Appendix A

Application Form

Application for
Resource Consent

Section 88 of the Resource Management Act 1991

GISBORNE DISTRICT COUNCIL

OFFICE USE ONLY

Application Number:	CE-2019-108849-00						
Received GDC	02 /04 /2019	Received SO	/ /20	Received ADM	02 / 04 /2019	EDRMS No.	
Deposit Paid	$ 500.00	Date Paid	12/04/2019	Category	CE	Officer.	Bram Armiento

About this Form

Please answer all the questions and provide the relevant details of your proposal. We recommend you talk your proposal through with Council planning staff before you fill in this form.

Activity Type and Location

This application is for:

- ☐ Change of conditions (s.127)
- ☐ Change of consent notice (s.221)
- ✓ Land Use Consent
- ☐ Subdivision Consent
- ☐ Land Use (Regional)
- ☐ Other

Site(s) to which this application relates is described as:

4, 6, 8 (Street/Rapid No.) Tuahine Crescent, Wainui Beach (Street / Road Name)

Property Valuation No. 0823070401, 0823070400, 0823070500 (see your rates notice)

Legal Description: Lots 5, 6 and 7 DP 3216

Fully describe the Location:

The rear of 4, 6 and 8 Tuahine Crescent (partially on beach)

Map Reference NZTM: (office use only)

Applicant's Details (all correspondence will be sent to the applicant unless Agent's details are completed)

Name in full: Simon Cave (Surname) Annabel Reynolds (First Name) (Middle Name)

Postal Address: 6 and 8 Tuahine Crescent, Wainui Beach

Phone: 068639876 (Day) (Mobile)

Email: simon.cave@gisborne.net.nz, bestbeachview@xtra.co.nz

Email is Council's preferred method of contact.
Do you agree to receiving your correspondence and consent by email? ✓ Yes ☐ No

The applicant is the:

- ✓ Owner
- ☐ Occupier
- ☐ Prospective Purchaser
- ☐ The Crown
- ☐ Network Utility Operator
- ☐ Agent / Consultant (provide details over page)

Property Owner's Details (if different from Applicant)

Name in full: (Surname) (First Name) (Middle Name)

Postal Address:

Phone: (Day) (Mobile)

Email:

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

Agent/Consultant Details (all correspondence will be sent to your Agent)

Company: 4Sight Consulting Contact Person: Cassandra Ng

Postal Address: PO Box 911310 Victoria Street West, Auckland

Phone: 0210511898 (Day) (Mobile)

Email: cassandran@4sight.co.nz

Email is Council's preferred method of contact.
Do you agree to receiving your correspondence and consent by email? ✓ Yes ☐ No

Address for Invoices

Send all invoices and annual charges to: ✓ Applicant ☐ Agent/Consultant ☐ Other

If other - Name:

Postal Address:

Detailed Description of Proposed Activity

Construction of a timber pile rip-rap hybrid sea wall to replace the existing degraded seawall - refer to AEE for more detail

continue on the back page if necessary

Additional Resource Consents Required for this Proposal

Are any other resource consent(s) required for your proposal, but are not being applied for under this application?

☐ Land Use Consent ☐ Subdivision Consent ☐ Discharge Permit
☐ Coastal Permit ☐ Water Permit ☐ Land Disturbance
☐ Other (give details)

Please list any previous consents relevant to this current application:

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

Consultation

Have you consulted with iwi? ✓ Yes ☐ No

If **yes**, who have your consulted with?

Ngati Porou and Ngati Oneone

Who else have you consulted with?

Please attach any relevant correspondence.

Approval of Potentially Affected Parties

Have you obtained written approval from all parties potentially affected by the proposal? ✓ Yes ☐ No

Please attach the completed approval forms with a copy of your plans also signed by the affected people.

Please Note: *Council planning staff will determine whether any people or groups are potentially affected by your proposal. Please discuss with our planning staff prior to lodging your application.*

See note on page 5.

Notification of the Application

Are you requesting the application to be publicly notified? ☐ Yes ✓ No

Please discuss the implications of notification with Council planning staff if necessary.

Assessment of Environmental Effects (AEE) (Please see the checklist on page 5 for guidelines on how to prepare an AEE)

Further information on AEEs is available at the customer service centre or on the Ministry for the Environment website www.mfe.govt.nz.

Please note: An AEE generally requires a seperate sheet/report. Please attach any additional information.

Please see attached AEE

continue on the back page if necessary

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

Council Contact

Have you discussed your proposal with any Council planning staff? ☑ Yes ☐ No

If yes, who have you spoken with: Paul Murphy

Name of Council staff member

Contributions

When granting consent to certain activities, Council may levy a monetary contribution. Development contributions are levies under the Local Government Act 2002 in accordance with the Council's Development Contribution Policy. Financial or reserve contributions are levies under the RMA and Council's Combined Regional Land and District Plan.

Deposit and Signature

The required deposit must be paid before we process your application. A deposit is not required for regional consents.

Land Use	Non notified $600.00	Notified $3,000.00	Balance to be charged or refunded on a time and material basis
Subdivision	Non notified $900.00	Notified $3,000.00	

☐ I enclose a deposit of $ for processing this application.

☑ I have paid a deposit by electronic banking of $ 600.00 on (date)

Council's bank account details:

ACCOUNT NO. 03 0638 0502288 00

PARTICULARS: **RC DEPOSIT** CODE: (surname) PARTICULARS: (road name)

I understand that Council may invoice me for the actual and reasonable costs incurred in processing this application.

I (please print full name) Simon Cave and Annabel Reynolds agree

i) that I am liable for all fees and charges relating to this application

ii) the deposit is to be paid at the time of lodging the application for resource consent

iii) that payment is due within 30 days of the issue date of any additional charges

iv) the information provided in this application and the attachments to it are accurate

Signature of the Applicant (or agent authorised to sign on behalf of the applicant) Date

Admin Check Y

Privacy Information

The information you have provided on this form is required so that your application can be processed under the RMA and statistics can be collected by Council. The information will be stored on a public register held by Council. The details may also be made available to the public on Council's website. These details are collected to inform the general public and community groups about all consents which have been issued through Council. If you would like to request access to, or correct your details, please contact Council.

Checklist

You need to provide the following information with your application for resource consent
If any of the items are not included in your application, Gisborne District Council may determine that the application is incomplete and return it to you, or your application may be put on hold until the necessary information is provided.

Check* (Office use only)

- ☐ **Certificate(s) of Title for the subject site.** *They must be less than 3 months old*
- ☐ **Statement of proposal.** *Provide full details of the nature and scale of the activity or development*
- ☐ **Location plan or aerial photograph at a suitable scale.**
  Showing the physical location of the subject site in relation to adjoining streets/roads and sites.
- ☐ **Site Plan (scale 1:200/1:500 - rural may be larger) that includes** *(if applicable to your proposal):*
  - ☐ North point
  - ☐ Title or reference number
  - ☐ Date the plans were drawn
  - ☐ Topographical information
  - ☐ Buildings on adjacent sites
  - ☐ Road frontages
  - ☐ Natural features, including significant trees Indigenous vegetation and watercourses alterations
  - ☐ Earthworks design and contours
  - ☐ Existing and proposed landscaping
  - ☐ Existing and proposed carparking areas
  - ☐ Site coverage calculation
  - ☐ Certificate of Title boundaries
  - ☐ Details of any signage (sign design, dimensions and location on building(s)
  - ☐ Location of existing and proposed buildings and/or proposed building
- ☐ **Elevation plans and floor plans (scale 1:50/1:100) of all structures to be constructed or altered, showing relationship of proposed buildings, including:**
  - ☐ The natural ground level
  - ☐ Existing and finished ground levels
  - ☐ Maximum building height and relevant height plane angle(s)
- ☐ **Assessment of the Effects on the Environmental (AEE)**
  - ☐ Have you addressed carparking requirements? (operational design dimensions numbers, vehicle manoeuvring etc).
  - ☐ Does the National Environmental standard for contaminated land apply? (see MfE leaflet available at front counter of Council offices).
  - ☐ Does the proposal create any positive environmental effects?
  - ☐ What are the current noise levels and what are the proposed noise levels generated by the proposal?
  - ☐ How does the proposal effect neighbours e.g sunlight intrusion, amenity, privacy?
  - ☐ What are the effects on any natural conservation areas, including indigenous vegetation, margins or waterways, the coastal environment, or wetlands.
  - ☐ Does the proposal remove or alter a building of cultural or historic significance, including archaeological sites, waahi tapu, heritage items or trees.
  - ☐ The compatibility of the proposal with the existing style of development and the existing amenity values.
  - ☐ The effects of the proposed activity on any landscape area overlays.
  - ☐ What are the risks associated with the use, storage or movement of hazardous substances.
  - ☐ The effects of the proposed activity on the State Highway (if applicable), district roading network and public parking.
  - ☐ The effects arising from dust, vibration or odour types of wastes involved, their volumes, the possible options for the treatment and disposal of wastes.
  - ☐ Natural hazards that might affect your site or proposal.
  - ☐ Effects of economic and social well being on the wider community.
  - ☐ Any visual effects of; buildings, equipment, storage or parking areas on the landscape.
  - ☐ Details of how any identified adverse effects are to be avoided, remedied or mitigated, including the use of covenants on land titles.
  - ☐ Has the site been used for an activity identified on the Hazardous Activities and Industries (HAIL) list at any stage in the past, as defined in the National Environmental Standard for Contaminated Land?
- ☐ **Written approval from all affected persons**
  - ☐ Complete the "Affected Persons Consent" form
  - ☐ Signed forms and plans are attached to the application

OFFICE USE ONLY: * Items to be marked:
☑ **Pass** - *i.e correct information supplied* ☒ **Fail** - *i.e unsatisfactory (need to state reason)* — **Not Applicable**

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

Checklist (cont'd)

Subdivision plan (subdivision consents only), including:

- The position of all new boundaries
- The areas of all new allotments
- The locations and areas of all new reserves to be created, including any esplanade reserves and esplanade strips and the locations and areas of any existing esplanade reserves, esplanade strips or access strips
- The locations and areas of land to be set aside as new road
- The location and widths of accessways giving legal and physical access to the allotments
- All existing and proposed easements
- If the subdivision is to be staged, define the stages
- The locations and areas of lands below mean high water springs of the sea or any part of the bed of a lake or river to be vested in the Crown or local authority under section 237A of the Resource Management Act 1991
- Services - proposed stormwater, sewer and potable water
- Ground levels.

OFFICE USE ONLY	
Signed by Acceptance Officer	
Name	
Date	

Extra space if required

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

LU-2019-108876-00

4SIGHT CONSULTING

LAND. PEOPLE. WATER.

Tuahine Seawall, Wainui Beach

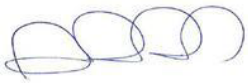
For Simon Cave and Annabel Reynolds

Resource Consent Application and Assessment of Environmental Effects

April 2019

REPORT INFORMATION AND QUALITY CONTROL

Prepared for:	Simon Cave and Annabel Reynolds

Author:	Cassandra Ng Planning and Policy Consultant	
	Sam Morgan Senior Coastal Consultant	
Reviewer:	Max Dunn Principal Planning and Policy Consultant	
Approved for Release:	Aaron Andrew Managing Director	

Document Name:	RC_Tuahine Seawall_April 19_v1.0

Version History:	V1.0	03 April 2019

CEMARS ISO 14064-1 certified organisation

SITE SAFE MEMBER

Telarc. Registered TM
Telarc Q-Base Code

CONTENTS

Page

List of Figures

List of Appendices

1 APPLICANT AND PROPERTY DETAILS

Site Address:	4, 6 and 8 Tuahine Crescent, Wainui Beach
Applicant's Name	Simon Cave and Annabel Reynolds
Address for Service:	4Sight Consulting Ltd PO Box 911 310, Victoria Street West Auckland 1142 Attention: Cassandra Ng / Sam Morgan
Address for Fees:	Simon Cave and Annabel Reynolds 6 and 8 Tuahine Crescent Wainui Beach Gisborne 4010
Owner:	4 Tuhaine Crescent – Cave Property Trust 6 Tuahine Crescent – Simon Cave 8 Tuahine Crescent – Annabel Reynolds
Legal Description:	Lots 5, 6, 7 DP 3216
Plan Name:	Tairāwhiti Resource Management Plan
Plan Zone:	General Residential
Plan Designations, Limitations, or Overlays:	Coastal Management: Significant Values Management Area Coastal Management: Outstanding Landscapes Coastal Management: Coastal Environment Natural Hazards: Stability Alert – Site Caution Natural Hazards: Coastal Hazard Overlays – Extreme Risk Historic and Cultural Heritage: Heritage Alert Overlay Land Management: Land Overlays 2 and 3
Brief Description of Proposal:	Construction of a timber pile rip-rap hybrid sea wall
Resource Consents Being Sought:	Land Use Consent
Overall activity status of resource consent:	Non-complying

Locality Plan:

Figure 1: Aerial maps showing location of proposed seawall (Source: Gisborne District Council)

2 INFORMATION REQUIREMENTS

2.1 General

This land use consent application has been prepared in accordance with the requirements of Schedule 4 of the Resource Management Act 1991 (the Act).

The completed council application form is attached at **Appendix A**.

3 BACKGROUND

3.1 Consent History

The existing railway iron and timber wall parallel to Tuahine Crescent was constructed around 1960. Whilst the structure was constructed by the Cook County Council (now Gisborne District Council) there is no record of consents authorising the construction of the structure.

Tonkin and Taylor, on behalf of Gisborne District Council, applied for resource consents for a replacement rock revetment wall, retention of gabion baskets and sand push up works at Wainui Beach in 2017 (council references LU-2017-107788-00, LL-2017-107789-00, CC-2017-07790-00, CO-2017-107791-00). The sand push ups were withdrawn from the application, and a hearing was held in February 2018 for the gabion basket and rock revetment wall. Following the hearing, resource consent for the retention of the gabion baskets was granted, while consent for the replacement rock revetment was refused. The replacement seawall proposed was considerably larger than the existing structure, with a crest height approximately 2-2.5m above the existing structure, and it extended an additional 3-3.5m seaward. The increase in structure size was considered necessary by Tonkin and Taylor to meet modern coastal engineering design parameters.

From a review of the hearing decision, concerns were regarding the potential impacts of the seawall on landscape amenity and natural character, largely due to the scale of the proposed seawall. In addition, the seaward advance of the structure also meant the replacement structure both extended into reserve land within the Coastal Marine Area (CMA) and the Common Marine and Coastal Area (CMCA). This raised further issues around public access along the foreshore and the extent of potential end effects from the structure, and the impact upon adjoining public and private land.

A copy of the hearing decision for the application lodged in 2017 is attached as **Appendix B**.

3.2 Coastal Marine Area

The CMA is defined in the Act as:

> *"the foreshore, seabed, and coastal water, and the air space above the water-*
>
> *(a) of which the seaward boundary is the outer limits of the territorial sea:*

(b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary shall be whichever is the lesser of-

(i) 1 kilometre upstream from the mouth of the river; or

(ii) the point upstream that is calculated by multiplying the width of the river mouth by 5"

Case law[1] indicates that due the fluctuating nature and eroding coastline of Wainui Beach, that a pragmatic approach for identifying mean high-water springs (MHWS) at this part of the beach is to use the existing line of the foredune protective structures i.e. the Council seawall. As such, for the purposes of this application, only works which are seaward of the existing seawall (and therefore MHWS) are deemed to be within the CMA.

4 THE PROPOSAL

The proposal involves the replacement of a seawall at 6 and 8 Tuahine Crescent. In brief, the works will involve demolition of the existing seawall and construction of a new seawall at 6 and 8 Tuahine Crescent. In addition, partial replacement of the seawall at 4 Tuahine Crescent and access to the site (i.e. for construction vehicles) via Wainui Beach will also be required. The proposed seawall will be entirely within the footprint of the existing seawall.

Plans of the proposed seawall prepared by LDE are attached at **Appendix C**.

4.1 Purpose

The existing seawall protecting the properties at 6 and 8 Tuahine Crescent is approximately 50 years old, is in a state of disrepair and the longevity of the wall is uncertain. In addition to this, the Wainui Beach Erosion Management Strategy identified the southern area of Wainui Beach as at risk from progressive erosion and the need to replace existing coastal protection structures in this area. As such, the purpose of this proposal is to enable the replacement of existing coastal protection structures to protect the properties at 6 and 8 Tuahine Crescent from loss and damage from coastal processes.

4.1.1 Wainui Beach Erosion Management Strategy

The Wainui Beach Erosion Management Strategy was developed in 2014 by Gisborne District Council, coastal experts and various stakeholders, and sets out Gisborne District Council's strategy for managing coastal erosion at Wainui Beach. The strategy identifies a number of short term (10-20 years), medium term (20-30 years) and longer term (next 100 years) actions for managing the risk in this area associated with coastal processes, erosion and sea level rise.

The strategy recognises that there are no appropriate options for soft engineering in the subject area (identified in the strategy as 'Area 2 – Tuahine Crescent'), and that the existing seawall to the north of the

[1] Gisborne District Council v Falkner A082/94

groyne is in a degraded condition and would require replacing to ensure engineered protection in this area is maintained. The replacement of the existing rail and rock wall north of the groyne is therefore identified as an option promoted for Area 2 – Tuahine Crescent.

The strategy also notes several points of relevance to the proposal, including that the new structure should *"minimise seaward encroachment over the beach - ideally trying to stay as close to the footprint of the existing wall as practicable"*. It is also identified that coastal structures have the potential to degrade the natural character of the shoreline and restrict public access along the coast at higher stages of the tide.

The proposal has been designed with the Wainui Beach Erosion Management Strategy in mind, noting that:

- The proposed seawall is entirely within the footprint of the existing seawall, and therefore does not result in any additional seaward encroach over the beach;
- The design and extent of the seawall will ensure there are no additional restrictions to public access along the beach beyond the existing situation; and
- The proposed seawall has been carefully designed to ensure that the scale and extent, materiality and proposed planting assists in ensuring the seawall is sympathetic to the natural character of the coastal environment.

4.2 Timber Pile/Rip-Rap Hybrid Seawall

The basis of the proposed seawall is described in the seawall feasibility letter in **Appendix D**. The letter notes that the proposed coastal protection structure will be a hybrid type solution with a vertical structure located in the front of the wall to restrict the toe and allow for the rip-rap behind the wall to be built up to design heights. The timber piles are prescribed at Ø300mm would be spaced at 900mm centres to avoid loss of rock between individual piles. The larger rock will be placed along the seaward face and along the top of the rip-rap wall to create a stable platform to construct the remainder of the wall. The proposed seawall will be approximately 24m long, noting the total existing seawall length (from 8 Tuahine Crescent to 72 Murphy Road) is approximately 83m long.

The rock wall will dissipate the energy approaching the base of the cliff to avoid any further erosion. It will act in a similar manner to the existing structure with the most significant difference being an increased crest height to allow for future sea-level rise. The crest height of the proposed structure is lower at RL 4m than the previously proposed RL 4.85m. This height reduction of 0.85mwill mean an increased risk of overtopping with a future sea-level rise of 1m, with 700mm of freeboard above the 1%AEP storm surge event and wave setup water level. This should provide more than sufficient protection from overtopping under present day conditions to enable time for salt tolerant planting to be established above the structure. This planting should be able to absorb the relatively minor and infrequent overtopping that is expected in the future.

The seawall has been designed to remain within the footprint of the existing structure and within private property boundaries to minimise the potential impact on the receiving environment. However, the crest of the seawall has been designed to be 2m higher than the existing to allow for existing overtopping

scenarios and future impacts of sea level rise and climate change. As there is risk of wave overtopping during extreme storm events once sea level rise has been realised, suitable salt tolerant planting is proposed at the top of the seawall to assist in land stabilisation and dampening the impact of any overtopping of the structure in the future. It is envisaged that the planting will be well established by the time this begins to occur with any frequency.

The seawall structure will be located entirely within the private property boundaries of 4, 6 and 8 Tuahine Crescent. It is noted that construction of the seawall will require works (i.e. temporary access by construction vehicles) in the esplanade reserve and CMA, however following completion of the works, no part of the seawall will be located in either the council owned esplanade reserve or the CMA (refer to Section 3.2)

With reference to Section 3.1 above, the seawall has also been specifically designed with a significantly reduced scale and extent compared to that previously proposed to ensure it addresses the key issues raised in the hearing for the resource consent sought for the previous replacement seawall (refer to Figure 2 and 3 below). Furthermore, the seawall will be constructed of local rock material (including rock from the existing wall) which is recessive in colour (i.e. beige, tan, white and grey tones) and the applicant accepts this as a condition of consent.

Photos and visual simulations of the existing and proposed seawall are illustrated in Figures 4-6 below. These are also contained within the Visual and Landscape Assessment prepared by 4Sight Consulting and attached at **Appendix E**.

Plans prepared by LDE illustrating the proposed seawall are attached at **Appendix C**.

4.2.1 Construction

The proposed seawall will be constructed generally as follows:

1) Construction will occur by first stacking the existing rock material for storage and reuse and removal of the railway irons to allow access to the desired alignment. This work will likely be done in stages so not to affect the integrity of the remaining wall and so that materials can be stored within the works footprint.

2) The new piles will then be drilled and concreted over the low tide cycle with the contractor to determine the number of piles that are able to be achieved on a daily basis. All spoil will be removed from site and disposed of to an appropriate site.

3) Concrete work will likely to occur after a sufficient number of piles have been ‘set’ and enough concrete is required to justify a delivery. In order to avoid heavy concrete trucks on the beach, concrete will likely be delivered from the Tuahine Crescent carpark and pumped to the foreshore. All other vehicles will access the site via the Pare Street beach ramp and traverse down the beach at low speed. No vehicles will be stored on the beach over the high tide period. The appointed contractor shall ensure that all machinery is well maintained to minimise the chance of failure or oil leaks. The contractor shall carry a spill kit with them at all times in case of an accidental spill. No refuelling of machinery shall occur on the beach.

Earthworks are proposed, however large quantities of earthworks are not envisaged as the structure will be placed on a mix of existing sand or bedrock. The exact quantity to be undertaken is unclear at this stage as the exact extent of the existing structure and nature of the underlying material will not be known until this has been cleared and excavation to design depth undertaken. Regardless it is anticipated that it earthworks volumes will be between 10-20m^3.The supply of additional rock has been allowed for in the design in order to achieve the design slopes.

The contractor will outline the erosion and sediment control measures to be adopted on the along with details of the Health and Safety requirements in a Construction Management Plan to be submitted to GDC prior to construction commencing. Works will be carried out in accordance with a Construction Management Plan (CMP) addressing matters such as machinery and vehicle refuelling, access for construction vehicles etc. The applicant offers the preparation of the CMP as a condition of consent.

4.3 Vegetation and Planting

As noted in Section 4.2 above, salt tolerant native plantings are proposed at the top of the seawall, including Hawera, Coastal Mahoe and Scrambling Pohuehue.

Further details of the proposed plantings are in Section 8 of the Visual and Landscape Assessment attached at **Appendix E**.

4.4 Mitigation Proposed

All works will be undertaken in accordance with the mitigation measures mentioned in the above sections, including:

- Works undertaken in accordance with a CMP;
- Construction of the seawall in local rock material; and
- Salt tolerant planting in accordance with the Visual and Landscape Assessment (**Appendix E**) will be planted at the top of the seawall.

4.5 Consideration of Alternatives

The proposal is not one that will generate more than minor adverse environmental effects (refer Section 9), so alternative locations and options do not need to be provided in accordance with the information requirements stipulated in Schedule 4 of the RMA. Although not required under the RMA, alternative solutions were considered throughout the design process, including two other seawall design options (including a vertical concrete/rip-rap hybrid and a rip-rap/toe backshore retaining). The two alternative seawall designs are described in detail in the feasibility letter prepared by 4Sight Consulting and attached at **Appendix D**.

The proposed seawall design was considered the most appropriate and preferred option due to the ability to stop rock to migrating seaward with the hybrid toe detail and the ability to remove the timber piles at their base in the future should the structure need to be removed. The extent of the seawall was

determined by the conditions on sit with the aim of minimising the footprint by tying into local natural features.

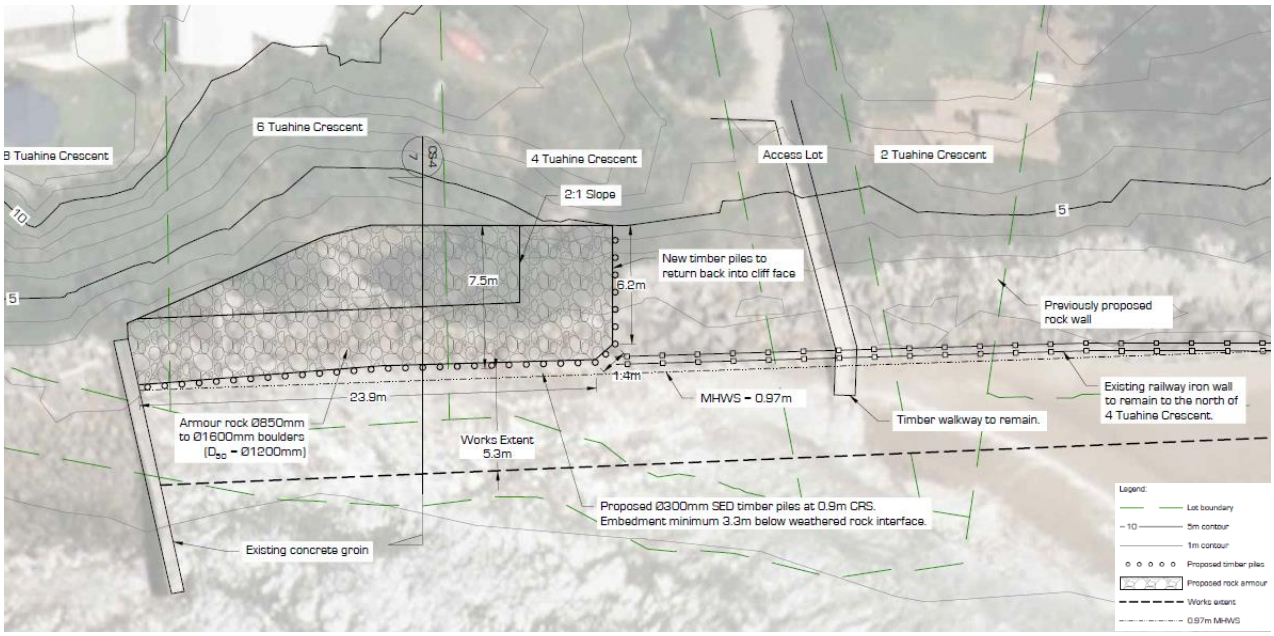


Figure 2: Site plan of proposed seawall (Source: LDE)

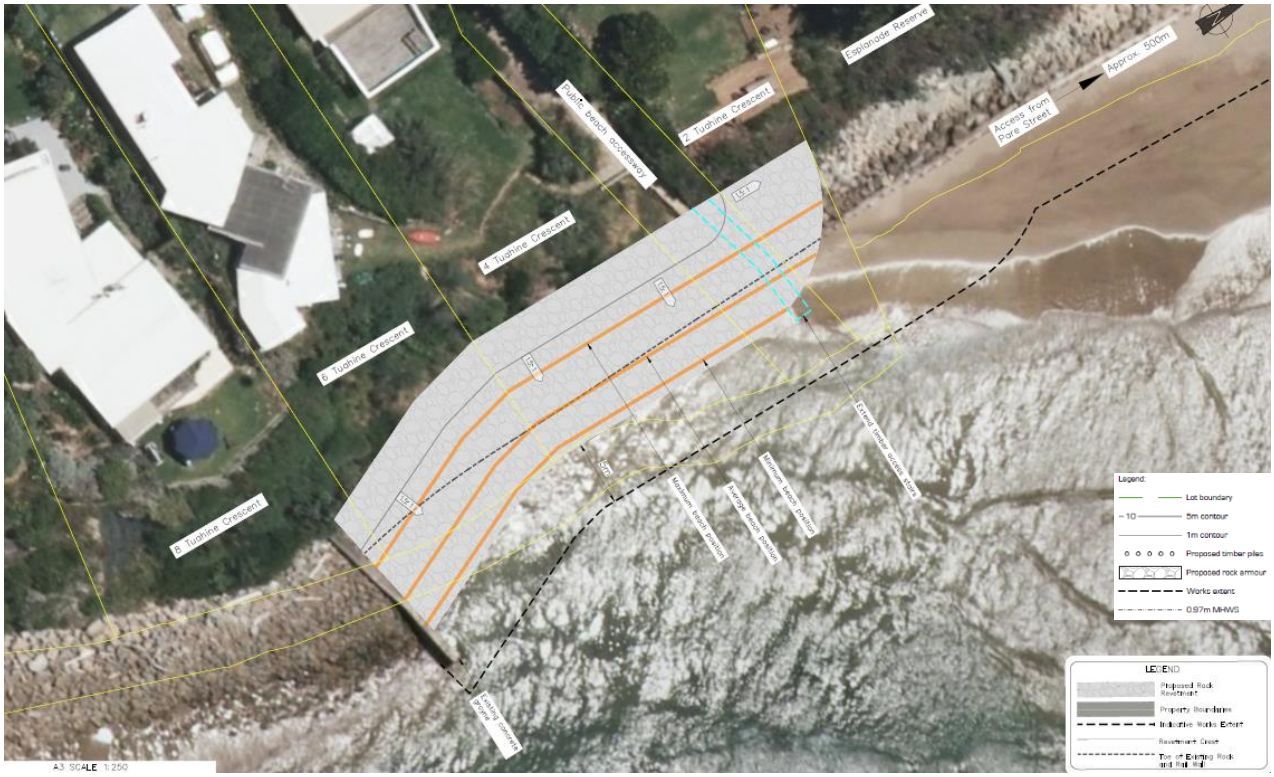


Figure 3: Site plan showing extent of previously proposed seawall under LU-2017-107788-00, LL-2017-107789-00, CC-2017-07790-00, CO-2017-107791-00 (Source: Tonkin and Taylor)

Figure 4: Photo of existing seawall (Source: 4Sight Consulting)

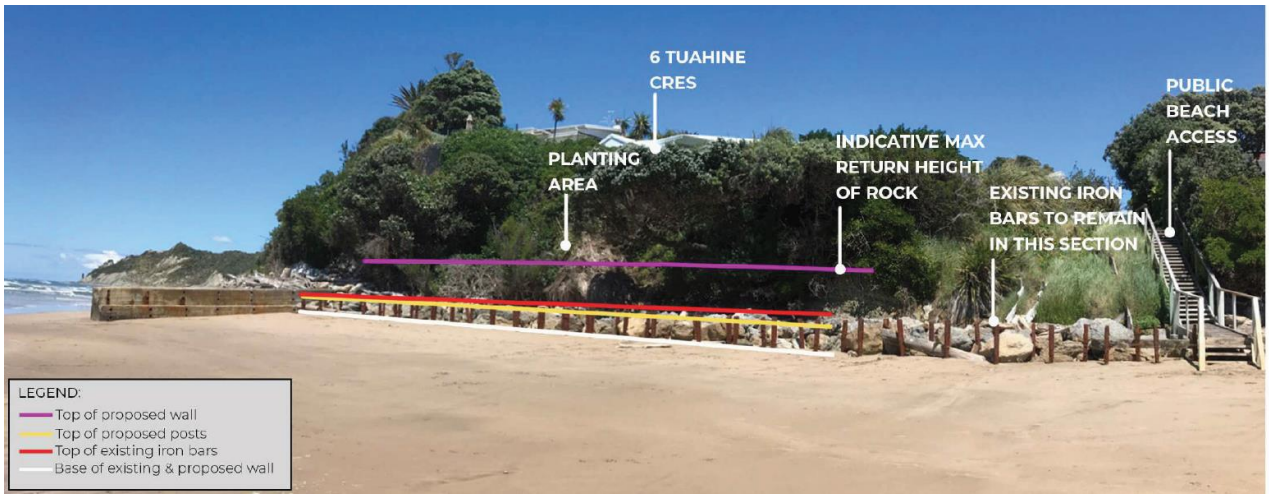


Figure 5: Diagram showing existing seawall and proposed extent of proposed seawall and planting area (Source: 4Sight Consulting)

Figure 6: Visual simulation showing proposed seawall (Source: 4Sight Consulting)

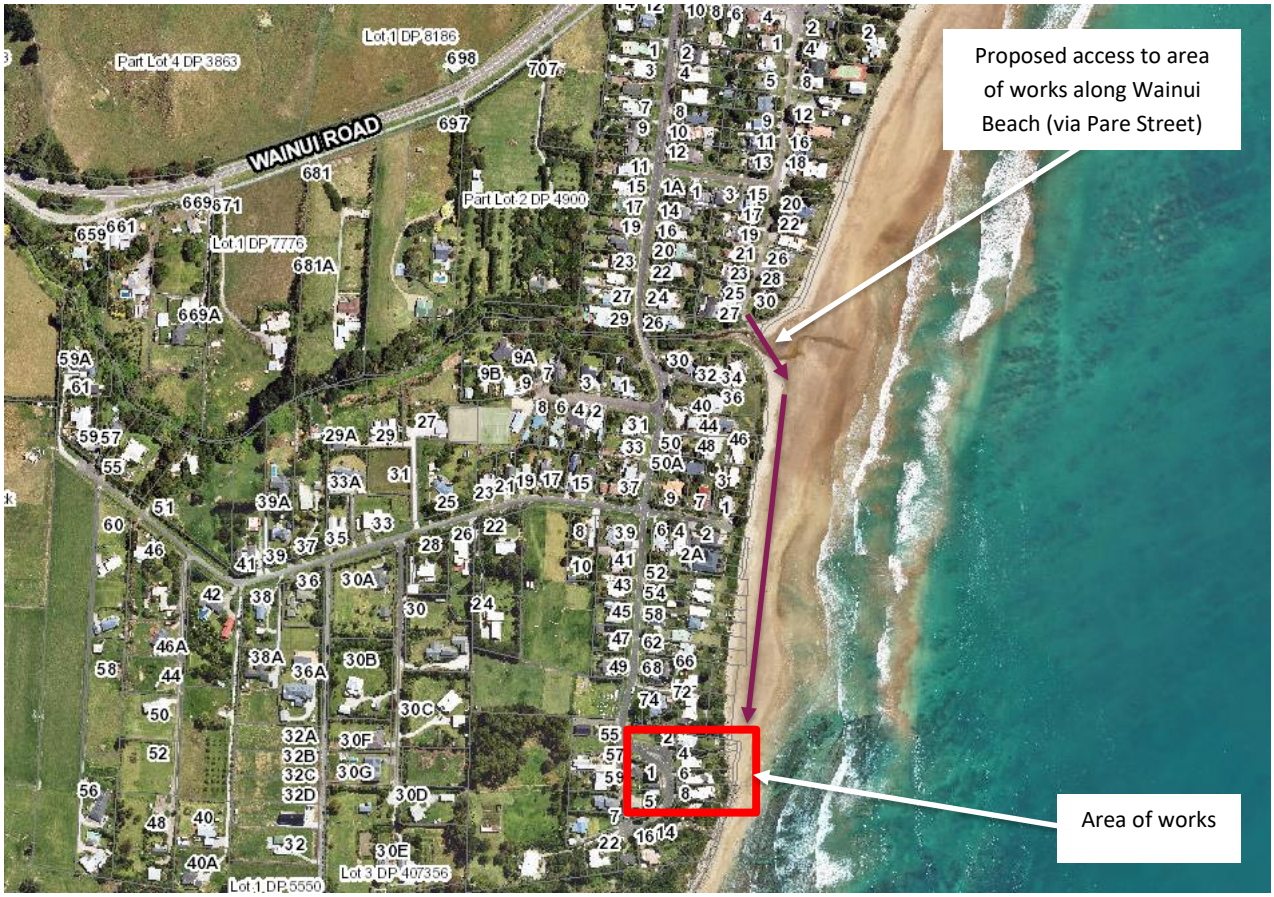


Figure 7: Aerial map showing area of works for construction of seawall and access to the site along Wainui Beach, via Pare Street (Source: Gisborne District Council)

5 THE SITE & SURROUNDING ENVIRONMENT

5.1 The Site and Surrounds

The subject site comprises of three residential properties at 4, 6 and 8 Tuahine Crescent, located at the southern end of Wainui Beach, approximately 6km to the east of Gisborne. The subject site is bound by Tuahine Crescent to the west, public stairs and reserve providing access to the beach from Tuahine Crescent to the north, Wainui Beach to the east and residential properties to the south. The residential sites each contain a residential dwelling, and slope down toward the east. There is an existing public reserve to the north of 4 Tuahine Crescent which provides access to Wainui Beach (Figure 8)

There is an existing coastal protection structure comprising a railway iron wall that traverses the rear of 4, 6 and 8 Tuahine Crescent in a north-south direction. The seawall is located approximately 8m seaward from the cliff toe and is approximately 160m long, running from the southern concrete groyne to 52 Murphy Street to the north. The seawall is approximately 50 years old and currently in a state of disrepair (refer to Figure 9). Other coastal protection structures in the area include an existing rock revetment to the south of the southern concrete groyne, and gabion baskets near 21 Wairere Road, approximately

900m north of the proposed works area. As such, the site is located on a part of Wainui Beach which has been highly modified by man-made structures.

The surrounding environment comprises of a coastal residential environment, with existing residential properties and development to the north, south and west and public reserve and Wainui Beach to the east.

The certificates of title for the sites are attached at **Appendix F**. There are no interests or restrictions on the titles for the sites that are relevant to this application.

Maps indicating the zoning and overlays relevant to the site are attached at **Appendix G.**

Figure 8: Aerial showing subject sites (outlined in red) and locations of adjacent council reserves (Source: Gisborne District Council)

5.2 Coastal Environment

5.2.1 Geology

Wainui Beach sits within the Hikurangi Deformation Front and the associated rock is siltstone and mudstones which have been uplifted and deformed to their present day position. The subject site marks the transition point from a beach setting to a cliff setting. This is indicated by the exposed siltstone face and the LDE geotechnical investigations of the site (refer to plans in **Appendix C** and Coastal Processes Memo prepared by 4Sight Consulting attached at **Appendix H**). Sand at the site fluctuates between 0.5 and 2m deep depending on changing weather and swell conditions.

5.2.2 Ecology

Due to the position within the tide and fluctuating nature of sands at the site, no significant marine or coastal habitat are known to be present at the site. Offshore from the site is a series of reef structure which is likely to contain a range of reef species common to the area. The adjoining bank is comprised of mostly weed species except for a couple of flax plants and one large pohutakawa located on private land.

5.2.3 Coastal Processes

Wainui Beach is considered to be a high energy beach open to ocean swells form the NE to the S. These swell events dictate a range of fluctuating current and sediment deposition patterns along the beach. For a further detailed description of the coastal processes at the site has been included at the Coastal Processes Memo attached at **Appendix H**.

Figure 9: Photo of existing seawall, facing south towards concrete groyne (Source: 4Sight)

6 CONSULTATION

6.1 Consultation with Mana Whenua

Copies of feedback and correspondence described in this section is attached at **Appendix I**.

The applicant has made contact with Ngati Porou and Ngati Oneone regarding the proposal. An email with a brief description of the proposal, plans and an invitation to meet on-site to discuss the proposal was sent to iwi representatives. Email correspondence to date has been supportive (refer to **Appendix I**) and further correspondence will be forwarded to the processing planner.

6.2 Written Approvals

Written approvals have been obtained from the owners of 4 Tuahine Crescent and 2 Tuahine Crescent (refer to Figure 10).

The signed approval forms and plans are attached at **Appendix J**.

Figure 10: Aerial showing locations of persons who have provided their written approval to the application

7 PERMITTED ACTIVITIES THAT ARE PART OF THE PROPOSAL

Permitted activities that form part of the proposal are as follows. A detailed review of compliance is contained in **Appendix K**.

- Removal of vegetation (being weed species plant and shrubs) not exceed 30cm d.b.h in the Outstanding Landscape Area and Coastal Environment overlays is permitted; and
- Removal of vegetation in the Land Overlay 3 is permitted.

8 REASONS FOR THE APPLICATION

An assessment of the proposal against the relevant statutory documents has been undertaken and the following reasons for consent are identified. A detailed analysis of the rules is provided in tabular form in **Appendix K**.

8.1 Tairāwhiti Resource Management Plan

Land use consent is being sought under the Tairāwhiti Resource Management Plan (TRMP) for the following activities:

- The construction of a seawall which is not provided for in residential zones. Pursuant to DD1.6.1(32), consent is required as **a non-complying** activity.
- The proposal will involve more than 10m³ soil/land disturbance in the Land Overlay 3. Pursuant to C7.1.6(3), consent is required as a **restricted discretionary** activity[2].
- The proposal involves the construction of a seawall to mitigate the effects of coastal hazards in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(1), consent is required as a **discretionary** activity.
- The proposal involves earthworks that will alter natural dune landform in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(3), consent is required as a **discretionary** activity.
- The proposal involves removal of the existing seawall in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(4), consent is required as a **discretionary** activity.
- The proposal will involve land disturbance in the Outstanding Landscape Area which will disturb more than 10m³ of soil. Pursuant to C9.1.6(12), consent is required as a **restricted discretionary** activity[2].

8.2 Overall Status of the Application

Overall, resource consent is required for a non-complying activity.

[2] As noted in Section 4.2.1, it is anticipated that the proposed seawall will involve minimal earthworks as construction of the seawall will predominantly involve uplift / placement of rock material and drilling for the new timber piles. However, the exact extent of earthworks / land disturbance is not known, such that consent is applied for out of an abundance of caution under C7.1.6(3) and C9.1.6(12) of the TRMP.

8.2.1 Non-Complying Activities – s87A, s104B and s104D

As a non-complying activity, there is no limitation in the matters that can be considered providing they are resource management related. The consent authority may decline consent or it may only grant consent with or without conditions providing the requirements of s104D are met.

9 SCHEDULE 4 RMA – ASSESSMENT OF ENVIRONMENTAL EFFECTS

9.1 Introduction

Having reviewed the relevant plan provisions, visited the site and taking into account the matters that must be addressed by an assessment of environmental effects as outlined in Clause 7 of Schedule 4 of the Act, the following environmental effects warrant consideration as part of this application.

As this application is for a non-complying activity, relevant effects that the council can consider are unlimited. Notwithstanding the ability of council consider all effects, we consider that only the following effects are relevant:

- Positive effects;
- Effects on visual amenity and landscape values;
- Construction and earthworks effects;
- Coastal process effects;
- Coastal hazard effects;
- Effects on public access;
- Effects on biodiversity and ecological values; and
- Cultural and archaeological effects.

An assessment of these effects, that corresponds with the scale and significance of the effects that the activity may have on the environment, is provided below in the remaining parts of section 9. Clause 7(2) notes that the requirement to address matters in the assessment of environmental effects is subject to the provisions of any policy statement or plan. The relevant documents have been assessed in Section 10 of this report.

9.1.1 Permitted Baseline

The permitted baseline is relevant to both the assessment under sections 95A – 95G and section 104 of the Act. Under these sections, a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect. This is the permitted baseline. It is only the adverse effects over and above those forming a part of the baseline that are relevant when considering an application.

The purpose of the permitted baseline test is to isolate and make irrelevant, the effects of activities on the environment that are permitted by the plan. When applying the permitted baseline, such effects cannot then be taken into account when assessing the effects of a particular resource consent

application. The baseline has been defined by case law as comprising the 'existing environment' and non-fanciful (credible) activities that would be permitted as of right by the plan in question.

In this case, the permitted baseline is of limited relevance as coastal protection structures, such as seawalls, are not provided for in the General Residential zone and therefore require resource consent. Vegetation removal as part of the proposal is permitted, and as such any effects associated with this are disregarded as within the permitted baseline.

In addition, no unlawful structure can be relied on as part of the permitted baseline.

9.1.2 Receiving environment

In assessing the potential adverse effects on the environment, the receiving "environment" for effects must be considered.

The receiving environment is a mandatory consideration defined by caselaw and is the environment beyond the subject site upon which a proposed activity might have effects. This includes the future state of the environment upon which effects will occur, including:

- The environment as it might be modified by the utilisation of rights to carry out permitted activities; and
- The environment as it might be modified by implementing resource consents that have been granted at the time a particular application is considered, where it appears likely that those resource consents will be implemented.

In this case the receiving environment is as described in Section 4.5 of this report, which identifies various coastal protection structures including the existing 160m long railway iron seawall which is in a state of disrepair. While the structure exists in its current location, as noted in Section 3.1, there is no record of lawful establishment of the seawall. However, documentation and historic aerial photographs indicate the seawall was established around 1960. Despite this, it cannot be denied that the structures have been in place and protected private properties on Tuahine Crescent for over 50 years, therefore supporting that (whether or not the seawall has been lawfully established), the seawall forms part of the existing environment.

There are no known resource consents yet to be exercised.

9.1.3 Other considerations

Sections 95D(d)-(e) and 104(3)(a) of the Act require that assessments must disregard:

- Trade competition, or the effects of trade competition; and
- Any effect on a person who has given written approval to this application.

Trade competition and written approval are not relevant to this application.

9.2 Positive Effects

The proposal will have positive effects, including:

- The protection of existing residential development and privately-owned land from coastal erosion, thereby protecting the social and economic wellbeing and health and safety of people and the community;
- Additional planting of native species within a coastal environment, providing additional land stability;
- Improved visual amenity due to the replacement of a part of an existing seawall currently in a state of disrepair and proposed planting of the lower slope; and
- Improved visual integration of the new seawall through use of natural and recessive materials and removal of visually prominent iron bars.

9.3 Effects on Visual Amenity and Landscape Values

The proposal is located within a coastal environment and an Outstanding Landscape, and involves the replacement of an existing seawall with a seawall with an increased height. As such, the proposal has the potential to generate adverse effects on the environment in terms of visual amenity and landscape character.

A Visual and Landscape Assessment has been prepared by 4Sight Consulting which assesses the visual impact of the proposed development in relation to visual amenity and landscape values. The assessment is attached at **Appendix E** and summarised below.

9.3.1 Visual Amenity

In terms of visual amenity, the assessment identifies six key viewing audiences as southern beach users (past groyne), residents of 6 Tuahine Crescent, users of the Tuahine Crescent public beach access, beach users in front of 4 and 6 Tuahine Crescent, beach users 50-250m north of the site and beach users more than 250m north of the site, and considers the effects of the proposal on each of these viewing audiences.

The assessment considers that the greatest visual change will be experienced by those closest to the proposal, being beach users in front of 4 and 6 Tuahine Crescent and users of the Tuahine Crescent public beach access. While the proposal will result in a visual change to these viewers, the assessment identifies that the most noticeable change will be the increase in height from the current rock revetment (which forms part of the receiving environment) to that of the proposed seawall. Although the proposal will result in a higher structure than currently exists, the seawall has been designed to be ensure it appears visually recessive and integrated when viewed in the wider landscape. The use of local rock material (including rock from the existing wall) which is recessive in colour (noting this has been offered as a condition of consent in Section 4.2) and the replacement of iron bars (noted in the assessment as the most visually dominating element in the landscape) with timber posts will soften the visual appearance of the wall and enable it to visually assimilate into the coastal edge environment. In addition, proposed revegetation will assist in obscuring the increased height and further assimilating the seawall into the

landscape. As such, while the assessment notes the proposal will form a "visible and recognisable change", the change itself will present an "improved visual situation" when assessed against the existing situation due to the greater visual integration of the new seawall compared to the existing. This is further demonstrated by Figures 4-6 (also included in the Visual and Landscape Assessment at **Appendix E**), which show that whilst a noticeable visual change, that the proposal will not detract from or generate adverse visual effects for these viewers due to its design and materiality, modest footprint and planting proposed. Overall conclusions regarding impacts on viewing audiences is that, while there will be some effect on viewing audiences within closest proximity, this will reduce over time as the use of natural and lighter coloured materials, maturing of planting and natural accumulation of driftwood will visually integrate the seawall with the shore and beach environment (particularly when viewed the north and west) (refer to Table 1 in the Visual and Landscape Assessment at **Appendix E**).

For the remaining viewing audiences described above, the proposal will represent an insignificant visual change as views of the seawall will be obscured by the existing groyne, topography or proposed planting, or viewed at such a distance that seawall will either form a small component of the coastal landscape or be barely discernible due to sheer distance and scale of the wall in the context of the wider landscape. Overall, conclusions regarding impacts on viewing audiences are that, while there will be some effect on viewing audiences with unobstructed views and within close proximity, the seawall has been designed to ensure that it will visually assimilate into the coastal edge environment.

Furthermore as noted in Section 5.1, that the proposal is located within an area of Wainui Beach which has been highly modified by man-made structures, including the existing seawall. Therefore, the proposal will replace an existing structure and will not introduce any new or additional man-made structures beyond that already existing and the proposal will not change the visual character of the site or generate additional adverse effects on the visual amenity or character of the area.

9.3.2 Landscape Values and Natural Character

In terms of effects on landscape values and natural character, the assessment considers that the proposed seawall will reduce the visual impact of a man-made structure, thereby presenting an improvement upon the existing situation. While of a greater height, the proposed seawall will be in the same location and extent as the current seawall, and has been designed to ensure the materials, colours and landscaping enable the replacement seawall to be readily absorbed within the receiving environment, and therefore reduce potential adverse effects on the coastal and outstanding landscape values. The assessment notes *"The proposed seawall replacement seeks to mitigate the effects of a man made intervention along the beachfront by using natural materials (timber and local rock) to create an aesthetic effect that is as visually integrated as possible given the technical constraints of seawall design. The location of the seawall , in the same alignment and location as the "facing edge" iron bars with the cliff and background vegetation adds to its ability to be absorbed within this environment. The increased height of the seawall along the cliff base will still sit low within the wider panoramic view and will be visually screened and softened by existing and proposed vegetation along its top edge over time"*.

With specific reference to the existing situation on the site, the assessment notes *"The proposed design also presents a reduction in the obviousness of human impact on this special coastline when compared to the existing iron bar condition"*.

Due to the sensitive nature of the site, the Visual and Landscape Assessment recommends a number of mitigation measures which the applicant accepts as forming conditions of consent. These conditions will ensure that the visual and landscape effects of the proposal will be assessed in this application, and the recommendations include matters such as undertaking planting in accordance with the planting schedule, restrictions on rock wall height to 4m and enabling a high LRV value to enable timber and rock materials to visually integrate with the coastal environment.

Overall, the assessment concludes that *"Taking into account the mitigation measures proposed specific to retention and enhancement of existing vegetation, use of local and natural materials and the maximum height of the wall, the inclusion of the new sea wall will have negligible impact on the existing landscape character and will not contribute to any significant diminishment in view quality"*.

9.3.3 Residential Character and Amenity

In terms of residential character and amenity, the proposal is to replace a portion of seawall which has existed on the site for over 50 years. The proposed seawall will be generally in keeping with the existing seawall in terms of extent, scale and form. These, together with the coastal location of the properties, will ensure that the proposed replacement seawall will not generate any further adverse effects on the environment in terms of residential character or amenity.

9.3.4 Conclusion

Based on the specialist's assessment and comments above, it is considered that the proposed development has been designed in a manner which ensures that effects in terms of visual amenity and landscape values are appropriately mitigated to have, at most, minor effects on the environment.

9.4 Construction and Earthworks Effects

Any adverse construction effects can be appropriately managed through a CMP, which will ensure that suitable controls are in place with respect to health and safety of the public and contractors, public access and alternative pedestrian routes during works (if necessary), vehicle refuelling and construction noise and hours. The beach area where works will be carried out will be closed off to the public, and the remainder of the beach (i.e. being the majority of the beach) will remain accessible to the public. Given the scale of the works, the works are expected to be completed within one month, as such the proposal will only have temporary adverse construction effects on the environment,

In addition, any adverse in terms of earthworks will be managed through an ESCP (within the offered CMP, as noted in Section 4.2.1) and best management practice. Controls will be in place prior to works commencing and will only be removed upon completion of works, ensuring that the effects of dust, erosion and sediment are contained within the area of works, with minimal discharge to the coastal marine area and surrounding environment and for the entire duration of works.

Overall the construction period is anticipated to be one month, with effects being temporary in nature. As such the earthworks and associated construction effects are considered to be less than minor.

9.5 Coastal Process Effects

A Coastal Processes Assessment has been prepared by Sam Morgan of 4Sight Consulting (attached at **Appendix H**) which assesses the potential adverse effects of the proposal on coastal processes.

The assessment considers that given the nature of local conditions and the scale and extent of the proposed seawall which is generally consistent with the existing structure, that it is unlikely that the replacement seawall will impact upon the local wave climate, current regimes, sediment transport or inundation level at Wainui Beach. The assessment notes "*The rock wall will dissipate the energy approaching the base of the cliff to avoid any further erosion. It will act in a similar manner to the existing structure [with the most significant difference being an increased crest height to allow for future sea-level rise]"*.

In terms of reflection, the assessment notes that the proposed seawall will act in a similar manner to the existing structure due to the permeable nature of the seaward face of the wall, enabling water to flow through the structure and dissipating some wave energy. It is concluded that the "*potential effects to arise from wave energy reflection off the proposed new structure are considered to be undetectable in the context of the existing situation"*.

In terms of end effects, the assessment notes that "[*Currently] there are existing structures on either side of the proposed which are capable of absorbing the potential impact of end effects. The structure has been designed in order to minimise the potential end effects by "tying off" into these existing structures*". Notwithstanding, the assessment recognises that should the existing seawall (beyond the proposed new wall) be removed, that there is a limited area to the north near the beach access stairs that may be impacted by end effects generated by the proposed seawall. The assessment notes that any effects on this structure will be appropriately managed by design of a new access structure, noting that the existing structure will likely need to be replaced during the removal of the existing seawall.

Based on the specialist's assessment, it is considered that the proposed seawall has been designed to ensure that any adverse coastal process effects will be appropriately managed and less than minor when compared to the existing situation on the site.

9.6 Coastal Hazard Effects

The site and surrounding area are located within a coastal environment and which is recognised under the TRMP as risk of coastal hazards and erosion. The proposed seawall will not increase the risk of coastal hazard or erosion at the site given its limited scale and extent. In terms of erosion, the 4Sight Coastal Processes Assessment (attached at **Appendix H**) recognises that due to the design and extent of the wall, it will not impact upon erosion risk at the site in any discernible way.

In terms of coastal inundation, the assessment notes that *"The rock wall …will act in a similar manner to the existing structure with the most significant difference being an increased crest height to allow for*

future sea-level rise. At RL4m, the crest height of the structure proposed here is lower than the previously proposed at a height of RL4.8m. While this height reduction will mean an increased risk of overtopping. Incorporating a future sea-level rise of 1m, the new design provides 700mm of freeboard above the 1%AEP storm surge event and wave setup water level. This height should provide sufficient protection from overtopping under present day conditions and enable time for salt tolerant planting to be established above the structure. This planting should be able to absorb the relatively minor and infrequent overtopping that is expected".

Based on the specialist's assessment, it is considered that the proposal has been designed to ensure that any adverse coastal hazard effects will be less than minor.

9.7 Effects on Public Access

Any adverse effects of the proposal in terms of public access will be less than minor as the proposed seawall will replace the existing railway iron wall; there will be no change or increase in the number or extent of structures that have the potential to obstruct public and walking access than from what currently exists. The public will continue to have the access to the beach from the access lot to the north of 4 Tuahine Crescent and this will remain unchanged following the proposed development, and any tidally restricted access will also remain unchanged from the existing situation.

Furthermore, as noted above, access will be restricted during the construction period, however this will be temporary in duration (approximately one month) and full public access will be restored on the completion of works.

As such, the proposal will not generate any adverse effects on public access beyond those already occurring as the proposal is for a replacement seawall of a similar scale and extent to that existing on the site.

9.8 Effects on Biodiversity and Ecological Values

The proposed seawall will not be located within an area identified as containing any significant conservation, biodiversity or ecological values. The proposed seawall will replace the existing seawall within a highly modified coastal environment and will be of an identical alignment and within the footprint of the existing structure. As such, the proposal is not anticipated to have any further impacts on benthic and terrestrial microfauna in the area than that already occurring. Furthermore, the seawall is not located within a bird nesting, roosting or feeding zone.

As the proposed seawall will replace an existing seawall within a highly modified environment which is not identified as containing any significant biodiversity or ecological values, it is considered that any adverse effects of the proposal on biodiversity and ecological values will be less than minor.

9.9 Cultural and Archaeological Effects

As the works are within a coastal environment, the proposal has the potential to generate adverse effects on the relation of Maori with their ancestral lands, water, sites, waahi tapu or other taonga. Relevant iwi

groups have been contacted in relation to this application and consultation is on-going. Responses and feedback from iwi will be provided to council when received, and it is noted that if any specific requests or cultural concerns are raised by iwi, the applicant is open to addressing these. It is noted that the potential adverse effects that iwi are likely to be interested in or concerned with (i.e. impacts on the coastal environment, biodiversity and ecological values) have been addressed in Section 7 of this report as less than minor.

Furthermore, a search of ArchSite has confirmed that there are no registered archaeological sites in the works area. It is also noted that the area is dynamic and earthworks have previously occurred in the works area (for the existing railway iron wall), and therefore the proposed works are unlikely to adversely affect any archaeological sites, and standard accidental discovery protocol will be adhered to and an Archaeological Authority from Heritage New Zealand will be applied for if any sensitive or archaeological material is uncovered during works.

As such, adverse effects on cultural values are likely to be less than minor, although consultation with iwi is ongoing and the responsibility for assessing impacts on cultural values ultimately lies with iwi as mana whenua of this area.

9.10 Environmental Effects Assessment Summary

Overall, from the assessment undertaken above the proposal will have actual and potential effects that are considered to be acceptable.

10 STATUTORY ASSESSMENT

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

Section 104(1)(a) requires that when considering an application for a resource consent, the consent authority must, subject to Part 2, have regard to 'any actual and potential effects on the environment of allowing the activity'.

As assessed in Section 9 above, the proposal will have actual and potential effects that are acceptable. In particular, the limited the scale and extent of the structure and use of natural and local materials will ensure that that proposed seawall is visually assimilated into the wider coastal landscape. Potential adverse effects during construction and earthworks can be suitably avoided or mitigated through the provision of a CMP, and effects in terms of public access and coastal processes will not be significantly different from the existing situation. The new seawall will also assist in restoring the natural character of the coastal environment through the removal of the visually prominent iron bars of the existing seawall and will ensure the protection of the properties at 4, 6 and 8 Tuahine Crescent (and beyond) from coastal erosion.

10.2 Section 104(1)(ab)

Section 104(1)(ab) requires that the consent authority consider "any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity".

In the case of this particular application, the proposal is not of a scale or nature that would require specific offsetting or environmental compensation measures to ensure positive effects on the environment.

10.3 Section 104(1)(b) of the Act

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

any relevant provisions of –

(i) a national environmental standard;

(ii) other regulations;

(iii) a national policy statement;

(iv) a New Zealand coastal policy statement;

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

(vi) a plan or proposed plan

An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that activity may have on the environment has been provided below.

10.3.1 New Zealand Coastal Policy Statement

The proposal involves use and development of land adjacent to the coastal environment, and therefore requires consideration against the New Zealand Coastal Policy Statement 2010 (NZCPS) which sets out how the coastal environment should be managed at a national level.

The key objectives and policies of the NZCPS seek to:

- Protect the integrity, form, functioning and resilience of the coastal environment and its ecosystems (Objective 1);
- Preserve and encourage the restoration of the natural character of the coastal environment and protect natural features and landscape values from inappropriate use and development (Objective 2, Policies 13, 15);
- To take into account the principles of the Treaty of Waitangi in relation to the coastal environment and recognise the relationship of tangata whenua over their lands, rohe and resources (Objective 3, Policy 2);
- Maintain and enhance public open space qualities and recreation opportunities of the coastal environment (Objective 4, Policies 18, 19);

- To ensure that coastal hazard risks are managed and consider the range of options for reducing coastal hazard risk (Objective 5, Policies 24, 25 and 27); and
- Enable people and communities to provide for their social, economic and cultural wellbeing and their health and safety through use and development, while recognising that the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms (Objective 6).

The proposal is consistent with the NZCPS as:

- The proposed development will not result in adverse effects on the integrity, form, functioning or resilience of the coastal environment as the proposed seawall will be entirely within the footprint/seaward extent of the existing seawall, and will effectively act as a 'renewal', rather than a new seawall. The limited extent of the proposed seawall will ensure that the integrity of the adjacent coastal environment and coastal processes are maintained;
- The proposal is appropriate in the context of the existing coastal environment as the proposed seawall will replace an existing, degrading structure. As outlined in the Visual and Landscape Assessment at **Appendix E**, although greater in height, the proposed seawall assists in restoring the natural character of the coastal environment through the use of natural, local and raw materials and proposed native planting which enable the seawall to assimilate into the coastal environment and the removal of man-made features (being the iron rods) from the coastal landscape;
- Relevant iwi groups have been contacted in relation to this application and consultation is on-going and there are no identified archaeological sites near the area of works;
- The proposal will maintain and enhance public and walking access as the proposed seawall will be within the footprint of the existing seawall, and therefore will not obstruct movement to or along the coast, nor will it reduce space in the CMA for recreational activities;
- Potential coastal management options have been considered in both the Wainui Beach Erosion Management Strategy by Gisborne District Council, as well as options for seawall designs by the applicant as discussed in Section 4.5 of this report. The replacement of the existing seawall is the only practical means to protect the private properties to the west of the cliff line which are at extreme risk from coastal erosion. The dwellings landward of the seawall, as well as the rock and rail iron wall, are existing and the replacement of the seawall will not facilitate more intensive residential development; and
- The proposal will enable people and communities to provide for their social, economic and cultural wellbeing and heath and safety by mitigating the effects of coastal erosion on the adjacent properties.

As such, the proposal is considered to be consistent with the strategic direction of the NZCPS.

10.3.2 Tairāwhiti Resource Management Plan

The relevant objectives and policies of the TRMP seek to:

- Ensure the sustainable use of natural and physical resources (Objective B9.1.1.3);

- Protect and preserve the natural character, amenity values and outstanding natural landscapes of the coastal environment (Objectives B4.3.1.1, B4.3.1.4, B4.4.1.1, B9.1.1.1, C3.2.2.1, C9.1.3.2 Policies B4.3.2.4, B9.1.2.9);
- The adverse effects of activities on the integrity, functioning and resilience of natural processes and qualities, such as natural movement of sediment and water, should be avoided as far as practicable (Objective B4.4.1.2, Policy C3.2.3.3);
- Protect outstanding natural features and landscapes from the adverse effects of activities (Objective C3.3.2.2, Policies C3.3.3.3, C3.3.3.4, C9.1.4.4);
- The restoration and rehabilitation of outstanding natural features and landscapes is undertaken where the adverse effects of past activities have degraded those features and landscapes (Objectives B4.3.1.2, B4.4.1.3, C3.3.2.3, Policy B4.3.2.5);
- Maintain public access to and along the CMA in the Coastal Environment (Objectives B9.2.1.1, C3.5.2.1, Policy C3.5.3.1);
- To restrict attempts to control natural processes by physical work to appropriate situations, such as where they are needed to protect existing development, will have no more than a minor adverse effect on the natural character of the coastal environment and will not cause or worsen hazards to other lands or waters (Policies B5.1.3.2, C8.1.4.5);
- Ensure mitigation works are designed and constructed in sympathy with the environment (Policy C8.1.4.6); and
- Recognise the implications of climate change, including a change in sea level rise (Policies B5.1.3.5, C8.1.4.7).

The following comments are made with respect to the objectives and policies above:

- The proposal will ensure the sustainable use of natural and physical resources, as the proposed seawall will be constructed out of natural and reused sustainable materials, including timber posts, local rock (including reuse of rock from the existing wall). The proposed seawall will also protect physical land resources from coastal erosion and processes;
- As assessed in Section 9.3 and the Visual and Landscape Assessment at **Appendix E**, the proposal will protect and preserve the natural character, amenity values and outstanding natural landscapes of the coastal environment. The proposal has been designed to ensure it is of a form, scale and visual appearance which visually assimilates into the receiving environment and is compatible with outstanding natural landscape values;
- As assessed in Section 9.5 and the Coastal Processes Assessment at **Appendix H**, the proposed seawall has been designed to ensure that it will maintain natural and coastal processes;
- As assessed in Section 9.3 and the Visual and Landscape Assessment at **Appendix E**, the proposal has been designed to ensure that it restores and rehabilitates the natural character of the coastal environment. The proposal reduces the extent of discernible human impact on this part of the coastline, when compared to the existing rock and iron bar seawall;
- As assessed in Section 9.7, the proposal will maintain the extent of existing public access across this part of the beach. The proposed seawall will not extend any farther seaward than the existing wall, and therefore will not further hinder public access to and along the CMA;

- The proposed replacement seawall is required to protect existing residential properties to the west of the cliff face from coastal erosion and hazards. The proposed seawall will replace an existing structure and will remain entirely within the footprint of the existing seawall, and therefore does not seek greater control or management of natural processes beyond that of the existing situation. As assessed in Section 9, the proposed seawall will have no more than minor adverse effects on the natural character of the coastal environment and will not generates hazards to other lands which cannot be appropriately managed; and
- As assessed in Section 9, the proposed seawall has been designed to take account of climate change and sea level rise.

As such, the proposal is considered to be generally consistent, and therefore not contrary to, the relevant objectives and policies of the TRMP.

10.4 Section 104(1)(b) Summary

The above assessments demonstrate that the proposal will be consistent with the relevant objectives and policies of the relevant statutory documents, subject to fair and reasonable conditions being imposed as recommended in Section 11.

10.5 Section 104 (1)(c) of the Act

Section 104(1)(c) also states that consideration must be given to "any other matters that the consent authority considers relevant and reasonably necessary to determine the application."

The Wainui Beach Erosion Management Strategy is relevant to the application and has been considered in Section 4.1.1 of this report.

11 OTHER RELEVANT SECTIONS OF THE ACT

11.1 Section 104D Test for Non-Complying Activities

To be able to grant consent to a non-complying activity, a council must be satisfied that either the adverse effects of the activity on the environment will be minor (s104D(1)(a)), or the proposed activity will not be contrary to the objectives and policies of a proposed plan and/or plan (s104D(1)(b)). This consideration is commonly known as the 'threshold test' or the 'gateway test'. If either of the limbs of the test can be passed, then the application is eligible for approval, but the proposed activity must still be considered under Section 104. There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test' can be considered to be passed.

As identified in the assessment above, the adverse effects of the activity on the environment will be minor and the proposed activity will not be contrary to the objectives and policies of the plan. As such the application can be considered under Section 104 and a determination made on the application as provided by Section 104B.

11.2 Section 108 – Recommended conditions of consent

As identified in the preceding assessment there are a number of recommended conditions of consent that will avoid, remedy or mitigate the potential adverse effects of the proposed activity on the environment. It is anticipated that the Council will adopt conditions relating to the following matters.

1) Provision of and for all works to be in accordance with a Construction Management Plan; and
2) Works to be in accordance with the recommendations of the Visual and Landscape Assessment, including restrictions on rock wall height, light reflectance values of materials and planting;

It is requested that the draft conditions be provided to 4Sight in advance of a decision being made on the application.

11.3 Section 125 – Lapsing of consent

The Act prescribes a standard consent period of five years in which all works must be undertaken, but this may be amended as determined to be appropriate by the Council. It is requested that the standard five year provision be applied in this case.

11.4 Section 35 – Monitoring charges

The Council is required to monitor the exercise of resource consents under Section 35 of the Act.

The applicant accepts a reasonable monitoring fee in accordance with the Council's monitoring fee system and that the Council may carry out its monitoring functions by way of inspections of the site during development of the proposal.

12 NOTIFICATION ASSESSMENT – SECTIONS 95A TO 95G OF THE ACT

12.1 Public Notification Assessment

Section 95A requires a council to follow specific steps to determine whether to publicly notify an application. The following is an assessment of the application against these steps:

12.1.1 Step 1: Mandatory public notification in certain circumstances

An application must be publicly notified if, under section 95A(3), it meets any of the following criteria:

> *(3) (a) the applicant has requested that the application be publicly notified:*
>
> *(b) public notification is required under section 95C:*
>
> *(c) the application is made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977.*

It is not requested the application be publicly notified and the application is not made jointly with an application to exchange reserve land. Therefore Step 1 does not apply and Step 2 must be considered.

12.1.2 Step 2: Public notification precluded in certain circumstances

An application must not be publicly notified if, under section 95A(5):

> *(5) (a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification:*
>
> *(b) the application is for a resource consent for 1 or more of the following, but no other, activities:*
>
> *(i) a controlled activity:*
>
> *(ii) a restricted discretionary or discretionary activity, but only if the activity is a subdivision of land or a residential activity:*
>
> *(ii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:*
>
> *(iv) a prescribed activity (*see *section 360H(1)(a)(i)).*

In this case public notification is not precluded, therefore Step 2 does not apply and Step 3 must be considered.

12.1.3 Step 3: Public notification required in certain circumstances

An application is required to be publicly notified if one of the following circumstances are met, under section 95A(8):

> *(8) (a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification;*
>
> *(b) the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.*

None of the circumstances specified under section 95A(8)(a) exist.

In regards to section 95A(8)(b), the following assessment is made:

The adverse effects assessment under section 95D must discount adjacent land and positive effects, may take into account the permitted baseline and must consider the receiving environment.

The adjacent land (Section 95D(a)) is identified in Figure 11 below, and includes Lot 16 DP 3216 (Tuahine Crescent beach access), Lot 14 DP 3216 (Esplanade reserve), 10 Tuahine Crescent and 1 Tuhaine Crescent.

Key: = Subject site = Adjacent land

Figure 11: Adjacent land

Section 9 contains a comprehensive assessment of environmental effects of the proposal. When taking into consideration the above matters, in terms of section 95D the adverse effects of the activity will be minor. In particular adverse effects in relation to visual amenity and landscape values, construction and earthworks, coastal processes and hazards, public access, biodiversity and cultural and archaeological values will be at most minor.

Therefore, Step 3 does not apply and Step 4 must be considered.

12.1.4 Step 4: Public notification in special circumstances

Section 95A (9) states that a council must publicly notify an application for resource consent if it considers that 'special circumstances' exist, notwithstanding that Steps 1 to 3 above do not require or preclude public notification.

Special circumstances are not defined in the Act. Case law though has identified special circumstances as something outside the common run of things which is exceptional, abnormal or unusual but less than extraordinary or unique. A special circumstance would be one which makes notification desirable despite

the general provisions excluding the need for notification. The council should be satisfied that public notification may elicit additional information on the aspects of the proposal requiring resource consent.[3]

However, special circumstances must be more than:

- where a council has had an indication that people want to make submissions;
- the fact that a large development is proposed;
- the fact that some persons have concerns about a proposal.

There are no special circumstances that exist to justify public notification of the application because the proposal involves the construction of a replacement seawall. This type of proposal in the context of a coastal environment is neither exceptional or unusual.

12.1.5 Public Notification Summary

From the assessment above it is considered that the application does not need to be publicly notified, but assessment of limited notification is required.

12.2 Limited Notification Assessment

If the application is not publicly notified, a consent authority must follow the steps of section 95B to determine whether to give limited notification of an application.

12.2.1 Step 1: Certain affected groups and affected persons must be notified

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

> *(2) (a) affected protected customary rights groups; or*
>
> *(b) affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).*
>
> *(3) (a) whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11; and*
>
> *(b) whether the person to whom the statutory acknowledgement is made is an affected person under section 95E.*

[3] *Far North District Council v Te Runanga-a-iwi o Ngati Kahu* [2013] NZCA 221 at 36–37

There are no protected customary rights groups or customary marine title groups or statutory acknowledgement areas that are relevant to this application. Therefore Step 1 does not apply and Step 2 must be considered.

12.2.2 Step 2: Limited notification precluded in certain circumstances

In the following circumstances an application must not be limited notified to any persons, as specified by section 95B(6):

> *(6) (a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification:*
>
> *(b) the application is for a resource consent for either or both of the following, but no other, activities:*
>
> *(i) a controlled activity that requires consent under a district plan (other than a subdivision of land):*
>
> *(ii) a prescribed activity (*see *section 360H(1)(a)(ii)).*

There is no rule in the plan or national environmental standard that precludes notification. The application is not for a controlled activity nor a prescribed activity. Therefore Step 2 does not apply and Step 3 must be considered.

12.2.3 Step 3: Certain other affected persons must be notified

Other affected persons must be notified in the following circumstances specified by section 95B(7) and (8):

> *(7) (a) in the case of a boundary activity, an owner of an allotment with an infringed boundary; and*
>
> *(b) in the case of any activity prescribed under section 360H (1) (b), a prescribed person in respect of the proposed activity.*
>
> *(8) In the case of any other activity, determine whether a person is an affected person in accordance with section 95E.*

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

In deciding who is an affected person under section 95E, a council under section 95E(2):

> *(2) (a) may disregard an adverse effect of an activity on a person if a rule or national environmental standard permits an activity with that effect (i.e. council may consider the "permitted baseline");*
>
> *(b) must disregard an adverse effect that does not relate to a matter for which a rule or environmental standard reserves control or restricts discretion; and*
>
> *(c) must have regard to every relevant statutory acknowledgement made in accordance with a statute set out in Schedule 11 of the Act.*

A council must not consider that a person is affected if they have given their written approval or it is unreasonable in the circumstances to seek that person's approval.

With respect to section 95B(8) and section 95E, the permitted baseline was considered as part of the assessment of environmental effects undertaken in Section 9 of this report, which found that the potential adverse effects on the environment will be, at most, minor. In regards to effects on persons, the assessments in sections 9 and 10 are also relied on and the following specific comments are made:

12.2.3.1 Public reserve (Lot 16 DP 3216)

The adjacent property to the north (Lot 16 DP 3216) is a public reserve providing access from Tuahine Crescent to the beach and which is owned by Gisborne District Council. The site is used as a thoroughfare by persons to travel to and from the beach, such as the public and council maintenance workers, and therefore persons on this property are limited to short term visitors. There are no permanent persons on this property, nor are there any public bathroom or camping facilities available.

The effects of the proposal on these persons has been assessed in the Visual and Landscape Assessment at **Appendix E**, which considers that there will be moderate visual effects on persons at this property in the short term (0 to 3 years) due to the noticeable increase the height of the rock material when viewed from the north-eastern end of the public reserve. This is considered to decrease to a low visual effect on persons in the medium to long term (after 3 years) as natural weathering and driftwood accumulation enable assimilation into the environment. The assessment recognises that "*While the proposed rock revetment will form a change within these viewshafts, it sits below the main panoramic view of the shore, ocean and horizon when viewed from viewpoint 4… however given the staircase is orientated out towards the east panoramic view, which is preserved, the rock revetment is more visible as a peripheral element in the wider view composition"*, and "*the overall visual effects for this viewing audience will be of moderate effect, given that the rock revetment will form a change within the wider view, however it will not have a marked effect on the character and quality of the broader panoramic view due to its low profile, continuing use of local rock material already present on site, and removal of the most visually dominant existing element: the iron bars*".

The assessment also notes that *"The proposed rock revetment will appear very similar to the existing situation from the perspectives of this viewing audience, particularly as the prevalence of rock will form the majority of the approaching view. As the iron bars which characterise and currently dominate this view will be removed, the rock revetment "front line" will be less visually dominant for this audience"*.

As such, while there will be discernible visual change, the assessment recognises that the visual effect will decrease over time, the proposal will not detract from the panoramic view of the ocean and horizon and it will not represent a significant change in the visual character of the site.

Furthermore, the nature of persons on this property is a relevant consideration. Persons at this property are either walking to/from the beach or council maintenance workers such that their presence on the site is generally limited to, at most, a single day, ensuring that even in the short term, the proposal will have only transient visual effects on persons.

Taking the sensitivity and nature of persons at this property, the design and materiality of the proposed seawall and the reduction of visual effects over time into account, it is considered that, overall, the effects on persons at the public reserve to the north will be less than minor.

12.2.3.2 Esplanade reserve (Lot 14 DP 3216)

The adjacent property to the east is the esplanade reserve (Lot 14 DP 3216) which forms part of the beach and is owned by Gisborne District Council. The site is used as part of the beach and is accessed by the public. There are no permanent persons on this property. Persons on this property are better categorised as persons on the beach, on which adverse effects have been assessed in Section 9 above. Notwithstanding, an assessment of effects on persons at this property is provided below.

The effects of the proposal on persons has been assessed in the Visual and Landscape Assessment at **Appendix E**. The assessment splits persons on the esplanade reserve as southern beach users (Viewing Audience A) and those persons directly in front of 4 and 6 Tuahine Crescent (Viewing Audience D).

12.2.3.2.1 Southern beach users

In terms of southern beach users, the assessment considers that any adverse visual effects of the proposal on persons will be very low as the existing groyne will obstruct the majority of views of the proposed seawall. Users of this part of the beach will view, at most, the very top of the proposed seawall and planting, which will soften and integrate the seawall into the vegetated cliff. As such, it is considered that adverse visual effects on persons will be less than minor due to the separation distances and visual integration of the proposed seawall into the wider coastal landscape.

12.2.3.2.2 Persons in front of 4 and 6 Tuahine Crescent

In terms of persons directly in front of 4 and 6 Tuahine Crescent, the assessment considers there will be a low visual effect in the short term (0 to 3 years) which will diminish to a low effect in the medium to long term (after 3 years) for the same reasons identified in Section 12.2.3.1 above. The assessment notes that *"The height of rock revetment up against the bank and existing vegetation will form the most obvious change in visual appearance from the current rock revetment"*, however *"The use of timber posts, when viewed from this angle represents a visual softening when viewed in comparison to the line of iron bars that currently characterise the site. Background vegetation, proposed revegetation, and the wall sitting low within this view enable the wall to appear more nestled and integrated, particularly when approaching the site from the north. The overhanging and bordering vegetation on the bank will also be able to provide more softening and integration over time"*.

In addition, the assessment notes that while *"the proposed rock revetment will form a visible and recognisable change or new element within the overall scene which may be noticed by this viewing audience, [however] when assessed against the existing rock revetment situation and the receiving environment, consists of only a minor detraction in the overall quality of the scene"*.

Similarly, to persons on the public reserve to the north (Lot 16 DP 3216), the nature of persons at this property is a relevant consideration. Persons at this part of the property (in front of 4 and 6 Tuahine Crescent) will be beach users and their presence on the beach will be short term and affected by tidal cycles), ensuring that even in the short term, the proposal will have transient visual effects on persons.

Based on the specialist's assessment and additional comments above, it is considered that whilst there will be a visual change, the proposal will not detract from the visual amenity of persons in this location

and the extent of visual change will reduce over time, such that overall, any effects are considered to be less than minor.

12.2.3.3 10 Tuahine Crescent

10 Tuahine Crescent is the residential property to the south. There will be no adverse effects on persons at 10 Tuahine Crescent as the proposed seawall will not be visible due to the topography of the site and screening by existing vegetation.

12.2.3.4 1 Tuahine Crescent

1 Tuahine Crescent is the residential property to the west. There will be no adverse effects on persons at 1 Tuahine Crescent due to the location of the works and sufficient separation distances.

12.2.3.5 Other persons

No other persons are considered to be adversely affected by the proposal due to the scale and nature of the proposed seawall, screening by vegetation and the topography of the landscape and relative separation distances.

12.2.3.6 Summary

Based on the preceding assessment, no persons will be affected to a minor or more than minor degree.

12.2.3.7 Statutory Acknowledgements

There are no statutory acknowledgements that are relevant to this application.

12.2.4 Step 3 Summary

Overall, the adverse effects on any persons are considered to be less than minor. Therefore Step 3 does not apply and Step 4 must be considered.

12.2.5 Step 4: Further notification in special circumstances

As required by section 95B(10), a council must determine the following:

> *(10) whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected persons)*

The proposal is for a replacement seawall and consideration of effects on any person has been undertaken at Step 3 where it was considered these are less than minor. As such it is not considered there are any other persons who would warrant notification of the application.

12.2.6 Limited Notification Assessment Summary

Overall, from the assessment undertaken Steps 1 to 4 do not apply and there are no affected persons.

12.3 Notification Assessment Conclusion

Pursuant to sections 95A to 95G it is recommended that the Council determine the application be non-notified for the following reasons:

- In accordance with section 95A Step 1, mandatory public notification is not required;
- In accordance with section 95A Step 2, public notification is not precluded;
- In accordance with section 95A Step 3, the circumstances requiring public notification do not apply, including that the adverse effects on the environment will be minor;
- In accordance with section 95A Step 4, there are no special circumstances to warrant public notification.
- In accordance with section 95B Step 1, there are no groups to whom the application must be limited notified;
- In accordance with section 95B Step 2, limited notification is not precluded;
- In accordance with section 95B Step 3 and section 95E, there are no such classes of affected persons;
- In accordance with section 95B Step 4, there are no special circumstances to warrant limited notification.

13 PART 2 ASSESSMENT

13.1 Section 5 - Purpose of the Act

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

It is considered that the proposal accords with the purpose of the Act and will not have an adverse effect on the sustainable management of natural and physical resources. The effects of the proposal in terms of adverse effects on the environment are discussed in detail in section 9 of this report.

13.2 Section 6 - Matters of National Importance

Section 6 of the Act sets out a number of matters of national importance.

Matters relevant to this application include:

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

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers;
(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; and
(h) the management of significant risks from natural hazards.

The proposal is not considered to affect any matter of national importance for the reasons set out in sections 9 and 10. The proposal will maintain the natural character of coastal environment and outstanding landscapes and consultation with relevant iwi is being undertaken to ensure their relationship with their culture, traditions and ancestral lands is upheld. The proposal will maintain public access to and along the CMA and appropriately manage significant risks from coastal inundation hazards.

13.3 Section 7 - Other Matters

Section 7 identifies a number of "other matters" to be given particular regard to in the consideration of any assessment for resource consent.

Matters relevant to this application include:

(a) the efficient use and development of natural and physical resources;
(b) the maintenance and enhancement of amenity values; and
(f) maintenance and enhancement of the environment.

The proposal is not considered to adversely affect any of these matters for the reasons identified in sections 9 and 10 of this report.

13.4 Section 8 - Treaty of Waitangi

Section 8 requires the principles of the Treaty of Waitangi to be taken account of. It is considered that the proposal raises no Treaty issues. Consultation is currently being undertaken to ensure any requests or cultural issues raised can be addressed and accommodated.

14 CONCLUSION

The applicant seeks resource consent to demolish the existing rock and rail seawall and to construct a replacement timber pile rip-rap seawall at 4, 6 and 8 Tuahine Crescent, Wainui.

From the assessment undertaken, it is considered that adverse effects on the environment are, at most, minor as discussed in sections 9 and 10 of this report, and such effects can be suitably avoided, remedied or mitigated through the conditions of consent offered as part of this application. No persons will be adverse affected by the proposal and there are no special circumstances. As such, the application does not need to be publicly or limited notified.

In terms of section 104(1)(a) of the Act, the actual and potential effects of the proposal will be acceptable, as discussed in sections 9 and 10 of this report. In particular, the proposal will provide positive effects including the improvement of visual amenity and landscape values on the site and coastal environment

and the provision of a replacement seawall to ensure the safety and protection of people and property from coastal erosion and hazards.

In terms of section 104(1)(b) of the Act, the proposal is found to be generally consistent with the objectives, policies and assessment criteria of the relevant statutory documents as set out in Section 10.

As such, in terms of section 104D of the Act, the proposal is found to meet both 'limbs' of the gateway test.

Hence, in accordance with section 104B of the Act in relation to non-complying activities, it is considered appropriate for consent to be granted on a non-notified basis, subject to fair and reasonable conditions

Appendix B

Previous Resource Consent Hearing Decision (LU-2017-107788-00, LL-2017-107789-00, CC-2017-07790-00, CO-2017-107791-00)

Wainui Beach - Gisborne. Proposed erosion protection works (rock revetment adjacent to Tuahine Crescent, and gabion baskets and rock rip rap below 21 Wairere Road).

Decision following the hearing of an application for resource consent under the Resource Management Act 1991

Proposal - Gisborne District Council (the applicant) lodged an application to undertake coastal erosion protection works at Wainui Beach. This included a proposed rock revetment wall to replace part of an existing wall at Tuahine Crescent and to retain the gabion basket works at 21 Wairere Road, which were constructed under the emergency works provisions of the Resource Management Act 1991 (RMA).
Sand push-ups along a wide portion of Wainui Beach was also originally proposed. This component of the application was withdrawn and no longer forms part of the application.

Summary of decisions

The resource consent for the rock revetment – on land and in the coastal marine area (CMA) adjacent to Tuahine Road is **REFUSED**.

The resource consent for the retention of the gabion baskets adjacent to 21 Wairere Road is **GRANTED**

No consent was sought to retain or remove the rock rip rap adjacent to 21 Wairere Road. On this bsis there is no jurisdiction to grant or refuse consent, as no consent exists and none was sought.

However the applicant stated in the application, and in evidence, that they intended to remove the rock rip rap. If my interpretation that no consent has been sought is incorrect, consent is **GRANTED** to the removal of the rock rip rap.

The reasons are set out below.

Application number(s):	LU-2017-107788-00, LL-2017-107789-00, CC-2017-07790-00, CO-2017-107791-00
Location	2 – 8 Tuahine Crescent and 21 Wairere Road and dune area within CMA at the respective coastal boundaries, Wainui Beach
Applicant:	Gisborne District Council
Hearing commenced:	8 February 2018 at 9.00am
Hearing panel:	Mr Greg Hill - Independent Hearings Commissioner.

Appearances:	For the Applicant: • Mr Neil Daykin - Rivers, Drainage and Coastal Manager for the Council • Dr Tom Shand - Senior Coastal Engineer with Tonkin & Taylor • Mr Rueben Hansen - Principal Environmental Planner with Tonkin & Taylor For the Submitters: • Mr Simon Cave • Ms McIldowie • Ms Fiona Cummings • Mr James Milton • Ms Ellen Howatson • Dr Robin Briant - with witness Ms Nes Benacek • Ms Nicola McCartney • Dr Allen Marx • Ms Laurie Lautmann with witness Ms Nes Benacek • Dr Amber Dunn For Council: • Mr Reginald Proffit – Consents Manager for the Council • Mr Todd Whittaker - Independent Planning Consultant • Mr Paul Murphy - Team Leader Water and Coastal Resources • Dr Willem de Lange - Senior Lecturer Waikato University - co-convenor for the Earth Sciences Programme Hearing Administration • Ms Maxine Paenga - Resource Consents Administration Officer
Hearing adjourned	9 February 2018
Commissioners' site visit	6 and 7 February 2018
Hearing Closed:	14 February 2018

Introduction

1. This decision is made on behalf of the Gisborne District Council ("the Council") by Independent Hearing Commissioner Mr Greg Hill, appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 ("the RMA").

2. This decision contains the findings from my deliberations on the application for resource consent and has been prepared in accordance with section 113 of the RMA.

3. The application was publicly notified. A total of 41 submissions were received; in support, partial support or opposition to the various components of the proposal.

Summary of proposal and activity status

Rock Revetment - Tuahine Crescent

4. The applicant proposes a rock revetment at Tuahine Crescent designed to replace an existing section of the revetment structure, extending for approximately 40m along the area to the south and just north of the Tuahine Crescent beach access way. A 25 year consent term was sought for this structure.

5. The existing revetment wall includes vertical railway irons driven into the sand to support a log wall structure with rocks positioned behind the log wall. It is proposed to remove this existing revetment in the area of the proposed new structure, but not beyond that.

6. As notified the profile of the proposed rock revetment wall extends approximately 3.5m further seaward of the existing log wall (although this profile will generally be below the existing beach level as measured February 2017) with the tow of the wall only exposed when beach levels reduces through natural coastal processes including storm events.

7. The height and bulk of the proposed revetment wall will be higher and deeper than the existing rock revetment profile. The height of the proposed revetment wall will be approximately 3m higher than the existing wall - being up to 5.6 m RL, and would have a slope face with a 1.5:1 gradient and a crest width of 3m. The revetment wall has a design life of 50 years and has been designed for a 1% AEP storm event.

8. In its Reply, the applicant provided the following response due to concerns by the reporting officer and a number of submitters about the bulk and scale of the rock revetment [1]:

Introduction

Amendment to Resource Consent application

Having heard the concerns raised by the submitters and the reporting officer regarding the scale of the proposed Tuahine Crescent seawall, the applicant wishes to amend its application in the following manner to further reduce the scale of the structure.

Option A

Drawing 1000724-03-Rev B, attached as Annexure A, demonstrates the amended geometry of the revised seawall and application. The rock size design remains based on a 1% AEP design event (i.e. 1% likelihood of being exceeded in any year, or a 30% likelihood of being exceeded over 25 years and 40% likelihood of being exceeded over 50 years) including allowance for 0.45 m sea level rise which could occur over 50 years. This allows the structure to be more easily

[1] Reply Letter dated 13 February 2018 from Mr Daykin.

augmented (raised) and/or re-consented in future if the community at that time require this outcome.

> *The seawall crest will be consented to be constructed at RL 4.85 m. This crest elevation keeps wave overtopping during a 1% AEP design event at present day sea levels to within tolerable limits (i.e. before erosion of the backshore occurs) but does not allow for future sea level rise. Under the original application lodged, consent was sought to enable the crest height of the seawall to be increased following initial construction works to RL 5.6 m to allow for future sea level rise if deemed necessary. The revised application will mean that a new application or consent variation will be required in the future if a crest height increase is proposed to occur.*
>
> *<u>Option B (alternative reduced scale option)</u>*
>
> *In the event that you deem that amending the application to "Option A" above is not sufficient to alleviate concerns regarding the scale of the structure, then the applicant would accept a lower design life and design event as set out below.*
>
> - *Design life: 25 years.*
> - *Design event 2% AEP storm.*
> - *Rock size: 2% AEP storm with 0.2 m SLR to 2042.*
> - *Crest level: 2% AEP storm at present day sea levels.*
>
> *The reduced design life and design storm event would result in a reduced crest height of RL 4.65 m and a reduced average extension of 0.4 m[2] seaward due to a slightly smaller rock size and structure thickness. This design provides for a 0.2 m of allowance for sea level rise over the next 25 years for rock size and no allowance for sea level rise in the seawall crest level. The design event has a 50% likelihood of being exceeded during a 25 year design life period. If this occurred, some damage to the rock (i.e. displacement onto the beach) may occur and some damage to the backshore may occur.*
>
> *<u>Option A versus Option B</u>*
>
> *The principal reasons for the applicant preferring Option A over Option B are set out below.*
>
> *The crest of the seawall in Option B cannot be "topped up" to respond to future changes in sea level rise beyond 0.2 m (expected in the first 25 years), due to the smaller rock size not being considered stable for the future design wave. The implication of this is that the seawall would need to be deconstructed and reconstructed with larger rock in the future, should a seawall be deemed the most appropriate response for managing the coastal erosion risk at shoreline at the site as part of a future resource management process in approximately 25 years' time.*

It is important to note that the 1% AEP extreme water level of RL 2.3 m shown on Drawing 1000724-03-Rev B represents a static water level comprised of storm tide plus wave set up (the increase in water level due to offshore wave breaking). During a design wave event, wave run up will occur above this static level and the crest height shown on the drawing is required to protect the backshore from this wave energy up to a certain level above which the energy is deemed insufficient to cause damage.

9. I accept that both options A and B would reduce the scale of the proposed revetment itself, however it is not clear that they would reduce the coastal process effects

[2] See Table 2 in Paragraph 8.4 of Dr Shand's evidence.

identified later in this decision. No evidence was presented on this or if the modified structure would have other effects that had not been assessed. For the reasons set out below, neither option A or B would in my view satisfy the relevant policy tests and would not meet the purpose of the RMA.

10. It was unclear whether the applicant had applied for or intended that the existing beach access over the existing wall would be reconstructed over the new revetment should consent be granted to the works. The applicant clarified at the hearing that they had sought to provide public access over the revetment, and offered a consent condition to ensure this occurred.

Gabion Baskets - 21 Wairere Road

11. Consent was sought for the gabion basket works that were constructed under section 330 - emergency works provisions of the RMA. The gabion basket extends along the frontage of 21 Wairere Road for approximately 15m.

12. The consent term sought for the gabion baskets was five years.

13. Consent was not sought for the rip rap (rocks) placed on top of the gabion baskets. At 3.1.3 - Gabion basket - 21 Wairere Road of the application document - it states:

> "*Retrospective resource consent is sought for the erection and occupation of the gabion baskets in the CMA. It is proposed to remove the rocks above the gabion baskets".*

14. It appears that consent has only been sought to authorise the "*erection and occupation of the gabion baskets".* Section 330A - Resource consents for emergency works states:

> ***330A- Resource consents for emergency works***
>
> *(2) Where such an activity, but for section 330 contravenes any of sections 9, 12, 13, 14, and 15 and the adverse effects of the activity continue, then the person (other than the occupier), authority .....who or which undertook the activity shall apply in writing to the appropriate consent authority for any necessary resource consents required in respect of the activity ...." (my emphasis)*

15. A "necessary resource consent" would be one for the erection and occupation (if in the CMA) of the rock rip rap above gabion baskets. However none has been sought. Without a consent being sought the rocks would need to be removed as they would be an unauthorised work (as consent has only been sought to 'regularise' the gabion baskets as part of the emergency work).

16. In the applicant's Reply, Mr Hansen considered that the rock removal was not a permitted activity and required consent under *rule 8.5.7 (4) - Removal of any work designed to mitigate the effects of coastal hazards* of the Tairawhiti Resource

Management Plan (Tairawhiti Plan)[3]. While I accept the rule, it appears no consent had been sought for the rock rip rap to remain or to be removed.

17. However, the applicant did request, and provided evidence on, the removal of the rock rip rap. This was also addressed by the Council's reporting officer and a number of the submitters. In case I am incorrect that no consent was sought to remove the rocks, I have granted consent in terms of *rule 8.5.7 (4)* as a discretionary activity. As I set out later, I agree it is appropriate to enable the rocks to be removed. I acknowledge this is not the outcome sought by a number of the submitters, but the expert evidence is that the structure is not effective as an erosions management structure.

18. A five year term was applied for the erection and occupation gabion basket located on esplanade reserve. A number of submitters sought a longer consent period. However as the application made was for a five year term, I am not able to extend that.
19. The following table describes the consent applications required with reference to the planning rules as contained in the Tairāwhiti Plan which updates the respective rule references described in the application documentation.

Tairāwhiti Plan Rule	Zone/Overlays/Special Areas	Activity Status	Activity
DC1 1.6.1(16)	Coastal Marine Area (Significant Values Management Area)	Discretionary	The erection or placement of any structure in the Coastal Marine Area which has a predominant purpose of avoiding, remedying or mitigating the effects of natural coastal processes on human property or life is a discretionary activity.
DC1 1.6.3(5)	Coastal Marine Area (Significant values management Area)	Discretionary	Except as provided for in other rules of this Chapter, any occupation of space involving Crown land within the CMA of the Significant Values Management Area is a discretionary activity.
DC2 2.6.1(14)	Coastal Marine Area (General Management Area)	Discretionary	The erection or placement of any structure in the Coastal Marine Area which has a predominant purpose of avoiding, remedying or mitigating the effects of natural processes on human property or life is a discretionary activity.
DC2 2.6.3(5)	Coastal Marine Area (Significant values management Area)	Discretionary	Except as provided for in other rules of DC2.6, any occupation of space involving Crown land within the Coastal Marine Area is a discretionary activity.
DD 1.6.1(32)	Residential Zone	Non-Complying	Activities that are not provided for as permitted, controlled, restricted discretionary, or

[3] The regional policy statement, regional plans and district plan have been amalgamated to form *The Tairāwhiti Resource Management Plan*. This Plan replaced and consolidated the previous set of seven district and regional plans and policy statement into one plan. It took effect on the 30 June 2017. The Tairāwhiti Resource Management Plan was not subject to the Schedule 1 process for plan changes but simply amalgamated the plans into a single document.

			discretionary activities. (Erosion Protection Works)
DD 5.6.1(38)	Amenity Reserve Zone	Non-Complying	Activities that are not provided for as permitted, controlled, restricted discretionary, or discretionary activities. (Erosion Protection Works)
C9 9.1.6(41)	Outstanding Landscape Area Overlay	Restricted Discretionary	Land Disturbance
C9 9.1.6(46)	Protection Management Area Overlay	Restricted Discretionary	Erection of new structures or alterations or additions to existing structures
C3.14.3(13)	Coastal Environment Overlay	Discretionary	Tree planting (subject to LO3A Rule C7.1.6.19), vegetation clearance, land disturbance, and structures within 200m of MHWS
C8.5.7(1)	Coastal Hazard 1	Discretionary	The installation of alteration of works designed to mitigate the effects of coastal erosion
C8.5.7(3)	Coastal Hazard 1	Discretionary	Any activity, including earthworks, that will alter natural dune landform
C7.1.629	Land Overlay 3	Restricted Discretionary	Land Disturbance

20. As mentioned I have also made a determination under *rule 8.5.7 (4) - Removal of any work designed to mitigate the effects of coastal hazards* of the Tairawhiti Plan to the removal of the rock rip rap.

21. The Table above has been taken from the section 42A report. There was no disagreement between the applicant and Council, and I accept it, and *rule 8.5.7 (4) - Removal of any work designed to mitigate the effects of coastal hazards* addresses the consents sought.

22. The applicant has sought consent to the application as a non-complying activity. This is the most restrictive activity status applying to any single component of the proposed works. In this respect I note that the non-complying activity status only arises from a generic rule for any activity not otherwise identified within the Residential Zone and the Amenity Reserve Zone. However, as the proposed rock revetment wall and gabion basket are separate structures in separate locations on Wainui Beach and span across the CMA and land, it would be difficult to 'unbundle' the activity.

23. The proposal has been considered as a **non-complying** activity.

Site and locality

24. The site and locality were fully described in the application documents, the Council officer's section 42A report and by a number of submitters. I agree with the descriptions provided. Rather than repeat all of that material I adopt those parts of

the application and section 42A report, and cross-refer to the material accordingly. I also agree with the descriptions of the area provided by submitters.

Procedural matters

25. Under sections 37 and 37A of the RMA, the time limit for the receipt of submissions is waived to accept the late submissions from Mr and Mrs Simon and Caroline Cave and Mr McLernon.

26. The reasons for accepting these submissions are that the matters raised in the submissions contribute to enabling an adequate assessment of the effects of the proposal. The late submissions did not result in any delay in hearing or making a decision on this application. Moreover the submission by Simon and Caroline Cave was provided to the council within the time limit, but due to an administrative issue it was not technically 'received' on time. The applicant did not oppose the acceptance of the late submissions.

Relevant statutory provisions considered

27. As already set out above the proposal is a non-complying activity. Section 104D states (in summary) that a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either:
    (a) the adverse effects of the activity on the environment will be minor; or

    (b) the application is for an activity that will not be contrary to the objectives and policies of:
        (i) the relevant plan, or
        (ii) the relevant proposed plan, or
        (iii) both the relevant plan and the relevant proposed plan.

28. If neither of the 'gateway tests' above can be met then the application must be refused.

29. Prior to my findings in relation to section 104D, I have considered the application in terms of the matters set out in section 104 which requires me to, subject to Part 2, to have regard to–
    (a) any actual and potential effects on the environment of allowing the activity; and
    (b) any relevant provisions of—
        (i) a national environmental standard:
        (ii) other regulations:
        (iii) a national policy statement:
        (iv) a New Zealand coastal policy statement:
        (v) a regional policy statement or proposed regional policy statement:
        (vi) a plan or proposed plan; and
    (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

30. Despite section 104 considerations being “subject to part 2”, the High Court in RJ Davidson Family Trust v Marlborough District Council [2017] NZHC 52 has held that recourse to Part 2 is only required, or relevant, where certain circumstances exist. Those circumstances include where there is “conflict between provisions” or where there is “invalidity, incomplete coverage, or uncertainty of meaning” in the relevant planning documents, which requires that Part 2 is considered to resolve the matter. Where there is an absence of those circumstances, there should be no need for the consent authority to have recourse to Part 2. Since this decision there have been a number of Environment and High Court Decisions which have taken a differing approach.

31. This is an important matter that I put to the expert planners (for the applicant and for the Council) at the beginning of the hearing; whether the provisions of the Tairāwhiti Plan were invalid, incomplete or uncertain vis-à-vis the NZCPS. Both planners generally considered the Tairāwhiti Plan had addressed the NZCPS matters. Mr Hansen offered that the NZCPS did 'discourage' hard protection structures, but that the Tairāwhiti Plan was more "enabling" about how hard protection structures were provided for, and focussed on the term "appropriate" structures.

32. Dr Dunn in her submission at the hearing said that *“…here in Gisborne we still only have a "first-generation" "proposed" Coastal Environmental Plan that went to public notification in July 1997. That makes the "proposed" Coastal Plan over 20yrs old and it has never been made operative. And, this Coastal Plan does not take into account the requirements of the NZCPS 2010*"[4].

33. In response to Dr Dunn's submission, Mr Whittaker considered that much greater weight should be placed on the NZCPS. This was on the basis that the Tairāwhiti Plan could not have addressed or "given effect" to the NZCPS, and that there were very directive provisions in the NZCPS relating to the management of natural hazards; and that hard protection structure were to be discouraged but may be appropriate as a 'last resort' in some circumstances.

34. Mr Hansen accepted that the Tairāwhiti Plan had not specifically addressed the NZCPS. However, he maintained his view that there were generally no inconsistencies in the NZCPS and how the Tairāwhiti Plan addressed the provisions of erosion protection structures, and in particular 'hard protection' structures.

35. It is my finding, and addressed in more detail later, that the Tairāwhiti Plan provisions are, in some importance instances, inconsistent and in-complete vis-à-vis the NZCPS. On this basis I have placed more weight on the NZCPS and less on the Tairāwhiti Plan provisions. Furthermore, the contents of the Tairāwhiti Plan and the 2010 NZCPS were developed before the addition of section 6(h) *the management of significant risks from natural hazards*. As above, I find that the Tairāwhiti Plan has not addressed this matter, but that the NZCPS can be relied upon to assist in determining if and how relevant section 6(h) is to this application.

[4] Para 2.1 of Dr Dunn’s evidence

Relevant standards, policy statements and plan provisions considered

36. In accordance with section 104(1)(b)(i)-(vi) of the RMA, I have had regard to the relevant policy statements and plan provisions of the Tairāwhiti Plan. However as mentioned above, due to the out-dated nature of the contents of the Tairāwhiti Plan, I have placed greater weight on the NZCPS.

37. I have also considered the Wainui Beach Erosion Management Strategy - August 2014 (WBEMS) to be relevant and reasonably necessary document to determine the application in accordance with section 104(1)(c) of the RMA. It was Mr Hansen's view that considerable weight could be placed on this strategy.

38. I have also addressed the Ministry for the Environment's ("MFE") December 2017 publication *Coastal Hazards and Climate Change: Guidance for Local Government.*

Summary of evidence heard

Council Officers

39. The Council planning officer's section 42A report was circulated prior to the hearing. That report, authored by Mr Whittaker, with input from Mr Murphy and Dr de Lange, addressed the proposal in terms of the effects on the environment and the statutory policy framework. It was Mr Whittaker's professional opinion that:

- Consent be granted for the retention of the gabion gaskets at 21 Wairere Rd. His reasoning was that this proposal is a more modest structure [compared to the Tuahine revetment] and is already having a positive benefit and its scale and location is such that any environmental effects of leaving the structure in situ would be minor. The scale of the structure and term of consent are such that the works are easier to reconcile with the planning instruments. He also considered that the removal of rocks above the gabion baskets and reinstatement of planting on the dune face is supported by the WBEMS.

- That consent be refused to the Tuahine revetment in its notified form. It was Mr Whitaker's opinion that granting consent to the proposed rock revetment wall would be contrary to principle of sustainable management given the provisions of the NZCPS and the Tairāwhiti Plan. He considered that an alternative design with reduced design parameters which more closely supports, and is subservient to, other hazard management responses may be more appropriate.

40. Dr de Lange and Mr Whittaker each provided a written statement having heard the applicant and submitter evidence. In summary Dr de Lange did not consider that the removal of the rock rip rap at 21 Wairere Road would result in any adverse effects on physical processes at Wainui Beach, and stated that any decision for them to stay or go was not about whether they were acting as erosion mitigation.

41. With respect to the Tuahine Crescent revetment, he confirmed that he could not identify any adverse effects on physical processes associated directly with the

replacement of the existing post and log structure. However he considered that the proposed rock revetment would result in a structure that was more resistant to erosion than the flanking structures. It was his opinion that this could lead to "*enhanced erosion*"[5] on the flanks of the proposed revetment if the remaining structure fails, and this would represent an increased hazard for properties adjacent to the structure.

42. Mr Whittaker's statement addressed the applicant's and submitters evidence. He outlined that he and Mr Hansen had a different opinion about the design of the proposed revetment and whether it was the most appropriate design option taking into account the national, regional and district planning instruments (addressed in more detail later in this decision). The essence of Mr Whittaker's opinion was that the revetment proposed was to "*only provide an appropriate standard of coastal protection over a relatively short period*"[6]. The consequences of the design chosen "*elevates its purpose to being the primary response or management mechanism to coastal erosion for the Tuahine Crescent properties and that this is not consistent with the national and regional policy directives*"[7].

43. In terms of his statement, Mr Whittaker remained unconvinced that the specific design of the revetment should be granted. It was his opinion that consent for the gabion baskets could be granted.

Applicant

44. Mr Daykin gave an overview of the project and the proposal. He addressed the development of the proposal, the consultation and meetings undertaken, the withdrawal of the sand push-up application and the WBEMS.

45. Dr Shand addressed in his evidence details and the site and its characteristics, the proposed works including those relating to the rock revetment and gabion baskets and the design conditions. With respect to the design conditions, he set out[8] "*A design life of 50 years has been initially assumed for the rock revetment. This is an 'industry standard life based on the typical design life of geotextile and placed rock"*. In response to Mr Whittaker's concerns about the scale of the rock revetment he set out some options[9] to "*further reducing the footprint of the revetment*".

46. Dr Shand stated[10] "*The proposed rock revetment provides an effective energy dissipating slope that will reduce wave action across the revetment slope, although some minor to moderate overtopping (< 10 l/s/m) may still occur during strong storm surges at high water levels, however, we expect the rate and severity of such activity*

[5] para 27 of Dr de Lange's Statement of Evidence

[6] para 11 of Mr Whittaker's Statement of Evidence

[7] para 13 of Mr Whittaker's Statement of Evidence

[8] para 4.1 of Dr Shand's evidence

[9] para 8.2 of Dr Shand's evidence

[10] para 6.3 of Dr Shand's evidence

to be less than what currently occurs with the existing rock and rail wall". In essence, that the proposed rock revetment will achieve its purpose.

47. He also acknowledged that there were potential end effects. In this respect he stated[11]: "*At its northern end, the proposed rock revetment will be recurved into the existing rock at 2 Tuahine Crescent. The length of remaining shoreline north of this point will likely continue to be protected by the existing rock and rail wall in the short- to medium-term. If this existing revetment were to be removed or were to fail, increased reflection and turbulence off the end of the proposed revetment could induce additional erosion (end effects) for 20-30m or for approximately 70% of the structure length".*

48. Dr Shand acknowledged at the hearing that existing rail and log wall was failing and was at the end of its life. He also accepted, as set out in the application and Assessment of Environment Effects (AEE)[12] that "*the revetment ends and transitions are indicative only and will be finalised during the detailed design phase*". In the Reply stage of the hearing he considered that end effects would be unlikely to occur to the Murphy Road properties due to their distance from the end of the proposed revetment.

49. With respect to the gabion baskets, Dr Shand considered that they were generally a short-term coastal protection option. However, it was his opinion that the gabion baskets at the Wairere Road site were consistent with other existing structures along Wainui Beach and likely partially protected from marine action by sand accumulation prolonging their life. He also set out that the rocks above the gabion baskets would not assist in mitigating beach erosion, and that "*The bank above the gabion baskets will flatten by slumping until a stable angle of repose is reached, some loss of land above the slope is therefore expected. Planting of the exposed dune face above the gabions is recommended using salt tolerant vegetation to stabilise the sand against wave run-up and overtopping of the gabion baskets"*[13].

50. Mr Hansen provided expert planning evidence. He addressed the statutory planning documents and provided an assessment of the proposal against those. This included the NZCPS, the provisions of the Tairāwhiti Plan. He provided a 'summary' of his interpretation of the policy intent of the NZCPS. This was:

> ***NZCPS***
> *In summary the objectives and policies identified in Annexure A* [attached to his evidence] *require that:*
> - *Coastal hazards risks are managed by:*
>
> o *Setting new development back from the hazard;*

[11] para 6.6 of Dr Shand's evidence

[12] section 3.14 Proposed alignment of the revetment

[13] Para 6.11 of Dr Shand's evidence

- *Using a range of responses, including managed retreat, for existing development; and*
- *Protecting or restoring natural defences to coastal hazards.*

- *The risk of coastal hazards affecting anthropocentric resources and activities is avoided and reduced over time;*
- *The use of hard protection structures is discouraged the use of alternatives to them, such as natural defences, is promoted;*
- *A careful consideration of the environmental and social costs of hard protection structures is made and, by inference, that these costs are weighed against their benefits.*
- *A range of management responses is developed and implemented; and*
- *In circumstances where hard protection structures are deemed necessary, then ensure these are located and designed to minimise adverse effects and are not located on public land if protecting private assets.*

51. Mr Hansen also provided a summary of the policy intent of the coastal provisions of the Tairāwhiti Plan. This was[14]:

In summary, the objectives and policies identified in Annexure A require that:

- *Provision is made for appropriate structures;*
- *Structures should not reduce the level of public access to the CMA;*
- *Structures should not be damaged by coastal processes or [coastal] events and should be designed to take into account the most up to date future sea level rise predicted by the Inter-Governmental Panel on Climate Change ("IPCC");*
- *The impact of coastal hazards on existing use and development is recognised and provision is made for coastal protection works to mitigate these impacts where the protection works can be shown to be the best method.*

52. He set out[15] that he considered that the proposal accords with the objectives and policies of both the NZCPS and the Tairāwhiti Plan for the reasons he set out in his evidence. Mr Hansen confirmed this position in questions about the extent to which the Tairāwhiti Plan provisions had "given effect" to the NZCPS. It was his view that there was no inconsistency, but difference emphasis, between the different provisions.

53. He also set out the relevant provisions of the WBEMS. He considered that the Strategy should be accorded significant weight as it was 'on point' in relation to erosion management at Wainui Beach, specifically addressed the replacement of

[14] para 3.20 of Mr Hansen's evidence

[15] para 3.8 and 3.21 of Mr Hansen's evidence

the revetment, and was a longer term and more strategic instrument than the Tairāwhiti Plan.

54. The applicant's right of reply addressed three key Issues:

    1. Engineering design parameters & geometry of revetment
    2. End effects and transition of revetment, and
    3. Public access

55. In relation to Engineering design parameters & geometry of revetment, the applicant provided four options for Tuahine Crescent (in order of preference).

    I. Retain proposed rock size but lower structure height from 5.6m RL to 4.85m RL for current day 100yr Design Event. Can be raised/modified more readily in future as rock adequately sized for future.

    II. Reduce rock size to 25yr SLR & 50yr design event which lowers structure height from 4.85m RL to 4.75m RL and shortens footprint by 0.4m. However, structure may need to be fully rebuilt to deal with any future SLR/climate change.

    III. Geo Synthetic Containers (GSC's) with 1:1 slope

    IV. Do Nothing

56. As set out above the applicant has confirmed that the application was modified to option AI (so that this became the proposed revetment).

57. End effects and the transition of revetment had been summarised in the evidence above, and I address this in more detail later in this decision. With respect to public access over the proposed rock, Mr Hansen clarified that application had been made to provide public access over the revetment and offered a consent condition to ensure this occurred.

58. A number of submitters requested an urgent partial review of the WBEMS, in relation to emergency response to erosion events. Mr Daykin set out in the Reply statement that he would "*take a paper to Council in light of new guidelines including desire for emergency response*"[16].

Submitters

59. The submitters who presented at the hearing are listed above. Submitters supported, conditionally supported or opposed the rock revetment adjacent to Tuahine Crescent.

60. The reasons expressed for opposing this part of the proposal was wide ranging and included:

    - Natural character and landscape values being adversely affected,
    - Potential impacts (end effects) of any new revetment on properties to the north - in particular Dr Dunn, Dr Briant, Ms Lautmann and Ms Benacek
    - Potential adverse effects on public access to and along the beach

[16] Para 8 of the Reply statement.

- Loss of amenity and recreational use of the beach,
- That the proposal is not supported by the statutory planning documents which seek to discourage hard engineering solutions to coastal hazards management,
- That the proposal is inconsistent with the WBEMS, and that long terms solutions such as 'managed or progressive retreat' need to be more seriously considered,
- Precedent effect and expectations of hard engineering as a solution if consent were granted, and
- Costs of any revetment walls should be borne by private users/benefactors.

61. Those supporting the proposal included reasons such as:
    - The need to protect the properties at 2 to 8 Tuahine crescent,
    - That the proposal is consistent with the WBEMS,
    - The existing rail irons are dangerous and need to be removed, and
    - The rock revetment wall will achieve appropriate mitigation and will also address existing issues with sand depletion at this end of the beach.

62. Dr Dunn, a coastal scientist, presented evidence in relation to her submission. She did not appear as an independent expert, but someone who has considerable 'expertise' in coastal science, and in particular this part of the coast. As set out in her statement her Master's thesis is titled "*Coastal Erosion at Wainui Beach, Gisborne*" and her PHD thesis is titled "*Coastal Storm Activity along the Eastern North Island of NZ*". She stated[17] that in relation to her PHD "*The primary focus area was the Gisborne*".

63. In relation to Dr Dunn's academic study, she found that there was "*erosion of the bounding headlands (Tuaheni & Makorori Points) and accretion of the sandy embayment between. That is, the sandy beach has an accretionary trend*"[18]. It was her view that "*.the most destructive shoreline changes or erosion at Wainui Beach come from storm events - and have magnitudes far greater than the long-term trend*[19]".

64. Dr Dunn was also concerned about potential "end effects" to the properties north of the proposed rock revetment. It was her view that due to the difference is size, height, design (eg slope) and construction material of the proposed wall compared to the existing structures that end effects could occur. She stated[20] that "*End effects are real; they are well documented the world over. I therefore urge you to shine a very bright light on this aspect to ensure that we don't 'protect Peter' and hurt Paul'".*

65. In relation to the gabion baskets and the rock rip rap at 21 Wairere Road, submitters presented evidence supporting the proposal. They set out that the works already undertaken had been successful in mitigating coastal erosion, was hardly visible

[17] Para 1.4 of Dr Dunn's evidence.

[18] Para 3.2 of Dr Dunn's evidence

[19] Para 3.3 of Dr Dunn's evidence

[20] Para 5.4 of Dr Dunn's evidence

with the gabion baskets now covered with sand with vegetation growing over the rock rip rap. Submitters sought that consent be granted for the gabion baskets (some asking for a longer consent term) and that the rock rip rap be retained.

Principal issues in contention

Gabion Basket

66. There were almost no issues in contention with respect to retaining the gabion baskets. The main issue related to whether the rock rip rap on top of the gabion baskets should be removed or retained. As already set out there is no proposal before me to retain the rocks; only a desire from the applicant to remove them.

Rock Revetment

67. There were major issues in contention with respect to the rock revetment. While the applicant had proposed (and modified) the revetment, the reporting officer and a number of submitters did not support it. A number of submitters sought that the revetment be refused consent due to the matters set out above under Submitter Summary of Evidence above.

68. Other submitters who supported the revetment sought consent be granted due to the matters set out above under Submitter Summary of Evidence.

Main findings on the principal issues in contention and reasons

69. This section sets out my findings and reasons in relation to the applications. I have largely, but not completely, separated the Tuahine Crescent rock revetment and the Wairere Road gabion baskets. This is because while they 'share' the same policy framework, they are essentially different applications with different effects.

70. As I have set out earlier, I have placed more weight on the provisions of the NZCPS over the provisions in the Tairāwhiti Plan. The NZCPS 2010 has considerably more directive provisions (including in relation to natural hazards management) than the previous NZCPS which was relevant at the time the current coastal plan was developed, and which is still not operative.

71. I find that the coastal provisions of the Tairāwhiti Plan are somewhat outdated, and unlikely to give effect to the NZCPS. In terms of the coastal provisions of the Tairāwhiti Plan (in which I agree with Mr Hansen that they have a focus on enabling "appropriate" structures) I have considered them in the context of the NZCPS provisions - i.e. what may be appropriate in that context.

72. I address the issue of natural hazards/erosion and natural character in some detail below. I find these are the key issues in terms of this application (both for the rock revetment and gabion baskets), and these matters which have resulted in the refusal of consent to the Tuahine Crescent revetment. Prior to addressing the matters regarding natural hazards/erosion and natural character, I address the issues of landscape, ecology, public access, recreational and amenity values of the beach and construction effects.

Landscape, ecology, public access, recreational and amenity values of the beach and construction effects.

73. The issues of landscape, ecology, public access, recreational and amenity values of the beach and construction effects are all relevant to this proposal. However they are less so compared to natural hazards/erosion and natural character, and they have not been determinative of the decision. The reasons for this are:
    - That the area of the proposal is not identified as an outstanding natural landscape (and therefore section 6(b) – matter of national importance in relation to landscape does not apply), and that while the revetment would have some adverse landscape and visual effects, those effects would not be significant. This is due to the plethora of 'built forms' in terms of seawalls (including the existing rail and log structure) wooden stairs and dwellings which has resulted in a highly modified environment.
    - That the applicant has addressed and agreed to maintain public access over the rock revetment; a major concern to a number of submitters. While the proposed revetment would extend beyond the footprint of the existing rail and log structure, the visually apparent width of the structure will vary with sand level as set out in Dr Shand's evidence[21]. In this respect I find the issues and policy directives of public access, a matter of national importance under section 6 (d) of the RMA, would have been satisfied by this proposal. In the same vein any effects on recreational and amenity values would not be significant.
    - There is unlikely to be any significant effect on ecological values, and no expert evidence was presented. Any ecological issues could have been addressed by conditions of consent; noting that the applicant agreed to include Blue Penguins (raised by Ms Howatson) to the Construction Management Plan as a condition of consent.
    - Construction effects would be able to be managed by appropriate conditions of consent - including the development and adherence to a Construction Management Plan.

74. Given the findings in relation to landscape, ecology, public access and recreational and amenity values of the beach and construction effects above, I accept that the proposal, in those respects, would not be contrary to or inconsistent with the relevant objectives of the NZCPS and the Tairāwhiti Plan. These provisions were set out in the AEE, Mr Whitaker's section 42A report and Mr Hansen's evidence, and I have not repeated them here. Moreover, any adverse effects arising from these matters could have been appropriately avoided, remedied or mitigated.

Natural hazards/erosion and natural character

75. Section 6(a) in relation to preserving natural character and section 6(h) – the management of significant risks from natural hazards, are relevant “matters of national importance.

76. The relevant NZCPS provisions are:

[21] para 6.2 of Dr Shand's evidence

Objective 5

To ensure that coastal hazard risks taking account of climate change, are managed by:

- locating new development away from areas prone to such risks;
- considering responses, including managed retreat, for existing development in this situation; and
- protecting or restoring natural defences to coastal hazards.

77. Policies 25 and 27 are highly relevant to this proposal[22]. I have set them out those parts relevant to this proposal, in particular relating to the Tuahine Crescent revetment:

Policy 25 - Subdivision, use and development in areas of coastal hazard risk

In areas potentially affected by coastal hazards over at least the next 100 years:

a. avoid increasing the risk of social, environmental and economic harm from coastal hazards;
b. avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;
c. encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;
d. encourage the location of infrastructure away from areas of hazard risk where practicable;
e. discourage hard protection structures and promote the use of alternatives to them, including natural defences;

Policy 27 - Strategies for protecting significant existing development from coastal hazards risk

1. In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:
   a. promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk;
   b. identifying the consequences of potential strategic options relative to the option of "do-nothing";
   c. recognising that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;
   d. recognising and considering the environmental and social costs of permitting hard protection structures to protect private property; and
   e. identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.

2. In evaluating options under (1):
   a. focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions;
   b. take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and
   c. evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.

[22] It is noted that NZCPS Policy 24 relates to the Identification of coastal hazards. The Tairāwhiti Plan includes identified and mapped Coastal Hazards Risk Areas. The area adjacent to 2 to 8 Tuahine Crescents where the revetment is proposed (and further north) is part of the Extreme Coastal Hazards Risk Area.

3. *Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.*
4. *Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so*.

(underlining is my emphasis)

78. I agree to a large extent with Mr Hansen's summary of the policy implications of the NZCPS as set out in his evidence. However I do not agree to the same extent that the proposal is consistent with them.

79. The NZCPS clearly discourages hard protection structures, but accepts at policy 27 1 c that "*hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance*". Policy 27(2) - states that evaluating options under (1): to ensure that where hard protection structures are considered necessary, that the form and location of any structures are designed to minimise adverse effects on the coastal environment. Policy 25(a) sets a high 'bar' by stating "avoid increasing the risk of social, environmental and economic harm from coastal hazards".

80. In this case the proposed revetment is essentially to protect private property at 2 to 8 Tuahine Crescent. While I can understand land owners wanting to have their properties protected, this form of protection is not 'supported' by the NZCPS. The NZPS accepts that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance. This proposal is not about protecting existing infrastructure of national or regional importance.

81. The applicant has advanced the revetment as a short to medium term 'fix' while the council and community devise a longer term sustainable strategy in relation to the existing development (and future development) at Wainui Beach. Mr Daykin acknowledged this at the hearing - saying it was to "buy some time" to develop a longer term approach recognising that the Tuahine Crescent dwellings were in the Extreme Coastal Hazards Risk Area. However I note from Mr Daykin's opening statement that 28 properties are identified within the 'Extreme Risk Area' coastal hazard zone - i.e. they are potentially at risk from erosion resulting from storms[23].

82. A 25 year consent term for the CMA component of the revetment was sought. Given that the maximum consent period that can be granted under the RMA is 35 years; 25 years cannot be seen as 'temporary' or 'short to medium term'. This issue is reinforced by the five year consent term sought for the gabion baskets at Wairere Road.

83. With respect to the terms of consent and the scale of the proposed structure (even with the somewhat scaled back version proposed in Reply), I share the same concerns as Mr Whittaker, and a number of submitters, that the consequences of the design chosen "*elevates its purpose to being the primary response or management mechanism to coastal erosion for the Tuahine Crescent properties*

[23] Slide 8 of Mr Daykin's opening statement

and that this is not consistent with the national and regional policy directives"[24]. As already set out, this is an issue the NZCPS discourages.

84. Moreover, the proposed revetment as ***the*** likely primary response or management mechanism to coastal erosion for the Tuahine Crescent is reinforced by the notified application and the proposal as modified at the hearing. The application as notified envisaged that the height of the revetment could be raised to 5.60 m RL (from 4.85 m RL) in the future to provide for a 50 year design life accounting for a sea level rise of 0.45 m[25]:

85. Option A of the amended application sought to retain the proposed rock size but accepted a lower structure height from 5.6m RL to 4.85m RL for current day 100yr Design Event. However it was stated this structure could be raised/modified more readily in future as the rock was adequately sized for future. The Reply also included that the crest of the seawall in Option B could not be "topped up" to respond to future changes in sea level rise beyond 0.2 m (expected in the first 25 years).

86. While I accept it is prudent to plan into the future, and this is supported by the NZCPS (Policy 25 envisages a 100 year time period), in this context it appears to 'cement in' a long term hard protection approach to coastal erosion.

87. Dr Shand was asked what would be the effect if "we did nothing" - i.e. no intervention with the proposed rock revetment (leaving the existing post and log structure in place). He accepted Dr Dunn's view that the storm events, as opposed to a longer trend of erosion of the sandy beach, was prevalent. On this basis it said it was difficult to predict what may happen, but that the post and log structure, which was failing, could last between 5 and 20 years. However severe stormwater events could adversely affect the Tuahine dwellings. On this basis, the policy intent of the NZCPS, and the longer term strategy of the WBEMS (discussed in more detail below), it is difficult to justify a compelling need for the intervention as proposed.

88. The coastal experts (including Dr Dunn) agreed that the revetment would likely perform as a protection structure for the properties it was designed to protect. This was due to its design and construction. However the experts (and some submitters) were divided on whether "end effects", particularly to private properties to the north, would be created and to what extent. The experts' opinions on this have been set out in the summary of evidence.

89. I am not convinced by the applicant's evidence that there will not be end effects, even with the modified options provided in Reply. As set out in Dr Shand's evidence [26] and in the AEE[27] the proposed rock revetment at its northern end will be recurved into the existing rock at 2 Tuahine Crescent. Dr Shand opined that the length of remaining

---

[24] para 13 of Mr Whittaker's Statement of Evidence

[25] AEE 3.1.1 - Rock Revetment- Tuahine Cresent

[26] para 6.6 of Dr Shand's evidence

[27] AEE - 5.1.2.7 Effects on adjacent shorelines

shoreline north of this point will likely continue to be protected by the existing rock and rail wall in the short - to medium-term. However he did acknowledge that this structure was failing. He went on to say if the existing revetment was removed or were to fail, increased reflection and turbulence off the end of the proposed revetment could induce additional erosion (end effects) for 20-30m or for approximately 70% of the structure length.

90. Moreover, it was acknowledged in the AEE[28] that the revetment ends and transitions are indicative only and will be finalised during the detailed design.

91. Policy 25 a - Subdivision, use and development in areas of coastal of the NZPS - set out the requirement to avoid increasing the risk of social, environmental and economic harm from coastal hazards. Given the uncertainty in relation to the extent of any end effects, it cannot be determined that the revetment will avoid increasing the risk from coastal hazards to the council owned reserve (used for public access, use and enjoyment) and the adjacent private properties.

92. Policy 27(4) states that "*Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so*". It is acknowledged that majority of the proposed revetment will be on privately owned land. However a part of revetment will be on public land, and given the purpose of the revetment, I find that there is no significant public or environmental benefit to that land or the public.

93. It is my findings for the reasons set out above the proposal would be inconsistent with the natural hazards provisions of the NZCPS, and the natural character provisions to the extent they relate to coastal processes (noting that policy 13 (2) - Preservation of natural character - sets out that natural character includes matters such as "natural elements, processes and patterns" and the natural movement of water and sediment).

94. I also find that it is unclear what the adverse “end effects” may be, as the detailed design work has not been undertaken and there is differences in the expert opinions on this matter. However the relevant policy is to avoid increasing the risk. On this basis I can only conclude that there may be adverse effects, but the extent is unknown.

Tairāwhiti Resource Management Plan

95. Mr Hansen also set out the relevant provisions of the Regional Policy Statement (RPS) and the coastal plan provisions. The relevant objective of the RPS is:

Objective B5.1.2
1. A pattern of human settlement that:

- *Provides a high level of personal safety from natural hazards for its inhabitants.*
- *Avoids or mitigates the risk to property and infrastructure from natural hazards.*

[28] AEE - 3.14 Proposed alignment of the revetment

- *Does not accelerate or worsen the effects of natural hazards upon the natural and physical environment.*

96. This objective is addressed by policy B51.3 (as it related to this application):

> *To recognise the limitations of attempts to control natural processes by physical work and limit such attempts to appropriate situations where they are:*
>
> *a) needed to protect existing development and*
>
> *c) will not have significant adverse effects on the natural character of the coastal environment, or other adverse environmental effects;*

97. The relevant objective in the coastal plan is:

> Objectives C3.7.2
>
> *1. Provision is made for appropriate structures in the CMA provided that any adverse effects on the environment arising from the erection, reconstruction, placement, alteration, extension, removal or demolition of a structure are avoided as far as practicable. Where complete avoidance is not practicable, the adverse effects are mitigated and provision made for remedying those effects, to the extent practicable.*
>
> …
>
> *6. Avoidance of damage to structures from physical coastal processes or events.*
>
> *7. Avoidance of adverse effects on the environment, including the adverse effect of preventing the natural migration of coastal systems such as dunes and wetlands which occurs as a result of dynamic coastal processes, as a result of the placement of structures where they may interfere in the dynamic processes of the coast and as a result of changes in the rate of coastal erosion or accretion caused by structures.*

98. It is my finding that while aspects of these provisions are not entirely inconsistent with the NZPS, they do not give effect to them. There is a focus on enabling or providing for "appropriate" structures (including seawalls) to protect existing development, and that adverse effects are "*avoided as far as practicable*". That where complete avoidance is not practicable, the adverse effects are "mitigated" with provision made for remedying those effects, "*to the extent practicable*". It is for this reason that greater weight needs to be placed on the NZCPS.

Wainui Beach Erosion Management Strategy (WBEMS)

99. The WBEMS 2014 was developed through a stakeholder engagement process and supported by a forum of key stakeholders formed by council to bring together multiple stakeholder perspectives and work through issues. This Strategy is a relevant matter to consider under section 104(1)(c) of the RMA.

100. It was Mr Hansen's opinion that considerable weight should be placed on the WBEMS as it was 'on point' as I have addressed earlier. I accept that the Strategy is 'on point' and has specifically addressed this (and other) sections of the beach as well as a proposed rock revetment. Section 6.2 Area 2 – Tuahine Crescent of the Strategy addresses this area.

101. It is my finding, for the reasons set out below, the WBEMS is not entirely 'supportive' of the proposal, and clearly does not 'over ride' the provisions of the statutory planning documents, particularly the NZCPS.
102. Section 6.2.3 Strategy for Area 2 sets out the following options to be promoted for Area 2:

- *Implementation of development controls to avoid exacerbation of the erosion risk and to reduce risk over time.*

- *Review of the existing hazard zones and refine policies and rules.*

- *Replacement of the existing rail and rock wall north of the groyne ending in the vicinity of the Tuahine Crescent beach access way with a more robust structure – though, as far as practicable, with a similar footprint to minimise adverse effects on beach values. The final extent of the wall will be established during consent level design to establish in more detail the backshore composition and localised erosion risk. The term of the consent for this structure should match the expiry date for the recently constructed revetment.*

- *Consider complete removal of the rock revetments from the coast once the existing consent for the recent rock revetment expires. Whether these works are replaced with appropriate structures or other action will depend on the understanding of hazards at that time.*

103. The 3rd bullet clearly envisages a replacement of the existing rail and rock wall north of the groyne ending in the vicinity of the Tuahine Crescent beach access way with a more robust structure. However the replacement is one of a number of options to be promoted. The first two bullets appear, to me at least, not to have yet been promoted, and would clearly provide 'context' to the advancement of a proposal "for a more robust structure". The "review of the existing hazard zones and refine policies and rules" may be highly relevant given the statement of page 16 of WBEMS which states:

> *Despite the extreme hazard risk suggested by the existing hazard lines, abandonment of the properties in Tuahine Crescent is unlikely to be required unless there is a major landslide event that renders some of the properties unusable. Further detailed investigation of cliff erosion processes and landslide mechanisms in this area is needed to confirm or refine the existing hazard zones. This will better establish the long term prognosis for the properties.*

104. It is also noted that the options seek any structure to have "*a similar footprint to minimise adverse effects on beach values.* The proposed structure as notified has a significantly larger footprint than the existing rail and log structure. This is largely due to the sloping nature of the revetment. I accept that the amended revetment (Option A) slightly reduces the footprint.

105. Section 7 - Implementation (iv) of the Strategy also sets out the placement of the rock revetment as action, along with a number of others, including a review of the resource management plans and seeking consent for sand push ups. It also sets out that the council intends to "*develop a detailed action plan to assist with its implementation of the Strategy*"[29]. There was no evidence before me about whether this action plan had been formulated or how the Council and community were to undertaken an integrated approach to addressing coastal hazard/erosion management, noting that the Vision of the WBEMS is "*Integrated management of Wainui Beach that conserves and enhances the environment for current and future generations*"[30].

[29] WBEMS, Section 7 - Implementation, pg 29

[30] WBEMS - pg 4

106. Having considered the WBEMS in the context of this application, I do not share the same view as Mr Hansen that the proposal is entirely consistent with it. While there are clearly elements of the WBEMS that 'support' the rock revetment, there are others that do not. The rock revetment appears to be one component of the identified actions, noting that sand push-up (extensively referenced in the Strategy as part of the 'integrated approach' to beach management) was withdrawn from the suite of consents sought. Also there was no evidence presented on the other 'actions' that make up the WBEMS.

Ministry for the Environment's ("MFE") December 2017 publication Coastal Hazards and Climate Change: Guidance for Local Government

107. Mr Hansen addressed MFE's guidance document containing a new planning approach to past coastal hazard management practice in respect of how uncertainty and community engagement is used in the decision making process. This new approach is a dynamic adaptive pathway ("DAP"). The DAP is being promoted by MFE through the guidance document as a best practice approach to coastal hazard management.

108. Mr Hansen considered that the approach was one that should be applied in this situation and noted Mr Whittaker's suggestion that the revetment's design life should mirror the expiry date for the tipped rock seawall to the south of the concrete groyne, and that the revetment should be deconstructed in 2042. Mr Hansen's opinion was:

> *"that determining the outcome of a future resource management process some 25 years ahead of when it needs to be made is unusual and contradicts the sustainable management purpose of the RMA. Further, that course of action would also contradict the guidance document which seeks to keep various "pathways" open at critical and pre-defined junctures (decision points),not close the pathways off before your adaptive plan has even commenced its implementation phase*"[31].

109. The applicant applied for consent for 25 years, on the basis that the rock revetment was a short to medium solution to protect the private properties at Tuahine Crescent. As I understand it from the hearing, a 'longer' term solution was to be determined in accordance with the WBEMS, as addressed above. Accordingly while I find the DAP is MFE's best practice approach, it does not change the decision I have made in relation to the rock revetment. The reasons for this are those already set out.

Gabion Baskets and the rock Rip Rap

110. As has already been set out these works were undertaken pursuant to the emergency works provisions of the RMA. As requested, consent has been sought for this work, but only in relation to the gabion baskets. No consent has been sought for the retention of the rock rip rap. This issue has been fully canvassed above.

[31] Para 4.7 of Mr Hansen's evidence

Gabion Baskets

111. As has been set out in the summary of evidence, the gabion baskets have achieved their purpose of stabilising the coastal erosion of this part of the beachfront. Sand has covered the baskets such that they are not visible (at the time of my site inspections). The applicant's and council's expert agree that the gabion are not affecting coastal processes, and that it is appropriate that they can remain in-situ.

112. The exert planners both opined that any adverse effects from the gabion baskets was minor, and that due to the small scale of the works and the limited consent term, that the proposal would not be inconsistent with the relevant objectives and policies of the statutory planning documents. A number of submitters set out why in their view the gabion baskets should remain.

113. I agree with the applicant, council officers and those submitters supporting the retention of the gabion basket. Based on the evidence before me I find this proposal, due to its scale and time frame, would not be inconsistent relevant objectives and policies, and any effects can be avoided, remedied or mitigated by conditions of consent.

Rock rip rap

114. The applicant sought to remove the rock rip rap; while a number of submitters sought to retain them. As set out earlier I have considered this aspect of the proposal as if consent had been sought.

115. Drs' Shand and de Lange both agree that the rocks are not performing any coastal erosion mitigation function, and have been installed without any geotextile matting. It is likely that in a storm event these rocks could be dislodged.

116. Mr Daykin set out in his opening statement that in relation the rocks:

T&T have assessed the rock to be:

- Not a conventional revetment design
- Poorly constructed
- Uncertainty around extents of geotextile under the rocks
- Mix of rock sizes. Many too small that are then likely to be displaced on to the beach during storm events
- Poor transition between gabions and rock including rock on top of the gabions that increases risk of rock dislodgment and damage to the gabions
- No rail iron support for gabions
- H&S risks to beach users (walkers, cyclists, horses, SLSC vehicles etc.) from falling & dislodged rock on the beach
- GDC Engineer who oversaw works won’t provide post construction certificate
- Inconsistent with NZCPS & WBEMS

117. It was Dr Shand's view that the bank above the gabion baskets will flatten by slumping until a stable angle of repose is reached, and some loss of land above the slope was therefore expected. He recommended planting of the exposed dune face above the gabions to stabilise the sand against wave run-up and overtopping of the gabion baskets.

118. Given the experts view, and notwithstanding the wishes of a number of submitters to retain the rock, they are not performing the function of erosion protection or mitigation. On this basis it is appropriate to enable their removal. This would be consistent with the objectives and policies already set out, and any adverse effects will be avoided or mitigated by the conditions of consent.

Decision

119. As already set out, the application is a non complying and must pass at least one of the two 'gateway tests". It is my finding that overall, the proposal is not contrary (as in repugnant to) the relevant objectives and policies - especially those relating to landscape, ecology, public access and recreational and amenity values of the beach. On this basis it is not necessary to make a finding in relation to section 104D (a); whether the adverse effects are minor or not. The application satisfies section 104D, and a decision can be made pursuant to section 104B of the RMA.

120. I have addressed the provisions sections 104 and Part 2 of the RMA. It is my finding that the rock revetment is, overall, inconsistent with the natural hazards and related natural character provisions of the NZCPS, which discourages hard protection structures unless it is only practical means to protect existing infrastructure of national or regional importance. The proposal is in part inconsistent with the Tairāwhiti Plan provisions. The reasons for this have been set out above, noting that I have placed greater weight on the provisions of the NZCPS.

121. Moreover it has not been demonstrated that the adverse coastal process effects, particularly "end effects" have been avoided (or remedied or mitigated) given the NZCPS policy 25 direction to avoid increasing the risk of social, environmental and economic harm from coastal hazards.

122. For the reason set out, the resource consent for the rock revetment is **refused**.

123. Consent for the retention of the gabion baskets is granted. This is based on the scale and time frame of the proposal. On this basis it is not inconsistent with relevant objectives and policies, and any effects can be avoided, remedied or mitigated by conditions of consent.

124. The applicant sought to remove the rip rap and presented evidence as to why it was not effective as an erosion protection structure. For the avoidance of doubt, consent is **granted**, for the reasons set out above in this decision.

125. Conditions have been imposed in relation to the consents to retain the gabion baskets and the removal of the rock rip rap.

Conditions

General Conditions

1. The proposed coastal erosion works authorised by this consent are limited to;
   - The gabion basket works along the coastal boundary of 21 Wairere Road, including retention of the existing gabion basket structure, and the removal of the rocks which have been placed on the dune face above the gabion basket.

2. The design of the gabion structures and construction works, and the removal of the rocks placed on the dune face above the gabion baskets, shall be undertaken in general accordance with the following documents and material;
   - The Resource Consent Application and AEE Report prepared by Tonkin and Taylor dated May 2017 (Ref 1000724)
   - The Resource Consent Engineering Report prepared by Tonkin and Taylor dated May 2017 (Ref 1000724)

   unless otherwise amended by the following conditions of consent.

3. The consent holder shall pay the Gisborne District Council any administration, inspection or monitoring charges fixed in accordance with S36(1) of the Resource Management Act 1991.

4. Where a conflict arises between any conditions of this consent and the application, the conditions of this consent will prevail.

5. All works and structures relating to this resource consent shall be designed and constructed to conform to the best engineering practices and at all times maintained to a safe and serviceable standard.

Term of Consent

6. The consent for the gabion basket works shall expire 5 years from the date of its commencement (pursuant to section 116 of the RMA).

Construction Management Plan (CMP)

7. At least 2 weeks prior to the works commencing (noting the gabion baskets are already in place), the Consent Holder shall submit to the Consents Manager, Gisborne District Council, for certification, a Construction Management Plan (CMP) prepared by a suitably qualified and experienced person(s). The CMP shall outline the environmental management and monitoring measures in respect to the rock removal and shall address, but not be limited to the following;

   - Compliance with all consent conditions
   - Sediment and erosion control measures and water quality management
   - Management and stabilisation of works in relation to tide and weather conditions
   - Machinery and truck refuelling and maintenance
   - Contingency plans

- Stockpile management
- Waste management and disposal
- Vehicle and machinery access management within the coastal marine area
- Public notice information and signage
- Public health and safety measures
- Vigilant attention to weather forecasting to prevent commencing work close to the arrival of coastal storms or extreme weather events, and undertaking construction in discrete stages

The rock removal activity shall not commence until the CMP has been certified by the Consents Manager, Gisborne District Council, and written confirmation from the Consents Manager, Gisborne District Council has been received. The consent authority will endeavour to have the certification process completed within 10 working days (excluding any periods where additional information is sought from the consent holder)

8. The Consent Holder may amend the CMP provided under condition 9, at any time by submitting the amended plan for approval to the Consents Manager, Gisborne District Council, for certification, following the same process outlined in Condition 9 above. Construction activities subject to the amendment shall not commence until the amendment has been certified by the Consents Manager, Gisborne District Council.

Construction Methodology and Conditions

9. The consent holder shall notify water.info@gdc.govt.nz of the intention to begin works at least 3 working days prior to the exercise of this consent. Where works are to be undertaken again having been discontinued for more than seven consecutive working days Council shall be re-notified.

10. All noise from construction shall comply with the following criteria for long term construction activities at the boundary of any residential site:

Time period	*Average Maximum Noise Level (dBA)*		
	L_{95}	L_{10}	L_{MAX}
Monday – Saturday 0600 – 1800 hours	*60*	*75*	*90*
Monday - Saturday at all other times	*60*	*75*	*90*

Sound levels shall be measured in accordance with New Zealand Standard NZS6801:1999 “Acoustics: Measurements of Environmental Sound” and assessed in accordance with NZS6802:1991 “Assessment of Environmental Sound”.

11. All vibration from construction shall comply with the following vibration criteria:

The maximum weighted vibration level (Wb or Wd) arising from construction, when measured at or within the boundary of any site, or the notional boundary of any adjacent dwelling shall not exceed the following limits:

General vibration	**Time Ma**	**Maximum Weighted Vibration Level (Wb or Wd)**
	0600- 1800 hours Monday to Saturday	45mm/s^2
Construction Vibration	**Time Ma**	**Maximum Weighted Vibration Level (Wb or Wd)**
	0600-1800 hrs Monday – Saturday	60mm/s2
	At all other times	15mm/s2

12. All vehicles involved in the exercise of this permit shall be inspected daily prior to entering the coastal marine area for leaks or other sources of contaminants. Evidence of this inspection shall be recorded in a log book and shall be made available to the consenting authority on request.

13. All waste material shall be removed from the coastal marine area and disposed of appropriately.

14. The sites and coastal marine area shall be left in a tidy condition upon completion of works.

15. The consent holder shall identify and submit a plan identifying stockpile areas to the consent authority prior to works occurring.

16. The consent holder shall arrange a site visit during operations to demonstrate compliance with all consent conditions. The site visit shall be attended by representatives of the Water and Coastal Resources Team, the contractor(s) and consent holder.

17. Machinery shall not be left unattended within the coastal marine area for any period longer than 3 hours.

18. All maintenance and refuelling activities shall be undertaken outside of the coastal marine area. Refuelling and maintenance to extraction and transport machinery must be carried out off to site to ensure that any contaminants (such as oil, diesel and petrol) used during the exercise of this consent cannot enter any watercourse.

19. Machinery operators shall be informed in writing and on-site by the consent holder or their agent of the responsibility to not modify any archaeological site that may

be uncovered as a result of works and the protocols to be followed in accordance with the documentation required by condition 9 above.

20. Spill kits, appropriate to the nature and scale of the operation, should be available on site to respond to an emergency spill. Machinery operators shall be trained and equipped to recognise and respond appropriately to a spill.

Finished Site Works and Planting Plan

21. Prior to works commencing, the Consent Holder shall submit to the Consents Manager, Gisborne District Council, for certification, a Finished Site Works and Planting Plan which shall include;
    (i) Details of landscape and stabilisation planting/works to be completed along the dune face and the proposed work areas and the timeframe for when the works shall be completed,
    (ii) Measures to rehabilitate any areas within the CMA which have been affected by the construction works including all access routes to and along the CMA,
    (ii) Details of ongoing maintenance of any landscape and stabilisation planting/works which shall be undertaken during the term of the consent.

    For clarification, any stabilisation and rehabilitation works are not required to provide short or long-term protection from coastal hazards and/or storm events. The works are designed to ensure that the work area is left in a tidy condition with suitable planting and landscaping to maintain the dune face and amenity of the area under non-storm event conditions.

22. The Consent Holder shall be responsible for undertaking the approved planting and rehabilitation works within the agreed timeframes and thereafter shall maintain the site and works for the term of the consent.

Recording and Notifications

23. A photographic record of the proposed work sites shall be taken prior to, during the works and at completion showing work progress and control measures. These photos shall be provided regularly to the consent authority throughout the works.

24. The New Zealand Marine Safety Authority (MSA) is to be notified of the protection works.

25. The Hydrographic Office is to be notified of the protection.

Review Condition

26. The Gisborne District Council may serve notice on the permit holder pursuant to S128 Resource Management Act 1991 of its intention to review the conditions of the permit on a monthly basis from the date of issue of the consent for the following purposes:

(i) To review the effectiveness of the conditions of the permit in avoiding or mitigating any adverse effects on the environment from which the consent holders activity and, if considered appropriate by the consent authority, to deal with such effects by way of further or amended conditions;

(ii) To review the appropriateness of conditions in the light of relevant national standards, regulations and guidelines, and the Council's relevant regional plans;

(iii) To impose additional, or modify existing, conditions of consent relating, but not necessarily limited to, the matters specified hereunder if necessary to deal with any adverse effect on the environment which may arise from the exercise of this permit and which it is appropriate to deal with at a later date:

- to require the permit holder to adopt the best practicable option to remove or reduce any adverse effects on the environment;

- to deal with any adverse effects upon the environment on which the exercise of this consent including water quality, coastal ecosystem health and impacts on coastal birds.

Greg Hill
Chairperson and Independent Hearings Commissioner

25 February 2018

Appendix C

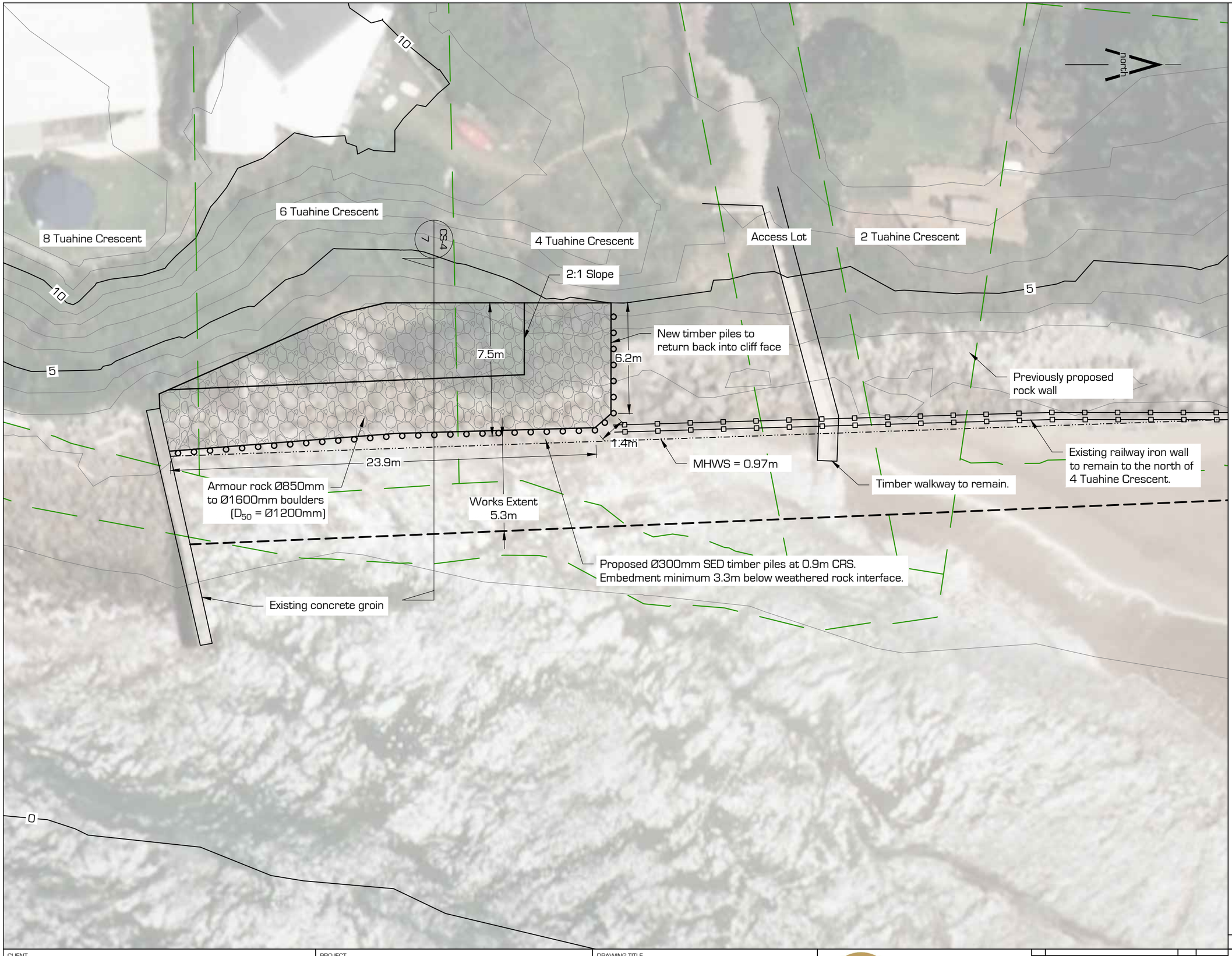
Plans

Seawall Renewal

4-8 Tuahine Crescent, Wainui Beach, Gisborne

Resource Consent Drawings

CONTENTS				
SHEET	DESCRIPTION	ISSUE DATE	STATUS	REVISION
1	Option C - Design Site Plan	19/12/2018	Resource Consent	2
2	Option C - Existing & Design Cross Sections	19/12/2018	Resource Consent	2



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed timber piles
- Proposed rock armour
- Works extent
- 0.97m MHWS

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

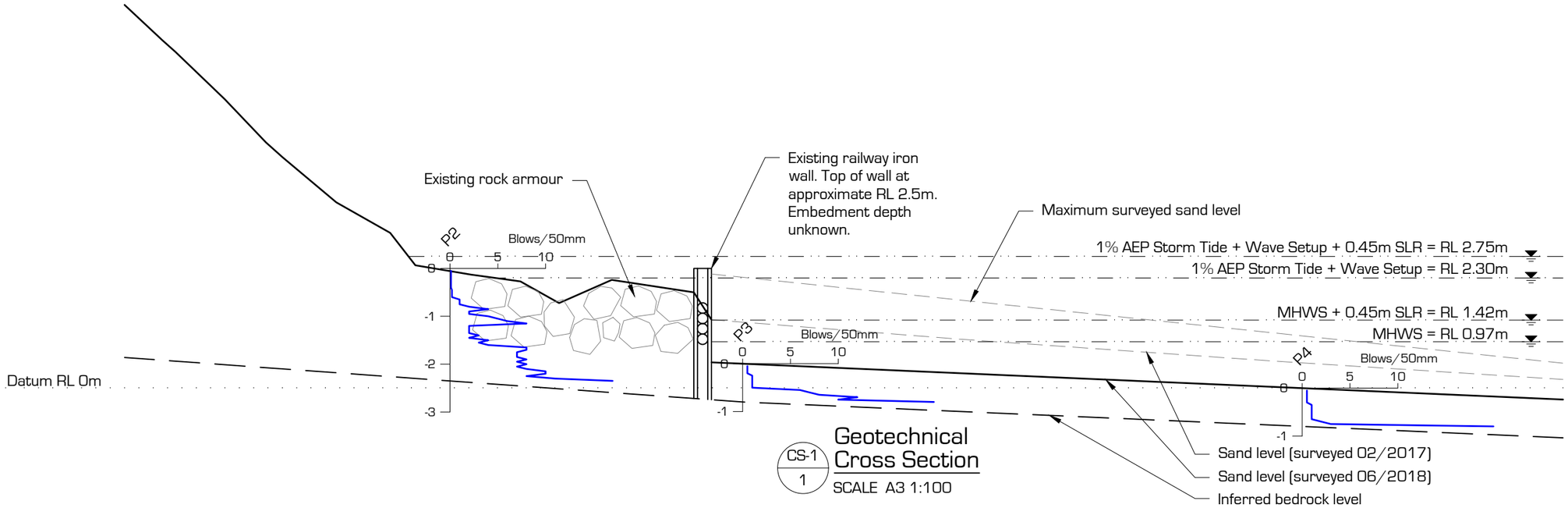
DRAWING TITLE
Option C
Design Site Plan

LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:200

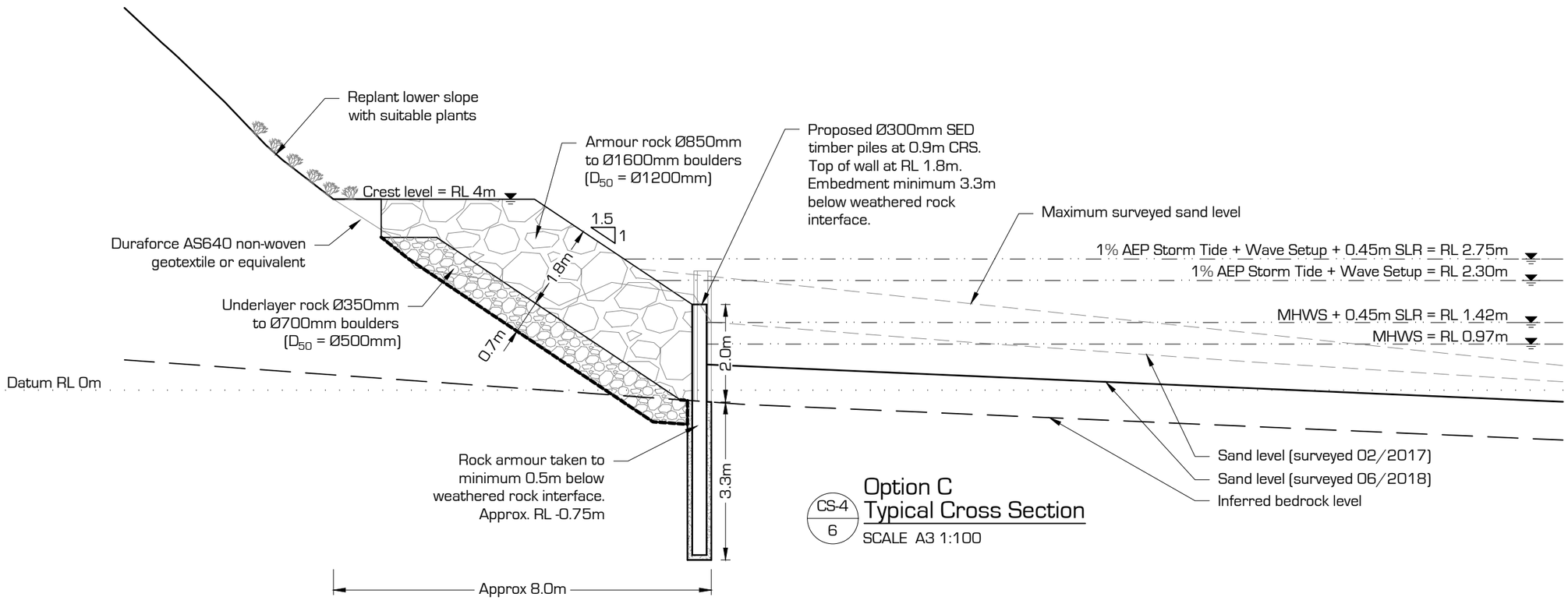
PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 1 of 2
DRAWING No: 14608-C01
REV: 2



CS-1 / 1

Geotechnical Cross Section

SCALE A3 1:100



CS-4 / 6

Option C Typical Cross Section

SCALE A3 1:100

Legend:

- Existing surface profile
- Inferred boundary layer

Notes:

0 1 2 3 4 5

Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

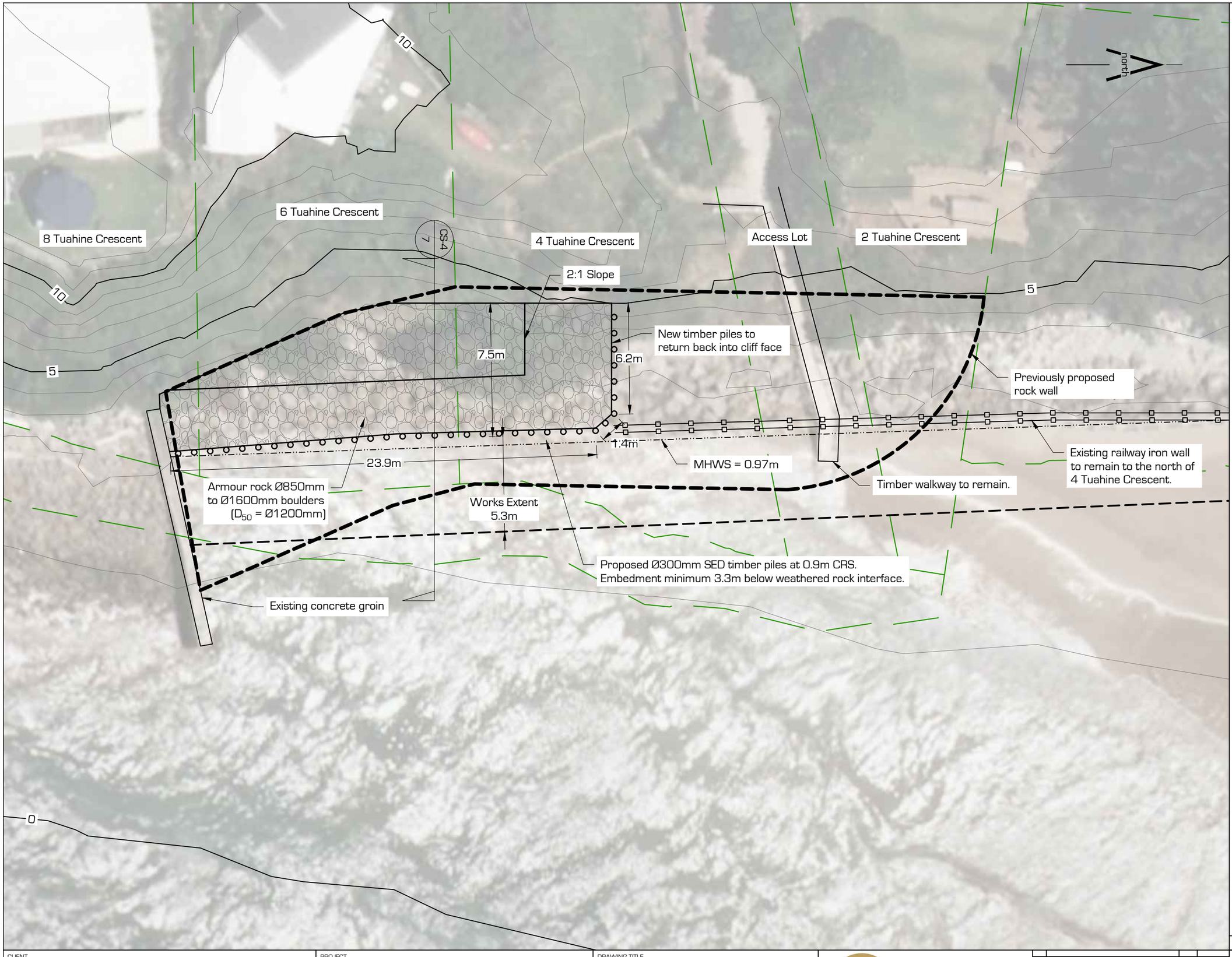
DRAWING TITLE
Option C
Existing & Design Cross Section

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:100

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 2 of 2
DRAWING No: 14608-C01
REV: 2



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed timber piles
- Proposed rock armour
- Works extent
- Previously proposed rock wall
- 0.97m MHWS

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

DRAWING TITLE
Option C and Previous Design Comparison Site Plan

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

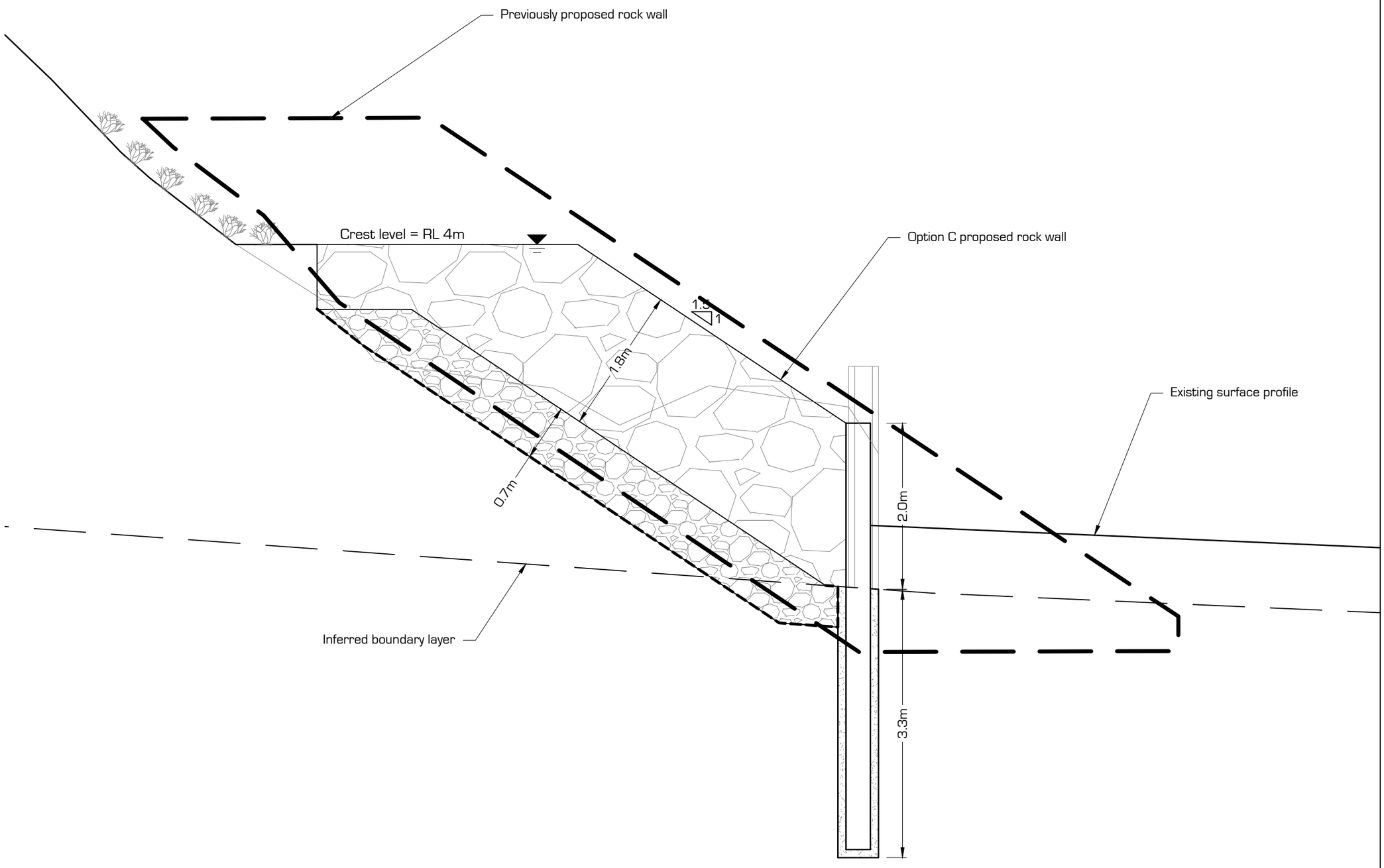
DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:200

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 1 of 2
DRAWING No: 14608-C02
REV: 2

CS-4
6

Comparison Cross Section

SCALE A3 1:50



Legend:

- Existing surface profile
- Inferred boundary layer
- Previously proposed rock wall

Notes:

0 1 2 3 4 5

Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

DRAWING TITLE
Option C and Previous Design
Comparison Cross Section

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:50

PROJECT STATUS: Resource Consent

PROJECT: 14608 SHEET: 2 of 2

DRAWING No: 14608-C02 REV: 2

Appendix D

4Sight Visual and Landscape Assessment

6 & 8 TUAHINE CRESCENT
Proposed Rock Revetment Replacement

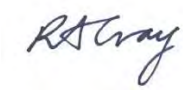
For Simon Cave and Annabel Reynolds

Visual and Landscape Assessment

April 2019

REPORT INFORMATION AND QUALITY CONTROL

Prepared for:	For Simon Cave and Annabel Reynolds.

Author:	Rebecca Cray Senior Landscape Architect	
Reviewer:	Renee Davies Principal Landscape Architect	 
Approved for Release:	Renee Davies Principal Landscape Architect	 

Document Name	R_AA3557_6 Tuahine Cres_Seawall_VIA_V3.0

Version History:	V.3.0

CONTENTS

Page

List of Tables

List of Figures

List of Appendices

1 INTRODUCTION

4Sight Consulting has been engaged by Simon Cave and Annabel Reynolds, residents and/or landlords, to undertake a Landscape and Visual Effects Assessment for the proposed replacement of an existing rock revetment in front of the private residences at number 4 and 6, Tuahine Crescent, Wainui Beach, Gisborne.

The proposed work includes:

- Removal of existing iron bar type rock revetment;
- Replacement with 300mm timber posts;
- Backfilling with local rock, and re-use of some existing rock revetment rock material;
- Weed removal and mitigation planting to aid bank stabilisation at top of wall;
- Associated earthworks.

1.1 Purpose of the Report

The purpose of this report is to provide a landscape and visual effects assessment of the proposed rock revetment replacement at number 4 and 6, Tuahine Cres. This assessment considers the location of the properties within an identified Outstanding Landscape Area, and reserve land, and its associated protection of values (natural character and amenity).

It is our understanding that a previously filed rock revetment design and associated resource consent were denied by the Gisborne District Council primarily due to its inability to effectively negate effects on public access, and end effects generated by wave action against the adjoining properties.

The report's focus is on the visual effect of the proposed rock revetment redevelopment within the site and its broader landscape context, and the effect on natural character, coastal values and public experience. The report also proposes mitigation measures to provide additional enhancement consistent with outcomes identified under Section C3, DD1 and DD5 of the Tairawhiti Resource Management Plan.

1.2 Methodology

The assessment of landscape and visual effects are separate, although linked, processes. The existing landscape and its visual context or visual envelope all contribute to the existing 'baseline' for the landscape and visual assessment studies. The assessment of the potential effects on the landscape is carried out as an effect on an environmental resource (i.e. landscape features or character). Visual effects are assessed as one of the interrelated effects on the surrounding viewing audience. The differences between these types of effects can be summarised as follows: Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape. Visual effects relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity.

The following methodology was implemented in the preparation of this landscape and visual assessment:

- Desktop review of relevant statutory documents (District Plan text and mapping);
- Site visit and assessment of visibility and local character;
- Field survey of the local area;
- Identification of the impact on the viewshafts from publicly accessible areas;
- Assessment of landscape and visual effects specific to the viewshafts; and
- Identification of proposed design and mitigation measures.

This assessment has been prepared with reference to the NZILA Best Practice Note Landscape Assessment and Sustainable Management 10.1.[1] The effects ratings and definitions used are available in Table 1 in **Appendix C** and simulated height indicators can be found in **Appendix D**. To determine the overall nature and significance of the landscape and visual effects, an understanding of the sensitivity of the landscape or viewing audience has been combined with an assessment of the magnitude of change resulting from the proposal in order to determine the overall significance of effects.

The site visit and field survey of the local area was undertaken on Tuesday 13th November 2018.

2 SITE LOCATION AND CONTEXT

2.1 Local Area

The site is located on the upper shores of Wainui Beach, ten minutes north of Gisborne central, within the Gisborne District Council's Natural Character Area, and adjacent to a public amenity reserve. The site sits within the larger Wainui Beach landscape, abutting a small cliff as the contour transitions from beach to land. The Natural Character Area seeks to preserve the character and values of Wainui Beach. As the site adjoins a public amenity reserve there are further prompts for visual amenity and public access to and from the reserve that must be maintained in light of peripheral development.

The site is located on Wainui Beach within the eastern property line extents of 4 and 6 Tuahine Crescent. Due to coastal erosion processes, this eastern property line extent now sits and appears contiguous as part of the Wainui Beach front. From the beach up the cliff is a mix of exotic and native vegetation, above which the roof lines of number 6 Tuahine Cres are partially visible from some angles. The existing remains of a former council rock revetment along these properties sits on the property boundary, delineating sandy beach, from the remains of the rock revetment extent which is now loosely comprised of local weathered limestone rocks that remain. The site's inclusion in the Coastal Management Zone indicates that these effects have been identified and have occurred over some time.

The wider site context is split between light sand coloured beach extent and coastal environment, and transitions into low-density suburbia with rolling hills and pasture in the background.

The Wainui Beach coastal landscape has an obvious natural character that is inclusive of low-level human development and appears typical in relation to expected New Zealand coastal living and development areas.

[1] NZILA Best Practice Note Landscape Assessment and Sustainable Management 10.1 and *"Auckland Council - Information requirements for the assessment of landscape and visual effects"*, September 2017, www.aucklanddesignmanual.co.nz/resources/tools#/resources/tools/landscapeandvisualeffectsassessment

[2] https://www.westernbay.govt.nz/our-services/property/natural-hazards/Pages/Land-Instability.aspx

Figure 1: Site Location and Context. A3 size version in **Appendix A.**

2.2 The Site

The site is located in front of number 4, 6 and 8 Tuahine Cres (legally described as Lot 5 DP 3216, and Lot 6 DP3216 and Lot 7 DP3216). The proposed wall is approximately 25 metres in length, and the proposed rock revetment backfill area will cover approximately 150sqm.

The existing rock revetment site is comprised of a row of approximately 1 metre high iron bars, with loose remaining backfill of weathered limestone, and some naturally accreted driftwood. Sand is visible within parts of the existing rock revetment due to loss of backfill material over time. The cliff ascending from the back of this rock revetment is predominantly covered in weed species, particularly shrubs and groundcovers.

The proposed rock revetment location is to replace the line of existing iron bars so that the alignment is still within private property and therefore protects the public amenity access and interest in the adjoining reserve. The protection of private property and prevention of further erosion is the purpose of the proposed rock revetment replacement, alongside incorporation of resilient design for climate change impacts.

Figure 2: Map showing the location of the subject properties in relation to public amenity reserves and the rock revetment location. NB: the proposed rock revetment location is the same alignment as the existing rock revetment.

3 PROPOSED DEVELOPMENT

The proposal is to remove the existing failed rock revetment and redevelop a new engineered rock revetment using 300mm diameter treated timber posts at 900mm centres along the exposed face, backfilled with large "self-retaining" weathered limestone rock stacks that back up towards the foot of the cliff which supports the residences at number 4 and 6 Tuahine Crescent.

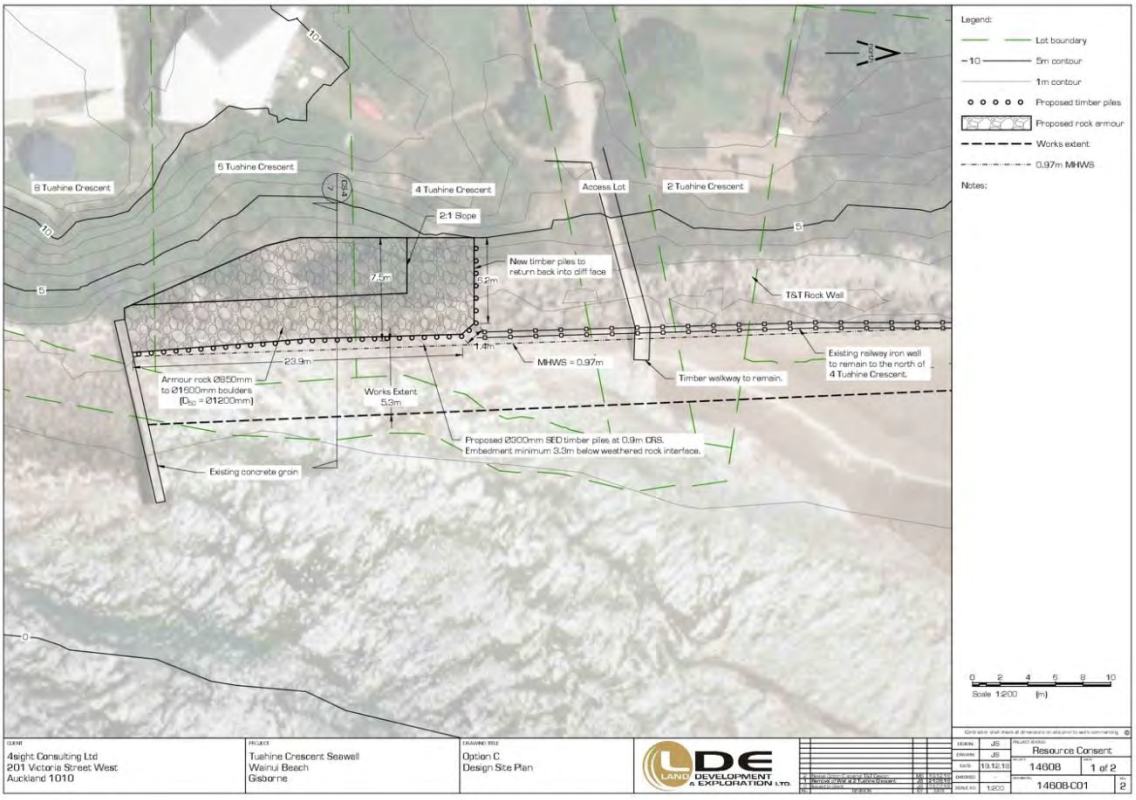


Figure 3 – Plan from LDE Engineering showing the layout and scope of works area for the replacement rock revetment.

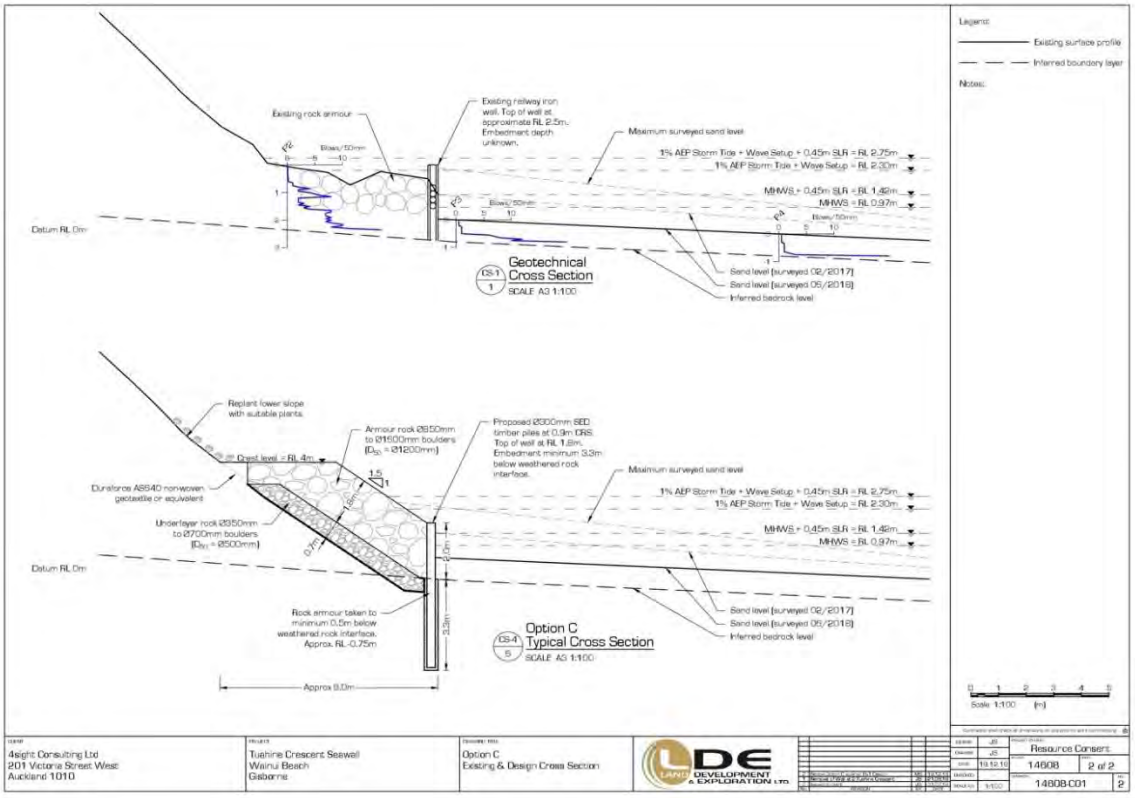


Figure 4 - Image from LDE Engineering Consultants showing north elevation of the proposed rock revetment in relation to the existing rock revetment.

3.1 Vegetation and Proposed Planting

As part of the development, some native planting is proposed along the upper western pocket of the rock revetment where a previous slip requires clearing and restructuring in line with the proposed rock revetment construction. This part of the small cliff face currently has a large proportion of weed species present and will benefit the wider Wainui beach character through minimising the prevalence of weeds in this area and establishing native vegetation characteristic of coastal cliff in Gisborne. This will assist in providing background vegetation cover that will help to integrate the upper reaches of the rock as part of the new rock revetment into the bank area.

Proposed plant species for this area include *Melicytus novae – zelandiae*, *Coprosma acerosa* and *Muehlenbeckia complexa*. Further detail is provided under Section 8 of this report.

3.2 Reflectivity, Colour and Materials Palette

The extreme coastal conditions that the rock revetment needs to withstand determines the small range of construction materials that are appropriate in this circumstance. The proposed rock revetment has however been designed with visual connectivity and appearance in mind. The use of 300mm diameter timber posts as a replacement for the existing iron bars will immediately provide a visual softening and the light timber (silvering over time) will recede visually within the sandy shore environment and driftwood of the beach environment.

Further to this, the fill material, large locally sourced weathered limestone, which have a mix of beige, tan, white and grey tones rapidly assimilate within this coastal edge environment, particularly when viewed from a distance. The rock remains of the existing rock revetment will also be used in the construction of the new rock revetment.

The combination of a natural timber finish, and use of local rock in this environment improves the visual flow and reduces the visibility of the rock revetment. In this environment, where the light-coloured sand causes a large amount of reflectivity, particularly near the ocean, the lighter and less reflective rock revetment materials will not create a visually prominent intervention in this location in terms of contrast with the light sands. The proposed material is also visually consistent with existing rock revetment extending from the south side of the groyne which this proposed rock revetment abuts.

Figure 5 - Image of existing rock revetment extending from the south side of the groyne. This local weathered limestone rock mix type is proposed for the new rock revetment fill. Due to natural ocean processes, the proposed rock revetment will also naturally accumulate driftwood, which will help visually integrate the rock revetment into the coastal environment.

3.2.1 Rock Revetment Heights

The proposed rock revetment will overall sit higher than the existing rock revetment, even though the timber posts will sit lower than the existing iron bars. This is for design and longevity reasons, considering rising sea levels as part of climate change. The rock will be layered up and back towards the bank to ensure it can stabilize the bank in larger tides, stormwater events, and mitigate the potential for end effects.

4 STATUTORY CONTEXT

4.1 Gisborne District Council

The proposed rock revetment is being evaluated for its impacts on public use, access and enjoyment of Wainui Beach, as well as outstanding landscape, natural heritage and coastal values. The proposed rock revetment will be located on private property directly adjacent to two thin strips of public reserve land that adjoin the public beach.

The proposal is also assessed as an Outstanding Landscape Area under Section C3 of the Tairawhiti Resource Management Plan:

C3.2 Issue – Natural Character

A key component of the natural character of the Coastal Environment is the landscape or visual element of the coast, it's landscape and landform, the vegetation, wildlife and the habitats and ecosystems present. Natural character also includes natural physical processes that occur and more intangible qualities such as the ambient air quality and background noise level and quality. Finally, the degree of Natural Character of an area may be determined by its remoteness and the presence or absence of human impacts on an area.

The RMA requires that the natural character of the Coastal Environment, rivers, lakes, and their margins be preserved provided this meets the purpose of the Act. It is not a requirement of the Act to identify areas of high natural character and in fact it may not be possible to do so without distracting people from the need to preserve natural character generally.

The NZCPS sets out to preserve natural character by protecting areas, features, and processes identified as regionally or nationally significant and these mechanisms are likely to preserve natural character in areas where particular characteristics have very high significance. The NZCPS also sets out the desirability of restoring an area's natural character using indigenous species by preference in areas where activities have damaged or destroyed natural character. Tairāwhiti Resource Management Plan – Part C (C1-C4) Last Updated 30 July 2018 84

There are eight common landscape areas, based on landform character, that are repeated throughout the Coastal Environment. Each area has particular sensitivities for which appropriate policies may be established.

These areas are:

- Headland
- Bay
- Scarp
- Truncated Coastal Hills
- Duneland
- Islands
- Terrace
- The Sea

Information on the landscape character of the Gisborne region, has been sourced from the report prepared by Boffa Miskell Ltd for the Gisborne District Council, entitled, "An Assessment of the Landscape Character of the Coastal Environment of the of the Gisborne District,".

There are four common landscape areas identified within the above document that are included in this visual assessment. These are: headland, bay, scarp and the sea.

C3.2.1 Issue

1) The natural character of the Gisborne regions Coastal Environment and the rivers, lakes, and their margins within the Coastal Environment has been and may continue to be adversely affected by some activities. Activities may adversely affect some or all the elements that combine to form the natural character of an area.

C3.2.2 Objectives

1) The natural character of the Gisborne regions Coastal Environment and wetlands, rivers, lakes, and their margins within the Coastal Environment is preserved unless such preservation is inconsistent with the purpose of the RMA.

2) The characteristics of the Coastal Environment that together form the natural character of the Coastal Environment of the Gisborne region are identified.

3) Areas of the Gisborne region Coastal Environment where natural character has been adversely affected by past activities are identified. Such specifically identified areas should, where appropriate, be restored and rehabilitated.

4) Principal reasons:

- **Objective 1:** Section 6(a) of the RMA states that all persons exercising powers, functions or duties under the Act must recognise and provide for, as a matter of national importance the preservation of the natural character of the Coastal Environment and its protection, from inappropriate subdivision, use and development.9F9F8
- **Objective 2:** It is not possible to assess the natural character of the Coastal Environment as a discrete value. It is a composite of various 'traits' that when viewed together combine to provide the distinctive character of the Gisborne Coast. The individual 'traits' are identifiable.
- **Objective 3:** The NZCPS states it is a priority to restore and rehabilitate the natural character of the Coastal Environment where appropriate. [2]

DD5 Reserve Zones

1) The construction of a rock revetment is not provided for in reserves zones, and therefore is a non-complying activity under DD5.6.1(38)

DD5.3

1) Location of reserve areas to maintain or enhance residential and district amenity, present and future recreation opportunity, public access, and conservation values.

2) Development and use of reserve land that does not create adverse effects on the reserve or surrounding environment.

DD5.4

1) To enable community well-being by making reserve land available in order to maintain and enhance:

- residential and district amenity
- present and future recreation opportunity
- public access
- conservation and landscape values
- and protect the environmental, cultural, visual and/or historical significance of reserves.

2) To ensure that the visual impact of reserve land and facilities maintains and enhances residential amenity and the natural value of the surrounding environment.

5) To maintain and enhance access to and along the margins of the district's rivers, lakes and coastline.

7) Particular attention should be given to the following matters when assessing applications for consents to conduct activities on reserves:

[2] Boffa Miskell Ltd *An Assessment of the Landscape Character of the Coastal Environment of the of the Gisborne District*

- the existing character and amenity of the reserve and the locality in which the site is set
- the location and design (including colour) of any proposed structure on the reserve itself
- the effect of the proposed activity regarding daylight and shading on adjoining properties and the reserve itself
- the effects of traffic flow to and from the reserve site and the locality in which the reserve is set
- access points onto the reserve
- any historical, conservation, ecological, archaeological or wāhi tapu values associated with the reserve design and location in terms of enabling people to provide for their safety either at the reserve or on adjoining properties.

Other rules that the application is being assessed against include:

C8 Coastal Hazards

- The proposal involves removal of the existing seawall in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(4), consent is required as a **discretionary** activity.

C9 Natural Heritage

- Earthworks in the Outstanding Landscape Area Overlay is a restricted discretionary activity under C9.1.6(41).

Other planning triggers in relation to this general proposal are:

DD1 Residential zones

- The construction of a rock revetment is not provided for in residential zones, and therefore is a non-complying activity under DD1.6.1(32)

C3 Coastal Management

- Vegetation clearance, land disturbance and structures (rock revetment) within 200m of MHWS in the Coastal Environment Overlay is a discretionary activity under C3.1.4.3(13)

C8 Natural Hazards

- Installation of a rock revetment to mitigate the effects of coastal hazards in the Coastal Hazard 1 Overlay is a discretionary activity under C8.5.7(1)
- Earthworks which alter the natural dune land form in the Coastal Hazard 1 Overlay is a discretionary activity under C8.5.7(3)

C7 Land Management

- Earthworks in the Land Overlay 3 is a restricted discretionary activity under C7.1.6(29).

Also assessed in relation to the Wainui Beach Management Strategy for Coastal Erosion: Background and Discussion Document from July 2013:

Section 2.5.6:

(**iii) Wainui Beach Management Strategy 2003**

The Wainui Beach Management Strategy 2003 (WBMS 2003) sets out a management strategy for the future of the Wainui Beach foreshore/foredune areas and Tuaheni Point/Headland under the following vision statement:

"The protection and enhancement of Wainui Beach and adjoining reserves for the use and enjoyment of future generations."

The WBMS 2003 recognises that different parts of the beach have different characteristics that require different management. Recommendations include:

- retirement from grazing on Tuaheni Point,
- removal of some existing beach protection works,

- construction of new and modification of existing rock revetments,
- use of a cobble berm/dynamic revetment with rock revetments,
- geotextile bag protection works,
- retreat of existing dwellings most at risk from erosion,
- beach scraping trials to facilitate dune development,
- dune and bank planting and dune care education,
- carparking restrictions.

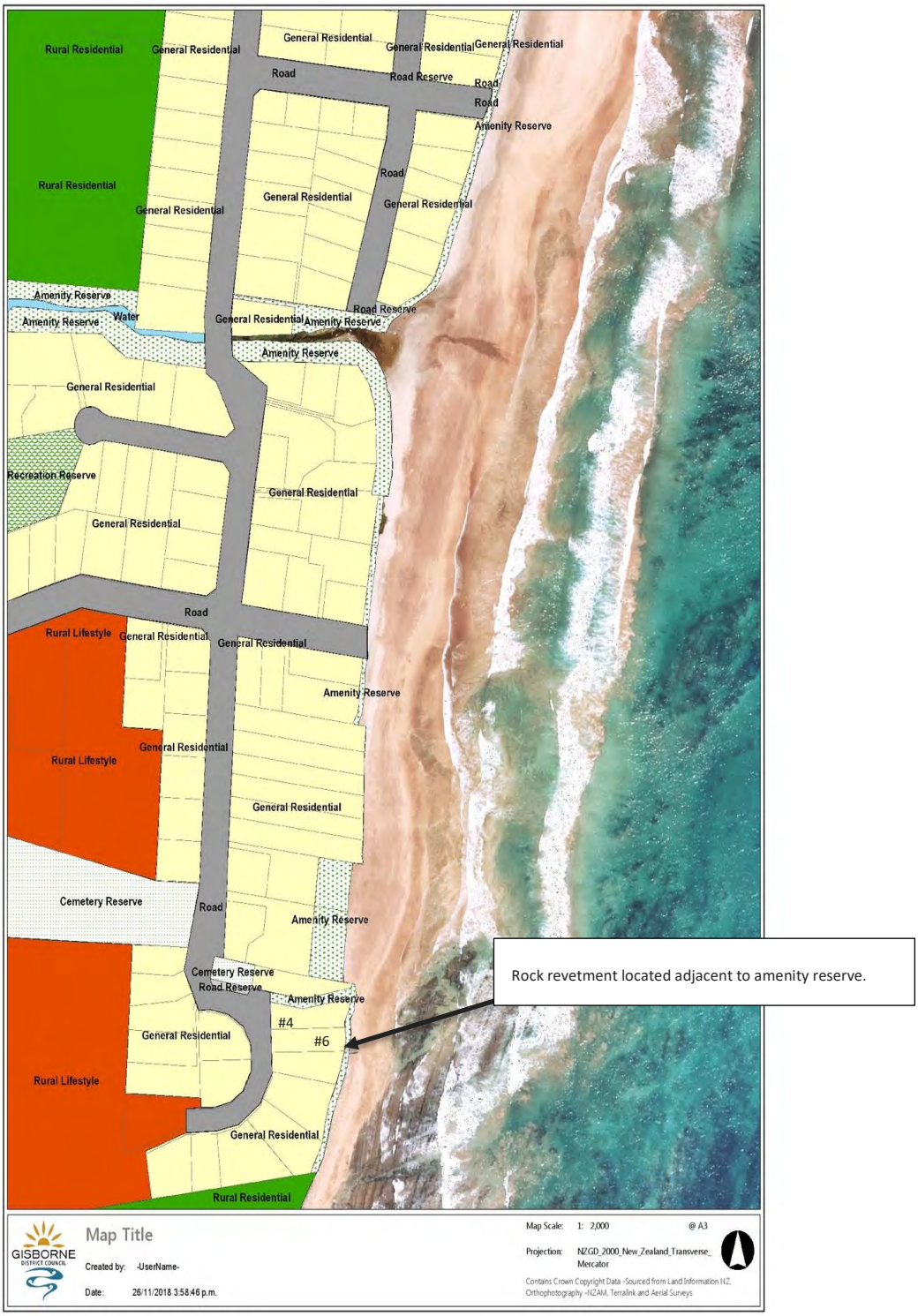


Figure 6: Gisborne District Council Planning Context Map demonstrating the extent of the Amenity Reserve that the proposed rock revetment would sit within.

VISUAL CATCHMENT AND VIEWING AUDIENCE

The proposed replacement rock revetment is of a design, texture and colour palette that complements and blends in with the existing coastal landscape, particularly from a distance. The prominence of the proposed rock revetment is most obvious for Viewing Audience D - beach users walking directly in front of the wall along the beach. The visual difference for Viewing Audience C - who utilise the public access off Tuahine Crescent is the second most prominent visual difference.

The remaining viewing audiences gain either mostly screened or obscured views, or in the case of beach users more than 250 metres away, the rock revetment is barely visible due to the sheer distance and scale of the rock revetment in proportion to the wider viewed landscape.

A selection of indicative viewpoints and height indicators have been provided from those viewing audiences where there may be views of any of the proposed development.

The key consideration in this assessment is the potential adverse effects of the new rock revetment with particular regard to:

- Scale and height;
- Backdrop and naturalness; and
- Colour and reflectivity

On this basis, the viewing audiences for the proposed development comprise the following:

- **Viewing Audience A:** Southern Beach Users (Past Groyne)
- **Viewing Audience B:** Residents of 4,6 & 8 Tuahine Crescent
- **Viewing Audience C:** Tuahine Crescent Public Beach Access
- **Viewing Audience D:** Beach Users in front of #4,6 & 8 Tuahine Crescent
- **Viewing Audience E:** Beach Users 50m – 250m north of site
- **Viewing Audience F:** Beach Users 250m and beyond, north of site

Figure 7: Diagram showing the identified viewing audiences. Refer to **Appendix D** for A3 version of map.

Some earthworks and vegetation clearance will need to take place in order to remediate and stabilise an existing small slip in front of the dwelling on 6 Tuahine Cres. At this location the existing background vegetated landscape character will be changed as part of the proposal. There is a high prevalence of weeds in this area, and therefore the restabilisation works being undertaken as part of the proposed rock revetment provide an opportunity to re-plant the upper edges of the rock revetment in native vegetation which will enable a positive contribution to the coastal landscape character, and enable edge softening of the new rock revetment.

Figure 8: Diagram showing the proposed rock revetment site in relation to #5 and 6 Tuahine Crescent.

5 VISUAL EFFECTS

The viewing audiences have been identified in section 4 above and the site photos shown in **Appendix D** provide indicative height and materiality simulations of the proposed rock revetment from key views of the site gained from the different viewing audiences.

The visual simulations have been based on the known height of the existing iron bars identified within the viewpoint, with the heights of the new rock revetment being calculated accordingly using the north elevation technical drawing from LDE. These iron bars have thus provided a datum for ensuring accuracy in determining the height line of the new rock revetment when inserted into the photo and associated scale.

The following steps were used in the preparation of the visual simulations:

1) Capturing of the iron bars within viewpoint photos; and

2) The selection of a range of representative viewpoint locations from which photographs were taken.

The visual simulations have used a red line datum to show the indicative location of the front line of 300mm timber posts, and the highest points of the rear (top) part of the rock revetment where it contacts the cliff. This shows relationships to the existing cliff and surrounding vegetation.

The reading distance for the visual simulations provided in **Appendix D** is 500mm as a 50mm focal length lens was used for the photos, with the image at 360mm width.

5.1 Viewing Audience A – Southern Beach Users (Past Groyne)

As outlined under Section 5 the site is barely visible for this viewing audience. Likely visibility consists of upper rock portions where they will touch the bank. Visual consistency will be achieved through revegetation planting where the slip area is cleared and re-stabilised. The existing groyne, which will remain, obscures approximately 95% of the potential views of the proposed rock revetment when approaching along the sandy shore. Given the reduction in available shore walking space in this area due to close proximity of rock revetment between the mean high-water springs line, and distance from public parking and access areas, this beach area does not appear to be as well used as the main part of Wainui Beach.

Figure 9: View from the south side of the groyne, along the edge of the protective rock revetment in this area. A3 size version of the viewpoint is provided in **Appendix D.**

The visibility for this viewing audience is screened significantly by the existing groyne, and softenend and integrated by existing and proposed vegetation along the upper reaches of the propsoed rock revetment extent. As such the visual effects for this audience are **very low**.

5.2 Viewing Audience B – Residents of 4,6 & 8 Tuahine Crescent

Although not a public audience, the rock revetment will be partially visible for this viewing audience, particularly as isolated vegetation clearance in front of #6 Tuahine Crescent will make a direct line of sight potentially available from the edges of the property, until the proposed revegetation planting establishes. Residents are likely to obtain small glimpses of the rock from this angle, which will disappear over time as the vegetation forms a typically dense cover over the cleared area. In general the visual effect on this viewing audience will be **very low** as the awareness of the proposed new rock revetment will be limited, and the overall quality of the view which is directed above and away from the site will not be affected.

The low-lying and visually recessive nature of the rock revetment, particularly when viewed from this acute angle is further softened and integrated with the prevalence and density of the foreground vegetation, resulting in visual effects that are very low.

Figure 10: View from the easternmost edge of 6 Tuahine Crescent down towards the upper shoreline edge and existing rock revetment extent. A3 size version of the viewpoint is provided in **Appendix D.**

5.3 Viewing Audience C – Tuahine Crescent Public Beach Access & Amenity Reserve

The proposed rock revetment is visible to this audience and comes into view towards the south the more that visitors descend the staircase. The transition of Viewpoints 4, 5 and 6 demonstrate the reveal of the rock revetment for this audience.

Figure 11: Photo from Viewpoint 4, midway down the public stair access looking south along the rock revetment site. A3 size version of the viewpoint is provided in **Appendix D.**

Figure 12: Photo from Viewpoint 5, midway down the public stair access looking south along the rock revetment site. A3 size version of the viewpoint is provided in **Appendix D.**

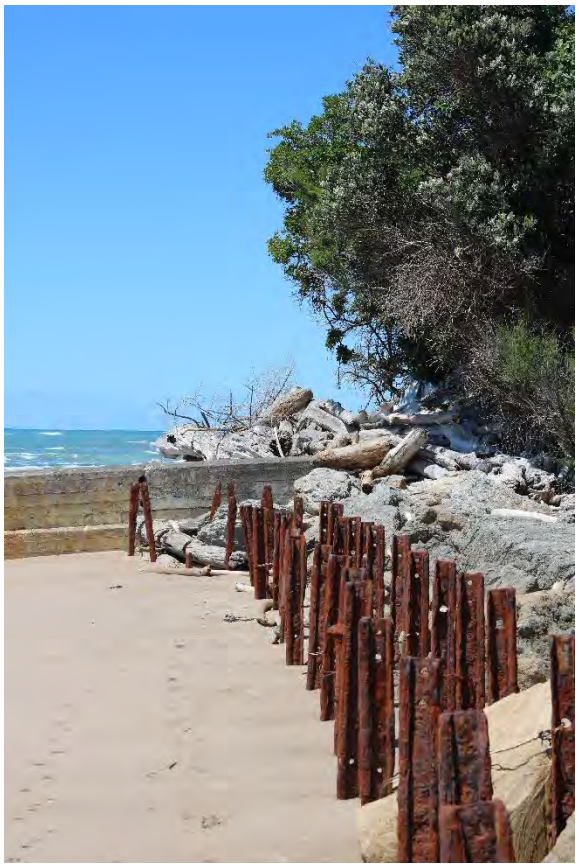


Figure 13: Photo from Viewpoint 6, at the bottom of the public stairs looking south along the rock revetment site. A3 size version of the viewpoint is provided in **Appendix D.**

The proposed rock revetment will appear very similar to the existing situation from the perspectives of this viewing audience, particularly as the prevalence of rock will form the majority of the approaching view. As the iron bars which characterise and currently dominate this view will be removed, the rock revetment "front line" will be less visually dominant for this audience. The appearance of backfill rock material will also be consistent from viewpoints 5 and 6 as this will be re-used and copied when further rock material is added as part of the construction. Importantly, the current front line of the rock revetment will not change. The main differences to this viewing audience will be an increase in the height of rock material, particularly when viewed from viewpoint 4, as this will then become visible from the upper part of the public access. The replacement with treated timber posts will form a more visually integrated relationship with the beach and wider coastal environment in comparison to the existing iron bars situation.

While the proposed rock revetment will form a change within these viewshafts, it sits below the main panoramic view of the shore, ocean and horizon when viewed from viewpoint 4. The rock revetment will form a larger component of views potentially obtained from viewpoints 5 and 6, however given the staircase is orientated out towards the east panoramic view, which is preserved, the rock revetment is more visible as a peripheral element in the wider view composition.

It is considered that the overall visual effects for this viewing audience will be of **moderate** effect in the short term as the rock revetment will form a change within the wider view, however it will not have a marked effect on the character and quality of the broader panoramic view due to its low profile, continuing use of local rock material already present on site, and removal of the most visually dominant existing element: the iron bars. Thus, once vegetation and natural weathering occurs it is anticipated that this visual effect will reduce to **low** in the medium term.

The removal of the iron bars represents an improvement in visual absorption, and the backfill rock material is visually consistent with the existing situation. The reflectivity of these materials is not considered to be a factor of concern in this environment, where the coresponding glare of the ocean and light- coloured sand is dominant when viewed by this audience.

The proposed rock revetment will generate some visual effects on this audience, which have been mitigated through a use of materials and removal of existing iron bars, along with a small amount of revegetation planting where the slip will need to be scraped back. Public access and enjoyment of this beach access and assoicated amenity reserve are not anticipated to be affected as the proposal presents an improved visual situation that represents that best possible visual integration and absorption given the design and material constraints of the site.

5.4 Viewing Audience D – Beach Users in front of #4, 6 and 8 Tuahine Crescent

The proposed rock revetment will be most visible to this viewing audience due to the proximity and unobstructed views obtained when looking west towards the cliff. The height of rock revetment up against the bank and existing vegetation will form the most obvious change in visual appearance from the current rock revetment, as indicated in the below figures. The use of timber posts, when viewed from this angle represents a visual softening when viewed in comparison to the line of iron bars that currently characterise the site. Background vegetation, proposed revegetation, and the wall sitting low within this view enable the wall to appear more nestled and integrated, particularly when approaching the site from the north. The overhanging and bordering vegetation on the bank will also be able to provide more softening and integration over time. The occasional surfer was noted near this end of the beach, compared to the wider beach, this area did not appear popular for swimming, surfing and boats. Views from recreational water users in this vicinity have also been considered as part of this viewing audience in the context of occasional users in close proximity to the proposed site.

The colour and materials of the proposed rock revetment appear mostly visually integrated and consistent with the coastal character when viewed by this audience. These factors will enable some visual recession of the rock revetment into the wider landscape and view, particulalry as views of the southern headland draw the eye out to the horizon when viewed by people within this audience heading south. Those heading north past the site are also visually drawn out and along the Wainui Beach curve towards the northern headland, hills and oceanic panorama.

It is anticipated that the proposed rock revetment will naturally accumulate some driftwood and logs, which will further mimic the existing situation on both sides of the groyne, and integrate with the same coastal character obvious along the beach extent, where driftwood accumulation forms a natural part of this beaches' coastal processes.

The visual effects on this audience are anticipated to be **moderate**, as they represent a more visually obvious component of the wider view when approached by this viewing audience, even though the increase in rock revetment when viewed by this audience does not negatively detract from the landscape character. This is also reflected in views when compared to the existing situation where there will be more visual continuity with existing extensive rock revetment heading south along the beach from the groyne should this proposal proceed. Visual effects to water - based users are assumed to also be **moderate** (an on – water assessment was not undertaken at the time of site visit), and could become **low**, as aspect and wave motion could further obscure visibility the further out users go.

The transition to timber posts, use of local weathered rock and natural accumulation of driftwood when combined with the background vegetation, proposed vegetation and cliff behind enable the rock revetment to form an integrated part of the view. The use of more natural and lighter-coloured materials enables better visual integration with the shore and beach environment in this location, particularly when viewed from viewpoint 12.

Figure 14: Photo from Viewpoint 12, looking southwest from near the water's edge at the existing situation towards the face of the rock revetment, to where it abuts the groyne. NB: this is a photo merge of two photos. A3 size version of the viewpoint is provided in **Appendix D.**

Figure 15: Photo from Viewpoint 12, looking southwest from near the water's edge at the existing situation towards the face of the rock revetment, to where it abuts the groyne. NB: this is a photo merge of two photos. A3 size version of the viewpoint is provided in **Appendix D.**

Figure 16: Photo from Viewpoint 12, looking southwest from near the water's edge at the existing situation towards the face of the rock revetment, to where it abuts the groyne. NB: this is a photo merge of two photos. A3 size version of the viewpoint is provided in **Appendix D.**

In summary, the proposed rock revetment will form a visible and recognisable change or new element within the overall scene which may be noticed by this viewing audience, however when assessed against the existing rock revetment situation and the receiving environment, consists of only a minor detraction in the overall quality of the scene. The proposal will have a **moderate** level of effect on the on the perceived amenity of public users in proximity to the site in the short term, and in the medium term will reduce to a **low** level of effect as natural weathering and driftwood accumulation will integrate the structure into the environment.

5.5 Viewing Audience E – Beach Users 50m – 250m north of site

The rock revetment will still be visible to this viewing audience, however will form a smaller component of the wider view. The use of more natural and lighter – coloured materials will enable the proposed rock revetment to be more visually recessive than the current rock revetment situation, where the profile and angle of view make the iron bars a prominent part of this view. The condensing of this view due to the beach curvature, as well as background and overhanging vegetation will further conceal the upper rock of the proposed rock revetment. From this angle, the proposed rock revetment is also viewed against the existing groyne which forms a focal point in the shore-scape transition towards the land. The proposed rock revetment is recessive when viewed against this groyne.

The proposed rock revetment constitutes only a minor component of the wider view and would not have a marked effect on public amenity and enjoyment of the beach, particularly as it represents an improvement in the material quality when assessed against the existing situation. The proposed rock revetment would not have a marked effect on the overall quality of the scene and in the short term is considered to have a **moderate** visual effects rating. Over time the wall will become more readily absorbed into the receiving environment through natural driftwood accumulation and weathering processes, reducing to a **low** visual effect in the medium term.

The photo from viewpoint 14 further illustrates the visual recession of the rock revetment into the wider environment when viewed from further north (145m away) from the site.

Figure 17: Photo from Viewpoint 13,100m away from the site, looking southwest along the beach as the rock revetment starts to recede into the wider view. A3 version is provided in **Appendix D.**

Figure 18: Photo from Viewpoint 14, 145m away from the site, looking southwest along the beach as the rock revetment starts to recede into the wider view. A3 version is provided in **Appendix D.**

5.6 Viewing Audience F – Beach Users 250m and beyond, north of site

The rock revetment would be barely visible for this viewing audience as the site condenses due to the beach curvature and general narrowing through distance to enable it to recede into the lower part of the wider view. The overbearing headland/cliff, groyne as a backdrop and relative proportion of the rock revetment when viewed from this distance, as well as the screening and softening side/back vegetation mean the rock revetment is unliklely to be noticed by this audience.

The proposal will have a **very low** visual effect on this viewing audience as the rock revetment does not form an easily identifiable part of the view. It is likley that with weathering processes over time this will reduce to no effect on this audience. For these reasons there is not anticipated to impact on the perceived amenity values of this landscape.

Figure 19: Photo from Viewpoint 16, looking southwest along the beach. The rock revetment recedes into the wider view. A3 size version of the viewpoint is provided in **Appendix D.**

Figure 20: Photo from Viewpoint 19, looking southwest along the beach. A3 size version of the viewpoint is provided in **Appendix D.**

Overall, the proposed rock revetment represents a more highly visually integrated solution than the existing rock revetment, primarily due to the omission of the iron bars in the proposed redevelopment. While rock revetment will sit higher than the current situation, it is of a nature, colour and application which is readily assimilated within the environment, particularly when viewed against the background vegetation, groyne and cliff landform. These attributes provide a softer finish to a man-made intervention and do not unreasonably detract from the outstanding landscape amenity values, or public use and enjoyment of the reserves and beach area.

Table 1: Visual Effects Summary

Viewing Audience	Ranking	
	Short Term (0 – 3yrs)	**Medium Term (3 – 8yrs)**
A: Southern Beach Users (Past Groyne)	Very low	Very low
B: Residents of 4,6 & 8 Tuahine Crescent	Very low	No effect
C: Tuahine Crescent Public Beach Access	Moderate	Low
D: Beach Users in front of #4, 6 and 8 Tuahine Crescent	Moderate	Low
E: Beach Users 50m – 250m north of site	Moderate	Low
F: Beach Users 250m and beyond, north of site	Very low	Very low

6 LANDSCAPE EFFECTS

The assessment methodology that has been used to determine the landscape effects is attached in **Appendix C**. Furthermore, the relevant statutory provisions under the Gisborne District Council as set out in Section 4 have been considered in relation to the assessment below.

6.1 Landscape Values

The landscape values as identified within the Gisborne District Council and associated overlays specific to the Outstanding Landscape Area, Coastal Management Area and Natural Heritage Overlays are focused on the protection of coastal character, natural heritage, public amenity and quality of views of the District's outstanding natural features and landscapes as visible from Wainui Beach and public amenity reserves associated with the southern end of the beach.

The proposed rock revetment replacement seeks to mitigate the effects of a man made intervention along the beachfront by using natural materials (timber and local rock) to create an aesthetic effect that is as visually integrated as possible given the technical constraints of rock revetment design. The location of the rock revetment , in the same alignment and location as the "facing edge" iron bars with the cliff and background vegetation adds to its ability to be absorbed within this environment. The increased height of the rock revetment along the cliff base will still sit low within the wider panoramic view and will be visually screened and softened by existing and proposed vegetation along its top edge over time.

The scale and impact of the proposed rock revetment have a significant backdrop of either panoramic ocean and coastal views or vegetated cliffs and headland which enables it to be readily absorbed within the receiving environment. Wainui Beach already possess a number of rock revetment and beach access structures along its extent, and as such the proposed rock revetment is not inconsistent with the existing landscape character, nor unexpected in this coastal edge where private properties abut the length of this coastline. The rock revetment therefore still provides protection of amenity values and wider unimpeded views of the outstanding landscape values in which the Gisborne District Council are wanting to protect and enhance.

As the viewpoints show, the proposed rock revetment does not detract or reduce the existing footprint of background vegetation along the cliffs of the subject properties. As such the rock revetment remains nestled within the main coastal panorama of outstanding landscapes beyond the site and as such, do not impact on distant views of the headlands or the beach environment. From a further extent, the backdrop and skyline view is not affected by the proposed rock revetment structures. The rock revetment meets the objectives of the Natural Character (coastal) objectives and policies by having a visually minimal landform change, and by providing for the natural coastal

processes in the responding design. By introducing native vegetation to the exposed edge at the top of the new rock revetment, the coastal character is enhanced whilst also providing for the protection of this section of the headland and scarp – identified common landscape areas within the "Assessment of the Landscape Character of the Coastal Environment of the of the Gisborne District."

In terms of "intangible, ambient qualities" the proposed materiality of the new rock revetment provides for significant ability to integrate into the receiving environment, using natural, local and raw materials where possible to achieve the protection required. These qualities of the proposed design will help to restore and rehabilitate the natural character of the coastal environment in a way that effectively balances the physical constraints and hazards of the site with the need for visual, amenity and character preservation and enhancement. The proposed design also prevents a reduction in the obviousness of human impact on this special coastline when compared to the existing iron bar condition.

The rock revetment form is considered to respond well to the lay of the shore - scape environment as it transitions from the intertidal zone into the dry upper landforms natural contour, with its low profile, in that it is constrained to an existing rock revetment extent and is thus reducing its impact on site. There is only a small amount of proposed landform modification associated with the proposed new rock revetment along the lowest edges of the cliff in order to adequately prepare and stabilise it in preparation for construction. Most of this will not be visible once the rock revetment is added. The isolated patch of vegetation clearance necessary to clear a previous slip may appear more visually obvious in the short to medium term as revegetation planting establishes in this area.

7 MITIGATION MEASURES AND RECOMMENDATIONS

The following measures are recommended to ensure that any adverse visual and landscape effects are mitigated.

- A plant schedule has been provided below for provision of background vegetation along the upper western edge of the rock revetment where the existing slip must be cleared. The planting is comprised of native species that will sit low against the cliff, and will be tolerant of the high salt environment. This planting will assist in integrating the rock of the rock revetment with the background vegetative character within the broader view, thus assisting with visual absorption of the proposed new rock revetment structure.
- **Rock height:** rock wall height has been restricted to 4 metres.
- **General Materiality:** Low LRV values are not recommended due to the high – light environment of the beach area, reflectivity off the sea, and the light sand colour generating higher contrast against introduced elements and structures. A high LRV value will allow the associated timber and rock material construction of the new rock revetment to visually integrate with the shoreline environment.

7.1 Planting

The following guidelines are recommended for the planting area:

a) Plant during the winter months from May through to September to ensure more favourable conditions for plant establishment and survival.

b) Hydration mediums such as crystal rain could be used to enhance survival rates, provided there is a reasonable existing soil to plant into.

c) Plant all cleared/exposed cliff that runs contiguous with the upper crest of the rock revetment to ensure a continuity of cover which will aid in bank stabilisation and reduction of invasive weed groundcovers currently present on site.

d) Weed management is recommended for the first two years following planting. This could include but is not limited to hand weeding every two months to allow the new planting the space and time to establish.

Tree planting within the Coastal Management Area must comply with the standards and any resource consent conditions of 3.1.4.3(13) and 7.1.6(13) within the District Plan. As the extent of the clear planting area will not be fully known until construction is undertaken, all plant schedule quantities are indicative only, more plants may be required, which should be chosen and implemented according to the plant schedule provided below.

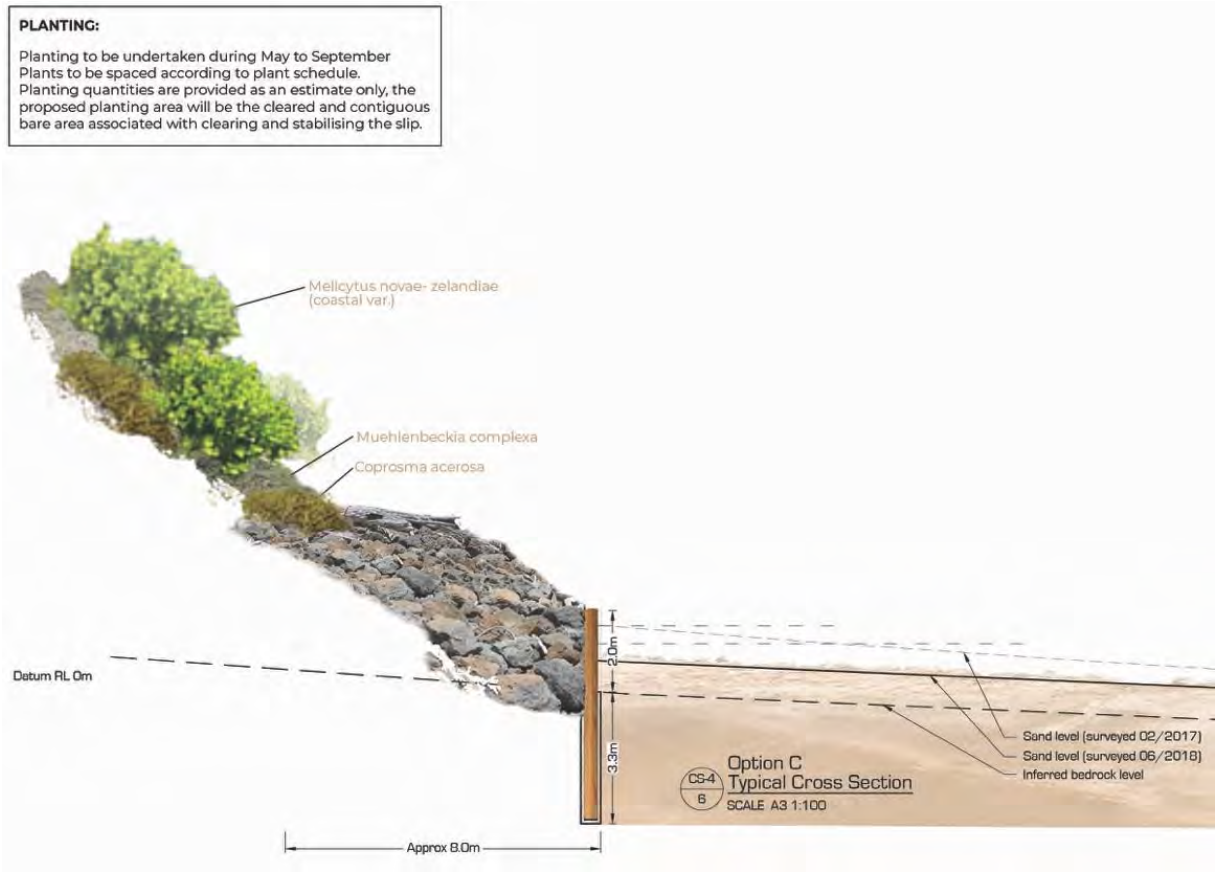


Figure 21: Adaptation of engineering cross section demonstrating the desired planting effect.

Table 1: Plant Schedule

Name	Other Name	Qty	Size	Spacing	Mature Size
Coprosma acerosa	Hawera	10	PB3	1m	H:0.2m x W:1.0m
Melicytus novae- zelandiae	Coastal Mahoe	5	PB8	3m	H:2.0m x W:2.0m
Muehlenbeckia complexa	Scrambling Pohuehue	8	PB5	2m	H:5.0m x W:5.0m

8 CONCLUSION

The clients propose to remove the existing iron bar and residual rock revetment and replace it with a new timber and rock revetment along the same alignment.

The proposed rock revetment has a design and materiality that enables it to form an integrated part of the view that does not appear inconsistent with the coastal character of Wainui Beach and associated rock revetment and beach access structures. Views obtained of the rock revetment, due to the materiality, textures and colour are readily absorbed into the receiving coastal environment and outstanding landscape area, ensuring it sits well within the main panoramic views of Wainui Beach and beyond. This ensures the retention of the existing broader landscape character and quality of the views is retained, providing no loss to public enjoyment and amenity in proximity to the site.

The proposal will give rise to visual effects that range from low to **moderate** in the short term. Once natural weathering, vegetation softening and sand and driftwood accumulation occur along the wall, this will reduce the visual effects range to **low** to **no effect** in the medium term. The proposal is consistent with the District Plan objectives and policies that seek to safeguard the coastal character, landscape, natural heritage and visual amenity values of the local area.

Taking into account the mitigation measures proposed specific to retention and enhancement of existing vegetation, use of local and natural materials and the maximum height of the wall, the inclusion of the new sea wall will have negligible impact on the existing landscape character and will not contribute to any significant diminishment in view quality in the medium term.

As such, the proposal is considered to be consistent with the Gisborne District Council's objectives to protect this outstanding landscape area and retain public amenity and enjoyment of the associated amenity reserves and beachfront.

Appendix A:

Site Location

Site Location and Context

Tuahine Seawall

Date: February 11 2019
Job No: AA3557
Dwg Ref: Site Location & Context
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Site Overlays

Tuahine Seawall

Date: February 11 2019
Job No: AA3557
Dwg Ref: VA Map
Revision: V1.0

4SIGHT CONSULTING

Appendix B:

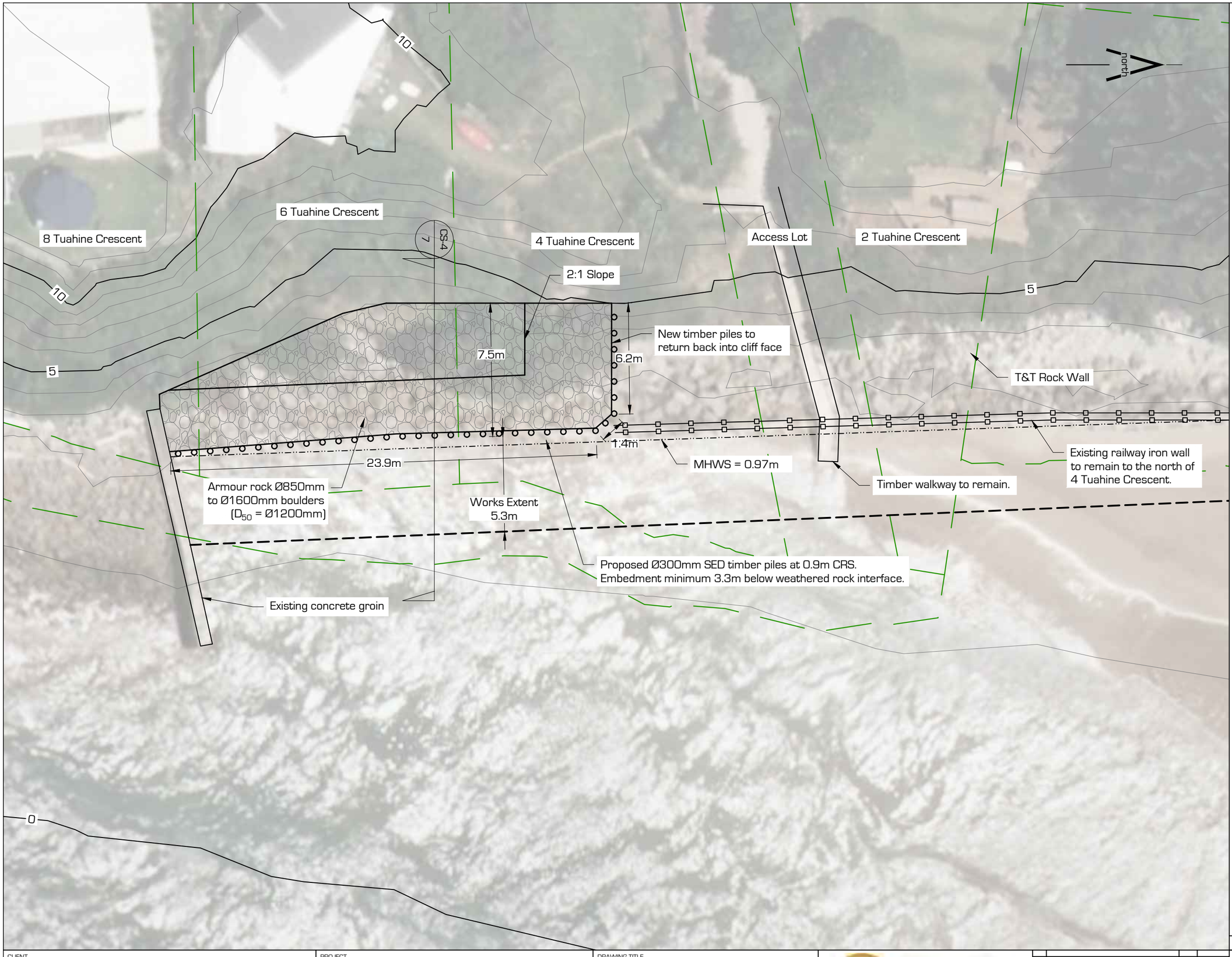
Proposed Rock Revetment Drawings

Seawall Renewal

4-8 Tuahine Crescent, Wainui Beach, Gisborne

Resource Consent Drawings

CONTENTS				
SHEET	DESCRIPTION	ISSUE DATE	STATUS	REVISION
1	Option C - Design Site Plan	19/12/2018	Resource Consent	2
2	Option C - Existing & Design Cross Sections	19/12/2018	Resource Consent	2



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed timber piles
- Proposed rock armour
- Works extent
- 0.97m MHWS

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

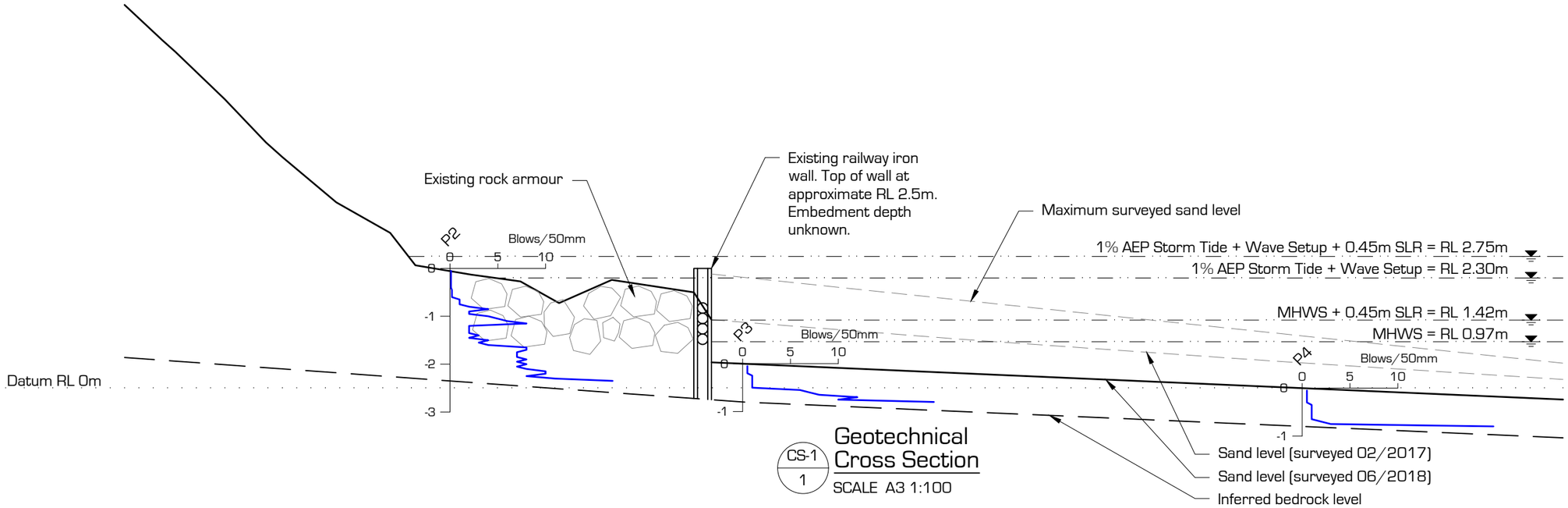
DRAWING TITLE
Option C
Design Site Plan

LDE Land Development & Exploration Ltd

No.	REVISION	BY	DATE
2	Revise Option C against T&T Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:200

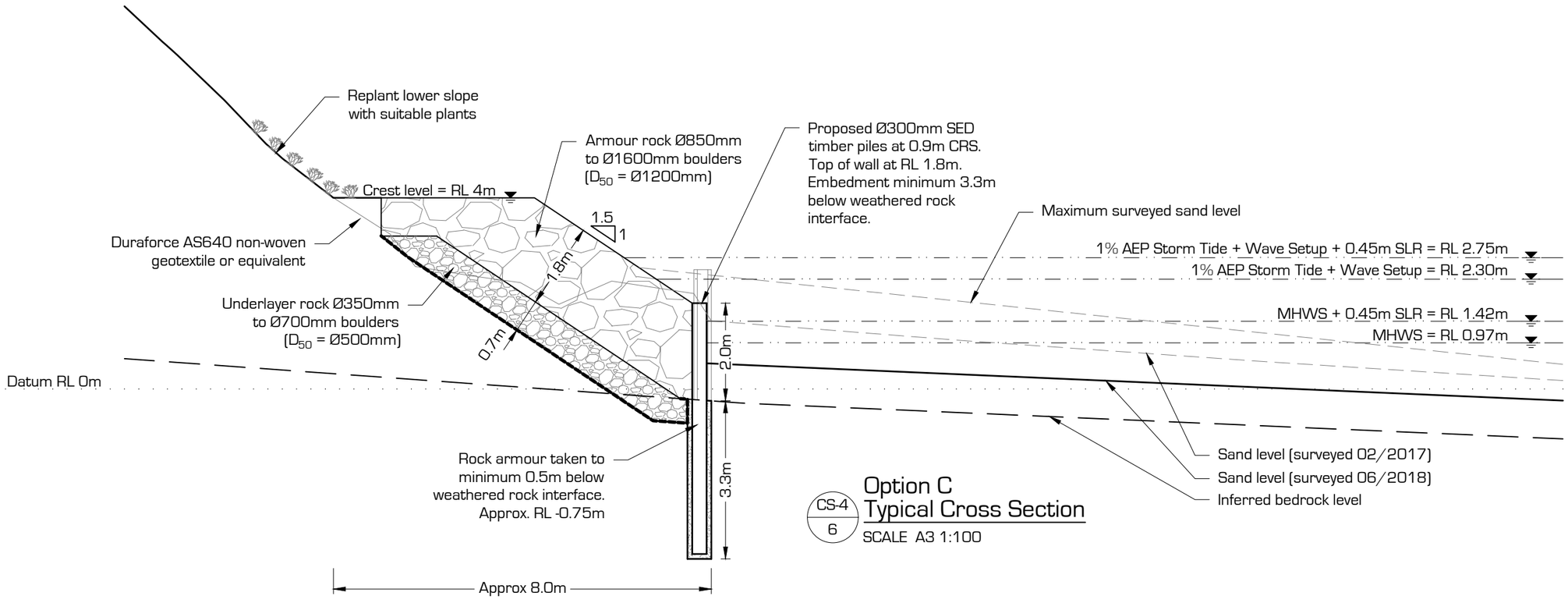
PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 1 of 2
DRAWING No: 14608-C01
REV: 2



CS-1 / 1

Geotechnical Cross Section

SCALE A3 1:100



CS-4 / 6

Option C Typical Cross Section

SCALE A3 1:100

Legend:

- Existing surface profile
- Inferred boundary layer

Notes:

0 1 2 3 4 5

Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

DRAWING TITLE
Option C
Existing & Design Cross Section

LDE Land Development & Exploration Ltd

No.	REVISION	BY	DATE
2	Revise Option C against T&T Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.06.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:100

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 2 of 2
DRAWING No: 14608-C01
REV: 2

Appendix C:

Effects Ranking and Ranking Table

Report descriptor NZILA[3]	Dictionary Definition (Oxford English)	Landscape Effects Explanation
Negligible	So small or unimportant as to be not worth considering; insignificant.	The proposed development is barely discernible or there are no changes to the existing character, features or landscape quality.
Very low		The proposed development is barely discernible with little change to the existing character, features or landscape quality. The proposal constitutes only an insignificant component of or change to the wider view. Awareness of the proposal would have a very limited effect on the overall quality of the scene.
Low	Below average in amount, extent, or intensity. Lacking importance, prestige, or quality; inferior.	A slight loss to the existing character, features or landscape quality. The proposal constitutes only a minor component of or change to the wider view. Awareness of the proposal would not have a marked effect on the overall quality of the scene.
Moderate	Average in amount, intensity, or degree.	Partial change to the existing character or distinctive features of the landscape and a small reduction in the perceived amenity. The proposal may form a visible and recognisable change or new element within the overall scene which may be noticed by the viewer, but does not detract from the overall quality of the scene.
High	Extending above the normal level. Great in amount, value, size, or intensity. Great in rank, status or importance.	Noticeable change to the existing character or distinctive features of the landscape or reduction in the perceived amenity or the addition of new but uncharacteristic features and elements. The proposal may form a visible and recognisable change or new element within the overall scene and may be readily noticed by the viewer and which detracts from the overall quality of the scene
Very High		Major change to the existing character, distinctive features or quality of the landscape or a significant reduction in the perceived amenity of the outlook. The proposal forms a significant and immediately apparent part of, or change to, the scene that affects and changes its overall character
Extreme	Extensive or important enough to merit attention.	Total loss of the existing character, distinctive features or quality of the landscape resulting in a complete change to the landscape or outlook. The proposal becomes the dominant feature of the scene to which other elements become subordinate and it significantly affects and changes its character

[3] NZILA Best Practice Note Landscape Assessment and Sustainable Management 10.1 and *"Auckland Council - Information requirements for the assessment of landscape and visual effects"*, September 2017, www.aucklanddesignmanual.co.nz/resources/tools#/resources/tools/landscapeandvisualeffectsassessment

Appendix D:

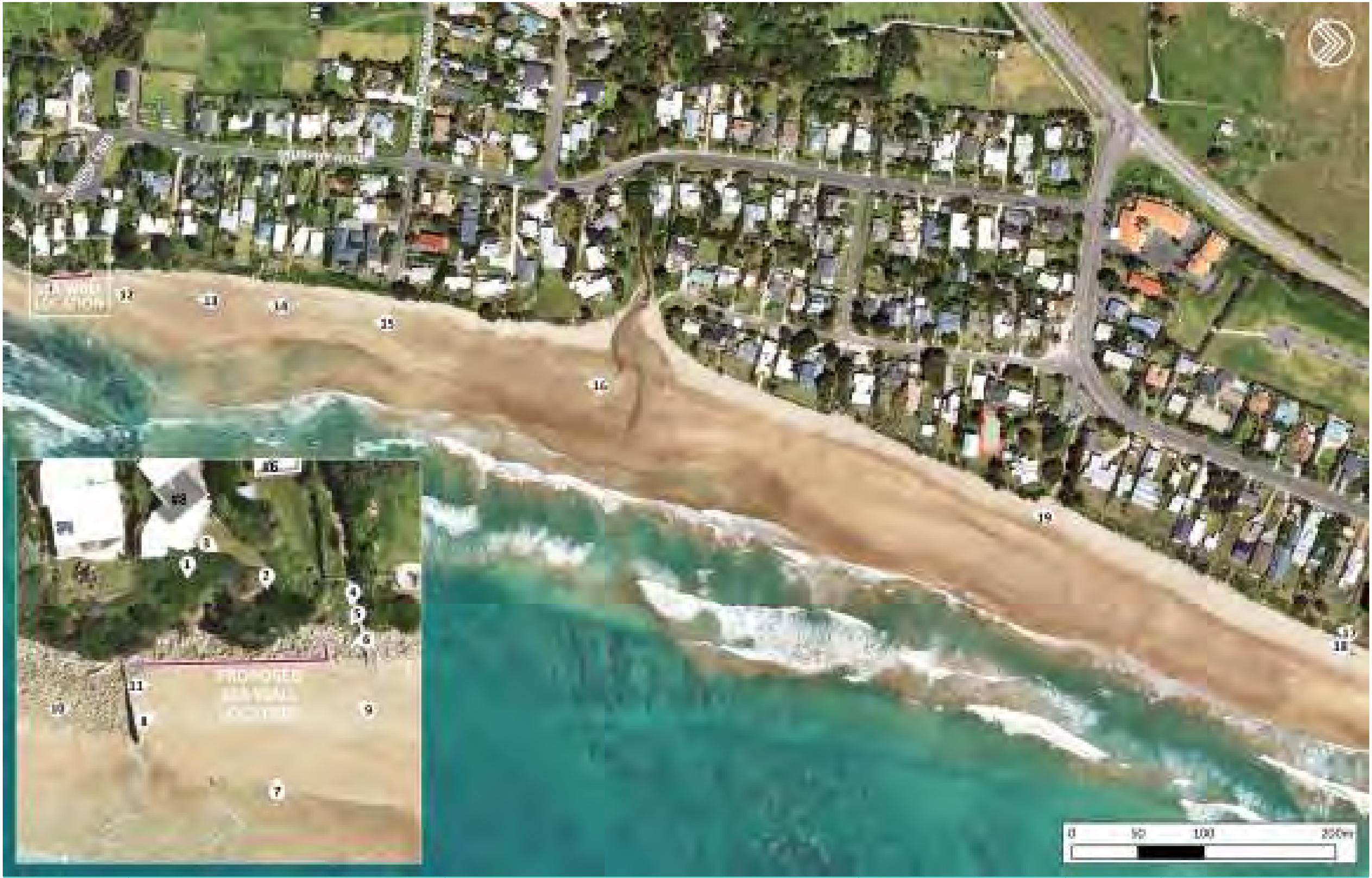
Viewpoints, Viewing Audiences and Visual Simulations

Viewpoint Audiences Map

Tuahine Seawall

Date: February 11 2019
Job No: AA3557
Dwg Ref: VA Map
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING



Viewpoint Location Map

Tuahine Seawall

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP Map
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 44.75185108S 178 04 17.54536800E
Photo taken: 20 November 2018

Viewpoint 1

Vegetation clearance and steepness makes visible

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-01
Revision: V1.0
Drawn by: RC Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro)
Photo location: 38 41 44.36585909S 178 04 17.59499040E
Photo taken: 20 November 2018

Viewpoint 2A

Visibility through pohutukawa and if vegetation cleared

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-02A
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro)
Photo location: 38 41 44.36585909S 178 04 17.59499040E
Photo taken: 20 November 2018

Viewpoint 2B

Visibility through pohutukawa and if vegetation cleared

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-02B
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro)
Photo location: 38 41 44.66685509S 178 04 17.41846440E
Photo taken: 20 November 2018

Viewpoint 3A

Standing edge of deck most visible from upper

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-03A
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro)
Photo location: 38 41 44.66685509S 178 04 17.41846440E
Photo taken: 20 November 2018

Viewpoint 3B

Standing edge of deck most visible from upper

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-03B
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro)
Photo location: 38 41 44.66685509S 178 04 17.41846440E
Photo taken: 20 November 2018

Viewpoint 3C

Standing edge of deck most visible from upper

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-03C
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 43.88894548S 178 04 17.65745040E
Photo taken: 20 November 2018

Viewpoint 4A

Public walkway top

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-04A
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 43.88894548S 178 04 17.65745040E
Photo taken: 20 November 2018

Viewpoint 4B

Public walkway top

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-04B
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 43.88894548S 178 04 17.65745040E
Photo taken: 20 November 2018

Viewpoint 5

Wide angle and battering

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-05
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 43.81743509S 178 04 17.93475840E
Photo taken: 20 November 2018

Viewpoint 6

Expanse to ground midway down stairs

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-06
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm (5 photos merged using Photoshop CC 2018)
Photo location: 38 41 44.24621669S 178 04 18.92479440E
Photo taken: 20 November 2018

Viewpoint 7
Shore edge

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-07
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 44.91443789S 178 04 18.53886000E
Photo taken: 20 November 2018

Viewpoint 8

Groyne

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-08
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro two photos merged)
Photo location: 38 41 44.84277268S 178 04 18.34422960E
Photo taken: 20 November 2018

Viewpoint 9

Direct line from stairs tide line

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-08
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro two photos merged)
Photo location: 38 41 44.84277268S 178 04 18.34422960E
Photo taken: 20 November 2018

Visual Identification from Viewpoint 9

With mitigation planting and labels

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-08
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro two photos merged)
Photo location: 38 41 44.84277268S 178 04 18.34422960E
Photo taken: 20 November 2018

Visual Simulation from Viewpoint 9

Rock wall with timber posts at 900mm centres.

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-08
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 31mm equivalent (iPad Pro two photos merged)
Photo location: 38 41 44.84277268S 178 04 18.34422960E
Photo taken: 20 November 2018

Visual Simulation from Viewpoint 9
With mitigation planting and labels

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-08
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 45.35001269S 178 04 18.48182880E
Photo taken: 20 November 2018

Viewpoint 10

Ground obscures

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-10
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 44.91805949S 178 04 18.41273040E
Photo taken: 20 November 2018

Viewpoint 11

Ground south side

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-11
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 44.91805949S 178 04 18.41273040E
Photo taken: 20 November 2018

Viewpoint 12

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-12
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 41.04707668S 178 04 18.67313640E
Photo taken: 20 November 2018

Viewpoint 13

Beach walker

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-13
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 39.32726308S 178 04 18.75883440E
Photo taken: 20 November 2018

Viewpoint 14

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-14
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 39.32726308S 178 04 18.75883440E
Photo taken: 20 November 2018

Viewpoint 15

Public access two

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-15
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 31.55874749S 178 04 20.61186960E
Photo taken: 20 November 2018

Viewpoint 16

Stream outflow curve of beach

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-16
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 31.55874749S 178 04 20.61186960E
Photo taken: 20 November 2018

Viewpoint 17

Public playground and beach access

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-17
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 13.19976629S 178 04 27.31431000E
Photo taken: 20 November 2018

Viewpoint 18

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-18
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 20.59683029S 178 04 23.88584280E
Photo taken: 20 November 2018

Viewpoint 19
Toilets access

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-18
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Lens: 50mm
Approx. optimum viewing distance at A3: 550mm
Photo location: 38 41 20.59683029S 178 04 23.88584280E
Photo taken: 20 November 2018

Visual Identification from Viewpoint 19

Date: February 11 2019
Job No: AA3557
Dwg Ref: VP-18
Revision: V1.0
Drawn by: SH Checked by: RC

4SIGHT CONSULTING

Appendix E

4Sight Seawall Feasibility Letter

1 August 18

Simon Cave, Annabel Reynolds, Adrian Cave and Dick Calcott
2, 4, 6 and 8 Tuahine Crescent
Wainui Beach
Gisborne

By e-mail: simon.cave@gisborne.net.nz

Dear Simon, Annabel, Adrian and Dick,

Re: Tuahine Seawall

The letter below explains our findings through the initial investigations and design phase. Three design options have been developed in-conjunction with LDE. The estimated cost of construction of both structures is provided and discussion given around the planning restraints for each option.

An outline of the next stages is also given with estimated costs and timelines to enable the group to make an informed decision about the desired course of action.

INTRODUCTION

The subject area is located at the southern end of Wainui Beach and encompasses 4 private properties, within the vicinity of the public stairs and reserve providing access to the beach from Tuahine Crescent (**Figure 1**). The existing coastal protection structure is approximately 50 years old, and the longevity of the structure is uncertain. This area was highlighted as being at risk from progressive erosion and that existing infrastructure (i.e. seawall) should be replaced under the Wainui Beach Erosion Management Strategy.

Figure 1: Location of subject area with the extent of the affected shoreline indicated by the red dashed arrows.

LAND. PEOPLE. WATER.

The Gisborne District Council (GDC) compiled a design and resource consent application for a seawall at the southern end of Wainui Beach which after a hearing in early February 2018 was declined in late February 2018. The replacement design presented through the application and hearing process was considerably larger than the existing structure with a crest height approximately 2-2.5m[1] above the existing structure and extended an additional 3-3.5m seaward. In general, the increase in structure size was considered necessary to meet modern coastal engineering design parameters.

In the hearing decision the size of the structure was a consistent theme and contributed to discussion around the potential impacts upon the landscape amenity and natural character. The seaward advance of the structure also meant the proposed structure extended into reserve land within the Coastal Marine Area (CMA) and into the Common Marine and Coastal Area (CMCA)[2]. This raised issues around the potential impacts upon public access along the foreshore, and issues around being able to define the extent of potential end effects from the structure and the impact upon adjoining public and private land.

From a technical perspective this also meant that parts of the regional coastal plan where relevant to the application, and therefor aspects of the NZ Coastal Policy Statement (NZCPS) needed to be considered. The decision focused on Polices 25 and 27 of the NZCPS, which (*in part*) discuss the appropriateness of hard protection structures in the coastal environment. Based on the above, it is my interpretation of the decision that because the proposed structure extended beyond the footprint of the existing structure and into public land, a more critical eye was cast upon the proposal, and in particular the potential effects to arise from its large scale on potential end effects and landscape and visual elements.

DESIGN OPTIONS

Based on information contained within the hearing decision a key design criterion was to keep the new designs within the footprint of the existing structure and within the private property boundaries. This would need to be placed with attaining a sufficient crest height for the structure to avoid the impact of overtopping. This places a control on the horizontal limit on the seaward face and a vertical control at the landward limit of the structure. To achieve this a hybrid solution incorporating vertical components was required as opposed to the more traditional and conservative rip-rap design utilized within the GDC application. Further, the crest height was lowered by approximately 800mm to reduce the scale of the structure in comparison to the existing situation. While the crest height is still ~800mm above the static 1%AEP storm surge[3] combined with 1m sea-level rise water level, this does raise the risk to the structure from wave overtopping during extreme events. However, to counter act this it is suggested that suitable salt tolerant planting be incorporated to help stabilize the land above and dampen the impact of any overtopping of the structure.

Other design components such as rock size and concrete strength were determined by LDE using standard engineering design methodologies.

The three design options are described briefly below with greater detail provided in the drawing set contained in **Appendix A**. Broadly speaking the design options presented are:

---

[1] The design was revised during the hearing process. The original design crest was approximately 3m above the existing structure.

[2] The distinction between the CMA and CMCA is basically that the CMA is defined by the position of Mean High Water Springs (MHWS) and CMCA refers to public lands within the CMA but without title. In essence, it means that a piece of land above MHWS is situated within the CMA but not necessarily in the CMCA.

[3] 1% AEP = 1 in 100-year event. The 1%AEP level includes storm surge from barometric pressure, wave setup and peak high tide levels.

Option A- Vertical Concrete/Rip-Rap Hybrid is similar to the existing structure in that there and is a vertical control along the seaward face. This allows for a reduction in the toe width whilst still achieving a slope of 1.5/1 for the rip-rap component behind the concrete bund. The height of the concrete bund is approximately 500mm lower than the rail-iron posts. Whilst the bund will provide some dissipative action from wave approach its main purpose is to retain the toe rock in position in order to achieve the design slope in front of the cliff face. Therefore, the 2m height is considered sufficient to achieve this.

Option B- Rip-Rap Toe/Backshore Retaining has focused on achieving the design objectives by essentially reducing the footprint of the rip-rap by reducing its crest height. This is achieved by utilizing precast concrete blocks as vertical retaining at the rear of the structure to achieve the final crest height. The crest of the rip-rap component is largely dictated by design slope of 1.5/1 and the seaward limit of the existing wall. However, this crest height is still above the 1%AEP storm tide level with an allowance for sea-level rise over the next 50 years.

Option C- Timber Pile/Rip -Rap Hybrid is similar to Option A in that a vertical structure is located in the front of the wall to restrict the toe and allow for the rip-rap behind the wall to be built up to design heights. The timber piles are prescribed at Ø300mm would be spaced at 900mm centers to avoid loss of rock between individual piles. The larger rock would be placed along the seaward face and along the top of the rip-rap wall.

CONSTRUCTION COSTS

LDE have provided an estimate of construction costs and these are detailed in **Appendix B**. These costings are reliant on the existing rock being used in the new structure. The ability to use this material will need to be confirmed by GDC staff as we go through the process. In summary the costs are:

Option A= $179,000

Option B= $191,000

Option C= $161,000

PLANNING ASSESSMENT

The likely reasons for consent are presented below, which are generally the same for each of the options. These are based upon the design parameters discussed above and assuming the designs largely remain unchanged.

Likely reasons for consent:

DD1 Residential zones

- The construction of a seawall is not provided for in residential zones, and therefore is a non-complying activity under DD1.6.1(32)

DD5 Reserve Zones

- The construction of a seawall is not provided for in reserves zones, and therefore is a non-complying activity under DD5.6.1(38)

C3 Coastal Management

- Vegetation clearance, land disturbance and structures (seawall) within 200m of MHWS in the Coastal Environment Overlay is a discretionary activity under C3.1.4.3(13)

C8 Natural Hazards

- Installation of a seawall to mitigate the effects of coastal hazards in the Coastal Hazard 1 Overlay is a discretionary activity under C8.5.7(1)
- Earthworks which alter the natural dune land form in the Coastal Hazard 1 Overlay is a discretionary activity under C8.5.7(3)

C9 Natural Heritage

- Earthworks in the Outstanding Landscape Area Overlay is a restricted discretionary activity under C9.1.6(41).

C7 Land Management

- Earthworks in the Land Overlay 3 is a restricted discretionary activity under C7.1.6(29).

Overall it appears the structure will be considered to be a **Non-complying** activity.

Further the area has highlighted as a Statutory Acknowledgement Area for both Ngati Porou and Rongowhakaata, so consultation with those groups will need to be undertaken to avoid full notification.

NEXT STAGES

A resource consent application will need to be drafted and then consent applied for. This will likely need to included comment on the potential effects on local coastal processes and the beach in general. It would also be useful to include an assessment of landscape and natural character effects. The costs associated with this would be:

Table 1: Fee Estimate

Task	Description	Fee Estimate
1	Assessment of Environmental Effects and Planning Assessment	$8,500
2	Coastal Processes Impact Assessment	$1,500
3	Landscape, Natural Character and Visual Assessment	$3,500
4	Consultation with Iwi	$500
TOTAL PROJECT FEE ESTIMATE		**$14,000**

Processing costs from GDC are difficult to ascertain at this stage but I would allow for **$10,000** as I suspect GDC will engage specialists to review the application. This will determine if the application will need to be notified or not.

If notified there will potentially a hearing undertaken and the costs of that are typically the responsibility of the Applicant. This cost could be in the order of **$10,000-15,000**.

Note we would try to compile an argument that the effects are no more than minor and there is no need for full notification. This would negate the need for a hearing and the associated costs.

Therefore, I estimate that the costs to obtain a resource consent are between **$24,000 and $40,000** depending on how GDC view the application.

CONCLUSION

Despite the ***Non-complying*** nature of the proposal it is our opinion that either of the designs presented have a good chance of obtaining resource consent. This is due to the reduced scale of the structure and restricting the footprint to match the existing. This enables a comparison to the existing situation for an assessment of environment effects. This also helps to negate discussion around potential end effects and public access in particular, both of which contributed to the negative hearing decision for the previous proposal.

It also reduces a focus on the policies and objectives of the NZCPS as the proposed solutions are contained within private property and outside of the CMA. The exception to this is the area of reserve between 2 and 4 Tuahine Cres where the structure will be situated on public reserve land. However, I am confident that an argument can be built to say this section of wall is having a positive public benefit by retaining access at this point.

Overall, I am of the opinion that **Option A and Option C** will be seen more favourably by the regulatory authority as it provides a fixed point where the wall terminates. **Option B** maybe seen to be requiring more maintenance in the future with the potential of rock migration down the beach. However, this issue is not considered to be insurmountable. **Option C** may also be able to be argued as a more environmentally sympathetic structure with the ability to more easily altered in the future should the management regime at Wainui Beach change.

I suggest that I arrange a discussion with GDC resource consenting staff in order to ascertain their feedback on the revised designs and our interpretation of the issues above. I would also appreciate their views on notification and Iwi consultation.

I would also like to get you feedback on the designs and associated costs of construction and consenting.

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

Kind Regards,

Sam Morgan
Senior Coastal Consultant
4Sight Consulting Ltd

Appendix A

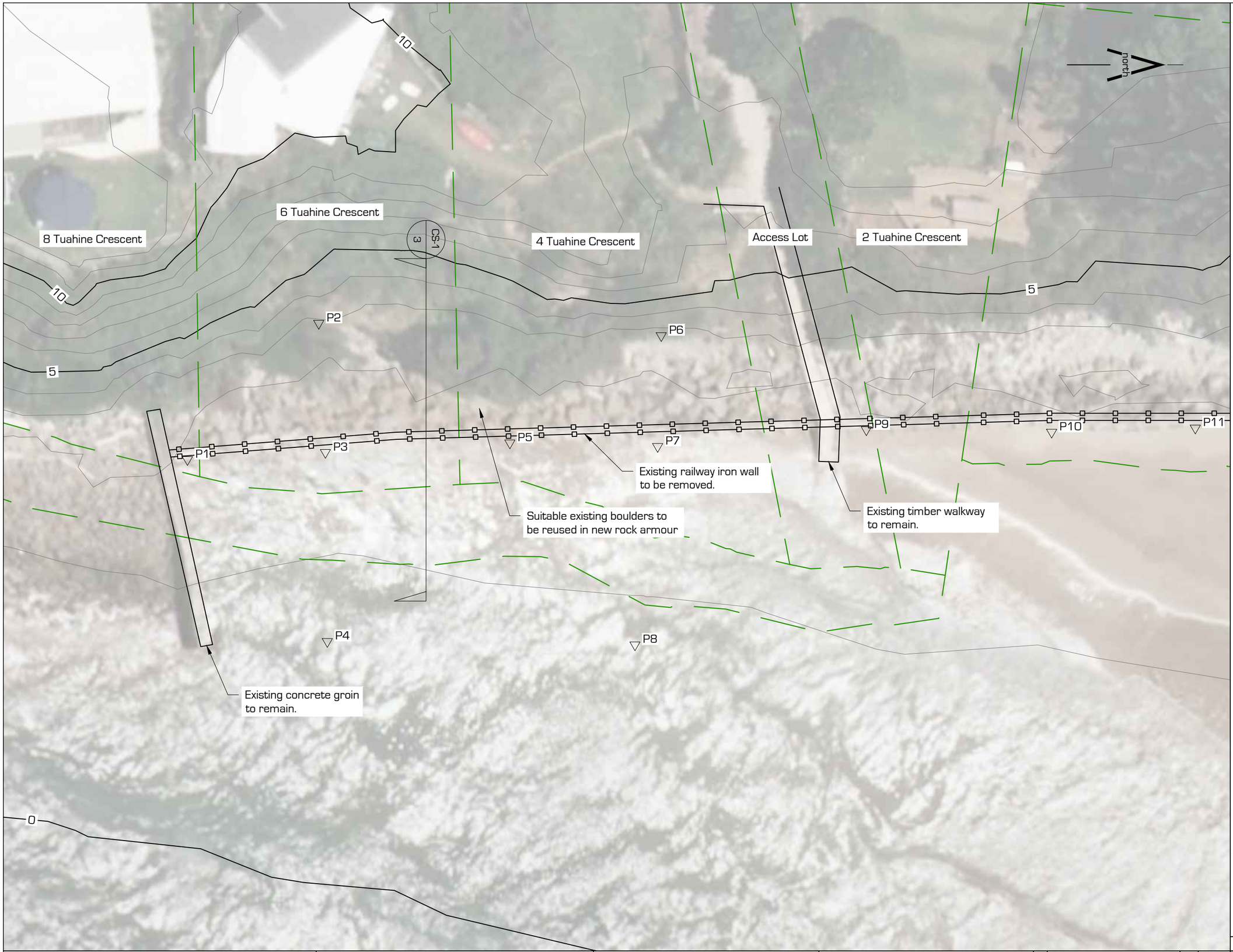
Design Drawings

Seawall Renewal

2-8 Tuahine Crescent, Wainui Beach, Gisborne

Resource Consent Drawings

CONTENTS				
SHEET	DESCRIPTION	ISSUE DATE	STATUS	REVISION
1	Existing Site Plan & Geotechnical Test Locations	17/07/2015	Resource Consent	0
2	Option A - Design Site Plan	17/07/2015	Resource Consent	0
3	Option A - Existing & Design Cross Sections	17/07/2015	Resource Consent	0
4	Option B - Design Site Plan	17/07/2015	Resource Consent	0
5	Option B - Existing & Design Cross Sections	17/07/2015	Resource Consent	0



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- P1 Penetrometer test

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

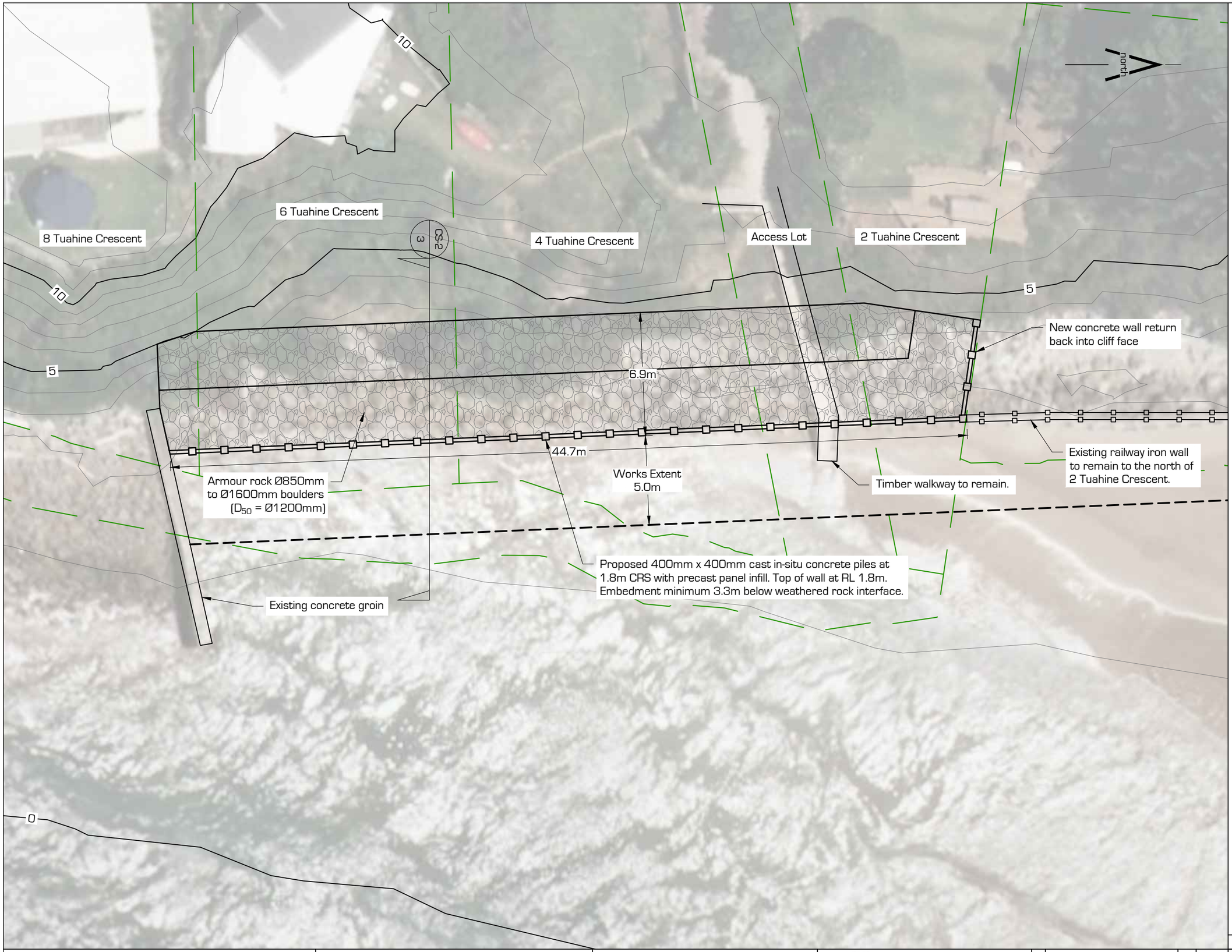
DRAWING TITLE
Existing Site Plan & Geotechnical Test Locations

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
0	Issued to client	JS	17.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	17.07.18
CHECKED:	AH
SCALE A3:	1:200

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 1 of 5
DRAWING No: 14608-C01
REV: 0



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed wall
- Proposed rock armour
- Works extent

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

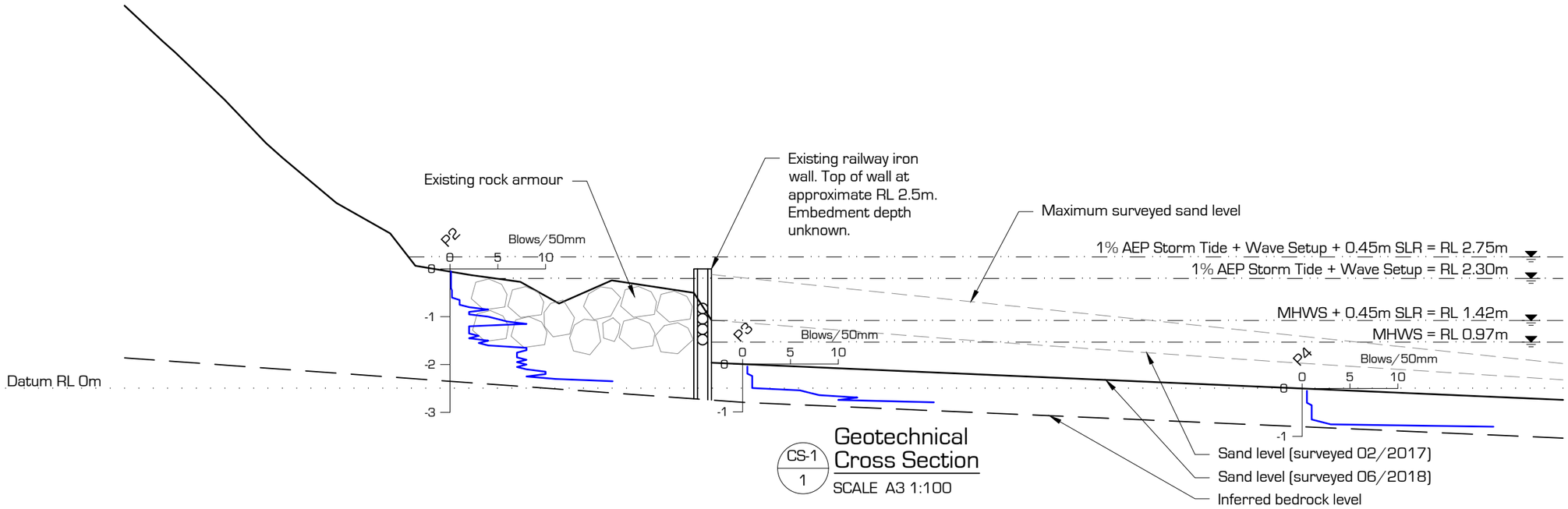
DRAWING TITLE
Option A
Design Site Plan

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
0	Issued to client	JS	17.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	17.07.18
CHECKED:	AH
SCALE A3:	1:200

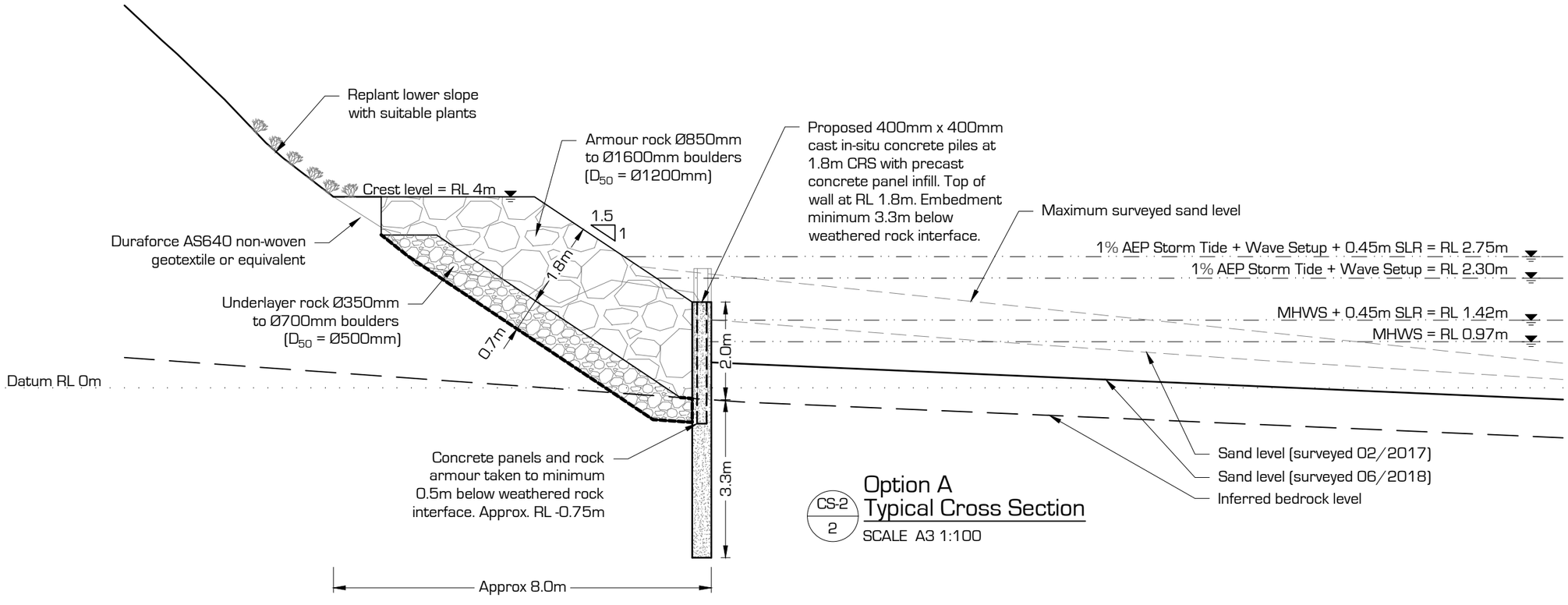
PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 2 of 5
DRAWING No: 14608-C01
REV: 0



CS-1 / 1

Geotechnical Cross Section

SCALE A3 1:100



CS-2 / 2

Option A
Typical Cross Section

SCALE A3 1:100

Legend:

P1 Blows/50mm 0 5 10 (0 to -1) — Scala penetrometer test results (Blows/50mm)

Existing surface profile

Inferred boundary layer

Notes:

0 1 2 3 4 5

Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT	4sight Consulting Ltd 201 Victoria Street West Auckland 1010
PROJECT	Tuahine Crescent Seawall Wainui Beach Gisborne
DRAWING TITLE	Option A Existing & Design Cross Section

LDE LAND DEVELOPMENT & EXPLORATION LTD.

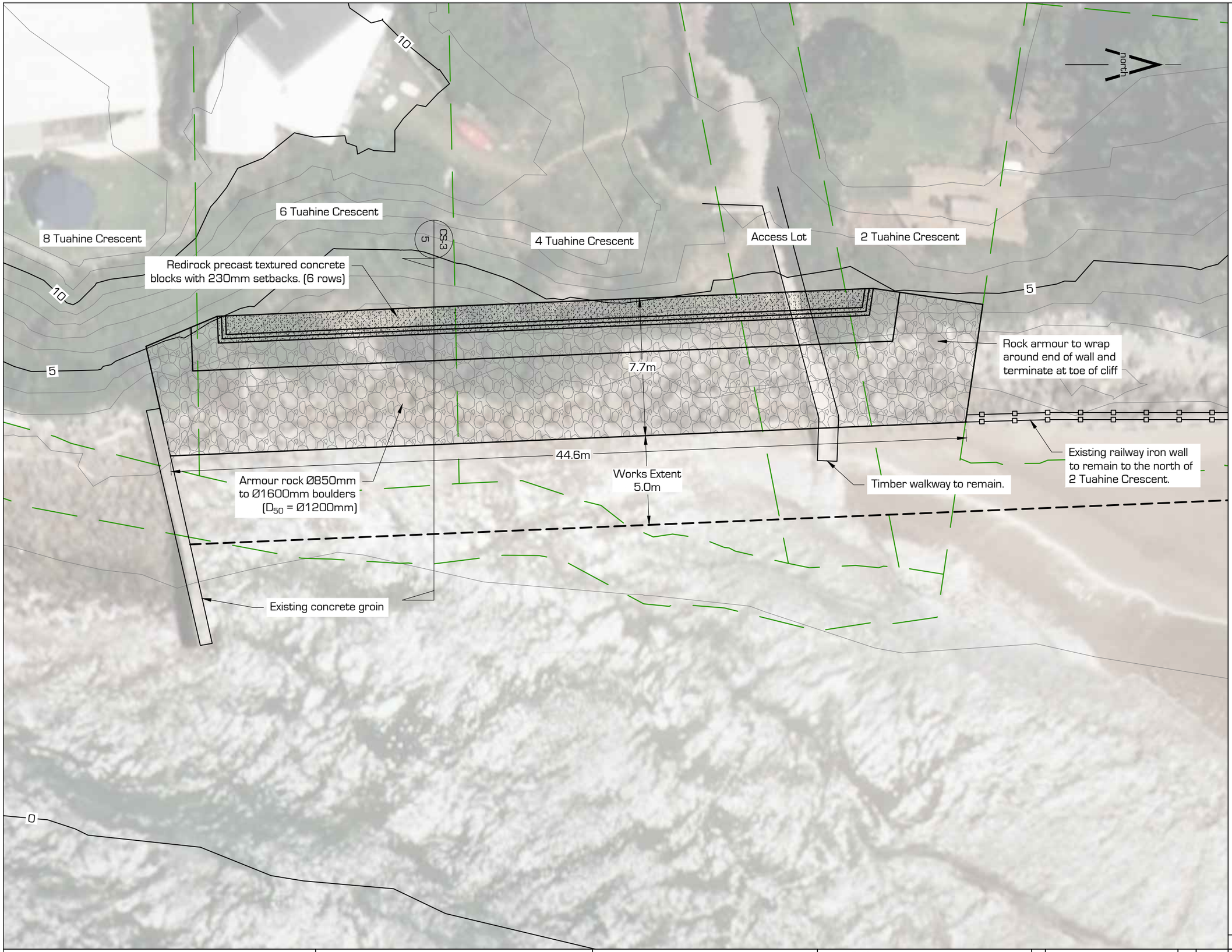
No.	REVISION	BY	DATE
0	Issued to client	JS	17.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	17.07.18
CHECKED:	AH
SCALE A3:	1:100

PROJECT STATUS: Resource Consent

PROJECT: 14608 SHEET: 3 of 5

DRAWING No: 14608-C01 REV: 0



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed Redirock precast blocks
- Proposed rock armour
- Works extent

Notes:

0 2 4 6 8 10

Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

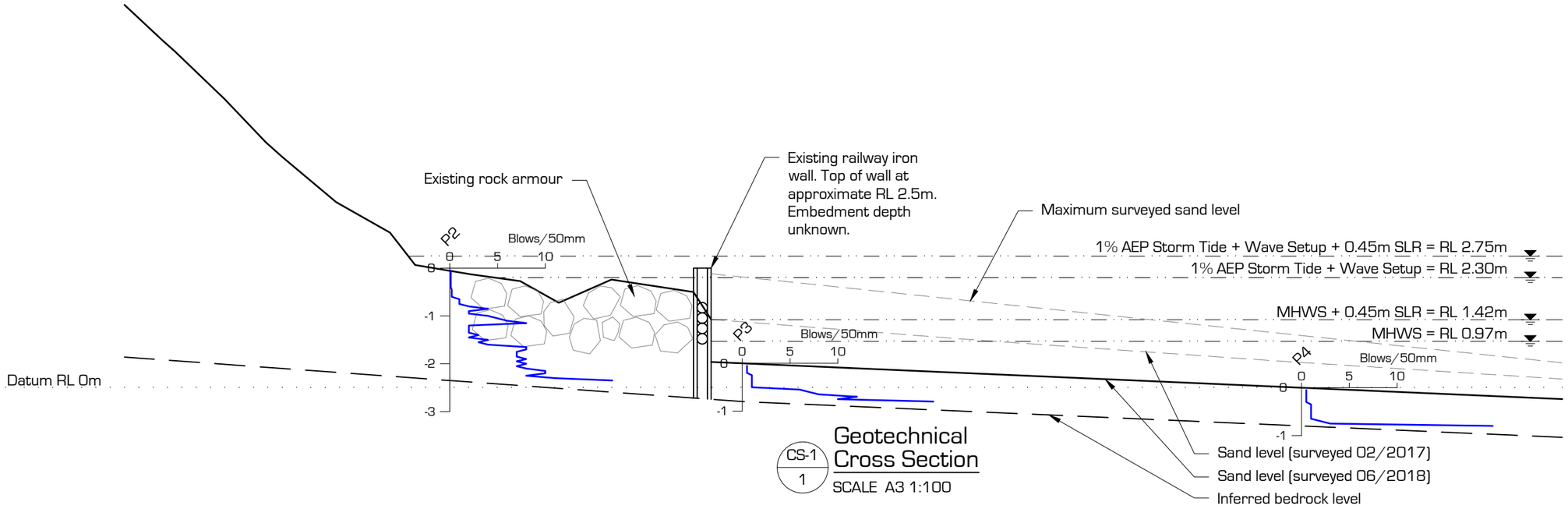
DRAWING TITLE
Option B
Design Site Plan

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
0	Issued to client	JS	17.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	17.07.18
CHECKED:	AH
SCALE A3:	1:200

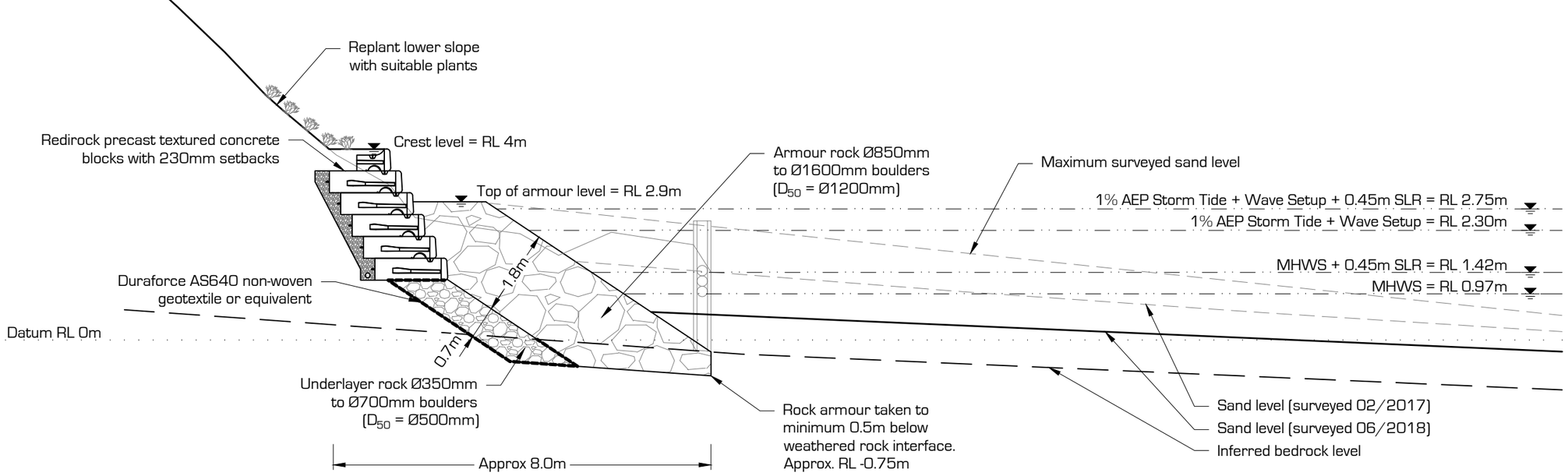
PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 4 of 5
DRAWING No: 14608-C01
REV: 0



CS-1 / 1

Geotechnical Cross Section

SCALE A3 1:100

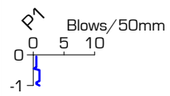


CS-3 / 4

Option B Typical Cross Section

SCALE A3 1:100

Legend:



Scala penetrometer test results (Blows/50mm)

Existing surface profile

Inferred boundary layer

Notes:

0 1 2 3 4 5

Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT	4sight Consulting Ltd 201 Victoria Street West Auckland 1010
PROJECT	Tuahine Crescent Seawall Wainui Beach Gisborne
DRAWING TITLE	Option B Existing & Design Cross Section

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
0	Issued to client	JS	17.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	17.07.18
CHECKED:	AH
SCALE A3:	Shown

PROJECT STATUS: Resource Consent

PROJECT: 14608 SHEET: 5 of 5

DRAWING No: 14608-C01 REV: 0

Appendix B

Cost Estimates

Seawall Renewal: Option A - Concrete Piles and Revetment

Client 4sight Consulting Ltd
Project Tuahine Crescent Seawall, Wainui Beach
Location Southern End, Wainui Beach, Gisborne

Item	Description	Units	Qty	Rate	COST
1.0	**Preliminary and General**				
1.1	Establishment and disestablishment	LS	100%	$10,000.00	$10,000.00
1.2	Site clearance, remove and dispose of existing railway iron wall.	LS	100%	$10,000.00	$10,000.00
1.3	Excavation of beach sand down to bedrock, stockpile and respread after completion.	LS	100%	$2,500.00	$2,500.00
1.4	Quality control testing, reporting, preparation of as-built drawings including producer statements.	LS	100%	$2,500.00	$2,500.00
	Total 1				**$25,000.00**
2.0	**Concrete Pile Wall**				
2.1	Supply, transport and installation of 400mm x 400mm cast in-situ 5.3m long concrete columns @ 1.8m CRS with 0.2m thick precast concrete panel infill. Includes boring of Ø400mm holes 3m into underlying bedrock, placement of reinforcement, placement of panels, formwork and pouring of concrete.	m	50	$1,200.00	$60,000.00
	Total 2				**$60,000.00**
3.0	**Revetment**				
3.1	Supply, transport, and installation of rock boulders as armour layer. Boulders ranging from Ø1200mm to Ø1600mm.	m^3	220	$220.00	$48,400.00
3.2	Remove, stockpile and replacement of existing rock boulders as armour layer. Boulders ranging from Ø850mm to Ø1200mm.	m^3	270	$50.00	$13,500.00
3.3	Remove, stockpile and replacement of existing rock boulders as filter layer. Boulders ranging from Ø350-700mm (D50=Ø500mm). Includes preparation of subgrade and placement of geotextile.	m^3	220	$50.00	$11,000.00
	Total 3				**$72,900.00**
4.0	**Miscellaneous**				
4.1	Replant lower bank with suitable plants including turf reinforcement.	LS	1	$5,000.00	$5,000.00
	Total 4				**$5,000.00**
	Total Cost				**$162,900.00**
	Contingency of Engineers Estimate		10%		**$16,290.00**
	Total Cost Estimate				**$179,190.00**

Seawall Renewal: Option B - Concrete Mass Blocks and Revetment

Client 4sight Consulting Ltd
Project Tuahine Crescent Seawall, Wainui Beach
Location Southern End, Wainui Beach, Gisborne

Item	Description	Units	Qty	Rate	COST
1.0	**Preliminary and General**				
1.1	Establishment and disestablishment	LS	100%	$10,000.00	$10,000.00
1.2	Site clearance, remove and dispose of existing railway iron wall.	LS	100%	$10,000.00	$10,000.00
1.3	Excavation of beach sand down to bedrock, stockpile and respread after completion.	LS	100%	$2,500.00	$2,500.00
1.4	Quality control testing, reporting, preparation of as-built drawings including producer statements.	LS	100%	$2,500.00	$2,500.00
	Total 1				**$25,000.00**
2.0	**Concrete Mass Blocks**				
2.1	Supply, transport and installation of precast textured concrete blocks with 230mm setbacks. Includes preparation of subbase.	m^2	132	$600.00	$79,200.00
	Total 2				**$79,200.00**
3.0	**Revetment**				
3.1	Excavate and key rock armour 0.5m into underlying bedrock. Excavated material to be compacted as fill beneath armour layer.	m^3	110	$30.00	$3,300.00
3.2	Supply, transport, and installation of rock boulders as armour layer. Boulders ranging from Ø1200mm to Ø1600mm.	m^3	200	$220.00	$44,000.00
3.3	Remove, stockpile and replacement of existing rock boulders as armour layer. Boulders ranging from Ø850mm to Ø1200mm.	m^3	250	$50.00	$12,500.00
3.4	Remove, stockpile and replacement of existing rock boulders as filter layer. Boulders ranging from Ø350-700mm (D50=Ø500mm). Includes preparation of subgrade and placement of geotextile.	m^3	100	$50.00	$5,000.00
	Total 3				**$64,800.00**
4.0	**Miscellaneous**	.			
4.1	Replant lower bank with suitable plants including turf reinforcement.	LS	1	$5,000.00	$5,000.00
	Total 4				**$5,000.00**
	Total Cost				**$174,000.00**
	Contingency of Engineers Estimate	10%			**$17,400.00**
	Total Cost Estimate				**$191,400.00**

Seawall Renewal: Option C - Timber Piles and Revetment

Client 4sight Consulting Ltd
Project Tuahine Crescent Seawall, Wainui Beach
Location Southern End, Wainui Beach, Gisborne

Item	Description	Units	Qty	Rate	COST
1.0	**Preliminary and General**				
1.1	Establishment and disestablishment	LS	100%	$10,000.00	$10,000.00
1.2	Site clearance, remove and dispose of existing railway iron wall.	LS	100%	$10,000.00	$10,000.00
1.3	Excavation of beach sand down to bedrock, stockpile and respread after completion.	LS	100%	$2,500.00	$2,500.00
1.4	Quality control testing, reporting, preparation of as-built drawings including producer statements.	LS	100%	$2,500.00	$2,500.00
	Total 1				**$25,000.00**
2.0	**Timber Piles**				
2.1	Supply, transport and installation of Ø300mm SED 5.3m long timber piles @ 0.9m CRS. Includes boring of Ø500mm holes 3m into underlying bedrock and pouring of concrete.	m	50	$870.00	$43,500.00
	Total 2				**$43,500.00**
3.0	**Revetment**				
3.1	Supply, transport, and installation of rock boulders as armour layer. Boulders ranging from Ø1200mm to Ø1600mm.	m^3	220	$220.00	$48,400.00
3.2	Remove, stockpile and replacement of existing rock boulders as armour layer. Boulders ranging from Ø850mm to Ø1200mm.	m^3	270	$50.00	$13,500.00
3.3	Remove, stockpile and replacement of existing rock boulders as filter layer. Boulders ranging from Ø350-700mm (D50=Ø500mm). Includes preparation of subgrade and placement of geotextile.	m^3	220	$50.00	$11,000.00
	Total 3				**$72,900.00**
4.0	**Miscellaneous**				
4.1	Replant lower bank with suitable plants including turf reinforcement.	LS	1	$5,000.00	$5,000.00
	Total 4				**$5,000.00**
	Total Cost				**$146,400.00**
	Contingency of Engineers Estimate		10%		**$14,640.00**
	Total Cost Estimate				**$161,040.00**

Appendix F

Certificates of Title

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **GS2A/1310**
Land Registration District **Gisborne**
Date Issued 22 October 1968

Prior References
GS88/8

Estate	Fee Simple
Area	850 square metres more or less
Legal Description	Lot 7 Deposited Plan 3216

Registered Owners
Rosemary Anne Reynolds as to a 1/2 share
Rosemary Anne Reynolds as to a 1/2 share

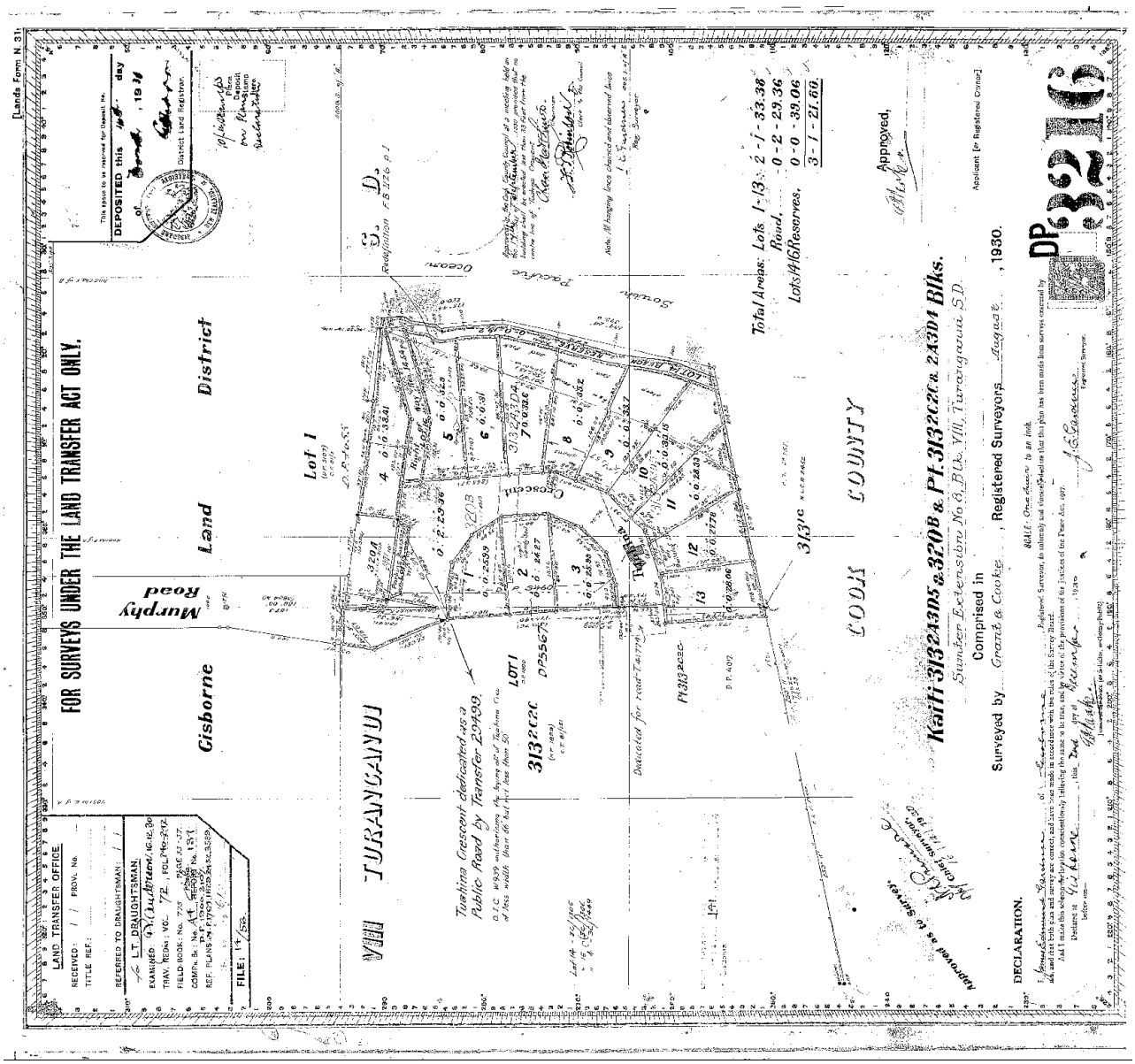
Interests

W939 Authority imposing Building Line Restriction - 17.12.1930 at 3.00 pm

149634.1 Notice that a building permit has issued under Section 641A(2) Local Government Act 1974 - 3.6.1983 at 2.27 pm

5946298.3 Mortgage to Bank of New Zealand - 25.3.2004 at 9:00 am

Identifier **GS2A/1310**



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **GS2C/253**
Land Registration District **Gisborne**
Date Issued 04 December 1968

Prior References
GS85/83

Estate	Fee Simple
Area	784 square metres more or less
Legal Description	Lot 6 Deposited Plan 3216

Registered Owners
Simon John Cave and Caroline Dorothy Cave

Interests

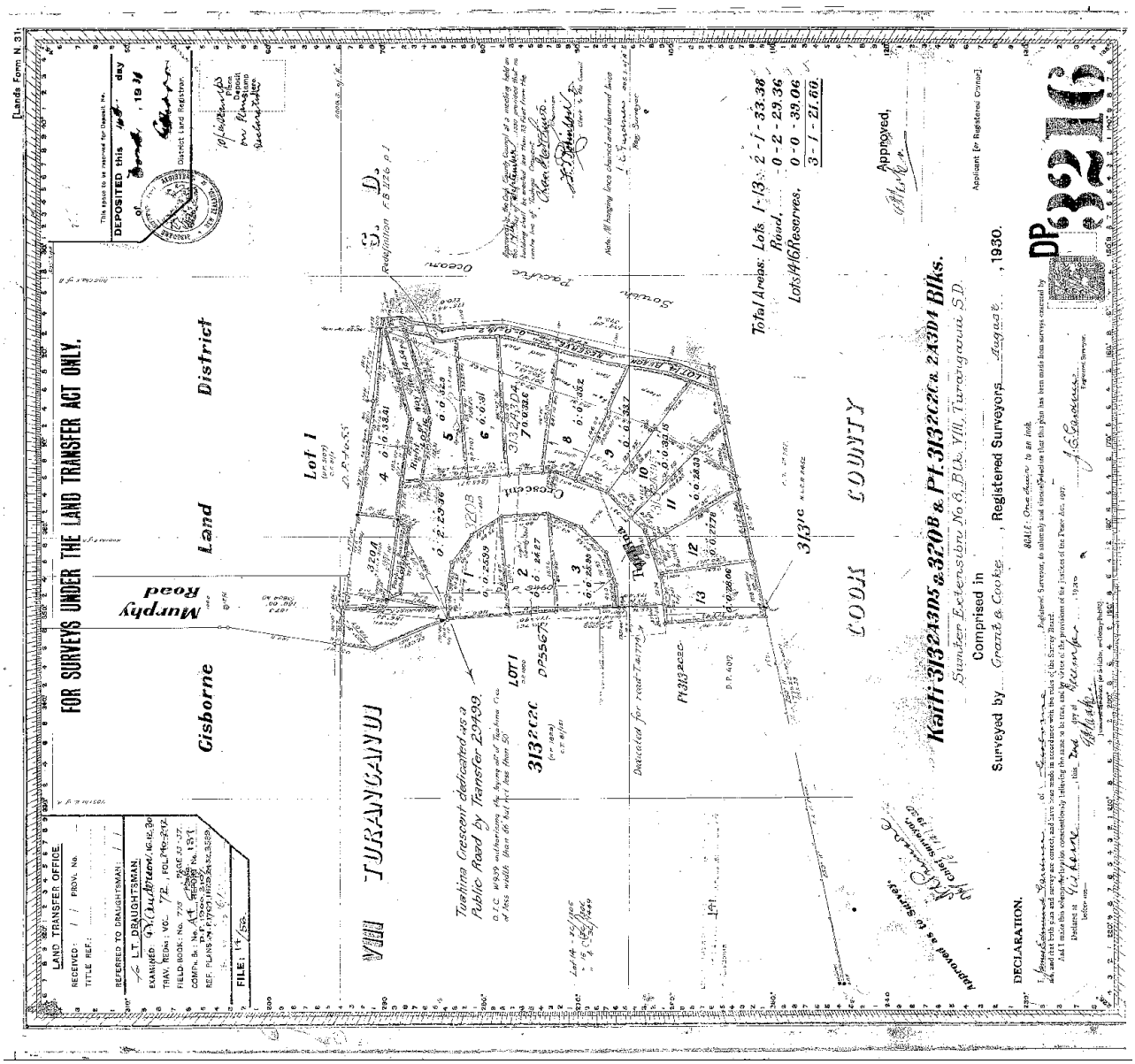
W939 Building Line Restriction

109516 Mortgage to Simon John Cave - 11.9.1973 at 2.20 pm

Subject to a right (in gross) to dig, construct and lay piped drains and to drain, discharge or convey stormwater over part marked A on DP 6894 in favour of the Cook County Council created by Transfer 169854.1 - 9.3.1988 at 9.11 am

5215872.1 Certificate that a building consent has been issued in respect of a building on the land that is described in Section 36(2) Building Act 1991 - 9.5.2002 at 9:00 am

Identifier **GS2C/253**



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**GS2C/278**
Land Registration District	**Gisborne**
Date Issued	06 December 1968

Prior References
GS85/131

Estate	Fee Simple
Area	832 square metres more or less
Legal Description	Lot 5 Deposited Plan 3216

Registered Owners
Adrian Michael Cave and Katherine Mary Cave

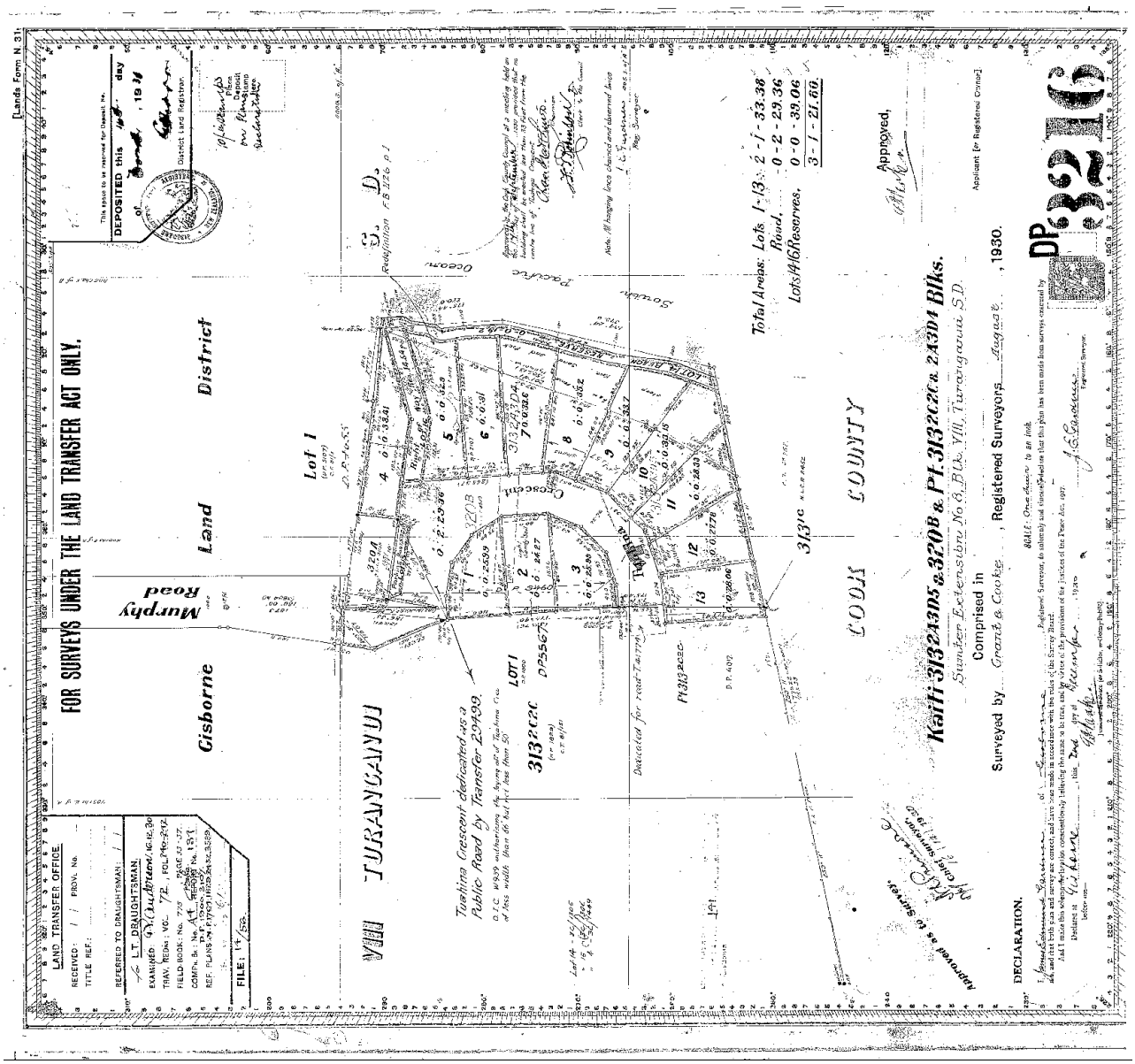
Interests

W939 Building Line Restriction

Subject to a right (in gross) to dig construct and lay piped drains and to drain discharge or convey stormwater over part marked B on DP 6894 in favour of The Cook County Council created by Transfer 169853.1 - 9.3.1988 at 9.11 am

6209039.3 Certificate that a building consent has been issued in respect of a building on the land that is described in Section 36(2) Building Act 1991 - 9.11.2004 at 9:00 am

Identifier **GS2C/278**



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**GS3C/1305**
Land Registration District	**Gisborne**
Date Issued	14 February 1972

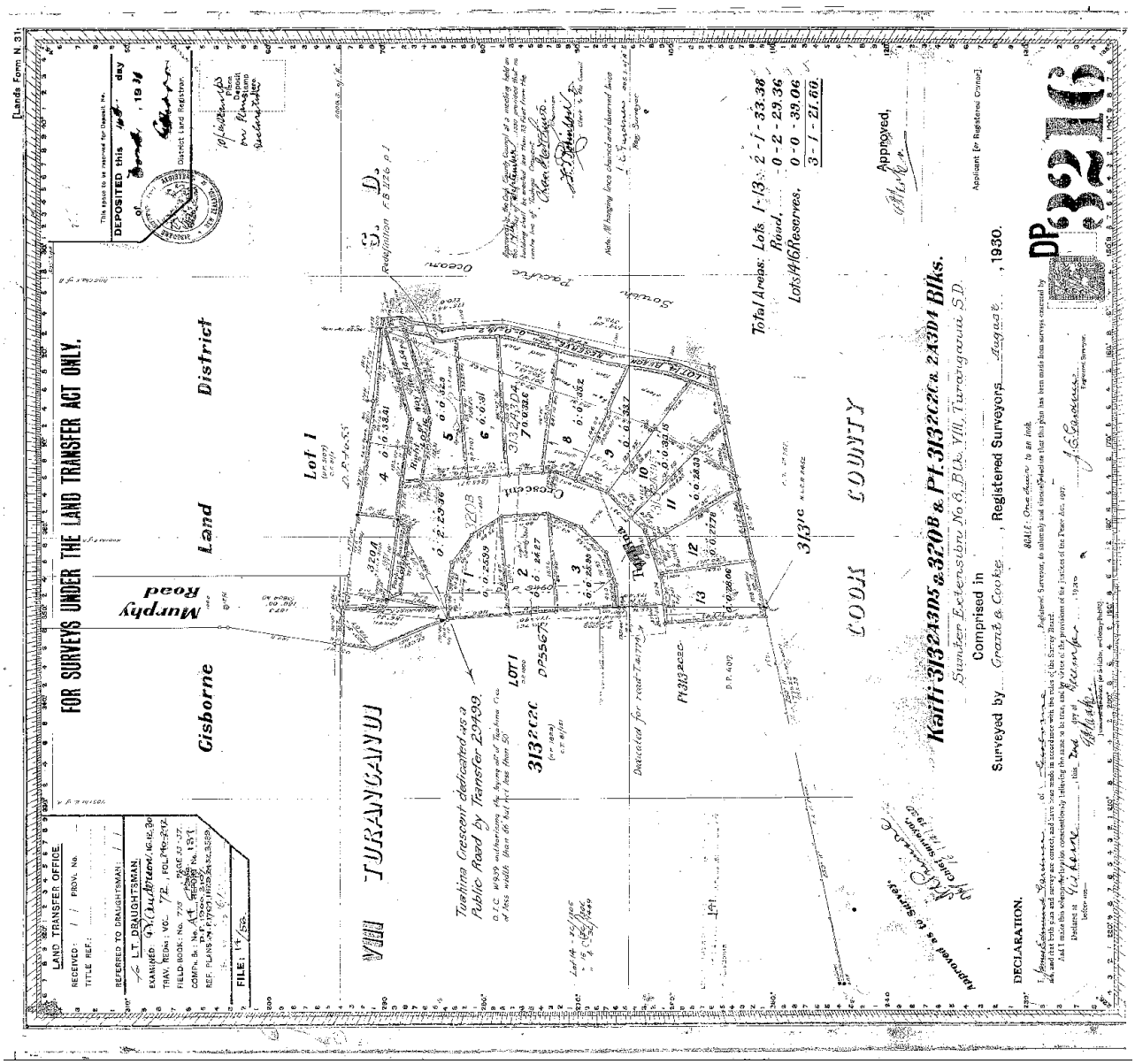
Prior References
GS81/151

Estate	Fee Simple
Area	486 square metres more or less
Legal Description	Lot 14 Deposited Plan 3216
Purpose	reserve for local purpose (esplanade)

Registered Owners
The Cook County Council

Interests

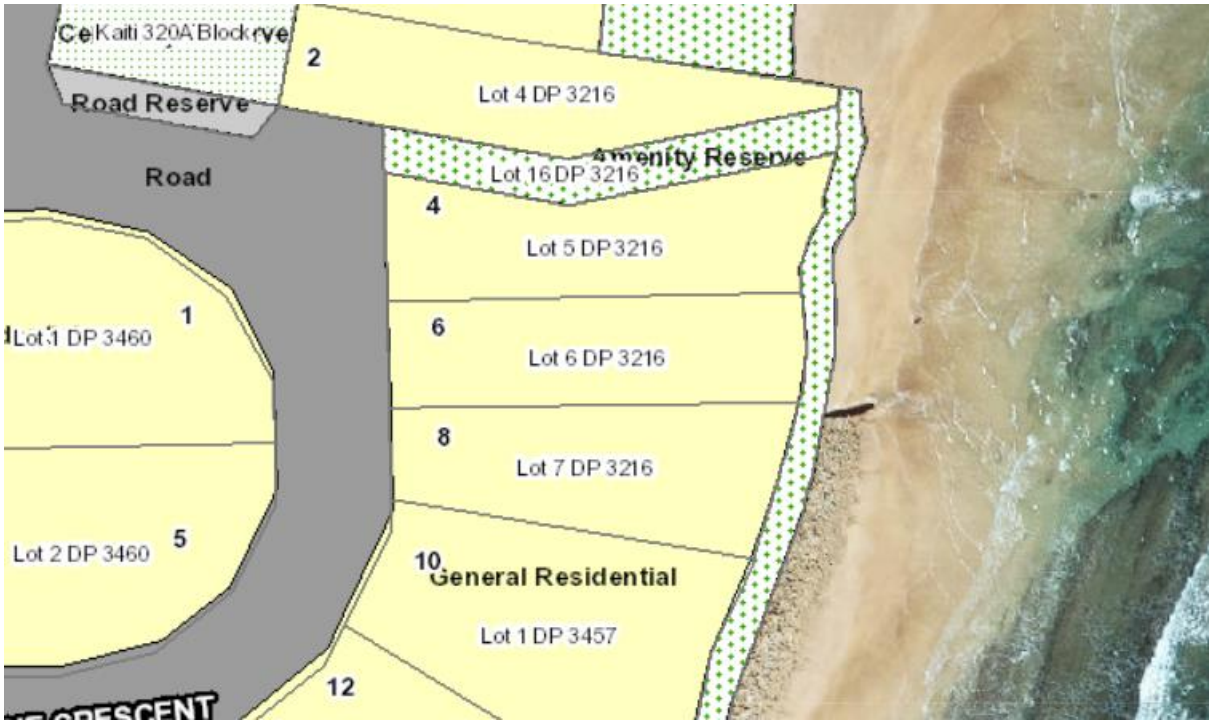
Identifier **GS3C/1305**



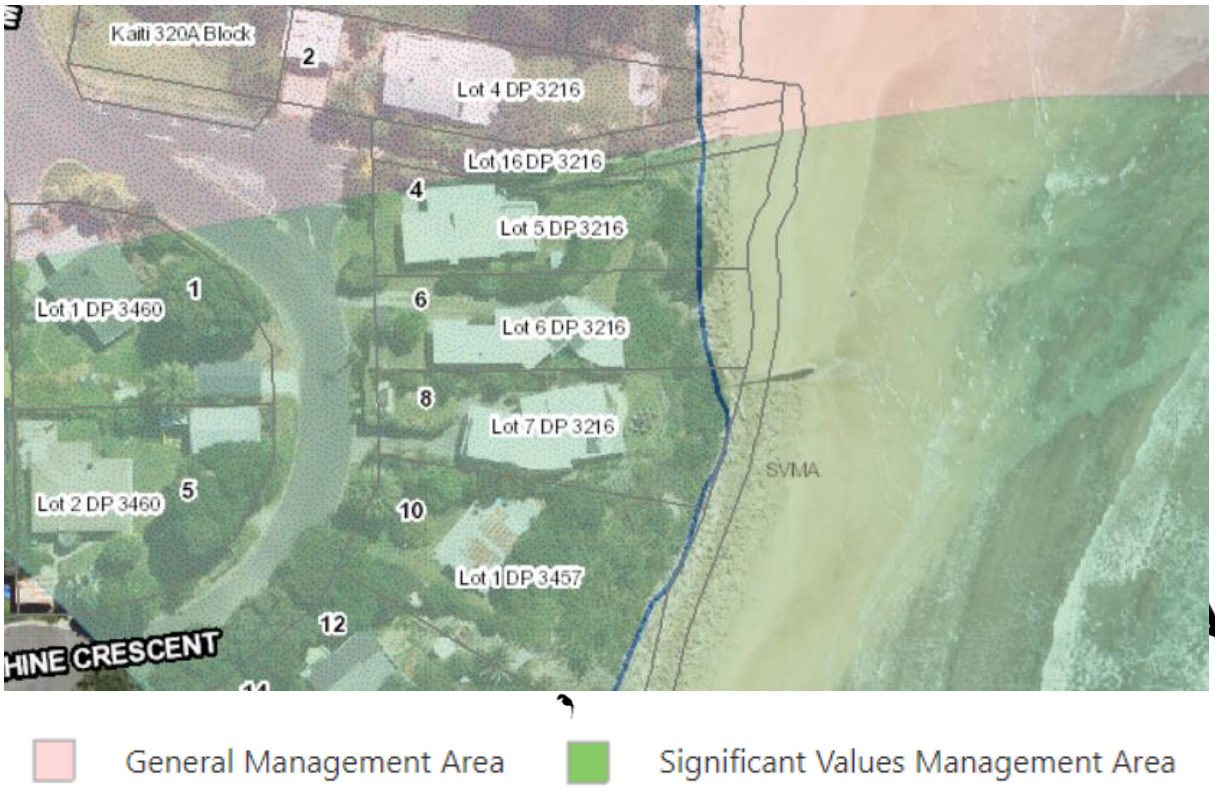
Appendix G

Tairāwhiti Resource Management Plan Maps

Zoning Map



Coastal Management – Coastal Environment Management Areas Map



Coastal Management – Outstanding Landscapes Map

Outstanding Landscapes

Coastal Management – Coastal Environment Overlay (Land)

Coastal Marine Area Boundary Coastal Environment Overlay (Land)

Natural Hazards – Stability Alert Map

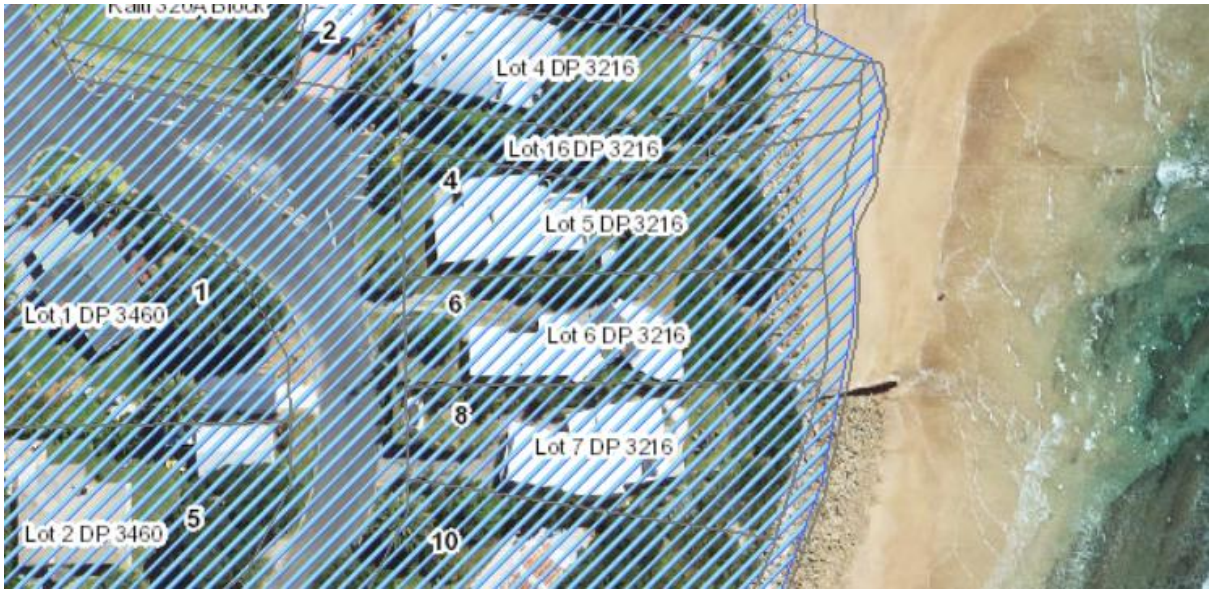
Site Caution

Natural Hazards – Coastal Hazard Overlay Map

EXTREME RISK HIGH RISK MODERATE RISK

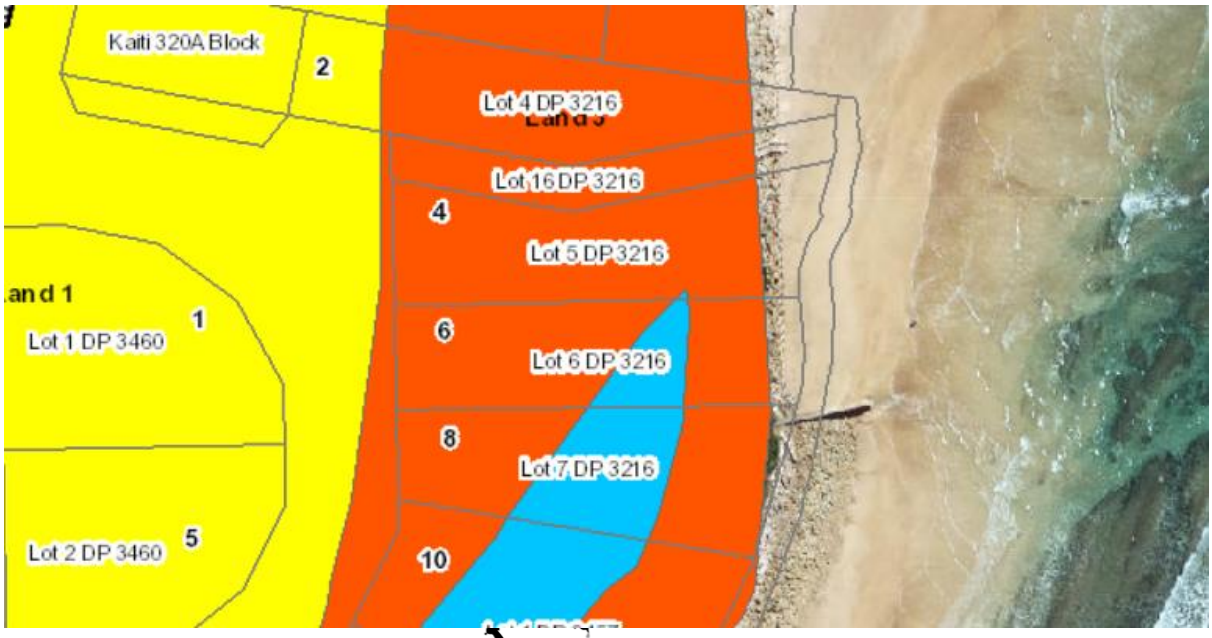
SAFETY BUFFER

Historic and Cultural Heritage – Heritage Alert Overlay Map



Heritage Alert Overlay

Land Management – Overlays 1-3 Map



Land 1 Land 2 Land 3

Appendix H

4Sight Coastal Processes Memo

Memorandum

To: Cassandra Ng

From: Sam Morgan

Date: 21 January 2019

Subject: Tuahine Cres Seawall - Coastal Processes and Impact Assessment

Scope

It is understood that Simon Cave and Anabel Reynolds of 6 and 8 Tuahine Crescent are seeking resource consent to replace an existing seawall at the southern end of Wainui Beach. The preferred option is a timber pile and rock rip-rap hybrid design similar in nature to the existing structure. As a part of the planning and design process this memo seeks to provide an understanding of the potential effects on the surrounding coastal environment. In order to achieve this, an understanding of the wider coastal processes has been obtained from previous research and reporting and supplemented by site observations and analysis of aerial photography.

Site Description and Geomorphic Setting

Wainui Beach is situated approximately 5km east of Gisborne City center on the east coast of the North Island. It is approximately 6km in length being bound by Tuahine Point to the south and Makorori Point to the north. The subject site is located at the southern end of Wainui beach and is the transition point from a beach setting to a cliff setting (**Figure 1**).

Wainui Beach itself is considered to be a rhythmic bar and beach system, which at times will switch to a longshore bar trough system, as per the NIWA beach classifications[1]. This due to the typical series of distinct rip troughs that are separated by detached sub tidal bars that operate along the beach. Sand within the system is somewhat constrained by two southeast trending reef systems situated offshore from the beach and extending from both bounding headlands (**Figure 2**). The seaward extent of the 30m depth contour in comparison to adjoining Makorori Beach indicates that these reef features are effective at retaining sand within the system

There are two streams that discharge out on to the beach, the Hauanatua and Wainui Streams, neither of which are considered larger enough to supply substantial amounts of sand to the beach. Nor are they considered larger enough to influence beach geomorphology apart from within the immediate vicinity of their mouths.

Over the medium to long term there are divided opinions within the various reports published on Wainui Beach over whether the beach is eroding or accreting. Dr. Gibb[2] suggested in his assessment that beach erosion rates where in the order of ~0.15m/yr since 1942, although it is unclear exactly how these figures were obtained and are perhaps based upon post-storm survey data. As verification to these erosion rates if you extrapolate out ~0.15m/yr from 1942 to present day you would expect to see an average of 10m of retreat across the beach. However, this degree of change is not readily apparent from brief analysis of the air photo record or from site observations. In her evidence presented at the council hearing for a larger seawall at this location, Dr. Dunn[3] contends that the beach is accreting

[1] https://www.niwa.co.nz/coasts-and-oceans/nz-coast/learn-about-coastal-environments/beach-types/13-beach-types/intermediate-rhythmic-bar-and-beach

[2] Gibb, J.(2001).Review of the 1995 Wainui Beach Coastal Hazard Zone. Report prepared for Gisborne District Council.

[3] Submission of Dr. Amber Dunn on the Southern Wainui Rock Revetment - February 2018

based upon research she undertook for a Master of Science thesis. Analysis of beach monitoring data was undertaken by Tonkin and Taylor[4] for the previous seawall application. This demonstrated that beach position has fluctuated over time with positive and negative trends noted across the beach. Often the greatest fluctuations appear near the stream mouths, which is not unusual beach behavior. However, there was no assessment of beach volumes presented which would provide great context for the assessment of beach state.

Notwithstanding the gaps in information, Wainui Beach does not appear to be demonstrating a significant erosional or accretionary trend over the period of GDC beach monitoring. This is supported by observations of beach state during site visits by 4Sight on several occasions in 2018 where no substantial signs of erosion were apparent.

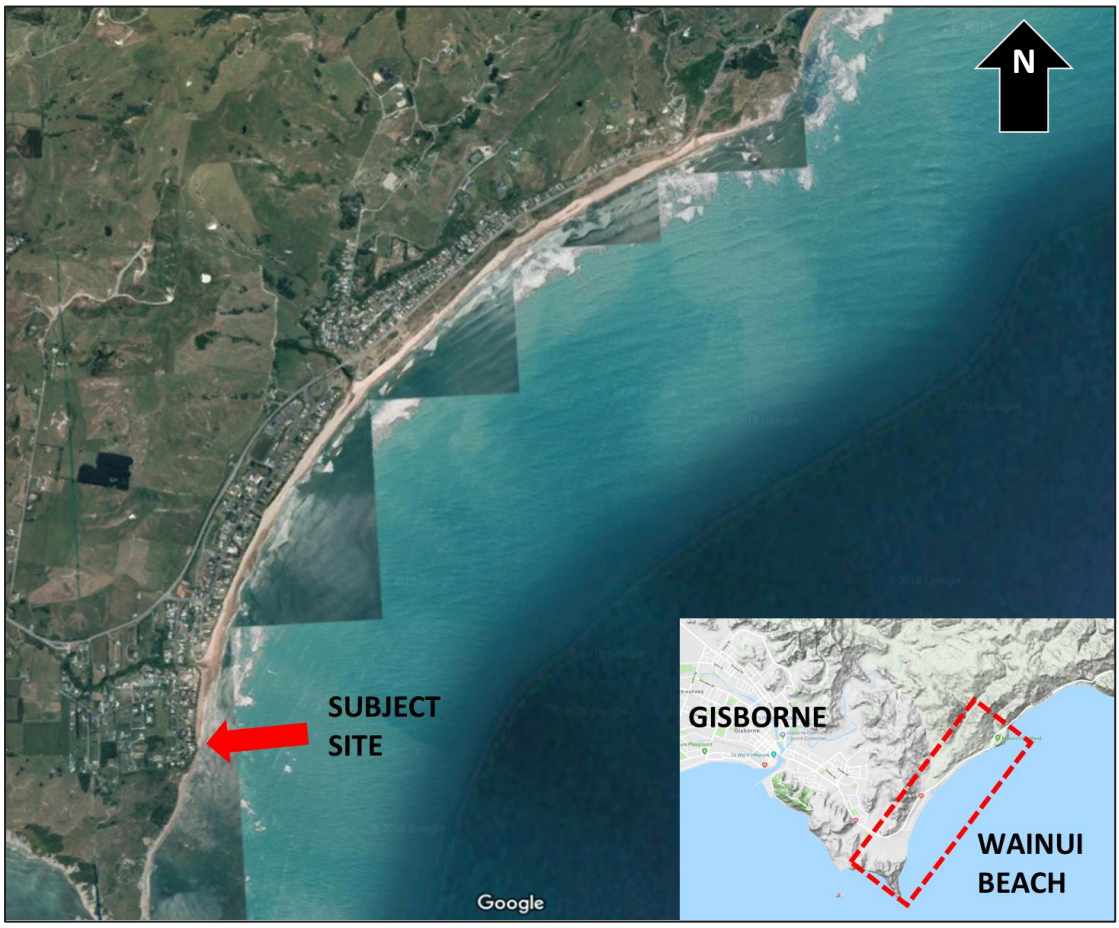


Figure 1: Site location map with subject site marked by red arrow.

It is recognized is that both bounding headlands are actively eroding due to the relatively soft nature of the siltstone cliff face, and is considered to be eroding at a rate of approximately 0.4m/yr[5]. The subject site marks the transition from the sandy beach environment to the abutting cliff. The composition of sand material reflects the nature of backshore parent rock at the subject site, as can be seen in **Figure 3**

[4] . Erosion Protection Works- Wainui Beach - Resource Consent Engineering Design Report. Tonkin and Taylor, July 2017.

[5] Gibb, J.(2001).Review of the 1995 Wainui Beach Coastal Hazard Zone. Report prepared for Gisborne District Council.

below. As illustrated in the image there is an exposure of siltstone formation migrating into an old slip face as you move toward the southern groyne. Beyond the groyne the cliff quickly rises to height in excess of 20m and up toward a peak of approximately 100m. Erosion at the site has been controlled to date by the existing seawall providing protection to the toe of the slope. This has prevented undermining of the rock face and removal of any talus material which ultimately lead to further over steepening of the existing slopes. Sand levels in front of the wall are known to fluctuate depending on climatic conditions, where northeast wind and swell events are thought to deliver sand to this part of the beach, which is then trapped by the southern groyne.

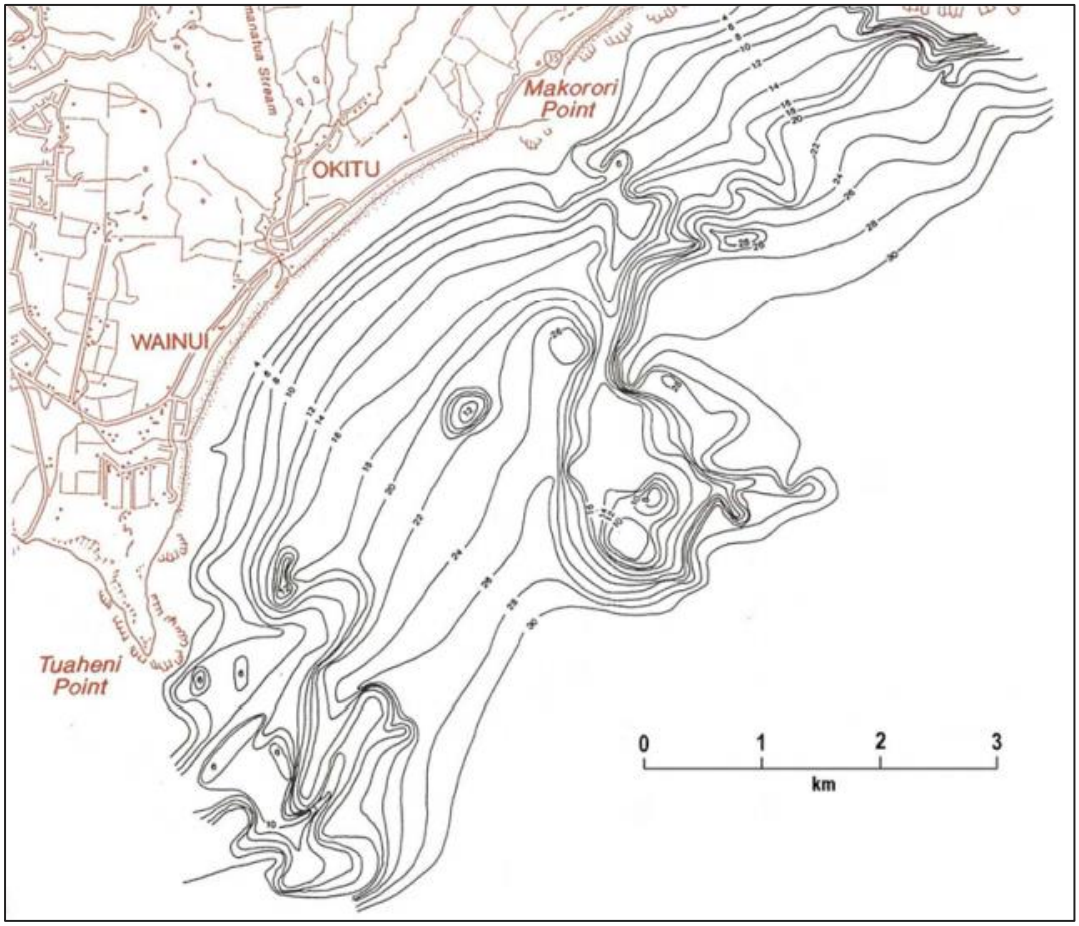


Figure 2: Wainui Beach offshore bathymetry.

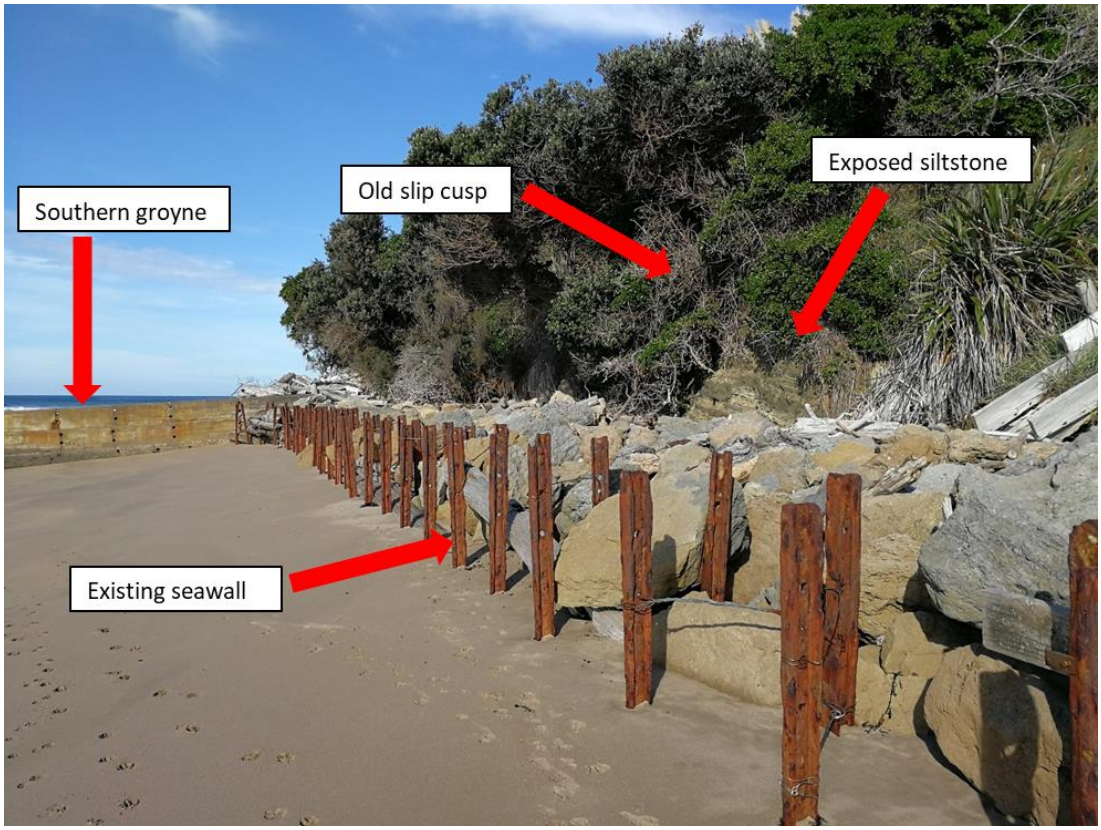


Figure 3: Subject site of proposed new seawall.

Wave Climate

In general, Wainui Beach is considered to be a high-energy environment receiving wave energy from the north-east through to the south. Hindcast wave data from Metocean View[6] indicates that the 100yr significant wave height is in the order 8.8m (**Table 1**) at a water depth of approximately 50m. The predominant wave direction is from the South at this location as can be seen in **Figure 4** below.

Waves directly acting upon the shoreline are expected to be significantly less than 8.8m due to energy decay from movement and breaking over a variety reef and sand bar structures as they move toward the shore. Therefore, waves acting upon the subject shoreline can be expected to be broken and limited in height by water depth. In order to assess this depth limited wave, a factor of 0.55 has been applied to the water depth at the wall during storm events based upon information from previous studies[7]. In this instance, broken wave heights can be expected to be in the order of 1.4m to 1.5m during extreme storm events.

Table 2: Summary of extreme wave heights at 25m Chart Datum.

Return Period	**10yr**	**100yr**	**1000yr**
Significant Wave Height (m)	7.1	8.8	11.9

[6] https://app.metoceanview.com/hindcast/sites/nz/-38.7/178.25

[7] Nelson, R C (1987), Design wave heights on very mild slopes – an experimental study. Civ. Eng. Trans. Inst. Eng. Aus., CE29(3): 157 – 161

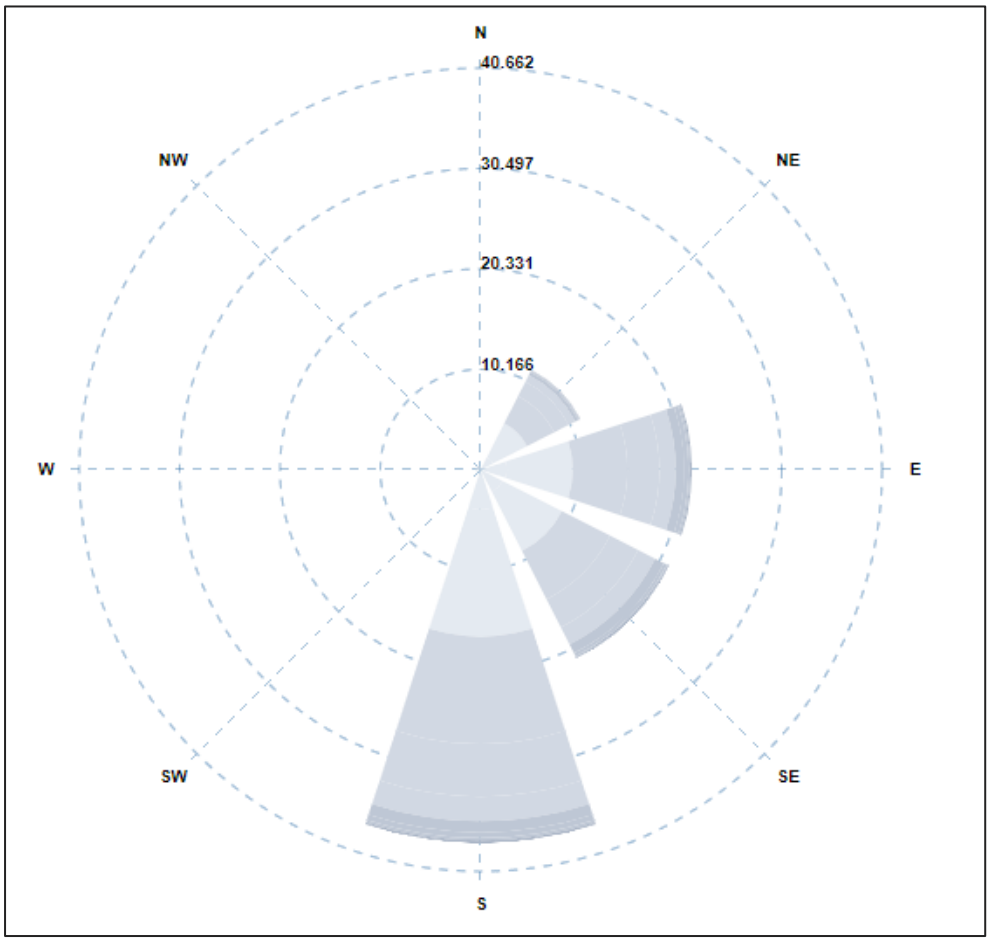


Figure 4: Wave rose for conditions offshore from Wainui Beach.

Inundation Levels

A pragmatic value for Mean High Water Springs (MHWS) for the site has been inferred to be **RL0.97m** taken from LINZ[8] for Eastland Port data situated approximately 5km south of the site. NIWA undertook a study of extreme sea level elevation along the Gisborne coastline and these are summarized for the relevant location in **Table 2** below. Tonkin and Taylor undertook modelling to determine the wave setup in the nearshore environment for the subject site during the design process for the previously proposed structure where they estimated this be approximately 0.9m.

Table 2: Summary of predict storm tide levels (not including wave set up)[9].

Return Period	5yr	10yr	20yr	50yr	100yr
Elevation (RL m)	1.33	1.35	1.37	1.40	1.43

[8] https://www.linz.govt.nz/sea/tides/tide-predictions/standard-port-tidal-levels

[9] Stephens, S., Robison, B. and Gorman, R. (2014). Extreme sea-level elevations from storm tides and waves along the Gisborne District coastline. Report prepared for Gisborne District Council.

Near Shore Currents

Due to the nature of the beach (i.e. a rhythmic bar and beach system) and the form of offshore structures no net current regime is apparent from site observations and aerial photo analysis. It is instead expected that currents along Wainui Beach will be largely dictated by changing wind and swell conditions. During significant storm or swell events, a longshore trough system may form in response to the respective wind and swell direction.

Currents at the subject site are thought to be influenced to some degree by the existing groyne. The groyne will interrupt the flow of currents originating from the southerly quarter and will likely cause back eddy's during periods of northerly current flow. It is important to note this will only occur within the high tide period as the seaward extent of the groyne is situated above the low water mark.

Sediment Transport Regime

Sediment transport along Wainui Beach is thought to largely correspond with changes in wind and swell conditions. Typically, large wave and storm events will mobilise sand stored in the upper beach margin, with the associated rip and current regimes depositing this material in offshore bar systems. These storm deposits are normally then transported back onshore by fair weather conditions and long period swells.

As mentioned above, greater short-term variability in sediment transportation can be expected around the two stream mouths situated along the beach as the variation in stream flows adds greater complexity to the beach dynamics.

Due to the nature of the offshore reef structures Wainui Beach is considered to be a largely closed system, with only a narrow window of opportunity to the southeast available for sand to be delivered to the beach given it loosely aligns with the predominant swell direction.

At the site itself sand levels are known to fluctuate, presumably in response to changing weather, swell and corresponding current regimes. **Figure 5** shows lower sand levels at the site on the 10th of August 2018 that followed a 5 day period of northeast swell activity. Conversely **Figure 6** shows relatively high sand levels on the 20th of November 2018 following during a long period of relatively small east swell that was preceded by period of calm conditions. Details of swell conditions for these periods are contained within **Appendix A**.

Figure 5: Sand levels at the site on 10.08.2018.

Figure 6: Sand levels at the site on 20.11.2018

Proposed Design Solution

Due to the cliff nature of the site there is an ongoing progressive erosion problem and a coastal protection structure is required in order to maintain the future integrity of the respective properties. The proposed coastal protection structure is hybrid solution with a vertical face located in the front of the wall to restrict the seaward extent of the wall toe and allow for rip-rap behind the wall to be built up to desired design heights. The timber piles are prescribed at Ø300mm spaced at 900mm centers to avoid loss of rock between individual piles. The larger rock would be placed along the seaward face and along the top of the rip-rap wall to create a stable platform to construct the remainder of the wall. The size of the rock has been determined using the rock sizing equations of Hudson[10] and Van der Meer[11] with allowance made to reuse the existing rock on site.

The rock wall will dissipate the energy approaching the base of the cliff to avoid any further erosion. It will act in a similar manner to the existing structure with the most significant difference being an increased crest height to allow for future sea-level rise. At RL4m, the crest height of the structure proposed here is lower than the previously proposed at a height of RL4.8m. While this height reduction will mean an increased risk of overtopping. Incorporating a future sea-level rise of 1m, the new design provides 700mm of freeboard above the 1%AEP storm surge event and wave setup water level. This height should provide sufficient protection from overtopping under present day conditions and enable time for salt tolerant planting to be established above the structure. This planting should be able to absorb the relatively minor and infrequent overtopping that is expected.

Coastal Processes Impact Assessment

The degree to which a coastal protection structure will impact on local coastal processes is often related to the size and type of structure, the beach type and behaviour, relative energy of coastal processes at the site and the position of structure within the tidal cycle[12][13][14]. In general, it is considered that vertical impermeable structures situated at low tide or below on a high energy beach steep beach with net directional sediment transport regime will have greatest effect on local beach conditions. Conversely a permeable and sloped structure that is only affected by coastal processes under extreme events on a generally low energy beach is likely to have less long-term effects on the beach and coastal process at a particular site.

Due to the nature of local conditions and scale of the proposed structure, it is unlikely that the structure will have any impact upon the local wave climate, local current regimes, sediment transport or inundation level at Wainui Beach.

The degree of exposure of the proposed structure will ultimately depend on climatic conditions and sand levels in front of the structure at any given time. A conservative estimate would be that the structure is exposed to coastal processes for an average of 3 hours either side of high tide. However, due to its position within the tidal cycle there is the potential for the structure to have a localised impact on the beach via reflection and end-effect processes. Therefore, consideration of the potential impacts are discussed in further detail below.

---

[10] CERC (1984) Shore Protection Manual. CERC Dept. of the Army, U.S. Army Corps of Engineers, Washington.

[11] The Rock Manual (2007) "The Use of Rock in Hydraulic Engineering", CIRIA-CUR-CETMEF (C683)

[12] Dean, R. G. 1987. Coastal armoring: effects, principles and mitigation. Proceedings of the 20th Coastal Engineering Conference, ASCE, pp 1843-1857

[13] Weggel, J. (1988). Seawalls: The Need for Research, Dimensional Considerations and a Suggested Classification. Journal of Coastal Research, 29-39.

[14] Griggs, G., & Tait, J. (1988). The Effects of Coastal Protection Structures on Beaches Along Northern Monterey Bay, California. Journal of Coastal Research, 93-111.

Reflection

It is recognised that the seaward face of the structure is vertical in nature which can increase the amount of energy reflection because the approaching wave is not able to dissipate up a sloped surface. In response, the seaward face will be permeable in nature allowing water movement through the structure to dissipate some of the wave energy. For this reason, the proposed structure will act in similar manner to the existing structure in terms of reflection.

As observed in **Figures 5 & 6** wave reflection currently does not appear to be significantly impacting the site. The impact of existing (and proposed) structural wave reflection is complicated by the adjoining groyne which is much more likely to have a substantive impact on sand retention at this part of the beach. This is due to the shore perpendicular orientation of the groyne and its solid-state nature.

Reflection is known to be a more significant issue during periods of increased wave activity[15] and potentially impact the founding of the structure by creating undermining of foundations. Piling the proposed structure will ensure that it is unable to be undermined, whilst the rip rap will be able to settle and adjust to changing sand levels. Further, bedrock material is less than 1m below average sand levels therefore there is a limit to the amount of scour associated with reflection that can occur.

Overall the potential effects to arise from wave energy reflection off the proposed new structure are considered to be undetectable in the context of the existing situation.

End-Effects

Seawalls are often known to cause 'end effects' or erosion to the adjoining softer shore lines. The exact nature of the root cause of end effects is not well understood but the simplest way of explaining it is as the release of potential energy built up due to the interaction of waves with hard 'reflective' structures and shifting that energy on to the adjoining shoreline. What has been commonly observed is that the further a structure is within the tidal prism the greater the effects and these effects are often worse on the downstream side of a structure.

Currently there are existing structures on either side of the proposed which are capable of absorbing the potential impact of end effects. The structure has been designed in order to minimise the potential end effects by "tying off" into these existing structures. This is intended to be achieved by reducing the slope on the northern end of the structure to allow for a reduction in the amount of "reflected energy" as it migrates into the existing structure to the north. However, the structure moving north is considered to be in poor condition so considered is given below to the potential effects should the structure no longer be in place.

In order to assess the potential risk to the adjoining areas from end effects guidance has been sought from Komar[16] who estimated that the adjoining downstream coast is affected by approximately 70% of the length of the structure. In this instance end effects to the north of the structure are considered to be a higher risk than those to the south because of the existing groyne and seawall structures to the south. South-east swell events are thought to the biggest risk to the northern end due to the predominance of swell from the direction and the subsequent currents they create. As shown in **Figure** 7 the groyne does provide some shelter from these events which essentially reduces the effective

[15] Carley, J., Flocard, F., Coghlan, I, Cox, R and Shand, Tom. (2015). Establishing the Design Scour Level for Seawalls. Proceedings of the Australasian Coasts & Ports Conference 2015. 15 - 18 September 2015, Auckland, New Zealand

[16] Komar, Paul D., 1998. Beach Processes and Sedimentation . 2nd edition, Prentice Hall, Upper Saddle River (New Jersey), x + 544 p.

length of the structure. The wall area terminates at a siltstone interface which provides some degree of resistance to the reflected energy, but the adjoining area by the access stairs is considered to be at risk should the existing wall be removed.

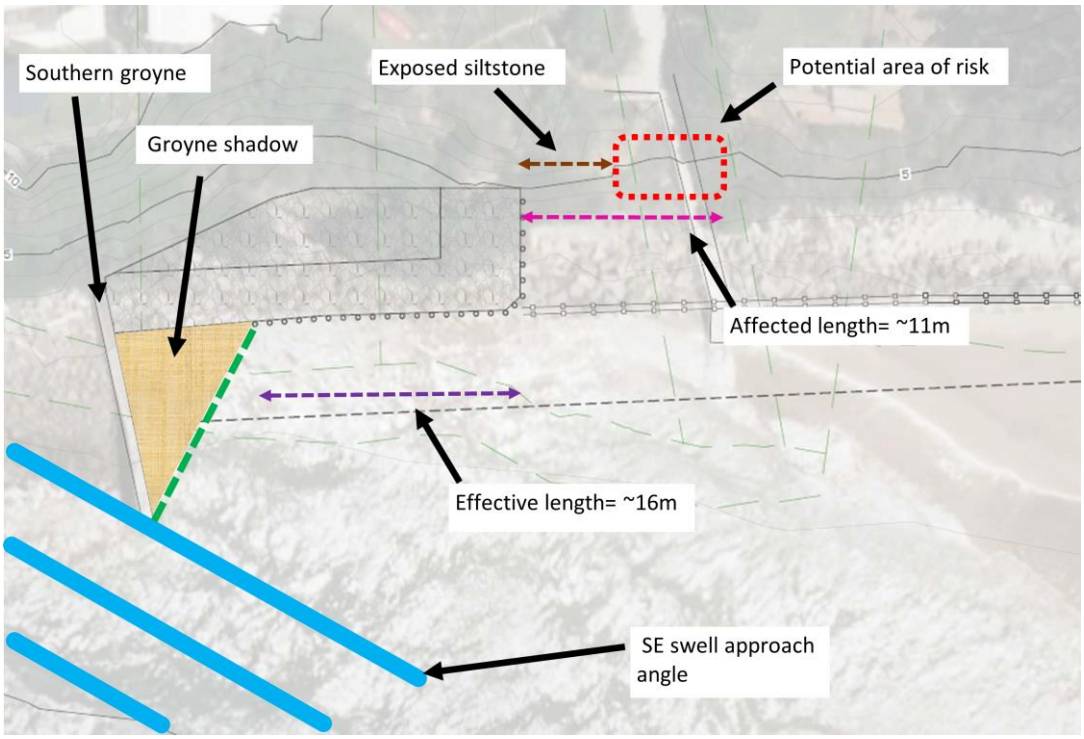


Figure 7: A schematic diagram showing the potential for end effects at the site.

Conclusion

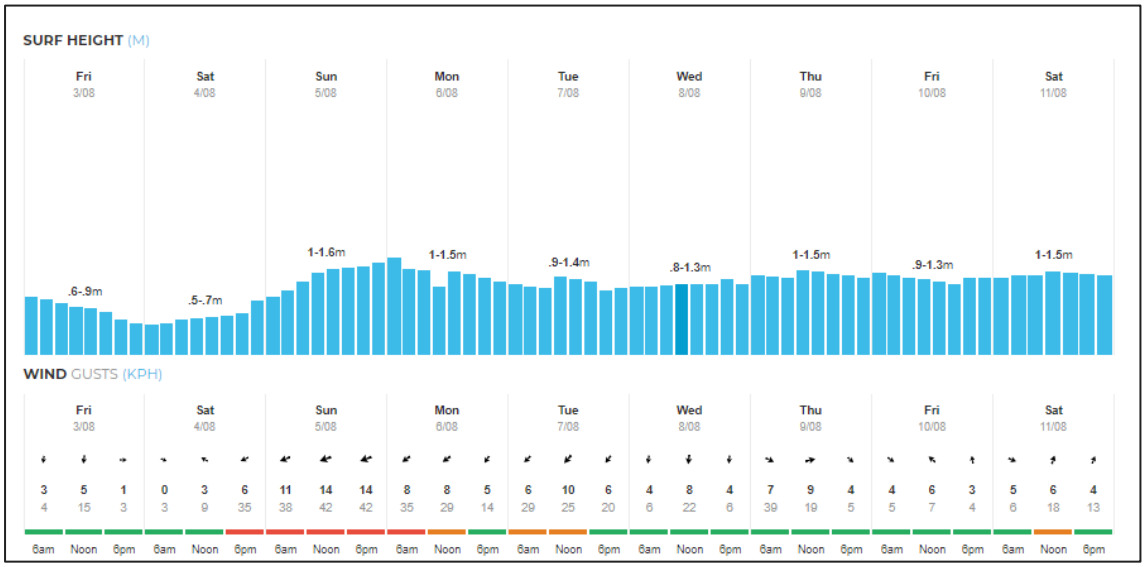
Investigations into coastal processes and hazards at the site confirm that a coastal protection structure in and along sections of the subject coastline is required to avoid impacts upon the landward infrastructure. The structures will be designed to handle the local coastal processes and allow for future sea-level rise.

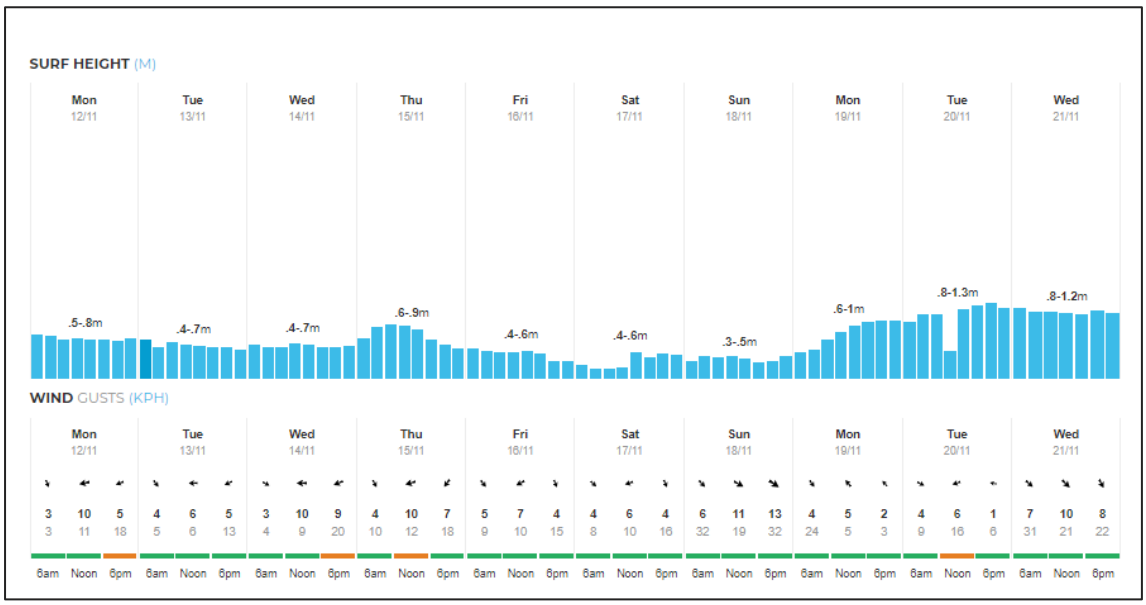
Due to the scale and location of the proposed structure it appears unlikely that there will be any discernible change to the larger coastal processes operating on Wainui Beach. Reflection from the proposed wall is thought to similar to the existing situation to which the beach does not appear to be impacted by.

Should the existing wall be removed in the future there is a small area that will potentially be impacted by end effects created by the new structure. However, this is should be able to be managed by appropriate design of a new access structure, as it is likely the existing structure will need to be replaced during the removal of the existing seawall. It is noted that should the existing seawall be removed the associated backshore margins are likely to undergo varying degrees of erosion as they adjust to the new energy regime.

Therefore, any effects on local coastal processes to arise from the proposed are not considered to be significant.

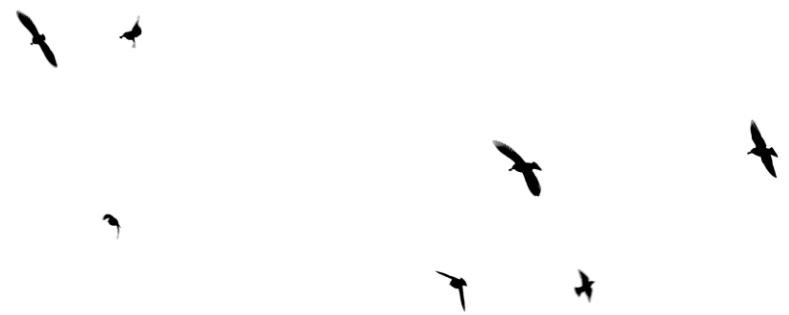
Appendix A- Corresponding swell conditions





Appendix I

Iwi Consultation



Cassandra Ng

From: Sam Morgan
Sent: Tuesday, 2 April 2019 3:57 PM
To: Cassandra Ng
Subject: FW: Tuahine Seawall

FYI

From: Nikki Searancke <searanckenikki@yahoo.com>
Sent: Wednesday, 20 February 2019 3:50 PM
To: Sam Morgan <samm@4sight.co.nz>
Subject: Re: Tuahine Seawall

Kiaora Sam

I'm in hospital I injured my knee last Friday!
I'm going home tomorrow!

I am happy to work with you and your clients as the resource consent process gets underway.

I can get in touch next week to provide formal written support.

Finally we have to support this activity to protect Maungaroa the headland and it's toe!

I will include Charlotte Gibson in my following email!

Nga mihi
Nikki Searancke

Sent from Yahoo Mail for iPhone

On Wednesday, February 20, 2019, 2:47 PM, Sam Morgan <samm@4sight.co.nz> wrote:

> Kia ora Nikki,
>
> Jus wanting to follow this one up. Simon and Co. are keen to lodge next week.
>
> Cheers,
>
> Sam

From: Nikki Searancke <searanckenikki@yahoo.com>
Sent: Monday, 4 February 2019 3:02 PM
To: Sam Morgan <samm@4sight.co.nz>
Subject: Re: Tuahine Seawall

Kia ora Sam

Yes I have read through your documents, I would like to discuss further with Charlotte and will do this week.

Ill get back to you by Monday next.

Cheers

On Monday, 4 February 2019, 2:01:40 PM NZDT, Sam Morgan <samm@4sight.co.nz> wrote:

Kia ora Nikki,

Just wondering if you are able to provide some comments/feedback re: the proposed.

Nga mihi,

Sam

From: Sam Morgan
Sent: Friday, 25 January 2019 2:24 PM
To: 'Nikki Searancke' <searanckenikki@yahoo.com>
Cc: Charlotte Gibson <charlotte@Kohanga.ac.NZ>
Subject: Tuahine Seawall

Kia ora Nikki,

That's for meeting up the other day and sharing your knowledge and insight to the area.

I have attached the draft documents for you to look at. You have the drawing set already but let me know if you need it again.

As soon as we have your comments we will make the final changes and look to lodge with GDC.

Nga mihi,

Sam

Sam Morgan
Senior Coastal Consultant

Mobile: 022 126 2514

4SIGHT CONSULTING

201 Victoria Street West, Auckland Central 1010

PO Box 911 310, Victoria St West, Auckland 1142
4Sight.Consulting LinkedIn

Appendix J

Written Approvals

RECEIVED 4/2 Sam M

Application for Affected Persons Consent

Section 95E of the Resource Management Act 1991

GISBORNE DISTRICT COUNCIL

About this form

In relation to application for Resource Consent number: TBA - Not yet lodged

Applicant's Details

Title: Mr Mrs ✔ Ms Miss

Name in full: Simon Cave and (Surname) Annabel Reynolds (First Name) (Middle Name)

Property Address:

6 and 8 Tuahine Crescent, Wainui

Legal Description: Lot 6 DP 3216 and Lot 7 DP 3216

Phone: (day) (mobile)

Email: simon.cave@gisborne.net.nz and bestbeachview@xtra.co.nz

Details of Resource Consent

I/we have applied for resource consent for the following development/activity:

Construction of a replacement seawall. Reasons for consent include:
- Construction of a seawall which is not provided for in residential zones - non-complying under DD1.6.2(32)
- More than 10m3 of soil disturbance in the Land Overlay 3 - restricted discretionary under C7.1.6(3)
- Construction of a seawall to mitigate the effects of coastal hazards, land alteration of natural dune landforms and removal of existing seawall in the Coastal Hazard Overlay 1 - discretionary under C8.5.7(1), (3) and (4)
- Land disturbance of 10m3+ in an Outstanding Landscape Area - restricted discretionary under C9.1.6(12)

Affected Person's Details

Title: ✔ Mr Mrs Ms Miss

Name in full: Cave Property Trust (Surname) Adrian Cave (Trustee) (First Name) Mary Cave (Trustee) (Middle Name)

Position (if applicable):

Postal Address: 21 Jacks Crescent, Lytton West, Gisborne

Address of Affected Property:

4 Tuahine Crescent, Wainui

Legal Description: Lot 5 DP 3216

I/we represent the:	Registered Owner of the Property	✔ Yes	No
	Occupier of the Property	✔ Yes	No
I/we have been provided with a copy of the development plans and the application and understand the nature of the development/activity proposed:		✔ Yes	No
I/we have read and understood the information on the back of this form:		✔ Yes	No

PO Box 747, Gisborne 4040 - 06 867 2049 - 0800 653 800 - service@gdc.govt.nz - www.gdc.govt.nz

Signature

I/we give written consent to the above proposal.

Name in full (please print): Adrian Cave

Signature of Affected Person or Agent

Date 30 JAN 2019

Name in full (please print): Mary Cave

Signature of Affected Person or Agent

Date 30 JAN 2019

Notes

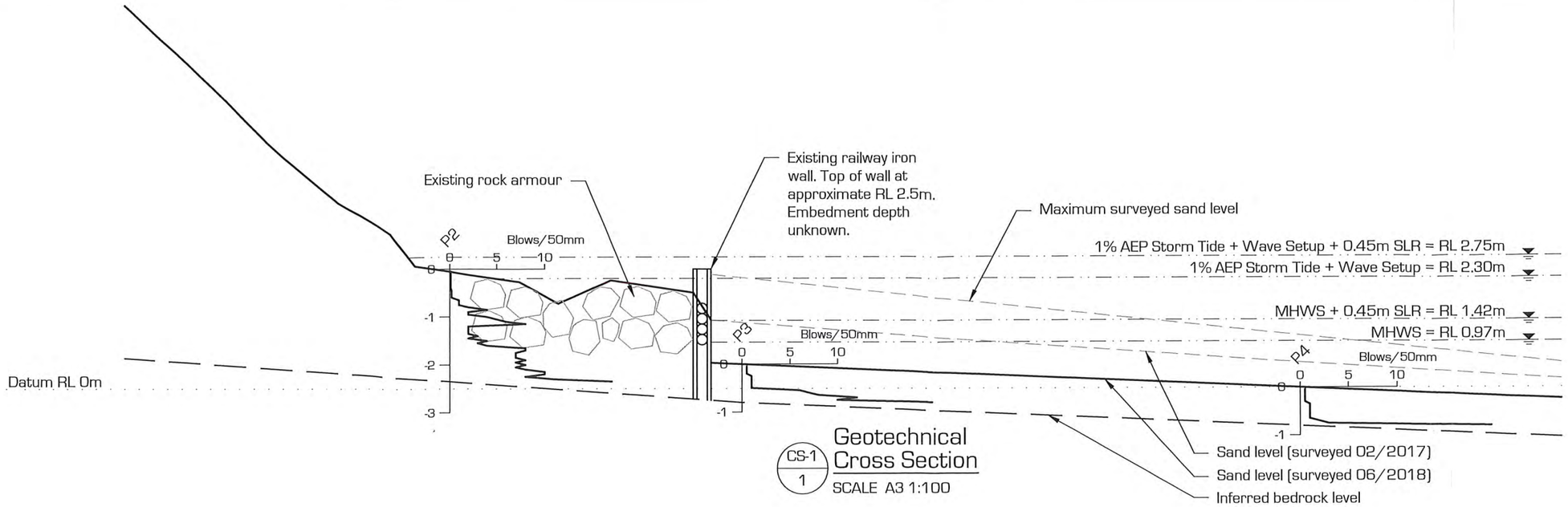
Information for the applicant

1. The written consent must be obtained from all registered property owners or the occupiers of a property if the registered owners do not occupy the property.
2. A copy of any development plans which clearly show the extent of infringement(s) non-compliance (if any) must be signed, dated and attached to this consent form. Where possible, please obtain all of the affected person's consents on one set of plans.
3. Please also provide the affected person(s) with a copy of the written application for the proposal including the assessment of environmental effects.
4. Council will not accept any consent forms subject to conditions. You must either amend the application to the satisfaction of the affected person so that they can give unconditional consent or advise Council that you wish to proceed with the application on a notified resource consent basis.
5. Please ensure that the name and address of each affected person is clearly printed in the relevant space on each form.

Information for the affected person

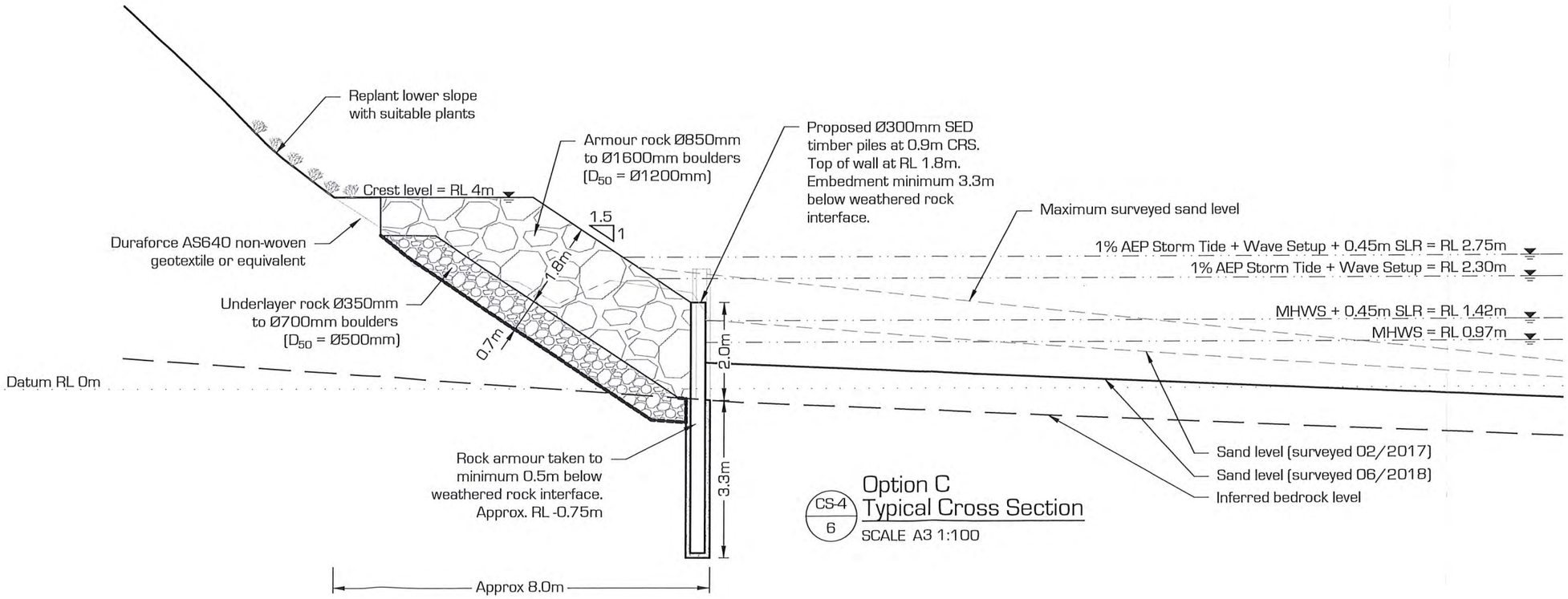
1. Under sections 95(D), 95(E) and 104(3) of the Resource Management Act 1991, when you give your written consent Council must disregard any effects of the proposal on you when deciding to notify or approve/decline the application.
2. Please ensure you sign a copy of the development plans and the written application as well as this form. You should also clearly state your name and the date on the plan(s) and/or application.
3. You are under no obligation to sign this consent form. You do not have to provide a reason for not giving your consent.
4. If you do not give your consent to an application, Council may publicly notify the application. This will provide you with an opportunity to make a submission to Council on the application and attend a Council hearing to speak in support of your submission.
5. It is acceptable to request that you be given some time to consider the application before you decide whether or not to give your consent to the proposed development/activity as there is no timeframe in which you must decide to give your consent or not.
6. You may withdraw your written consent at any time, and you do not have to provide a reason for doing so. However, you need to withdraw your consent in writing (to Council) prior to Council making a decision on the application.
7. If you have any concerns about giving your consent, or need help understanding the proposed development/ activity, please feel free to contact Council.
8. You may also obtain your own professional advice on the application before deciding whether or not to give your written consent to the proposed activity.

PO Box 747, Gisborne 4040 • 06 8673049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz



CS-1 / 1 Geotechnical Cross Section

SCALE A3 1:100



CS-4 / 6 Option C Typical Cross Section

SCALE A3 1:100

Legend:

Existing surface profile

Inferred boundary layer

Notes:

KR Cabe.

30.01.19

0 1 2 3 4 5

Scale 1:100 [m]

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

DRAWING TITLE
Option C
Existing & Design Cross Section

LDE LAND DEVELOPMENT & EXPLORATION LTD.

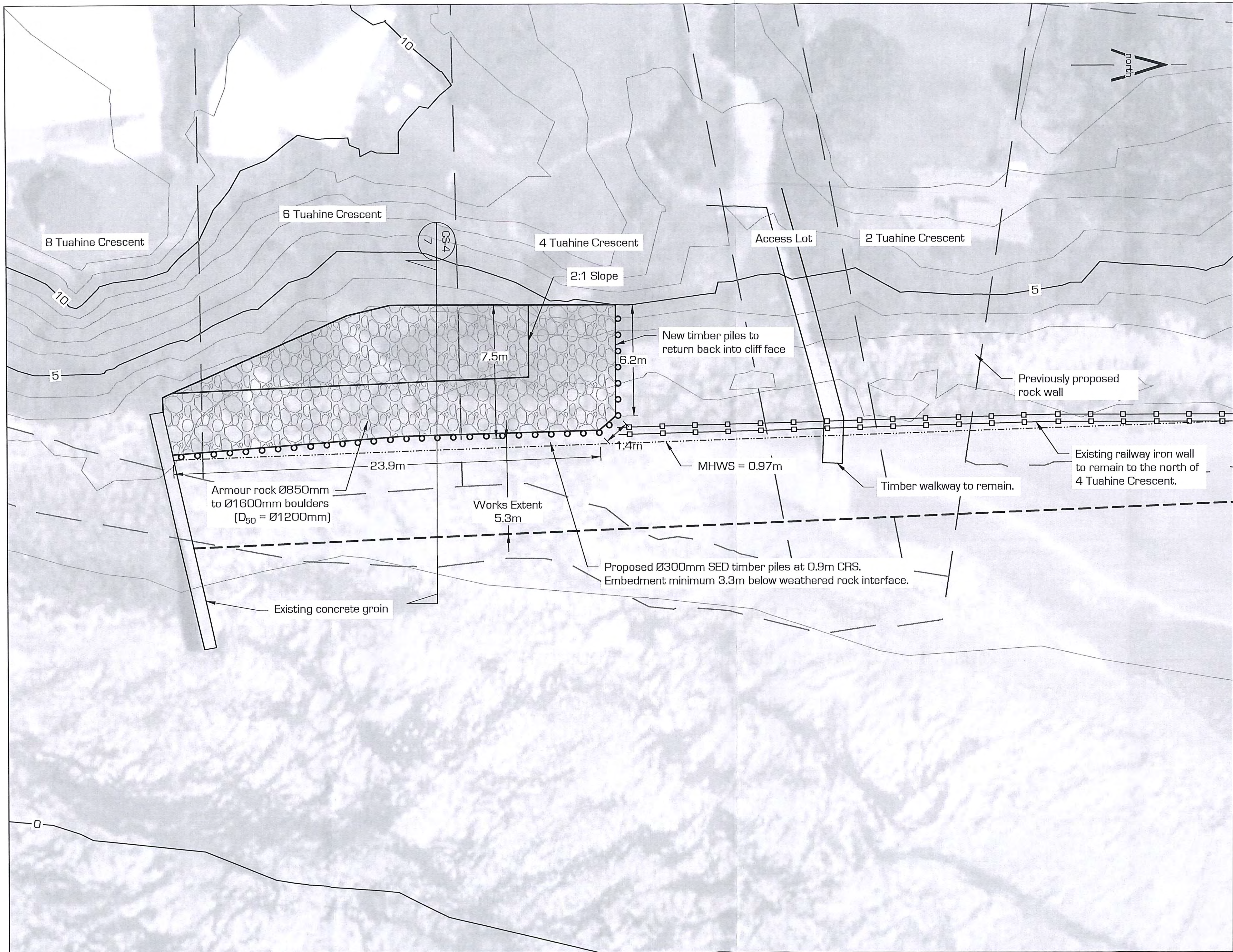
No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:100

PROJECT STATUS: Resource Consent

PROJECT: 14608 SHEET: 2 of 2

DRAWING No: 14608-C01 REV: 2



Legend:

- Lot boundary
- 5m contour
- 1m contour
- Proposed timber piles
- Proposed rock armour
- Works extent
- 0.97m MHWS

Notes:

30.01.19

0 2 4 6 8 10
Scale 1:200 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

DRAWING TITLE
Option C
Design Site Plan

LDE LAND DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS	PROJECT STATUS:	Resource Consent
DRAWN:	JS		
DATE:	19.12.18	PROJECT: 14608	SHEET: 1 of 2
CHECKED:	-	DRAWING No: 14608-C01	REV: 2
SCALE A3:	1:200		

Application for
Affected Persons Consent

Section 95E of the Resource Management Act 1991

GISBORNE DISTRICT COUNCIL

About this form

In relation to application for Resource Consent number: TBA - Not yet lodged

Applicant's Details

Title: ☐ Mr ☐ Mrs ☑ Ms ☐ Miss

Name in full: Simon Cave and (Surname) Annabel Reynolds (First Name) (Middle Name)

Property Address: 6 and 8 Tuahine Crescent, Wainui

Legal Description: Lot 6 DP 3216 and Lot 7 DP 3216

Phone: (day) (mobile)

Email: simon.cave@gisborne.net.nz and bestbeachview@xtra.co.nz

Details of Resource Consent

I/we have applied for resource consent for the following development/activity:

Construction of a replacement seawall. Reasons for consent include:
- Construction of a seawall which is not provided for in residential zones - non-complying under DD1.6.2(32)
- More than 10m3 of soil disturbance in the Land Overlay 3 - restricted discretionary under C7.1.6(3)
- Construction of a seawall to mitigate the effects of coastal hazards, land alteration of natural dune landforms and removal of existing seawall in the Coastal Hazard Overlay 1 - discretionary under C8.5.7(1), (3) and (4)
- Land disturbance of 10m3+ in an Outstanding Landscape Area - restricted discretionary under C9.1.6(12)

Affected Person's Details

Title: ☑ Mr ☐ Mrs ☐ Ms ☐ Miss

Name in full: Calcott (Surname) RIchard (First Name) CHURCHILL (Middle Name)

Position (if applicable): NEIGHBOUR. TWO HOUSE SEPARATION

Postal Address: 2 TUAHINE CRESCENT, WAINUI GISBORNE

Address of Affected Property: 2 Tuahine Crescent, Wainui

Legal Description: Lot 4 DP 3216

I/we represent the:
- Registered Owner of the Property ☑ Yes ☐ No
- Occupier of the Property ☑ Yes ☐ No

I/we have been provided with a copy of the development plans and the application and understand the nature of the development/activity proposed: ☑ Yes ☐ No

I/we have read and understood the information on the back of this form: ☑ Yes ☐ No

PO Box 747, Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

Signature

I/we give written consent to the above proposal.

Name in full (please print): Richard Calcott

Signature of Affected Person or Agent — Date: 02 FEBRUARY 2019

Name in full (please print): M. A. Calwell.

Signature of Affected Person or Agent — Date: 2-2-19

THIS SIGNING IS DONE SO ON THE BASIS THAT WE WILL NOT BE MAKING ANY FINANCIAL CONTRIBUTION TO THIS PROJECT.

Notes

Information for the applicant

1. The written consent must be obtained from all registered property owners or the occupiers of a property if the registered owners do not occupy the property.
2. A copy of any development plans which clearly show the extent of infringement(s) non-compliance (if any) must be signed, dated and attached to this consent form. Where possible, please obtain all of the affected person's consents on one set of plans.
3. Please also provide the affected person(s) with a copy of the written application for the proposal including the assessment of environmental effects.
4. Council will not accept any consent forms subject to conditions. You must either amend the application to the satisfaction of the affected person so that they can give unconditional consent or advise Council that you wish to proceed with the application on a notified resource consent basis.
5. Please ensure that the name and address of each affected person is clearly printed in the relevant space on each form.

Information for the affected person

1. Under sections 95(D), 95(E) and 104(3) of the Resource Management Act 1991, when you give your written consent Council must disregard any effects of the proposal on you when deciding to notify or approve/decline the application.
2. Please ensure you sign a copy of the development plans and the written application as well as this form. You should also clearly state your name and the date on the plan(s) and/or application.
3. You are under no obligation to sign this consent form. You do not have to provide a reason for not giving your consent.
4. If you do not give your consent to an application, Council may publicly notify the application. This will provide you with an opportunity to make a submission to Council on the application and attend a Council hearing to speak in support of your submission.
5. It is acceptable to request that you be given some time to consider the application before you decide whether or not to give your consent to the proposed development/activity as there is no timeframe in which you must decide to give your consent or not.
6. You may withdraw your written consent at any time, and you do not have to provide a reason for doing so. However, you need to withdraw your consent in writing (to Council) prior to Council making a decision on the application.
7. If you have any concerns about giving your consent, or need help understanding the proposed development/ activity, please feel free to contact Council.
8. You may also obtain your own professional advice on the application before deciding whether or not to give your written consent to the proposed activity.

PO Box 747 Gisborne 4040 • 06 8672049 • 0800 653 800 • service@gdc.govt.nz • www.gdc.govt.nz

LAND DEVELOPMENT & EXPLORATION LTD.

Seawall Renewal

4-8 Tuahine Crescent, Wainui Beach, Gisborne

Resource Consent Drawings

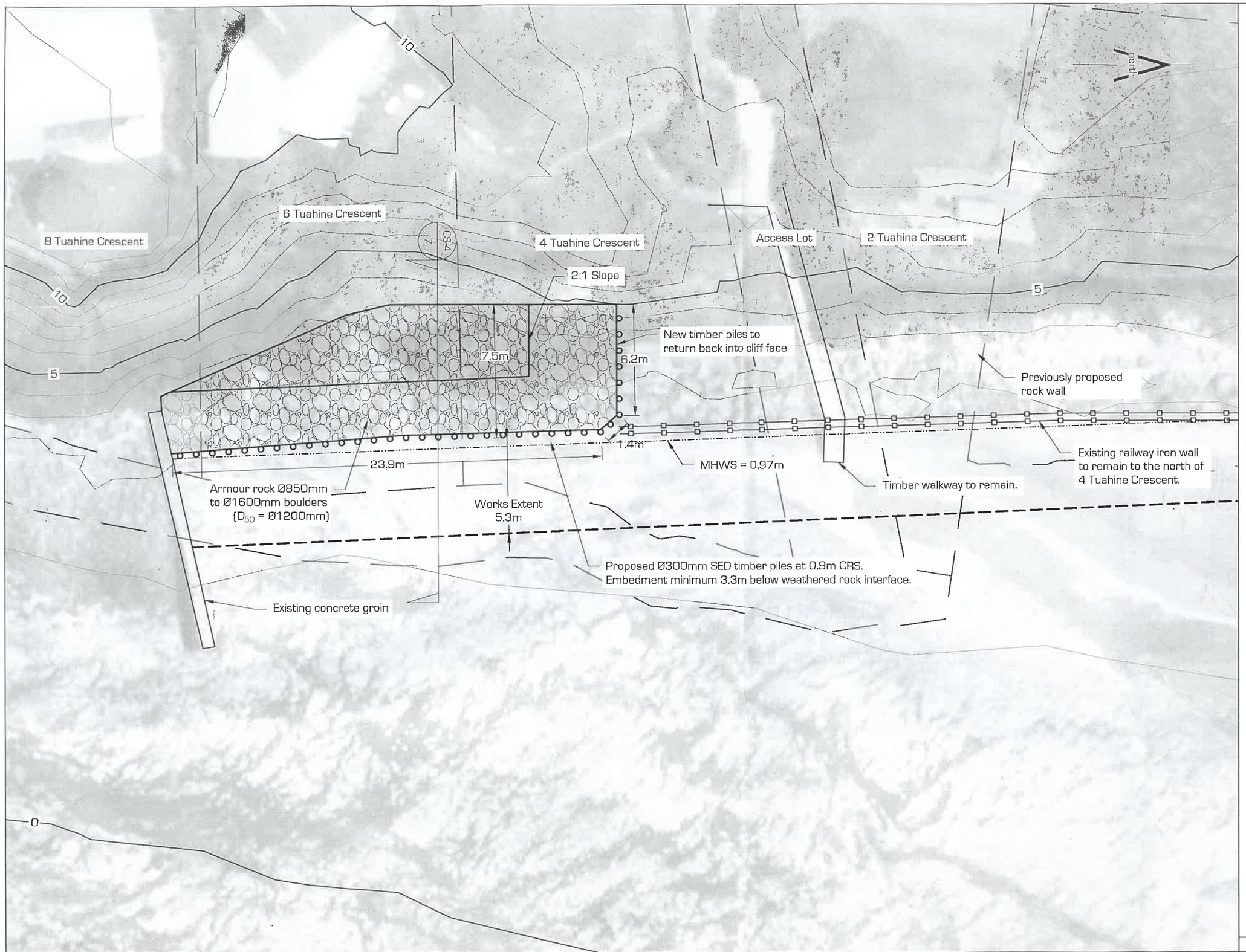
CONTENTS				
SHEET	DESCRIPTION	ISSUE DATE	STATUS	REVISION
1	Option C - Design Site Plan	19/12/2018	Resource Consent	2
2	Option C - Existing & Design Cross Sections	19/12/2018	Resource Consent	2

IN SUPPORT

RICHARD CALCOTT
04/03/2019

Mayo Caldwell
MCM
4/03/19

THIS DOCUMENT IS SIGNED ON THE UNDERSTANDING THAT WE HAVE NO FINANCIAL CONTRIBUTION TO MAKE OR ANY LEGAL OBLIGATION



Legend:

- Lot boundary
- 10 — 5m contour
- 1m contour
- Proposed timber piles
- Proposed rock armour
- Works extent
- 0.97m MHWS

Notes:

IN SUPPORT.

RICHARD CALLOTT

04/03/2019

Mayo Calloti

04/03/19

THIS DOCUMENT IS SIGNED ON THE UNDERSTANDING THAT WE HAVE NO FINANCIAL CONTRIBUTION TO MAKE.

0 2 4 6 8 10

Scale 1:200 (m)

CLIENT
4sight Consulting Ltd
201 Victoria Street West
Auckland 1010

PROJECT
Tuahine Crescent Seawall
Wainui Beach
Gisborne

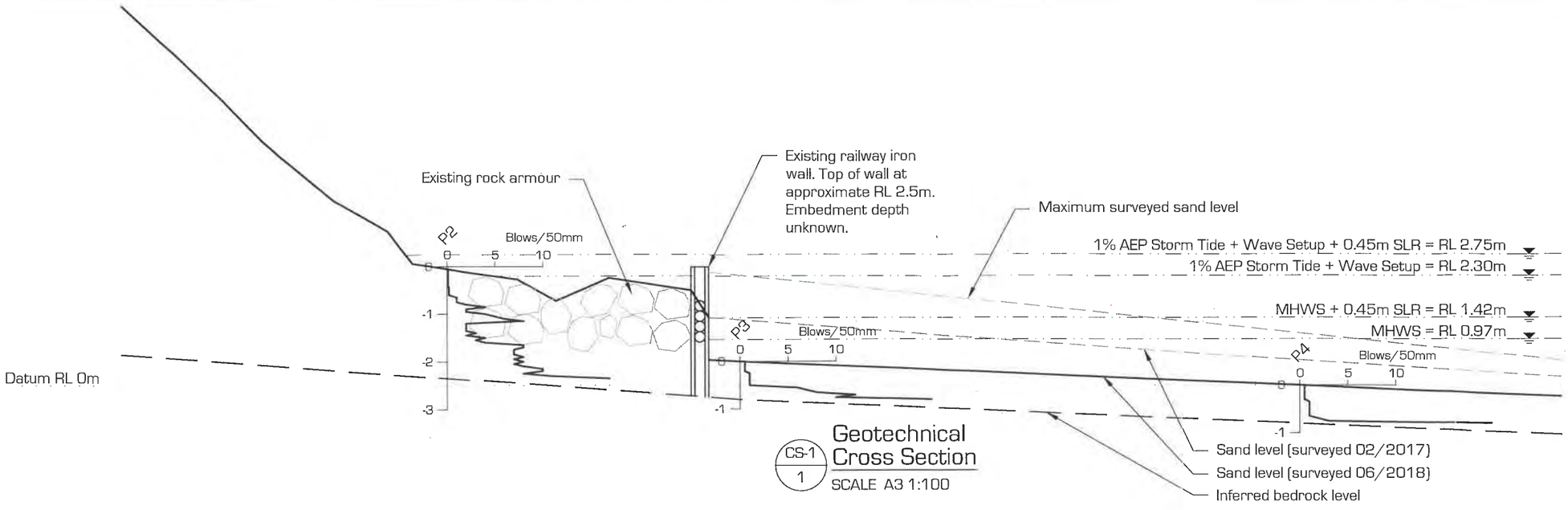
DRAWING TITLE
Option C
Design Site Plan

LDE LAND DEVELOPMENT & EXPLORATION LTD.

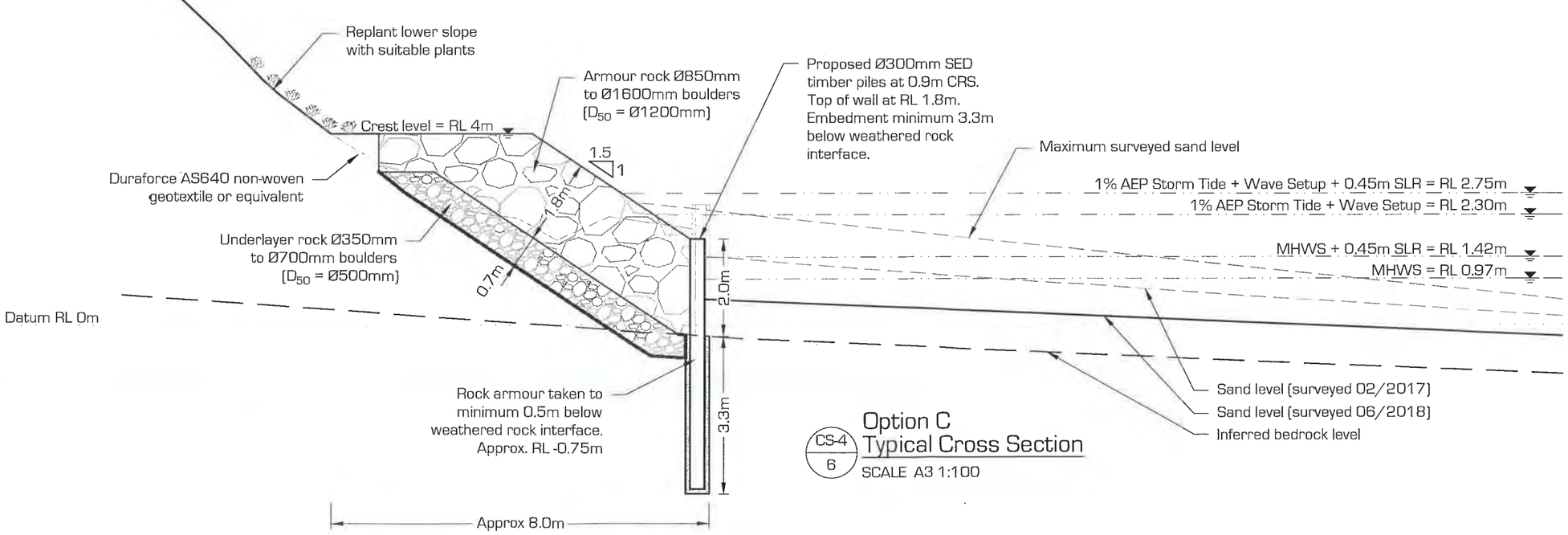
No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:200

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 1 of 2
DRAWING No: 14608-C01
REV: 2



CS-1 / 1 Geotechnical Cross Section
SCALE A3 1:100



CS-4 / 6 Option C Typical Cross Section
SCALE A3 1:100

Legend:

Existing surface profile

Inferred boundary layer

Notes:

IN SUPPORT

RICHARD CALLOT

04/03/2019

MANJA CALLOW

04/03/19

THIS DOCUMENT IS SIGNED ON THE UNDERSTANDING THAT WE HAVE NO FINANCIAL CONTRIBUTION TO MAKE.

0 1 2 3 4 5
Scale 1:100 (m)

Contractor shall check all dimensions on site prior to work commencing ©

CLIENT	4sight Consulting Ltd 201 Victoria Street West Auckland 1010
PROJECT	Tuahine Crescent Seawall Wainui Beach Gisborne
DRAWING TITLE	Option C Existing & Design Cross Section

DEVELOPMENT & EXPLORATION LTD.

No.	REVISION	BY	DATE
2	Revise Option C against Previous Design	MS	19.12.18
1	Removal of Wall at 2 Tuahine Crescent	JS	21.08.18
0	Issued to client	JS	31.07.18

DESIGN:	JS
DRAWN:	JS
DATE:	19.12.18
CHECKED:	-
SCALE A3:	1:100

PROJECT STATUS: Resource Consent
PROJECT: 14608
SHEET: 2 of 2
DRAWING No: 14608-C01
REV: 2

Appendix K

Rule Assessment

The following analysis of rules has determined that the proposal is a non-complying activity. Note that only those rules/standards which are relevant to the assessment of this proposal have been addressed.

Rule	**Compliance comment**
DD1 Residential Zones	
DD1.6.1 Rule Table - Non-complying activities (32) Activities that are not provided for as permitted, controlled, restricted discretionary or discretionary activities in residential zones – non-complying	**Consent required.** The proposed construction of a seawall is not provided for in residential zones. Pursuant to DD1.6.1(32), consent is required as a **non-complying** activity.
C3 Coastal Management	
C3.14.3 Rule Table - Permitted activities (14) Vegetation clearance in the Coastal Environment Overlay – permitted, provided that: (a) The vegetation comprises trees or shrubs or other plants not exceeding 30cm d.b.h, and scattered amongst pasture. (b) The clearance is by grazing. (c) The clearance is plantation forest thinning resulting in at least 250 evenly distributed trees remaining per hectare. (d) The clearance is harvesting of agricultural and horticultural crops. (e) The clearance is required under a Regional Pest Management Strategy under the Biosecurity Act 1993. (f) The clearance is land preparation by discing, ploughing or ripping. (g) The clearance is for fencing, confined to the extent necessary to create and maintain a stable fence-line, and not more than 5m total width, except that in respect to Rule C3.14.3(12) the total width is limited to 4m. (h) The clearance is of the indigenous understorey to plantation forest, and is incidental to permitted or otherwise authorised plantation forest clearance.	Complies. The proposal will involve vegetation clearance in the Coastal Environment Overlay which comprises predominantly of weeds, plants and shrubs not exceeding 30cm d.b.h.
C3.14.3 Rule Table - Discretionary activities (13) Tree planting, vegetation clearance, land disturbance and structures within 200m of MHWS in the Coastal Environment Overlay – discretionary, provided that: (a) The activity is not for the purpose of erecting a dwelling unit on a site to be erected on a building platform for which a subdivision resource consent has been granted between 1 October 1991 and 8 November 1997. (b) The site is outside any residential or port management zone. (c) The activity is vegetation clearance greater than 100m2 in any one contiguous area, or is tree planting that covers more than 100m2 in any one contiguous area	N/A. Does not apply as the works are within a residential zone.

(excluding landscaping associated with residential buildings). (d) The activity exposes more than 10m2 of earth measured in a vertical plane view in any three month period, or disturbs more than 10m³ of earth in any three month period, or alters the natural landform of a dune.	
C4 Cultural and Historic Heritage	
N/A – The site is within the Historic Heritage Alert Overlay which does not trigger any rules.	
C7 Land Management	
C7.1.6.1 General Standards Subject to any other rule in the Plan, land disturbance and vegetation clearance activities conducted in land overlays 1, 2 and 3 (including 3A), as denoted on the Tairawhiti Plan Maps, are permitted where they comply with the following regional rules.	Complies. The proposal involves vegetation clearance activities in the Land Overlay 3, which is not listed as any other activity in C7 and which, as assessed below, will comply with the regional rules.
(a) No activity shall cause conspicuous change in colour or natural visual clarity of any off-site receiving water after reasonable mixing.	Met. Vegetation clearance will not result in change of colour or visual clarity of off-site receiving water.
(b) No vegetation, slash, spoil or other debris shall be: i) directly deposited into a permanently flowing water body, lake, wetland or the sea, or ii) be deposited into a position where it can readily enter, or be carried into a permanently iii) flowing water body, lake, wetland, or the sea. iv) left in such a position described in (i) above where the vegetation exceeds • 100mm diameter and 3 metres in length; or • 100mm diameter and any lesser length, where the vegetation or slash may cause diversion, damming, erosion or result in movement of debris and deposition downstream.	Met. Cleared vegetation will be removed from the site, ensuring it does not enter / is not able to enter any water body or sea.
(c) All land disturbance activities shall include runoff controls around the area of disturbance where necessary to prevent concentration of runoff causing, erosion, scour and sediment discharge offsite.	N/A – As assessed below, land disturbance activities require consent and is not required to meet this standard.
(d) Where an activity results in areas of exposed ground greater than a 0.5ha contiguous area over a 12 month period on any one site excluding firebreak sites, these areas shall be revegetated to give a ground cover of 75% of that area within 12 months of the activity ceasing.	N/A – The proposal will not result in an area of exposed ground greater than 0.5ha.
(e) Land disturbance batters and side-castings are to be stabilised by methods such as surface revegetation and drainage to avoid slumping and the generation of sediment.	N/A – As assessed below, land disturbance activities require consent and is not required to meet this standard.

(f) Soil and fill shall not be placed over vegetation other than grass, or placed in a position where it can cause erosion.	N/A – As assessed below, land disturbance activities require consent and is not required to meet this standard. Notwithstanding, soil and fill will not be placed over vegetation or in an area where it can cause erosion.
C7.1.6 Rule Table - Land Overlay 3 (30) Land disturbance in Land Overlay 3 – restricted discretionary, provided: (a) The activity involves side-cutting of more than 0.5m deep over a contiguous length greater than 20m in any 3 month period; OR (b) Causes the disturbance of more than 10m³ of soil on land in any 3 month period. (32) Land disturbance and vegetation clearance activities in Land Overlay 3 which do not comply with the General Standards and are not provided for as Controlled or Restricted Discretionary Activities - discretionary	**Consent required.** The proposal will involve land disturbance in Land Overlay 3 which will involve more than 10m³ of soil disturbance. Pursuant to C7.1.6(3), consent is required as a **restricted discretionary** activity. N/A – As assessed above, the proposed vegetation clearance will meet the permitted standards under C7.1.6.1.
C8 Natural Hazards	
C8.4.2 Rule Table - Site Caution Overlay (18) Subdivision of land in the Site Caution Overlay – restricted discretionary	N/A. Does not apply as no subdivision is proposed.
C8.5.7 Rule Table - Coastal Hazard Overlay (1) The installation or alteration of works designed to mitigate the effects of coastal hazards in the Coastal Hazard 1 Overlay - discretionary (3) Any activity, including earthworks, that will alter natural dune landform in the Coastal Hazard 1 Overlay - discretionary (4) Removal of any works designed to mitigate the effects of coastal hazard in the Coastal Hazard 1 Overlay - discretionary	**Consent required.** The proposal involves the construction of a seawall to mitigate the effects of coastal hazards in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(1), consent is required as a **discretionary** activity. The proposal involves earthworks that will alter natural dune landform in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(3), consent is required as a **discretionary** activity. The proposal involves removal of the existing seawall in the Coastal Hazard 1 Overlay. Pursuant to C8.5.7(4), consent is required as a **discretionary** activity.
C9 Natural Heritage	
C9.1.6 Rule Table – Outstanding Landscape Area Overlay (4) Vegetation clearance in Outstanding Landscape Area Overlay – permitted, provided: (a) The vegetation comprises trees or shrubs or other plants not exceeding 30cm d.b.h., and scattered amongst pasture; or	**Consent required.** Met. The proposal will involve vegetation clearance in the Outstanding Landscape Area Overlay which comprises weed plants and othr shrubs not exceeding 30cm d.b.h.

(b) The clearance is by grazing; or (c) The clearance is plantation forest thinning resulting in at least 250 evenly distributed trees remaining per hectare; or (d) The clearance is harvesting of agricultural and horticultural crops; or (e) The clearance is required under a Regional Pest Management Strategy under the Biosecurity Act 1993; or (f) The clearance is land preparation by discing, ploughing or ripping; or (g) The clearance is for fencing, confined to the extent necessary to create and maintain a stable fenceline, and not more than 5m total width; or (h) The clearance is of the indigenous understorey to plantation forest, and is incidental to permitted or otherwise authorised plantation forest clearance.	
(12) Land disturbance in the Outstanding Landscape Area Overlay – restricted discretionary, provided that: (a) The activity exposes more than 10m² of earth measured in a vertical plane view in any three month period, or disturbs more than 10m³ of earth in any three month period	The proposal will involve land disturbance in the Outstanding Landscape Area which will disturb more than 10m³ of soil. Pursuant to C9.1.6(12), consent is required as a **restricted discretionary** activity.