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?	See attached application. Ngati Korokoro Hapu Trust letter of support obtained.
Who else have you consulted with?	Fire & Emergency NZ

*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: Nicholas Bowler

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: Williams & King, Attention: Natalie Watson

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: As per applicant.

Property Address/ Location:

Postcode

8. Application Site Details

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

Name/s:

Site Address/ Location:

29 Signal Station Road

Omapere

Postcode 0444

Legal Description: Lot 1 DP 86502 **Val Number:** 00619-40801

Certificate of title: NA44A/1165

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

Site visit requirements:

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

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

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

Please phone applicant - Nicholas Bowler - on 021 211 4065 to arrange site visit, or obtain padlock combination for gate.

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.

Proposed residential development in the Coastal Living Zone including completed earthworks and vegetation clearance, requiring consent under Visual Amenity, Stormwater Management, Fire Risk to Residential Units, Excavation and/or Filling, and Indigenous Vegetation Clearance Rules.

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):

- [x] **Building Consent** EBC-2025-520/0
- [ ] **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**
- [x] **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) Nicholas Bowler

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) Nicholas Bowler

Signature: [redacted] Date 5/28/2025
(signature of bill payer)

MANDATORY

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)** Natalie Watson

Signature:

Date 03-Jun-2025

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

Checklist (please tick if information is provided)

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

Nicholas Bowler

Land Use Consent for New Buildings, Earthworks, Vegetation Clearance & Impermeable Surfaces

29 Signal Station Road, Ōmāpere

Williams & King, Kerikeri[1]
5 June 2025

[1] Williams & King - a Division of Survey & Planning Solutions (2010) Ltd
Surveyors, Planners, Resource Managers - Kerikeri and Kaitaia
PO Box 937 Kerikeri Phone (09) 407 6030 Email: nat@saps.co.nz

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1. OVERVIEW

1.2 Summary of proposal

Nicholas Bowler proposes to develop a property located at 29 Signal Station Road in Ōmāpere. The proposed development involves the construction of a new two bedroom dwelling, a small cabin and a shed, within existing and proposed building platforms. Vehicle access within the site and the lower parking area have been prepared through earlier earthworks and vegetation clearance, and the application includes a request for retrospective consent for these activities. Likewise, existing impermeable surfaces have been already established for vehicle access, and consent will be sought for the cumulative coverage of the existing and proposed impermeable surfaces required for the development.

Additional earthworks are required to complete parking and manoeuvring areas for the dwelling and cabin and selected removal of indigenous vegetation will be undertaken to mitigate the risk of fire hazard.

The subject site is legally described as Lot 1 DP 86502 and is held in the Record of Title NA44A/1165.

Revegetation to strengthen the remaining areas of indigenous vegetation is proposed, both to offset areas where vegetation clearance has been or is required for the new buildings and accessway, and to provide a positive long term ecological outcome.

1.2 District Plan zoning and activity status

The subject site is in the ‘Coastal Living Zone’ and has an area of ‘Outstanding Landscape Feature’ (‘Pukekohe No.3’) in the Operative Far North District Plan. The proposed development requires resource consent under the ‘Visual Amenity’ and ‘Stormwater Management’ rules of the Coastal Living zone, while consent under District Wide Rules ‘Excavation and/or Filling…’, ‘Fire Risk to Residential Units’ and ‘Indigenous Vegetation Clearance in Other Zones’ rules is also sought retrospectively as well as for the proposed works. The proposal has been assessed as being a discretionary activity overall.

Under the Proposed Far North District Plan, the site is zoned 'Rural Lifestyle' and is within the 'Coastal Environment' Overlay. The site is also within a Treaty Settlement Area of Interest. Relevant rules with legal effect under the Proposed District Plan are:

- EW-R12 and EW-R13, both of which can be satisfied as a permitted activity via consent conditions and an advice note.
- IB-R1 and IB-R4 – Discretionary activity.

1.3 Statutory framework

This report and its appendix accompany the Resource Consent application made by the Applicant and is provided in accordance with the requirements set out in Schedule 4 of the Resource Management Act 1991 ("RMA"). It is intended to provide the necessary information, in sufficient detail, to provide an understanding of the proposal, including any actual or potential effects the proposed activity may have on the environment, any proposed or agreed to measure to ensure positive effects, and the relevant matters specified under section 104 of the RMA (Consideration of applications). As the application is for a discretionary activity, Section 104B of the RMA is relevant:

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority –

(a) may grant or refuse the application; and

(b) if it grants the application, may impose conditions under section 108.

2. DESCRIPTION OF PROPOSAL

2.1 Proposed buildings

The overarching purpose of the proposal is to establish a new dwelling, cabin and shed on a site within the Coastal Living zone of the Operative District Plan. Refer to the Dorrington Atcheson Architects Plan Set in **Appendix 1** and the Pryda NZ Floor and Elevation Plans for the proposed shed in **Appendix 2**. **Figure 1** below depicts the overall site plan.

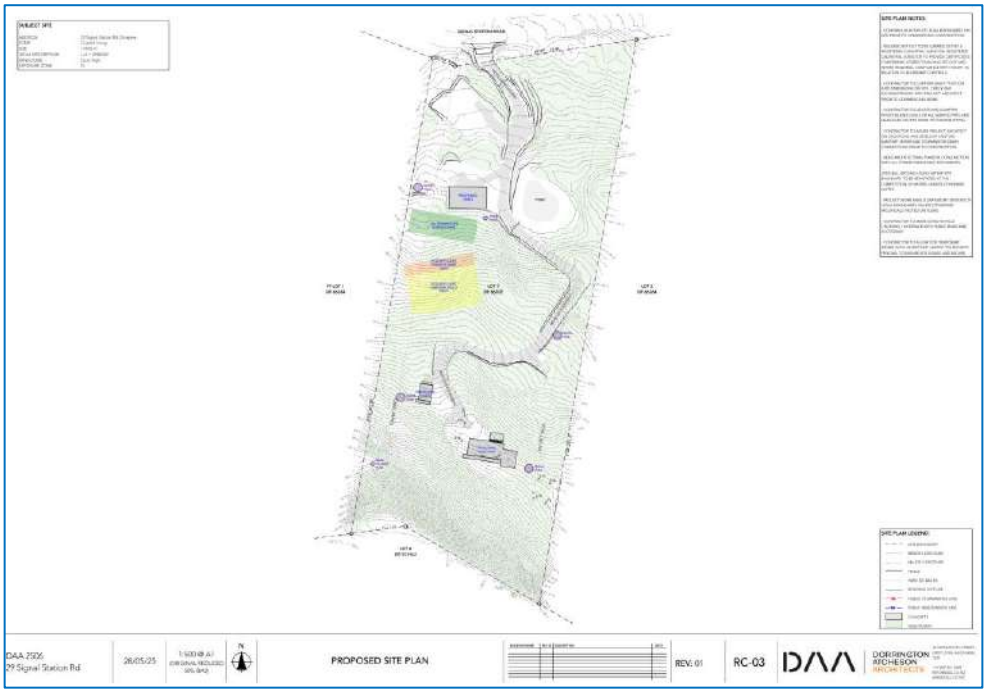

Figure 1: Proposed Site Plan

2.1.1 Proposed dwelling

A single level two-bedroom dwelling is proposed, with a floor area of approximately 146m² plus a covered entry, producing a total roof area of approximately 172m². The dwelling will be located at the termination of the formed metalled driveway between the 79.4 and 83 contours and built on pole foundations. The maximum height (the highest point at the north eastern corner of the covered deck) will be approximately 7.9m. The building will be orientated towards the north for sunlight and sea view, with the living/dining area and bedrooms facing this direction.

Exterior cladding will comprise vertical metal with timber features, and a metal roof.

2.1.2 Proposed cabin

The proposed cabin will be located north west of the proposed dwelling, and set upon pole foundations on sloping ground between the 76 and 78.5 contours, with a maximum height of approximately 6.85m above the existing ground level immediately below the building ridge line. The cabin contains a downstairs living room and bath room, with a bedroom located on a mezzanine area above those rooms, with ground floor area being approximately 36m² plus an 8m² covered entry. Covered and uncovered decking will be built to the north and south of the building.

To match the dwelling, exterior cladding will comprise vertical metal with timber features, and a metal roof.

2.1.3 Proposed shed

A shed with a roof area of 9m x 15.7 (143m²) is proposed, comprising timber poles, rafters and framing, with lightweight metal roofing and cladding. The shed will be located on an existing cut platform lower on the site at approximately the 55m contour, to the west of the existing driveway and pond. The monopitch roof line will have a maximum height of approximately 3.8m, sloping down to 3.1m. The shed will be accessed via two roller doors and two sets of sliding doors. Refer to the Site Plan in **Appendix 1** and the Shed Floor and Elevation Plans in **Appendix 2**. Building consent has now been issued for this shed.

2.2 Property access and parking arrangements

Access to the site has been formed as a concrete vehicle crossing off Signal Station Road.

Within the site, the existing metalled driveway provides access to each of the buildings. Minor additional manoeuvring and parking areas will be formed as metalled surfaces upon completion of the buildings.

Car parking will be available within the shed, or upon outdoor metalled hardstand areas adjacent to the cabin or dwelling.

2.3 Earthworks

Earthworks have been completed to prepare the shed building platform, form a flat parking area below the shed platform, and to form vehicle access to the proposed building sites.

The volume of already completed earthworks has been estimated by way of comparison of recent site survey of the topography of finished areas to the assumed natural contours that existed prior to earthworks using LiDAR levels, with adjustments for the thick kikuyu cover over the site.

The volume of completed earthworks is estimated as 200m³ cut to fill, plus 200m³ of laid aggregate used for surfacing the accessway. Therefore, the total completed earthworks volume is 600m³. Consent is sought for this activity retrospectively as part of this application.

Remaining earthworks to complete parking areas outside the proposed dwelling and cabin will be undertaken within a separate 12-month period from the already completed works. They will not exceed the permitted activity standard of 300m³ (including aggregate placement), nor will they involve a cut or fill height exceeding 1.5m.

All future earthworks undertaken at the site will be carried out in accordance with Auckland Council Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GC05). This can be included as a condition of consent. Other earthworks recommendations are specified in the Geotechnical Report, including for excavation and filling.

2.4 Indigenous vegetation clearance, revegetation, pest and weed management

Vegetation clearance has been completed to prepare building sites and vehicle access. This has included selective removal of vegetation amongst areas that were already predominantly clear and in grass (particularly in the lower part of the site in the vicinity of the lower parking platform, the shed building site and the northern part of the vehicle access), as well as additional clearance for the dwelling site, and the remainder of the access. Minimal additional vegetation clearance will be required to finalise the building platforms for the dwelling and cabin, and to establish safety zones around the perimeter of the buildings to reduce the risk of fire hazard. The proposed clearance for this purpose is described in the Fire & Emergency NZ written approval in **Appendix 8**.

Review of 2016 aerial imagery via Google Earth shows the sparse nature of the vegetation, particularly in the southern part of the site, which indicates that limited clearance was undertaken in this area for the purpose of the shed building site and lower parking and vehicle access areas. The applicant has also indicated that the areas cleared were interspersed with exotic vegetation. Refer to **Figure 2**.

Figure 2: 2016 Aerial Image (Source: Google Earth)

Additional vegetation clearance to accommodate the vehicle access as well as the dwelling site was undertaken in 2023. It is difficult to estimate the extent of vegetation clearance, as aerial photography only shows that the canopy has been opened up in these areas but not whether the removed vegetation was indigenous or exotic. An estimate of clearance undertaken in the northern part of the site for these purposes as well as the shed building site is approximately 650m². It is estimated that approximately 160m² of additional clearance will be required to finalise the dwelling and cabin building sites and to provide a fire hazard buffer from the remaining surrounding vegetation. Cumulative vegetation clearance amounts to approximately 810m² or 4.5% of the site area.

With the historic, completed and proposed vegetation clearance, the total area of cleared land has conservatively been measured as approximately 3,500m², or 19.5% of the total site area. Refer to **Figure 3** below, showing the approximate existing extent of cleared area.

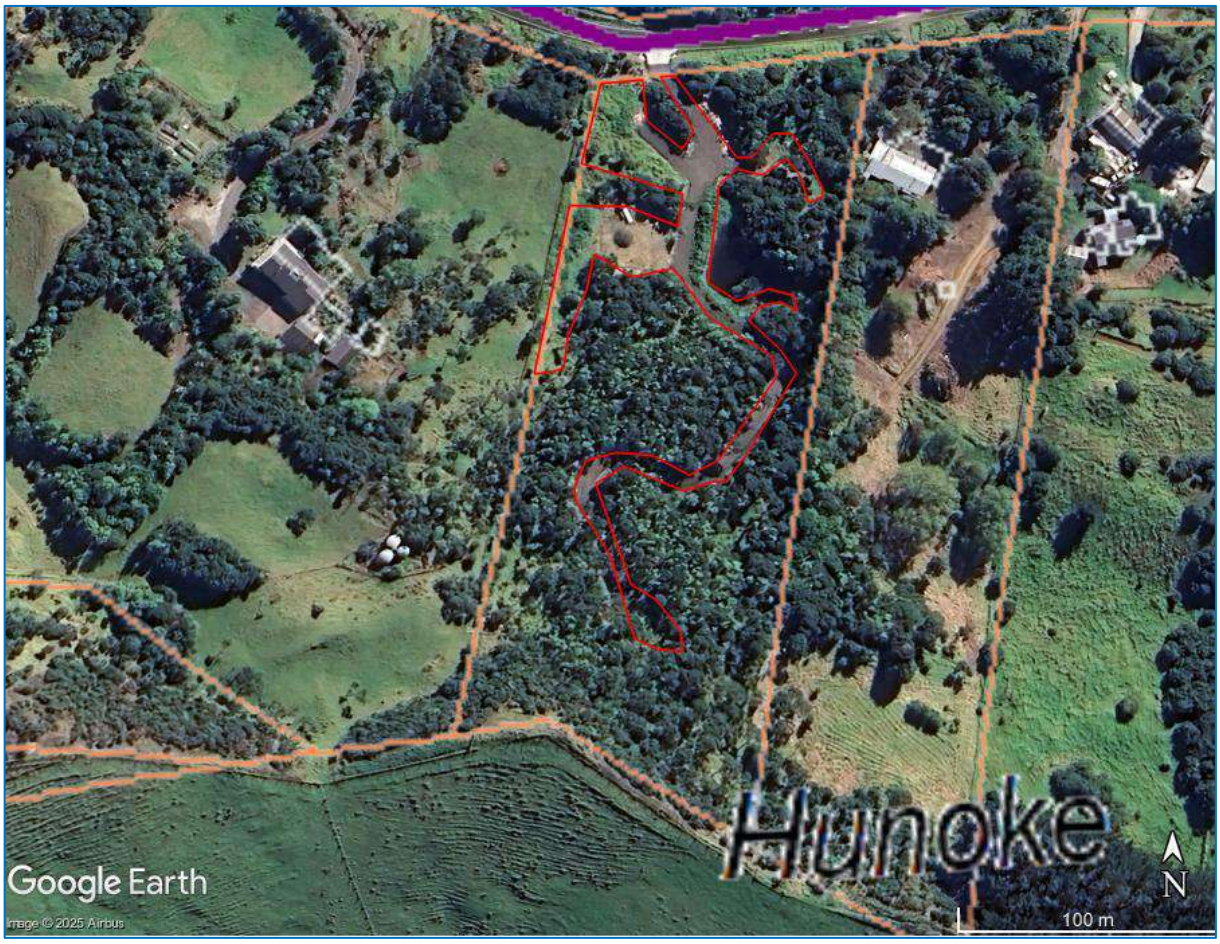

Figure 3: 2024 Aerial Image, showing approximate extent of existing and completed cleared area (Source: Google Earth)

Ecological and natural character enhancement is proposed, to both offset the adverse effects of vegetation clearance and to generate a positive ecological and visual effect through the following actions:

- Restoration planting in areas where the existing canopy of native vegetation is thin.
- Revegetation of areas exposed following earthworks.
- Restoration planting around part of the perimeter of the pond.
- Formalised weed and pest control to monitor and remove invasive plant and animal species.

Details of the above measures are included within the Ecological Impact Assessment (**Appendix 3**) and in the Landscape & Visual Effects Assessment (L&VEA) in **Appendix 4**.

2.5 Impermeable surface coverage

The Coverage Calculations Plan in **Appendix 1** tables impermeable surface coverage as amounting to approximately 1,480m², comprising the existing metalled driveway areas and proposed parking, manoeuvring and roof areas. All decks will be timber slatted decks and thus permeable.

Attenuation calculations have been undertaken by T. Drupsteen Consulting Engineer, which suggests that an attenuation volume of 6.6m³ is required for the proposed development and associated level of impermeable surface coverage. This can be accommodated by the existing pond, which is described as being suitable in size, with an appropriately sized V-notch overflow weir, which will allow an adequate discharge capacity of .093m³ per second, being less than the permitted activity attenuated flow. Refer to the Stormwater Attenuation Report in **Appendix 5**.

Discharge of collected stormwater in a controlled manner to the pond is also recommended by the Geotechnical Report, which notes that inappropriate stormwater disposal can result in land slippage and/or erosion, and further notes that stormwater discharges shall be located away from onsite effluent disposal locations. Refer to the Geotechnical Report in **Appendix 6**.

2.6 Utility services

Existing water tanks will be relocated on the site for domestic and firefighting water supply.

Onsite wastewater treatment and disposal will be used, with an indicative disposal and reserve disposal area shown on the Site Plan. The Geotechnical Report assesses onsite effluent disposal, and recommends a secondary level of effluent treatment, with pressure compensating drip irrigation ("PCDI") for disposal of treated wastewater, at a design irrigation rate of 3.5mm per day. A suitable disposal and reserve disposal field has been identified.

2.7 Landscape Plan

The proposed Landscape Plan shows amenity plantings to be strategically placed around the proposed buildings and water tanks, selected boundary planting and retention and enhancement of indigenous bush areas. Refer to **Figure 4**.

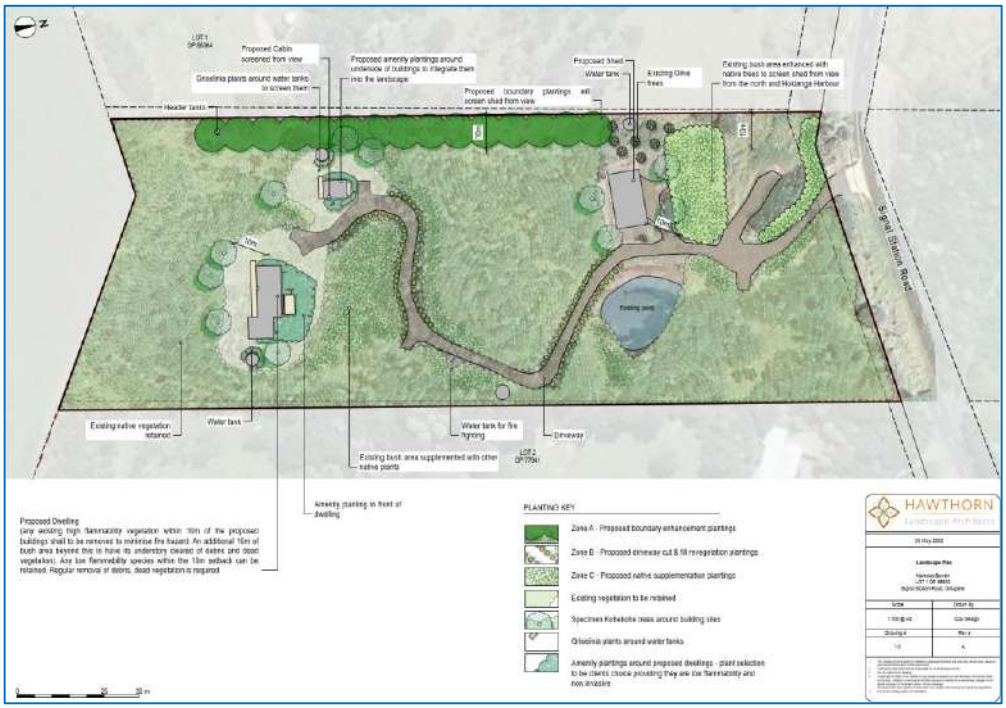

Figure 4: Hawthorn Landscape Architects Landscape Plan

3. APPLICATION SITE DETAILS AND DESCRIPTION

3.1 Location

The site is located at 29 Signal Station Road, to the south west of Ōmāpere village, and approximately 230m west of State Highway 12. The property adjoins Signal Station Road to the north, and other privately owned land to the east, south and west. The site is located approximately 200m south of the Hokianga Harbour coastal marine area. Refer to the Location and Cadastral Maps in **Figures 5** and **6**.

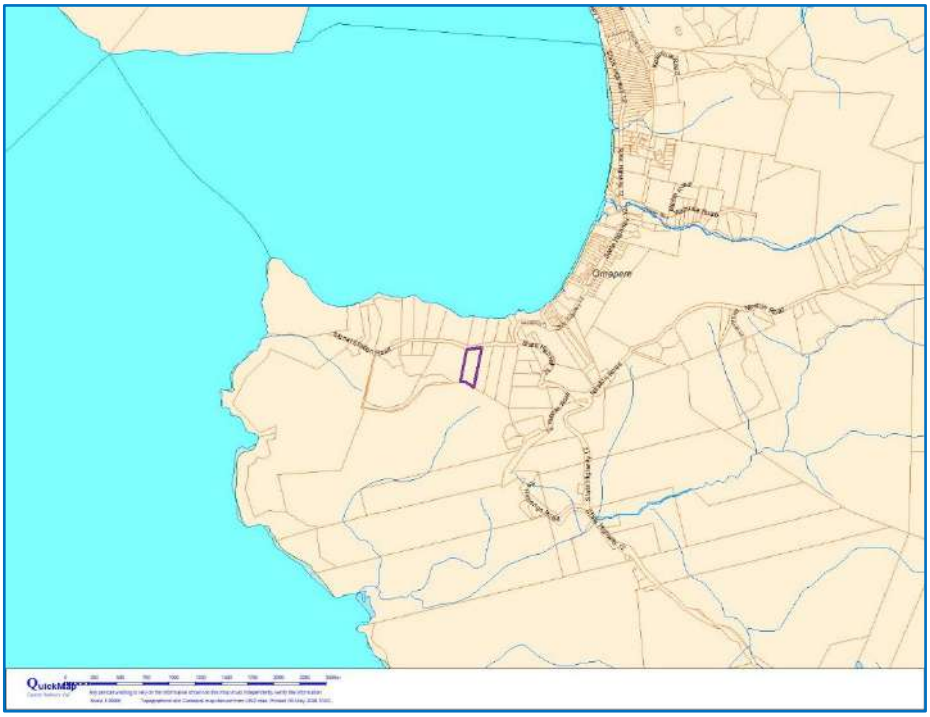

Figure 5: Location Map (Source: QuickMap)

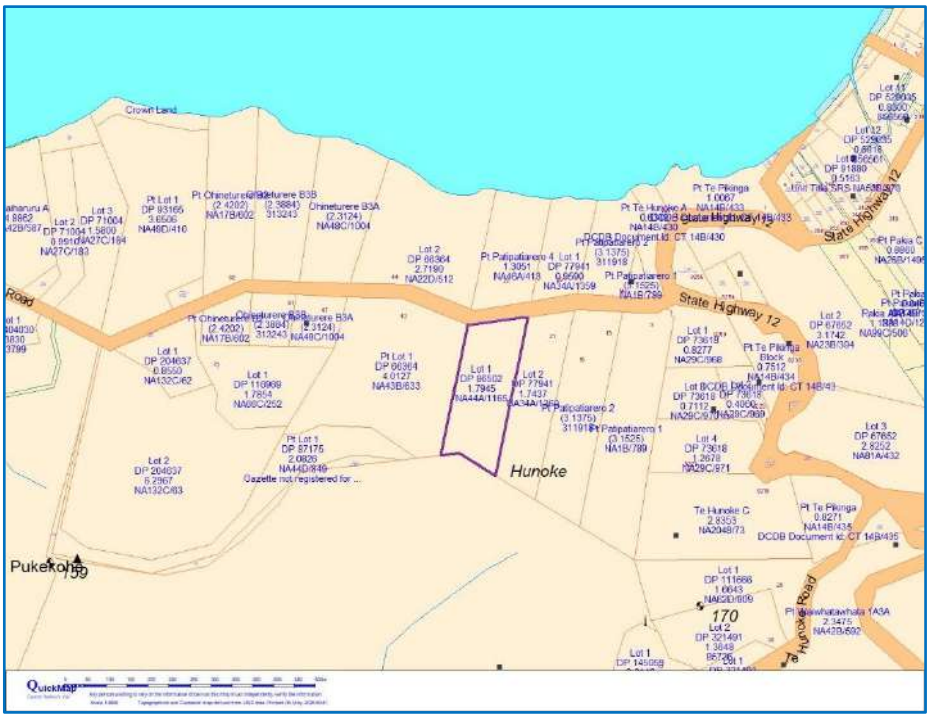

Figure 6: Cadastral Map Highlighting the Application Site (Source: QuickMap).

3.2 Legal details

Legal details of the application sites are summarised below and in the Record of Title (**Appendix 7**).

LEGAL DESCRIPTION	RECORD OF TITLE IDENTIFIER	TITLE AREA	INTERESTS
Lot 1 DP 86502	NA44A/1165	1.7945ha more or less	-

3.3 Existing land use and development

The subject site is a vacant coastal lifestyle site, which has now been partly developed with a metalled accessway. Other constructed features on the site are listed below.

- The cut face on the shed building platform is supported by a timber retaining wall.
- Two arrays of horizontal bored drains, which have been installed to reduce the likelihood of landslide movement by prevent elevated water pressures developing within the underlying ground.
- Onsite drainage, including a lined and rocked pond outlet drain have been formed.
- Water tanks are being stored in temporary locations and will be shifted to the locations shown on the Site Plan.

Otherwise, there are no existing buildings or structures on the site.

Refer to **Photographs 1** - **3** below.

Photograph 1: Existing entrance and southern portion of metalled driveway.

Photograph 2: Existing retaining wall and temporary water tank storage, shed building site.

Photograph 3: Upper area of existing metalled driveway, temporary water tank storage.

3.4 Natural and recorded features

Outside of the cleared and developed areas, the vegetation cover is generally a thinning canopy of regenerating shrubland dominated by manuka, kanuka and ti kouka (cabbage tree) with emergent puriri and kohekohe, while ground cover is predominantly kikuyu grass and occasional pockets of indigenous ground cover as well as other exotic weed species.

The topographical characteristics, geological setting and ground conditions are described in detail in the Geotechnical Report prepared by Northland Geotechnical Specialists. Refer to **Appendix 6**.

The Geotechnical Report describes the site as "slightly irregular in shape" but "*approximated by a 210m long (NNE-SSW) by 84m (WNW-ESE) rectangle. Elevations on the site fall from a high point of 110m on a sharp ridgeline on the southern boundary to 45m at the northeast corner of the site*". Published geology is also described in the Geotechnical Report as being "*underlain by cobble and pebble conglomerate of the Omapere conglomerate derived mainly from Tangihua Complex, while the wider geological setting indicates the Otaua Group (i.e. conglomerate layers) are likely underlain by Hukerenui Mudstone of the Northland Allochthon Mangakahia Complex*".

Slope angles of the irregular topography range from between 5° and 20° in the northern half of the site, and 10° and 25° in the southern half of the site.

A pond is located to the east of the driveway, approximately 50m south of the Signal Station Road boundary. The pond has been formed from a gully feature through earlier damming and earthworks, thought to have been completed sometime in the middle of last century. The pond is described in the Ecological Impact Assessment as having been formed as a farm pond for stock watering and irrigation. It states that "*Given its origins as a constructed farm pond, the feature does not meet the criteria of a natural inland wetland in terms of the National Policy Statement for Freshwater Management or the proposed Regional Plan for Northland. However, despite its utilitarian origins, this pond is a relatively unique feature in this area deserving of care and consideration as a potential habitat for wetland flora and fauna*".

Refer to **Photographs 4** – **6**.

Photograph 4: Location of proposed dwelling, showing typical remaining indigenous vegetation.

Photograph 5: Typical kikuyu ground cover in areas of sparse indigenous vegetation.

Photograph 6: Pond to the east of formed driveway.

The site is within the coastal environment. It does not include any areas of high or outstanding natural character, or outstanding natural landscapes or features as recorded in the Regional Policy Statement.

The site is not part of any ecological unit recorded in the Department of Conservation Protected Natural Area ("PNA") mapping. The nearest Department of Conservation public conservation land is the 'Signal Station Road Recreation Reserve', being Pt Lot 1 DP 87175, approximately 36m west of the site's south western boundary.

The site is not mapped as being within a kiwi habitat in Far North Maps "Species Distribution (DoC)" Map.[2] The mapping related to kiwi habitat is a non-statutory document.

The site is mapped as comprising Land Use Capability ("LUC") unit VIe16. This LUC Unit does not meet the definition of 'highly versatile soils' as per the Regional Policy Statement or the definition of 'highly productive land' in the National Policy Statement for Highly Productive Land.

3.5 Vehicle access

The subject land has legal frontage to Signal Station Road, from which a concrete vehicle crossing has been formed, with a culvert and grouted rock at each end. A formed and metalled driveway with drainage has been formed through the property to a varying width generally 3 – 3.5m. Refer to **Photograph 7**.

Photograph 7: Existing concrete vehicle crossing off Signal Station Road.

[2] A map showing the distribution of Northland Brown Kiwi and Northland Mudfish in the Far North District. Kiwi habitat distribution based on call count monitoring in 2019 by Department of Conservation: Craig, E. (2020): Call count monitoring of Northland brown kiwi 2019. Department of Conservation, Whangarei, New Zealand.

3.6 Surrounding land

The subject site is generally surrounded by existing coastal lifestyle development to the north, east and west. The property to the south is a larger rural block, generally in grazed pasture.

4. DISTRICT PLAN ASSESSMENT

4.1 Far North Operative District Plan

The application site is zoned Coastal Living. The south western corner of the site is within an Outstanding Landscape Feature, described as 'Pukekohe No.3' ("*Peak on south head of Hokianga Harbour, overlooking Signal Station Rd and harbour*"), as shown in **Figure 7**. Note that this Outstanding Landscape Feature has not been carried over into the more recent mapping completed for the Regional Policy Statement for Northland.

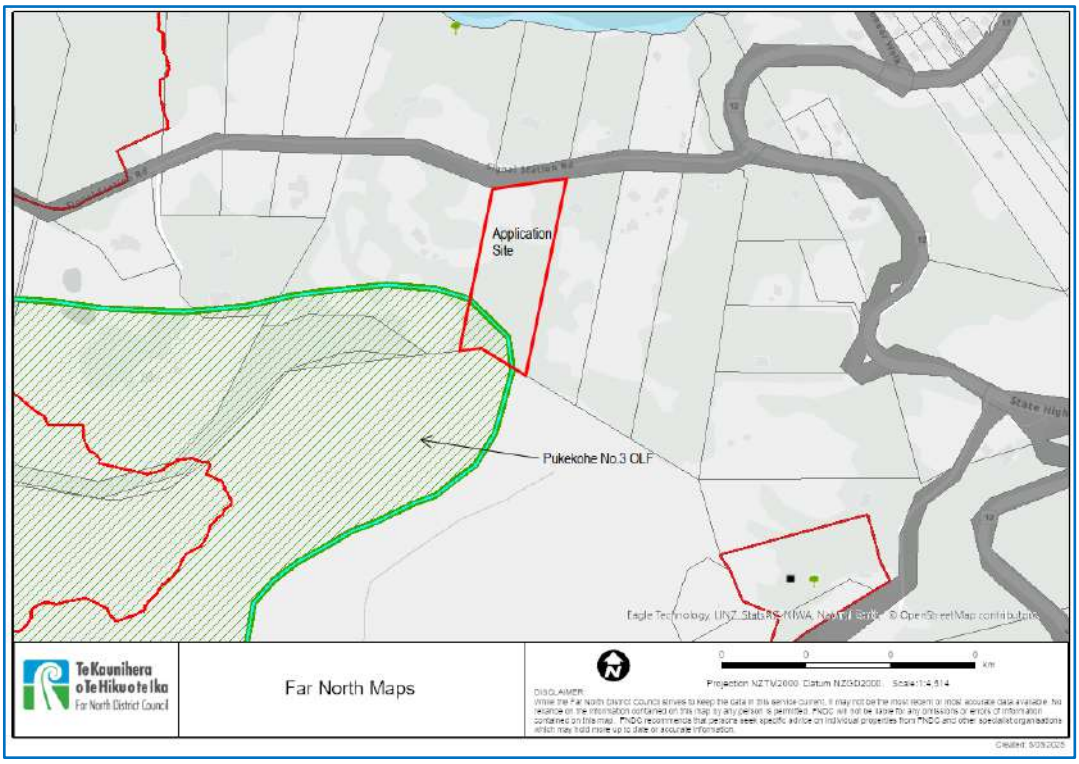

Figure 7: Operative District Plan map showing extent (in green diagonal lines) of Outstanding Landscape Feature Pukekohe No.3.

The proposal is assessed against the relevant rules of the Operative District Plan as follows.

4.1.1 Coastal Living Zone

Rule	Discussion	Compliance
10.7.5.1 PERMITTED ACTIVITIES		
10.7.5.1.1 Visual Amenity	The gross floor area of the shed, dwelling and cabin will each exceed 50m².	Does not comply
10.7.5.1.2 Residential Intensity	The proposal is for a single residential unit with accessory buildings.	Complies
10.7.5.1.3 Scale of Activities	The proposed dwelling will be used by people who normally reside on the site.	Complies

10.7.5.1.4 Building Height	Building height does not exceed 8m.	Complies
10.7.5.1.5 Sunlight	Permitted activity recession planes are met.	Complies
10.7.5.1.6 Stormwater Management	Proposed impermeable surfaces exceed 600m², being the lesser area compared with 10%.	Does not comply
10.7.5.1.7 Setback from Boundaries	Proposed buildings are at least 10m from all site boundaries.	Complies
10.7.5.1 CONTROLLED ACTIVITIES		
10.7.5.2.2 Visual Amenity	Building envelopes have not been approved under a resource consent.	Does not comply
10.7.5.3 RESTRICTED DISCRETIONARY ACTIVITIES		
10.7.5.3.1 Visual Amenity	Proposed buildings meet the restricted discretionary activity standard.	Complies
10.10.5.3.8 Stormwater Management	This rule limits the maximum proportion of the gross site area which may be covered by buildings and other impermeable surfaces to the lesser of 15% or 1,500m². 1,500m² is the lesser amount, and impermeable surfaces (existing and proposed) do not exceed this area.	Complies

4.1.2 Natural & Physical Resources

Rule	Discussion	Compliance
PERMITTED ACTIVITIES		
12.1.6.1.1 Protection of Outstanding Landscape Features	No tree planting, above ground utility services, excavation or filling, or vegetation clearance is proposed within the Outstanding Landscape Feature.	Complies
12.2.6.4 Indigenous Vegetation Clearance in Other Zones	The site does not meet the definition of being within the urban environment. Vegetation clearance is permitted provided that it does not increase the total area of cleared land on the site above 500m². The total area of cleared land exceeds 500m².	Does not comply
12.3.6.1.2 Excavation and/or filling … in the … Coastal Living … zones	Completed earthworks to form vehicle access and the lower parking area have exceeded 300m³. Additional earthworks will comply (new 12 month period).	Does not comply
12.4.6.1.2 Fire Risk to Residential Units	The dwelling and cabin will be located within 20m of the remaining vegetation on the site.	Does not comply
12.7.6.1.2 Setback from Smaller Lakes, Rivers and Wetlands	This rule requires consideration of the RMA wetland definition, which “includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plans and animals that are adapted to wet conditions”. The constructed pond may meet this broad definition, however, is less than 1ha in area - as a result, this rule does not apply.	Not applicable
12.7.6.1.3 Preservation of Indigenous Wetlands	The pond and resultant wetland species have been determined as not being naturally occurring, therefore do not meet the definition of ‘Indigenous Wetland’.	Not applicable

12.7.6.1.4 Land use activities involving discharge of human sewage effluent	There is sufficient area available for onsite wastewater disposal to accommodate a 30m separation distance from any water body.	Complies
DISCRETIONARY ACTIVITES		
12.4.6.3 Discretionary Activities (Natural Hazards)	Breach of Rule 12.4.6.2 confers a discretionary activity status.	Complies
12.1.6.3.2 Buildings within Outstanding Landscape Features	Not applicable	Not applicable

4.1.3 Transportation

Rule	Discussion	Compliance
Traffic – Permitted Activities		
15.1.6A.2.1 Traffic Intensity	The first residential unit on a site is exempt from this rule.	Complies
Parking – Permitted Activities		
15.1.6B.1.1 On-Site Car Parking Spaces	More than two off street car parks will be available.	Complies
Access – Permitted Activities		
15.1.6C.1.1 Private Accessway in all Zones	The site has individual access from Signal Station Road.	Complies
15.1.6C.1.5 Vehicle crossing standards in … Coastal Zones	No new vehicle crossings are proposed. Existing entrance complies.	Complies.
15.1.6C.1.7 General Access Standards	Less than four parking spaces will be accessed from Signal Station Road as per clause (a). Remaining clauses (b) – (d) will be met by the existing access design.	Complies

4.1.4 Summary of Activity Status under the Far North Operative District Plan

Overall, the proposal has been assessed as a discretionary activity. Sections 104 and 104B of the RMA are applicable.

4.2 Far North Proposed District Plan

The application site is zoned 'Rural Lifestyle' in the Far North Proposed District Plan and is located within the 'Coastal Environment' Overlay.

The proposal is assessed against the relevant rules of the Proposed District Plan as follows.

4.2.1 Area-Specific Matters – Rural Lifestyle Zone

Rule	Discussion	Compliance
RLZ-R1 New buildings or structures…	PER-1 – the proposed buildings accommodate a permitted activity (RLZ-R3). PER-2: RLZ-S1: 8m height not exceeded. RLZ-S2: Recession planes complied with. RLZ-S3: 10m setbacks achieved.	These rules do not have legal effect.

	RLZ-S4: More than 30m from MHWS. RLZ-S5: Building / structure coverage is less than 12.5%. RLZ-S6: Not applicable.	
RLZ-R2 Impermeable Surface Coverage	12.5% (2,243m²) is the less than 2,500m². The cumulative existing and proposed impermeable area is approximately 1,480m², which will meet the permitted standard.	
RLZ-R3 Residential activity	A single residential unit per lot is intended.	

4.2.2 District-Wide Matters - Hazards and Risks

Rule	Discussion	Compliance
Permitted Activities		
NH-R5 Wild Fire - Buildings used for a vulnerable activity (excluding accessory buildings)	Onsite Water storage is used as per condition 2 of PER-1. The building will be within 20m of vegetation and does not comply with PER-2.	This rule does not have legal effect.

4.2.3 District-Wide Matters – Energy, Infrastructure, & Transport – Transport

Rule	Discussion	Compliance
TRAN-R1 Parking	Outdoor parking areas or parking within the shed can be provided to comply with the permitted standard.	These rules do not have legal effect.
TRAN-R2 Vehicle crossings and access, including private accessways	Existing vehicle crossing formed to a single site / household equivalent. Existing crossing not off the listed road types.	
TRAN-R5 Trip generation	Single residential unit proposed. Proposed development does not generate traffic exceeding that listed in TRAN-Table 11 – Trip generation.	

4.2.3 District-Wide Matters – Ecosystems and indigenous biodiversity

Rule	Discussion	Compliance
1B-R1 Indigenous vegetation … clearance and any associated land disturbance for specified activities within and outside a SNA	(7) allows for construction of a single residential unit on a title and essential on-site infrastructure and access, provided it does not exceed 1,000m². Some vegetation will have been removed under (10), which allows removal or clearance from land which was previously cleared and the indigenous vegetation to be cleared is less than 10 years old.	Does not comply – discretionary activity.
IB-R4 Indigenous vegetation clearance and associated land disturbance outside a SNA	Clearance permitted where a report from a suitably qualified and experienced ecologist has been obtained to confirm that the vegetation does not meet the criteria for a SNA, the report is submitted to Council 14 days in advance of clearing being undertaken, and in the Rural Lifestyle Zone the clearance does not exceed 500m² over a 5-year period. Without the report, clearance is limited to 100m² in any calendar year.	Does not comply – discretionary activity.

4.2.5 District-Wide Matters - Coastal environment

Rule	Discussion	Compliance
Permitted Activities		
CE-R1 – New buildings or structures	PER-2 is applicable as the site is not located within an urban zone. The proposed dwelling is not ancillary to farming activities and exceeds 25m², therefore does not comply with conditions 1 and 2. The building site is outside an outstanding natural character area. PER-4 requires compliance with CE-S1 and CE-S2, which limit the maximum height of any new building or structure to 5m above ground level and the nearest ridgeline, headland or peninsula, and require the use of materials / finishing with a reflectance value no greater than 30% and an exterior finish within Groups, A, B or C as defined within the BS5252 standard colour palette, respectively. CES-S1 is not met, as the height of the dwelling and cabin will exceed 5m. Exterior colours are to be confirmed.	These rules do not have legal effect.
CE-R3 Earthworks …	PER-2: earthworks have exceed 400m² in extent.	

4.2.5 Earthworks

Rule	Discussion	Compliance
EW-R1 Earthworks for building or structures …	Earthworks have been undertaken for this purpose. Standards reported on below.	These rules do not have legal effect.
EW-R6 Earthworks for … formation … of … private accessways	Earthworks have been / will be undertaken for this purpose. Standards reported on below.	
EW-R12 Earthworks and the discovery of suspected sensitive material	An Accidental Discovery Protocol advisory note can be added to the resource consent.	Complies. Refer to EW-S3 below.
EW-R13 Earthworks and erosion and sediment control	Erosion and sediment control has been / will be implemented.	Complies. Refer to EW-S5 below.
EW-S1 Maximum earthworks thresholds.	Less than 1000m³ / 2,500m² completed or proposed per calendar year.	These rules do not have legal effect.
EW-S2 Maximum depth & slope	Depth will not exceed 1.5m.	
EW-S3 Accidental Discovery Protocol	Has been / will be complied with.	Complies
EW-S4 Site reinstatement	Will comply.	This rule does not have legal effect.
EW-S5 Erosion & sediment control	Has been / will be complied with.	Complies

4.2.6 Summary of Activity Status under the Far North Proposed District Plan

Relevant rules with immediate effect are:

- EW-R12 and EW-R13, both of which can be satisfied as a permitted activity via consent conditions and an advice note.
- IB-R1 and IB-R4 – Discretionary activity.

5. ASSESSMENT OF ENVIRONMENTAL EFFECTS

Section 104(1)(a) and (ab) requires the consent authority to have regard to any actual and potential effects on the environment of allowing the activity; and any measure proposed or agreed to by the application 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.

Section 104(2) indicates that a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard of the plan permits an activity with that effect and Section 104(3)(a)(ii) requires a consent authority to not, when considering an application, have regard to any effect on a person who has given written approval to the application (unless that person has withdrawn the written approval before the date of a hearing or before the application is determined, as set out in 104(4)).

Clauses 6 and 7 of Schedule 4 of the RMA indicate the information requirements and matters that must be addressed in or by an assessment of environmental effects, both of which are subject to the provisions of any policy statement or plan. This assessment of environmental effects is not limited to any particular matters, but includes an assessment of the relevant criteria listed in Operative District Plan Rules 12.2.6.2.2 (Indigenous Vegetation Clearance in Other Zones), 12.3.6.2.1 (Excavation and/or Filling in the … Coastal Living… Zones), 10.7.5.3.1 (Visual Amenity) and 10.7.5.3.8 (Stormwater Management), and 12.4.7 (Natural Hazards).

5.1 Stormwater effects

Impermeable surfaces resulting from the proposed development decrease site impermeability by 1,480m², which equates to approximately 8% of the total site area. The total extent of impermeable areas on the site is the minimum necessary to provide for the proposed development. In particular, it is noted that the preferrable building site for the dwelling, to maximise views, is located in the southern part of the site, thus requiring a considerable length of vehicle access. Resultantly, there would be difficulty in developing the site for residential use in such a way that would comply with the permitted activity standard and the 600 m² permitted activity limit is particularly onerous for large lots. The roof areas proposed are collectively considered to be modest in size, and overall, the proposal is not considered to represent an excessive level of coverage.

The existing pond provides sufficient storage volume for attenuation of stormwater runoff, as a low impact design method to reduce stormwater effects. This is detailed in the Stormwater Attenuation Report, which assesses capacity using increased post-development rainfall values to account for climate change (i.e. “using the NIWA HIRDS 4 RCP 6.6 + Change 2081-2100 predicted rainfall data”). The proposed stormwater management achieves suitable attenuation and also respects the recommendations for stormwater management in terms of preventing slippage and erosion, as outlined in the Geotechnical Report. To this end, roof water from the buildings will be captured within proposed tanks, with overflows being piped to the pond via either a sealed pipe from the shed, or novacoil pipes from the cabin and house. Driveway water is controlled and directed to the pond via culverts and open drains. This mitigates the potential for runoff to pass over or saturate surrounding soils. There is no known catchment plan for this location.

The overall contours of the site are retained, including drainage patterns to the existing pond, which is assumed to have been historically formed as a farm pond within a natural gully. Outside of the level areas for the proposed shed and lower parking area, the natural slope is retained, so as to avoid ponding and interference with natural water absorption.

Soil types are described in the Geotechnical Report, which includes recommendations to avoid slippage and erosion, including avoiding stormwater disposal to soakage systems. Avoidance of slippage and erosion will be beneficial to the life supporting capacity of soils. Furthermore, retention of the majority of the existing vegetation cover over the land will also prevent erosion and soil loss. This vegetation will reduce the adverse effects of stormwater runoff by reducing the velocity of surface water and providing filtration.

As indicated in the Geotechnical Report, there is sufficient area for disposal of treated wastewater as well as stormwater discharge to the pond, without generating adverse effects on the quantity or quality of water bodies or any off-site effects. The site is well set back from the coastal marine area.

In summary, the proposed level of impermeable surface coverage is considered to be reasonable for the site and its expected use, and stormwater management has been designed to control stormwater flows and reduce scour and erosion. With implementation of the proposed stormwater management systems, it is considered that the proposal will avoid and mitigate potential adverse stormwater effects, such that effects will be less than minor. This includes avoidance and mitigation of detrimental effects on neighbouring properties or on the receiving environment.

5.2 Effects of fire hazard

Fire risk is a relevant consideration where new residential activities are established in close proximity to areas of vegetation, with potential effects on both the residential activity as well as the vegetation being relevant. The proposed dwelling and cabin will be located less than 20m away from the areas of surrounding residual indigenous shrubland. The dwelling is to be placed so as to make use of existing cleared areas where possible to act as a buffer to mitigate the increased fire risk. Minimum additional clearance will be undertaken to remove manuka and kanuka within 5m, thinning of manuka and kanuka within 10m of the buildings, with further removal of deadwood and selective pruning within 30m around the perimeter of the dwelling and cabin. This will exclude any individual mature indigenous specimen trees, which will be retained.

In the event of a fire, fire crews are likely to respond from the nearest fire station, being the Ōmāpere Volunteer Fire Brigade, located at 191 Hokianga Harbour Drive in Ōmāpere. The distance from this fire station to the subject site is approximately 2.5km, or less than 5 minutes of driving time.

Emergency water supply for firefighting will be supplied via the proposed onsite water storage tanks. The water storage volume of the proposed tanks allows an adequate volume for firefighting use. Consultation with Fire and Emergency New Zealand (FENZ) has been undertaken, and a written approval is provided in **Appendix 8**.

Exterior building materials for the dwelling and cabin will predominantly be metal cladding and roofing, with only small feature areas of timber cladding and decking. The majority of exterior building materials are fire resistant to mitigate the risk of fire spreading between vegetation and buildings.

Overall, it is considered that the fire risk generated by the proposal is mitigated to an appropriate level so as to be less than minor.

5.3 Earthworks effects

Completed earthworks have since been stabilised with aggregate and/or revegetated, and are well screened by the existing vegetation on the site, which will have helped with avoiding adverse visual and amenity effects on both nearby residents and for the wider public. See Section 5.5 of this Report. Future proposed earthworks will be undertaken in accordance with the standard erosion and sediment control requirements of GD05.

Most of the completed earthworks have been minor in depth, being those required to form the vehicle accessway and improve gradients where possible or necessary. A deeper cut, up to 1.5m has been completed and retained by a timber retaining wall to form the shed building site.

5.4 Ecological effects

Potential environmental effects are described in the Ecological Impact Assessment, including effects arising from vegetation clearance (including habitat loss) and water quality effects, tougher with the strategies to avoid, mitigate and offset those effects. Refer to **Appendix 3**.

The subject site does not include any mapped areas of significant indigenous vegetation, and the vegetation that has been and will be cleared was or is in a degraded state, with exotic and weed species and a sparse canopy in places. The remaining areas of vegetation will be enhanced through revegetation, weed and pest management, and pond restoration, to enhance natural processes and ecosystems, resulting in a long-term net positive effect on habitat and biodiversity.

Other potential ecological effects of the development are able to be controlled through standard mitigation, including avoidance of the introduction of exotic vegetation that is an environmental weed or on the National Pest Plant Accord, and controlled management of stormwater and wastewater discharge to avoid sediment input.

The site is in close proximity to 'Signal Station Road Recreation Reserve' (Pt Lot 1 DP 87175), being a reserve under section 17 of the Reserves Act 1977. This land is administered by the Department of Conservation. The proposed development will generate any issues with regards to their ability to administer this reserve.

5.5 Landscape and visual effects

Landscape and visual effects are to be evaluated in the L&VEA. Based on the existing screening provided by vegetation on the site, the proposed amenity plantings around buildings and water tanks along with proposed boundary plantings and enhancement of existing bush areas, it is considered that the proposed buildings will be appropriately integrated into their setting, so as to avoid and mitigate adverse landscape and visual effects to a level that is less than minor.

5.6 Archaeological and cultural effects

There are no recorded historic sites (including those recorded in the District Plan, or NZAA archaeological sites) or sites of cultural significance mapped within the property in the Far North Maps 'Historic sites' map. However, the wider environment includes a number of archaeological sites as well as 'Pukekohe – coastal lookout', 'Te Hunoke Pa' and 'Hokianga – south head', being sites of cultural significance to Māori (MS11-11, 14 and 28), which are each located more than 300m from the nearest boundary of the subject site. Thus, the applicant has initiated consultation with the iwi contacts provided via the Council's Te Hono Support email. Further correspondence with Ngāti Korokoro Hapu Trust has been undertaken – refer to Section 7.1 of this report.

The majority of earthworks and land disturbance for the development have been completed, with no reported discovery of archaeological material. Minimal additional land disturbance is required. We suggest that the standard Accidental Discovery Protocol advisory note be included in the consent, to advise the consent holder of their obligations under the Heritage New Zealand Pouhere Taonga Act 2014. This is considered sufficient to avoid adverse archaeological effects.

5.7 Soil

Soils on the subject site are not mapped as being Class I, II or III in the NZ Land Resource Inventory Worksheets. The mapped Land Use Capability class is VI and does not meet the definition of 'highly productive land' under the National Policy Statement for Highly Productive Land or of 'highly versatile soils' in the Regional Policy Statement. The proposed development is an expected activity in the Coastal Living Zone and is located on soils which are not considered to be a scarce resource, such that the proposal is considered to be an efficient use of soil resources.

The proposal locates the proposed buildings within a framework of existing vegetation and proposed plantings. Stormwater management has been designed to avoid erosion and slippage. In this way, the proposal is considered to contribute to the protection of the life supporting capacity of soils.

6. STATUTORY ASSESSMENT

Section 104(1)(b) of the Resource Management Act 1991 requires the consent authority, subject to Part 2 of the Act, to have regard to any relevant provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement, a plan or proposed plan, and any other matter the consent authority considers relevant and reasonably necessary to determine the application. Of relevance to the proposed activity are the following documents, which are commented on in the proceeding Sections 6.1 – 6.5 of this Report. This is followed by an assessment of Part 2 of the Act.

- *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011*
- *Resource Management (National Environmental Standards for Freshwater) Regulations 2020*
- *New Zealand Coastal Policy Statement*
- *National Policy Statement for Highly Productive Land*
- *National Policy Statement for Indigenous Biodiversity*
- *Regional Policy Statement for Northland*
- *Operative Far North District Plan*
- *Proposed Far North District Plan*
- *Proposed Regional Plan for Northland*

6.1 National Environmental Standards

6.1.1 Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 ("NESCS")

The subject land is not recorded on the Northland Regional Council Selected Land-use Register as a site that has been used for any activity included in the Ministry for the Environment's Hazardous Activities and Industries List ("HAIL").[3]

Review of historic aerial imagery using Retrolens (aerial image from years 1942, 1968, 1977, 1980 and 1987), and more recent aerial and satellite photography indicates that the property was in manuka shrubland in 1942, was partially cleared as pasture with scattered trees remaining by 1968, with the shrubland cover becoming denser at the southern (rear) half of the property from 1977 onwards. The pond was formed by 1968. Subsequently there has been little change to the land use and site conditions.[4] There is no apparent evidence that the site has been used for any of the activities listed on the HAIL.

As such, using the method set out in Section 6(2) of the above Regulations, the subject site is not considered to be a 'piece of land' in terms of the above regulations.

6.1.2 Resource Management (National Environmental Standard for Freshwater) Regulations 2020

The Ecological Impact Assessment in **Appendix 3** identifies the pond within which wetland vegetation has established as being a wetland that has developed in or around a deliberately constructed water body since the construction of the water body, and therefore not a 'natural inland wetland' in terms of the above regulations. The applicant has consulted with Northland Regional Council regarding this assessment, who agree that the pond was constructed, and associated water body and vegetation would not be considered natural inland wetland as described in the National Policy Statement for Freshwater 2020 or for the purpose of the above regulations. Refer to **Appendix 11**. As such, it is considered that the above regulations are not relevant to the proposed activity.

[3] Northland Regional Council (n.d.): *Selected Land-use Register Map.* Retrieved 6 May 2025 from https://localmaps.nrc.govt.nz/localmapsviewer/?map=65b660a9454142d88f0c77b258a05f21
[4] Sourced from http://retrolens.nz and licensed by LINZ CC-BY 3.0

6.2 National Policy Statements

6.2.1 New Zealand Coastal Policy Statement 2010 ("NZCPS")

The NZCPS provides strategic direction for territorial authorities as to how coastal management should be dealt with in planning documents. The most recent mapping of the 'coastal environment' is within the operative Regional Policy Statement, which includes the subject site.

When considering an application for resource consent, the consent authority must, subject to Part 2 of the Act, have regard to, amongst other matters, any relevant provision of the NZCPS. We have assessed those parts of policies 6 (Activities in the coastal environment), 13 (Preservation of natural character), 14 (Restoration of natural character), 15 (Natural features and natural landscapes), 22 (Sedimentation), and 23 (Discharge of contaminants) that are relevant to the proposed activity. It is our opinion that the proposed activity appropriately endorses the relevant NZCPS provisions as follows:

- In relation to policy 6, the proposal is consistent with the character of the surrounding coastal lifestyle development that is already located in the wider catchment, with the site being within an existing coastal lifestyle area. It allows the existing site to be used in such a way that avoids detracting from the character of this part of the existing environment.

- Policies 13 and 15, which require preservation of natural character and protection of natural character, features and landscapes from inappropriate subdivision, use and development, have been taken into account during the selection of the building sites, as they avoid the Outstanding Landscape Feature, as well as through building design and scale, and low visibility from public viewing points. It is further noted that the subject land is not part of a mapped area of high or outstanding natural character, and is not within an Outstanding Natural Landscape. Natural character can be preserved, significant adverse effects on natural features and landscapes are avoided, while other potential adverse effects are avoided, remedied and mitigated.

- In relation to policy 14, the proposal includes riparian restoration and landscape enhancement planting, which will both offset the vegetation clearance required for the development but also result in visual and ecological benefits. It therefore promotes restoration and rehabilitation of the natural character of the coastal environment in accordance with this policy direction.

- In relation to policies 22 and 23, the designs for treatment and disposal of stormwater and wastewater disposal have been undertaken with particular regard to soil conservation and prevention of erosion and instability.

6.2.2 National Policy Statement for Highly Productive Land 2022 – Amended 2024 ("NPSHPL")

The site is mapped as comprising Land Use Capability ("LUC") unit VIe16. This LUC Unit does not meet the definition of 'highly productive land' in the NPSHPL.

6.2.3 National Policy Statement for Indigenous Biodiversity ("NPSIB")

The objective of the above policy statement is set out in 2.1, as copied below:

(1) The objective of this National Policy Statement is:

(a) to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date; and

(b) to achieve this:

(i) through recognising the mana of tangata whenua as kaitiaki of indigenous biodiversity; and

(ii) by recognising people and communities, including landowners, as stewards of indigenous biodiversity; and

(iii) by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity; and

(iv) while providing for the social, economic, and cultural wellbeing of people and communities now and in the future.

There is no SNA included in the district plan or identified in a policy statement or plan. The 17 listed policies set out to achieve this objective, and of most relevant to this proposal is Policy 8:

Policy 8: The importance of maintaining indigenous biodiversity outside SNAs is recognised and provided for.

Part 3 guides the implementation of the NPSIB. Of relevance is the following approach to implementing the NPSIB.

3.16 Indigenous biodiversity outside SNAs
(1) If a new subdivision, use, or development is outside an SNA and not on specified Māori land, any significant adverse effects of the new subdivision, use, or development on indigenous biodiversity outside the SNA must be managed by applying the effects management hierarchy.

Effects Management Hierarchy is defined as follows:

effects management hierarchy means an approach to managing the adverse effects of an activity on indigenous biodiversity that requires that:
(a) adverse effects are avoided where practicable; then
(b) where adverse effects cannot be avoided, they are minimised where practicable; then
(c) where adverse effects cannot be minimised, they are remedied where practicable; then
(d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible; then
(e) where biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided; then
(f) if biodiversity compensation is not appropriate, the activity itself is avoided.

It is not practicable to avoid direct effects, as indigenous vegetation clearance has or will be required to form building sites. Adverse effects are minimized through limiting the amount of clearance required, removing only selected vegetation to reduce fire risk, and through the low quality of the vegetation that has been or will be cleared. Biodiversity offsetting is to be provided through revegetation of selected areas, as well as pest and weed management. It is therefore considered that the proposal is consistent with the above National Policy Statement.

6.3 Regional Policy Statement for Northland ("RPS")

The RPS provides an overview of resource management issues and gives objectives, policies, and methods to achieve integrated management of natural and physical resources of the region. The site is within the coastal environment but does not include any areas of high or outstanding natural character, or outstanding natural landscapes or features as recorded in the Regional Policy Statement.

The relevant policies from the RPS are addressed below.

4.4.1 Policy – Maintaining and protecting significant ecological areas and habitats

This policy requires adverse effects in the coastal environment to be avoided so that they are no more than minor on threatened or at risk indigenous taxa, significant areas of indigenous vegetation and habitats of indigenous fauna, and areas set aside for full or partial protection of indigenous biodiversity under other legalisation (Policy 4.4.1(1)). For other ecological values, in the coastal environment, significant adverse effects must be avoided, and other effects avoided, remedied or mitigated. The relevant parts of this policy are considered to be met by the proposal, in that it does not affect significant flora and fauna, but nonetheless avoids significant effects on the degraded vegetation within the site. Other effects are avoided and mitigated through minimisation of vegetation clearance and revegetation and pest and weed control.

4.6.1 Policy – Managing effects on the characteristics and qualities natural character, natural features and landscapes

The subject site does not include any areas of outstanding natural character, outstanding natural features or outstanding natural landscapes as mapped by the RPS. The proposal avoids significant adverse effects, and avoids, remedies or mitigates other adverse effects on natural character and the wider landscape. The listed methods have been taken into account in the placement of building sites and their location within an existing area of coastal lifestyle development.

5.1.2 Policy – Development in the coastal environment

The proposed building sites have adequate setbacks from the coastal marine area and can be adequately serviced with onsite wastewater and stormwater disposal to avoid offsite effects. The proposed coastal lifestyle development is located within an area zoned for this purpose.

Policy 5.1.1 – Planned and coordinated development

This policy requires co-ordinated location, design and building for subdivision, land use and development. Relevant matters are listed under (a), (c), (e), (g) and (h). These matters have been considered in preceding sections of this report. In particular:

- Servicing with the necessary infrastructure is viable, with onsite storage of potable water and onsite wastewater and stormwater disposal being proposed.
- The site is not near any significant mineral resources.
- The new building sites are not close to any incompatible land use activities and avoids reverse sensitivity;
- The proposal does not have any significant effect on any landscape or natural character values, historic or cultural heritage values, or transport corridors;
- Ecological effects are minimised through only selective clearing of indigenous vegetation and offset planting.
- Adverse effects associated with natural hazards and downstream flooding are avoided.
- The site does not contain highly versatile soils.
- The residential intensity complies with that provided for by the Operative District Plan, and the sense of place and character of the surrounding environment can be retained.

6.4 District Plan Objectives and policies

6.4.1 Operative Far North District Plan

The objectives and policies of the Coastal Environment, Coastal Living Zone, Natural Hazards and Earthworks Sections of the District Plan are relevant to this proposal.

The proposal achieves a restricted discretionary activity status specifically in terms of the Coastal Living Zone rules, and the relevant matters over which Council has restricted the exercise of its discretion have been addressed within this report. Therefore, the proposal can be considered to be in accordance with the objectives and policies of both the Coastal Environment as well as the Coastal Living zone.

As outlined below, it has been concluded that the proposal is not contrary to the remaining relevant objectives and policies of the Operative District Plan.

Natural Hazards

12.4.3 OBJECTIVES

12.4.3.1 To reduce the threat of natural hazards to life, property and the environment, thereby to promote the well-being of the community.

12.4.3.2 To ensure that development does not induce natural hazards or exacerbate the effects of natural hazards.

12.4.3.7 To avoid fire risk arising from the location of residential units in close proximity to trees, or in areas not near fire fighting services.

12.4.4 POLICIES

12.4.4.7 That the risk to adjoining vegetation and properties arising from fires be avoided.

The risk of fire can never be fully avoided, as fire risk would remain even with a 20m separation distance between a dwelling and areas of vegetation. However, the applicants have taken practicable steps to minimise fire risk, including using a grassed buffer area immediately between the dwelling and cabin and the surrounding areas of vegetation, including fire resistant exterior building materials (predominantly metal cladding, and metal roof) to reduce the risk of fire spreading to nearby existing vegetation, and vice versa, and having adequate water supply to minimise the spread of fire. In addition, it is noted that the site is in close proximity to the nearest volunteer fire station.

The proposal is considered to be consistent with the above objectives and policies related to fire hazard, as it avoids fire risk to the extent practicable.

6.4.1 Proposed Far North District Plan

Relevant objectives and policies are set out under the parts 'Rural Lifestyle Zone', 'Natural Hazards', 'Transport', 'Coastal Environment' and 'Earthworks'. The proposal would meet the permitted activity standard of the Rural Lifestyle Zone and Transport rules and therefore can be considered to be in accordance with the objectives and policies of those parts. Remaining objectives and policies of the Natural Hazards, Coastal Environment and Earthworks parts are assessed below, where relevant. It is concluded that the proposal will be consistent with the relevant strategies.

Coastal Environment
Objectives
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.
CE-O2 - Land use and subdivision in the coastal environment:
a. Land use and subdivision in the coastal environment:
b. preserves the characteristics and qualities of the natural character of the coastal environment;
c. is consistent with the surrounding land use;
d. does not result in urban sprawl occurring outside of urban zones;
e. promotes restoration and enhancement of the natural character of the coastal environment; and
f. recognises tangata whenua needs for ancestral use of whenua Māori.

Policies
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.
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
b. avoiding sprawl or sporadic patterns of development.
CE-P8 Encourage the restoration and enhancement of the natural character of the coastal environment.
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:
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;
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

The proposed building sites are not located within an area of high or outstanding natural character. Natural character of the coastal environment can be protected, as the proposal does not affect the qualities of the site and surrounding environment that contribute to the overall level of natural character. In particular, the site will retain existing vegetation, and the proposed buildings will fit within the existing settlement pattern in this part of the coastal environment, and at a scale which does not contribute to urban sprawl.

The proposal will not result in significant adverse effects, and other effects on the characteristics and qualities of the coastal environment will be avoided and mitigated through location and design of the building. A residential development on a site of this size is neither sprawling nor sporadic.

Retention of existing vegetation, together with the reasonable scale of the buildings, will mean that existing amenity values and the current level of natural character in the wider area are maintained.

The above matters have been addressed previously, whereby it is concluded that the natural character of the coastal environment can be preserved, the proposal is consistent with surrounding development, and restoration and enhancement of natural character can be achieved via proposed planting. Significant adverse effects on the coastal environment are avoided, and other effects avoided, remedied and mitigated.

Natural Hazards
Objectives
NH-O1 The risks from natural hazards to people, infrastructure and property are managed, including taking into account the likely long-term effects of climate change, to ensure the health, safety and resilience of communities.
NH-O2 Land use and subdivision does not increase the risk from natural hazards or risks are mitigated …

Policies
NH-P9 Manage land use and subdivision that may be susceptible to wildfire risk by requiring:
- *(a) Setbacks from any contiguous scrub or shrubland, woodlot or forestry;'*
- *(b) Access for emergency vehicles; and*
- *(c) Sufficient accessible water supply for fire-fighting purposes.*

The proposal includes measures to reduce the risk of fire, including having adequate water supply to minimise the spread of fire. The site is close to a volunteer firefighting service. Other steps to minimise fire risk include using a grassed buffer area and planting of selected low-medium flammability species immediately between the dwelling and cabin and the surrounding areas of vegetation, using fire resistant exterior building materials to reduce the risk of fire spreading to nearby existing vegetation and vice versa.

The proposal is considered to be consistent with the above objectives and policies, as it avoids and mitigates wildfire risk to the extent practicable.

6.4.2 Weighting assessment of Operative and Proposed Far North District Plan

The current District Plan review process was initiated in 2016. Submissions and further submissions have been received. Public hearings are currently taking place, and in 2026 the council will give notice of its decisions on the Proposed District Plan. At this stage, as there is scope for relevant rules, objectives and policies to change, it is considered that limited weight should be attributed to the Proposed District Plan, and more weight applied to the provisions of the Operative District Plan.

6.5 Proposed Regional Plan for Northland (February 2024)

Stormwater management proposals are based on Proposed Regional Plan for Northland Rule C.6.4.2, with the intention being that the existing pond will provide sufficient attenuation to avoid downstream flooding, and its existing outlet designed to avoid scour and erosion. Stormwater quality is unlikely to be an issue from this residential activity.

The discharge of sewage effluent onto land is controlled by the permitted activity rules C.6.1.3 of the Regional Plan for Northland. A feasible design that complies with that standard has been devised, as outlined in the Geotechnical Report. An effluent field and reserve area can be located in compliance with the current rules.

Completed and proposed earthworks have not or will not exceeded 5,000m² of exposed earth at any time, and will be within the permitted activity earthworks thresholds specified in Table 15 of Rule C.8.3.1.

No consents are considered necessary for the proposed activity under the Proposed Regional Plan for this proposal, although careful implementation of future earthworks, and the designed onsite wastewater and stormwater management systems, will be required.

6.6 Part 2 of the Resource Management Act 1991

An assessment of the proposal in relation to the relevant purpose and principles of Part 2 of the Resource Management Act 1991 is given below.

PART 2 PURPOSE AND PRINCIPLES

5 Purpose

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-

(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b)Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

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

(h) the management of significant risks from natural hazards.

7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall have particular regard to-

(b) The efficient use and development of natural and physical resources;

(c) The maintenance and enhancement of amenity values;

(f) Maintenance and enhancement of the quality of the environment;

8 Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The proposal is considered to promote sustainable management as per the purpose of the Act (Section 5) by enabling the development of an existing site for its intended purpose. The proposed buildings can be adequately serviced in terms of the disposal of wastewater and stormwater, and the collection and supply of water.

The proposal provides for the economic and social well-being of the owners of the property by allowing them to live on the site, resulting in physical changes to the site that are consistent with the nature and scale of development in the surrounding area. The proposed development can be completed in such a way that avoids, remedies and mitigates actual and potential adverse effects arising from vegetation clearance, earthworks, new buildings and impermeable areas, and fire hazard risk.

The site is within a modified part of the coastal environment, where there is no high or outstanding degree of natural character. The proposed buildings are of modest height and floor area, and together with the retention of established planting, will ensure that adverse visual amenity effects are appropriately avoided and mitigated, to ensure that the existing character of the site and its surrounds can be retained. The proposed residential development of this site is considered to be an appropriate activity.

Fire risk can be minimised through the availability of suitable water storage for firefighting purposes, as well as through maintaining and enhancing a buffer of cleared land with a fire-resistant planting at the perimeter.

The proposed activity is considered to be an efficient use of this land, which is neither highly productive nor highly versatile in terms of its productive capability. The building sites can be developed without reducing overall amenity values, while the pond restoration and other planting that is proposed will enhance landscape amenity values. The existing character of the wider coastal lifestyle area will be retained. The proposal is therefore considered to maintain amenity values and the overall quality of the environment in accordance with section 7.

The proposal has no known implications in terms of the Treaty of Waitangi. Mana whenua input has been sought by the Applicant and responses included in the application.

Overall, the proposal is considered to be consistent with the purpose and principles of the Resource Management Act 1991.

7. CONSULTATION & NOTIFICATION ASSESSMENT

7.1 Consultation

7.1.1 Iwi Consultation

A list of Iwi contacts for the area was supplied by Council's Te Hono Support. Refer to **Appendix 9**.

The applicant has sent details of the activity to the people whose contacts were provided by Te Hono Support and received a response from Ngāti Korokoro Hapu Trust. Further consultation with Ngāti Korokoro Hapu Trust has been undertaken, and the Trust have advised by way of a letter that they have no objection to the proposal. Refer to **Appendix 10**.

7.1.2 Fire & Emergency New Zealand

Consultation with Fire & Emergency NZ has been undertaken, resulting in a written approval being provided in terms of fire fighting water supply, fire appliance access to the water supply, and vegetation risk reduction strategies. Refer to **Appendix 8**.

7.2 Public notification

Step 1: Public notification is not requested. Sections 95A(3)(b) and (c) do not apply.

Step 2: Public notification is not precluded.

Step 3: There are no relevant rules that require public notification, and the adverse effects of the proposal have been assessed as being less than minor, as set out in Section 5 of this Report. As such, public notification is not considered necessary.

Step 4: No special circumstances are considered to exist to warrant public notification.

7.3 Limited notification

Step 1: The subject site does not adjoin the coastal marine area, and there are no affected protected customary rights groups or affected customary marine title groups. The subject site adjoins Te Roroa Area of Interest within the deed of Settlement between the Crown and Te Roroa and therefore adjoins land that is subject to the statutory acknowledgment in terms of 95B (3)(a) of the RMA. The applicant has consulted with Te Roroa via the contact details supplied by Council's Te Hono Support. No response has been received. Regardless, the subject site slopes away from the adjoining Area of Interest, and the development will retain a vegetated buffer between the new buildings and the land above. Therefore, it is considered that Te Roroa are not an affected person in terms of 95B(4).

Step 2: Limited notification is not precluded.

Step 3: Section 95E describes when a person is an affected person. Section 95E(1) specifies that a person is an affected person if the consent authority decides that the activity's adverse effects on the person are minor or more than minor (but are not less than minor).

Section 95E(2) provides guidance as to how a consent authority should assess an activity's adverse effects on a person for the purposes of Section 95E, including clause (a), where they may disregard an adverse effect of the activity on a person if a rule or national environmental standard permits an activity with that effect and clause (b), where they must, if the activity is a controlled activity or a restricted discretionary activity, disregard an adverse effect of the activity on the person if the effect does not relate to a matter for which a rule or a national environmental standard reserves control or restricts discretion.

Section 95E(3) specifies that a person is not an affected person in relation to an application for a resource consent for an activity if (a) the person has given, and not withdrawn, approval for the proposed activity in a written notice received by the consent authority before the authority has decided whether there are any affected persons.

The anticipated adverse effects of the proposed development are expected to be less than minor as:

- There will be no adverse effects on any downstream land in terms of flooding or inundation.
- Fire risk is mitigated to a reasonable and expected extent, so as to not cause an undue risk to neighbouring properties resulting from the spread of fire.
- The potential adverse effect on proximate and neighbouring individuals will be (at most) less than minor.
- Completed and proposed earthworks are not within close proximity to any boundaries, and temporary construction effects arising from dust, noise, silt and sediment migration are also considered to have been less than minor in scale and magnitude.

As such, it is considered that limited notification is not required via Step 3.

Step 4: There are no special circumstances to warrant notification to any other person.

7.4 Summary of Notification Assessment

As outlined above we are of the opinion that the proposal satisfies the statutory requirements for non-notification, and we respectfully request that it be processed on that basis.

9. CONCLUSION

In terms of section 104 and 104B of the Resource Management Act 1991, we consider that:

- The actual and potential adverse effects of the proposal can be avoided and mitigated so as to be less than minor.
- Positive effects will arise as a result of the implementation of managing exotic vegetation and weed species, and through additional revegetation planting.
- The proposal is considered to be consistent with the relevant objectives and policies of the Operative District Plan, Proposed District Plan, Regional Policy Statement and New Zealand Coastal Policy Statement.
- The proposal is in accordance with the Purpose and Principles of the Resource Management Act 1991.

We also note that:

- The proposal satisfies the statutory requirements for non-notification, and we respectfully request that it be processed on that basis.

For these reasons it is requested this application be considered to be a non-notified application, and that the Council grant consent to the proposal, under delegated authority, as detailed in the application and supporting information.

Signed 
Natalie Watson,
Resource Planner

Date: 5 June 2025
WILLIAMS & KING
Kerikeri

10. APPENDICES

Appendix 1	Architects Plan Set
Appendix 2	Shed Floor and Elevation Plans
Appendix 3	Ecological Impact Assessment
Appendix 4	Landscape & Visual Effects Assessment
Appendix 5	Stormwater Attenuation Report
Appendix 6	Geotechnical Report & Onsite Wastewater Design
Appendix 7	Record of Title
Appendix 8	Fire & Emergency NZ Written Approval
Appendix 9	Te Hono Support Email
Appendix 10	Ngāti Korokoro Hapu Trust Letter of Support
Appendix 11	Northland Regional Council Confirmation of No Natural Inland Wetland

RESOURCE CONSENT

29 Signal Station Road

RESOURCE CONSENT DRAWING INDEX

DRAWING	NAME	REVISION
RC-00	TITLE	
RC-01	PLANNING CONTROLS	
RC-02	SURVEY	
RC-03	PROPOSED SITE PLAN	
RC-04	PROPOSED SITE PLAN	
RC-05	HOUSE - GROUND FLOOR PLAN	
RC-06	HOUSE - ROOF PLAN	
RC-07	HOUSE - NORTH & EAST ELEVATIONS	
RC-08	HOUSE - SOUTH & WEST ELEVATIONS	
RC-09	HOUSE - SECTIONS	
RC-10	HOUSE - SECTIONS	
RC-11	CABIN - FLOOR PLAN	
RC-12	CABIN - ROOF PLAN	
RC-13	CABIN - NORTH & EAST ELEVATIONS	
RC-14	CABIN - SOUTH & WEST ELEVATIONS	
RC-15	CABIN - SECTIONS	
RC-16	COVERAGE CALCULATIONS	
RC-17	PERSPECTIVES	
RC-18	PERSPECTIVES	
RC-19	PERSPECTIVES	

ARTIST'S IMPRESSION ONLY

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TITLE

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-00

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WWW.DAA.CO.NZ

PLANNING CONTROLS

ADDRESS- 29 Signal Station Rd Omapere

ZONE: Coastal Living

SITE AREA: 17945

LEGAL DESCRIPTION: Lo1 1 DP86502

CONTROL	REQUIRED	EXISTING	PROPOSED	COMPLIES
DENSITY	1 UNIT PER 4ha		1 RESIDENCE	✓
SITE COVERAGE	BUILDING COVERAGE	EXISTING COVERAGE: N/A	PROPOSED COVERAGE: 359m² (2.13%)	
	IMPERVIOUS COVERAGE	EXISTING IMPERVIOUS AREA: N/A	PROPOSED IMPERVIOUS COVERAGE: 1483m² (8.26%) BUILDING COVERAGE AREA: 384m² DRIVEWAY: 1099m²	
				✓
YARDS	FRONT: 10M SIDE: 10M REAR: 10M		REFER TO SITE PLAN	✓
HEIGHT IN RELATION TO BOUNDARY	2m + 45 DEGREES TO EACH BOUNDARY		REFER TO ELEVATIONS AND SECTIONS * INFRINGEMENTS	✓
MAX HEIGHT	8m MAXIMUM HEIGHT		MAXIMUM PROPOSED HEIGHT: 7.8m	✓

LOCATION PLAN NTS

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PLANNING CONTROLS

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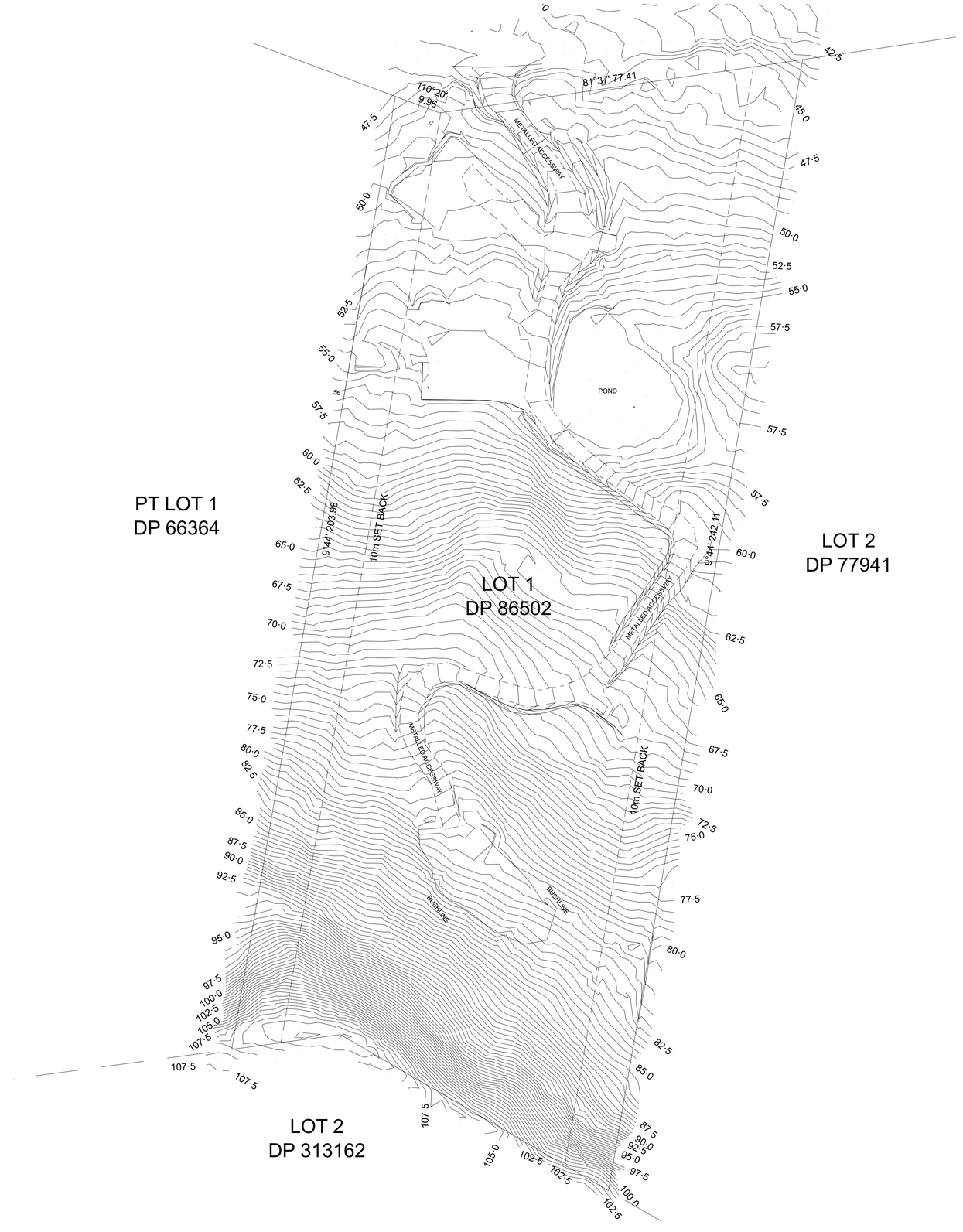

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SURVEY

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

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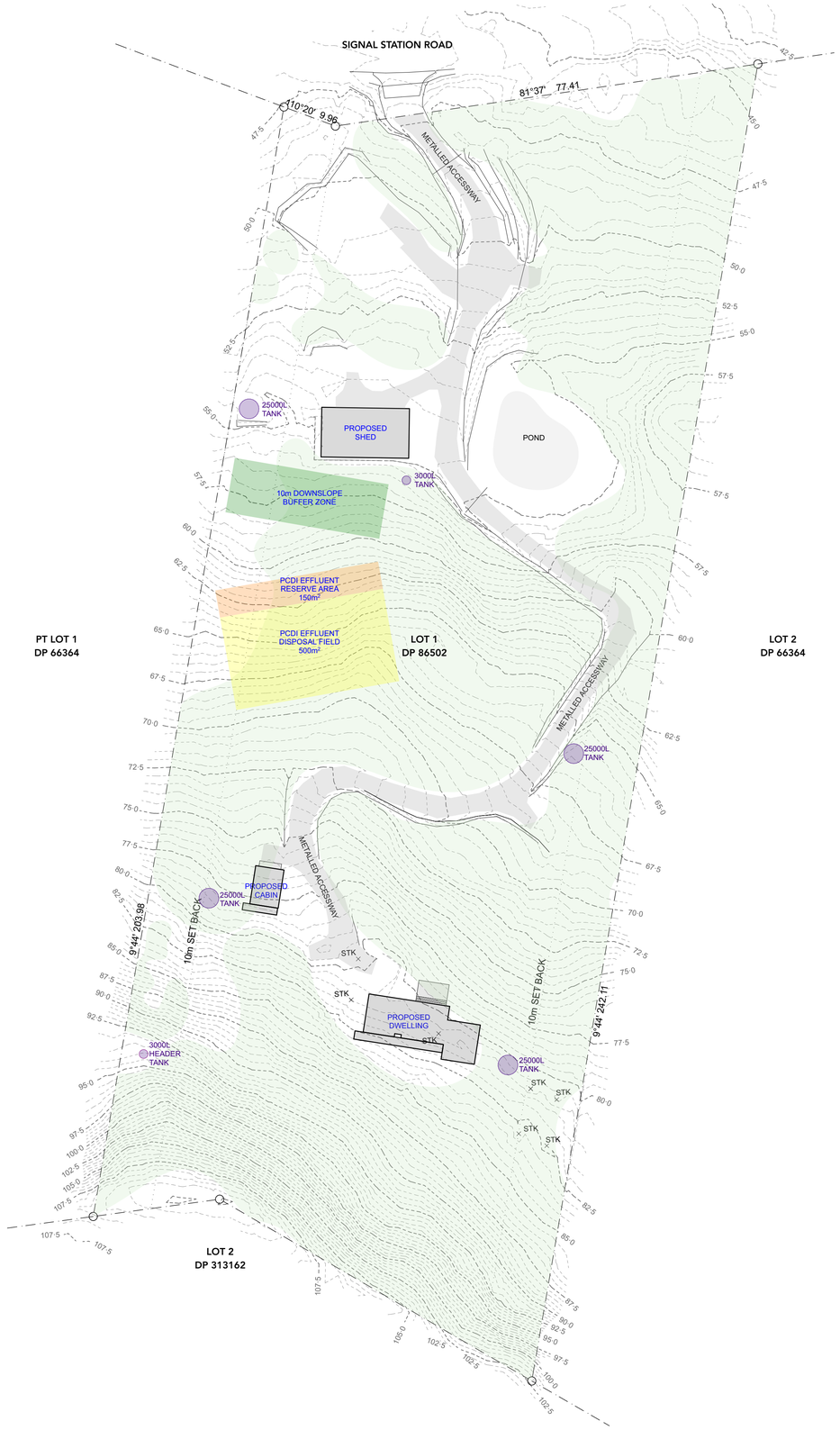
SUBJECT SITE

ADDRESS	29 Signal Station Rd Omapere
ZONE	Coastal Living
SIZE	17945 m²
LEGAL DESCRIPTION	Lo1 1 DP86502
WIND ZONE	Extra High
EXPOSURE ZONE	D



SITE PLAN NOTES:

- CONFIRM LOCATION OF LEGAL BOUNDARIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.

- BUILDING SET OUT TO BE CARRIED OUT BY A REGISTERED CADASTRAL SURVEYOR. REGISTERED CADASTRAL SURVEYOR TO PROVIDE CERTIFICATES CONFIRMING CORRECT BUILDING SET-OUT AND, WHERE REQUIRED, COMPLIANCE WITH HEIGHT IN RELATION TO BOUNDARY CONTROLS.

- CONTRACTOR TO CONFIRM EXACT POSITION AND DIMENSIONS ON SITE. CHECK ANY INCONSISTENCIES WITH PROJECT ARCHITECT PRIOR TO COMMENCING WORK.

- CONTRACTOR TO LOCATE AND CONFIRM POSITION AND LEVELS OF ALL SERVICE PIPES AND MANHOLES ON SITE PRIOR TO CONSTRUCTION.

- CONTRACTOR TO ADVISE PROJECT ARCHITECT ON LOCATIONS AND LEVELS OF EXISTING SANITARY SEWER AND STORMWATER DRAIN CONNECTIONS PRIOR TO CONSTRUCTION.

- READ ARCHITECTURAL PLANS IN CONJUNCTION WITH ALL OTHER CONSULTANT DOCUMENTS.

-NATURAL GROUND LEVELS WITHIN SITE BOUNDARY TO BE REINSTATED AT THE COMPETITION OF WORKS, UNLESS OTHERWISE NOTED.

- PROJECT WORK AREA IS DEFINED BY EXTENTS OF LEGAL BOUNDARIES UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS.

- CONTRACTOR TO MAKE GOOD VEHICLE CROSSING / INTERFACE WITH PUBLIC ROAD AND ACCESSWAY.

- CONTRACTOR TO ALLOW FOR TEMPORARY WORKS SUCH AS (BUT NOT LIMITED TO) SECURITY FENCING TO ENSURE SITE IS SAFE AND SECURE.

SITE PLAN LEGEND:

- SITE BOUNDARY
- MINOR CONTOURS
- MAJOR CONTOURS
- FENCE
- YARD SETBACKS
- BUILDING OUTLINE
- SS — PUBLIC STORMWATER LINE
- SW — PUBLIC WASTEWATER LINE
- CONCRETE
- VEGETATION

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PROPOSED SITE PLAN

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REV: 01

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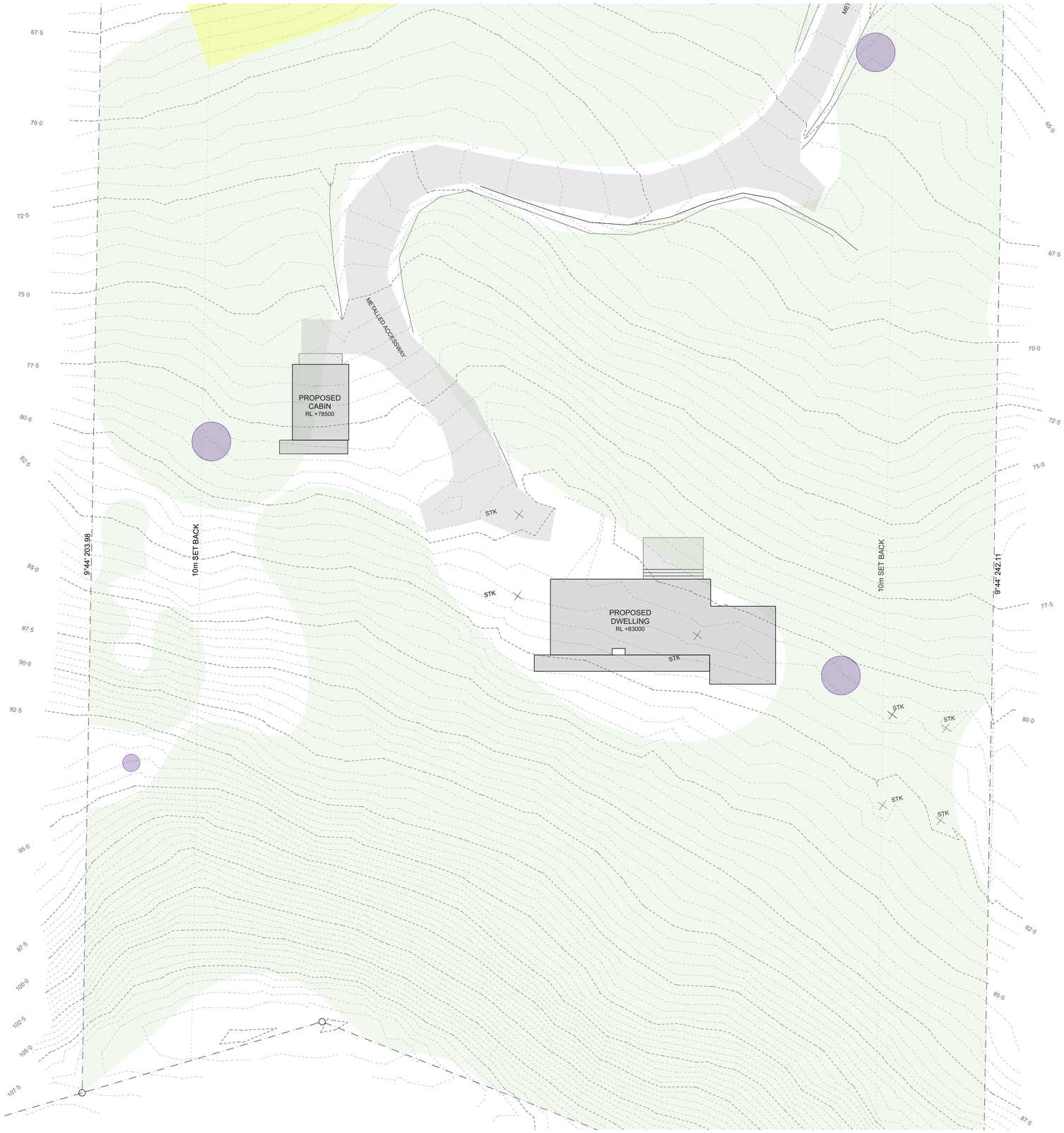
SUBJECT SITE

ADDRESS	29 Signal Station Rd Omapere
ZONE	Coastal Living
SIZE	17945 m^2
LEGAL DESCRIPTION	Lo1 1 DP86502
WIND ZONE	Extra High
EXPOSURE ZONE	D



SITE PLAN NOTES:

- CONFIRM LOCATION OF LEGAL BOUNDARIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.

- BUILDING SET OUT TO BE CARRIED OUT BY A REGISTERED CADASTRAL SURVEYOR. REGISTERED CADASTRAL SURVEYOR TO PROVIDE CERTIFICATES CONFIRMING CORRECT BUILDING SET-OUT AND, WHERE REQUIRED, COMPLIANCE WITH HEIGHT IN RELATION TO BOUNDARY CONTROLS.

- CONTRACTOR TO CONFIRM EXACT POSITION AND DIMENSIONS ON SITE. CHECK ANY INCONSISTENCIES WITH PROJECT ARCHITECT PRIOR TO COMMENCING WORK.

- CONTRACTOR TO LOCATE AND CONFIRM POSITION AND LEVELS OF ALL SERVICE PIPES AND MANHOLES ON SITE PRIOR TO CONSTRUCTION.

- CONTRACTOR TO ADVISE PROJECT ARCHITECT ON LOCATIONS AND LEVELS OF EXISTING SANITARY SEWER AND STORMWATER DRAIN CONNECTIONS PRIOR TO CONSTRUCTION.

- READ ARCHITECTURAL PLANS IN CONJUNCTION WITH ALL OTHER CONSULTANT DOCUMENTS.

-NATURAL GROUND LEVELS WITHIN SITE BOUNDARY TO BE REINSTATED AT THE COMPETITION OF WORKS, UNLESS OTHERWISE NOTED.

- PROJECT WORK AREA IS DEFINED BY EXTENTS OF LEGAL BOUNDARIES UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS.

- CONTRACTOR TO MAKE GOOD VEHICLE CROSSING / INTERFACE WITH PUBLIC ROAD AND ACCESSWAY.

- CONTRACTOR TO ALLOW FOR TEMPORARY WORKS SUCH AS (BUT NOT LIMITED TO) SECURITY FENCING TO ENSURE SITE IS SAFE AND SECURE.

SITE PLAN LEGEND:

- SITE BOUNDARY
- MINOR CONTOURS
- MAJOR CONTOURS
- FENCE
- YARD SETBACKS
- BUILDING OUTLINE
- SS — PUBLIC STORMWATER LINE
- SW — PUBLIC WASTEWATER LINE
- CONCRETE
- VEGETATION

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PROPOSED SITE PLAN

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REV: 01

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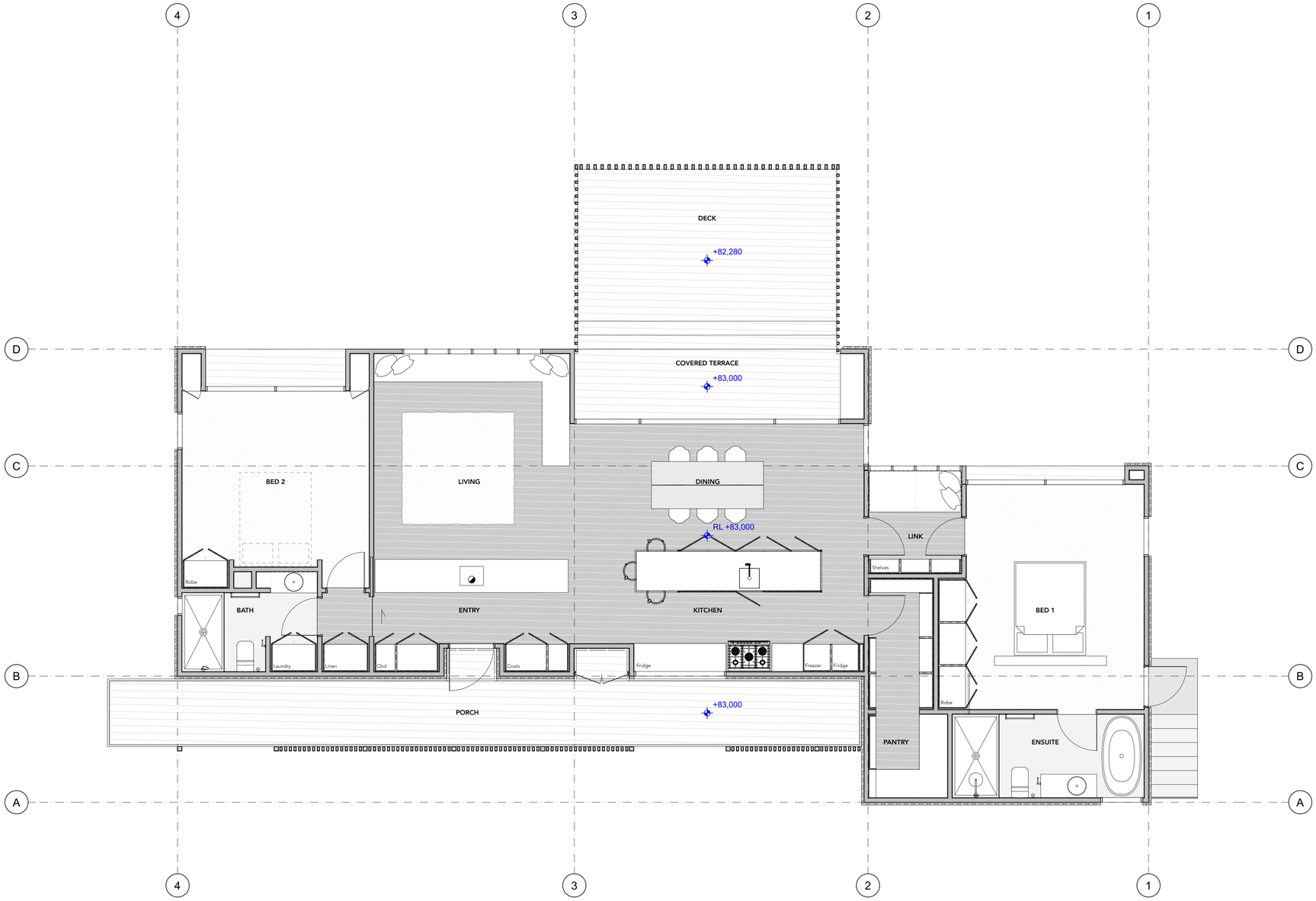

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HOUSE - GROUND FLOOR PLAN

1

FLOOR PLAN LEGEND:

- SITE BOUNDARY
- MINOR CONTOURS
- MAJOR CONTOURS
- YARD SETBACKS
- GRASS
- CONCRETE
- TIMBER FLOOR BOARDS
- TIMBER DECKING
- FFL ±0 — FINISHED FLOOR LEVEL
- FDL ±0 — FINISHED DECK LEVEL

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HOUSE - GROUND FLOOR PLAN

REVISION NAME	REV ID	DESCRIPTION	DATE

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ROOF PLAN NOTES:

-REFER TO CURRENT RESOURCE CONSENT (REF: –) AND ENGINEERING PLAN APPROVAL (REF: –) FOR RELEVANT CONDITIONS AND PROCEDURES. ENSURE ALL CONDITIONS ARE ADHERED TO DURING CONSTRUCTION OF PROJECT.

-ALL ROOFING PRODUCTS (INCL MEMBRANE) TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS. INSTALLER TO CONFIRM MINIMUM FALLS AND PROVIDE A PRODUCER STATEMENT FOR THE PRODUCT AND INSTALLATION.

-CONTRACTOR TO ALLOW FOR BUILD UP IN LAYERS OF ROOFING MEMBRANES TO ENSURE PONDING DOES NOT OCCUR & THAT FINISHED MEMBRANE THICKNESS DOES NOT COMPROMISE INTENT OF DETAILING.

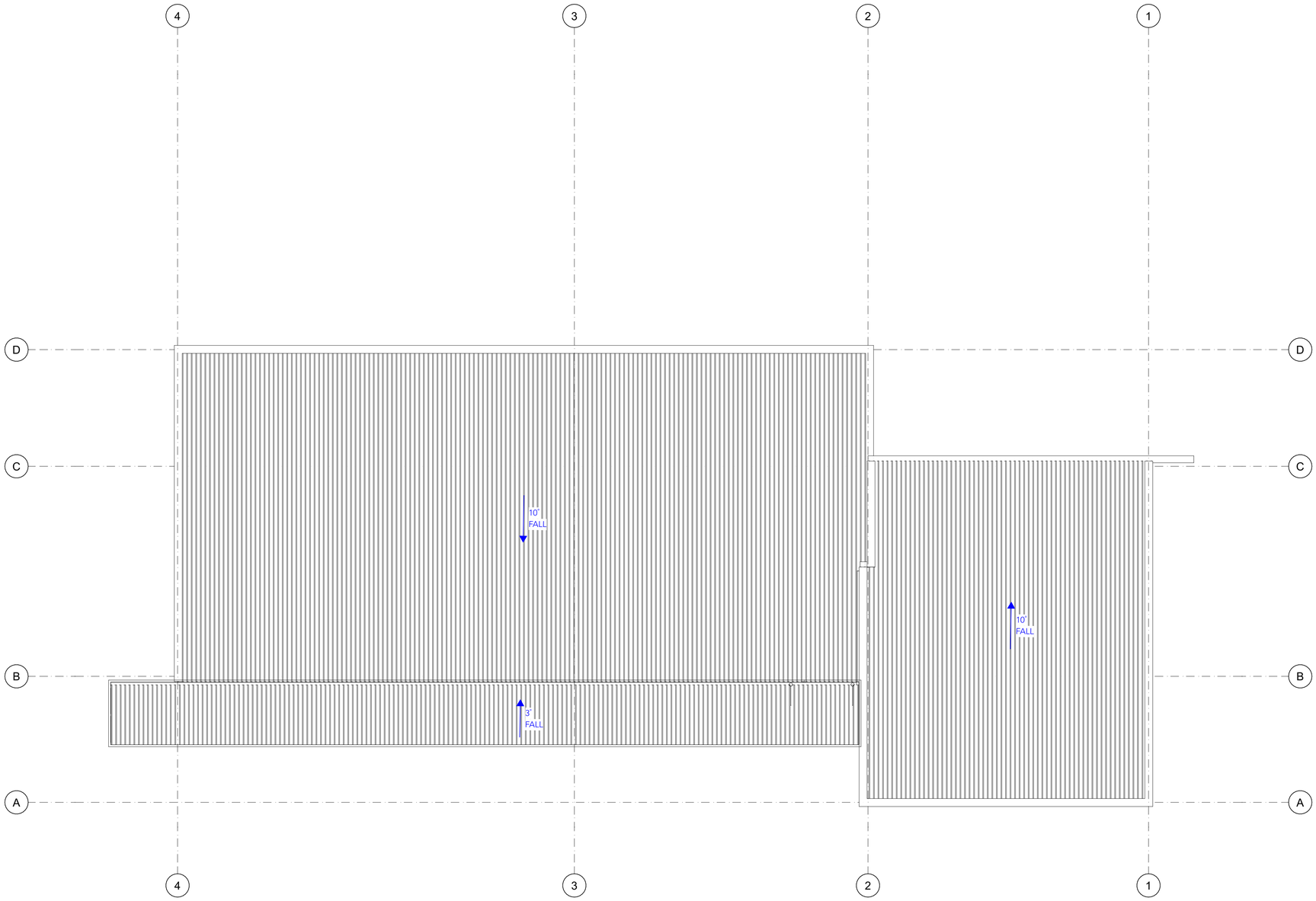
-ALL OUTLETS TO HAVE PROPRIETARY CLAMP TYPE FITTING SUITABLE FOR ROOFING MEMBRANE APPLICATION.

-ALL OUTLETS TO HAVE DOME GRATE COVER. ALL DOWNPIPES CONCEALED WITHIN BUILDING ENVELOPE TO BE WRAPPED WITH ACOUSTIC RATED LAGGING.

-PROVIDE OVERFLOWS AT POSITIONS NOTED. SIZE TO EQUAL MINIMUM NZBC DOWNPIPE SIZE REQUIREMENT.

-ALL FLASHINGS TO COMPLY WITH NZBC E2/AS1

-ALL FLASHINGS TO BE COLOUR MATCHES TO ROOFING UNLESS OTHERWISE NOTED



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HOUSE - ROOF PLAN

1

ROOF PLAN LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- METAL ROOFING
- FFL ±0 FINISHED FLOOR LEVEL
- RL ±0 REFERENCE LEVEL
- FDL ±0 FINISHED DECK LEVEL

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HOUSE - ROOF PLAN

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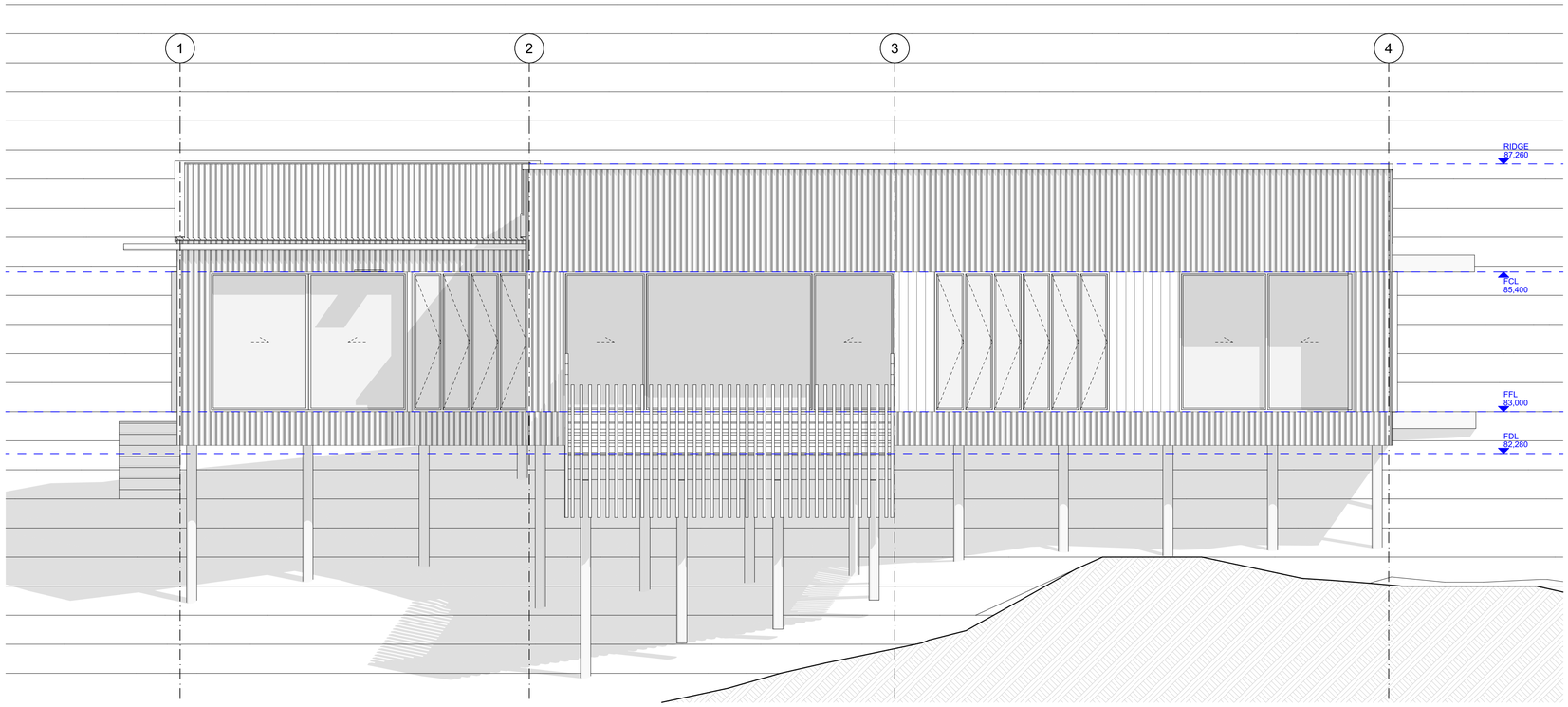
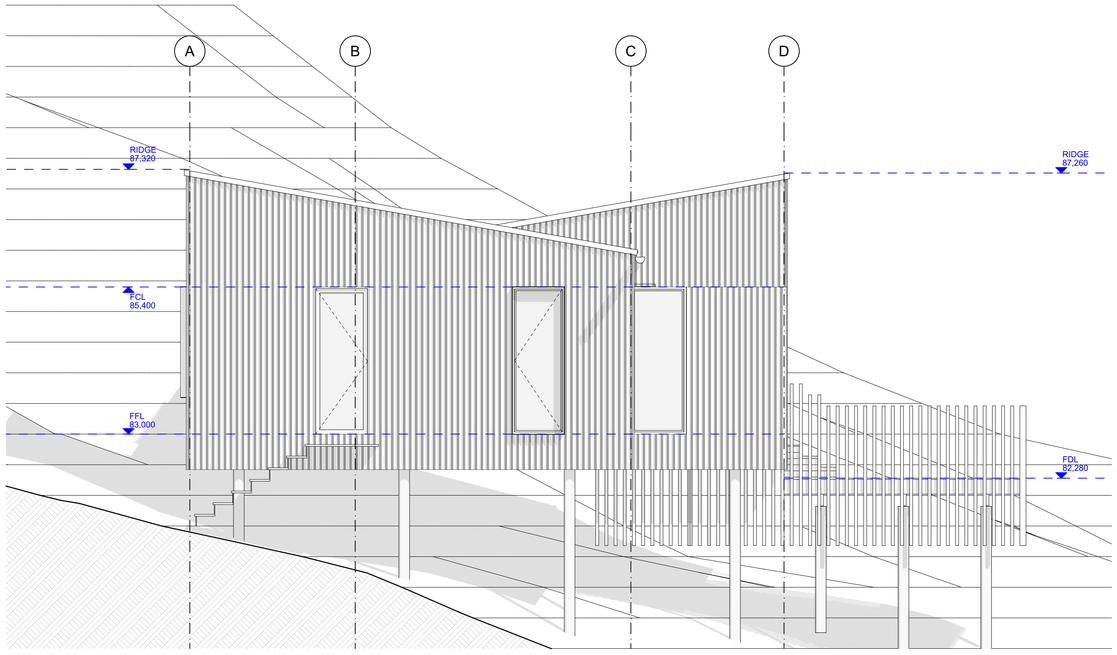


1:50 NORTH ELEVATION - HOUSE 1



1:50 EAST ELEVATION - HOUSE 2

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 — FINISHED FLOOR LEVEL
- RL +0,000 — REFERENCE LEVEL
- FDL +0,000 — FINISHED DECK LEVEL.

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1:50 @ A1
(ORIGINAL REDUCED 50% @A3)

HOUSE - NORTH & EAST ELEVATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-07

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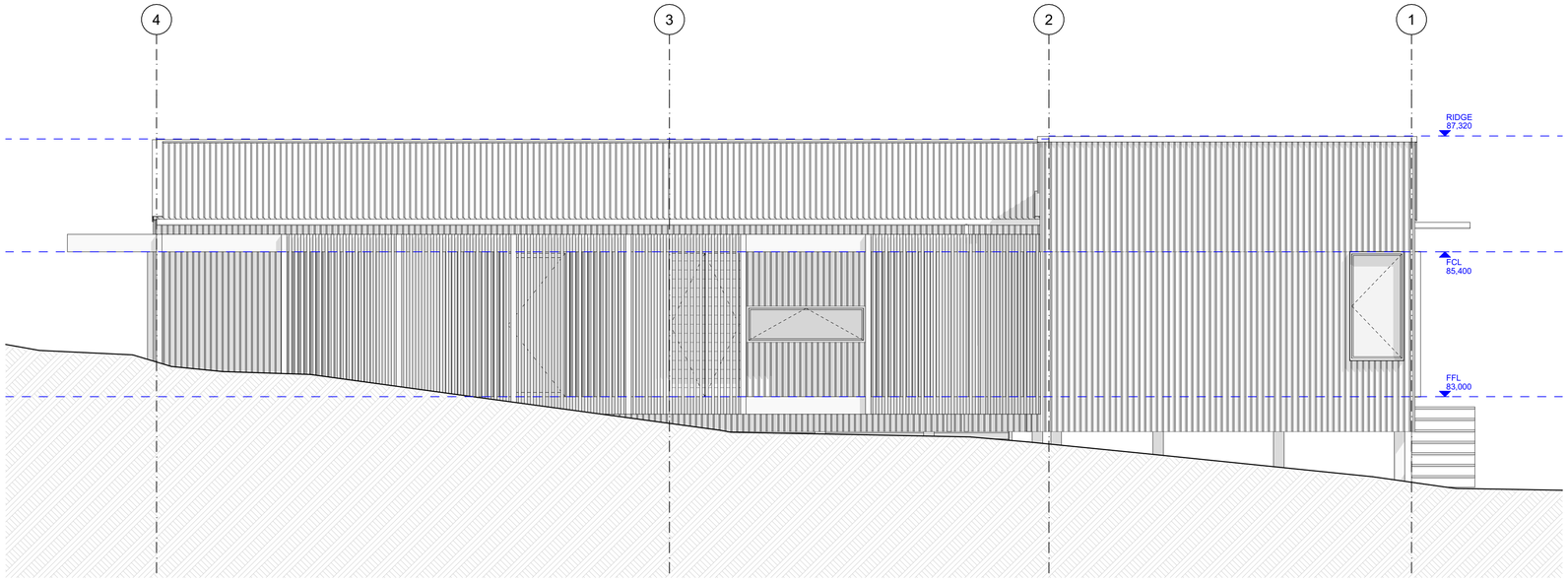
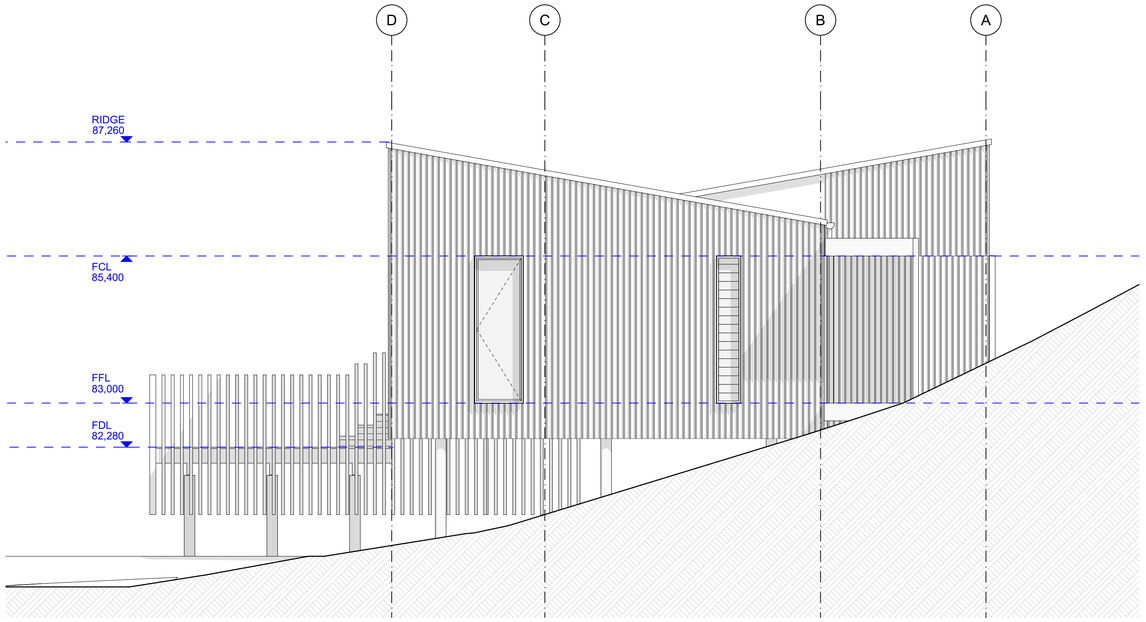


1:50 SOUTH ELEVATION - HOUSE 1



1:50 WEST ELEVATION - HOUSE 2

ELEVATION & SECTION NOTES:

-CONTRACTOR TO LOCATE AND CONFIRM POSITION AND LEVELS OF ALL SERVICE PIPES AND MANHOLES ON SITE PRIOR TO CONSTRUCTION. CONTRACTOR TO ADVISE LOCATION OF EXISTING SANITARY SEWER AND STORMWATER DRAIN CONNECTIONS.

-CONFIRM ALL BOUNDARY LOCATIONS IN RELATION TO GRIDS ON SITE PRIOR TO CONSTRUCTION.

-READ IN CONJUNCTION WITH ALL CONSULTANT DOCUMENTS.

-ENSURE GROUND CLEARANCES AS PER NZBC E2 FIGURE 65 & TABLE 18.

-ENSURE ALL PRODUCT MANUFACTURER'S DOCUMENTS ARE REFERRED TO AND PRODUCTS ARE INSTALLED STRICTLY TO MANUFACTURER'S INSTRUCTIONS.

-ALL STRUCTURAL COMPONENTS SHOWN AS INDICATIVE ONLY. REFER TO STRUCTURAL ENGINEERING DOCUMENTS FOR ALL STRUCTURAL COMPONENTS.

-REFER TO JOINERY SCHEDULE FOR SPECIFIC JOINERY NOTES AND DIMENSIONS.

-NATURAL GROUND LEVELS WITHIN SITE BOUNDARY TO BE REINSTATED AT THE COMPETITION OF WORKS, UNLESS OTHERWISE NOTED.

-CONTRACTOR TO MAKE GOOD VEHICLE CROSSING / INTERFACE WITH PUBLIC ROAD AND ACCESSWAY.

REVIEW

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 — FINISHED FLOOR LEVEL
- RL +0,000 — REFERENCE LEVEL
- FDL +0,000 — FINISHED DECK LEVEL.

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1:50 @ A1
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HOUSE - SOUTH & WEST ELEVATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-08

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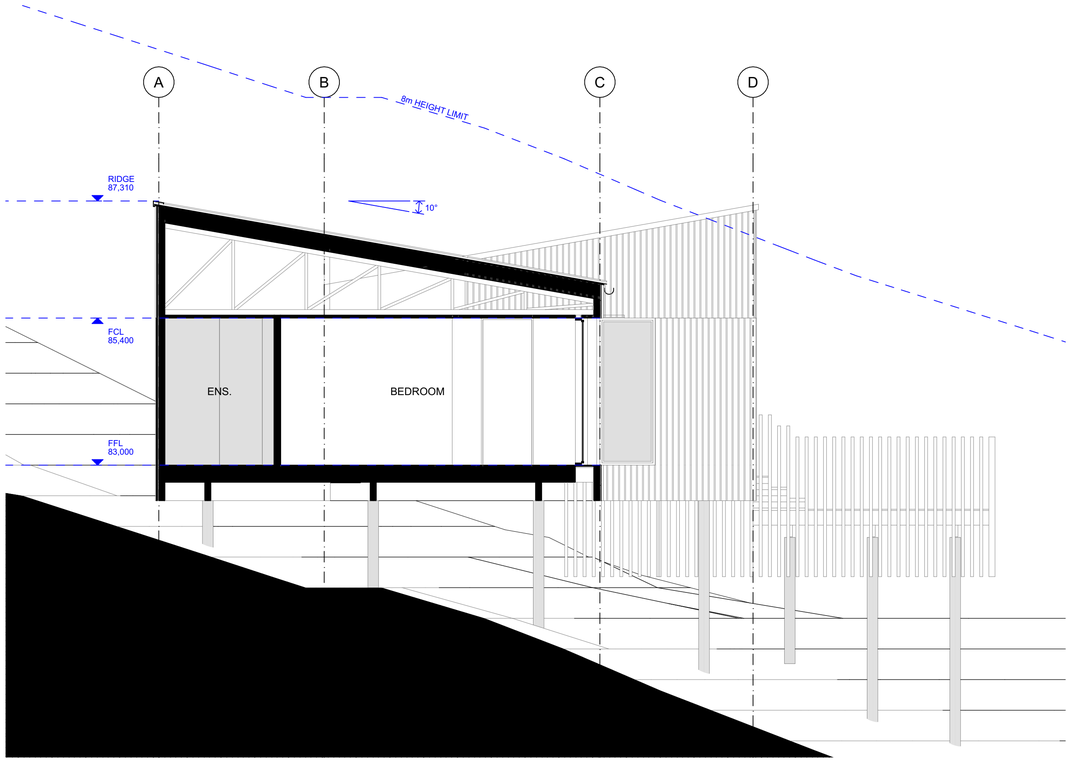
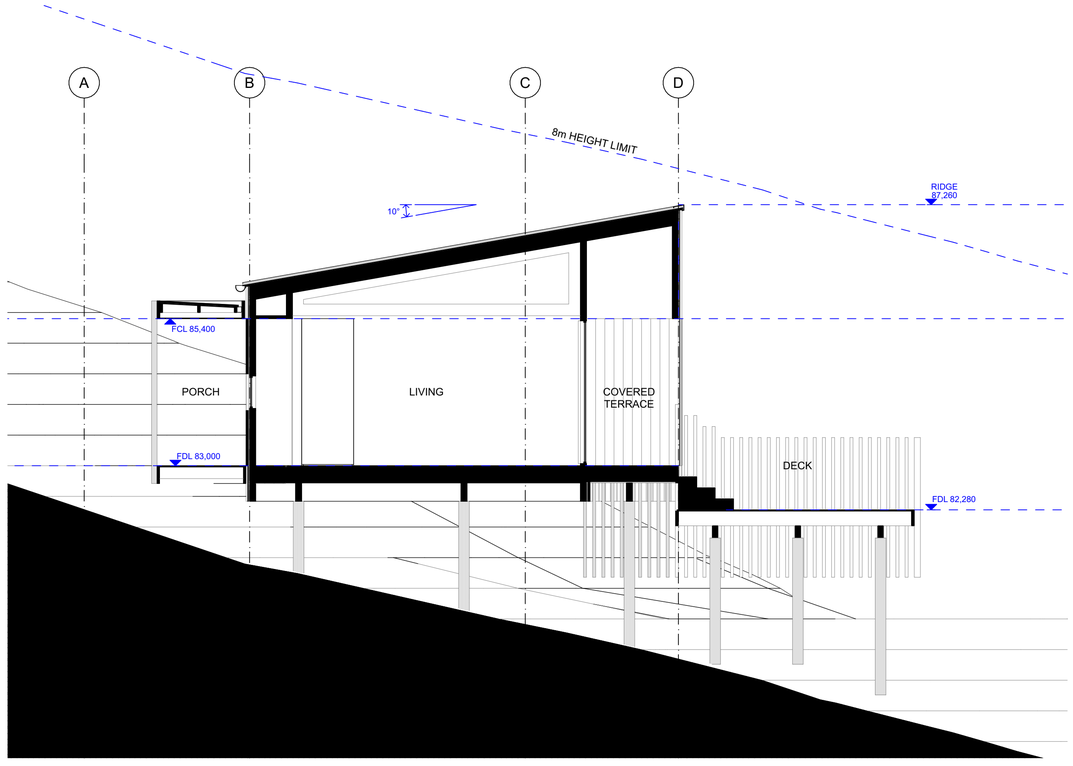


1:50 RC - SECTION A-A 1



1:50 RC - SECTION B-B 2

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 — FINISHED FLOOR LEVEL
- RL +0,000 — REFERENCE LEVEL
- FDL +0,000 — FINISHED DECK LEVEL.

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1:50 @ A1
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HOUSE - SECTIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-09

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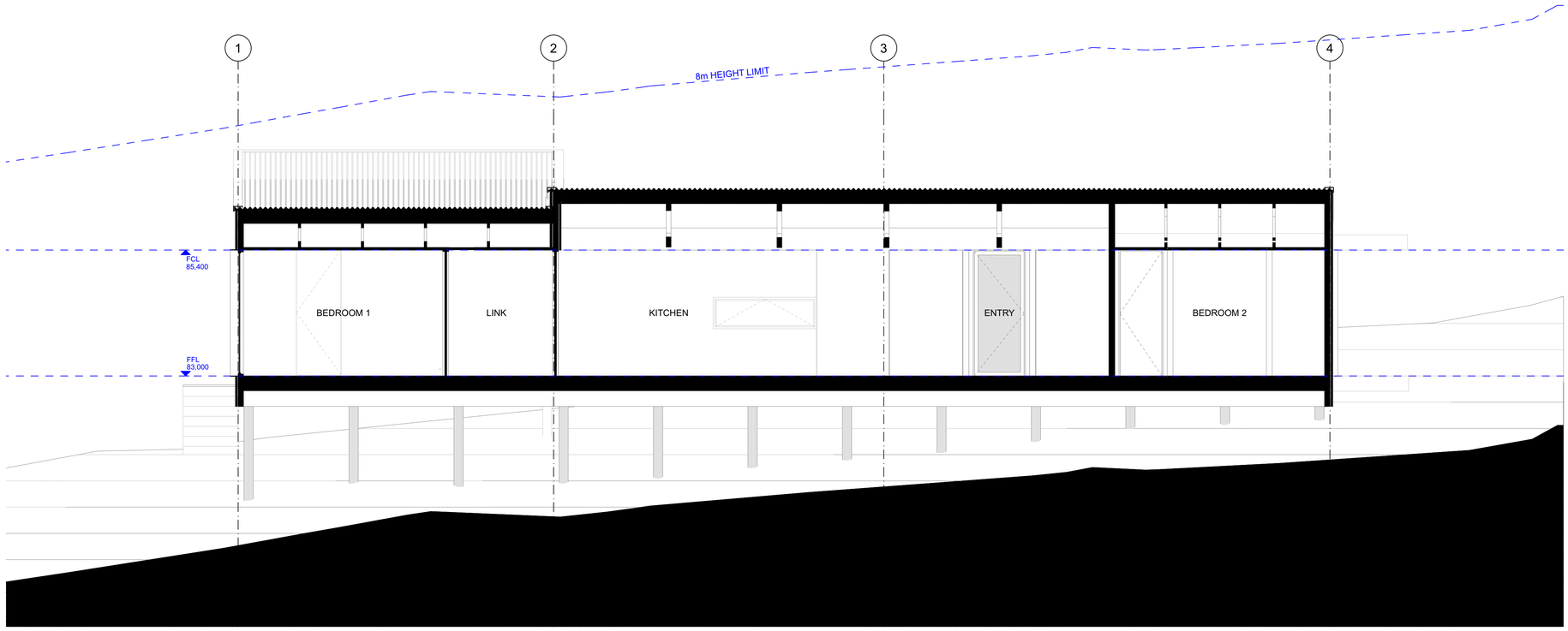

1:50

Section 1

1

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 — FINISHED FLOOR LEVEL
- RL +0,000 — REFERENCE LEVEL
- FDL +0,000 — FINISHED DECK LEVEL.

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HOUSE - SECTIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-10

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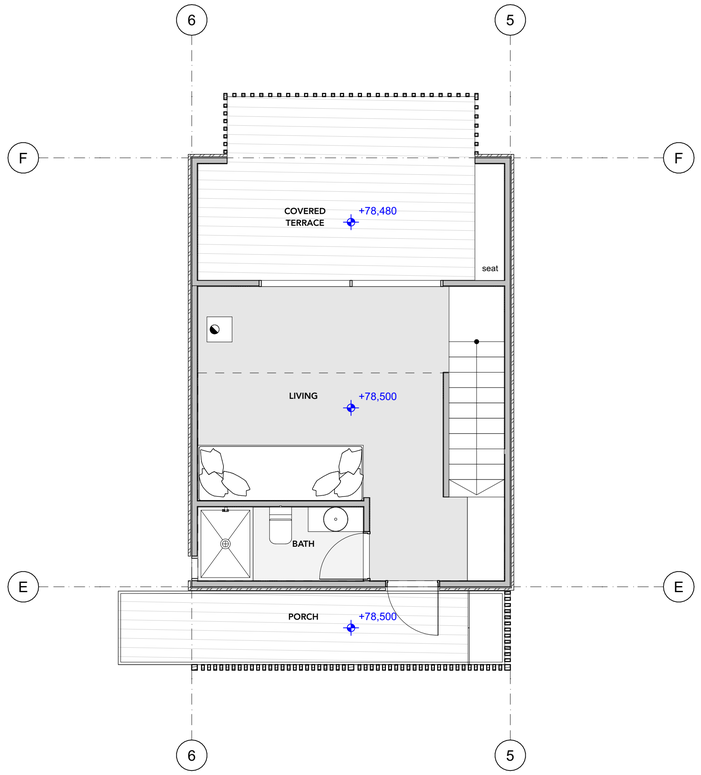
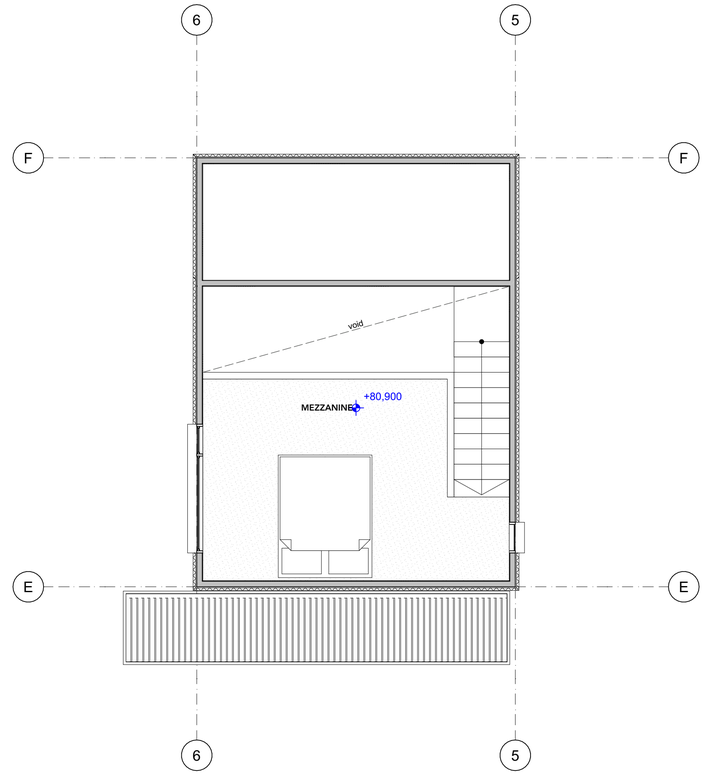


1:50 CABIN - GROUND FLOOR PLAN 1



1:50 CABIN - MEZZANINE FLOOR PLAN 2

PROPOSED FLOOR PLAN NOTES:

-READ IN CONJUNCTION WITH ALL CONSULTANT DOCUMENTS.

-CONTRACTOR TO CHECK ON SITE ALL DIMENSIONS.

-TIMBER FRAMING TO BE COMPLIANT WITH NZS:3604.2011 AND SG8 UNLESS SPECIFICALLY ENGINEERED.

-ALL TIMBER TREATMENT TO BE COMPLIANT WITH B2/AS1 AND NZS3602:2003.

-ALL EXPOSED AND SHELTERED STRUCTURAL FIXINGS TO BE 304 STAINLESS STEEL IN ACCORDANCE WITH NZS3604:2011.

-SELECTED TILING TO BE COMPLIANT WITH NZBC D1/AS1 - TABLE 7 AIR RESISTANCE CO-EFFICIENTS.

-WINDOWS TO BATHROOMS/ENSUITES/WC TO BE OPENABLE IN CONJUNCTION WITH MECHANICAL VENTILATION.

-HOT WATER CYLINDER VALVING TO COMPLY WITH AS1/NZS3500.2.

-REFER TO STAIR SECTIONS AND DETAILS FOR RISER, TREADS AND HANDRAIL SPECIFICATIONS AND DIMENSIONS. ENSURE COMPLIANCE WITH NZBC D1.

-STRUCTURAL INFORMATION ON THE ARCHITECTURAL DRAWINGS IS INDICATIVE & FOR INFORMATION ONLY. REFER TO STRUCTURAL ENGINEER FOR STRUCTURAL COMPONENTS.

REVIEW

DIMENSION NOTES:

1.CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS, LEVELS AND ANGLES ON SITE PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

2.CONTRACTOR TO PROPOSE LOCATION OF ALL CONSTRUCTION JOINTS AND CONTROL JOINTS WITH PROPOSED FINISHING DETAIL TO ARCHITECT FOR APPROVAL.

3.REFER DETAILS FOR SPECIFIC SET OUT REQUIREMENT. REFER ANY INCONSISTENCIES TO ARCHITECT FOR CLARIFICATION.

ZONES:

WIND ZONE - Extra High
EXPOSURE ZONE - D

FLOOR PLAN LEGEND:

- SITE BOUNDARY
- MINOR CONTOURS
- MAJOR CONTOURS
- YARD SETBACKS
- GRASS
- CONCRETE
- TIMBER FLOOR BOARDS
- TIMBER DECKING
- FFL ±0 — FINISHED FLOOR LEVEL
- FDL ±0 — FINISHED DECK LEVEL

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CABIN - FLOOR PLAN

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-11

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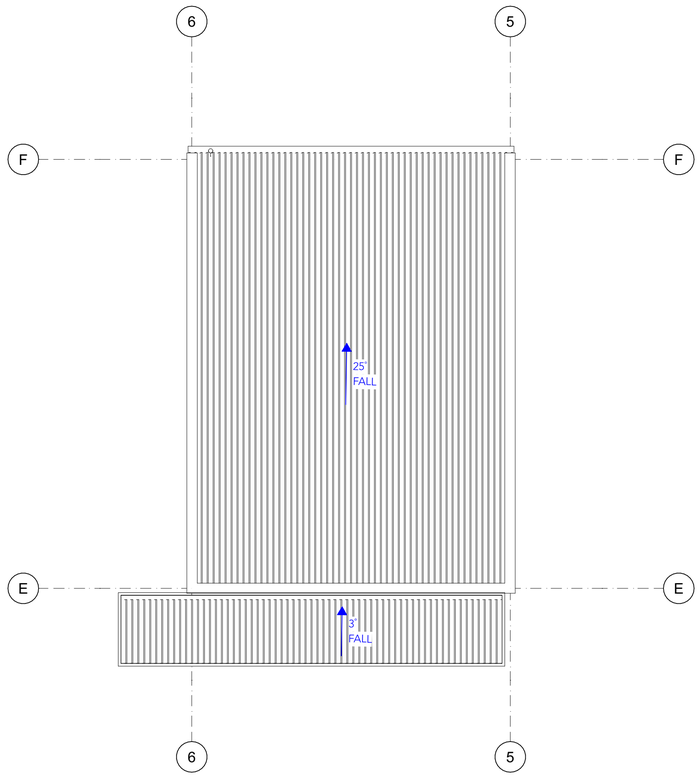

1:50 CABIN - ROOF PLAN 1

ROOF PLAN NOTES:

-REFER TO CURRENT RESOURCE CONSENT (REF: –) AND ENGINEERING PLAN APPROVAL (REF: –) FOR RELEVANT CONDITIONS AND PROCEDURES. ENSURE ALL CONDITIONS ARE ADHERED TO DURING CONSTRUCTION OF PROJECT.

-ALL ROOFING PRODUCTS (INCL MEMBRANE) TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS. INSTALLERS TO CONFIRM MINIMUM FALLS AND PROVIDE A PRODUCER STATEMENT FOR THE PRODUCT AND INSTALLATION.

-CONTRACTOR TO ALLOW FOR BUILD UP IN LAYERS OF ROOFING MEMBRANES TO ENSURE PONDING DOES NOT OCCUR & THAT FINISHED MEMBRANE THICKNESS DOES NOT COMPROMISE INTENT OF DETAILING.

-ALL OUTLETS TO HAVE PROPRIETARY CLAMP TYPE FITTING SUITABLE FOR ROOFING MEMBRANE APPLICATION.

-ALL OUTLETS TO HAVE DOME GRATE COVER. ALL DOWNPIPES CONCEALED WITHIN BUILDING ENVELOPE TO BE WRAPPED WITH ACOUSTIC RATED LAGGING.

-PROVIDE OVERFLOWS AT POSITIONS NOTED. SIZE TO EQUAL MINIMUM NZBC DOWNPIPE SIZE REQUIREMENT.

-ALL FLASHINGS TO COMPLY WITH NZBC E2/AS1

-ALL FLASHINGS TO BE COLOUR MATCHES TO ROOFING UNLESS OTHERWISE NOTED

ROOF PLAN LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- METAL ROOFING
- FFL ±0 FINISHED FLOOR LEVEL
- RL ±0 REFERENCE LEVEL
- FDL ±0 FINISHED DECK LEVEL

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CABIN - ROOF PLAN

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-12

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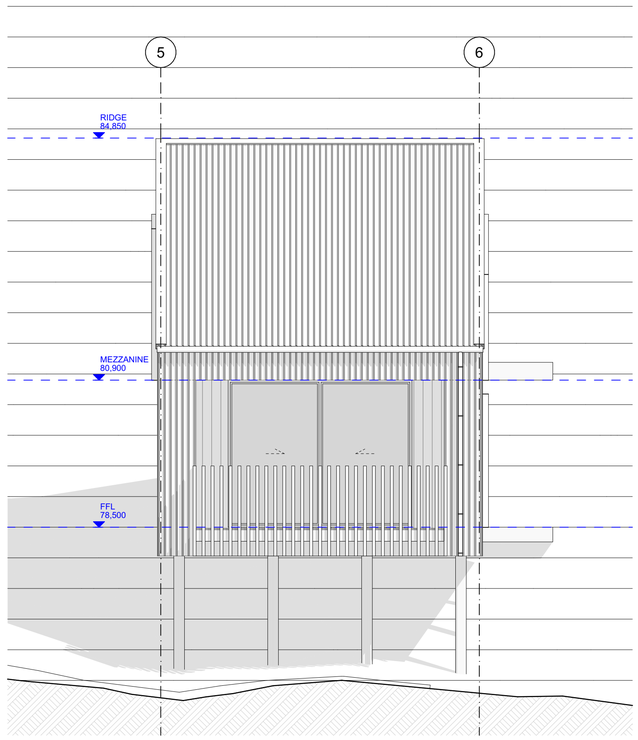
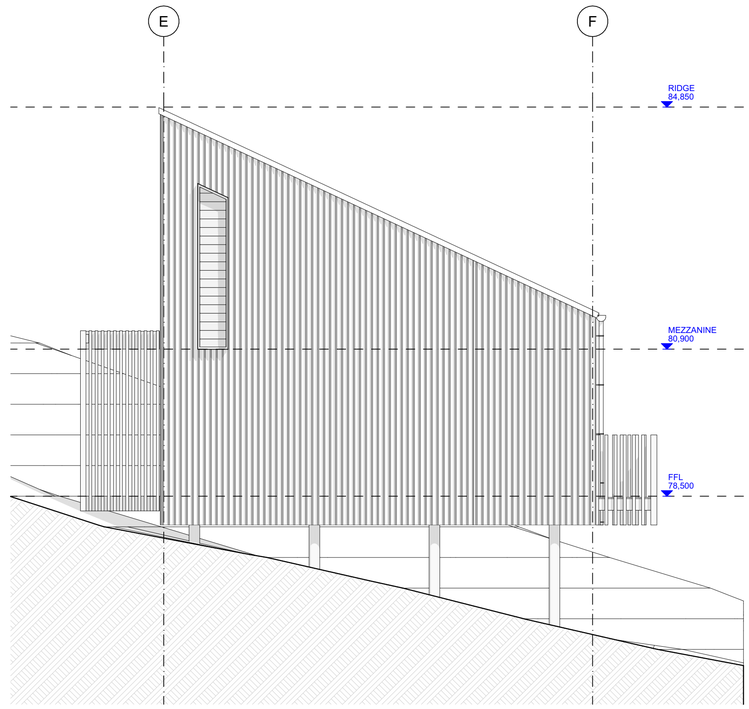


1:50 NORTH ELEVATION - CABIN 1



1:50 EAST ELEVATION - CABIN 2

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 FINISHED FLOOR LEVEL
- RL +0,000 REFERENCE LEVEL
- FDL +0,000 FINISHED DECK LEVEL.

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1:50 @ A1
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CABIN - NORTH & EAST ELEVATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-13

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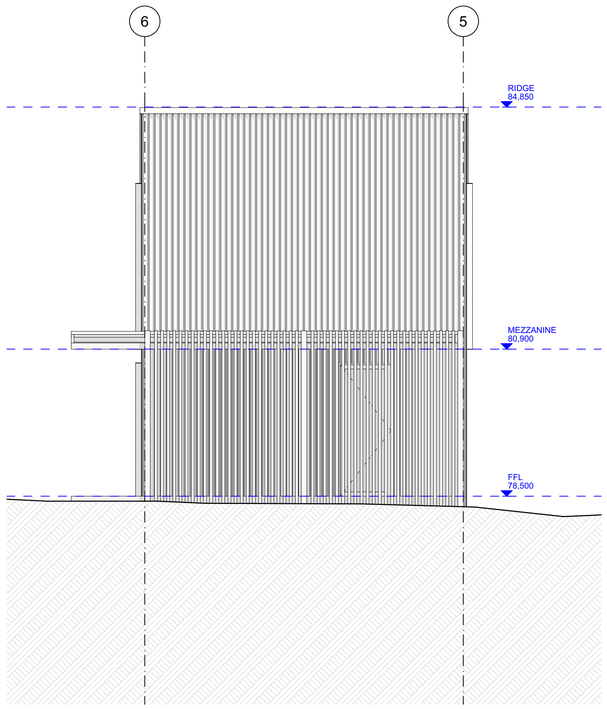
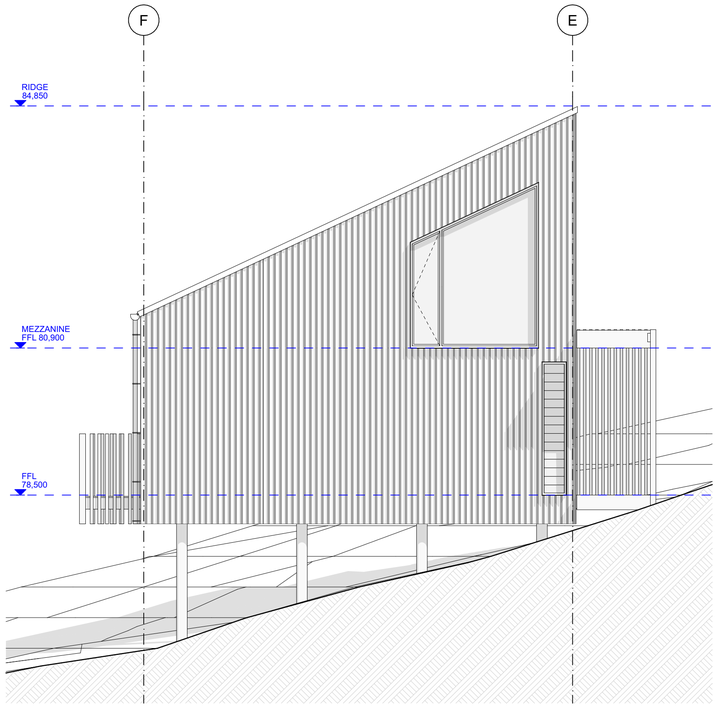


1:50 SOUTH ELEVATION - CABIN 1



1:50 WEST ELEVATION - CABIN 2

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0,000 FINISHED FLOOR LEVEL
- RL +0,000 REFERENCE LEVEL
- FDL +0,000 FINISHED DECK LEVEL.

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CABIN - SOUTH & WEST ELEVATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-14

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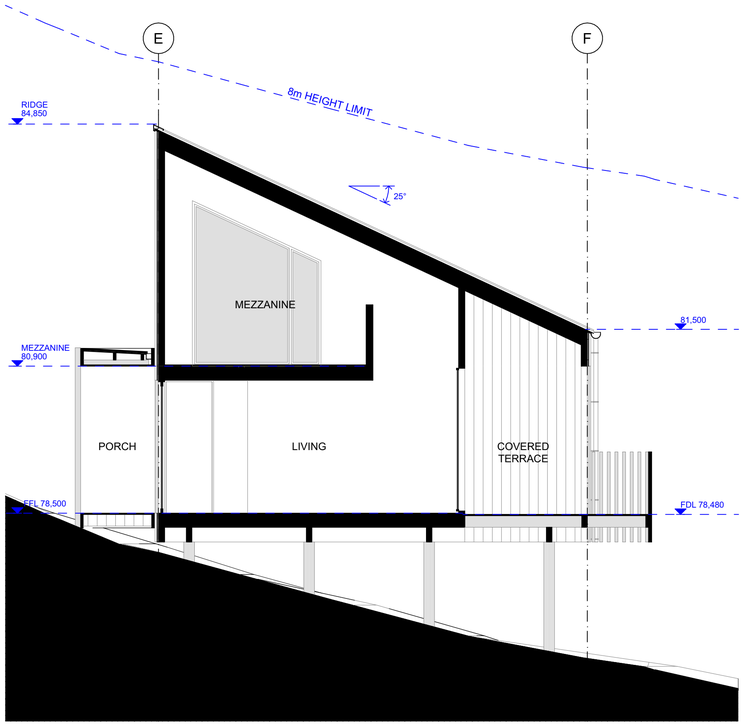
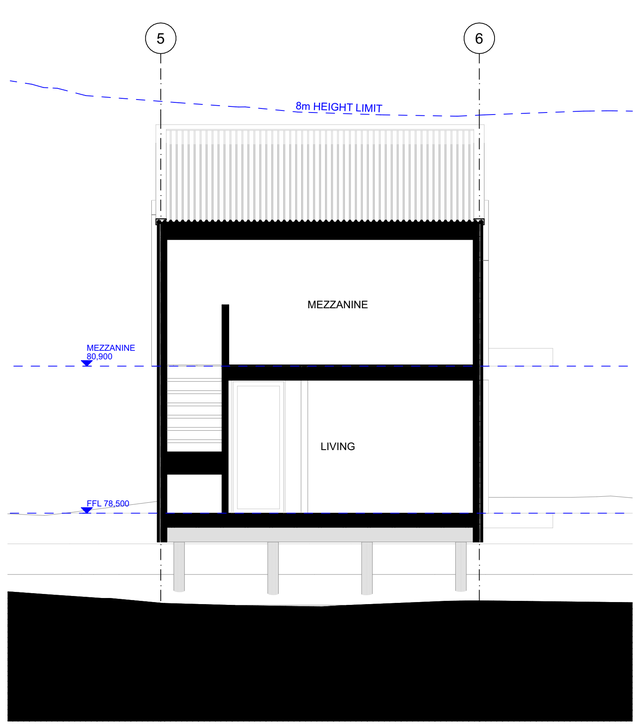


1:50 SECTION C-C 1



1:50 SECTION 2 2

ELEVATION/SECTION LEGEND:

- SITE BOUNDARY
- YARD SETBACKS
- HEIGHT IN RELATION TO BOUNDARY
- HEIGHT LIMIT
- NON-COMPLIANCE
- VERTICAL METAL CLADDING
- TIMBER CLADDING
- FFL +0.000 — FINISHED FLOOR LEVEL
- RL +0.000 — REFERENCE LEVEL
- FDL +0.000 — FINISHED DECK LEVEL.

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CABIN - SECTIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-15

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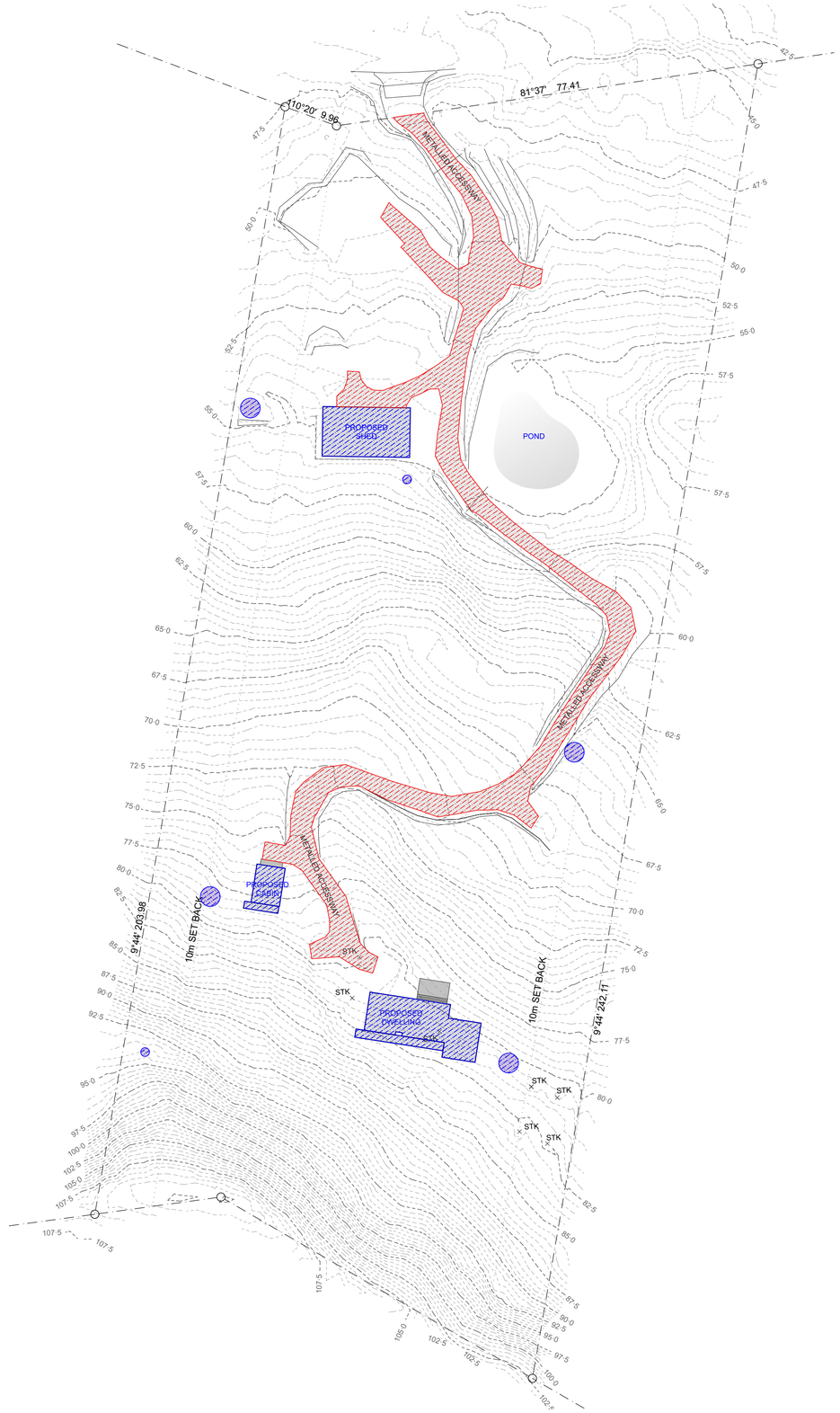

COVERAGE CALCULATIONS:

PLANNING RULES

PLANNING ZONE: COASTAL LIVING

CALCULATIONS

TOTAL EXISTING SITE AREA:	17945m^2
BUILDING COVERAGE	
HOUSE - COVERED ENTRY:	26m^2
HOUSE:	146m^2
CABIN - COVERED ENTRY:	8m^2
CABIN:	36m^2
SHED:	143m^2
WATER TANKS: (AREA ABOVE PERMITTED 20m^2)	25m^2
TOTAL BUILDING COVERAGE: 2.13%	384m^2
IMPERVIOUS COVERAGE:	
BUILDING COVERAGE:	384m^2
DRIVEWAY:	1099m^2
TOTAL IMPERVIOUS COVERAGE:8.26%	1483m^2

COVERAGE LEGEND:

-·-·-	SITE BOUNDARY
- - - -	YARD SETBACKS
🟥	IMPERVIOUS
🟦	BUILDING COVERAGE

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COVERAGE CALCULATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-16

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ATCHESON
ARCHITECTS

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ARTIST'S IMPRESSION ONLY

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28/05/25

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50% @A3)

PERSPECTIVES

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-17

DORRINGTON ATCHESON ARCHITECTS
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ARTIST'S IMPRESSION ONLY

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@ A1
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50% @A3)

PERSPECTIVES

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-18

DORRINGTON ATCHESON ARCHITECTS
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@ A1
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50% @A3)

PERSPECTIVES

REVISION NAME	REV ID	DESCRIPTION	DATE

REV: 01

RC-19

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Pryda Job Reference: 27952PS

PRODUCER STATEMENT (PS1 – DESIGN)

We hereby certify that we have been engaged by **Buildlink - Kawakawa** to peruse the design for:

Client: Nik Bowler #6
At: 31 Signal Road, Omapere

Based on Design Assumptions:
Building Importance Level: 1 Building Life: 50 years ULS design: for 1/100 year event
Regional wind speed: 47m/s (50m/s for residential) Terrain Category: 2
Earthquake Hazard Factor: 0.3
Open Ground Snow Load: 0.0 kPa
Minimum Undrained shear strength: 70 kPa
Exterior cladding: Colour steel cladding / 0.4 BMT 5-Rib cladding / vertical profiled metal cladding

The design of following **(3x4.5+1x2.2)x7.0m 3.1m-3.8mH Lean-to farm shed** and associated details described in the appended 9 pages of drawings numbered 27952 are covered by this producer statement;

(All timber shall be H3.2 except poles to be H5 - LVL shall be covered from exposure)
Poles: Ø200mm SED H5 poles
Pole foundation: Ø 600mm concrete (minimum 25 MPa) foundation 1.4m deep
Rafters span 3.5m with 1.0m overhang: 2/250x50 SG8 with timber blocking at 900mm ctrs.
Rafters fixing to poles: 2/M16 bolts + 4/SBS400 (optional)
End Rafters span 3.5m with 1.0m overhang:1/250x50 SG8
End Rafters fixing to poles: 2/M16 bolts + 2/SBS400 (optional)
Purlins span 4.5m: 200x50 SG8 @ 1000mm crs, Use FB52174 for fixing
Purlins span 2.2m: 150x50 SG8 @ 1000mm crs, Use FB52124 for fixing
Girts span 3.5m: 150x50 SG8 @ 1100mm crs, Use 1/NPP2G or equivalent for fixing.
Girts span 4.5m: 200x50 SG8 @ 1100mm crs, Use 1/NPP2G or equivalent for fixing.
Beam span 3.0m for roller door: 2/200x50 SG8 nailed together using 3.15x90 nails @200mm ctrs (staggered)
Post height 3.2m for roller door: 2/200x50 SG8 nailed together using 3.15x90 nails @200mm ctrs (staggered)
Beam span 3.0m for window/door: 2/150x50 SG8 nailed together using 3.15x90 nails @200mm ctrs (staggered)
Post height 3.2m for window/door: 2/150x50 SG8 nailed together using 3.15x90 nails @200mm ctrs (staggered)
Bracing: Full roof bracing with 25mm Strapbrace.

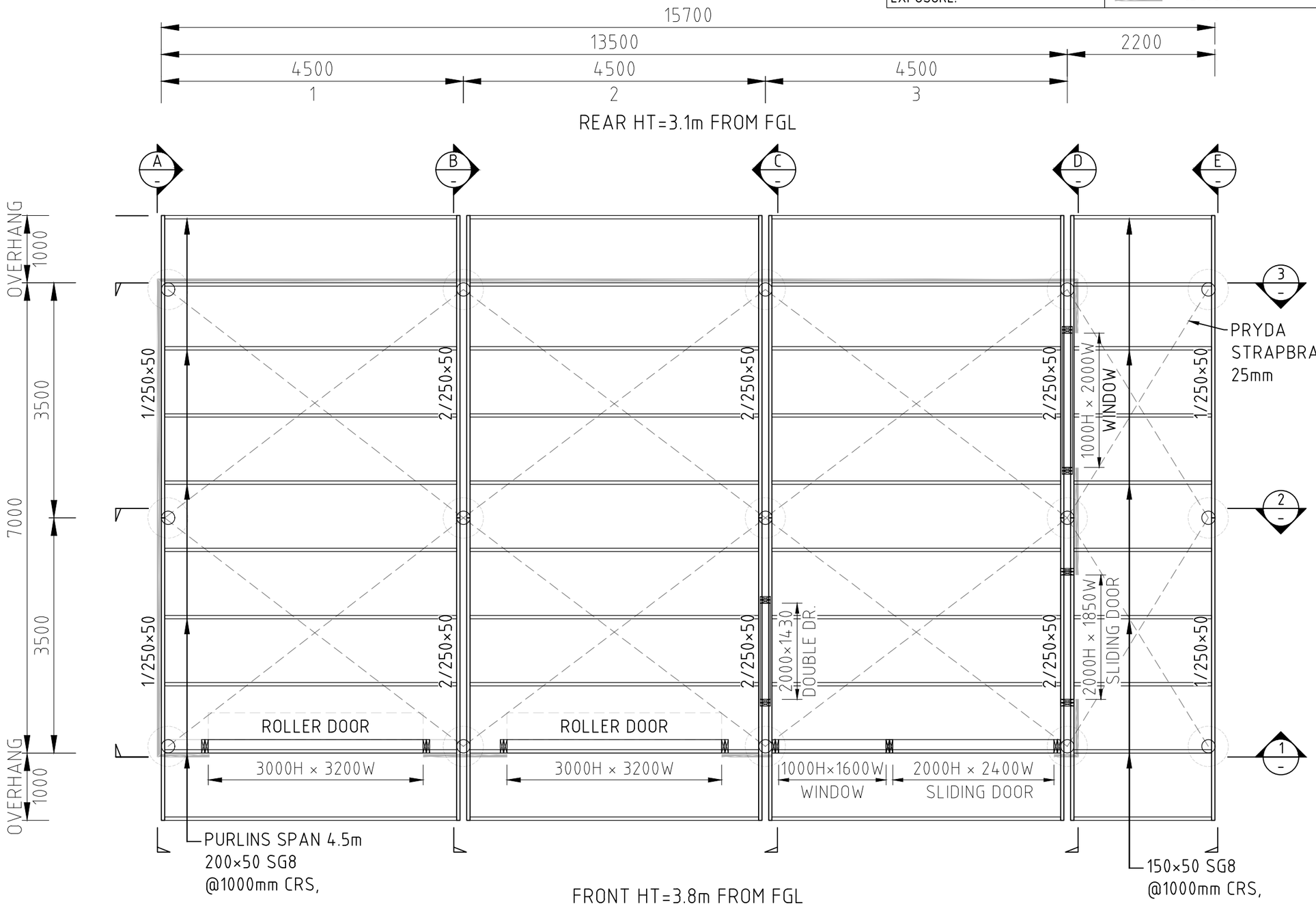
This design has been prepared in accordance with sound and widely accepted engineering principles, to support dead and imposed loads as stipulated above and specified in AS/NZS 1170 ***Structural Design Actions***, with capacities so induced not to exceed those specified in NZS 3603: 1993 ***Timber Structures Standard*** or in NZS 3404: 1997 ***Steel Structures Standard***.
I believe on reasonable grounds that the design complies with the relevant provisions of the NZ Building Code (Compliance Documents and Verification Method B1/VM1). The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the insured sum of $500,000.

Dr. Kristopher Orlowski
BSc (Eng), MEng, DR-PHILENG, CPEng AUS (4125476), CPEng NZ (2001879)
STRUCUTRAL ENGINEER
Pryda
ITW Construction, Asia Pacific

Dated: 29/01/2025

NOTE:
ALL POLES TO BE
ø200mm MIN. SED H5 TREATED.
POLE FOUNDATION: ø600mm 20MPa
1.4m DEEP FOUNDATION:
ALL TIMBER H3.2 TREATED EXCEPT POLES TO BE H5 TREATED.
LVL SHALL BE COVERED FROM EXPOSURE.

LEGEND:
- ROOF BRACING
- SED POLE
- POST
- CLADDING



PLAN

Rev	Date	Comments	Drawn
0	12/11/24	ISSUED FOR CONSTRUCTION	JJI
1	29/01/24	ISSUED FOR CONSTRUCTION	JJI

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- Fastener coating for environments:
  Shall comply to NZ3604 provisions

Fastener spacing in accordance with AS1720.1

FASTENER	END	S1	EDGE	S2
Ø3.15mm Nail	63	63	16	32
No.12g Type 17 Screw	56	56	28	17
No.14g Type 17 Screw	63	63	32	19

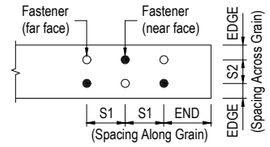

FIGURE 1: FASTENER SPACING DIAGRAM

- New timber are to be clear of defects such as wanes, splits, knots, gum veins and checks 150mm from fastener locations and/or cut ends, which ever governs.
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- Plywood face grain to be orientated horizontally U.N.O.
- Provide continuous 6mm structural adhesive bead prior to installation of plywood. (Structural adhesive to comply with American Plywood Installation Standard AFG-01)

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Project Details :

Buildlink - Kawakawa
Nik Bowler #6
31 Signal Road,
Omapere

Pryda Fabricator / Client :

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Buy Better Build Better

(NZBN 94229039833129)
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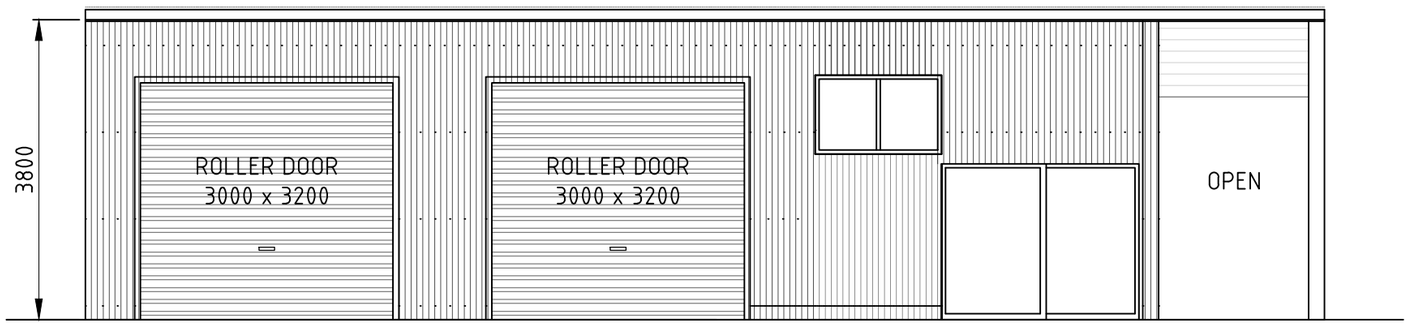
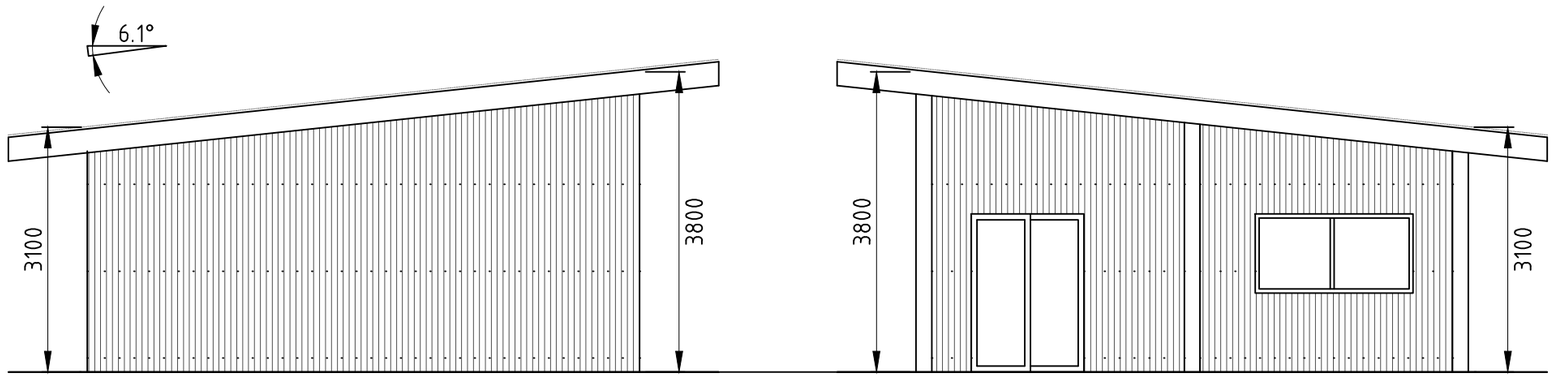
Drawn:	JJI	Engineer:	S.V.
Date:	12/11/24	Scale:	Var. on A3
Project Reference: 27952		Sheet No.: 1	Rev. 1

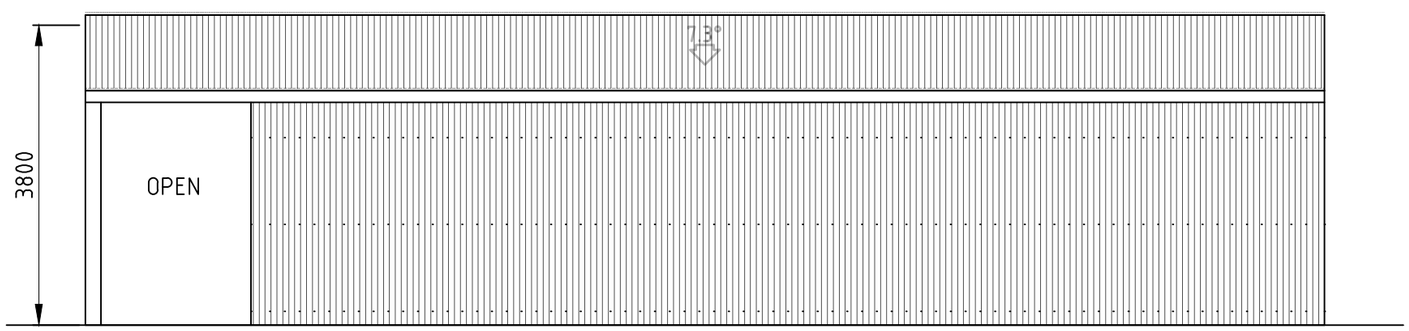


FRONT ELEVATION



LEFT ELEVATION

RIGHT ELEVATION



REAR ELEVATION

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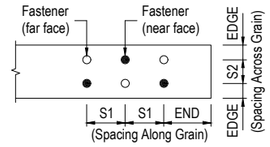

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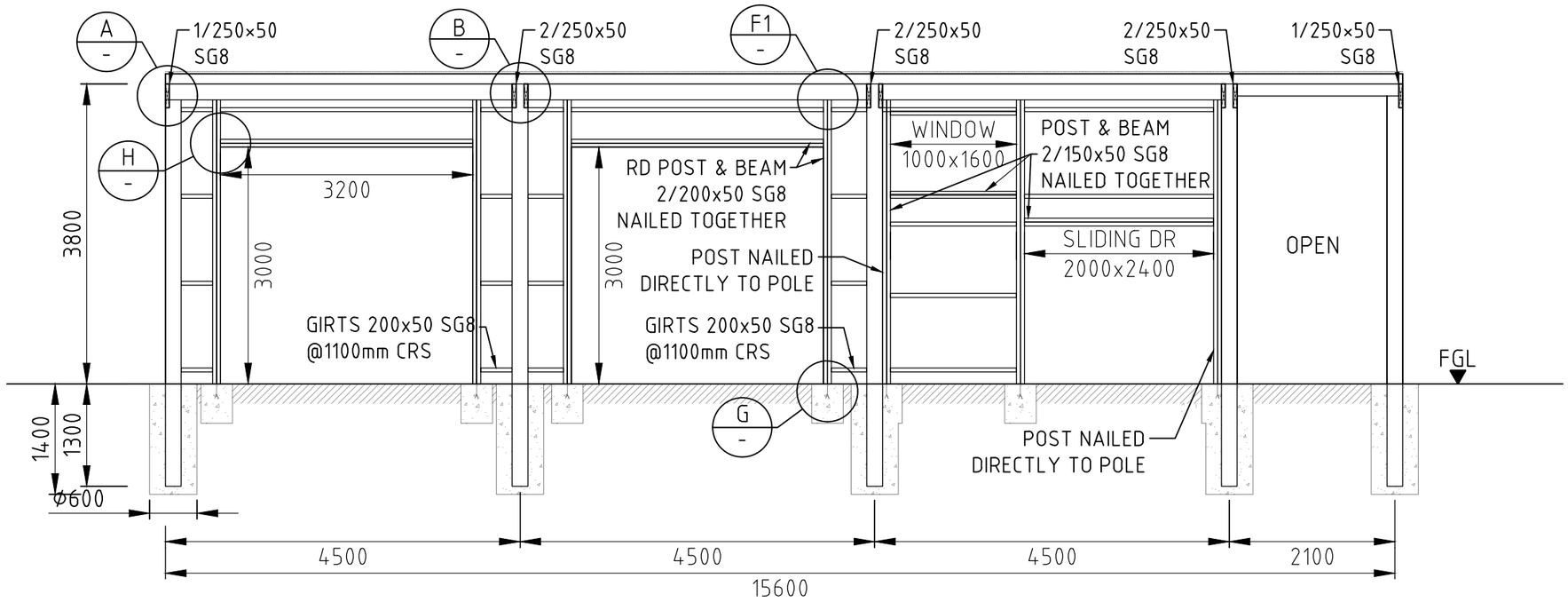
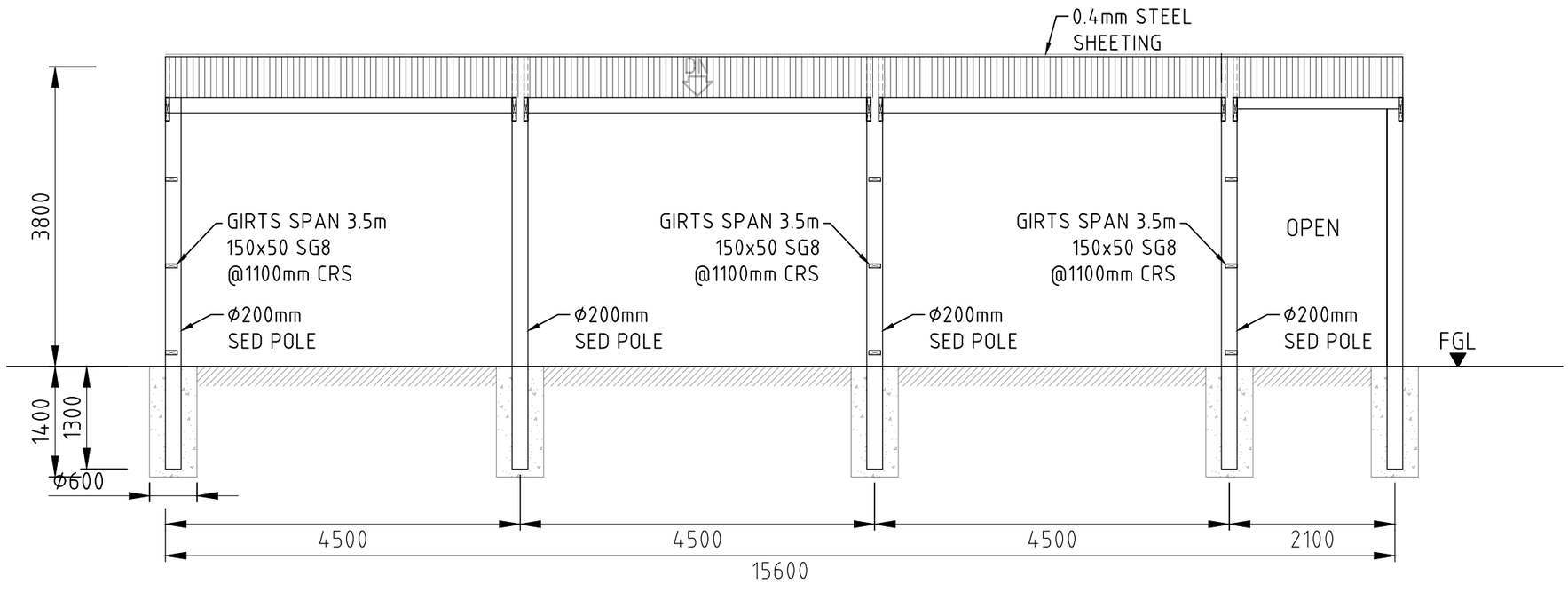
Drawn:	JJI	Engineer:	S.V.
Date:	12/11/24	Scale:	Var. on A3
Project Reference: 27952		Sheet No.: 2	Rev. 1



SECTION 1



SECTION 2

Rev	Date	Comments	Drawn
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Fastener spacing in accordance with AS1720.1

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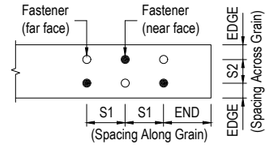

FIGURE 1: FASTENER SPACING DIAGRAM

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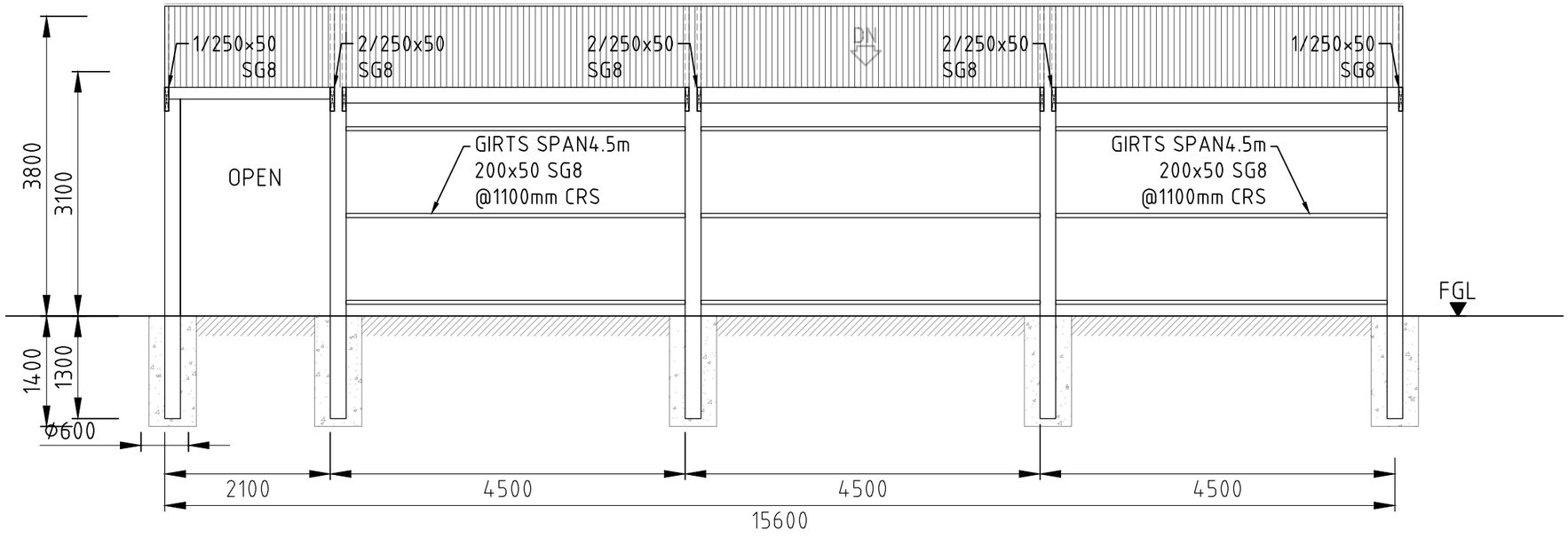

SECTION 3

Rev	Date	Comments	Drawn
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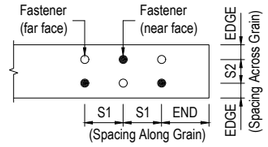

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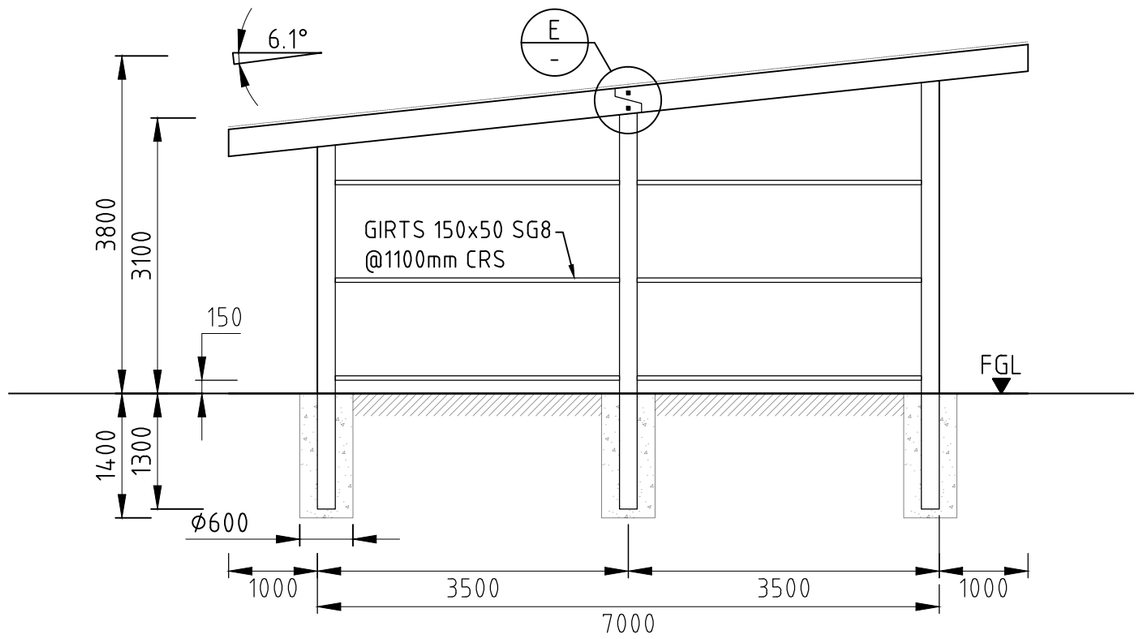
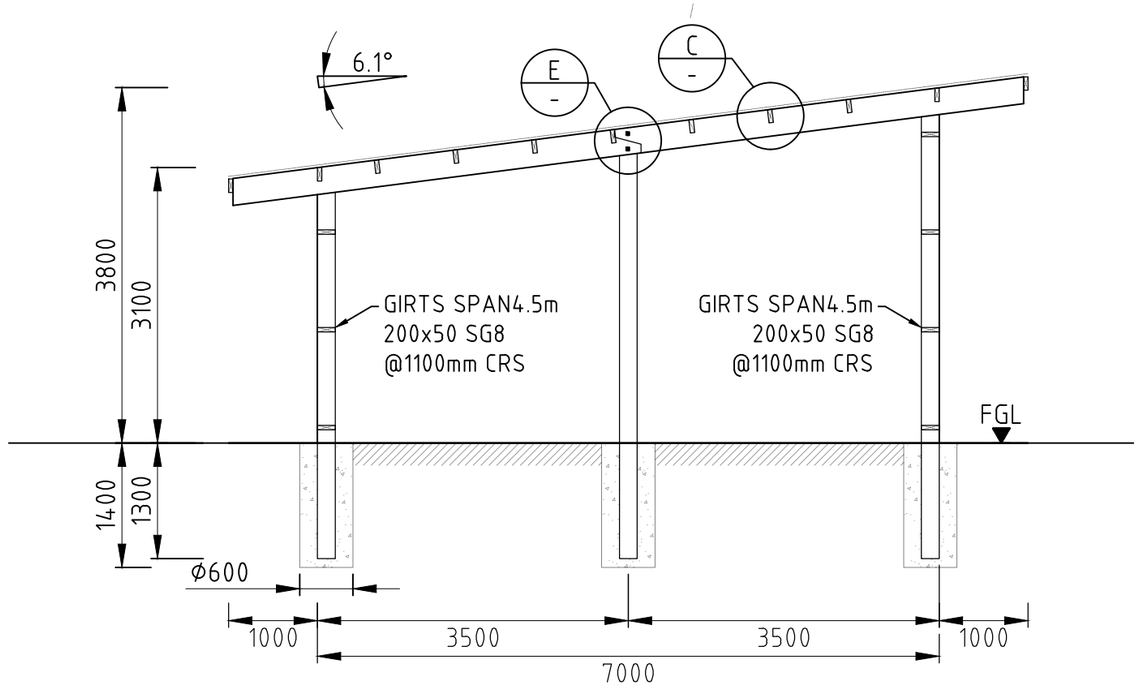
Drawn:	JJI	Engineer:	S.V.
Date:	12/11/24	Scale:	Var. on A3
Project Reference: 27952		Sheet No.: 4	Rev. 1



SECTION A



SECTION B

Rev	Date	Comments	Drawn
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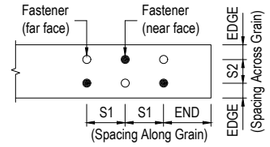

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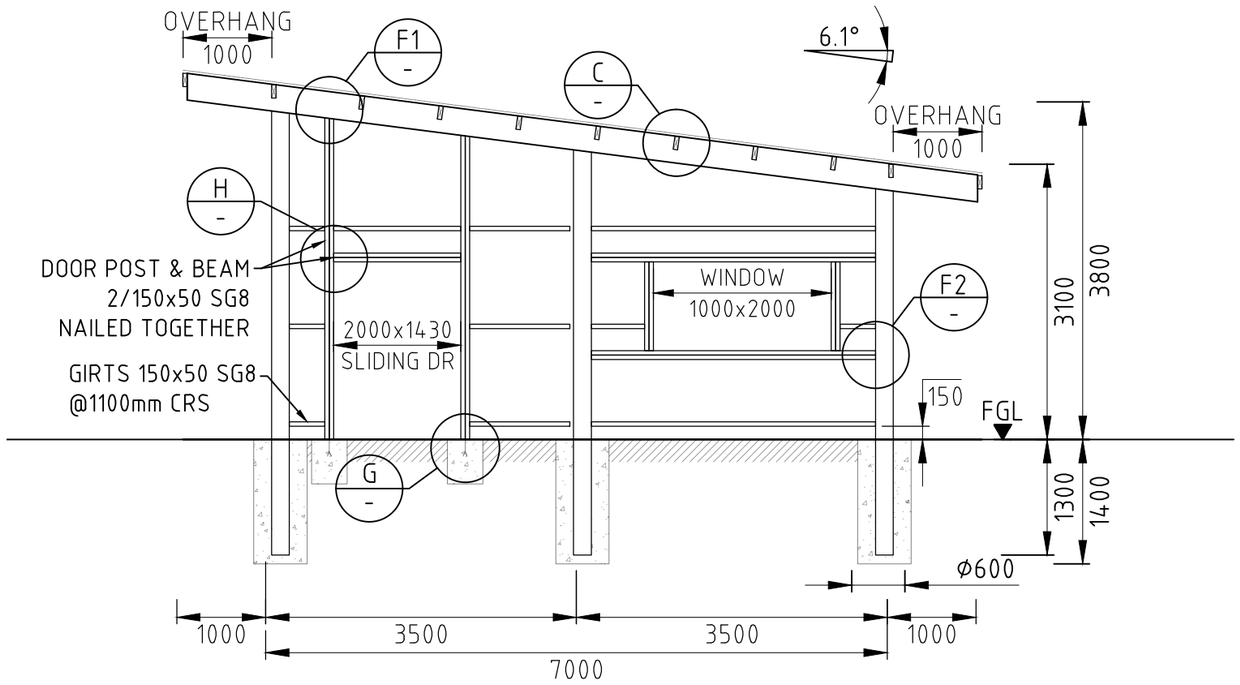
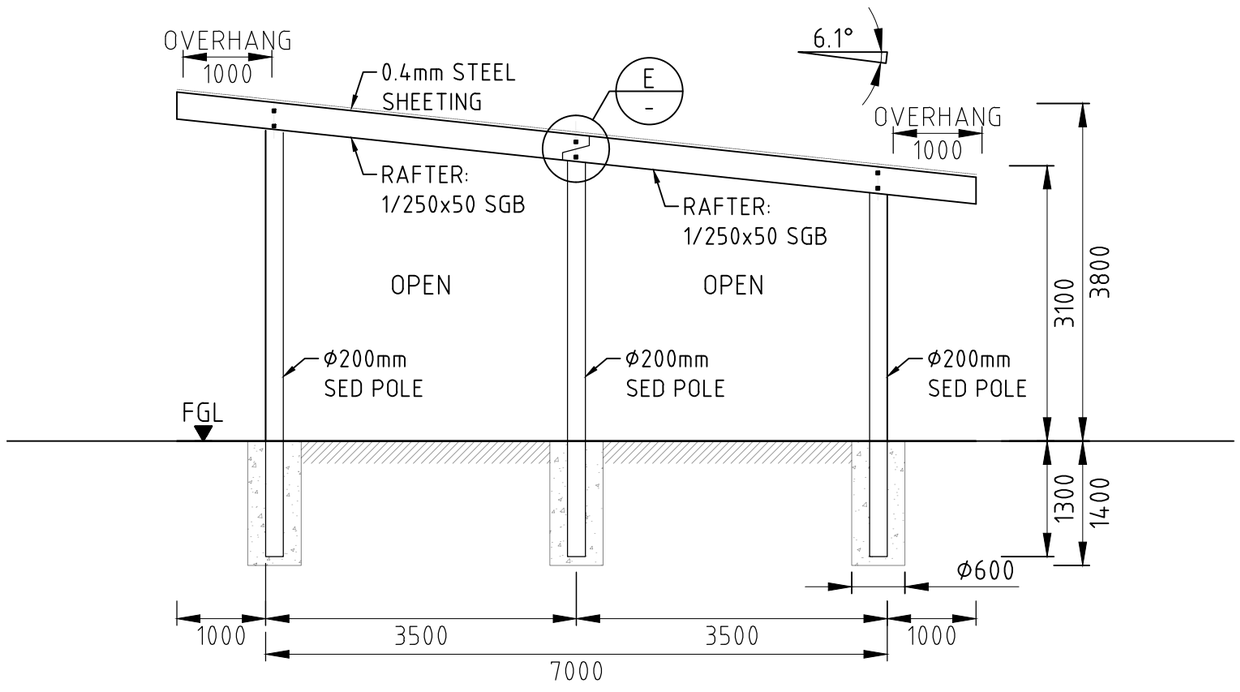
Project Reference: 27952		Sheet No.: 5	Rev. 1



SECTION C



SECTION D

Rev	Date	Comments	Drawn
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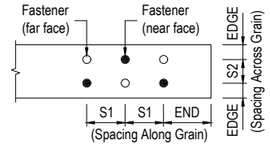

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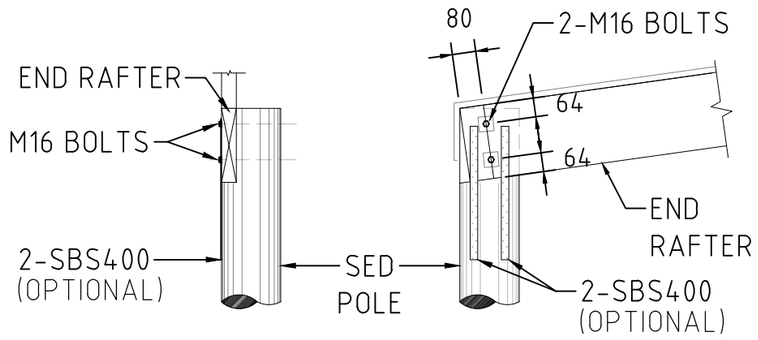
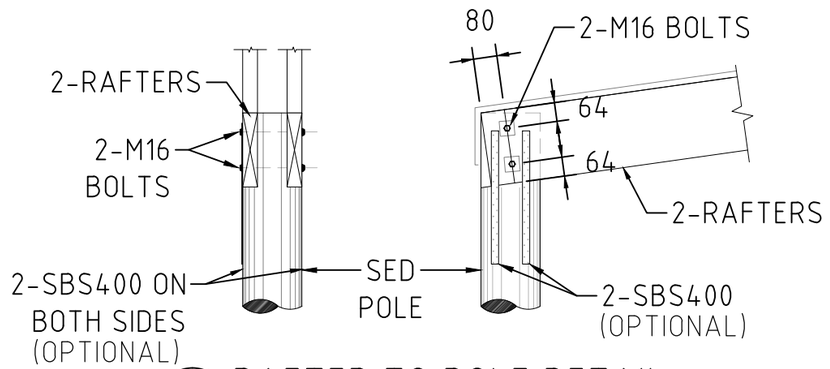
Project Reference: 27952		Sheet No.: 6	Rev. 1



A — END RAFTER TO POLE DETAIL

50x50x3mm WASHERS FOR HIGH WIND ZONES
50x50x6mm WASHERS FOR VERY HIGH/EXTRA HIGH WIND ZONES



B — RAFTER TO POLE DETAIL

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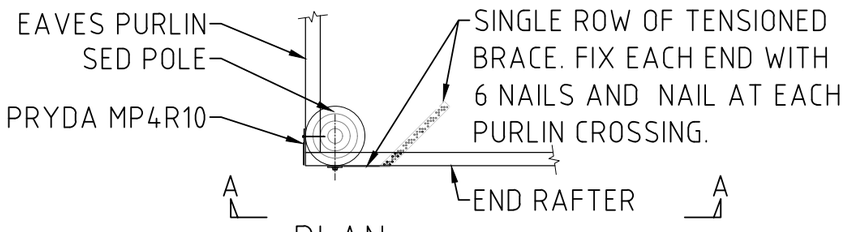
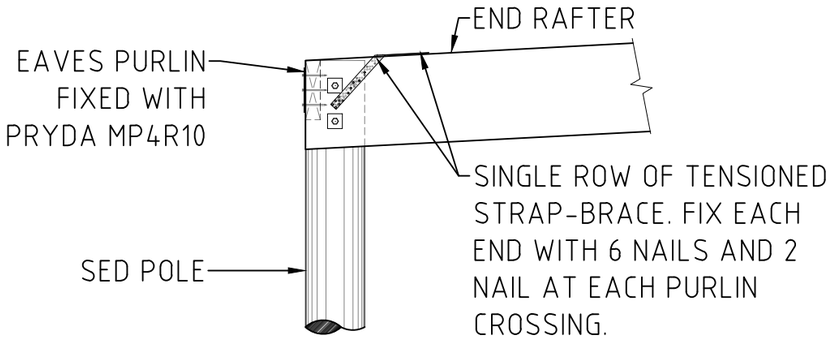
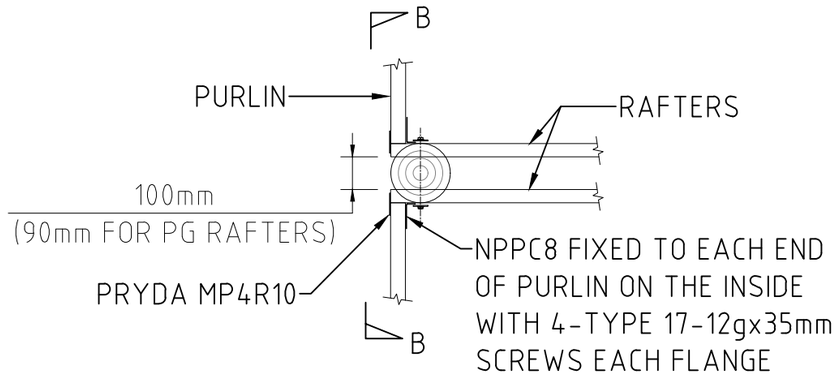


PLAN

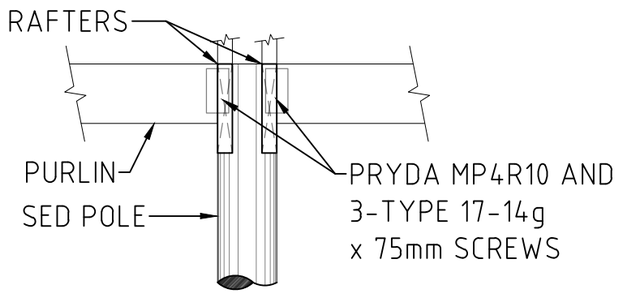


SECTION A-A

FLUSH PURLIN & BRACING FIXING



PLAN



SECTION B-B

PURLIN FIXING - CLOSED BAY

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0	12/11/24	ISSUED FOR CONSTRUCTION	JJI
1	29/01/24	ISSUED FOR CONSTRUCTION	JJI

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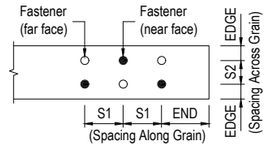

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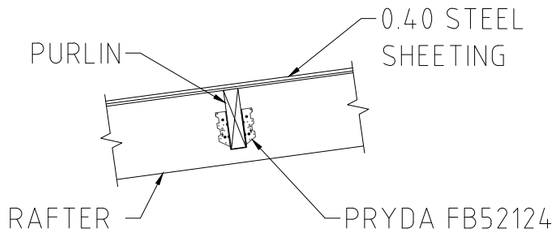
Web www.pryda.co.nz

Drawn:	JJI	Engineer:	S.V.
Date:	12/11/24	Scale:	Var. on A3
Project Reference: 27952		Sheet No.: 7	Rev. 1



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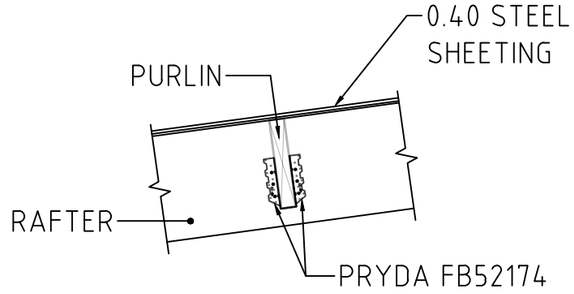

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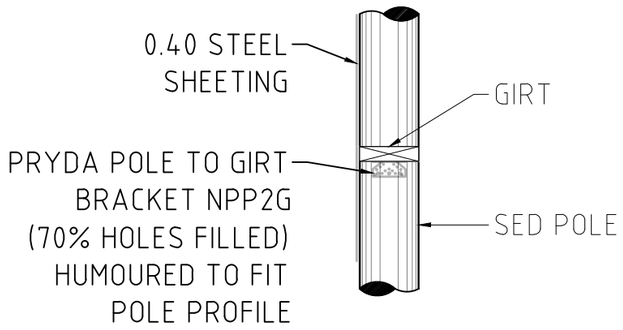

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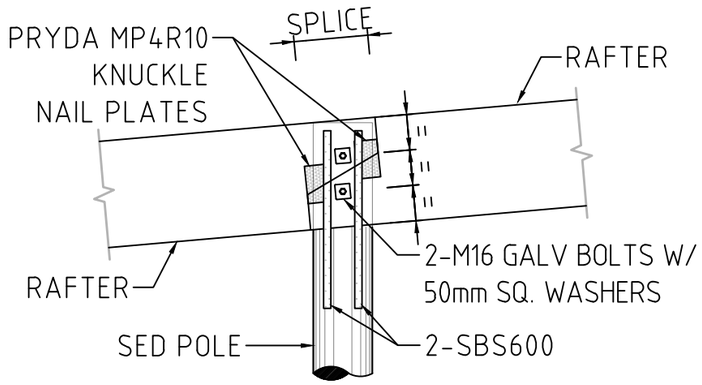

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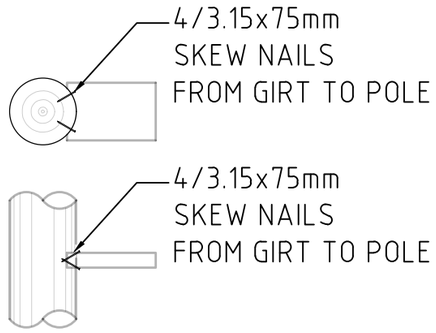

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300 NEAR OPENINGS

Rev	Date	Comments	Drawn
0	12/11/24	ISSUED FOR CONSTRUCTION	JJI
1	29/01/24	ISSUED FOR CONSTRUCTION	JJI

General Notes :

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- This design assumes that the building and associated elements are braced and stable in their own right.
- This design is prepared based on information from the truss fabricator and assumes all trusses and nailplated joints have been manufactured correctly in accordance with the original truss design.
- Fastener coating for environments:
  Shall comply to NZ3604 provisions

Fastener spacing in accordance with AS1720.1

FASTENER	END	S1	EDGE	S2
Ø3.15mm Nail	63	63	16	32
No.12g Type 17 Screw	56	56	28	17
No.14g Type 17 Screw	63	63	32	19

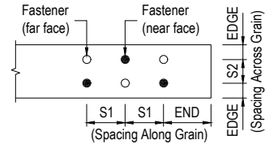

FIGURE 1: FASTENER SPACING DIAGRAM

- New timber are to be clear of defects such as wanes, splits, knots, gum veins and checks 150mm from fastener locations and/or cut ends, which ever governs.
- Plywood to comply with AS2269-2004 with minimum stress grade of F11 and Type A bond.
- Nails shall be galvanised and flat head type ("D" head nails must not be used) and shall be at least 7mm from edge/end of plywood sheet. (Do not overdrive nails)
- Plywood face grain to be orientated horizontally U.N.O.
- Provide continuous 6mm structural adhesive bead prior to installation of plywood. (Structural adhesive to comply with American Plywood Installation Standard AFG-01)

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Project Details :

Buildlink - Kawakawa
Nik Bowler #6
31 Signal Road,
Omapere

Pryda Fabricator / Client :

BuildLink
Buy Better Build Better

(NZBN 94229039833129)

pryda

PRYDA NZ
A Division of ITW New Zealand
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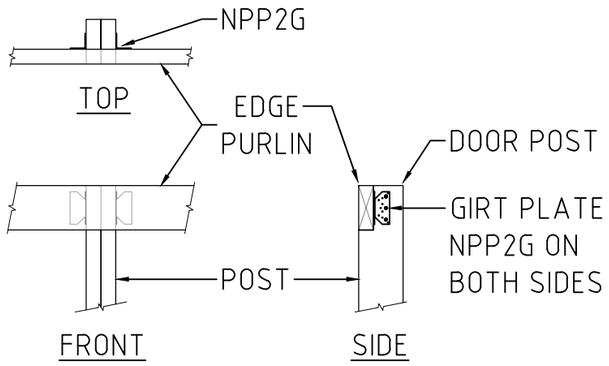
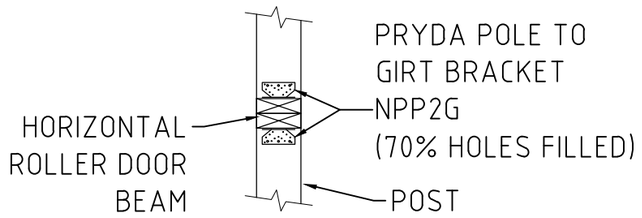


F1 POST TO EDGE PURLIN



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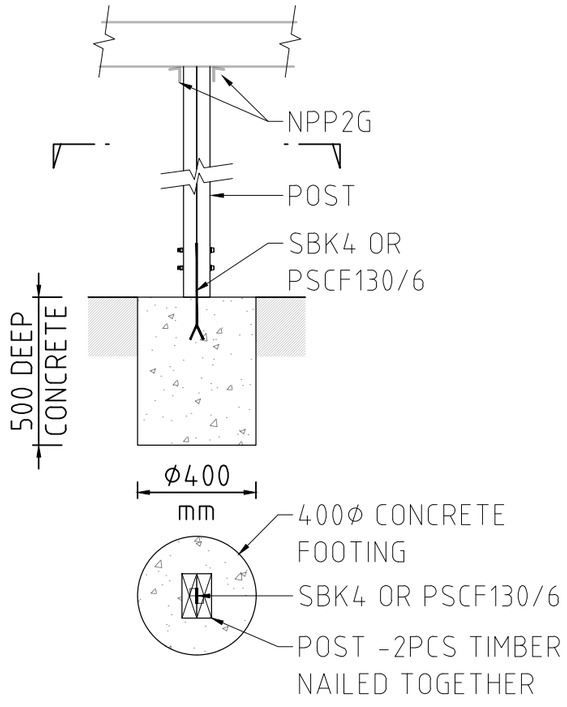
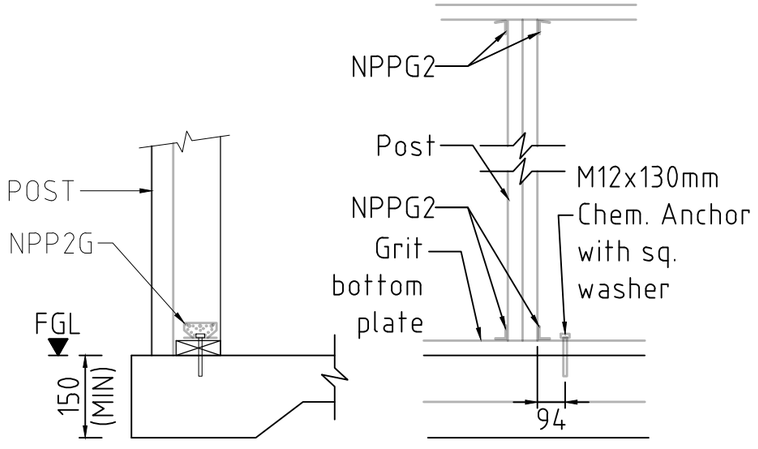


G POST FOOT DETAIL

OR



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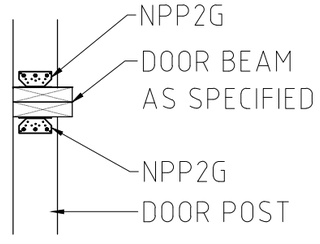

H COLUMN TOP DETAIL

Rev	Date	Comments	Drawn
0	12/11/24	ISSUED FOR CONSTRUCTION	JJI
1	29/01/24	ISSUED FOR CONSTRUCTION	JJI

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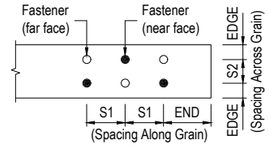

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Ecological Impact Assessment for Bowler Resource Consent on Signal Station Road Lot 1 DP 86502

1. Introduction

The following report was prepared by the landowners Nicholas Bowler and Nicola Sullivan through discussion with environmental consultant Charles Barrie and is being submitted as part of the resource consent application required for the proposed construction of a 110 m2 shed, a 127.5 m2 house and a 27.5 m2 cabin along with the necessary accessways on Lot 1 DP 86502. It discusses the current ecological condition of the property and the likely and potential impacts of the proposed development, along with the applicant's proposed mitigation and ecological enhancement strategies.

The applicants intend to create a modest, eco-friendly home with minimal ecological or visual impact. As such, they are designing their development to integrate as much as possible with the surrounding landscape through effective stormwater management, soil conservation practices and taking steps to protect and enhance local flora and fauna habitats.

2. Site Description

Lot 1 DP 86502 is on Signal Sation Road in Omapere, Hokianga Harbour, Northland.
The site is a coastal slope composed of pasture and areas of regenerated native scrub.

The landscape surrounding the site includes modified lots with homes, farms, and lifestyle blocks, primarily in pasture. In contrast, other nearby lots include native scrubland protected by covenants and are mainly composed of regenerating scrub. Nearby are the Patipatiarero and Arai Te Uru Recreational Reserves.

Lot 1 DP 86502 covers an area of approximately 1.79 ha. The foreshore (Hokianga Harbour) is 200m north, and there is an existing pond within the northeastern portion of the site.

3. Ecological Features

The upper portion (approx 70%) of the property appears to have dense native tree cover from aerial photographs; however, on visiting the site, it becomes evident that beneath this thinning canopy, the understory is mostly choked by invasive weed species. The lower portion of the site has significantly less canopy cover due to ongoing kikuyu encroachment.

The vegetated areas are composed of regenerating native scrub up to approximately 100 years old. The trees are predominantly Manuka, Kānuka, and Ti Kōuka, with several emerging Puriri and many Kohekohe specimens approximately 30-40 years old interspersed with smaller colonising native species and occasional native groundcover. The understory in the lower section consists of Kikuyu grass and Muehlenbeckia with occasional pockets of lantana, agapanthus and other invasive species. Invasive species are

also ubiquitous throughout the steeper upper area, where adjacent properties are being farmed. Many of the larger trees, around 3 to 6 meters tall, are dying off and being replaced by Kikuyu grass.

Towards the southern end of the property, there is a relatively small area (less than 20% of the property), mostly free from exotic groundcovers. This understory is dominated by karamu, flax, kawakawa, karo and red matipo and a sparse layer of native groundcover.

Freshwater

Regarding the pond, a review of historic aerial photographs (sourced from retrolens.co.nz) reveal it to have been mechanically formed as a farm pond sometime between 1942 and 1968 alongside significant vegetation clearance occurring during this period - see images in appendix. The original purpose of the pond is not clear. However, the property was at this time part of a farm and site inspections have found evidence of pipes leading to the neighbouring properties to the east, indicating that it has been used as an irrigation and stock pond.

To the east, in the 3 neighbouring properties, there is a gully feature that appears to have been modified through historic earthworks into a farm-style drain through which water runs into the pond. The pond also catches stormwater from the southeastern slopes of the property. A site accessway running through this area of the property was created in 2023, with a culvert flowing into the pond. The watercourse leading to this culvert includes gabion rock and geotech fabrics to mitigate siltation and slow the water, and does not increase the volume of water flowing into the pond over the natural contours as indicated by the topographical map in the appendix (image 15).

The pond has a muddy substrate and is predominantly vegetated with raupo, with watercress and duckweed also present. There is an area of regenerating native, with mature kānuka, ti kōuka, karamu and other species along the eastern edge of the pond, though as in many other areas of the property, kikuyu grass is encroaching on the native vegetation. Numerous other weeds are also present in the pond's surrounds, including lantana, blackberry, agapanthus and others.

Given its origins as a constructed farm pond, the feature does not meet the criteria of a natural inland wetland in terms of the National Policy Statement for Freshwater Management or the proposed Regional Plan for Northland. However, despite its utilitarian origins, this pond is a relatively unique feature in this area deserving of care and consideration as a potential habitat for wetland flora and fauna.

The current development plan proposes to protect and enhance the pond as a wetland habitat. Weed control and riparian planting efforts have already been initiated by the current owners, with care also taken to prevent sediment from any surrounding activity from reaching the feature - **see appendix.**

Vegetation present on site:

Native species:

- Harakeke *Phormium texax*
- Mānuka *Leptospermum scoparium*
- Kānuka *Kunzea ericoides*
- Karamu *Coprosma robusta*
- Tī Kōuka *Cordyline australis*
- Kawakawa *Piper excelsum*
- Red Matipo *Myrsine australis*
- Pohuehue *Muehlenbekia australis*
- Pūriri *Vitex lucens*
- Pohutukawa *Metrosideros excelsa*
- Kohekohe *Dysoxylum spectabile*
- Raupo *Typha orientalis*
- Kiokio *Parablechnum novae-zelandiae*
- Duckweed *Lemna disperma*
- Karo *Pittosporum crassifolium*
- Hangehange *Geniostoma ligustrifolium*
- Poroporo *Solanum aviculare*
- Native sedge *Carex sp*

Exotic species:

- Kikuyu grass *Cenchrus clandestinus*
- Lantana *Verbenaceae*
- Privet *Ligustrum vulgare*
- Wild Ginger *Hedychium gardnerianum*
- Eucalypts *Eucalyptus Cameldulensis*
- Wattle *Caesalpiniodeae*
- Agapanthus *Amaryllidaceae*
- Ivy *Hedera helix*
- Woolly Nightshade *Solanum mauritianum*
- Periwinkle *Vinca major*
- Mistflower *Conoclinium coelestinium*
- Blackberry *Rubus fruticosis*
- Pampas grass *Cortaderia selloana*
- Watercress *Nasturtium officinale*

Fauna observed on site:

Native birdlife:

- Tūī
- Pīwakawaka (Fantail)
- Kererū (NZ wood pigeon)
- Riroriro (Grey Warbler)
- Kahu (Hawk)
- Kōtare (Kingfisher)

Exotic birdlife:
- Pheasants
- Quails
- Ducks

Reptiles:
- Skinks

4. Ecological Values & Significance

Given its proximity to Hokianga Harbour and the modified nature of the surrounding landscape area, the regenerating coastal ecosystem present on the property has significant importance for biodiversity conservation and habitat creation, erosion prevention, and the maintenance of mountain-to-sea ecological corridors.
However, as things are at present, the regeneration process is adversely impacted by the dominance, in large areas of the site, of kikuyu grass and muehlenbeckia. In these areas, many of the larger kānuka and manuka trees, which stand around 3 to 5 meters tall, are dying off one by one and being pulled down by the muehlenbeckia, with the kikuyu groundcover preventing the regeneration of new seedlings. The current development plans include assisting the regeneration process through the implementation of a careful planting and weed management plan. The applicants have committed to no net tree loss, intending to increase native vegetation cover, biodiversity, and wildlife habitat. Supporting this regeneration process is also important for ongoing soil conservation and erosion mitigation.

A range of birdlife frequents the site's pond, with the potential for this to be enhanced as a wetland habitat through riparian planting, keeping it clear of invasive species and mitigating silt runoff. Fish presence in the pond is unlikely, though it could also provide habitat for eels.

The neighbouring Arai Te Uru Recreational and Patipatiarero Reserves are particularly significant to local Hapu and the wider community. Ensuring the current development proposal respects and conserves Arai te Uru's spiritual, ecological and visual values is important to the applicants and is one of the key matters under discussion with Manawhenua.

5. Potential Environmental Effects

With a focus on minimising tree clearance and habitat loss, and reducing runoff sediment, the proposed development should be carefully planned to have a limited ecological impact. Key considerations include:

1. Habitat Loss & Vegetation Removal
While the built features are centred on existing clearings, preparing for the construction of the house, cabin, shed, and driveways has necessitated the clearance of select areas of regenerating scrub.

As manuka and kānuka are particularly inflammable, some further clearance may required around the proposed house site. This is currently under discussion with FENZ, with the

applicants seeking to minimise tree removal as much as possible and/or restrict it to the most flammable species

2. Effects on Wildlife
Given the plan to keep vegetation clearance to a minimum and to effectively manage silt and stormwater, there are no specific concerns regarding the effects of this development on wildlife. Furthermore, there is potential for additional wildlife habitat creation through the proposed restoration plantings, landscaping and ongoing ecological stewardship of the vegetated areas and the pond.

3. Water Quality & Sediment Control
The site will be subject to increased stormwater runoff due to the creation of driveways and increased impermeable surfaces. The construction process will create the potential for increased erosion of exposed slopes and generate sediment, which must be managed. Particular care should be placed on protecting the pond from excess sediment and stormwater impacts.

4. Managing Invasive Species
Soil disturbance and increased vehicle use may further expose the site to the introduction of pest plant species. These species will have to be managed by ongoing weed control. Without ongoing intervention, the Kikuyu will likely take dominance over most of this site, with unmown Kikuyu also forming a significant fire hazard.

6. Mitigation, Management and Monitoring

The development can minimise the above environmental impacts through a series of mitigation strategies and has the potential to enhance the ecological value of the site through ongoing restoration planting, pest control and erosion management practices. The following steps are proposed or already underway by the applicants to support ongoing ecological restoration:

1. Minimising Habitat Loss & Vegetation Removal
• The house and shed sites were deliberately chosen in existing clearings, minimising site disruption and reducing the need for vegetation removal.
• Any necessary tree loss will be balanced by the significant restoration plantings and pest plant control proposed by the owners in other portions of the property, resulting in a net gain in native vegetation cover
• The applicants will regularly monitor the health and progress of the restoration plantings.

2. Wildlife Protection & Habitat Restoration
• Retained native vegetation will continue to provide nesting and feeding opportunities for local wildlife.
• Revegetation with native plants, including ongoing management and monitoring, will occur pre and post-construction to restore any disturbed areas. Special attention should be paid to the protection and restoration of the pond and its surrounds.
• Consideration will be given to installing bird nesting boxes or feeders to encourage the native bird population.

3. Water Quality & Erosion Control
• Stormwater and sediment management systems areas will be implemented, including stormwater mitigation tanks, sediment traps, geofabrics and rock materials to enhance stormwater filtration and sediment capture.
• Landscaping will feature permeable surfaces to minimise water runoff and maintain natural drainage patterns. The proposed planting plan, mulching and rock placement will also slow stormwater flow (including around the pond) and assist with water retention on site.
• Further erosion control measures, such as silt fencing and mulch barriers, will be employed as necessary.
• The stormwater management and sediment catchment areas will be regularly inspected and maintained to ensure proper function.
• If sediment buildup occurs, remediation actions such as clearing debris or reinforcing buffer plantings will be taken.
• The site will also be regularly monitored for erosion with additional mitigation actions taken if necessary.

4. Invasive Species Management
• A proactive approach and regular schedule for weed control in the vegetated and pond-surround areas will be followed, focusing on removing invasive plants before they spread.
• The presence of pest animals, such as possums or rats, will be monitored and managed if they threaten native biodiversity.
• Replanting efforts will focus on fast-growing native species to outcompete potential invasive plants. To this end seeds have been sourced from the site and germinated, ready for planting during the appropriate season.
• The success of native replanting efforts will be assessed to ensure they effectively suppress weed growth. In addition to the already initiated native planting and mulching programme, the applicants are spreading rye and clover groundcover seed mixed with manuka and kānuka seed on suitable areas of soil disturbance.
• Mowing or grazing is recommended for any areas of Kikuyu that are not intended to be planted.

5. Enhancing Ecological Value
Taking the need for some vegetation removal and soil disturbance into account, the sensitive landscaping, extensive planting, pest control and pond restoration activities proposed by this development have the potential to enhance the ecological value of the site through increasing biodiversity and native wildlife habitat and mitigating erosion.

Additionally, the plantings and pond restoration will strengthen the site's function as an ecological corridor and provide habitat for pollinator species. To further support the biodiversity enhancing potential of the proposed plantings, consideration can be placed on bioregionally significant at-risk species such as kauri, purple hebe, Pseudopanax discolour, Pimelea tomentose, koru and pohutukawa.

7. Conclusion

In their proposed development the applicants have committed to long-term environmental stewardship and undertaking a continuous adaptive management approach. Their regular

monitoring of the site conditions, mitigation measures and ecological outcomes will guide decisions on additional planting, erosion control, or habitat enhancement. The proposed development focuses on a low impact home, sensitively integrated into the site with minimal vegetation clearance, significant restoration planting and the enhancement of the habitat potential of the pond.

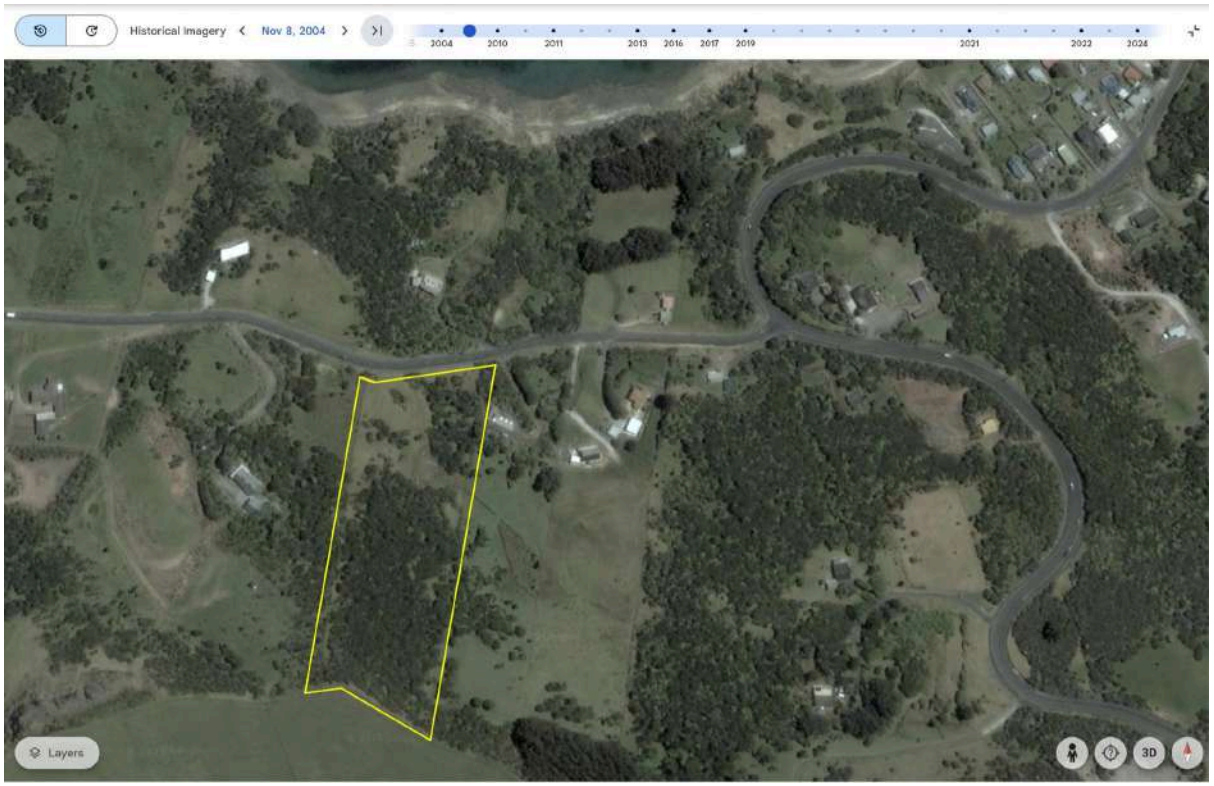
By implementing the above-described mitigation, management and monitoring practices, the project can ensure that its impacts are minimised, biodiversity is supported, and that the ecosystem services and ecological values provided by the property are retained and arguably enhanced.

8. Appendix - Site images and plans

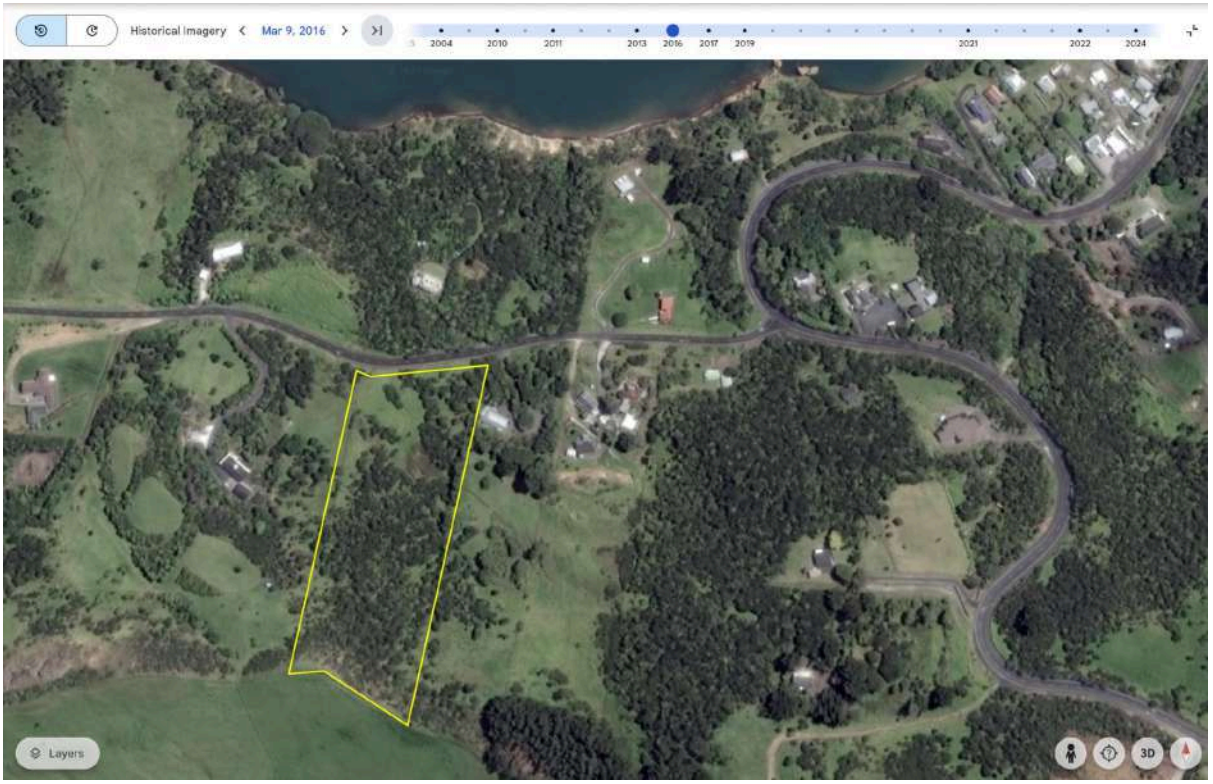
1. 1942 (Retro lens) - extensive scrub cover before the formation of Signal Station Road. No sign of any pond or wetland on the property.

2. 1968 (Retro lens) - the formation of the pond and road

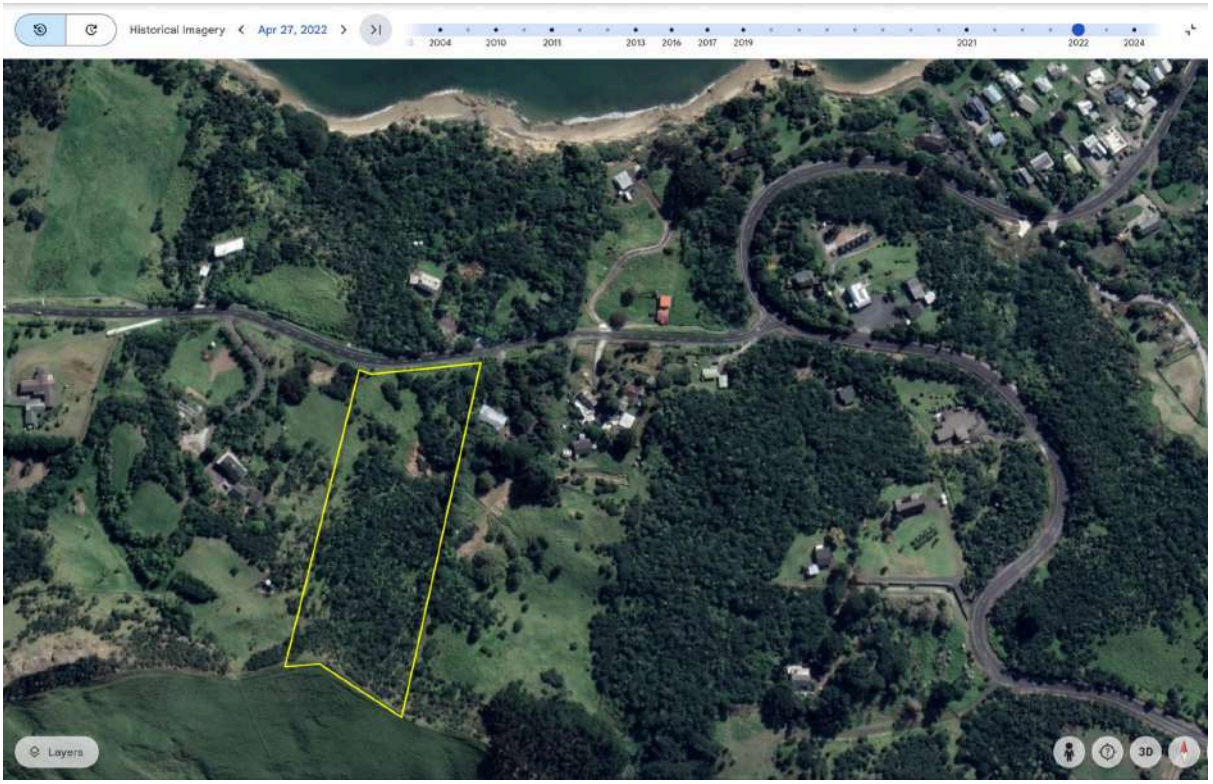
3. 1987 (Retro lens) - subdivision of the farm and major earthworks on neighbouring properties



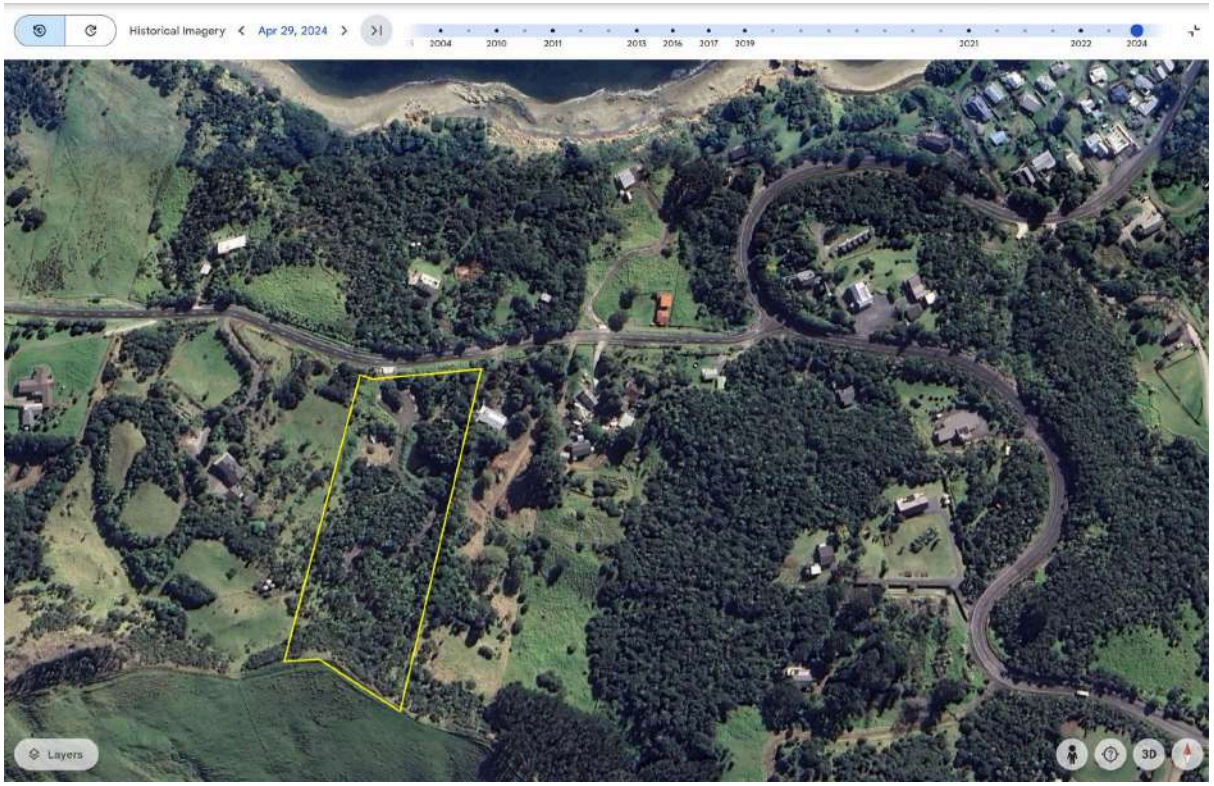
4. 2004



5. 2016



6. 2022 - the last google earth image before the recent property development began



7. 2024 after the accessway constructed and the shed platform created

8. Proposed house site

9. Mixed native and exotic species on eastern boundary

10. Example of regenerating understory

11. Kikuyu dominating site clearings - south east

12. Sparse older trees dying off amidst dense kikuyu grass

13. Kikuyu dominating site clearings beneath sparse native canopy

14. Pond

15. Proposed cabin site and west boundary

16. Mature trees with new native plantings

	Name	Date
Surveyed	GJ	20.03.25
Designed		
Drawn	GJ	06.04.25
Height Datum	NZVD 2016	
Local Reference		
Contour Interval		
Major 2.5m	Minor 0.5m	
Address	23 Signal Station Road	
Title NA44A/1165	Area 1.7945 ha	

SHEET TITLE:

TOPOGRAPHICAL PLAN
OF LOT 1 DP 86502

JOB/CLIENT:

Nicholas Bowler

Job No: 24219
File: Topo Survey 1-750@A3.tcd

Williams & King
Registered Land Surveyors, Planners & Land Development Consultants
27 Hobson Ave
PO Box 937, Kerikeri
Tel: 09-407 6030 Fax: 09-4076032
Email: kerikeri@surveyandplanning.co.nz

SCALE @ A3
1:750

SHEET No
1/1

17. Topographical plan


SIGNAL STATION ROAD
POND
DAA 2506
23 Signal Station Rd
2/05/25
N
PROPOSED SITE PLAN
Work in Progress
REV: 01 - WIP
RC-03
DORRINGTON
ATCHESON
ARCHITECTS

18. Site Plan

Weed and pest species control programme

29 Signal Station Road, Omapere

Enhance native biodiversity through regular pest control

Control predator species

Possum

Continue and increase trapping; use Timms traps for possum.

Mustalid

Use mustalid 2000 trap baited with rabbit or egg, installed near the pond.

Rat

Use traps and set poison (Diphacinon-based) in bait stations regularly, install and top up bait for 3 days at least once per month (twice per month in colder months).

For a property of this size 6 bait stations will be sufficient, placed around any habitation and spaced at least 30m apart.

Weed control

Task

Gradually eliminate noxious exotic flora and replace it with native species.

Control kikuyu in replanting areas and release seedlings from competing exotic species.

Use mulch where possible to suppress weeds and support emerging native species.

Method

Use vigilant or similar paste to cut and poison woody species.

Use glysophate or similar grass killing poison for kikuyu and pampas grass.

Use Tordon or similar poison to control broadleaf weed species

Timing

Control pest plant species at least twice yearly throughout the property, as they will continue to become present due to bird droppings and wind-borne seed.

T.DRUPSTEEN CPENG

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61652,
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drupsteenthijs65@gmail.com

TD Ref: 25/ 17
Date: 13 /05 / 2025

BY EMAIL

The Chief Executive
Far North District Council
Memorial Ave
Kaikohe

Your Ref: Letter EBC-2025-520/0 of 10 February 2025 signed by Jude Barber

Proposed Shed at 29 Signal Station Rd, Omapere [L1, DP 86502]
Stormwater Attenuation [Part Rule 10.7.5.1.6]

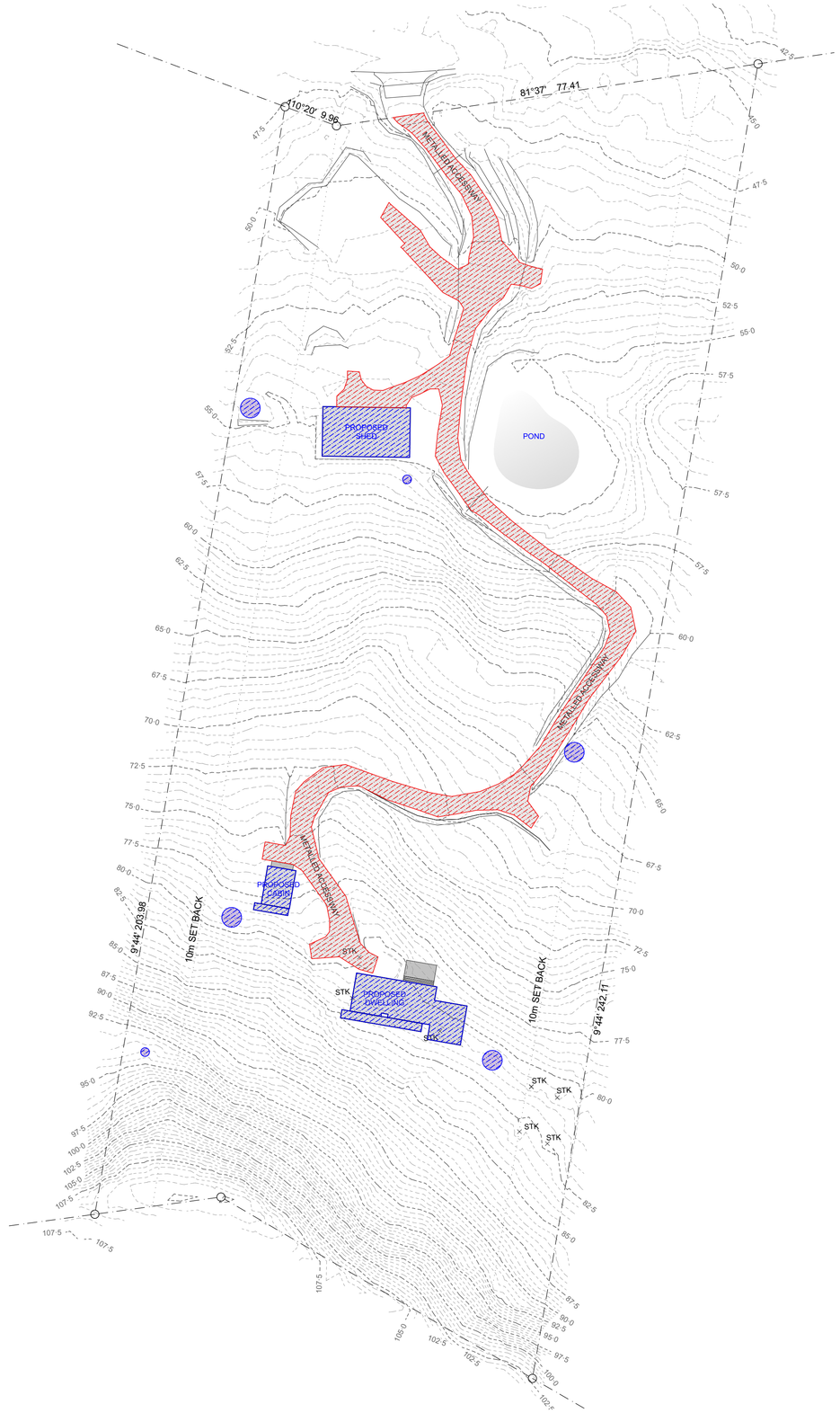
1 Overview: This report uses the Far North District Council Stormwater attenuation spreadsheet to attenuate a 10-year 10-minute storm using the NIWA HIRDS 4 RCP 6.6 + Change 2081-2100 predicted rainfall data, modelling the existing 660m2 pond [with vertical sides] on the site as a circular water tank of radius 14.5 m.
2 Input Data: This is summarised on the attached Stormwater Data sheet. This sheet also shows the details of the existing V-notch weir in the pond bund.
3 FNDC Stormwater Attenuation Spreadsheet Calculations: These are attached and show that the required attenuation volume is 6.6 m3, achieved by arise in pond level of 0.01m.
The overflow discharge orifice, should according to the spreadsheet, be a 5.0 m diameter pipe discharging 6.36 m3/s!
4 Discussion on The Spreadsheet Result: Computer results should always be examined by experienced professional scrutiny: in this case the 5 diameter overflow orifice is obviously unrealistic.
It is postulated that more attenuation by a smaller discharge orifice is not a harmful thing, and a similar comment applies to more detention storage.
The existing V-notch overflow weir will result in a flow much reduced from the 6.4 m3/s calculated by the spreadsheet using a 5.0 m diameter pipe. 400mm head in the V-notch weir will produce a flow of about 0.093 m3/s, much less than the permitted attenuated flow [see the attached data sheet] Also, that 400mm rise in the pond level will store 40 times the required attenuation volume of 6.6m3. This can only be beneficial also.

5 Conclusion: It is concluded that the present 660m2 existing pond with its present V-notch weir supplies all the necessary stormwater attenuation for the proposed development impervious surfaces as shown on the attached plan by Dorrington Atcheson Architects numbered RC-16 dated 13/05/25.

T. Drupsteen

Thijs Drupsteen
Chartered Professional Engineer 61652

Attached: DAA plan RC-16
Stormwater data sheet
FNDC Spreadsheet calculations



COVERAGE CALCULATIONS:

PLANNING RULES

PLANNING ZONE:	COASTAL LIVING

CALCULATIONS

TOTAL EXISTING SITE AREA:		17945m^2
BUILDING COVERAGE		
HOUSE - COVERED ENTRY:		23m^2
HOUSE:		146m^2
CABIN - COVERED ENTRY:		8m^2
CABIN:		36m^2
SHED:		143m^2
WATER TANKS: (AREA ABOVE PERMITTED 20m^2)		25m^2
TOTAL BUILDING COVERAGE:	2.12%	381m^2
IMPERVIOUS COVERAGE:		
BUILDING COVERAGE:		381m^2
DRIVEWAY:		1099m^2
TOTAL IMPERVIOUS COVERAGE:	8.25%	1480m^2

COVERAGE LEGEND:

-·-·-	SITE BOUNDARY
- - - -	YARD SETBACKS
🟥	IMPERVIOUS
🟦	BUILDING COVERAGE

DAA 2506
29 Signal Station Rd

13/05/25

@ A1
(ORIGINAL REDUCED
50% @A3)

COVERAGE CALCULATIONS

REVISION NAME	REV ID	DESCRIPTION	DATE

Work in Progress

REV: 01 - WIP

RC-16

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DORRINGTON
ATCHESON
ARCHITECTS

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25/17 ①
T. Drupsteen
13/5/25.

New shed @ 31 Signal Station Rd Stormwater Data _ EBC 2025-5201

(L1, DP 86502).

1. Stormwater Attenuation

Total Lot size: 17,945 m².

Impervious Areas: Metalled Driveways 1099 m²

New Shed roof 143 m²

Tanks 4/25m³ @ 10m² ea + 2@ 3m³ @ 2.5m² ea leg 20m²

allowable discount = 45-20 25 m²

Decks (Cabin (7 × 5.2m + porch 8m²) 44 m²

(not included) House & Porch 169 m²

All buildings + d/ways 1480 m²

Total buildings 356 + 25 tanks = 381

→ 16465 vegetated area left

Inputs for FNDC Spreadsheet

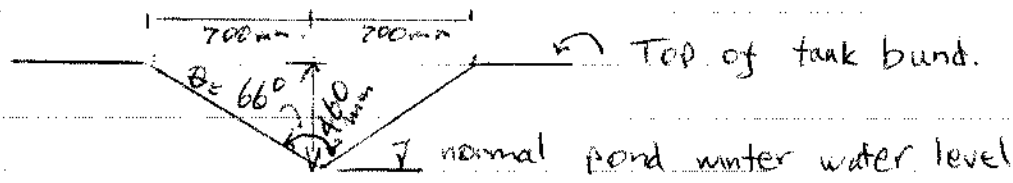
Initial 17,945 Total made up of 17345 veget + 600 impervious metal

New 17,945 made up of 1099 metal (of which 600 m² remains as area, with no change in impermeability values, 494 m² of metal is not caught for attenuation, and 5m² is a caught change in imp'y values)

NB. circular water tank = 660m² pond with vertical sides = 14.5m R.

38/m² Roofs & decks = all buildings [shed + house + cabin + {water tanks above 20m² permitted water tanks}]

Existing Pond outlet V-notch weir



Weir flow with 400 mm head

$$Q = Cd \times \frac{8}{15} \times \sqrt{2g} \times \tan\frac{\theta}{2} \times H^{2.5}$$

$$\approx 0.60 \times 0.533 \times 4.43 \times 0.649 \times 0.4^{2.5}$$

$$= 0.920 \times 0.101$$

$$= 0.0931 \text{ m}^3/\text{s}$$

$$= 9.3 \text{ l/s}$$

1 **Rational method** 48hr

Pre – Development water flow

(Original water flow) Total area.	Area (m^2)	Roof & decks 1 (m^2)	Concrete & smooth seal 2 (m^2)	Metaled area Or rough seal 3 (m^2)	Other Impervious 4 (m^2)	Vegetation 5 (m^2)	Bush 6 (m^2)
	17945.00		0	600	0	17345	0
						1,5	
Runoff coefficent		Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)
Use "C" values from FNDC TR55 chart		0.00	0.00	0.90	0.00	0.69	0.00
Generally do not use slope adjustment Ci factor if using TR55		0.96	0.96	0.8	0.65	0.59	0.59
Rainfall intensity		I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)
Rainfall Data from NIWA. Hirds 4, RCP6, 2081-2100		4.42	4.42	4.42	4.42	4.42	4.42
Use an appropiate event for the situation							
Flow rate of surface water		Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)
		0.000	0.000	0.001	0.000	0.015	0.000
Pre – development flow		Qp (m^3/sec)	Qp (L/sec)				
of developed area		0.0007	0.67				

Pre-development Slope %	
	40
Ci correcdtion	
	0.10

Post-development Slope %	
	40
Ci correcdtion	
	0.10

Post – Development water flow

		Any area where there is a change in the impermiablity values				Pre-development area where there is a change in impermeable surfaces but not collected in atenuation system		Any area where there is no change to the impermiablity values	
Total area.	Area (m^2)	Roof & decks 1 (m^2)	Concrete & smooth seal 2 (m^2)	Metaled area Or rough seal 3 (m^2)	Vegetation 4 (m^2)	Concrete & smooth seal 5 (m^2)	Metaled area or vegetation 6 (m^2)	Metaled area or seal 7 (m^2)	Vegetation 8 (m^2)
	17945.00	381	0	5	0		494	600	16465
	OK								499
Use "C" values from FNDC TR55 chart		Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)	Ci (coefficient)
Generally do not use slope adjustment Ci factor if using TR55		1.00	0.00	1.00	0.00	0.2	0.3	1.00	0.69
		0.96	0.96	0.96	0.59			0.96	0.59
						"C" value difference between Pre & Post			
						Maximum value 0.2 (at the moment)			
Rainfall intensity rate		I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)	I (mm/hr)
Rainfall Data from NIWA. Hirds 4, RCP6, 2081-2100		4.93	4.93	4.93	4.93	4.42	4.42	4.42	4.42
Use an appropiate event for the situation									
Flow rate of surface water		Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)	Qc (m^3/sec)
		0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.014
		Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)
		0.52	0.00	0.01	0.00	0.00	0.18	0.74	13.95

Total included in attenuation system calc's post – development flow	Qa (m^3/sec)	Qa (L/sec)
	0.000	0.04

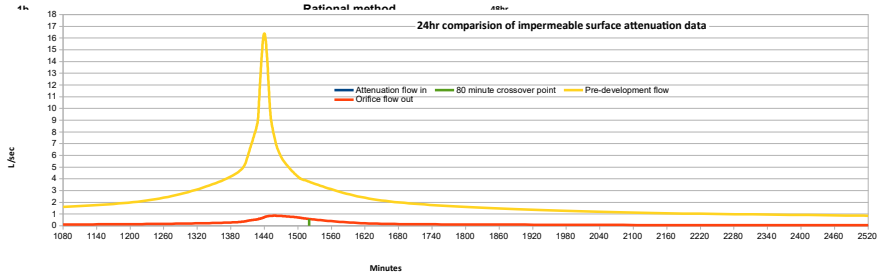
Post – Pre development flow	Qtpp (m^3/sec)	Qtpp (L/sec)
	-0.0001	-0.14

Total post development flow Developed flow + undeveloped flow 0 to 10min	Qatt (m^3/sec)	Qatt (L/sec)
	0.0150	15.03

Total impermeable excluded from attenuation system collection	Qby (m^3/sec)	Qby (L/sec)
	0.000	0.18

Total no change, excluded from attenuation system calc's	Qby (m^3/sec)	Qby (L/sec)
	0.015	14.69

1b **Rational method** 48hr



Pre-development Slope %	
	40
Ci correcdtion	
	0.10

Post-development Slope %	
	40
Ci correcdtion	
	0.10

2

		Round	Square		Calculation (initial) Total tank area	Calculation (initial) Total tank volume	Calculation (initial) usable height hmax (m)	Calculation (final) Additional area	Num. Of tanks 0
Select 1 for type of tank/area, 0 for other		1	0		m^2	m^3	0.01	m^2	r (m)
Estimate storage volume				Tank radius	660.52	6.61	OK	Nil	0
Adjust to match max Vstored		Num. Of tanks		r (m)			OK	Total area	m^2 for fixed H68 height
Round area		1		14.5	660.52	Initial calculation	Same as initial	0.00
		Num. Of tanks	Width	Length	m^2	hstor max.	0.003	Final volume	Not used
Square/rectangular area		0	0	0	0.00	Vstored max.	1.91	Same as initial	Trench width
						Vstored min.	0.001		0
						0.05 to3.5% left @ 48hr	0.07		Trench length
Short tube, 0.76		Orifice type "u"	g				OK	Same as initial	20.6
Thin sharp, 0.62		0.76	9.8067			Graph, 24hr Vstored 2520m	0.004	Not used	m^2 for fixed H68 height
						Max.10% left @ 24hr from initial calc.	0.21	0.21	0.00
						or add extra volume			Not used

		48hr	24hr	12hr	6hr	2hr	60	30	20
Pre – development flow		C20	L20	U20	AD20	AM20	AV20	BE20	BN20
3 of developed area		0.00067	0.00107	0.00161	0.00239	0.00420	0.00588	0.00824	0.01006

Pre–development flow matches 2hr 40min. Intensity	Qp (m^3/sec)	Qp (L/sec)		Qin max.			Slope factor adjustment at
Uses (80min.crossover O126) as a source value	0.0016	1.5874		0.00183		48hr program	Min.crossover
Do not change	OK					Min.crossover	Chart point (min.)
For calculation purposes this section changes	Dia check	Dia	Area	Qout 1520 (L/sec)	Qout (m^3/sec)	Chart point (min.)	0.91
the dia only and thereby the area	0.0776	0.07749	0.0047	0.578	0.00058	1520	peak flow
The information is not used for anything else		77.49		0		1520	Chart point (max.)
If additional storage is required use the original/inital orifice size and calc. height							0.15

4

Calculate maximum storage volume

Chart intensity hr values steps used	Chart intensity accumulated minute steps	Storm duration- THR (hr)	Storm duration- Event data, TMINS mins	Attenuation calc. total Direct to Atten. Qa (L/sec)	Catchment pre-devel. plus orifice flow out Qtin (L/sec)	CC (RCP6) Intensity Current (0 deg) SITE Post-dev RCP6 10 yr	SITE Pre-dev (0 deg) 10 yr	Chart step factor
48	720	12.00	720	0.04	15.20	4.9	4.4	1.4
24	1080	6.00	360	0.1	24.1	7.9	7.0	1
12	1260	3.00	180	0.1	36.5	12.3	10.6	0.55
6	1380	2.00	120	0.2	54.1	18.4	15.7	0.56
2	1410	0.50	30	0.5	95.0	33.2	27.6	0.9
1	1425	0.25	15	0.8	133.3	47.0	38.7	0.8
30	1430	0.08	5	1.0	186.6	65.8	54.2	0.04
20	1435	0.08	5	1.3	227.9	80.3	66.2	1.0
10	1440	0.08	5	1.8	322.7	114.0	93.8	1.0
10	1445	0.08	5	1.8	322.7	114.0	93.8	1.5
20	1450	0.08	5	1.3	228.1	80.3	66.2	1.0
30	1455	0.08	5	1.0	186.9	65.8	54.2	0.9
	1470	0.25	15	0.8	133.7	47.0	38.7	0.8
2	1500	0.50	30	0.5	95.5	33.2	27.6	1.1
6	1620	2.00	120	0.2	54.1	18.4	15.7	1
12	1800	3.00	180	0.1	36.5	12.3	10.6	1
24	2160	6.00	360	0.1	24.1	7.9	7.0	0.8
48	2880	12.00	720	0.0	15.2	4.9	4.4	0.8

Catchment flow Qpat (cell MAX(P109:P130)	Qcap max.	Qp (m^3/sec)	Qp (L/sec)	Qout max. (m^3/sec)	Qout max. (L/sec)	Vstored max. Vol. stored, (m^3)
Catchment flow = orifice flow out + catchment pre-development flow	6596.026	6.5960	6596.0	6.36330	6363.30	2.478
						Raise C132
						OK
For calculation purposes this section changes	Dia check	Dia	Area			
the dia only and thereby the area	5.0011	4.99518	19.5971			
The information is not used for anything else		4995.18				

Use this orifice size for final design

Northland Geotechnical Specialists

GEOTECHNICAL REPORT FOR SHED & DWELLING

Location	31 Signal Station Road, Omapere
Client	Nicholas Bowler
NGS Ref	0355
Date	22 October 2024

Report prepared by	David Buxton
Report reviewed by	Rebekah Buxton
Authorised for NGS by	David Buxton

Northland Geotechnical Specialists Limited
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Table of contents

1. Introduction

Northland Geotechnical Specialists Ltd (NGS) was engaged by Nicholas Bowler to undertake subsoil investigations and provide a geotechnical report suitable for detailed design of a shed and dwelling at 31 Signal Station Road, Omapere.

This report is suitable to support Building Consent application to the Far North District Council (FNDC).

2. Proposed Development

We understand that an approximately 18m x 7m pole shed is proposed for the site, located in the northern portion of the site and primarily on a cut platform on land originally sloping at approximately 7°. A dwelling is also proposed to in the southern portion of the site on more elevated and steeply sloping land (approx. 18°). The dwelling is expected to be approximately 150m^2 in size and have a suspended floor on pile foundations.

The approximate location of the area for development is shown on Figure 1 – Site Plan.

3. Site Description

The site is legally described as Lot 1 DP 86502 and covers an area of approximately 1.79Ha. The site is slightly irregular in shape but can be approximated by a 210m long (NNE-SSW) by 84m (WNW-ESE) rectangle. Elevations on the site fall from a high point of 110m on a sharp ridgeline on the southern boundary to 45m at the northeast corner of the site. The foreshore (Hokianga Harbour) is located a further 200m north of the site boundary.

The area adjacent to the southern boundary of the site has very steep northeast facing slope that falls at up to 50° that form part of an east-west ridgeline escarpment. About 25m from the southern boundary slope angles reduce to around 20°. The site has somewhat irregular topography. Slope angles in the southern half of the site are typically between 10° and 25°. Slope angles in the northern half of the site are typically between 5° and 20°. There is a pond within the northern portion of the site.

The site is elevated and is not mapped as being at risk of flooding on the NRC GIS hazard maps[1].

The nearest mapped[2] active water bore is located approximately 200m west of the site.

The site is shown on Figure 1 – Site Plan, attached.

[1] https://nrcgis.maps.arcgis.com/apps/webappviewer/index.html?id=81b958563a2c40ec89f2f60efc99b13b, accessed 14/10/2024

[2] https://localmaps.nrc.govt.nz/localmapsviewer/?map=b1bce4c2e2f940288c1f7f679b2ac7b7, accessed 15/10/2024

4. Geological Conditions

4.1. Published Geology

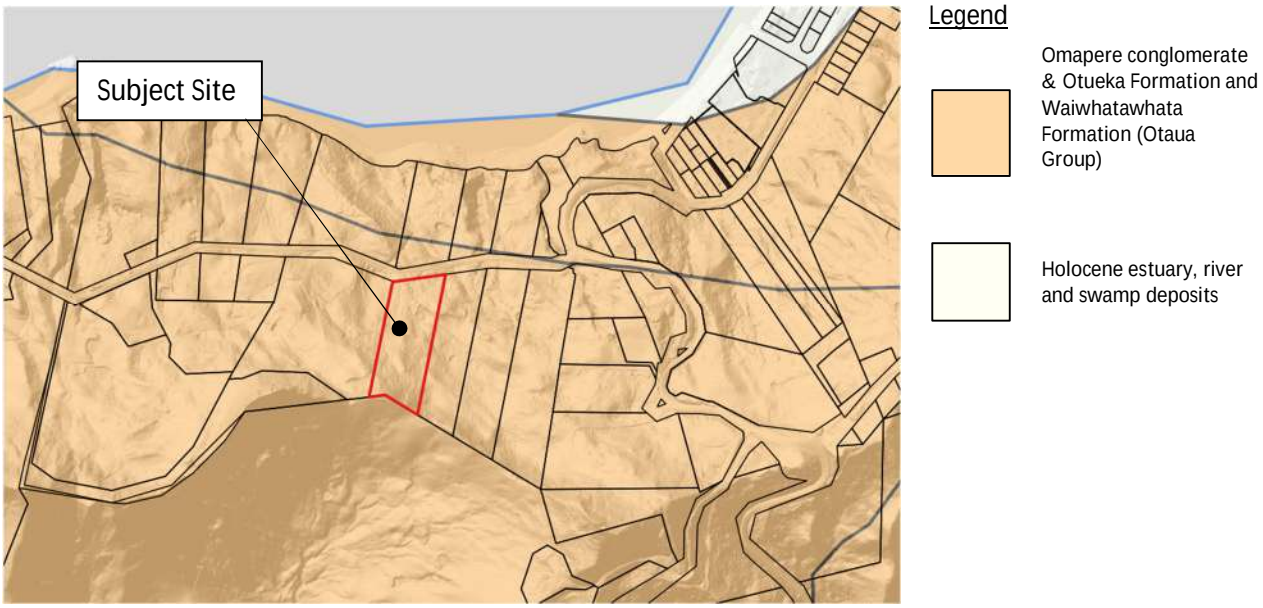


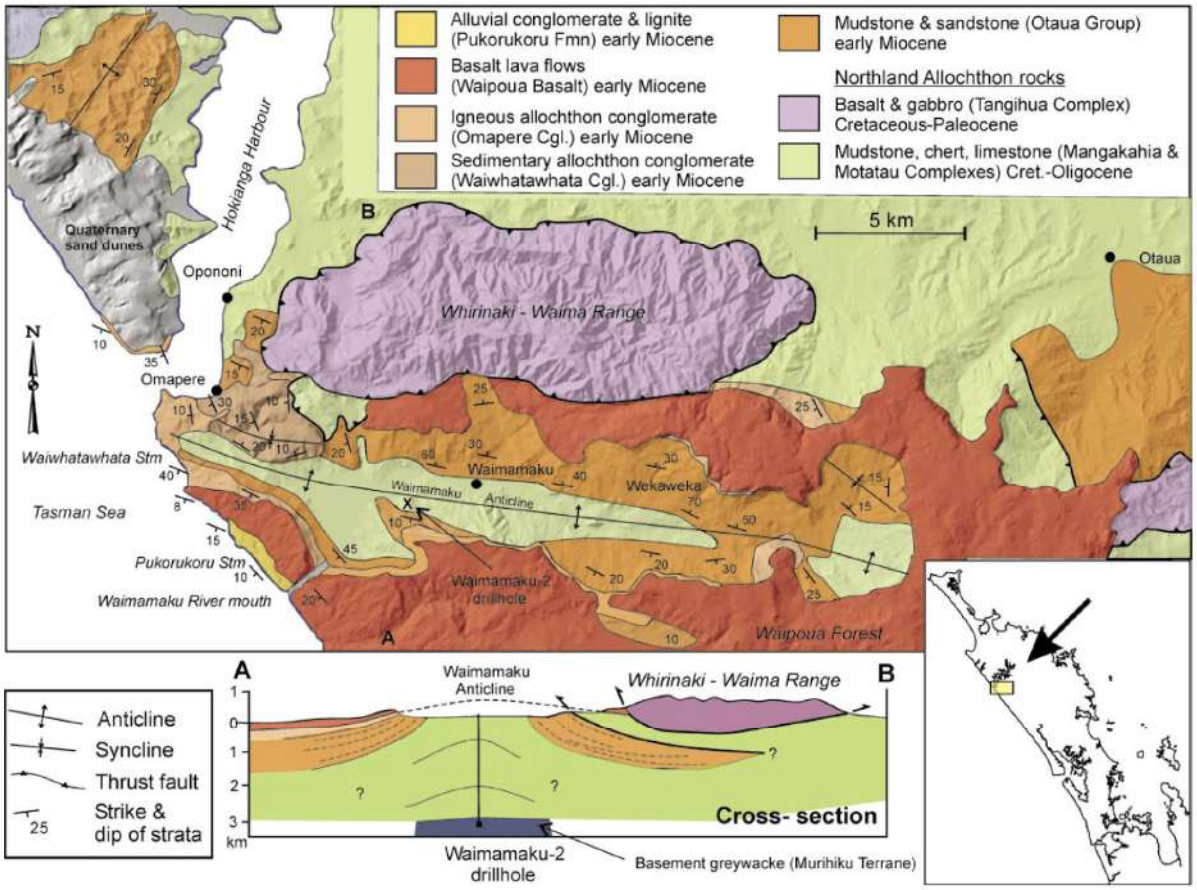
Figure 4-1: 1:250,000 Scale Geological Map with 2018 NRC LiDAR DEM and LINZ property boundaries

The published geology[3] indicates that the site is underlain by cobble and pebble conglomerate of the Omapere conglomerate derived mainly from Tangihua Complex. The Omapere conglomerate is underlain by Otueka Formation and Waiwhatawhata Formation that comprise conglomerate and sandstone derived from the Northland Allochthon. While not shown on the above map excerpt, the wider geological setting indicates the Otaua Group (i.e. conglomerate layers) are likely underlain by Hukerenui Mudstone of the Northland Allochthon Mangakahia Complex, described as soft red, brown, green, yellow and grey mudstone, commonly highly sheared to broken formation or melange. Other Northland Allochthon lithologies are also exposed in the wider area including sandstone and muddy limestone.

Further detail on the regional geological setting is provided in Figure 5.71 of "Out of the Ocean, Into the Fire[4]", reproduced in Figure 4-2 below. This indicates the south head of the entrance to the Hokianga Harbour, on which the site sits, is located on the flank of the Waimamaku Anticline. An anticline is a "fold" in the geology. With respect to the site and surrounds this indicates the geology has likely been tilted to dip out of slope (i.e. the geological layers and contacts likely slope downwards in a similar direction to the fall of the slope). It also shows the Omapere Conglomerate being underlain by Mangakahia and Motatau Complexes of the Northland Allochthon.

[3] Isaac, M.J. (compiler) 1996. Geology of the Kaitaia area. Institute of Geological and Nuclear Sciences 1:250 000 geological map 1. 1 sheet + 44p. Lower Hutt, New Zealand: GNS.

[4] Out of the Ocean, Into the Fire, History in the rocks, fossils and landforms of Auckland, Northland and Coromandel, Bruce W. Hayward, Geoscience Society of New Zealand, 2017. ISBN 978-0-473-39596-4



5.71 Geological map showing the surface distribution and structure of the Early Miocene Hokianga Basin rocks and their relationship to the underlying and sometimes overthrust Northland Allochthon rocks. A north-south cross-section of the inferred subsurface geology is shown (A-B). Modified from Hayward (1993) and Evans (1994).

Figure 4-2: Extract from "Out of the Ocean, into the Fire" showing the regional geological setting

4.2. History of Landsliding

The north facing slope traversed by Signal Station Road and SH12 from the intersection with Pioneers Walk to the Pakia Hill Summit has a history of known landslide movement. This is known from damage to road pavements and damage to homes.

The Natural Hazard Commission's (formerly EQC) claims map[5] indicated four settled claims for Natural Disaster Damage. Typically, these are expected to have been for landslip damage. Two of the claims appear to be for the same property and indicate landslip damage occurred in August 2008[6]. The other two settled claim locations do not automatically return information due to a failure of property data to match in their system, however, appear to also possibly relate to landslip damage and we understand that this potentially occurred in 2017.

We are also aware that NZ Transport Agency Waka Kotahi (NZTA) engaged WSP to complete survey monitoring following landslide movement in around 2017/2018 that caused damage to SH12. Older episodes of movement are also inferred as we are also aware that the then Transit NZ completed

[5] https://www.naturalhazardsportal.govt.nz/s/claims-map?gad_source=1&gclid=Cj0KCQjwyL24BhCtARIsALo0fSBIJBeSPFjF1Q472t67M1A7zzYo72MQW5LmZCvSj3aRz-_J2n9vkb4aAktDEALw_wcB&gclsrc=aw.ds accessed 17/10/24

[6] It is unclear if this is the same claim duplicated or separate claims for damage

installation of horizontal bored drains under a portion of SH12 in 2000. Several locations of displacement to Signal Station Road are also known to have occurred in 2017.

From the above history it has been inferred that the mapped Otaua Group Conglomerates are sliding over an inclined (out of face dipping) interface with underlying Northland Allochthon mudstone, with the Northland Allochthon mudstone visible in some locations along the coast below. This movement appears to occur intermittently following sustained rainfall sufficiently heavy to elevate groundwater levels across the wider area.

4.3. Aerial Photograph Review

Review of historical aerial photographs[7] dated between 1942 and 1987 and present-day aerial photos[8] indicates the following:

- In 1942 the site is at the western edge of tree cover (likely re-generating). Land to the west has a mix of grass pasture and scrub/tree coverage. SH12 has been formed in a position similar to the present.
- By 1968 Signal Station Road has been formed and there has been variable change in bush/scrub coverage with areas of both growth and clearance in the wider area, with the site substantively cleared. The pond onsite may be visible however the photo resolution is not sufficient to confirm.
- In 1977 the pond is clearly visible and the upper portions of the site are covered with vegetation.
- In 1980 construction of the dwelling on the lot immediately west of the site is visible.
- In 1987 construction of the dwelling on the lot immediately east is visible.
- There is little change in the site from 2004 to 2022 other than growth of vegetation. In 2024 an accessway has been formed within the site and the proposed shed cut platform is visible.

When viewed as stereopairs (i.e. in 3D) the 1942 images clearly show the east-west escarpment at the crest of the north facing slopes. The north facing slope along the length of Signal Station Road has irregular terrain with several notable breaks in topography consistent with the terrain having been formed by landsliding. This is consistent with but more readily assessed from the LiDAR terrain model presented in Section 4.3 below.

The 1942 and 1987 images are presented below.

[7] Aerial photos from 1942, 1968, 1977, 1980, 1984 and 1987 sourced from www.retrolens.nz.
[8] Aerial photos from 2004 to 2024 sourced from Google Earth.

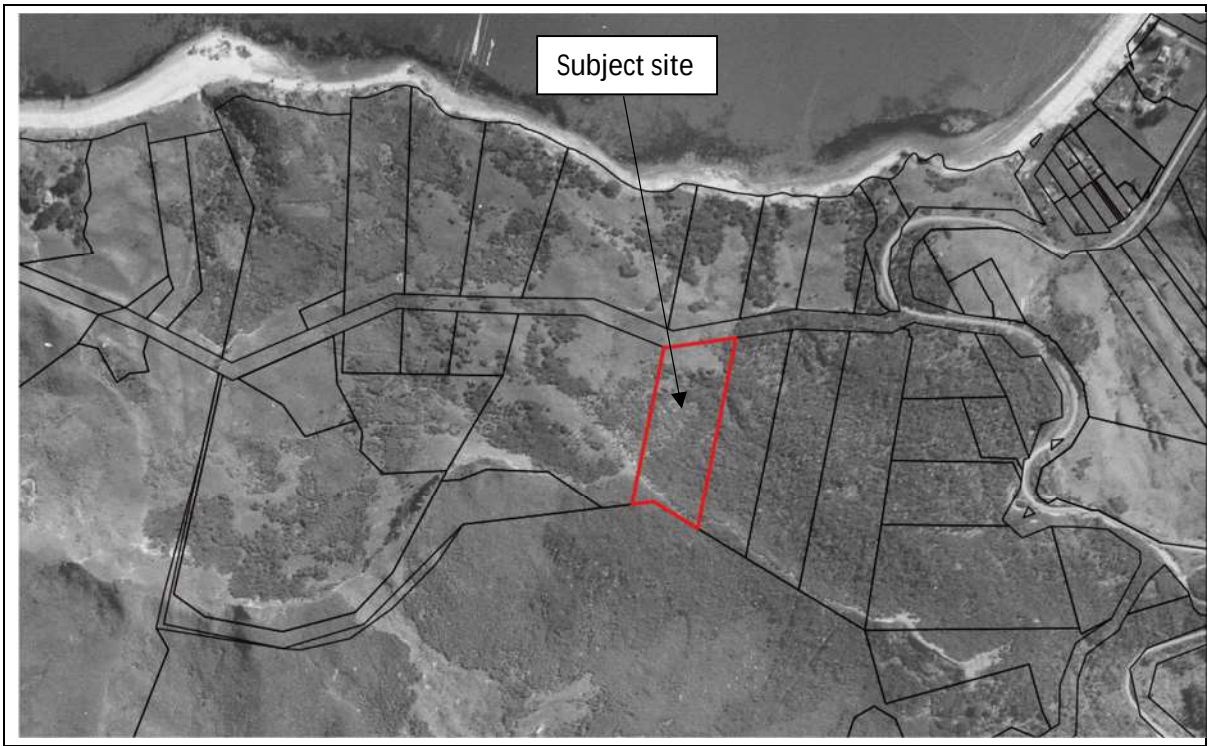


Photo 1: 1942 image. Crown_209_396_3 sourced from Retrolens approximately georeferenced with approximate property boundary overlain in red.

Photo 2: 1987 image. Crown_8712_I_6 sourced from Retrolens approximately georeferenced with approximate property boundary overlain in red.

4.4. LiDAR Terrain Review

We have prepared a shaded terrain model of the site derived from the 2018/2019 NRC LiDAR data. Onto this terrain model we have annotated known locations of cracking/deformation across Signal Station Road and SH12 pavements and then inferred from the shape of terrain the potential extent of movement that would be consistent with each given location of the road pavement. We have also bounded an upslope area that we infer is the extent of the landscape scale (i.e. area wide) landslide feature. This terrain model is shown in Figure 4-3 below.

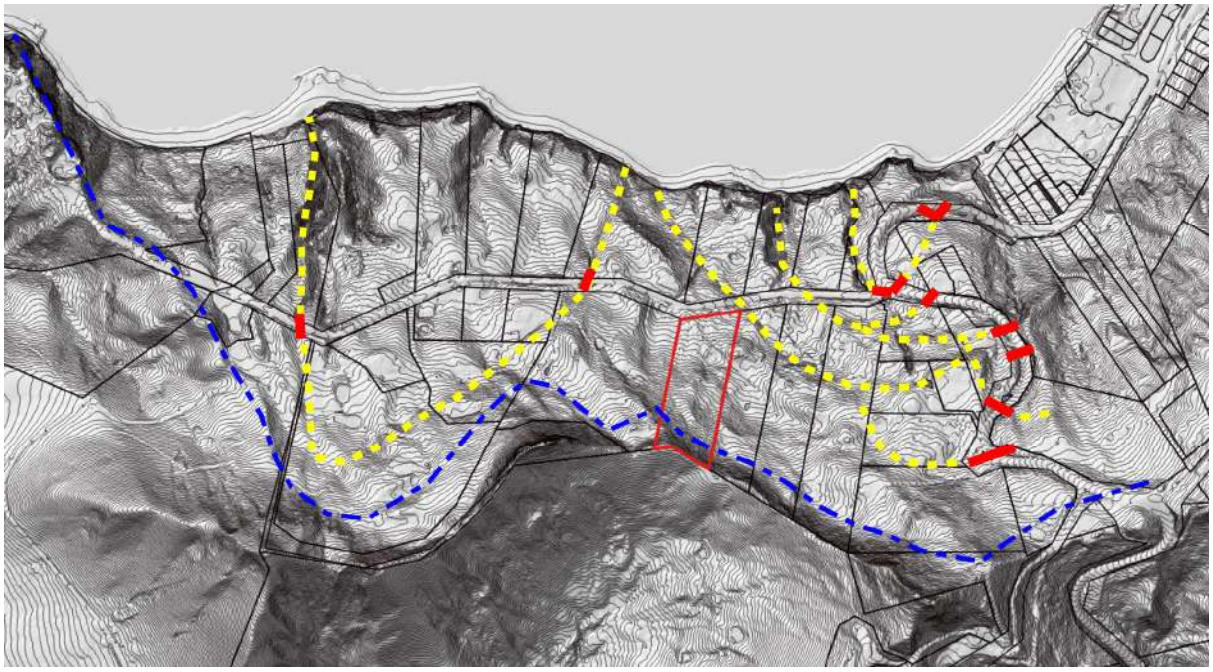


Figure 4-3: 2018/2019 NRC LiDAR as a terrain shaded model with 1.0m contour overlay (NZVD). Red lines indicate observed cracking/displacement in road pavement as observed on 16 January 2021 (SH12) and 11 April 2018 (Signal Station Road). Yellow dashed lines present an interpretation from the terrain as to the possible zones of movement indicated by the road displacement. Blue dashed line is the inferred upslope extent of the landscape scale landside feature.

The north face of the ridgeline above Signal Station Road is evident in the terrain model and is steep (>45°) and has exposed conglomerate faces. We interpret this to be the backscarp of the large landslip feature, with it having been exposed by downslope landslip movement over thousands to hundreds of thousands of years. The irregular and blocky shape of the terrain is consistent with formation by landsliding. The large-scale landslip movement appears to have an eastern and western zone separated by the changing alignment of the ridgeline above. The site falls within the eastern zone of movement and the interpretation shown on Figure 4-3 above suggests that the site may have been located outside of the extent of known recent movements (note this is an inference only).

A closer scale terrain model is shown of the site in Figure 4-4 below. The upper portions of the site are clearly steeper than the lower portions of the site. There is a gully feature to the southeast of the site that appears to drain to a pond within the site (although there is also an alternative outlet further east). The sides of the gully feature provide subtle changes of slopes. The terrain around the site is irregularly shaped indicating likely geological irregularities are consistent with formation through a mechanism such as landsliding, where blocks of material could have rafted intact with more disturbed and depressed zones (i.e. grabens) forming between, however the terrain is not readily interpretated with certainty at the site-specific level.

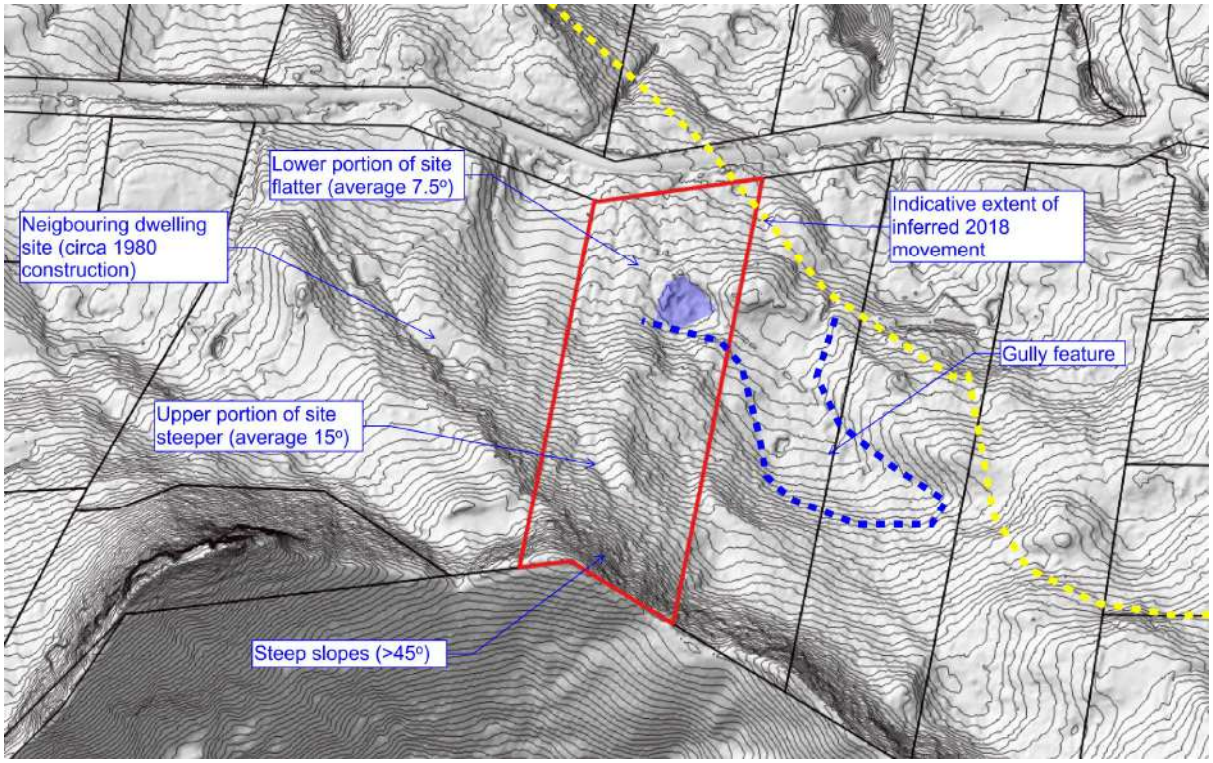


Figure 4-4: 2018/2019 NRC LiDAR as a terrain shaded model with 1.0m contour overlay (NZVD). Annotated with features, site outlined in red.

4.5. Site Investigations

Four machine drilled auger holes (MA01 to MA04) were put down by an excavator under the supervision of Wilton Joubert Consulting Engineers (WJ) on 09 November 2023. These auger holes were put down to 3.3m to 5.3m depth. They were extended with Scala penetrometer testing to 5.4m to 8.1m depth. We have been supplied the logs of these investigations with a plan showing their location.

A geotechnical engineer from NGS completed a site walkover on 04 June 2024 to observe the site and soil exposures. We also put down one hand auger borehole to effective refusal at 0.9m depth. Scala penetrometer testing was extended from the base of the borehole to 2.9m depth

Investigation locations are shown on Figure 1 – Site Plan and the site investigation logs are attached with this report.

4.6. Subsoil Conditions

The site typically has a 200mm to 400mm thick layer of topsoil. This is underlain by cobbly/pebbly clayey silt/silty clay (weathered conglomerate) that is typically very stiff and of moderate plasticity. The WJ logs indicate that the weathered conglomerate becomes sandier at 2.2m to 2.6m depth.

Weathered mudstone was encountered at 4.7m, 3.3m and 3.5m depth in MA02 to MA04 respectively. This is noted as being less weathered at 4.5m and 4.4m in MA03 and MA04 respectively. It is possible but not confirmed that this mudstone comprises the Northland Allochthon, with the conglomerate deposition sequence also including sandstone and mudstone layers.

Scala penetrometer testing from the base of the machine auger holes encountered refusal (>20 blows per 100mm penetration) at 8.0m, 7.2m, 5.9m and 5.2m respectively.

Groundwater was recorded at 2.7m, 4.2m, 4.7m and 3.2m in MA01 to MA04 respectively. Groundwater was not encountered in HA01.

5. Design Recommendations

5.1. General

The nature and continuity of the subsoil conditions onsite have been inferred from four machine augered bores and one hand augered borehole. It must be appreciated that actual subsoil conditions could differ from those inferred. If the subsoil condition differs in any way from those described in this report it is essential that we be contacted.

5.2. Stability

The site is located in an area with known large-scale intermittent landslide slope movement and the geology and terrain suggests landslide movement has likely occurred on the site in the past thousands to hundreds of thousands of years. Accordingly, there is potential for landslide movement to occur on this site. There are however no records of known landslide movement on this site[9], and we have been advised[10] that an adjacent dwelling on similar land has performed adequately over the past 40 years. Landslide movement in the wider area has typically occurred as discrete episodes of typically creeping movement at intervals of 5 to 15 years. Where damage has occurred to dwellings or pavements it has typically been limited to locations of tension cracks/headscarps. The zone of landslide movement is approximately 1200m across slope east-west and 400m upslope from the coast north to south.

The landslide movement is assessed to comprise conglomerate (Otaua Group) sliding over an out-of slope dipping interface with the underlying Northland Allochthon mudstone (likely Hukerenui Mudstone). The toe of this landslide is being released by coastal erosion along the south side of the Hokianga Harbour entrance, where in some locations the conglomerate/Allochthon interface is exposed.

The scale and nature of the landslide feature means that it is unlikely that building works on a given site would accelerate or worsen the movement, however disposal of stormwater to soakage systems should not be undertaken.

The site is located at the very upslope extent of the feature, with the southern (upper) boundary of the site being the ridgeline that appears to be a stable feature and formed as the backscarp to the landslide feature. The site is located between two assessed sub-zones (east and west) of the larger feature. The location of site both on the upper portions of the slope and between these two sub-zones suggests that the site has a lower risk of movement when considered to the wider area along Signal Station Road, however it must be appreciated that there is still a risk of landslide movement onsite.

[9] We note that landslide movement can often be un-noticeable on vegetated sites, so a lack of observed movement does not mean that no movement has occurred.
[10] Pers Comm Nicholas Bowler (client), 04 June 2024, advising the neighbours approx. 40 year old dwelling has not had any notable movement based upon a discussion with the dwelling owner.

The Otaua Group conglomerates stand in near vertical escarpment features west of the site and comprise a typically stable geological unit where stability is not compromised by the underlying interface with the Northland Allochthon. As such the steeper slopes (>45°) are interpreted as likely stable features, except that they have formed at angles steeper than weathered soil profiles can develop in a stable manner. As such the steeper slopes (>22°) have a risk of shallow instability in the weathered soil mantle (typically the upper 1m but possibly up to 2m to 3m depth) where a soil mantle has developed, with the risk being most significant on slopes >30°.

With respect to Section 71 of the Building Act and with specific reference to the proposed building locations shown on Figure 1 (attached) and subject to the recommendations in this report being followed and the additional specific recommendations below we consider that:

1. The land on which the building work is to be carried out (Ref Figure 1 – Site Plan) may be subject to, or likely to be subject to slippage; and
2. The building work is not likely to accelerate, worsen of result in slippage on the site or any other property.

With respect to Section 72 (c) of the Building Act there are grounds for FNDC to grant a waiver for the building code with respect to the natural hazard of slippage as the intermittent nature and creeping movement of this slippage does not typically cause an intolerable life safety risk to appropriately designed structures. The appropriate design of structures on this site shall comprise:

A) The shed is to comprise a simple timber pole structure with a single span roof across the width of the structure. The structure and all elements within it shall have robust connections capable of tolerating some enforced rotation/deformation. The shed and the elements that form it shall not have brittle failure mechanisms so the shed can tolerate ground deformations, if they were to occur, without sudden collapse.
B) The dwelling shall comprise a single level structure on a suspended timber floor, where the subfloor structure is accessible for assessment and repair if it were to be required. The dwelling shall have a robust structure and elements with an increased chance of sudden collapse shall not be incorporated (for example arch structures or large beams with small support areas that could be come unseated). A regularly shaped structure with a large degree of redundancy in the structural design is preferred to ensure it is robust and has ductility so can tolerate ground deformations, if they were to occur, without sudden collapse.

The dwelling plans/concept has not been developed in detail. Upslope from the dwelling location there are slopes of up to 50° but decreasing in slope with proximity to the proposed dwelling location. There is some potential for shallow instability on these slopes due to the slope angle. The dwelling shall be protected or isolated from this by an adequate set back, sufficient ground clearance of the floor or a protection structure (such as a small debris catch/diversion wall/bund). We recommend this is reviewed by NGS at detailed design stage.

The dwelling may also extend over a 15° to 25° slope along the downslope edge and specific embedment depths for leading edge pile foundations are given in Section 5.4 below.

5.3. Flood Susceptibility

The site is elevated and not prone to flooding.

5.4. Foundations

The site is underlain by very stiff gravelly and sandy clays and silts. These soils are consistent with good ground to NZS 3604 except that they are likely to be moderately expansive. No specific laboratory testing to access expansivity was completed. We understand that the proposed shed is likely to have shallow pile and strip foundations. The dwelling is likely to be founded on timber piles.

Pile foundations

Pile foundations in accordance with NZS 3604 may be adopted except that the following minimum pile embedment shall be adopted to limit soil shrink swell effects:

Ordinary piles	0.6m
Brace piles	0.75m
Anchor piles	0.9m

Where pile foundations are located on slopes steeper than 16° the leading edge (downslope) row of pile foundations shall have a minimum embedment depth of 3.0m and comprise a minimum size of a 175 SED timber pole.

For piles subject to specific engineering design a geotechnical ultimate end bearing pressure of 450kPa and an ultimate limit state end bearing pressure of 225 kPa may be adopted. The above minimum embedments shall be complied with.

Shallow foundations

Shallow footings embedded in very stiff to hard natural ground may adopt a geotechnical ultimate bearing capacity of 300kPa (i.e. a bearing capacity equivalent to good ground in NZS 3604). As such a conventional concrete slab designed for Class M conditions in accordance with MBIE Acceptable Solution B1/AS1, amendment 19, November 2019 (i.e. a typical minimum perimeter embedment of 525mm to 550mm), or a waffleraft floor system to Class M expansive soil conditions are considered to be appropriate for this site. All topsoil and organic material shall be stripped from the building footprint.

Waffle raft style floor slabs should be subject to specific design. We note that recent research suggests that current available methods to estimate soil shrink/swell total and differential ground movement may not be accurate. Design of such systems should accordingly account for the specific situation and be suitably robust to tolerate possible variance from the assumed design conditions.

The subgrade for shallow footings and floor slabs shall not be allowed to dry significantly prior to protection with a layer of hardfill or placement of the floor slab. If the subgrade is allowed to dry during construction this may result in heave of the subsoils and cracking of the floor slab.

General Foundation Recommendations

Foundations on expansive soils require maintenance and protection to limit moisture changes in the underlying soils. Such measures include:

A. The drainage and wetting of the site shall be controlled so that extremes of wetting and drying of the soils are prevented.
B. The position and operation of gardens adjacent to the structure are controlled, and the planting of trees near to foundations is suitably restricted.

C. Any leaks which develop in plumbing, stormwater or sanitary sewage systems are repaired promptly.

5.5. Retention

Retention design may be undertaken using the design parameters presented in Table 5-1, below. Retaining walls may comprise cantilevered timber or concrete retaining walls or gravity retaining walls.

Table 5-1: Retention Design Parameters

Parameter	Congolmerate soils
Soil Density, γ	18 kN/m^3
Soil Friction Angle, Ø'	30°
Drained Cohesion, c'	5 kPa (to be ignored above 1.5m depth for active earth pressure calculations)
Active Earth Pressure Co-efficient, k_a	0.28
Passive Earth Pressure Co-efficient, k_p	4.0
At-rest Earth Pressure Co-efficient, k_o	0.5

Notes
1 Earth pressures are for flat ground with interface friction of ⅔ϕ' on the active side and ⅓ϕ'on the passive side. The coefficients shall be adjusted for sloping ground and surcharges.
2 We recommend cohesion is ignored to 1.5m depth from cleared ground level for calculations of active earth pressures to ensure an appropriately robust retaining wall design.

Where appropriate, design of retaining walls shall include assessment of retaining wall deflections to ensure they are within tolerable limits given the actual location and significance of the retaining wall.

All retaining walls shall be detailed with adequate subsoil drainage.

5.6. Earthworks

Cuts of up to 1.5m may be formed in the very stiff conglomerate soils at 1V:2H (26.5˚). Batters greater than 1.5m in height shall be retained or subject to specific assessment.

It is not anticipated that any fill will be placed within the footprint of any structures. As such any fill shall be well packed onsite but is not subject to specific inspection or testing.

If any fill (other than formation layers of hardfill less than 600mm thick) is placed within the influence of the foundations and under the floor slab it shall be subject to control on material type and be subject to specific testing and certification requirements.

All fill shall be placed in thin (less than 200mm loose thickness) layers and compacted with dedicated compaction plant (rollers and heavy plate compactors) appropriate to the fill type.

The fill type, testing methods, acceptable result limits and testing frequency shall be documented and agreed prior to any fill being placed onsite.

5.7. Liquefaction Hazard

The soils onsite are not susceptible to liquefaction due to their cohesive nature and groundwater conditions.

5.8. Stormwater Disposal

The site is 1.79Ha in size and stormwater attenuation is not typically required on sites of this size with relatively limited building coverage. We recommend that stormwater run off from the shed and dwelling developments is discharged to the existing pond onsite.

Inappropriate stormwater disposal can result in land slippage and/or erosion. Stormwater generated from the development (i.e. from roofs and pavement) shall be collected and discharged in a controlled manner to avoid this. Stormwater discharges shall be located away from onsite effluent disposal locations.

5.9. Onsite Effluent Disposal

The land in the vicinity of the proposed building platform has been assessed for effluent suitability with respect to the Proposed Regional Plan for Northland (PRP, October 2023) and ASNZS 1547:2012.

In accordance with Table 5.1 of ASNZS 1547, we have identified the residual soils across the site as category 5 “clay loams”. Adequate depth of topsoil was indicated by the site investigations.

We have adopted a design occupancy of six people for the four-bedroom dwelling.

Based on the design occupancy of six people, onsite roof water tank supply and water usage of 145L/day per person the design daily flow is 870L/day. This assumes standard water reduction fixtures will be adopted. A Design Irrigation Rate (DIR) of 3.5mm/day is considered appropriate in accordance with Table M1 of ASNZS 1547:2012. In accordance with Table M2, a reduction in DIR of 50% is adopted for the sloping ground. Accordingly, a DIR of 1.75mm/day is adopted.

A discharge area of 500m^2 is required and a reserve area of 150m^2 (30%) is required for a disposal field. There is adequate area on the lot for discharge and reserve areas with appropriate separation distances from boundaries and surface water. The disposal field shall be located in the area shown as suitable on Figure 1 – Site Plan. An indicative proposed field is also shown. An Onsite Effluent Maintenance and Operation Plan is attached to this report.

Compliance with the Northland Regional Council (NRC) permitted activity rules within the PRP is demonstrated in Table 5-2 below.

Table 5-2 Summary of PRP Permitted Activity Compliance for Secondary Treated Effluent

PRP Requirement C.6.1.3 (Primary & Secondary)	Proposed development Compliance
1) design and construction in accordance with AS/NZS1547:2012 - On-site Domestic Wastewater Management.	Disposal field design prepared in accordance with NZS 1547:2012 Plant sizing and treatment levels to meet these requirements.
2) volume of wastewater discharged does not exceed $2m^3$/day.	Effluent volume <$2m^3$/day estimated.
3) discharge is not via a spray irrigation system or deep soakage system.	Discharge by PCDI
4) slope of the disposal area is not greater than 25 degrees.	Average slopes <25˚ in disposal field
5) discharge of secondary treated or tertiary treated wastewater is via: a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of ASNZS1547, or b) an irrigation line system that is dose loaded and covered at all times by 50mm of topsoil, mulch, or bark.	Design requirements specified to meet these requirements.
6) additional requirements for discharge of wastewater onto slopes greater than 10 degrees.	Where slopes are greater than 10° ensure: Irrigation lines are firmly attached (pinned) to the disposal area. All surface water runoff is diverted away from disposal area. (The disposal area and adjacent area are sloping and naturally contoured to prevent ponding) 10m downslope buffer from lowest irrigation line The disposal area is located within existing established vegetation that has at least 80% canopy cover or cover irrigation lines with a minimum 100mm mulch or bark.
7) disposal area and reserve area setbacks in Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems.	Clearance to winter groundwater >0.6m as indicated by subsurface site investigations & site geology. >100m from closest mapped groundwater bores. No identified stormwater flow paths within 5m. Greater than 1.5m from site boundaries.
8) for septic tank treatment systems, a filter that retains solids greater than 3.5mm in size is fitted on the outlet.	N/A – assessment completed for secondary treated effluent.
9) reserve disposal areas requirements.	Sufficient area for a 30% reserve area exists and is shown on the Site Plan (Figure 1).
10) the on-site system is maintained so that it operates effectively at all times is undertaken in accordance with the manufacturer's specifications for maintenance.	Maintenance shall be in accordance with the manufacturers/suppliers' specifications.
11) the discharge does not contaminate any water supply or surface water.	Minimum treatment levels and water offsets to be complied with to prevent discharge contaminating any water supply or surface water.
12) there is no surface runoff or ponding of wastewater.	The disposal area and adjacent area are sloping and naturally contoured to prevent ponding. A suitable disposal rate has been adopted to prevent surface run off.
13) there is no offensive or objectionable odour beyond the property boundary.	Treatment specified in accordance with good practice requirements to prevent offensive odour.

Design Summary

1. For the proposed development a discharge area of 500m^2 and a reserve area of 150m^2 is required.
2. Install a secondary treatment plant capable of treating 870L/day to the requirements of the Northland Regional Council (NRC) Proposed Regional Plan. The plant shall be maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications.
3. Install pressure compensating dripper irrigation (PCDI) over 500m^2 within the area shown as suitable on Figure 1 – Site Plan. The dripper irrigation lines shall have drippers at 1m intervals and the lines shall be spaced at 1m centres. Each line shall not exceed 60m in length.
4. The dripper lines shall be pinned to the slope and buried or surface mulched to have a minimum of 100mm topsoil, mulch or bark cover or be within an area of established vegetation that has at least 80% canopy cover.
5. Maintain surface water controls to ensure no stormwater can enter the disposal area. It appears that the upslope road has a cross fall away from the site and will act as an upslope cutoff drain. The installer shall confirm the actual field location and install an upslope cutoff drain if surface flow from upslope is possible.
6. Access to the site shall be restricted, in particular if there is potential for stock to be onsite it shall be permanently fenced.
7. A reserve area of 150m^2 shall be set aside for future use as a disposal area.
8. Operate the system in accordance with the attached Onsite Effluent Maintenance and Operation plan.
9. The actual location/shape of the effluent area may be amended but shall remain within the areas shown as suitable on the attached Figure 1 – Site Plan. We have shown two example layouts.
10. The dwelling shall have standard water reduction fixtures comprising dual flush toilets, shower-flow restrictors, aerator faucets and water conserving washing machines. If standard water reduction fixtures are not adopted the design daily flow would increase to 1080L/day which would require a 617m^2 disposal field and a 185m^2 reserve area.

6. Applicability

This report has been prepared for the sole use of our client, Nicholas Bowler, for the particular brief and on the terms and conditions agreed with our client. It may not be used or relied on (in whole or in part) by anyone else, for any other purpose or in any other contexts, without prior written agreement.

The nature and continuity of the subsoil conditions onsite have been inferred from four machined drilled augers by others and one hand augered borehole by NGS. It must be appreciated that actual subsoil conditions could differ from those inferred. If the subsoil conditions differ in any way from those described in this report it is essential that Northland Geotechnical Specialists Ltd be contacted.

Authorised for Northland Geotechnical Specialists Limited by:

David Buxton

Geotechnical Engineer, BE Civil (Hons), CPEng, CMEngNZ

Attached:	Figure 1 – Site Plan	1 x A3 page
	Site investigation Logs, HA1 and MA01-MA04	5 x A4 pages
	Onsite effluent operation and maintenance plan	3 x A4 pages

ngs georpt_31 signal station rd_bowler_oct4

LEGEND:

- Property Boundary
- HA1 — Hand augered borehole location
- MA2 — Machine auger bore location (WJ)
- Proposed shed & dwelling locations
- 56 — 1.0m contour from 2019 NRC LiDAR
- Extent of area suitable for onsite effluent disposal
- 5 m — Onsite effluent disposal offset: dwelling 3m, BDY 1.5m, downslope drain 5m, pond/stream 15m
- PCDI Effuluent disposal area (500m^2)
- PCDI Effuluent reserve area (150m^2 - 30%)
- 10m downslope buffer zone for slopes >10deg

Alternative PCDI on-site effluent disposal area

Proposed Shed (approx 7m x 18m)

Proposed Dwelling (approx 150m^2)

Proposed PCDI on-site effluent disposal area

Swale drains upslope of accessway (min 5.0m offset for onsite effluent disposal)

Pond

Signal Station Road

MA1 MA2 MA3 MA4 HA1

10 m 5 m 1.5 m 3 m

0 20 40 60 80 100 m

NGS Northland Geotechnical Specialists

www.northlandgeotech.co.nz

NOTES:
Contours - NRC 20118/2019 LiDAR NZVD 1m intervals
Terrain shading from LiDAR DEM (if shown)
Aerial Map - Google Maps
Map Rotated 80 degrees from north

This figure is not for construction unless signed as approved
Approved: Date:

CLIENT **Nicholas Bowler**
PROJECT **Geotechncial Assessment**
LOCATION **31 Signal Station Road, Omapere**
TITLE **Site Plan**

Scale 1:750 @ A3

Project No. **0355**
Date **21/10/24**
By **DSB**
Figure No. **1**
Revision **0**

HAND AUGER LOG

NGS Northland Geotechnical Specialists

HOLE NO.: HA01

CLIENT: Nicholas Bowler

JOB NO.: 0355

PROJECT: Geotechnical assessment for new shed and dwelling

SITE LOCATION: 31 Signal Station Road, Hokianga

START DATE: 04/06/2024

CO-ORDINATES: 1634461mE, 6067026mN (NZTM)

ELEVATION: 81.5m (NZVD)

END DATE: 04/06/2024

LOGGED BY: DB

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 100mm)	VANE SHEAR STRENGTH (kPa) Vane: NGS Vane 2 - 19mm	WATER
	Clayey SILT, with trace organics; dark brown. Stiff, moist; low to high plasticity. Topsoil.		0.2				
	Clayey SILT, with some gravel and cobbles; brownish. Very stiff, moist; low to high plasticity.		0.4			205+ - 205+ -	Groundwater Not Encountered
	Refusal on likely gravels/cobbles from conglomerate. Dry on completion. EOH: 0.90m		0.6, 0.8, 1.0, 1.2, 1.4, 1.6, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8		5, 4, 3, 4, 3, 4, 3, 4, 4, 4, 15, 10, 12, 12, 11, 10, 14, 17, 16, 11		

REMARKS

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

HAND AUGER : MA01

JOB NO.: 130102 **SHEET:** 1 OF 4

START DATE: 09/11/2023 **NORTHING:** **GRID:**

CLIENT: Nicholas Bowler **DIAMETER:** 300mm **EASTING:**

PROJECT: Geotechnical Investigation and Assessment **SV DIAL:** DR4830 **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 86502, 31 Signal Station Road, Omapere **FACTOR:** 1.49 **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, dark brown, moist		0.0						
Omapere Conglomerate of Waipoua subgroup (Waitakere Group)	Silty CLAY, greyish brown, very stiff, moist, high-plasticity. Frequent gravel and cobble inclusions. Gravel is fine to coarse, greavel and cobbles rounded to sub-angular of intermixed, weathered cobble and pebble conglomerate.		0.2						
			0.4						
			0.6		209+	-	-		
			0.8						
			1.0		206	33	6.2		
			1.2						
			1.4		131	42	3.1		
			1.6						
			1.8						
			2.0		146	51	2.9		
			2.2						
			2.4		134	33	4.1		
	Slightly sandy, gravelly, slightly cobbly silty CLAY, greyish brown, very stiff, moist, high-plasticity. Sand is fine to coarse, gravel is fine to coarse of intermixed, weathered cobble and pebble conglomerate.		2.6	09/11/2023	164	30	5.5		
			2.8		149	45	3.3		
			3.0						
			3.2		60	30	2.0	2	
	EOH: 3.30m - Hole Collapse		3.4					2	
			3.6					3	
			3.8					2	
			4.0					3	
			4.2					2	
			4.4					4	
			4.6					2	
			4.8					3	
			5.0					3	
			5.2					3	
			5.4					3	
			5.6					3	
			5.8					4	
			6.0					3	
			6.2					4	
			6.4					9	
			6.6					8	
			6.8					4	
			7.0					4	
			7.2					3	
			7.4					4	
			7.6					22	
			7.8					11	
			8.0					8	
								18	
								11	
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								29	
								20	

REMARKS

End of borehole @ 3.30m (Target Depth: 5.00m)

Groundwater encountered @ 3.30m during drilling. Standing groundwater @ 2.70m.

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

LOGGED BY: NxA

CHECKED BY: SJP

▼ Standing groundwater level

▽ GW while drilling

WILTON JOUBERT Consulting Engineers

185 Waipapa Road, Kerikeri 0295
Phone: 09-945 4188
Email: jobs@wjl.co.nz
Website: www.wiltonjoubert.co.nz

HAND AUGER : MA02

JOB NO.: 130102 **SHEET:** 2 OF 4

START DATE: 09/11/2023 **NORTHING:** **GRID:**

CLIENT: Nicholas Bowler **DIAMETER:** 300mm **EASTING:**

PROJECT: Geotechnical Investigation and Assessment **SV DIAL:** DR4830 **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 86502, 31 Signal Station Road, Omapere **FACTOR:** 1.49 **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
Omapere Conglomerate of Waipoua subgroup (Waitakere Group)	Clayey SILT, brownish grey, very stiff, moist, low-plasticity.		0.2						
	Silty CLAY, greyish brown, very stiff, moist, high-plasticity. Frequent gravel and cobble inclusions. Gravel is fine to coarse, greavel and cobbles rounded to sub-angular of intermixed, weathered cobble and pebble conglomerate.		0.4						
			0.6						
			0.8		95	30	3.2		
			1.0		164	21	7.8		
			1.2						
			1.4		134	30	4.5		
			1.6						
			1.8		152	21	7.2		
			2.0		167	15	11		
			2.2						
			2.4		125	15	8.3		
			2.6						
			2.8						
			3.0		116	27	4.3		
			3.2		134	36	3.7		
			3.4						
			3.6		164	54	3.0		
			3.8						
			4.0		UTP	-	-		
			4.2	09/11/2023					
			4.4		UTP	-	-		
			4.6						
			4.8		UTP	-	-		
	Weathered Mudstone recovered as silty sandy GRAVEL with trace clay, dark grey, very stiff to hard, wet, non-plastic. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to subrounded.		5.0						
			5.2		149	54	2.8		
	EOH: 5.20m - Target Depth - End of Reach		5.4					3	
			5.6					4	
			5.8					4	
			6.0					7	
			6.2					4	
			6.4					4	
			6.6					4	
			6.8					5	
			7.0					7	
			7.2					11	
			7.4					10	
			7.6					12	
			7.8					10	
			8.0					10	
								9	
								10	
								13	
								19	
								20	
								19	
								20	

REMARKS

End of borehole @ 5.20m (Target Depth: 5.00m)

Groundwater encountered @ 4.70m during drilling. Standing groundwater @ 4.20m.

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

LOGGED BY: NxA

CHECKED BY: SJP

▼ Standing groundwater level

▽ GW while drilling

WILTON JOUBERT Consulting Engineers

185 Waipapa Road, Kerikeri 0295
Phone: 09-945 4188
Email: jobs@wjl.co.nz
Website: www.wiltonjoubert.co.nz

HAND AUGER : MA03

JOB NO.:	130102	**SHEET:**	3 OF 4
START DATE:	09/11/2023	**NORTHING:**	**GRID:**
DIAMETER:	300mm	**EASTING:**	
SV DIAL:	DR4830	**ELEVATION:**	Ground
FACTOR:	1.49	**DATUM:**	

CLIENT: Nicholas Bowler

PROJECT: Geotechnical Investigation and Assessment

SITE LOCATION: Lot 1 DP 86502, 31 Signal Station Road, Omapere

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
Omapere Conglomerate of Waipoua subgroup (Waitakere Group)	Silty CLAY, greyish brown, very stiff, moist, high-plasticity. Abundant gravel and cobble inclusions. Gravel is fine to coarse, greavel and cobbles rounded to sub-angular of intermixed, weathered cobble and pebble conglomerate.		0.2						
			0.4						
			0.6		122	63	1.9		
			0.8						
			1.0		194	42	4.6		
			1.2		149	57	2.6		
			1.4		194	27	7.2		
			1.6		209+	-	-		
			1.8						
			2.0						
			2.2		134	89	1.5		
			2.4						
			2.6		176	15	12		
	Slightly sandy, slightly gravelly clayey SILT, grey mottled greenish grey and orangish brown, very stiff, moist, low-plasticity. Occasional cobbles. Gravel is fine to coarse, rounded to sub-angular.		2.8		119	54	2.2		
			3.0		107	42	2.5		
			3.2		113	45	2.5		
	Clayey gravelly SILT, dark bluish green, very stiff, wet, low-plasticity. (Completely weathered MUDSTONE).		3.4						
			3.6		92	39	2.4		
			3.8						
			4.0		122	24	5.1		
			4.2						
			4.4		134	66	2.0		
	Weathered Mudstone recovered as silty GRAVEL with trace clay, dark grey, very stiff to hard, wet, non-plastic. Gravel is sub-angular to subrounded.		4.6	▼ 09/11/2023					
			4.8		95	36	2.6		
			5.0		194	27	7.2		
			5.2						
	EOH: 5.30m - Target Depth - End of Reach		5.4					6	
			5.6					2	
			5.8					3	
			6.0					4	
			6.2					3	
			6.4					3	
			6.6					20	
			6.8						
			7.0						
			7.2						
			7.4						
			7.6						
			7.8						
			8.0						

REMARKS

End of borehole @ 5.30m (Target Depth: 5.00m)

Standing groundwater @ 4.70m.

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

LOGGED BY: NxA

CHECKED BY: SJP

▼ Standing groundwater level

▽ GW while drilling

WILTON JOUBERT Consulting Engineers

185 Waipapa Road, Kerikeri 0295
Phone: 09-945 4188
Email: jobs@wjl.co.nz
Website: www.wiltonjoubert.co.nz

HAND AUGER : MA04

JOB NO.: 130102 **SHEET:** 4 OF 4

START DATE: 09/11/2023 **NORTHING:** **GRID:**

CLIENT: Nicholas Bowler **DIAMETER:** 300mm **EASTING:**

PROJECT: Geotechnical Investigation and Assessment **SV DIAL:** DR4830 **ELEVATION:** Ground

SITE LOCATION: Lot 1 DP 86502, 31 Signal Station Road, Omapere **FACTOR:** 1.49 **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, dark grey, moist	TS	0.0						
Omapere Conglomerate of Waipoua subgroup (Waitakere Group)	Silty CLAY, greyish brown, very stiff, moist, high-plasticity. Frequent gravel and cobble inclusions. Gravel is fine to coarse, greavel and cobbles rounded to sub-angular of intermixed, weathered cobble and pebble conglomerate.		0.2						
			0.4						
			0.6		179	24	7.5		
			0.8						
			1.0		95	27	3.5		
			1.2						
			1.4		107	18	5.9		
			1.6		152	48	3.2		
			1.8						
			2.0		134	36	3.7		
			2.2		164	54	3.0		
	Slightly sandy, slightly gravelly clayey SILT, grey mottled greenish grey and orangish brown, very stiff, moist, low-plasticity. Occasional cobbles. Gravel is fine to coarse, rounded to sub-angular.		2.4		89	30	3.0		
			2.6		134	30	4.5		
			2.8		113	27	4.2		
			3.0						
			3.2	09/11/2023	116	15	7.7		
	3.3m: Becoming saturated, very gravelly.		3.4		122	30	4.1		
			3.6		164	36	4.6		
	Clayey gravelly SILT, dark bluish green, very stiff, moist, low-plasticity. (Completely weathered MUDSTONE).		3.8						
			4.0		209+	-	-		
			4.2		137	45	3.0		
			4.4		173	60	2.9		
	Weathered Mudstone recovered as silty GRAVEL with trace clay, dark grey, very stiff to hard, wet, non-plastic. Gravel is sub-angular to subrounded.		4.6		UTP	-	-	2	
			4.8		UTP	-	-	2	
	EOH: 4.70m - Target Depth - End of Reach		5.0					2	
			5.2					1	
			5.4					5	
			5.6					10	
			5.8					26	
			6.0					27	
			6.2						
			6.4						
			6.6						
			6.8						
			7.0						
			7.2						
			7.4						
			7.6						
			7.8						
			8.0						

SOIL DESCRIPTION: TOPSOIL, CLAY, SAND, PEAT, FILL, SILT, GRAVEL, ROCK

REMARKS

End of borehole @ 4.70m (Target Depth: 5.00m)

Groundwater encountered @ 4.40m during drilling. Standing groundwater @ 3.20m.

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

LOGGED BY: NxA

CHECKED BY: SJP

▼ Standing groundwater level

▽ GW while drilling

WILTON JOUBERT Consulting Engineers

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Project Ref: 0355
21 October 2024

Onsite Effluent Operation and Maintenance Plan
31 Signal Station Road, Omapere, Lot 1 DP86502

Purpose

Home owners are legally required to keep their onsite treatment and disposal system in good working order. The purpose of this operation and maintenance plan is to outline the main requirements you, as the homeowner, are required to undertake to ensure the onsite effluent treatment and disposal system installed onsite operates effectively. The system supplier may also have supplied additional operation and maintenance guidance.

Treatment Plant Size

The size of your system is limited by both the plant (either a septic tank or proprietary secondary treatment plant) to treat the effluent and the capacity of the soakage system to dispose of the effluent.

Overloading the treatment plant, either by excess water volumes or with products requiring treatment (i.e. food waste, fats, soap etc.) will result in poorly treated effluent. Overloading the disposal field can result in surface breakout of effluent (i.e. seepage emerging from the ground surface) and a reduction of the long-term soakage ability of the soil. Both situations result in health risks by potentially allowing exposure to under/untreated effluent, and environmental risks due to possible undesired effluent flow paths.

Your plant has been sized for a long-term occupancy of six people (based on a four-bedroom house) in a house with roof water supply and standard water reduction fixtures resulting in 870 litres of effluent per day.

Appropriate Use of Products

Products used for household purposes such as cleaning and all forms of washing that are disposed to the effluent system must be appropriate/compatible with your system. The treatment system utilises bacteria which can be killed by inappropriate products, resulting in treatment system breakdown and leading to disposal field failure and offensive odours from the treatment system.

Only products labelled as suitable for onsite effluent treatment systems must be used in the household. This includes:

1. Use biodegradable soaps
2. Use low-phosphorus detergent
3. Use low-sodium detergent in dispersive soil areas
4. Use the minimum amount of detergent required
5. Don't use powerful bleaches, whiteners, nappy soakers, spot removers and disinfectants
6. Don't put chemicals, antibiotics or paint down the drain

Water Reduction Requirements

To minimise disposal field size and/or on sites with limited space, specific water usage reduction measures may be required. Standard water reduction fixtures including dual flush toilets, shower-

flow restrictors, aerator faucets (taps) and water-conserving automatic washing machines (i.e. modern standard appliances) have been specified on your site and shall be maintained.

Minimisation of water use will however make your system last longer and improve its performance. Water minimisation measures include:

1. Installation of water conservation fittings
2. Taking showers instead of baths
3. Washing clothes only when there is a full load
4. Running the dishwasher only when full
5. Avoiding days of peak high usage, for example not doing all the washing on one day or running the washing machine and dishwasher at the same time.
6. Never allow stormwater to enter gully traps. Gully traps must be raised above ground level to prevent this.

Minimisation of Sludge Build up

With time, sludge will build up in the septic tank that forms part of your system and this will require periodic removal. Sludge build up can be minimised by:

1. Keeping all solids out of the system (e.g. avoid washing dirt down a sink)
2. Removing all food waste (particularly oils and grease) from dishes and disposing to waste prior to washing
3. Don't use a garbage grinder unless the system has been specifically designed for it
4. Don't put sanitary napkins, other hygiene products or disposable nappies into the system

Septic Tank Maintenance

Septic tanks accumulate sludge over time and the sludge requires removal (pumping out). The frequency depends on site conditions, tank size and usage. De-sludging shall be undertaken every 3 to 5 years or sooner if sludge occupies more than two thirds of the tank volume depending on site conditions, tank size and usage. The septic tank shall be inspected, and the sludge level checked at periods of not more than 3 years, or sooner if required by the manufacture's recommendations.

The following is also required:

1. The tank shall be protected from vehicles
2. Any grease traps shall be cleaned out regularly
3. The vents and covers shall remain exposed
4. The outlet filter shall be inspected and cleaned regularly

Secondary Treatment Plant Maintenance

Secondary treatment plants are proprietary and typically include mechanical plant (i.e. pumps and air blowers) and electrical controls. The nature of the mechanical and electrical items and their maintenance requirements vary between manufacturers and plant type. A detailed operation and maintenance plan specific to your plant will have been provided by the supplier and shall be implemented. This will likely include regular checks to ensure the plant is operating correctly, cleaning and/or flushing of filters and disposal lines and a contingency plan/trouble shooting guide to diagnose problems, potential causes and advice on determining response actions.

It is a permitted activity requirement under the Northland Regional Council Proposed Regional Plan that the treatment plant is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications.

Disposal Field

The disposal field is the area where the treated effluent soaks away into the ground. The disposal field shall be maintained as follows:

1. Fencing (if required) shall be maintained. Stock shall be excluded from the disposal field at all times as they may pug the ground and damage the pipes and soil drainage characteristics.
2. No vehicles shall be driven over the disposal area.
3. Surface drainage shall be maintained to avoid surface water entering the soakage area. Surface drainage typically comprises shallow surface drainage channels to divert stormwater around the disposal area.
4. Vegetation in the disposal area shall be appropriate. Deep rooting trees or shrubs should not be planted over trenches or pipes. Grass should be kept tidily mown to improve evapotranspiration of the area.

Further Information

Further information, including a list of suitable plants for your disposal field and a guide to looking after your system can be found on the Northland Regional Council Website – search for “NRC Septic tanks and sewage systems” or follow this link:

www.nrc.govt.nz/resource-library-summary/publications/waste/septic-tanks-and-sewerage-systems/

File: 0356 effluent operation and maintainance schedule

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

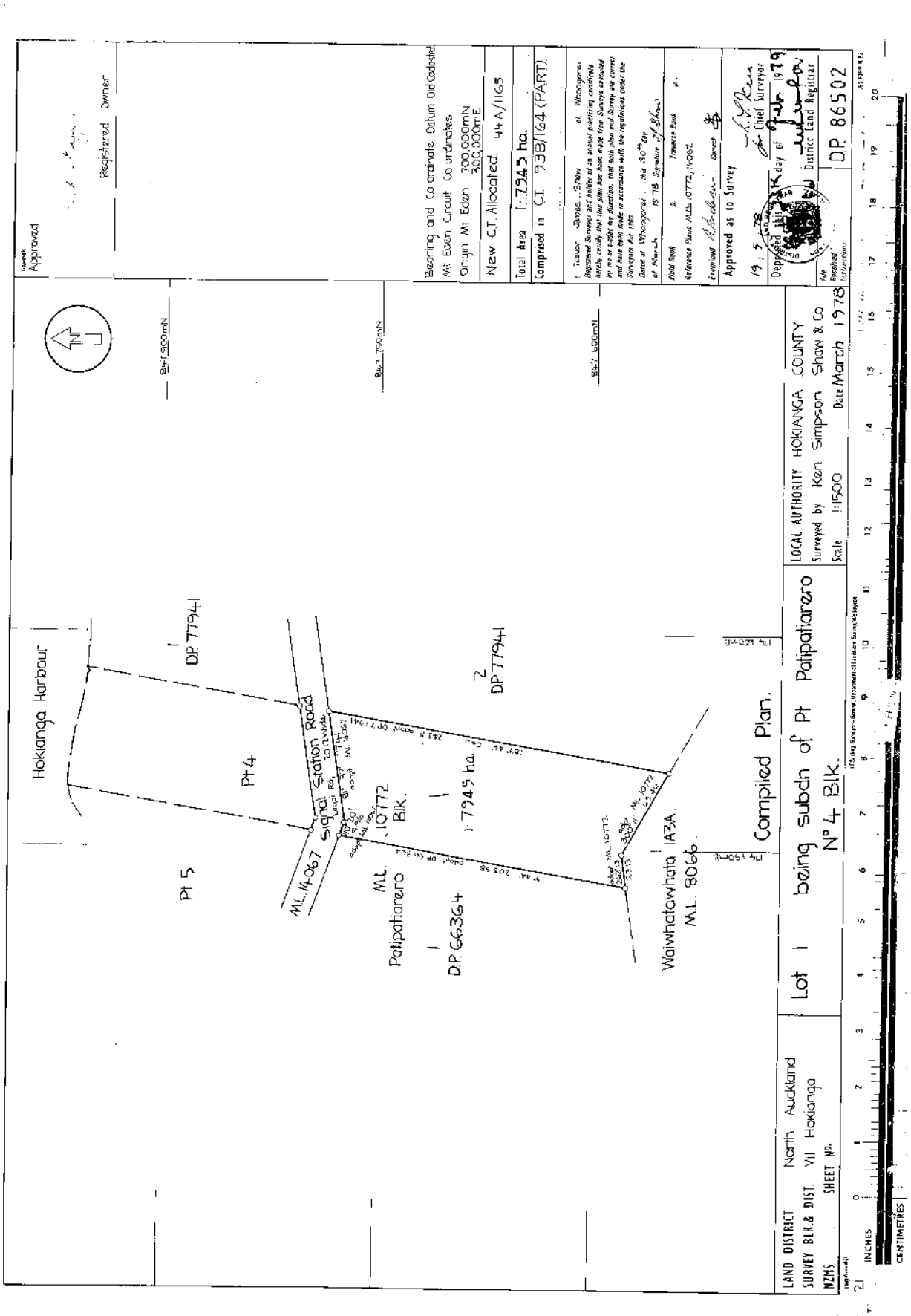
Identifier	**NA44A/1165**
Land Registration District	**North Auckland**
Date Issued	13 February 1979

Prior References
NA938/164

Estate	Fee Simple
Area	1.7945 hectares more or less
Legal Description	Lot 1 Deposited Plan 86502
Registered Owners	

Nicholas Paul Bowler

Interests


Hokianga Harbour
Pt 5
Pt 4
1 DP 77941
2 DP 77941
Signal Station Road
ML 14067
ML 10772 Blk
Patipatiarero
1 DP 66364
1.7945 ha.
Waiwhatawhata IA2A
ML 8066
Compiled Plan.
Lot 1 being subdn of Pt Patipatiarero N° 4 Blk.
LAND DISTRICT North Auckland
SURVEY BLK.& DIST. Vil Hokianga
NZMS SHEET №.
LOCAL AUTHORITY HOKIANGA COUNTY
Surveyed by Ken Simpson Shaw & Co
Scale 1:1500 Date March 1978
Bearing and Co ordinate Datum Old Cadastral
Mt Eden Circuit Co ordinates
Origin Mt Eden 700,000mN 300,000mE
New C.T. Allocated 44A/1165
Total Area 1.7943 ha.
Comprised in C.T. 938/164 (PART)
Approved as to Survey
Deposited this 7th day of June 1979
Chief Surveyor
DP 86502
Approved
Registered Owner
INCHES
CENTIMETRES

View Pending Transactions

Dealing Number	13320686
Status	Lodged
Date and Time Lodged	06/06/2025 07:00:00
Lodged By	Regulatory & Customer Services Department - Far North District Council (Kaikohe)
Lodged For	Regulatory & Customer Services Department - Far North District Council (Kaikohe)

Associated Instruments

Instrument Number	Instrument Type	Status
13320686.1	Building Act 2004 - Notification of Condition - s73(1)(c) & 73(3)	Lodged

Non-Reticulated Firefighting Water Supplies, Vehicular Access & Vegetation Risk Reduction Application for New and Existing Residential Dwellings and Sub-Divisions

Contents

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:	Nicholas Bowler
Address:	79B Curtis Road, Rawene, 0473
Contact Details:	021 211 4065
Return Email Address:	bowler.mrnik@gmail.com

Section C – Property Details

Property Details	
Address of Property:	29 Signal Station Road, Omapere, 0437
Lot Number/s:	Lot 1 DP 86502
Dwelling Size: (Area = Length & Width)	169m2 house, 44m2 cabin
Number of levels: (Single / Multiple)	Dwelling - Single, Cabin – Two Levels (upper floor is mezzanine)

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 5 metres minimum (depends on chosen parking space – see site plan).	

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: There is one section of the driveway at approximately 17 degrees; we can concrete this section if necessary. The entire accessway is currently compacted gravel over 4M wide. Suitable access is provided.

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 15,000 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: 100,000L
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.

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: We will have markers directing the fire service to the tank location.

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: We have a locked gate. Will use a cable tie on the valve.

Internal FENZ Risk Reduction comments only: Click or tap here to enter text.

3. 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: This tank is separate from stormwater and overflow. It will be dedicated to firefighting unless we need to take a maximum of 10,000L out in case of drought. There will be a clear marker showing this limit, and we will strictly observe the amount. This is a water storage tank of 25,000L separate from the house and garden water supply and it will be manually filled and manually extracted from if necessary.

Internal FENZ Risk Reduction comments only:
Click or tap here to enter text.

4. 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.

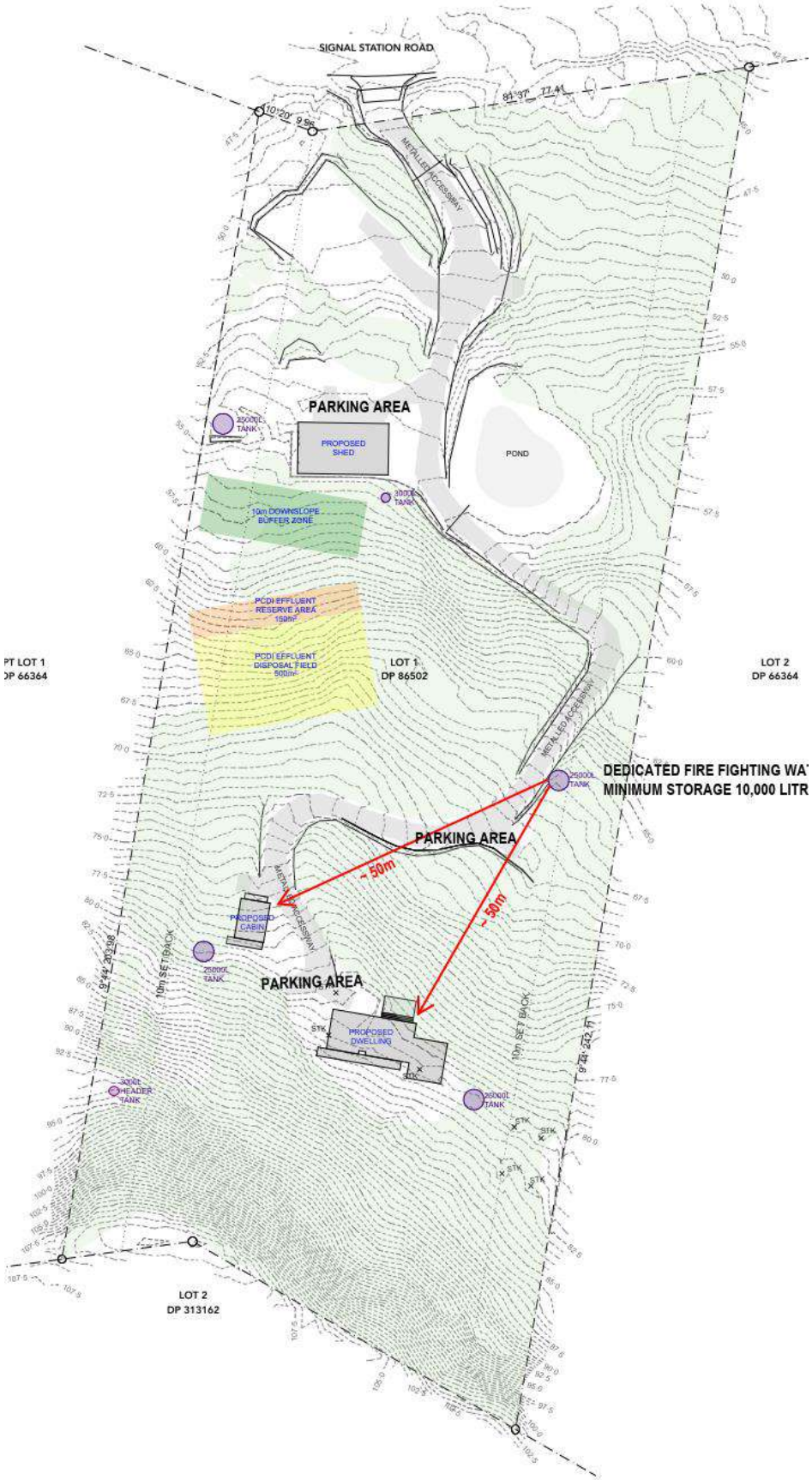
Appendix H describes a method for determining the maximum fire size in a structure. Appendix J describes a method for assessing the adequacy of the firefighting water supply to the premises.

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.

5. 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.

6. 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

Zone 1 around Dwelling and Cabin.
we will keep surfaces mown, or gravel covered around all buildings.
Bush areas in zones 1 and 2 will be kept free of deadwood, thinned and pruned.

Tall trees - we want to ask for an exemption for some of our tall trees as they screen the house from public spaces - we want to work with the fire service to make this safe and reasonable-

We will cut down all manuka and kanuka within 5m of the house and cabin and prune deadwood from all trees within 30m of the house and cabin.
We will cut down most manuka and kanuka within 10m of the house and cabin, leaving only a few feature trees that are separated by at least 6m with crowns that are at least 5m from the ground.

We will leave some less flammable mature cabbage trees, and kawakawa within 3m of the house and cabin but remove any dead wood or leaves.

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 . Nicholas Bowler Dated: 16/05/2025

Contact No.:021 211 4065.

Email:bowler.mrnik@gmail.com

Signature: N Bowler

9. Approval

In reviewing the information that you have provided in relation to your application being approximately a 69m2 house + 44m2 cabin. *square metre.*

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 en

P.P on behalf of the Area Manage

Fire and Emergency New Zealand
Te Tai Tokerau / Northland District

APPROVED
By GoffinJ at 10:14 am, May 20, 2025

Jason Goffin- Advisor Risk Reduction

Natalie Watson

From: Te Hono Support <tehonosupport@fndc.govt.nz>
Sent: Tuesday, 25 February 2025 9:13 am
To: Natalie Watson
Subject: RE: Signal Station Road, Omapere - Request for Iwi contacts

Follow Up Flag: Follow up
Flag Status: Flagged

Kia Ora Natalie.

These are the two iwi contacts Snow Tane gm@teroroa.iwi.nz (Te Roroa), Mane Tahere chair@ngapuhi.org (Ngapuhi). If you also require hapu engagement Cheryl Turner wally0494@xtra.co.nz, Sheena Ross nikiana06@yahoo.co.nz, John Klaracich lilajohnk@gmail.com .

Mauri Ora

From: Natalie Watson <nat@saps.co.nz>
Sent: Monday, February 24, 2025 1:19 PM
To: Te Hono Support <tehonosupport@fndc.govt.nz>
Subject: Signal Station Road, Omapere - Request for Iwi contacts

Good afternoon,

I was wondering if you could please supply me with the contact details of local Iwi who may have an interest in a resource consent application at Signal Station Road, in Omapere?

Thank you,
Natalie Watson

WILLIAMS & KING
P +64 9 407 6030
27 Hobson Ave
P.O. Box 937, Kerikeri 0230, NZ
http://www.saps.co.nz

22nd May 2025

Far North District Council

Memorial Avenue

Kaikohe

Mark Ambler (Chairman, Kaikorero)

Ngati Korokoro Hapu

7771 State Highway 12

RD3 Kaikohe 0473

Sheena Ross (Chairman/Secretary,Kaikorero)

Ngati Korokoro Hapu Trust

15 Taita Road

Counter Delivery 0473

Waimamaku

Northland

Email: nikiana06@yahoo.co.nz

Kia ora,

Re; Resource Consent 31 Signal Station Road Nicholas Bowler & Nicky Sullivan

On the 14th May 2025 Ngati Korokoro Hapu:Ngati Korokoro Hapu Trust held an on-site meeting with Nicholas Bowler and Nicky Sullivan of 31 Signal Station Road, Omapere.

We spoke with Nicholas and Nicky in what their aspirations were, they showed us how they have replanted trees back into papatuanuku.

Mark went up to where they are wanting to build. We are happy with what they are doing in removing of trees to make way for the build and to protect the proposed buildings, as well as the proposed placement of the house, cabin, and shed.

We must compliment about the mahi they have done in creating access to the building platforms, they have tried to retain much natural environment as possible, and they are replanting and repositioning natives a lot of work went into doing this.

We are aware of how close that they are to Patipatiparero but found no danger to the wahi tapu, as they will not be disturbing that area.

However, we did state if they come across any kowiwi, or taonga Ngati Korokoro Hapu: Ngati Korokoro Hapu Trust need to be contacted immediately.

So therefore, we support the Resource Consent of Nicholas Bowler & Nicky Sullivan of 31 Signal Station Road, Omapere.

Nga mihi

M. Ambler

Mark Ambler (Chairman/Kaikorero) Ngati Korokoro Hapu

S Ross

Sheena Ross (Chairperson/Kaikorero) Ngati Korokoro Hapu Trust

Natalie Watson

From: Nik Bowler <bowler.mrnik@gmail.com>
Sent: Tuesday, 27 May 2025 10:41 am
To: Natalie Watson
Subject: Fwd: Response to Bowler N -29 Signal Station Road - Pond Status
Attachments: Ecological Impact Assessment for Bowler Resource Consent on Signal Station Road.pdf

---------- Forwarded message ---------
From: **Paul Maxwell** <PaulM@nrc.govt.nz>
Date: Tue, 27 May 2025 at 10:31 AM
Subject: Response to Bowler N -29 Signal Station Road - Pond Status
To: Nik Bowler <bowler.mrnik@gmail.com>

Tēnā koe Nick,

Thank you for your email and the attached report.

The report clearly describes the site and its current state and attached photographic records sourced from Retrolens provides clear evidence that the pond was constructed and associated water body and vegetation would not be considered natural inland wetland as defined by the National Policy Statement for Freshwater 2020 (NPS) or for the purpose of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES- FW).

The NPS defines Natural inland Wetland as:

natural inland wetland means a wetland (as defined in the Act) that is not:

(a) in the coastal marine area; or

(b) a deliberately constructed wetland, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural inland wetland; or

(c) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or

(d) a geothermal wetland; or

(e) a wetland that:

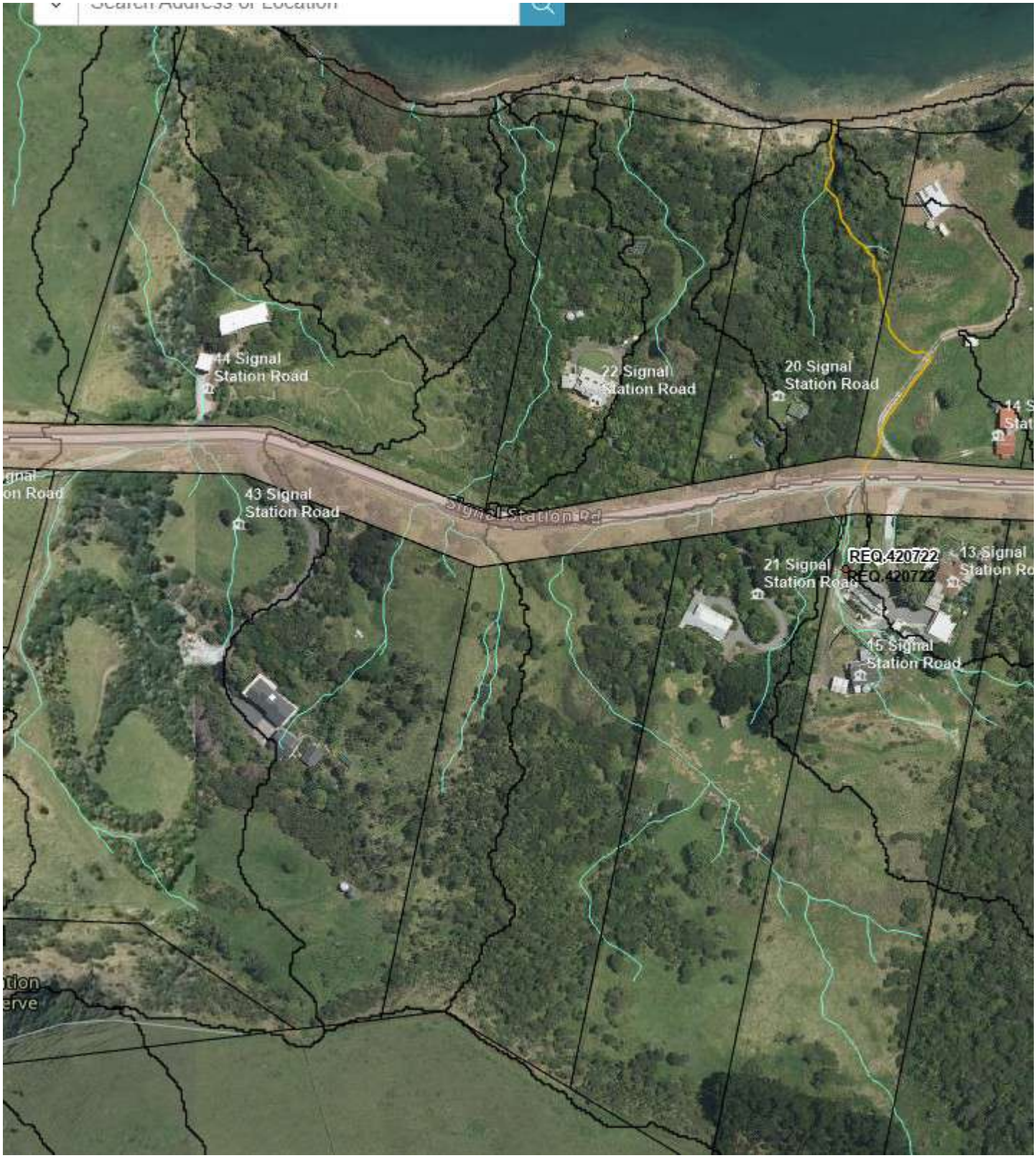
  (i) is within an area of pasture used for grazing; and

  (ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the *National List of Exotic Pasture Species* using the *Pasture Exclusion Assessment Methodology* (*see* clause 1.8)); unless

  (iii) the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply

The report provides clear evidence that the pond was constructed and associated vegetation that has developed in and around the constructed water body is not a natural inland wetland in accordance with clause b) and c) of the definition.

The NRC Digital River Network (DRN) Watershed and stream line - GIS layer identifies the overland flow path across the property as being 'ephemeral' in nature (blue line on the image below) , so therefore is not considered to be a river or stream for the purpose of the Resource Management Act 1991, NES FW, or Regional Plan or District Plans. (Note intermittently flowing streams are indicated as a yellow line)



Earthworks to establish accessways and building platforms. The topographic Plan in the report indicates that the total amount of area that may have been 'open' at any time will be well within the 5,000 square meter threshold for permitted earthworks activities (Rule C.8.1) in the Proposed Regional Plan for Northland. https://www.nrc.govt.nz/media/2yojfgax/proposed-regional-plan-february-2024.pdf

The permitted earthworks rule is attached to this email below.

All the best for your project.

Ngā mihi

Paul Maxwell

Coastal & Works Consents Manager
Northland Regional Council » Te Kaunihera ā rohe o Te Taitokerau

Ph 0800 002 004

C.8.3.1 Earthworks – permitted activity

Earthworks outside the bed of a river, lake, wetland, īnanga spawning site and the coastal marine area, and any associated damming and diversion of stormwater and discharge of stormwater onto or into land where it may enter water, are permitted activities provided:

1) the area and volume of earthworks at a particular location or associated with a project complies with the thresholds in *Table 15: Permitted activity earthworks thresholds*.

Table 15: Permitted activity earthworks thresholds

Location	Earthworks thresholds
Within 10m of a natural wetland, the bed of a continually or intermittently flowing river or lake	200m^2 of exposed earth at any time, and 50m^3 of moved or placed earth in any 12-month period.
Within 10m of an īnanga spawning site	200 m^2 of exposed earth at any time, and 50m^3 of moved or placed earth in any 12-month period.
Catchment of an Outstanding Lake	2,500m^2 of exposed earth at any time.
Erosion-prone Land	2,500m^2 of exposed earth at any time.
High-risk flood hazard area	50m^3 of moved or placed earth in any 12-month period.
Coastal riparian and foredune management area	Excluding for coastal dune restoration, 200m^2 of exposed earth at any time.
Flood hazard area	100 m^3 of moved or placed earth in any 12-month period.
Other areas	5,000m^2 of exposed earth at any time.

2) the discharge is not within 20 metres of a geothermal surface feature, and

3) except for coastal dune restoration activities, good management practice erosion and sediment control measures equivalent to those set out in the *Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016 (Auckland Council Guideline Document GD2016/005)*, are implemented for the duration of the activity, and

4) batters and side castings are stabilised to prevent slumping, and

5) exposed earth is stabilised upon completion of the earthworks to minimise erosion and avoid slope failure, and

6) earth and debris are not deposited into, or in a position where they can enter, a natural wetland, a continually or intermittently flowing river, a lake, an artificial watercourse, or the coastal marine area, and

7) the earthworks activity does not:

   a) reduce the height of a dune crest in a coastal riparian and foredune management area, except where dunes are recontoured to remove introduced materials or to remediate dune blow-outs as part of coastal dune restoration work, or

   b) exacerbate flood or coastal hazard risk on any other property, or

   c) create or contribute to the instability or subsidence of land on other property, or

d) divert flood flow onto other property, and

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8) any associated damming, diversion and discharge of stormwater does not give rise to any of the following effects in the receiving waters beyond the zone of reasonable mixing:

   a) any conspicuous change in colour or visual clarity, or

   b) the rendering of freshwater unsuitable for consumption by farm animals, or

   c) contamination which may render freshwater taken from a mapped priority drinking water abstraction point (refer I Maps | Ngā mahere matawhenua) unsuitable for human consumption after existing treatment, and

9) information on the source and composition of any clean fill material and its location within the disposal site are recorded and provided to the Regional Council on request, and

10) the Regional Council's Compliance Manager is given at least five working days' notice (in writing or by email) of any earthworks activity being undertaken within a high-risk flood hazard area, flood hazard area, where contaminated land will be exposed, or in sand dunes within a coastal riparian and foredune management area.

Notes:

1) *Work affecting archaeological sites is subject to an authority process under the Heritage New Zealand Pouhere Taonga Act 2014. If any activity could modify, damage or destroy any archaeological site(s), an authority (consent) from Heritage New Zealand must be obtained for the work to proceed lawfully.*

2) *This rule enables progressive closure and stabilisation works being utilised as part of a continuing project to remain within the permitted thresholds.*

3) *The thresholds identified within Table 15: Permitted Activity Earthworks Thresholds apply to the land disturbance activity, irrespective of whether or not the activity occurs on contaminated land or potentially contaminated land. Discharges from contaminated land or potentially contaminated land are provided for under C.6.8 Contaminated Land, while the territorial authority is responsible for managing the disturbance of contaminated land.*

For the avoidance of doubt this rule covers the following RMA activities:

- Earthworks (s9(2)).
- Damming and diversion of stormwater associated with earthworks (s14(2)).
- Discharge of stormwater associated with earthworks into water or onto or into land where it may enter water (s15(1)).

From: Nik Bowler <bowler.mrnik@gmail.com>
Sent: Friday, 16 May 2025 9:39 am

To: Paul Maxwell <PaulM@nrc.govt.nz>
Subject: 29 Signal Station Road - Pond

Hi Paul,

As we discussed yesterday, I have attached our draft ecological report for the resource consent application for our building project at 29 Signal Station Road.

The relevant part relating to the pond is on page 2 (and appendix page 8).

Could you please provide guidance regarding our classification of this pond - as not a natural inland wetland - and, therefore, not a resource consent issue?

I'm looking forward to hearing from you.

Cheers

Nik