



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
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R. W. Muir
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of Land

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Land Registration District North Auckland
Date Issued 04 October 1977

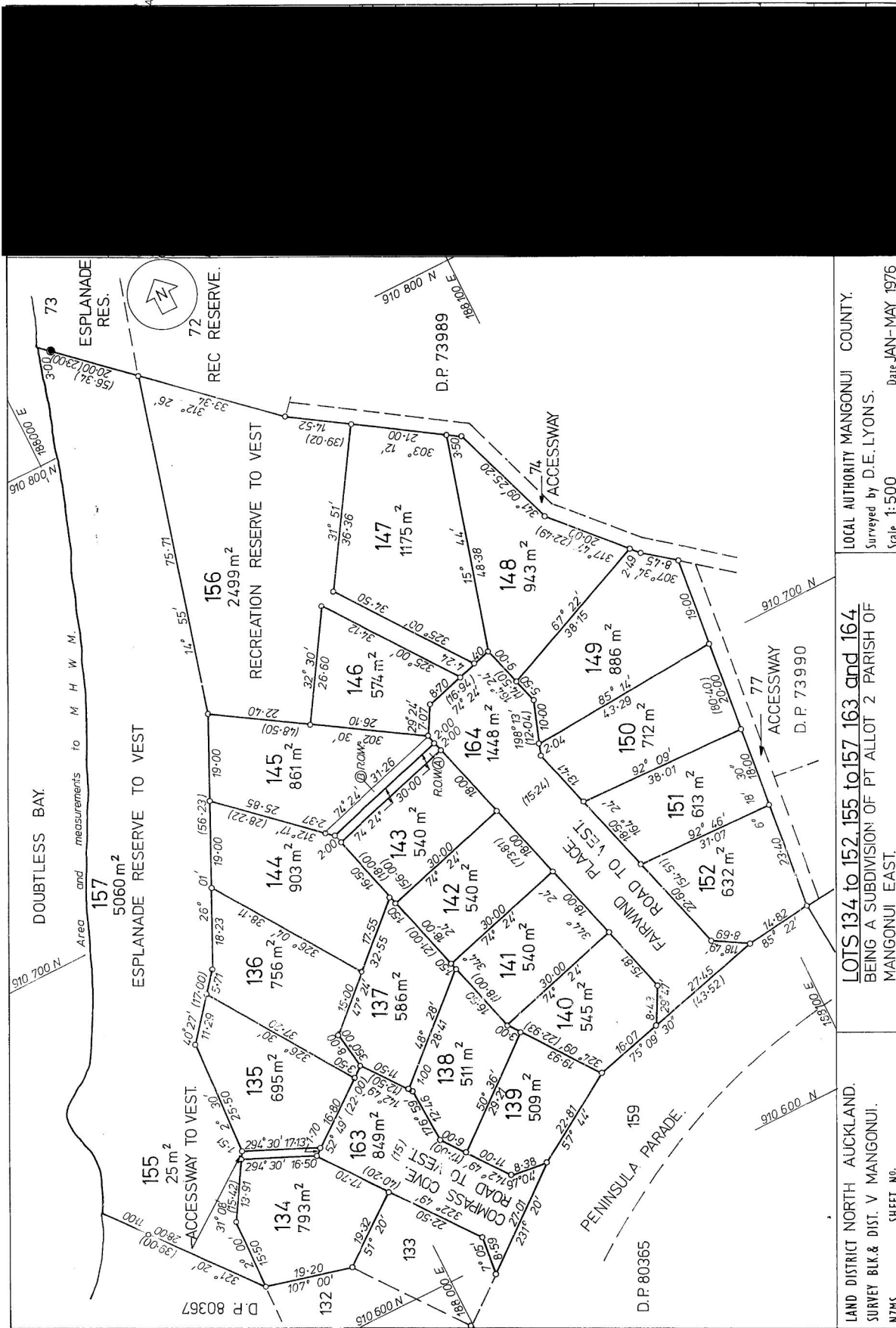
Prior References
NA20B/1130

Estate Fee Simple
Area 574 square metres more or less
Legal Description Lot 146 Deposited Plan 80368
Registered Owners



Interests

Appurtenant hereto is a water right created by Transfer 503347



LOCAL AUTHORITY MANGONUI COUNTY.
 Surveyed by D.E. LYONS.
 Scale 1:500
 Date JAN-MAY 1976

LOTS 134 to 152, 155 to 157, 163 and 164
 BEING A SUBDIVISION OF PT ALLOT 2 PARISH OF
 MANGONUI EAST.

LAND DISTRICT NORTH AUCKLAND,
 SURVEY BLK & DIST. V MANGONUI.
 SHEET No. 1
 NZMS

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SECTION 127 – VARIATION TO LAND USE CONSENT RESOURCE CONSENT AT 7 FAIRWINDS PLACE, HIHI

NOVEMBER 2023

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APPLICANT DETAILS

Applicant/Owner: Lee Eglinton & Keith Kerr

Site Address: 7 Fairwinds Place, Hihi

Legal Description: Lot 146 DP 80368

Site Area: 574m²

Consent: Variation to Consent – s127

Activity: Consent is being sought to vary conditions of consent 2230348-RMALUC for the construction a new dwelling within a coastal hazard 2 area.

Operative District Plan Zone:
Coastal Residential
Coastal Hazard 2 Area

Proposed District Plan Zone:
General Residential
Coastal Flood Zone (50, 100 and 100+ year events)
River Flood Hazard Zone (50 and 100 Year ARI events)

Address for Service: Claire Phillips
Consultant Planner
CPPC Planning
PO Box 550, Warkworth, 0941, New Zealand
Mobile: 021302340
Email: claire.phillips1@xtra.co.nz

PROPOSAL DESCRIPTION

Land use consent is being sought pursuant to section 127 of the Resource Management Act 1991 to vary condition 1 of 2230348-RMALUC to amend the design and location of the proposed dwelling at 7 Fairwinds Place, Hihi.

2230348-RMALUC was issued under delegated authority on 18 April 2023 to construct a dwelling in the Coastal Residential Zone breaching Coastal Hazard 2 Area and Car Parking Space Standards rules as a Discretionary Activity.

The proposal involves the following the following changes:

- Reduce the size of the dwelling from 144m² to 56m². The dwelling will contain two bedrooms, bathroom and kitchen and dining area. The dwelling will continue to be constructed using the same materials and colours.
- The dwelling is to be constructed with a finished floor level of RL3.55, which is above RL3.4.
- Impervious surfaces will be reduced from 183m² to 93m² as a result of the reduction in built development.
- No other changes to the development are proposed.



Figure 1: North elevation of dwelling

The proposal will not trigger any new reasons for consent.

Condition 1 is to be amended as follows:

(additions in **bold** and underlined and deletions struck through):

Changes to Condition 1

The activity shall be carried out in general accordance with the approved plans prepared by BC Design Studio, referenced New Dwelling @ Lot 146 DP 80368, dated ~~21 February 2023~~, **12 November 2023** and attached to this consent with the Council's "Approved Stamp" affixed to them. These plans include the following:

- ~~Site Plan~~
- ~~Maneuver Plan~~
- ~~Elevations~~
- ~~Floor Plan, dated 15 December 2022~~

Application to vary consent conditions prepared by CPPC Planning, dated 13 November 2023 and amended plans dated 12-11-23, Revision A and B prepared by B C Design Studio:

- **Drawing List – Sheet A0.00, Revision A, dated 12 November 2023**
- **Site Plan – Sheet A1.00, Revision B, dated 12 November 2023**
- **Manoeuvre Plan – Sheet A1.01, Revision A, dated 12 November 2023**
- **Floor Plan – Sheet A2.00, Revision A, dated 12 November 2023**
- **Elevations – Sheet A3.00, Revision B, dated 12 November 2023**

SITE DESCRIPTION

The subject property is currently legally described as Lot 146 DP 80368 having an area of 574m². The temporary structures on site have been removed. The remainder of the site is grassed and relatively flat. The site is located amongst established residential dwellings and a recreation reserve to the east adjacent to Hihi Beach.



Figure 2: Aerial Photo of Locality – Source – FNDC Maps



Photo 1: View of site from Fairwinds Place



Photo 2: View of site from reserve to the north

SECTION 127 – CHANGE OR CANCELLATION OF CONDITIONS

Section 127(1) of the Resource Management Act 1991 states that the holder of a resource consent application may apply to a council to change or cancel a condition of their resource consent (other than any condition as to the duration of the consent).

Section 127(3) states that 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.*

Section 127(4) provides guidance in terms of determining who must be considered as being potentially adversely affected by the change or cancellation of a condition(s), specifically a council must consider every person who:

- (a) made a submission on the original application; and*
- (b) may be affected by the change or cancellation.*

The proposed change to condition 1 is considered to fall within the scope of the original 2230348-RMALUC to construct a dwelling in the Coastal Residential Zone breaching Coastal Hazard 2 Area and Car Parking Space Standards.

Overall the consent is considered to be a Discretionary Activity under s127.

FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN

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

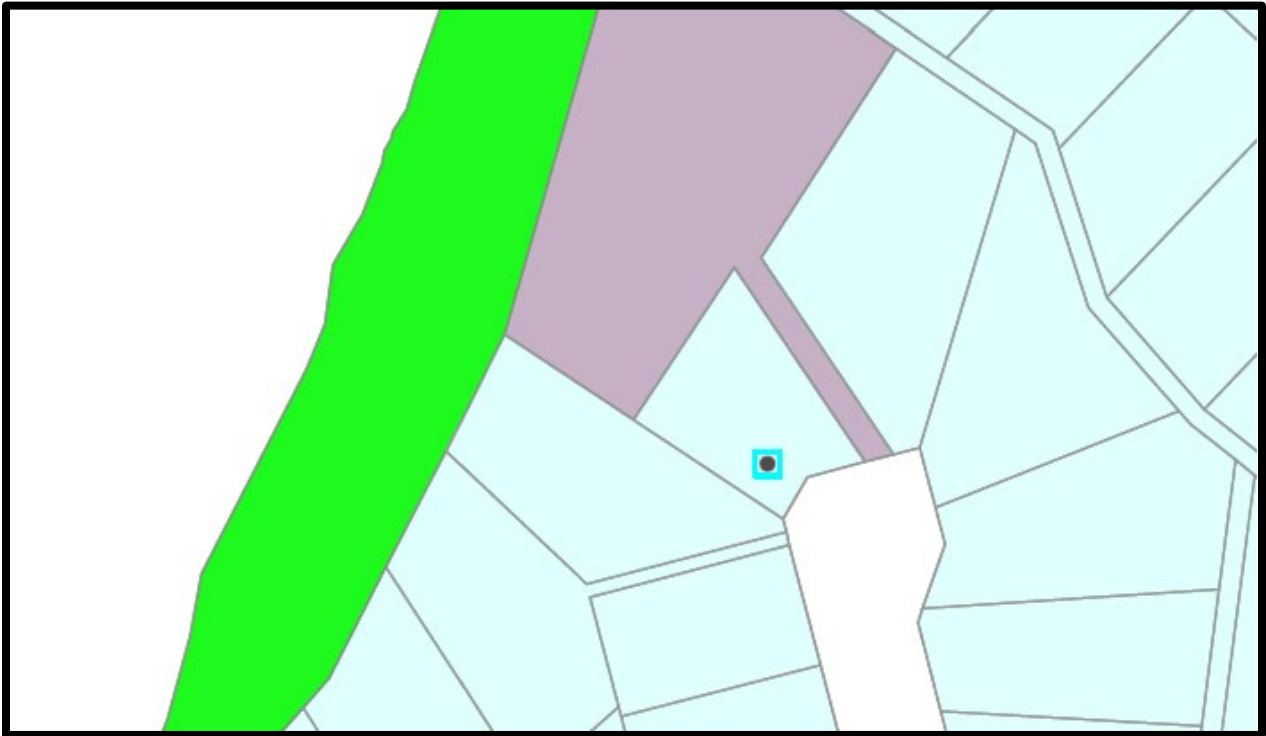


Figure 3: Zone Map Source – Far North Operative District Plan

There are no new rules infringed with this variation over and above those applied for and consented under the original consent.

FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN

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

There are no relevant rules that have immediate legal effect under this document.



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

PUBLIC NOTIFICATION ASSESSMENT

ASSESSMENT OF STEPS 1 TO 4 (SECTION 95A)

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

STEP 1: MANDATORY PUBLIC NOTIFICATION IN CERTAIN CIRCUMSTANCES

Step 1 states that no mandatory notification is required as:

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

In this case the applicant does not request notification.

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

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

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

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

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

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

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

STEP 4: PUBLIC NOTIFICATION IN SPECIAL CIRCUMSTANCES

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

Special circumstances are those that are:

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

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

ASSESSMENT OF ENVIRONMENTAL EFFECTS

EXISTING ENVIRONMENT AND PERMITTED BASELINE

ENVIRONMENT

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

These activities and their constituent effects form part of the existing (lawfully established) environment. In this case the existing consent forms part of the permitted baseline as well as the existing residential unit and access from Conifer Lane.

PERMITTED BASELINE

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

- Dwelling complying with the zone standards and providing a controlled activity flood assessment.
- Connection to Council's reticulated stormwater system

ASSESSMENT OF EFFECTS

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

ANY EFFECT ON THOSE IN THE NEIGHBOURHOOD AND, WHERE RELEVANT, THE WIDER COMMUNITY, INCLUDING ANY SOCIAL, ECONOMIC, OR CULTURAL EFFECTS

The proposal is not likely to result in effects on the wider community including any social, economic or cultural. The proposal will maintain the heritage values of the site and locality.

ANY PHYSICAL EFFECT ON THE LOCALITY, INCLUDING ANY LANDSCAPE AND VISUAL EFFECTS

The proposed variation is considered not to create any effects on the residential coastal landscape or result in visual effects adverse to the established rural coastal character in this locality. The proposed changes to the location of the dwelling are minor and will not be visually or appreciably different to the approved consent outlined in 2230348-LUCRMA, however the proposal will allow the applicant to fulfil the residential function of the site in a more suitable location.

ANY EFFECT ON ECOSYSTEMS, INCLUDING EFFECTS ON PLANTS OR ANIMALS AND ANY PHYSICAL DISTURBANCE OF HABITATS IN THE VICINITY

No vegetation removal or disturbance to ecosystems is proposed as part of the application.

ANY EFFECT ON NATURAL AND PHYSICAL RESOURCES HAVING AESTHETIC, RECREATIONAL, SCIENTIFIC, HISTORICAL, SPIRITUAL, OR CULTURAL VALUE, OR OTHER SPECIAL VALUE, FOR PRESENT OR FUTURE GENERATIONS

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

The amended scale and design of the proposal is typical of the surrounding environment and consistent with the surrounding dwellings. Given the existence of the natural hazards (in this case flooding), the ability to develop the site requires any building to be raised above the flood levels, which in this case, involves the construction of a dwelling with a finished floor level of RL3.55 metres, which is supported by the natural hazard assessment.

The amended dwelling is modest in floor area and will utilize recessive colours and materials to ensure the building fit cohesively in this coastal residential environment. Thus the development will not result in a building that could be considered dominant or out of character, particularly when viewed in conjunction with other dwellings in this locality. These factors ensure that any effects on are considered to be no more than minor. There will be no obvious differences which differentiate the infringement from that of a complying activity, particularly when viewed from adjacent properties.

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

ANY DISCHARGE OF CONTAMINANTS INTO THE ENVIRONMENT, INCLUDING ANY UNREASONABLE EMISSION OF NOISE, AND OPTIONS FOR THE TREATMENT AND DISPOSAL OF CONTAMINANTS

Water supply is proposed by way of two water tanks.

The site is not serviced via a reticulated SW network. • Impervious surfaces will be reduced from 183m² to 93m² as a result of the reduction in built development. All water is collected by roof collection and water supply. From their there is a surface water diversion drain.

The report prepared by Haigh Workman Limited dated December 2019 addresses the impacts of the coastal hazard within the site and has recommended that the dwelling has a finished floor level of RL 3.4, with the dwelling actually have a finished floor level of RL3.55, which ensure that the dwelling will be free of the hazard. Please refer to the Haigh Workman Limited report for further details.

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

ANY RISK TO THE NEIGHBOURHOOD, THE WIDER COMMUNITY, OR THE ENVIRONMENT THROUGH NATURAL HAZARDS OR HAZARDOUS INSTALLATIONS.

There are no known natural hazards within the property. Further access to the new buildings is considered to be suitable.

SUMMARY

In summary, having assessed the adverse effects of the activity on the environment, it is considered that the proposal will have less than minor adverse effects on the environment.

LIMITED NOTIFICATION ASSESSMENT

ASSESSMENT OF STEPS 1 TO 4 (SECTION 95B)

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

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

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

The application site is not affected by customary rights.

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

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

There are no rules precluding notification.

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

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

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

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

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

STEP 4: FURTHER NOTIFICATION IN SPECIAL CIRCUMSTANCES

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

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

SECTION 95E STATUTORY MATTERS

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

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

- Adverse effects permitted by a rule in a plan or NES (the permitted baseline) may be disregarded.
- The adverse effects on those persons who have provided their written approval must be disregarded.

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

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

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

- The design of the proposed variation will continue to be of a design that is to be sympathetic with the rural environment.
- The amenity of the surrounding area is made up of large separation distances and landscaping, as sense of openness and privacy.
- The proposal retains sufficient separation distances between the neighbouring dwellings (consistent with other locations within this locality) and will not compromise the existing levels of amenity or rural character enjoyed by adjacent properties to a minor or more than minor extent.
- The proposal will be consistent in the residential coastal character and scale to other dwellings located within the local vicinity and will comply with all the relevant development standards so will not generate adverse effects in terms of shading, overbearance and overlooking to the adjoining properties.

OBJECTIVES AND POLICIES

FAR NORTH DISTRICT COUNCIL – OPERATIVE DISTRICT PLAN

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

Chapter 10.8 Coastal Residential

- *Objectives 10.8.3*
- *Policies 10.8.4*

The objectives and policies seek to enable the development of residential activity in and around existing coastal settlements and protect the coastline from inappropriate use and development, while enabling the development of coastal settlements where urban amenity and coastal environmental values. The proposed new dwelling is envisaged within the Coastal Residential zone and will continue to maintain the natural character of the area, with the majority of the site open space or landscaped. The proposed variation is consistent with the direction of this document.

Chapter 12.4 Natural Hazards

- *Objectives 12.4.3*
- *Policies 12.4.4*

The objectives and policies seek to reduce the risk to life, property and the environment from natural hazards. The proposal involves a development that has taken into consideration the natural hazards within the site, including but not limited to the fire hazard to residential dwellings. The proposed variation continues to ensure that the has a finished floor level above the coastal hazard and mitigates effects on natural hazards.

Chapter 15.1. Transportation

- *Objectives 15.1.3*
- *Policies 15.1.4*

The objectives and policies seek to minimise the adverse effects of traffic on the natural and physical environment, ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access and use of the site and that appropriate and efficient provision is made for loading and access for activities. Further they seek to promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities. The proposed variation does not alter the approved car parking area and reverse manoeuvring.

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

FAR NORTH DISTRICT COUNCIL – PROPOSED DISTRICT PLAN

Part 2 – District Wide Matters – Hazards and Risks – Natural Hazards

- *Objectives NH-01 – NH-04*
- *Policies NH-P1 – NH-P10*

The objectives and policies seek to ensure that the risks from natural hazards to people, infrastructure and property are managed, including taking into account the likely long-term effects of climate change, to ensure the health, safety and resilience of communities.

The proposed variation is consistent with the above.

Part 2 – District Wide – General District Wide Matter – Coastal Environment

- *Objectives CE-01 - CE-03*
- *Policies CE-P1 – CE-P10*

The above objectives and policies seek to ensure that the natural character of the coastal environment is managed to ensure its long-term preservation and protection for current and future generations, including the characteristics and qualities of the area, does not result in urban sprawl and recognizes iwi. The proposed variation is considered to be consistent with the above objectives and policies as the proposal involves an efficient use of the residential land resource.

Part 3 – Area Specific Matters – Zones - Residential Zones – General Residential

- *Objectives GRZ-01 - GRZ-06*
- *Policies GRZ-P1 - GRZ-P8*

The above objectives and policies seek to ensure that general residential provides for a variety of densities, housing types and responds to amenity and character of the receiving environment.

The development of the site with a modest residential dwelling is considered to be in keeping with the above objectives and policies.

In summary it is concluded that this proposed variation continues to satisfy the relevant matters requiring consideration under section 104.

NATIONAL ENVIRONMENTAL STANDARD

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

PART II OF THE RESOURCE MANAGEMENT ACT

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

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

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

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

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

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

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

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

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

CONCLUSION

It is concluded that the proposed variation to consent will have less than minor adverse effects on the surrounding environment. Further the proposed activity is considered to be in keeping with the relevant assessment criteria, objectives and policies set out in Far North District Plan (Operative) and Proposed District Plan as relevant.

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

Appendix 1 – Record of Title

Appendix 2 – Architectural Plans

Appendix 3 – Approved Consent

Appendix 4 – Coastal Hazard Report

**DECISION ON LAND USE CONSENT APPLICATION
UNDER THE RESOURCE MANAGEMENT ACT 1991**

Decision

Pursuant to section 34(1) and sections 104, 104B and Part 2 of the Resource Management Act 1991 (the Act), the Far North District Council **grants** land use resource consent for a Discretionary, subject to the conditions listed below to:

Council Reference:	2230348-RMALUC
Applicant:	John Keith Kerr
Property Address:	7 Fairwinds Place, Hihi 0494
Legal Description:	LOT 146 DP 80368

The activities to which this decision relates are listed below:

Construct a dwelling in the Coastal Residential Zone breaching Coastal Hazard 2 Area and Car Parking Space Standards rules.

Conditions

Pursuant to sections 108 of the Act, this consent is granted subject to the following conditions:

1. The activity shall be carried out in general accordance with the approved plans prepared by BC Design Studio, referenced New Dwelling @ Lot 146 DP 80368, dated 21 February 2023, and attached to this consent with the Council's "Approved Stamp" affixed to them. These plans include the following:
 - Site Plan
 - Maneuver Plan
 - Elevations
 - Floor Plan, dated 15 December 2022
2. Submit plans and details of all works below for the approval of Far North District Council. It is to be noted that certain works must be carried out or certified by a Suitability 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). The works include.
 - a) Secondary overland flow paths that can handle a 1% AEP storm event, to ensure adequate capacity for stormwater runoff. Secondary overland flow paths must be designed to ensure that they do not cause or worsen flooding effects on downstream properties and be unobstructed by new buildings, structures, or landscaping to ensure that stormwater can flow freely.

3. The habitable building shall have a minimum floor level in accordance with the Coastal Hazard Assessment Report prepared by Haigh Workman Ltd (ref 19 217, dated 19/12/19). The details of design shall be submitted in conjunction with the Building Consent application.
4. As the Coastal Hazard Assessment Report prepared by Haigh Workman Ltd (ref 19 217, dated 19/12/19) calculates the site as having a 95% probability of erosion by 2115, the habitable building shall be designed to be removed within 50 to 100 years when coastal erosion reaches the site. The details of design shall be submitted in conjunction with the Building Consent application.
5. Without the prior approval of the Council, no building shall be erected, nor any works which increase impermeable surfaces be undertaken, nor any planting or structure placed which may create a flow obstruction, on any area of the site which has been proposed as a secondary overland (Q100) flow path as approved in accordance with condition 2(a).

Advice Notes

Lapsing of Consent

1. *Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses.*
 - a) *The consent is given effect to; or*
 - b) *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 Act.*

Right of Objection

2. *If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Act) 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.*

Archaeological Sites

3. *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.*

General Advice Notes

4. *The consent holder is advised that a vehicle crossing is to be constructed to Council's appropriate standards and that a Traffic Management Plan (TMP) will need to be approved by Council's Corridor Access Engineer and a Corridor Access Request (CAR) obtained prior to the vehicle crossing being constructed. Application for TMP and CAR are made via <https://www.fndc.govt.nz/Our-Services/Transport/Roads/Road-closures-and-restrictions>.*

5. *Erosion and sediment control measures in accordance with Auckland Council GD05 requirements are to be implemented prior to any earthworks and construction activities commencing to ensure compliance with rule EW-R13 – Erosion and Sediment Control of the Proposed District Plan. Alternatively, you may obtain resource consent where compliance cannot be achieved.*
6. *Secondary overland flow paths should be properly maintained to ensure they remain unobstructed and functional at all times.*
7. *As the property requires reverse gear manoeuvring to exit and/or enter the lot, the lot owner should keep vegetation, or any objects clear that may impede sightlines so the aforementioned can be achieved safely.*
8. *All earthworks should be carried out in periods of fine weather within the typical October to April earthwork season.*
9. *The consent holder is advised that the responsibility for arranging for buried services to be located and marked prior to commencing earthworks is the applicants, as is the expense and responsibility for the repair and reinstatement of any underground services damaged as a result of the earthworks.*
10. *The consent holder should ensure that all earthworks' operations are carried out in a manner that minimises the potential for soil erosion. Effective mitigation measures should be installed as required to mitigate and/or remedy any slope failures.*
11. *The consent holder is advised that that the responsibility for the repair and reinstatement of the public road carriageway, if damaged as a result of the works will be at the expense of the applicant.*
12. *The consent holder is advised that any debris deposited on the public road as a result of the earthworks shall be removed by or at the expense of the applicant.*

Reasons for the Decision

1. By way of an earlier report that is contained within the electronic file of this consent, it was determined that pursuant to sections 95A and 95B of the Act the proposed activity will not have, and is not likely to have, adverse effects on the environment that are more than minor, there are also no affected persons, and no special circumstances exist. Therefore, under delegated authority, it was determined that the application be processed without notification.
2. The application is for a Discretionary activity resource consent as such under section 104 the Council can consider all relevant matters. In particular the matters listed in 12.4.6.1.1 – Coastal Hazard 2 Areas and 15.1.6B.1.5(a) – Car Parking Space Standards are of particular relevance.
3. In regard to section 104(1)(ab) of the Act there are no offsetting or environmental compensation measures proposed or agreed to by the applicant for the activity.

4. In regard to section 104(1)(b) of the Act the following statutory documents are considered to be relevant to the application:
- a. New Zealand Coastal Policy Statement 2011,
 - b. Northland Regional Policy Statement 2018,
 - c. Proposed Northland Regional Plan 2022,
 - d. Operative Far North District Plan 2009,

Operative Far North District Plan

The following objectives and policies of the District Plan have been considered:

- The objectives and policies of the Coastal Environment (Chapter 10 sections 10.3 and 10.4)
- The objectives and policies of the Coastal Residential Zone (Chapter 10.8 sections 10.8.3 and 10.8.4)
- The objectives and policies of Natural Hazards (Chapter 12.4 sections 12.4.3 and 12.4.4)
- The objectives and policies of Transportation (Chapter 15.1 sections 15.1.3 and 15.1.4)

Objectives and policies of the Coastal Residential zone seek to enable a range of housing types and forms of accommodation, recognising the diverse needs of the community and the coastal location while avoiding or mitigating the effects of stormwater runoff on the receiving environment. It is considered, the activity is consistent with these objectives and policies.

Objectives and policies of Natural Hazards seek to reduce the threat of natural hazards to life, property and the environment and to promote the well being of the community, and to ensure that the adverse effects on people, property and the environment from coastal hazards in the Coastal Hazard Areas, as identified by the Northland Regional Council, are avoided. It is considered, the activity is consistent with these objectives and policies.

Objectives and policies of Transportation seek to minimise adverse effects of traffic while ensuring appropriate provisions are made for on-site car parking for all activities, that existing parking spaces are retained or replaced with equal or better capacity, so as to ensure the orderly movement and control of traffic. It is considered, the activity is consistent with these objectives and policies.

Proposed Far North District Plan

- Objectives and policies of the General Residential zone
- Objectives and policies of Natural Hazards
- Objectives and policies of Transport

Objectives and policies of the General Residential environment seek to develop new residential areas, which are currently predominately residential in form and character, and can provide for a range of housing types and forms of accommodation, where the activity is consistent with the scale, character and amenity anticipated in the residential environment. The activity has been designed in a manner which is consistent with these objectives and policies.

Objectives and policies of Natural Hazards seek to reduce the threat of natural hazards to life, property and the environment and to ensure that the adverse effects on people, property and the environment from coastal hazards in the Coastal Hazard Areas are avoided or mitigated. It is considered, the activity is consistent with these objectives and policies.

Objectives and policies of Transportation seek to minimise adverse effects of traffic while ensuring safe and efficient operation for road users. It is considered, the activity is consistent with these objectives and policies.

For this resource consent application, the relevant provisions of both an operative and any proposed district plan must be considered. Weighting is relevant if different outcomes arise from assessments of objectives and policies under both the operative and proposed district plans.

As the outcomes sought are the generally the same under the operative and the proposed plan frameworks, no weighting is necessary.

5. In regard to section 104(1)(c) of the Act there are no other matters relevant to the application.
6. Based on the assessment above the activity will be consistent with Part 2 of the Act.
The activity will avoid, remedy or mitigate any potential adverse effects on the environment while providing for the sustainable management of natural and physical resources and is therefore in keeping with the Purpose and Principles of the Act. The proposal is an efficient use and development of the site that will maintain existing amenity values without compromising the quality of the environment. The activity is not considered to raise any issues in regard to Te Tiriti o Waitangi.
7. Overall, for the reasons above it is appropriate for consent to be granted subject to the imposed conditions.

Approval

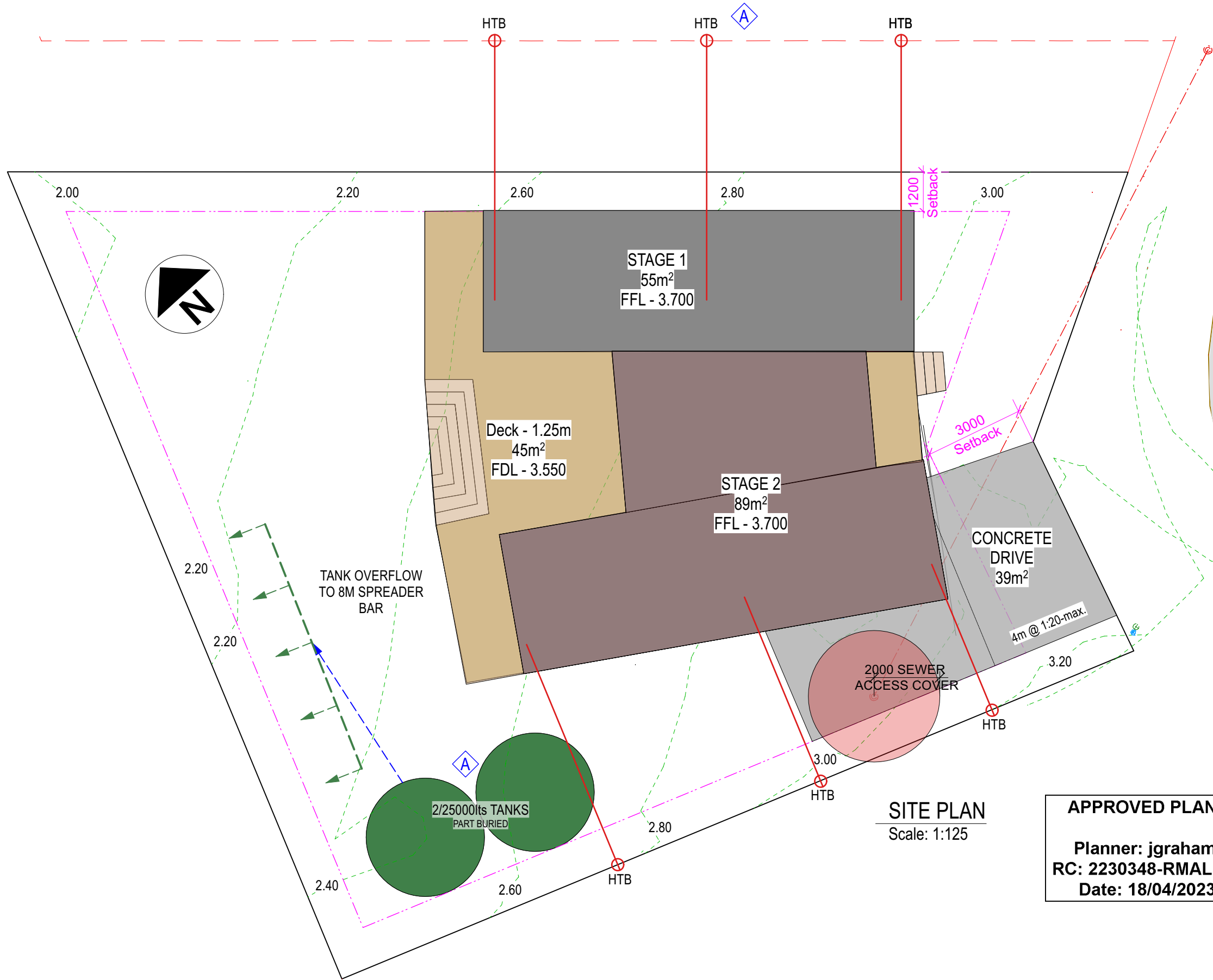
This resource consent has been prepared by Jo Graham, Resource Planner. I have reviewed this and the associated information (including the application and electronic file material) and for the reasons and subject to the conditions above, and under delegated authority, grant this resource consent.



Simeon Mclean
Team Leader Resource Consents

Date: 18 April 2023

NOTES: All dimensions and underground service locations to be checked on site by contractor prior to the commencement of any work. Contractor to ensure all ground levels and height restrictions are correct and comply with Territorial Authority bylaws at all stages of construction. DO NOT SCALE from drawings, work from dimensions shown.



SITE PLAN
Scale: 1:125

APPROVED PLAN
Planner: jgraham
RC: 2230348-RMALUC
Date: 18/04/2023

SITE DESCRIPTION			
CR Coastal Residential			
Lot No	146	DP	80368
Areas	A		
Site Area	573 sq.m		
Dwelling Stage 1	55 sq.m		
Dwelling Stage 2	89 sq.m		
Site Coverage	144sq.m (25% (45 % max.))		
Concrete Drive	39 sq.m		
Total Impervious	183 sq.m (33% (60% max.))		
Resource Consent (RC)			
Flood Zones, High to Boundary			
Landscaping			
Font yard	32 sq.m of 50q.m (64% (50% min.))		
Total yard	389 sq.m (67% (50% min.))		

B C Design Studio
Architectural Designers

Licensed Building Practitioner
Licence No. BP133708
Tel 09 426 3170
Email jonathan@bcdesign.co.nz

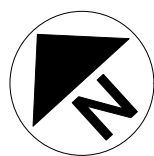
New Dwelling @
Lot 146 DP 80368
7 Fairwinds Place, Hihī
for Lee Eglinton & Keith Kerr

Wind zone	Very High	Sheet size	A3
Corrosion zone	D		
Earthquake	1		
NZS3604:2011			
Drawn	Eng. ref.		
Jonathan Leech			
homestar Practitioner	Sheet no.	A1.00	

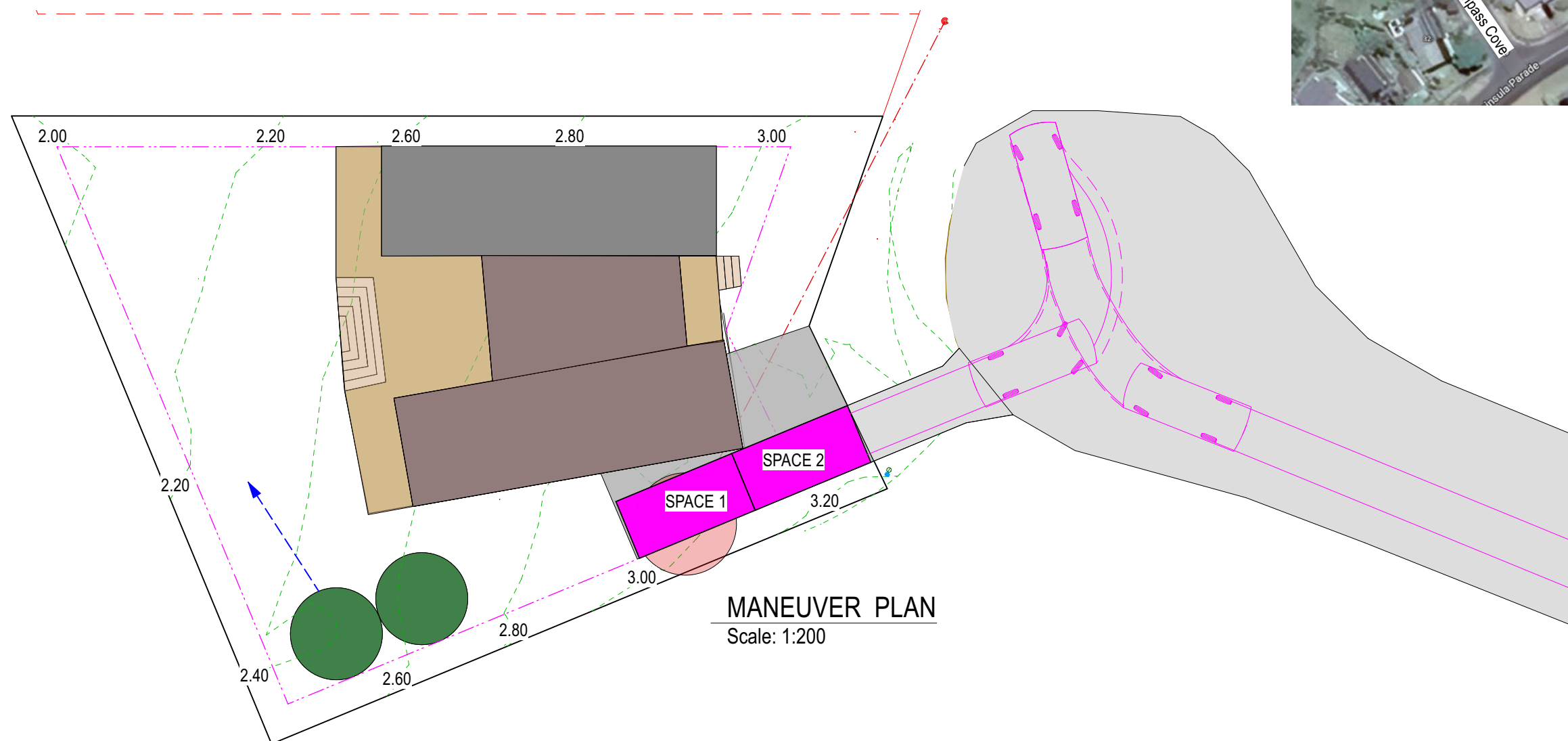
Rev: A	Corrected Lot no. & HTB position, relocated tanks	21/02/2023
RESOURCE CONSENT	21 February 2023 BCD-082 - 7 Fairwinds Place	

NOTES: All dimensions and underground service locations to be checked on site by contractor prior to the commencement of any work. Contractor to ensure all ground levels and height restrictions are correct and comply with Territorial Authority bylaws at all stages of construction. DO NOT SCALE from drawings, work from dimensions shown.

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APPROVED PLAN
Planner: jgraham
RC: 2230348-RMALUC
Date: 18/04/2023




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 Email jonathan@bcdesign.co.nz

New Dwelling @
Lot 146 DP 80368
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for Lee Eglinton & Keith Kerr

Wind zone	Very High	Sheet size
Corrosion zone	D	A3
Earthquake	1	
NZS3604:2011		
Drawn	Eng. ref.	
Jonathan Leech		
Sheet no.	A1.01	

RESOURCE CONSENT	21 February 2023 BCD-082 - 7 Fairwinds Place
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ELEVATION 1
Scale: 1:100



ELEVATION 1
Scale: 1:100



ELEVATION 3
Scale: 1:100



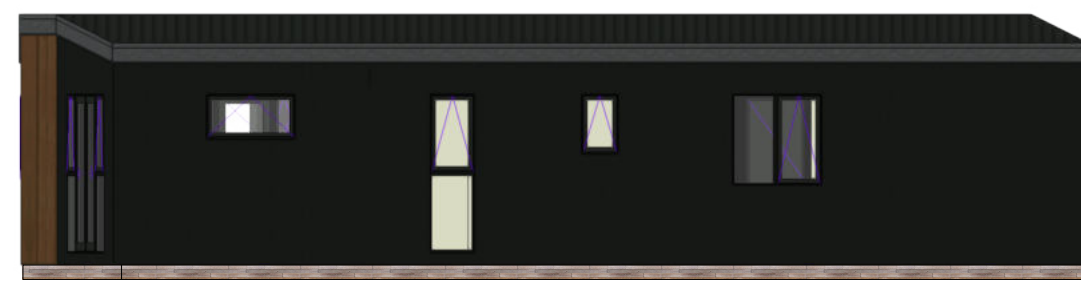
ELEVATION 3
Scale: 1:100

APPROVED PLAN

Planner: jgraham
RC: 2230348-RMALUC
Date: 18/04/2023



ELEVATION 2
Scale: 1:100



ELEVATION 4
Scale: 1:100

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New Dwelling @
Lot 146 DP 80368
7 Fairwinds Place, Hihi
for Lee Eglinton & Keith Kerr

Wind zone Corrosion zone Earthquake NZS3604:2011	Very High D 1	Sheet size A3
Drawn Jonathan Leech	Eng. ref.	
Sheet no.	A3.00	

Rev: A	Corrected HTB	21/02/2023
RESOURCE CONSENT	21 February 2023 BCD-082 - 7 Fairwinds Place	

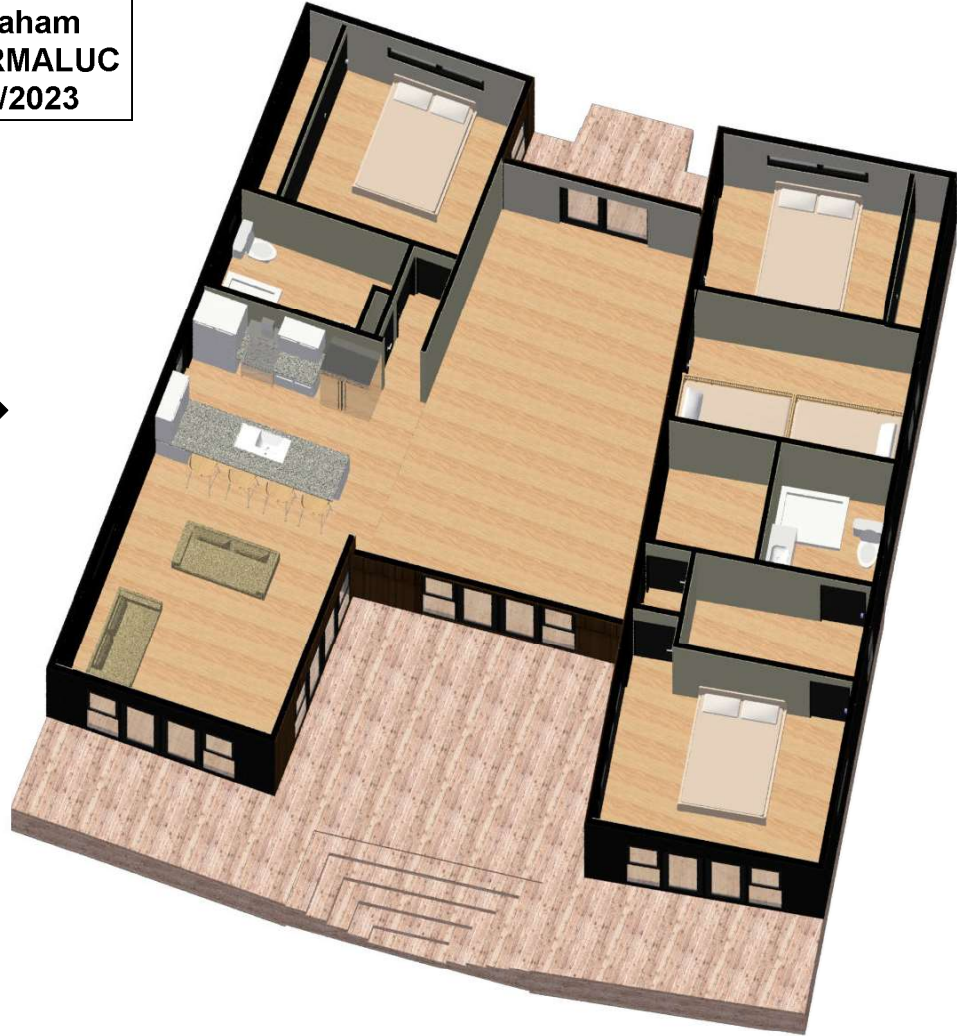
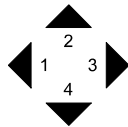
NOTES: All dimensions and underground service locations to be checked on site by contractor prior to the commencement of any work. Contractor to ensure all ground levels and height restrictions are correct and comply with Territorial Authority bylaws at all stages of construction. DO NOT SCALE from drawings, work from dimensions shown.



APPROVED PLAN
 Planner: jgraham
 RC: 2230348-RMALUC
 Date: 18/04/2023



FLOOR PLAN
 Scale: 1:100




B C Design Studio
 Architectural Designers



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 BP133708

Tel 09 426 3170
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New Dwelling @
 Lot 146 DP 80368
 7 Fairwinds Place, Hihi
 for Lee Eglinton & Keith Kerr

Wind zone	Very High	Sheet size
Corrosion zone	D	A3
Earthquake	1	
NZS3604:2011		
Drawn	Eng. ref.	
Jonathan Leech		
Sheet no.	A2.00	

RESOURCE CONSENT	15 December 2022 BCD-082 - 7 Fairwinds Place
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Coastal Hazard Assessment for
Proposed Residential Development
7 Fairwinds Place, Hihi
for
Keith Kerr

Haigh Workman reference 19 217

December 2019



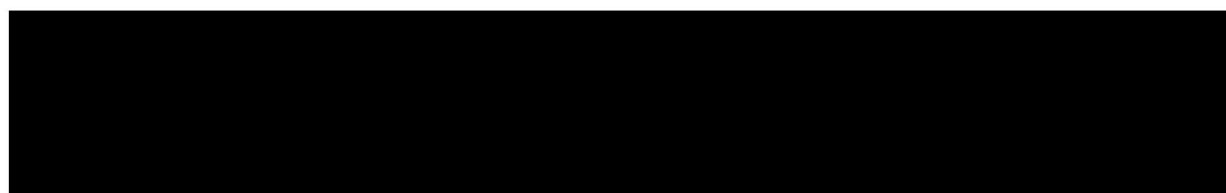
Revision History

Revision N ^o	Issued By	Description	Date
A	Sagar Harhare	First Issue	19 December 2019

Prepared By

Reviewed By

Approved By



Sagar Harhare

Civil Engineer

Tom Adcock

Senior Civil Engineer

John Papesch

Senior Civil Engineer

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Executive Summary

Haigh Workman Ltd was commissioned by Keith Kerr to undertake a coastal hazard assessment of land at 7 Fairwinds Place, Hihi.

It is proposed to have a residential dwelling on site and this report is to investigate the coastal erosion hazard to the property and potential mitigation measures available.

The flood hazard assessment recommends the final floor level of a dwelling be 0.5 m above the design 100-year ARI (1% AEP) flood level. The site is in a 100-year flood hazard zone. On this basis we recommend the finished floor level of the proposed dwelling should at 3.4 m OTP datum. Based on the flood risk to the site, the dwelling will need to be elevated above the ground level.

Whilst a safe floor level has been established, the 'land on which the building work is placed' is expected to be subject to a natural hazard (erosion and inundation) within a 100-year event. This is not within the lifetime of the building (50 years). Hence the council may require a notice under Section 72 of the Building Act 2004 should be registered on the title.

1 Introduction

1.1 Project Brief and Scope

Haigh Workman Ltd (Haigh Workman) was commissioned by Keith Kerr (the client) to undertake a coastal hazard assessment of land at 7 Fairwinds Place (the 'site'). This report presents the factual information available during the appraisal, interpretation of data obtained during fieldworks with site specific engineering recommendations relevant to the defined objectives.

The site currently slopes moderately from south east to north west. It is proposed to have a residential dwelling on site and this report is to investigate the coastal hazard and potential mitigation measures available.

This appraisal has been designed to report on coastal flood hazard and erosion process at the site and in particular their effects on the proposed development.

The objectives of this investigation were to:

- Establish the geological and environmental setting of the site;
- Assess available coastal flood and erosion data and reports;
- Provide engineering recommendations for long-term residential development of the site.

To achieve this, the scope of works conducted by Haigh Workman included:

- Review of GIS data, available geological and topographical maps;
- Review of Publish coastal hazard reports (Tonkin and Taylor Reports – dated 2016 and 2017);
- Preparation of this report with site specific engineering recommendations.



Figure 1 - Site Location

1.2 Applicability

This report has been prepared for the use of the Keith Kerr with respect to the particular brief outlined to us. This report is to be used by our Client and may be relied upon when considering coastal hazard advice. Furthermore, this report may be utilised in the preparation of building and/or resource consent applications with local authorities. The information and opinions contained within this report shall not be used in other context for any other purpose without prior review and agreement by Haigh Workman Ltd.

2 Site Description and Proposed Development

2.1 Site Description

Site Address: 7 Fairwinds Place, Hihi

Legal Description: Lot 146 DP 80368

Area: 0.0574Ha

The site is legally described as Lot 146 DP 80368 with a total land area of 574m². The property is rectangular in plan shape and is currently undeveloped. The site is a low-lying coastal property, with the ground surface having a gentle 1.0m fall to the north. The site has is surrounded by residential properties. Along the southern boundary is Fairwinds Place which is connects with Peninsula Parade. The Far North District Council GIS viewer and topographical survey indicate a Wastewater Manhole present on site and 100 mm diameter public wastewater pipeline running parallel with the south eastern boundary.

2.2 Proposed Development

Residential dwelling is proposed for the site, with areas of hardstand (driveway and car parking).

Should the proposed development vary from the proposals described above and/or be relocated outside of the investigated area, further investigation and/or amendments to the recommendations made in this report may be required.

3 Geology

3.1 Published Geology

- GNS Science Geological Memoir 1, 1996: “Geology of the Kaitaia Area”;
- GNS Sciences 1:250,000 scale map Sheet 1, 1996: “Kaitaia” (Rocks);
- NZMS Sheet 290 N04/05, 1:100,000 scale map, Edition 1, 1979: “Kaitaia- Rawene” (Soils);
- NZMS Sheet 290 N04/05, 1:100,000 scale map, Edition 1, 1982: “Kaitaia- Rawene” (Rocks).

The site is within the bounds of the GNZ Geological Map “Geology of the Kaitaia area”, 1:250,000 scale. The published geology shows the site to be underlain by Unconsolidated to poorly consolidated sand, peat, mud and shell deposits (estuarine, lacustrine, swamp, alluvial and colluvial) formation. An excerpt of the geological map is shown in Figure 2, with relevant units presented in Table 1.

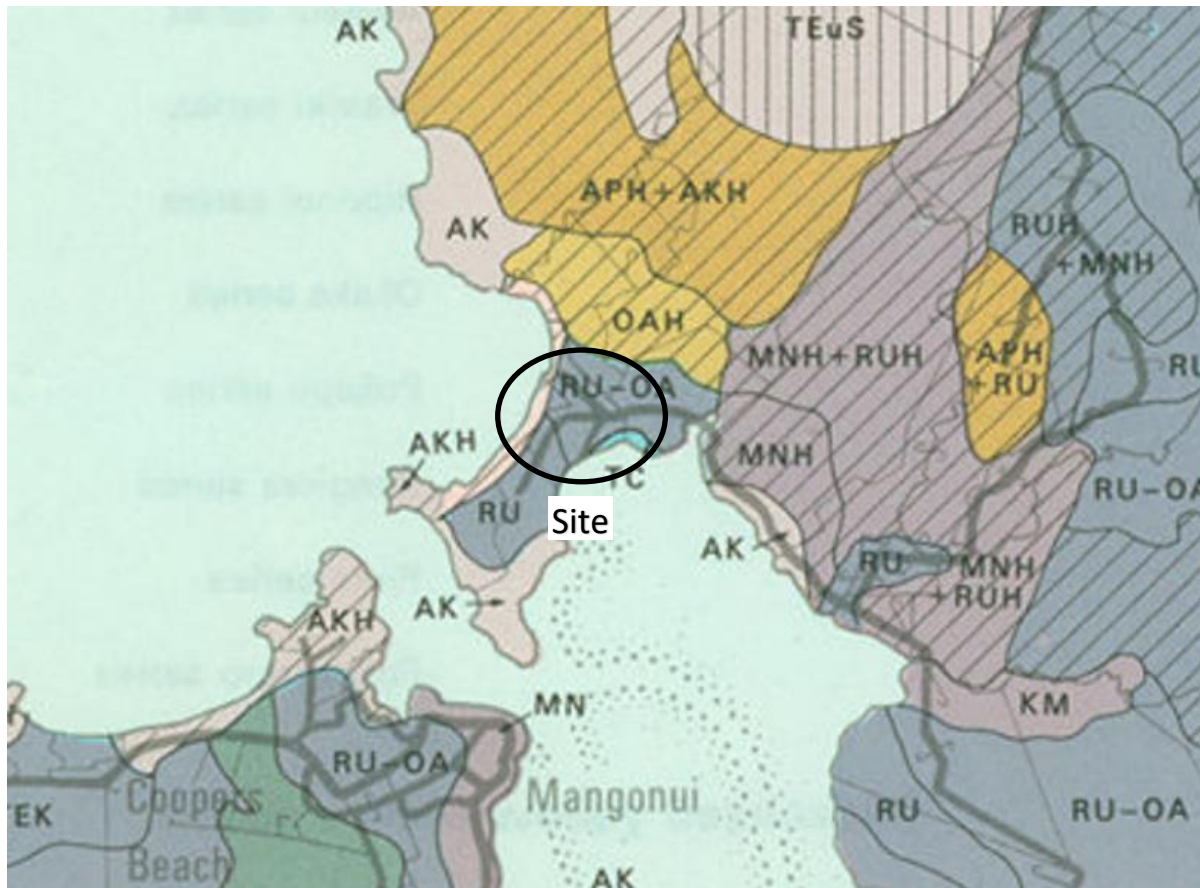


Figure 2 – NZMS 290 Sheet N04/05 Soil Map

Table 1 - Geological Legend

Symbol	Name	Description
RU	Rangiuru Clay	Well to moderately drained
OA	Okaka Clay and Silty Clay	Imperfectly to moderately drained
AK	Awapuku Clay Loam	Well to moderately well drained

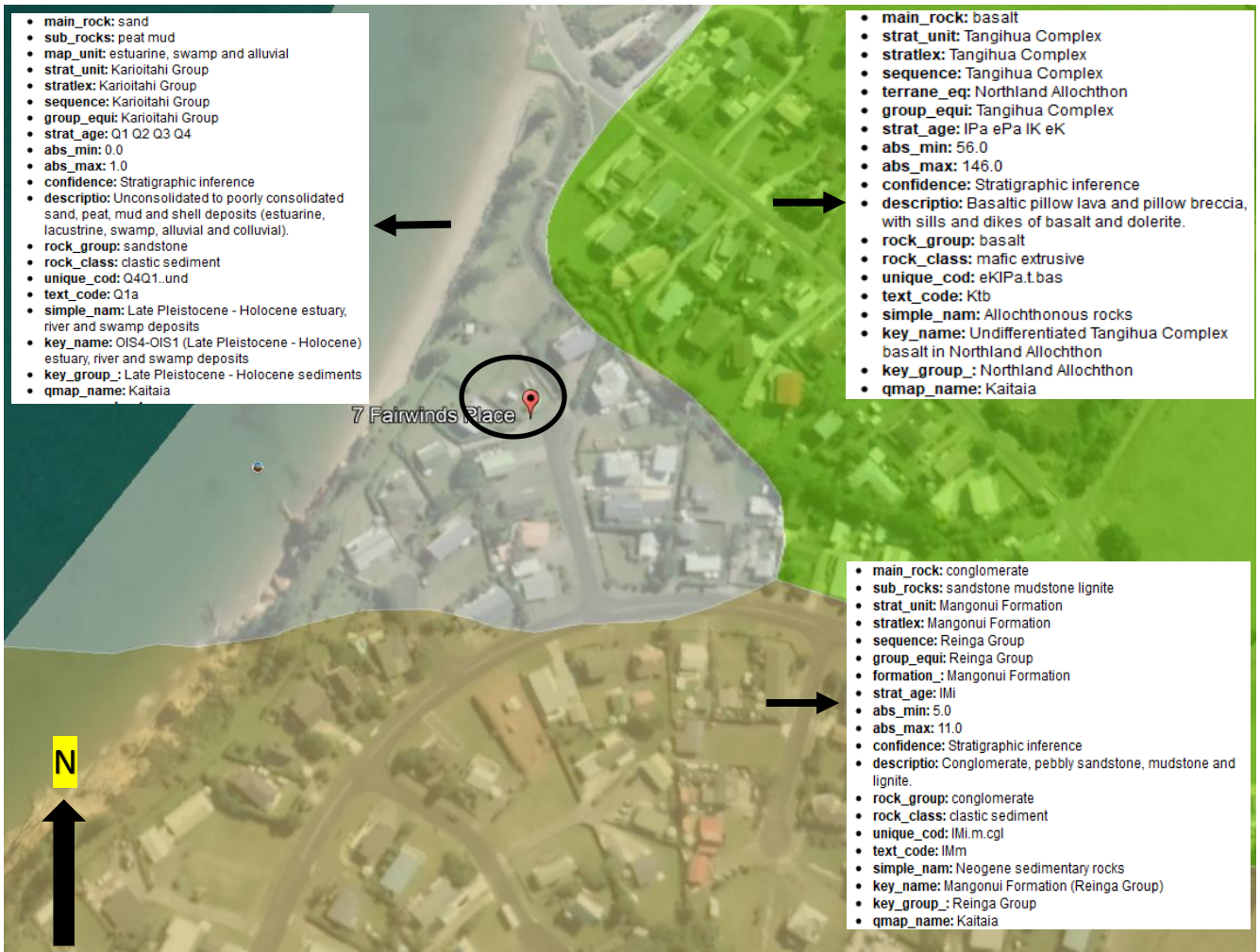


Figure 3 – GNS Sciences 1:250,000 scale map

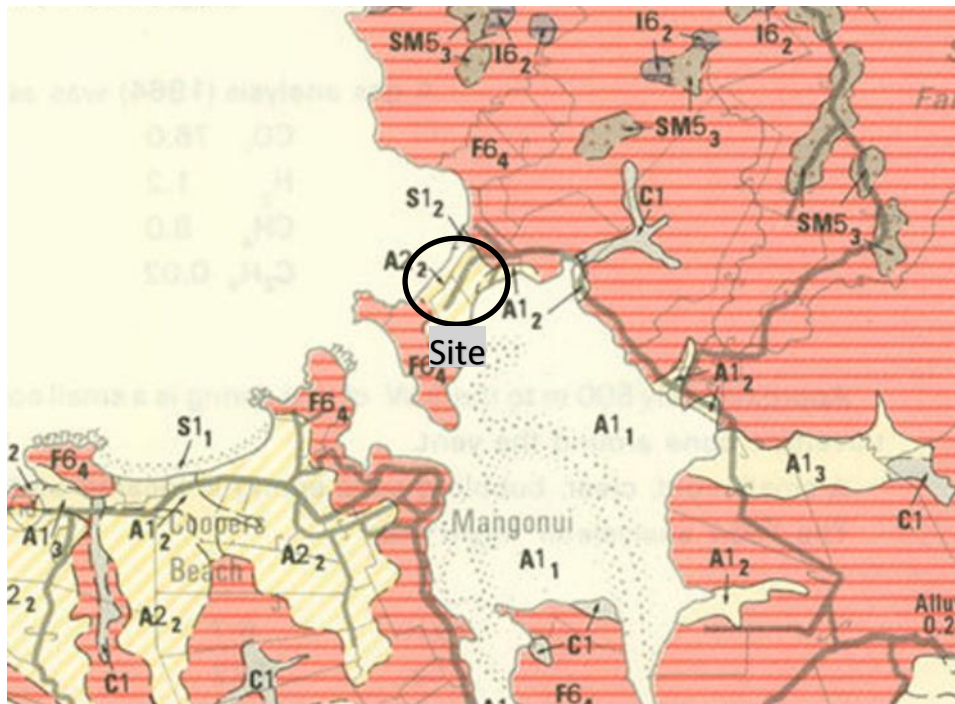


Figure 4 – NZMS Kaitaia – Rawene Rock Map

Table 2 - Geological Legend

Symbol	Name	Description
S1 ₂	Sand	Feldspathic with some quartz, forming moving and partially fixed dunes, unconsolidated and unweathered.
A2 ₂	Alluvium	Mud, sand, gravel, lignite, carbonaceous sandstone and mudstone. Rare iron oxide pans, forming dissected terrace surfaces upto 150m above sea level, very soft to moderately soft. Weathered to multicoloured clay with some rock fragments to depths of 10m surfaces are modified by erosion.
F6 ₄	Basalt and Dolerite	Very fine to medium grained altered, crystalline basalt and dolerite with some breccia (B5 ₂) with rare blocks of S5 ₂ , M4 ₁ and L5 ₂ , closely to moderately fractured with some curved jointing; hard to very hard; weathered to soft brown clay to depths of 30m

4 Regulatory Framework

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 or slippage. We assess the susceptibility of this site to these potential hazards as;

Erosion (including coastal erosion, bank erosion, and sheet erosion)	Yes
Falling debris (including soil, rock, snow, and ice)	No
Subsidence (vertical settlement)	No, with careful engineering
Inundation (including flooding, overland flow, storm surge, tidal effects, and ponding)	Yes
Slippage	No

The specific hazards listed as potentially applicable to this site are discussed further below.

4.1 Far North District Plan

From figure 5, it can be seen that the site is in the Coastal Erosion Hazard Zone 2 (100 years). As per Far North District Plan,

12.4.6.2.1 New Buildings & Additions to Existing Buildings in Coastal Hazard 2 Areas

The erection of new buildings/structures and additions to existing buildings/ structures that increase the external dimensions, on land identified on the Coastal Hazard maps (Maps CH 1-17) as lying within a Coastal Hazard 2 Area, are controlled activities provided a report from a person suitably qualified in coastal processes is lodged with the Council in respect of the proposed development. In order for the activity to be regarded as a controlled activity, the report shall specify that the design of the new building/structure or addition will not increase the risk to people, property or the environment.

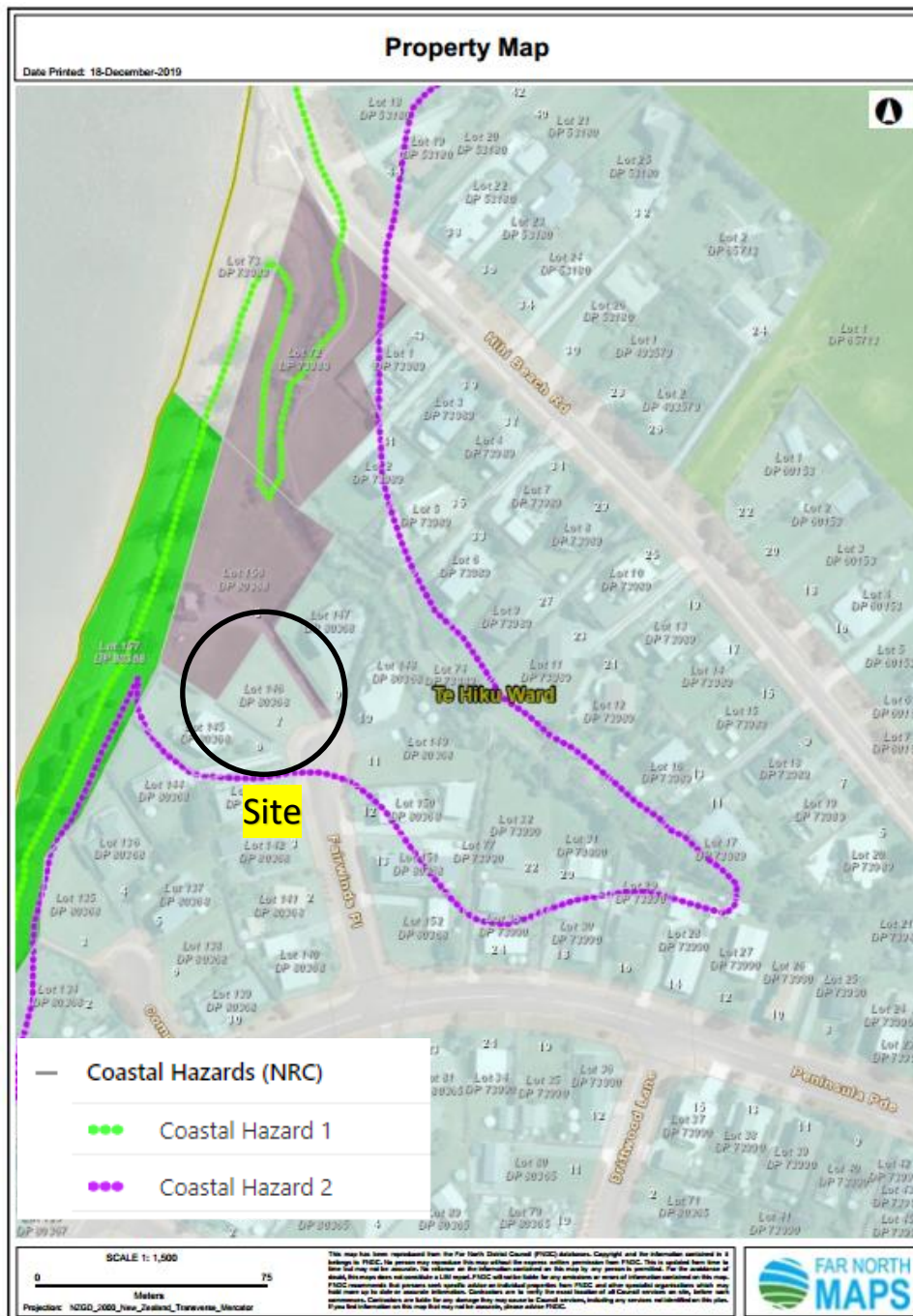


Figure 5 – Coastal Erosion Hazard Zone (Source: Far North District Plan)

4.2 Northland Regional Policy Statement

The Operative Regional Policy Statement (RPS) for Northland section 7.1.7(5) specifies:

<p>(5) The regional and district councils shall ensure that within the coastal environment:</p> <p>(a) Any new habitable dwelling has a minimum floor level of 3.3m above One Tree Point datum on the east coast and 4.3m above One Tree Point Datum on the west coast. New non-habitable buildings will have a minimum floor level of 3.1m above One Tree Point datum on the east coast and 4.1m on the west coast; and</p> <p>(b) An additional allowance for wave run-up shall be assessed over and above the requirements above for exposed east coast locations where ground elevation is less than 5m above One Tree Point datum, and for exposed west coast locations where ground elevation is less than 6m above One Tree Point datum.</p> <p>(c) Clauses (a) and (b) do not apply to:</p> <p>i) Non-habitable buildings not designed for habitation or commercial use and where the potential impact of the building being materially damaged or destroyed by a coastal hazard event (including the replacement cost) is minor (e.g. pump sheds, car ports, farm sheds and public toilets); and</p> <p>ii) Non-habitable buildings that have a functional need to be located in the coastal marine area (e.g. boatsheds);</p>

How minimum floor levels are derived in the RPS;

Condition	East Coast	West Coast
Assessed 1% AEP sea level	1.8m OTP	2.8m OTP
Allowance for Sea Level Rise (to 2115)	1.0m	1.0m
Freeboard (habitable dwellings)	0.5m	0.5m
Freeboard (non-habitable buildings)	0.3m	0.3m

5 Coastal Erosion Hazard

The Coast of Hihi is identified as at risk of Coastal erosion by Northland Regional Council (NRC) and by Far North District Council (FNDC). Tonkin and Taylor Ltd were commissioned by NRC to assess the Coastal Flood and Erosion Hazard Zones for selected sites in Northland region. Tonkin and Taylor have prepared a detailed report for Coastal Flood Hazard Zones (dated May 2016) and Coastal Hazard Erosion Zones (dated December 2017). They have also prepared separate reports for assessment of different sites regarding Coastal Erosion Hazard. Coastal erosion report for Hihi site has been attached in Appendix to this report. The same reports have been referred to for making comments regarding Coastal Erosion Hazard to our site at 7 Fairwinds Place in Hihi.

The figure below indicates that the site is in 24E cell zone in the Tonkin and Taylor report. Also, the figure indicates the presence of erosion protection structure for 24E cell.

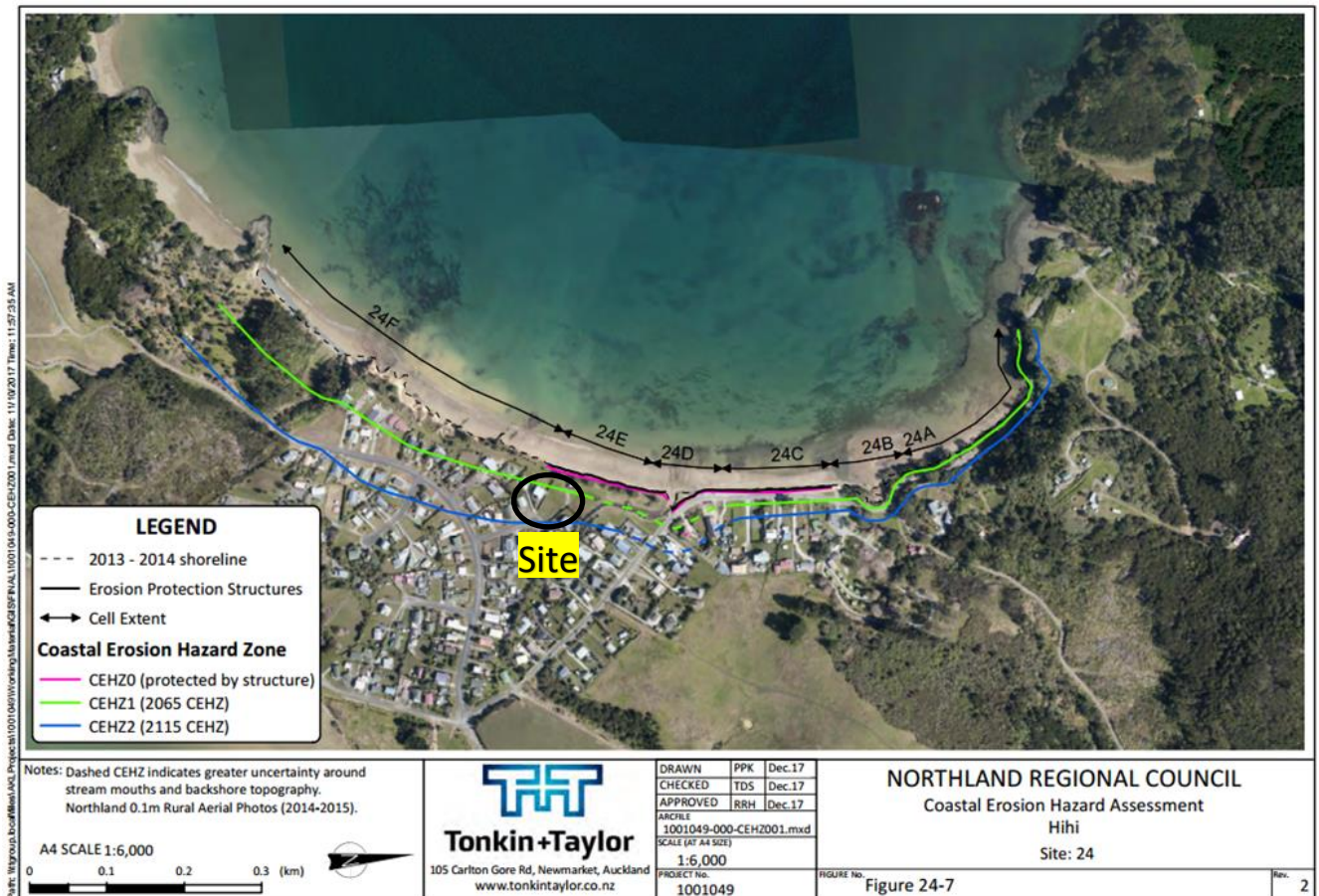


Figure 6 – Coastal Erosion Hazard Zone lines (Source: Tonkin Taylor Erosion Hazard report for Site Hihi)



Figure 7 – Coastal Erosion Hazard Zone lines (Source: Northland Regional Council)

Table 24-2 Coastal Erosion Hazard Zone Widths

Site		24. Hihi																		
Cell		24A			24B			24C			24D			24E			24F			
Time		2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115	
Probability of CEHZ (m) Exceedance	Min	0	0	0	0	-2	-3	-7	-13	-20	-6	-18	-31	-7	-19	-32	0	-7	-15	
	99%	0	0	-1	0	-2	-5	-8	-15	-22	-7	-21	-37	-8	-22	-37	0	-10	-22	
	95%	0	-1	-2	0	-3	-6	-9	-16	-24	-8	-23	-40	-9	-23	-40	0	-12	-27	
	90%	0	-1	-3	0	-3	-7	-9	-17	-25	-9	-24	-41	-10	-24	-42	0	-14	-31	
	80%	0	-2	-4	0	-4	-9	-10	-18	-26	-10	-25	-44	-11	-26	-44	0	-16	-36	
	70%	0	-2	-5	0	-4	-10	-11	-19	-27	-10	-26	-45	-11	-26	-46	0	-17	-40	
	66%	0	-2	-5	0	-4	-10	-11	-19	-27	-11	-26	-46	-11	-27	-46	0	-18	-41	
	60%	0	-3	-5	0	-5	-11	-11	-20	-28	-11	-27	-47	-12	-27	-47	0	-19	-44	
	50%	0	-3	-6	0	-5	-12	-12	-20	-29	-12	-27	-48	-12	-28	-49	0	-21	-48	
	40%	0	-3	-7	0	-6	-13	-12	-21	-29	-12	-28	-50	-13	-29	-50	0	-23	-52	
	33%	0	-3	-7	0	-6	-14	-13	-21	-30	-13	-28	-51	-13	-29	-51	0	-24	-56	
	30%	0	-4	-7	0	-6	-14	-13	-21	-30	-13	-29	-51	-13	-29	-52	0	-25	-57	
	20%	0	-4	-8	0	-7	-16	-14	-22	-31	-13	-30	-53	-14	-30	-54	0	-27	-64	
	10%	0	-5	-9	0	-8	-18	-15	-23	-33	-14	-31	-56	-15	-32	-56	0	-31	-73	
	5%	0	-5	-10	0	-8	-20	-15	-24	-34	-15	-32	-58	-16	-33	-59	0	-33	-81	
	1%	0	-6	-12	0	-10	-24	-16	-25	-35	-16	-34	-63	-17	-35	-63	0	-39	-98	
	Max	0	-7	-14	0	-14	-30	-17	-27	-38	-17	-37	-71	-17	-39	-71	0	-53	-138	
	CEHZ1		-2*			-4*			-19			-26			-27			-18*		
	CEHZ2		-10*			-20*			-34			-58			-59			-81*		

*Updated using cliff projection methodology, so distance to future cliff toe position has been tabulated. Actual CEHZ width will be greater depending on cliff height and stable slope angle.

Figure 8 – Coastal Erosion Hazard Zone Widths (Source: Appendix C - Tonkin and Taylor Report)

From the figure 6 it can be seen that our site is in 24E cell extent. For cell 24E the coastal erosion hazard zone (CEHZ) width is estimated in Table 3.3.

Table 5.1 – Summary of Published CEHZ width

Probability of CEHZ Exceedence	Year 2015	Year 2065	Year 2115
95%	9 m	23 m	40 m
66%	11 m	27 m	46 m
5%	16 m	33 m	59 m

The Northland Regional Council has adopted two coastal erosion hazard zone (CEHZ) widths:

- CEHZ1: likely erosion zone = 66% probability of being exceeded by 2065
- CEHZ2: potential erosion zone = 5% probability of being exceeded by 2115

It is recommended that building set-backs be based on the 5% exceedance probability; that is

- For buildings with 50-year life: 5% probability of being exceeded by 2065: 33 m set-back, and;
- For buildings with 100-year life: 5% probability of being exceeded by 2115: 59 m set-back.

The distance to the site from the current shore line is approximately 40m. From figure 7, it can be seen that the site is currently protected by an existing seawall structure. There is a high probability of the site being eroded by 2115.

For this site, there is less than 5% probability of erosion by year 2065 and greater than 95% probability of erosion by year 2115.

From the setback distances mentioned in the above table 3.3, it is recommended to have a habitable dwelling on site with 50-year life period. This period can be extended in the future with review of the shoreline and coastal erosion data available in future. However, we recommend that the building be designed so that it can be removed in 50 to 100 years when coastal erosion reaches the site.

6 Coastal Flood Hazard Level

The report by Tonkin & Taylor Ltd 'Coastal Flood Hazard Zones for Selected Northland Sites' updated December 2017 evaluated the factors that contribute to high tides:

- astronomical tide,
- medium term fluctuations in sea level,
- long-term sea level change,
- low barometric pressure and
- wave set-up.

On the Northland Regional Council GIS maps, the site is identified as at risk of coastal inundation as shown below:

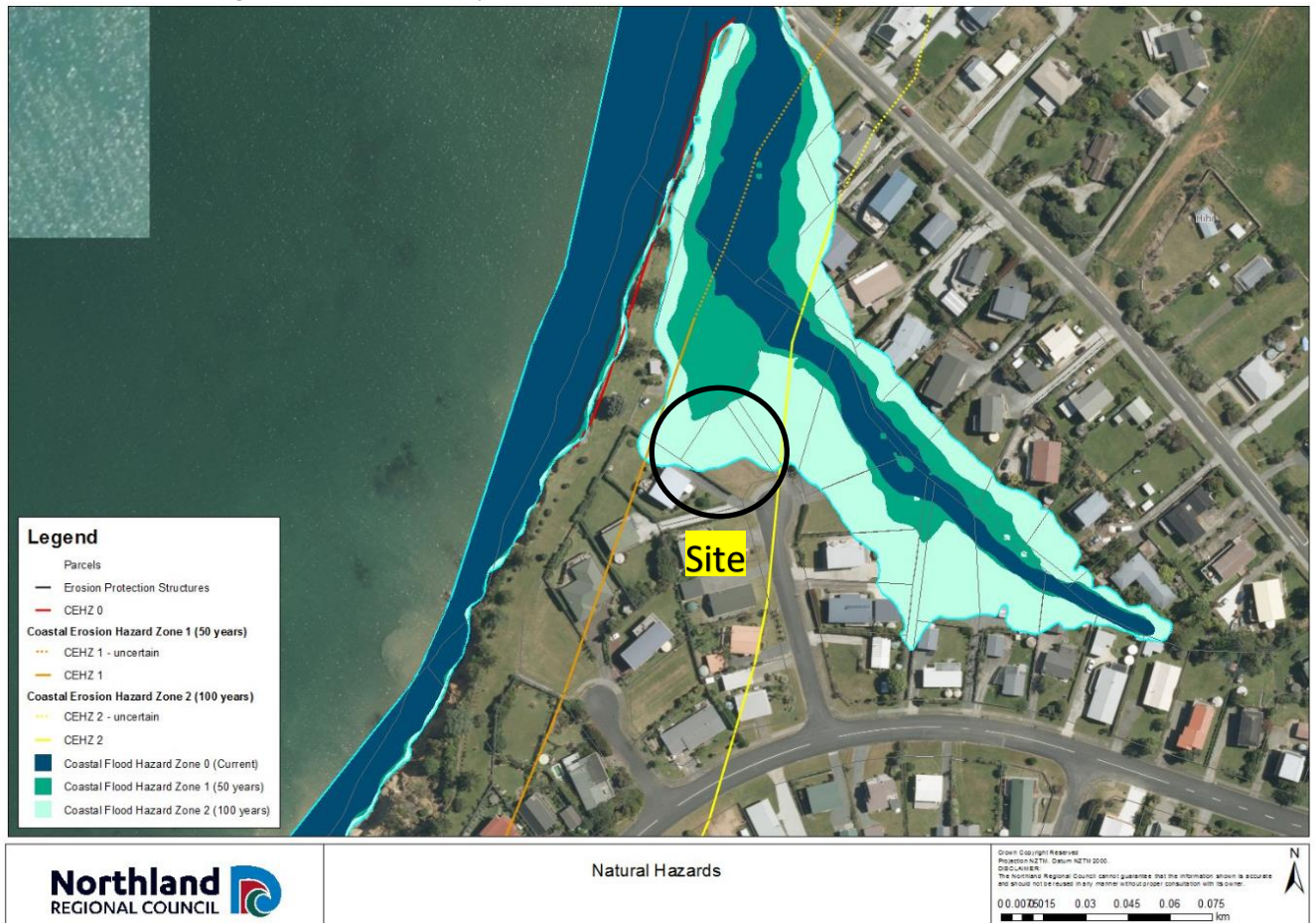
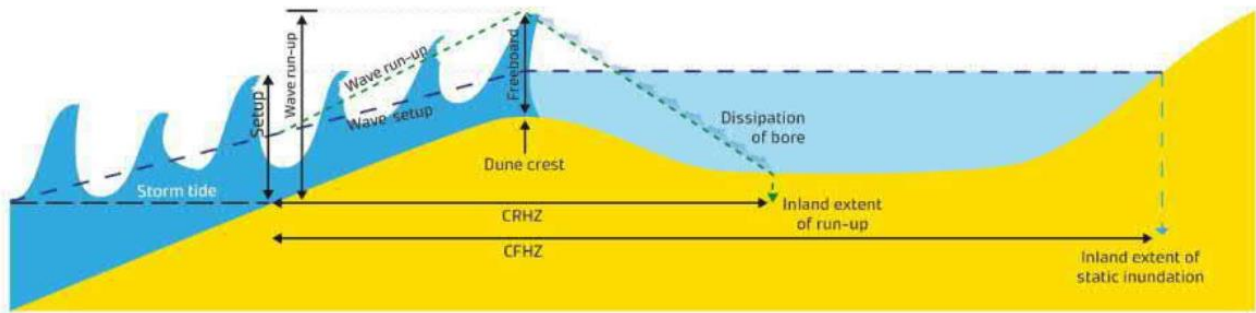


Figure 9 – Coastal Flood Hazard Zone (Source: Northland Regional Council)



**Figure 10 – Definition sketch for Coastal Flood Hazard Zone (CFHZ) and Coastal Run-up Hazard Zone (CRHZ)
(Source: Appendix C - Tonkin and Taylor Report)**

The 1% AEP combined storm tide levels were estimated at various Northland sites. For open and sheltered coasts at Hihi, the table below estimates a 1% AEP storm tide level and 1.0 m sea level rise by 2115.

Site		Type	Cell	MHWS (m OTP)	Current 1% AEP (m OTP)			2065 2% AEP (m OTP)			2115 1% AEP (m OTP)		
No.	Name				Storm tide	Static WL	Run-up level	Storm tide	Static WL	Run-up level	Storm tide	Static WL	Run-up level
33	Whangaroa Harbour (Totara North)	Sheltered		1.13	1.6	1.8		2.0	2.1		2.6	2.8	
34	Whangaroa Settlement (34A Whangaroa Settlement; 34B Matangirau)	Sheltered	A	1.13	1.6	1.8		2.0	2.1		2.6	2.8	
		Sheltered	B	1.13	1.6	1.7		2.0	2.0		2.6	2.7	
35	Kaeo Estuary	Sheltered		1.13	1.6	1.8		2.0	2.1		2.6	2.8	
36	Pupuke Estuary	Sheltered		1.13	1.6	1.8		2.0	2.2		2.6	2.8	
37	Taupo Bay	Open coast		0.99	1.6	2.3	5.0	1.9	2.6	5.2	2.6	3.3	6.0
38	Hihi	Open coast	A	1.00	1.6	1.9	3.8	1.9	2.2	4.0	2.6	2.9	4.8
		Sheltered	B	1.00	1.6	1.7		1.9	2.1		2.6	2.7	

Figure 11 –Storm tide and extreme water levels (Source: Appendix C - Tonkin and Taylor Flood Hazard Report)

6.1 Wave run up

Wave run-up occurs as waves travel across the surf zone and are then carried by momentum above the still water level until such forces are exceeded by gravity. Due to lack of data in sheltered coastal environments, wave run up is not calculated for sheltered coasts. In this case, we assume the site is an open coast and use the formula below to calculate the wave run up distance.

$$X = \frac{\sqrt{R-Y_0} \cdot A(1-2m) \cdot gT^2}{5\sqrt{gT^2}}$$

Where,

X = Wave run-up attenuation distance (m)

R = Wave run-up level including the storm tide (m RL)

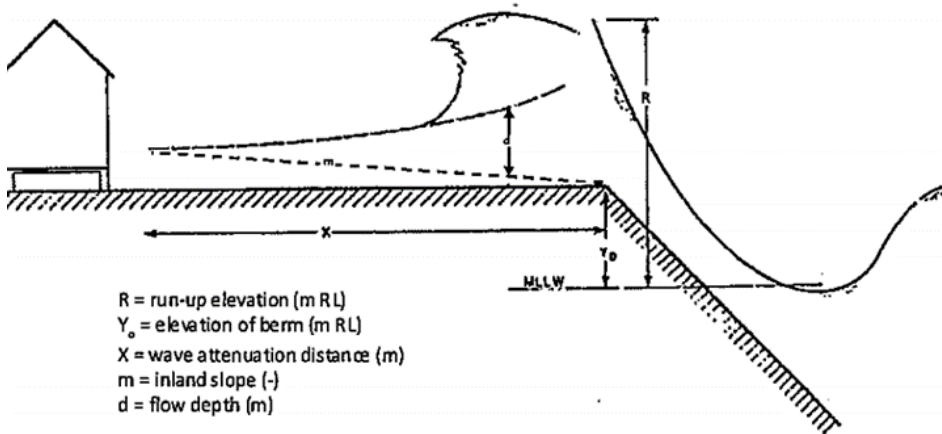
Y_0 = Dune crest elevation (m RL)

T = Wave period (use T_p (s) for 1% exceedance event in Table 2-4 for relevant location)

$g = 9.81 \text{ m/s}^2$

A = Inland slope factor (default = 1, can be adjusted at own preference)

m = Positive upward inland slope valid for $-0.5 < m < 0.25$ (e.g. for 1(V):10(H), $m = 0.1$)



Using the formula,

$$X = \frac{\sqrt{R - Y_0} \cdot A(1 - 2m) \cdot gT^2}{5\sqrt{gT^2}}$$

Table 6.1 – Values for calculating the wave run up for current scenario

	Value	Units	Assumptions
R	3.8	m	From figure 11 – Wave run up level
Y_0	1	m	Dune crest elevation
A	1		By formula
m	0.034		Slope calculated from survey data available
g	9.81	m/s	By formula
T	10.8	s	From table 2.4 of Tonkin Taylor report

In current scenario the wave run up level is 3.8m, dune crest elevation can be assumed zero but a conservative value of 1m has been assumed. For this scenario, the wave attenuation distance calculated is 10.5m. From figure 7 it can be seen that the site is approximately 39m from the current shoreline.

Table 6.2 – Values for calculating the wave run up for 50-year event

	Value	Units	Assumptions
R	4	m	From figure 11 – Wave run up level
Y ₀	2	m	Dune crest elevation
A	1		By formula
m	0.067		Slope calculated from survey data available
g	9.81	m/s	By formula
T	10.8	s	From table 2.4 of Tonkin Taylor report

In a 50-year event, the shoreline will be approximately 15m from the site. There will be change of contours and the crest elevation can be assumed 2m in this case. The wave run up level is 4m. The site slopes northwest. In a 50-year event, the site will have very small inland slope. After analysis, the wave attenuation distance calculated is 8.5m. The site is approximately 15m from the 50-year erosion hazard zone shoreline.

As the erosion figures indicate, in a 100-year event, the shoreline would have surpassed the site, so further calculations were not considered at this stage. Calculations presented in this section of the report represent conservative values. To arrive at a more accurate distances, a detailed wave run up study would be required.

6.2 Floor Level Assessment

The site is situated currently in a 100-year flood level with the static water level of 2.9m. Hence it is recommended to have the floor level of the dwelling atleast 500mm above the flood level.

6.2.1 Statutory Guidelines for Buildings

FNDC Engineering Standards & Guidelines Clause 4.3.2.5.2 specifies all habitable buildings shall be set above the 100-year return period flood level plus 500 mm. There is no standard for non-habitable buildings.

The New Zealand standard NZS4404:2010 'Land Development and Subdivision Engineering' states;

4.3.5.2 Freeboard

The minimum freeboard height additional to the computed top water flood level of the 1% AEP design storm should be as follows or as specified in the district or regional plan:

Freeboard	Minimum height
Habitable dwellings (including attached garages)	0.5 m
Commercial and industrial buildings	0.3 m
Non-habitable residential buildings and detached garages	0.2 m

The minimum freeboard shall be measured from the top water level to the building platform level or the underside of the floor joists or underside of the floor slab, whichever is applicable.

The Northland Regional Policy Statement sets similar standards as NZS4404, except the freeboard for non-habitable buildings is increased to 300mm.

We recommend adopting the more conservative of these standards, that is freeboard above the 2115 1%AEP Flood event of:

- Habitable dwellings (including attached garages) 0.5 m
- Non-habitable residential buildings and detached garages 0.3 m

6.2.2 Recommended Minimum Floor Level

The design 100-year ARI (1% AEP) flood level at the site is allowing for 1.0m sea level rise by 2115.

Table 6.3 – Recommended Minimum Levels

Development	Recommended Criterion	Recommended minimum level (m OTP datum)
Residential (minimum floor level)	0.5m above 2115 1% AEP Flood Level	3.4
Non-habitable buildings (minimum floor level)	0.3m above 2115 1% AEP Flood Level	3.2
Parking areas	2115 1% AEP Flood Level	2.9

7 Tsunami

On the Northland Regional Council GIS maps, the site is identified as at risk of coastal inundation as shown below:

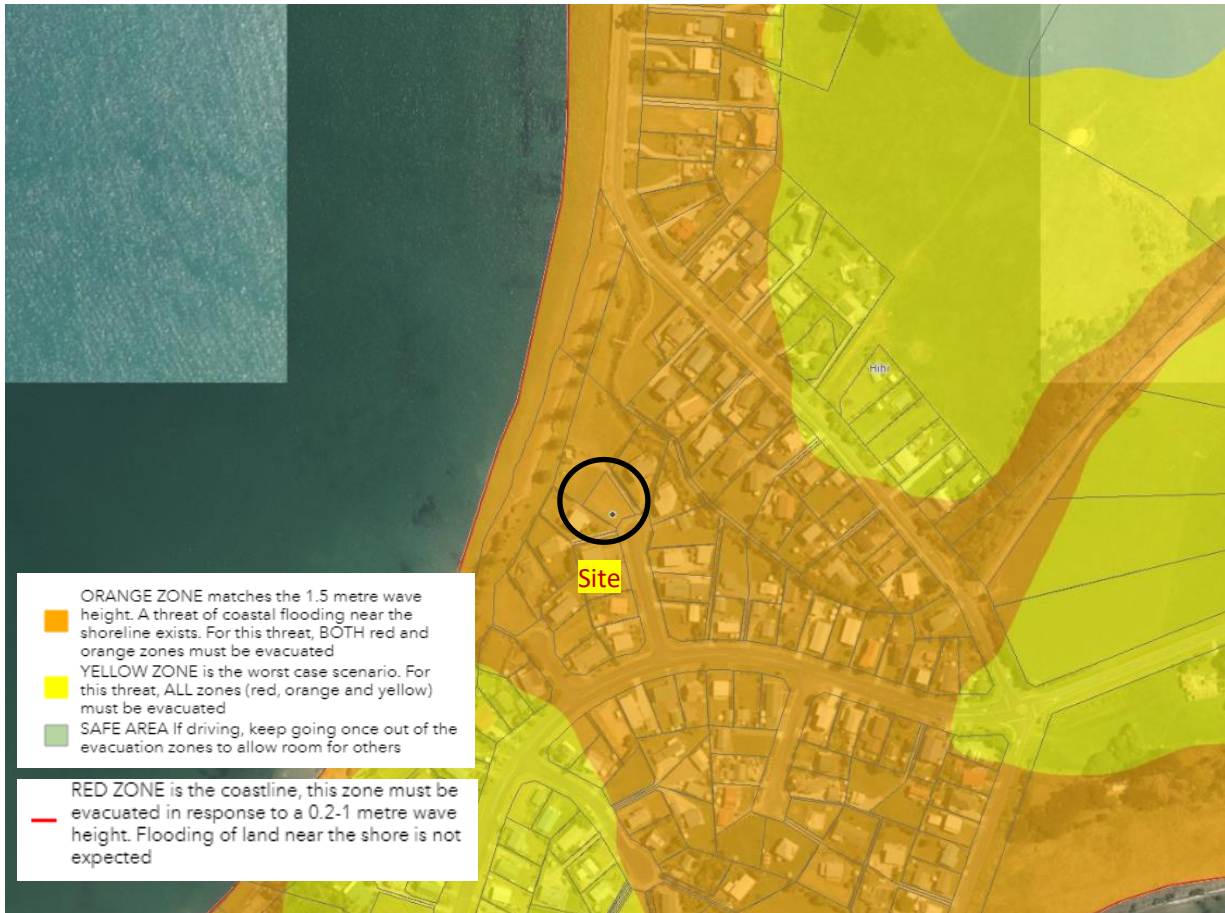


Figure 12 – Tsunami Evacuation Zones

The site is indicated to be within an orange Tsunami zone. This indicates a 1.5m wave height.

The Northland Regional Council commissioned a number of reports by NIWA on the tsunami risk along the Northland coast. The report relevant to this site is a June 2006 report by NIWA entitled 'Tsunami Hazard Assessment Baseline for the Northland Region'.

The report investigated historic and paleo tsunami records which indicated:

- Distant events from South America generate moderately large tsunamis along the east coast.
- Distant/regional events from other sources such as Indonesia and the north (Fiji Basin/Solomon Sea) are poorly represented or not at all. They are unlikely to be large magnitude events – probably moderate but would be more likely to affect the whole coastline.
- A large regional and/or local tsunami has not occurred in historic time but appears to be recorded in the paleo tsunami record. Some local and/or regional sources are likely to produce large (>5m) tsunamis on all or part of the region's coastline. The travel times for such events will not exceed 3 hours.

- Four moderate events in 150 years yield a return period of one every 37.5 years for the east coast only. There is insufficient data to calculate a similar return period for the north or west coasts.

In summary, a moderate hazard and risk is suggested for most of the northwest and east coast, a high hazard and moderate risk for the north, and a low hazard and risk for the west (NIWA Report Figure 3).

8 Building Act

8.1 Building Act Section 71

Building on land subject to natural hazards

Under Section 71(1) of the Building Act 2004, A building consent authority must refuse to grant a building consent for construction of a building, or major alterations to a building, if

- a) the land on which the building work is to be carried out is subject or is likely to be subject to 1 or more natural hazards*
- b) the building work is likely to accelerate, worsen, or result in a natural hazard on that land or any other property*

However, under Section 71(2), the Section 71(1) restriction does not apply if the Building Consent Authority is satisfied that adequate provision has been made, or will be made to:

- (a) protect the land, building work, or other property referred to in that subsection from the natural hazard or hazards; or*
- (b) restore any damage to that land or other property as a result of the building work.*

The Site contains natural hazards that warrant consideration under Section 71(1) of the Building Act 2004. The critical potential hazard at this site is coastal flooding in a 100-year event.

A building can be protected from inundation with the safe floor level provided by this report. We consider that a Building Consent could be issued without conditions if the minimum floor levels are based on recommended freeboard above the 1% AEP 2115 published flood levels.

The proposed buildings will not accelerate, worsen, or result in a natural hazard on the property or any other properties.

Our assessment of Section 71(2) (a) for “adequate provision” as listed in the FNDC Natural Hazards Guidance Notes, is as follows;

Assessment criterion	Assessment
Confirmation that suitable mitigation of the relevant natural hazards has been or will be achieved on the site	<p>Floor level for a dwelling set appropriately above flood hazard in accordance with FNDC Engineering requirements being 500 mm above the 100-year ARI flood.</p> <p>Non-habitable buildings can be set with appropriate freeboard above the 100-year ARI flood level or be designed to withstand flooding.</p>
Confirmation that the proposed design incorporates appropriate protection of the land, the building work, or other property	Flood velocities will be low and the land will not be damaged by coastal flooding.

and/or that any damage to the land or other property will be restored	Buildings can be protected from flooding either by adequate freeboard above flood levels or, in the case of non-habitable buildings, being designed to withstand flooding without damage. Sea level rise will occur gradually and can be monitored. Buildings can be lifted or removed if necessary.
Producer Statement (PS1) certification of the design	A PS1 may be provided to accompany a building consent application once final development plans are completed for Engineering review
Assessment of compliance with the NZ Building code	The FNDC Engineering standards are more stringent than the performance requirement of the Building Code clause E1 with regard to return period. Therefore, the floor level complies with a factor of safety.

8.2 Building Act Section 72

Building consent for building on land subject to natural hazards must be granted in certain cases

Despite section 71, a building consent authority that is a territorial authority must grant a building consent if the building consent authority considers that

- a) the building work to which an application for a building consent relates will not accelerate, worsen, or result in a natural hazard on the land on which the building work is to be carried out or any other property; and*
- b) the land is subject or is likely to be subject to 1 or more natural hazards; and*
- c) it is reasonable to grant a waiver or modification of the building code in respect of the natural hazard concerned*

In the situation of the Council considering land on which a building is placed to be subject or likely to be subject to a natural hazard a Section 72 notice is registered on the title. A Section 72 notice may affect the owner's ability to obtain appropriate insurance cover.

Whilst a safe floor level has been established, the 'land on which the building work is placed' is expected to be subject to a natural hazard (erosion and inundation) within a 100-year event. This is not within the lifetime of the building (50 years). Hence the council may require a notice under Section 72 of the Building Act 2004 should be registered on the title.

Appendix A – Drawing

Drawing No.	Title	Scale
19 217/01	Site Location Plan	1:1000
	Survey Plan	

NOTES:
 1. LOT BOUNDARIES AND AERIAL PHOTO INFORMATION TAKEN FROM LAND INFORMATION NEW ZEALAND (LINZ).

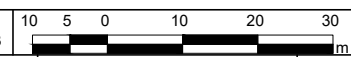
F
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Issue	Date	Revision
A	10/12/2019	FIRST ISSUE

DWG	SITE LOCATION PLAN		
Scale	1:1000 @A3	Date	10/12/2019
Drawn	SRH	Checked	JP
Approved	JP		
File	X:\19_JOBS\19_217_KEITH_KERR\ENGINEERING\REPORT\19_217_SITE_PLAN.DWG		



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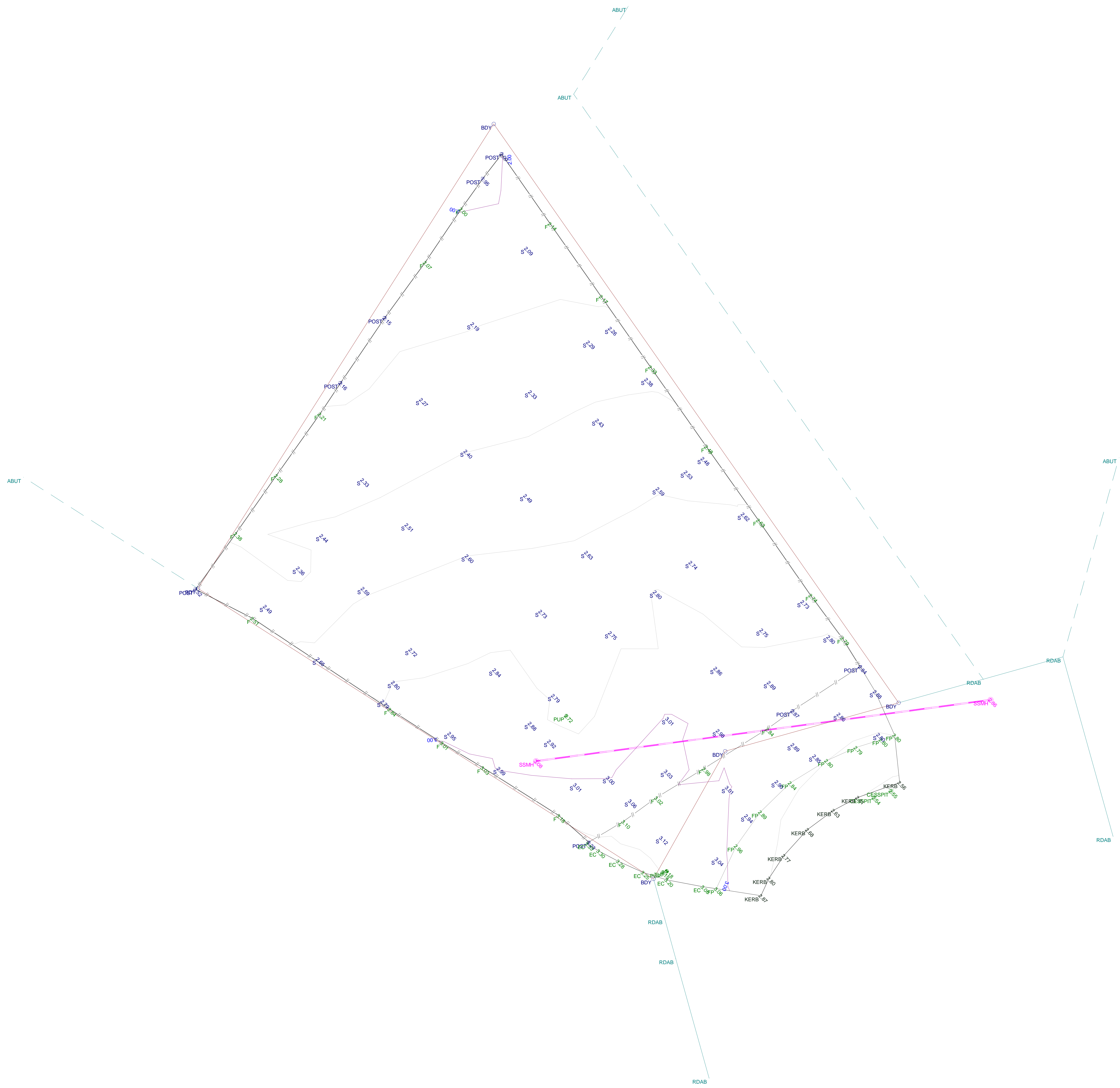
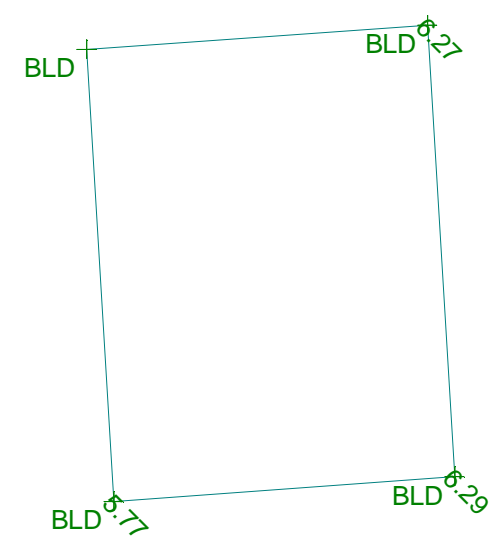
6 Fairway Drive
 Kerikeri, B01

T: 09 407 8327
 F: 09 407 8378
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Project	COASTAL HAZARD REPORT	
Client	7 FAIRWINDS PLACE, HIHI	
Client	KEITH KERR	
Project No.	19 217	RC no.

DWG No.	P1
Sheet No.	1 of 1



Appendix B – Tonkin and Taylor Coastal Erosion Hazard Site Report

24 Hihi

Description and geomorphology

Hihi is located at the southern end of Doubtless Bay, approximately 29 km east of Kaitiaki.

The site is approximately 1.3 km long situated between Rangitoto Point in the south and Waitetoki Point in the north.

The northern 200 m of the site comprises a boulder beach shoreline backed by Basaltic Allocthon rock (cell 24A). A rock revetment exists at the base of the cliff bank along the entire 200 m. Waiaua Stream cuts through the shoreline at the southern extent of this rock unit.

The next 400 m of shoreline comprises unconsolidated beach (cell 24C to 24E), of which approximately 150 m is currently fronted by a vertical grouted rock seawall. Another stream mouth is located within the unconsolidated beach which has a localised effect on shoreline position. A boat ramp is located on the northern side of this stream. A low crested seawall comprising cemented sand exists along the beach shoreline south of the stream mouth. The beach comprises fine sand and has a minimal berm above the high tide line. The dune crest in this area is approximately RL 2 to 4 m.

The remainder of the shoreline is characterised by a cliff shoreline comprising weak sedimentary Mudstone Conglomerate (Mangonui Formation). The cliff height rises up to RL 23 m at the southern extent of the site.

Local considerations

Erosion protection structures exist along approximately 450 m of the sandy beach shoreline located in the centre of the site. A boat ramp is situated on the northern side of the central stream.

Two streams enter the site and provide sediment and form small deltas that will affect wave patterns. The streams also locally lower the foreshore level adjacent to the mouth resulting in fluctuations of shoreline position in these areas over time. There is a greater level of uncertainty in these areas because fluvial processes also effect shoreline movement.



Site Photograph A (north – grouted rock seawall)



Site Photograph B (central beach dune area)



Site Photograph C (south – cliff shoreline)

The resulting hazard zones are dashed in these areas to reflect this uncertainty.

Coastal Erosion Hazard Assessment

The site is split into six cells based on differences in geomorphology, exposure and dune height.

Adopted component values are presented within Table 24-1. Long-term erosion rates for the basalt range from 0 to -0.1 m/year and for the Mangonui Formation Mudstone from 0.1 to 0.4 m/year. The beaches are generally also eroding at between -0.1 and -0.2 m/year.

Histograms of individual components and resultant CEHZ distances using a Monte Carlo technique are shown in Figure 24-3 to Figure 24-5. Coastal Erosion Hazard Zone widths are presented within Table 24-2 and Figure 24-7.

CEHZ1 values range from 19 to 27 m. CEHZ2 values range from 34 to 59 m. CEHZ's have been

mapped in agreement with the calculated values. Note that at cell 24D an area with a length of 25 m have likely been reclaimed, with CEHZ offset from the most recent shoreline.

For cell 24A, 24B and 24F the cliff projection method has been adopted with future shoreline distances shown in Figure 24-1, Figure 24-2, Figure 24-6 and Table 24-2 instead of CEHZ distances. The future cliff toe distances range from 2 to 19 m to 2065 and 10 to 81 m to 2115.

Figure 24-8 shows the available historic shorelines for Hihi.

Table 24-1 Component values for Erosion Hazard Assessment

Site		24. Hihi					
Cell		24A ¹	24B ¹	24C ²	24D ²	24E ²	24F ¹
Cell centre (NZTM)	E	1649112	1649139	1649139	1649127	1649095	1648952
	N	6130425	6130298	6130180	6130066	6129966	6129725
Chainage, m (from N/W)		0-230	230-310	310-450	450-560	560-690	690-1250
Morphology		Basalt	Soft Cliff	Dune	Dune	Dune	Mangonui mudstone
Short-term (m)	Min	0	0	5	5	5	0
	Mode	0	0	10	10	10	0
	Max	0	0	15	15	15	0
Dune/Cliff elevation (m above toe or scarp)	Min	3.3	3.5	2.0	1.7	2.2	15.2
	Mode	5.6	6.1	2.5	2.0	3.1	17.9
	Max	7.3	8.8	2.9	2.4	3.5	22.3
Stable angle (deg)	Min	45	26.6	30	30	30	18.4
	Mode	57.5	30.2	32	32	32	22.5
	Max	70	33.7	34	34	34	26.6
Long-term (m) -ve erosion +ve accretion	Min	0	-0.02	-0.1	-0.1	-0.1	-0.1
	Mode	-0.05	-0.05	-0.15	-0.15	-0.15	-0.2
	Max	-0.1	-0.1	-0.2	-0.2	-0.2	-0.4
Closure slope (beaches)	Min	0.25	0.75	0.75	0.05	0.05	0.75
	Mode	0.125	0.5	0.5	0.034	0.034	0.5
	Max	0	0.25	0.25	0.025	0.025	0.25
SLR 2065 (m)	Min	0.19	0.19	0.19	0.19	0.19	0.19
	Mode	0.29	0.29	0.29	0.29	0.29	0.29
	Max	0.39	0.39	0.39	0.39	0.39	0.39
SLR 2115 (m)	Min	0.45	0.45	0.45	0.45	0.45	0.45
	Mode	0.77	0.77	0.77	0.77	0.77	0.77

Site		24. Hihi					
Cell		24A ¹	24B ¹	24C ²	24D ²	24E ²	24F ¹
	Max	1.1	1.1	1.1	1.1	1.1	1.1

¹Updated using cliff projection methodology.

²CEHZO included behind coastal protection structure.

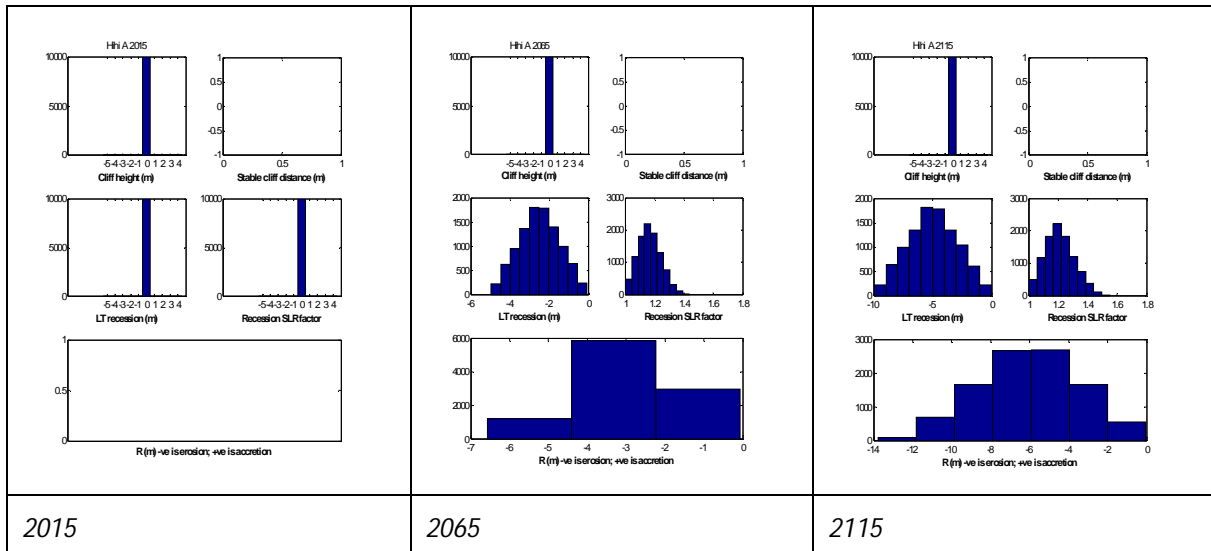


Figure 24-1 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24A

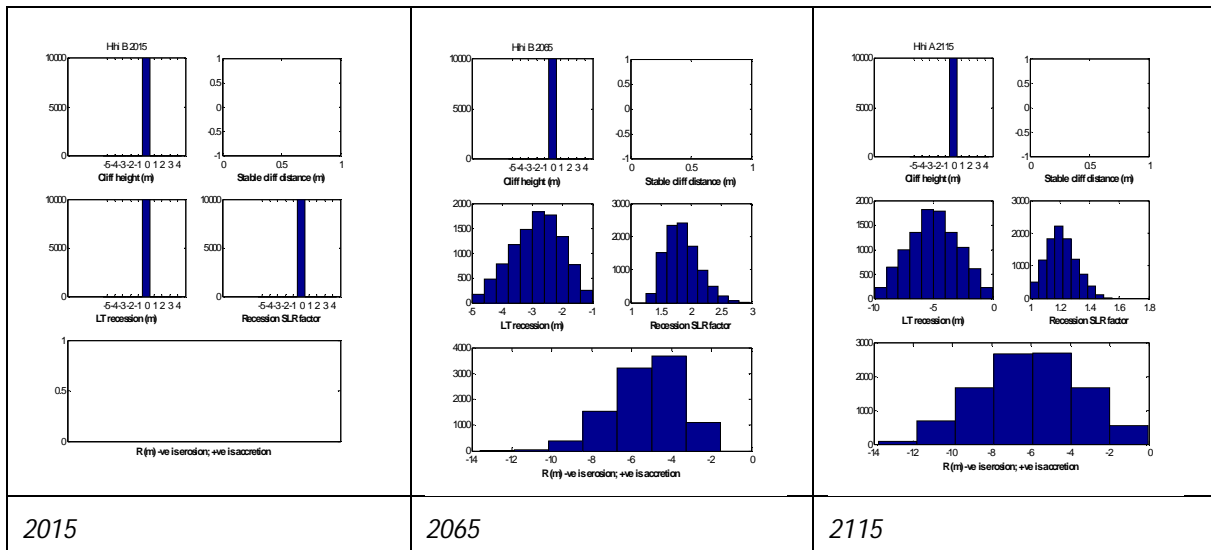


Figure 24-2 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24B

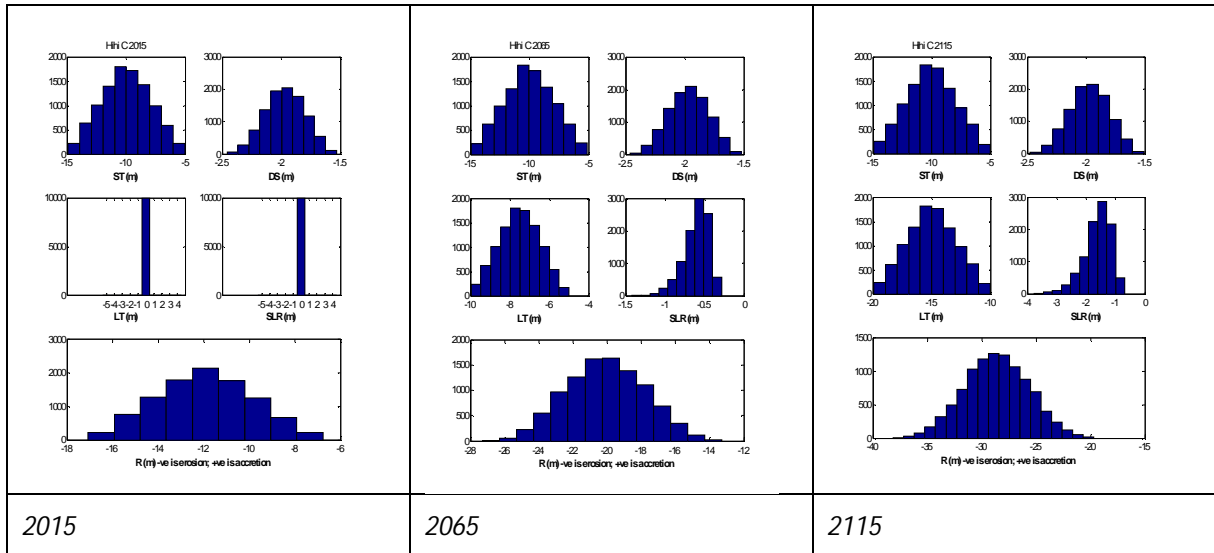


Figure 24-3 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24C

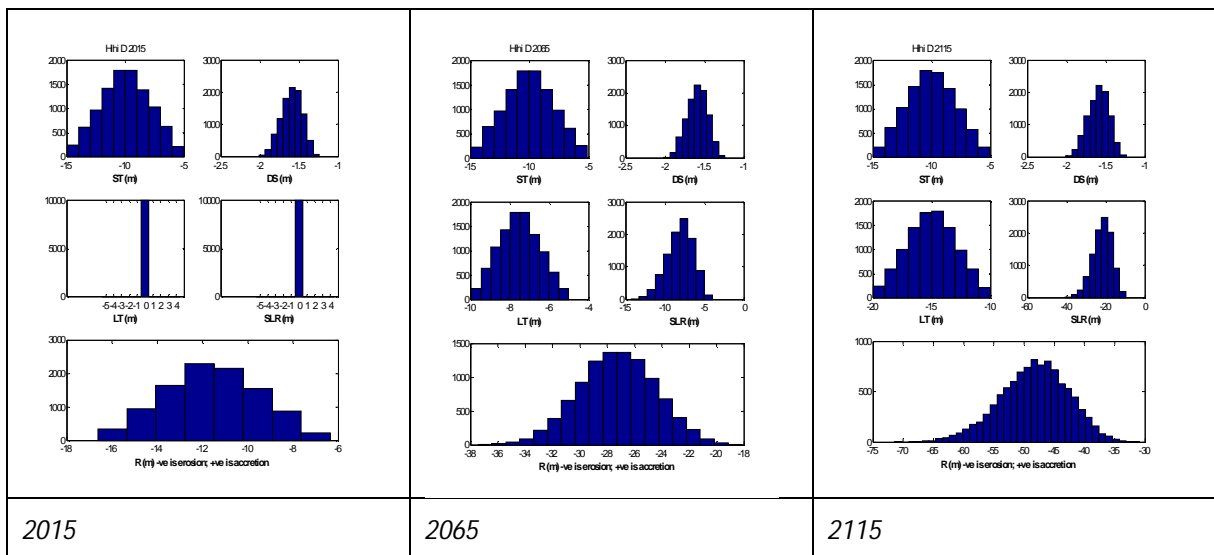


Figure 24-4 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24D

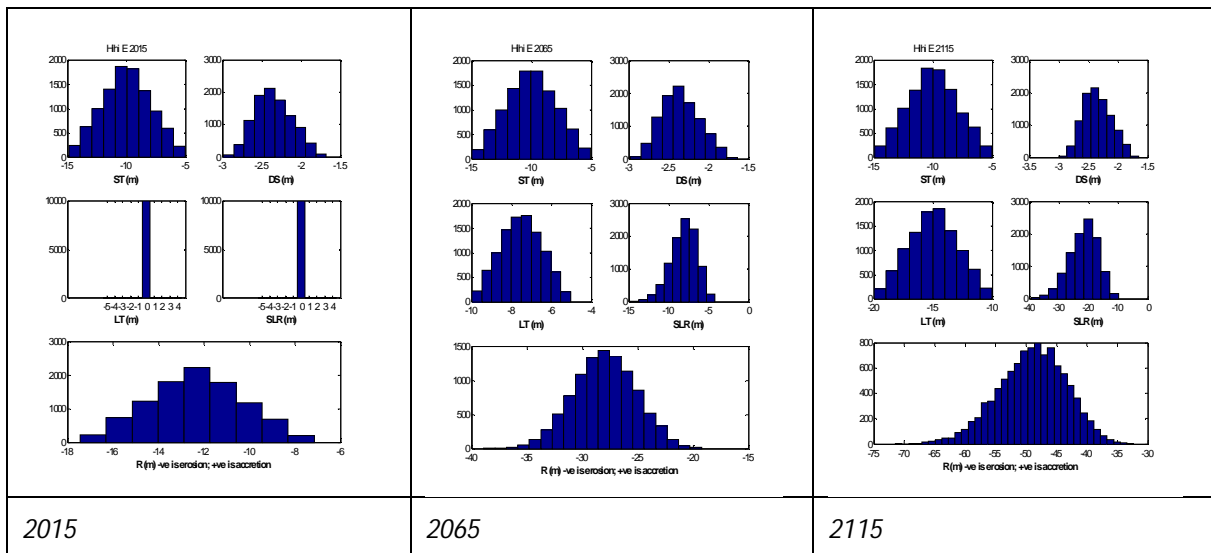


Figure 24-5 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24E

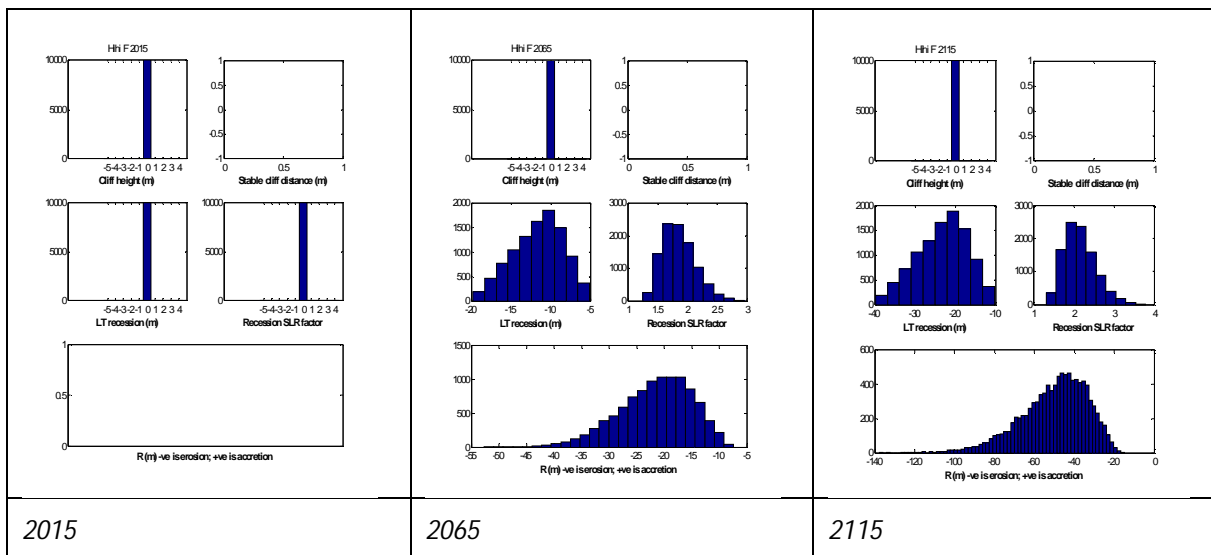
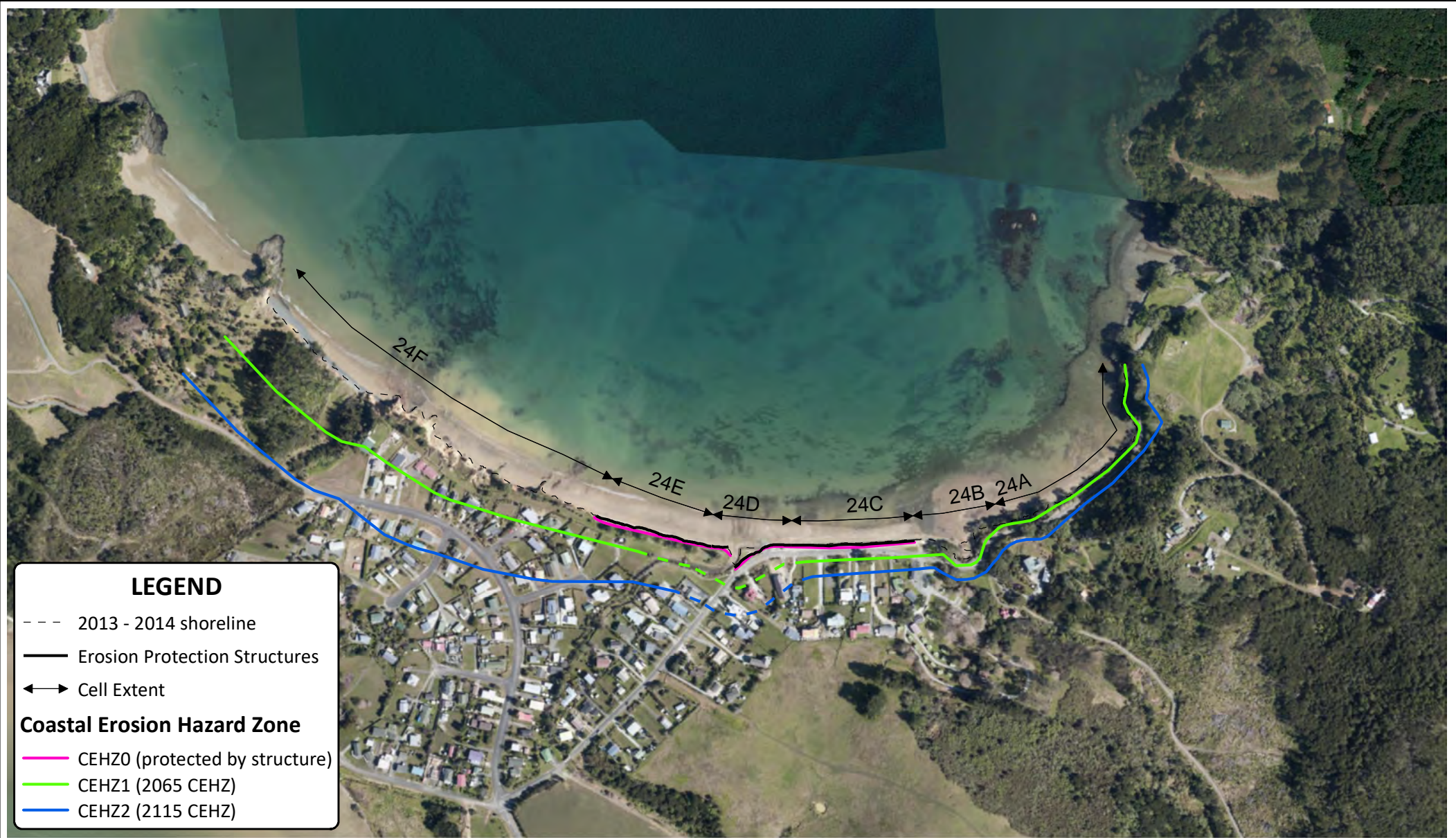


Figure 24-6 Histograms of parameter samples and the resultant shoreline distances for 2015, 2065 and 2115 timeframes for cell 24F

Table 24-2 Coastal Erosion Hazard Zone Widths

Site		24. Hihi																	
Cell		24A			24B			24C			24D			24E			24F		
Time		2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115	2015	2065	2115
Probability of CEHZ (m) Exceedance	Min	0	0	0	0	-2	-3	-7	-13	-20	-6	-18	-31	-7	-19	-32	0	-7	-15
	99%	0	0	-1	0	-2	-5	-8	-15	-22	-7	-21	-37	-8	-22	-37	0	-10	-22
	95%	0	-1	-2	0	-3	-6	-9	-16	-24	-8	-23	-40	-9	-23	-40	0	-12	-27
	90%	0	-1	-3	0	-3	-7	-9	-17	-25	-9	-24	-41	-10	-24	-42	0	-14	-31
	80%	0	-2	-4	0	-4	-9	-10	-18	-26	-10	-25	-44	-11	-26	-44	0	-16	-36
	70%	0	-2	-5	0	-4	-10	-11	-19	-27	-10	-26	-45	-11	-26	-46	0	-17	-40
	66%	0	-2	-5	0	-4	-10	-11	-19	-27	-11	-26	-46	-11	-27	-46	0	-18	-41
	60%	0	-3	-5	0	-5	-11	-11	-20	-28	-11	-27	-47	-12	-27	-47	0	-19	-44
	50%	0	-3	-6	0	-5	-12	-12	-20	-29	-12	-27	-48	-12	-28	-49	0	-21	-48
	40%	0	-3	-7	0	-6	-13	-12	-21	-29	-12	-28	-50	-13	-29	-50	0	-23	-52
	33%	0	-3	-7	0	-6	-14	-13	-21	-30	-13	-28	-51	-13	-29	-51	0	-24	-56
	30%	0	-4	-7	0	-6	-14	-13	-21	-30	-13	-29	-51	-13	-29	-52	0	-25	-57
	20%	0	-4	-8	0	-7	-16	-14	-22	-31	-13	-30	-53	-14	-30	-54	0	-27	-64
	10%	0	-5	-9	0	-8	-18	-15	-23	-33	-14	-31	-56	-15	-32	-56	0	-31	-73
	5%	0	-5	-10	0	-8	-20	-15	-24	-34	-15	-32	-58	-16	-33	-59	0	-33	-81
	1%	0	-6	-12	0	-10	-24	-16	-25	-35	-16	-34	-63	-17	-35	-63	0	-39	-98
	Max	0	-7	-14	0	-14	-30	-17	-27	-38	-17	-37	-71	-17	-39	-71	0	-53	-138
CEHZ1		-2*			-4*			-19			-26			-27			-18*		
CEHZ2		-10*			-20*			-34			-58			-59			-81*		

*Updated using cliff projection methodology, so distance to future cliff toe position has been tabulated. Actual CEHZ width will be greater depending on cliff height and stable slope angle.



LEGEND

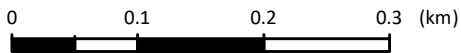
- 2013 - 2014 shoreline
- Erosion Protection Structures
- ↔ Cell Extent

Coastal Erosion Hazard Zone

- CEHZ0 (protected by structure)
- CEHZ1 (2065 CEHZ)
- CEHZ2 (2115 CEHZ)

Notes: Dashed CEHZ indicates greater uncertainty around stream mouths and backshore topography. Northland 0.1m Rural Aerial Photos (2014-2015).

A4 SCALE 1:6,000



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DRAWN	PPK	Dec.17
CHECKED	TDS	Dec.17
APPROVED	RRH	Dec.17
ARCFILE		
1001049-000-CEHZ001.mxd		
SCALE (AT A4 SIZE)		
1:6,000		
PROJECT No.		
1001049		

NORTHLAND REGIONAL COUNCIL

Coastal Erosion Hazard Assessment

Hihi

Site: 24

FIGURE No. Figure 24-7

Rev. 2

Path: P:\1001049\WorkingMaterial\GIS\FINAL\HistoricShorelines.mxd Date: 4/10/2017 Time: 3:08:01 PM



Legend

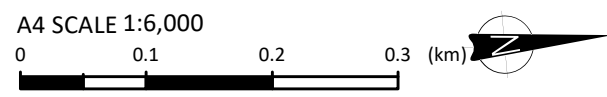
↔ Cell Extent

Shorelines

- 2014 baseline
- 14/01/2014
- 30/03/2006
- 04/03/2000
- 15/05/1999
- 28/10/1981
- 02/05/1966
- 09/04/1948

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographic IGN, and the GIS User Community

Notes: Dashed CEHZ indicates greater uncertainty around stream mouths and backshore topography. Northland 0.1m Rural Aerial Photos (2014-2015).



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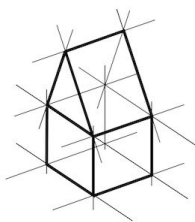
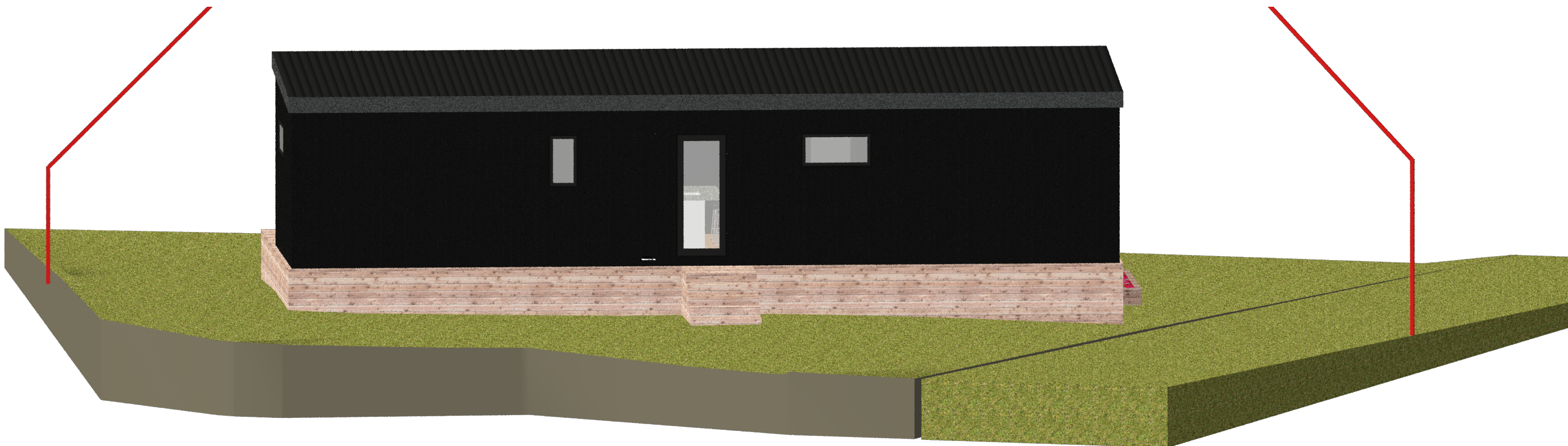
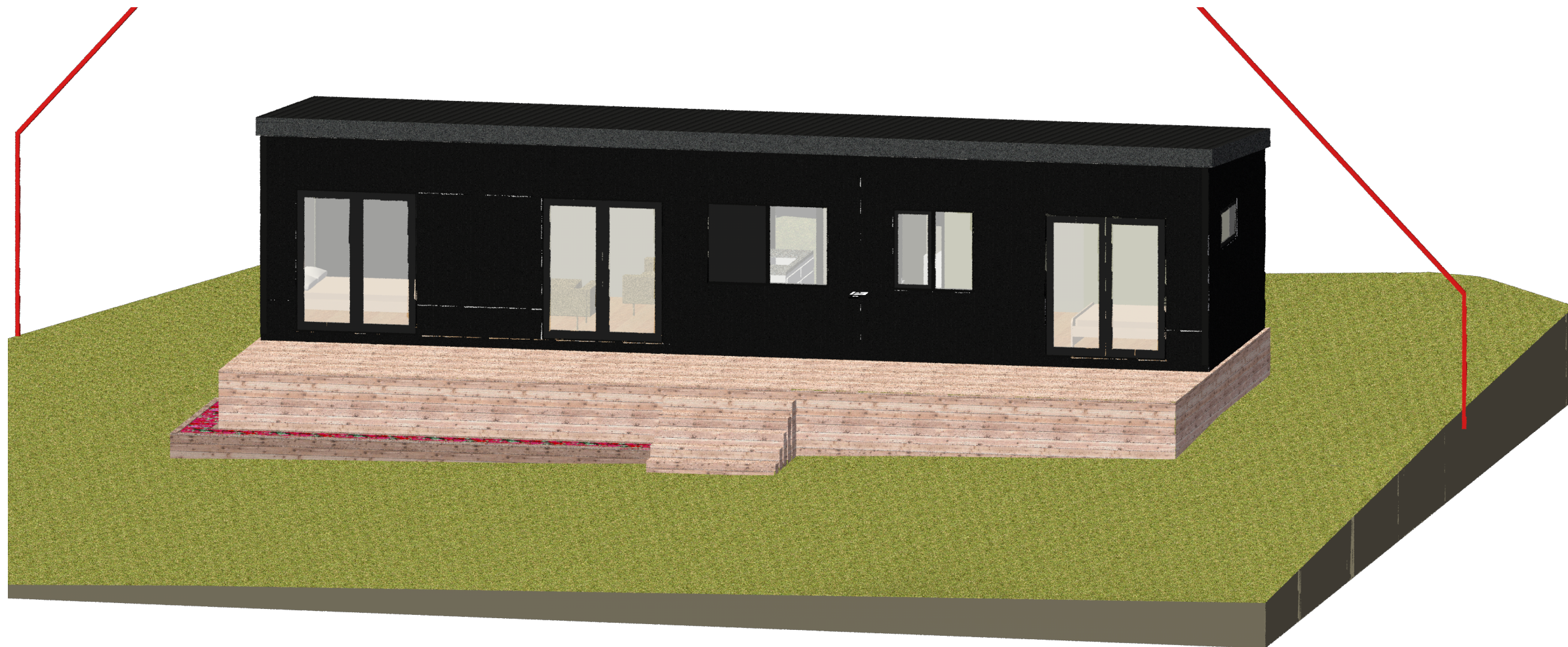
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SCALE (AT A4 SIZE) 1:6,000		
PROJECT No. 1001049		

NORTHLAND REGIONAL COUNCIL
Historic shorelines
Hihi
Site: 24

FIGURE No. Figure 24-8	Rev. 2
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DRAWING LIST

Page Number	Page revision date	Drawing Title
A0.00	12/11/2023	COVERSHEET
A1.00	12/11/2023	SITE PLAN
A1.01	12/11/2023	MANOEUVRE PLAN
A2.00	12/11/2023	FLOOR PLAN
A3.00	12/11/2023	ELEVATIONS
A3.01	REMOVED	ELEVATIONS
A3.02	REMOVED	STAGE 1 ONLY



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New Dwelling @
Lot 146 DP 80368
7 Fairwinds Place, Hihi
for Lee Eglinton & Keith Kerr

Wind zone
Corrosion zone
Earthquake
NZS3604:2011

Drawn
Jonathan Leech



Very High
D
1

Eng. ref.

Sheet no.

Sheet size
A3

A0.00

Rev:A

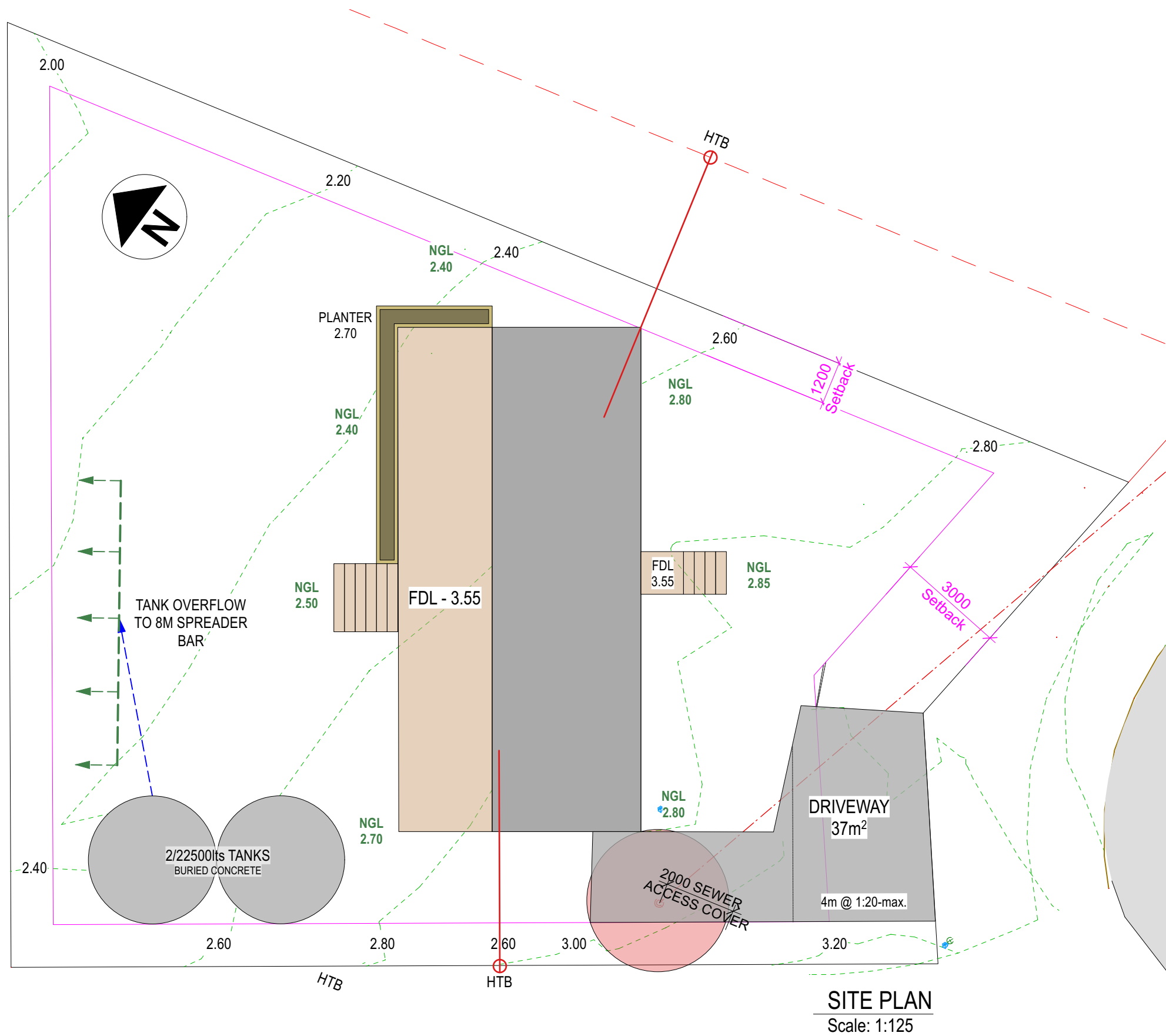
NOT FOR
ISSUE

Revised design & Layout

14 November 2023
BCD-082 - 7 Fairwinds Place

12/11/2023

NOTES: All dimensions and underground service locations to be checked on site by contractor prior to the commencement of any work. Contractor to ensure all ground levels and height restrictions are correct and comply with Territorial Authority bylaws at all stages of construction. DO NOT SCALE from drawings, work from dimensions shown.




SITE DESCRIPTION			
CR Coastal Residential			
Lot No	146	DP	80368
Areas			
Site Area	573 sq.m		
Dwelling Stage 1	56 sq.m		
Site Coverage	56sq.m (10% (45 % max.))		
Driveway	37sq.m		
Total Impervious	93sq.m (18% (60% max.))		
Resource Consent (RC)			
Flood Zones, Manoeuvring Off-site			
Landscaping			
Font yard	32 sq.m of 50q.m (64% (50% min.))		
Total yard	517 sq.m (90% (50% min.))		

SITE PLAN
Scale: 1:125

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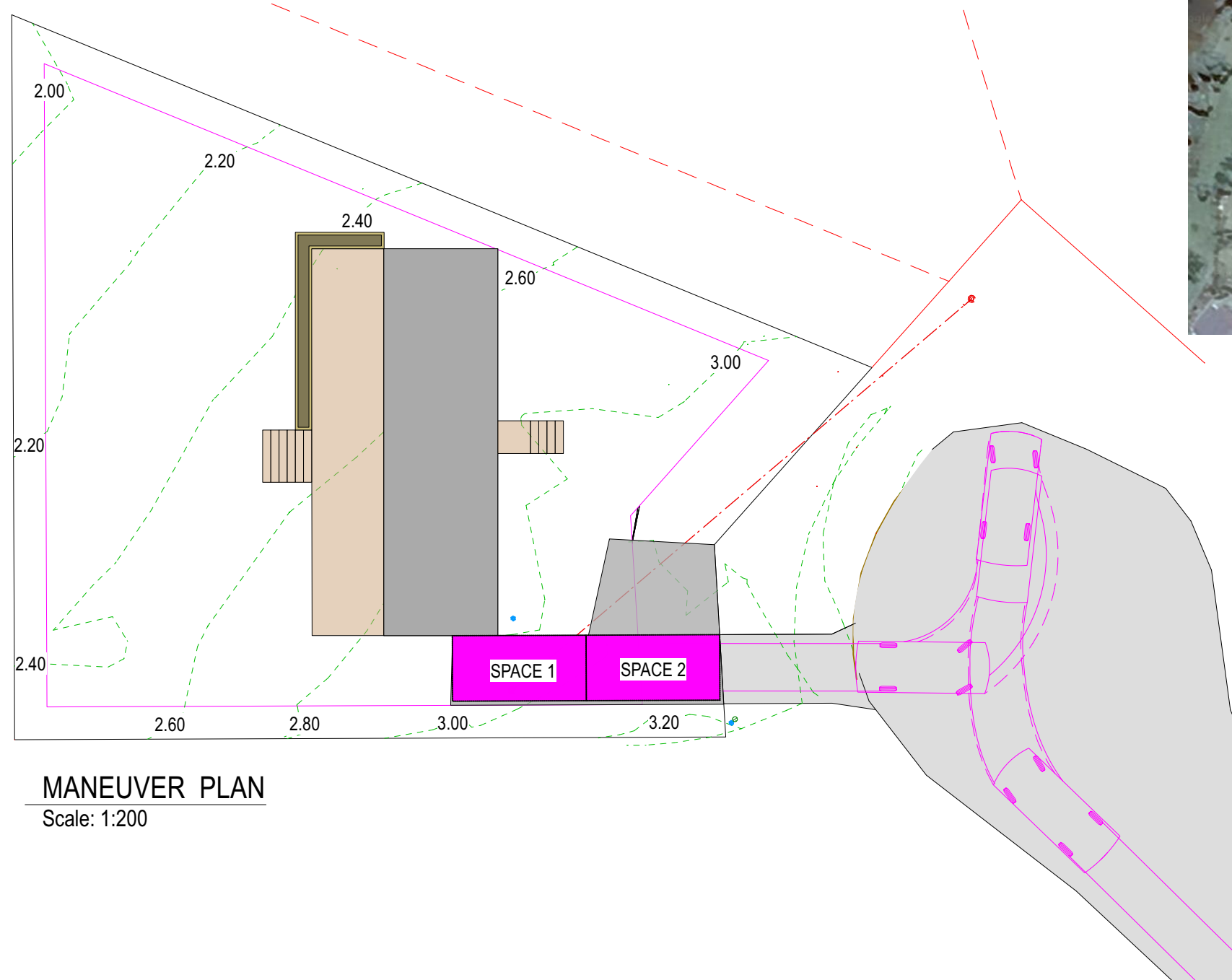
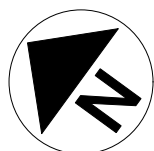
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Corrosion zone	D	A3
Earthquake	1	
NZS3604:2011		
Drawn	Eng. ref.	
Jonathan Leech		
	Sheet no.	A1.00

Rev:B	Revised design & Layout	12/11/2023
Rev:A	Corrected Lot no. & HTB position, relocated tanks	21/02/2023
NOT FOR ISSUE	14 November 2023	
	BCD-082 - 7 Fairwinds Place	

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Flood Zones, Manoeuvring Off-site	
Landscaping	
Font yard	32 sq.m of 50q.m (64% (50% min.))
Total yard	517 sq.m (90% (50% min.))

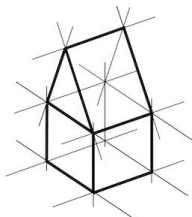


MANEUVER PLAN

Scale: 1:200



LOCATION PLAN



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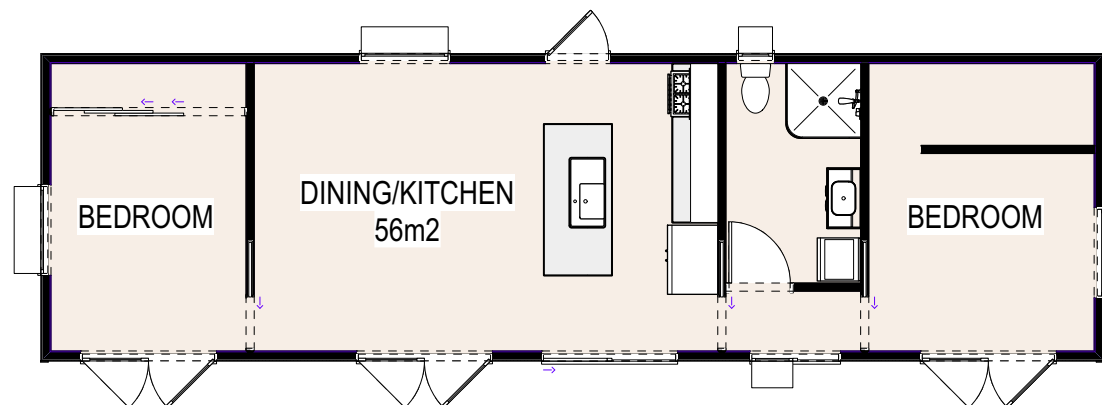
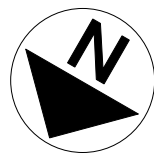
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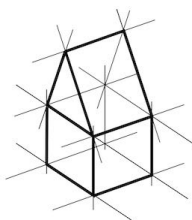
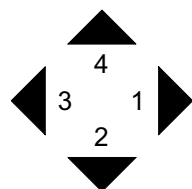
New Dwelling @
Lot 146 DP 80368
7 Fairwinds Place, Hihi
for Lee Eglinton & Keith Kerr

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Corrosion zone	D	A3
Earthquake	1	
NZS3604:2011		
Drawn	Eng. ref.	
Jonathan Leech		
Sheet no.	A1.01	

Rev:A	Revised design & Layout	12/11/2023
NOT FOR ISSUE	14 November 2023	
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FLOOR PLAN
Scale: 1:100



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Wind zone
Corrosion zone
Earthquake
NZS3604:2011

Drawn
Jonathan Leech



Very High
D
1

Eng. ref.

Sheet no.
A2.00

Sheet size
A3

Rev:A

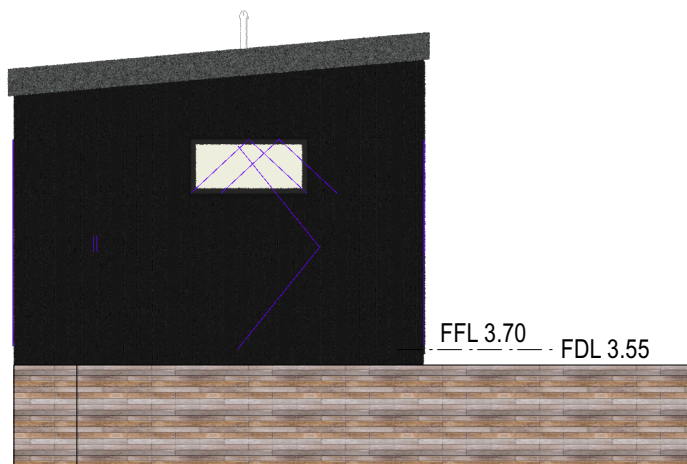
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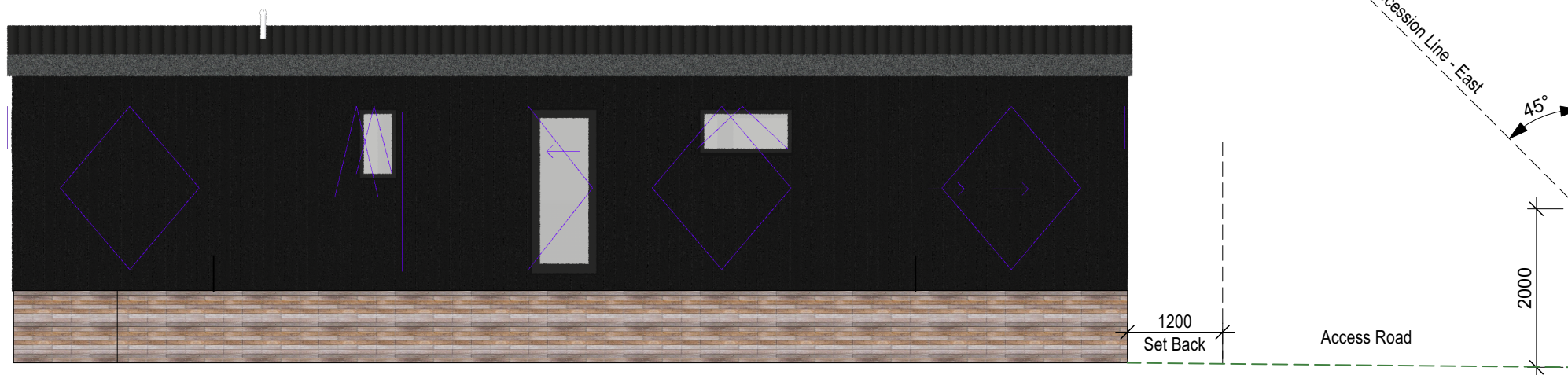
14 November 2023
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12/11/2023

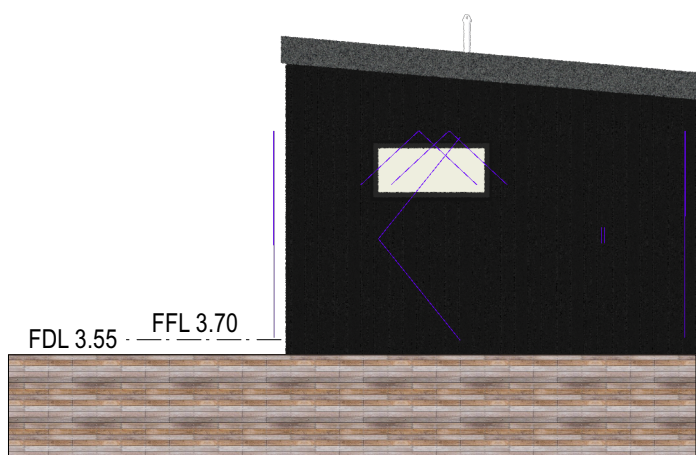
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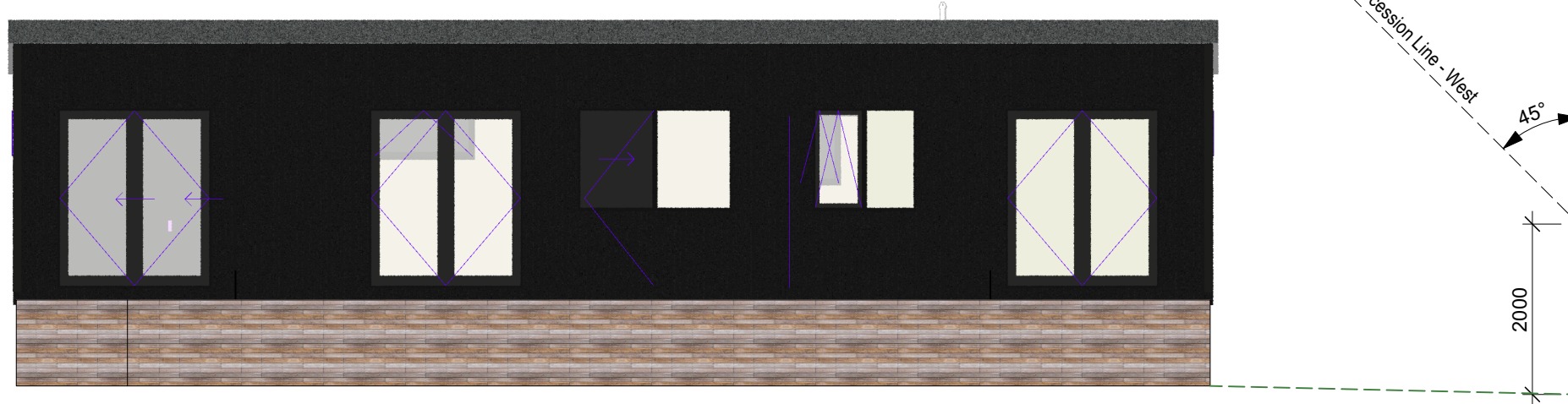
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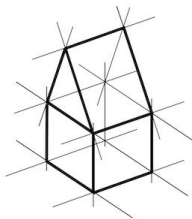
ELEVATION 2
Scale: 1:75



ELEVATION 3
Scale: 1:75



ELEVATION 4
Scale: 1:75



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Wind zone
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NZS3604:2011

Very High
D
1

Sheet size
A3

Drawn
Jonathan Leech

Eng. ref.



Sheet no.
A3.00

Rev:B
Rev: A

Revised design & Layout
Corrected HTB

12/11/2023
21/02/2023

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