Far North District Council

Private Bag 752, Memorial Ave
Kaikohe 0440, New Zealand
Freephone: 0800 920 029
Phone: (09) 401 5200
Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz
Website: www.fndc.govt.nz

Office Use Only
Application Number:

APPLICATION FOR RESOURCE CONSENT OR FAST-TRACK RESOURCE CONSENT

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA))
(If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Form 9)

Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges – both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a Council Resource 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):

- (X) Land Use
- O Fast Track Land Use*
- O Subdivision
- O Discharge
- O Extension of time (s.125)
- O Change of conditions (s.127)
- O Change of Consent Notice (s.221(3))
- O Consent under National Environmental Standard (e.g. Assessing and Managing Contaminants in Soil)
- O Other (please specify) _____

***The fast track for simple land use consents is restricted to consents with a controlled activity status and requires you provide an electronic address for service.**

3. Would you like to opt out of the Fast Track Process? Yes / No

4. Applicant Details:

Name/s: Advance Build

Electronic Address for Service (E-mail): [redacted]

Phone Numbers: [redacted] Home: _____

Postal Address: (*or* alternative method of service under section 352 of the Act) Po Box 111, Kerikeri

Post Code: 0245

5. Address for Correspondence: *Name and address for service and correspondence (if using an Agent write their details here).*

Name/s: CPPC Planning - Claire Phillips

Electronic Address for Service (E-mail): [redacted]

Phone Numbers: [redacted] Home: _____

Postal Address: (*or* alternative method of service under section 352 of the Act) Po Box 550, Warkworth

Post Code: 0941

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

6. 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: Philip Kingston and Louise George

Property Address/: Location: Po Box 5, Piha

7. Application Site Details:

Location and/or Property Street Address of the proposed activity:

Site Address/ Location: Lot 8, 1000 Sandhills Rd, Ahipara Or 121 Tiromoana Way, Ahipara

Legal Description: Lot 8 DP XXXXXXX Val Number:

Certificate of Title:

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

Site Visit Requirements:

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

Is there a dog on the property? Yes / No

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

Please give 24 to 48 hours notice before site visit so we can advise owners

8. Description of the Proposal:

Please enter a brief description of the proposal here. Attach a detailed description of the proposed activity and drawings (to a recognized scale, e.g. 1:100) to illustrate your proposal. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

Consent to relocate a new pre built dwelling to site.
Please refer to the AEE for further details.

Please note that the S224c is almost issued for the subdivision - bonds have been paid

If this is an application for an Extension of Time (s.125); Change of Consent Conditions (s.127) or 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) or extension being sought, with reasons for requesting them.

9. Would you like to request Public Notification

Yes/No

10. Other Consent required/being applied for under different legislation (more than one circle can be ticked):

(X) Building Consent (BC ref # if known) EBC-2024-942

O Regional Council Consent (ref # if known)

O National Environmental Standard consent

O Other (please specify)

11. 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 (further information in regard to this NES is available on the Council's planning web pages):

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)

O yes (X) no O don't know

Is the proposed activity an activity covered by the NES? (If the activity is any of the activities listed below, then you need to tick the 'yes' circle).

O yes (X) no O don't know

O Subdividing land

O Changing the use of a piece of land

O Disturbing, removing or sampling soil

O Removing or replacing a fuel storage system

12. 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.

Please attach your AEE to this application.

13. 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 all names in full) Advance Build Ltd

Email: angela@advancebuild.co.nz

Postal Address: Po Box 111, Kerikeri, Northland

Post Code: 0245

Phone Numbers: Work: [redacted] Home: _____ Fax: _____

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.

Nam[redacted] (please print)

Sign[redacted] (signature of bill payer – **mandatory**) Date: 10/06/24

14. 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.

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

Name: [redacted] (please print)

Signatu[redacted] (signature) Date: 10/06/24

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

Checklist (please tick if information is provided)

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

Only one copy of an application is required, but please note for copying and scanning purposes, documentation should be:

UNBOUND **SINGLE SIDED** **NO LARGER THAN A3 in SIZE**

CPPC PLANNING
PLANNING DEVELOPMENT CONSULTANT

PO Box 550, Warkworth 0941
Mobile: 021 302 340
Email: claire.phillips1@xtra.co.nz
Web: www.cppcplanning.co.nz

RESOURCE CONSENT APPLICATION AT A PROPERTY AT LOT 8 – 121 TIROMOANA WAY, AHIPARA

JUNE 2024

DELIVERING QUALITY PLANNING

CONTENTS

APPLICANT DETAILS 4
PROPOSAL DESCRIPTION 5
SITE DESCRIPTION, BACKGROUND AND CONSENT NOTICE 7
SITE DESCRIPTION 7
BACKGROUND 9
CONSENT NOTICE 10
STATUTORY ASSESSMENT 12
FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN 12
FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN 13
PUBLIC NOTIFICATION ASSESSMENT 14
ASSESSMENT OF STEPS 1 TO 4 (SECTION 95A) 14
STEP 1: MANDATORY PUBLIC NOTIFICATION IN CERTAIN CIRCUMSTANCES 14
STEP 2: IF NOT REQUIRED BY STEP 1, PUBLIC NOTIFICATION PRECLUDED IN CERTAIN CIRCUMSTANCES 14
STEP 3: IF NOT PRECLUDED BY STEP 2, PUBLIC NOTIFICATION REQUIRED IN CERTAIN CIRCUMSTANCES 14
STEP 4: PUBLIC NOTIFICATION IN SPECIAL CIRCUMSTANCES 15
ASSESSMENT OF ENVIORNMENTAL EFFECTS 16
EXISTING ENVIRONMENT AND PERMITTED BASELINE 16
ENVIRONMENT 16
PERMITTED BASELINE 16
PERSONS WHO HAVE GIVEN THEIR WRITTEN APPROVAL 16
ASSESSMENT OF EFFECTS 16
RESIDENTIAL CHARACTER AND AMENITY VALUES 16
PRESERVATION OF NATURAL CHARACTER 17
CULTURAL/HISTORIC HERITAGE 18
TRAFFIC AND ACCESS EFFECTS 18
DUST, NOISE AND VIBRATION EFFECTS 18
WATER QUALITY EFFECTS 19
NATURAL HAZARDS AND SERVICING EFFECTS 19

SUMMARY 20
LIMITED NOTIFICATION ASSESSMENT 20
ASSESSMENT OF STEPS 1 TO 4 (SECTION 95B) 20
STEP 1: CERTAIN AFFECTED PROTECTED CUSTOMARY RIGHTS GROUPS MUST BE NOTIFIED 20
STEP 2: IF NOT REQUIRED BY STEP 1, LIMITED NOTIFICATION PRECLUDED IN CERTAIN CIRCUMSTANCES 20
STEP 3: IF NOT PRECLUDED BY STEP 2, CERTAIN OTHER AFFECTED PERSONS MUST BE NOTIFIED 20
STEP 4: FURTHER NOTIFICATION IN SPECIAL CIRCUMSTANCES 21
SECTION 95E STATUTORY MATTERS 21
ADJACENT PROPERTIES 21
SECTION 104 MATTERS 22
ASSESSMENT CRITERIA 22
FAR NORTH DISTRICT PLAN 22
OBJECTIVES AND POLICIES 25
FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN 25
FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN 25
NATIONAL ENVIRONMENTAL STANDARD 26
PART II OF THE RESOURCE MANAGEMENT ACT 26
CONCLUSION 27
Appendix 1 – Record of Title
Appendix 2 – Architectural Plans
Appendix 3 – On-Site Wastewater Report
Appendix 4 – Site Suitability Report
Appendix 5 – Landscape Mitigation Plan

APPLICANT DETAILS

Applicant:	Advance Build
Owner:	Lot 8 – Philip Kingston and Louisa George
Land Owner:	One Thousand Sandhills Limited
Site Address:	121 Tiromoana Way, Ahipara – Subdivision of 1000 Sandhills Road, Ahipara -
Legal Description:	Lot 8 LT 594744 – Subdivision of Part Lot 3 DP 49057
Site Area:	1.53 hectares
Consent:	Land Use
Activity:	Consent for a new pre built relocated dwelling.
District Plan Zones: Operative District Plan	 <u>Zone</u> General Coastal
Proposed District plan	 <u>Zone</u> Rural Production
Overlays:	There are some natural hazards on the parent property. Lot 8 is free of natural hazards and overlays
Address for Service:	Claire Phillips Consultant Planner CPPC Planning PO Box 550, Warkworth, 0941, New Zealand Mobile: 021302340 Email: claire.phillips1@xtra.co.nz

Consent is being sought pursuant to section 88 of the Resource Management Act 1991 for a new pre built relocated dwelling at 121 Tiromoana Way, Ahipara.

The proposal involves the following elements:

- A single level dwelling with an area of 143.14m^2 and will contain three bedrooms, bathrooms, study, kitchen, dining and living room and laundry. The roof area is 184.07m^2. The deck with verandah is located on the western side of the dwelling with an area of will surround the dwelling with an area of 14.5m^2. The remainder of the deck is open. The main exterior cladding is weathertex (Dulux Whakarewarewa – LRV 29). All joinery fascia and roof are to be colour Ironsand (LRV 9). The exterior cladding of the building will be recessive.

Figure 1: West elevation of dwelling

- To provide the platform for the proposed dwelling and associated outdoor living and driveway areas, earthworks are to be undertaken with a volume of 60.1m^3. The earthworks are to be undertaken in accordance with the Auckland Council's GD05, with appropriate erosion and sediment control measures.

- Water supply is proposed by way of two on-site water 25,000 litre plastic tanks.

- The proposal involves impervious surfaces of 584.69m^2, being 3.8% of the site. All

stormwater/water from the roof is to be collected for portable water supply and retained in the on-site water tanks.

- A new on-site secondary wastewater disposal system is to be installed with approximately 225 metres of buried dripper lines.

SITE DESCRIPTION

The subject property is currently legally described as Lot 8 LT 594744 – Subdivision of Part Lot 3 DP 49057 having an area of 1.53 hectares. The 224c certificate to create Lot 8 was signed off on 6 June 2024. The property is situated approximately 5 kilometres north of the Ahipara township. The property contains a small existing shed and the building platform is vacant of buildings and contains an existing access from Sandhills Road. The site is covered with grass and is generally flat in the location of the approved building platform. The surrounding land is made up of rolling farmland to the east of Ninety Mile Beach.

The locality is made up of single and multi-level residential dwellings located within a rural coastal environment. Each dwelling has a moderate amount of separation. The property looks out towards the west over Ninety Mile Beach.

Figure 2: View of site – Source Google Maps

Photo 1: View of building platform looking west

Photo 2: View from building platform looking north-west

Photo 3: View from building platform looking south

Photo 4: View from building platform looking south-west

BACKGROUND

Subdivision consent was issued by Council and subsequently varied and referenced 2160143-RMAVAR/C. This variation was issued 19 June 2023 and is the latest version of the consent to create 16 rural residential lots and a balance lot, with associated access lots off Sandhills Road.

The 224c certificate to create Lot 8 was signed off on 6 June 2024.

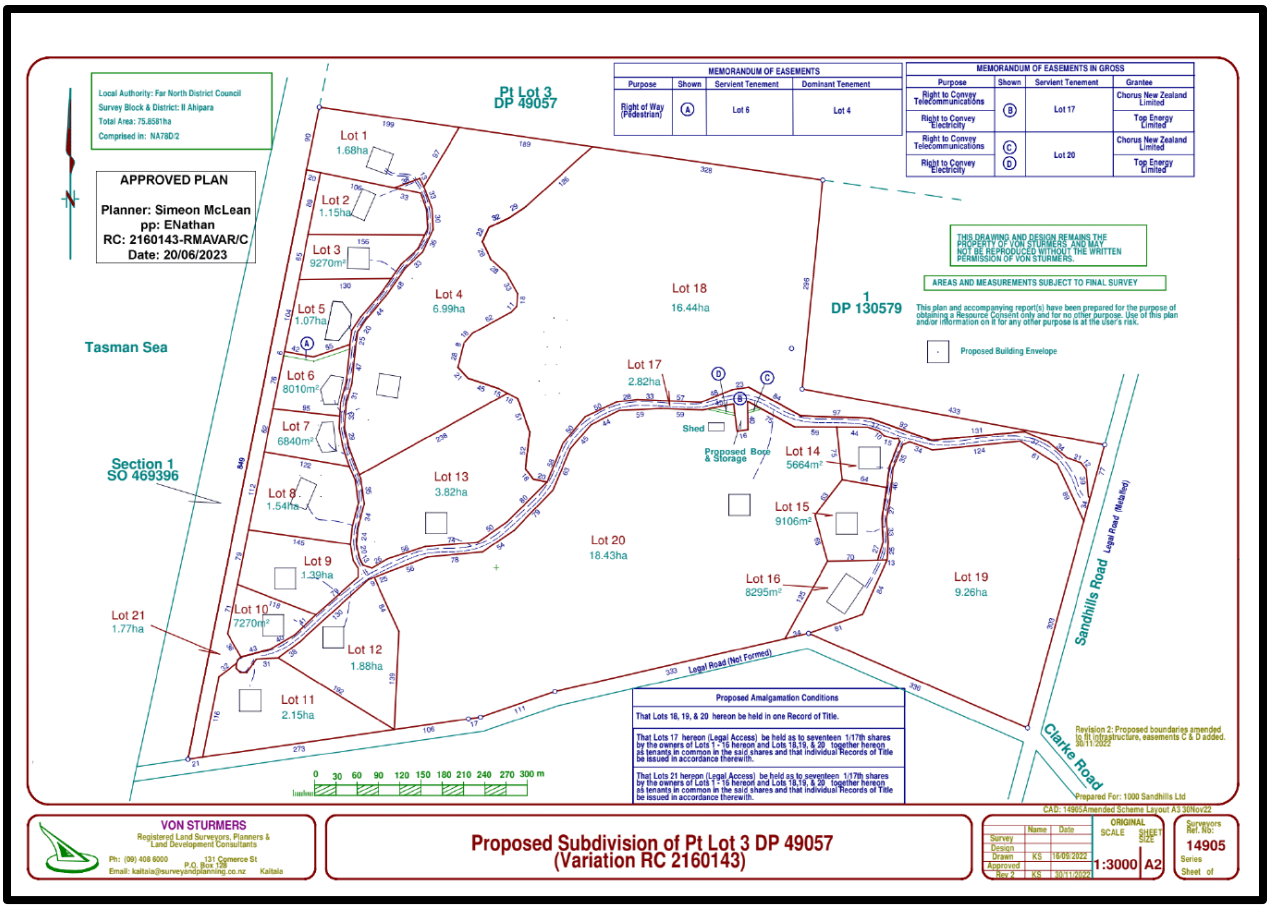


Figure 3: Approved Scheme Plan – Source Council Decision

CONSENT NOTICE

Whilst the record of title for Lot 8 is yet to be issued, it is known that the title will be subject to consent notice restrictions as follows:

- Final Allotment Management Plan, including the following restrictions:
    - Prior to resource consent a landscape plan is prepared,
    - Foundations are designed to meet the requirements of the PK Engineering report,
    - Buildings be located on the identified building platform,
    - Buildings on Lot 8 are restricted to a maximum height of 6 metres,
    - The exterior of all dwellings and other structures shall have a reflectance value of not more than 35% according to the BS5252 colour chart.
    - Roof pitch should not exceed 25° and roof design should avoid large unbroken expanses or areas of glazing and must comply with requirements for colour and reflectivity,
    - Wastewater disposal shall comply with the wastewater disposal requirements set out in the report by PK Engineering,

- In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions shall be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN

The subject site is zoned General Coastal as shown on the portion of planning map below:

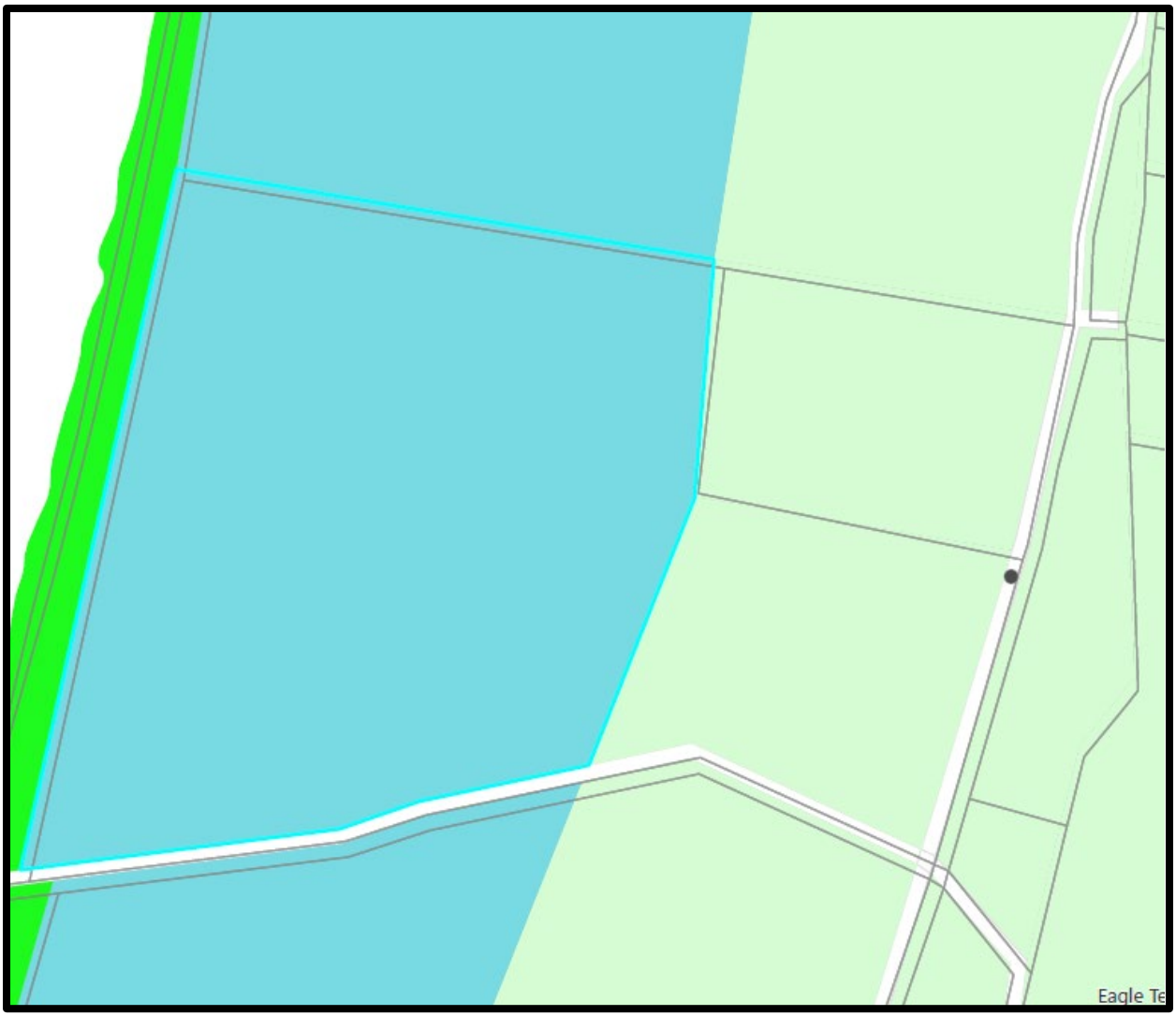


Figure 4: Zone Map – Source – Far North Operative District Plan

Chapter 10 – Coastal Environment – General Coastal

- The new relocated dwellings that do not meet the permitted standard in Rule 10.6.5.1.1 (building greater than 50m^2 within the General Coastal zone is a Controlled Activity under Rule 10.6.5.2.2.

FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN

The Far North Proposed District Plan was notified on July 27, 2022. Only some parts of this plan have legal effects and only those rules where relevant are assessed below.

The subject site is zoned Rural Production as shown on the portion of planning map below:

Figure 5: Zone Map Source – Far North Proposed District Plan

Part 2 – District Wide – General District Wide Matter Earthworks

- Earthworks that comply with the standards in EW-S5 Erosion and Sediment Control are permitted under rule EW-R13. As demonstrated on the plans and within this application, the proposal involves the installation of a stabilized crossing and silt fencing, that is commensurate of the level of earthworks proposed.

Note: The above only reflects those rules that have immediate legal effect. If Council considers that more rules require assessment, I am sure you will let us know.

Overall the proposal is considered to be a Restricted Discretionary Activity.

PUBLIC NOTIFICATION ASSESSMENT

ASSESSMENT OF STEPS 1 TO 4 (SECTION 95A)

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

STEP 1: MANDATORY PUBLIC NOTIFICATION IN CERTAIN CIRCUMSTANCES

Step 1 states that no mandatory notification is required as:

- the applicant has not requested that the application is publicly notified (s95A(3)(a));
- there are no outstanding or refused requests for further information (s95C and s95A(3)(b)); and
- the application does not involve any exchange of recreation reserve land under s15AA of the Reserves Act 1977 (s95A(3)(c)).

In this case the applicant does not request notification.

STEP 2: IF NOT REQUIRED BY STEP 1, PUBLIC NOTIFICATION PRECLUDED IN CERTAIN CIRCUMSTANCES

Step 2 states that the application is not precluded from public notification as:

- The activities are not subject to a rule or national environmental standard (NES) which precludes public notification (s95A(5)(a)); and
- The application does not exclusively involve one or more of the activities described in s95A(5)(b).

In this case, the proposal is not precluded from notification.

STEP 3: IF NOT PRECLUDED BY STEP 2, PUBLIC NOTIFICATION REQUIRED IN CERTAIN CIRCUMSTANCES

The application is not required to be publicly notified as the activity are not subject to any rule or a NES that requires public notification (s95A(8)(a)).

The following assessment addresses the adverse effects of the activities on the environment, as public notification is required if the activities will have or are likely to have adverse effects on the environment that are more than minor (s95A(8)(b)).

Only those effects that relate to matters that are within the council's control under the rules are considered in this assessment. These matters are:

- 10.6.5.2.2 Visual Amenity
  - *(i) the size, bulk, and height of the building in relation to ridgelines and natural features;*
  - *(ii) the colour and reflectivity of the building;*
  - *(iii) the extent to which planting can mitigate visual effects;*
  - *(iv) any earthworks and/or vegetation clearance associated with the building;*
  - *(v) the location and design of associated vehicle access, manoeuvring and parking areas;*
  - *(vi) (vi) the extent to which the building and any associated overhead utility lines will be visually obtrusive;*
  - *(vii) the cumulative visual effects of all the buildings on the site;*
  - *(viii) the degree to which the landscape will retain the qualities that give it its naturalness, visual and amenity values;*
  - *(ix) the extent to which private open space can be provided for future uses;*
  - *(x) the extent to which the siting, setback and design of building(s) avoid visual dominance on landscapes, adjacent sites and the surrounding environment;*
  - *(xi) the extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent sites.*

No other effects have been taken into account in this assessment.

STEP 4: PUBLIC NOTIFICATION IN SPECIAL CIRCUMSTANCES

If an application has not been publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified (s95A(9)).

Special circumstances are those that are:

- exceptional, abnormal or unusual, but something less than extraordinary or unique;
- outside of the common run of applications of this nature; or
- circumstances which make notification desirable.

In this instance I have turned my mind specifically to the existence of any special circumstances and conclude that there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that public notification should occur.

EXISTING ENVIRONMENT AND PERMITTED BASELINE

ENVIRONMENT

The 'Environment' includes the 'Existing Environment' which includes all lawfully established activities that exist – and the 'Future Environment' which includes the effects of activities enabled by an unimplemented consent where the consent is 'live' that have not lapsed and there are no reasons why the consent is not likely to be implemented.

These activities and their constituent effects form part of the existing (lawfully established) environment.

In this case the site and locality have been described in the site description above.

PERMITTED BASELINE

RMA states that for the purposes of formulating an opinion as to whether the adverse effects on the environment will be minor or more than minor a consent authority may disregard an adverse effect of an activity on the environment if the plan permits an activity with that effect. In this case the site is within General Coastal Zone and the following activities are provided for as it relates to this application:

- New buildings up to 50m^2.
- Impervious surfaces up to 10%.

PERSONS WHO HAVE GIVEN THEIR WRITTEN APPROVAL

No persons have provided their written approval to the proposal.

ASSESSMENT OF EFFECTS

Having regard to the above and after an analysis of the application, including any proposed mitigation measures, the adverse effects of the activity on the environment are identified and discussed below.

RESIDENTIAL CHARACTER AND AMENITY VALUES

The amenity values of an area are those special qualities, in particular natural and physical characteristics that make an area pleasant, unique or different. In this case, the site is within the General Coastal Zone. This particular zone is recognized for

- This zone is generally rural with a coastal focus and natural character predominates.

- Development to preserve the natural character of the coastal environment and protect it from inappropriate subdivision and use
- This zone seeks to preserve the natural character and the restoration and enhancement of areas which may have been compromised by past land management practices.

The scale and design of the proposal is typical of the surrounding environment and consistent with the surrounding dwellings. The development will not result in a proposal that could be considered dominant or out of character, particularly when viewed in conjunction with other dwellings and accessory buildings in this locality. The proposed dwelling is modest in nature and compliant with most development standards with the exception of visual amenity. The residential character of the site and locality will be maintained and the overall scale, design and nature of the proposed dwelling is considered appropriate.

In addition to the design elements, the proposal also involves the implementation of a landscape plan, to further integrate the dwelling into this coastal environment.

These factors when combined with the minor nature of the infringement, ensures that any effects on are considered to be no more than minor. There will be no obvious differences which differentiate the infringement from that of a complying activity, particularly when viewed from adjacent properties.

The dwelling is considered to be of a size and scale consistent with other dwellings in this immediate vicinity, therefore will maintain the existing character of the area particularly given the presence of the proposed landscaping and recessive colours proposed for the dwelling.

Overall, it is considered that the adverse effects of the proposed dwelling on residential character and visual amenity will be no more than minor.

PRESERVATION OF NATURAL CHARACTER

The subject site is located within the Coastal environment of Ahipara and Ninety Mile Beach and the west coast. The preservation of the natural character of the coastal environment is a matter of national importance as outlined in Section 6 of the Resource Management Act.

The subject site and associated dwelling are adjacent to the coastal environment. The design, location and development of the development has taken into consideration the natural character. It is noted that there is no specific landscape protection at the site and the development is considered to reflect a history of development within this locality and envisaged within the Coastal Zone, being primarily for residential development.

The primary natural character elements of the site will continue, with the proposal being designed to take into consideration the coastal factors influencing the site.

The effects of the proposal will be able to be located within this coastal environment without generating any adverse effects on the natural character of the coastal environment that will be less than minor.

CULTURAL/HISTORIC HERITAGE

There are no known heritage sites or archaeological sites within the area adjacent to the application site.

In accordance with standard protocols accidental discovery, work must cease immediately, and Council and Heritage NZ notified should any archaeological or heritage site be uncovered during the earthworks. Given this standard and the relatively unlikely nature of any archaeological site being uncovered, it is considered that the effects of the proposal on cultural matters will be less than minor.

The proposal will not result in effects on the cultural or heritage values of the area.

TRAFFIC AND ACCESS EFFECTS

Access to the property will be over a new crossing with Tiromoana Way, being an access lot from Sandhills Road. The proposal involves on-site parking and manoeuvring with the overall effects on the efficient operation of the roading network will be maintained and less than minor

Construction machinery will be delivered to the site for the earthworks and once the earthworks and associated impervious surfaces are completed the construction machinery will be removed. The traffic movements to and from the site will be minimal and not outside the level anticipated in a Coastal Living zone.

It is considered that any adverse traffic or roading effects will be less than minor.

DUST, NOISE AND VIBRATION EFFECTS

Effects such as noise, dust and vibration on the surrounding environment are less than minor.

The proposal involves land disturbing activities (earthworks) to provide for platform and retaining wall for the residential use of the site.

Through the use of dust minimisation methodologies (commonly accepted), any dust resulting from the works will be minimised. Once the earthworks are completed, the areas will be otherwise covered.

The proposed earthworks are temporary and are expected to be completed in approximately 2 weeks, weather depending. The works will be completed within one earthworks season.

Noise and vibration from machinery during the earthworks operations will comply with the noise and vibration standards throughout the works.

Overall, it is considered that the earthworks will not result in off-site effects as a result of dust, noise and vibration. The effects of noise, vibration and dust will also be effectively managed with appropriate conditions of consent and is considered to be less than minor.

WATER QUALITY EFFECTS

The main adverse effects on the environment that could potentially arise from earthworks relate to the silt discharge from the earthworks site. If silt is uncontrolled it can create adverse effects on water quality of a waterway.

The applicant will implement erosion and sediment control measures in accordance with the Auckland Councils GD05. The applicant proposes to install measures to control and/or mitigate any silt/stormwater run-off. In particular, the applicant will install a silt fencing and provide a stabilised crossing.

On this basis of the above, it is considered that any adverse effects on water quality will be less than minor.

NATURAL HAZARDS AND SERVICING EFFECTS

The property is not subject to any natural hazards and is reasonably flat.

Water supply is proposed by way of two on-site water 25,000 litre plastic tanks.

The proposal involves impervious surfaces of 584.69m^2, being 3.8% of the site. All stormwater/water from the roof is to be collected for portable water supply and retained in the on-site water tanks.

A new on-site secondary wastewater disposal system is to be installed with approximately 225 metres of buried dripper lines.

It is considered that the effects of the natural hazards and servicing of the site will be less than minor.

SUMMARY

In summary, having assessed the adverse effects of the activity on the environment, it is considered that the proposed new pre-built dwelling with associated access will be less than minor adverse effects on the environment. In particular the proposal is considered to be consistent with the type of building anticipated within this residential environment.

LIMITED NOTIFICATION ASSESSMENT

ASSESSMENT OF STEPS 1 TO 4 (SECTION 95B)

If the application is not publicly notified under s95A, the council must follow the steps set out in s95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

STEP 1: CERTAIN AFFECTED PROTECTED CUSTOMARY RIGHTS GROUPS MUST BE NOTIFIED

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups or affected persons under a statutory acknowledgement affecting the land (ss95B(2) and 95B(3)).

The application site is not affected by customary rights.

STEP 2: IF NOT REQUIRED BY STEP 1, LIMITED NOTIFICATION PRECLUDED IN CERTAIN CIRCUMSTANCES

Step 2 describes that limited notification is precluded where all applicable rules and NES preclude public notification; or the application is for a controlled activity (other than the subdivision of land) or a prescribed activity (ss95B(5) and 95B(6)).

The proposal is a Restricted Discretionary activity and there are no rules precluding notification.

STEP 3: IF NOT PRECLUDED BY STEP 2, CERTAIN OTHER AFFECTED PERSONS MUST BE NOTIFIED

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

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of a prescribed activity under s360H(1(b), a prescribed person; and
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary or prescribed activity, and therefore an assessment in accordance with s95E is required. This assessment is set out below.

Overall, it is considered that any adverse effects in relation to adjacent properties will be less than minor, and accordingly that no persons are adversely affected.

STEP 4: FURTHER NOTIFICATION IN SPECIAL CIRCUMSTANCES

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

There are not considered to be any special circumstances that would warrant notification.

SECTION 95E STATUTORY MATTERS

As required by step 3 above, certain other affected persons must be notified, and the following assessment addresses whether there are any affected persons in accordance with s95E. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).

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

Adverse effects permitted by a rule in a plan or NES (the permitted baseline) may be disregarded.

It is considered that there is no useful baseline that can be applied as the land needs to be earth worked to provide building platforms and subdivision of the land would also require resource consent.

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

Because of the minor scale of the proposal no written approvals have been sought for this proposal.

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

ADJACENT PROPERTIES

The adjacent properties to be considered in the limited notification assessment under section 95B and 95E are set out below:

No persons are considered to be adversely affected by the activity because:

- The design of the proposal has been designed to be sympathetic with the coastal environment, through nestling into the site through the proposed landscaping and recessive colour pallet.

- The proposal retains sufficient separation distances between the neighbouring dwellings (consistent with other locations within this locality) and will not compromise the existing levels of amenity or coastal character enjoyed by adjacent properties to a minor or more than minor extent.
- The proposal will be consistent in the coastal character and scale to other dwellings located within the local vicinity and will comply with all the relevant development standards so will not generate adverse effects in terms of shading, overbearance and overlooking to the adjoining properties.
- Stormwater within the site will be suitably controlled to ensure that pre development flows are maintained.
- Any construction related effects will be temporary and transient and less than minor.
- Suitable erosion and sediment control methods will be utilized to ensure that the effects on the adjacent sites as a result of the earthworks will be less than minor.

SECTION 104 MATTERS

The matters that require consideration in assessing this application are set out in section 104 of the Resource Management Act 1991. These matters include the actual and potential effects of the allowing the activity on the environment and the relevant rules and assessment criteria.

ASSESSMENT CRITERIA

FAR NORTH DISTRICT PLAN

The following assessment criteria are considered relevant to the application and provide a reliable basis to determine the effects of the proposal. As demonstrated above, the proposal is considered to be consistent with these assessment criteria.

11.5	**Visual Amenity – Coastal Living**		
	Requirement	**Comment**	**Compliance**
	(a) The size, bulk, height and siting of the building or addition relative to skyline, ridges, areas of indigenous vegetation and habitat of	The design of the proposal has taken into consideration the coastal character and amenity features existing in this locality as well as the zone standards. As demonstrated below, the proposal is considered to meet	**Compliant**

	indigenous fauna, or outstanding landscapes and natural features.	the relevant objectives and policies. The additions and alterations to the existing dwelling are set into the landscape and will not protrude above any ridgelines. Further the site is not within and ONL.	
	(b) The extent to which landscaping of the site, and in particular the planting of indigenous trees, can mitigate adverse visual effects.	The proposal does not involve the removal of any native bush or vegetation other than grass as there is no existing indigenous vegetation within the approved building platform.	**Compliant**
	(c) The location and design of vehicle access, manoeuvring and parking areas	Suitable access is proposed and there is sufficient parking for the proposed dwelling.	**Compliant**
	(d) The means by which permanent screening of the building from public viewing points on a public road, public reserve, or the foreshore may be achieved.	The proposed dwelling is not visible from the public road and will not be visually prominent on the site. The proposed landscape plan will further integrate the proposal into the site, with visual effects from public locations minimised.	**Compliant**
	(e) The degree to which the landscape will retain the qualities that give it naturalness and visual value as seen from the coastal marine area.	The effects of the proposal have been addressed above and concluded to be less than minor.	**Compliant**
	(f) Where a building is in the coastal environment and it is proposed to be located on a ridgeline, whether other more suitable sites should be	As noted above, the proposed dwelling is suitably mitigated by the proposed landscape planting along with recessive colour palet and not visible from the road. Thus will not	**Compliant**

	used and if not, whether landscaping, planting or other forms of mitigation can be used to ensure no more than minor adverse visual effects on the coastal environment.	create visual effects on the coastal environment.	
	(g) The extent to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment.	Stormwater disposal is proposed to be undertaken in accordance with industry accepted practices, such as the use of the existing swale and dispersal.	**Compliant**
	(h) the extent to which private open space can be provided for future uses ;	There areas of grass to provide for private open space.	**Compliant**
	(i) the extent to which the siting, setback and design of building(s) avoid visual dominance on landscapes, adjacent sites and the surrounding environment;	The proposed dwelling is set back from the road within the approved building platform and will provide sufficient visual separation from the road and is set into the landscape, with bush surrounds.	**Compliant**
	(j) the extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent sites.	The proposal is not considered to result in privacy and outlook effects that would result in effects on the enjoyment of private open space areas.	**Compliant**

OBJECTIVES AND POLICIES

FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN

The following objectives and policies are considered relevant when considering this application:

Chapter 10.6 General Coastal

- *Objectives 10.6.3*
- *Policies 10.6.4*

The objectives and policies seek to provide for appropriate subdivision, use and development consistent with the need to preserve its natural character. Further they seek to ensure that natural character of the coastal environment is preserved and protected from inappropriate subdivision, use and development. Finally they seek to manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations.

The proposed dwelling is considered modest and appropriate for this General Coastal Zone. The proposal is consistent with the above objectives and policies.

In summary it is concluded that this proposal satisfies the relevant matters requiring consideration under section 104.

FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN

Part 2 – District Wide – General District Wide Matter – Earthworks

- *Objectives EW01 – EW03*
- *Policies EW-P1 – EW-P8*

The objectives and policies seek to ensure earthworks are enabled where they are required to facilitate the efficient development of land, while managing adverse effects on waterbodies, coastal marine area, public safety, surrounding land and infrastructure. Further earthworks are appropriately designed, located and managed to protect historical and cultural values, natural environmental values, preserve amenity and safeguard the life-supporting capacity of soils. Further earthworks are undertaken in a manner which does not compromise the stability of land, infrastructure and public safety. The earthworks are consistent with the above.

Part 3 – Area Specific Matters – Zones - Rural Zones – Rural Production

- *Objectives RPROZ-01 - RPROZ-04*
- *Policies RPROZ-P1 – RPROZ-P7*

The above objectives and policies seek to ensure that the Rural Production Zone is used predominantly for primary production and management of sensitive activities are avoided. Development is to maintain the character and functional need. The proposal is considered to be consistent with the above objectives and policies as the proposal involves an efficient use of the residential land resource.

In summary it is concluded that this proposal satisfies the relevant matters requiring consideration under section 104.

NATIONAL ENVIRONMENTAL STANDARD

There are no NES or other regulations in effect that apply to this application.

PART II OF THE RESOURCE MANAGEMENT ACT

Part II of the Act sets out the Purpose and Principles. This proposal is in keeping with Part II as the effects of the proposal on the environment will be minor and the proposal will not compromise the ability of this site to be used by existing and future generations, also the life supporting capacity of air, water, soil and ecosystems will not be compromised.

Section 5 of the Resource Management Act 1991 (the Act) describes the Purpose and Principles of the Act and provides a definition of 'sustainable management' which includes reference to managing the use and development of natural and physical resources at a rate that allows people and communities to provide for their wellbeing, whilst avoiding, remedying and mitigating any adverse effects of activities on the environment.

This involves sustaining resource potential (excluding minerals), safeguarding the life supporting capacity of air, water, soil and ecosystems and avoiding, remedying or mitigating adverse effects. The effects of this proposal on the environment have been described above.

The proposal is considered to be consistent with the Purposed and Principles outlined above as the effects on character and amenity will be no more than minor. Further any potential effects can be adequately avoided, remedied and mitigated.

Section 6 of the Act requires all persons exercising functions and powers under the Act to recognise and provide for matters of national importance in relation to the natural character of the coastal environment, wetlands, lakes and rivers and the protection of them from inappropriate subdivision use and development. Outstanding natural features and landscapes are also to be protected from inappropriate subdivision, use and development.

The proposal is considered to be consistent with section 6 of the Act as there are considered to be no matters of national importance on this site.

Section 7 relates to other matters that are to which regard must be had in achieving the sustainable management of natural and physical resources: The proposed shed is considered to be consistent with the provisions of the section of the Act.

Section 8 requires that account shall be taken of the principles of the Treaty of Waitangi. The proposal is considered to be consistent with the matters outlined in Section 8.

Overall, it is considered that the proposal is in keeping with Part II of the Resource Management Act 1991.

CONCLUSION

It is concluded that the proposal to construct a new dwelling and associated works will have less than minor adverse effects on the surrounding environment. Further the proposed activity is considered to be in keeping with the relevant assessment criteria, objectives and policies set out in Far North District Plan.

As a result of the above granting consent to this proposal will be in keeping with the provisions set out in Part II of the Resource Management Act 1991 and sections 104 and 104A.

Appendix 1 – Record of Title

Appendix 2 – Architectural Plans

Appendix 3 – On-Site Wastewater Report

Appendix 4 – Site Suitability Report

Appendix 5 – Landscape Mitigation Plan

TA Approvals

Territorial Authority	Far North District Council TA Certification Division	**TA Reference**	RC2160143-RMAVAR/C
Survey Number	LT 594744	**Survey Purpose**	LT Subdivision
Surveyor Reference	14905 Sandhills	**Land District**	North Auckland
Surveyor	David Brett King		
Surveyor Firm	Survey & Planning Solutions (2010) Limited		
Dataset Description	LOTS 1 - 21 BEING A SUBDIVISION OF PART LOT 3 DP 49057		

TA Certificates

Pursuant to Section 224(c) Resource Management Act 1991 I hereby certify that some of the conditions of the subdivision consent have been complied with to the satisfaction of the Far North District Council and that a consent notice has been issued in respect of those conditions that have not been complied with. Dated this 6th day of June 2024. ☑

Signature

Signed by Patricia Wynsome Routley, Authorised Officer, on 06/06/2024 04:52 PM

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

TA Approvals

Territorial Authority	Far North District Council TA Certification Division	**TA Reference**	RC2160143-RMAVAR/C
Survey Number	LT 594744	**Survey Purpose**	LT Subdivision
Surveyor Reference	14905 Sandhills	**Land District**	North Auckland
Surveyor	David Brett King		
Surveyor Firm	Survey & Planning Solutions (2010) Limited		
Dataset Description	LOTS 1 - 21 BEING A SUBDIVISION OF PART LOT 3 DP 49057		

TA Certificates

I hereby certify that plan LT 594744 was approved by the Far North District Council pursuant to section 223 of the Resource Management Act 1991 on the 6th day of June 2024. ☑

The approval of the Council under Section 223 of the Resource Management Act 1991 is subject to the granting or reserving of the easement(s) set out in the Memorandum of Easements attached as a supporting document to plan LT 594744 ☑

The approval of the Council under Section 223 of the Resource Management Act 1991 is subject to the amalgamation condition(s) set out hereon ☑

That Lots 18, 19, 20 hereon be held in the same Record of Title. See 1844763 ☑

That Lot 17 hereon (legal access) be held as to seventeen 1/17th shares by the owners of Lots 1 - 16 hereon and Lots 18, 19, 20 together hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith. See 1844763 ☑

That Lot 21 hereon (legal access) be held as to seventeen 1/17th shares by the owners of Lots 1 - 16 heron and Lots 18,19,20 together hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith. See 1844763 ☑

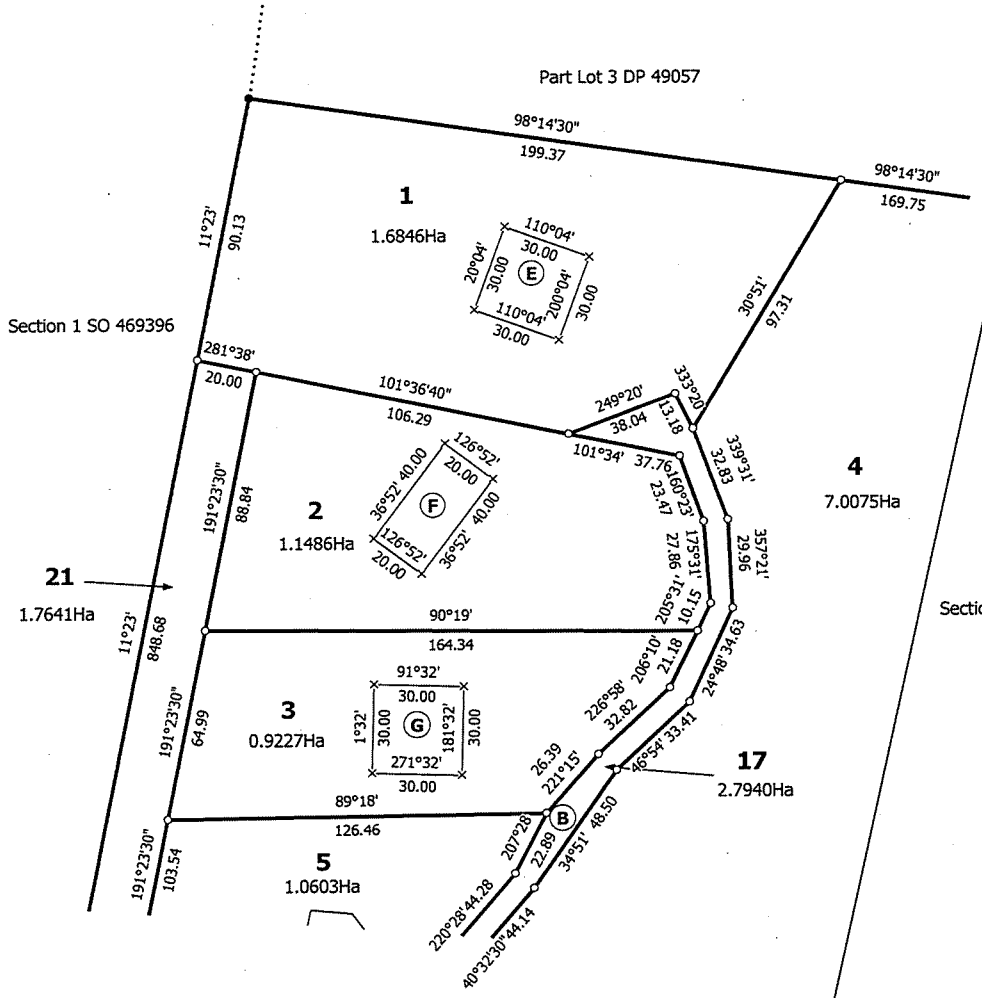
Signature

Signed by Patricia Wynsome Routley, Authorised Officer, on 06/06/2024 04:50 PM

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

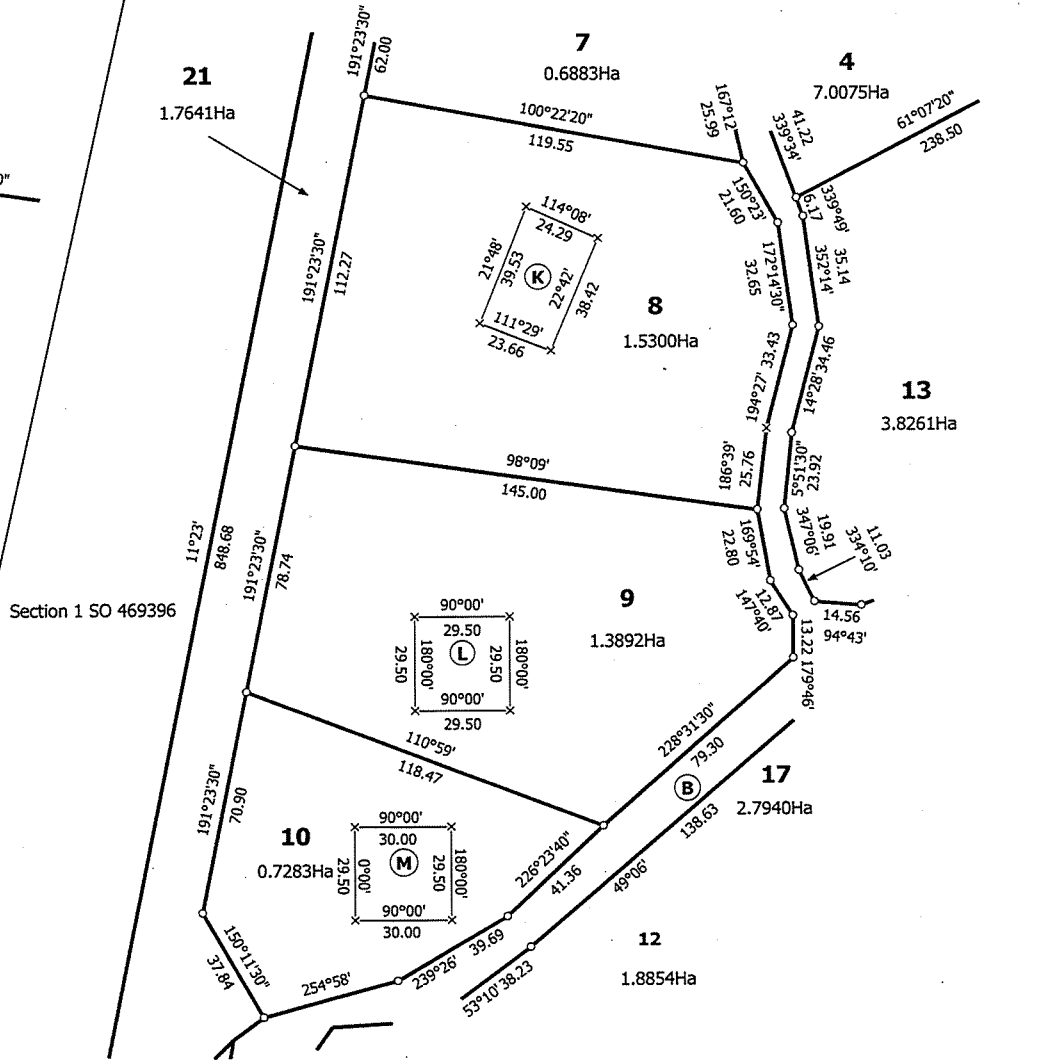
Diag. D

Not to Scale



Diag. B

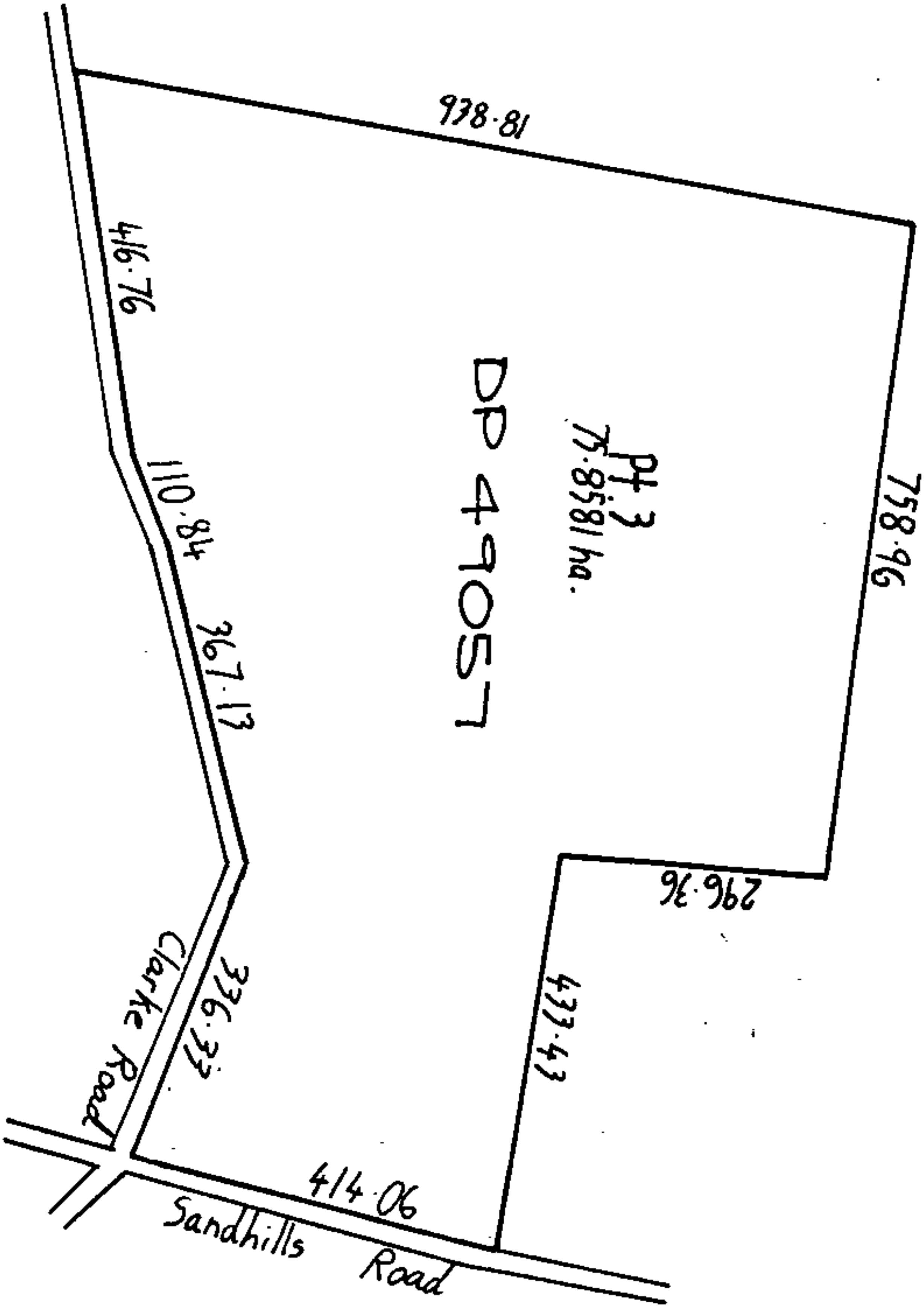
Not to Scale



Surveyors Ref: 14905

T 2/6

Land District: North Auckland Digitally Generated Plan Generated on: 10/11/2023 10:17am Page 6 of 10	LOTS 1 - 21 BEING A SUBDIVISION OF PART LOT 3 DP 49057	Surveyor: David Brett King Firm: Survey & Planning Solutions (2010) L	Title Plan LT 594744 DRAFT


938·81
416·76
110·84
367·17
DP 49057
Pt 3
75·8581 ha.
758·96
296·36
433·43
336·33
Clarke Road
414·06
Sandhills
Road

Proposed New Dwelling

Lot 8, 1000 Sandhills Road, Ahipara

For: Philip Kingston & Louisa George

Advance build

0800 327 828
Fax 09 401 6506
PO Box 111, Kerikeri 0245
www.advancebuild.co.nz

Contents

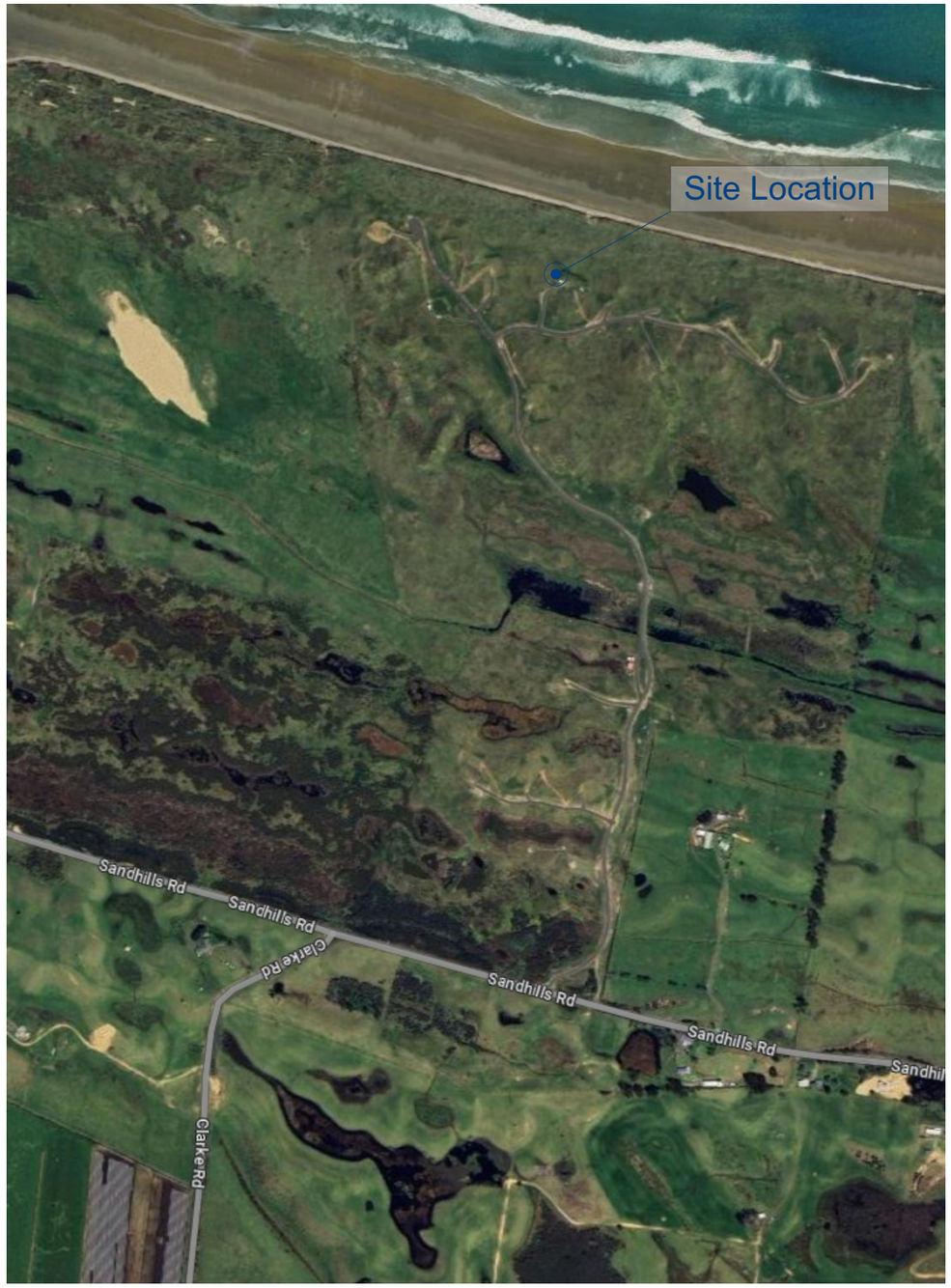
P01	Site Location Plan
P01A	Site Plan
P02	Floor Plan
P03	Elevations
P04	Electrical Plan
P05	Fitting Plan
P06	Kitchen Plan

Concept Plans

Concept 2
March 2024

Revision:	C02
Project No.	1221
Drawn By:	JBD
HC:	TKD

Final working drawings take precedence over concept plans



Overall Site Plan
Scale - 1:1250

Revision	By:	Date:
Drawn	JBD	Dec 14 2023
Rev	JBD	Mar 11 2024

Advance build

0800 327 828
Fax 09 401 6506
PO Box 111, Kerikeri 0245
www.advancebuild.co.nz

Proposed New Home for:
Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara

Sheet Title:
Site Location Plan

Scale: NTS

Project No:	Page:	Revision:
1221	01	C02

Site Information

1000 Sandhills Road, Ahipara
Lot 8 DP 594744
Very High Wind Zone
Corrosion Zone D
Earthquake Zone 1
Zone: General Coastal

Site area: 15300m2
Driveway area: 400.62m2
New buildings area:
Floor Area(excl. slatted Deck): 143.14m2
Roof Area: 184.07m2
Existing buildings area:
Shed Area: 18.6m2
Total impermeable surfaces: 603.29m2 = 3.94%
Earthworks:
Total Driveway Cut Volume= 60.1m3

N

STK

STK

STK

STK

20 956

7 258

8 141

Proposed New Dwelling

FFL: 10.3m(TBC)
Minimum 650mm Above Ground

Existing Shed

FNDC- 6m turning circle indicator

Indicative Driveway & Turnaround Area

26 154

20 379

22 558

2 x 25000l Promax Plastic Water Tanks (1m Buried)

20 Micron Filter to be fitted between pump and potable supply in dwelling

Septic Tank

SW Overflow to spreader Bar

Wastewater Treatment & Disposal Field Minimum Separation Distances	
Boundaries	1.5m
Buildings	3.0m
Surface Water Drains etc	15.0m
Groundwater	1200mm (vertical)
Rivers & Wetlands	30m

Septic system & soakage field as per TP58 report

Revision	By:	Date:
Drawn	JBD	Dec 14 2023
Rev	JBD	Jan 25 2024
Rev	JBD	Jan 30 2024
Rev	JBD	Feb 2 2024
Rev	JBD	Mar 11 2024

Advance build

0800 327 828
Fax 09 401 6506
PO Box 111, Kerikeri 0245
www.advancebuild.co.nz

Proposed New Home for:
Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara

Sheet Title:
Site Plan

Scale: 1 : 150 (A3 Original)

Project No:	Page:	Revision:
1221	01A	C02

Roof Pitch 3 deg
Stud height - 3deg raking from 2.4m to Kit/Liv/Din
- 2.4m Flat Elsewhere

1
4 2
3

Elevations

Revision	By:	Date:
Drawn	HCA	Sep 08 2023
Rev	HCA	Oct 24 2023
Rev	JBD	Feb 2 2024
Rev	JBD	Mar 25 2024

Advance build

0800 327 828
Fax 09 401 6506
PO Box 111, Kerikeri 0245
www.advancebuild.co.nz

Proposed New Home for:
Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara

Sheet Title:
Floor Plan

Scale: 1 : 75 (A3 Original)

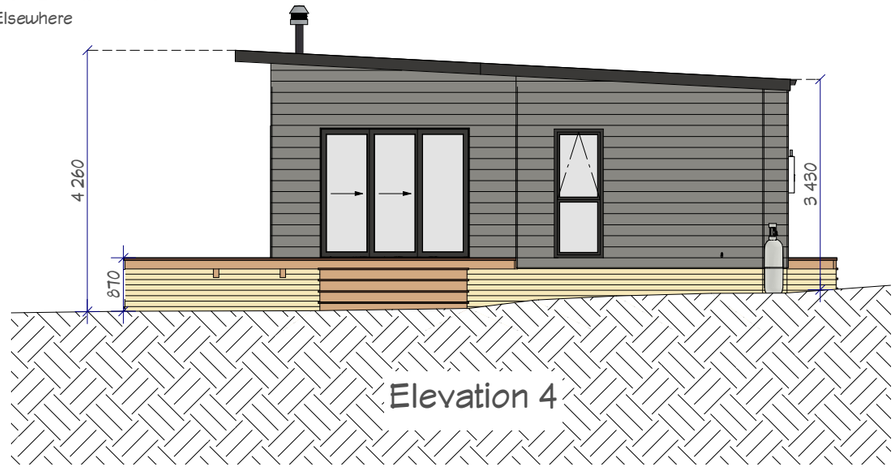
Project No:	Page:	Revision:
1221	02	C02

Coloursteel Maxx T-Rib
roofing or similar

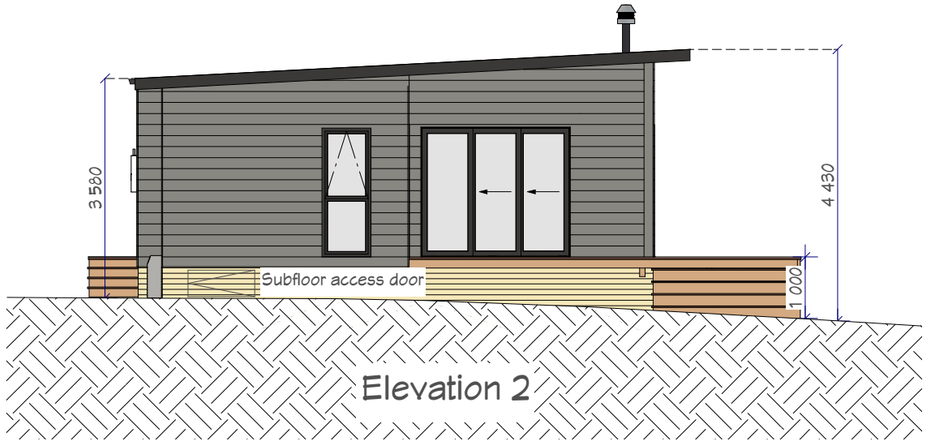
Weathertex 200mm weatherboard
cladding - direct fix

Elevation 1

Roof Pitch 3 deg
Stud height - 3deg raking from 2.4m to Kit/Liv/Din
- 2.4m Flat Elsewhere



Elevation 4



Elevation 2

Double glazed windows

140mm H3 baseboards, 25mm gap

Elevation 3

Revision	By:	Date:
Drawn	JBD	Dec 14 2023
Rev	JBD	Jan 12 2024
Rev	JBD	Jan 25 2024
Rev	JBD	Jan 30 2024
Rev	JBD	Feb 2 2024
Rev	JBD	Mar 12 2024
Rev	JBD	Mar 25 2024

Advance build

0800 327 828
Fax 09 401 6506
PO Box 111, Kerikeri 0245
www.advancebuild.co.nz

Proposed New Home for:
Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara

Sheet Title:
Elevations

Scale: 1 : 100 (A3 Original)

Project No:	Page:	Revision:
1221	03	C02

Onsite Wastewater Report (TP58)

Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara
Far North District
Lot 8 DP 594744

Written by: Nicola O'Brien
Reviewed by: Martin O'Brien

Rev: A
Date: 15th February 2024
Job No: 2936

Ph: (09) 407 5208 | Mob: 027 407 5208
E-mail: martin@obrienconsulting.co.nz
E-mail: nicola@obrienconsulting.co.nz

Contents

Executive Summary 3

Recommendations: 3

1.0 Introduction 4

1.1 Scope 4

1.2 Proposal 4

1.3 Site Visit 4

1.4 Desk Study 4

2.0 Site Evaluation 4

2.1 Site Description & Suitability for Wastewater 4

2.2 Northland Regional Council Property Map & Google Earth Image 6

2.4 Groundwater 7

2.5 Soil Profile 7

3.0 On-site Effluent Disposal 7

3.1 System Requirements 7

3.2 Proposed Wastewater Disposal Field 8

3.3 Reserve Area 9

3.4 Stormwater Management 9

4.0 Council Requirements for new Building Consents 9

4.1 Smoke Alarms 9

4.2 Earthworks 9

4.3 Hazardous Activities and Industries List (HAIL) 9

5.0 Summary 9

6.0 TP58 3rd Edition, Appendix E 10

PART A: Owners Details 10

PART B: Property Details 11

PART C: Site Assessment - Surface Evaluation 11

PART D: Site Assessment - Subsoil Investigation 13

PART E: Discharge Details 15

PART G: Secondary and Tertiary Treatment 15

PART H: Land Disposal Method 16

PART I: Maintenance & Management 17

PART J: Assessment of Environmental Effects 17

PART K: Is Your Application Complete? 17

7.0 Borehole Log 18

8.0 Site Plan & Disposal Field Detail 19

9.0 On Site Wastewater Installation Guide for the Installer 21

10.0 On Site Wastewater Maintenance for the Owner 24

10.1 Why regular maintenance 24

10.2 Northland Regional Council Public Information 25

11.0 Limitations 27

12.0 Producer Statement 28

Executive Summary

Lot 8 DP 594744 will become a 15,300m², grassed section located at 1000 Sandhills Road, Ahipara zoned General Coastal in the Far North District plan. The owners propose to construct a 3-bedroom dwelling approximately central on the lot. Onsite wastewater is required to service the dwelling. A secondary treatment system with buried dripper lines is proposed.

Recommendations:

- A secondary treatment system with buried dripper lines is recommended.
- Effluent will be disposed of via a robust secondary treatment system which complies with the New Zealand Building Code. The system is to have a high output quality of: BOD5 equal to or less than 20g/m³ and TSS equal or less than 30g/m³, in line with NZS1546.3:2008 and the New Zealand Building Code.
- The proposed wastewater disposal field shall consist of approximately 225m of subsurface dripper line spaced at 1m. 225m² area in total. Dripper lines shall be buried 150–200mm below the surface within the topsoil layer. Anti-root intrusion, robust subsurface dripper line such as Netafim, Techline AS XR, or similar must be used.
- The wastewater disposal field is to be planted with grass and should be mown frequently to promote nutrient uptake and evapotranspiration. The field is to be grassed immediately following install.
- The wastewater field and reserve are to be setback a minimum of 5m from any existing or future intermittent stormwater flow path downslope of the field. No existing flow paths were noted within 5m of the proposed field and reserve.
- The field is to be setback a minimum of 30m from the coast to the west. The proposed location is well away from the coast.
- There is adequate area to support a 100% reserve wastewater disposal field.
- The owner is to obtain a maintenance agreement from the manufacturer on purchase of the system. Aeration treatment systems should have an annual maintenance agreement with the supplier as stated in the Far North District Council bylaw 2805.2. This ensures the system operates efficiently and is serviced regularly.
- Correct use and maintenance of the wastewater system is required for it to work effectively and minimise environmental impacts.

1.0 Introduction

1.1 Scope

An on-site effluent disposal investigation, to obtain building consent, has been undertaken in accordance with TP58 On-site Wastewater Systems: Design and Management Manuel Third Edition (2004), Regional Plan for Northland (2019) and the Far North District Plan (2009). A wastewater treatment system and land application method are recommended based on site characteristics including groundwater and surface water setbacks and soil type. A wastewater design is provided based on aforementioned documents and site characteristics.

1.2 Proposal

A secondary treatment system with buried dripper lines to service a proposed 3-bedroom dwelling.

1.3 Site Visit

The site investigation was undertaken on 3rd February 2024 and comprised of a visual assessment of the proposed wastewater disposal field and the surrounding area. A 50mm borehole to a depth of 1200mm was taken to acquire soil samples for examination and to establish groundwater depth. USDA feel method was used to determine soil texture, soil structure and soil category. The test location is indicated on the attached Site Plan, Section 8.

1.4 Desk Study

A desk study of available information and site characteristics was undertaken. The following sources were reviewed, TP58 (2004), Regional Plan for Northland (2019), Section C.6.1.3, Far North District Plan, Section 12.7.6.1.2, 12.7.6.1.4(b), Far North and Northland Regional Council Maps, Google Earth, and Ahipara - Herekino Soil Map.

At the time this report was written Lot 8 was in the process of being subdivided from Part Lot 3 DP 49057. The Decision for RC 2160143-RMAVAR was reviewed. This site-specific Onsite Wastewater Report (TP58) is in line with condition (vii) which states that "no system shall be installed or operated in a manner which does not result in the final discharge to ground at the same or better than that which can be attained using the Biolytix wastewater treatment system". The system proposed meets this condition.

The Site Suitability Report written by T & A Structures Limited, 20th January 2024 for Lot 8 was available and reviewed. Groundwater was not encountered during any of the 4 boreholes taken over the site to a depth of 2m, during summer. Planting of grasses was recommended for potential erosion along the steep bank at the western side of the proposed house platform. The site did not appear to be subject to creep or instability.

2.0 Site Evaluation

2.1 Site Description & Suitability for Wastewater

At the time this report was written Lot 8 was in the process of being subdivided from Part Lot 3 DP 49057. Google Earth provided more up to date information on proposed Lot 8 than council maps including the location of the right of way and driveway. The caravan and shed on Lot 8 are shown on Google Earth. Section 2.2 shows the Northland Regional Council Map (NRC) of original Part Lot 3 DP 49057 along with a Google Earth image showing the approximate lot boundaries. Lot 8 DP 594744 is located off 1000 Sandhills Road, Ahipara and is zoned General Coastal in the Far North District Plan.

Lot 8 will become a 1.5300 ha, undulating, coastal property with grasses including sand dune species. The proposed dwelling is to be located at the end of a newly formed driveway. The proposed wastewater disposal field and reserve are to be located on the side of a steeply sloping hill as shown in Photograph 1. The topography is approximately 19 degrees. Locating the field on the north-westerly facing, exposed hillside will assist in wastewater evapotranspiration.

The wastewater disposal field is to be setback a minimum of 5m from any existing or future intermittent stormwater flow path such as an overland flow path, drain or stormwater spreader as per the Regional Plan for Northland (2019), Section C.6.1.3. No intermittent stormwater flow paths were noted within 5m of the proposed field.

Intermittent ponds are shown on Google Earth to the northeast, east and southeast. The ponds are located on neighboring lots and are well away from Lot 8.

No surface water bodies were noted in the near vicinity of the proposed wastewater disposal field (30m radius) meeting the 15m separation distance required by the Regional Plan for Northland (2019), Section C.6.1.3, Table 9 and the more conservative 30m separation distance outlined in the Far North District Plan, Section 12.7.6.1.4(b).

Ahipara Bay is located to the west. The proposed field and reserve are well away from the coast (approximately 110m).

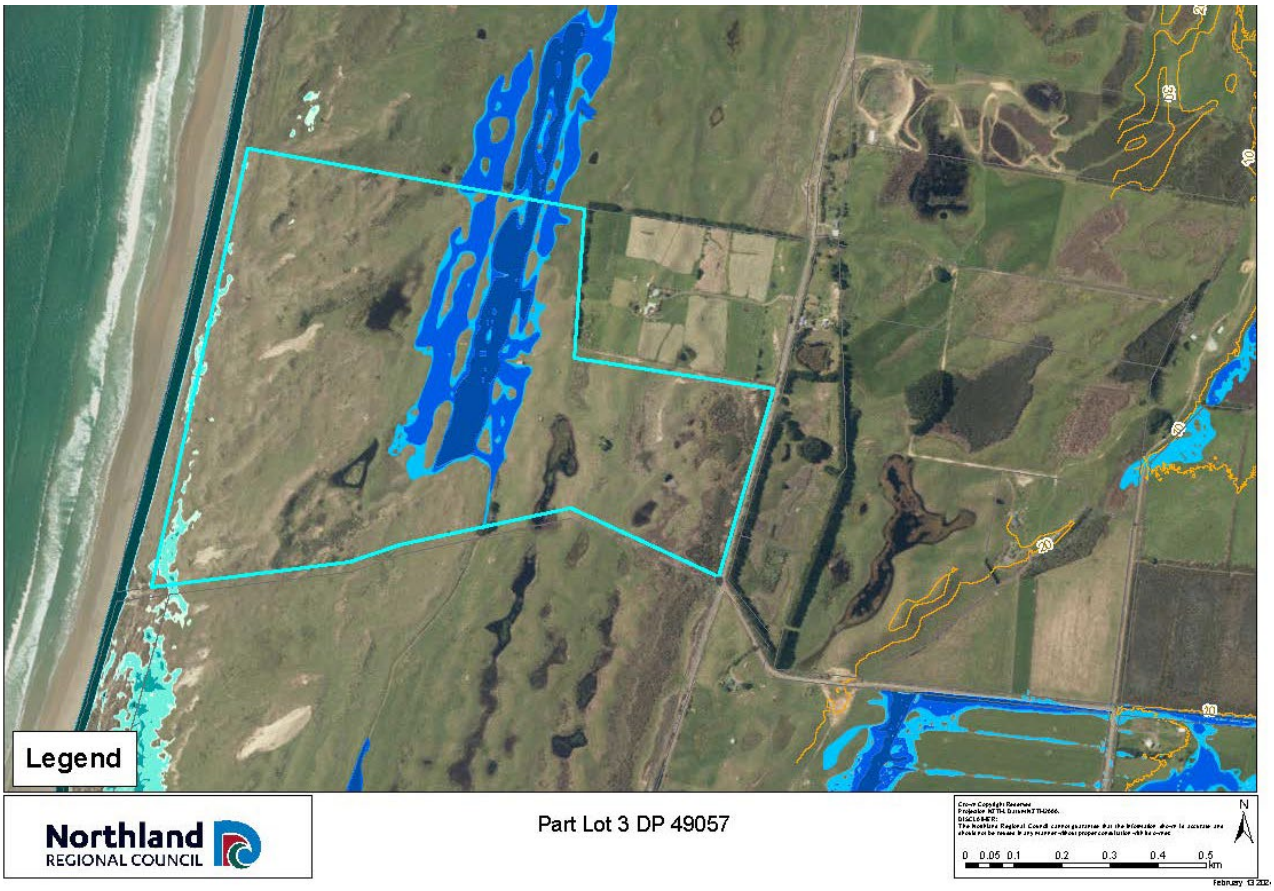
According to Northland Regional Council Hazard maps Lot 8 is not identified as being in a flood area. But is identified as "Erosion Prone Land".

The proposed field is to be setback 1.5m from boundaries and buildings as per TP58, (2004), Table 5.2. A 3m setback for the system is recommended. The field is to be set back a minimum of 3m from any retaining wall. Refer to TP58, (2004), Table 5.2, The Regional Plan for Northland, (2019), Section C.6.1.3 and the Far North District Plan, Section 12.7.6.1.2, 12.7.6.1.4(b) for all wastewater setback requirements.

The Site Plan, Section 8 shows the location of the proposed field and reserve along with setback requirements.

Photograph 1: Showing an area proposed for wastewater disposal on steep hillside.

2.2 Northland Regional Council Property Map & Google Earth Image



Google Earth image, October 2023, showing the approximate location and boundaries of Lot 8. Note that no ponds are located on the lot. The proposed field is to be located to the east of the caravan and shed well away from the coast.

2.4 Groundwater

The Regional Plan for Northland (2019), Section C.6.1.3, Table 9 requires a 600mm separation distance of secondary treated wastewater from groundwater. TP58 (2004), Table 5.2 recommends a more conservative separation distance of 1200mm in category 3 soils.

Groundwater was not intercepted during the 1200mm borehole taken during Summer, 3rd February 2024.

A 20m setback from a freshwater bore is required by the Regional Plan for Northland (2019), Section C.6.1.3, Table 9. The owner is not aware of any freshwater bores on or near the property. The NRC Water Resources map which shows the location of freshwater bores could not be checked as the website was not working.

2.5 Soil Profile

Geological Map Reference Number: NZMS 290 Sheet N 04/05 describes the soils as Houhora sand (HO) with well to moderately well drained soils of the coastal sand dune complex.

The borehole showed soils, in the area of the wastewater disposal field, to be category 3, sand with good draining characteristics. Refer to Photograph 2 and the Borehole Log, Section 7 showing soil layers.

Photograph 2: Borehole showing 50mm of category 3, slightly moist, sandy topsoil followed by category 3, slightly moist, light brown sand.

3.0 On-site Effluent Disposal

3.1 System Requirements

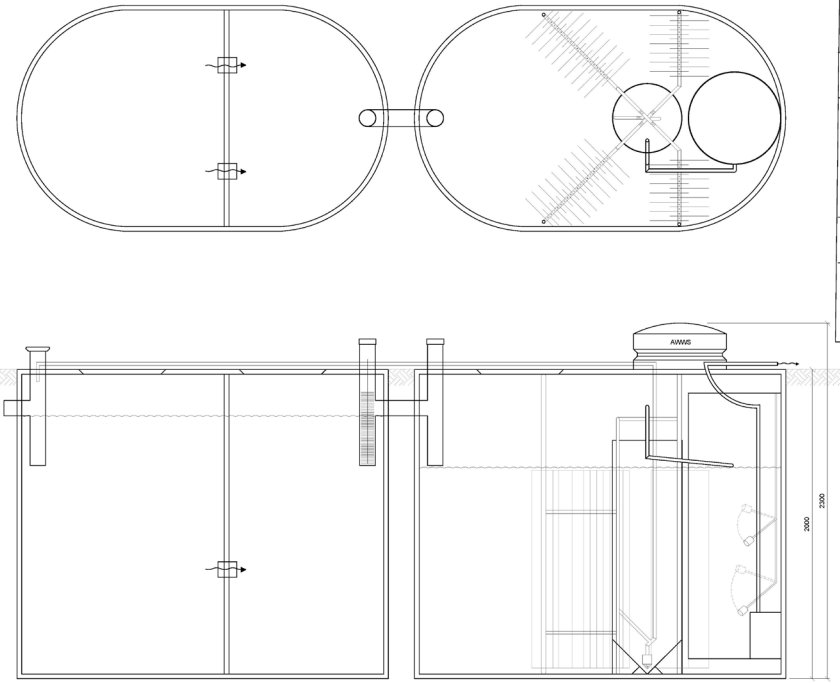
Effluent will be disposed of via a robust secondary treatment system which complies with the New Zealand Building Code. The system is to have a high output quality of: BOD5 equal to or less than 20g/m³ and TSS equal to or less than 30g/m³, in line with NZS1546.3:2008 and the New Zealand Building Code. The system is to have emergency storage and be fitted with an alarm to protect against system failure.

The owner is to obtain a maintenance agreement from the manufacturer on purchase of the system. Aeration treatment systems should have an annual maintenance agreement with the supplier as stated in Far North District Council bylaw 2805.2. This ensures the system operates efficiently and is serviced regularly.

The system is to be installed by a registered installer to manufacturer's instructions. It is imperative that a maintenance contract be obtained at the point of installation to avoid problems with the system. Installation and maintenance notes can be found at the back of this report, Section 8, 9 and 10.

Proposed system: AWWS-5000-C

Advanced WasteWater Systems Ltd
AWWS-5000-C Specification



Model: Process Description of System	AWWS-5000-C Vertically mounted thermo formed Poly sheets with fine bubble aeration
Volumes - Total operational Volumes - No of tanks - Pump out Chamber - Primary/Septic - Aeration Tank - Aeration Chamber - Clarification - Pump Out Chamber	 2000L/Day 2 Internal 5000 Dual 5000L 3600L 300L 300L
Filter - NZ 1546 standards	 1/16 inch Bio Filter (primary septic inlet)
Aeration - Type - Make/Model - Run Time - KW - Warranty Irrigation Pump	 Blower Secoh JDK80 - JDK120 9x 2hr 0.045 = 0.81 max KW per day 3 years To be specified if needed (metres head/lrr field size)
Recirculation	Sludge Return from Clarification to septic (Auto air operated)
Electrical - Controls	 4Plug ST controller 10Amp Circuit Breaker High Level Alarm Low or no air Alarm

AWWS
ADVANCED WASTEWATER SYSTEMS

1666 SH10, Kerkeri
Ph 021.407.130 Email blair@awws.co.nz
www.awws.co.nz

3.2 Proposed Wastewater Disposal Field

Wastewater calculations as follows:

Potential occupancy of the dwelling x litres per person per day / loading rate = area of wastewater disposal field

5 x 180 litres / 4 = 225m²

Occupancy taken from TP58 (2004), Table 6.1, p.51. 180 litres of wastewater produced per person per day with tank water is allocated, in line with TP58 (2004), Table 6.2, p.52. A loading rate of 4 is assigned due to category 3 soils with good draining characteristics in line with TP58 (2004), Table 9.2, p.150.

The proposed effluent field shall consist of approximately 225m length of subsurface dripper line spaced at 1m in a 225m² area. Dripper lines shall be buried 150–200mm below the surface within the topsoil layer. Anti-root intrusion, robust subsurface dripper line such as Netafim, Techline AS XR, or similar must be used.

The area shall be planted with grass and regularly mown to encourage nutrient uptake and evapotranspiration. It is essential that the field is planted with grass immediately following install. Refer to the attached Site Plan, Section 8, for details of the field including location, setbacks, and dripper line installation.

The wastewater disposal field should not be used to graze animals, be driven on or built over. These activities can result in damage to and failure of the effluent field. The field should remain grass as tree and shrub roots can damage dripper line.

A wastewater disposal field works best when exposed to sunlight and wind. This helps the grass grow and transpire wastewater and generally keeps the field dry. This should be considered when landscaping. For example, avoid planting large trees around the field which may shade it in the future.

It is a permitted activity when buried dripper lines are laid on slopes less than 25 degrees as per the Regional Plan for Northland, Section C.6.1.3, rule 4. The slope is approximately 19 degrees.

Refer to Section 8, 9 and 10 for further information on installation and maintenance.

3.3 Reserve Area

A 100% reserve wastewater disposal area is specified, greater than the minimum 30% required by the Regional Plan for Northland, 2019, C.6.1.3, 9b. The purpose of the reserve is to provide additional area for wastewater disposal, for example in the event of failure of the original field or future expansion of the proposed development. The reserve area must be protected from any development that would prevent its use in the future.

3.4 Stormwater Management

The property does not benefit from a connection to the town main water supply. Stormwater from the roof of the dwelling will be collected in water tanks. The overflow from the tanks is to be downslope of and well away from the proposed wastewater field.

A cut off drain is not required due to minimal upslope catchment.

4.0 Council Requirements for new Building Consents

4.1 Smoke Alarms

Smoke alarms shall be installed in accordance with the New Zealand Building Code Clause F7 Section 3.0. Smoke alarms shall be installed on or near the ceiling in every sleeping space or within 3m of every sleeping space door. This is a requirement by the Far North District Council for all new Building Consents.

4.2 Earthworks

The proposed works will comply with Earthworks EW-S3 Accidental Discovery Protocol and Earthworks EW-S5 Erosion and Sediment Control – Auckland Council Guideline Document GD005 GD05 Erosion and Sediment Control. Pdf (aucklanddesignmanula.co.nz).

4.3 Hazardous Activities and Industries List (HAIL)

A Preliminary Site Investigation report is not available for Lot 8 DP 594744.

5.0 Summary

A secondary treatment system with 225m² of buried dripper lines and 100% reserve is recommended.

Setback distances from stormwater flow paths, surface water and groundwater has been achieved.

6.0 TP58 3rd Edition, Appendix E

PART A: Owners Details

1. **Applicant Details:**

Applicant Name:	Philip Kingston & Louisa George
Company Name:	
Property Owner Name:	Philip Kingston & Louisa George
Nature of Applicant	Owners

2. Consultant / Site Evaluator Details:

Consultant/Agent Name	O'Brien Design Consulting Ltd	
Site Evaluator Name	Martin O'Brien	
Postal Address	O'Brien Design Consulting Ltd	
	153B Kerikeri Inlet Road, Kerikeri	
	0293	
Contact Details	Phone	09 407 5208
	Mobile	027 4075208
Name of Contact Person	Martin O'Brien	
E-mail Address	martin@obrienconsulting.co.nz	
Website	www.obriendesignconsulting.co.nz	

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

No

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted?

None

PART B: Property Details

1. Property for which this application relates:

Physical Address of Property	1000 Sandhills Road		
	Ahipara		
Territorial Local Authority	Far North District Council		
Regional Council	Northland Regional Council		
Legal Status of Activity	Permitted: √	Controlled:	Discretionary:
Relevant Regional Rule(s) (Note 1)			
Total Property Area (m²)	15,300m²		

2. Legal description of land (as shown on Certificate of Title)

Lot No.	Lot 8	DP No.	DP 594744	CT No.	
Other:					

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

Has a relevant property history study been conducted?

Please Tick	No	√	Yes	

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

1. Has a Slope Stability Assessment been carried out on the property?

Please tick	No		Yes	√

If No, state why?

The slope, in the area of the proposed disposal field is steep at ~19° and showed no signs of slippage or instability.
If Yes, please give details of report (and if possible, please attach report): fill out if you said yes

Author:	Teo Pilapil
Company/Agency:	T & A Structures Ltd.
Date of Report:	20th January 2024

Brief Description of Report Findings: - "The site did not appear to be subject to creep or instability. There appear
to be no recent ground movement on the site. It is also anticipated that the proposed development will not affect
or worsen the current stability of the site".

2. Site Characteristics:

Provide descriptive details below:
Performance of Adjacent Systems:
Unconfirmed.
Estimated Rainfall and Seasonal Variation:
Information available from **N.I.W.A MET RESEARCH**
Northland = 112.6mm average per month during 1981-2010
Vegetation / Tree Cover:
Grass.
Slope Shape: (Please provide diagrams)
In the area of the proposed field the slope is linear divergent.
Slope Angle:
~19°
Surface Water Drainage Characteristics:
Refer to Section 2.1 and 3.4.
Flooding Potential: YES/NO
No flooding on Lot 8.
Surface Water Separation:
Refer to Section 2.1 and the Site Plan, Section 8.

3. Site Geology

Houhora sand (HO) with well to moderately well drained soils of the coastal sand dune complex.

Geological Map Reference Number	Ahipara – Herekino, NZMS 290 Sheet N 04/05

4. What Aspect(s) does the proposed disposal system face?

North		West	
Northwest	√	Southwest	
Northeast		Southeast	
East		South	

5. Site clearances

Separation Distance from	Treatment Plant Separation Distance (m)	Disposal Field Separation Distance (m)
Boundaries	*1.5m minimum*	*1.5m minimum*
Surface water	*15m minimum*	*15m minimum*
Groundwater	-	*0.9m minimum*
Stormwater flow paths e.g. drain	*5m minimum*	*5m minimum*
Stands of trees/shrubs	*Outside tree canopy*	*Outside tree canopy*
Wells & potable water bores	*20m minimum*	*20m minimum*
Lakes, rivers, wetland & the coastline	*30m minimum*	*30m minimum*
Buildings	*3m minimum*	*1.5m minimum*
Flood area	*Ensure sealed unit no setback*	*Outside the 100yr ARI flood event*

PART D: Site Assessment - Subsoil Investigation

1. Please identify the soil profile determination method:

Borehole	Hand Augured	1200mm deep	No of Boreholes	1
Other:	USDA feel method to determine soil texture and soil structure			

Soil Report attached?

Please Tick	Yes	√	No	

2. Was fill material intercepted during the subsoil investigation?

Please Tick	Yes		No	√

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

3. Percolation Testing (mandatory and site specific for trenches in soil type 4 to 7)

Not required				
Test Report Attached?	Yes		No	√

4. Are surface water interception/diversion drains required?

Please tick	Yes		No	√
A cut off drain is not required due to minimal upslope catchment.				

4a. Are subsurface drains required?

Please tick	Yes		No	√

5. Please state the depth of the seasonal water table:

Winter	>1200mm	Measured		Estimated	√
Spring	>1200mm	Measured		Estimated	√
Summer	>1200mm	Measured	√	Estimated	
Autumn	>1200mm	Measured		Estimated	√

6. Are there any potential storm water <u>short circuit paths</u>?

Please Tick	Yes		No	√

7. Based on results of subsoil investigation above, please indicate the disposal field soil category

Is Topsoil Present?	Yes	If so, Topsoil Depth?	50mm
Soil Category	**Description**	**Drainage**	**Tick One**
1	Gravel, coarse sand	Rapid draining	
2	Coarse to medium sand	Free draining	
3	Medium-fine & loamy sand	Good drainage	√
4	Sandy loam, loam & silt loam	Moderate drainage	
5	Sandy clay-loam, clay loam & silty clay-loam	Moderate to slow drainage	
6	Sandy clay, non-swelling clay & silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

Reasons for placing in stated category

The borehole log showed soils from 0-50mm to be slightly moist, category 3, brown, sandy topsoil. From 50-
1200mm soils were slightly moist, category 3, light brown sand. Soils are described as having good drainage.

PART E: Discharge Details

1. Water supply source for the property:

Rainwater (roof collection)	√
Bore/well	
Public supply	

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available (Refer TP58 Table 6.1 and 6.2)

Number of Bedrooms	3		
Design Occupancy	5		(Potential number of people)
Per capita Wastewater Production	180		(Litres per person per day)
Other - specify			
Total Daily Wastewater Production	900		(Litres per day)

3. Do any special conditions apply regarding water saving devices?

a) Full Water Conservation Devices?	Yes		No	√	(Please tick)
b) Water Recycling - what %?	0%				(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage:

4. Is Daily Wastewater Discharge Volume more than 2000 litres:

Please tick	Yes		No	√

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

PART G: Secondary and Tertiary Treatment

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system:

Secondary Treatment			
Home aeration plant	√	Refer to Section 3.1	
Tertiary Treatment			
Ultraviolet disinfection			
Other		Specify	

PART H: Land Disposal Method

1. Please indicate the proposed loading method:

Gravity	
Dosing Siphon	
Pump	√

2. High water level alarm to be installed in pump chambers

Please tick	Yes	√	No	
If not to be installed, explain why:				

3. If a pump is being used, please provide the following information:

Total Design Head	32	(m)
Pump Chamber Volume	150	(Litres)
Emergency Storage Volume	1000	(Litres)

4. Please identify the type(s) of land disposal method proposed for this site:

Surface Dripper Irrigation	
Sub-surface Dripper Irrigation	√
Mound with Dripper Irrigation	

As Per Attached Plan

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

Loading Rate	4		(Litres/m²/day)
Disposal Area	Design (m²)	225	For driplines spaced at 1m
	Reserve (m²)	225	For driplines spaced at 1m

Explanation *(Refer TP58 Sections 9 and 10)*

Loading rate for category 3 soils in line with recommendations from TP58 (2004), Table 9.2, p.150.

6. What is the available reserve wastewater disposal area
(Refer TP58 Table 5.3)

Reserve Disposal Area (m²)	225
Percentage of Disposal Area (%)	100%

For dripper lines spaced at 1m

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:

Description and Dimensions of Disposal Field:

Refer to Proposed Wastewater Disposal Field, Section 3.2 and the Site Plan, Section 8.					
Plan Attached?	Yes	√	No		(Please tick)

PART I: Maintenance & Management

(Refer TP58 Section 12.2)

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

Please tick	Yes		No	√

The owner is to obtain a maintenance agreement from the manufacturer on purchase of the system. Aeration
treatment systems should have an annual maintenance agreement with the supplier as stated in Far North District
Council bylaw 2805.2. This ensures the system operates efficiently and is serviced regularly.
Client to enter into agreement with chosen system supplier as per FNDC bylaw

PART J: Assessment of Environmental Effects

1. Is an assessment of environmental effects (AEE) included with application?
(Refer to TP58 Section 5. Ensure all issues concerning potential effects addressed)

Please tick	Yes	√	No	

PART K: Is Your Application Complete?

1. In order to provide a complete application have you remembered to:

Fully Complete this Assessment Form	√
Include a *Location Plan* and *Site Plan* (with Scale Bars)	√
Attach an Assessment of Environmental Effects (AEE)	√

2. Declaration

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

Name: Martin O'Brien	Signature	[redacted]
Position: Director	Date	15th February 2024

Note:

Any alteration to the site plan or design after approval will result in noncompliance.

Building consent must be approved before work commences.

7.0 Borehole Log

O'BRIEN DESIGN CONSULTING

BOREHOLE LOG 1

Client	Philip Kingston & Louisa George	**Job No.**	2936
Project	Installation of onsite wastewater	**Date Drilled**	3/02/2024
Site Address	1000 Sandhills Road, Ahipara	**Drilled By**	Martin O'Brien
Legal Description	Lot 8 DP TBC	**Drill Method**	50mm hand auger

Depth mm	GWL	Soil Map Reference	Graphic Log	Field Description	Soil Category
100	Groundwater not intercepted	Houhora sand (HO)		50mm Slightly moist dark brown sandy topsoil	3
200				Slightly moist light brown SAND	
300					
400					
500					
600					
700					
800					
900					
1000					
1100					
1200					
1300				EOB	
1400					
1500					
1600					
1700					
1800					
1900					
2000					
2100					

Graphic Log Legend

Fill | Topsoil | Gravel | Sand | Clay | Silt

The subsurface data described above has been determined at this specific borehole location and will not identify any variations away from this location. The data is for the determination of soil type for wastewater disposal applications only and is not to be used for geotechnical purposes.

N

Wastewater disposal field to be setback 1.5m from boundary

1.5m

Proposed water tanks

Sewer: 100mm Ø pipe, gradient 1:60

Aeration treatment system with power cable from house

20mm Alkathene pipe, TBC with manufacturers installation instructions

225m² Wastewater disposal field (subsurface dripper line): 225m Length approx of dripperline with emitters at no greater than 600mmc/c with flow rate of 1.6l/hr at 1000mm spacing's buried 150-200mm below surface within topsoil layer

Proposed dwelling

Proposed deck

Driveway

BH1

225m² (100%) Reserve area

5m Setback from open drain

Legend

- Open drain
- Setbacks
- Power cable
- Sewer: 100mm Ø pipe, gradient 1:60
- Alkathene pipe
- Wastewater disposal field
- Reserve area

NOTES

1. Contour lines at 1m increments, sourced from NRC .
2. All drainage to comply with AS/NZS3500 & NZBC G13/AS1. All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
3. Length of dripper lines to be no more than 100m between feed points.
4. Dripper lines to follow contour lines
5. Dripper lines to be setback:

- 1.5m from buildings
- 1.5m from property boundaries
- 5m from any intermittent storm water flow path such as a drain or overland flow path down slope of the field
- 30m from coastline

6. Overflow from water tanks to be directed well away from the proposed wastewater disposal field.
7. Smoke alarms are to be installed in accordance with the New Zealand Building Code Clause F7 Section 3.0:

- Smoke alarms shall be installed on or near the ceiling in every sleeping space or within 3m of every sleeping space door.

7. The works which are being proposed will comply with Earthworks EW-S3 Accidental Discovery Protocol and Earthworks EW-S5 Erosion and Sediment Control - Auckland Council Guideline Document GD005 GD05 Erosion and Sediment Control.pdf (aucklanddesignmanual.co.nz)

O'BRIEN DESIGN CONSULTING

T 09 407 5208 | martin@obrienconsulting.co.nz

Project Title

Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara
Lot 8 DP 594744

Sheet Title

Wastewater Site Plan

Drawn 5 February 2024

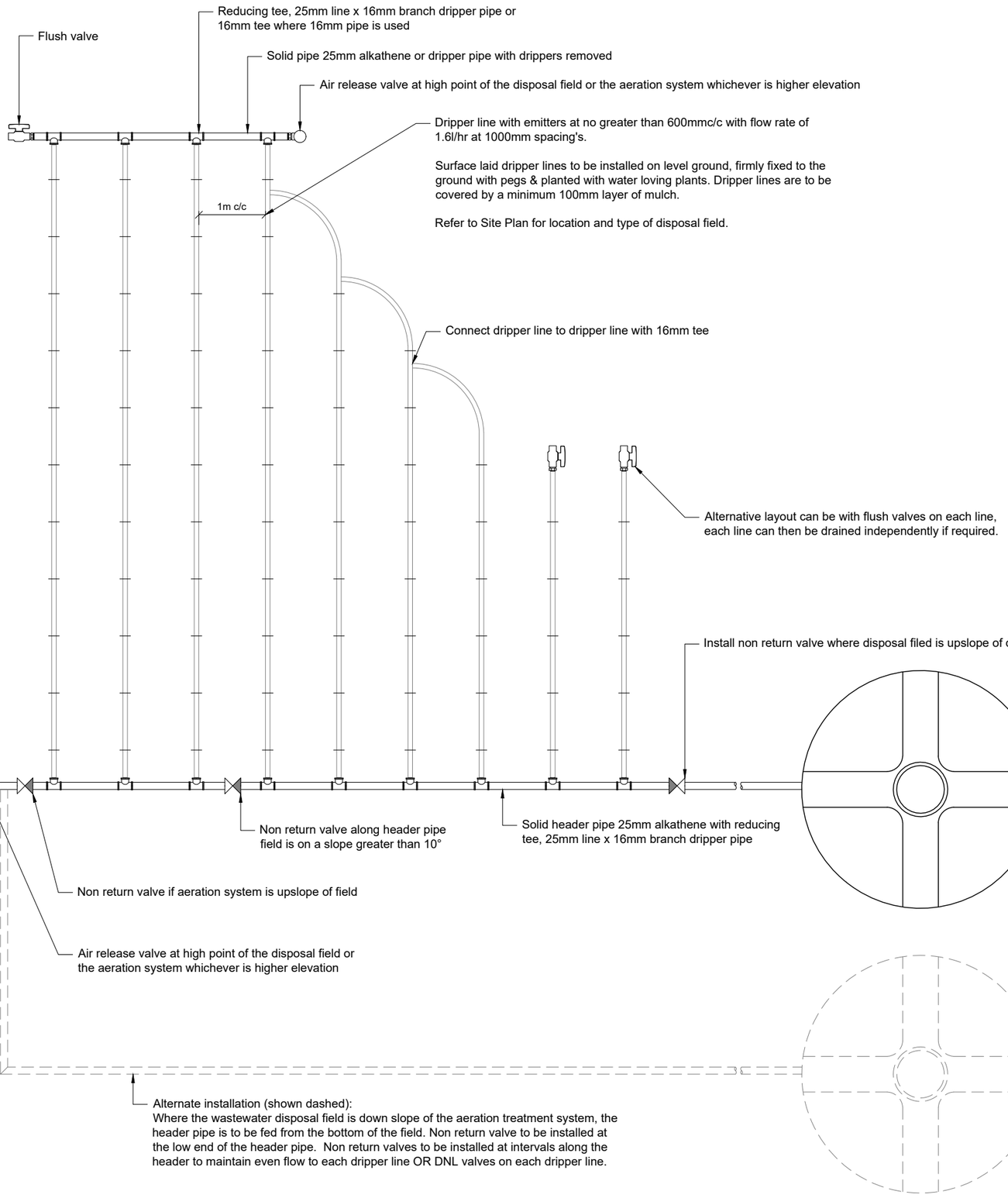
Project No 2936

Rev A

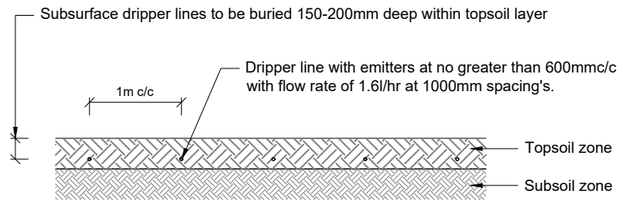
Sheet A01

Scale (A3 Original) 1: 250

2.5 1.25 0 2.5 5 m



W01 Typical Wastewater Disposal Field Plan
SCALE = 1:20



W02 Typical Subsurface Dripper Line Detail
SCALE = 1:20

NOTES

1. All drainage is diagrammatical, do not scale from drawing.
2. Length of dripper lines to be no more than 100m between feed points.
3. Dripper lines to follow contour lines.
4. Dripper lines to laid on even ground, laying dripper lines on gully's or humps in the ground can cause ponding.
5. Air release valve to be at the high point in the disposal field or at the system if that is a higher elevation, locations shown on detail are indicative.
6. The works which are being proposed will comply with Earthworks EW-S3 Accidental Discovery Protocol and Earthworks EW-S5 Erosion and Sediment Control - Auckland Council Guideline Document GD005 GD05 Erosion and Sedimen Control.pdf (aucklanddesignmanual.co.nz)

O'BRIEN DESIGN CONSULTING
T 09 407 5208 | martin@obrienconsulting.co.nz

Project Title
Philip Kingston & Louisa George
1000 Sandhills Road
Ahipara
Lot 8 DP 594744

Sheet Title
Wastewater Detail

Drawn 5 February 2024

Project No 2936

Rev A

Sheet A02

Scale (A3 Original) 1: 20

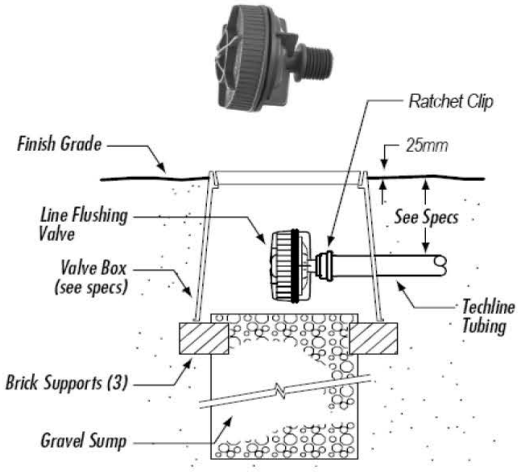
0.2 0.1 0 0.2 0.4 m

9.0 On Site Wastewater Installation Guide for the Installer

TECHLINE AS™ DESIGN GUIDE

LINE FLUSHING VALVES:
Line Flushing Valves are used to provide a cleansing action in the dripperline each time the zone is turned on.

- When a zone is turned on, the flush valve begins dumping water into a sump *(valve box)*.
- The dumping of water *(additional flow)* allows the velocity of water inside the dripperline to increase momentarily helping to clean the inside walls of the tubing and drip inlet filters.
- This action moves sediment out of the zone and into the sump.

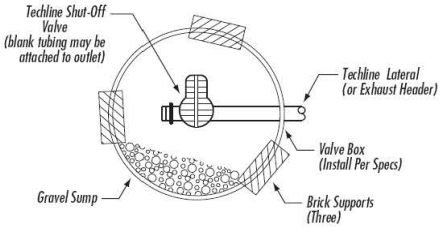


AUTOMATIC LINE FLUSHING VALVE:

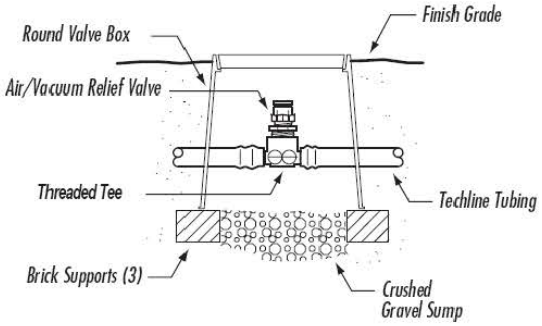
- Place one Automatic Line Flushing Valve at the furthest point in the drip system.
- For GRID layouts this will typically be in the collecting manifold. On flat sites the Automatic Line Flushing Valve can be installed in the middle of the collecting manifold however in sloping sites the flushing manifolds should be installed at the lowest end.
- For LITE layouts the Automatic Line Flushing Valve will be installed at the midpoint of the tubing layout.
- Use one Automatic Line Flushing Valve for each 45L/M of zone flow.
- All Automatic Line Flushing Valves should be installed in a valve box with a gravel sump adequate to drain approximately 4 litres of water.
- Automatic Line Flushing Valve requires a minimum pressure of 70kPa (7m) to shut off completely.

MANUAL FLUSHING VALVE:

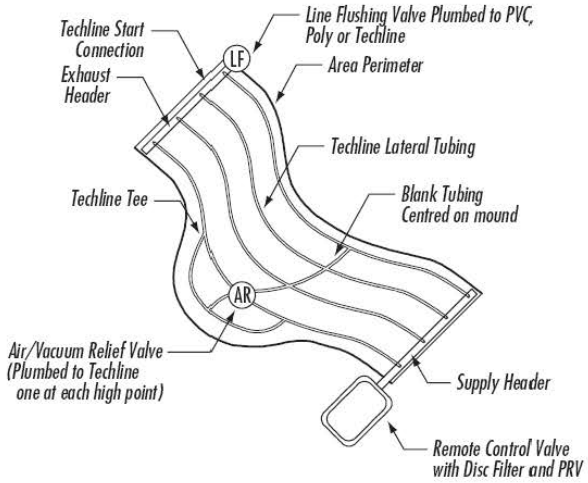
- Allows for manual flushing of lines during system start-up and during season.
- Manual Flushing Valves should be located at each end of the collecting manifold in a GRID system.
- Manual Flushing Valve should be located at the midpoint of a LITE layout.
- Allow 1 second per metre of dripperline & poly pipe in the zone for as a general guide for an adequate flush time.



AIR/VACUUM RELIEF VALVES:
Air/Vacuum relief valve freely allows air into a zone after shut down. It also ensures a vacuum within non Anti Siphon dripperline system doesn't suck debris or dirt back in to the dripperline. It also provides a means of releasing air from the dripperline when the zone is turned on, eliminating air pockets and speeding up the dripperline operation.



- Install Air/Vacuum Relief Valve at the highest point in the drip system.
- Install one Air/Vacuum Relief Valve for every 40L/M of zone flow.
- Ensure that all of the rows of Dripperline can take advantage of the Air/Vacuum Relief Valve; install it/them along a lateral that runs perpendicular to the dripperline laterals. This may be a collecting manifold, or a special lateral connecting all rows of dripperline, such as going over a mound.



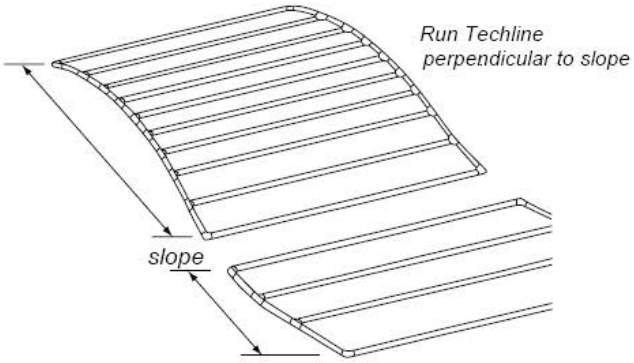
- All Air/Vacuum Relief Valves should be installed in a valve box with a gravel sump. This will ensure that the only clean air will enter the drip system.

Note: Larger Air Release valves are available for large projects.

SLOPES AND MOUNDS:
Techline AS™ has a self regulating dripper with an anti-siphon device built into it which will ensure that it will perform reliably on sites with slopes or mounds. When the drip systems shuts down however remaining water inside Techline AS™ will drain out which can cause an accumulation of water at the lower reaches of the drip system. This can be further compounded by the natural movement of water down the slope.

When designing a Techline AS™ system for sloping ground or mounds ensure that:

- Techline AS™ is installed perpendicular to *(across)* slopes. This helps eliminate water drainage at the lower ends of the drip laterals.
- On large slopes split the slope into two zones; run the top 2/3 on one zone and run the bottom 1/3 on a separate zone. This will allow greater irrigation control and will allow two areas with different water requirements to operate more efficiently.



- Install Dripperline Non Leakage *(DNL)* device which will hold back water inside the dripperline laterals and manifolds.

NOTE: Netafim UniRam CNL™ is a commercial dripperline that has a "non-leakage device" built into its drippers and prevents water draining out of them when the system is shut-off. It will hold back 1.4m of water within the drip system. This dripperline should be considered for projects where water drainage is undesirable.

10.0 On Site Wastewater Maintenance for the Owner

10.1 Why regular maintenance

Septic tanks and on-site wastewater treatment systems need regular maintenance to work properly. The impact on the environment is minimal if your system is well-maintained.

Owners are legally responsible for maintaining their on-site wastewater treatment system.

There are health risks for you, your family and your community from poorly maintained wastewater treatment systems. Poor maintenance of treatment systems can cause sewage effluent to rise to the surface or effluent to enter the groundwater system. People and animals can fall sick by coming into contact with raw sewage or by drinking contaminated groundwater.

The life of your system depends on how much effluent is discharged each day and other factors such as rainfall and general clogging of pores in the ground. The greatest impact is how you maintain your system and what you put down it.

Components of your system

- Wastewater treatment unit – generally a septic tank or aerated treatment system.
- A land application system – generally trenches, or low-pressure surface or subsurface irrigation drip lines.

Do:

- Use biodegradable, low phosphate household cleaners and laundry powders or liquid.
- Use body washes and shower gels, instead of soap, (or non-petroleum based products).
- Use the water and suds saver cycles on your dishwasher and washing machine (if fitted) and put a water saver device on your shower.
- Fix any leaking pipes and toilet systems.
- Clean septic tank outlets and filter when required (usually every 6 months).
- Follow the service and maintenance requirements of your system.
- Scrape all dishes to remove food material before washing.
- Keep all possible solids out of the system.
- Inspect tank annually for sludge and scum levels.
- The tank should be pumped out approximately every 3–5 years. Have tank pumped out when:
    - the top of the floating scum is 75mm or less from the bottom of the outlet
    - sludge has built up to within 250mm of the bottom of the outlet

Don't:

- Use soap-based washing powders that do not biodegrade.
- Install a waste master disposal in your sink.
- Dispose of eggshells, coffee grounds or tea bags. Compost food scraps or put in rubbish.
- Dispose of strong bleaches, chlorine compounds, antiseptics or disinfectants, medicines or disposable nappies, sanitary napkins/pads or condoms into drains.
- Allow fat to be poured down the sink.
- Put petrol, oil, flammable/explosive substances, trade waste or chemicals down the drain.
- Empty a spa or swimming pool into the system.

Signs of trouble

The system is not working correctly if:

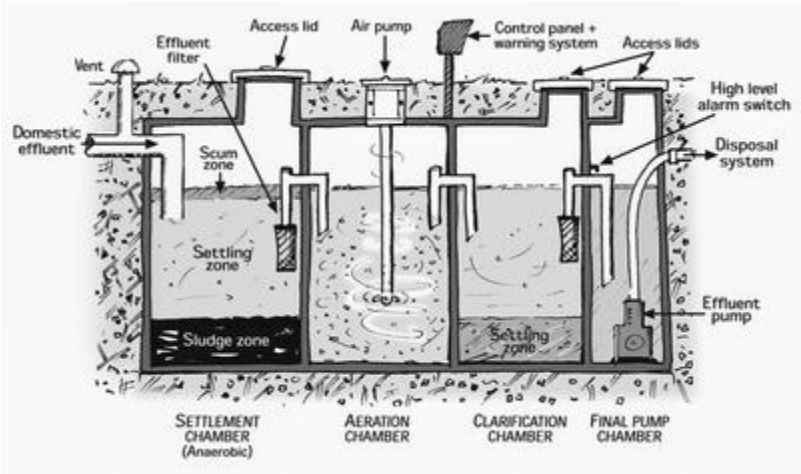
- There is a foul smell around tank or land application area.
- The tank, gully trap or tank mushroom is overflowing.
- The ground around the tank is soggy.
- Sinks/basins/toilets are emptying slowly or making gurgling noises when emptying
- The grass is unusually dark green over the land application area.

10.2 Northland Regional Council Public Information

Aerated Wastewater Treatment Systems

The term 'Aerated Wastewater Treatment Systems (AWTS)' covers a range of types of onsite treatment systems that provide additional treatment to septic tank effluent. Their mechanical pumps require regular maintenance and a continuous power supply.

In general, an AWTS has three parts which may be housed in a single unit or split into more than one unit (see diagram below). This is a generalised diagram of an AWTS. Different brands will differ in design.



The three main processes that take place in an AWTS are:

Settlement and anaerobic treatment

This takes place in a chamber or tank, and the process is identical to what happens in a septic tank. Solids within the effluent settle and are broken down by anaerobic bacteria (bacteria that live without oxygen).

Aerated treatment

The effluent then enters a second chamber where aerobic bacteria (bacteria that require oxygen to live) break down the solids further and reduce the number of harmful bugs within the effluent. This normally happens by either passing the effluent over, or through, a material that contains aerobic bacteria or by pumping air directly into the effluent. In some AWTS, a combination of both methods may be used.

Final settlement (clarification)

After the aeration treatment, the effluent is allowed to settle before being pumped to a disposal system. An AWTS removes a greater amount of solids from the effluent than a septic tank does therefore problems within the disposal system caused by clogging are less likely. The additional treatment within the aerobic chamber should result in effluent that has fewer harmful bugs and nutrients, so it is less harmful to the environment. The installation of an AWTS is particularly useful in areas where there is a high groundwater table or surface water that needs protection or where there are poorly draining soils.

Effluent disposal

Effluent from an AWTS is commonly disposed of through dripper irrigation lines, which are flexible pipes with small pressure-compensating drippers installed along their length. The drippers should be self-flushing which helps prevent them becoming clogged. There should also be "flushing valves" at the end of each line for maintenance purposes.

Dripper lines shall be buried 150–200mm below the surface within the topsoil layer. Anti-root intrusion, robust subsurface dripper line such as Netafim, Techline AS XR, or similar must be used. The waste disposal field is to be planted with grass and should be mown frequently to promote nutrient uptake

It is recommended that the wastewater disposal area be clearly marked or fenced to minimise the risk to human health and reduce the possibility of damage to the system. The disposal field should not be used to graze animals, be driven on or built over. Buried dripper line should be planted with grass only. Do not plant shrubs and trees over buried dripper lines as the roots can damage the lines.

Surface water cut-off drains

If your disposal system is located on a slope a surface water cut-off drain will usually be installed above the effluent disposal system to prevent stormwater runoff from the slope entering the disposal area. All surface water cut-off drains need to be maintained to make sure they work properly. This may include removing excess grass or plant growth from the drains and making sure there are no other obstructions to prevent the free flow of water.

Prior to winter, it is a good idea to give all surface water cut-off drains a quick visual check and to carry out any required maintenance as soon as possible. If a surface water cut-off drain is not working properly, the excess stormwater entering the disposal area will cause failure of the disposal system and result in effluent flowing down the slope.

11.0 Limitations

1. It is imperative that this report be read in full before installation commences. O'Brien Design Consulting Ltd. is to be contacted if there are any variations in subsoil or site conditions from those described in this report. Site conditions may change from the date of the site visit.

2. O'Brien Design Consulting Ltd. is to be contacted if for any reason installation of the onsite wastewater system cannot be achieved to the design set out in this document. In this event O'Brien Design Consulting Ltd. reserves the right to revise this document. Should at any time the design be altered, O'Brien Design Consulting Ltd. are to be contacted for written approval before installation commences.

3. Our responsibility for this report is limited to the property owner named in Part A of this document. We disclaim all responsibility and will accept no liability to any other person unless that party has obtained the written consent of O'Brien Design Consulting Ltd. O'Brien. Design Consulting Ltd reserves the right to qualify or amend any opinion expressed in this report in dealing with any other party. It is not to be relied upon for any other purpose without reference to O'Brien Design Consulting Ltd.

4. Any alteration to the site plan or design will result in noncompliance.

5. The wastewater disposal field is designed according to the number of bedrooms, potential occupancy and wastewater volumes produced, as outlined in this report. Any increase in the number of bedrooms, potential occupancy or wastewater volumes produced may result in failure of the field. O'Brien Design consulting take no liability for wastewater volumes produced exceeding that stated in Part E, number 2.

6. Recommendations and opinions in this report are based on data obtained from the investigations and site observations. The nature and continuity of subsoil conditions and groundwater at locations other than the investigation bores and test areas are inferred and it should be appreciated that actual conditions could vary over the site.

7. This report does not investigate or give recommendations on ground bearing capacity for foundations or slope stability. A geotechnical report may be required. This is the responsibility of the homeowner.

8. Following payment to the FNDC your Building Consent documentation will be emailed to you. It is the responsibility of the homeowner/builder to engage a registered drainlayer to install the system and field. The homeowner/builder is responsible for ensuring a printed copy of the issued Building Consent documentation is onsite at every inspection. Plans must be printed in colour and be at least A3 size. The installation is to be inspected by a FNDC inspector or similar suitably qualified person.

9. Following completion of the project it is the homeowner's responsibility to apply for Code of Compliance. The system manufacturer and drainlayer should assist you in applying for Code of Compliance. You will need to fill out a Code of Compliance Form as provided in the following link: https://www.fndc.govt.nz/Our-Services/Building-Consents/Building-forms-and-guides/Code-Compliance-Certificate-Form-6. You will also need an As Build diagram from the drainlayer showing installation and a commissioning statement and electrical certificate from the manufacturer.

10. The homeowner is responsible for the everyday upkeep of the system and field. Information is provided in the NRC Public Information section of this report. Further information is to be supplied by the manufacturer.

11. It is the responsibility of the owner to provide the Far North District Council with a maintenance agreement for the installed system. The maintenance of onsite wastewater systems should be sustained to reduce the risk of system failure.

12. Any questions arising from the above or during installation, please call O'Brien Design Consulting Ltd.

12.0 Producer Statement

DESIGN: ON-SITE EFFLUENT DISPOSAL SYSTEMS (TP58)

ISSUED BY: Martin O'Brien……(approved qualified design professional)

TO: Philip Kingston & Louisa George……..(owners)

TO BE SUPPLIED TO: Far North District Council

PROPERTY LOCATION: 1000 Sandhills Road, Ahipara, Lot 8 DP 594744

TO PROVIDE: Design an on-site effluent disposal system in accordance with Technical Paper 58 and provide a schedule to the owner for the systems maintenance.

THE DESIGN: Has been in accordance with G13 (Foul Water) G14 (Industrial Liquid Waste) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity Insurance (Design) to a minimum value of $200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:
(1) The site verification of the soil types.
(2) All proprietary products met the performance requirements.

The proposed design will meet the relevant provisions of the Building Code and 8.15 of The Far North District Council Engineering Standards.

……(Signature of approved design professional)
Licence Building Practitioner - Design 2, MA, BA with Hons (Professional qualifications)
BP103567……(Licence Number or professional Registration number)

Address: 153B Kerikeri Inlet Road, Kerikeri
Phone Number: 09 407 5208
Mobile Number: 027 407 5208
Date: 15th February 2024

Note: This form is to accompany every application for a Building Consent incorporating a T.P.58. Approval as a design professional is at Councils discretion.

SITE SUITABILITY REPORT

1000 Sandhills Road, Ahipara 0483

T&A Structures Ltd.

20 January, 2024

Table of Contents

1. PROJECT 3
2. SITE DESCRIPTION 3
3. GEOTECHNICAL INVESTIGATIONS 4
4. MATERIAL PROPERTIES 6
5. STORMWATER AND SEWERAGE 6
6. NATURAL HAZARD 6
7. ASSESSMENT 7
8. OTHER RECOMMENDATIONS 8
9. LIMITATIONS 9
10. APPENDIX 1: BORE LOGS 10

1. PROJECT

1.1 Project Details

Client's Name	:	Advance Build
Site Address	:	1000 Sandhills Road, Ahipara 0483
		This is a newly subdivided lot being a part of
Lot Number	:	Pt Lot 3
DP number	:	4905715

1.2 Brief

T&A Structures were engaged by the Client to undertake a Site Suitability Report with the purpose of checking the suitability of the site for a proposed new dwelling. The site assessment was carried out on 10 January 2024.

This report addresses the suitability of the site for the proposed dwelling. As part of the assessment, the report undertakes to:

- Describe the soils at the site;
- Quantify sub-soil conditions to allow selection of foundation types;
- Note any pertinent features of the land;
- Make recommendations regarding further investigations if necessary.

It was understood that the Client proposes to construct a lightweight single level dwelling in the factory and then transport it to the site.

2. SITE DESCRIPTION

The property occupies a land area of about 1.53 hectares. There were no existing permanent buildings and other structures in the property apart from a mobile caravan and a small storage.

The property is bounded by an easement along the western and eastern boundaries and neighbouring properties along the northern and southern boundaries. The part of the property where the proposed house is to be built is sloping down very gently (almost flat) towards the west east by an average ground slope of about 5 degrees. About 3 metres from the western side of the proposed house, the ground abruptly slopes down towards the west by about 30 to 40 degrees, down by about 3 metres, then became flat again.

3. GEOTECHNICAL INVESTIGATIONS

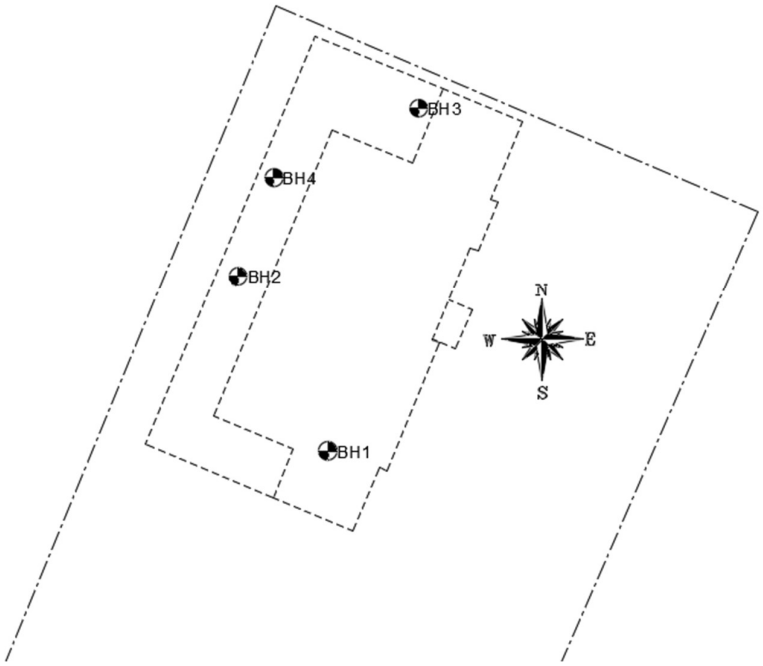
3.1 Geology

The land is described in the New Zealand Land Inventory NZMS 290 series as Houhora Sand (HO), belonging to the Soils of the Coastal Sand Dune Complex and categorised as well to moderately well drained soils. This has been found to be consistent with the results of the site investigation.

3.2 Subsurface Investigations

The investigations undertaken included a walkover inspection, one augered borehole and three Scala Penetrometer tests. The location plan of the test holes is attached below.

The borehole logs are attached as Appendix 1 to this report. The depths of strata on the Engineer's log are measured from ground levels at each exploratory hole.



3.4 Subsurface Findings

BH1 and BH3 are Scala penetrometer tests carried towards the eastern side of the proposed house. These tests found a suitably hard subsoil (at least 300 UBC) at about 1000mm bgl.

BH2 is a Scala penetrometer test carried out towards the western side of the proposed house. This test did not find a suitably hard subsoil until at least 2400mm bgl. BH4, which was carried out using a hand auger and a Shear Vane near BH2 revealed a soft ground within the test depth and an un-engineered fill of about 900mm thick.

The test results indicated that when the area was developed, the original soil was probably pushed towards the west in the effort to create a relatively level building flatform.

Soil was found to be predominantly soft sand. Ground water was not encountered in any of the test holes. It should be noted however, that ground water table varies according to season.

The subsurface conditions are detailed on the borehole logs in Appendix 1. The observations noted in the investigations have been extrapolated between the various test locations to infer probable site conditions. It is noted that these inferences in no way guarantee the validity of these findings due to the inherent variability of natural soil

deposits. The actual ground conditions discovered during excavation may vary from what is reported herein.

4. MATERIAL PROPERTIES

Soil shear strengths (measured with shear vane, BH4) range from 50kpa to 96kpa, with mean shear strength of about 60kpa.

The two Scala Penetrometer tests (BH1 and BH3) carried out within the eastern part of the proposed house footprint generally reached 100 kpa (3.3 blows per 100mm) allowable soil bearing capacity at 1.00 mbgl and consistently have higher readings as the scala was driven down. The Scala Penetrometer test (BH2) carried out within the western part of the proposed house footprint generally reached 100 kpa (3.3 blows per 100mm) allowable soil bearing capacity at 2.40 mbgl and consistently have higher readings as the scala was driven down.

5. STORMWATER AND SEWERAGE

The FNDC 3 Waters Map indicated that both the council's wastewater and stormwater reticulated system are not available in this site for the wastewater and stormwater disposal. However, the concept plans provided for this study indicated that the requirements for the proper disposal and mitigation of wastewater and stormwater respectively, have already been sorted out.

Any site-specific stormwater management design and/or wastewater disposal system design, if required, is outside the scope of this report.

6. NATURAL HAZARD

The NRC Natural Hazards Map indicated that as of writing this report, there were no any natural hazard affecting the property which could affect the proposed development apart the possible soil erosion problem along the steep bank at the western side of the proposed house flatform. It is recommended that this steep bank should be protected by planting it with suitable grasses to provide the necessary grass cover.

7. ASSESSMENT

7.1 Expansiveness

Based on the results of our field investigation, along with our knowledge and experience with these kinds of soils, we classify the investigated site as not expansive in terms of AS2870:2011. Expansive soils are prone to shrinkage and swelling effects resulting from moisture changes from within the soil.

We note that no laboratory testing of the material to confirm the soil expansivity was undertaken.

7.2 Site Stability

The site did not appear to be subject to creep or instability. There appear to be no recent ground movement on the site. It is also anticipated that the proposed development will not affect or worsen the current stability of the site.

7.3 Earthworks and Retaining Structures

As mentioned earlier, the ground in the site where the proposed dwelling is to be built is almost flat. It is anticipated that the proposed development will not require considerable amount of earthwork and retaining. Cuts and fills in excess of 0.5m high and within 3.0 metres from any of the building footprints, if specifically needed should be either battered back at no greater than 1v:2h or retained by a suitably designed retaining wall unless approved otherwise by an engineer. Any retaining wall should be specifically designed according to the following parameters:

- Unit weight of soil: 18 KN/m^3
- Angle of internal friction: 26^o
- Undrained soil shear strength: 60 kpa

7.4 Liquefaction Potential

Liquefaction occurs when the structure of a loose, saturated sand breaks down due to some rapidly applied loading such as earthquake shaking. As mentioned above, the soil in the site is soft sand but ground water was not encountered within the test depths in any of the test holes. In addition, the site is in Northland where earthquake occurrence is considered unlikely. Hence, it is considered that liquefaction is unlikely to occur on this site.
A detailed liquefaction assessment for this site is outside the scope of this study.

7.5 Foundation System

The soils on this site are considered to be not expansive but soft. The soils appeared to have not complied with the definition of “good ground” as noted in NZS3604:2011. It is however, considered that the site is suitable for the proposed development. The following are the recommended foundation options:

- Specifically designed pile foundation. The design should consider the effect of soft soil deposits and un-engineered fill along the western side of the proposed dwelling. Due possible soil collapse during drilling for foundation footings, it is recommended that a driven pile should be considered for the pile foundation instead of bored piles. Subject to specific calculations, the piles should be embedded at least 3000mm into the ground as a minimum requirement. The piles can be pre-drilled by up to 1000mm deep. The piles should be driven to refusal defined by the pile set computed using Hiley Formula. Final pile embedment requirement should be determined by driving a test pile.
- Where a shallow foundation is preferred, a specifically designed ribraft slab foundation is recommended. The top 400mm of soil, including topsoil should be taken out and be replaced with compacted hardfill, preferably Gap 65 or 40. The compacted hardfill should extend at least 1000mm from the building footprint. The foundation should be designed for a maximum allowable soil bearing pressure of 50Kpa. In case of habitable dwelling, the western side of the foundation should be supported with driven piles as discussed above.

8. OTHER RECOMMENDATIONS

- In case of shallow foundation, the exposed subsoils should be examined, and any potential soft spots are to be further examined and then removed as appropriate. Replacement fill shall be GAP 65 or GAP 40 placed in layers not exceeding 150mm thick and compacted with a suitable compactor. Any fill exceeding 600mm thick should be tested for compaction.
- All stormwater collected from roofed and paved surfaces together with discharges from retaining walls and other subsoil drains shall be controlled and piped away from the proposed building footprint. Ensure that no uncontrolled runoff or concentrated discharges are directed onto open ground, into soakage pits or into subsoil drainage systems.
- Fill materials beneath any on-ground slab shall be GAP 65 or GAP 40 placed and compacted in layers not exceeding 150mm thick. Any fill exceeding 600mm thick should be tested for compaction.

- An engineer should inspect the earthworks, building flatform construction and foundation, and in the case of concrete slab construction, prior to the concrete being poured to ensure that the actual soil parameters are as mentioned in this report or better. Producer Statements PS4 – Construction Review should be required for each of these stages.

9. LIMITATIONS

- Our responsibility for this report is limited to the Client named in this report. We disclaim all responsibility and will accept no liability to any other person unless that party has obtained the written consent of T&A Structures. T&A Structures reserves the right to qualify or amend any opinion expressed in this report in dealing with any other party. It is not to be relied upon for any other purpose without reference to T&A Structures.
- Recommendations and opinions in this report are based on data obtained from the investigations and site observations as detailed in this report. The nature and continuity of subsoil conditions at locations other than the investigation bores and tests are inferred and it should be appreciated that actual conditions could vary from the assumed model.
- It is essential that this office be contacted if there is any variation in subsoil conditions from those described in this report as it may affect the design parameters recommended.
- This report was carried for the purpose of checking the ground with respect to the proposed development. This should not be taken as a full geotechnical report.
- Our professional services were performed using a degree of care and skill normally exercised, under similar circumstances, by reputable consultants practicing in this field at the time.

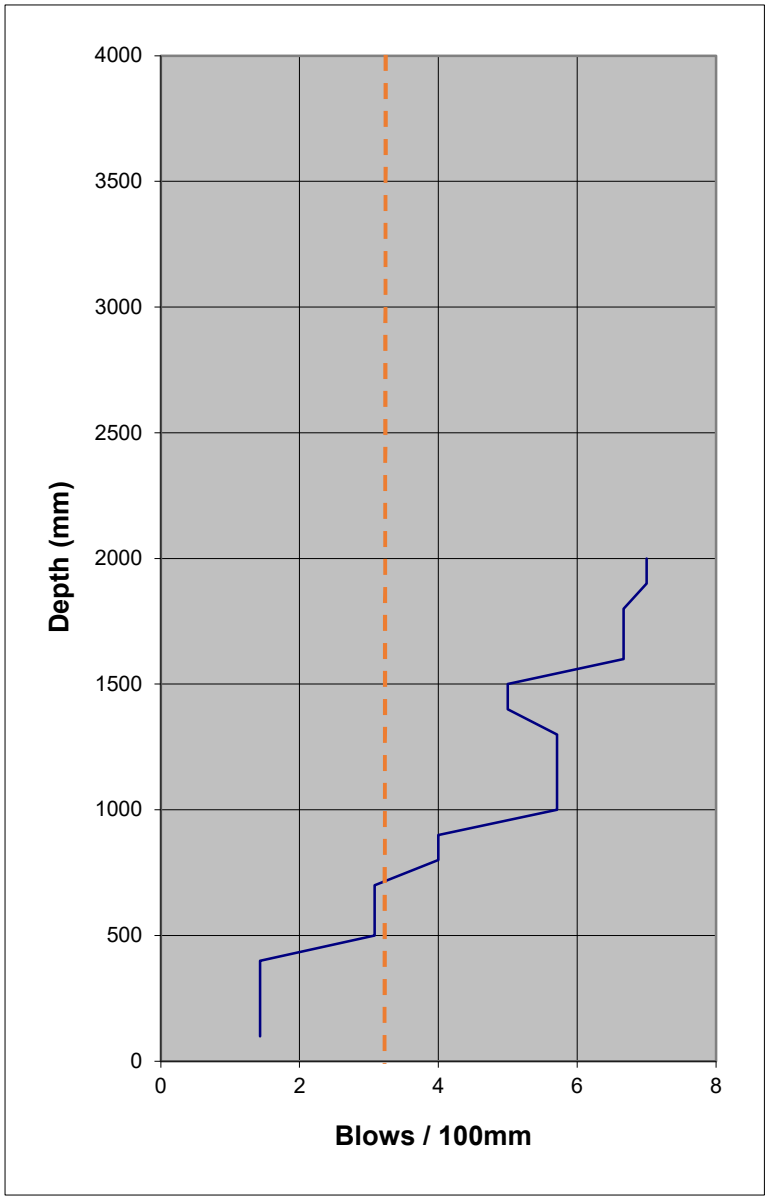
Teo Pilapil
Chartered Professional Engineer
Structural Engineer, CMEngNZ CPEng
T&A STRUCTURES LTD.

10. APPENDIX 1: BORE LOGS

Scala Penetrometer results
BORE HOLE LOG BH1

Client	Advance Build	**Date**	10 Jan 2024
Project	1000 Sandhills Road, Ahipara 04	**Logged By**	Teo

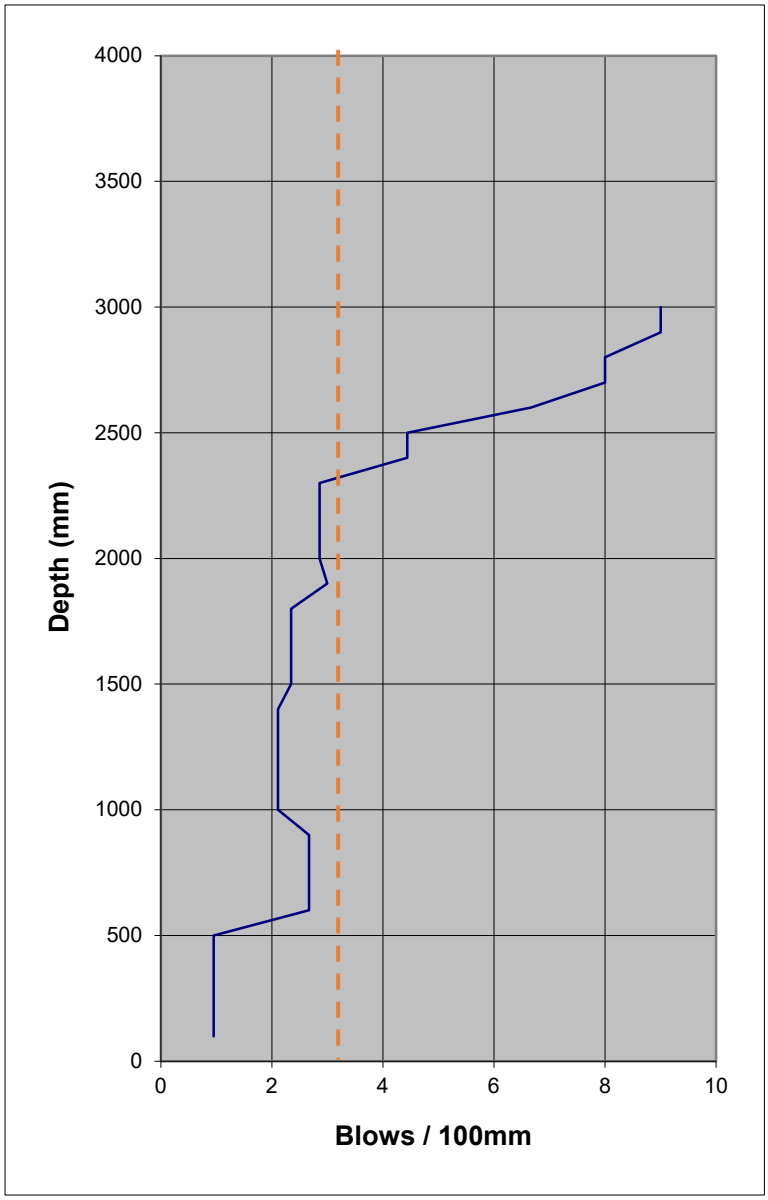
Depth of reading	Number of blows/ 100mm
100	1.43
200	1.43
300	1.43
400	1.43
500	3.08
600	3.08
700	3.08
800	4
900	4
1000	5.71
1100	5.71
1200	5.71
1300	5.71
1400	5
1500	5
1600	6.67
1700	6.67
1800	6.67
1900	7
2000	7
2100	
2200	
2300	
2400	
2500	
2600	
2700	
2800	
2900	
3000	
3100	
3200	
3300	
3400	
3500	
3600	
3700	
3800	
3900	
4000	



Scala Penetrometer results
BORE HOLE LOG BH2

Client	Advance Build	**Date**	10 Jan 2024
Project	1000 Sandhills Road, Ahipara 04	**Logged By**	Teo

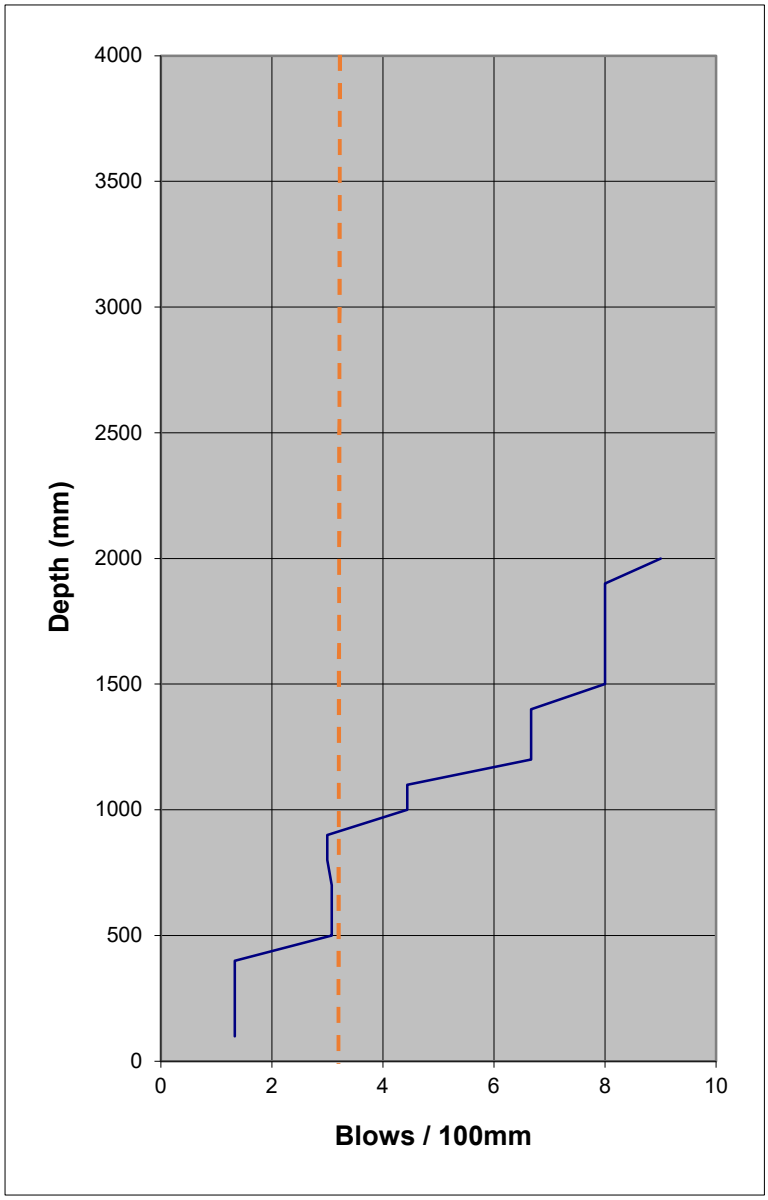
Depth of reading	Number of blows/ 100mm
100	0.95
200	0.95
300	0.95
400	0.95
500	0.95
600	2.67
700	2.67
800	2.67
900	2.67
1000	2.11
1100	2.11
1200	2.11
1300	2.11
1400	2.11
1500	2.35
1600	2.35
1700	2.35
1800	2.35
1900	3
2000	2.86
2100	2.86
2200	2.86
2300	2.86
2400	4.44
2500	4.44
2600	6.67
2700	8
2800	8
2900	9
3000	9
3100	
3200	
3300	
3400	
3500	
3600	
3700	
3800	
3900	
4000	



Scala Penetrometer results
BORE HOLE LOG BH3

Client	Advance Build	**Date**	10 Jan 2024
Project	1000 Sandhills Road, Ahipara 04	**Logged By**	Teo

Depth of reading	Number of blows/ 100mm
100	1.33
200	1.33
300	1.33
400	1.33
500	3.08
600	3.08
700	3.08
800	3
900	3
1000	4.44
1100	4.44
1200	6.67
1300	6.67
1400	6.67
1500	8
1600	8
1700	8
1800	8
1900	8
2000	9
2100	
2200	
2300	
2400	
2500	
2600	
2700	
2800	
2900	
3000	
3100	
3200	
3300	
3400	
3500	
3600	
3700	
3800	
3900	
4000	



BORE HOLE LOG BH4

Job No.	205-FND-23SD		
Address	1000 Sandhills Road, Ahipara 0483		
Client	**Advance Build**		
Borehole Location	Refer to site plan		
Surface elevation		Datum	Ground level
Surface Condition	Grassed		

Fill **Topsoil** **Sand** **Clay** **Silt**

Depth mm	G.W.L	Geologic Unit	Graphic Log	Field Description
300				topsoil, dark brown sand, soft
600				fill, sandy soil w/ organics and buried topsoil
900				
1200				brown fine sand, soft
1500				
1800				
2100				the same EOB

Undrained Shear Strength (kPa) Corrected (Per NZGS guideline)
50 100 150 200

0 0 0 0 0 0 55 28 0 0 62 34 0 0 96 41 0 0 62 34 0 0 48 28 0 0 55 28 0 0 62 34 0 0 55 28 0 0 55 28 0 0 0

Scala Penetrometer (blows/ 100 mm)
3 6 9 12

Drill Method	50mm hand auger
Date Drilled	10 Jan 2024
Drilled by	Teo
Shear Vane No	

NOTE : The subsurface data described above has been determined at this specific borehole location. Such data will not identify any variations away from this location

T&A STRUCTURES LTD
CHARTERED PROFESSIONAL ENGINEERS
www.tastructures.co.nz info.tastructures@gmail.com

Tests
- In situ shear vane reading
- Remoulded shear vane reading
- Scala Penetrometer
- 100 kPa reference line

northscape
PREMIUM LANDSCAPE SOLUTIONS

Landscape Mitigation Plan

LOT 8/1000 Sandhills Road, Ahipara 0483

Northscape
Ph. 021 433 780

9/11 South Road, Kaitaia 0410
Sales@northscape.co.nz

northscape
PREMIUM LANDSCAPE SOLUTIONS

23/05/2024
Kingston Residence
LOT 8/1000 Sandhills Road,
Ahipara 0483

Re: Landscape Mitigation Plan for LOT 8/1000 Sandhills Road, Ahipara 0483

A landscape plan has been prepared for the area around the proposed dwelling to assist with the visual and landscape integration and mitigation of the development.

The application site is located within the 1000 Sandhills Road development and is situated in the General Coastal Zone. There are no Outstanding Natural Landscape or Outstanding Natural Features located within or on the property.

The attached Landscape Plan details where the new landscape plantings will be located, the species composition and number of plants.

The key aspects of landscape mitigation and enhancement plantings are:

- Feature Specimen trees and plantings within the site to tie the proposed building with the surroundings. This is also to create balance in height variations as well as mitigate and act as screening from surrounding locations
- Planting around the water tanks and the proposed dwelling exterior colors being Whakarewarewa (LRV:29%) will add to the mitigation of the proposed dwelling by blending in more with surrounding environment

The cut batter formed to create the building platform around the outside of the dwelling footprint will be of a grade that is easily mowable. The cut batter should have a 300 mm layer of topsoil added to the batters to ensure a good establishment of lawn areas.

Should you have any questions, please don't hesitate to contact me.

Yours sincerely,

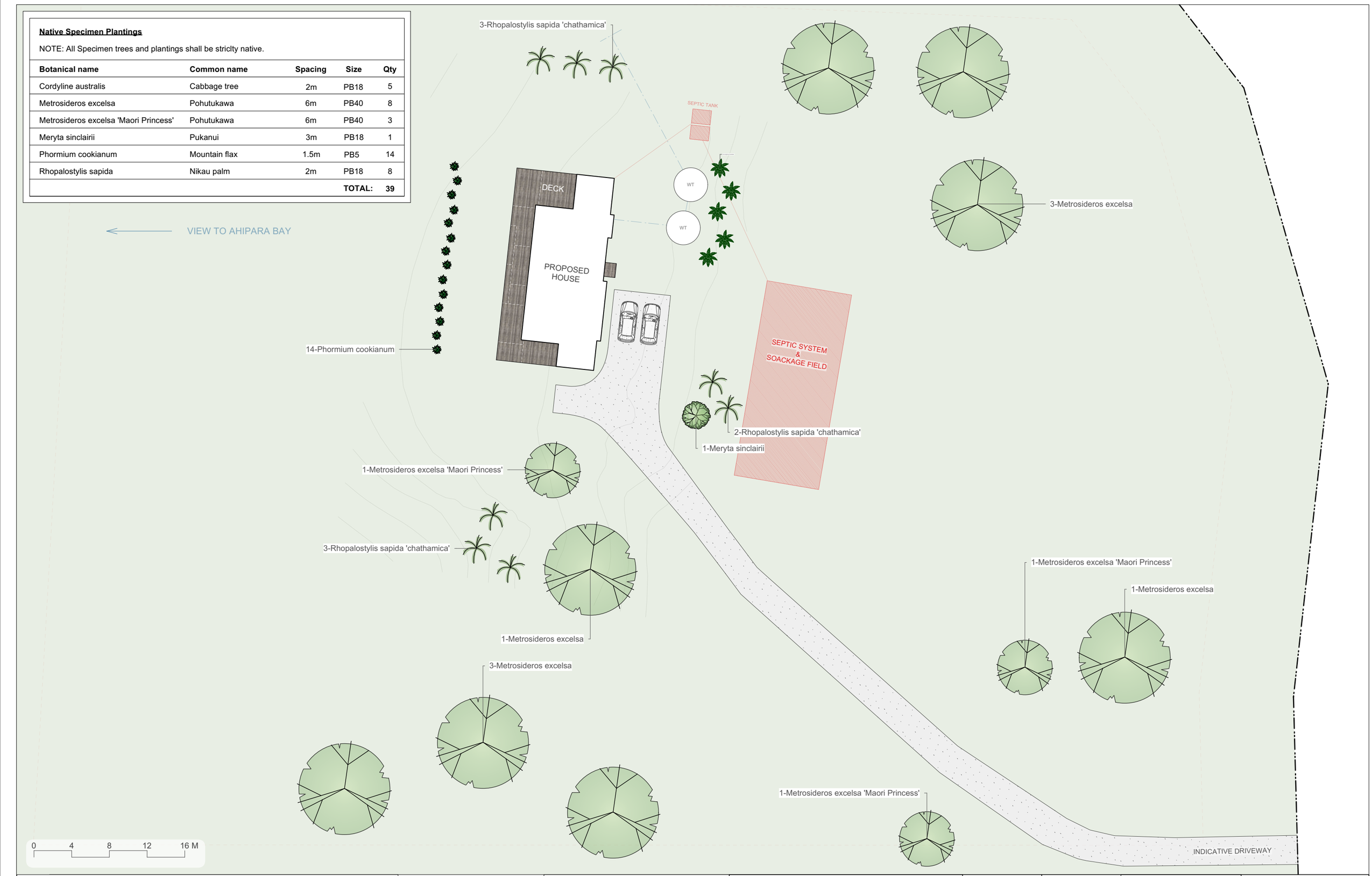
Catherine Correia
Northscape

Attached: Landscape Mitigation Plan & Maintenance Schedule

Native Specimen Plantings

NOTE: All Specimen trees and plantings shall be stricly native.

Botanical name	Common name	Spacing	Size	Qty
Cordyline australis	Cabbage tree	2m	PB18	5
Metrosideros excelsa	Pohutukawa	6m	PB40	8
Metrosideros excelsa 'Maori Princess'	Pohutukawa	6m	PB40	3
Meryta sinclairii	Pukanui	3m	PB18	1
Phormium cookianum	Mountain flax	1.5m	PB5	14
Rhopalostylis sapida	Nikau palm	2m	PB18	8
			TOTAL:	**39**



northscape
PREMIUM LANDSCAPE SOLUTIONS
021 433 780
sales@northscape.co.nz
www.northscape.co.nz

Revision: 01	Project: Kingston Residence	Sheet name: **Landscape Mitigation Plan**	Sheet No.: LC 01	Date: 23/05/2024	Scale: 1:350 @A3
Drawn by: CC					
Approved by: Edward Foster	Site: LOT 8 - 1000 Sandhills Road, Ahipara		File name: Kingston Residence - Sandhills Road.vwx		N

CORDYLINE AUSTRALIS

METROSIDEROS EXCELSA

METROSIDEROS EXCELSA 'MAORI PRINCESS'

MERYTA SINCLARII

PHORMIUM COOKIANUM

RHOPALOSTYLIS SAPIDA

Native Specimen Plantings

NOTE: All Specimen trees and plantings shall be stricly native.

Botanical name	Common name	Spacing	Size	Qty
Cordyline australis	Cabbage tree	2m	PB18	5
Metrosideros excelsa	Pohutukawa	6m	PB40	8
Metrosideros excelsa 'Maori Princess'	Pohutukawa	6m	PB40	3
Meryta sinclairii	Pukanui	3m	PB18	1
Phormium cookianum	Mountain flax	1.5m	PB5	14
Rhopalostylis sapida	Nikau palm	2m	PB18	8
			TOTAL:	**39**

Native Revegetation Planting

NOTE:
(If required) The cut and fill batters and the spetic & soackage field shall be revegetated with native species and will be eco-sourced if necessary. This will enhance the amenity and value of the property and visually soften the presence of the new dwelling.

Plant a mix of the following species in groups of 3, 5 and 9 plants (This will be will be calculated in percentages as this is optional).

Botanical name	Common name	Spacing	Qty
Apodasmia similis	Oioi	7cm	10%
Coprosma repens	Taupata	1m	20%
Muehlenbeckia axillaris	Pohuehue	1m	10%
Phormium cookianum	Mountain flax	1.5m	30%
Phormium tenax	Harakeke flax	1.5m	30%

northscape
PREMIUM LANDSCAPE SOLUTIONS
021 433 780
sales@northscape.co.nz
www.northscape.co.nz

Revision: 01
Drawn by: CC
Approved by: Edward Foster

Project: Kingston Residence
Site: LOT 8 - 1000 Sandhills Road, Ahipara

Sheet name: **Planting Palette**

Sheet No.: LC 02
Date: 23/05/2024
Scale: @A3
File name: Kingston Residence - Sandhills Road.vwx

N

northscape
PREMIUM LANDSCAPE SOLUTIONS

Planting Method/Implementation:

I. Undertake clearance of any exotic weed species. No native vegetation shall be removed.

II. The initial weed control should be carried out during the autumn months prior to the winter planting when plants are still actively growing and therefore more susceptible to herbicides.

III. Blanket spray planting areas three weeks before planting. A follow-up spray should be applied if Required.

IV. Apart from grasses one of the main weeds that may require spraying is gorse. For gorse, the following is recommended:

For Gorse:

I. Spray with 5g metsulfuron-methyl (600g/kg e.g. Escort®) + 10 ml penetrant per 10 litres water;
or
II. Gun and hose at a rate of 35g metsulfuron-methyl + 100 ml penetrant per 100 litres of water.
or
III. To be mowed

For grasses:

I. Spray 100ml glyphosate (e.g. Roundup)+ 20ml penetrant per 10 litres water
or
IV. To be mowed

Timing of Planting:

I. Planting shall only be undertaken between the months of April to September. If planting is undertaken early or late in the season, plants should be irrigated during any dry periods.

Plant Material:

I. Plants shall be purchased from a reputable nursery. All plants shall be the best nursery stock, being healthy and vigorous. Root systems shall be well developed and in balance with the amount of foliage growth of the plant.

II. Root-bound plants or those with badly spiraling root systems shall not be acceptable. Plants should have a root ball of fine, fresh root growth. This should be sliced through vertically with a sharp knife when removing the planter bag.

III. Plants are to be planted as soon as possible after delivery and no later than 3 days after delivery.

Siting of Plants:

I. Planting shall be in accordance with and as shown on the Proposed Individual Site Landscape Plan.

Planting:

I. In areas where mass planting/total vegetation replacement is proposed a 150mm layer of 50/50 mix of locally sourced compost and topsoil should be placed over the whole area to receive planting. More of this soil/compost mix should also be mixed into individual plant holes during planting (as described below).

II. Hessian matting is to be placed over any steeper areas or those close to a water source to prevent excessive runoff.

III. Plants should be well watered in their containers prior to planting.

IV. Holes for the larger (PB3 and above) plants should be dug approximately 1.5 times wider than the root ball so that the roots are not cramped. Some loose soil should be left in the bottom of the hole to aid root growth and drainage.

V. Approximately one tablespoon of good quality, eighteen to twenty-four-month slow-release fertilizer should be placed in the bottom of the plant hole, and mixed in with the loose soil, ensuring that the fertilizer is not sitting directly on the roots (as it may burn them).

VI. Soil returned around the roots should be firmed with the foot, with a small amount of loose soil left at the top of the hole.

VII. Holes for large plants may exceed the depth of topsoil. In these cases, the subsoil is to be thoroughly broken and well mixed with topsoil, which has been added as a 100mm layer to the bottom of the planting hole. Any compacted soil pan is to be thoroughly broken by relevant measures ensuring good root penetration and drainage.

VIII. Individual specimens should be planted approx 50mm proud of the existing ground level to prevent Waterlogging.

IX. The base of the planting hole is to be filled and firmed with backfilling material to a level where the top of the plant root ball is level with the surrounding ground.

X. All care shall be taken to keep the root ball of the plant intact during placement.

XI. Finish all newly planted areas with a 70mm layer of mulch

Specimen Tree Planting:

I. Ground preparation is to take place prior to planting; consisting of a 1m3 hole for each pb95 grade tree. Integrate existing soil within this hole with a 50/50 mix of locally sourced compost and topsoil.

II. Trees should be planted approx 50mm proud of the existing ground level to prevent waterlogging.

III. Finish with a 70mm layer of locally sourced, high-quality mulch to a 1m diameter around the tree trunk, do not mound up around the trunk.

IV. Stake trees with appropriate wooden stakes and soft tree ties.

Watering In:

Immediately after planting all of the plants are to be thoroughly watered until the planting hole is saturated. The foliage of plants is also to be thoroughly wetted. This is to be done even if soil conditions are already wet.

Planting Maintenance & Schedule:

I. Maintenance weed control should commence within three months following the planting, and then twice annually (see Table 1.1 for maintenance timing).

II. Maintenance shall be undertaken for a minimum period of 3 years following practical completion in accordance with this specification and the accompanying plan.

III. Care should be taken to identify and control any weeds that may have been introduced to the property in potting mix associated with the new plants.

IV. All weeds should be cleared from the site by appropriate physical and chemical control. The majority of weeds growing close to the plant can be pulled by hand (taking care not to damage the roots of the plant) or, if appropriate, sprayed with herbicide by an experienced operator.

V. During this three-year maintenance programme, any dead plants will need to be replaced.

VI. An annual top-up of mulch is required throughout all mass-planted areas, and around each specimen, to achieve a 70mm layer of mulch

VII. Selective pruning/trimming of specimen trees shall be undertaken to remove any dead wood or damaged growth and to maintain healthy vigor and good form.

northscape
PREMIUM LANDSCAPE SOLUTIONS

		Time of Year to Complete Tasks											
Maintenance Task	**Frequency**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Maintenance weeding around specimen trees and in all mass planted areas.	2x annually												
Top up of mulch on all trees and mass planted areas to achieve a 70mm layer.	2x annually												
removal and replacement of any damaaged or dead specimens.	1x annually												
Selective pruning/trimming of specimen trees to remove any dead wood or damaged growth and to maintain healthy vigour and good form	1x annually												

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	**NA78D/2**
Land Registration District	**North Auckland**
Date Issued	02 August 1989

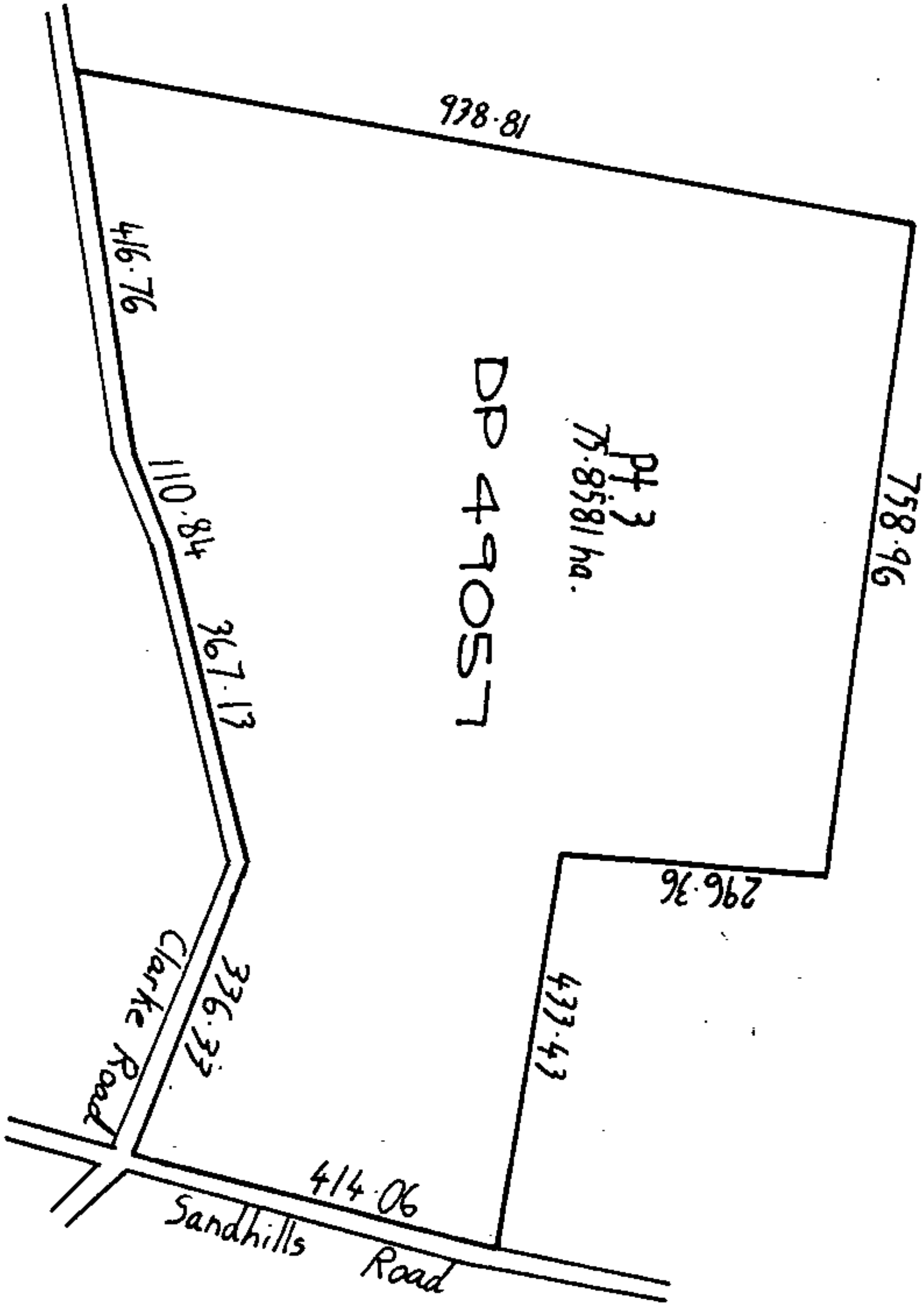
Prior References
NA64A/27

Estate	Fee Simple
Area	75.8581 hectares more or less
Legal Description	Part Lot 3 Deposited Plan 49057
Registered Owners	

One Thousand Sandhills Limited

Interests

12556640.1 CAVEAT BY TOP ENERGY LIMITED - 19.9.2022 at 11:54 am


938.81
416.76
110.84
367.17
Pt 3
75.8581 ha.
DP 49057
758.96
296.36
437.43
336.37
Clarke Road
414.06
Sandhills
Road