

Office Use Only Application Number:

# Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting	
Have you met with a council Resource to lodgement? <b>Yes No</b>	Consent representative to discuss this application prior
2. Type of Consent being applied fo	r
(more than one circle can be ticked):	
C Land Use	Discharge
Fast Track Land Use*	Change of Consent Notice (s.221(3))
Subdivision	Extension of time (s.125)
Consent under National Environm (e.g. Assessing and Managing Conta	<b>iental Standard</b> minants in Soil)
Other (please specify) Change cons	ent conditions pursuant to Section 127 of the Resource Management Act
3. Would you like to opt out of the I	Fast Track Process?
Ves No	
4. Consultation	
Have you consulted with lwi/Hapū?	Yes 🕜 No
If yes, which groups have you consulted with?	
Who else have you consulted with?	
For any questions or information regarding Council tehonosupport@fndc.govt.nz	iwi/hapū consultation, please contact Te Hono at Far North Distric

Form 9 Application for resource consent or fast-track resource consent 1

Name/s:	Signal Heights Limited	
Email:		
Phone number:		
<b>Postal address:</b> (or alternative method of		-
service under section 352		

### 6. Address for Correspondence

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

Name/s:	Northland Planning & Development
Email:	
Phone number:	
<b>Postal address:</b> (or alternative method of service under section 352 of the act)	POSICOUE

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

### 7. Details of Property Owner/s and Occupier/s

Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s:	Kilkerran Estate Limited
Property Address/ Location:	112 Signal Road, Okaihau

Postcode

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#### 8. Application Site Details

Name/s:	Kilkerran Estate Limited		
Site Address/ Location:	112 Signal Road, Okaihau		
	Postcode		
		Postcode	
Legal Description:	Lot 3 DP39764	Postcode Val Number:	

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 (V) 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 rearrange a second visit.

This is a working farm. If Council would like access to the property, please contact Hamish via details above.

#### 9. Description of the Proposal:

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

Change to consent conditions under RC2220161 pursuant to s127 of the RMA.

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

10. Would you like to request Public Notification?

Yes 🖌 No

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11. Other Consent required/being applied for un	nder different legislation
(more than one circle can be ticked):	
Building Consent Enter BC ref # here (if known)	
Regional Council Consent (ref # if known) Ref #	here (if known)
National Environmental Standard consent	nsent here (if known)

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

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

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) Yes **Vo Don't know** 

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

Subdividing land

Changing the use of a piece of land

Other (please specify) Specify 'other' here

Disturbing, removing or sampling soil

Removing or replacing a fuel storage system

#### 13. Assessment of Environmental Effects:

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

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

#### **13. Draft Conditions:**

Do you wish to see the draft conditions prior to the release of the resource consent decision? • Yes

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

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#### 14. Billing Details:

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

Name/s: (please write in full)	Signal Heights Limited
Email:	
Phone number:	
<b>Postal address:</b> (or alternative method of service under section 352 of the act)	

#### **Fees Information**

An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

#### **Declaration concerning Payment of Fees**

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.



#### 15. Important Information:

#### Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form. You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

#### **Fast-track application**

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

#### **Privacy Information:**

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

#### 15. Important information continued...

#### Declaration

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

Name: (please write in full)	Hagnish	MyFNNes	Ferguson	
Signature:				Date 3/10/24
			nic mean	15

#### Checklist (please tick if information is provided)

Payment (cheques payable to Far North District Council)

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

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



# Variation of Consent Conditions For RC2220161 Signal Heights Limited 112 Signal Road, Okaihau

Date: 1 October 2024

Please find attached:

- an application form to change consent conditions pursuant to Section 127 of the Resource Management Act;
- an Assessment of Environmental Effects in support of the change to conditions 1, 3A)(i)(iii)(iv), 4(d), 4(h), 4(k)(iv), (vii), (viii) and (x) of RC 22220161.

The application has been assessed as a **Discretionary Activity** under Section 127 of the Resource Management Act 1991.

Regards,



Alex Billot Resource Planner Reviewed by:

Rochelle Jacobs Director/Senior Planner

# NORTHLAND PLANNING & DEVELOPMENT 2020 LIMITED





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# **Appendices**

- 1. FNDC Application Form signed
- 2. Record of Title NA1352/70 LINZ
- **3.** Amended Plan Williams and King
- 4. Engineering Report Haigh Workman
- 5. Ecological Report Bay Ecological





- 6. Soil Versatility Assessment Haigh Workman
- 7. RC2220161 Approved Decision FNDC
- 8. RC2220161 Approved Plans FNDC
- 9. Initial email post CDM FNDC
- **10. Email correspondence** *NTA*





# **Assessment of Environment Effects Report**

# 1. Description of the Proposed Activity

- 1.1. The proposal is seeking to vary the subdivision layout as it was noted after a wet summer in 2022 and Cyclone Gabriel in 2023 that Lots 3 & 4 became quite damp. As a result, Signal Heights Limited sought to relocate these two sites. In looking to relocate these sites it became clear that the original development plan would no longer be appropriate with productive farming operations surrounding most proposed allotments on at least 2 boundaries. To ensure future reverse sensitivity matters could be addressed, Signal Heights Limited now seeks to relocate all of the allotments towards the Eastern corner of the property.
- 1.2. Originally Signal Heights Limited and a neighbouring property (111C Signal Road) were seeking to develop their sites at the same time. While both subdivisions were approved with reference to a combined Traffic Impact Assessment (TIA) there has been a considerable time difference between the approval of the two applications. This report recommended that the entirety of Signal Road be upgraded and both subdividers planned on sharing costs. Signal Heights Limited is now ready to commence development and the neighbouring development is yet to progress. As such we are looking to vary the condition of consent such that Signal Heights Ltd only needs to upgrade the portion of Signal Road which will be utilised by the development. This will see the first approx. 600m of Signal Road being upgraded with the remaining 500m left to the neighbouring developer to upgrade.
- 1.3. In relocating these sites, the following conditions require updating:

Condition 1 – Plan updated; Condition 3(a)(i), (iii) and (iv) – Changes to reflect the updated engineering report and delete works that are not required. Condition 4(d) – Update of note; Condition 4(h) – Change to reflect lot numbers. Condition 4(k)(iv) – The relocation of the lots means that landscaping is no longer necessary; Condition 4(k)(vii) – Remove reference to GWE report and reflect updated report; Condition 4(k)(viii) – Remove reference to GWE report and reflect updated report; Condition 4(k)(x) – Remove reference to GWE report and reflect updated report; Condition 4(k)(x) – Remove reference to GWE report and reflect updated report;

- 1.4. It is also proposed to add one condition to address the proposed covenanted wetland areas and indigenous vegetation area.
- 1.5. The proposal will result in a better outcome for reverse sensitivity, rural amenity and highly productive land. The proposal is therefore within the scope of a change to consent conditions pursuant to Section 127 of the Resource Management Act 1991. It is noted that this stance was confirmed via a CDM with Salamasina in March 2024 (refer Appendix 9).





Figure 1: Approved RC2300398 scheme plan.



Figure 2: Proposed variation scheme plan

# 2. Site Description

- 2.1 The property is located at 112 Signal Road, Okaihau and is legally described as Lot 3 DP 39764. The site is located on the northern side of Signal Road and extending towards an unformed legal road which is unnamed and contains a small stream. The site is irregular in shape following both Signal Road and the unnamed legal road / stream on its Northern and southern boundaries. The Western boundary of the site is bounded by the remaining productive farming allotments and the farmhouse. The property gains access directly off Signal Road.
- 2.2 The topography of the land is rolling pasture generally sloping downwards from the Signal Road towards the stream. The site contains overland flow paths, and small water courses which have been created from the culverts draining Signal Road and the elevated sites to the South. Additional detail can be found within the Site Suitability Report. Vegetation coverage is generally pasture, with the stream contained within the legal road being fenced with some riparian planting.
- 2.3 The surrounding environment is mixed use, being both productive farm allotments and lifestyle sections. The last 5 10 years has seen development within the area boom with several lifestyle sites being created within the immediate local surrounds.



Figure 3 – Location of farm which consists of 3 titles.

# 3. Activity Status

- 3.1. The previous application (RC2220161) resulted in approval to subdivide the site to create 7 allotments (6 additional) under the Operative District Plan.
- 3.2. The proposal is to vary a suite of conditions relating to the plan, physical formation conditions and consent notices to reflect the new site layout. The original subdivision application was processed as a Non-Complying Activity. This variation is assessed as a **Discretionary activity**, under section 127 of the Act.





# Section 127 of the RMA

3.3. The following section of the Resource Management Act (RMA) is relevant to the proposed change to consent conditions.

#### 127 Change or cancellation of consent condition on application by consent holder

(1) The holder of a resource consent may apply to a consent authority for a change or cancellation of a condition of the consent, subject to the following:

(a) the holder of a subdivision consent must apply under this section for a change or cancellation of the consent before the deposit of the survey plan (and must apply under section 221 for a variation or cancellation of a consent notice after the deposit of the survey plan); and

(b) no holder of any consent may apply for a change or cancellation of a condition on the duration of the consent.

- (2) [Repealed]
- (3) Sections 88 to 121 apply, with all necessary modifications, as if-

(a) the application were an application for a resource consent for a discretionary activity; and

(b) the references to a resource consent and to the activity were references only to the change or cancellation of a condition and the effects of the change or cancellation respectively.

(3A) If the resource consent is a coastal permit authorising aquaculture activities to be undertaken in the coastal marine area, no aquaculture decision is required in respect of the application if the application is for a change or cancellation of a condition of the consent and does not relate to a condition that has been specified under section 186H(3) of the Fisheries Act 1996 as a condition that may not be changed or cancelled until the chief executive of the Ministry of Fisheries makes a further aquaculture decision.

(4) For the purposes of determining who is adversely affected by the change or cancellation, the consent authority must consider, in particular, every person who—

(a) made a submission on the original application; and

(b) may be affected by the change or cancellation.

# 4. Variation to consent conditions

4.1. The variation will involve changes to ten conditions and the addition of one condition. The conditions are shown below, with the amendments shown in red.

## 4.1.1. <u>Condition 1 states the following:</u>

The subdivision shall be carried out in accordance with the approved plan of subdivision prepared by Williams and King, referenced Proposed Subdivision of Pt Lot 3 DP 39764, dated May 20214, and attached to this consent with the Council's "Approved Stamp" affixed to it.

- 4.1.2. The changes to this condition reflect the new plan associated with the variation.
- 4.1.3. Addition of Condition 2(b)



Areas shown as 'E-I', are to be subject to land covenants for wetland protection and Area shown as 'D' is to be subject to land covenants for indigenous vegetation protection.

- 4.1.4. Inclusion of the proposed covenanted areas have been included as a condition of consent.
- 4.1.5. <u>Condition 3(a) states the following:</u>

*Prior to the approval of the survey plan pursuant to Section 223 of the Act, the consent holder shall:* 

a) Submit plans and details of all works for the approval of Far North District Council.

It is to be noted that certain works must be carried out or certified by a Suitably Qualified Person (IQP) or Chartered Professional Engineer (CPEng) working within the bounds to their assessed competencies.

All plans needing design/certification by Council approved IQP/CPEng will require completion of design producer statement (PS1).

Plans are to include but are not limited to:

- i. Upgrade of Signals Road to a 6.5m wide carriageway with 1.0m wide shoulders, consistent with Rural Road in accordance with FNDC Engineering Standard FNDC/S/7 and Table 3.1A, Type B specifications... 6m wide carriageway consistent with the FNDC Engineering Standards 2023 Tables 3.3 and 3.4 for Access Band 3 and the recommendations within the Engineering Report prepared by Haigh Workman, dated September 2024 reference 24 068.
- *ii.* Intersection upgrade Signals Road to Waiare Road in accordance with FNDC Engineering Standard FNDC/S/6B.
- iii. New cul-de-sac at the termination of Signals Road in accordance with Figure 3.3 of NZS4404:2010.

Note: Design for (i.) to (iii.) above to note the restrictions and recommendations of the Transport Assessment prepared by TPC Traffic Planning Consultants, dated 18 August 2021, reference 21442. The cul-desac shall be constructed entirely within the road corridor. If the cul-de-sac (or a portion thereof) is to be constructed on private property, the underlying land is to be surveyed and vested in Council.

- iv. Vehicle access crossings from Signals Road to Lots 1 to 6 in accordance with section 3.3.7 of FNDC Engineering Standards, FNDC/S/6 and FNDC/S/6B
   Engineering Standards 2023 Sheet 21 Type 1A. Drawings are to show that adequately sized culverts (minimum diameter 375mm) are to be installed under each new crossing with grouted rock headwalls on both ends.
- v. Erosion and sediment control measures which are to be in place for the duration of the works in accordance with Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

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- 4.1.6. The condition has been amended accounting for the updated Engineering Standards which were released earlier this year. This has been discussed with Pravin (formally with NTA and now with FNDC prior to making the application. Please refer to Appendix 10 for correspondence. The condition now reflects those standards.
- 4.1.7. Signal Heights Limited is only upgrading the first 600m of Signals Road. As the first 600m does not include the cul-de-sac this condition can be removed. This has been discussed within a CDM with Council and later correspondence from NTA.
- 4.1.8. It is noted that the existing note referring to the construction of the cul-de-sac encroaching upon Lot 7 of this development is also no longer needed. Plans provided within the original Traffic Impact Assessment show a separation between the site boundary and the formed cul-de-sac.
- 4.1.9. <u>Condition 4(d) states the</u> <u>following:</u>

d) Provide evidence that reflective markers have been installed on the poles and the base of the poles shall be painted white to a height of 2 metres.



Figure 4 - Location of proposed cul-de-sac within the legal road boundary.

*Note: This condition applies for to the portion of Signal Road being upgraded only.* 

- 4.1.10. This note has been amended to refer to the fact that only part of Signal Road will be upgraded rather than the entire length.
- 4.1.11. <u>Condition 4(h) states the following:</u>

*h)* Provide evidence that boundary planting has been undertaken along the Signal Road frontage of Lots <u>1-6.1, 2, 3, 4 & 6</u>

Note: It is recommended that the species used do not grow over 5 metres due to the existing powerlines, or to disrupt sightlines.

Note: It is recommended that prior to planting any vegetation that Top Energy be consulted on the species and location of the vegetation to ensure compliance is achieved with the Electricity (Hazards from Trees) Regulations 2003.



4.1.12. The condition has been amended to reflect the lots which have road frontage. The note has been amended to reflect recent correspondence with Top Energy on works within proximity to powerlines.

# 4.1.13. <u>Condition 4(k)(iv) states the following:</u>

Prior to the use if a Code of Compliance Certificate for any buildings, or within one month of its occupation (whichever comes first), provide a landscaping plan from a suitably qualified and experienced person, for the approval of the Council's Resource Consents Manager, or other duly delegated officer, which indicates the means to lessen the visual impact of the building, its access and any earthworks. On approval of this plan, the landscaping specified is to be provided within six months and adequately maintained thereafter. Plants requiring removal due to damage, disease or other cause shall be replaced wit ha similar specimen before the end of the next following planting season (1<sup>st</sup> May to 30<sup>th</sup> September).

- 4.1.14. It is proposed to cancel this consent notice condition in its entirety as it is considered that a landscaping plan for the lots is no longer required due to the change in layout coupled with boundary planting along the road frontage as per Condition 4(g). The allotments have been shifted back towards the beginning of the site. Houses within this area are setback from the site boundaries generally with an outlook towards the wetland and gully to the south or to the South West looking in the direction of Dargaville (which can be viewed from some of the higher properties). The previous site locations were within the outlook of newer homes that had been constructed closer to the road which is why the landscaping was previously sought.
- 4.1.15. <u>Condition 4(k)(vii) states the following:</u>

*Prior to the issuing of a certificate pursuant to Section 224(c) of the Act, the consent holder Shall:* 

(vii) The location and foundations of any buildings shall be designed and certified by a suitably experienced Chartered Professional Engineer, prior to issue of any building consent, noting the restrictions and recommendations of the <del>Site</del> Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1, reference J3044 submitted with Resource Consent 2220161, Engineering Report prepared by Haigh Workman, dated September 2024 reference 24 068.

[All-Lots <u>1 - 6</u>]

- 4.1.16. Updated to reflect the new site suitability report for the amended allotment layout and reflected to reference just the new allotments being created (1-6).
- 4.1.17. <u>Condition 4(k)(viii) states the following:</u>

*Prior to the issuing of a certificate pursuant to Section 224(c) of the Act, the consent holder Shall:* 





In conjunction with the construction of any building requiring a wastewater disposal system the lot owner shall obtain a Building Consent and install the wastewater treatment and effluent disposal system as detailed in the report prepared by Site Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1, reference J3044 and submitted with Resource Consent 2220161. Engineering Report prepared by Haigh Workman, dated September 2024 reference 24 068.

Note: Where a wastewater treatment and effluent disposal system is proposed that differs from that detailed in the above-mentioned report, a new TP 58 / Site and Soil Evaluation Report will be required to be submitted, and Council's approval of the new system must be obtained, prior to its installation.

For on-site wastewater disposal system:

*A* The installation shall include an agreement with the system supplier or its authorised agent for the ongoing operation and maintenance of the wastewater treatment plant and the effluent disposal system.

*A* Following 12 months of operation of the wastewater treatment and effluent disposal system the lot owner shall provide certification to Council that the system is operating in accordance with its design criteria.

- 4.1.18. Updated to reflect the new site suitability report for the amended allotment layout and reflected to reference just the new allotments 1-6.
- 4.1.19. <u>Condition 4(k)(x) states the following:</u>

In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install stormwater retention tank/s with a flow attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater <u>thean</u> the predevelopment flow from the site for rainfall events up to a 10% AEP plus allowance for climate change. The details of the on-site retention , storage and flow attenuation shall be prepared by a suitable qualified engineer, noting the restrictions and recommendations of the <del>Site Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1 reference J3044 included in RC2220161</del>. Engineering Report prepared by Haigh Workman, dated September 2024 reference 24 068, with particular detail provided on mitigating sediment and erosion levels to the protected wetland areas as identified in RMA/VAR 2220161.

4.1.20. This condition has been amended to reflect the updated Engineering Report as well as comment added to ensure the stormwater report addresses effects on the wetland areas.





# 5. Assessment of Environmental Effects

- 5.1. For the purposes of this assessment, consideration of the effects of the proposal has been limited to the proposed changes rather than re-visit the effects of the original application.
- 5.2. The proposal has been reconfigured to provide a superior outcome in regards to subdivision layout which results in positive effects on productive capacity of the site as well as ecological benefits.
- 5.3. The proposal will see the area of wetland along the Mangakaretu Stream set aside as it relates to Lots 1, 2, 3 & 5. Riparian planting will be introduced as part of the Land Covenant, which will enhance the ecological and biological wellbeing of the wetland areas and stream as detailed within the Ecological Report provided with this application. Although the proposal will see an increase in impermeable surfaces which will most likely be within 100m of the identified wetland areas, the Ecological Report determined that with the inclusion of appropriate stormwater attenuation methods which reduce and control erosion and sediment levels into the wetland areas, there will be no change to the hydrological function of the wetland areas. An Advice Note can be placed on the decision document advising future owners that impermeable surfaces within 100m of the wetland areas may require consent under the National Environmental Standards for Freshwater 2020 (NES-F) and the consent notice condition requiring a report addressing stormwater attenuation has been revised to note that detail on mitigation measures for the wetland area are to be included within any such report. As concluded within the Ecological Report, this provides a superior outcome to what was previously approved under RC2220161, as formal protection and enhancement of the wetland areas on site as they relate to Lots 1-6 will be provided. Formal protection of the totara remanent located within the very eastern portion of the site has also been provided, depicted as Area 'D' on the revised scheme plan.
- 5.4. In regards to superior effects on the productivity of the site, the proposal sees the smaller, more intense development located down one end of the site which is known to be suboptimal pastoral land. This leaves the remainder of the site (Lot 7) being able to be utilised as one large productive lot. It also reduces the area of productive land which will share a boundary with the rural residential lots. For example, under RC2220161, Lot 7 had shared boundaries will all of the six rural-residential lots which amounted to over 480 metres of shared boundary. Whereas under the revised scheme plan, Lot 7 will only share boundaries with Lots 5 & 6, which equates to less than 165m of shared boundary. This mitigates reverse sensitivity effects between productive activities and the rural-residential lots have been increased from around 4000m2 to between 5600m2-8800m2, with the exception of Lot 6 which still remains 4168m2, which is still larger than what was originally proposed under RC2220161. This enables a larger land area for rural-residential activities and adjoining productive activities, further mitigating reverse sensitivity effects.
- 5.5. It is noted that the site has soils classified as LUC3s1, with the exception of the eastern corner of the site which has soils of LUC4s1 (this area is to be set aside as Land Covenant). Under the





National Policy Statement for Highly Productive Land (NPS-HPL), soils classified as LUC 3 are classified as Highly Productive Land. A Land Use Capability (LUC) report has been completed by Haigh Workman which determined that the soils where Proposed Lots 1-6 are to be located are in fact Class 4s2. Further discussion on this will be made within Section 7 of this report. The proposal is considered to provide a superior outcome in terms of productivity compared to what has been previously approved. The proposal will see all six rural-residential lots located down one end of the site, enabling a regular sized balance lot which will maximise the productive potential of Lot 7. The proposal mitigates reverse sensitivity effects as discussed above and promotes the productive capacity of Lot 7. It is considered that the proposal provides a superior outcome in regards to productive capacity and potential of Lot 7 compared to what has been approved under RC2220161.

- 5.6. In terms of visual impact, the proposed layout is considered to have a less than minor visual effect compared to what has been previously approved. The reasoning behind the landscaping requirement as part of RC2220161, was due to the proposed lots being located directly opposite built development on Lots 1 & 2 DP529440. The proposed lots have now shifted such that the visual impact from built development on Lots 1 & 2 DP529440 will be adequately mitigated via the proposed boundary planting imposed as a condition of consent. Built development on Lots 1 & 2 DP325147 and Lot 1 DP359745, is a sufficient distance from the road, such that views of any built development on the proposed lots will be screened by the proposed boundary planting. With planting along the road frontage and also within the 10m buffer of the wetland areas at the rear of the lots, this will provide foreground and background vegetation, which will enable any future built development to be set within a vegetative scene. Moreover, the outlook from the dwellings across the road from the new locations tend to be in a southern direction, taking in the views of the wetland and gully and views of Dargaville and the West coast (which can be viewed from some neighbouring sites). It is therefore considered that the visual effects of any future built development within the proposed lots will be mitigated by having vegetation buffers along the road boundary, along the rear boundary with the 10m buffer area of the wetland, and the eastern most boundary which adjoins Covenanted Area D. Also, the lots will now be concentrated in one area, rather than being spread out across a large road frontage. As such, the requirement for a landscaping plan at the time of built development on the lots is not considered necessary.
- 5.7. The alternative concept is not considered to change the original assessment of the proposal and it is considered that the proposal can still achieve the intent of what was sought under the consent that was granted.
- 5.8. Changes to the conditions are directly related to the change in layout of the proposed lots and the flow on effects from this. There are no effects that are increased adversely or exacerbated by the variation.
- 5.9. Overall, it is considered that the proposal will result in no more than minor environmental effects and will in fact provide a superior outcome to what was previously proposed. The proposal does not seek to increase the number of allotments, rather reconfigure these





allotments to provide a positive outcome to the productivity of the balance lot as well as to the ecological effects of the site.

# 6. Statutory Assessment

# **Section 104B of the Act**

6.1. Section 104B governs the determination of applications for Discretionary and Non-Complying Activities. With respect to both Discretionary and Non-Complying Activities, a consent authority may grant or refuse an application, and impose conditions under section 108.

# Section 104(1)(a) of the Act

6.2. Section 104(1) of the Act states that when considering an application for resource consent –

"the consent authority must, subject to Part II, have regard to -

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

- (b) Any relevant provisions of -
  - (i) A national environmental standard
  - (ii) Other regulations
  - (iii) A national policy statement
  - (iv) A New Zealand Coastal Policy Statement
  - (v) A regional policy statement or proposed regional policy statement
  - (vi) A plan or proposed plan; and
- (c) Any other matter the consent authority considers relevant and reasonable necessary to determine the application.'
- 6.3. Actual and potential effects arising from a development as described in 104(1)(a) can be both positive and adverse (as described in section 3 of the act). As assessed in Section 5 above, the proposal will have actual and potential effects that are acceptable.
- 6.4. Section 104(1)(ab) requires that the consent authority consider 'any measure proposed or agreed to by the applicant for the purposes of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity'. The proposal results in positive effects on the environment by the formal protection of the wetland areas as indicated on the site plan. Riparian planting to enhance the ecological aspects of the wetland areas will also be imposed as part of the Land Covenant.
- 6.5. Section 104(1)(b) requires the consent authority to consider the relevant provisions of the above listed documents. An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that the activity may have on the environment has been provided in Section 7 below.



6.6. Section 104(1)(c) states that consideration must be given to 'any other matters that the consent authority considers relevant and reasonable, necessary to determine the application'. There are no other matters relevant to this application.

# 7. Policy Documents

7.1. Section 104(1)(b) requires that when considering an application for a resource consent, the consent authority must, subject to Part 2, have regard to:

Any relevant provisions of -

- i. A national environmental standard;
- ii. Other regulations;
- iii. A national policy statement;
- iv. A New Zealand coastal policy statement;
- v. A regional policy statement or proposed regional policy statement;
- vi. A plan or proposed plan
- 7.2. An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that activity may have on the environment has been provided below.
- 7.3. An assessment of the Proposed district Plan has been included below, as it is now relevant to the proposal.

# **National Environmental Standards**

# National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health

7.4. As determined within the previous application under RC2220161, the NESCS is not considered applicable to the proposal. This also stands with this application as the area which the proposed rural-residential allotments are to be created on, is not known to have been or currently be utilised for any activities listed on the HAIL. As such, the application has been considered Permitted in terms of the NESCS.

# National Environmental Standards for Freshwater 2020

- 7.5. As determined within the Wetland Report provided by Bay Ecological, there are areas of wetland identified along Mangakaretu Stream which affects Lots 1, 2, 3 & 5. These areas of wetland have been set aside as well as a 10m buffer zone introduced which will be formally protected by Land Covenant as indicated on the scheme plan. These areas are defined as natural inland wetland as defined under the National Policy Statement for Freshwater Management (NPS-FM), and therefore the NES-F is applicable to this proposal.
- 7.6. It is noted with the Ecological Report, that the building platforms within Lots 1-6 will most likely be within 100m of the natural inland wetland. However, the wetland's extant hydrological sources are to the east and from the opposite bank tributaries (Lots 2 & 3 DP52283) and therefore the proposed lots are not considered to contribute heavily to the hydrological function of the wetland areas. It is noted that the future impermeable surfaces within the lots will result in diversion and diffuse of natural discharge, however the Ecological Report





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determined that 'this will not likely change the water level range or hydrological function of the wetland in any measurable way.' It has been recommended that at the time of built development, stormwater inputs shall be controlled to prevent sediment, scouring or erosion to avoid adverse effects on the wetland and aquatic habitat condition. The buffer planting will also assist in reducing erosion and sediment. Amendments to the existing consent notice condition listed within RC2220161 (Condition 4(k)(x)) have been made to ensure that a stormwater report is provided at the time of any building or other impermeable surface on the lots to address stormwater inputs to the wetland. It is also offered that an Advice Note is issued on the decision document advising future owners that consent may be required under the NES-F for works within 100m of the wetland areas, due to discharge potentially entering the wetland areas.

As part of this application, works which could be within 100m of the wetland areas would be 7.7. limited to the upgrading of Signal Road and the construction of any crossing places to the lots. As the tributaries to the wetland are located to the east of the subject site, it is considered that the road upgrades and crossing place construction would not change the water level range or hydrological function of the wetland in any measurable way. The discharge from the impermeable surfaces associated with the road upgrade and crossing places is also not anticipated to enter the wetland areas, as runoff from these services will be directed to the roadside drains. As such, in terms of Regulation 54 of the NES-F, the works proposed as part of this application, although potentially within 100m of the wetland areas, are not considered to have a hydrological connection between the discharge and the wetland, the discharge is not anticipated to enter the wetland and the discharge is not anticipated to change the water level range of hydrological function of the wetland. Therefore, the proposed works as part of this application are not considered to require consent under the NES-F.



## **Other National Environmental Standards**

7.8. No other NES are considered applicable to this proposal.





# **National Policy Statements**

- 7.9. There are currently eight National Policy Statements in place. These are as follows:
  - National Policy Statement on Urban Development
  - National Policy Statement for Freshwater Management
  - National Policy Statement for Renewable Electricity Generation
  - National Policy on Electricity Transmission
  - New Zealand Coastal Policy Statement
  - National Policy for Highly Productive Land
  - National Policy Statement for Indigenous Biodiversity
  - National Policy Statement for Greenhouse Gas Emissions from industrial Process Heat 2023

## **National Policy Statement for Freshwater Management**

- 7.10. As detailed earlier in this report, the NPS-FM is applicable to this proposal as the proposal involves natural inland wetland areas as determined by Bay Ecological.
- 7.11. The proposal is considered to be consistent with the objectives and policies of the NPS-FM as the proposal will see the areas of wetland located alongside the smaller rural-residential allotments, set aside by formal protection. Buffer planting and weed and pest management within the riparian margins of the wetland areas will be undertaken as part of the Land Covenant requirements. As detailed within the Wetland Report by Bay Ecological, the formal protection proposed will enhance the health and well-being of these areas. The proposal has considered the effects of the development on the wetland areas with conditions imposed to ensure the ongoing wellbeing of the wetland areas as well as controls in place to ensure erosion and sediment levels are controlled post development of the sites. The proposal will not result in loss of extent of the natural inland wetlands and will protect and retore the values of the wetlands within the site.
- 7.12. Overall, it is considered that the proposal provides a positive outcome for the health and wellbeing of the natural inland wetlands identified and will enhance this for future generations.

## National Policy Statement for Highly Productive Land

- 7.13. It is considered that the NPS for Highly Productive Land is applicable to this application given the highly versatile soils (3s1) mapped on site.
- 7.14. The NPS for HPL has one objective and 9 policies. These all relate to sites which are classified as having highly productive land. Highly Productive Land is defined as –

**highly productive land** means land that has been mapped in accordance with clause 3.4 and is included in an operative regional policy statement as required by clause 3.5 (but see clause 3.5(7) for what is treated as highly productive land before the maps are included in an operative regional policy statement and clause 3.5(6) for when land is rezoned and therefore ceases to be highly productive land) 7.15. As this is a new NPS the Regional Policy Statement is yet to map highly productive land and as such in assessing this, we refer to clause 3.5(7).

3.5(7) - Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:

(a) Is

- *i.* zoned general rural or rural production; and
- ii. LUC 1, 2, or 3 land; but
- (b) Is not
  - i. identified for future urban development; or
  - *ii. subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle*
- 7.16. The site is zoned Rural Production and also contains soils which are classified as LUC 3s1. The proposed district plan has not identified the site for future urban development and the site is not subject to a plan change to rezone it from rural production to rural lifestyle.
- 7.17. As has been mentioned earlier in this report, a Land Use Capability Report has been completed by Haigh Workman which found after soil testing the locations of Lots 1-6, that the soils on site were in fact assessed as LUC 4s2, which are not classified as highly versatile and as such the land not being classified as HPL. Nonetheless, as the RPS shows the LUC of the land is 3s1, an assessment of the relevant objective and policies within the NPS-HPL will be undertaken below.
- 7.18. It is worth highlighting that subdivision of the site is already approved to create six ruralresidential allotments and one larger balance allotment. Hence there is no question or assessment required of the effects of the site being subdivided to create six rural-residential allotments, rather it is an assessment of the effects of re-configuring the subdivision and how this will provide a superior outcome for productive use of the balance lot.

## 2.1 Objective

# Highly productive land is protected for use in land-based primary production, both now and for future generations.

7.18.1. Resource consent for subdivision of the site was granted on 08/10/2021, which approved subdividing the site to create six additional allotments ranging from 4015m2 to 4100m2. This resource consent approval predates the NPS-HPL and therefore the LUC of the soils onsite were not required to be considered as part of the subdivision resource consent process. The subdivision plan approved under RC2220161 resulted in the smaller rural-residential allotments being located along the southern boundary of the balance lot, Lot 7, resulting in a large area of land being removed from the middle of the site, creating an awkward area to the west and east of these lots, constraining productivity in these areas of Lot 7. The proposal will see the subdivision reconfigured, such that the six smaller rural-residential allotments will be contained





to the south-eastern corner of the site, allowing a larger, regular shaped area for the balance lot, Lot 7.

7.18.2. Overall, it is considered that the proposal will protect the land for primary production both now and for future generations as the proposal will see the balance lot reconfigured to enable practical use and maximise the potential of the productive use of the land, whilst mitigating reverse sensitivity effects.

# Policy 1: Highly productive land is recognised as a resource with finite characteristics and longterm values for land-based primary production.

7.18.3. The LUC Report completed by Haigh Workman identified that the soils were not in fact highly versatile, however the proposed change to the scheme plan is considered to protect the long term values of HPL by providing more opportunities for the balance lot to contain productive activities.

# Policy 2: The identification and management of highly productive land is undertaken in an integrated way that considers the interactions with freshwater management and urban development.

*Policy 3: Highly productive land is mapped and included in regional policy statements and district plans.* 

- 7.18.4. As this is a new NPS, the Regional Policy Statement is yet to map highly productive land. Section3.4 of the NPS for HPL provides some guidelines for mapping of highly productive land.
- 7.18.5. The site is zoned Rural Production and is mapped as having soils as LUC 3, however specific onsite testing has been undertaken which has determined the soils to be LUC 4. The site is not considered to form a large and geographically cohesive area as is split from land to the south by Signal Road and split from land to the north and east by Mangakaretu Stream and associated wetland areas. Land in the area is already fragmented to smaller rural-lifestyle allotments which is a result of recent subdivision approvals over the past 10 or so years.
- 7.18.6. The proposal is considered to provide a superior outcome in terms of management of land that may be HPL, by ensuring that the potential of the balance lot to provide productive use is maximised.

# Policy 4: The use of highly productive land for land-based primary production is prioritised and supported.

7.18.7. As mentioned above, the proposed re-configuration of the approved subdivision under RC2220161 is considered to prioritise and support land which may be HPL. The proposal will concentrate the smaller rural-residential allotments down one end of the site, limiting



boundaries with the larger balance lot, which aids in mitigating reverse sensitivity effects. This enables the balance lot to form a regular shape, enabling productive use to be maximised. As stated earlier in this report, it also reduces the area of productive land which will share a boundary with the rural residential lots. For example, under RC2220161, Lot 7 had shared boundaries with all of the six rural-residential lots which amounted to over 480 metres of shared boundary. Whereas under the revised scheme plan, Lot 7 will only share boundaries with Lots 5 & 6, which equates to less than 165m of shared boundary.

- 7.18.8. The smaller rural-residential lots will also include areas of wetland which cannot be utilised for productive use, further increasing the amount of usable land within the balance lot.
- 7.18.9. It is considered that the proposed scheme plan ensures the use of HPL for land-based primary production is prioritised and supported.

# Policy 5: The urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement.

*Policy 6: The rezoning and development of highly productive land as rural lifestyle is avoided, except as provided in this National Policy Statement.* 

7.18.10. The proposal does not include the urban rezoning of the site. As mentioned, the site has already received approval for subdivision to create six rural-residential allotments and one larger balance lot. The proposal is seeking to re-configure the subdivision layout to maximise the potential of the balance lot. It is considered that this will provide a superior outcome in terms of protecting HPL, compared to what has previously been approved prior to the NPS-HPL coming into legal effect.

# Policy 7: The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.

Policy 8: Highly productive land is protected from inappropriate use and development.

7.18.11. It is considered that Section 3.8 of the NPS-HPL is relevant to this Policy in this instance, which is as follows:

# 3.8 Avoiding subdivision of highly productive land

 Territorial authorities must avoid the subdivision of highly productive land unless one of the following applies to the subdivision, and the measures in subclause (2) are applied:
 (a) the applicant demonstrates that the proposed lots will retain the overall productive capacity of the subject land over the long term:

(b) the subdivision is on specified Māori land:

(c) the subdivision is for specified infrastructure, or for defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990, and there is a functional or operational need for the subdivision.





Territorial authorities must take measures to ensure that any subdivision of highly productive land:

 (a)avoids if possible, or otherwise mitigates, any potential cumulative loss of the availability and productive capacity of highly productive land in their district; and
 (b) a the life of the set of

(b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on surrounding land-based primary production activities.

- 7.18.12. Approval to subdivide the site has already been obtained, with the proposal reconfiguring the layout of the subdivision to maximise the productive potential of the balance lot and provide a superior outcome. Subclause 1(a) is considered relevant to this application, as the proposal will retain and enhance the overall productivity capacity of the site over the long term. As mentioned above, the current approved subdivision plan has the six rural-residential allotments in the middle of the balance lot, creating areas of the balance lot which are difficult to utilise for productive use as well as providing large lengths of shared boundaries with the smaller rural-residential allotments. The proposal will see all six rural-residential allotments confined to one area of the site, located in the south-eastern corner. The balance lot will therefore become a regular shaped allotment and only share boundaries with two of the six rural-residential allotments, mitigating reverse sensitivity effects. The balance lot will become a regular shaped allotment promoting the productive use of the lot. It is therefore considered that subclause (1)(a) applies to the proposal.
- 7.18.13. In terms of subclause (2), the proposal is considered to mitigate any potential cumulative loss of the availability and productive capacity of HPL as it will enhance the productive use of the balance lot. The smaller rural-residential lots will include wetland areas which will be set aside for protection. These wetland areas could not be utilised for productive use and hence the proposal will see an area of the site which had limited productive potential being converted to rural-residential lots, rather than an area of the site which could be utilised for productive use. Reverse sensitivity effects will be mitigated by reducing the amount of shared boundaries of the balance lot and the smaller rural-residential lots as has been discussed within this report.
- 7.18.14. Overall, it is considered that the proposal meets the requirements of Clause 3.8 and therefore subdivision of the site is provided for within the NPS for HPL and the proposal does not result in inappropriate use and development of the site. No assessment of Clause 3.10 is considered required as the proposal is considered to meet Clause 3.8.

# *Policy 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.*

- 7.18.15. In terms of this policy, it is considered that reference to Section 3.13 of the NPS for HPL is applicable.
- 7.18.16. The proposal is not considered to create any reverse sensitivity effects. Subdivision of the site to create six rural-residential allotments and one larger balance lot has already been approved,





with the proposal re-configuring the layout to provide a superior outcome. The proposal is considered to mitigate reverse sensitivity effects by confining the rural-residential allotments to one corner of the site which has limited production potential, which in turn, results in a lesser shared boundary between the larger productive lot and the smaller rural-residential allotments.

- 7.18.17. The proposal is also creating slighter larger rural-residential allotments, which will provide larger area for built development and potentially larger setback distances from boundaries, with ample area for open space within the allotments.
- 7.18.18. Overall, it is considered the proposal does not create any reverse sensitivity effects and provides a superior outcome to what has previously been approved for the site.

# Summary

7.19. Overall, it is considered that the proposal is consistent with the objectives and policies of the NPS for HPL. Although soils on the site have been determined to be LUC4, assessment of the NPS-HPL has been provided above, which has determined that the proposed reconfiguration of the scheme plan will provide a superior outcome in terms of productive capacity of the balance lot as well as mitigating reverse sensitivity effects.

# **Regional Policy Statement**

- 7.20. The role of The Regional Policy Statement is to promote sustainable management of Northland's natural and physical resources by providing an overview of the regions resource management issues and setting out policies and methods to achieve integrated management of Northlands natural and physical resources.
- 7.21. The proposal is considered to create less than minor effects on the character of the locality. The proposal will not compromise the sustainable management of natural and physical resources of the environment. The proposal is considered to have negligible effects on the life supporting capacity of air, water, soil and ecosystems. As such, it is considered the proposal is compatible with the intent of the RPS.

# Far North District Plan

7.22. A full assessment of the relevant objectives and policies within the Operative District Plan was undertaken as part of the recent consent application. As the proposal will not alter the number of allotments, it is considered that the statements made within the recent application are relevant to this proposal and will not change as a result of the variation.

# **Proposed District Plan**

7.23. Under the Proposed District Plan, the site is zoned Rural Production and therefore an assessment of the objectives and policies within this chapter have been included below. The proposal is considered to create no more than minor adverse effects on the rural environment





and is consistent with the rural intent of the surrounding environment and the zone. The proposal is considered to be consistent with the objectives and policies of the Proposed District Plan.

# **Rural Production Zone**

7.24. An assessment on the relevant objectives and policies within the Rural Production Zone has been addressed below.

# **Objectives**

*RPROZ-O1* - The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.

RPROZ-O2 - The Rural Production zone is used for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be in a rural environment.

RPROZ-O3 - Land use and subdivision in the Rural Production zone:
(a)protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production;
(b)protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation;
(c)does not compromise the use of land for farming activities, particularly on highly productive land;
(d)does not exacerbate any natural hazards; and
(e)is able to be serviced by on-site infrastructure.

# *RPROZ-O4 - The rural character and amenity associated with a rural working environment is maintained.*

7.24.1. The proposal will see the scheme plan reconfigured to ensure the productive capacity of the balance lot can be maximised. This will ensure that the balance lot is managed to ensure its availability for primary production activities and long-term protection. The proposal is considered to have a functional need to be located in the rural environment as assessed within the original application under RC2220161. As discussed above, areas of potential HPL will be protected by the reconfiguration of the proposal. Reverse sensitivity effects are not anticipated. The proposal will not exacerbate hazards. The lots can accommodate onsite infrastructure. Rural character and amenity will be maintained as the number of lots is not changing from what was originally approved.

# **Policies**

RPROZ-P1 - Enable primary production activities, provided they internalise adverse effects onsite where practicable, while recognising that typical adverse effects associated with primary production should be anticipated and accepted within the Rural Production zone.



*RPROZ-P2* - Ensure the Rural Production zone provides for activities that require a rural location by:

(a)enabling primary production activities as the predominant land use; (b)enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail, visitor accommodation and home businesses.

RPROZ-P3 - Manage the establishment, design and location of new sensitive activities and other non-productive activities in the Rural Production Zone to avoid where possible, or otherwise mitigate, reverse sensitivity effects on primary production activities.

RPROZ-P4 - Land use and subdivision activities are undertaken in a manner that maintains or enhances the rural character and amenity of the Rural Production zone, which includes:

(a)a predominance of primary production activities;

(b)low density development with generally low site coverage of buildings or structures;

(c)typical adverse effects such as odour, noise and dust associated with a rural working environment; and

(d)a diverse range of rural environments, rural character and amenity values throughout the District.

**RPROZ-P5** - Avoid land use that:

(a)is incompatible with the purpose, character and amenity of the Rural Production zone;

(b) does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone;

(c)would result in the loss of productive capacity of highly productive land;

(d)would exacerbate natural hazards; and

(e)cannot provide appropriate on-site infrastructure.

RPROZ-P6 - Avoid subdivision that:

(a) results in the loss of highly productive land for use by farming activities.

(b)fragments land into parcel sizes that are no longer able to support farming activities, taking into account:

1. the type of farming proposed; and

2. whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land.

(c)provides for rural lifestyle living unless there is an environmental benefit.

*RPROZ-P7 - Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:* 

(a)whether the proposal will increase production potential in the zone;

(b)whether the activity relies on the productive nature of the soil;

(c)consistency with the scale and character of the rural environment;

(d)location, scale and design of buildings or structures;

(e) for subdivision or non-primary production activities:

i. scale and compatibility with rural activities;

*ii. potential reverse sensitivity effects on primary production activities and existing infrastructure;* 

*iii. the potential for loss of highly productive land, land sterilisation or fragmentation* 

(f)at zone interfaces:

*i.* any setbacks, fencing, screening or landscaping required to address potential conflicts;

*ii. the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable;* 

(g)the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer;

(h)the adequacy of roading infrastructure to service the proposed activity;

(i)Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity;

(j)Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

7.24.2. The proposal will enable primary production activities in the balance lot. No reverse sensitivity effects are anticipated. Rural character will be maintained and enhanced as the smaller ruralresidential lots will be confined to one area of the site which is an area of the site where productive activities can not easily be undertaken. No adverse effects are anticipated. The proposal is not considered incompatible with the surrounding environment and is considered to have a functional need in the zone. The proposal will not result in loss of productive capacity of HPL. As discussed, the proposal is considered to have a superior outcome of areas of potential HPL. The proposal is not considered to exacerbate natural hazards and each allotment is capable of providing onsite infrastructure. The proposal results in an environmental benefit by formally protecting the areas of wetland within the smaller rural-residential allotments. The proposal is considered to increase the production potential of the site compared to what was previously approved under RC2220161. The proposal is considered consistent with the scale and character as it will not be increasing the number of lots already approved. No reverse sensitivity effects are anticipated. The site is not located at a zone interface. Each allotment can cater onsite infrastructure. The effects on roading were assessed as part of RC2220161 with the proposal not considered to alter these effects as the number of lots proposed is not increasing. No effects on historic heritage or cultural values are anticipated. The proposal is considered to have a positive impact on biodiversity as it will result in formal protection of wetland areas within the smaller allotments.

#### Summary

7.25. The assessment above demonstrates that the proposal will be consistent with the relevant objectives and policies and assessment criteria of the relevant statutory documents.





# 8. Consideration of potentially affected parties

8.1. Sections 95D and 95E (shown below) detail the requirement of consideration of likely effects on any person or party by the consenting authority to determine if a person is considered to be an "affected" by the proposed activity.

# 95D Consent authority decides if adverse effects likely to be more than minor

A consent authority that is deciding, for the purpose of section 95A(2)(a), whether an activity will have or is likely to have adverse effects on the environment that are more than minor— (a) must disregard any effects on persons who own or occupy—

(i) the land in, on, or over which the activity will occur; or

(ii) any land adjacent to that land; and

(b) may disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect; and

(c) in the case of a controlled or restricted discretionary activity, must disregard an adverse effect of the activity that does not relate to a matter for which a rule or national environmental standard reserves control or restricts discretion; and

(d) must disregard trade competition and the effects of trade competition; and

(e) must disregard any effect on a person who has given written approval to the relevant application.

8.2. The proposal includes assessment of the effects, that demonstrates that the actual and potential adverse effects of the proposal are no more than minor on the environment.

# 95E Consent authority decides if person is affected person

(1) A consent authority must decide that a person is an affected person, in relation to an activity, if the activity's adverse effects on the person are minor or more than minor (but are not less than minor).

(2) The consent authority, in making its decision, —

(a) may disregard an adverse effect of the activity on the person if a rule or national environmental standard permits an activity with that effect; and

(b) in the case of a controlled or restricted discretionary activity, must disregard an adverse effect of the activity on the person that does not relate to a matter for which a rule or national environmental standard reserves control or restricts discretion; and

(c) must have regard to every relevant statutory acknowledgement made in accordance with an Act specified in Schedule 11.

(3) Despite anything else in this section, the consent authority must decide that a person is not an affected person if—

(a) the person has given written approval to the activity and has not withdrawn the approval in a written notice received by the authority before the authority has decided whether there are any affected persons; or

(b) it is unreasonable in the circumstances to seek the person's written approval.

The application must be limited notified to the relevant persons if the following are determined, as specified by section 95B(2) and (3):

(2) (a) affected protected customary rights groups; or

(b) affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).

(3) (a) whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in <u>Schedule 11</u>; and





(b) whether the person to whom the statutory acknowledgement is made is an affected person under <u>section 95E</u>.

- 8.3. There are no rules or NES that permit the activity. The proposal is not for a controlled or restricted discretionary activity. There are no protected customary rights groups or customary marine title groups or statutory acknowledgement areas that are relevant to this application as per the assessment undertaken in RC2220161.
- 8.4. Other affected persons must be notified in the following circumstances specified by section 95B(7) and (8):

(7) Determine whether, in accordance with section 95E, the following persons are affected persons:

(a) in the case of a boundary activity, an owner of an allotment with an infringed boundary; and

(b) in the case of any activity prescribed under section 360H(1)(b), a prescribed person in respect of the proposed activity.

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

8.5. The proposal is not for a boundary activity nor is it a prescribed activity.

In deciding who is an affected person under section 95E, a council under section 95E(2): (2) The consent authority, in assessing an activity's adverse effects on a person for the purpose of this section,—

(a) may disregard an adverse effect of the activity on the person if a rule or a national environmental standard permits an activity with that effect; and

(b) must, if the activity is a controlled activity or a restricted discretionary activity, disregard an adverse effect of the activity on the person if the effect does not relate to a matter for which a rule or a national environmental standard reserves control or restricts discretion; and

(c) must have regard to every relevant statutory acknowledgement made in accordance with an Act specified in Schedule 11.

- 8.6. A council must not consider that a person is affected if they have given their written approval, or it is unreasonable in the circumstances to seek that person's approval.
- 8.7. With respect to section 95B(8) and section 95E, the effects of the proposal was considered as part of the assessment of environmental effects undertaken in Section 5 of this report, which found that the potential adverse effects on the environment will be less than minor. In regard to effects on persons, the assessment in Sections 5, 6 & 7 are also relied on and the following comments made:
  - The proposed changes are not considered to be contrary to the objectives and policies under the District Plan or the Proposed District Plan.
  - The proposed changes are not contrary to the relevant National Policy Statements or the Northland Regional Policy Statement.
  - The variation can still achieve the intent of the original subdivision consent, whilst providing a more superior outcome.





- The proposal is accompanied by a Wetland Report which is in support of the proposal noting that the proposal will provide a better outcome for biodiversity and protection of the wetland areas onsite.
- The proposal will result in a better outcome for access, stormwater management and also wastewater with reduced physical works to be carried out on the site.
- The proposal will not result in any adverse effects on adjoining sites.
- 8.8. Taking into account the intent of the original subdivision consent and the consent conditions that are in place to mitigate the various effects; it is considered that no persons or parties are considered to be actually or potentially affected by the proposal. Overall, the adverse effects on any persons are considered to be less than minor.

# 9. Conclusion

- 9.1. The proposed variation is considered suitable in the context of the site and surrounding environment. The amendment to the relevant conditions will still achieve the intent of the original proposal, whilst providing a superior outcome compared to what has previously been approved under RC2220161.
- 9.2. No significant adverse effects are anticipated to arise from the activity included in the application and no consideration of alternatives has been undertaken. All effects of the activity are considered to be managed within the property boundaries. Overall, it is considered that the proposal will result in no more than minor effects on the environment.
- 9.3. Written approval has not been sought from any parties, given that the proposal is not considered to adversely affect adjacent property owners/occupiers.
- 9.4. As a Discretionary Activity, the application has been assessed under the matters specified under Section 127 of the Resource Management Act 1991. It is considered that that the proposal results in no more than minor effects on the environment, and that the activity is generally consistent with the relevant objectives and policies of the Operative District Plan and the Proposed District Plan. In accordance with sections 104 and 104B of the Act, it is considered that the variation should be granted on a non-notified basis.

# **10.LIMITATIONS**

- 10.1. This report has been commissioned solely for the benefit of our client, in relation to the project as described above, and to the limits of our engagement, with the exception that the Far North District Council or Northland Regional Council may rely on it to the extent of its appropriateness, conditions and limitations, when issuing their subject consent.
- 10.2. Copyright of Intellectual Property remains with Northland Planning and Development 2020 Limited, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants or agents, in respect of any information contained within this report.





- 10.3. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.
- 10.4. Although this report may be submitted to a local authority in connection with an application for a consent, permission, approval, or pursuant to any other requirement of law, this disclaimer shall still apply and require all other parties to use due diligence where necessary.





# **RECORD OF TITLE UNDER LAND TRANSFER ACT 2017 FREEHOLD**

**Transfer Act 2017** 



Guaranteed Search Copy issued under Section 60 of the Land R.W. Muir Registrar-General of Land

NA1352/70 Identifier Land Registration District North Auckland **Date Issued** 20 December 1956

**Prior References** NA1157/19

Estate Fee Simple Area 23.1683 hectares more or less Lot 3 Deposited Plan 39764 **Legal Description Registered Owners** Kilkerran Estate Limited

### Interests

K51570 Building Line Restriction (affects part) 10783140.3 Mortgage to Westpac New Zealand Limited - 1.6.2017 at 4:08 pm




PURPOSE	SHOWN	BURDENED LAND	GRANTEE
r to drain R	А,	LOT 3 HEREON	
	в	LOT 4 HEREON	F.N.D.C
	С	LOT 5 HEREON	

(					
	Name	Date	SCALE	SHEET	
Survey				SIZE	
Design					123361
Drawn	W & K	May2024	L		
			1:3000	A3	
Rev					



# Engineering Report for Proposed Subdivision

Signal Road, Okaihau

Lot 3 DP 39764

for

# Signal Heights Limited

Supporting report for RC Applications to Far North District Council

Haigh Workman reference 24 068

#### September 2024



Phone: 0800 424 447 • info@haighworkman.co.nz • www.haighworkman.co.nz



### **Revision History**

Revision Nº	Issued By	Description	Date
А	Joshua Cuming	For Resource Consent	30 September 2024

Prepared by

Josh Cuming

**Environmental Geologist** 

BSc Geol, Env Stu, CEnvP

i

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Approved by

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John Papesch Senior Civil Engineer BE (Civil Engineering), CPEng, CMEngNZ



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### **Executive Summary**

Haigh Workman Ltd (Haigh Workman) was commissioned by Signal Heights Limited (the client) to undertake an engineering assessment of land on Signal Road, Okaihau (the site), for a proposed seven lot subdivision.

The site is within the Rural Production zone and has an area of 23 ha and comprises pasture with slight to moderate slopes.

This report assesses access, natural hazards, earthworks, stormwater, water supply and wastewater with specific regard to the local authority plans and subdivision rules contained. Below is a synopsis of the key sections covered:

#### **Natural Hazards**

Northland Regional Council GIS show that only a small area of the site is subject to river flooding hazard. This area is related to the mapped wetlands.

Based on site observations and published soil and geology maps the site is a very low stability risk.

#### **Vehicle Crossings**

The required sight stopping distances can be achieved for all proposed lots.

It is proposed that lot 7 will stay in production. However sufficient road frontage with appropriate sight stopping distances is available to construct a conforming vehicle crossing.

Vehicle crossing should be formed at time of subdivision when the location is obvious, as in the case of lot 5 which has a 6m wide panhandle. Crossing for the remaining lots is best left to time of development when the house platform is known. We recommend a consent notice on the titles of lots 1,2, 3, 4, 6 and 7 requiring a crossing permit at time of building development.

#### **Access & Parking**

We recommend that Signal Road be upgraded to minimum 6.0m wide carriageway from the intersection of Waiare Road to the end of Lot 6.

All sites have suitable land for driveway access plus parking and manoeuvring space for a minimum two cars.

#### Earthworks

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Proposed earthworks at subdivision stage are for constructing a vehicle crossing. All earthworks will be contained within the Council road reserve which are exempt from the District Plan limits.

All earthworks will comply with the proposed District Plan Rules EW-R12 and EW-R13, and Standards EW-S3 and EW-S5.

#### **Stormwater Management**

The proposed stormwater management has been designed to comply with the permitted activity and subdivision rules of the Far North District Plan and Regional Plan for Northland. Where flow rate control is provided this shall be for the 10% AEP rainfall event.

To comply with the 2023 Council Engineering Standards, attenuation shall be designed to 80% of pre-development peak flow rate (for the permitted activity) for the 2, 5 and 10-year events with no adjustment for climate change. When applying the 80% of pre-development, we take this to apply to that area of the site covered by impermeable surfaces. Attenuation should be designed at building consent stage.



Downstream from the site there are buildings located within the mapped 100-year flood zone. However, the size of catchment upstream of the affected properties is significant and the scale of the proposed development in relation is small. It is unlikely that this development will cause a measurable increase in downstream flood hazard in a 100-year flood event. Furthermore, the rural nature and relatively steep topography of the catchment make cumulative effects unlikely.

#### Wastewater

For each of the vacant lots a suitable area of 600m2 has been identified for secondary treated effluent disposal plus reserve area. The soils were classified as AS/NZS 1547:2012 Category 5, generally silt based with varying levels of clay content, and can be expected to sustain a loading rate of 3 mm/day for surface laid dripper irrigation.

#### Water Supply

Domestic water supply will be roof runoff collected in storage tanks.

#### **Fire Fighting**

Far North District Council Engineering Standards 2004 (2009 Rev.) require a water supply that is adequate for firefighting purposes. There is no reticulated water supply, so each lot will be responsible for providing an on-site firefighting supply.



### 1. Introduction

#### 1.1 Project Brief and Scope

Haigh Workman Ltd (Haigh Workman) was commissioned by Signal Heights Limited (the client) to undertake an engineering assessment of land on Signal Road, Okaihau (the site), for a proposed seven lot subdivision.

The scope of the report includes the following assessment items:

- General site assessment
- Natural hazards
- Vehicle access, parking and manoeuvring
- Earthworks
- Stormwater and wastewater
- Water supply and firefighting

A proposed subdivision plan prepared by Williams and King Reference 23361 dated April 2024 was made available at the time of writing this report. Refer copy appended.

The site is zoned 'Rural Production' under the Operative Far North District Plan.

#### 1.1 Limitations

This report has been prepared for our client Signal Height Limited with respect to the brief outlined to us. This report is to be used by our Client and Consultants and may be relied upon by the Far North District Council (FNDC) when considering the application for the proposed subdivision and development. The information and opinions contained within this report shall not be used in any other context for any other purpose without prior review and agreement by Haigh Workman Ltd.

It has been assumed in the production of this report that the site is to be subdivided and subsequently developed. At the time of writing there was no information available for proposed future developments on either lot following subdivision. If any of these assumptions are incorrect, then amendments to the recommendations made in this report may be required.

The comments and opinions presented in this report are based on the findings of the desk study and ground conditions encountered during an intrusive site visit performed by Haigh Workman. There may be other conditions prevailing on the site which have not been revealed by this investigation and which have not been taken into account by this report. Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of strata or other spatially variable features between or beyond investigation positions is conjectural and given for guidance only.



### 2 Site Description and Proposed Development

#### 2.1 Site Identification

Site Address:	Signal Road, Okaihau
Legal Description:	Lot 3 DP 39764
Area:	23.1682 ha
Operative Far North District Plan Zone:	Rural Production

#### 2.2 Site Description

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The property is irregular in shape and covers an area of 23.1682ha. The topography of the property varies between flat, rolling, moderate and steeply sloping. However, in the southeast where the residential lots are proposed the ground contour is slight to moderately sloping. The property is bounded to the north by the Maungakaretu Stream and Signal Road to the south and was laid to pasture at the time of our investigations. Refer Figure 1 for site location.



HW Ref 24 068 September 2024



Figure 1 Site Location

#### 2.3 Proposed Subdivision

A scheme plan has been provided, which identifies the intent to subdivide the property into five lots varying from 0.4168 to 20.4894 hectares in area.

The subdivision is a discretionary activity.

Proposed lots are described in Table 1 below:

Table 1 Lot descriptions						
Lots	Proposed Area (ha)	End-use				
Lot 1	0.7708	Rural residential				
Lot 2	0.5694	Rural residential				
Lot 3	0.8815	Rural residential				
Lot 4	0.5868	Rural residential				
Lot 5	0.7835	Rural residential				
Lot 6	0.4168	Rural residential				
Lot 7	19.0670	Balance lot				
Total	23.1682					

#### 24 068



HW Ref 24 068 September 2024

### 3 Environmental Setting

### 3.1 Geology

Published GNS geology maps indicate the site is underlain by the Kerikeri Volcanic Group (Pvb). The Kerikeri Volcanic Group comprises basalt lava, volcanic plugs, and minor tuff.



Figure 2 - GNS Geology Map

#### 3.1.1 Weathered Geology (Soils)

Sources of information:

• NZMS Sheet 290 Q04/05, 1:100,000 scale map, Edition 1, 1980: "Bay of Islands" (Soils)

Further reference to the New Zealand land inventory maps (1:100,000) indicate the soils on the site comprise of the flowing soil types Okaihau gravelly friable clay, Pungaere gravelly friable clay, Otaha clay and Otaha gravelly clay.

However, in the southeast where the residential lots are proposed the soils are mapped as Pungaere gravelly friable clay and Okaihau gravelly friable clay





OK – Okaihau gravelly friable clay. PG – Pungaere gravelly friable clay. OD – Otaha clay. ODg – Otaha gravelly clay loam

Figure 3 - New Zealand Land Inventory (1:100.000). Sheet P04/05										
rigure 5 - New Zealand Land Inventory (1.100.000). Sheet P04/03	Elguro	2	Now	Zoolond	Iand	Invontory	11.100	000)	Chaot	DO1/0E
	rigui e	<u>э</u> -	INEW	Zealallu	Lanu	Inventory	(1.100)	.0001.	Sneet	PU4/U3

Symbol	Unit Name	Drainage Properties
ОК	Okaihau gravelly friable clay	excessively to somewhat excessively drained
PG	Pungaere gravelly friable clay	well to moderately well drained
OD	Otaha clay	imperfectly to very poorly drained
ODg	Otaha gravelly clay loam	imperfectly to very poorly drained

#### 3.2 Natural Hazards

Under Section 2 of the Resource management Act 1991, **natural hazard** means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Natural hazards listed in Section 71(3) of the Building Act 2004 include: erosion, falling debris, subsidence, inundation and slippage. We assess the susceptibility of this site to these potential hazards in table 3 below.



#### Table 3 - Natural Hazards

Natural Hazard	Risk
Erosion (including coastal erosion, bank erosion, and sheet erosion)	No, subject to maintaining vegetation cover
Falling debris (including soil, rock, snow, and ice)	No
Subsidence (vertical settlement)	No, based on surface observations and soil and geology mapping.
Inundation (including flooding, overland flow, storm surge, tidal effects, and ponding)	No, building platforms are available well outside and several metres elevation above the minor flood hazard mapped along the northern boundary.
Slippage	No, based on surface observations and soil and geology mapping.

In respect of Section 71(2) of the Building Act 2004, adequate provision can be made to protect the land and buildings from natural hazards. Subject to the conditions recommended in this report, there is no significant risk from natural hazards that would cause Section 106 of the Resource Management Act to apply.

#### 3.2.1 NRC Flood Mapping

Parts of the site are modelled as being subject to flooding. The mapped flood areas are almost entirely contained within the wetlands mapped by Bay Ecological Consultancy Limited along the northeast boundary.



Figure 4 – NRC Flooding regionwide model



### 4 Site Access

#### 4.1 Signal Road

All proposed lots have frontage onto Signal Road which is a no exit access road width capable of supporting two-way traffic but poorly maintained and driven as a single-track road due to low traffic volumes.

NTA (Mobile Roads) estimates traffic volumes as 125 vpd with 10% heavy and an estimated carriageway width of 4.6m.

The legal speed limit is 60 km/h but operating speeds are typically 60 -70km/h.

A condition of the previously granted subdivision resource consent was an 'upgrade of Signals (sic) Road to a 6.5m wide carriageway with 1.0m wide shoulders, consistent with Rural Road in accordance with FNDC Engineering Standards FNDC/S/7 and Table 3.1A, Type B specifications".

Under the new FNDC Engineering Standards 2023 Tables 3.3 and 3.4, Signal Road would be classified as an Access (50-200 ADT), Band 3 with a minimum 6.0m wide carriageway. It is noted that Secondary Collector (201-1,000 ADT) has the same minimum 6.0m wide carriageway.

The road serves 25 properties, 23 of which have been developed for residential occupation. The proposed subdivision will create 6 additional residential lots. Allowing 10 vehicle movements per Household Equivalent as per District Plan Appendix 3B-1, the potential increase in traffic once all vacant lots are developed is 80vpd.

Actual traffic generation is likely to be less than the TIF calculation, this is because the longer distances from the site to destinations will discourage multiple journeys. Hence, traffic volumes are not expected to exceed the 200 ADT threshold.

We recommend that Signal Road be upgraded to minimum 6.0m wide carriageway from the intersection of Waiare Road to the end of Lot 6.

### 4.2 Vehicle Crossings

Vehicle crossing stopping sight distances (SSDs) were assessed for all lots. Refer Section 4.3 for tabulated SSDs. Photos are included in Appendix B.

The appropriate vehicle crossings standard is Engineering Standards 2023 Sheet 21 Type 1A. Vehicle crossing should be formed at time of subdivision when the location is obvious, as in the case of lot 5 which has a 6m wide panhandle. Crossing for the remaining lots is best left to time of development when the house platform is known. We recommend a consent notice on the titles of lots 1,2, 3, 4, 6 and 7 requiring a crossing permit at time of building development.

#### 4.3 Sight Distance Standards

Minimum sight distances from vehicle crossings are specified in the Far North District Council Engineering Standards and Guidelines 2023 Drawing Sheet 4.



Signal Road is classified as Access with a 60 km/h speed limit and an estimated vpd of 125.1

The Standards require a minimum sight distance of 85m for an Access road with a 60km/hr posted speed limit. Haigh Workman have assessed the operating speed for each crossing location as per Table 4 below. As allowed by Note 2 (Drawing Sheet 4).

Lot number	Approach direction	Posted Speed	FNDC Sight Dist. (Drawing Sheet 4) (m)	Sight Distance Achieved
1	East	60 km/h	85m	120m
	West	60 km/h	85m	180m
2	East	60 km/h	85m	120m
	West	60 km/h	85m	150m
3	East	60 km/h	85m	180m
	West	60 km/h	85m	130m
4	East	60 km/h	85m	130m
	West	60 km/h	85m	110m
5	East	60 km/h	85m	140m
	West	60 km/h	85m	110m
6	East	60 km/h	85m	140m
	West	60 km/h	85m	100m
7	East	60 km/h	85m	
	West	60 km/h	85m	

#### Table 4 Sight Stopping Distances

The required sight stopping distances can be achieved for all proposed lots.

<sup>&</sup>lt;sup>1</sup> Estimate provided by Mobile Road website, July 2024.



#### 4.3.1 Lot 7 Crossing

It is proposed that lot 7 will stay in production. However sufficient road frontage with appropriate sight stopping distances is available to construct a conforming vehicle crossing.

#### 4.4 Parking and Manoeuvring

Parking in accordance with District Plan Rule 15.1.6B and associated manoeuvring can be accommodated within the proposed lots for a minimum of two vehicles.

### 5 Earthworks

#### 5.1 Proposed Earthworks

Proposed earthworks at subdivision stage are for the construction of a vehicle crossing. All earthworks will be contained within the Council road reserve and are therefore exempt.

The Proposed Far North District Plan was notified on 27 July 2022 and defines earthworks as:

The alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.

The following Proposed Plan rules and standards have legal effect and will be complied with:

- Earthworks Rule EW-R12 (Earthworks and the discovery of suspected sensitive material)
- Earthworks Rule EW-R13 (Earthworks and erosion and sediment control
- Standard EW-S3 Accidental Discovery Protocol
- Standard EW-S5 Erosion and sediment control



### 6 Stormwater Management

#### 6.1 Regulatory Framework

#### 6.2 Far North District Plan Provisions

The Site is zoned as Rural Production. The relevant permitted activity rule for impermeable surfaces is as follows:

#### 8.6.5.1.3 STORMWATER MANAGEMENT

The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.

Note: It is recommended that the Low Impact Design principles are used where appropriate to promote the onsite percolation of stormwater to reduce runoff volumes and to protect receiving environments from the adverse effects of stormwater discharges.

The relevant controlled activity rule for impermeable surfaces is as follows:

#### 8.6.5.2.1 STORMWATER MANAGEMENT

The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 20%.

In order for an activity to be regarded as a controlled activity a report must be prepared to demonstrate the likely effects of the activity on stormwater run-off and the means of mitigating run-off to no more than the levels that would result from the permitted threshold of buildings and other impermeable surface coverage in Rule 8.7.5.1.5. Any report required by this rule shall be prepared by a Chartered Professional Engineer or other suitably qualified person and must be provided to Council with an application for resource consent.

Subdivision Rule relating to stormwater disposal is 13.7.3.4. The pertinent sections relating to this site are:

#### **13.7.3.4 STORMWATER DISPOSAL**

(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).

(d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.

(d) Where flow rate control is required to protect downstream properties and/or the receiving environment then the stormwater disposal system shall be designed in accordance with the onsite control practices as contained in "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003).



### 6.3 Regional Plan for Northland

Rule C.6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions); the diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10 percent annual exceedance probability, or flooding of buildings on another property in a storm event of up to and including a one percent annual exceedance probability.

#### 6.4 Council Engineering Standards 2023

The FNDC Engineering Standards have recently been updated and Council is encouraging their use. The pertinent sections relating to stormwater management are:

#### **Chapter 4: Stormwater and Drainage**

#### 4.1.3 Performance Standards

e. The primary stormwater system shall be capable of conveying <u>10% AEP design storm events</u> without surcharge (see Section 4.3.9 Hydrological Design Criteria).

#### 4.1.6. Managing Effects of Land Use on Receiving Environments

Hydrological balance can be partly maintained by <u>limiting the maximum rate of discharge and peak flood levels</u> <u>for post-development to that at pre-development levels</u> and enabling infiltration to minimise impacts on base flow and ground water recharge.

Peak flow management can be achieved using detention storage, utilising extended duration, for the duration of a limited peak flow event. Therefore, in the absence of more detailed assessment of stream stability, the discharges from detention devices into a stormwater network shall be constrained to 80% of pre-development peak flow rate. These constraints may be relaxed, subject to detailed assessments and hydrological/hydraulic modelling of the catchment being provided.

#### 4.2.1. Discharge into a Stream or Watercourse

<u>All new and existing discharges to an existing FNDC owned and / or maintained watercourse(s) located within</u> <u>approximately 500m require specific approval from the Stormwater Manager</u> before proceeding with design details and, if approved, FNDC shall apply appropriate conditions to the discharge.

#### 4.3.8. System Design

#### Table 4-1: Minimum Design Summary

<u>Current rainfall (i.e. not climate change adjusted</u>) shall be used for the following:

• Determining pre-development stormwater runoff flows and volumes for use in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

<u>Climate change adjusted rainfall</u> shall be used for the following:

• Determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

<u>Flood Control</u> (1% AEP event). Detention required, limiting the post-development 1% AEP event flow rates to 80% of the pre-development 1% AEP event flow rates.



<u>Flow attenuation</u> (Attenuation of the 50% and 20% AEP events). Limit the post-development 50% and 20% AEP event flow rates to 80% of the pre-development flows through controlled attenuation and release. Typically, always required in the upper catchment and <u>sometimes not required where development site is located in proximity to the catchment outlet</u>, discharging to a watercourse with sufficient network capacity, and where <u>flow attenuation may worsen flooding hazards due to relative timing of peak flows</u>. This is subject to assessment demonstrating no negative impacts would occur. If the proposed stormwater discharge is into a tidal zone, then no attenuation is required.

### 6.5 Discussion

The site is in the upper catchment of the Mangakaretu Stream which leads into the Waikaraka Stream, Whakanekeneke River, Waihou River and eventually the Hokianga Harbour. Downstream from the site there are buildings located within the mapped 100-year flood zone. However, the size of catchment upstream of these affected properties is significant and the scale of the proposed development in relation to the catchment is very small. It is unlikely that this development will result in a measurable increase in the downstream flood hazard. Furthermore, the rural nature and relatively steep topography of the catchment make cumulative effects unlikely.

Although the subdivision is a non-complying activity, it is a permitted activity with regard to stormwater management. The proposed stormwater management has been designed to comply with the permitted activity and subdivision rules of the Far North District Plan and Regional Plan for Northland. Proposed lots 1 - 6 are smaller than 2 ha, therefore detailed reporting addressing stormwater disposal has been provided.

#### 6.6 Existing and Proposed Development

A gravelled farm track is present on proposed lot 7. It is approximately 481m long and covers an area of approximately 1680m<sup>2</sup>.

The proposed subdivision provides for, but does not include rural-residential / lifestyle development. It is anticipated that houses when they are built will be of a similar scale to the existing residential / lifestyle development in other rural-residential land along Signal Road.

### 6.7 Existing Site Drainage

The site generally slopes to the north-west, north and north-east with slopes up to 8° in proposed lots 1-6. Proposed lots 1-6 generally slope to the north-east.

Proposed lots 1-6 drain into a delineated inland wetland<sup>2</sup>. The wetland then drains into the Mangakaraka Stream which is within the catchment of the Waihou River.

A culvert under Signal Road feeds an ephemeral flow path which is located between proposed lots 3 and 4. This flowpath then flows into the wetland.

<sup>&</sup>lt;sup>2</sup> Wetland Report, Signal Road, Bay Ecological Consultancy Ltd.



#### 6.8 Proposed Stormwater Management

For this site Rule C.6.4.1 indicates that it is appropriate to ensure flood levels do not increase for rainfall events up to the 10% AEP. This shall be achieved by attenuating run off.

District Plan and Regional Plan policies and rules require the avoidance or mitigation of adverse effects of stormwater runoff on receiving environments, including downstream properties. To comply with these requirements and the Council Engineering Standards 2023, attenuation shall be designed to 80% of pre-development peak flow rate for the 2 and 5-year events with no adjustment for climate change. When applying 80% of pre-development, we take this to apply to that area of the site covered by impermeable surfaces.

Residential development is not expected to result in contaminated stormwater runoff. By discharging concentrated flows to ground in a dispersive manner and making use of existing drains and flow paths, stormwater contamination can be avoided.

It is proposed that development is attenuated for 2, 5 and 10-year events at building consent stage. Attenuation can be achieved using roof runoff detention or by a combination of roof runoff detention and detention basin.

The mapped wetland along the north-eastern boundary will need to be considered with regard to stormwater design at building consent stage. The proposed lots drain into the wetland so although the creation of impermeable surfaces is interpreted as stormwater diversion, stormwater runoff from the new lots will continue to drain to the wetland. Furthermore, roof water capture and slow release of this through both attenuation tanks and domestic use will moderate flows and arguably benefit the wetland during dry periods.

#### 6.8.1 Assessment Criteria

The proposed stormwater management system has been assessed in accordance with Rule 13.10.4 for discretionary (subdivision) activities in Rule 13.11 as follows:

Stormwater Disposal Assessment Criteria	Comment
(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.	The proposed stormwater management complies with both the 'Operative' and 'Proposed (Appeals Version)' of the Regional Plan, permitted activity rules. Proximity to wetland will be address at build consent stage for each lot.
(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).	The proposed stormwater management complies with Council's <i>"Engineering Standards"</i> (2023)
(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.	The proposed stormwater management complies with Far North District Council Strategic Plan - Drainage rules.
(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.	Natural watercourses and overland flow paths will be retained.

 Table 5 Far North District Plan Section 13.10.4 Assessment Criteria



(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.	On-lot stormwater will be attenuated to pre- development levels at building consent stage.
(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.	Not applicable.
(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.	Natural flow paths will be retained where possible.
(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.	The proposed stormwater system is not connected to a Council stormwater system.
(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.	Stormwater runoff will be attenuated to 80% of pre- development levels for the 50%, 20% and 10% AEP storm events at time of building consent. There will be a minor increase in peak flows from the site during a 1% AEP storm event however the cumulative effects of this are less than minor.
(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of discharge that existed on the land before the subdivision takes place.	Stormwater retention basins are not considered necessary at time of subdivision. Basins could be designed at building consent stage for individual lots.
(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.	No adjoining properties are adversely affected by stormwater discharges from the proposed subdivision.
(I) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipelines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.	No stormwater pumping is proposed.
(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.	Natural overland flow paths will be maintained.



(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.	No easements for stormwater are considered necessary.
(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.	NA
(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.	NA
(q) The need for and extent of any financial contributions to achieve the above matters.	NA
(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.	NA

# 7 Potable Water

### 7.1 Potable Water Supply

There is no public water supply available at the site. Domestic water supply may be provided using roof runoff collected in storage tanks.

# 8 Fire Fighting

Council Engineering Standards require a water supply that is adequate for firefighting purposes. Where there is no reticulated water supply, then each residential lot will be responsible for providing adequate on-site firefighting supply.

For a single-family home without a sprinkler system in a non-reticulated supply area, the New Zealand Fire Service (NZFS) Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 recommends a minimum firefighting water storage capacity of 45 m<sup>3</sup> within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank. If the water bore is desired for use as a firefighting supply, it would generally need to provide 750 Litres of water per minute (in line with a reticulated water supply), along with the appropriate fittings under discussion with the NZFS National Commander's representative.



### 8.1 Alternative to Fire Fighting Supply

The Code (SNZ PAS 4509:2008) specifically allows for alternative methods to be used in meeting the Code requirements, as long as there is approval from an appropriate person nominated by the NZFS National Commander. Clause 4.4 of the Code states that:

- Fire engineers or similar competent persons may use alternative methods to determine firefighting water supplies. To comply with this code of practice, such alternatives must be submitted for approval to the person(s) nominated by the National Commander. The person(s) so nominated will approve these cases on confirmation that the method and calculations used are correctly applied.
- Alternative methods will need to show that the calculated firefighting water supply makes allowances for tactical flow rates (that is, the amount needed above a theoretical amount to absorb the released heat for operational effectiveness).

The procedure to be followed in the case of an alternative fire-fighting supply is as follows:

• The competent person should submit a firefighting facilities checklist (FFFC), with a scale site map showing contours and proposed alternatives to Table 2 with rationale for assessment to NZFS.

If the proposed supply is approved by a nominated NZFS person, Council will accept the FFFC and compliance with the Code will be achieved.

NZFS considers that a 'one size fits all' volume is not appropriate in all circumstances. There are alternatives to firefighting couplings but firefighters are not expected to lift pumps or hoses onto the top of water tanks.

# 9 On-site Effluent Disposal

#### 9.1 Regulatory Framework

#### 9.1.1 Regional Plan

The discharge of wastewater effluent to land is regulated by the permitted activity Rule C.6.1.3 of the Regional Plan for Northland. Table 9 of the plan specifies exclusion areas and set-back distances as follows:



#### Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater		
Exclusion areas					
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability		
Horizontal setback distances					
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres		
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres		
Coastal marine area	20 metres	15 metres	15 metres		
Existing water supply bore	20 metres	20 metres	20 metres		
Property boundary	1.5 metres	1.5 metres	1.5 metres		
Vertical setback distances	Vertical setback distances				
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres		

Additional requirements under the Rule also state:

1) The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. Onsite Domestic Wastewater Management (AS/NZS 1547:2012), and

2) The volume of wastewater discharged does not exceed two cubic metres per day, and

5) For wastewater that has received secondary treatment or tertiary treatment, it is discharged via:

a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of AS/NZS 1547:2012; or

b) an irrigation line system that is dose loaded and covered by a minimum of 50mm of topsoil, mulch, or bark, and

9) The following reserve disposal areas are available at all times:

a) one hundred percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or

b) thirty percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment

#### 9.1.2 **Operative District Plan**

The Far North District Plan contains an additional rule relating to wastewater discharges to land:

District Plan Rule 12.7.6.1.4 specifies that effluent fields shall be located no closer than 30 m from any river, lake, wetland or the Coastal Marine Area.



#### 9.2 Lots 1 -6 Wastewater Management

#### 9.2.1 Design Occupancy Rating

The onsite wastewater disposal for the proposed development of the Lots has been assessed.

It has been assumed for the purpose of this site suitability report that Lots 1-6 will each contain a three-bedroom residential unit. In reference to TP58 Section 6.3.1, it is recommended that the design occupancy of five people is adopted for this report.

#### 9.2.2 Design Flow Volumes

It is assumed that the proposed residential units will be designed to meet category 'C' according to TP58 Section 6.3.1, '*households with 11/5.5 or 6/3 Flush Toilet(s) and Standard Fixtures, low water use dishwasher and NO garbage grinder'*. A category C property accounts for up to <u>180 litres/person/day</u> of wastewater generation for bore water and onsite roof water supply.

Total daily wastewater generation of the proposed development is calculated as follows;

Total daily wastewater generation = Daily occupancy number  $\times$  design flow allowances

 $= 5 persons \times (180 litres/person/day)$ 

#### <u>= 900 litres/day</u>

Design flows of 900 litres per day for a three-bedroom household shall be adopted for the purpose of this report.

#### 9.2.3 Effluent Disposal

Effluent disposal systems will need to be situated to avoid surface runoff from higher ground, or protected by using interception drains. In addition, site restrictions listed in Section 8.1 of this report will need to be adhered to, to ensure a suitable setback from the identified overland flow paths, boundaries, wetlands and buildings.

Standard separation distances can be applied with regard to site slope, which is below 10° on all lots assessed. Lot 1 has the steepest slopes but do not exceed 8 degrees.

#### 9.2.4 Land Disposal System Sizing and Design

Sufficient area is available on all lots for wastewater disposal including allowances for the required setback distances associated with the Regional Plan, potential effluent disposal areas have been shown on the Wastewater Management Plan appended.

Two hand augured boreholes were advanced to a depth of 1.2m below ground level, these were BH8 and BH12. Topsoil depths were checked in each of the lots. Refer BH logs 8 and 12 appended. The soils encountered are summarised as follows.

Observed topsoil thicknesses were between 0.1m - 0.15m.

#### Table 6 Borehole Summary

Lot Borenole Topsoli deptri (m) Soli Description (top 1m)	Lot	Borehole	Topsoil depth (m)	Soil Description (top 1m)
---	-----	----------	-------------------	---------------------------



4	8	0.15	Silt low plasticity becoming highly plastic silty clay after 0.3m
1	12	0.15	Silt low plasticity becoming highly plastic silty clay after 0.3m

The NZMS soils map records Okaihau and Pungarere series soils across the lots with drainage properties ranging between *'well to moderately well drained'* and *'excessively to somewhat excessively drained'*. For assessment purposes we conservatively categorise the soils as AS/NZS1547 Category 5. These soils are categorised as light clay, poor drainage with a daily irrigation rate (DIR) of 3 mm/day.

For poor drainage soils surface dripper lines are recommended for secondary treated effluent.

The total length of the trickle irrigation system required (UniBioline or similar) is calculated as follows;

 $Total \ area \ of \ dripper \ irrigation \ field = \frac{Total \ daily \ wastewater \ generation}{Design \ irrigation \ rate}$ 

$$=\frac{900}{3}$$

#### $= 300 m^2$

The Wastewater Management Plan appended indicates there is space available for dripper fields a 100% reserve area on each lot.

#### 9.2.5 Treatment Plant Design Sizing

The naming of a proprietary secondary treatment plant will be decided by the new owner at the building consent stage, when the position and scale of the building are known.

The system is to meet the quality output of AS/NZS 1546.3:2003, producing effluent of less than 20 g/m<sup>3</sup> of 5-day biochemical oxygen demand (BOD<sub>5</sub>) and no greater than 30 g/m<sup>3</sup> total suspended solids (TSS) at the estimated wastewater generation rate for the proposed development.



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# Appendix A – Drawings

Drawing No.	Title	Scale
23361	Williams and King – Proposed subdivision of PT Lot 3 DP 39764, April 2024.	1: 3000 @ A3
P01	Wastewater Plan	1: 3000 @ A3
P02	Vehicle Crossing Plan	1: 3000 @ A3



PURPOSE	SHOWN	BURDENED LAND	GRANTEE
TO DRAIN R	А,	LOT 3 HEREON	
	в	LOT 4 HEREON	F.N.D.C
	С	LOT 5 HEREON	

1					
	Name	Date	SCALE	SHEFT	
Survey				SIZE	00004
Design				·	123361
Drawn	W&K	May2024			
			1:3000	[A3]	
Rev				レノ	



	8
ID	
	Indicative house site
	Wastewater field 300m <sup>2</sup> + 100% reserve area
	Approximate area of natural wetland
	30m Setback from wetland

NOTE: HOUSE SITES ARE INDICATIVE ONLY. GEOTECHNICAL INVESTIGATIONS ARE REQUIRED TO CONFIRM BUILDING PLATFORM SUITABILITY.

F

Е

D

С

В

Issued for Information

SIGNAI LOT 3 D	- ROAD P 39764	Stage	A
SIGNAL H	IEIGHTS LIMITED	Dwg No. P01	
	RC no.	Sheet No. 1 of 2	





# **Appendix B – Sight distances photolog**



Photo 1. Visibility east of proposed lot 1 crossing



Photo 2. Visibility west of proposed lot 1 crossing





Photo 3. Visibility east of proposed lot 2 crossing



Photo 4. Visibility west of proposed lot 2 crossing



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Photo 5. Visibility east of proposed lot 3 crossing



Photo 6. Visibility west of proposed lot 3 crossing



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Photo 7. Visibility east of proposed lot 4 crossing



Photo 8. Visibility west of proposed lot 4 crossing



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Photo 9. Visibility east of proposed lot 5 crossing



Photo 10. Visibility west of proposed lot 5 crossing


Engineering Report for Proposed Subdivision Signal Road, Okaihau For Signal Heights Limited HW Ref 24 068 September 2024



Photo 11. Visibility east of proposed lot 6 crossing



Photo 12. Visibility west of proposed lot 6 crossing

# WETLAND REPORT



# VARIATION OF SUBDIVISION SCHEME 2220161-RMASUB PT LOT 3 DP 39764 SIGNALS ROAD, ŌKAIHAU



PO Box 229, KERIKERI PH 021 151 8315

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CONCLUSION	
APPENDIX 1: SPECIES LIST	

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#### This report may be cited as-

BAY ECOLOGICAL CONSULTANCY LTD (21/6/24) WETLAND REPORT VARIATION OF SUBDIVISION SCHEME 2220161-RMASUB PT LOT 3 DP 39764 SIGNALS ROAD, ŌKAIHAU

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WETLAND REPORT VARIATION OF SUBDIVISION SCHEME 2220161-RMASUB PT LOT 3 DP 39764 SIGNALS ROAD, ŌKAIHAU JUNE 2024



# **EXECUTIVE SUMMARY**

Bay Ecological Consultancy Ltd has been engaged by Signal Heights Ltd to determine the presence or otherwise of *natural inland wetland (NPS FM 2020)* in a focus area of Pt Lot 3 DP 39764, Signals Rd, Ōkaihau in respect to a subdivision proposal.

The standing subdivision consent (2220161 RMASUB 28/10/2021) was approved for six 4000m<sup>2</sup> Lots in the Rural Production Zone. The current proposal represents a reconfiguration with consolidation of six proposed Lots (approx. 4.1-8.8ha) at the eastern end of the parent Lot and Signal Rd, where a residential lifestyle character already prevails. Additionally, this will avoid fracturing the residual production parcel (proposed Lot 7) and retire suboptimal pastoral land<sup>1</sup>.

A desktop review of available ecological context of the site was undertaken, primarily from aerial photography; online databases & mapping, to provide insight into the possible *extent* of any potential wetland and associated *values*<sup>2</sup>, subject to regulations of the *NES-F* (2020). *Extent* and *values* are primary considerations in avoidance of adverse effects of any development, largely dependant on maintenance of hydrology.

Field work was undertaken on the 18/04/24 with regard to the MfE Wetland Delineation Protocol (2022) and supporting documents. Site photos are provided for illustration. Wetlands identified were further subject to topographic survey in conjunction with Williams & King Ltd staff (8/05/24). They are identified on the accompanying scheme bordering proposed Lots 1;2;3;& 5.

Key findings from this reporting are:

- Natural inland wetlands subject to the National Environmental Standards for Freshwater NES –
  F (2020) have been recognized, according to definitions of the NPS FM (2020) and PNRP (2021),
  by dominant hydrophytic (OBL, FACW) floral assemblages supported by evidence of persistent
  site hydrology.
- Site wetlands are diagnostically
  - o swamp
- The Rapid Test, as the first strata of wetland delineation, was sufficient to determine wetland presence with dominance typified by obligate (OBL) and facultative wetland (FACW) species forming very obvious <u>natural inland wetland</u> communities. Abrupt loss of wetland dominance occurs with slight elevation in contour at the edges.
- Wetland is visible from aerial photography dating to the 1950s showing prolonged periodicity and occupancy.

<sup>&</sup>lt;sup>1</sup> Determined to be LUC Class 4 HAIGH WORKMAN LTD (19/6/24) 112 SIGNAL RD – LUC REPORT)

<sup>&</sup>lt;sup>2</sup> VALUES (NPS FM 2020 Amendment No.1 (2022) (i) ecosystem health; (ii) indigenous biodiversity; (iii) hydrological function; (iv) Maori freshwater values; (v) amenity values

- Primary hydric indicators included saturation and surface water, with supportive indicators of the geomorphic profile and drainage patterns in the landscape.
- The prevailing character of the site beyond identified wetland is rough pastoral- kikuyu dominance, strong clumps of *Paspalum dilatum*; rye; browntop; clovers, & further common FACU / UPL grass and weed species e.g. *Senecio; Plantago* and *Daucus*. The intent and extent of occupation of the areas does not allow for ongoing pastoral use of the focus areas once the development is commenced. None of the *natural inland wetland* <u>mapped</u> in this reporting would be subject to the pastoral exclusion clause of the *natural inland wetland* definition<sup>3</sup>.
- Ecological site values within the designated footprint are related to the wetland area encompassing a ranked headwater reach of the Mangakaretu Stream<sup>4</sup> and a totara dominant remnant in the eastern corner of the scheme (Area D)
- Predicted ecosystem<sup>5</sup> type on the Ōkaihau Gravelley Friable Clay mapped<sup>6</sup> soil type is
   *WF11 Kauri podocarp broadleaved*

Only individual or small clusters of species are remnant adjacent the wetland or Area D. There are no species with threat status or regionally rare/significant.

- There are no kauri in the development areas to invoke consideration of the *Biosecurity* (*National PA Pest Management Plan*) Order 2022.
- The primary wetland associations onsite are Machaerina rubignosa (OBL) Isachne globosa (OBL) dominant with frequent Epilobium pallidiflorum (OBL), Paspalum distichum\* (FACW); Juncus effusus (FACW); Eleocharis acuta (OBL); Persicaria\* (OBL & FACW spp); Cyperus brevifolius\* (FACW); Isolepsis prolifera (OBL) are also common. Confined occurences of larger stature Schoenoplectus tabernaemontani (OBL); Parablechnum minus (FACW) swamp fern and clumps of flax (FACW) are apparent. Associations vary with depth of saturation/standing water.
- Mātātā (*Histiopteris incisa* FAC) is found toward the edge with innocuous *Ranunculus repens* (*FAC*) and *Holcus lanatus* (*FAC*). *Paesia scaberula* is present on dry hummocks with gorse, and blackberry scrambling over wetland from dry rooted areas. Tobacco weed is scattered along margins.
- Two point source contributions to the wetland are identified on the scheme in areas A, B & C. The eastern is channelized directly downstream to the wetland from culvert at Signals Rd, and may be considered an *artificial watercourse*<sup>7</sup>. If it contained wetland it would be subject to exclusion in the *natural inland wetland* definition(*c*)<sup>8</sup>.

The more western has a natural form and meanders downslope with a series of bare incised runs and eroded pools containing standing water, with obvious depressed overland flow path between. It may considered an *ephemeral stream* under PNRP definition.

• After stock exclusion the wetlands are likely to increase in cover and biodiversity. It is recommended that buffer planting be incorporated for joint functional purpose of aquatic function (attenuation; shade; sediment control; bank stabilization) and amenity. It should also be noted that any planting within 10m of wetland must be locally appropriate and indigenous as per *REG 55 NES- F (2020)* to create a natural ecosystem pattern and to avoid potential adverse effect of loss of values.

<sup>&</sup>lt;sup>3</sup> (e) a wetland that:

<sup>(</sup>i) is within an area of pasture used for grazing; and(ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)(iii) the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply

<sup>&</sup>lt;sup>4</sup> NZ SEG1008227 Ranked Top 18% C8 Type

<sup>&</sup>lt;sup>5</sup> https://services2.arcgis.com/J8errK5dyxu7Xjf7/arcgis/rest/services/Northland\_Biodiversity\_Ranking/FeatureServer

<sup>&</sup>lt;sup>6</sup> https://lris.scinfo.org.nz/layer/48066-nzlri-soil/

<sup>&</sup>lt;sup>7</sup> PNRP (2021) B Definitions | Whakamāramatanga ARTIFICIAL WATERCOURSE : A man-made channel constructed in or over land for carrying water and includes an irrigation canal, roadside drains and water tables, water supply race, canal for the supply of water for electricity power generation and farm drainage canals. It does not include a channel constructed in or along the path of any historical or existing river, stream or natural wetland.

<sup>&</sup>lt;sup>8</sup> NPS – FM (2020 Amendment 8th December 2022) Natural inland wetland is NOT ... (c) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body;

- A diversity of appropriate riparian species referencing the appropriate predicted ecosystem forest types or suitable sedges & low shrubs is recommended to accommodate final built form
- In the focus area building platforms and associated infrastructure are potentially within 100m of *natural inland wetland*. However, the wetland's extant hydrological sources are to the east and from the opposite bank tributaries (Lot 2 & 3 DP 552283) fed by flow/ seepage with variable output highly responsive to meteorological conditions in a pastoral setting. Diversion of diffuse natural discharge naturally permeating or sheetflow downslope through the development area will not likely change the water level range or hydrological function of the wetland in any measureable way.
- Stormwater inputs to the CSAs or more directly to wetland may represent a discharge within 100m, non complying under *Reg 54(d) NES- F (2020)*. Species composition throughout has a level of tolerance adapted to periodic moderate to high fluctuation in water levels without discernible shift in composition or aquatic life. Inputs should be controlled in a manner that prevents sediment, scouring or erosion as best practice to avoid adverse effects of such on wetland and aquatic habitat condition. Buffer planting CSAs and of their entry points to wetland is recommended in addition to the wetland buffer to reduce overall erosion and sediment load potential.
- The wetland and portion of the focus area is mapped *TEC Level II- Chronically Threatened*, referenced in regional significance assessment: *RPS (2018) Appendix 5 2(a)1.*
- The swamp is also sufficiently large, representative, indigenous dominant with headwater and buffering functionality to be considered significant under further *RPS (2018) Appendix 5* criteria.
- Five minute bird counts during fieldwork determined habitat suitable for insectivourous generalists sighted e.g. kingfisher; pukeko; fantail; sparrow utilizing wetlands as part of wider territorial economics. This is likely true for any kiwi that may be present. Other than pukeko and paradise ducks no wetland birds were sighted, they are typically reticent even in response to playback. With pest control and buffering potential habitat for
- Fish survey was outside the scope of works. Predicted species mapping implies redfinned bully and shortfin eel at minimum in adjacent waterways. While much of the site wetland may be considered too shallow to serve as habitat it likely becomes hydrologically connected and an extension of habitat under high rainfall. Controls on inputs as above are considered sufficient to avoid adverse effects on any species present. This also includes invertebrate communities adapted to require the reliable wet ecosystem niches of the wetlands for at least part of their lifecycle, flagshipped by the OBL & FACW plant composition.

The buffering and formal protection of the wetland, retirement of the critical source areas and adherence to the NES-F (2020) in development will provide for improvement of their values, including as catchment water quality protection and habitat patches throughout the wider landscape, aligned with aspirations of the site's TEC Level II designation in conjunction with additional protection of the totara remnant (D). In respect of these recommendations, the proposal represents a positive ecological effect over the existing approved baseline of 2220161-RMASUB. It is unlikely there will be a loss of *extent* or *values* as per the NPS- FM (2020) definitions, significant species or habitat from the proposal.

### NORTH EASTERN WETLAND COMMENCEMENT



# **INTRODUCTION**

The subject property (PT LOT 3 DP 39764) is located on the northern side of Signals Rd, approx. 14 km southwest of Kerikeri, shortly west of the Okaihau Golf Course.

Approval was granted (2220161 RMASUB 28/10/2021) for Non complying subdivision to create six 4000m<sup>2</sup> Lots in the Rural Production Zone. The current proposal represents a reconfiguration with consolidation of six proposed Lots (approx. 4.1-8.8ha) at the eastern end of the parent Lot and Signal Rd, where a residential lifestyle character already prevails. Additionally, this will avoid fracturing the residual production parcel (proposed Lot 7) and retire suboptimal pastoral land<sup>9</sup>.

The majority of the areas has been in exotic pasture throughout the available historic aerial record, on gently rolling contour, sloping down northeast from Signals Rd to the Mangakaretu Stream and wetland investigation area, approx. 327-316masl.

The purpose of this reporting is to determine the presence or otherwise of *natural inland wetland (NPS FM 2020)* within these areas, including *extent* and *values*, the primary variables of any proposal to consider in avoidance of effects.

The focus area is illustrated in *Fig 2* and described in *Table 1*.



# FIG 1: SITE LOCATION

<sup>&</sup>lt;sup>9</sup> Determined to be LUC Class 4 HAIGH WORKMAN LTD (19/6/24) 112 SIGNAL RD – LUC REPORT)



# **REGULATORY CONTEXT**

Site investigation has been undertaken specifically with regard to the presence or otherwise of *natural inland wetland*, as defined in the National Policy Statement for Freshwater Management (NPS -FM2020) and subject to the protective regulations within the National Environmental Standards for Freshwater (NES-F 2020). There is no previously mapped *known wetland*<sup>10</sup> or ranked wetland<sup>11</sup> on the parent parcel. We are not aware of any previous reporting on site wetland.

The definition of **wetland** is given in the Resource Management Act (1991):

Wetland includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals <u>adapted</u> to wet conditions.

Plants adapted to live in wetland conditions as above are defined in three categories -

- **OBL**: Obligate. Almost always is a hydrophyte, rarely in uplands (estimated probability >99% occurrence in wetlands)
- **FACW**: Facultative Wetland. Usually is a hydrophyte but occasionally found in uplands (estimated probability 67–99% occurrence in wetlands)
- **FAC**: Facultative. Commonly occurs as either a hydrophyte or non-hydrophyte (estimated probability 34–66% occurrence in wetlands)

(Clarkson, B. et al 2021)

Identification and dominance of these species in vegetation forms the basis for diagnosis as wetland and has been incorporated into the NPS –FM (2020). To this end, both exotic and native species have been categorised by NZ experts in supporting documentation.

The NPS – FM (2020) & accompanying regulations of the NPS- F (2020) have recently been amended<sup>12</sup>, incorporating a new definition of *natural inland wetland* as subject to the *NES F (2020)* as below, providing exclusions of some classes of wetland as per the broader RMA definition:

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

(a) in the coastal marine area; or

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

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

(d) a geothermal wetland; or

(e) a wetland that:

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

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

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

 <sup>&</sup>lt;sup>10</sup> NRC BIODIVERSITY WETLANDS https://localmaps.nrc.govt.nz/localmapsviewer/?map=55bdd943767a493587323fc025b1335c
 <sup>11</sup> Wildlands (2011) RANKING OF TOP WETLANDS IN THE NORTHLAND REGION STAGE 4 - RANKINGS FOR 304 WETLANDS Contract Report No. 2489

<sup>&</sup>lt;sup>12</sup> 8<sup>th</sup> December 2022 NPS; 5<sup>th</sup> December NES effective 5 Jan 2023

Under these updates, Regulation (e) (i) & (ii) only apply while a site is in active pastoral use, and not once its purpose changes<sup>13</sup>. The planning application is for anticipated residential purpose and Lots singularly insufficient for continued pastoral use, also evident onsite in pasture quality and bedrock protrusion.

*Exotic pasture species*<sup>14</sup> as per definition do not include common wetland/ wet pasture grasses *Glyceria*; *Paspalum distichum*<sup>\*15</sup> (*FACW*), *Isachne globosa* (OBL); *Alopecaurus geniculatus* (*FACW*) and *Agrostis stolonifera*\* (*FACW*) or unpalatable exotics such as *Ranunculus repens* (*FAC*).

<sup>&</sup>lt;sup>13</sup> "This exclusion is not targeted at pasture being targeted for urban development or for other land uses. It does not apply to wetlands in other areas of grassland that are not grazed, such as in parklands, golfcourses, landscaped areas and areas of farmland not used for grazing purposes". MfE (December 2022) Pasture Exclusion Assessment Methodology Pg 9
<sup>14</sup> National List of Exotic Pasture Species List (2022) MFE

<sup>&</sup>lt;sup>15</sup> \* denotes exotic

# SITE CONTEXT

The following site context is a combination of desktop review and site visit, including detail of the immediate surrounding landscape.

#### TABLE 1: MAPPED SITE SUMMARY

DESCRIPTION	PT LOT 3 DP 39764	
ADMINISTRATION	SIGNAL HEIGHTS LTD	
FNDP OPERATIVE ZONE	RURAL PRODUCTION	
TOTAL LOT AREA	23.1682 ha approx.	
PROPOSED LOTS AREA	LOT 1         0.7708ha         LOT 5         0.7835ha           LOT 2         0.5694ha         LOT 6         0.4168ha           LOT 3         0.8815ha         LOT 7         19.0670ha (RESIDUAL PRODUCTION PARCEL)           LOT 4         0.5868ha         LOT 7         19.0670ha (RESIDUAL PRODUCTION PARCEL)	
ECOLOGICAL DISTRICT	KAIKOHE	
COVER FOCUS AREA	<ul> <li>EXOTIC GRASS/ PASTURE</li> <li>WETLAND - SWAMP;</li> <li>NO BUILT FORM</li> </ul>	
RIVERS <sup>16</sup>	<ul> <li>1<sup>st</sup> Order MANGAKARETU STREAM C8 TYPE</li> <li>NZ SEGMENT 1008227</li> </ul>	
SOIL TYPE <sup>17</sup>	OKAIHAU GRAVELLEY FRIABLE CLAY (Ok)	
POTENTIAL ECOSYSTEM <sup>18</sup>	WF11 Kauri podocarp broadleaved on PC soil     Remnant individual trees totara	
TEC CLASSIFICATION <sup>19</sup>	CLASS II : CHRONICALLY THREATED (10- 20% indigenous cover remains)	
MAPPED SNA;NORTHLAND BIODIVERSITY RANKING - TERRESTRIAL TOP 30 SITES; RANKED RIVERS; KNOWN WETLANDS; RANKED WETLANDS	NZ SEGMENT 1008227 RANKED 0.185 (TOP 18% C8 TYPE CREEK IN NORTHLAND)	
RARE ECOSYSTEMS <sup>20</sup>	WETLANDS	

Key sources of the desktop review included:

- Retrolens aerial photography <u>www.retrolens.co.nz</u>
- https://data.linz.govt.nz/
- Conning; Holland & Miller (2004) Natural Areas of Kaikohe Ecological District Reconnaissance Survey Report for the PNA Programme. DoC, Whangarei
- Forester & Townsend (2004) Threatened plants of the Northland Conservancy
- Johnson & Gerbeaux (2004) Wetland types in NZ. DoC, Wellington
- LRIS portal https://lris.scinfo.org.nz/
- NRC Local Mapping & supporting documents Leathwick (2018); Singers (2018)
- TEC Classification https://ourenvironment.scinfo.org.nz/
- Wildlands Consultants (2011) Ranking of top Wetlands in the Northland Region Stage 4 Rankings for 304 Wetlands Wildlands Contract Report No. 2489 for the Northland Regional Council
- Wildlands Consultants (2012) Report on Wetland Guidelines for the Northland Region Contract Report 2952

<sup>&</sup>lt;sup>16</sup> LINZ 2022 NZ River Centrelines https://data.linz.govt.nz/layer/50327-nz-river-centrelines-topo-150k/

<sup>&</sup>lt;sup>17</sup> https://nrcgis.maps.arcgis.com/apps/webappviewer/index.html?id=fd6bac88893049e1beae97c3467408a9

<sup>&</sup>lt;sup>18</sup> https://services2.arcgis.com/J8errK5dyxu7Xjf7/arcgis/rest/services/Northland\_Biodiversity\_Ranking/FeatureServer/0

<sup>&</sup>lt;sup>19</sup> https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Habitats/lenz\_tec

<sup>&</sup>lt;sup>20</sup>Williams et al (2007) New Zealand's historically rare terrestrial ecosystems set in a physical and physiognomic framework *New Zealand Journal of Ecology 31(2):* 119-128

## **HISTORIC AERIAL REVIEW**

Review of available aerial photography preceded fieldwork to determine historic location and subsequent persistence of any site hydrology/ wetland.

## **KEY FINDINGS**

- Wetlands visible throughout review demonstrating long term occupancy and periodicity.
- Remnant trees in scheme Area D are visible to the 1950s
- Drain in Area A visible in 2000. More natural ephemeral flow path in B & C visible from 1950s

#### FIG 3: RETROLENS 1953<sup>21</sup>



<sup>&</sup>lt;sup>21</sup> All Retrolens aerials sourced from http://retrolens.nz and licensed by LINZ CC-BY 3.0

#### FIG 4: 1968 RETROLENS



# FIG 5: 1977 RETROLENS



#### FIG 6: 1981 RETROLENS





## FIG 8: 2004 GOOGLE EARTH



# **SOILS & PREDICTED ECOSYSTEM TYPE**

Underlying soil patterns provide an indication wetland likelihood e.g. poor permeability or podzolisation. Broad scale geology changes across a site may also promote the eruption of hydrological sources and are often a marker of wet areas, as on site. Soil types infer an historic associated cover, which is a relevant reference for any revegetation or amenity planting. FIG 9: NRC SOIL MAPPING



75,202.452 6,095,572.787 Metacs

Site soils are mapped throughout<sup>22</sup> as  $\overline{O}$ kaihau Gravelley Friable Clay with a transition north of the wetland (Lot 2 & 3 DP 552283) to the associated Pungaere Gravelley Friable Clay (Pg).

# ŌKAIHAU GRAVELLEY FRIABLE CLAY (OK)

- Old basalt volcanic soil of the Kiripaka suite- basement basalt lava flow
- Typic nodular oxidic soil (XNT)
- Hydrolic conductivity of surface horizons is fast. Soils are somewhat excessively drained although clay-enriched B horizons create intermittent wetness/ perching at this layer of short duration
- Strong to very strongly leached resulting in an infertile friable topsoil with a prominent layer of iron oxide nodules.
- Toxic free iron and aluminium creates high phosphate retention. May inhibit root function and may contribute to shallow rooting habits
- Friable topsoil prone to slipping often associated with seepage areas at the heads of gullies
- Bare, cropped soils are especially susceptible to rill erosion

This soil is associated historically with  $WF11 - Kauri Podocarp broadleaved forest^{23}$ , the dominant forest type in Northland, occurring from sea level to 300 m, typically on shallow to steep hillslopes and ridges.

Although this terrestrial vegetation reference type is absent from the site, the relationship to the site soils is appropriate to guidance for post development revegetation or amenity planting directly adjacent wetlands as per NES – F regulations.

Type characteristics is given as:

# WF11:

- Kauri, podocarp, broadleaved forest with occasional rimu, miro, kahikatea, kauri, taraire, tawa, tōwai, kohekohe, pūriri and rewarewa.
- Drivers of composition are fertility, drainage and altitude
- Altitude variants taraire and kohekohe more abundant at lower altitudes, and tawa and tōwai more common at higher altitudes.
- Broadleaved species in gullies
- Commonly a secondary derivative of kauri forest
- Rainfall 1000–2500mm.

<sup>&</sup>lt;sup>22</sup> https://lris.scinfo.org.nz/layer/48066-nzlri-soil/

<sup>&</sup>lt;sup>23</sup> Singers & Rogers (2014) A classification of New Zealands terrestrial ecosystems. Science for Conservation Series 325

## **HYDROLOGY**

The mapped river<sup>24</sup> that interacts with the site is a headwater reach of the Mangakaretu Stream, described in *Table 2* below. The reach has *low elevation origin (L)*, typically with marked seasonal flow patterns: high in winter, low in summer. Concentration of phosphorus tends to be high in the *volcanic acidic geology* class (VA) with fine substrate (sands, silts and mud), combined with high relative nutrient concentration from the dominant *pastoral land cover (P)* categories. Erosion rates tend to be high, with rapid and more extreme flood peaks, resulting in low water clarity and fine suspended sediment compared to natural land cover. The *medium gradient* (MO) landform class suggests shallow and meandering paths through the landscape.

#### FIG 10: STREAM & PREDICTED ECOSYSTEM TYPE



<sup>&</sup>lt;sup>24</sup> **river** means a continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal)

#### TABLE 2: REC CLASSIFICATION

CHARACTERISTIC	MANGAKARETU STREAM	
NZ SEGMENT	1008227	
ORDER	1 <sup>st</sup>	
ТҮРЕ	<b>C8</b> consists of small, moderate gradient streams with coarse gravelly substrates in inland locations and elevation	
NRC BIODIVERSITY RANKING	0.18 (Top 18% C8 type Northland)	
MEAN FLOW (m <sup>-3</sup> s <sup>-1</sup> )	0.12	
CONDITION SCORE (SITE/ C8 TYPE)	0.205/ 0.466	
CLIMATE	WW Warm Wet	
SOURCE OF FLOW	L Low Elevation	
GEOLOGY	VA Volcanic Acidic	
LAND COVER	P Pastoral	
NETWORK POSITION	LO Low Order	
VALLEY -LANDFORM	LG Low Gradient	

From the desktop review, the C8 stream was considered likely to contain wetland due to the typically slow flow rate for its class. The flow has a lower condition score than the type, likely influenced by the wider catchments dominant pastoral cover. Condition scores are based on FENZ database parameters,<sup>25</sup> values closest to 1 representing optimal condition.

Two point source contributions to the wetland are identified on the scheme in areas A, B & C. These hydrologically active areas may be considered critical source areas<sup>26</sup> (CSAs) to the wetland. The eastern is channelized directly to the wetland from culvert at Signals Rd, and may be considered an *artificial watercourse*<sup>27</sup>. If it contained wetland it would be subject to exclusion in the *natural inland wetland* definition(c)<sup>28</sup>.

The more western has a natural form and meanders downslope with a series of bare incised runs and eroded pools containing standing water, with obvious depressed overland flow path between. It may considered an *intermittent stream* under PNRP definition<sup>29</sup>. Historic aerials show it with adjoining vegetation presenting visually similar to adjacent site wetland and typically undeveloped as opposed to surrounding well kept pasture.

<sup>&</sup>lt;sup>25</sup> Ranking parameters include indigenous cover in the upstream catchment; estimates of instream nitrogen concentrations; alteration of river flows and fish passage by control structures; introduced fish, discharges from industry; and impervious surfaces from development. DoC 2010

<sup>&</sup>lt;sup>26</sup> Critical source area: Means a landscape feature such as a gully, swale or depression that accumulates surface run-off from adjacent land; and delivers, or has the potential to deliver, one or more contaminants to one or more rivers, lakes, wetlands, or surface drains, or their beds (regardless of whether there is any water in them at the time).

<sup>&</sup>lt;sup>27</sup> PNRP (2021) B Definitions | Whakamāramatanga ARTIFICIAL WATERCOURSE : A man-made channel constructed in or over land for carrying water and includes an irrigation canal, roadside drains and water tables, water supply race, canal for the supply of water for electricity power generation and farm drainage canals. It does not include a channel constructed in or along the path of any historical or existing river, stream or natural wetland.

<sup>&</sup>lt;sup>28</sup> NPS – FM (2020 Amendment 8th December 2022) Natural inland wetland is NOT ... (c) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body;

Neither system contains sufficient vegetation to be considered wetland, despite small <1m2 patches of *Paspalum distichum (FACW)* or *Perscaria (FACW)* elsewhere amongst dominant kikuyu

# FIG 11: AREAS A; B & C



## **VALUES MAPPING**

There is no NRC Biodiversity Ranking<sup>30</sup> or PNAs<sup>31</sup> mapping within the focus areas or within a zone of influence (ZOI).

The proposed Lots are largely encompassed by TEC *Level II* mapping<sup>32</sup> - *Acutely Threatened (10 -20% indigenous cover remains)*, which has been incorporated into national and regional policy<sup>33</sup> to address biodiversity protection on private land. The TEC layer is most appropriately applied to help identify priorities for formal protection against clearance and/or incompatible land-uses, and/or to restore lost species, linkages and buffers. Any remaining indigenous vegetation on such sites is considered significant and a priority for formal protection, linkage and buffering, including wetland.



#### FIG 12: TEC CLASSIFICATION

There is a possible record<sup>34</sup> for the rare *Lobelia physaloides*<sup>35</sup> (*Nationally Threatened*) nearby – a large forest herb with distinctive clusters of long tubular purple flowers. Exact details of the record are obscured as standard for rare species. It was not found onsite although often found along stream sides, or in damp sites in riparian remnant shade.

<sup>&</sup>lt;sup>30</sup> https://services2.arcgis.com/J8errK5dyxu7Xjf7/arcgis/rest/services/Northland\_Biodiversity\_Ranking/FeatureServer

<sup>&</sup>lt;sup>31</sup> https://services5.arcgis.com/H4FIrMy6xTBd6Ywx/arcgis/rest/services/Protected\_Natural\_Areas\_(DOC\_2016)/FeatureServer <sup>32</sup> Threatened Environment Classification (2012) Landcare Research Manaaki Whenua. Based on Land Environments New Zealand (LENZ), classes of the 4th Land Cover Database (LCDB4, based on 2012 satellite imagery) and the protected areas network (version 2012, reflecting areas legally protected for the purpose of natural heritage protection).Combination of components of *Land Environments New Zealand Level VI; Land Cover Database 4 (2012); Protected Areas Network (2012).* Classifications - *Acutely Threatened (<10% Indigenous vegetation remains) Chronically Threatened (10-20% Indigenous Cover remains); At Risk (20-30%) Indigenous Cover Remains; Critically Underprotected (>30% cover, <10% protected);Underprotected(>30% Indigenous cover remains, 10-20% protected); Better Protected(>30 indigenous cover, >20% protected)* 

 <sup>&</sup>lt;sup>33</sup> National Policy Statement for Indigenous Biodiversity 2023; Northland Regional Policy Statement 2018 Appendix 5:2(a)i
 <sup>34</sup> Auckland War Museum Herbarium P. Bellingham date unknown

<sup>&</sup>lt;sup>35</sup> https://www.nzpcn.org.nz/flora/species/?scientific\_name=Lobelia+physaloides

# WETLAND

Visual vegetation survey was undertaken to characterize the site associations for wetland presence with regard to the MfE Wetland Delineation Protocol (2022) and supporting documents:

- A vegetation tool for wetland delineation in New Zealand (Clarkson et al 2021)
- Hydric soils a field identification guide (Fraser et al 2018)
- Wetland delineation hydrology tool for Aotearoa New Zealand. (MfE 2021)
- Wetlands types in New Zealand (Johnson & Gerbeaux 2004)

The Rapid Test, as the first strata of wetland delineation, was sufficient to determine wetland presence with dominance typified by obligate (OBL) and facultative wetland (FACW) species in saturated ground forming very obvious <u>natural inland wetland</u> communities. Hydrology and vegetation precluded the need for repeated soil observations.

Wetland determination as per the Protocols is not dependent on indigenous dominance. Regardless of origin, wetland species have high functionality in retaining sediment and protecting groundwater or open waterways from nutrient input.

Formal wetland topographical survey was undertaken with Williams & King Ltd staff for inclusion on a scheme.

Swamp areas are diagnostically:

- standing water and/ or surface channels with gentle flow
- mainly surface water with groundwater
- water table usually above the surface;
- moderate to high fluctuation but permanent wetness at depth
- mineral or peat soils
- sedge; rush; reed; tall herb

The primary indigenous association *OBL Machaerina* – *Isachne globosa* represents a typical lowland scenario with reliable hydrology in the absence of grazing disturbance.

Vegetation onsite is typified by *Machaerina rubignosa (OBL) - Isachne globosa (OBL)* dominant with frequent *Epilobium pallidiflorum (OBL), Paspalum distichum\* (FACW); Juncus effusus* (FACW); *Eleocharis acuta (OBL); Persicaria\* (OBL & FACW spp); Cyperus brevifolius\* (FACW); Isolepsis prolifera (OBL)* are also common. Confined occurences of larger stature *Schoenoplectus tabernaemontani* (OBL); *Parablechnum minus (FACW)* swamp fern and clumps of flax (*FACW*) are apparent.

The larger stature perennial sedge type association suggests prolonged stability of deeper hydrology, where OBL species are prevalent frequent e.g. *Isolepsis prolifera, Eleocharis acuta; Isachne globosa; Ludwigia palustris.* 

The site wetland is representative of a broad type<sup>36</sup> reference:

# WL11: MACHAERINA SEDGELAND

- Palustrine/riverine/lacustrine wetlands of a wide range of variants throughout New Zealand
- Sedgeland, rushland with a high water table dominated by species of Machaerina, square sedge, Eleocharis and Juncus
- Scattered harakeke and Carex spp.
- Oioi, tangle fern and Gahnia spp., can be locally dominant.

Classification is based on the emphasis of observed vegetation type and hydrology, however all wetlands are dynamic systems with potential to change extent and composition over time due to natural factors e.g. drought; invasion; interspecific competition.

Associations vary with depth of saturation/standing water promoting biodiversity in terms of individual species and also different associations/ pattern.

Mātātā (*Histiopteris incisa* FAC) is found toward the edge with innocuous *Ranunculus repens* (*FAC*) and *Holcus lanatus (FAC*). *Paesia scaberula* is present on dry hummocks with gorse, and blackberry as the most prevalent wetland weed scrambling from dry rooted areas. Tobacco weed is scattered along margins.

The occurrence of innocuous exotics *Holcus lanatus\*; Ranunculus repens\** & *Lotus pedunculatus\* (FAC)* and gorse on micro hummocks within the wetlands is not sufficiently frequent to alter the evident wetland diagnosis. These species are common throughout many forms of wetland in Northland on margins or on slightly raised microtopography, not preferring prolonged submersion.

Wetland throughout grades quickly with reduced soil saturation and slight micro elevation to loss of dominance typified by FACU & UPL exotic grass species including kikuyu; ryegrass; browntop; cocksfoot; abundant carrotweed (UPL); *Paspalum dilatatum*; and ratstail with common herbaceous pasture weeds such as hawksbeard (FACU), plantain (FACU), and dock (FACU). This represents <u>non wetland</u> both in terms of species dominance and NEPSL<sup>37</sup> pastoral exclusion species.

There is an absence of tall terrestrial vegetation on site with the exception of individual totara and common riparian shrubland broadleaves scattered on the edge of the wetland and a remnant at the eastern corner (Area D). This contains common shrubs e.g. *Coprosma robusta; C. rhamnoides;* matipo; cabbage tree; mahoe & hange hange with exotic grasses amongst exotics species wattle and tobacco weed. There are no kauri in the development area to invoke consideration of the *Biosecurity (National PA Pest Management Plan) Order 2022.* No flora species with threat status or locally uncommon were found within or beyond the wetlands in the footprints despite search for those recorded<sup>38</sup> locally.

Grasses were recognised through professional experience from leaf form, ligule; growth habit and habitat, with simple determination from few seed heads not broadly practicable at this time of year. The NLEPS does not include common wetland grasses *Glyceria*; *Paspalum distichum*<sup>\*39</sup> (FACW), Isachne globosa (OBL) and Agrostis stolonifera\* (FACW).

<sup>&</sup>lt;sup>36</sup> Singers & Rogers (2014) A classification of New Zealand's terrestrial ecosystems. Science for Conservation 325, DoC Wellington <sup>37</sup> National Exotic Pasture Species List (2022) AgResearch for MfE

<sup>38</sup> https://biocache.ala.org.au/

<sup>&</sup>lt;sup>39</sup> \* denotes exotic

# PASPALUM DISTICHUM\* (FACW) SEEDHEAD



FROM LEFT: LOOKING NORTH EAST FROM MID SITE DRY PASTURE ABOVE VALLEY BASAL WETLAND; WELL MAINTAINED DRY PASTURE; TOTARA REMNANT AT EASTERN END (D)



FROM LEFT: EPHEMERAL FLOW IN B & C ; EROSION IN EPHEMRAL FLOWPATH SHOWING OKAIHAU GRAVELLEY FRIABLE CLAY PROFILE; TEMPORARY POOLS REMAIN SEVERAL DAYS AFTER LAST RAINFALL BUBBLING SEEPAGE APPARENT







CLOCKWISE: AREA A CUT DRAIN; 1<sup>ST</sup> ORDER MANGAKARETU CREEK EMERGES AS ROCKY CHANNEL; CONVERGENCE OF CREEK LOT 2 DP 552283 AND WETLAND; RAFTING AND MOUNDING WETLAND GRASS ISACHNE GLOBOSA(OBL) WITH HERBACEOUS EPILOBIUM (OBL) IN FOREGROUND IN SATURATED WETLAND; EPILOBIUM PALLIDIFLORUM(OBL); SCHOENOPLECTUS(OBL), MACHAERINA AND ISCAHNE WITH BLACKBERRY THE PREVALENT WEED ENCROACHING GROWING OVER WETLAND FROM DRIER ROOTED AREAS AND HUMMOCKS













CLOCKWISE FROM LEFT:MACHAERINA RUBIGNOSA (OBL) DENSE & LARGE STATURE; LOOKING NORTHWEST MONOCULTURE SWATHS OF MACHAERINA, TREES ON OPPOSITE BANK; GORSE ON HUMMOCKS & EDGES; BLACKBERRY STOLONS GROWS THROUGH MACHERINA FROM DRY ROOTED AREAS & MAY ROOT ALONG EXTENT WHERE CONTACTS SUITABLE DRY STRATA; DISTINCT BOUNDARY BETWEEN MACHAERINA AND MOUNDING ISACHNE GLOBOSA (FOREGROUND) MONOCULTURES







FROM LEFT: ISACHNE AND JUNCUS FOREGROUND GORSEY AREA ON DRY MOUND LOOKING WEST WITHIN WETLAND; TALL SEDGE SCHOENOPLECTUS WITH SMALLER HERBACEOUS EPILOBIUM





# FAUNA

Basic observations were incidental to the main consideration of wetland and vegetation significance, soils and hydrology, but complement the characterisation of the site. Pest control and an increased density of peripheral shrubby riparian cover would create better functional habitat for any species on site including as a buffer for aquatic function and internal habitat, mitigatory of increased residential occupation.

# AVIFAUNA

Four 5 minute bird counts were undertaken on the 18/4/24 in the morning under fine clear conditions to observe species utilising the focus area

- o Signals Rd by culvert broad pasture extent and flowpaths
- Within Area D Totara remnant
- $\circ \quad \text{Wetland Area G}$
- Wetland Area F

Conspicuous birdlife was limited largely to exotic and native insectivorous generalists for which the pasture , wetlands and scattered podocarps contribute to territorial feeding areas habitat e.g. skylark; swallows; thrush, fantail; sparrow. Pukeko and paradise duck are also present. Numerous kingfisher were sighted on fenceposts. A kahu sighted was using open pasture as hunting ground, likely for rabbits.

The property has *Kiwi Present* designation (DoC 2018). Wetland and pasture for feeding with adjacent (<300m) terrestrial cover represents high quality territory. An increase in shrubby riparian cover and pest control would improve functional habitat. Playback for fernbird did not result in any reply although the habitat is suitable, also for crakes. There are no records of bittern in the area.

# FISH

A fish survey was outside the scope of reporting. There are no site or reach specific FWFD record<sup>40</sup> onsite and local records are scarce.

NIWA has combined REC V2 classification with monitoring data to extrapolate a wide range of instream water quality and fish habitat parameters for all mapped NZ rivers. This resource gives potential fish species in both reaches interacting directly with the site as below.

NIWA PREDICTED SPECIES WHAWHARU STREAM	COMMON NAME
Anguilla australis	Shortfin eel
Gobiomorphus hutonni	Redfin bully

#### TABLE 3: NIWA PREDICTED SPECIES

From professional experience others may be present however the flowpaths in A, B & C are unlikely to provide habitat despite becoming hydrologically connected during high rainfall events.

<sup>&</sup>lt;sup>40</sup> Freshwater Fish Database records NIWA

#### **INVERTEBRATES**

Invertebrate survey was outside the scope of this reporting. However, the proliferation of OBL & FACW wetland species is also an indicator of niches supportive of invertebrate populations adapted to complete at least a portion of their lifecycle in wet conditions, and it may be assumed they are present. In NZ this has been shown to vary with region; wetland type and water chemistry (largely acidity) with fauna dominated by communities of five invertebrate groups *-Chironomidae* midges; aquatic mites (*Acarina*); microcrustacea (copepods &ostracods) and aquatic nematodes. The mud snail *Potamopyrgus* antipodarumwas cosmopolitan across NZ. Unlike aquatic insects, meiofauna such as the nematodes, copepods and ostrocods do not leave the wetland environment as winged adults.

Despite their inconspicuousness and little recognition in comparison to fauna commonly valued by society e.g. birds & fish - they have a critical role in wider ecosystem function e.g. organic carbon and nutrient turnover; as part of the food web reaching large densities and in terms of intrinsic biodiversity value -many being known only to NZ.

#### REDFIN BULLY (NOT TAKEN ONSITE)



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# SIGNIFICANCE

Consideration of significance is given, in regard to Northland Regional Policy Statement Appendix 5 (2018), with guidance contained within non statutory documents including DOC Guidelines for Assessing Significant Ecological Values (2016); Guidelines for the Application of Ecological Significance Criteria for Indigenous Vegetation and Habitats of Indigenous Fauna in the Northland Region (Wildlands 2019).

Appendix 5 is the standard Northland criteria for assessing significance of an ecological site, and directly reflects those contained in Appendix 1 of the recently mandated National Policy Statement for Indigenous Biodiversity (2023) including consideration of Representativeness; Diversity & Pattern; Rarity and Distinctiveness & Ecological Context.

## TABLE 4: ASSESSMENT OF SIGNIFICANT INDIGENOUS VEGETATION AND SIGNIFICANT HABITATS OF INDIGENOUS FAUNA IN TERRESTRIAL, FRESHWATER AND MARINE ENVIRONMENTS NORTHLAND REGIONAL POLICY STATEMENT (2018) APPENDIX 5

(1)	REPRESENTATIVENESS	WETLAND
	(A)Regardless of its size, the ecological site is largely indigenous	
<ul> <li>(A)Regardless of its size, the ecological site is largely indigenous vegetation or habitat that is representative, typical and characteristic of the natural diversity at the relevant and recognised ecological classification and scale to which the ecological site belongs <ul> <li>(i) if the ecological site comprises largely indigenous vegetation types: and</li> <li>(ii) Is typical of what would have existed circa 1840</li> <li>(iii) Is represented by the faunal assemblages in most of the guilds expected for the habitat type</li> </ul> </li> <li>(B) The ecological site <ul> <li>(i) Is a large example of indigenous vegetation or habitat of indigenous fauna</li> <li>(ii) Contains a combination of landform and indigenous vegetation and habitats of indigenous fauna that is considered to be a good example of its type at the relevant and recognised ecological classification and scale</li> </ul> </li> </ul>		<ul> <li>A – Yes Machaerina, Juncus edgaraie; Isachne globosa; Schoenoplectus; Isolepis</li> <li>(iii) Internal habitat for birds/ fish/ invertebrates available. Increases territorial economy over dry pasture. Insectivores present; wetland birds potentially limited except for common &amp;adaptable pukeko.</li> <li>B (i)meets swamp criteria and in connection with further offsite extent</li> <li>(ii) gully wetland Machaerina - Isachne, impacted by weeds and little riparian vegetation</li> </ul>
(2)	RARITY/ DISTINCTIVENESS (A)The ecological site comprises indigenous ecosystems or indigenous vegetation types that:	A(i) YES LEVEL II
	(i) Are acutely or chronically threatened land environments associated	(iii) estimated onsite YES, inclusive of offsite YES
	with LENZ Level 4	B) none observed
	(ii) Excluding wetlands, are now less than 20% original extent	C) none observed
	(iii) excluding man made wetlands are examples of wetland classes that either otherwise trigger Appendix 5 criteria or exceed any of the	D) I)yes indigenous wetland vegetation
	following area threshold	MODERATE - HIGH
	(a) Saltmarsh 0.5ha	
	(b) Shallow water lake margins and rivers 0.5ha	
	(c) Swamp >0.4	
	(d) Bog >0.2 ha	
	(e) Wel Healthanus>0.2 ha (f) Marsh: fen: enhemeral wetland or seenage/flush >0 05ha	
	(B) Indigenous vegetation or habitat of indigenous fauna that	
	supports one or more indigenous taxa that are threatened, at	
	risk, data deficient , or uncommon either nationally or within the	
	relevant ecological scale	
	(C) The ecological site contains indigenous vegetation or an	
	(i) and and a start is a start of the Northland (Auskland region	
	(ii) At its distribution limit in the Northland region	
	(D) The ecological site contains indigenous vegetation or an	
	association of indigenous taxa that	
	(i) Is distinctive of a restricted occurrence	
	(ii) Is part of an ecological unit that occurs on a originally	
	rare ecosystem	
	(III) Is an indigenous ecosystem and vegetation type that is	
	naturally rare of has developed as a result of an	

	unusual environmental factor(s) that occur or are likely to occur in Northland: or (iv) Is an example of a nationally or regionally rare habitat as recognised in the New Zealand Marine Protected Areas Policy	
(3)	<ul> <li>DIVERSITY AND PATTERN</li> <li>(A) Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of:         <ul> <li>(i) Indigenous ecosystem or habitat types; or</li> <li>(ii) Indigenous taxa</li> </ul> </li> <li>(B) Changes in taxon composition reflecting the existence of diverse natural features or ecological gradients; or         <ul> <li>(C) Intact ecological sequences</li> </ul> </li> </ul>	(B)ii Variation in species composition with saturation/ surface water within wetland e.g. <i>Machaerina</i> in most reliable flow; Schonoplectus in deeper standing water; <i>Isolepis</i> margins C)Headwater wetland below remnant bush (D) to 1 <sup>st</sup> order stream. Abrupt change from wetland species to terrestrial dryland Sequence of taxon composition/ dominance changes with water depth and/ or nutrients.
		MODERATE
(4)	<ul> <li>ECOLOGICAL CONTEXT</li> <li>(A) Indigenous vegetation or habitat of indigenous fauna is present that provides or contributes to an important ecological linkage or network, or provides an important buffering function: or</li> <li>(B) The ecological site plays an important hydrological, biological or ecological role in the natural functioning of a riverine, lacustrine, palustrine, estuarine, plutonic(including karst), geothermal or marine system</li> <li>(C) The ecological site is an important habitat for critical life history stages of indigenous fauna including breeding/ spawning, roosting, nesting, resting, feeding, moulting, refugia or migration staging point (as used seasonally, temporarily or permanently</li> </ul>	<ul> <li>(A) &amp; B) Wetland nutrient processing &amp; retains sediment; buffers groundwater and suface water to Mangakaretu Stream in catchment</li> <li>C) Damp pasture function as heightened feeding territorial economics for ground dwelling species and insectivores e.g. kiwi;kingfisher over pasture dry extent. Likely invertebrate communities with lifestages requiring wet conditions <i>MODERATE</i></li> </ul>

The wetland has *MODERATE* significance, related to water quality protection; size and indigenous character; pattern and TEC II Class. The lack of a riparian margin with exotic weeds is typical for the type in a pastoral setting.

Individual species value is LOW as per EIANZ (2018)<sup>41</sup> criteria below. Dominance of rafting *Isachne* and *tall Machaerina* is unlikely to change with an increase in stormwater inputs providing they are diffuse, the wetland is not completely inundated and sediment; erosion and scouring is avoided.

#### TABLE 5: FACTORS TO CONSIDER IN ASSESSING SPECIES VALUE (TABLE 5 EIANZ 2018)

VALUE	EXPLANATION
VERY HIGH	Nationally Threatened species (Critical, Endangered or Vulnerable) found in the Zone of Influence (ZOI) or likely to occur there, either permanently or occasionally
нідн	At Risk (Declining) species found in the Zone of Influence or likely to occur there, either permanently or occasionally
MODERATE-HIGH	Species listed in any other category of <i>At Risk category (Recovering, Relict or Naturally Uncommon</i> ) found in the Zone of Influence or likely to occur there, either permanently or occasionally.
MODERATE	Locally uncommon/rare species but not Nationally Threatened or At Risk.
LOW	Species Not Threatened nationally and common locally.
NEGLIGIBLE	Exotic species, including pests

<sup>&</sup>lt;sup>41</sup> (2018) EIANZ Ecological Impact Assessment Guidelines for New Zealand 2nd Edition

# **VALUES & EXTENT**

Preservation of *extent* is central to the intent of the NPS – FM (2020) and accompanying protective regulations of the NES-F (2020). Consideration of the site wetland also informs potential *values*. Avoidance of loss of *values* in addition to *extent* is core policy<sup>42</sup> of the NPS – FM (2020).

# Values as per NPS- FM definition-

# ECOSYSTEM HEALTH

- Currently impacted by lack of riparian margin; weed ingress and point source inputs from pasture Areas A; B & C condition –
- Indigenous dominance
- Diversity as expected for gully pastoral setting
- functionality of sediment retention and processing
- Contribution of basic feeding habitat and heightened territorial economics across guilds in otherwise production site

# INDIGENOUS BIODIVERSITY

- Limited bird guild insectivores dominant pest control lacking
- Likely invertebrate communities adapted to wet conditions
- Pastoral influence largely exotic and/or common wetland species typical of this setting

# HYDROLOGICAL FUNCTION

- Sediment retention and nutrient processing
- Buffers ranked segment of 1<sup>st</sup> order Mangakaretu Stream
- Protective of groundwater and sediment control under rainfall when hydrological connections to ground and surface water pronounced from pastoral setting

## MĀORI FRESHWATER VALUES

• outside scope of this report

# SUMMARY OF ECOLOGICAL ISSUES IDENTIFIED

Key environmental issues existing prior to development are identified below. These are a combination of implied, from desktop review, and observed. They are common throughout Northland ecosystems and consistent with key pressures identified in Regional Policy Statement Sec 2.2 - being habitat loss and fragmentation, and the impact of weeds/ pests. These may be mitigated or remedied through the proposal to provide positive effect. **TABLE 6: CURRENT SITE ISSUES IDENTIFIED PRIOR TO DEVELOPMENT** 

EXISTING ISSUE	STATUS	RECOMMENDED MANAGEMENT
WETLAND CONDITION	Weed ingress	Weed control to allow natural regeneration.
	Functionality as habitat and corridor reduced by lack	Pest control to maintain/ bolster habitat
	of pest control.	Retirement of A B & C
	Not defined/ protected; further encroachment and	10m buffer with appropriate species
	loss of extent likely with development	Covenanting
	Flowpaths in A, B & C point source inputs to wetland	

<sup>&</sup>lt;sup>42</sup> Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

Covenanting represents formal protection of *extent*. In order to provide a visually obvious cue, additionally protecting existing *values* from disturbance and inadvertent encroachment we recommend a 10m minimum advisable riparian buffer<sup>43</sup>

- allow succession to occur within the buffer for long term resilience
- provide habitat
- protection of internal wetland habitat from disturbance
- achieve aquatic function attenuation; shade; sediment control
- amenity

Wider buffers are often suggested to reduce edge effects of weed ingress, facilitating self sustaining vegetation. However, this can be mitigated with maintenance of the buffer required through consent requirements.

Buffers should contain a diversity of riparian species with fidelity to predicted ecosystem type of *WF11 Kauri podocarp* broadleaved. It should also be noted that REG 55 NES- F (2020) requires any planting within 10m of wetland to be locally appropriate and indigenous to create a natural ecosystem pattern and to avoid potential loss of values.

## DRAINAGE OF NATURAL INLAND WETLANDS: 52 NON-COMPLYING ACTIVITIES

(1) Earthworks outside, but within a 100 m setback from, a natural inland wetland is a non-complying activity if it—

(a) results, or is likely to result, in the complete or partial drainage of all or part of a natural inland wetland; and

(b) does not have another status under any of regulations 38 to 51.

(2) The taking, use, damming, or diversion of water outside, but within a 100 m setback from, a natural inland wetland is a non-complying activity if it—

(a) results, or is likely to result, in the complete or partial drainage of all or part of a natural inland wetland; and

(b) does not have another status under any of regulations 38 to 51.

Minor natural diffuse or sheetflow inputs to the wetlands within 100m will likely be *diverted* by the change of site cover, however in the absence of alteration of any point source inputs in Areas A, B or C designated for retirement, it is considered this will not result in *complete or partial drainage of all or part of the wetland* as per *Reg 52(i);(ii)* if works do not occupy or intersect with the wetlands.

Likewise, as per REG 54 c) below it is unlikely to change the *water level range or hydrological function* of the wetlands with continued inputs from Areas A, B & C.

# **OTHER ACTIVITIES: 54 NON-COMPLYING ACTIVITIES**

The following activities are non-complying activities if they do not have another status under this subpart:

(a) vegetation clearance within, or within a 10 m setback from, a natural inland wetland:

(b) earthworks within, or within a 10 m setback from, a natural inland wetland:

(c) the taking, use, damming, or diversion of water within, or within a 100 m setback from, a natural inland wetland if—

*(i) there is a hydrological connection between the taking, use, damming, or diversion and the wetland; and* 

<sup>&</sup>lt;sup>43</sup> NIWA (2000) Review of Information on riparian buffer widths necessary to support sustainable vegetation and meet aquatic functions TP350 Auckland Regional Council
(ii) the taking, use, damming, or diversion will change, or is likely to change, the water level range or hydrological function of the wetland:

(d) the discharge of water into water within, or within a 100 m setback from, a natural inland wetland if—

(i) there is a hydrological connection between the discharge and the wetland; and
(ii) the discharge will enter the wetland; and
(iii) the discharge will change, or is likely to change, the water level range or hydrological function of the wetland.

- *Reg 54(a)* We understand as per there is no vegetation clearance required.
- *Reg 54(b)* Earthworks with 10m of wetland would be constrained by the 10m riparian buffer recommended
- *Reg 54(d)* Final stormwater engineering was not available at the time of reporting. Stormwater inputs to the wetland represents a discharge within 100m. Inputs should be diffuse and in a manner that prevents sediment, scouring or erosion as best practice to avoid adverse effects and to maintain aquatic habitat condition. As before, the extant hydrological source of the wetlands is rain and groundwater in a pastoral catchment with variable water levels highly responsive to meteorological conditions. The wetlands with swamp character have developed under such conditions and are adapted to moderate to high fluctuations without discernible shift in *extent or value*, including hydrological function.

Fish survey was outside the scope of works. Controls on inputs as above are considered sufficient to avoid adverse effects on any species and habitat, including invertebrates as food source and ecosystem processors.

# CONCLUSION

Wetland delineation has been undertaken within a designated focus area on the subject property PT LOT 3 DP 39764, Signals Rd, Ōkaihau (NA 1352/70) in order to assist reorientation of a prior subdivision scheme (2220161 RMASUB).

Natural inland wetland (NPS FM 2020) has been identified, subject to the National Environmental Standards for Freshwater NES – F (2020). They have been topographically surveyed in association with Williams & King Ltd staff for design advancement.

The wetlands are diagnostically *swamp* type, with indigenous dominance, confined to the northern basal boundary of the focus area, bordering otherwise a dry production slope. The wetland assemblages have both intrinsic and functional aspects that contribute to significance in regard to *Appendix 5 Northland Regional Policy Statement (2018)* size and indigenous character; pattern and TEC II Class; water quality protection; linkage and buffering of the adjacent ranked Mangakaretu Stream (NZ SEG 1008227).

Area A on the scheme contains an *artificial watercourse, while B & C* contain an *ephemeral flow.* While neither contains *natural inland wetland* they are hydrologically active CSAs and point sources to the wetland/ stream, representing conduits for nutrient and sediment. We recommend their retirement and buffering as a positive effect of the subdivision.

Use of the currently open dryland focus area is preferable in any design. Taller vegetation is largely exotic FACU & UPL grass species of negligible value as individual species or habitat.

Potential adverse development effects on wetlands can be pre empted by their recognition in the scheme, buffering and covenanting. To protect the *MODERATE* (EIANZ 2018) significance values identified we recommend-

- Covenanting & vegetation of 10m buffer to wetland and flowpaths in Areas A B & C
- Inclusion of the remaining totara remnant (D) in covenant
- Formalised weed and pest control in covenants
- No plant varietals are used and species are ecosourced from the Eastern Northland coastal area at minimum . Plants are sourced from a reliable nursery to void incursion of rainbow skink; Argentinian ants; myrtle rust & kauri PA. No kauri to be imported onsite

The swamp type has developed under reliable saturation demonstrated by the tall stature and obligate vegetation dominance. As a potential receiving environment for stormwater it can naturally tolerate moderate to high fluctuations in water levels without discernible shift in composition or aquatic life with the proviso that engineering will ensure final increase in impermeable area and stormwater dispersal is unlikely to have any adverse effect. Inputs should be diffuse and not cause scouring, erosion or gross sediment input.

The recommended mitigation will serve to embed the increased residential occupancy within a resilient and effective habitat, recognising the interdependency of the wetland with surrounding terrestrial areas and hydrological linkage across the landscape. An increase in both amenity and ecological value will be positive effects in comparison to the prior consented scheme, avoiding any further loss of extent or value of *natural inland wetland* which has persisted throughout the sites pastoral history.

RIShodge

REBECCA LODGE, PRINCIPAL ECOLOGIST BScEcology PGDipSci (Distinction) Botany Bay Ecological Consultancy Ltd



#### **APPENDIX 1: SPECIES LIST**

Species are listed as per Clarkson, B. et al (2021):

OBL: OBLIGATE. Almost always is a hydrophyte, rarely in uplands (estimated probability >99% occurrence in wetlands)
 FACW: FACULTATIVE WETLAND. Usually is a hydrophyte but occasionally found in uplands

(estimated probability 67–99% occurrence in wetlands)

- FAC: FACULTATIVE. Commonly occurs as either a hydrophyte or non-hydrophyte (estimated probability 34–66% occurrence in wetlands)
- FACU: FACULTATIVE UPLAND. Occasionally is a hydrophyte but usually occurs in uplands (estimated probability 1–33% occurrence in wetlands)
- UPL: OBLIGATE UPLAND. Rarely is a hydrophyte, almost always in uplands (estimated probability <1% occurrence in wetlands)</li>

The majority of tree species are considered upland unless otherwise described.

\*Denotes exotic species

#### **MONOCOT TREES & SHRUBS**

Cordyline australis (FAC) Phormium tenax (FACW)

#### **DICOT HERBS**

Ageratina riparia\*(FAC) Callitriche stagnalis (OBL) Crepsis capillaris\*(FACU) Daucus carota\* (UPL presumed) Epilobium pallidiflorum (OBL) Euchiton limosus (FACW) Leondonton saxatilis\* (FAC) Lotus pendunculatus\* (FAC) Ludwigia palustris\* (OBL) Myosotis laxa subsp. caespitosa\* Persicaria hydropiper\* (FACW) P. decipiens (OBL) Rumex acetosella\*(FACU) R. conglomeratus \*(FAC) Trifolium spp\*(FACU/ UPL)

#### GRASSES

Agrostis capillaris\* (FACU) A.stolonifera\* (FACW) Alopecurus pratensis\* (FACU) Briza\* spp (UPL) Cenchrus clandestinus\*(FACU) Holcus lanatus\* (FAC) Isachne globosa (OBL) Lolium arundinacaeae\*(FAC) flax

cabbage tree

mistflower starwort hawksbeard carrot weed tarawera, willowherb hawkbit Lotus ludwigia water forget me not Persicaria tutanawai willow weed persicaria sheeps sorrel dock clover

browntop creeping bent meadow foxtail shivery grass kikuyu Yorkshire fog native swamp millet tall fescue Lolium spp\* (FACU/ UPL) Paspalum dilatatum\* (FACU) P. distichum\* (FACW)

#### SEDGES & RUSHES

Carex leporina\* (FACW) Carex subdola (OBL) Cyperus brevifolius\* (FACW) C. eragrostis\* (FACW) Eleocharis acuta(OBL) Isolepis prolifera (OBL) I.reticularis (FACW) Juncus articulatus (FACW) J.effusus\* (FACW) J.edgariae (FACW)

# ryegrass paspalum mercer grass

globe sedge tall flatsedge umbrella sedge

jointed rush soft rush wiwi/ Edgars rush

hangehange

mānuka

#### TREES & SHRUBS

Coprosma rhamnoides C. robusta Geniostoma rupestre var. ligustrifolium Leptospermum scoparium (FAC) Macropiper excelsum subsp. excelsum Melicytus ramiflorus Myrsine australis Pinus spp.\* Pittosporum tenuifolium Podocarpus tōtara Pseudopanax arboreus Pterophylla sylvicola Solanum mauritianum\* (presumed UPL) Ulex europaeus\* (FACU) Vitex lucens

# FERNS

Astroblechnum penna marina Lindsaea linearis (FACW)

#### VINES

Blackberry \*

# LICHENS LYCOPODS BRYOPHYTES

Plants given as rare in Northland as per Wildlands (2012) No orchids were observed kawakawa māhoe mapou kōhūhū, black matipo tōtara whauwhaupaku, five finger tōwai tobacco weed gorse pūriri

Swamp kiokio common Lindsey



# FAR NORTH DISTRICT COUNCIL

# FAR NORTH OPERATIVE DISTRICT PLAN

### DECISION ON RESOURCE CONSENT APPLICATION (SUBDIVISION)

Resource Consent Number: 2220161-RMASUB

Pursuant to sections 104 B and D of the Resource Management Act 1991 (the Act), the Far North District Council hereby grants resource consent to:

#### Signal Heights Limited

**The activity to which this decision relates:** The proposal seeks to undertake a subdivision of Lot 3 DP 39764 into 6 x 4000m2 sites as non-complying subdivision in the Rural Production Zone.

#### Subject Site Details

Address:	112 Signal Road, Okaihau 0475
Legal Description:	Pt Lot 1 DP 42693, Pt Lot 4 DP 39764, Lot 3 DP 39764
Record of Title reference:	NA-1135/127, NA-1352/70, NA-52D/1197

# Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

- 1. The subdivision shall be carried out in accordance with the approved plan of subdivision prepared by Williams and King, referenced Proposed Subdivision of Pt Lot 3 DP 39764, dated May 2021, and attached to this consent with the Council's "Approved Stamp" affixed to it.
- 2. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:
  - a) A drainage easement to provide at least 2m of clearance for stormwater drain to convey water from all culverts, pursuant to Section 220(1)(f) of the Resource Management Act 1991 and shall be endorsed on the survey plan under a Schedule of Memorandum of Easements and shall be duly granted or reserved. The easement shall be in favour of the Far North District Council.

Note: The survey plan may show Lot 7 as incorporating Part Lot 1 DP 42693 and Part Lot 4 DP 39764.

- 3. Prior to the approval of the survey plan pursuant to Section 223 of the Act, the consent holder shall:
  - a) Submit plans and details of all works for the approval of Far North District Council.

It is to be noted that certain works must be carried out or certified by a Suitably Qualified Person (IQP) or Chartered Professional Engineer (CPEng) working within the bounds to their assessed competencies.

All plans needing design/certification by Council approved IQP/CPEng will require completion of design producer statement (PS1).

Plans are to include but are not limited to:

- i. Upgrade of Signals Road to a 6.5m wide carriageway with 1.0m wide shoulders, consistent with Rural Road in accordance with FNDC Engineering Standard FNDC/S/7 and Table 3.1A, Type B specifications.
- ii. Intersection upgrade Signals Road to Waiare Road in accordance with FNDC Engineering Standard FNDC/S/6B.
- iii. New cul-de-sac at the termination of Signals Road in accordance with Figure 3.3 of NZS4404:2010.

Note: Design for (i.) to (iii.) above to note the restrictions and recommendations of the Transport Assessment prepared by TPC Traffic Planning Consultants, dated 18 August 2021, reference 21442. The cul-desac shall be constructed entirely within the road corridor. If the cul-de-sac (or a portion thereof) is to be constructed on private property, the underlying land is to be surveyed and vested in Council.

- iv. Vehicle access crossings from Signals Road to Lots 1 to 6 in accordance with section 3.3.7 of FNDC Engineering Standards, FNDC/S/6 and FNDC/S/6B. Drawings are to show that adequately sized culverts (minimum diameter 375mm) are to be installed under each new crossing with grouted rock headwalls on both ends.
- v. Erosion and sediment control measures which are to be in place for the duration of the works in accordance with Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).
- 4. Prior to the issuing of a certificate pursuant to Section 224(c) of the Act, the consent holder shall:
  - a) A Chartered Professional Engineer shall determine the level of construction monitoring (CM1-CM5) required and shall ensure that the construction work is in accordance with FNDC Engineering Standards and the approved plans and provide a producer statement (PS4) on completion of the works.

- b) The consent holder will be responsible for the repair and reinstatement of the public roads (Waiare & Signal) carriageway, if damaged as a result of the works and building operations.
- c) The consent holder shall provide evidence that the existing fence has been relocated and roadside vegetation trimming is to be undertaken at the Waiare Rd/Signals Rd intersection in accordance with the recommendations of the Transport Assessment prepared by TPC Traffic Planning Consultants, dated 18 August 2021, reference 21442.
- d) Provide evidence that reflective markers have been installed on the poles and the base of the poles shall be painted white to a height of 2 metres.

Note: This condition applies for Signal Road only.

- e) The consent holder shall provide evidence that a Traffic Management Plan (TMP) has been approved by Councils Corridor Access Engineer and a Corridor Access request (CAR) obtained prior to any vehicle crossings being constructed or undertaking any remedial works to the existing public road carriageway.
- f) The consent holder's contractor shall provide a producer statement (PS3) on completion of the works to confirm the construction works are in accordance with FNDC Engineering Standards and approved plans.
- g) Provide evidence of the existing stock exclusion fencing along the stream that boarders Lot 7.
- h) Provide evidence that boundary planting has been undertaken along the Signal Road frontage of Lots 1-6,

Note: It is recommended that the species used do not grow over 5 metres due to the existing powerlines, or to disrupt sightlines.

- Provide evidence that a caveat in favour of Council has been placed on the Record of Titles of Part Lot 1 Deposited Plan 42693, and Part Lot 4 Deposited Plan 39764 which will preclude further subdivision of these lots for a period of 10 years after the title has been issued for this development. The caveat document will not be required if Lot 7 is expanded to include Part Lot 1 Deposited Plan 42693, and Part Lot 4 Deposited Plan 39764.
- j) Consent holder to provide suitable evidence by way of as-built information, test results and RAMM data that the road upgrade works have been completed in accordance with the requirements of the FNDC Engineering Standards and Schedule 1D of NZS 4404:2004 are to be submitted to Council on completion.
- k) Secure the conditions below by way of a Consent Notice issued under Section 221 of the Act, to be registered against the titles of the affected allotment. The costs of preparing, checking and executing the Notice shall be met by the Applicant.
  - i. No more than two working dogs shall be introduced or kept on the lot at any time.

Prior to the introduction or keeping of any working dog on the lot, the occupier must provide to the Resource Consents Monitoring Officer of Far North District council the following:

Two working farm dog(s) as defined in the Dog Control Act 1996 is exempt from this condition if it is:

(a) micro-chipped,

(b) within a dog proof fence area, on a lead or under effective control at all times when outside the fenced area,

(c) kept in a kennel or tied up at night.

(d) For any dog written confirmation that the dog has current kiwi aversion training certification along with the expiry date for the certification.

Prior to the keeping of introduction of any working dog to the site the occupier must provide the following to the Councils Resource Consent Monitoring Officer: -

(a) A photograph of the dog;

- (b) Written confirmation that the dog has been micro-chipped;
- (c) A plan showing the extent of the dog proof fenced area.

[Lot 7]

ii. No more than one dog shall be introduced or kept on the lot at any time. Any dog must be micro-chipped and have a current kiwi aversion trained certification. Any dog must be within a dog-proof fenced area on the lot and be under effective control at all times when outside of the fenced area, e.g. on a lead. At night any dog must be kept inside or be tied up.

Prior to the introduction or keeping of any dog on either lot, the occupier must provide to the Resource Consents Monitoring Officer of Far North District council the following:

i. A photograph of the dog;

ii. Written confirmation that the dog has been microchipped
iii. Written confirmation that the dog has current kiwi aversion training certification along with the expiry date for the certification.
iv. A plan showing the extent to the dog proof forced area.

iv. A plan showing the extent to the dog proof fenced area.

[Lots 1-6]

iii. No occupier of, or visitor to the site, shall keep or introduce to the site carnivorous or omnivorous animals (such as cats, or mustelids).

[All Lots]

iv. Prior to the issue of a Code Compliance Certificate for any buildings, or within one month of its occupation (whichever comes first), provide a landscaping plan from a suitably qualified and experienced person, for the approval of the Council's Resource Consents Manager, or other duly delegated officer, which indicates the means to lessen the visual impact of the building, its access and any earthworks. On approval of this plan, the landscaping specified is to be provided within six months and adequately maintained thereafter. Plants requiring removal due to damage, disease or other cause shall be replaced with a similar specimen before the end of the next following planting season (1<sup>st</sup> May to 30<sup>th</sup> September).

[Lots 1-6]

v. In conjunction with the construction of any dwelling on the lot, 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 is to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

# [All Lots]

vi. Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner

# [All Lots]

vii. The location and foundations of any buildings shall be designed and certified by a suitably experienced Chartered Professional Engineer, prior to issue of any building consent, noting the restrictions and recommendations of the Site Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1, reference J3044 submitted with Resource Consent 2220161.

# [All Lots]

viii. In conjunction with the construction of any building requiring a wastewater disposal system the lot owner shall obtain a Building Consent and install the wastewater treatment and effluent disposal system as detailed in the report prepared by Site Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1, reference J3044 and submitted with Resource Consent 2220161.

Note: Where a wastewater treatment and effluent disposal system is proposed that differs from that detailed in the above-mentioned report, a new TP 58 / Site and Soil Evaluation Report will be required to be submitted, and Council's approval of the new system must be obtained, prior to its installation.

For on-site wastewater disposal system:

- The installation shall include an agreement with the system supplier or its authorised agent for the ongoing operation and maintenance of the wastewater treatment plant and the effluent disposal system.
- Following 12 months of operation of the wastewater treatment and effluent disposal system the lot owner shall provide certification to Council that the system is operating in accordance with its design criteria.

ix. The consent holder shall enter into a maintenance contract with a suitably qualified and experienced person to maintain the wastewater treatment system so that it works effectively at all times. At a minimum, all maintenance shall be in accordance with the recommendations of the Operation and Maintenance Manual prepared by the system supplier.

# [All Lots]

x. In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install stormwater retention tank/s with a flow attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus allowance for climate change. The details of the on-site retention storage and flow attenuation shall be prepared by a suitable qualified engineer, noting the restrictions and recommendations of the Site Suitability Report prepared by GWE Consulting Engineers, dated July 2021, v1, reference J3044 included in RC2220161.

[All Lots]

## Advice Notes

- 1. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.
- 2. The site is accessed off an unsealed road. Unsealed roads have been shown to create a dust nuisance from vehicle usage. It is advised that the dwelling is either located as far as possible or at least 80m from the road, and/or boundary planting within the site is utilised to assist with this nuisance. Alternatively the applicant may consider sealing their road frontage to remove the issue.

### Reasons for the Decision

1. The Council has determined (by way of an earlier report and resolution) that the adverse environmental effects associated with the proposed activity are no more than minor and that there are no affected persons or affected customary rights group or customary marine title group.

Rule # & Name	Non Compliance Aspect
13.7.2.1 – Minimum	All 3 titles to the farm have residual subdivision rights.
Lot Sizes	application seeks to combine all rights to one block to have
	the smallest impact on their productive farming activities.

District Plan Rules Affected:

Two	of	these	sites	can	be	created	as	а	restricted
discre	etior	nary ac	tivity,	howe	ver	the furth	er 4	ar	e a Non-
Comp	olyin hent	g activ	vity as	they scretic	y ca onar	annot mo	eet f	the	minimum

#### Adverse effects will be minor:

It is considered the relevant and potential effects have been addressed within the assessment of effects above, and it has been concluded that the adverse effects will be less than minor.

#### Positive effects of the proposal:

Under s104(1)(a) the positive and potential effects of the proposal are:

- a) The proposed subdivision will create allotments in keeping with the surrounding development pattern in the area. The rural character and current lifestyle use of the area will not change as a result of the subdivision;
- b) There are no outstanding landscapes, natural features or landscape features on the site.
- c) The proposal will not result in any adverse social, economic or cultural effects.

#### Objectives and policies of the District Plan:

- The following objectives and policies of the District Plan have been considered:
  - a) Chapter 8 Rural Environment
  - b) Chapter 13 Subdivision

The relevant objectives and policies of the Plan are those related to the Rural Environment and Rural Production Zone. The proposal is considered to create no more than minor adverse effects on the rural environment as the sites are all able to meet the Restricted Discretionary activity standard site sizes. The proposed sites will be visible from Signal Road, however, given the existing lifestyle development in the area, additional housing will not be out of character. The sustainable management of natural and physical resources will continue, with the balance allotment of 20ha remaining and being farmed in conjunction with two other titles of 69ha and 126ha. The majority of the productive farm contains highly versatile soils. Approx. 2.5ha of which will be removed from production to create the lifestyle allotments. This equates to just over 1% of the farm being removed as productive land. The sites will be clustered and will be located across the road from other rural lifestyle allotments. Future housing areas will be separated from other neighbouring landuses which may cause reverse sensitivity effects. Additional controls on cats, dogs and mustelids have been offered as consent notices on each new title to ensure that native kiwi are not adversely impacted by future development of these sites.

### 2. Section 104D Assessment

Pursuant to section 104D of the Resource Management Act 1991 if a proposal is Non-Complying then it must satisfy one or both of the subsections of 104D(1) before a decision can be granted under section 104B of this Act. If the application does not pass either test of the section 104D(1) then the application must be declined.

It is considered that the proposal is not contrary to the Objectives and Policies of the District Plan; and it has been concluded that the adverse effects will be less than minor, as demonstrated above.

- 3. In accordance with an assessment under s104(1)(b) of the RMA the proposal is consistent with the relevant statutory documents.
  - a) The Northland Regional Policy Statement 2018
  - b) Northland Regional Plan 2019
  - c) National Environmental Standards (Air/ NESCS/ Forestry etc)

There are 4 different soil types which are located on the site subject to subdivision. Majority of the site is considered highly versatile by the Regional Policy Statement for Northland. It is noted that a large proportion of the farm is covered in highly versatile soils except for some of the steeper slopes at the rear of the site and some areas around the stream. Approx. 2.5ha of which will be removed from production to create the lifestyle allotments. This equates to just over 1% of the farm being removed as productive land. The sustainable management of natural and physical resources will continue, with the balance allotment of 20ha remaining and being farmed in conjunction with two other titles of 69ha and 126ha.

- 4. In accordance with an assessment under s104(1)(c) of the RMA. No other non statutory documents were considered relevant in making this decision.
- 5. Other matters considered in relevant in making this decision:

#### Precedent

Case Law has established that the precedent of granting resource consent is a relevant factor for a consent authority in considering whether to grant Non-Complying resource consent. A precedent effect is likely to arise in situation where consent is granted to a Non-Complying activity that lacks the evident unique, unusual or distinguished qualities that serve to take the application out the of the generality of cases or similar sites in the vicinity. In other words, if an activity is sufficiently unusual and sufficiently outside the run of foreseeable other proposals it avoids any precedent effect can be approved.

The applicant owns the two adjoining properties. The proposal is to subdivide across three titles (older than 28 April 2000), as a Non- Complying activity. As an Restricted Discretionary Activity (Each title is prior to April 2000), the applicant can subdivide each Title creating 4 additional lots with the balance farm. However, would prefer the non-complying option by creating all the lots together in a concentrated area, as opposed to spacing them out. The sites will be clustered and will be located across the road from other rural lifestyle allotments. The proposal is not considered to create a precedent.

6. Part 2 Matters

The Council has taken into account the purpose & principles outlined in sections 5, 6, 7 & 8 of the Act. It is considered that granting this resource consent application achieves the purpose of the Act.

7. In summary it is considered that the activity is consistent with the sustainable management purpose of the RMA.

### Approval

This resource consent has been prepared by Whitney Peat – Intermediate Planner and is granted under delegated authority (pursuant to section 34A of the Resource Management Act 1991) from the Far North District Council by:

Killalea.

Pat Killalea, Principal Planner

# Date: 28th October 2021

#### **Right of Objection**

If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Resource Management Act 1991) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.

#### Lapsing of Consent

Pursuant to section 125 of the Resource Management Act 1991, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;

The consent is given effect to; or

An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Resource Management Act 1991.



27 Hobson Ave PO Box 937 Kerikeri

Prepared for: Kilkerran Estate Limited

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# **Northland Planning Development**

From:	Salamasina Brown <salamasina.brown@fndc.govt.nz></salamasina.brown@fndc.govt.nz>
Sent:	Tuesday, 12 March 2024 10:01 am
То:	Northland Planning Development
Subject:	112 Signal Road Okaihau CDM Meeting

Morena Rochelle,

I have spoken internally regarding the HPL matter for the site. It is quite difficult as I cannot give advice on whether an application would be accepted or not and similarly whether it's worth pursuing. At this stage it is recommended to lodge the application and it would be at the discretion of the planner. Without an application we are unable to determine the effects, we may have an indicative idea, but we do not have an assessment against the National Policy Statement.

Essentially the proposal to relocate the lots on the site would be supported as a variation. I would suggest a soil report accompanies the application in order for Councils planner to make their own assessment on whether the relocation does not create any additional effects and does not take away from the productive use.

Will have meeting minutes to you in the coming days.

Feel free to call me to discuss any matters further, happy to help accommodate where I can.

Regards,



## Rochelle

Pravin Singh   NTA <pravin.singh@nta.govt.nz></pravin.singh@nta.govt.nz>
Thursday, 28 March 2024 7:42 am
Rochelle
Brad Hedger; Salamasina Brown; Hamish Ferguson
RE: Follow up on CDM 2024-18

Hi Rochelle,

Apologies for the delay.

Firstly, the proposed extent of widening to approx. 600m seems reasonable. Of course, the condition should still remain, so Prospect Estate Ltd should complete the remainder of works required on Signals Road.

As for sealing on Signal Road. NTA/FNDC has no plans to seal this road at this stage.

I have a question for yourself, and your customer. This may need to be checked with our team too (FNDC Planner and RC Eng) as this may result in a change of condition for both consents. Would your customer be willing to push for a narrower width (5m) and meet the new FNDC EES? Pavement structure will need to be presented to FNDC/NTA, but the new standards state a pavement depth of 100mm with an additional 100mm wearing course.

I'd appreciate your thoughts on this.

Kind regards,

Pravin Singh **Traffic Engineer** | Northland Transportation Alliance Far North | Kaipara | Whangarei M 021 075 1175

# NORTHLAND TRANSPORTATION ALLIANCE

Far North District Council e o foi Islamor li te Rak

CO KAIPARA 🖘 Whangarei

Northland

The Northland Transportation Alliance is a partnership between all four councils within Northland and Waka Kotahi (NZTA). The information contained within this email may be confidential.

Therefore, if you have received this in error, you should delete it immediately and advise the sender noting that information contained within this communication should not be used or transmitted in any format.

From: Rochelle <rochelle@northplanner.co.nz> Sent: Tuesday, March 12, 2024 11:54 AM To: Pravin Singh | NTA <pravin.singh@nta.govt.nz>; Consents | NTA <NTAConsents@nta.govt.nz> Cc: Brad Hedger <Brad.Hedger@fndc.govt.nz>; Salamasina Brown <Salamasina.Brown@fndc.govt.nz>; Hamish Ferguson <hamish ferguson@hotmail.com> Subject: Follow up on CDM 2024-18

Good Morning Pravin / NTA,

Yesterday I had a CDM meeting with Brad and Salamasina regarding the relocation of approved allotments at 112 Signal Road, Okaihau (RC 2220161).

One of our big questions was for NTA which I'm hoping you can provide some feedback on. When the consent was originally completed both Signal Heights Ltd and Prospect Estate Ltd obtained a shared TIA which confirmed that they would upgrade Signal road. The plan was that both developers would upgrade the road together and share costs. This consent was granted on the 28<sup>th</sup> Oct 2021 and Prospect Estates consent was granted a year later on the 28<sup>th</sup> Oct 2022. Prospect Estate is looking at maximizing the timeframes on their consent and they have an additional year to do this whereas Signal Heights is looking to give effect to their application in the near future. As a result, Signal Heights would be lumped with all the costs to upgrade the road in order to give effect to their consent which makes the development uneconomical and unlikely to proceed.

We would like to propose a mid-way solution where Signal Heights upgrades the road up until the point of the last new allotment being formed. This is approx. 600m of Signal road which is a sizeable benefit to the Council and NTA.

Could you please confirm via return email that NTA would support this change.

We would also like to know whether there any plans for Signal Road to be upgraded or sealed given the changes to Councils Dust Matrix. The reason why we ask is that if anything is planned, we could look at some cost sharing between Council and the developer and do all the works at the same time, or we could look at a bonding condition instead such that Council has the funds to undertake the works.

Regards,



**Rochelle Jacobs** Director / Senior Planner

Offices in Kaitaia & Kerikeri 9 408 1866 | 027 449 8813 Northland Planning & Development 2020 Limited

The Northland Transportation Alliance is a partnership of Northland's Councils, with Waka Kotahi (NZTA), for better transport outcomes. The information contained within this email may be confidential. Therefore, if you have received this in error, you should delete it immediately and advise the sender noting that information contained within this communication should not be used or transmitted in any



#### 112 Signal Road, Okaihau (Lot 3 DP 39764)

C/O Signal Heights Limited

19 June 2024

#### Re: Signal Road – LUC (Land Use Capability) – Job no. 24 068

#### Introduction

Haigh Workman Limited have been engaged by Signal Heights Limited to determine the land use classification for 112 Signal Road, Lot 3 Deposited Plan 39764 for a proposed subdivision, in consideration to the National Policy Statement (NPS) for Highly Productive Land.

#### **Site Description**

The property is approximately 23.0693 ha. The topography of the property varies between flat, rolling, moderately and steeply sloping. However the investigation area in the south and south east of the property is slight to slightly to moderately sloping. Slopes in the investigation area are north and northeast facing. The site is irregular in shape. The property is bounded to the north by the Maungakaretu Stream.

#### **Proposed development**

The proposed subdivision plan is included in Appendix A. A summary of the proposed lot area are included in table 1 below.

Table 1 - Proposed lot areas

Lot	Area (ha)
1	0.7708
2	0.5694
3	0.8815
4	0.5868
5	0.7835
6	0.4168
7	19.0670

#### Background

The National Policy Statement for Highly Productive Land 2022 (NPS-HPL), took effect in October 2022. Its primary objective is to safeguard New Zealand's most fertile and potentially productive land for the cultivation of food and fibre crops. Until a more detailed database can be collated, and Northland Regional Council has more precisely defined and identified 'highly productive land,' land falling within Land Use Capability classes 1 – 3 will be categorised as 'highly productive'. Land on the property is mapped on the NZLRI-LUC database as NZ3s-1 and is subject to the NPS-HPL.

Resource consent for the subdivision of Lot 3 DP 39784 into six 4000m<sup>2</sup> sites as a non-complying activity in the Rural Production Zone was issued on 28<sup>th</sup> October 2021. As this resource consent predates the NPS-HPL land use capability of the soils onsite were not required to be considered in issuing this resource consent.

It is now sought to adjust the scheme lot boundaries. The investigation area for this report is the combined areas of the new lots of the consented and revised schemes. The scheme plans are appended to the report. The investigation area is shown below.





Figure 1 - Site Investigation Area

## Published Geology and Soil Mapping

Published geology maps indicate the site is underlain by the Kerikeri Volcanic Group (Pvb). The Kerikeri Volcanic Group comprises basalt lava, volcanic plugs, and minor tuff.

Further reference to the New Zealand land inventory maps (1:100,000) indicate the soils on the site comprise of the flowing soil types Okaihau gravelly friable clay, Pungaere gravelly friable clay, Otaha clay and Otaha gravelly clay.

The soils mapped within the investigation area comprise of excessively to somewhat excessively drained Okaihau gravelly friable clay. The Okaihau series is described as strongly to very strongly leached soils. The site is also indicated to comprise of well to moderately well drained Pungaere gravelly friable clay. The Pungaere series is described as strongly to very strongly to very strongly leached soils.





Figure 2 - GNS Geology Map



clay. ODg – Otaha gravelly clay loam

Figure 3 - New Zealand Land Inventory (1:100,000), Sheet P04/05

The New Zealand Soil Classification (Landcare Research - Manaaki Whenua) soils mapviewer further describes the soils mapped in the investigation area as 'nodular oxidic'.



### Mapped Land Use Capability

The New Zealand Land Resource Inventory GIS database indicates a nz3s-1 soil in the majority of the investigation area with a small area of nz4s-2 in the east. FNDC mapping indicates the same soil classifications being present in the investigation area.

The soil classes mapped in the investigation area are typically described below:

- NZ3s-1 (3s2 historic regional unit Northland) 'Flat to undulating slopes on deeply weathered basalt and ash below 200 m asl with well structured, moderately fertile and well drained Granular (red and brown loam) soils in mild moderate (1200-1600 mm) rainfall areas with a seasonal moisture deficit.'
- NZ4s-1 (4s2 historic regional unit Northland)– 'Flat to undulating slopes on deeply weathered basalt below 400 m asl with strongly leached low fertility Granular (red and brown loam) soils in mild moderate to high (1400-2000 mm) rainfall areas with a potential for slight to moderate rill and sheet erosion when cultivated.'



Figure 4 - Land use classification, FNDC Maps

#### Site investigation

A site investigation was undertaken on 4 April 2024 to assess the land use classification of the soils onsite. The investigation consisted of 12 hand dug trial pits to a depth of approximately 0.2m. The trial pits were then extended to a depth of 0.6mbgl with a hand auger. The site investigation plan is included in Appendix A. Topsoil thickness onsite was observed as typically being between 0.05 - 0.2m in thickness.



The encountered subsoils were typically brown to reddish brown, silty clay and clayey silty, medium to high plasticity, stiff to very stiff, with trace to minor fine gravel. The soils encountered were consistent with the mapped Okaihau soils.

#### Discussion

Based on observations made during the site investigation the land use capability mapping of the of site is not considered accurate based on the encountered soils in particular the strongly leached soils.

The encountered Okaihau soils have iron and aluminium nodules. Due to the iron and aluminium concentrations of these nodules, the potential for successful growth of most plants on this terrain is restricted. Iron and aluminium at low PH are free ions that effectively immobilize or strongly bind the majority of nutrients, rendering them insoluble and inaccessible to plants. This results in nutrient deprivation for plants, with phosphate being notably affected. In addition, aluminium is toxic to plant roots inhibiting root penetration, thus restricting water access during the summer, and causing larger plants to become less stable in windy conditions. While specific patches within this area may support the growth of crops like citrus to some extent, it is generally unsuitable for horticultural or arable purposes. Furthermore, beneath the aluminium and iron rich gravel inclusions a stiff to very stiff clay is present which additionally constrains root penetration. During wet periods, the stiff to very stiff layer leads to waterlogging of the soil due to its low permeability, resulting in an increased risk of fungal root diseases and a decrease in the stability of trees.

This land is suited for pastoral purposes, allowing for the occasional cultivation of fodder crops. However, it is not suitable for horticultural or arable uses. Therefore the soils in the investigation area have been assessed as being class 4s2.

#### Conclusion

The National Policy Statement for Highly Productive Land (NPS-HPL) identifies land with LUC classifications in classes 1, 2 and 3 as highly productive land. Under this definition the investigation area is not defined as highly productive land. Based on site observations and the underlying geology, the land should be categorised, as class 4.

#### Disclaimer

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

Prepared by:

Environmental Geologist CEnvP

Reviewed and approved by:

Wayne Thorburn

Senior Geotechnical Engineer CPEng, CMEngNZ



#### Encls

#### 1. Drawings

Drawing name	Scale
Site investigation plan, Haigh Workman, 11.06.2024	1:2500 @ A4
Proposed Subdivision of PT Lot 3 DP 39764, Williams and King, May 2021. Approved Plan.	1:3000 @ A3
Proposed Subdivision of PT Lot 3 DP 39764, Williams and King, May 2024.	1:3000 @ A3

#### 2. Photolog



# Legend

Trial pit
 Cutting
 Investigation area
 Site Boundary
 1m Contour (LINZ)

0 25 m 50 m LINZ CC BY 4.0 © Imagery Basemap contributors

# 

Produced by Datanest.earth

Title: Site Investigati	on Plan		
Client: Signal Height	Size: A3		
Project: Signal Road	Drawn: JCum	Drawing No.:	
Date: 11-06-2024	Checked: WT	1	
Proj No: 24 068	Scale: 1:2500	Version: REV1	



Ph: (09) 407 6030 Email: kerikeri@saps.co.nz 27 Hobson Ave PO Box 937 Kerikeri Prepared for: Kilkerran Estate Limited

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# Photolog



Photo 1. TP1 Topsoil



Photo 2. TP1 soils





Photo 3. TP2 Topsoil



Photo 4. TP2 Soils





Photo 5. TP3 Topsoil



Photo 6. TP3 Soils





Photo 7. TP4







Photo 9. TP5 topsoil



Photo 10. TP5 Soils





Photo 11. TP6



Photo 12. TP6





Photo 13. TP7



Photo 14. TP7





Photo 15. TP8



Photo 16. TP8





Photo 17. TP9



Photo 18. TP9




Photo 19. TP10



Photo 20. TP10





Photo 21. TP11



Photo 22. TP11





Photo 23. TP12







Photo 25. West of the investigation area.



Photo 26. Centre of the investigation area towards the east.





Photo 27. Identified wetland along northern boundary.



Photo 28. Identified wetland along northern boundary.





Photo 29. Cutting 1.