bedrooms'. The calculation is made on the basis of one extra person times the ratio of the total floor area of the additional rooms to that of the smallest designated bedroom & rounded up to the next whole number.

Therefore, for the purpose of this application and design report, the total peak design occupancy was calculated as 4 persons.

9. WASTEWATER TREATMENT

Wilton Joubert Ltd. recommends the installation of a >4,500L septic tank with a 3.5mm outlet filter to provide Primary Level Treatment to service the proposed dwelling. We recommend Duracrete's 4,500L Syphon Septic Tank with AutoFlow Syphon or similar. Discharge from the septic tank will be discharged via conventional trenches. The basic system requirements are summarised in Table 4 below.

Table 4: Secondary Treatment Requirements

Emergency Storage Capacity	Total holding capacity = ~4,500L Required storage time = 48 hours
Location	Please refer to Site Plan. More than 3.0m clear of habitable buildings; 1.5m clear of boundaries
Discharge Quality	Primary Level BOD_5 <= 30 mg/L, TSS <= 45 mg/L

10. DESIGN VOLUMES

Maximum Daily Wastewater Discharge = Maximum Occupancy x Flow Allowance (litres/ person/ day). This calculation results in a total wastewater flow rate of 800 litres per day. Since the daily flow does not exceed 2,000 litres, the output complies with the PRPN as a Permitted Activity and a Resource Consent is not required.

The ratio of lot area to design flow = Gross Lot Area (16,840m²) / 800 Max Daily Flow (litres/day). This calculation provides an A:V Ratio of approximately 21 m²/litre/day.

11. LAND DISPOSAL METHOD

Conventional Trenches

Disposal should be via conventional trenches within a suitably planted / grassed area. Each trench must be level. The trenches are recommended to receive a daily basal application rate of 15mm/day. This configuration will require 89m length of trenches at 0.6m width. The trenches should be 600mm deep which includes a 150mm topsoil cap. The configuration is indicated on the appended Site Plan (141241-C300). Other configurations may be acceptable; however, these must be reviewed & approved by WJL.

Table 5: Land Disposal System

LAND DISPOSAL SYSTEM	Conventional Trenches
Soil Category	Category 2 as per AS/NZS 1547:2012
Buffer Zone	Not Required (slopes are less than 10°) and buried
Overall Trench Length Required where; L = Q / (DLR x W) L = length in m Q = design daily flow rate in L/day DLR = daily loading rate in mm/day W = width in m	L = 800 / (15 x 0.6) = 89m
Loading Rate	15mm/day – Conservative rate for Category 2
Loading Method	Dose loading by syphon or pump
Recommended Field Setup	5 x 18mL x 0.6mW with 1m spacing, See appended Site Plan (141241-C300)
Primary Disposal Area	Basal = 54m² Total Covered Area (including spacing) = 126m²
Reserve Disposal Area	100% Total Covered Area (including spacing) = 126m²

12. ASSESSMENT OF ENVIRONMENTAL EFFECTS

This report serves as a full AEE. Each section displays compliance with the relevant council standards while providing explanations on how the proposed design of on-site effluent treatment system will prevent adverse effects on the surrounding environment.

In conclusion:

The system has been designed in accordance with AS/NZS 1547:2012. It further complies with the setbacks stipulated in the *P*RPN.

It is anticipated that the proposed primary treatment system and conventional trenches for the site will have a less than minor effect on the environment. The soils encountered at the site are capable of accepting the treated effluent given a loading rate of 15mm/day.

Separation distances shall be maintained from the property's boundary and existing vegetation will assist with the retention, breakdown and uptake of effluent at the site and prevent effluent from being washed off-site. Given the appropriate separation distances to water sources and a reserve area of 100%, the proposed wastewater disposal is considered to be suitable to protect the environment and the effects are deemed less than minor.

Additionally:

- To protect against any possible failure of the disposal area, the reserve area should remain undeveloped and should be maintained with a grassed/vegetated surface ready for the possible installation of additional conventional trenches.

- To protect the integrity of the disposal area from unwanted damage from persons or animals we recommend that the area be fenced off or clearly marked. Vehicular traffic over the disposal area is not allowed.

- To protect the physical treatment plant from misuse or neglect the manufacturer of the plant will supply a detailed maintenance schedule that must be adhered to. It is imperative that the operator of the system both schedule and undertake regular maintenance of the system to ensure its effectiveness.

Based on our site assessment and calculations, we consider that the site is able to provide for the sustainable treatment and land application of domestic effluent generated from the proposed residential dwelling.

Since the discharge volume does not exceed: three cubic metres per day, averaged over the month of greatest discharge, and six cubic metres per day over any 24-hour period, the application falls under a Permitted Activity and Northland Regional Council Resource Consent is not required.

13. LIMITATIONS

The recommendations and opinions contained in this report are based on our visual reconnaissance of the site, information from geological maps and upon data from the field investigation as well as the results of in-situ testing of soil carried out by Wilton Joubert Ltd. Inferences are made about the nature and continuity of sub soils away from and beyond the exploratory holes but cannot be guaranteed. The descriptions detailed on the exploratory borehole logs are based on the field descriptions of the soils encountered.

This assignment only considers the design of a primary on-site effluent treatment system and all drainage designs are up to the connection point for each building face of any new structures/slabs; no internal building plumbing or layouts have been done.

During construction, a person competent to judge whether the conditions are compatible with the assumption made in this report should examine the site. In all circumstances, should variations in the subsoil occur which differ from that described or assumed to exist, the matter should be referred back to Wilton Joubert Ltd.

The performance behaviour outlined by this report is dependent on the construction activity and actions of the builder/contractor. Inappropriate actions during the construction phase may cause behaviour outside the limits given in this report.

This report has been prepared for the particular project described to us and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

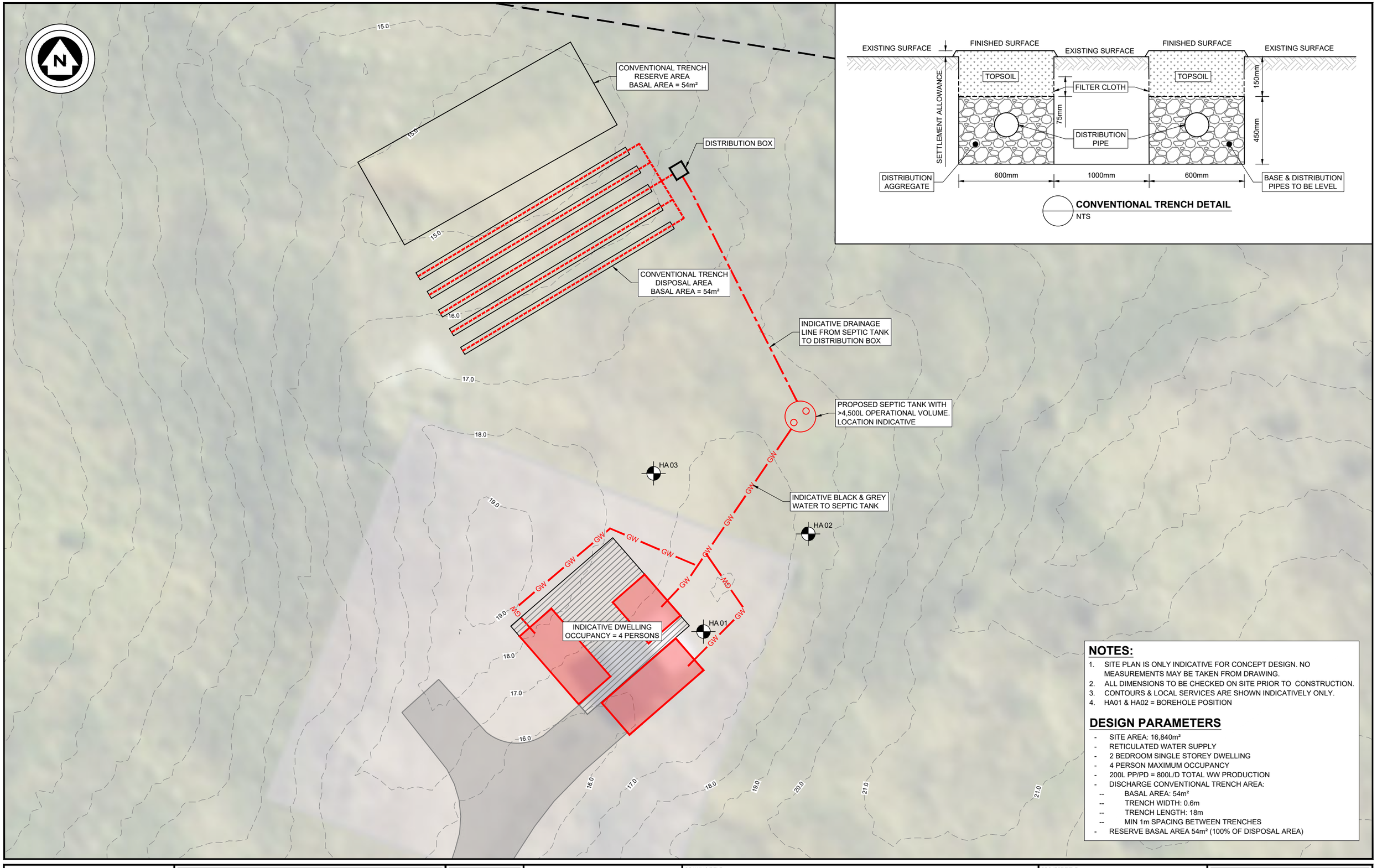
Yours faithfully,

Wilton Joubert Ltd.

Gustavo Medina Brant
BE(Hons)

REPORT ATTACHMENTS

- Site Plan (1 sheet)
- Floor Plan (1 sheet)
- Borelogs (3 sheet)
- FNDC TP58 PS1 (1 sheet)



CONVENTIONAL TRENCH DETAIL
NTS

NOTES:

1. SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING.
2. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
3. CONTOURS & LOCAL SERVICES ARE SHOWN INDICATIVELY ONLY.
4. HA01 & HA02 = BOREHOLE POSITION

DESIGN PARAMETERS

- SITE AREA: 16,840m²
- RETICULATED WATER SUPPLY
- 2 BEDROOM SINGLE STOREY DWELLING
- 4 PERSON MAXIMUM OCCUPANCY
- 200L PP/PD = 800L/D TOTAL WW PRODUCTION
- DISCHARGE CONVENTIONAL TRENCH AREA:
  - BASAL AREA: 54m²
  - TRENCH WIDTH: 0.6m
  - TRENCH LENGTH: 18m
  - MIN 1m SPACING BETWEEN TRENCHES
- RESERVE BASAL AREA 54m² (100% OF DISPOSAL AREA)

WILTON JOUBERT
Consulting Engineers
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Auckland: 09 527 0196
Christchurch: 021 824 063
Wanaka: 03 443 6209
www.wiltonjoubert.co.nz

ISSUE / REVISION

No.	DATE	BY	DESCRIPTION
01	JUL '25	GMB	WASTEWATER REPORT
02	JUL '25	GMB	WASTEWATER REPORT REV-02
03	AUG '25	BGS	WASTEWATER REPORT REV-03

DESIGNED BY: GMB
DRAWN BY: GMB
CHECKED BY: BGS
SURVEYED BY: N/A

SERVICES NOTE
WHERE EXISTING SERVICES ARE SHOWN, THEY ARE INDICATIVE ONLY AND MAY NOT INCLUDE ALL SITE SERVICES. WILTON JOUBERT LTD DOES NOT WARRANT THAT ALL, OR INDEED ANY SERVICES ARE SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING SERVICES PRIOR TO AND FOR THE DURATION OF THE CONTRACT WORKS.

BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE: **SITE PLAN**

PROJECT DESCRIPTION: **NEW TRANSPORTABLE DWELLING**

PROJECT TITLE:
LOT 1 DP 594744
137 TIROMOANA WAY
AHIPARA
NORTHLAND

ORIGINAL DRAWING SIZE:	OFFICE:
A3	OREWA
DRAWING SCALE: 1:250	CO-ORDINATE SYSTEM: NOT COORDINATED
DRAWING NUMBER: 141241-C300	ISSUE: 03

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GENERAL NOTES:
PLANNING ZONE: TBC (transportable building)
WIND ZONE: **designed to VERY HIGH**
EXPOSURE ZONE: Designed to exposure **D**
SUBSOIL CLASSIFICATION: E (Default to NZS3604) for bracing calculations
SOIL CLASS: n/a transportable no foundations or piles
ROOF PITCH: 10 degrees
ROOF WEIGHT: LIGHT
CLADDING WEIGHT:LIGHT

PLAN AREAS: approx
POD 1 FLOOR AREA= 20.46m2 POD 1
POD 2 FLOOR AREA=12.40m2 POD 2
POD 3 FLOOR AREA =22.32m2 POD 3

POD 1 ROOF AREA =24.80m2 POD 1
POD 2 ROOF AREA=15.62m2 POD 2
POD 3 ROOF AREA =22.95m2 POD 3

KEY:

External Cladding 1: 12mm H3.1 Shadowclad cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

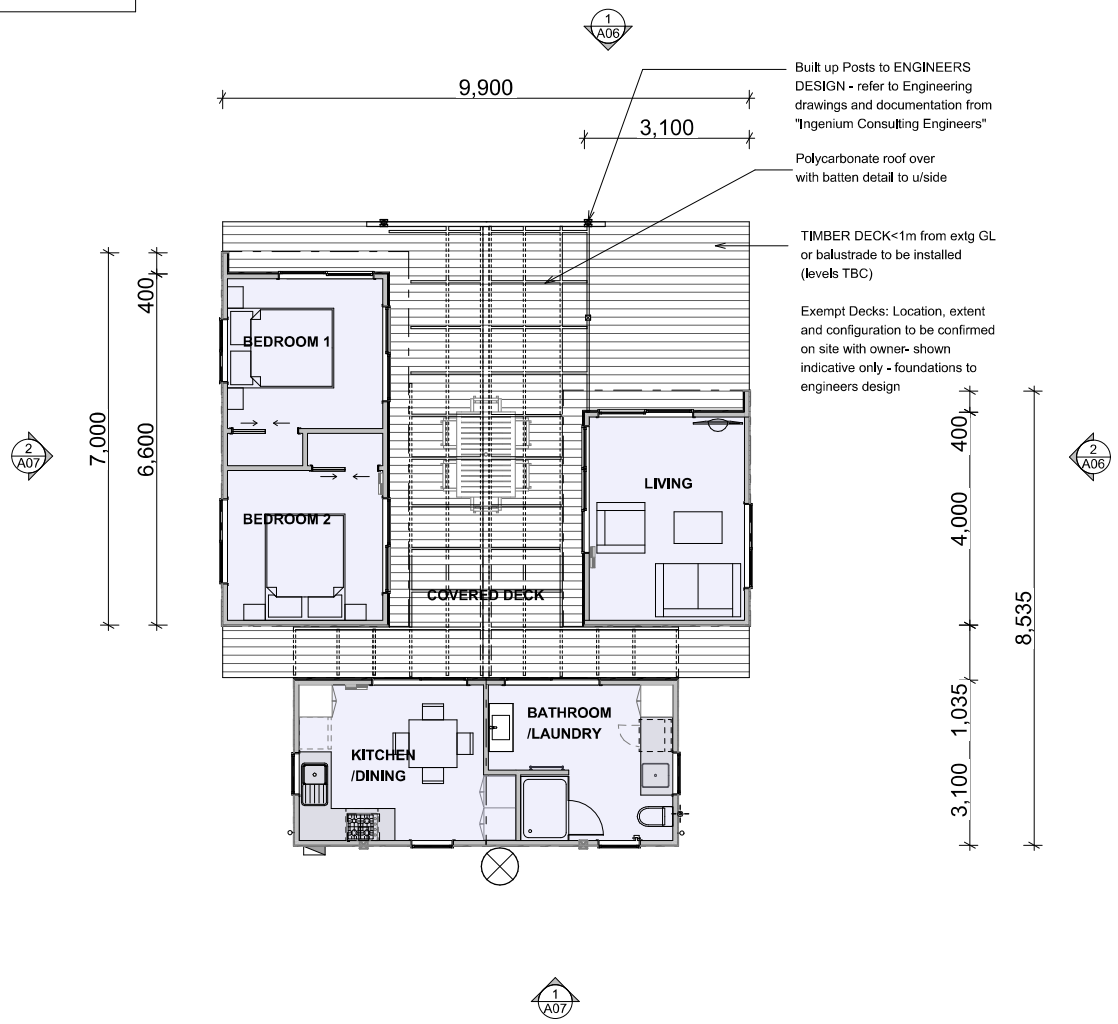
Typical timber walls: H1.2 SG8 timber framing

W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

Roof line

Sheet vinyl flooring throughtout - refer to spec

PLY CEILING LINING and GIB WALL LINING



NOTES:

1) All construction to be in accordance with NZS3604:2011 & the NZBC Acceptable Solutions unless Specifically designed or Alternative Solution approved by BCA.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Setout dimensions are to timber framing.

4) Timber wall framing to be H1.2 SG8 unless specified otherwise. Nogs at 800mm max ctrs typically or as required by cladding manufacturer.

5)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, WC Cistern, towel rails, toilet roll holders, etc as required

6)External window & Door dimensions are nominal frame sizes. Refer to joinery manufacturers schedule for trim sizes.

7) Internal Doors are leaf sizes. Framing to allow for door frame and tolerances.

8) All recessed light fixtures to be CA rated to comply with AS/NZS 605982.2 (Insulation to comply with AS/NZS 60695.11.5)

9) All electrical work by registered electrician to comply with Electricity regulations, NZ Standards, NZBC and LA requirements. Electrician to provide compliance certificate.

INSULATION: Minimum requirements to habitable spaces comply to with NZBC H1: 5th Edition (Refer to BRANZ Calculation Method in accompanying documents)

INTERIOR FINISHES: to comply with E3/AS1

a) Seal around all penetrations and at junctions of wall/floor finishes with approved mould resistant silicone sealant to all water splash areas and kitchen benches and between vinyl flooring and pre-primed timber skirting.

b) "Watersplash" areas and surfaces adjacent to sanitary and facilities to be "impervious" to comply with NZBC E3/AS1 3.0

c) Impervious finish to lining to shower 1800mm min high, to extend 50mm above shower rose to E3/AS1.Shower lining to comply with B2/AS1

d) Bench/work surfaces used for food preparation to comply with G3/AS1

Lindholmdesign ARCHITECTURAL SERVICES
P.O Box 960, 0245 Kerikeri
ph/fax: (09) 407 3037 , mob: 021 407390
email:karin@lindholmdesign.co.nz
web: www.lindholmdesign.co.nz
Karin Lindholm Andreassen
LBP: Design 2: 107526

MODULAR DWELLINGS LIMITED

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NEW TRANSPORTABLE DWELLING at TIROMOANA WAY, 1000 SANDHILLS ROAD AHIPARA

CLM TRUSTEES LTD & KTP TRUSTEE SERVICES LTD

Sheet: REFERENCE FOOR PLAN

Date: Wednesday, 18 June 2025 Scale: 1:100 (A3)

C 18/06/2025

REVISION

CONCEPT

DO NOT SCALE. Work only to figured dimensions. All dimensions are to be checked on site prior to commencing work. Any discrepancies are to be reported to designer prior to commencing work.

All construction to comply with NZS3604:2011 and the NZBC

These drawings and design remain the property of Modular Dwellings (2016) Limited. Drawings are not to be distributed or copied without prior approval from Modular Dwellings (2016) Limited.

HAND AUGER : HA01

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust

DIAMETER: 50mm **EASTING:**

PROJECT: New Dwelling

SV DIAL: **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 594744, 1000 Sandhills Road, Ahipara

FACTOR: **DATUM:**

TOPSOIL CLAY SAND PEAT
FILL SILT GRAVEL ROCK

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE: PEAK STRENGTH (kPa)	SHEAR VANE: REMOULD STRENGTH (kPa)	SHEAR VANE: SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Top soil	Sandy TOPSOIL, dark brown, moist.							2	
OIS1 (Holocene) Active Dune Deposits of Karioitahi Group	NATURAL: Fine SAND, greyish brown, medium dense, moist.		0.2	Groundwater Not Encountered				3	
								3	
			0.4					4	
								4	
			0.6					4	
								4	
			0.8					5	
								5	
			1.0					5	
								4	
			1.2					4	
								4	
			1.4					3	
								4	
			1.6					4	
								3	
			1.8					3	
								4	
			2.0					4	
								4	
			2.2					4	
								4	
			2.4					5	
								5	
			2.6					5	
								5	
			2.8					6	
								6	
			3.0					7	
								7	
			3.2					8	
	EOH: 3.20m - Borehole Collapsing Due To Low Cohesion							8	
			3.4					8	
								8	
			3.6					8	
								10	
			3.8					12	
								15	
			4.0					12	
								15	
			4.2					15	
								15	
			4.4					12	
								12	
			4.6					11	
								13	
			4.8					15	

REMARKS

End of borehole @ 3.20m (Target Depth: 5.00m)

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

LOGGED BY: JEM

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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Website: www.wiltonjoubert.co.nz

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HAND AUGER : HA02

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust **DIAMETER:** 50mm **EASTING:**

PROJECT: New Dwelling **SV DIAL:** **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 594744, 1000 Sandhills Road, Ahipara **FACTOR:** **DATUM:**

TOPSOIL CLAY SAND PEAT FILL SILT GRAVEL ROCK

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE: PEAK STRENGTH (kPa)	SHEAR VANE: REMOULD STRENGTH (kPa)	SHEAR VANE: SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Topsoil	Sandy TOPSOIL, dark brown, moist.	TS	0.2	Groundwater Not Encountered				0.5	
								0.5	
OIS1 (Holocene) Active Dune Deposits of Kariotahi Group	NATURAL: Fine SAND, light brown, loose, moist.		0.4					1	
								2	
			0.6					2	
								2	
			0.8					3	
								3	
			1.0					2	
								3	
			1.2					2	
	1.2m: Occasional dark brown staining.							2	
			1.4					2	
	1.5m: Becoming brown, medium dense.							3	
			1.6					3	
								3	
			1.8					3	
								3	
	2.0m: Frequent dark brown staining.		2.0					3	
								3	
			2.2					4	
								3	
	2.4m: Becoming light brown.		2.4					4	
	EOH: 2.50m - Borehole Collapsing Due To Low Cohesion		2.6					5	
								5	
			2.8					5	
								6	
			3.0					8	
								8	
			3.2					9	
								8	
			3.4					8	
								8	
			3.6					10	
								11	
			3.8					13	
								14	
			4.0					14	
								14	
			4.2					13	
								11	
			4.4					10	
								12	
			4.6					13	
								16	
			4.8					14	

REMARKS

End of borehole @ 2.50m (Target Depth: 5.00m)

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

LOGGED BY: SJP

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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HAND AUGER : HA03

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust

DIAMETER: 50mm **EASTING:**

PROJECT: New Dwelling

SV DIAL: **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 594744, 1000 Sandhills Road, Ahipara

FACTOR: **DATUM:**

TOPSOIL CLAY SAND PEAT FILL SILT GRAVEL ROCK

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE: PEAK STRENGTH (kPa)	SHEAR VANE: REMOULD STRENGTH (kPa)	SHEAR VANE: SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Topsoil	Sandy TOPSOIL, dark brown, moist.	TS	0.2	Groundwater Not Encountered				1	
								2	
OIS1 (Holocene) Active Dune Deposits of Karioitahi Group	NATURAL: Fine SAND, brownish grey, medium dense, dry to moist.		0.4					3	
								4	
			0.6					4	
								4	
			0.8					5	
								5	
			1.0					5	
								4	
			1.2					4	
								4	
			1.4					5	
								5	
			1.6					5	
								5	
			1.8					5	
								4	
			2.0					5	
								5	
			2.2					5	
								6	
			2.4					6	
								5	
			2.6					5	
	EOH: 2.60m - Borehole Collapsing Due To Low Cohesion							4	
			2.8					4	
								5	
			3.0					6	
								5	
			3.2					6	
								6	
			3.4					6	
								5	
			3.6					5	
								6	
			3.8					7	
								8	
			4.0					9	
								9	
			4.2					13	
								12	
			4.4					11	
								10	
			4.6					11	
								12	
			4.8					13	
								12	
								17	

REMARKS

End of borehole @ 2.60m (Target Depth: 5.00m)

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

LOGGED BY: SJP

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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PRODUCER STATEMENT

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

ISSUED BY: Ben Steenkamp on behalf of Wilton Joubert Ltd (approved qualified design professional)

TO: Tim Burges & Peter Hunt (owner)

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

PROPERTY LOCATION: 1000 Sandhills Road, Ahipara

LOT…1……..DP……594744…VALUATION NUMBER……

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

THE DESIGN: Has been in accordance with G13 (Foul Water) G14 (Industrial Liquid Waste) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity Insurance (Design) to a minimum value of $200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:
(1) The site verification of the soil types.
(2) All proprietary products met the performance requirements.
The proposed design will met the relevant provisions of the Building Code and 5.3.11 of The Far North District Council Engineering Standards.

……(Signature of approved design professional)

CPEng, BEng (Civil), BSc (Geology), CMEngNZ (Professional qualifications)

2001008 (Licence Number or professional Registration number)

Address 196 Centreway Road, Orewa, Auckland

Phone Number 09 527 0196 Fax Number …… Cell Phone 0272792392
Date 05.08.2025

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

Wilton Joubert Limited
09 945 4188
185 Waipapa Road,
Kerikeri

SITE	**137 Tiromoana Way, Ahipara**
LEGAL DESCRIPTION	**Lot 1 DP 594744**
PROJECT	**New Dwelling**
CLIENT	**KTP No 1 Trust & Burgess Lockley Family Trust**
REFERENCE NO.	**141238**
DOCUMENT	**Geotechnical Assessment Report**
STATUS/REVISION NO.	**Revision B – Report Amendments for Building Site Location Change**
DATE OF ISSUE	**4 August 2025**

Report Prepared For	Email
KTP No 1 Trust & Burgess Lockley Family Trust	peter.hunt@mcelroys.co.nz & tim@goodcopy.co.nz

Authored by	**S. Page** *Pt NZDE (Civil)*	Engineering Technician	shaun@wjl.co.nz	
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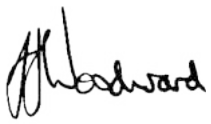
Approved by	**S.J. Woodward** *ME, CPEng, CMEngNZ*	Senior Geotechnical Engineer	simonwoodward@wjl.co.nz	

1. EXECUTIVE SUMMARY

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

Development Type:	New residential dwelling
Development Proposals Supplied:	Yes – Concept drawings (9 sheets) and preliminary Site Plans (2x sheets). No earthwork plans provided.
Geology Encountered:	Dune deposits of Karioitahi Group.
Surficial Topsoil Encountered:	Yes – 0.10m to 0.20m thick layers.
Overall Site Gradient in Proximity to Development:	Generally gently sloping however, is bound to the east by a moderately to steeply inclined, sand dune flank and to the west by a minor crowned dome.
Site Stability Risk:	Low risk of deep-seated global instability.
Liquefaction Risk:	Negligible risk of liquefaction susceptibility.
Suitable Foundation Option(s):	1st pref; Timber piles driven to a set calculated using the Hiley Formula with FoS = 6. 2nd; pref; Specifically Engineer Designed Screw Piles, or 3rd pref; Shallow Engineered stiffened Raft Foundation (TC2 type) The underlying sandy deposits are considered too unstable to drill bored piles.
Soil Bearing Capacity:	Competent Natural Ground beyond a 1.5m depth. For shallow foundations above that, Engineer certified ground compaction required to achieve Geotechnical Ultimate Bearing Capacity= 300kPa.
NZBC B1 Expansive Soil Classification:	Class A (Non-Expansive).
NZS1170.5:2004 Site Subsoil Classification:	Class C – Shallow soil stratigraphy.
Earthworks:	As no earthwork plans were provided, we are unsure of the proposed earthworks in forming the building site. We generally envisage that some lesser-scope earthworks may be carried out to level the building site, likely by way of minor localised cutting and filling of less than 0.60m. Refer report text for design guidance.
Retaining Walls	None are anticipated. On the future event of their being needed, where retaining walls require a Building Consent, these should be Specifically Engineer Designed.
Consent Application Report Suitable for:	Building Consent. Any noticeable variation to the proposed building site location should be referred to WJL for review.

2. INTRODUCTION

2.1. SCOPE OF WORK

Wilton Joubert Limited (WJL) was engaged by **KTP No 1 Trust** and **Burgess Lockley Family Trust** (the clients), to undertake a geotechnical assessment of ground conditions at the above site, where we understand, it is proposed to construct a new residential dwelling.

For the purposes of this report, we have assumed the dwelling will comprise of a lightweight, timber framed structure, designed and constructed to apply loads generally in keeping with the requirements of NZS3604:2011.

2.2. SUPPLIED INFORMATION

At the time of preparing this report, we were supplied with the following drawings:

- Subdivision Scheme Plan (1 sheet) of the former parent Lot, prepared by Von Sturmers, titled; '*Proposed Subdivision of Pt Lot 3 DP 49057 (Variation RC 2160143)*', dated 30 September 2022 (Ref: 14905),
- Water, telecom and power service as-built drawings of the subdivision of the former parent Lot (18 sheets), prepared by Haigh Workman Limited, titled; '*Proposed Subdivision, One Thousand Sandhills Limited*', dated 30 June 2023 (Ref: 21 050),
- Concept drawings of the proposed development (9 sheets), prepared by Lindholm Design Limited, titled; '*New Transportable Dwelling for CLM Trustees LTD & LTP Trustee Services Ltd*', dated 18 June 2025 (unreferenced). The drawing set includes floor, elevation and 3D plans, and
- Preliminary Site Plans of the proposed development (2 sheets), prepared by Lindholm Design Limited, titled; '*New Transportable Dwelling, CLM Trustees LTD & LTP Trustee Services Ltd, 137 Tiromoana Way, Ahipara, Lot 1 DP 594744*', dated 29 July 2025 (MD-25 SANDHILLS). No earthwork plans were supplied.

Any revision of the supplied development proposals with geotechnical implications should be referred to WJL for review. Most notably, any noticeable variation to the proposed building site location.

3. SITE DESCRIPTION

The subject 1.6486ha, almost rectangular shaped block is accessed at its southeastern boundary corner, off the northern end of newly formed Tiromoana Way, approximately 1.8km northwest of the Sandhills Road intersection. The property is legally titled Lot 1 DP 594744 and is situated within a General Coastal Zone in accordance with the Far North District Council (FNDC) on-line GIS District Plan Map.

Topographically speaking, the property is positioned on a west facing, rolling sand dune flank that overlooks the southern hook of 90 Mile Beach. The western boundary is bound by a Recreational-Passive Outdoor Reserve of approximately 45m in length which separates the property from the maritime environment.

Vegetation comprises mainly of overgrown grass and reeds typical of coastal environments. An existing shipping container is positioned on near level ground within the eastern portion of the allotment.

The dwelling is proposed to be constructed across the proposed shipping container location. The land targeted for development is generally positioned atop gently sloping terrain however, is bound to the east by a moderately to steeply inclined, sand dune flank and to the west by a minor crowned dome. Existing ground levels across the proposed building platform essentially range between approximately RL16m and RL18m New Zealand Vertical Datum (NZVD). The gently inclined nature of the development area is believed to be a result of previous earthworks carried out on-site circa 2017.

At the time of preparing this report, we note that the FNDC on-line GIS Water Services Map and supplied as-built service drawings indicates that a reticulated water connection is available to the property. It is our understanding that reticulated wastewater and stormwater service connections are not available.

The property and proposed building site are depicted on our appended Site Plan (Ref: 141238-G600) and in Figure 1 below.

Figure 1: Screenshot aerial view of the subject site from the FNDC on-line GIS Property and Land Map.
Property boundary is highlighted in cyan. 10m LiDAR contours are overlaid. Red ring depicts the proposed development location.

Figure 2: Site photograph looking south-westerly towards the proposed building site.

4. DEVELOPMENT PROPOSALS

In reviewing the supplied set of drawings, we note that the clients propose to construct a new single dwelling of approximately 110m² across the gently inclined land to the north of the existing shipping container.

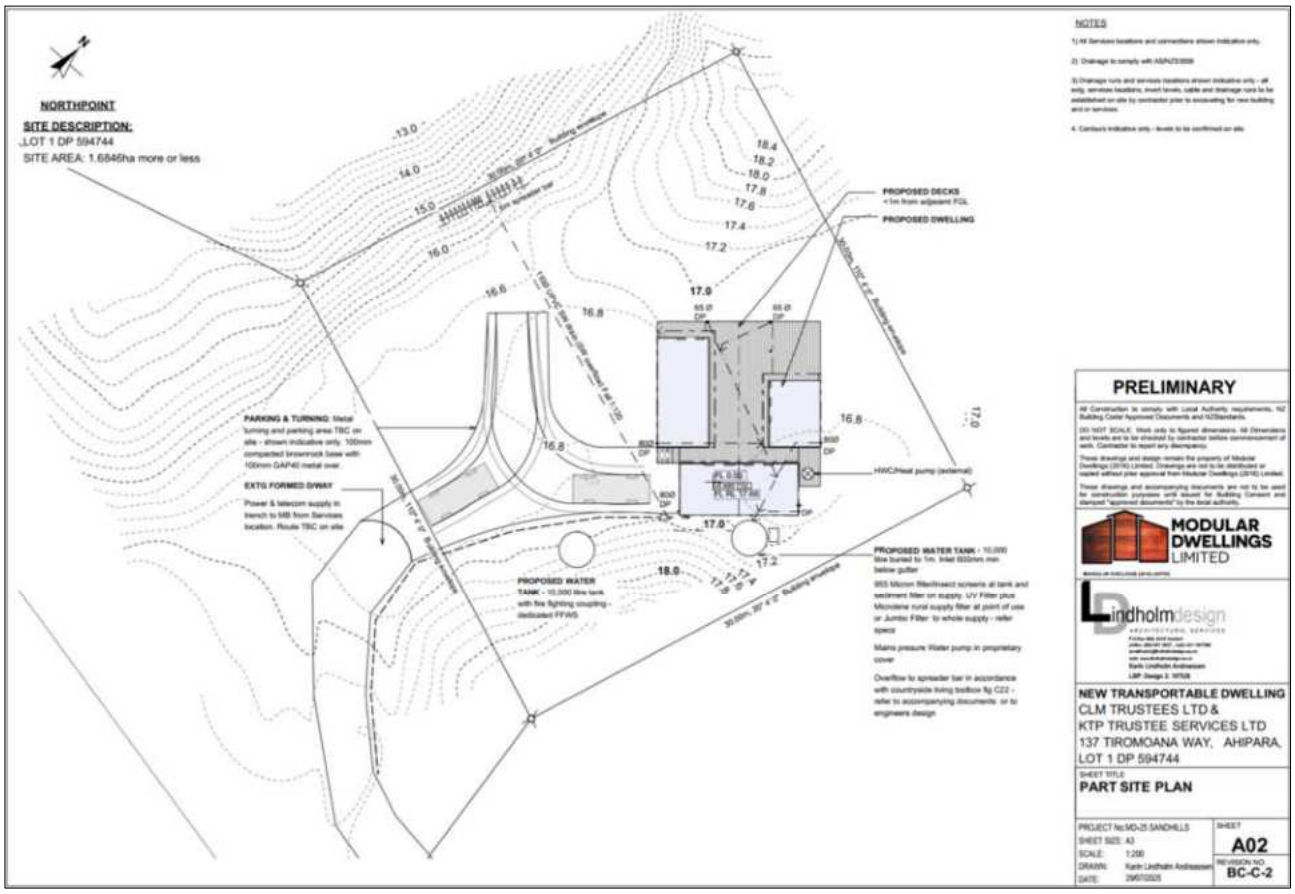


Figure 3: Screenshot of our part site plan from the supplied preliminary drawings.

The dwelling consists of three detached pods that are joined by decking in creating a square building platform. The pods and decking will be found on timber subfloors and decking, suspended on pile foundations, supporting lightweight timber framing, a mixture of Shadowclad and vertical corrugated steel cladding, and longrun steel roofing, to apply loadings generally in accordance with NZS3604:2011.

As no earthwork plans were provided, we are unsure of the proposed earthworks in forming the building site. We generally envisage that some lesser-scope earthworks may be carried out to level the building site, likely by way of minor localised cutting and filling of less than 0.60m.

As a result, the principal objectives were to investigate and assess the suitability of potential foundation options for the site subsoils, not only primarily in terms of bearing capacity, but also for differential foundation movement.

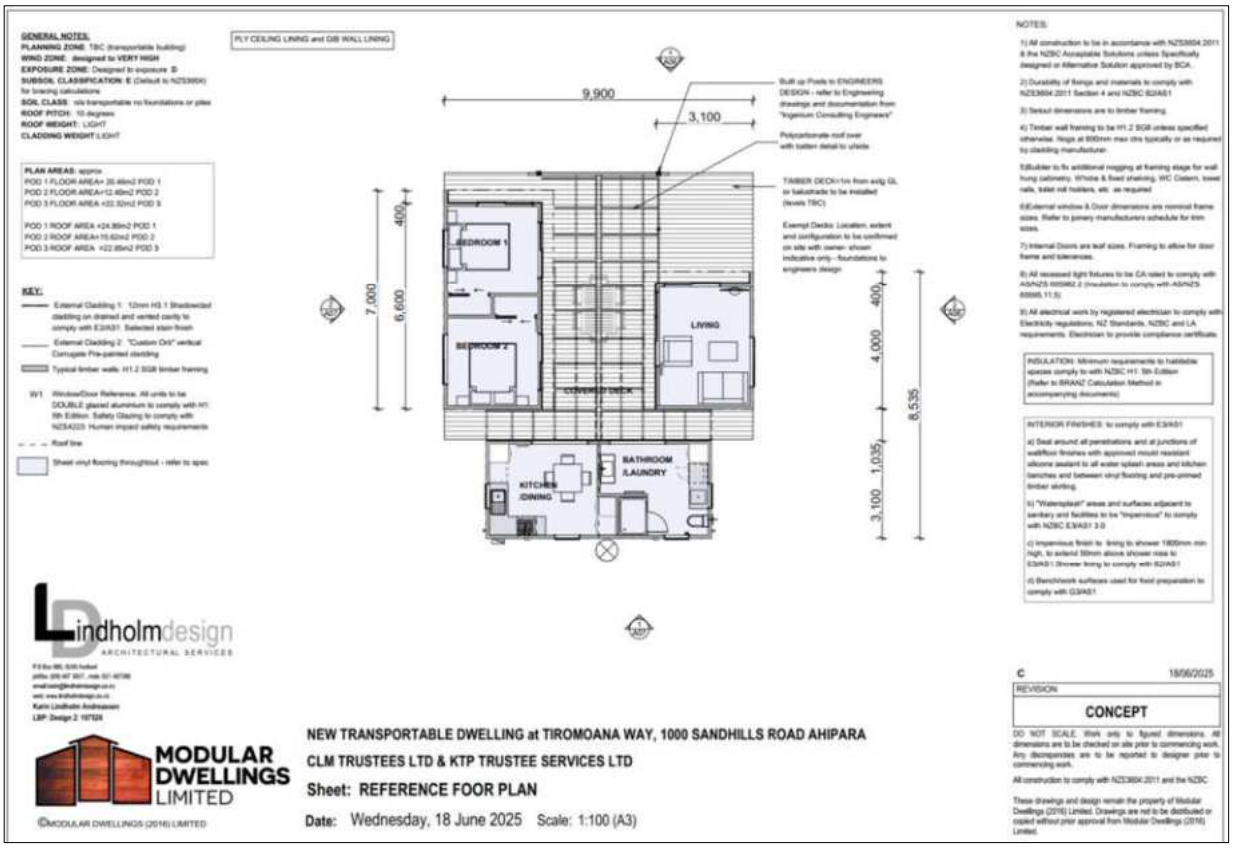


Figure 4: Screenshot of the floor plan from the supplied concept drawings.

Figure 5: Screenshot of the elevations plan from the supplied concept drawings.

5. DESKTOP STUDY

2.3. PUBLISHED GEOLOGY

Local geology across the property and surrounding land is noted by the GNS Science New Zealand Geology Web Map, Scale 1:250,000, as; **OIS1 (Holocene) Active Dune Deposits of Karioitahi Group**. These deposits are up to approximately 14,000 years in age and described as; "*Loose sand in mobile dunes.*"

However, the subsoils observed during our investigation and from supplementary cone penetration testing (CPT) essentially comprised of medium dense to very dense sands commencing directly below the surface and continuing with depth.

Approximately 130m beyond the eastern boundary, GNS have mapped an approximate boundary of subsoil deposits similar in geology and described as; **OIS5+ (Early Pleistocene to Middle Pleistocene) Dune Deposits**. These deposits are approximately 128,000 to 1.8 million years in age and described as; "*Uncemented to moderately cemented and partly consolidated sand in coastal foredunes. Clay-rich sandy soils.*"

Figure 6: Screenshot aerial view from the New Zealand Geology Web Map. Blue marker depicts approximate development location.

2.4. HISTORICAL GEOTECHNICAL REPORTS

We have reviewed the following Geotechnical Reports relating to the subdivision of the parent Lot:

- '*Site Development Report for Proposed Subdivision of Lot 3 DP 49057 for Ahipara Land Company Ltd at Sandhills Road, Ahipara*', prepared by P K Engineering Limited (PKE LTD), dated February 2008 (Ref: 07-119), and
- '*Sandhills Road, Ahipara: Coastal Hazard Assessment, Final Report, Prepared for Ahipara Land Co Limited*', prepared by Tonkin & Taylor Limited (T&T LTD), dated April 2016 (Ref: 31461.v1). This evaluation encompassed the potential impact of coastal inundation, erosion, and tsunamis over both a 50 and 100-year span.

In reviewing the Site Development Report for Proposed Subdivision by PKE LTD, we note the following conclusions and recommendations were given:

- Suitable building sites are available,
- Low risk of ground instability,
- Minimum depth of driven pile foundations to be 3.0m below ground level or a floating rigid raft foundation with a minimum of 0.60m of compacted hardfill below slab, and
- Sites should not require any retaining walls although small gabion walls (1.0m high) may be used for landscaping purposes.

In reviewing the Coastal Hazard Assessment Report by T&T LTD, we note the following conclusions and recommendations were given:

- Coastal Inundation

  The assessment delved into coastal inundation, a consequence of elevated sea levels influenced by various factors such as tides, storm surges, waves, and climate-driven sea level rise. The report presented projections for coastal inundation and floor levels for the present, 2065, and 2115, factoring in these components. Complying with a 500 mm freeboard for habitable dwellings, as specified in the Regional Policy Statement, the evaluation suggests that, based on the topographic data available (One Tree Point Vertical Datum 1964 - OTP), the Sandhills Road site is improbable to experience inundation. Specifically, the 1% Annual Exceedance Probability (AEP) extreme static water level for 2115 is derived at 4.3m OTP, with a recommended FFL at 4.8m OTP. The topographic information available for the development indicates that dune elevation ranges from 17m to 18m NZVD, supporting the conclusion that the development is unlikely to be inundated.

- Coastal Erosion

  The assessment of coastal erosion, characterized by the landward retreat of coastlines due to storm activities and sediment transportation, was approached probabilistically to gauge future hazard probabilities. The report provided specific P5% values for 2065 and P50% values for 2115. Analysis indicated that the proposed building placements are likely shielded from erosion effects until 2065. However, there's a possibility that some properties (Lots 1, 2, 3, 5, 6, 7, 8, 9, 10 and 11) might face erosion by 2115, as indicated by the Coastal Erosion Hazard Zone (CEHZ) values detailed in Figure 7 further below.

  Coastal regions facing wind erosion pose significant geotechnical risks to structures due to the potential destabilization caused by soil displacement. Structures situated near shorelines are susceptible to compromised stability and long-term structural integrity due to the gradual landward retreat caused by coastal erosion. Safeguarding by vegetation becomes imperative to mitigate the impact of wind erosion on coastal areas. Vegetation acts as a crucial natural defence, preventing soil loss and maintaining stability, thus safeguarding structures against the long-term implications of wind erosion in these vulnerable zones. We recommend that a robust planting regime be carried out and maintained to help safeguard the site.

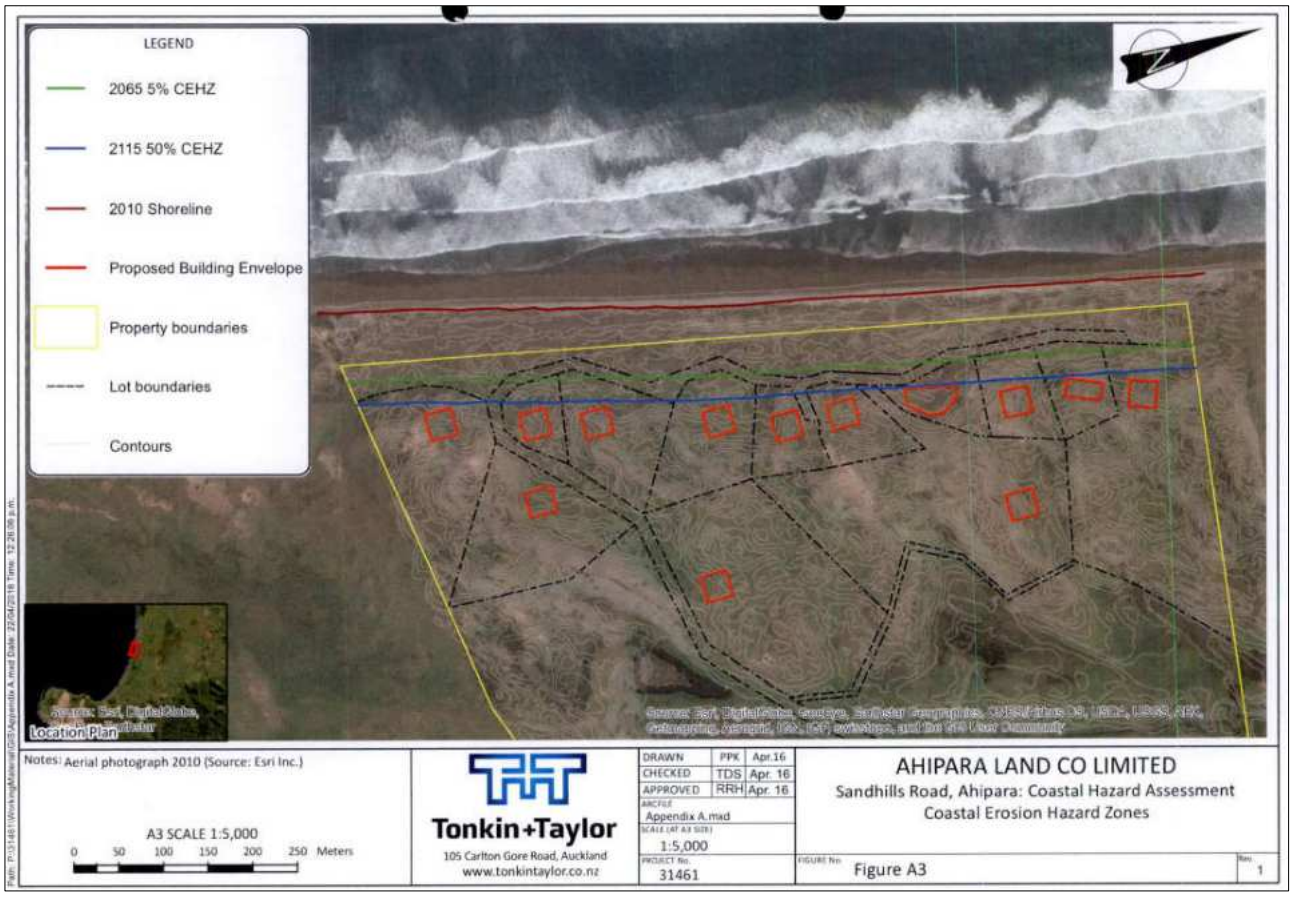


Figure 7: Screenshot of the Coastal Erosion Hazard Zones Plan from the T&T LTD Coastal Hazard Assessment Report.

- Tsunami Hazard

  Regarding the tsunami hazard, the Northland Civil Defence Emergency Management Group's evacuation maps highlighted that a significant portion of the proposed development site falls within the "Yellow" zone. Despite a low risk of a major tsunami event, it is advisable for development plans to consider provisions for evacuation to the Safe Zone ("grey"). While strict development restrictions might not be necessary, planning for potential evacuation would be prudent given the low but existing risk.

6. GEOTECHNICAL INVESTIGATION

We undertook a geotechnical investigation of the site on 2 July 2025, involving the following:

- A walkover inspection of the proposed building site and surrounding influential land,
- Drilling three (no.) 50mm diameter hand auger boreholes (HA01 to HA03 inclusive) to termination depths ranging between 2.5m and 3.2m below existing ground level (BEGL), where each HA displayed clear evidence of continual collapse due to the low cohesion of the sandy deposits, and
- All three HA's were supplemented with dynamic cone – scala penetrometer testing (DCP's) in determining the available bearing capacities of the underlying sandy deposits. DCP's were ultimately extended to depths ranging between 4.8m and 4.9m BEGL.

The soil sample arisings from the HAs were logged in accordance with the "Field Description of Soil and Rock", NZGS, December 2005, and records are appended to this report along with the DCP results.

In addition to our above handheld testing measures, we made reference to a single CPT previously undertaken in proximity to the southwestern end of the development location on 30 November 2023 by Underground Investigation Limited. The CPT probe was pushed into the ground at a constant rate of approximately 20mm per second. The sensors of the probe produce continuous, pseudo-analogue data of cone resistance (qc), sleeve friction (fs) and pore water pressure (u2). The CPT was terminated at a depth of approximately 14.4m BEGL due to high tip pressure which induced anchor failure.

We have also drawn a cross-section (A-A') using 1.0m LiDAR contours sourced from the Northland Regional Council (NRC) database to represent the topography of the proposed building site and surrounding influential slopes.

The HA, CPT and cross-section locations are depicted on our appended Site Plan (Ref: 141238-G600) and the HA and CPT logs, and cross-section drawing (Ref: 141238-G610) are appended to this report.

7. GEOTECHNICAL FINDINGS

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

7.1. TOPSOIL

Surficial TOPSOIL layers of 0.10m to 0.20m thickness were overlying all three HA's.

7.2. FILLED GROUND

Fill material was not encountered in any of the investigated HA's however, we are aware that some fill may have been pushed over the outside edges of the building site as a result of previous earthworks.

Without any certification, any in-situ fill should be considered as non-engineered and should either be removed or bypassed during construction if found to be underlying future foundation locations.

7.3. NATURAL GROUND

The underlying natural deposits encountered were consistent with our expectations of Dune Deposits.

Our HA01 and HA03 locations on gently inclined ground encountered medium dense fine SAND to a depth of around 3.0m BEGL, overlying denser sands as inferred by DCP's.

Blow counts per 0.10m ground penetration during DCP's ranged between 3 and 6 within the upper 3.0m stratum, and 7 and 17 within the underlying stratum to a depth of 4.9m BEGL.

Our HA02 location on the toe of the eastern dune flank encountered typically loose, fine SAND to a depth of 1.5m BEGL, overlying dense fine SAND to a depth of 3.7m BEGL, and very dense sands below that.

Blow counts per 0.10m ground penetration during the DCP ranged between 1 and 3 within the upper 1.5m non-topsoil loose stratum, 3 and 6 between 1.5m and 3.0m BEGL, and 8 and 16 within the underlying stratum to a depth of 4.8m BEGL.

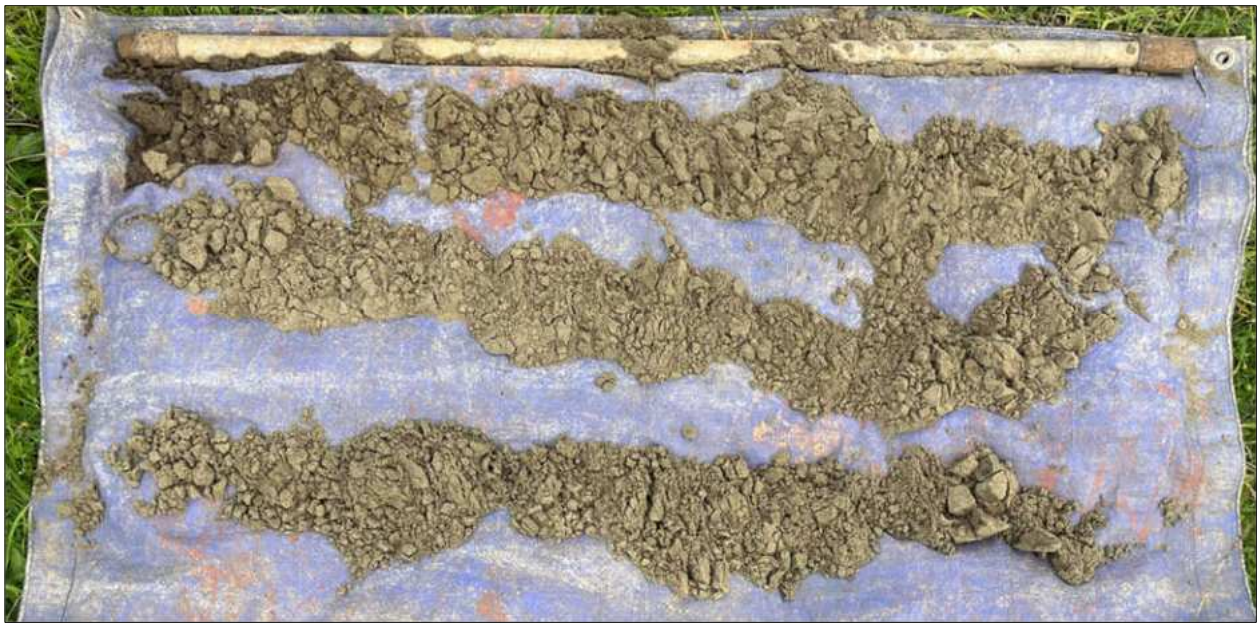


Figure 8: Site photograph of the typical HA soil arisings encountered (HA03: 0.0m to 2.6m).

Interpretation of the CPT investigation indicates that the site is underlain by sand-like dilative materials to a minimum depth of 14.4m BEGL.

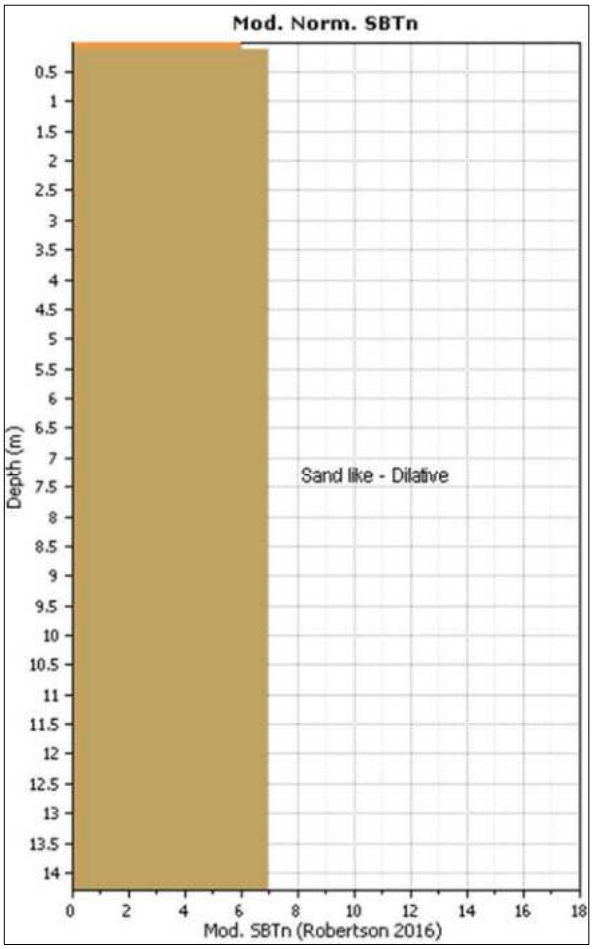


Figure 9: Normalised Soil Behaviour Type (SBTn) with depth from CPT data (approximately scaled to depth).

7.4. GROUNDWATER

Groundwater was not struck at any of our three HA locations.

Our fieldwork investigation was undertaken on a fine weather day during the winter period and followed a three-day period of similar fine weather conditions. Prior to these three days, approximately 54mm of rainfall fell during 26 and 28 June 2025.

A collapsed groundwater level of 12.5m BEGL was measured during the CPT.

7.5. SUMMARY TABLE

The following table summarises our inferred stratigraphic profiling:

Investigation Hole ID	Termination Depth (m)	Depth to Base of Surficial Topsoil (m)	DCP Blow Count Range Per 0.10m Ground Penetration within Natural Ground	Standing Groundwater Depth (m)
HA01	3.2	0.10	3 - 15	NE
HA02	2.5	0.20	1 - 16	NE
HA03	2.6	0.20	3 - 17	NE

Note: NE = Not Encountered

8. GEOTECHNICAL ASSESSMENTS

8.1. SITE STABILITY

On the basis of:

- No obvious evidence of deep-seated instability within the immediate vicinity of the proposed building site and surrounding influential land,
- The gently inclined nature of the proposed building site and surrounding influential land,
- Generally, the medium dense to dense nature of the underlying sandy deposits, and
- Lack of groundwater evidence within our three HA locations and measured depth of 12.5m BEGL during the CPT,

we perceive the risk of deep-seated global slope instability, impacting the proposed development to be significantly low.

It should be noted that some possible localised cutting into the toe of the eastern flank above the building site may be required in forming the building site. Recommendations pertaining to such excavations will be given in Section 9 below.

8.2. LIQUEFACTION

Liquefaction is a phenomenon where the effective strength of cohesionless soil, typically sand, is lost due to pore-water pressures generated during a seismic event such as an earthquake. This can result in vertical settlement and/or horizontal movement (lateral spreading) of the ground. It is important to note that changes in groundwater levels due to increases or decreases in rainfall, which may also be influenced by climate change, could also affect the occurrence of liquefaction. However, predicting the magnitude of such changes is difficult due to the uncertainties associated with climate change.

In accordance with https://www.building.govt.nz/assets/Uploads/building-code-compliance/canterbury-rebuild/repairing-and-rebuilding-houses/canterbury-guidance-part-d.pdf, the assessment of liquefaction characteristics involves evaluating the relevant soil profile. Settlement calculations usually focus on the upper 10m of subsoil stratum for comparison with Table 16.1's index values.

8.2.1. LIQUEFACTION SUSCEPTIBILITY ASSESSMENT

At the time of preparing this report, we note that the FNDC on-line GIS Liquefaction Vulnerability Map indicates that the eastern portion of the property lies within an "*Unknown Zone*", whilst the wider surrounding land to the west, north and south lies within a "*Possible*" zone, necessitating the need for a liquefaction triggering analysis.

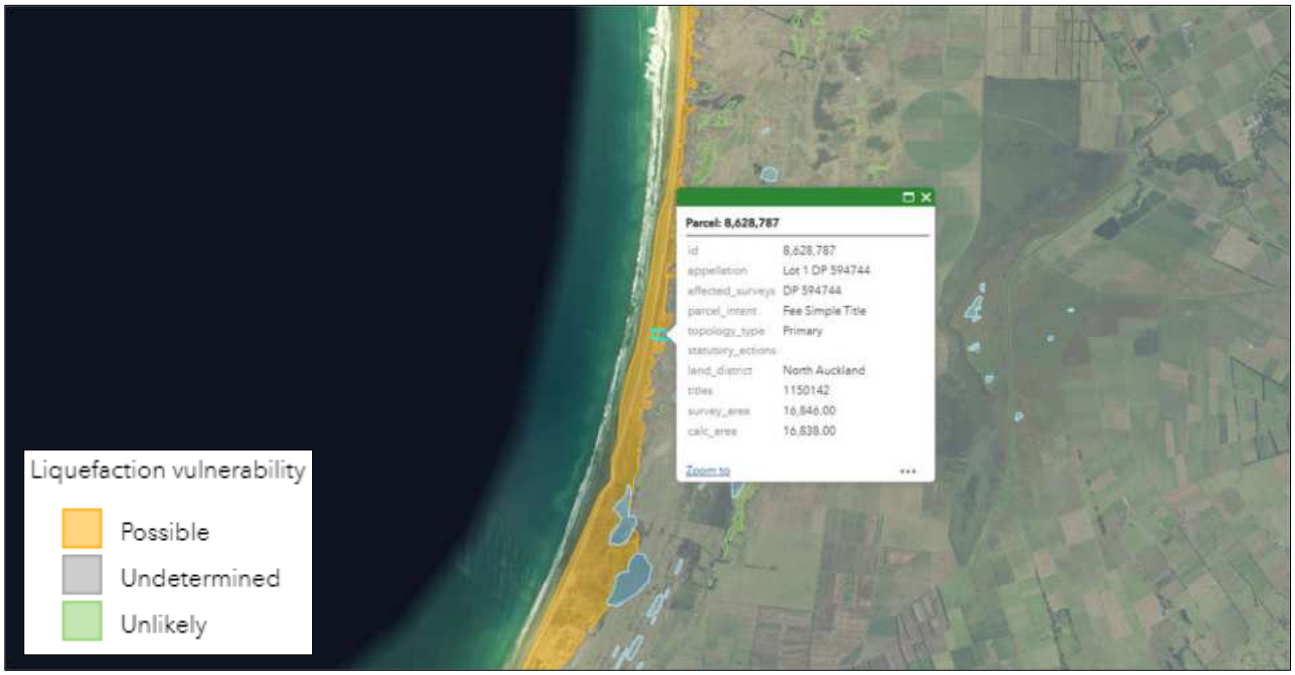


Figure 8: Screenshot aerial view from the FNDC on-line GIS Liquefaction Vulnerability Map. Property boundary is highlighted in cyan.

8.2.2. LIQUEFACTION TRIGGERING ASSESSMENT

Assessment of liquefaction induced free field settlement and lateral spread across the proposed building site has been undertaken in general accordance with MBIE guidelines and using specialised software 'Cliq 3.0' developed by Geologismiki Limited.

Liquefaction assessment was carried out using the Boulanger & Idriss (2014) method and settlements according to the Zhang et al (2002) procedure to determine possible liquefaction induced ground subsidence across the site following future large earthquake events.

The analysis has been performed using:

- The on-site CPT data,
- A groundwater level of 12.5m BEGL as measured during the CPT, and
- A horizontal distance of 120m from the western leading-edge of the building platform to the coastal dune face was adopted to estimate lateral displacement.

Design earthquake scenarios of Serviceability Limit State (SLS) and Ultimate Limit State (ULS) were considered using the recommended values for peak ground acceleration and earthquake magnitude in geotechnical assessment, as outlined in Module 1 of the guidelines for Earthquake Geotechnical Engineering Practice, updated in November 2021 and Table 1 below.

Table 1: Design Earthquake Scenarios

Location	25-year return period SLS		500-year return period ULS1 & ULS2	
	amax	M	amax	M
Northland	0.03	5.8	0.13 (0.19)	5.8 (6.5)

Note:
Amax = Peak Ground Acceleration,
M = Earthquake Magnitude
SLS = serviceability Limit State, beyond which, damage might render a building 'non-serviceable'.
ULS1, ULS2 = Ultimate limit states (refer to Module 1. Earthquake geotechnical engineering practice, Overview of the guidelines, November 2021)

8.2.2. ANALYSIS RESULTS

The calculated vertical settlements indicate that there should be no occurrence of free field induced settlement during SLS, ULS1 and ULS2 events.

Similarly, the calculated lateral displacements indicate that there should be no occurrence during SLS, ULS1 and ULS2 events.

The Liquefaction Potential Index (LPI) and the Liquefaction Severity Number (LSN) are indicators to assess the damage potential of liquefaction that may occur during a seismic event. The LPI plots indicate negligible risk of liquefaction potential for SLS, ULS1 and ULS2 events. The LSN plots also do not indicate any expression of liquefaction for SLS, ULS1 and ULS2 events.

Based on the above, we conclude that the subsoils beneath the proposed building site have a negligible risk of liquefaction susceptibility and liquefaction damage is therefore considered to be unlikely.

The abridged results of the liquefaction analyses are appended to this report

9. CONCLUSIONS AND RECOMMENDATIONS

On the basis of the above findings, we consider that the risk of moderate to deep-seated global slope instability and liquefaction impacting the proposed building site to be significantly low, provided all recommendations contained within our report are implemented in design and construction.

With regard to the Building Act 2004; Sections 71-72, we believe on reasonable grounds that:

i. The current proposed site development and associated building work within the relayed building platform should not accelerate, worsen, or result in slippage or subsidence on the land on which the building work is to be carried out or any other property, and
ii. The land beneath the building footprint and surrounding immediate amenity areas of the relayed building platform are neither subject nor likely to be subject to slippage or subsidence, provided the development is undertaken in accordance with the recommendations and guidance of this report.

9.1. FOUNDATION OPTIONS

Possible foundation solutions for the proposed development considering the above conclusions are as follows:

Because of the challenges of achieving and maintaining adequate corrosion resistance in a commonly harsh coastal environment, we list our recommendations in the following order of preference

a) Driven Timber Piles driven to a set calculated using the Hiley Formula with Factor of Safety (FoS) = 6.
b) Screw Piles designed with a GUBC of 300kPa and a soil friction angle of 34°.
Screw piles to be designed in accordance with Practice Note 28 Screw Piles: Guidelines for Design, Construction & Installation.
(https://d2rjvl4n5h2b61.cloudfront.net/media/documents/Practice_Note_28_Screw_Piles_Guidelines_for_Design_Construction_and_Installation.pdf)
- However, we stress that sands in a coastal environment like this are likely to have a high salt content requiring the designers to give due regard to providing adequate corrosion resistance and/or sacrificial thickness.

Adoption of either of the above two options should be preceded by installation trials to confirm details of suitable foundations.

c) Although the modular nature of the dwelling units implies that shallow foundations will not be used at this time, there remains a possibility that some future vehicle/vessel garaging may be developed, for which a slab-on-ground would be favorable. However, the perils of shallow foundations on sand are biblical, and their use would require a reliable level of confinement to prevent sand erosion.

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

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

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

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

9.1.1. PILED FOUNDATION DESIGN

Given the legacy recommendation for piled foundations together with the non-expansive nature of the sands, we consider that the risk of seasonal soil shrinkage and/or swelling is negligible. However, given also the presence of loose and non-cohesive fine sands, we consider that there is a risk that unconfined surface sands and those containing bored piles could collapse and be difficult to clear of loose debris. Therefore, we consider that the most pragmatic piling method would be timber piles driven to sets calculated in accordance with the Hiley Formula, using a factor of safety of 6 as recommended by the University of Auckland School of Engineering researchers, Pender & Quilter. A FoS of 3 should only be considered when sets are approaching refusal.

We also highlight the potential risk of insufficiently embedded piles, when they run parallel along only one side of pipe trenches, becoming "undermined" by lateral consolidation of loose trench backfill. We stress the need to check for sufficient pile embedment below the line of influence using the Broms method for determining pile cantilever anchorage length, and for sufficient pile stiffness, using conventional cantilever pile earth pressure theory.

We envision that the driven timber piles will have a minimum embedment of 1.5m, subject to the specific requirements of the foundation designer.

The construction of the driven pile foundation must commence with several test piles being driven at locations within the building footprints as selected by the Engineer to:

- Confirm both ground conditions and pile lengths, and,
- Indicate achievement of the design set.

Test piles that have achieved both satisfactory embedment and sets may then be used as production piles, and then the remaining piles in the array installed to achieve both the specified pile embedment's and set in all cases.

Piles should be at a minimum 175mm small end diameter, but the actual size and depth of the piles would depend on their required load capacities. The minimum TPA treatment of timber piles should be H5.

9.1.2. SHALLOW FOUNDATION DESIGN

The near surface soils at the property are considered to be Class A (non-expansive) soils.

The bearing capacity values given below are considered to be appropriate for the design of shallow foundations, subject to

- founding directly within or on competent natural ground or engineered fill, and
- careful Geo-Professional inspections of the subgrade to check that the underlying ground conditions are consistent with our expectations:

Geotechnical Ultimate Bearing Capacity	300 kPa
ULS Dependable Bearing Capacity (Φ=0.5)	150 kPa

We caution that it is important to exercise caution to verify that the surficial natural ground meets the above recommended bearing capacity, because aeolian sand deposits can be variable in their density across a given area, and/or disturbed if unconfined. Although considered not at risk from liquefaction, as stated above, the sands can be erodible if not confined. Therefore, if shallow raft foundations are to be utilized, then they should utilize a TC2 type foundation specifically designed by a structural engineer.

During construction, hardfill layers should be compacted under geotechnical monitoring to check for soft areas requiring more treatment and tested to ensure that an adequate level of density (bearing capacity) has been attained. This is crucial for preserving structural integrity.

9.1.3. NZS1170.5:2004 SITE SUBSOIL CLASSIFICATION

We consider the proposed building site to be underlain with a Class C – Shallow Soil stratigraphy.

9.2. SITE EARTHWORKS

As no site or earthwork plans were provided, we are unsure of the proposed earthworks in forming the building site. We generally envisage that some lesser-scope earthworks may be carried out to level the building site, likely by way of minor localised cutting and filling of less than 0.60m.

Generally, and as directed by a suitably experienced engineer, all earthworks should be undertaken in accordance with the following standards:

- NZS4431:2022 "Code of Practice for Earth Fill Residential Development",
- Section 2 "Earthworks & Geotechnical Requirements" of NZS4404:2010 "Land Development and Subdivision Infrastructure", and
- Chapter 2 "Site Development Suitability (Geotechnical and Natural Hazards" of the Far North District Council Engineering Standards, (Version 0.6 issued May 2023).

9.3. SITE PREPARATION

The competency of the exposed subgrade underlying all future foundations and structures should be confirmed by a Geo-Professional. In this regard, we recommend the following sequencing:

- Form the subgrade to the required design level,
- Mark out the building outlines and have the cut subgrade inspected to confirm suitability,
- Assuming the use of piled foundations only, dress the subgrade with a working course of hardfill to provide stable vehicular access, and
- Under the monitoring of either the foundation design engineer, or a geotechnical engineer familiar with the contents of this report, conduct a test piling programme at the positions of at least the corners of each building platform and preferably at mid points also, to confirm acceptable target depths, and allow determination of final pole orders.

When driven piles are used, it is not uncommon for Building Consent Conditions to require a Producer Statement – Construction Review (PS4) for test piling and a Producer Statement – Construction (PS3) from the piling contractor. Without such monitoring being undertaken, a Chartered Professional Geotechnical Engineer is unable to issue a Review which could result in the failure to meet Building Consent requirements as set by Council as conditions of consent.

9.4. SUBGRADE PROTECTION

Given the proposed piling of all building loads, subgrade protection should not be required for building loads, but the site would likely benefit from being covered with a 100mm thick layer of granular fill such as GAP40 basecourse to provide a stable work surface.

9.5. TEMPORARY & LONG-TERM EARTHWORK BATTERS

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

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

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

All temporary cuts not exceeding 1.5m should be battered back at no steeper than 1V:0.5H whilst temporary cuts of between 1.5m to 2.5m should be battered back at no steeper than 1V:1H.

Permanent batters should be formed at no steeper than 1V:3H (18°).

We do not recommend leaving any cuts and fills that exceed a vertical height 1.0m height unsupported.

Unsupported temporary cuts can induce slippage of the ground above, especially where heavy construction plants are present close to the edge of the cut. We recommend intensive monitoring of the site by a Geotechnical Engineer where temporary cuts are present.

Unsupported cuts below 1.0m high should be battered no steeper than 1V:3H (18°) or if it cannot be achieved due to site constraints, they should be supported by SED retaining structure.

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

The structural designer and building contractor should ensure that a satisfactory FoS against ground instability is available at all stages of the development.

9.6. CUT/FILL LIMITATIONS

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

In a like fashion, cuts that could remove the support from slopes and/or adjacent structures (be they existing or future proposed), should also be restricted unless specifically reviewed and approved.

For the reasons stated above, any future retaining walls supporting cut and/or fills in excess of these magnitudes will likely require specific assessment and, if considered appropriate, be subject to specific engineering design.

9.7. GENERAL SITE WORKS

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

Furthermore:

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

9.8. RETAINING WALL DESIGN

We are not aware of any retaining wall proposals and advise that any retaining walls higher than 1.5m, or with surcharges above (sloping ground, structures, and traffic load) or with reduced support below, should be subject to Specific Engineering Design and Building Consent.

10. STORMWATER CONTROL

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

All stormwater runoff from new roof and paved areas should be collected in sealed pipes and be discharged to a stable disposal point that is well clear of, and not directly downslope of, the building site, and which is suitably protected from sand erosion. Such an outfall might consist of a common concrete farm trough (for permanence and durability) with its base perforated and sitting on a suitable geotextile, with the stormwater discharge pipe feeding into a coiled novaflo, and the trough backfilled with no-fines drainage metal.

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

11. UNDERGROUND SERVICES

Underground services, public or private, mapped, or unmapped, of any type may be present, hence we recommend staying on the side of caution during the commencement of any work within the proposed development area.

12. FUTURE CONSTRUCTION MONITORING

The foregoing statements are Professional Opinion, based on a limited collection of information, some of which is factual, and some of which is inferred. Because soils are not a homogeneous, manufactured building component, there always exists a level of risk that inferences about soil conditions across the greater site, which have been drawn from isolated “pin-prick” locations, may be subject to localized variations. Generally, any investigation is deemed less complete until the applicability of its inferences and the Professional Opinions arising out of those are checked and confirmed during the construction phase, to an appropriate level.

It is increasingly common for the Building Consent Authorities to require a Producer Statement – Construction (PS4) which is an important document. The purpose of the PS4 is to confirm the Engineers’ Professional Opinion to the BCA that specific elements of construction, such as the verification of design assumptions and soil parameters (NZBC clause B1/VM4 2.0.8), are in accordance with the approved Building Consent and its related documents, which should include the subject Geotechnical Report. Where site works will involve the placement of fill, the PS4 should reference NZBC clause B1/VM1 10.1.

For WJL to issue a PS4 to meet the above clauses of the NZBC, we will need to carry out the site inspections as per the Building Consent and Council requirements.

We require at least 48 hours’ notice for site inspections.

Site inspections should be undertaken by a Chartered Professional Geotechnical Engineer or their Agent, who is familiar with both this site and the contents of this Geotechnical Report.

Prior to works commencement, the above Engineer should be contacted to confirm the construction methodologies, inspection, and testing frequency.

The primary purpose of the site inspections is to check that the conditions encountered are consistent with those expected from the investigations and adopted for the design as discussed herein. If anomalies or uncertainties are identified, then further Professional advice should be sought from the Geo-Professional, which will allow the timely provision of solutions and recommendations should any engineering problems arise.

Upon satisfactory completion of the above work aspects, WJL would then be in a position to issue the PS4 as required by Council.

At this time, we anticipate that Geotechnical site inspections and testing should include but not be limited to the following:

- Driven piles or pile footings, and
- Pre-pour retaining wall footings (if required).

13. LIMITATIONS

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

This report has been commissioned solely for the benefit of our clients, **KTP No 1 Trust & Burgess Lockley Family Trust**, in relation to the project described herein, and to the limits of our engagement, with the exception that the local Territorial Authority may rely on it to the extent of its appropriateness, conditions and limitations, when issuing the subject consent. Any variations from the development proposals described herein as forming the basis of our appraisal should be referred to us for further evaluation. Copyright of Intellectual Property remains with WJL, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants, or agents, in respect of any other geotechnical aspects of this site, nor for its use by any other person or entity, and any other person or entity who relies upon any information contained herein does so entirely at their own risk. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.

The recommendations provided in this geotechnical report are in accordance with the findings from our shallow investigation. However, it is important to acknowledge that additional refinement of the investigation and analysis may be necessary to meet the specific requirements set by the local council.

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

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

Yours faithfully,

WILTON JOUBERT LIMITED

Enclosures:

Site Plan (1 sheet)
Cross-Section A-A' (1 sheet)
Hand Auger Borehole Records (3 sheets)
CPT Calibration Sheet & CPT Plots (6 sheets)
Liquefaction Analysis Modelling Results (3 sheets)
Construction Monitoring (1 sheet)

SITE LOCATION

IMAGE SOURCE:
FAR NORTH DISTRICT COUNCIL LOCAL MAPS

HA 03
HA 02
HA 01
CPT01
A G610
A' G610

SYMBOL KEY	
HA	HAND AUGER LOCATIONS
A G610 / A' G610	CROSS SECTION LOCATION

GENERAL NOTES

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

0m 5m 15m 30m

SCALE 1:300

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Christchurch: 021 824 063 Wanaka: 03 443 6209
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ISSUE / REVISION

No.	DATE	BY	DESCRIPTION
A	JUL '25	SJP	ISSUED WITH GEOTECHNICAL REPORT
B	JUL '25	SJP	ISSUED WITH GEOTECHNICAL REPORT REV B

DESIGNED BY: SJP
DRAWN BY: GMB
CHECKED BY: SJP
SURVEYED BY: N/A

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GEOTECHNICAL

DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE: **SITE PLAN**

PROJECT DESCRIPTION: **NEW TRANSPORTABLE DWELLING**

PROJECT TITLE:
LOT 1 DP 594744
137 TIROMOANA WAY
AHIPARA
NORTHLAND

ORIGINAL DRAWING SIZE:	OFFICE:
A3	KERIKERI
DRAWING SCALE:	CO-ORDINATE SYSTEM:
1:300	NOT COORDINATED
DRAWING NUMBER:	ISSUE:
141238-G600	B

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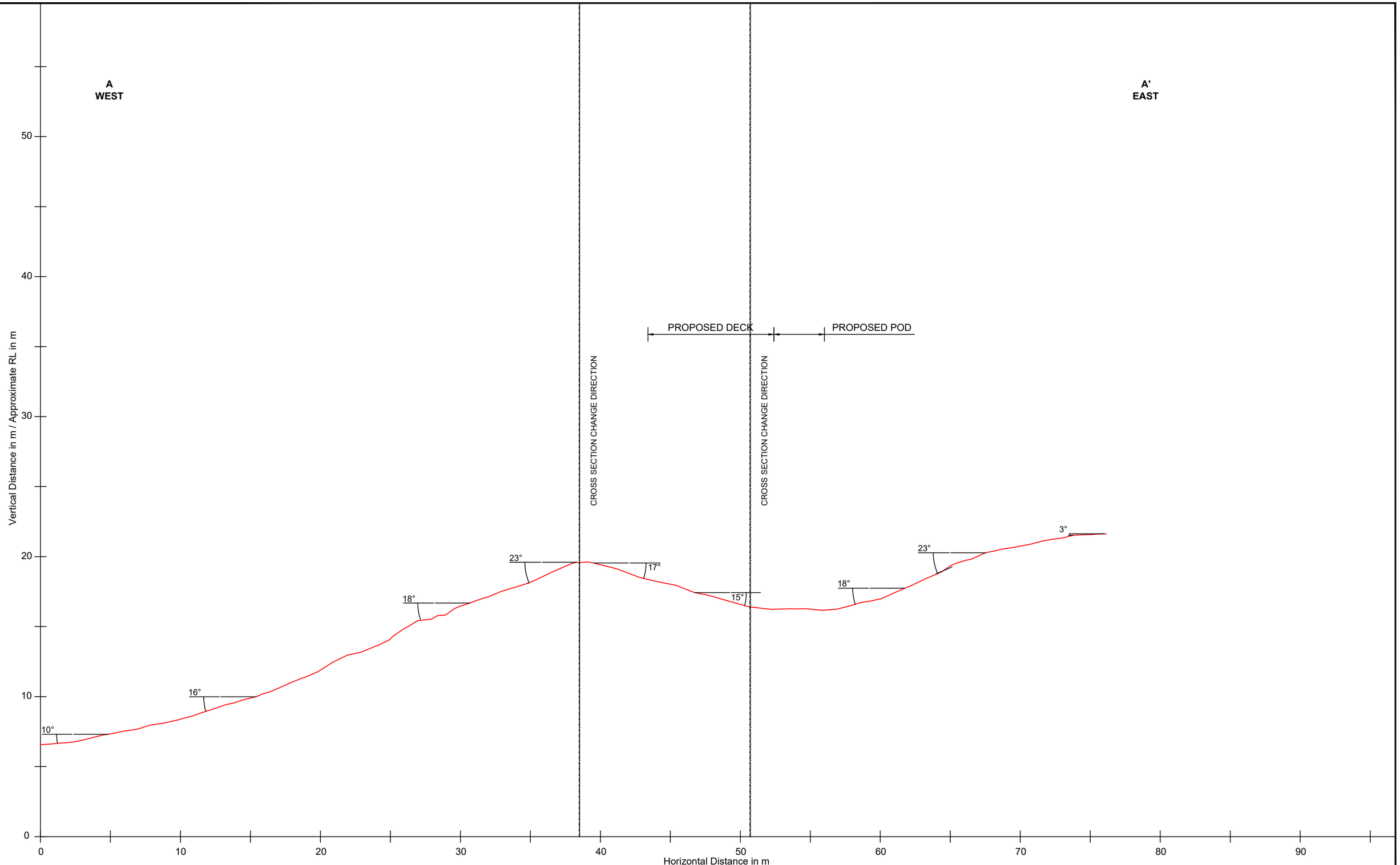

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DESIGNED BY: SJP
DRAWN BY: GMB
CHECKED BY: SJP
SURVEYED BY: N/A

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GEOTECHNICAL
DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE:
CROSS SECTION A-A'

PROJECT DESCRIPTION:
NEW TRANSPORTABLE DWELLING

PROJECT TITLE:
LOT 1 DP 594744
137 TIROMOANA WAY
AHIPARA
NORTHLAND

ORIGINAL DRAWING SIZE: A3	OFFICE: KERIKERI
DRAWING SCALE: 1:300	CO-ORDINATE SYSTEM: NOT COORDINATED
DRAWING NUMBER: 141238-G610	ISSUE: B

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HAND AUGER : HA01

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust **DIAMETER:** 50mm **EASTING:**

PROJECT: New Dwelling **SV DIAL:** **ELEVATION:** Ground

SITE LOCATION: 137 Tiromoana Way, Ahipara **FACTOR:** **DATUM:**

SOIL DESCRIPTION

TOPSOIL | CLAY | SAND | PEAT | FILL | SILT | GRAVEL | ROCK

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE PEAK STRENGTH (kPa)	SHEAR VANE REMOULD STRENGTH (kPa)	SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Top soil	Sandy TOPSOIL, dark brown, moist.							2	
OIS1 (Holocene) Active Dune Deposits of Karioitahi Group	NATURAL: Fine SAND, greyish brown, medium dense, moist.		0.2	Groundwater Not Encountered				3	
								3	
			0.4					4	
								4	
			0.6					4	
								4	
			0.8					5	
								5	
			1.0					5	
								4	
			1.2					4	
								4	
			1.4					3	
								4	
			1.6					4	
								3	
			1.8					3	
								4	
			2.0					4	
								4	
			2.2					4	
								4	
			2.4					5	
								5	
			2.6					5	
								5	
			2.8					6	
								6	
			3.0					7	
								7	
			3.2					8	
	EOH: 3.20m - Borehole Collapsing Due To Low Cohesion							8	
			3.4					8	
								8	
			3.6					8	
								10	
			3.8					12	
								15	
			4.0					12	
								15	
			4.2					15	
								15	
			4.4					12	
								12	
			4.6					11	
								13	
			4.8					15	

REMARKS

End of borehole @ 3.20m (Target Depth: 5.00m)

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

LOGGED BY: JEM

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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HAND AUGER : HA02

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust **DIAMETER:** 50mm **EASTING:**

PROJECT: New Dwelling **SV DIAL:** **ELEVATION:** Ground

SITE LOCATION: 137 Tiromoana Way, Ahipara **FACTOR:** **DATUM:**

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE: PEAK STRENGTH (kPa)	SHEAR VANE: REMOULD STRENGTH (kPa)	SHEAR VANE: SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Topsoil	Sandy TOPSOIL, dark brown, moist.	TS	0.2	Groundwater Not Encountered				0.5 0.5	
OIS1 (Holocene) Active Dune Deposits of Karioitahi Group	NATURAL: Fine SAND, light brown, loose, moist. 1.2m: Occasional dark brown staining. 1.5m: Becoming brown, medium dense. 2.0m: Frequent dark brown staining. 2.4m: Becoming light brown.		0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4					1 2 2 2 3 3 2 3 2 2 2 2 3 3 3 3 3 3 3 3 4 3	
	EOH: 2.50m - Borehole Collapsing Due To Low Cohesion		2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8					4 5 5 5 6 8 8 9 8 8 8 10 11 13 14 14 14 13 11 10 12 13 16 14	

REMARKS

End of borehole @ 2.50m (Target Depth: 5.00m)

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

LOGGED BY: SJP

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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HAND AUGER : HA03

JOB NO.: 141238 **SHEET:** 1 OF 1

START DATE: 02/07/2025 **NORTHING:** **GRID:**

CLIENT: KTP No 1 Trust & Burgess Lockley Family Trust

DIAMETER: 50mm **EASTING:**

PROJECT: New Dwelling

SV DIAL: **ELEVATION:** Ground

SITE LOCATION: 137 Tiromoana Way, Ahipara

FACTOR: **DATUM:**

STRATIGRAPHY	SOIL DESCRIPTION	LEGEND	DEPTH (m)	WATER	SHEAR VANE: PEAK STRENGTH (kPa)	SHEAR VANE: REMOULD STRENGTH (kPa)	SHEAR VANE: SENSITIVITY	DCP - SCALA (Blows / 100mm)	COMMENTS, SAMPLES, OTHER TESTS
Topsoil	Sandy TOPSOIL, dark brown, moist.	TS	0.2	Groundwater Not Encountered				1	
								2	
OIS1 (Holocene) Active Dune Deposits of Karioitahi Group	NATURAL: Fine SAND, brownish grey, medium dense, dry to moist.		0.4					3	
								4	
			0.6					4	
								4	
			0.8					5	
								5	
			1.0					5	
								4	
			1.2					4	
								4	
			1.4					5	
								5	
			1.6					5	
								5	
			1.8					4	
								5	
			2.0					5	
								5	
			2.2					6	
								6	
			2.4					5	
								5	
			2.6					4	
	EOH: 2.60m - Borehole Collapsing Due To Low Cohesion							4	
			2.8					5	
								6	
			3.0					5	
								6	
			3.2					6	
								6	
			3.4					5	
								5	
			3.6					6	
								7	
			3.8					8	
								9	
			4.0					9	
								13	
			4.2					12	
								11	
			4.4					10	
								11	
			4.6					12	
								13	
			4.8					12	
								17	

REMARKS

End of borehole @ 2.60m (Target Depth: 5.00m)

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

LOGGED BY: SJP

CHECKED BY: SJW

▼ Standing groundwater level

▽ GW while drilling

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CPT Client Engagement / Quote Request

Project Details		Date	30/11/2023
Project Name	Proposed Development	Job Identifier	WJL 1000 Sandhills Rd Ahipara
Project Address	1000 Sandhills Rd Ahipara		
Engineering Consultant Company Name	Wilton Jubert	Engineering Project Manager	Keavy Mitchell
Email		Mobile	
Client Name		Client Contact Details	

Test Requirements - CPT		Preferred Job Completion Date	
Target No of CPT Tests Required	6	Maximum Test Depth Required	Refusal/20m
No of CPT Tests Required Through Pavement or Other Hard Surface		Type and Thickness of Hard Surface	
Other Requirements Outside Standard Greenfield Testing			

Please note: Service clearance is to be provided by the client or their agents and details are to be provided to the CPT operator prior to Underground Investigation Ltd commencing work. Any delays due to service clearance or H&S approvals will be at the clients expense and may reduce the amount of testing being able to be completed in the working day.

Test Requirements - Dissipation Testing		Please List Test No and Approximate Target Depth of Dissipation	
Test No	Depth	Test No	Depth

Please note: In order to provide useful dissipation data, UIL recommends carrying out at least one CPT prior to carrying out dissipation in order to select appropriate depths for testing. It is preferred if the Geotechnical Engineer for the project discusses this with the CPT operator after completion of the initial testing.

Any Other Site Requirements

UNDERGROUND INVESTIGATION

CPT Equipment Information

CPT Rig Type	Geotech AB - Georig 220	Maximum Push Capacity	200kN
Any Deviations From Common Setup		Reaction Restraint	Screw Anchors
Cone Penetrometer	Nova Cone 100MPa With Memory	Cone Penetrometer Type	TE2
Manufacturer	Geotech AB	Load Cell Configuration	Compresion
Tip Area	10cm	Pore Pressure Type	U_2
Full Scale Output of Sensors	q_c : 100 MPa	f_s : 1 MPa	u_2 : 2 MPa
Calibration Test Class	ISO 1	Saturation Method	Pump Saturation With Secondary Vacuum
Temprature Sensor	No	Data Interval	10mm
Temprature Conditioning	Cone Warmer set to 20° C	Typical Cone Temprature at Start of Test	16-20° C
Any Deviations From Above			

UNDERGROUND INVESTIGATION

CPT Test Information

Test Hole Number	CPT Lot 1	Job Identifier	WJL 1000 Sandhills Rd Ahipara
Test Date	30/11/2023	Operator	Craig Greenfield
Cone Serial Number	5654	Battery Voltage Start	5.81
Cone Area Ratio	0.832	Start Recording	4:15:00 PM
Probe Radius	0.0179	Finish Recording	4:47:00 PM
Date of First Push Current Calibration	2/05/2023	Measured Ground Water Depth	collapsed at 12.5m
Metres To Next Calibration	1130	Total Penetration Depth (m)	14.342
Depth of Predrill	0	Test ended due to:	☐ High Tilt ☑ High Tip Pressure ☐ High Friction ☐ High Pore Pressure ☐ High Total load ☐ Danger of Rods Buckling ☐ Target Depth ☑ Anchor Failure
Depth at Start of Test	0		
Anchor Depth (Left)	1.5		
Anchor Depth (Right)	1.5		

Zero Value Change % FSO

	Point Resistance	Pore Pressure	Sleeve Friction
Zero Shift Since First Push Current Calibration	0.05%	0.00%	0.78%
End of test with tip loosened	0.04%	0.03%	0.34%

Dissipation Testing

Test No	Depth (m)	Duration (secs)	Comments

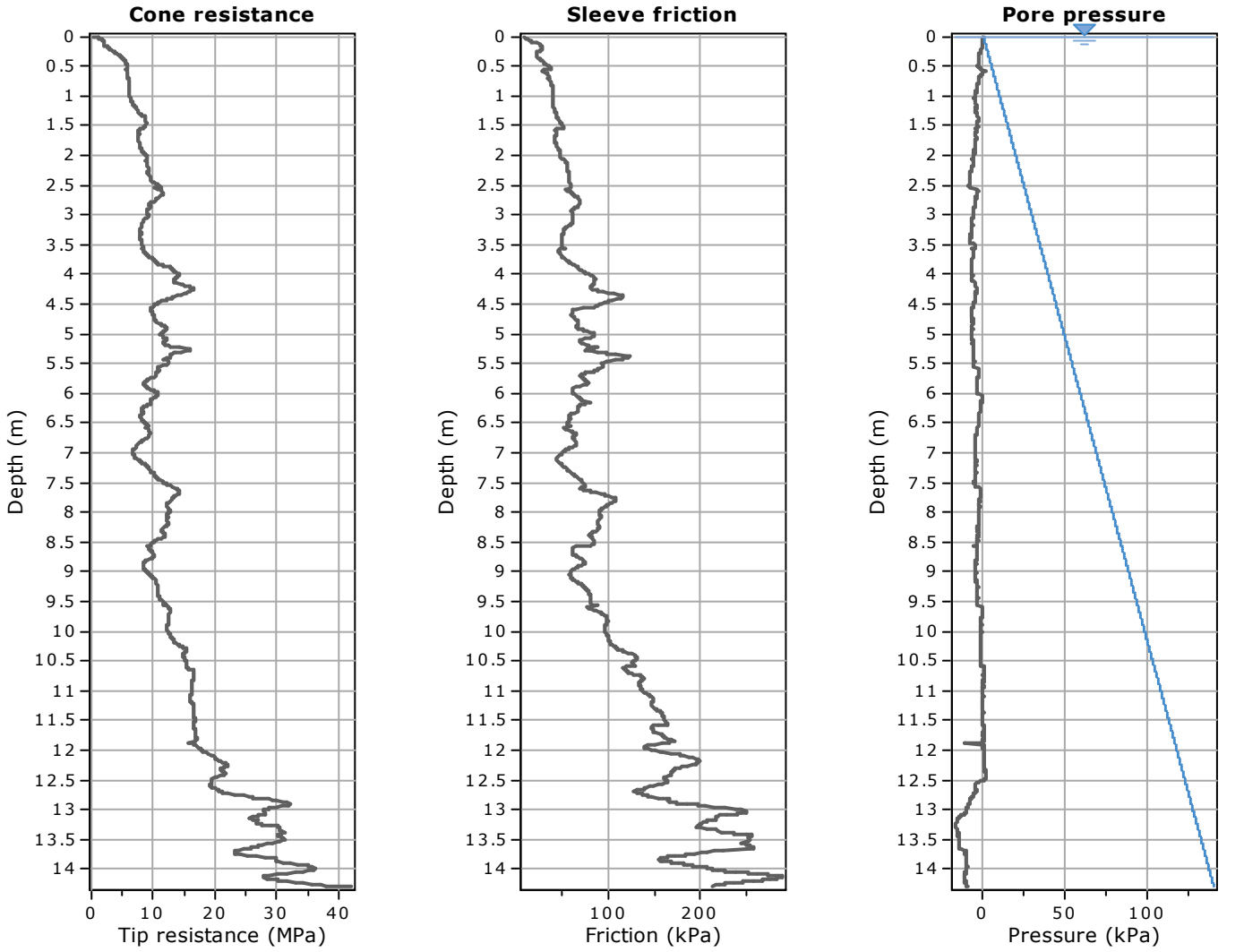
Notes and Comments

Data loss (typically at rod change points). Either deleted or averaged	qc	fs	u

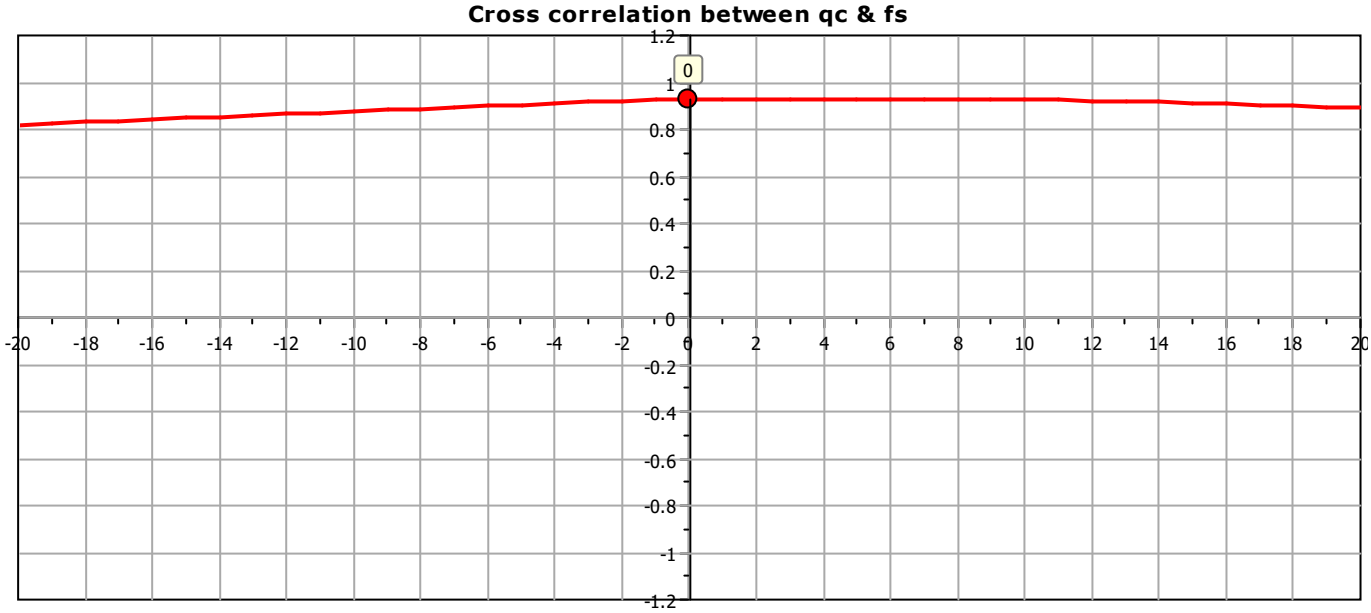
Underground Investigation Ltd
Cone Penetration Testing
craig@undergroundinvestigation.co.nz
+64211473249

CPT: CPT Lot 1
Total depth: 14.29 m, Date: 1/12/2023
Surface Elevation: 0.00 m
Coords: X:0.00, Y:0.00
Cone Type:
Cone Operator:

Project:
Location:



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



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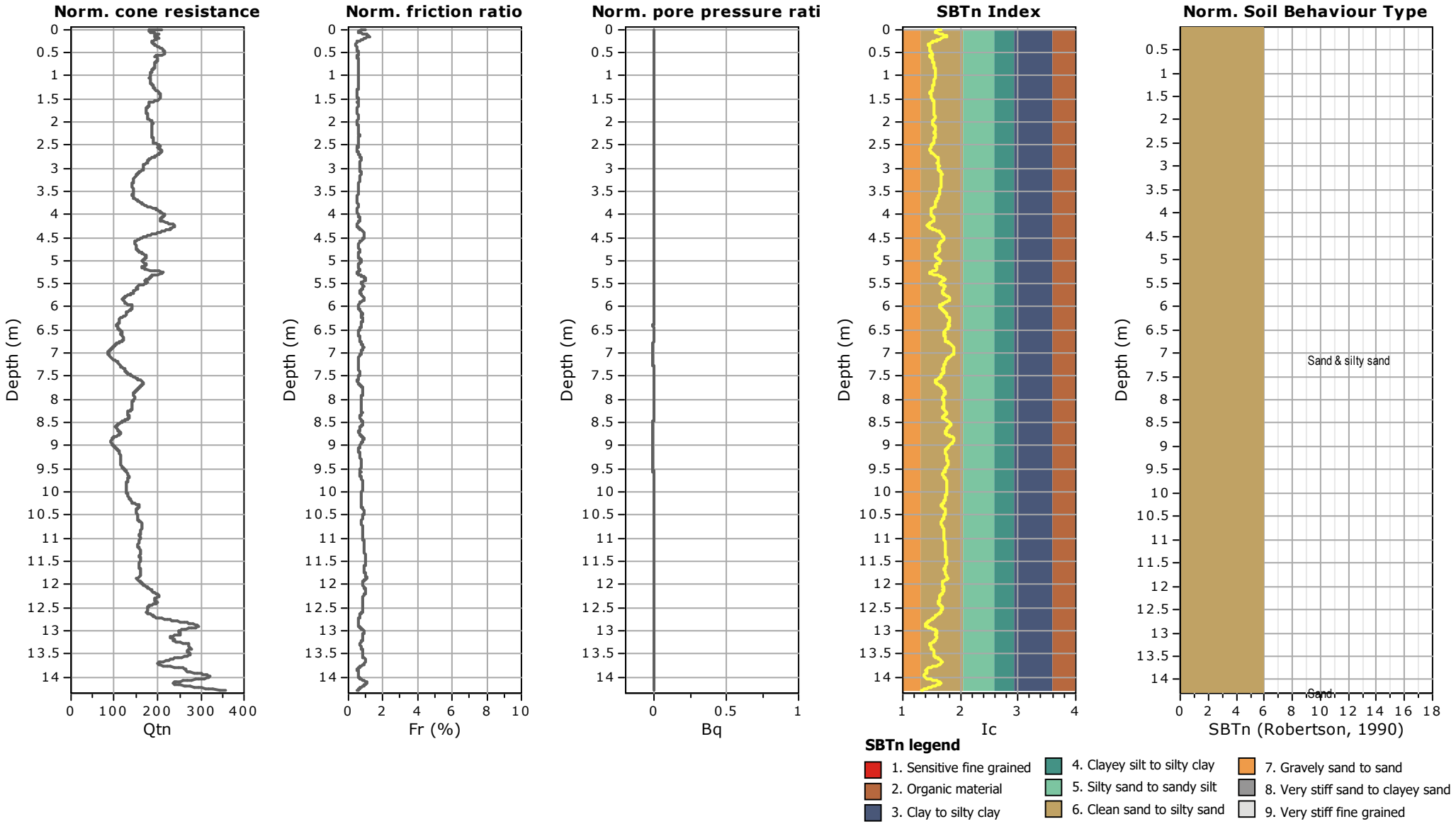
+64211473249

CPT: CPT Lot 1
Total depth: 14.29 m, Date: 1/12/2023
Surface Elevation: 0.00 m
Coords: X:0.00, Y:0.00
Cone Type:
Cone Operator:

Project:
Location:



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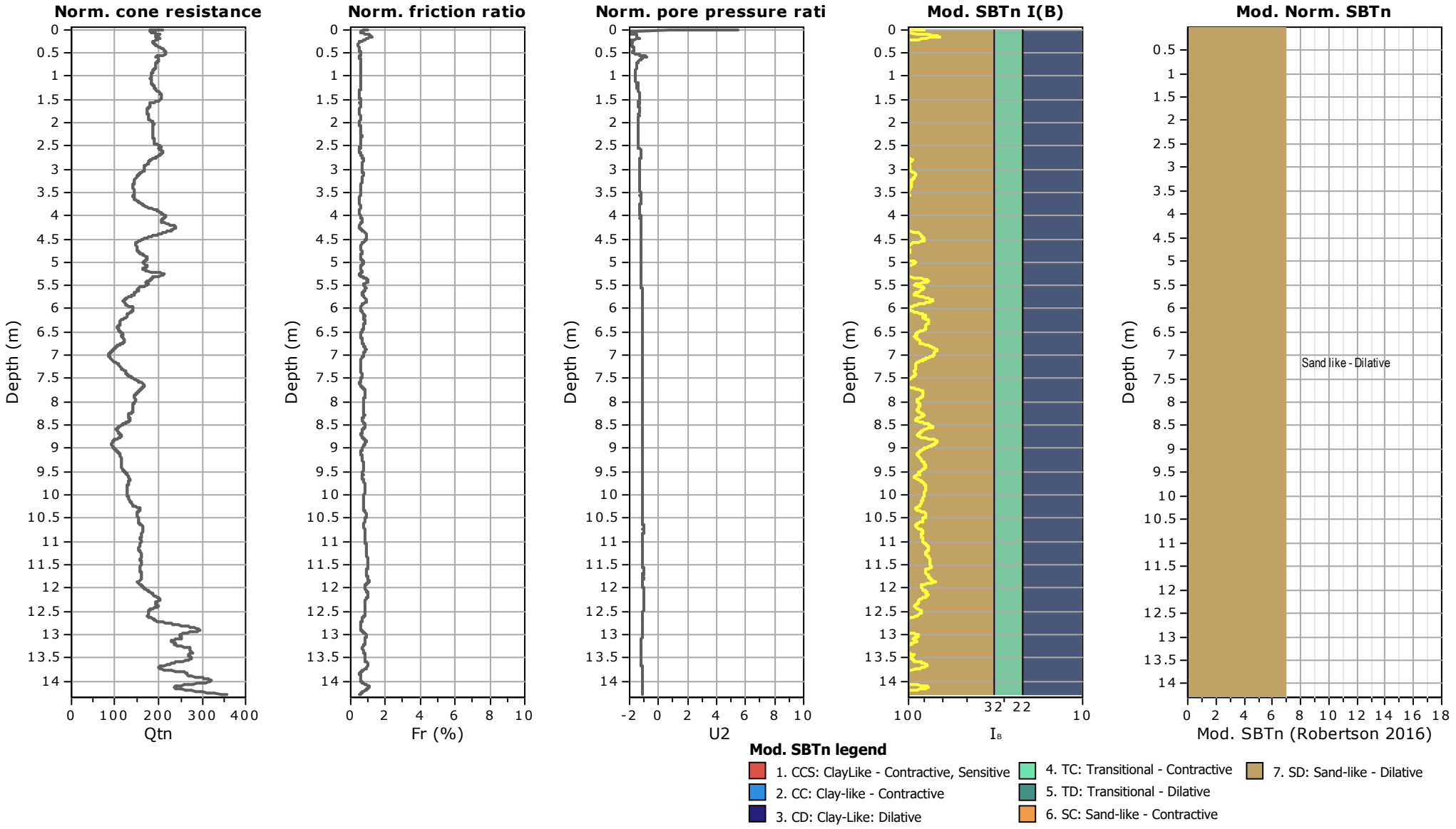
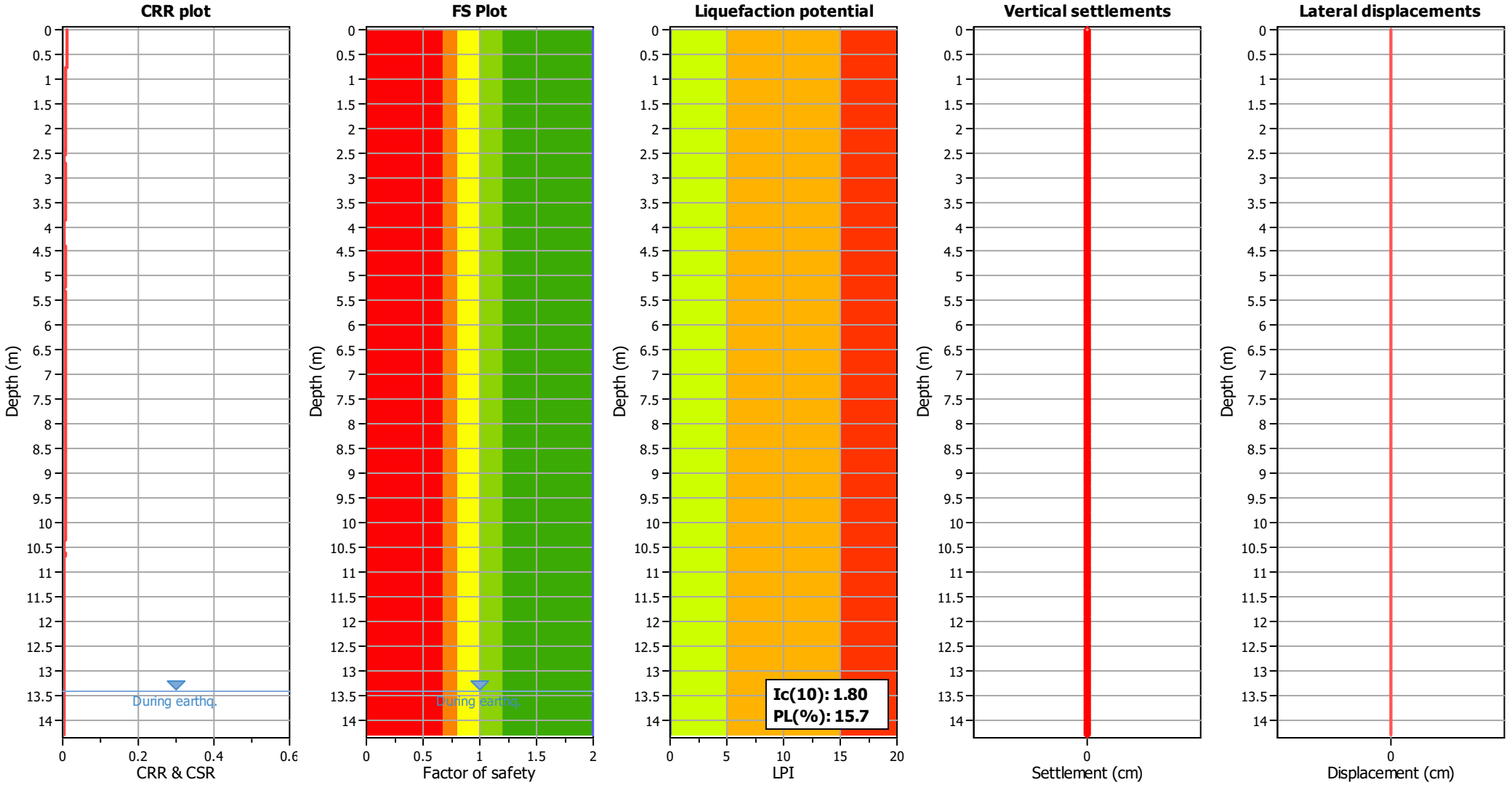
craig@undergroundinvestigation.co.nz
+64211473249

CPT: CPT Lot 1
Total depth: 14.29 m, Date: 1/12/2023
Surface Elevation: 0.00 m
Coords: X:0.00, Y:0.00
Cone Type:
Cone Operator:

Project:
Location:



Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	13.40 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	2.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.03	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	13.40 m	Fill height:	N/A	Limit depth:	10.00 m

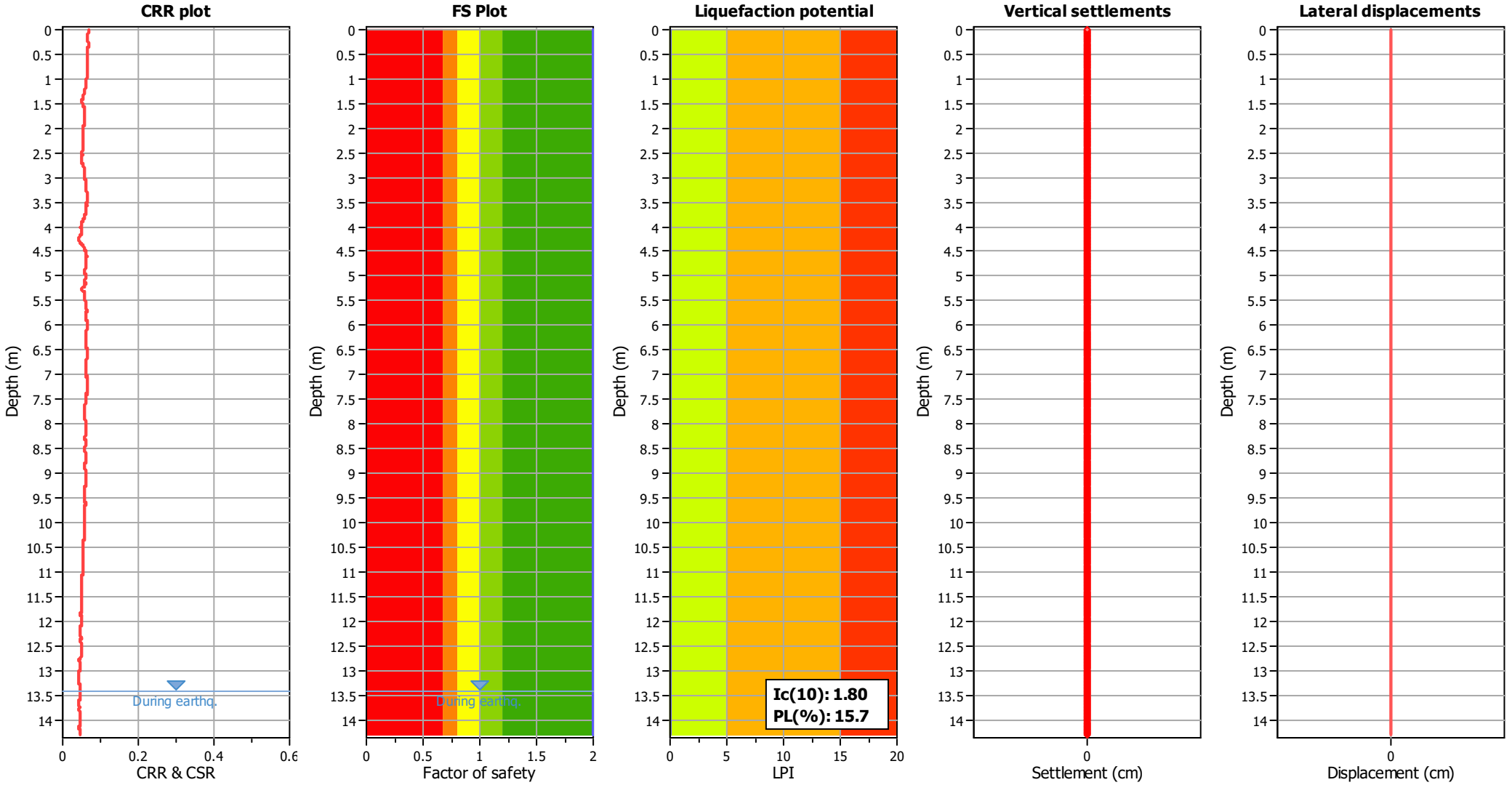
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	13.40 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.13	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	13.40 m	Fill height:	N/A	Limit depth:	10.00 m

F.S. color scheme

- Almost certain it will liquefy
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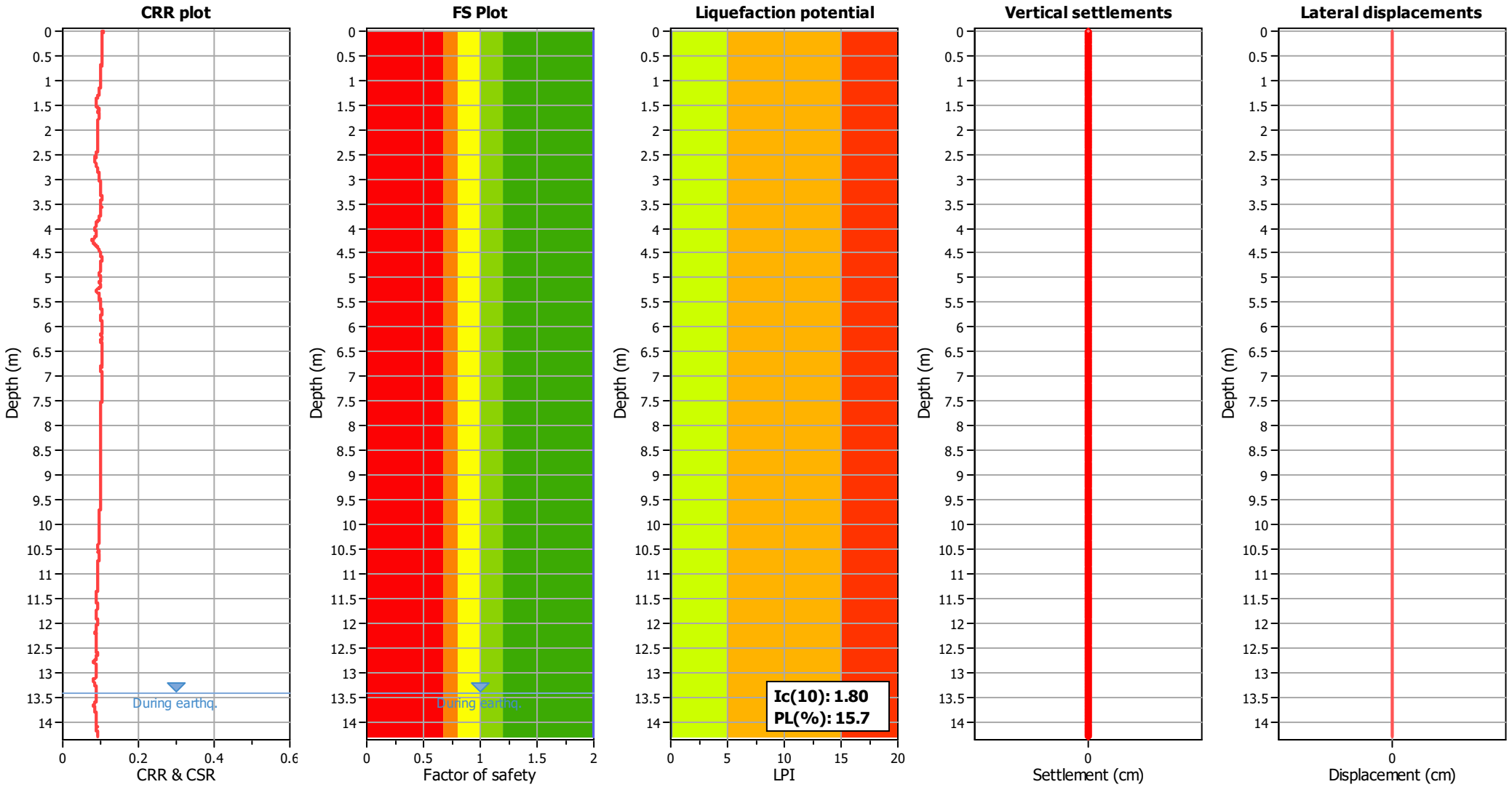
Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	13.40 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.19	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	13.40 m	Fill height:	N/A	Limit depth:	10.00 m

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

WILTON JOUBERT
Consulting Engineers

Construction Monitoring Services

Northland, Auckland-Waikato, Canterbury, Southern Lakes

Need a PS4?

- Please read the conditions of your Building Consent to determine which section of the works Council wants an engineer to sign off on.
- Book an inspection with Wilton Joubert Ltd or with a suitable qualified engineer.
- Have the Consent documents on site at the time of the inspection
- Be sure to verify both the grounding conditions (soil parameters) as well as the structural elements of works in question
- If in doubt what to get inspected please clarify with Council.

Producer Statements 4 - Construction Review Documents (PS4's) relates to Building Consents (BC) only, not Resource Consents (RC), unless there is an element of the RC which requires a BC, e.g. a retaining wall needed to develop a subdivision.
In soils, RC's are usually verified with a "Statement of Professional Opinion as to Suitability for Building Development", or variations on that title.

CONSTRUCTION MONITORING SERVICES

Construction monitoring refers to the physical inspection of selective components of the design or works as required by Council and as specified in the Consented documents. It is up to the Consent holder to read the special conditions set out by Council and arrange for the required inspections to be done. No PS4 can be issued without the physical inspection of works and sighting of Consented plans either by the design engineer, his representative, or another qualified engineer. (download PDF with more info via our website)

It is also important to note that, more often than not, there are two physical components that needs verification:

1. Geotechnical or grounding Conditions –referring to the strength or bearing capacity of the soil
2. Structural Components – verify that works are done as per design and in accordance with the consented plans.

To complicate matters there can be multiple engineers that might be engaged on the same site:

- Civil Engineer – To do storm water and wastewater designs
- Geotechnical Engineer – to do a Geotech report and specificity soil parameters as required
- Structural Engineer – to design structural components such as retaining walls, raft floors, beams and so on.

In cases where engineers from different companies are appointed it is important to make sure all the required boxes are ticked as not to complicate matters when it comes to the issuing of all the relevant PS4's.
Note: sites in the Auckland area might requires multiple PS4's for the same component (e.g. a raft floor requires a Geotechnical Engineer to verify the bearing capacity of the platform and a Structural engineer needs to verify the structural components are according to the design.
Not to mention a Council inspection is also required on the same floor to verify position, plumbing and so on.

In Summary:

- Read the conditions as laid out in the Consent documents to which elements of the design requires a PS4's from the design engineer.
- Have Consented plans on site during inspection time
- Book inspections ahead of time (a minimum of 48 hours in advanced)
- Ensure both grounding conditions as well as structural components are inspected. In some cases, this might mean two separate inspections if different engineers are involved.
- If you have any further questions, feel free to contact us at any time during business hours.

Construction Monitoring Enquiries
Email: *jobs@wjl.co.nz*
or scan QR code to visit our website

HAWTHORN
Landscape Architects

Landscape and Visual Effects Assessment

Proposed Dwelling

Lot 1 Sandhills Estate

137 Tiromoana Way - Ahipara

Prepared For: Burgess Lockley Family Trust & KTP No 1 Trust

Prepared By: Christine Hawthorn BLA (Hons)

Date: 22nd August 2025

Hawthorn Landscape Architects Ltd 88 Kerikeri Road, Kerikeri 2030
P. 09 407 6448 M. 021 407649 info@hawthornlandscapes.co.nz

HAWTHORN
Landscape Architects

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Appendix 2 – Development Plans
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Appendix 6 – Sandhills Estate Allotment Management Plan
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Appendix 8 – Table 1: Sandhills Estate Allotment Management Plan – Landscape Provisions

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LANDSCAPE AND VISUAL EFFECTS ASSESSMENT, HAWTHORN LANDSCAPE ARCHITECTS LTD (22/8/25)

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As regulatory standards are constantly changing, conclusions and recommendations considered to be acceptable at the time of writing, may in the future become subject to different regulatory standards which cause them to become unacceptable. This report provides some regulatory commentary but is not intended as planning review of all statutory obligations of the proposal, for which specialist planning advice should be sought and relied upon in the first instance.

1.0 INTRODUCTION

Hawthorn Landscape Architects Ltd (HLA) has been engaged by the clients Burgess Lockley Family Trust & KTP No 1 Trust (the applicants) to undertake a landscape and visual amenity assessment to assist with their application to construct a new dwelling located on their property, Lot 1 at 1000 Sandhills Road (137 Tiromoana Way), Ahipara.

This report will provide the following:

- An assessment of the context and character of the existing environment,
- Assessment of the visibility of the proposed dwelling,
- Assessment of the potential landscape and visual amenity effects of the proposal,
- Assessment of the proposal under the relevant statutory documents including assessing the building against the Visual Amenity Rule 10.6.5.3.1 of the FNDP.
- Assessment of the proposal against the Sandhills Estate Allotment Management Plan.
- Proposed Landscape Plan to integrate the proposed dwelling into the landscape to avoid any potential adverse landscape and visual amenity effects.

The application site (Lot 1 DP 594744) is located within Sandhills Estate which was formed via an approved resource consent for subdivision (RC 2160143, and its variations) at 1000 Sandhills Road, Ahipara. Each title is subject to a Consent Notice requiring the owner and their successors in title to comply with the provisions of the relevant Allotment Management Plan.

Each title is also subject to a Consent Notice requiring the owner and their successors in title to comply with the provisions of the Sandhills Estate Master Plan and the Sandhills Estate Allotment Management Plan applicable to their title. **Refer to Appendices 6 and 7**.

The Sandhills Estate Master Plan provides an overview of the purpose and philosophy underpinning the management of the Estate as a whole. Individual Allotment Management Plans share a common format and include generic information applicable to all the relevant allotments as well as the specific requirements applicable to each title and the on-going responsibilities of the lot owner in respect of their particular property.

2. METHODOLOGY

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

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

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

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

In summary, the significance of effects identified in this assessment are based on a seven-point scale which includes very low; low; low-moderate; moderate; moderate-high; high and very high ratings.

The ratings of high and very high equate to 'significant' effects when considering Policy 13 (1) (b) and Policy 15(b) of the New Zealand Coastal Policy Statement, where the test is 'to avoid significant adverse effects.

In relation to this proposal the assessment considers the effects of the proposed dwelling and infrastructure along with amenity planting on the landscape and visual amenity characteristics and qualities of the site and surrounding environment.

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

3.0 THE SITE AND ITS LANDSCAPE CONTEXT

3.1 Site Location & Sandhills Estate

The applicant's property is located at 137 Tiromoana Way, Ahipara. It is approximately 6km to the north of Ahipara, and 15km to the west of Kaitaia.

Sandhills Estate totals 75.85 hectares of rural coastal land sited between Sandhills Road and Ninety Mile Beach north of Ahipara at the southern end of the Aupouri Peninsula. It contains 16 lifestyle allotments of various sizes, 13 of which (the 'coastal' lots) are located close to the coast on the western side of a ridge formed from old sand dunes. Three 'rural' lots are located on the eastern side of the Estate. The balance of the Estate is held in one title comprising three large rural lots.

The site is accessed via a 1.3km long jointly owned gravel driveway from Sandhills Road. Lot 1 is located at the very end of the northern arm of the road. Refer to **Appendix 1 - Location Map** and **Figure 1** below.

Lot 1 is a coastal lot in the Estate, located close to the western boundary overlooking Ninety Mile Beach. It has the legal description Lot 1 DP 594744 contained in RT 1150149 which also includes a 1/17th share of Lot 17 DP 594744 which is the main road access

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

lot serving the Estate and a 1/17th Share of Lot 21 DP 594744 which the access lot fronting the site towards Ninety Mile Beach.

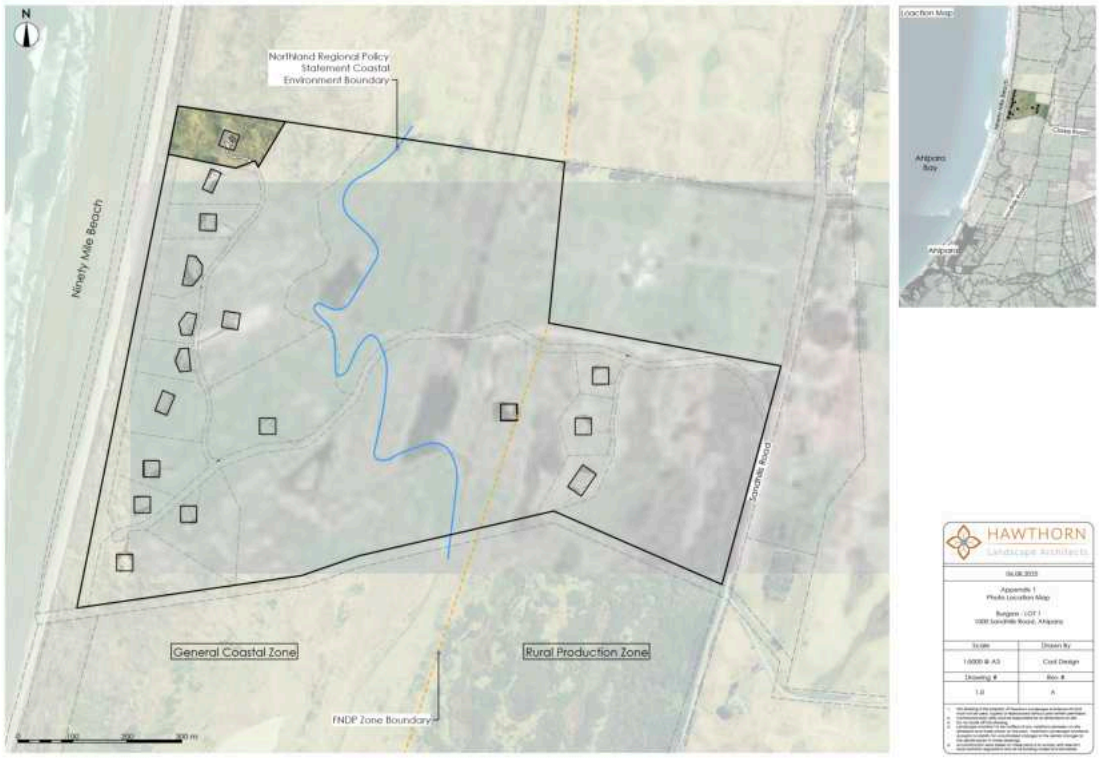

Figure 1: Site Plan showing the application site (Lot 1) set within Sandhills Estate

3.2 Application Site

The application site, Lot 1 is 1.6846ha in size and is situated at the northwestern corner of Sandhills Estate. The identified building platform is shown on the **Development Plans** contained in **Appendix 2**. This is almost centrally located within the lot.

An existing gravel driveway provides access off the main access lot to the consented building platform. A relatively level area on the site will be utilised as the building platform.

The building site is situated between rolling dunes to the north, south and east, with expansive views out to the west towards Ninety Mile Beach. The building site is approximately 130m to the east of the dune drop off onto the beach below. **(Refer to Appendix 3 - On Site Photographs).**

3.3 Neighbourhood Context

The site and surrounding terrestrial landscape are characterised by the rolling pastoral dune system that extends inland from Ninety Mile Beach to Sandhills Road. The undulating contour results in high points and crater like low areas that sometimes accommodate small ponds or wetland areas.

The foredunes abutting the beach create a physical and intermittently obscured visual barrier between the beach and the pastoral land beyond. The foredunes are typically vegetated with a mix of native dune species including Spinifex and Muehlenbeckia. Within the wider landscape particularly to the north of the site towards Waipapakauri there are large areas of pine plantations that extend right to the beach edge.

Built development is present within the surrounding landscape setting. Some dwellings have been located closer to the beach while others are set further inland on the undulating crests of the farmed backdune system. Some of the houses are noticeable in the landscape due to their lack of landscape integration plantings and reflective colours.

The nearby Ninety Mile Beach has a sense of remoteness and wilderness about it. There is a relative lack of built development visible from the beach due to the height of the dune scarp.

4.0 THE PROPOSAL

4.1 Proposed Dwelling

The proposed dwelling will be located within the consented building envelope as shown on the Development Plans contained in **Appendix 2** and **Figure 2.**

The small dwelling (total area of 55.18m^2) is made up of three related "pods" linked by decking areas, some covered. The pods are visually similar in height, style, colour and building materials so that they read as one dwelling. The cohesiveness of the design and colour of the pods create an aesthetically pleasing overall appearance.

Pod 1 contains bedrooms 1 and 2, Pod 2 accommodates the living space, and Pod 3 contains the kitchen, dining, bathroom and laundry areas.

The dwelling will be located within a low point between dunes. The dwelling has a backdrop of rolling dunes hills to the south, east and northeast that enable the structures to be nestled into the landscape. The architectural design thus is very responsive to the natural contours and landform. The building height is within the consented maximum limit.

The roof will be dark grey MAXAM Corrugate roofing and exterior cladding a mix of dark grey Custom Orb vertical corrugate cladding and PLY with a brown stain finish. There will be a polycarbonate sunroof over the internal decking area between the pods.

The exterior of the dwelling is required to have a reflectance value of not more that 35% according to the BS5252 colour chart. The proposed colours will comply with this, refer to Appendix 2.

The proposed structures have been assessed against the "Principals for Design – Buildings" within the Sandhills Estate Master Plan and the Sandhills Estate Allotment Management Plan and comply with those provisions. Refer to **Appendices 6 and 7**. A summary of this assessment is provided in **Appendix 8 – Table 1**.

Figure 2: Plan & Elevation view

4.2 Landscape Plan

Landscaping will be implemented around the dwelling in the curtilage area. This planting will assist with integrating the building and associated activities into the landscape. This will minimise potential adverse effects upon coastal natural character and visual amenity values. Refer to the Landscape Plan contained in **Appendix 5 and Figure 3.**

The structural planting shown on the Landscape Plan consists of Pohutukawa, Ngaio, Pseudopanax, Pittosporum and Cabbage trees. These trees and the other shrub plantings such as Flax will tie the proposed dwelling into the natural surroundings.

The landscape plantings utilise naturally occurring native plantings that will seamlessly blend the development into the existing vegetation patterns.

The Landscape Plan has been prepared following the guidelines in Appendix C – Sandhills Estate Master Plan.

Figure 3: Landscape Plan

5.0 ASSESSEMNT OF LANDSCAPE AND VISUAL EFFECTS

5.1 Introduction

The landscape and visual effects assessment process provides a framework for assessing and identifying the nature and significance of potential landscape and visual effects that may result from a proposed development. Such effects can occur

in relation to changes to physical elements and existing character of the landscape and impacts on viewing audiences and visual amenity.

The existing landscape and it's a visual context form the baseline for landscape and visual effects assessments. The assessment of visual effects considers how changes to the physical landscape affect the viewing audience.

In assessing effects on landscape there is a distinction made between landscape effects (effects on the character and amenity of a landscape, this may not be visible to the general public), and visual effects (the response of a viewing audience, principally from public viewing positions, but also surrounding privately owned properties).

These effects are assessed in terms of the degree of change brought about by a development. The degree of landscape and visual effects resulting from a development may be negative (adverse), or positive (beneficial), contributing to the visual character and quality of the environment.

The landscape and visual effects assessment will consider the following:

- Visual amenity effects from the identified viewing positions.
- Landscape effects, resulting from the physical modification of the site, including any vegetation removal and changes to the landform.
- Landscape character effects generated from the proposal, including how well the architectural treatment of the building integrates the proposal into its landscape context.

5.2 Visual Effects

The potential visual effects of this development will be generated by any visual changes to the landscape because of the proposal, with the significance of the effects measured by the response of a particular viewing audience.

This is influenced by the degree of visibility, whether the proposal is the focal point or part of a wider view, whether the view is transient or permanent and the degree of contrast with the surrounding environment. The visual qualities of the proposal and the ability to integrate any change within this landscape setting also influences the degree of effects.

The degree of adverse visual effects generated by a proposal also depends upon the character of the surrounding landscape (the context), existing levels of development on the application site, the contour of the land, the presence or absence of screening and/or backdrop vegetation, and the characteristics of the future activities facilitated by the application.

The existing landscape and its visual context contribute to the existing baseline for this landscape and visual effects assessment.

The existing landscape or 'environment' to use as the baseline for this assessment also includes the future state of the landscape or environment. In this instance the landscape that the site is located within is part of the Sandhills Estate subdivision that has consent for 16 residential dwellings to be developed following architectural and

landscape design guidelines and other provisions of the Sandhills Estate Master Plan and Allotment Management Plan.

This assessment will establish the potential visibility of the proposed dwelling and determine who the potentially effected viewing audience is, the degree of change brought about by the proposed development, and if there will be any potential adverse visual effects associated with this.

The photographs contained in **Appendix 4** Off Site Viewpoints depict representative viewing positions that illustrate the potential view of the application site. The location of the viewpoints is shown in **Appendix 1** – Location Map.

Viewpoints 1 - 3

These viewing positions are located on the top of the dunes that back Ninety Mile Beach. This land is a Scenic Reserve that runs parallel with the beach and is only accessible publicly from the beach.

Due to the vertical 3-4m drop from the top of the dunes to the beach below, access to this part of the Scenic Reserve for the public is somewhat impractical. This significantly limits the viewing audience who will potentially visit this area of the reserve that is located to the west of the building site.

Most users of Ninety Mile Beach frequent the open flat beach area between the water's edge, and the dune face (most often in vehicles) so will not view this area or the proposed dwelling.

If a visitor to Ninety Mile Beach was to venture up to the top of the dune along the reserve their view of the site which is approximately 100m away would be temporary and constantly changing as they walk by, as depicted in Viewpoints 1 – 3. Their view would also take in the expansive coastal and dune landscapes. The proposed dwelling will form a very small part of the overall view on offer.

Most of the dwelling will be screened from view by the surrounding undulating dune landscape and the foreground plantings of flax that are positioned along the top of the foreground dune to the west of the building site.

The proposed dwelling will be positioned within the consented building envelope and will be viewed with a land backdrop and will not be visible on a skyline. This greatly enhances the ability of the landscape to visually absorb the built form while minimising any potential adverse visual effects.

The small size of the dwelling and the recessive colours will limit the potential visibility of the structure when viewed from the reserve and the coastal environment. The proposed landscape amenity plantings will integrate the dwelling into the landscape so that it is recessive and subordinate to the natural surroundings.

Overall, the proposal will be nestled into the landscape through appropriate siting and through the implementation of the landscape integration plantings. This will blend the dwelling into the landscape whilst minimising any potential adverse visual effects to a low level (less than minor).

5.3 Landscape Effects

Potential landscape effects of a development can be generated by either landform or land-cover modification or may be more subtle such as influencing the overall pattern and character of the landscape.

Landscape character is the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects combinations of geology, landform, soils, vegetation, land use and human settlement.

The significance of the landscape effects will be determined by the extent of the change, the sensitivity of the landscape, its context, existing levels of development surrounding the site and the contour of the land.

It will also be dependent upon the presence or absence of screening and/or backdrop vegetation, and the characteristics of the future activities associated with the development on the application site.

Physical Landscape Effects

The earthworks associated with the proposal will be minimal as the foundation of the building is driven foundations and timber framed floor. The driveway to the building site already exists, and a parking and turning area will extend off this on a level part of the building envelope. The proposal will therefore not alter the landform in any significant way.

There is no vegetation removal required, so this will not alter any of the surrounding vegetation patterns or habitats of local fauna.

The main permanent physical effects on the landscape will be associated with the built form. Building and landscape design guidelines contained within the Sandhills Estate Master Plan and Allotment Management Plan will ensure that any built form placed on the approved building envelopes within the subdivision will be appropriate and visually recessive, thus not resulting in any adverse physical effects.

The proposed structures will be a visually recessive colour and located below the ridgeline of the surrounding dune slopes. The proposed landscape amenity plantings will minimise the presence of the built form upon the site so that it is integrated into the surrounding landscape setting.

Overall, is considered that the proposal will generate low adverse physical landscape effects, as the key characteristics and values of the site and surrounding landscape will be maintained.

Landscape Character Effects

The Far North District Plan maps identify that there are no Outstanding Landscape, Outstanding Landscape Features or Natural Features on or near the site. The Regional Policy Statement identifies that there are no identified Outstanding Natural Landscape, Outstanding Natural Features, High Natural Character or Outstanding natural Character areas on or near the site.

As such the property does not have any important physical, sensory or associative landscape attributes assigned to it within any of the statutory documents which would otherwise make it very sensitive to accommodating change.

The Sandhills Estate development has however undertaken extensive dunefield and wetland restoration planting as part of the subdivision development. This will enable lifestyle development in a setting where the prevailing rural character is maintained, and natural character values are protected and enhanced with buildings being effectively integrated into the landscape setting. Refer to **Appendix 7- Sandhills Estate Master Plan**.

The future development of residential activities on the 16 consented building envelopes within Sandhills Estate is an anticipated and accepted use within this landscape setting. The characteristics of the future activities associated with the development on these lots will be in context with the existing lifestyle living use on other land within this locality.

The proposed dwelling is located on the site where there is an existing formed building platform with the consented building envelope. The building site is set back approximately 120m from the foreshore of Ninety Mile Beach. Very long distant views from the beach near Ahipara are obtained, approximately 4km away. The dwelling will be visually recessive and will not impact upon the landscape and experiential values associated with Ninety Mile Beach.

The modest building height, recessive colouring, and the proposed landscape amenity plantings all assist with absorbing the dwelling into the landscape so that the development will not adversely affect the current landscape character values.

Overall, it is considered that the proposal will have a less than minor effect on the landscape character attributes of the wider landscape and coastal environment.

6. STATUTORY CONTEXT

6.1 Far North District Plan (FNDP)

Within the Operative Far North District Plan (FNDP) Lot 9 is zoned General Coastal. The Resource Map identifies that there are no Outstanding Landscape, Outstanding Landscape Features or Natural Features identified on the site.

The expected environmental outcomes of development within the General Coastal Zone is for an allowance of a wide range of activities providing the natural and physical resources are managed in a sustainable way and the natural character is preserved.

The following are the relevant landscape objectives found in Chapter 10 Section 6 General Coastal Zone.

General Coastal Zone

Objective 10.6.3.1

"To provide for appropriate subdivision, use and development consistent with the need to preserve its natural character".

Objective 10.6.3.2
"To preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development"

Objective 10.6.3.3
"To manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations".

Following are the relevant landscape policy's found in Chapter 10 Section 6 General Coastal Zone.

Policy 10.6.4.1
"That a wide range of activities be permitted in the General Coastal Zone, where their effects are compatible with the preservation of the natural character of the coastal environment".

Policy 10.6.4.2
"That the visual and landscape qualities of the coastal environment be protected from inappropriate subdivision, use and development".

Policy 10.6.4.3
"Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to S6 matters, and shall avoid adverse effects as far as practicable by using techniques including:

a) Clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;
b) Minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;

Policy 10.6.4.6
"The design, from, location and siting of earthworks shall have regard to the natural character of the landscape including terrain, landforms and indigenous vegetation and shall avoid, remedy or mitigate adverse effects on those features".

Comment:

The applicant's lot is part of a larger management plan subdivision containing 16 lifestyle lots with designated building envelopes. The Allotment Management Plan for the subdivision provides in depth detail about how the Sandhills Estate subdivision will be implemented so that the natural character, landscape and visual qualities of the coastal environment are protected. Refer to **Appendix 6 – Sandhills Estate Allotment Management Plan, Appendix 7 – Sandhills Estate Master Plan**.

The following extract sets out the goal of the Management Plan.

"The development of the Sandhills Estate is guided by the Sandhills Estate Master Plan (provided under separate cover and also attached to the Record of Title) which sets out the management principles and measures to be adopted to achieve the overall purpose of accommodating this lifestyle development in a setting where the prevailing rural character is maintained, where the natural character values are protected and enhanced and where buildings are integrated into their landscape setting.

The land within the Estate has mostly been retired from pastoral farming. The overall management aims are to restore indigenous vegetation and habitats typical of those formerly found on the Peninsula. The main habitat types being restored are the dunefield vegetation behind the beach, shrubland on the ridges found within the Estate, and wetlands within the flatter areas between the ridges. The restored habitats have the potential to support several threatened species whose status stems from loss or degradation of habitat through previous land use practices".

The Sandhills Estate development though the management plan subdivision has implemented design measures that will avoid potential adverse effects so that the natural character of the coastal environment is preserved. In addition, the restoration of the dune fields will result in positive effects upon habitat quality.

Through the implementation of the Sandhills Estate Management Plan the visual impact of buildings, development, and associated vegetation clearance and earthworks, will be minimised particularly as seen from public land and the coastal marine area

In summary there will be no vegetation clearance required, and the earthworks will be minimal. The proposed dwelling is small in scale and will not be viewed on a ridgeline. It will be integrated into the landscape through the addition of the landscape amenity plantings.

The development will be viewed as a very small change to the landscape scene and will be recessive and subtle so that the natural character and visual amenity values of the coastal environment are maintained.

10.6.5.3.1 Visual Amenity Rule

In addition to assessing the proposal against Visual Amenity Rule 10.6.5.3.1 the proposal has been assessed against the "Principals for Design – Buildings" within the Sandhills Estate Master Plan and the Sandhills Estate Allotment Management Plan. A summary of this assessment is provided in **Appendix 8 – Table 1**.

i. The location of the building;

The proposed dwelling is located within the consented building envelope for this lot. The dwelling will be located on an existing formed building site that has an existing driveway leading to it. This will minimise any additional earthworks required. The site is located approximately 120m back from the edge of Ninety Mile Beach and not readily visible from the foreshore.

ii. *The size, bulk and height of the building in relation to ridgelines and natural features;*

The dwelling is small in scale and will be set into the landscape and not viewed on a sensitive ridgeline. The modest building height enables the structure to be integrated into the surrounding undulating dune landform. It is not located near any identified natural features, and the site has not been identified as having any outstanding natural landscape values or high or outstanding natural character values.

iii. *The colour and reflectivity of the building;*

The exterior of the building will be visually recessive and have LRV's within the required 35% for this property. The proposed colours complement the rural and coastal location and will be visually recessive.

iv. *The extent to which planting can mitigate visual effects;*

The proposed landscape integration plantings located around the building site will partially screen and soften the view of the dwelling from the surrounding viewing positions, including from within the coastal marine area. This will minimise any potential adverse visual amenity effects to a low level.

v. *Any earthworks and or vegetation clearance associated with the building;*

There is no indigenous vegetation clearance associated with the development. The volume of earthworks associated with the development is very small.

vi. *The location and design of associated vehicle access, manoeuvring and parking areas;*

The building site is already serviced by an existing driveway. This will be extended to the house and a parking and manoeuvring area located to the southwest of the house within the consented building envelope.

vii. *The extent to which the building and any associated overhead utility lines will be visually obtrusive*

The utility services will not be overhead. The dwelling is low level and small in scale and situated below the ridgeline of the surrounding dunes. It will not be visually obtrusive as its size, height and colour are recessive and can be readily absorbed into the landscape.

viii. *The cumulative visual effects of all the buildings on the site;*

The 'dwelling' is made up of 3 pods that read as one dwelling. The structures will be connected by decking areas and a covered sunroof and viewed as a cohesive group, rather than a number of separate dwellings. The proposed landscape amenity plantings will also link the structures together and integrate them into the landscape. This will minimise any potential for cumulative visual effects of buildings on site.

ix. *The degree to which the landscape will retain the qualities that give it its naturalness, visual and amenity values;*

The Far North District Plan maps identify that there are no Outstanding Landscape, Outstanding Landscape Features or Natural Features on or near the site. The Regional Policy Statement identifies that there are no identified Outstanding Natural Landscape, Outstanding Natural Features, High Natural Character or Outstanding Natural Character areas on or near the site.

The landscape that the building site is set upon has been modified from its original state as there is a network of driveways to the 16 building sites present within the Sandhills Estate development.

The qualities that contribute to the naturalness of this landscape include the small pockets of wetland areas within the low areas of the dune system and the undeveloped foredune adjacent to Ninety Mile Beach. Recent wetland and dune restoration plantings at Sandhills Estate will see this landscape restored which will enhance the natural character values of the site.

The building site is not located next to a wetland, and there will be minimal earthworks and no vegetation removal is required. The site is located approximately 120m back from the edge of the beach and the main foredune which is relatively untouched, and natural looking will not be affected.

The proposed dwelling is in an appropriate location on the site and of a size, height, style and colour that is appropriate for this locality. The proposal will not diminish the qualities that give this landscape its naturalness, visual and amenity values.

x. *The extent to which private open space can be provided for future users;*

The property is of a size that enables ample private open space to be provided for the owners.

xi. *The extent to which siting, setback and design of buildings avoid visual dominance on landscapes, adjacent sites and the surrounding environment;*

The dwelling is located within the consented building envelope so will avoid any visual dominance on the immediate and surrounding environment. The dwelling will be located approximately 120m from the foreshore of Ninety Mile Beach. The structures are low single storey and will be recessively coloured. This is addition to the proposed landscape plantings will result in it being visually subordinate to the surrounding landscape.

xii. *The extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent site.*

The proposed dwelling will not adversely affect the privacy or outlook of private open space from adjoining sites.

6.2 Regional Policy Statement for Northland (RPS)

In 2012, the Northland Regional Mapping Project ("Mapping Project") was undertaken by the Northland Mapping Group (on behalf of the NRC). The purpose of the

Mapping Project was to determine the delineation of the Coastal Environment, and the natural heritage areas within the region comprising Outstanding Natural Landscapes ("ONL").

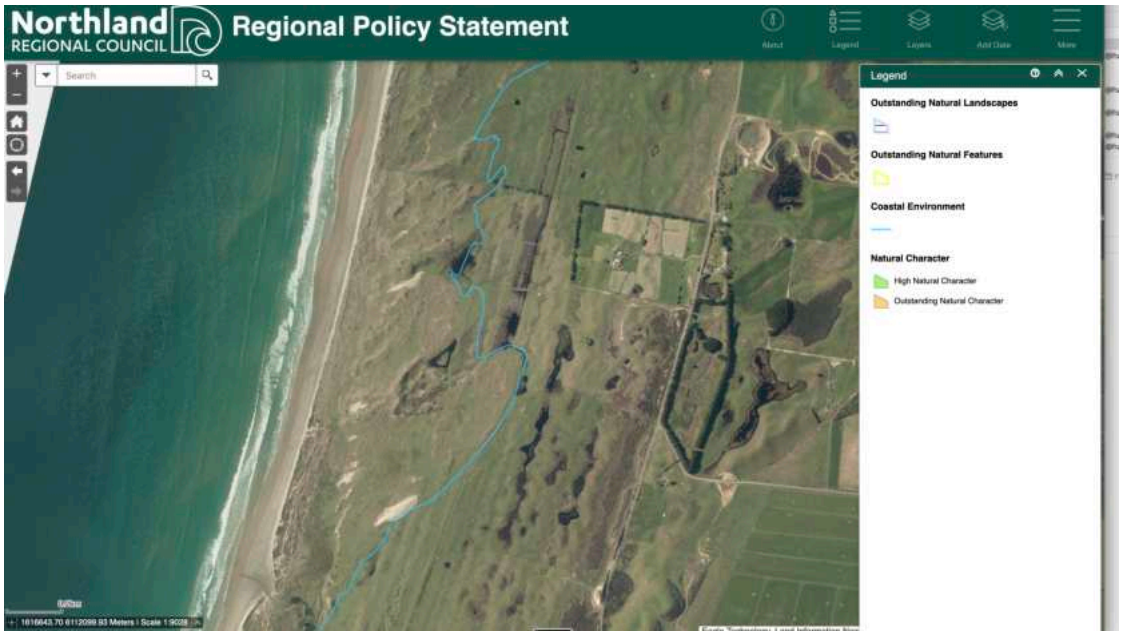

Figure 4: RPS Map showing that Lot 9 is located within the Coastal Environment

Policy 4.6.1
Managing effects on the characteristics and qualities natural character, natural features and landscape.

(1) In the coastal environment:

a) Avoid adverse effects of subdivision use and development on the characteristics and qualities which make up the outstanding values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes.

b) Where (a) does not apply, avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of subdivision, use and development on natural character, natural features and natural landscapes.

Methods which may achieve this include:

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

(ii) In areas of high natural character, minimising to the extent practicable indigenous vegetation clearance and modification (including earthworks/disturbance, structures, discharges and extraction of water) to natural wetlands, the beds of lakes, rivers and the coastal marine area and their margins; and

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

Comment:
The consented building envelope is located within the Coastal Environment, and has no identified ONL, ONF, HNC or ONC areas.

The development proposal includes measures to minimise the potential effects upon the coastal environment through appropriate exterior building colours which are recessive and integrate well into the landscape. There will be minimal earthworks and no vegetation clearance associated with the development. The proposed landscape amenity planting will soften the built form and blend it into the landscape.

The proposal will be sensitive to the characteristic qualities that make up the values of this coastal environment.

6.3 New Zealand Coastal Policy Statement

The site is located within the Coastal Environment. The following policies are of relevance. Policy 6 - Activities in the coastal environment, Policy 13 - Preservation of natural character, and Policy 15 Natural features and Natural Landscapes.

Policy 6 Activities in the coastal environment
(1) In relation to the coastal environment:

(f) consider where development that maintains the character of the existing built development should be encouraged, and where development resulting in a change in character would be acceptable;
(i) set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment;

Policy 13 Preservation of natural character
(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and
(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes and patterns;
(b) biophysical, ecological, geological and geomorphological aspects;
(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;
(d) the natural movement of water and sediment;
(e) the natural darkness of the night sky;

(f) places or areas that are wild or scenic;
(g) a range of natural character from pristine to modified; and
(h) experiential attributes, including the sounds and smell of the sea; and their context or setting.

Policy 15 Natural Features and natural landscapes
To protect the natural features and natural landscapes (including Seascapes) of the coastal environment from inappropriate subdivision, use and development.

(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and
(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment;

Comment:
The site has not been identified as being part of or having any ONL, ONF, HNC or ONC areas.

The Sandhills Estate subdivision has consent for 16 building sites located upon the 75.85ha site. The development has been accepted as an appropriate activity within this coastal environment and on this property providing development is undertaken in accordance with the Sandhills Estate Master Plan and Management Plan. The proposed development upon the site has been assessed and complies with the necessary landscape requirements of the Sandhills Estate Master Plan and Management Plan

The proposed landscape integration plantings and recessive colour of the buildings will assist with maintaining the existing character of this landscape setting and will not adversely affect the natural character values of the coastal environment.

7.0 Mitigation Measures

7.1 Landscape Plan

The Landscape Plan contained in **Appendix 5** identifies the areas around the building in the curtilage areas and feathering out into the House Site Integration Area that will be planted to provide a vegetated setting for the dwelling to be located within. This planting has been recommended to assist with minimising any potential adverse landscape and visual amenity effects to a low level (less than minor).

The key components of the planting include:

- Pohutukawa and Cabbage trees located around the building site to provide long term vertical height to ground the building,
- Native plantings of Pseudopanax, Ngaio, and Pittosporum to provide a bushy vegetated setting and backdrop to the building site,
- Flax plantings to the west of the building site to provide a vegetated foreground when viewed from the Scenic Reserve and beach area.

The landscape plantings utilise naturally occurring native species that will seamlessly blend the development into the existing vegetation patterns.

The Landscape Plan has been prepared following the guidelines in Appendix C – Sandhills Estate Master Plan.

8. CONCLUSION

The application site is located within the Sandhills Estate, a 75.85 ha lifestyle subdivision with 16 consented building sites, 13 of which have views out towards Ninety Mile Beach. The future development of residential activities on the 16 consented building envelopes within Sandhills Estate is an anticipated and accepted use within this landscape setting.

A Consent Notice requires the owner of this lot to comply with the provisions of the relevant Allotment Management Plan and Sandhills Estate Master Plan.

The applicant proposes to build a dwelling which consists of three "pods" that have a visually similar appearance and are connected by decking to form the dwelling. The cohesiveness of the building design and colours create an aesthetically pleasing overall appearance so that the pods are viewed as one dwelling site.

The proposal will not alter the landform and there is no vegetation removal required, so this will not alter any of the surrounding vegetation patterns or habitats of local fauna. This will ensure that the potential landscape effects will be very low.

The proposed structures will be visually recessive and located below the ridgeline of the surrounding dune slopes. The dwelling will be nestled into the landscape through the implementation of the landscape integration plantings. This will blend the built form into the landscape whilst minimising any potential adverse visual amenity effects to a low level.

The proposed structures have been assessed against the "Principals for Design – Buildings" within the Sandhills Estate Master Plan and the Sandhills Estate Allotment Management Plan and comply with those provisions.

The proposed landscaping located around the dwelling will minimise any potential adverse effects upon coastal natural character and visual amenity values. It utilises locally occurring native species and has been prepared following the guidelines in Appendix C – Sandhills Estate Master Plan.

The visual amenity, physical landscape effects and impact upon the natural character values of the coastal environment have been assessed as low (less than minor).

The Far North District Plan maps identify that there are no Outstanding Landscape, Outstanding Landscape Features or Natural Features on or near the site. The Regional Policy Statement identifies that there are no identified Outstanding Natural Landscape, Outstanding Natural Features, High Natural Character or Outstanding Natural Character areas on or near the site.

This is a development that is consistent with the relevant zone rules and assessment criteria found within the FNDP, NZCPS and RPS.

Christine Hawthorn

BLA (Hons.)
Hawthorn Landscape Architects Ltd.

N

Northland Regional Policy Statement Coastal Environment Boundary

3

2

1

Ninety Mile Beach

Tiromoana Way

Sandhills Road

General Coastal Zone

Rural Production Zone

FNDP Zone Boundary

0 100 200 300 m

Loaction Map

KEY

3 Viewpoints 1 - 3

HAWTHORN
Landscape Architects

11.08.2025

Appendix 1
Photo Location Map

Burgess Lockley Family Trust & KTP No 1 Trust
137 Tiromoana Way, Ahipara

Scale	Drawn By
1:5000 @ A3	Cad Design
Drawing #	Rev #
1.0	A

1. This drawing is the property of Hawthorn Landscape Architects Ltd and must not be used, copied or reproduced without prior written permission.
2. Contractors shall verify and be responsible for all dimensions on site.
3. Do not scale off this drawing.
4. Landscape Architect to be notified of any variations between on site dimensions and those shown on the plan. Hawthorn Landscape Architects accepts no liability for unauthorised changes to the details changes to the details shown in these drawings.
5. All construction work based on these plans is to comply with relevant local authority regulations and all NZ building codes and standards.

NEW TRANSPORTABLE DWELLING at LOT 1 DP 594744 , 137 TIROMOANA WAY, AHIPARA for CLM TRUSTEES LTD & KTP TRUSTEE SERVICES LTD

ARTISTIC IMPRESSION ONLY

ARCHITECTURAL DRAWINGS

Sheet	Layout Name	REV
A00	COVER	BC-C-3
A01	OVERALL SITE	BC-C-3
A02	PART SITE PLAN	BC-C-3
A03	REFERENCE FLOOR PLAN	BC-C-3
A04	FLOOR PLAN - POD 1 & 2	BC-C-3
A05	FLOOR PLAN - POD 3	BC-C-3
A06	ELEVATIONS - SHEET 1	BC-C-3
A07	ELEVATION - SHEET 2	BC-C-3
A08	SECTION A-A	BC-C-3
A09	SECTION B-B & C-C	BC-C-3
A10	FOUNDATION & PILE LAYOUT	BC-C-3
A11	DECK PILE & FRAMING LAYOUT	BC-C-3
A12	FLOOR FRAMING PLAN - POD 1 & 2	BC-C-3
A13	FLOOR FRAMING PLAN - POD 3	BC-C-3
A14	DRAINAGE & SERVICES PLAN	BC-C-3
A15	LINTEL & WALL FRAMING PLAN - POD 1 & 2	BC-C-3
A16	LINTEL & WALL FRAMING PLAN - POD 3	BC-C-3
A17	BRACING PLAN	BC-C-3
A18	ROOF PLAN	BC-C-3
A19	ROOF FRAMING PLAN - POD 1 & 2	BC-C-3
A20	ROOF FRAMING PLAN - POD 3	BC-C-3
A21	POLYCARBONATE ROOF FRAMING PLAN	BC-C-3
A22	POLYCARBONATE ROOF KEY	BC-C-3
A23	WINDOW & DOOR SCHEDULE - SHEET 1	BC-C-3
A24	WINDOW & DOOR SCHEDULE - SHEET 2	BC-C-3
A25	TYPICAL FRAMING CONNECTIONS - SHEET 1	BC-C-3
A26	TYPICAL FRAMING CONNECTIONS - SHEET 2	BC-C-3
A27	TYPICAL FRAMING CONNECTIONS - SHEET 3	BC-C-3
A28	TYPICAL FRAMING CONNECTIONS - SHEET 4	BC-C-3
A29	DECK CONNECTION DETAILS	BC-C-3
A30	EXTERNAL STAIR & HANDRAIL DETAILS	BC-C-3
A31	TYPICAL CLADDING DETAILS	BC-C-3
A32	PLY CLADDING JOINERY DETAILS	BC-C-3
A33	PLY CLADDING DETAILS - SHEET 1	BC-C-3
A34	PLY CLADDING DETAILS - SHEET 2	BC-C-3
A35	CORRUGATE JOINERY DETAILS	BC-C-3
A36	CORRUGATE CLADDING DETAILS	BC-C-3
A37	CLADDING JUNCTION & FLASHING DETAILS	BC-C-3
A38	TYPICAL ROOF DETAILS	BC-C-3
A39	PLUMBING SCHEMATIC	BC-C-3
A40	E3/AS1 INTERNAL DETAILS	BC-C-3
A41	PLUMBING & DRAINAGE DETAILS	BC-C-3

ACCOMPANYING DOCUMENTS

Certificate of Title 1150142
Consent Notice 13153773.3
Land Covenants
Company Extract/s

CODW Designer
CODW Engineer

Engineers Drawings

Engineers PS1 & Calcs - rebated studs for bracingGIB EZYBrace Schedule H1 Compliance - BRANZ Calculation method
DesignIT Schedule & PS1
GIB EzyBrace Bracing schedules

Project Specification

Product Specifications & Manufacturers Literature

BC-C-3 18/08/2025

REVISION

BUILDING CONSENT

Lindholmdesign ARCHITECTURAL SERVICES

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Karin Lindholm Andreassen
LBP: Design 2: 107526

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NORTHPOINT

SITE DESCRIPTION:

LOT 1 DP 594744

SITE AREA: 1.6846ha more or less

WIND ZONE CALCULATION:
to BRANZ MAPS & NZS3604 Table 5.4:
VERY HIGH
TERRAIN: Open
SITE EXPOSURE: Exposed
TOPOGRAPHICAL CLASS: T2
- Outer Zone
- Moderate Gradient) = 0.16
Note: BRANZ MAPS indentify site within Very High Wind Zone

DISTRICT PLAN COMPLIANCE:
GENERAL COASTAL ZONE (Operative Plan)

VISUAL AMENITY: New Building area
Total Permitted:= New building for human habitation ≤ 25m2
Total Proposed: Proposed Dwelling Floor area =55.18m2 TOTAL
= RESOURCE CONSENT REQUIRED

RESIDENTIAL INTENSITY: Permitted 1 unit/20ha = COMPLIES

BUILDING HEIGHT:
Permitted: = 8m max
Proposed: = 4.1m max to apex = COMPLIES

SUNLIGHT: = COMPLIES

STORMWATER MANAGEMENT:
Proposed Total Roof Area: =94.70m2 (incl verandah)
Existing Driveway from survey measured: = 204.3m2 approx
Proposed Driveway (extended): = 110m2 approx (Extent to be confirmed on site)
Total Permitted: =10% max
Total Proposed: =409m2 approx =2.4% approx.
= COMPLIES

SETBACKS to BOUNDARIES:
Permitted =10m min
Proposed = >10m
= COMPLIES

EARTHWORKS VOLUME: Operative Plan
Total Permitted: = 300m3 max permitted in any 12month period
Proposed:
No earthworks proposed. Driven foundations and timber framed floor strucutre above extg ground level. Scrape to remove organic material under fottprint only.
Total Cut and Fill Proposed within 12mth period = COMPLIES

CUT/FILL FACE:
Permitted = ≤1.5m max cut face
Proposed: no cut or fill proposed = COMPLIES

EARTHWORKS PERMIT: NOT REQUIRED :
Earthworks less than han 500mm in depth and less than 50m3 as defined by Earthworks bylaw

HAIL/NES : NOT REQUIRED Not a HAIL site & soil disturbance less than 25m3 per 500m2 of site area.

1 Overall Site Plan 1:1000

2 Location Plan 1:12500

NOTES

1) All Services locations and connections shown indicative only.

2) Drainage to comply with AS/NZS3500

3) Drainage runs and services locations shown indicative only - all extg. services locations, invert levels, cable and drainage runs to be established on site by contractor prior to excavating for new building and or services.

4. Contours from Survey.

5. Floor level RL to be confirmed on site.

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
EQ ZONE: 1
SOIL CLASS: A - Refer to Geotech report
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
ROOF PITCH: 10
CLADDING WEIGHT: Light

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Karin Lindholm Andreassen
LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
OVERALL SITE

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:1000, 1:12500
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

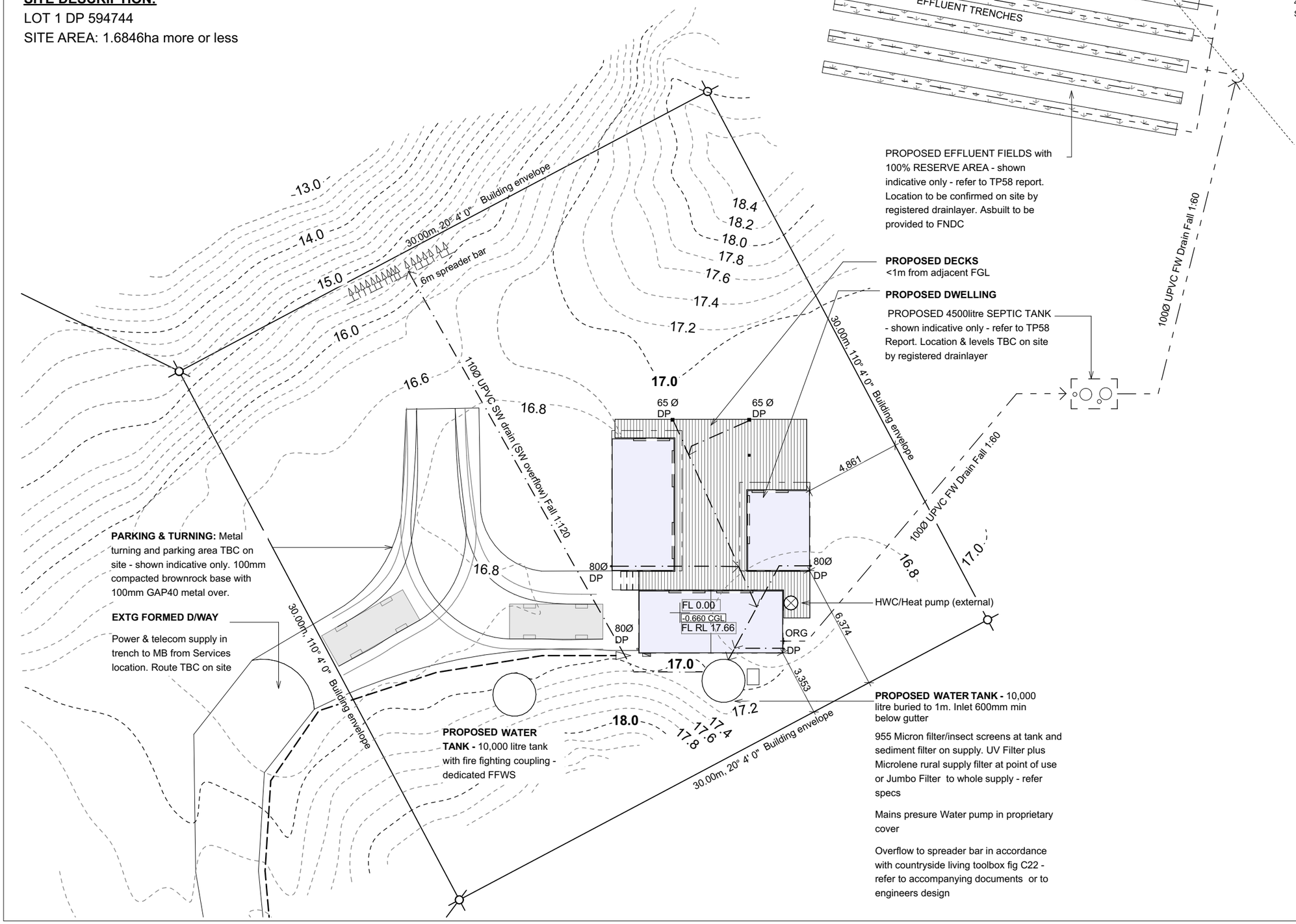
SHEET **A01**
REVISION NO. **BC-C-3**

NORTHPOINT

SITE DESCRIPTION:

LOT 1 DP 594744

SITE AREA: 1.6846ha more or less



NOTES

1) All Services locations and connections shown indicative only.

2) Drainage to comply with AS/NZS3500

3) Drainage runs and services locations shown indicative only - all extg. services locations, invert levels, cable and drainage runs to be established on site by contractor prior to excavating for new building and or services.

4. Contours indicative only from SURVEY drawing provided by Von Sturmers surveyors , Kaitaia (one tree point datum 1964)

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KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
PART SITE PLAN

PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:200
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A02**

REVISION NO. **BC-C-3**

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: **VERY HIGH**
EXPOSURE ZONE: Designed to exposure **D**
SUBSOIL CLASSIFICATION: C - Refer to Geotech report**SOIL CLASS**: A - Refer to Geotech report
ROOF PITCH: 10 degrees
ROOF WEIGHT: LIGHT
CLADDING WEIGHT:LIGHT

PLAN AREAS: approx
POD 1 FLOOR AREA= 20.46m2 POD 1
POD 2 FLOOR AREA=12.40m2 POD 2
POD 3 FLOOR AREA =22.32m2 POD 3
TOTAL FLOOR AREA: =55.18m2 TOTAL

POD 1 ROOF AREA =24.80m2 POD 1
POD 2 ROOF AREA=15.62m2 POD 2
POD 3 ROOF AREA =22.95m2 POD 3
TOTAL ROOF AREA =94.70m2 (incl verandah)

KEY:

External Cladding 1: 12mm H3.1 PLY cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

Typical timber walls: H1.2 SG8 timber framing

W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

Roof line

Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1

INSULATION: Minimum requirements to habitable spaces comply to with NZBC H1: 5th Edition (Refer to BRANZ Calculation Method in accompanying documents)

POD 1 & 2: R4.5 min insulation to rafter depth
POD 3: R3.6 min insulation to rafter depth
R2.6 min insulation to exterior walls
R2.6min insulation to timber floors
IGU to exterior windows/doors - refer to window schedule

PLY to ceilings and PLASTERBOARD to walls

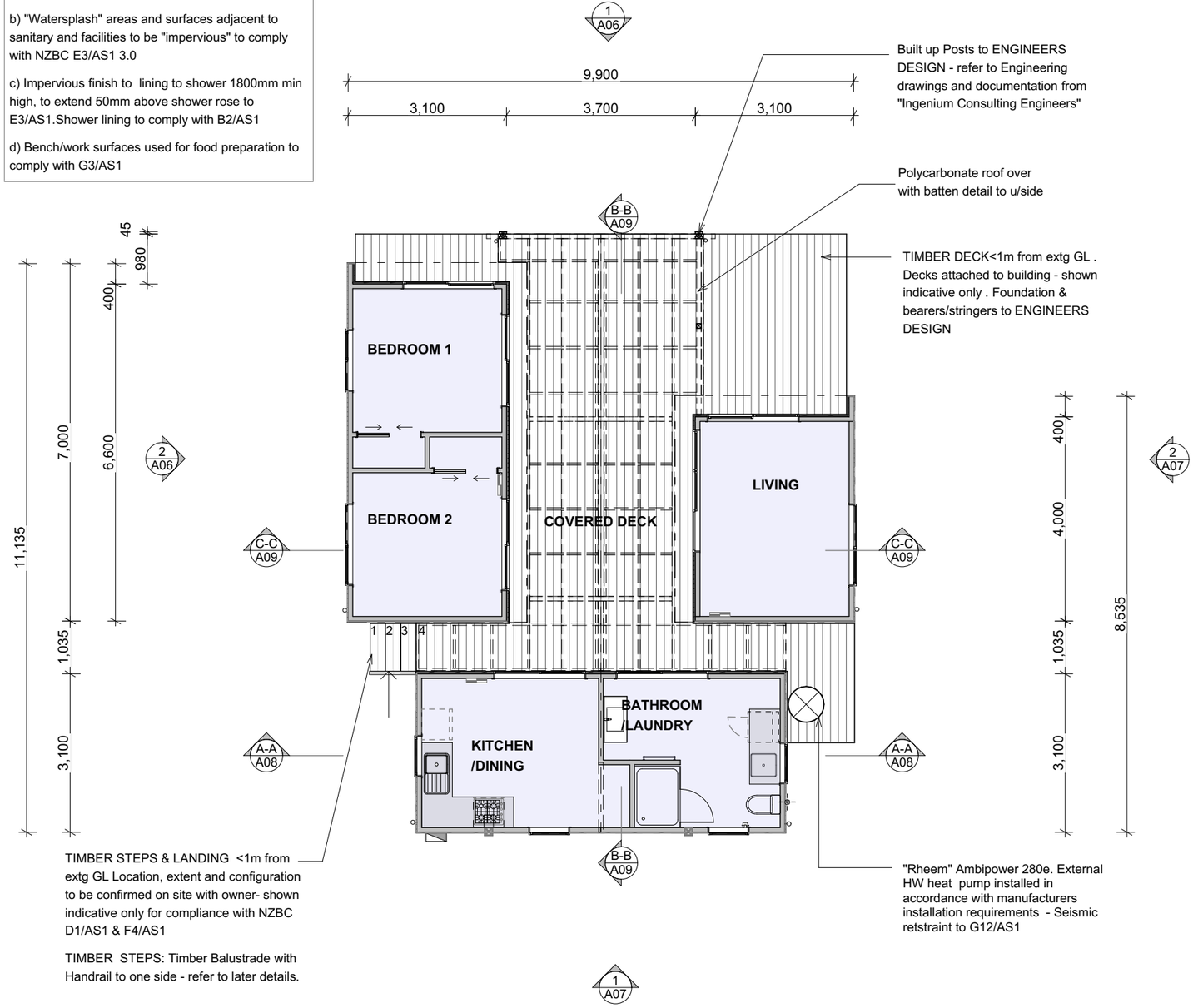
INTERIOR FINISHES: to comply with E3/AS1

a) Seal around all penetrations and at junctions of wall/floor finishes with approved mould resistant silicone sealant to all water splash areas and kitchen benches and between vinyl flooring and pre-primed timber skirting.

b) "Watersplash" areas and surfaces adjacent to sanitary and facilities to be "impervious" to comply with NZBC E3/AS1 3.0

c) Impervious finish to lining to shower 1800mm min high, to extend 50mm above shower rose to E3/AS1.Shower lining to comply with B2/AS1

d) Bench/work surfaces used for food preparation to comply with G3/AS1



NORTHPOINT

NOTES

1) All construction to be in accordance with NZS3604:2011 & the NZBC Acceptable Solutions unless Specifically designed or Alternative Solution approved by BCA .

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3) Setout dimensions are to timber framing.

4) Timber wall framing to be H1.2 SG8 unless specified otherwise. Nogs at 800mm max ctrs typically or as required by cladding manufacturer.

5)Builder to fix additional nogging at framing stage for wall hung cabinetry, W'robe & fixed shelving, WC Cistern, towel rails, toilet roll holders, etc as required

6)External window & Door dimensions are nominal frame sizes. Refer to joinery manufacturers schedule for trim sizes.

7) Internal Doors are leaf sizes. Framing to allow for door frame and tolerances.

8) All recessed light fixtures to be CA rated to comply with AS/NZS 605982.2 (Insulation to comply with AS/NZS 60695.11.5)

9) All electrical work by registered electrician to comply with Electricity regulations, NZ Standards, NZBC and LA requirements. Electrician to provide compliance certificate.

BUILDING CONSENT

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LBP: Design 2: 107526

NEW TRANSPORTABLE DWELLING
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KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
REFERENCE FLOOR PLAN

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:100, 1:200
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET **A03**
REVISION NO. **BC-C-3**

KEY:

External Cladding 1: 12mm H3.1 PLY cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

Typical timber walls: H1.2 SG8 timber framing

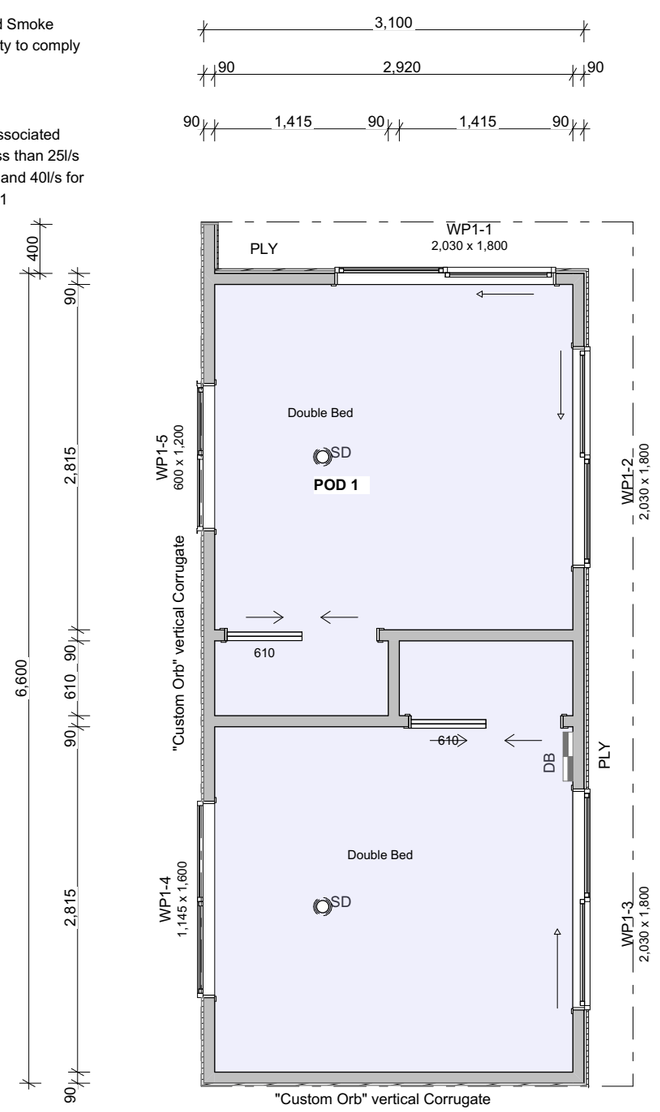
W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

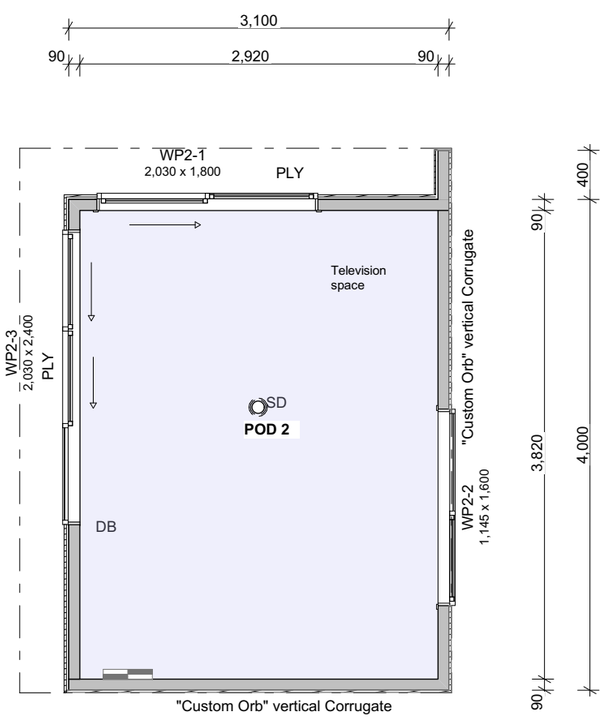
Roof line

Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1





NOTES

1) Refer to A03 for notes

BUILDING CONSENT

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LBP: Design 2: 107526

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KTP TRUSTEE SERVICES LTD
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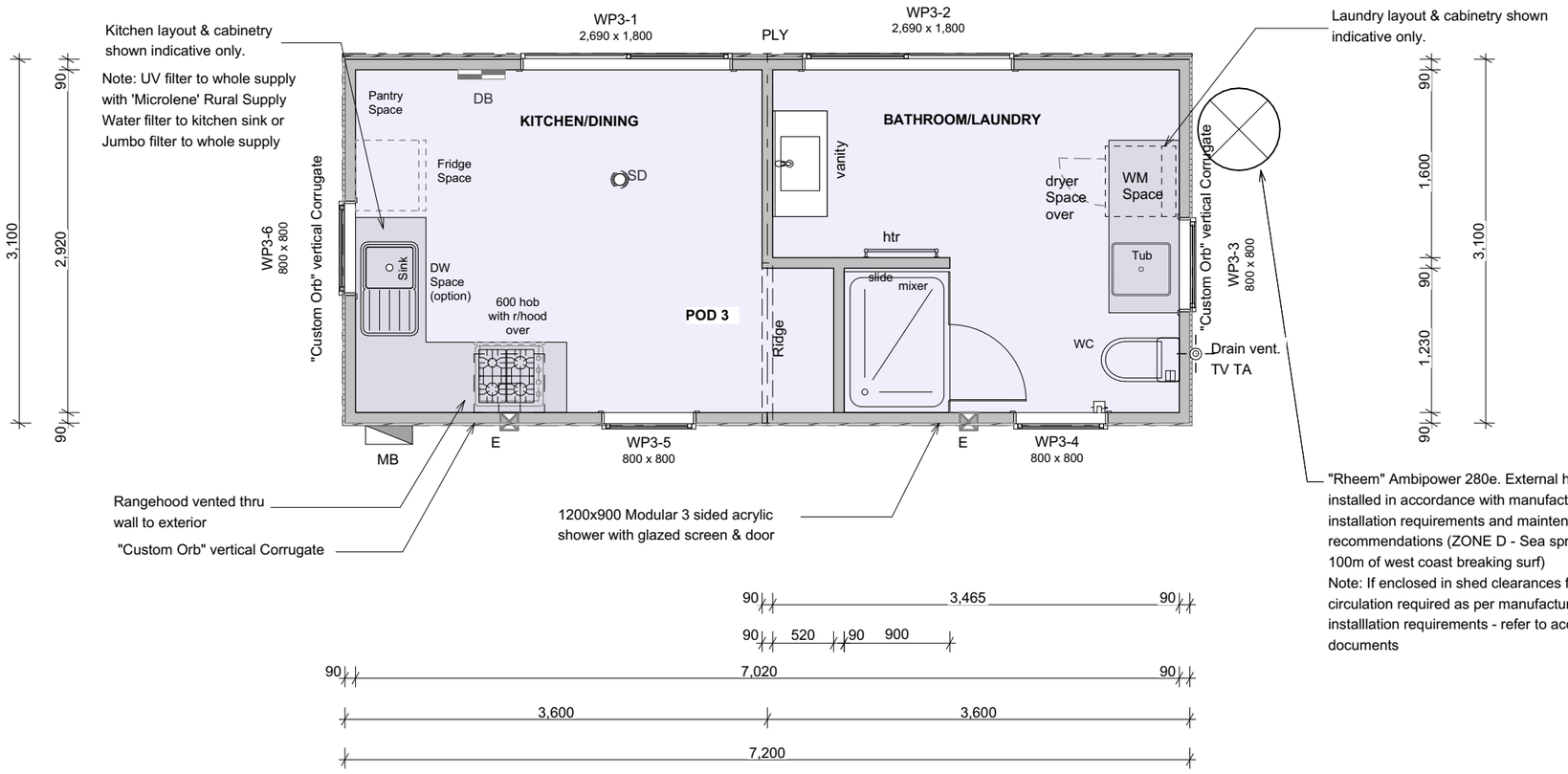
LOT 1 DP 594744

SHEET TITLE
FLOOR PLAN - POD 1 & 2

PROJECT No:	MD-25 SANDHILLS	SHEET A04
SHEET SIZE:	A3	
SCALE:	1:50	
DRAWN:	Karin Lindholm Andreassen	REVISION NO. BC-C-3
DATE:	18/08/2025	



NOTES

1) Refer to A03 for notes

KEY:

External Cladding 1: 12mm H3.1 PLY cladding on drained and vented cavity to comply with E2/AS1. Selected stain finish

External Cladding 2: "Custom Orb" vertical Corrugate Pre-painted cladding

Typical timber walls: H1.2 SG8 timber framing

W1 Window/Door Reference. All units to be DOUBLE glazed aluminium to comply with H1: 5th Edition. Safety Glazing to comply with NZS4223: Human impact safety requirements

Roof line

Sheet vinyl flooring throughtout - refer to spec

SD Interconnected wireless or hardwired Smoke Detectors with 60 Second hush facility to comply with NZBC C/AS1 & F7/AS1

E Extract ducted to exterior - thru wall. Mechanical extract fans (including associated ducting) must have a flowrate not less than 25l/s for shower space , 50l/s for Kitchen and 40l/s for laundry to comply with NZBC G4/AS1

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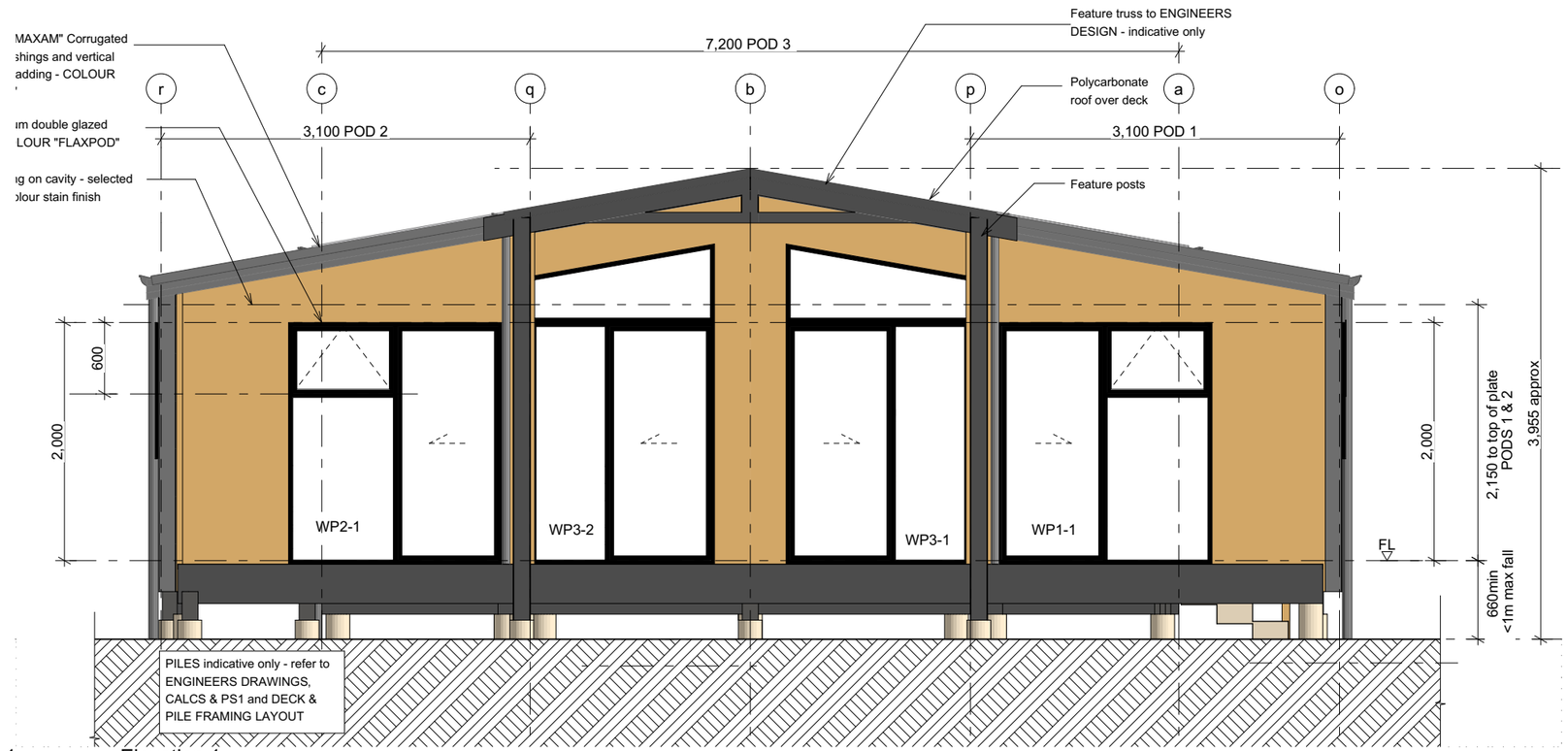
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
FLOOR PLAN - POD 3

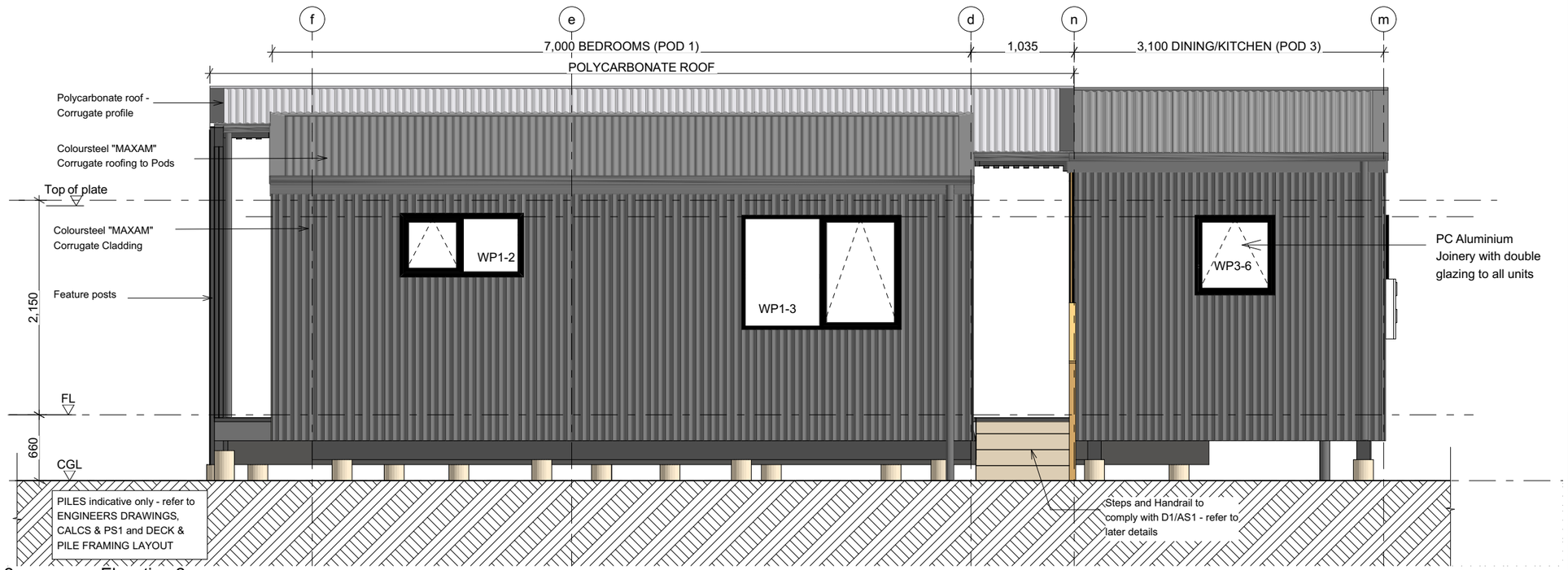
PROJECT No:	MD-25 SANDHILLS
SHEET SIZE:	A3
SCALE:	1:50
DRAWN:	Karin Lindholm Andreassen
DATE:	18/08/2025

SHEET **A05**

REVISION NO. **BC-C-3**



1 Elevation 1



2 Elevation 2

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3)External joinery shown indicative - refer to window manufacturers schedule for configurations.

4) Ground levels shown indicative

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
SOIL CLASS: A - Refer to Geotech report
ROOF PITCH: Typical 10 degrees
CLADDING WEIGHT:LIGHT

BUILDING CONSENT

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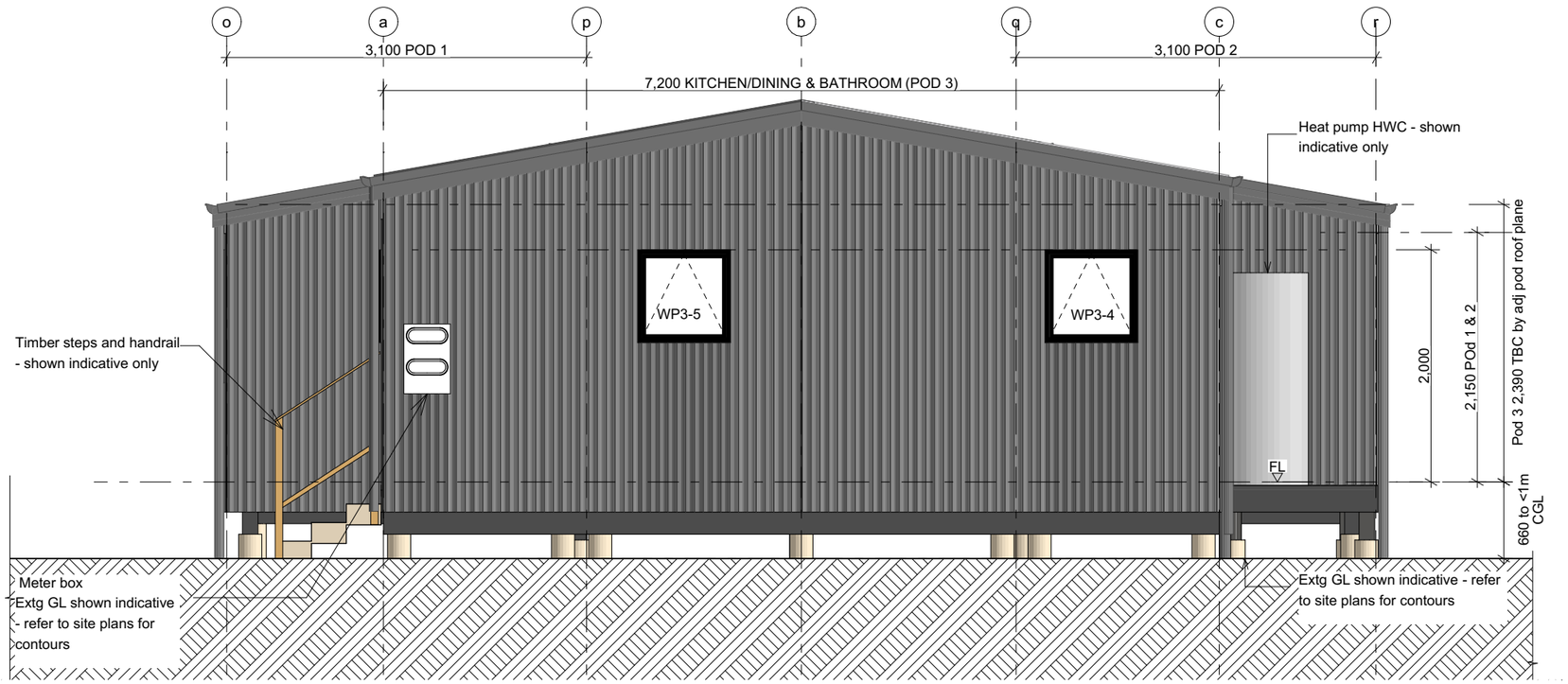
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

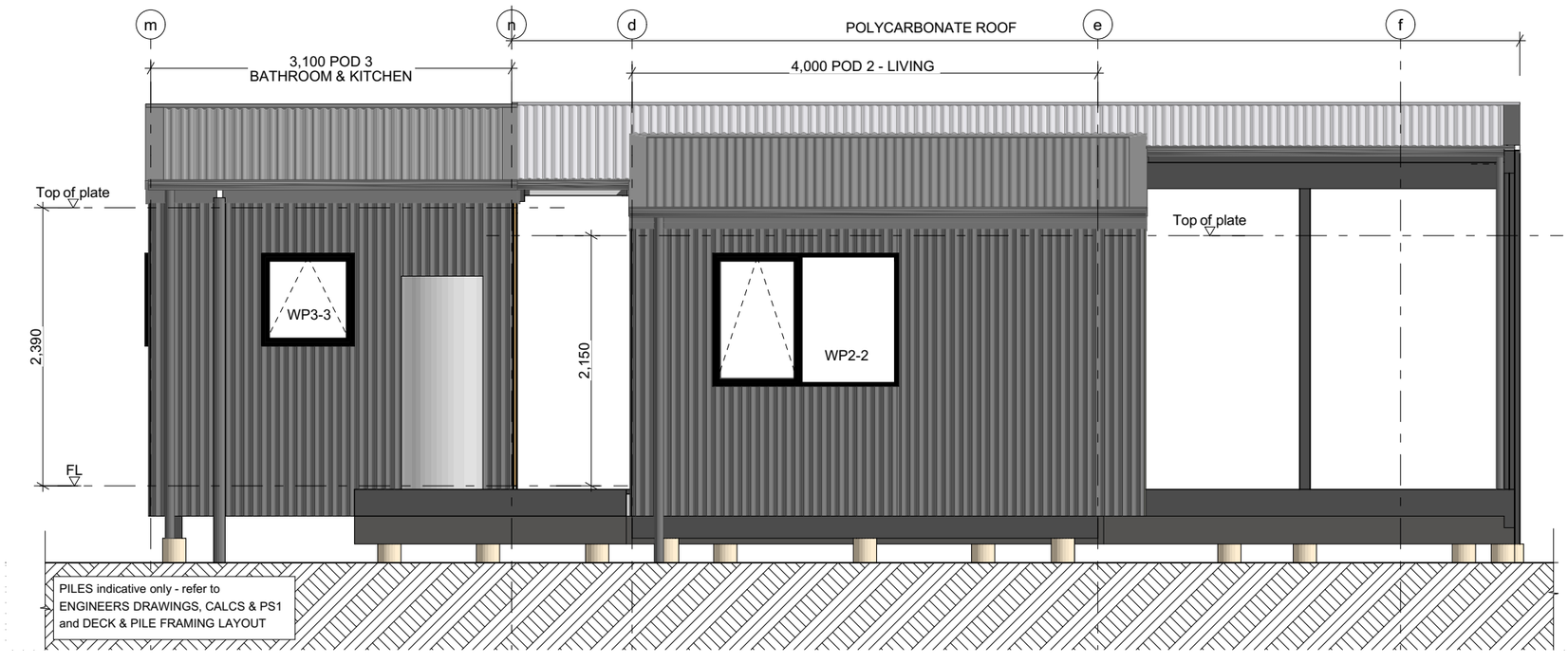
SHEET TITLE
ELEVATIONS - SHEET 1

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A06
REVISION NO.
BC-C-3



1 Elevation 3



2 Elevation 4

NOTES

1) All construction to be in accordance with NZS3604:2011 the NZBC unless specifically designed.

2) Durability of fixings and materials to comply with NZS3604:2011 Section 4 and NZBC B2/AS1

3)External joinery shown indicative - refer to window manufacturers schedule for configurations.

4) Ground levels shown indicative

GENERAL NOTES:
PLANNING ZONE: GENERAL COASTAL ZONE
WIND ZONE: VERY HIGH
EXPOSURE ZONE: D
SUBSOIL CLASSIFICATION: C - Refer to Geotech report
SOIL CLASS: A - Refer to Geotech report
ROOF PITCH: Typical 10 degrees
CLADDING WEIGHT:LIGHT

BUILDING CONSENT

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LBP: Design 2: 107526

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CLM TRUSTEES LTD &
KTP TRUSTEE SERVICES LTD
137 TIROMOANA WAY, AHIPARA,
LOT 1 DP 594744

SHEET TITLE
ELEVATION - SHEET 2

PROJECT No:MD-25 SANDHILLS
SHEET SIZE: A3
SCALE: 1:50
DRAWN: Karin Lindholm Andreassen
DATE: 18/08/2025

SHEET
A07
REVISION NO.
BC-C-3

Photo 1 – View from the house site looking southwest towards Ahipara

Photo 2 – View across the house site in the foreground with Ninety Mile beach and Ahipara in the background

Photo 3 – View of the proposed house site, beyond the container and caravan.

Photo 4 – View of the house site and looking to the northwest towards Ninety Mile beach.

Viewpoint 1 – Located approximately 100m to the south west of the building site on the Scenic Reserve that backs Ninety Mile beach.

Viewpoint 2 – Located approximately 100m to the west of the building site on the Scenic Reserve that backs Ninety Mile beach.

HAWTHORN
Landscape Architects

Off Site Viewpoints

Burgess Lockley Family Trust & KTP No 1 Trust
Lot 1 - 1000 Sandhills Road, Ahipara
Proposed Dwelling

Viewpoint 3 – Located approximately 100m a little further to the west of the building site on the Scenic Reserve that backs Ninety Mile beach.

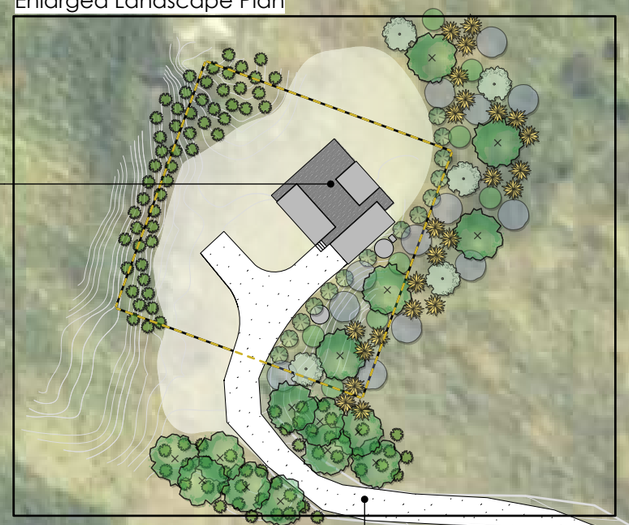
HAWTHORN
Landscape Architects

Off Site Viewpoints

Burgess Lockley Family Trust & KTP No 1 Trust
Lot 1 - 1000 Sandhills Road, Ahipara
Proposed Dwelling

N

Enlarged Landscape Plan



Proposed house

Proposed driveway

0 25 35 45 m

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Appendix 5

Overall Landscape Plan

Burgess Lockley Family Trust & KTP No 1 Trust
137 Tiromoana Way, Ahipara

Scale	Drawn By
1:700 @ A3	Cad Design
Drawing #	Rev #
1.0	A

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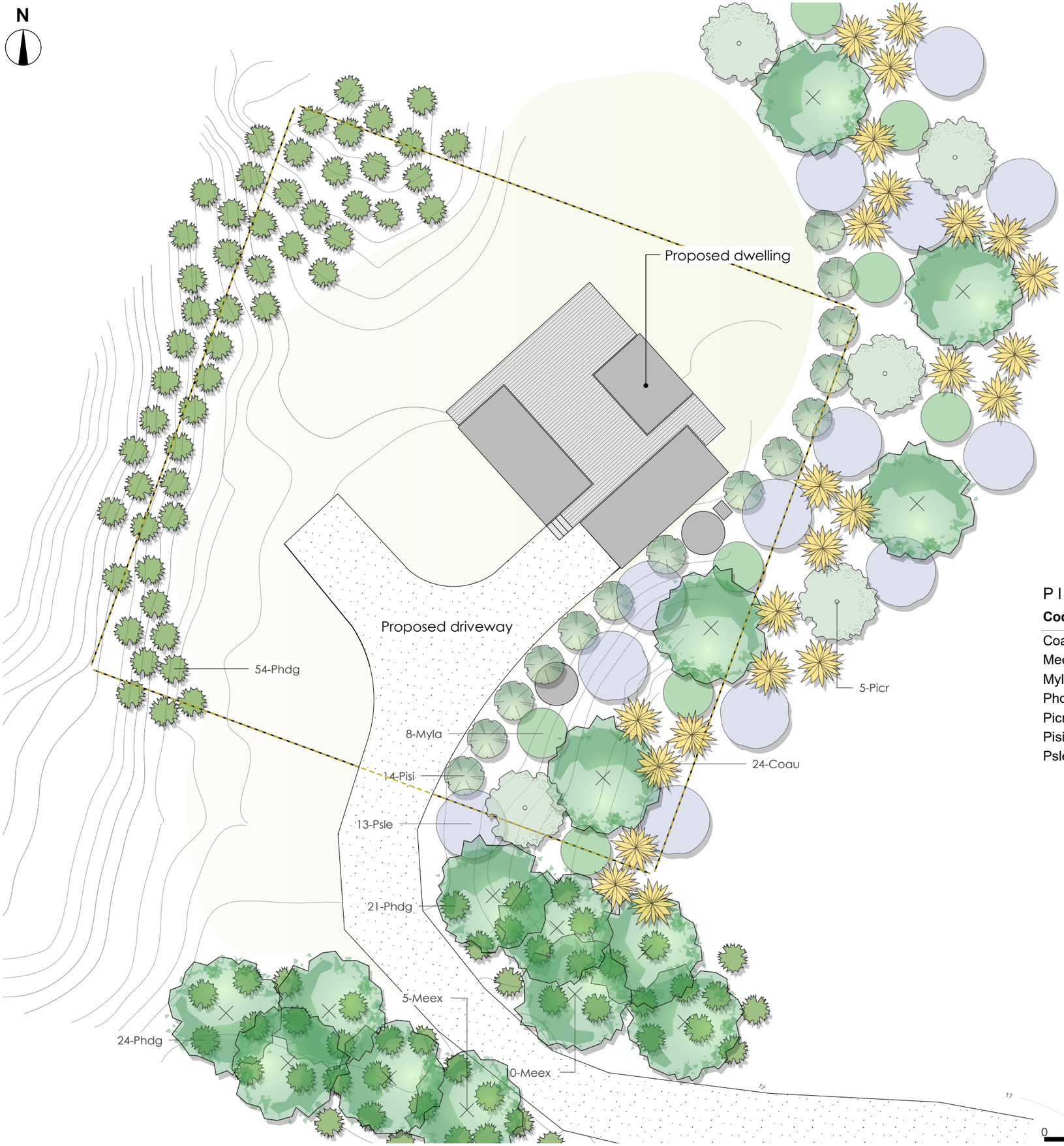

Plant Schedule

Code	Qty	Botanical Name	Common Name	Schedule Size
Coau	24	Cordyline australis	Cabbage Palm	PB5
Meex	15	Metrosideros excelsa	Pohutukawa	PB18
Myla	8	Myoporum laetum	Ngaio	PB5
Phdg	99	Phormium 'Green Dwarf'	Dwarf Flax	PB5
Picr	5	Pittosporum crassifolium	Karo	PB5
Pisi	14	Pittosporum Ralphii Stephens Island	Stephen Is. Pitto	PB5
Psle	13	Pseudopanax lessonii	Five finger	PB5

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Appendix 5

Enlarged Landscape Plan

Burgess Lockley Family Trust & KTP No 1 Trust
137 Tiromoana Way, Ahipara

Scale	Drawn By
1:200 @ A3	Cad Design
Drawing #	Rev #
2.0	A

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Plant Palette

Coau
Cordyline australis

Meex
Metrosideros excelsa

Myla
Myoporum laetum

Phdg
Phormium ‘Green Dwarf’

Picr
Pittosporum crassifolium

Pisi
Pittosporum Ralphii Stephens Island

Psle
Pseudopanax lessonii

Plant Schedule

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Plant Palette & Schedule

Burgess Lockley Family Trust & KTP No 1 Trust
137 Tiromoana Way, Ahipara

Scale	Drawn By
1:200 @ A3	Cad Design
Drawing #	Rev #
3.0	A

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Landscape Planting Implementation + Maintenance

Implementation Scope

The scope of the planting is:

i. Preparation of planting areas;

ii. Timing of planting;

iii. Plant material;

iv. Siting of plants in accordance with the planting plan;

v. Planting;

vi. Watering in newly planted shrubs, and;

vii. General maintenance, and;

viii. Weed pest and disease control.

Preparation of Planting Areas

i. Undertake clearance of any exotic weed species. No native vegetation shall be removed.
ii. The initial weed control should be carried out during the autumn months prior to the winter planting, when plants are still actively growing and therefore more susceptible to herbicides.
iii. Blanket spray planting areas three weeks before planting. A follow up spray should be applied if required.
iv. Apart from grasses one of the main weeds that may require spraying is gorse. For gorse the following is recommended:

For Gorse spray:
- Spray with 5g metsulfuron-methyl (600g/kg e.g. Escort®) + 10 ml penetrant per 10 litres water; or
- Gun and hose at a rate of 35g metsulfuron-methyl + 100ml penetrant per 100 litres water.

For grasses spray:
- Spray 100ml glyphosate (e.g. Roundup)+ 20ml penetrant per 10litres water

Timing of Planting

i. Planting shall only be undertaken between the months of April to September. If planting is undertaken early or late in the season, plants should be irrigated during any dry periods.

Plant Material

i. Plants shall be purchased from a reputable nursery. All plants shall be best nursery stock, being healthy and vigorous. Root systems shall be well developed and in balance with the amount of foliage growth of the plant.
ii. Root-bound plants or those with badly spiraling root systems shall not be acceptable. Plants should have a root ball of fine, fresh root growth. This should be sliced through vertically with a sharp knife when removing the planter bag.
iii. Plants are to be planted as soon as possible after delivery and no later than 3 days after delivery.

Siting of Plants

i. Planting shall be in accordance with and as shown on the Proposed Landscape Concept Plans.

Planting

i. In areas where mass planting/total vegetation replacement is proposed a 150mm layer of 50/50 mix locally sourced compost and topsoil should be placed over the whole area to recieve planting. More of this soil/compost mix should also be mixed into individual plant holes during planting (as described below).
ii. Hessian matting to be placed over any steeper areas or those close to a water source to prevent excessive runoff.
iii. Plants should be well watered in their containers prior to planting.
iv. Holes for the larger (pb3 and above) plants should be dug approximately 1.5 times wider that the root ball, so that the roots are not cramped. Some loose soil should be left in the bottom of the hole to aid root growth and drainage.
v. Approximately one tablespoon of good quality eighteen to twenty-four month slowrelease fertiliser should be placed in the bottom of the plant hole, and mixed in with the loose soil, ensuring that the fertiliser is not sitting directly on the roots (as it may burn them).
vi. Soil returned around the roots should be firmed with the foot, with a small amount of loose soil left at the top of the hole.
vii. Holes for large plants may exceed the depth of topsoil. In these cases the subsoil is to be thoroughly broken and well mixed with topsoil, which has been added as a 100mm layer to the bottom of the planting hole. Any compacted soil pan is to be thoroughly broken by relevant measures ensuring good root penetration and drainage.
viii Individual specimens should be planted approx 50mm proud of the existing ground level to prevent waterlogging.
ix. The base of the planting hole is to be filled and firmed with backfilling material to a level where the top of the plant root ball is level with surrounding ground.
x. All care shall be taken to keep the root ball of the plant intact during placement.
xi. Finish all newly planted areas with a 70mm layer of locally sourced, high quality mulch.

Specimen Tree Planting

i. Ground preparation to take place prior to planting; consisting of a 1m3 hole for each pb95 grade tree. Integrate existing soil within this hole with a 50/50 mix of locally sourced compost and topsoil.
ii. Trees should be planted approx 50mm proud of the existing ground level to prevent waterlogging.
iii. Finish with a 70mm layer of locally sourced, high quality mulch to a 1m diameter around tree trunk, do not mound up around trunk.
iv. Stake trees with appropriate wooden stakes and soft tree tie.

Watering In

Immediately after planting all of the plants are to be thoroughly watered until the planting hole is saturated. The foliage of plants is also to be thoroughly wetted. This is to be done even if soil conditions are already wet.

General Maintenance

i. Maintenance weed control should commence within three months following the planting, and then twice annually (see table 1.1 for maintenance timing).

ii. Maintenance shall be undertaken for a minimum period of 3 years following practical completion in accordance with this specification and the accompanying plan.

iii. Care should be taken to identify and control any weeds that may have been introduced to the property in potting mix associated with the new plants.

iv. All weeds should be cleared from the site by appropriate physical and chemical control. The majority of weeds growing close to the plant can be pulled by hand (taking care not to damage the roots of the plant) or, if appropriate, sprayed with herbicide by an experienced operator.

v. During this three-year maintenance programme, any dead plants will need to be replaced.

vi. An annual top up of mulch is required throughout all mass planted areas, and around each specimen, to achieve a 70mm layer.

Table 3.1		Time of Year to Complete Tasks											
Maintenance Task	**Frequency**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Maintenance weeding around specimen trees and in all mass planted areas.	2x annually				■							■	
Top up of mulch on all trees and mass planted areas to achieve a 70mm layer.	2x annually				■							■	
Removal and replacement of any damaged or dead specimens.	1x annually						■						
Selective pruning/trimming of specimen trees to remove any dead wood or damaged growth and to maintain healthy vigour and good form.	1x annually								■				

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11.08.2025

Implementation + Maintenance

Burgess Lockley Family Trust & KTP No 1 Trust
137 Tiromoana Way, Ahipara

Scale	Drawn By
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Drawing #	Rev #
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SANDHILLS ESTATE

Lot 1 Allotment Management Plan

INTRODUCTION

This Allotment Management Plan prepared for One Thousand Sandhills Limited, forms part of the approved resource consent for subdivision reference RC 2160143 (and its variations) at Sandhills Road, Ahipara. Each title will be subject to a Consent Notice requiring the owner and their successors in title to comply with the provisions of the relevant Allotment Management Plan.

Each title is subject to a Consent Notice requiring the owner and their successors in title to comply with the provisions of the Sandhills Estate Master Plan and the Sandhills Estate Allotment Management Plan applicable to their title.

The Sandhills Estate Master Plan provides an overview of the purpose and philosophy underpinning the management of the Estate as a whole. Individual Allotment Management Plans share a common format and include generic information applicable to all the relevant allotments as well as the specific requirements applicable to each title and the on-going responsibilities of the lot owner in respect of their particular property.

Sandhills Estate

Sandhills Estate totals 75.85 hectares of rural coastal land sited between Sandhills Road and Ninety Mile Beach north of Ahipara at the southern end of the Aupouri Peninsula. It contains 16 lifestyle allotments of various sizes, 13 of which [the 'coastal' lots] are located close to the coast on the western side of a ridge formed from old sand dunes. Three 'rural' lots are located on the eastern side of the Estate. The balance of the Estate is held in one title comprising three large rural lots.

An access lot traversing the Sandhills Estate is jointly owned by the owners of the 16 lifestyle lots and the balance area (Lot 17). Various easements provide pedestrian rights of ways, rights to convey electricity, and telecoms. Lot 21 is also jointly owned by the 17 owners – like the access lot which fronts the site along the coast.

The development of the Sandhills Estate is guided by the Sandhills Estate Master Plan [provided under separate cover and also attached to the Record of Title] which sets out the management principles and measures to be adopted to achieve the overall purpose of accommodating this lifestyle development in a setting where the prevailing rural character is maintained, where the natural character values are protected and enhanced and where buildings are integrated into their landscape setting.

The land within the Estate has mostly been retired from pastoral farming. The overall management aims are to restore indigenous vegetation and habitats typical of those formerly found on the Peninsula. The main habitat types being restored are the dunefield vegetation behind the beach, shrubland on the ridges found within the Estate, and wetlands within the flatter areas between the ridges. The restored habitats have the potential to support several threatened species whose status stems from loss or degradation of habitat through previous land use practices.

Within that framework, owners of the lifestyle lots are responsible for longer term maintenance of restorative plantings aimed at integrating their lots with the larger scale initiatives on the balance area, and for implementing design and servicing of their development in accordance with the purpose and principles of the Master Plan. More detailed guidance is provided through individual Allotment Management Plans for each of the separate titles of the 16 lifestyle blocks within the Estate.

Purpose of Allotment Management Plans

Allotment Management Plans for the 16 individual lifestyle titles detail the management measures applicable to that allotment within the overall aims for the Estate as set out in the Sandhills Estate Master Plan.

In purchasing an allotment on Sandhills Estate, lot owners commit themselves to pursuing these overall aims through the following measures:

a) Securing the approvals and consents needed to construct their dwelling so it can be integrated into its setting to maintain the rural character of the Estate and to avoid adverse effects on the natural character of the coastal environment.
b) Designing and siting their dwelling and other buildings in accordance with the design controls incorporated in their individual Allotment Management Plan to contribute to the landscape and amenity values of the Estate.
c) Adhering to the recommendations set out in their individual Allotment Management Plan in respect of service infrastructure to avoid adverse effects on the quality of both surface and ground freshwater within the Estate.
d) Landscaping the curtilage of their dwelling in accordance with the design controls included in their individual Allotment Management Plan to enhance the amenity of the Estate.
e) Implementing the management requirements contained in their individual Allotment Management Plan in respect of the structural planting areas on their allotment as their contribution to restoring habitat, enhancing biodiversity and landscape values, and protecting the coastal environment of the Estate.
f) Complying with the generic requirements of the Sandhills Estate Master Plan in respect of all other relevant matters such as pest and weed control, prohibitions on pets, respecting cultural and spiritual values held by tangata whenua, protection of archaeological heritage and other general measures to protect the overall environment.

Content of Allotment Management Plans

The Allotment Management Plans share a common base in respect of the background information, format of the plans and generic requirements common to all such plans. They also distinguish specific requirements for each lot depending on what covenant types and specific design controls apply to the title. While controls on building design and service infrastructure apply more widely, habitat restoration initiatives are much more dependent on the location of the lot and whether it is coastal or rural. The restorative planting areas on the coastal lots involve indigenous foreground and backdune shrubland revegetation while the rural lots involve inland shrubland planting.

The Allotment Management Plans are structured as follows. After a description of the individual allotment and the work achieved prior to title being issued, the requirements for further approvals and consents to be obtained by the Lot owner are explained. Management responsibilities are then described by topic before implementation mechanisms are outlined.

Legal Description

Lot 1 is one of the coastal lots located at the northern end of the Estate. It has the legal description Lot 1 DP 594744 contained in RT 1150142 which also includes a 1/17th share of Lot 17 DP 594744 which is the main road access lot serving the Estate and a 1/17th Share of Lot 21 DP 594744 which the access lot fronting the site towards 90 Mile Beach. The Title Plan for LT 594744 is found in **Appendix A.**

Description of Lot 1

Lot 1 is 1.6846ha in size with a frontage onto the access lot of 38.04 metres. The identified building platform is as shown on the title plan in **Appendix A.**

At the time title is issued, the driveway and building platform will have been formed and vegetated to prevent erosion. Power will have been reticulated underground to the boundary.

The site suitability investigations conducted by PK Engineering[1], as provided in **Appendix B** provide information on soil depth, drainage characteristics, subsurface stratification, and rock depths. These investigations will be supported by site specific geotechnical reporting and design at time of building consent.

Management Areas

The documents found in **Appendix C** detail the overall management areas of the subdivision against the internal requirements for each allotment from a landscape perspective. These internal areas are referred to as 'House Site Landscape Integration Areas". The specific details of planting and species mix for Lot 1 is to be determined by site specific landscape assessment and planting, considering the themes of backdune shrubland and foreground / stability vegetation associations considered for the overall Master Plan.

Overview

Individual lot owners are responsible for the further works required within their lots which must be undertaken in accordance with the requirements of the Sandhills Estate Master Plan. These encompass approvals from a duly delegated Council officer to confirm that compliance with those requirements has been achieved together with any statutory consents required under planning and building regulations. Owners should note that costs over and above the consent fees may be required for such approvals – including relevant Council costs / fees.

While seeking statutory consents for their dwelling, Lot owners must also seek consent, or have obtained prior approval from a duly delegated Council officer, for the following:

a) Visual assessment and landscape planting plan for the whole allotment prepared by a suitably qualified person.
b) Building foundations design complying with the recommendations of the Site Development Report or as detailed by a suitably qualified engineer.

Owners should also note that at the time the Sandhills Estate subdivision was granted consent, the District Plan was under review. The information given below was accurate at that time, but owners must check current zonings and rules applicable at the time they want to commence development as rules and regulations change from time to time.

At the time the subdivision of Sandhills Estate was approved the coastal allotments were located within the General Coastal Zone of the Far North District Plan. The rules current at that time require resource consent to be obtained for habitable buildings over 25m^2 gross floor area and non-habitable buildings over 50m^2 gross floor area under the rules on Visual Amenity.

[1] Site Development Report, PK Engineering Limited, 2008 as updated by letter dated 18 March 2018
This report forms part of the original documentation supporting the application for resource consent from the Far North District Council and may be inspected at their office.

Where new buildings are located entirely within an "approved building envelope", the status of the resource consent is a Controlled Activity. The identified building platform on the coastal lots together with the maximum building height control specified in each Allotment Management Plan constitute an approved building envelope for the purposes of those visual amenity rules.

The rural lots were in the Rural Production Zone at the time consent was granted where one dwelling per site is generally a permitted activity. Subject to compliance with rules on bulk and location and building and impermeable surfaces coverage.

Resource consent may also be required from the Far North District Council for earthworks to complete the internal driveway and building platform in accordance with the requirements of the Site Development Report dependent on whether the volume of works will exceed the permitted limit in the relevant Zone or the rules applicable at the time of development.

Owners should note that much of the soil on the Estate is classified as erosion prone under regional plan classifications at the time of subdivision approval. A new Regional Plan is for the most part operative which also classifies the seaward end of the Estate as highly erodible soils. Owners must therefore check current District and regional rules for earthworks at the time they want to commence development.

Building consent applications must contain material to demonstrate that stormwater from the buildings and their curtilage will be managed and that a wastewater treatment system will be installed and maintained in compliance with the recommendations of the Site Development Report [and the consent conditions as detailed further below in the Service Infrastructure section below.

Built Development

Management of the built development within Sandhills Estate is an important means of achieving the aims of the Sandhills Estate Master Plan in respect of protecting coastal natural character, integrating development within the landscape, and maintaining and enhancing landscape and amenity values.

This is achieved in two ways, defining the location of the buildings by identifying building platforms on each lot and implementing design controls. The controls do not provide strictly defined building designs but are aimed at achieving structures which are generally simple, low profile and pavilion like. Some items such as maximum building height are specific to each allotment whereas others, such as paint colours, offer a range of options. Others rely on specified design principles.

The building envelope on each allotment is shown on the title plan and has been identified through consideration of both engineering and landscape factors. At the time of subdivision, levelling of the platform will have been undertaken but completion of the formation is the responsibility of the lot owner and must be designed by a chartered professional engineer in accordance with parameters set out below. All built development must be located within the identified building envelope.

The maximum height of the building above ground level at time of subdivision shall be 6 metres for all Lots other than Lots 4 and 13 where it is 5 metres. Together these factors create the building envelope for the purpose of meeting the Controlled Activity rule of the General Coastal Zone current at the time of subdivision.

The Consent Holder commissioned a 'Coastal hazard assessment' [prepared by Tonkin and Taylor, job number 31461.v1, dated April 2016] which considered the effects of coastal inundation, coastal erosion, and tsunami on Lots 1 to 12. The report sets minimum floor levels at 4.8 metres One Tree

Point Vertical Datum 1964. No habitable building shall be constructed with finished floor levels below this minimum.

Stabilisation of Building Platforms

As its name suggests Sandhills Estate is located on an area of former sand dunes with its soils and subsurface conditions reflecting those origins.

The position of the building envelope has been set to take account of both land stability and landscape effects and setting the platform in its proposed location also eliminates the risk of it being affected by wave surge. Recommended measures for addressing platform stability are provided within the Master Plan and will be further addressed at time of building consent for building development.

Building Foundations

The nature of the soils on the allotment necessitates specific foundation design. The recommendations in specify different types of foundation design which can be employed on this allotment depending on the design of the dwelling. All the options must be designed by a chartered professional engineer, noting that new options for site specific engineering reporting that reflects site and house specific design.

Building Design

The Sandhills Estate Master Plan includes design controls and principles applicable to all built development. The salient principles are:

a) Buildings must be responsive to and enhance the setting and landscape of the Lot and its immediate surroundings.
b) A design that reduces mass and visual impact allowing the built form to recede and integrate into the environment is preferred.
c) Forms should have a horizontal emphasis and variations in form or use of multiple elements should be cohesive and avoid a fragmented appearance.
d) Roof forms should adopt the principle of broken forms avoiding large unrelieved expanses and account must be taken as to how the roof form will be viewed from other parts of Sandhills Estate.
e) Materials which age well naturally with weathering are encouraged and various options for roofs and walls are specified in the Master Plan.
f) Use of a palette of colours recommended in the Master Plan is encouraged.
g) Specific conditions of the Resource consent require the exterior of all dwellings and other structures to have a reflectance value of not more than 35% according to the BS5252 colour chart. Roof pitch is not to exceed 25o and materials shall comply with requirements for colour and reflectivity.

Ancillary Buildings

Any ancillary structures including, but not limited to signs, television and radio antennae and clotheslines shall be discretely integrated with the dwelling architecture and sited within the landscape of the site so that they are not highly visible from any jointly accessed area or adjoining property.

Landscaping

As noted earlier Far North District Council's approval of a landscape plan for each Lot is required prior to planting commencing or at the time resource consent is sought (where required). This will encompass the planting and treatment of hard landscape elements within the curtilage of the dwelling. The landscape plan must be cognisant of the developing natural character of the estate within the context of the overall Sandhills Estate Master Plan and must integrate with the restorative planting areas on the individual Lot.

Principles applicable to the curtilage area include:

a) Integration between the building and the immediate landscape through responsive siting, with reference to natural contour.
b) Aesthetic controls aimed at achieving coherence between buildings and the landscape and each other.
c) Integration with the existing and proposed areas of vegetation to reduce visibility from external locations and to create an overall sense of coherence.
d) Should feature a predominantly native plant selection.

With respect to hard elements, use of natural materials is encouraged. Colours and finishes should promote integration into the landscape and for concrete and exposed aggregate should incorporate colouring oxides in the recommended tones. Visible retaining walls are to be avoided but if necessary are to be finished with natural materials and vegetation to soften their impact. Driveways shall be formed with gravel consistent with that used on the access road.

Apart from fencing of the Scenic Reserve which affects Lots 1 and 21, fencing within all other lots is limited to fencing required for safety reasons such as a swimming pool. This aims to allow the flowing profile of the Estate landscape to be unhindered and to protect the open natural coastal character from visually emphatic post and rail, close boarded or painted fences providing undue ornamentation, particularly along the rustic road front.

While outdoor lighting may be provided for security and safety, it must not interfere with traffic or cause a nuisance to other residents of the Estate or detract from the natural character of the surroundings. The design and location of exterior lighting must be included in the consent documentation for approval by Far North District Council.

Amenity Planting

Implementation of the approved landscape plan is to be undertaken within the first planting season (approximately March-August) directly following commencement of any construction work for buildings on the Lot.

Landscape planting within the curtilage area is divided into two categories, large scale structural planting and more intimate domestic planting. The sample section drawing provided earlier shows how these two elements relate to the dwelling and landscape of the Lot. Structural planting aims to provide a bold framework of locally appropriate indigenous vegetation within the dwelling curtilage to link with the vegetation that will be established in the structure planting areas and within the wider landscape of the Estate.

Appropriate species lists are provided in **Appendix C** and will be further specified by landscape assessment / plan to suit the individual dwelling proposed. The vegetation and landform are intended to flow seamlessly across title boundaries to create a broad, visually bold, entity.

On the coastal lots the selected species should be compatible with the "indigenous foreground/stability vegetation" and "backdune shrubland" categories as planted by the Consent Holder, while in the rural lots the structural planting must integrate with the inland shrubland category as planted by the Consent Holder.

Domestic planting is used within the immediate environs of the buildings. As well as sitting within the framework of the structural planting it should be used to break up the mass and bulk of the buildings, provide both a foreground setting, and a backdrop recognising the landform of the Lot and provide screening of utility or service areas.

Species selection for the domestic planting areas is less restrictive but 40% of the total area must be planted in the indigenous species employed in the structure planting areas. The balance of the domestic planting may include a range of native and exotic shrub and tree species suitable for the local environment, but any species that are known or potential weeds, e.g. Agapanthus orientalis, must be avoided.

The emphasis within the Sandhills Estate Master Plan on maintaining, enhancing, and restoring indigenous vegetation and natural character depends on using vegetation types found naturally in such an area which in turn means they are dependent on the soil types and growing conditions which prevail within the Estate.

For those reasons, bringing in other growing materials which could considerably alter the character of the vegetation cover, other than any materials required for engineering stability purposes, is not permitted. Other aids to plant establishment such as use of water holding silica products and irrigation are permitted.

Right of Way Frontage Treatment

Lots 1 to 3, and 5 to 10 have frontage onto the Right of Way in Lot 21. These frontage areas are required to be planted in a manner which is sympathetic to both the dune restoration activities and the nearby structural planting. Owners may choose to grass these areas, promote restoration of dunefield species[2], or extend adjacent structure planting areas using the same species mix, but must not introduce exotic plant species or weed species which could threaten the active dunefield vegetation.

Where grassed areas are implemented, the intention is not to create a high-quality amenity turf surface, since the soil and climatic conditions do not lend themselves to creating lawns. Instead, it is envisaged that the grassed areas would be rather coarse and informal, being mown approximately 2 times per annum and lightly broadcast fertilised with an NPK fertiliser annually to maintain a limited vigour and density of cover.

Light Grazing Management

An area of terrain centred in Lots 1, 4 and 13 is identified as being subject to a "light grazing" management regime aimed primarily at allowing the owners of the larger lots to keep a small number of horses.

The predominantly sandy soils and rolling contour of this part of the site makes it vulnerable to erosion arising from a loss of vegetative cover and/or physical damage to the ground surface. The grazier shall

[2] Refer **Appendix C**.

carefully monitor pasture condition and withdraw stock immediately if vegetative cover becomes compromised or if there is sign of significant surface damage to the ground because of stock movement. The lot owners shall also be responsible for fencing their grazing areas prior to any stock being brought onto the land to ensure that stock do not enter shrubland planting or wetland areas.

If the light grazing zone becomes impracticable to manage, these areas may be developed as backdune shrubland or mown grass and managed as outlined in paragraph 50 above.

Similar light grazing may also be undertaken in the eastern part of Lot 20 and on Lots 14 to 16 on the eastern ridge subject to the same controls.

Service Infrastructure

Wastewater Treatment

The report prepared by PK Engineering in Appendix B recommends that wastewater treatment and disposal be achieved through use of a proprietary aeration treatment plant providing advanced secondary treatment of effluent to a standard suitable for dripline irrigation.

It also includes recommendations for the primary disposal area, which can generally be sited within the structure planting area and will assist the establishment of the vegetation in that area, the specifications for the treatment plant, the length and suggested layout of the driplines and a reserve disposal area.

Appropriate systems available locally are listed in the Report. Details of the chosen system and its design specifications and the layout of the disposal and reserve fields must be included in the consent documentation to be submitted to Far North District Council.

Without limiting the type of wastewater disposal system installed on the Lot, no system shall be installed or operated in a manner which does not result in a final discharge to ground at the same or better than that which can be attained using the Biolytix wastewater treatment system.

The maintenance procedures for the chosen system must be strictly adhered to and it is preferable that the owner of Lot 1 enter a maintenance contract from the supplier at the time of purchasing the system.

Stormwater

As described in the Site Development Report in **Appendix B**, management of stormwater is essential to maintain the stability of the building site. Although the soils are generally rapidly draining, the presence of buildings and other hard surfaces will result in a concentration of stormwater which needs to be collected and discharged appropriately. The recommended method of disposing of stormwater as detailed in **Appendix B** must be adopted and detailed in the consent documentation to be submitted to Far North District Council. Any soak pit will be excavated within the building platform and backfilled with scoria or similar material.

Water Supply

In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These

provisions shall be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

Construction

In initiating work on Lot 1, the owner is expected to co-ordinate with all builders' suppliers and tradespeople to ensure that the environments of neighbouring allotments, the Estate, and its surroundings, including 90 Mile Beach and the coastal reserve, are not unnecessarily disrupted.

While there is no time limit for owners to commence construction, once construction has started, a dwelling will be constructed and finished within 12 months of commencement of excavation for foundations. All ancillary work including planting of lawns, landscaping and any other development work shall be completed within 18 months of commencement of excavation for foundations. All un-built sites shall be maintained by the owner to best horticultural practice.

All disturbed areas of the site shall be protected from wind and water erosion during and after the construction period. All earthworks shall be re-vegetated within one month of completion by either the spreading of a grass seed mix (perennial rye grasses and clover), by planting ground cover or by further bolstering protection using biodegradable geotextile cover (e.g. jute or coconut fibre products).

The owner and builder shall ensure that existing and regenerating indigenous vegetation around the construction areas on site are protected from damage.

Damage caused by the builder to services such as roads, power etc. adjacent to any Lot will be repaired by the owner at their cost. The owner must immediately notify any other effected owners, in writing, of any such damage.

All construction materials, rubbish and excavation materials shall be stored within the boundaries of the site. Builders shall provide adequate rubbish containers on the site and control waste materials to prevent dispersal by wind onto other properties. No fires are permitted. If a proper clean up does not occur, any other owner may remove the debris and charge the costs to the owner.

Structural Planting Areas

In the longer term, lot owners will assume responsibility for maintaining the structural planting areas on their property. This section describes the purpose and composition of the three restorative initiatives applicable to the lifestyle lots to assist owners in carrying out these future responsibilities and in integrating these areas with their individual development and landscaping.

Foreground Stability

These areas are generally located on the seaward side of the building platforms and are intended to provide low growing native planting which has the multiple functions of stabilising the more recent sandy soils to prevent erosion, particularly by wind, maintaining the open coastal character by complementing the low straggly vegetation on the dunefield and coastal reserve, and allowing lot owners views towards the sea. This approach also reproduces the natural sequence of vegetation types which would extend inland from the coastal edge and improves biodiversity by replicating the associated habitat types and facilitating movement of species such as insects' birds and lizards. Typical plant species are provided in **Appendix C**.

Backdune Shrubland

This revegetation type generally applies to the areas landward of the building platforms and aims to re-establish the shrubland cover which would typically be found on the ridges formed by older more stable dunes. The sand binding species found in the foreground areas gives way to manuka and kanuka and some coastal tree species may also emerge on these slopes.

These areas are important to the creation of the overall vegetation sequence across the Estate as they form the linkage between the foreground planting, which is largely the responsibility of individual lot owners, and the extensive areas of shrubland being restored on the large title. Having these 'fingers' of shrubland connecting to the foreground areas and the 'corridor' created by the dunefield and the coastal reserve will serve to greatly enhance the biodiversity values of the estate and adjoining land.

While manuka and kanuka are the predominant species, specimens of pohutukawa can be added to the mix. In contrast to the landscape role played by the foreground planting this area with the varied height of different plants provides a backdrop for the dwelling and assists its integration into the landscape. The full list of species is found in **Appendix C**.

Inland Shrubland

The inland shrubland areas are less subject to coastal influences than the backdune shrubland. Planting is based on a narrower range of species with a greater predominance of manuka and kanuka.

Planting and Maintenance

Although **Appendix B**, provides some recommendations on planting sizes and spacing, the landscape plan to be prepared for Council approval shall specify the following:

a) Size and species of proposed stock.
b) Locations and spacing, planting methods, details of staking of trees etc.
c) Details of proposed maintenance.
d) Details of proposed mulch, type, depth of application etc.
e) Planting programme.

Principles to be adopted in implementing the planting include:

a) All species used shall be top quality plants propagated from local genetic material and are therefore adapted to local conditions. Plants should go through a hardening off process to ensure a transition between the nursery conditions and the site.
b) Plant very deep [up to 150mm of sand over top of roots] using root trainers with their deep root ball.
c) Use slow release or controlled release fertiliser in the base of the planting hole to foster deep rooting and plant performance.
d) Consider the use of water retention crystals/gel as further insurance against drought.
e) Plant as early as possible [May] to make the most of root growth through the winter.
f) Maintain and monitor the planting vigilantly, paying particular attention to weed species which may smother new plants.
g) Control rabbits and hares.

Pest and Weed Management

Weed control shall target Apple of Sodom, gorse, lupin, boxthorn, prickly hakea, woolly nightshade, blackberry, and pampas to ensure only low levels within the Estate. Methods to be adopted include

spot spraying, as blanket spraying would have the dual costs of killing desirable native species when controlling the invasive plants and of exposing large areas of fragile, sandy-derived soils to the eroding effects of wind and water, and a combination of felling and stump painting for larger specimens. Species which may smother new planting should be targeted particularly while non-invasive species which can 'nurse' new planting can be left; particularly where potential erosion can result if too much cover is sprayed out.

The main pest control activity required by landowners is control of rabbits and hares to minimise impact on new plantings, both within the lot and on the nearby vegetation restoration areas, particularly the recolonisation of the active dunefield vegetation. Rabbits should be controlled through hand-broadcasting of pindone pellets by a certified operator. Once vegetation is established more general trapping of predators can be implemented to assist the overall predator control throughout the estate. Appropriate methods are described in the Sandhills Estate Master Plan.

The use of professional contractors for pest control activities and promotion of the formation of a Landcare group to include individual lot owners are recommended for on-going pest control activities.

Other Generic Measures

These measures are part of the Sandhills Estate Master Plan and apply to all lot owners. They are repeated here to emphasise their importance.

Cultural and Spiritual Values

Ahipara and its surroundings have a well recorded history, and the Aupouri Peninsula has great significance for Maori. The Consent Holder commissioned a Cultural Impact Assessment whose recommendations are incorporated within the Master Plan and the Allotment Management Plans for Sandhills Estate.

Sandhills Estate is located within the rohe of Te Rarawa and the Consent Holder and Te Runanga o Te Rarawa are continuing to liaise over implementation of the development of the Estate. As part of that engagement, a document describing the overall cultural significance of the locality of the Estate, the specific sites identified in the Cultural Impact Assessment, and the importance of respecting and acknowledging those cultural values will be prepared. [this is still to be finalised] As required by Consent Notices on the title of this lot, a copy of the document must be made available to any future owner and any prescriptive requirements given effect by the lot owner and their successors in title.

Tangata whenua support the habitat restoration initiatives and have participated in finalising the overall landscape plan associated with the Master Plan, selection of species lists for the various habitat types, and dunefield restoration. Given the high importance of the dune vegetation restoration to tangata whenua, access to the beach by residents is restricted to walking access only using the blow out at the southern end of the Estate.

The Cultural Impact Assessment identified areas of wahi tapu in the vicinity of Sandhills Estate and recommends that residents are made aware of the need to respect and protect those significant areas and avoid entering those places to avoid transgression of the tapu. Is it possible to map the areas as an attachment?

As Sandhills Estate is located between two significant battle sites known to have resulted in high casualty numbers, tangata whenua are concerned that koiwi may be discovered during works on the land. As set out below, appropriate protocols apply to such discoveries.

Historic Heritage

An archaeological assessment conducted as part of the consenting process for the Estate subdivision identified five sites within the Estate. The sites found were in poor condition and do not constitute sites of major archaeological significance. The report also concluded that due to past land use practices the likelihood of further finds is low. It is noted that there is one [1] recorded site on Lot 1.

Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Given the importance of recording and protecting historic heritage it is essential therefore to have protocols in place if archaeological evidence is uncovered during works on the land so that statutory requirements are adhered to, and cultural values are respected.

Should any archaeological evidence be inadvertently uncovered, the procedure to be followed is is that work should cease, and Heritage New Zealand and Te Runanga o Te Rarawa contacted immediately for advice, which may include a requirement to apply for an authority to modify.

Should koiwi (human remains) be uncovered, work must be stopped immediately, and the area secured from any further disturbance. Te Runanga o Te Rarawa, Heritage New Zealand and the NZ Police must be contacted and the advice of a kaumatua (Senior Elder) nominated by Kahui Kaumatua o Te Rarawa should be followed in respect of further actions. Kaumatua should be given the opportunity to undertake such ceremonies and activities at the site as may be considered appropriate in accordance with Te Rarawatanga (Tikanga Maori).

Protection of Dunes

The active dune and the dunefield behind it are fragile environments vulnerable to both ecological threats, natural erosion and erosion caused by inappropriate disturbance from human activities.

The provision of access to the beach for estate residents will therefore be restricted to the unformed public road at the southern boundary of the estate. Lot owners are requested to utilise only this access point when visiting the beach and to respect the fragile nature of the dunefield and active dune by not walking over other parts of those features.

Residents are also required to support the dune vegetation restoration initiative undertaken by the Consent Holder through pest and weed control and compatible planting. A list of appropriate species is provided in **Appendix C**.

Exclusion of Pet Animals

Improving the habitat values of the Estate, particularly for threatened bird species, is dependent on good predator control, particularly in the early stages of restoration when vegetation cover is not as dense as in later stages. While predator control is an integral part of the management measures applied to the estate, it is also important that the risk of pet dogs and cats preying on birds and other fauna, particularly ground nesting species such as bittern and rails, is avoided.

Lot owners are therefore prohibited from keeping or bringing on to the Estate cats, dogs, or other potential predators such as mustelids and are required to request all visitors and persons working on their lot to adhere to these restrictions.

Exclusion of bees
The Lot owner will not keep any bees on the property under any circumstances whatsoever. [Note: this applies to Lots 1 to 16 (inclusive)].

IMPLEMENTATION MECHANISMS

Consent Notices

Consent Notices specified on the Certificate of Title for Lot 1 detail conditions of the subdivision consent which are required to be implemented on an on-going basis by the Lot owner. These matters are subject to monitoring and enforcement by the Far North District Council under the provisions of the Resource Management Act.

Consent notices specify that no further subdivision may occur. Consent notices also require the following:

a) The owner of each Lot must always comply with all aspects of the Sandhills Estate Master Plan and the respective Allotment Master Plan.

b) Prohibiting further subdivision within the Estate.

c) On all Lots no occupier of, or visitor to the site, shall keep or introduce to the site carnivorous or omnivorous animals (such as, but not limited to, cats, dogs, or mustelids) which have the potential to be predators of kiwi or other vulnerable fauna.

d) No earthworks shall be carried out or building erected on any Lot without the prior approval of Council to the specific design for cut and fill batters, retaining walls and building foundations.

e) The property is subject to an *'Allotment Management Plan'* which addresses scale, siting and design of buildings, landscape development and planting, activities in structure planting areas, revegetation, weed and pest management, stormwater, and wastewater management.

f) The Allotment Management Plans shall be observed and continued and shall not cease without the express permission of Council.

g) Residential development on the balance area [Lots 18, 19, 20 and 21] is limited to one residential unit and one worker's cottage.

h) Give effect to any requirements of the document prepared as follow up to the Cultural Impact Assessment and provide a copy to any successor in title.

i) A 'Coastal hazard assessment' prepared by Tonkin and Taylor, job number 31461.v1, dated April 2016 (submitted in support of RC2160143), considers the effects of coastal inundation, coastal erosion, and tsunami on the lot. The report sets minimum floor levels at 4.8 metres One Tree Point Vertical Datum 1964. No habitable building shall be constructed with finished floor levels below this.

Covenants

The covenants registered on the Certificate of Title for Lot 1 detail the matters the Lot owner must comply with in respect of the areas identified on the title plan in relation to buildings. These covenants bind future owners of the land in perpetuity. Compliance with the covenants is required under the individual Allotment Management Plans and is therefore enforceable under the conditions of consent.

DESIGN CONTROLS

The development of Sandhills Estate provides an opportunity for landscape and amenity enhancement through the on-going Management Plan approach. Much of the framework planting and site development will have been undertaken by the Consent Holder prior to titles being issued with approval and monitoring of those works being the responsibility of Far North District Council.

These design controls are therefore focussed particularly upon ensuring that the development of the individual Lots is complementary to the wider vision for the property and to manage potential adverse effects from both within and beyond the site. The controls form a significant part of the individual Allotment Management Plans.

A landscape assessment was carried out through several site visits to the property during 2006 and 2007.

That assessment contributed to the definition of building sites, access alignments and the overall configuration of restoration and mitigation works on the property. Measures to avoid, remedy or mitigate the potential adverse effects of the proposal are therefore closely aligned to the findings and

recommendations of that assessment. These initiatives will also result in a significant level of amenity and evolving natural character of the site for the pleasure of residents.

Each Lot owner must, as a minimum, comply with the requirements set out in this section subject to any additional matters specified within their respective Allotment Management Plan. Demonstration of compliance with these controls is required when seeking resource and /or building consents from the Far North District Council.

Vision

Sandhills Estate is located along a stretch of the coastal hinterland to the Tasman Ocean, north of Ahipara.

The principal objectives for the Sandhills Estate are to provide a quality environment and to maintain a coastal rural character and amenity. These aims will preserve and enhance the natural assets and amenity values for the benefit of the owners, visitors to the site, and surrounding communities. While people will live and enjoy recreation time within Sandhills Estate, it is envisaged that the natural character of the site itself and elements of the wider setting will strongly prevail over the presence of buildings and associated infrastructure.

The Sandhills Estate development provides an opportunity to enhance the natural environment through the retirement and restorative planting of sensitive parts of the site, planting wetland areas, controlling weeds, and management of the active dune zone in consultation with the Department of Conservation.

Owners of properties will contribute to regeneration/conservation process through a commitment to ongoing land and pest management.

Purpose of the Controls

Why do we need design controls?

These landscape and design guidelines are intended to maintain and enhance the qualities of the Sandhills Estate environment. The Management Plan is designed to result in a development where the built form is controlled to achieve a landscape that is sympathetic to the location.

Built form will occur on individual properties because of this subdivision and some dwellings will potentially be visible beyond the property, or to vehicles travelling along Sandhills Road. This is a change in land use from rural-to-rural lifestyle. The purpose of the design controls is to achieve integration of buildings into the landscape.

Who monitors the controls?

All sites require building design approval, and a landscape plan to be prepared for the approval of the Far North District Council. Under the District Plan rules applying at the time consent was granted, an application will need to be made to the Council for resource consent as well as building consent for a dwelling on a coastal lot [Lots 1 to 13 and 20]. On the rural lots [Lots 14 - 16] resource consent may or

may not be required. Council is likely to charge for its work associated with approving plans required under the Sandhills Estate Master Plan and Allotment Management Plans over and above the consenting processes.

Site

Topography, soil types and drainage characteristics have been used to identify the proposed Lot boundaries. The layout has been designed to assist with future management and sustainability of the area. This includes significant ecological values.

The subdivision layout within the property is responsive to the landscape form of the land. All building sites are as shown on the Plan of Subdivision set out in **Appendix A**.

Foundations and minimum design criteria

All owners shall, as a minimum, comply with the foundation design criteria and the design and construction recommendations contained in the PK Engineering report, as detailed in **Appendix B** of each Allotment Management Plan unless the Council specifically agrees otherwise.

Building design and style

Specific building design principles are set out below for all Lots within the Sandhills Estate.

It is not proposed to provide strictly defined architectural designs; however, all designs must meet the controls set out herein. It is anticipated that the controls and architectural responses to the characteristics of the site will result in structures that are relatively simple, low-profile and "pavilion-like" in their format.

Principles for Design – Buildings

The following principles relate to all the Lots within the Management Plan area:

a) Dwellings and out buildings are to be constructed in a similar style, construction and material.

b) Consideration is to be given to the existing rural and coastal character of the area.

c) Roof structures are to be of consistent pitch with a single plane of 0-12 degrees or gabled with a pitch of between 15-25 degrees.

d) The most prominent viewpoints that they will be viewed from should be considered in the placement and design of the roof form. Large areas or unrelieved expanses that will be dominantly visible from other allotments, shared areas within the property or from beyond the site are not permitted.

e) Colours utilised will be natural colours and not highly reflective such as white, or of high visibility such as red, for the purpose of visual amenity from off-site locations.

f) Driveways should utilise curved formations and planting to integrate into the landscape.

g) Dwellings should incorporate pergolas, decks, or verandahs to soften building form.

h) Windows and joinery should have low reflectivity.

i) Lighting should be designed with sensitivity to external visual effects.

Principles for Design - Landscape

It has been determined that landscape restoration and extensive planting will be an effective means of maintaining and heightening visual amenity.

It is noted that the consent holder will establish the minimum landscape management areas as set out in **Appendix C**.

Each Lot owner is required to produce a landscape plan, by a suitably qualified person, for approval by the Far North District Council, relating to planting around each house. Provision of these is to be either at time of building consent application or at time of resource consent application.

Landscape

The treatment of proposed hard and soft landscape elements, including earthworks, roading, drainage, retaining walls, surfacing and landscape planting, should complement the character of both the site and its surroundings and the planting in the protected areas. Materials and species used should allow integration of elements into the landscape with limited artificial modification evident.

The landscape plan (which relates to the property but excluding the minimum landscape area relating to the planting to be undertaken on Lots 18-21 (inclusive)) should be developed using a comprehensive approach to architecture and landscape to respond to the site's developing natural character, and will need to address:

a) Integration between the building and the immediate landscape through responsive siting, with particular reference to natural contour.

b) Aesthetic controls aimed at achieving coherence between buildings and the landscape and each other.

c) Integration with the existing areas of vegetation to reduce visibility from external locations and to create an overall sense of coherence.

d) Should feature a predominantly native plant selection as more fully described under the subheading "planting" which follows.

The landscape and architectural plans will need to be prepared by suitably qualified persons and submitted for approval by the Far North District Council.

Hard Landscape Elements

The hard landscape elements include retaining walls, road edges, gates and fences and other built elements that are not an integral part of the dwelling.

Surfacing of Decks, Forecourts and Terraces

Natural materials, such as timber and stone are encouraged. Colour and finish should promote integration into the existing landscape. Concrete should have an exposed aggregate finish of an approved colour and finish. All material colours and finishes will need to be approved. Area limitations may apply.

Fences

Unless required for safety reasons (such as swimming pools or to prevent falls from elevated areas), fences are not allowed other than for the external boundaries of the Estate and areas approved for grazing on Lots 1, 4, 13 and 20. The intention of this restriction is to allow the flowing profile of the landscape to be unhindered by boundary fences or undue ornamentation at Lot access points.

No livestock shall be put onto those parts of Lots 1, 4, or 13 and 20 which are approved for grazing without the perimeter of these areas first being fenced. For these areas, simple agricultural fences are allowed, but visually emphatic post and rail, close-boarded or painted fences are not acceptable.

Driveways

To be formed with gravel consistent with that used on shared accessways within the Estate or in an exposed aggregate concrete finish incorporating colouring oxides in tones of mid grey, subtle brown or sand-like colours. Colours and finishes are to be approved by the Far North District Council. Area limitations may apply.

Retaining Walls

With the potential to be disruptive in the rolling contour of this landscape, visible retaining walls should be avoided to the greatest extent practicable. Measures such as burying structural support of the land and planting over that support shall be fostered. Where unable to be avoided, visible retaining walls shall be detailed sensitively. Natural materials, such as timber, rammed earth, and stone, with vegetation incorporated to soften the impact of the structure will be encouraged. Colours and finishes need to be approved.

Planting

Landscape plans within a proposed dwelling's curtilage area must be submitted for approval by the Far North District Council at the same time as building consent or resource consent is applied for any house to be constructed on any Lot.

Implementation of the landscape plan is the responsibility of the relevant Lot owner and is to be undertaken within the first planting season (approximately March-August) directly following commencement of any construction of a house upon a relevant Lot.

Landscape planting within the curtilage area is divided into two categories, large scale structural planting and more intimate domestic planting, including indigenous foreground / stability vegetation as defined in **Appendix C**.

Structural planting may consist of native shrubland and domestic [amenity planting]. The installation of this vegetation will be undertaken by the Lot owner to form the framework of the planting within the dwelling's curtilage area, bold and simple in character and providing a visual and physical link with the balance of the vegetation within the development. Domestic planting may be more intimate in character, providing an amenity setting in the area immediately surrounding the house sites.

The treatment of these two planting types is set out in the guidelines below:

Structural planting

The purpose of structural planting will be to provide a bold framework of locally appropriate indigenous vegetation within the dwelling curtilage to link with similarly composed vegetation that will be established within the wider landscape on the nearest structure planting areas. The vegetation and landform are intended to flow seamlessly across title boundaries to create a broad, visually bold, entity.

Domestic Planting

Domestic planting can be used within the framework of structural planting, in the immediate environs of the buildings. Planting should be used to:

a) Create a further linkage between built development and the broader structural planting.

b) Breaking up the mass and bulk of buildings.

c) Providing a foreground setting and a grounding for buildings.

d) Providing a backdrop to buildings; and

e) Providing full or partial screening of utility or service areas.

Integration with the areas forming the broader structural planting can be achieved by using species contained within the lists contained in **Appendix B**.

While the palette of species appropriate for use within the remaining domestic planting areas is less restricted than for the wider restorative and amenity plantings on the site, there is a need to provide a degree and linkage and coherence up to buildings. Accordingly, not less than 40% of the area of Domestic Planting shall also be composed of species from the appropriate planting area in **Appendix B**. The balance of planting may include a range of native and exotic shrub and tree species suitable for the local environment. Any species that are known or potential weeds, e.g. Agapanthus orientalis, must be avoided.

Imported Soil

The distinctive vegetation types founding on the site are a natural reflection of growing conditions, including the sand dominant soils that prevail over much of the property. Whilst creating more challenging circumstances for establishing new planting, these soil conditions do shape the nature of the place, so that bringing in other growing materials has the potential to considerably alter that character. Accordingly, imported soil – other than some limited clay capping or aggregate required for building site stability – is not allowed for under these guidelines. Water holding silica products are, however, permitted to aid plant establishment, as is irrigation.

Lighting

Outdoor lighting may be provided for security and safety. Lighting must be located so as not to interfere with traffic or become a nuisance to neighbours. Excessive lighting will not be permitted. All exterior lighting (design and location) must be submitted to the Far North District Council for approval.

Additional Principles for Design

In addition to the landscape principles and guidelines outlined above, properties must comply with the following principles:

a) Buildings that relate to and enhance the setting and landscape in which they sit.

b) Integration between the building and the immediate landscape through responsive siting.

c) Aesthetic controls aimed at achieving coherence between buildings and the landscape and between adjacent buildings.

d) Given the open and exposed nature of some sites, buildings which are low and nestled into the landform.

e) The building scale, mass and form should reflect the site type and location. Designs that reduce mass and visual impact are preferred, allowing built form to recede and integrate into this environment.

Scale

Single level or split-level buildings with a maximum rolling height of 5 metres in Lots 4 and 13 and 6 metres in all other lots relative to the mean ground level existing at the time the certificates of title issue for such lots are permitted. As indicated by Consent Order on the title no habitable building shall be constructed with finished floor levels below 4.8 metres One Tree Point vertical datum 1964.

Form

Variation in form or materials in a manner that does not lead to the building appearing fragmented is encouraged to reduce the perceived scale of the building when viewed from within and outside the site. For example, wall panels separated by areas of glazing or different materials and colour.

Forms that create a horizontal emphasis whilst emphasising a strong connection with the ground are appropriate.

The form of the building can be a single element or multiple elements dependant on individual owner preference. However, variation in form is encouraged to reduce the scale of the building. If the building takes the form of multiple elements there should be a relationship between those separate elements so that they read as a cohesive whole and part of a 'household unit'.

Roof Forms

Generally, roofs with a pitch of less than 25 degrees, which is the maximum permitted, are preferred.

Roof forms that are of very low pitch and with a simple fascia often assist to reduce prominence provided that the fascia is not detailed in such a way as to create very emphatic horizontal line.

Roofs that have the potential to present large unrelieved expanses when seen from other identified dwelling locations, shared areas or surrounding public vantage points, will not be permitted.

Accordingly, the relationship of the various sites with adjacent areas and the broader situation needs to be considered. Viewpoint needs to be considered when designing the roof/s and the principle of broken forms applies. Flat, gable, monopitch, and butterfly roof forms are generally permitted. Deep eaves that create shadow lines and minimise exposure of glazed areas to reflecting the sun are encouraged.

Materials

Generally, the use of materials which age well naturally with weathering is encouraged.

Roof materials

Reflectance values must not exceed 35% according to the BS5252 colour chart.

Permitted materials are:

a) Profiled roll-formed or folded metal is permitted subject to colour and reflectivity controls.
b) Sheet materials including powder coated steel (e.g. Colorsteel), copper, cedar shingles and slates.
c) Concrete with appropriate recessive colouring.
d) Bituminous and rubber membranes.
e) Turf and other planted roof options.

Wall Materials

Wall materials will be subject to an assessment of visual impact including reflectivity, colour, extent and location.

Areas of glazing are not limited, but mirror glass is not permitted.

Dwellings will have walls of:

a) Copper or zinc
b) Cedar shingles
c) Weatherboards
d) Concrete blocks
e) Of not more than 50m2 of substantially unbroken surface in one plane.
f) Timber, stucco, plaster, rendered or painted textured finish, stone or brick, timber or other material as having architectural merit.
g) Not in a continuous plane across the face of any adjoining dwelling.

Window and Door Joinery

a) Powder coated and anodised aluminium of recessive colour or natural, oiled or varnished timber construction may be used. Silver or other polished metallic finishes shall only be utilised in small extent.

Ancillary Structures

Any ancillary structures including, but not limited to signs, television and radio antennae and clotheslines shall be discretely integrated with the dwelling architecture and sited within the landscape of the site so that they are not highly visible from any jointly accessed area or adjoining property.

Colour Specifications

Use of bright colours and painted surfaces should be limited to relatively small and defined architectural accents. The area of colour should constitute not more than 10% of any elevation.

The exterior of the dwelling shall have a reflectance value of not more that 35% according to the BS5252 colour chart (available from Resene). As a guide, colours that are presented in the Resene 'Earth Palettes' and/or 'Fashion Grey Palette' range, which comply with this reflectance limit and which are found within the following ranges, are encouraged:

a) RO Red Oxide
b) GO Green Oxide
c) YO Yellow Oxide
d) BO Brown Oxide
e) GR Grey Palette

Lighting

Exterior lighting brightness, orientation and duration must be controlled to support the aims of the guidelines and to avoid any nuisance to neighbours.

Design Approval

These guidelines supplement, but do not replace, the requirements of the Far North District Council.

Construction

The co-operation of owners, builders and tradespeople is sought to ensure that the environment and neighbours are not unnecessarily disrupted.

Construction Time Limit

While there is no time limit for owners to commence construction, once construction has started, a dwelling will be constructed and finished within 12 months of commencement of excavation for foundations. All ancillary work including planting of lawns, landscaping and any other development work shall be completed within 18 months of commencement of excavation for foundations. All un-built sites shall be maintained by the owner to best horticultural practice.

Erosion control and damages during construction

All disturbed areas of the site shall be protected from wind and water erosion during and after the construction period. All earthworks shall be re-vegetated within one month of completion by either the spreading of a grass seed mix (perennial rye grasses and clover), by planting ground cover or by further bolstering protection using biodegradable geotextile cover (e.g. jute or coconut fibre products). Further guidance for erosion management is provided in the Allotment Management Plans.

Protecting Existing Trees and Vegetation

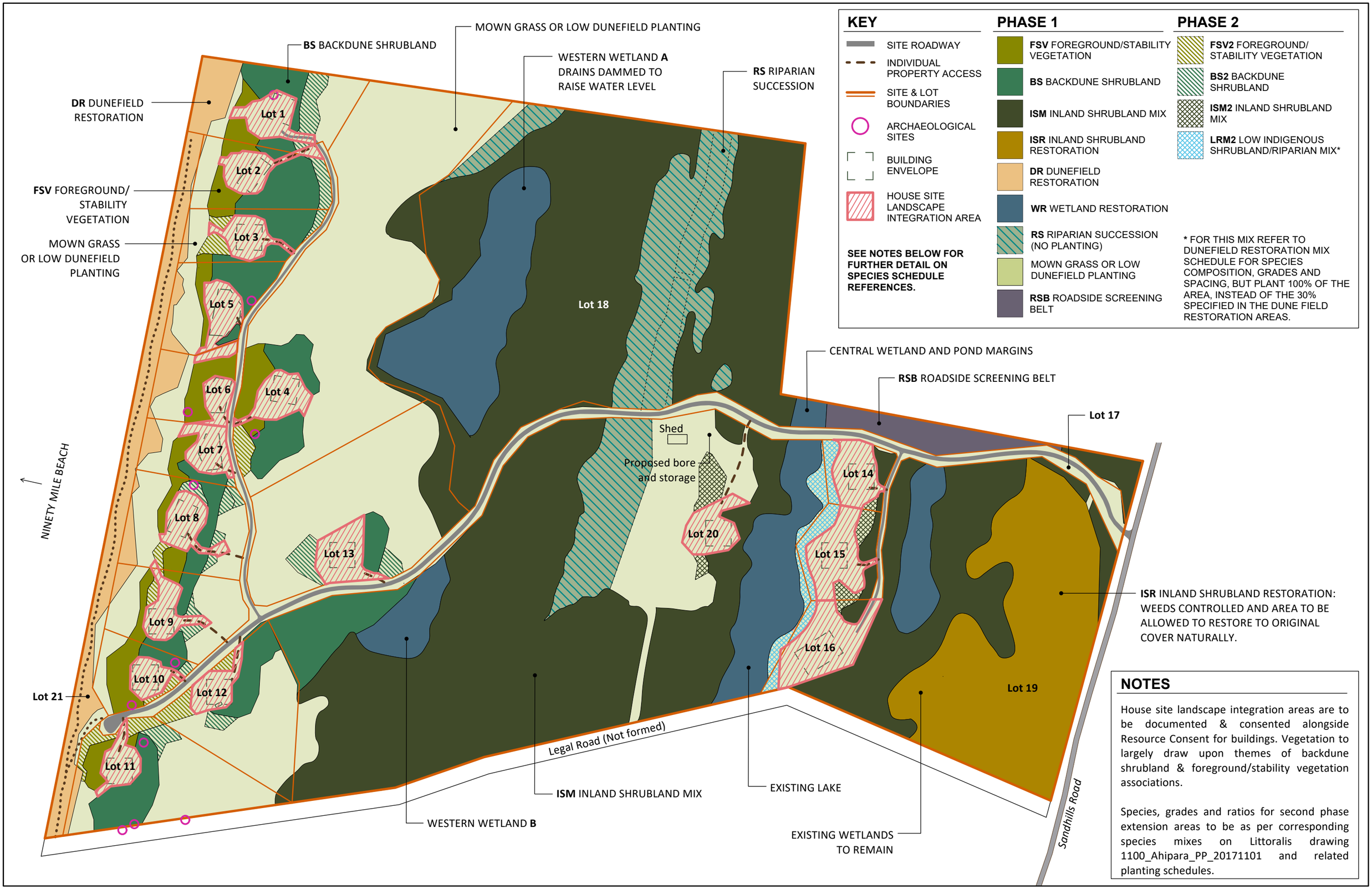
The owner and builder shall ensure that existing and regenerating indigenous vegetation around the construction areas on site are protected from damage.

Damage during construction

Damage caused by the builder to services such as roads, curbs, power etc. adjacent to any Lot will be charged to the owner. The owner must immediately notify any other effected owners, in writing, of any such damage.

Construction storage

All construction materials, rubbish and excavation materials shall be stored within the boundaries of the site. Builders shall provide adequate rubbish containers on the site and control waste materials to prevent dispersal by wind onto other properties. No fires are permitted. If proper clean up does not occur, debris will be removed, and the costs charged to the owner.



KEY

- SITE ROADWAY
- INDIVIDUAL PROPERTY ACCESS
- SITE & LOT BOUNDARIES
- ARCHAEOLOGICAL SITES
- BUILDING ENVELOPE
- HOUSE SITE LANDSCAPE INTEGRATION AREA

SEE NOTES BELOW FOR FURTHER DETAIL ON SPECIES SCHEDULE REFERENCES.

PHASE 1

- **FSV** FOREGROUND/STABILITY VEGETATION
- **BS** BACKDUNE SHRUBLAND
- **ISM** INLAND SHRUBLAND MIX
- **ISR** INLAND SHRUBLAND RESTORATION
- **DR** DUNEFIELD RESTORATION
- **WR** WETLAND RESTORATION
- **RS** RIPARIAN SUCCESSION (NO PLANTING)
- MOWN GRASS OR LOW DUNEFIELD PLANTING
- **RSB** ROADSIDE SCREENING BELT

PHASE 2

- **FSV2** FOREGROUND/ STABILITY VEGETATION
- **BS2** BACKDUNE SHRUBLAND
- **ISM2** INLAND SHRUBLAND MIX
- **LRM2** LOW INDIGENOUS SHRUBLAND/RIPARIAN MIX*

* FOR THIS MIX REFER TO DUNEFIELD RESTORATION MIX SCHEDULE FOR SPECIES COMPOSITION, GRADES AND SPACING, BUT PLANT 100% OF THE AREA, INSTEAD OF THE 30% SPECIFIED IN THE DUNE FIELD RESTORATION AREAS.

NOTES

House site landscape integration areas are to be documented & consented alongside Resource Consent for buildings. Vegetation to largely draw upon themes of backdune shrubland & foreground/stability vegetation associations.

Species, grades and ratios for second phase extension areas to be as per corresponding species mixes on Littoralis drawing 1100_Ahipara_PP_20171101 and related planting schedules.

0 50 100 150 200 250 m

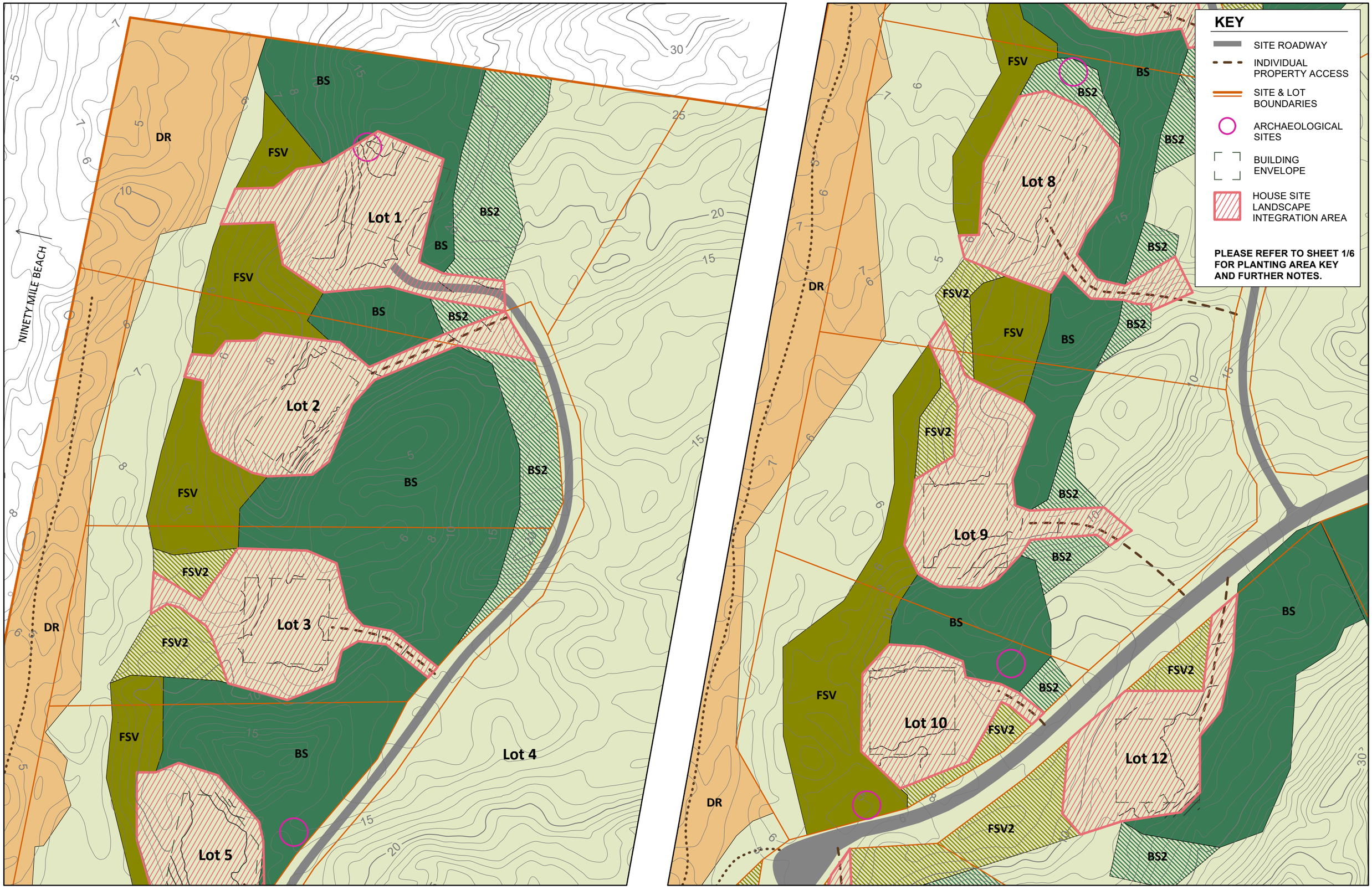
Scale: 1: 4000 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 1|6

ALLOTMENT VEGETATION PLAN NOVEMBER 2023

Ref.: 1324_Ahipara_AllotmentVegZones_20231116



0 20 30 40 50 m

Scale: 1: 1200 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 2|6

ALLOTMENT VEGETATION PLAN NOVEMBER 2023

Ref.: 1324_Ahipara_AllotmentVegZones_20231116

0 20 30 40 50 m

Scale: 1: 1200 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 3|6

ALLOTMENT VEGETATION PLAN NOVEMBER 2023

Ref.: 1324_Ahipara_AllotmentVegZones_20231116

KEY

- SITE ROADWAY
- INDIVIDUAL PROPERTY ACCESS
- SITE & LOT BOUNDARIES
- ARCHAEOLOGICAL SITES
- BUILDING ENVELOPE
- HOUSE SITE LANDSCAPE INTEGRATION AREA

PLEASE REFER TO SHEET 1/6 FOR PLANTING AREA KEY AND FURTHER NOTES.

Lot 4
Lot 13
Lot 12
Lot 14
Lot 15
Lot 16
Lot 20
Lot 19

FSV
FSV2
BS
BS2
ISM
ISM2
LRM
WR
ISR

0 20 30 40 50 m

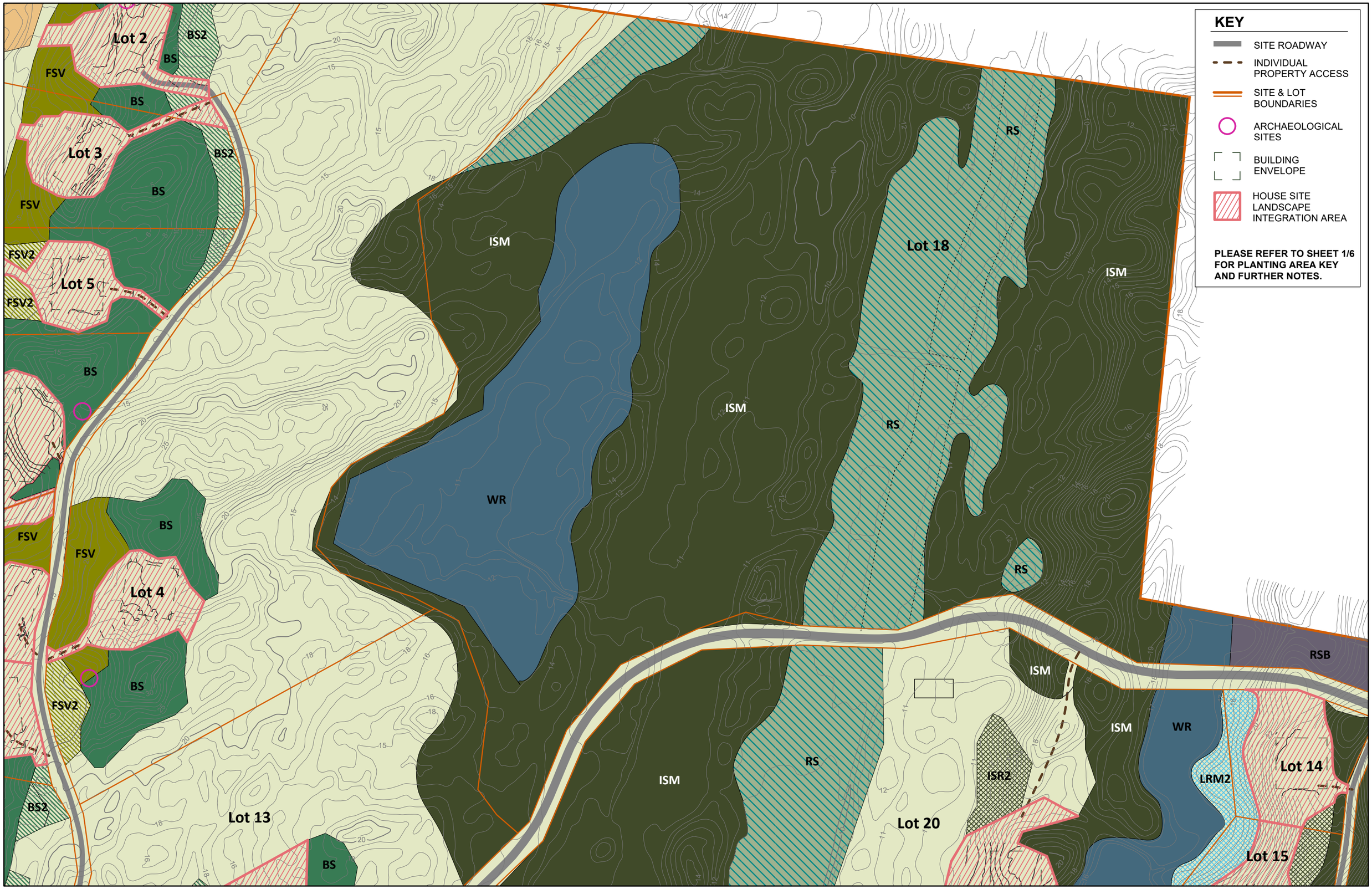
Scale: 1: 1200 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 4|6

ALLOTMENT VEGETATION PLAN NOVEMBER 2023

Ref.: 1324_Ahipara_AllotmentVegZones_20231116



KEY

- SITE ROADWAY
- INDIVIDUAL PROPERTY ACCESS
- SITE & LOT BOUNDARIES
- ARCHAEOLOGICAL SITES
- BUILDING ENVELOPE
- HOUSE SITE LANDSCAPE INTEGRATION AREA

PLEASE REFER TO SHEET 1/6 FOR PLANTING AREA KEY AND FURTHER NOTES.

0 20 30 40 50 m

Scale: 1: 2000 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 5|6

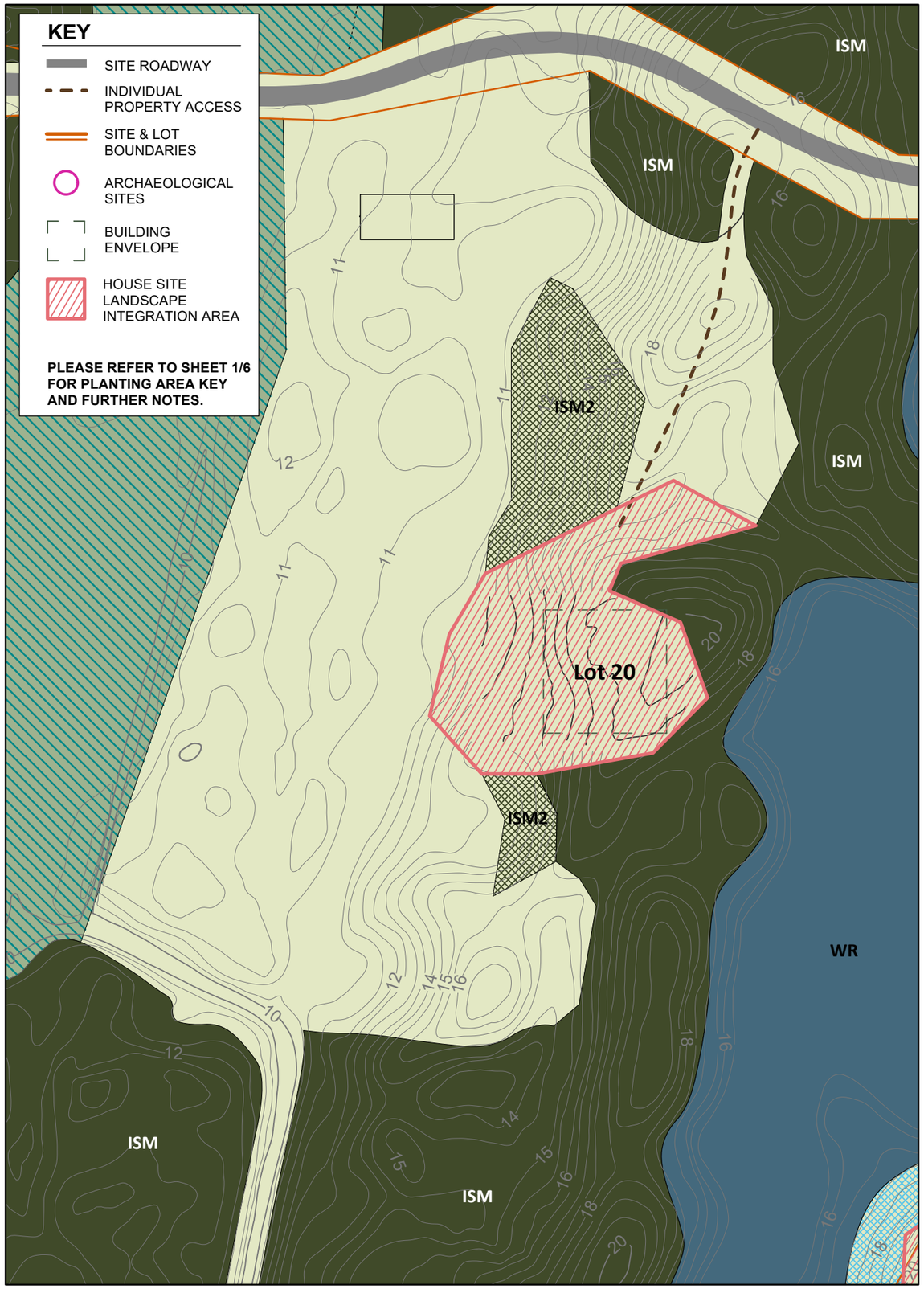
ALLOTMENT VEGETATION PLAN NOVEMBER 2023

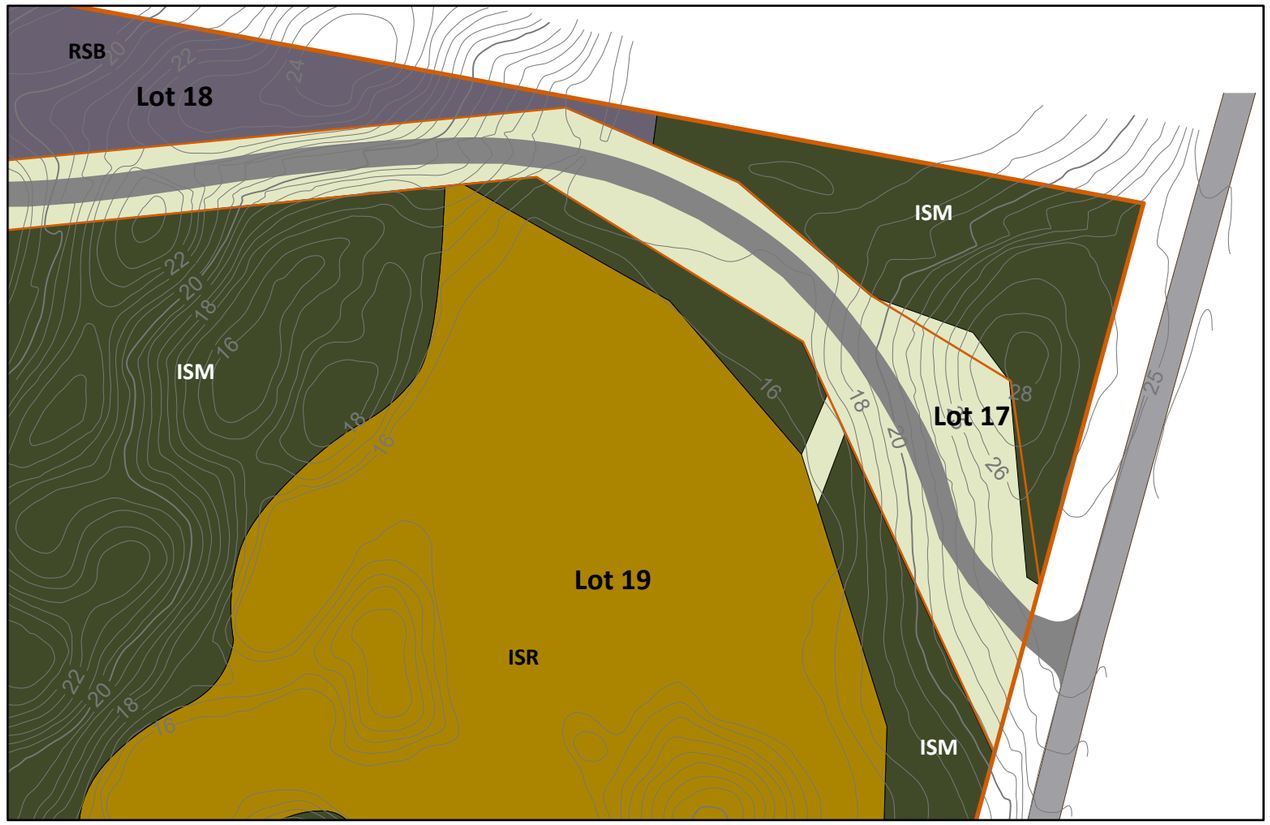
Ref.: 1324_Ahipara_AllotmentVegZones_20231116

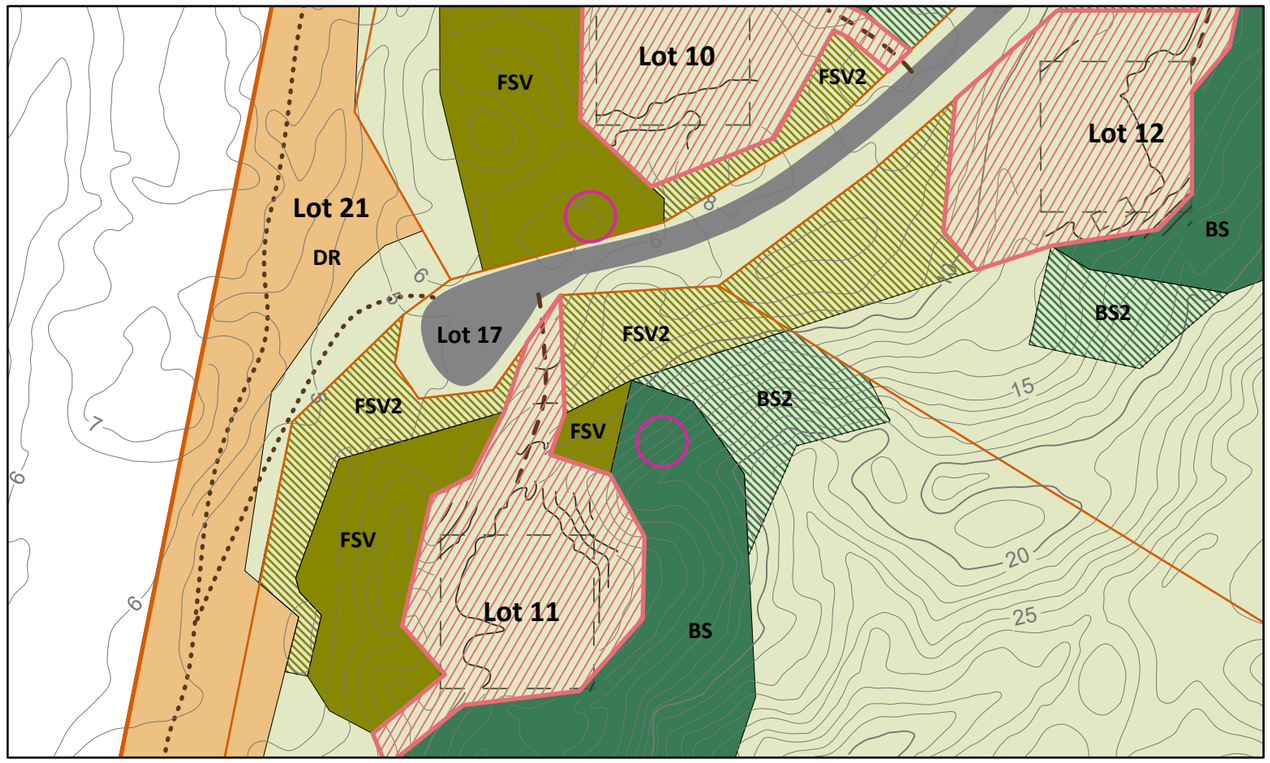
KEY

- SITE ROADWAY
- INDIVIDUAL PROPERTY ACCESS
- SITE & LOT BOUNDARIES
- ARCHAEOLOGICAL SITES
- BUILDING ENVELOPE
- HOUSE SITE LANDSCAPE INTEGRATION AREA

PLEASE REFER TO SHEET 1/6 FOR PLANTING AREA KEY AND FURTHER NOTES.







0 20 30 40 50 m

Scale: 1: 1200 @ A3

LITTORALIS LANDSCAPE ARCHITECTURE

ONE THOUSAND SANDHILLS LTD SHEET 6|6

ALLOTMENT VEGETATION PLAN NOVEMBER 2023

Ref.: 1324_Ahipara_AllotmentVegZones_20231116

PLANTING NOTES

TO BE READ IN CONJUNCTION WITH PLANTING PLAN

Ref.: 1100_Ahipara_PP_20171101

PLANT SOURCE

- All plant material, in terms of seed and cuttings used for propagation, shall be collected from within the Aupouri or Ahipara Ecological Districts, with the exception of manuka installed in the plantation, which will be selected for high UMF.
- Plants will be contract-grown by The Native Plant Nursery and transported to site in a fully covered vehicle.

PLANTING METHODS

- All planting areas are to be cleared of competing kikuyu and comparable smothering species through repeated applications of glyphosate spray (Roundup) at two monthly intervals. Gorse, lupin, apple of sodom and other potentially larger competing weeds shall be spot sprayed during months of active growth (ideally spring and early autumn), taking care to avoid overspray onto adjacent worthwhile plants that are to be conserved, and into water bodies. All spraying to occur during still, cool conditions.
- Planting is to occur between the months of May and August, inclusive.
- Whilst most planting will occur in friable, sandy soils, there is some possibility of encountering shallow, mineralised pans. In these circumstances, planting holes are to be well-shattered to promote root growth and prevent trapping water.
- The top of the plant rootball is to be set approximately 100mm below natural ground in sandy soils, within a slight depression. In perennially moister soils, the rootball is to be slightly below natural ground and covered with a thin layer of soil. Plants to be thoroughly heeled in place to prevent drying and wind movement.
- All plants, other than those that may be installed in standing water, are to receive a single 18 month fertiliser tablet placed below and apart from the root-ball.
- Water retention crystals (eg Crystal Rain or Austrosorb) may be specified at the discretion of the landscape architect on sites that are most vulnerable to drying. Crystals are to be well mixed in planter hole (a pinch to small plants and 1 teaspoon to trees) to avoid “heaving” of the plant when the crystals hydrate.
- All plants to be well watered prior to installation.
- In some areas where competing weed growth has the potential to be an issue (primarily in the most fertile soils of the site), the landscape architect may specify that plants are to be marked with a 1.400 bamboo stake to their south side.

MAINTENANCE

- Monitor bimonthly, with particular attention during peak growing months of spring and autumn.
- Spray release plants up to four times per year, using selective herbicides (see above) or broad spectrum products with a cone or very careful application. All spraying to occur during still, cool conditions.
- Release maintenance is to occur until canopy closure or predominant ground cover is achieved. This is expected to be between 3 and 5 years, depending upon the species mix type and part of the site that is involved.
- Topdress around the perimeter of each plant with an NPK prill fertiliser in late winter of year 2 following planting. Rates as per manufacturer’s recommendations.
- Once canopy closure has been reached, planting monitoring and maintenance can be reduced to a twice per annum basis, focussed on spring and autumn.
- Replace plants that die when the percentage of the overall installation exceeds 10% or when loss is concentrated within a defined area.
- Manage browsing pests such as rabbits, hares and possums, using toxic baits and shooting as may be required. All baiting and shooting to comply with relevant legislation and best practise efficacy and safety measures.

GENERAL

All preparation, planting and management methodologies are to be consistent with recognised best practise horticultural and ecological restoration methods and standards.

Note:
RT = root trainer
Div = division

DUNEFIELD RESTORATION COVENANT AREA
(within Sandhills Estate boundary)
Allowing for natural colonisation and fostering existing pohuehue scattered through the area, so provision to actively plant 30% of total area (as small "islands' or peninsulas) of 2.6647 ha at 1.000m centres (~ 8,000 plants).

botanical name	common name	pb size	% of mix	subtotal
Ozothamnus leptophyllus	tauhinu	RT	5	400
Cortaderia splendens	toetoe	Tube/RT	10	800
Ficinia nodosa	wiwi / knobbly club rush	RT/Div	10	800
Muehlenbeckia complexa	pohuehue	Tube/RT	25	2000
Phormium tenax	harakeke	Tube/RT	10	800
Spinifex sericeus	kowhangatara	RT	40	3200

FOREGROUND/STABILITY VEGETATION COVENANT AREA
(Forground to Lots 1 to 11)
All areas of foreground/stability planting (1.6891 ha) are to be planted 100 % at min. 1.000m centres (~ 17,000 plants)

botanical name	common name	pb size	% of mix	subtotal
Ozothamnus leptophyllus	tauhinu	RT	5	850
Cortaderia splendens	toetoe	Tube/RT	10	1700
Ficinia nodosa	wiwi / knobbly club rush	RT/Div	10	1700
Muehlenbeckia complexa	pohuehue	Tube/RT	25	4250
Phormium tenax	harakeke	Tube/RT	10	1700
Spinifex sericeus	kowhangatara	RT	40	6800

BACKDUNE SHRUBLAND RESTORATION COVENANT AREA
(Backdrop to Lots 1 to 13 and Lot 20)
Assuming entire planting coverage at approx.1.200 centres of total area of 4.1485 ha (~ 28,500 plants).

botanical name	common name	pb size	% of mix	subtotal
Cordyline australis	ti kouka / cabbage tree	RT	4.5	1283
Coprosma repens	taupata	Tube/RT	10	2850
Cortaderia splendens	toetoe	Tube/RT	15	4275
Dacrycarpus dacridioides	kahikatea	Pot 1L/PB3	0.5	143
Leptospermum scoparium	manuka	RT	25	7125
Kunzea ericoides	kanuka	RT	15	4275
Metrosideros excelsa	pohutukawa	POT14	5	1425
Muehlenbeckia complexa	pohuehue	Tube/RT	5	1425
Phormium tenax	harakeke	Tube/RT	20	5700

INLAND SHRUBLAND
(Strip to the seaward side of western wetland A, areas east of Lots 14 to 16 and area near site entrance)
Provision to actively plant 100% of total area of 1.5638 ha at 1.200m centres (~ 10.500 plants).

botanical name	common name	pb size	% of mix	subtotal
Cordyline australis	ti kouka / cabbage tree	RT	2	210
Cortaderia splendens	toetoe	Tube/RT	8	840
Leptospermum scoparium	manuka	RT	15	1575
Kunzea ericoides	kanuka	RT	50	5250
Phormium tenax	harakeke	Tube/RT	25	2625

LITTORALIS
LANDSCAPE ARCHITECTURE

WETLAND RESTORATION AREA
(Western wetland A and B, central wetland incl. existing lake margins and wetland on Lot 20 between manuka plantation and open, grassed area)
Allowing for natural colonisation, areas of standing water and primary focus on margins, so provision to actively plant 20% of total area of 5.6581 ha at average 750mm centres (~ 20,000 plants).

botanical name	common name	pb size	% of mix	subtotal
Cordyline australis	ti kouka / cabbage tree	RT	2	400
Cortaderia splendens	toetoe	Tube/RT	2	400
Cyperus ustulatus	giant umbrella sedge	Tube/RT	5	1000
Dacrycarpus dacridioides	kahikatea	Pot 1L/PB3	1	200
Juncus maritimus var australiensis	wiwi / sea rush	RT/Div	20	4000
Ficinia nodosa	wiwi / knobbly club rush	RT/Div	20	4000
Leptocarpus similis	oioi / jointed wire rush	RT/Div	15	3000
Leptospermum scoparium	manuka	RT	15	3000
Muehlenbeckia complexa	pohuehue	Tube/RT	5	1000
Phormium tenax	harakeke	Tube/RT	15	3000

NATURAL RESTORATION AREA
(Between Lots 14-16 and Sandhills Rd)
Allowing for natural colonisation, areas of standing water outside of main inundated areas, so provision to actively plant 30% of total area of 5.2417 ha at 1.500m centres (~ 7,000 plants).

botanical name	common name	pb size	% of mix	subtotal
Cordyline australis	ti kouka / cabbage tree	RT	1.5	105
Cortaderia splendens	toetoe	Tube/RT	1	70
Cyperus ustulatus	Giant umbrella sedge	Tube/RT	5	350
Dacrycarpus dacridioides	kahikatea	Pot 1L/PB3	1	70
Juncus maritimus var australiensis	wiwi / sea rush	RT/Div	12.5	875
Ficinia nodosa	wiwi / knobbly club rush	RT/Div	15	1050
Leptocarpus similis	oioi / jointed wire rush	RT/Div	2	140
Leptospermum scoparium	manuka	RT	50	3500
Muehlenbeckia complexa	pohuehue	Tube/RT	2	140
Phormium tenax	harakeke	Tube/RT	10	700

ROADSIDE SCREEN BELT COVENANT AREA
(Along eastern portion of northern boundary)
Taller native tree species (karaka, pohutukawa) to be positioned in relation to small native trees species (kanuka, manuka, ngaio) to provide future canopy.
Total area of 0.6572 ha at approx. 2.000 m centres (~ 1,640).

botanical name	common name	pb size	% of mix	subtotal
Corynocarpus laevigatus	karaka	POT14	15	246
Leptospermum scoparium	manuka	RT	30	492
Kunzea ericoides	kanuka	RT	20	328
Metrosideros excelsa	pohutukawa	POT14	20	328
Myoporum laetum	ngaio	POT 1L	15	246

* Ngaio to be positioned well back from the boundary fence line so that there is no potential for them to extend future growth into the neighbouring property where stock are kept.*

MANUKA (UMF) PLANTATION (22.3 ha INSTALLED)
FUTURE EXTENSION 1.4 ha 2,200 plants at 2.500 centres
Leptospermum scoparium (UMF) manuka

RIPARIAN SUCCESSION (4.2 ha)
No planting.

GRASS
lawn or grazed areas - no planting.

SANDHILLS ESTATE RESTORATION AND MITIGATION PLANTING

SCHEDULE FOR PLANT SUPPLY

28/11/2017

LITTORALIS
LANDSCAPE ARCHITECTURE

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITIES PER PLANTING ZONE								TOTAL QTYS
			DUNEFIELD RESTORATION	FOREGROUND/STABILITY	WETLAND RESTORATION	INLAND SHRUBLAND	NATURAL RESTORATION	BACKDUNE SHRUBLAND	ROADSIDE SCREEN BELT	MANUKA PLANTATION EXTENSION	
Coprosma repens	taupata	tube/RT	0	0	0	0	0	2850	0	0	**2850**
Cordyline australis	ti kouka / cabbage tree	RT	0	0	400	210	105	1283	0	0	**1998**
Cortaderia splendens	toetoe	tube/RT	800	1700	400	840	70	4275	0	0	**8085**
Corynocarpus laevigatus	karaka	POT 14	0	0	0	0	0	0	246	0	**246**
Cyperus ustulatus	giant umbrella sedge	tube/RT	0	0	1000	0	350	0	0	0	**1350**
Dacrycarpus dacridioides	kahikatea	POT 1 litre/PB3	0	0	200	0	70	143	0	0	**413**
Juncus maritimus var australiensis	wiwi / sea rush	RT/Div	0	0	4000	0	875	0	0	0	**4875**
Ficinia nodosa	wiwi / knobbly club rush	RT/Div	800	1700	4000	0	1050	0	0	0	**7550**
Kunzea ericoides	kanuka	RT	0	0	0	5250	0	4275	328	0	**9853**
Leptocarpus similis	oioi / jointed wire rush	RT/Div	0	0	3000	0	140	0	0	0	**3140**
Leptospermum scoparium	manuka	RT	0	0	3000	1575	3500	7125	492	0	**15692**
***Leptospermum scoparium* (UMF)**	manuka (UMF)	RT	0	0	0	0	0	0	0	2200	**2200**
Metrosideros excelsa	pohutukawa	POT 14	0	0	0	0	0	1425	328	0	**1753**
Muehlenbeckia complexa	pohuehue	tube/RT	2000	4250	1000	0	140	1425	0	0	**8815**
Myoporum laetum	ngaio	POT 1 litre	0	0	0	0	0	0	246	0	**246**
Ozothamnus leptophyllus	tauhinu	RT	400	850	0	0	0	0	0	0	**1250**
Phormium tenax	harakeke	tube/RT	800	1700	3000	2625	700	5700	0	0	**14525**
Spinifex sericeus	kowhangatara	RT	3200	6800	0	0	0	0	0	0	**10000**

Table 1: Sandhills Estate Allotment Management Plan - Landscape Provisions	
Requirement	**Assessment / Evidence**
<u>Principles for Design – Buildings</u> The following principles relate to all the Lots within the Management Plan area:	
a) Dwellings and out buildings are to be constructed in a similar style, construction and material.	The 'dwelling' has been designed as a set of three 'pods' accommodating 2 bedrooms, living area and a combined kitchen, dining and bathroom/laundry, linked by a covered deck area. The style, and building materials have a similar resemblance in appearance.
b) Consideration is to be given to the existing rural and coastal character of the area.	The architectural design has given regard to the rural and coastal character of the area. The style, layout and building materials are sympathetic to and in character with both the rural and coastal setting.
c) Roof structures are to be of consistent pitch with a single plane of 0-12 degrees or gabled with a pitch of between 15-25 degrees.	The roof structures are single plane and comply.
d) The most prominent viewpoints that they will be viewed from should be considered in the placement and design of the roof form. Large areas or unrelieved expanses that will be dominantly visible from other allotments, shared areas within the property or from beyond the site are not permitted.	These viewpoints have been considered, the built structures will not be viewed as a prominent built form from any viewpoint as it is set low into the landscape with a land backdrop and is visually recessive and subordinate in the landscape.
e) Colours utilised will be natural colours and not highly reflective such as white, or of high visibility such as red, for the purpose of visual amenity from off-site locations.	Building colours are all natural looking and recessive, in dark tones. Refer to Architects plans.
f) Driveways should utilise curved formations and planting to integrate into the landscape.	The first section of the driveway is already present and is curved. Landscape plantings are proposed to be located around the new portion of driveway next to the building site.
g) Dwellings should incorporate pergolas, decks, or verandahs to soften building form.	This has been achieved in the overall architectural design of the structures.
h) Windows and joinery should have low reflectivity.	Complies
i) Lighting should be designed with sensitivity to external visual effects.	Complies

Landscape The treatment of proposed hard and soft landscape elements, including earthworks, roading, drainage, retaining walls, surfacing and landscape planting, should complement the character of both the site and its surroundings and the planting in the protected areas. Materials and species used should allow integration of elements into the landscape with limited artificial modification evident. The landscape plan (which relates to the property but excluding the minimum landscape area relating to the planting to be undertaken on Lots 18-21 (inclusive)) should be developed using a comprehensive approach to architecture and landscape to respond to the site's developing natural character, and will need to address:	
a) Integration between the building and the immediate landscape through responsive siting, with particular reference to natural contour.	The building has been set within the consented building envelope. This is located within a low point of a saddle, with a backdrop rolling dunes hills that enable the structure to be nestled into the landscape. The architectural design thus is very responsive to the natural contours and landform.
b) Aesthetic controls aimed at achieving coherence between buildings and the landscape and each other.	The landscape plantings tie the pods together within a vegetated setting, while the cohesiveness of the building design and colours create an aesthetically pleasing overall appearance.
c) Integration with the existing areas of vegetation to reduce visibility from external locations and to create an overall sense of coherence.	The landscape plantings located on the periphery of the landscaped areas around the structures utilise naturally occurring native dune plantings that will reduce visibility and seamlessly blend the development into the existing vegetation patterns
d) Should feature a predominantly native plant selection as more fully described under the subheading "planting" which follows.	A Landscape Plan has been prepared for the area the buildings within the consented building envelope, and feathering out into the House Site Integration Area.
The landscape and architectural plans will need to be prepared by suitably qualified persons and submitted for approval by the Far North District Council.	This is achieved.

Hard Landscape Elements The hard landscape elements include retaining walls, road edges, gates and fences and other built elements that are not an integral part of the dwelling.	
Surfacing of Decks, Forecourts and Terraces Natural materials, such as timber and stone are encouraged. Colour and finish should promote integration into the existing landscape. Concrete should have an exposed aggregate finish of an approved colour and finish. All material colours and finishes will need to be approved. Area limitations may apply.	The colours and material finishes will blend with the surrounding landscape.
Fences Unless required for safety reasons (such as swimming pools or to prevent falls from elevated areas), fences are not allowed other than for the external boundaries of the Estate and areas approved for grazing on Lots 1, 4, 13 and 20. The intention of this restriction is to allow the flowing profile of the landscape to be unhindered by boundary fences or undue ornamentation at Lot access points.	No fences are proposed.
No livestock shall be put onto those parts of Lots 1, 4, or 13 and 20 which are approved for grazing without the perimeter of these areas first being fenced. For these areas, simple agricultural fences are allowed, but visually emphatic post and rail, close-boarded or painted fences are not acceptable.	N/A
Driveways To be formed with gravel consistent with that used on shared accessways within the Estate or in an exposed aggregate concrete finish incorporating colouring oxides in tones of mid grey, subtle brown or sand-like colours. Colours and finishes are to be approved by the Far North District Council. Area limitations may apply.	The driveway and parking areas will be gravel consistent with the existing driveway.
Retaining Walls With the potential to be disruptive in the rolling contour of this landscape, visible retaining walls should be avoided to the greatest extent practicable. Measures such as burying structural support of the land and planting over that support shall be fostered. Where unable to be avoided, visible retaining walls shall be detailed sensitively. Natural materials, such as timber,	There will be no retaining walls

rammed earth, and stone, with vegetation incorporated to soften the impact of the structure will be encouraged. Colours and finishes need to be approved.	
<u>Planting</u> Landscape plans within a proposed dwelling's curtilage area must be submitted for approval by the Far North District Council at the same time as building consent or resource consent is applied for any house to be constructed on any Lot.	A Landscape Plan for the curtilage area has been prepared and is contained in Appendix 5 of the Hawthorn Landscape Architects Landscape Assessment report.
Implementation of the landscape plan is the responsibility of the relevant Lot owner and is to be undertaken within the first planting season (approximately March-August) directly following commencement of any construction of a house upon a relevant Lot.	Acknowledged
Landscape planting within the curtilage area is divided into two categories, large scale structural planting and more intimate domestic planting, including indigenous foreground / stability vegetation as defined in **Appendix C**.	The Landscape Plan has been prepared following the guidelines in Appendix C – Sandhills Estate Master Plan.
Structural planting may consist of native shrubland and domestic [amenity planting]. The installation of this vegetation will be undertaken by the Lot owner to form the framework of the planting within the dwelling's curtilage area, bold and simple in character and providing a visual and physical link with the balance of the vegetation within the development. Domestic planting may be more intimate in character, providing an amenity setting in the area immediately surrounding the house sites. The treatment of these two planting types is set out in the guidelines below:	The structural planting shown on the Landscape Plan consists of Pohutukawa, Ngaio, Pseudopanax, Pittosporum and Cabbage trees. These trees and the other shrub plantings such as Flax will tie the proposed landscaping into the surrounding landscape.
<u>Structural planting</u> The purpose of structural planting will be to provide a bold framework of locally appropriate indigenous vegetation within the dwelling curtilage to link with similarly composed vegetation that will be established within the wider landscape on the nearest structure planting areas. The vegetation and landform are intended to flow seamlessly across title	This guideline has been achieved through the planting specified on the Landscape Plan, refer to Appendix 5.

boundaries to create a broad, visually bold, entity. <u>Domestic Planting</u> Domestic planting can be used within the framework of structural planting, in the immediate environs of the buildings. Planting should be used to: a) Create a further linkage between built development and the broader structural planting. b) Breaking up the mass and bulk of buildings. c) Providing a foreground setting and a grounding for buildings. d) Providing a backdrop to buildings; and e) Providing full or partial screening of utility or service areas. Integration with the areas forming the broader structural planting can be achieved by using species contained within the lists contained in **Appendix B**. While the palette of species appropriate for use within the remaining domestic planting areas is less restricted than for the wider restorative and amenity plantings on the site, there is a need to provide a degree and linkage and coherence up to buildings. Accordingly, not less than 40% of the area of Domestic Planting shall also be composed of species from the appropriate planting area in **Appendix B**. The balance of planting may include a range of native and exotic shrub and tree species suitable for the local environment. Any species that are known or potential weeds, e.g. Agapanthus orientalis, must be avoided.	This guideline has been achieved through the planting specified on the Landscape Plan, refer to Appendix 5.
<u>Scale</u> Single level or split-level buildings with a maximum rolling height of 5 metres in Lots 4 and 13 and 6 metres in all other lots relative to the mean ground level existing at the time the certificates of title issue for such lots are permitted. As indicated by Consent Order on the title no habitable building shall be constructed	The proposed structures are single level and meet these requirements.

with finished floor levels below 4.8 metres One Tree Point vertical datum 1964.	
Form Variation in form or materials in a manner that does not lead to the building appearing fragmented is encouraged to reduce the perceived scale of the building when viewed from within and outside the site. For example, wall panels separated by areas of glazing or different materials and colour.	The architectural design of the proposed structure has ensured the pods are viewed as a cohesive group visually. Refer to Architects Plans.
Forms that create a horizontal emphasis whilst emphasising a strong connection with the ground are appropriate.	This has been achieved.
The form of the building can be a single element or multiple elements dependant on individual owner preference. However, variation in form is encouraged to reduce the scale of the building. If the building takes the form of multiple elements there should be a relationship between those separate elements so that they read as a cohesive whole and part of a 'household unit'.	This has been achieved.
Roof Forms Generally, roofs with a pitch of less than 25 degrees, which is the maximum permitted, are preferred.	This has been achieved.
Roof forms that are of very low pitch and with a simple fascia often assist to reduce prominence provided that the fascia is not detailed in such a way as to create very emphatic horizontal line.	This has been achieved.
Roofs that have the potential to present large unrelieved expanses when seen from other identified dwelling locations, shared areas or surrounding public vantage points, will not be permitted.	The proposed roof will not result in this potential.
Accordingly, the relationship of the various sites with adjacent areas and the broader situation needs to be considered. Viewpoint needs to be considered when designing the roof/s and the principle of broken forms applies. Flat, gable, monopitch, and butterfly roof forms are generally permitted. Deep eaves that create	This has been considered and achieved.

shadow lines and minimise exposure of glazed areas to reflecting the sun are encouraged.	
Materials Generally, the use of materials which age well naturally with weathering is encouraged. Roof materials Reflectance values must not exceed 35% according to the BS5252 colour chart. Permitted materials are: a) Profiled roll-formed or folded metal is permitted subject to colour and reflectivity controls. b) Sheet materials including powder coated steel (e.g. Colorsteel), copper, cedar shingles and slates. c) Concrete with appropriate recessive colouring. d) Bituminous and rubber membranes. e) Turf and other planted roof options. Wall Materials Wall materials will be subject to an assessment of visual impact including reflectivity, colour, extent and location. Areas of glazing are not limited, but mirror glass is not permitted. Dwellings will have walls of: a) Copper or zinc b) Cedar shingles c) Weatherboards d) Concrete blocks e) Of not more than 50m2 of substantially unbroken surface in one plane. f) Timber, stucco, plaster, rendered or painted textured finish, stone or brick, timber or other material as having architectural merit.	This has been achieved. This has been achieved. The roofing material will be Colorsteel. There will be no mirror glass This is achieved.

g) Not in a continuous plane across the face of any adjoining dwelling. <u>Window and Door Joinery</u> a) Powder coated and anodised aluminium of recessive colour or natural, oiled or varnished timber construction may be used. Silver or other polished metallic finishes shall only be utilised in small extent.	This is achieved.
<u>Ancillary Structures</u> Any ancillary structures including, but not limited to signs, television and radio antennae and clotheslines shall be discretely integrated with the dwelling architecture and sited within the landscape of the site so that they are not highly visible from any jointly accessed area or adjoining property.	This is achieved.
<u>Colour Specifications</u> Use of bright colours and painted surfaces should be limited to relatively small and defined architectural accents. The area of colour should constitute not more than 10% of any elevation. The exterior of the dwelling shall have a reflectance value of not more that 35% according to the BS5252 colour chart (available from Resene). As a guide, colours that are presented in the Resene 'Earth Palettes' and/or 'Fashion Grey Palette' range, which comply with this reflectance limit and which are found within the following ranges, are encouraged: a) RO Red Oxide b) GO Green Oxide c) YO Yellow Oxide d) BO Brown Oxide e) GR Grey Palette	This is achieved. This is achieved.
<u>Lighting</u> Exterior lighting brightness, orientation and duration must be controlled to support the aims of the guidelines and to avoid any nuisance to neighbours.	This is achieved.

Non-Reticulated Firefighting Water Supplies, Vehicular Access & Vegetation Risk Reduction Application for New and Existing Residential Dwellings and Sub-Divisions

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Section A - Firefighting Water Supplies and Vegetation Risk Reduction Waiver

"Fire and Emergency New Zealand strongly recommends the installation of automatic fire detection system devices such as smoke alarms for early warning of a fire and fire suppression systems such as sprinklers in buildings (irrespective of the water supply) to provide maximum protection to life and property".

Waiver Explanation Intent

Fire and Emergency New Zealand [FENZ] use the New Zealand Fire Service [NZFS] Code of Practice for firefighting water supplies (SNZ PAS 5409:2008) (The Code) as a tool to establish the quantity of water required for firefighting purposes in relation to a specific hazard (Dwelling, Building) based on its fire hazard classification regardless if they are located within urban fire districts with a reticulated water supply or a non-reticulated water supply in rural areas. The code has been adopted by the Territorial Authorities and Water Supply Authorities. The code can be used by developers and property owners to assess the adequacy of the firefighting water supply for new or existing buildings.

The Area Manager under the delegated authority of the Fire Region Manager is responsible for approving applications in relation to firefighting water supplies. The Area Manager may accept a variation or reduction in the amount of water required for firefighting for example; a single level dwelling measuring 200^{m2} requires 45,000L of firefighter water under the code, however the Area Managers in Northland have excepted a reduction to 10,000L.

This application form is used for the assessment of proposed water supplies for firefighting in non-reticulated areas only and is referenced from (Appendix B – Alternative Firefighting Water Sources) of the code. This application also provides fire risk reduction guidance in relation to vegetation and the 20-metre dripline rule under the Territorial Authority's District Plan. Fire and Emergency New Zealand are not a consenting authority and the final determination rests with the Territorial Authority.

For more information in relation to the code of practice for Firefighting Water supplies, Emergency Vehicle Access requirements, Home Fire Safety advice and Vegetation Risk Reduction Strategies visit www.fireandemergency.nz

Section B – Applicant Information

Applicants Information	
Name:	Tim Burgess, Rochelle Lockley, Peter Hunt, Kate Dillon
Address:	137 Tiromoana Way, Ahipara
Contact Details:	c/- Bay of Islands Planning Limited
Return Email Address:	steve@bayplan.co.nz

Section C – Property Details

Property Details	
Address of Property:	137 Tiromoana Way, Ahipara
Lot Number/s:	Lot 1 DP 594744
Dwelling Size: (Area = Length & Width)	55.18m2
Number of levels: (Single / Multiple)	1

1. Fire Appliance Access to alternative firefighting water sources - Expected Parking Place & Turning circle

Fire and Emergency have specific requirements for fire appliance access to buildings and the firefighting water supply. This area is termed the hard stand. The roading gradient should not exceed 16%. The roading surface should be sealed, able to take the weight of a 14 to 20-tonne truck and trafficable at all times. The minimum roading width should not be less than 4 m and the property entrance no less 3.5 metres wide. The height clearance along access ways must exceed 4 metres with no obstructions for example; trees, hanging cables, and overhanging eaves.

1 (a) Fire Appliance Access / Right of Way	
Is there at least 4 metres clearance overhead free from obstructions?	☒YES ☐NO
Is the access at least 4 metres wide?	☒YES ☐NO
Is the surface designed to support a 20-tonne truck?	☒YES ☐NO
Are the gradients less than 16%	☒YES ☐NO
Fire Appliance parking distance from the proposed water supply is approximately 20 metres	

If access to the proposed firefighting water supply is not achievable using a fire appliance, firefighters will need to use portable fire pumps. Firefighters will require at least a one-metre wide clear path / walkway to carry equipment to the water supply, and a working area of two metres by two metres for firefighting equipment to be set up and operated.

1 (b) Restricted access to firefighting water supply, portable pumps required
Has suitable access been provided? ☒YES ☐ NO
Comments: Access considered suitable for appliance.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

2. Firefighting Water Supplies (FFWS)

What are you proposing to use as your firefighting water supply?

2 (a) Water Supply Single Dwelling	
Tank	☒ Concrete Tank ☒ Plastic Tank ☒ Above Ground (Fire Service coupling is required - 100mm screw thread suction coupling) ☒ Part Buried (max exposed 1.500 mm above ground) ☐ Fully Buried (access through filler spout) Volume of dedicated firefighting water 10000 [Note – details of type of tank not yet known but will be to standards] litres

2 (b) Water Supply Multi-Title Subdivision Lots / Communal Supply	
Tank Farm	☐ Concrete Tank ☐ Plastic Tank ☐ Above Ground (Fire Service coupling is required - 100mm screw thread suction coupling) ☐ Part Buried (max exposed 1.500mm above ground) ☐ Fully Buried (access through filler spout) Number of tanks provided Click or tap here to enter text. Number of Tank Farms provided Click or tap here to enter text. Water volume at each Tank Farm Click or tap here to enter text. Litres Volume of dedicated firefighting water Click or tap here to enter text. litres

2 (c) Alternative Water Supply	
Pond:	Volume of water: Click or tap here to enter text.
Pool:	Volume of water: Click or tap here to enter text.
Other:	Specify: Click or tap here to enter text.
	Volume of water: Click or tap here to enter text.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

3. Water Supply Location

The code requires the available water supply to be at least 6 metres from a building for firefighter safety, with a maximum distance of 90 metres from any building. This is the same for a single dwelling or a Multi-Lot residential subdivision. Is the proposed water supply within these requirements?

3 (a) Water Supply Location	
Minimum Distance:	*Is your water supply at least 6 metres from the building?* ☒YES ☐ NO
Maximum Distance	*Is your water supply no more than 90 metres from the building?* ☒YES ☐ NO

3 (b) Visibility
How will the water supply be readily identifiable to responding firefighters? E.g.: tank is visible to arriving firefighters or, there are signs / markers posts visible from the parking place directing them to the tank etc.
Comments: Easy sightlines to tank from driveway.

3 (c) Security
How will the FFWS be reasonably protected from tampering? E.g.: light chain and padlock or, cable tie on the valve etc.
Explain how this will be achieved: Secluded subdivision down long road.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

4. Adequacy of Supply

The volume of storage that is reserved for firefighting purposes must not be used for normal operational requirements. Additional storage must be provided to balance diurnal peak demand, seasonal peak demand and normal system failures, for instance power outages. The intent is that there should always be sufficient volumes of water available for firefighting, except during Civil Défense emergencies or by prior arrangement with the Fire Region Manager.

4 (a) Adequacy of Water supply
Note: *The owner must maintain the firefighting water supply all year round. How will the usable capacity proposed be reliably maintained? E.g. automatically keep the tank topped up, drip feed, rain water, ballcock system, or manual refilling after use etc.*
Comments: Dedicated tank with 10,000l

Internal FENZ Risk Reduction comments only:
Click or tap here to enter text.

5. Alternative Method using Appendix's H & J

If Table 1 + 2 from the Code of Practice is not being used for the calculation of the Firefighting Water Supply, a competent person using appendix H and J from the Code of Practice can propose an alternative method to determine firefighting water supply adequacy.

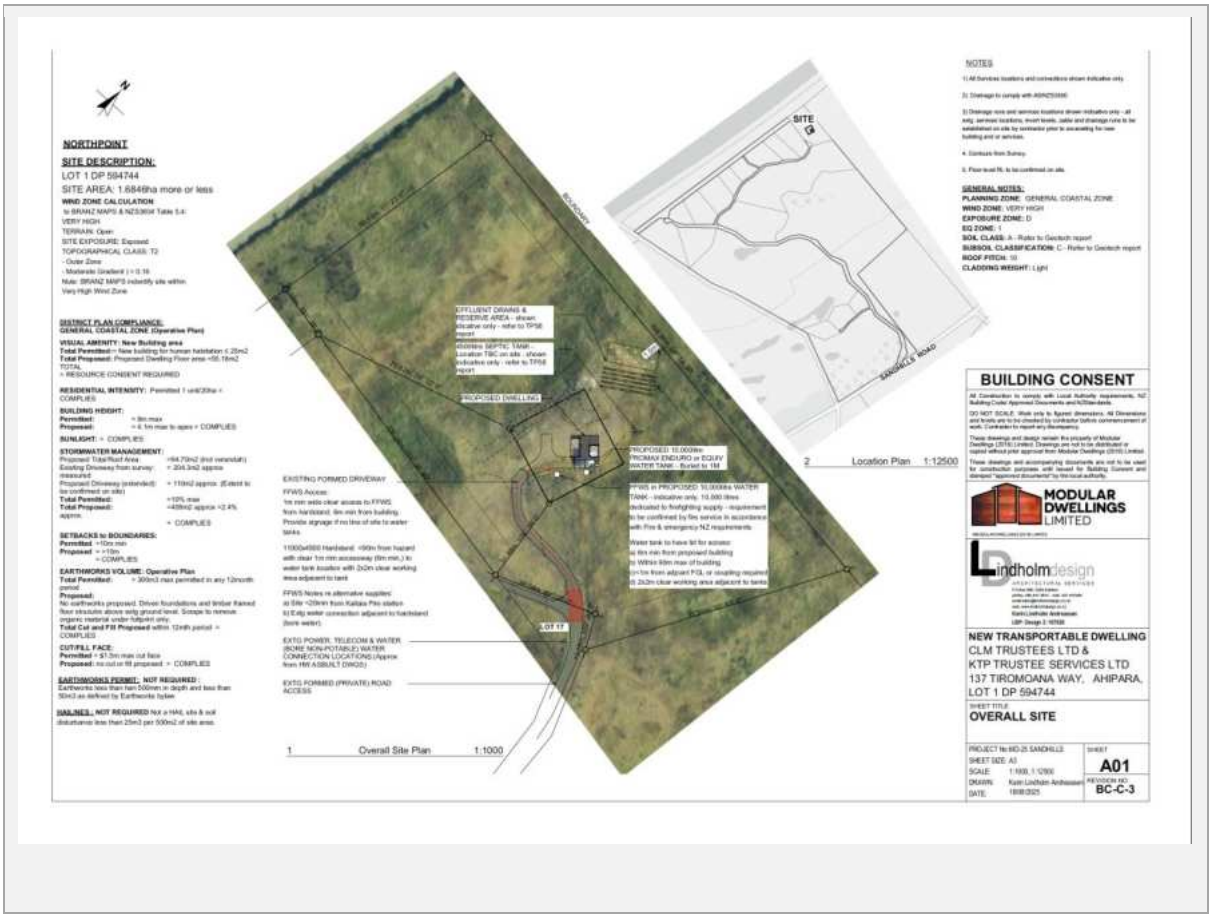
Appendix H describes a method for determining the maximum fire size in a structure. Appendix J describes a method for assessing the adequacy of the firefighting water supply to the premises.

5 (a) Alternative Method Appendix H & J	
If an alternative method of determining the FFWS has been proposed, who proposed it? Name: Click or tap here to enter text.	
Contact Details: Click or tap here to enter text.	
Proposed volume of storage?	Litres: Click or tap here to enter text.
Comments: Click or tap here to enter text. ** Please provide a copy of the calculations for consideration.*	

Internal FENZ Risk Reduction comments only: Click or tap here to enter text.

6. Diagram

Please provide a diagram identifying the location of the dwelling/s, the proposed firefighting water supply and the attendance point of the fire appliance to support your application.



Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

7. Vegetation Risk Reduction - Fire + Fuel = Why Homes Burn

Properties that are residential, industrial or agricultural, are on the urban–rural interface if they are next to vegetation, whether it is forest, scrubland, or in a rural setting. Properties in these areas are at greater risk of wildfire due to the increased presence of nearby vegetation.

In order to mitigate the risk of fire spread from surrounding vegetation to the proposed building and vice-versa, Fire Emergency New Zealand recommends the following;

I. *Fire safe construction*

Spouting and gutters – Clear regularly and consider screening with metal mesh. Embers can easily ignite dry material that collects in gutters.

Roof – Use fire resistant material such as steel or tile. Avoid butanol and rubber compounds.

Cladding – Stucco, metal sidings, brick, concrete, and fibre cement cladding are more fire resistant than wood or vinyl cladding.

II. *Establish Safety Zones around your home.*

Safety Zone 1 is your most import line of defence and requires the most consideration. Safety Zone 1 extends to 10 metres from your home, you should;

a) *Mow lawn and plant low-growing fire-resistant plants; and*
b) *Thin and prune trees and shrubs; and*
c) *Avoid tall trees close to the house; and*
d) *Use gravel or decorative crushed rock instead of bark or wood chip mulch; and*
e) *Remove flammable debris like twigs, pine needles and dead leaves from the roof and around and under the house and decks; and*
f) *Remove dead plant material along the fence lines and keep the grass short; and*
g) *Remove over hanging branches near powerlines in both Zone 1 and 2.*

III. *Safety Zone 2 extends from 10 – 30 metres of your home.*

a) *Remove scrub and dead or dying plants and trees; and*
b) *Thin excess trees; and*
c) *Evenly space remaining trees so the crowns are separated by 3-6 metres; and*
d) *Avoid planting clusters of highly flammable trees and shrubs*
e) *Prune tree branches to a height of 2 metres from the ground.*

IV. *Choose Fire Resistant Plants*

Fire resistant plants aren't fire proof, but they do not readily ignite. Most deciduous trees and shrubs are fire resistant. Some of these include: poplar, maple, ash, birch and willow. Install domestic sprinklers on the exterior of the sides of the building that are less 20 metres from the vegetation. Examples of highly flammable plants are: pine, cypress, cedar, fir, larch, redwood, spruce, kanuka, manuka.

For more information please go to https://www.fireandemergency.nz/at-home/the-threat-of-rural-fire/

If your building or dwelling is next to vegetation, whether it is forest, scrubland, or in a rural setting, please detail below what Risk Reduction measures you will take to mitigate the risk of fire development and spread involving vegetation?

7 (a) Vegetation Risk Reduction Strategy
Above mitigation measures will be implemented where possible.

Internal FENZ Risk Reduction comments only:

Click or tap here to enter text.

8. Applicant

Checklist	
☒	Site plan (scale drawing) – including; where to park a fire appliance, water supply, any other relevant information.
☒	Any other supporting documentation (diagrams, consent).

I submit this proposal for assessment.

Name: Steven Sanson Dated: 28/0/2025

Contact No.: 0211606035

Email: steve@bayplan.co.nz

Signature: Steven Sanson

9. Approval

In reviewing the information that you have provided in relation to your application being approximately a Click or tap here to enter text. *square metre,* Choose an item. *dwelling/sub division, and non-sprinkler protected.*

The Area Manager of Fire and Emergency New Zealand under delegated authority from the Fire Region Manager, Te Hiku, has assessed the proposal in relation to firefighting water supplies and the vegetation risk strategy. The Manager Choose an item. *agree with the proposed alternate method of Fire Fighting Water Supplies. Furthermore; the Manager agrees with the Vegetation Risk Reduction strategies proposed by the applicant.*

Name: Click or tap here to enter text.

Signature: Click or tap here to enter text. Dated: Click or tap to enter a date.

P.P on behalf of the Area Manager