

**BEFORE THE OTAGO REGIONAL COUNCIL AND DUNEDIN CITY  
COUNCIL**

**IN THE MATTER** of the Resource Management Act  
1991 (**Act**)

**AND**

**IN THE MATTER** Resource Consent Applications  
ORC RM19.441 and DCC LUC-  
2019-658 – Port Otago Ltd – Te  
Rauone Beach Rock Groynes  
and Sand Re-nourishment

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**STATEMENT OF EVIDENCE OF LEZEL BOTHA  
ON BEHALF OF PORT OTAGO LIMITED**

**Date** 1 December 2020

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## STATEMENT OF EVIDENCE OF LEZEL BOTHA FOR PORT OTAGO LIMITED

### INTRODUCTION

- 1 My full name is Lezel Botha and I am a Senior Environmental Planner at GHD Ltd. I hold a Bachelors Degree with honours in Planning from the University of Auckland. I am a full member of the New Zealand Planning Institute.
- 2 I have over 12 years of experience in all facets of planning and resource and environmental management relating to: managing the application of and processing resource consent applications, policy development, project management, development of management plans and stakeholder engagement. Prior to joining GHD in 2017, I was self-employed, I also worked for Auckland Council and worked for another multi discipline consultancy firm.
- 3 I have been involved in a range of planning work for Port Otago Ltd (Port Otago) since 2018 including wharf replacements, upgrade of the multi-purpose wharf, the construction of a new administration building, the resource consent application for removal of slip material from Flagstaff, a geotechnical investigations drilling application of the Upper Harbour and am currently working on renewal of the Port Chalmers stormwater discharge permit.
- 4 My evidence is given in support of the resource consent applications lodged with the Otago Regional Council and Dunedin City Council in December 2019 by Port Otago Ltd. The application relates to a community led project for the proposed construction of rock groynes and the deposition of sand to rehabilitate Te Rauone Beach in Otago Harbour which has been subject to significant erosion. The works include the following:
  - 4.1 Construction of three rock groynes which will extend 70-80m from the existing shoreline. The groynes will be constructed of 0.5 m diameter rocks which will form the armour layer of the structure with smaller rocks (around 0.2 m diameter) forming the core of the structure.
  - 4.2 Post construction of the groynes, sand will be deposited along the north end of Te Rauone Beach. The deposition area relates to approximately 300 metres of coastline located in front of the Te Rauone Beach Reserve. The total initial deposition is predicted to be 26,500m<sup>3</sup> - 34,000m<sup>3</sup>, more or less, to be determined by an updated survey prior to construction commencing.
  - 4.3 Maintenance requirements will be dependent on monitoring and inspections, but are expected to include renourishment top ups as determined under a Maintenance and Operation Plan.
- 5 I am familiar with the area that the proposal covers and I assisted with the preparation of the *Assessment of Environmental Effects* (AEE) which was lodged in support of the proposal.
- 6 I record that I have read and agree to abide by the Environment Court's Code of Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2014. This evidence is within my area of expertise, except where I state that I rely upon the evidence of other expert witness as presented to this hearing. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

## **SCOPE OF EVIDENCE**

- 7 In preparing my evidence, I have reviewed the officer's reports prepared under Section 42A of the RMA by Hilary Lennox and Robert Buxton which both recommend that the applications be granted subject to conditions of consent. I refer to the officer's reports and conditions throughout my evidence and suggest some modifications to these, later in my evidence.
- 8 My evidence is structured as follows:
  - 8.1 Background and role;
  - 8.2 Statutory context;
  - 8.3 Submissions;
  - 8.4 Assessment of environmental effects;
  - 8.5 Assessment against policy and planning documents;
  - 8.6 Part 2 analysis;
  - 8.7 Proposed conditions; and
  - 8.8 Conclusions.

## **BACKGROUND AND ROLE**

- 9 GHD Ltd was engaged by Port Otago in September 2018 to assist with the preparation of the resource consent application for the construction of groynes and associated beach replenishment works. Port Otago have however developed this solution over a 10-year period in consultation with Te Rauone Beach Coast Care Committee (TRBCCC) as well as professional coastal engineering design advice provided by Beca and Dr Martin Single. I have been GHD's project manager and lead planner for this work. I have also worked closely with both Otago Regional Council and Dunedin City Council's reporting officers in responding to information requests and developing conditions of consent for their consideration.

## **STATUTORY CONTEXT**

### **Regional Plan: Coast for Otago (RCP)**

- 10 The relevant statutory document for assessing the resource consent sought is the Regional Plan: Coast for Otago (RCP) where works are located within the Coastal Marine Area and the Proposed Second Generation Dunedin City District Plan (2GP).
- 11 No rules identified as relevant under the 2GP are under appeal and are therefore fully operative. As a result, the Operative Dunedin City District Plan is not applicable to the application.
- 12 The site falls within a Coastal Protection Area (CPA) of the Otago Harbour as identified in Schedule 2 of the RCP. CPA17 includes the subject site and relates to the following natural features:
  - Kai Tahu cultural and spiritual values.

- Estuarine values which include a wading area for migratory birds.
  - The intertidal flats are a significant cockle habitat.
  - There are eelgrass beds in parts of this area.
- 13 Also noted in relation to the CPA is the heritage seawall and a registered midden. The works will not impact the protected seawalls or the midden.
- 14 Te Rauone Beach is listed as a Coastal Hazard Area in Schedule 3 of the RPC and highlighted as an area subject to “sandy beach erosion” with the beach, road and property noted as being at risk.
- 15 The resource consent (coastal permit) sought is for the:
- 15.1 Occupation of the coastal marine area
  - 15.2 Erection of a structure in the coastal marine area
  - 15.3 Disturbance of the foreshore and seabed
  - 15.4 Deposition of sand in the coastal marine area
  - 15.5 Discharge water and sand to the coastal marine area
- 16 Consent is required for the proposed activity as a Discretionary Activity, pursuant to Rules 7.5.1.5, 8.5.1.9, 9.5.3.6, 9.5.4.3 and 10.5.6.2 of the RCP.
- 17 In summary, I concur with the ORC reporting officer, that the application for the above coastal permits should be assessed as a discretionary activity.
- 18 In regard to the 2GP, the landward side of Te Rauone Beach is zoned as ‘Recreation’. Te Rauone Beach is also located within an ‘Archaeological Alert Layer’, a ‘Native Reserves - Otago Heads (Taiaroa/Mount Charles)’ Overlay, is a ‘Hazard 3 – Coastal’ site and is subject to two Wahi Tupuna Overlays known as the ‘Ōtākou Harbour’ and Ōtākou Native Reserve.
- 19 The 2GP resource consent is required for:
- 19.1 Large scale earthworks, including within 20m of MHWS
  - 19.2 Indigenous vegetation removal where habitat for threatened indigenous fauna species may be located (southern grass skink)
- 20 I note that through alterations made to the AEE post a s92 request for more information, that consent requirements pursuant to rules 8.3.2(3) and 8.3.2(4) relating to natural hazard mitigation earthworks and structures were removed. I determined that the proposal did not fall within the definition of “natural hazard mitigation” as the works are designed to provide beach amenity and have not been designed to mitigate natural hazards and their effects on properties.
- 21 I note that Mr Buxton has however included rules 8.3.2(3) and 8.3.2(4) as consent triggers which would make the application a discretionary activity overall. After considering Mr Buxton’s assessment, whilst the proposed rock groynes and beach replenishment works are not designed to prevent natural hazards, the proposal does arguably fall within the provisions of rules 8.3.2(3) and 8.3.2(4) as the works will assist with beach erosion remediation.

- 22 I therefore consider that the application can be considered a Discretionary Activity, pursuant to Rules 8A.3.2(3), 8.3.2(3), 8.3.2(4), 10.3.2.3(c) and 10.3.3 of the 2GP.

### **Sections 104B RMA**

- 23 The activities subject to the RCP and 2GP are classified as a discretionary activity. This means that section 104B of the RMA applies to the determination of the regional and district resource consent applications under the RCP and 2GP. This section of the RMA confirms that the consent authority may grant or refuse the application and, if granted, may impose conditions under section 108 of the RMA.

### **Section 104 RMA**

- 24 Section 104 of the Act sets out the matters to be considered when assessing an application for a resource consent. These matters are subject to Part 2, the purpose and principles, which are set out in sections 5 to 8 of the Act. Part 2 matters are discussed further below in paragraphs 87 and 88 of my evidence.

- 25 Section 104(1)(a) of the RMA requires the council to have regard to any actual and potential effects on the environment of allowing the activity. I have provided this assessment below.

- 26 I concur with Ms Lennox and Mr Buxton that the relevant statutory plans and policy statements for this application (s104(1)(b)) are:

26.1 The New Zealand Coastal Policy Statement 2010;

26.2 The Partially Operative Regional Policy Statement for Otago 2019;

26.3 The Regional Plan: Coast for Otago 2001 (RPC); and

26.4 The Second Generation Dunedin City District Plan 2018 (2GP).

Key themes from these documents are discussed later in my evidence.

- 27 Section 104(1)(c) requires the consent authority to consider any other matters relevant and reasonably necessary to determine the application. In this instance, the Heritage New Zealand Pouhere Taonga Act 2014 is relevant. As required by the conditions appended to both s42A reports, an archaeological authority is required to be obtained prior to the first exercise of the consents due to the potential effects on the historic groyne located in the shallows at Te Rauone Beach.

- 28 The Kai Tahu Ki Otago Natural Resource Management Plan 2005 (NRMP) is also relevant to the application and is discussed within paragraph 33 below.

### **Section 108 RMA**

- 29 Section 108 is relevant to the scope of any conditions that can be imposed on the resource consent.

## SUBMISSIONS

- 30 I have reviewed the submissions received. Of these submissions, 383 were in support, 2 were in opposition, and 1 was neutral. I consider that the overwhelming submissions of support received reflects that the project has been driven by the community and reflects the importance of Te Rauone Beach to the community. A number of submissions speak of the cultural and recreational significance of Te Rauone Beach and that the project will provide for future generations. As discussed in paragraph 9 above, Port Otago have been working on a design solution with the community (namely Te Rauone Beach Coast Care Committee (TRBCCC)) for more than 10 years and so the need for the project to be undertaken, is compelling.
- 31 Further to this support, of note is the submission received by Te Rūnanga o Ōtākou. The Rūnanga conclude within their submission that they *“have long sought a solution to the erosion of the sand dunes of the Te Rauone beach and the impact on cultural values, local interests and the recreation value of the area”* They recognise *“that the ‘construction’ phase will have a significant impact both on the intertidal area where the groynes are to be placed, but also in traffic movements of trucks carting the rock for the groynes and of supplementary sand also from the seaward side as well as by road”*, however they conclude that *“this is a necessary sacrifice for what we trust will be a long term solution.”*
- 32 The Rūnanga however did request the following conditions to be imposed within the relevant resource consents:
- The Kai Tahu ki Otago Natural Resource Management Plan be considered and adhered to and that;
  - Te Rūnanga o Ōtākou be informed in real time when adaptive management is being considered and that;
  - Baseline information prior to commencement of construction be undertaken.
- 33 Ms Lennox has provided an assessment of the Kai Tahu ki Otago Natural Resource Management Plan. I concur with her assessment. I also note that the relevant policies within Chapter 5.8 of the plan maintain the same themes as the relevant objectives and policies of the NZCPS, partly operative RPS and RCP. The assessment of these planning documents concluded that the relevant objectives and policies are able to be met by the project. I still consider this conclusion applicable.
- 34 Further, conditions 10, 11, 13 and 16 of the draft conditions in RM19.441.01 and condition 8 of draft RM19.441.02 require that results and reporting required within the suite of conditions be provided to Te Rūnanga o Ōtākou. I consider that these conditions sufficiently address the Rūnanga’s above required conditions.
- 35 In respect to Mr Steven Clearwater’s submission, I consider that Mr Clearwater’s submission point regarding the use of a nearer quarry could be struck out under s308B as this point of the submission is not in relation to the effects on the environment. In regard to Mr Clearwater’s comments around the traffic effects being greater than those if rock was received from a nearer quarry, I consider that this is significantly overstating any potential for additional traffic safety

effects given that trucks would still need to travel along most of the narrow stretches of road along Harington Point Road which have been identified as 'pinch points' within the Traffic Impact Assessment. Further, the rock has been identified as appropriate for use by the project's engineers Beca. I also refer to paragraph 61 of Mr Buxton's evidence, where DCC's Landscape Architect, Mr Mike Moore considers the proposed volcanic rock from the Logan Point quarry to have a similar character to the volcanic rock in the wider Te Rauone Beach context, and will be appropriate to the landscape character of the area.

- 36 Mr Clearwater's second point suggesting that long term boat mooring or a boat ramp should have been considered as part of the design is also out of scope. The project has been specifically designed over an extensive period to provide a beach amenity for the community, with significant community input. The construction and operational effects associated with a new boat ramp or mooring would be different to those proposed here, and are not proposed by the applicant, nor could such works be reasonable or related to any adverse effects of the works that are proposed to require as a condition of consent.
- 37 Mr Simon James has opposed the application as he considers that *"the dumping of rocks on the beach and the pumping of sand will in my opinion obliterate a unique piece of coastline."* Further, *"the immediate proximity of cockle beds is a concern and the effect the work may have on the ecology seems not to be considered."* I have provided comment on these points within my assessment of effects below.
- 38 The Department of Conservation (DoC) also submitted in opposition of the proposal with a range of concerns regarding to the effects on marine mammals, wild life and in particular, the effects on seagrass. Moreover, DoC did not consider that the proposed mitigation measures provided certainty and the lack of a draft Environmental Management Plan and Lizard Management Plan was concerning. Port Otago have worked closely with DoC to alleviate all of their concerns. DoC have therefore confirmed that on the basis of the proposed consent conditions being imposed and that the draft EMP and LMP are maintained, they do not have any outstanding concerns and do not wish to be heard.

## **SUMMARY OF EFFECTS**

- 39 The reporting officers identify the potential environmental effects associated with the groyne construction and beach replenishment activity. Ms Lennox's report breaks these effects into those that have been adequately addressed including effects on tides, localised changes to wave and current conditions, sediment processes, physical effects on the adjacent coastline, public access, visual, character and noise effects and the effects on the historic timber groynes. She further addresses the ecological effects separately and identifies the positive effects also. The ecological considerations have been limited to matters outstanding to DoC's submission (now resolved) and Dr Giles' (the ORC consultant technical advisor) outstanding concerns. I concur with Ms Lennox's assessment categories.
- 40 Mr Buxton identifies the potential environmental effects associated with the proposal are positive effects, visual amenity and natural character of the coast, amenity of surrounding properties, biodiversity values, public access, transportation, cultural values and stability of land, buildings and structures. I

concur with Mr Buxton's assessment categories and so provide my assessment under these themes.

### **Coastal Processes**

- 41 DoC's early submission raised concerns that the altered coastal processes could have the potential for adverse effects further afield, particularly as there are a number of ecologically and culturally significant sites in the Otago Harbour, including Aramoana and Wellers Rock. DoC considered it important that there is certainty that adverse effects will be avoided.
- 42 The effects on coastal processes caused by the project have been addressed within Beca's "*Te Rauone Beach Management Scheme – Assessment of Effects on Coastal Processes*", dated 12 March 2020 and further within Ms Jennifer Hart's evidence.
- 43 Whilst the proposed groynes will intentionally affect coastal processes to avoid further erosion of Te Rauone Beach, these effects will be positive and any adverse effects will be minor, and confined to the immediate vicinity of the works as discussed within Ms Hart's evidence.
- 44 I understand that there are not expected to be any significant effect on waves in the harbour beyond the immediate vicinity of Te Rauone Beach. Wake from large vessels at normal operating speeds may be reflected towards the channel but should not have an effect on adjacent shores, the harbour bed or channel edge geomorphology.
- 45 The southern groyne will be constructed to allow sand to pass through it to the south to continue the existing sediment transport process, and will be assisted in this process by the initial (and ongoing) placement of sand on the south side of it to address the potential for localised erosion downcoast of the groyne. As identified within the Beca report, this could have the potential to cause accretion at Wellers Rock Jetty. To mitigate and manage the possibility of this occurring, condition 10 of the ORC reporting officer's recommended conditions requires that annual surveys of water depths at Wellers Rock jetty be undertaken for the first three years following completion of the initial construction stage. Further, a report assessing levels of accretion and including recommendations for mitigation (if required) are to be provided to the ORC (and to Te Rūnanga o Ōtākou).
- 46 In regard to Aramoana and Shelly Beach, Ms Hart's evidence states "*the historic harbour entrance and channel modifications compartmentalise coastal processes at the site. Effects on the sandy foreshore at Te Rauone Beach are confined between sections of rock-protected coastline to the north and south, and the main channel / entrance channel, where strong currents and deep water provide an effective outer (western) boundary to the local coastal compartment. Accordingly, the small magnitude of the coastal change proposed is not expected to affect the general harbour processes, or the Aramoana Ecological Area and Shelly Beach which are separated from the site by the main channel.*"<sup>1</sup>

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<sup>1</sup> Hart, J, Statement of Evidence, Paragraph 39



- 47 On the basis of the Ms Hart's evidence, I concur with Ms Lennox that the effects on coastal processes have been adequately addressed. This is further provided through the proposed Maintenance and Operation Plan which will include observation of the performance of the groyne and beach renourishment components, and intervention to provide maintenance and mitigation where required.

### **Ecological Effects**

- 48 DoC initially raised concerns in regard to the ecological effects of the proposed works. Of note within DoC's submission, was that the original submitted application relied largely on the effects being managed through an Environmental Management Plan (EMP) and Lizard Management Plan (LMP) which were not drafted at the time of notification. To address these concerns, a draft EMP and LMP have been written, with the LMP now submitted to DoC to obtain a Wildlife Authority permit to mitigate the effects on the southern grass skink that are found within Te Rauone reserve.
- 49 DoC have subsequently written to confirm that their concerns raised in their submission have been addressed. This letter was sent to the ORC and DCC on the 24<sup>th</sup> November 2020, however is attached to my evidence as reference within Appendix A.
- 50 In addition to this, DoC and Dr Hilke both also raised concerns that the effects on benthic communities (infauna) and the seagrass beds to the south of the project footprint had not been adequately dealt with within the Ryder Ecological Assessment submitted with the AEE.
- 51 In response to these concerns, Port Otago engaged Dr Leigh Tait from NIWA who has prepared a report which provides metrics to outline the current status of seagrass in the region of Te Rauone Beach, identify thresholds for management intervention, recommends intervention measures, and a monitoring programme for timely identification of impacts of the planned groyne construction on the sea grass beds. This report is titled "*Managing and mitigating impacts to seagrass beds*", dated October 2020 and has been provided to the consent authorities and considered in the s42A reports.
- 52 Seagrass is identified as a highly valued ecosystem engineer that provides important ecological services such as sediment stabilisation, nutrient processing and carbon sequestration<sup>2</sup>. Seagrass is also identified as an indigenous habitat that is particularly vulnerable to modification within the New Zealand Coastal Policy Statement (NZCPS) – Policy 11. It is my understanding that Dr Tait's proposed monitoring and mitigation methodology is adequate to ensure that if there are any effects on the seagrass beds found within the vicinity of the project footprint, that these effects will be detected quickly and interventions put in place to avoid any adverse effects on the seagrass beds.
- 53 Dr Hilke Giles of Pisces Consulting has tabled some minor outstanding issues within her memorandum to Ms Lennox, dated 20 November, 2020. Most of these issues have been addressed through the revised draft EMP prepared by Port

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<sup>2</sup> Tait, L. (October 2020). *Managing and mitigating impacts to seagrass beds*.

Otago and attached to Ms Lennox's s42A report. I provide comment on those issues still considered outstanding within Table 1 below.

Table 1 - Comments on Dr Giles' outstanding issues

Issue	Comment
<p><i>The Marine Mammal and Wildlife Sighting Form is very useful. However, at the moment it would not be clear to those receiving the form why the decision was made that management action was/was not required. I suggest adding to the form a field asking for information on whether there was an interaction with the groyne construction/beach replenishment works. This information would show whether any management actions were required.</i></p> <p><i>The draft EMP does not provide for training of contractors for completing the Marine Mammal and Wildlife Sighting Form.</i></p>	<p>The Marine Mammal and Wildlife Sighting Form has been designed in consultation with DoC. It is expected that this form will be altered as necessary prior to construction commencing in consultation with DoC who are the authority that have requested this form as a requirement of the application.</p>
<p><i>The draft EMP describes pre-determined visual monitoring areas. It is not clear to me why this is necessary. Why is this not specified as the area out to the maximum seaward extent of the works? The proposed approach appears unnecessarily complicated and would require detailed knowledge of construction activities, including travel routes of vehicles. A simplified approach might be more effective.</i></p>	<p>As stated within the draft EMP, these monitoring areas are indicative only and will be altered in consultation with a suitability qualified expert. It is imperative to note that the EMP is a draft and will be finalised once the detailed construction methodology is understood.</p>
<p><i>The NIWA report does not provide a monitoring programme but, instead, a proposed monitoring programme containing suggestions and options for monitoring. This is highlighted by the frequent use of "should", "it is suggested" and "ideally". As a result, it is not clear what exact (or minimum) monitoring is proposed as part of the application.</i></p>	<p>I consider that the proposed conditions of consent adequately address the requirement for monitoring. However, a revised report is attached to Dr Tait's evidence addressing this issue.</p>

<p><i>Condition 18 (now condition 13 of the ORC's s42A report conditions) provides for a review of the trigger levels. It is not clear to me what regulatory oversight ORC will have for such reviews.</i></p>	<p>The review of trigger levels will be undertaken by a suitably qualified and independent ecologist who is familiar with the project. Duplicating this through an ecologist engaged by the regulatory authority as oversight is therefore not required.</p>
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- 54 It is noted that the lodged application included monitoring of benthic communities (burrowing and epifaunal species - infauna). This was later omitted after engaging Dr Tait. As mentioned within Ms Lennox's s42A report, this monitoring was omitted because the benthic surveys undertaken by Ryder Environmental noted a range of burrowing and epifaunal species present within and adjacent to the construction footprint, however, also noted, there were few valued or habitat forming species besides seagrass. Dr Tait therefore advised that there was no real merit of undertaking benthic monitoring as it is difficult to find meaningful metrics for the range of species found and for the minimal effect the proposed works would have on benthic (infauna) communities. This is also reflected in Dr Giles' memorandum.
- 55 The proposed conditions of consent do however require limiting vehicle tracks and excavation activities on the beach surface as far as possible to provide unnecessary damage to benthic (infauna) communities. It is also noted that there will be loss of some benthic species under the groyne footprint, however this is considered a minor effect considering the abundance of benthic communities whilst balancing the overall positive effects that the groynes and beach replenishment works will have on sustaining benthic communities.
- 56 In regard to marine mammals and other wildlife (e.g. birds), the effects will be managed through the EMP and conditions 7, 8 and 16 of proposed coastal permit RM19.441.01. This includes restricting construction access to outside of sea lion breeding season, training contractors on how to identify, record and respond to marine mammals and wildlife that may frequent pre-determined monitoring zones and management measures if sea lions and other marine mammals come within 50m of the construction works. I consider that these measures are appropriate to mitigate the effects on sea mammals and other wildlife. In addition, these conditions have been negotiated with DoC who are included within reporting requirements of these conditions.
- 57 The southern grass skink is in decline across New Zealand and are classified as being at risk and protected under the Wildlife Act (1953)<sup>3</sup>. The project does include the removal of pohuehue vineland vegetation which is habitat for the southern grass skink. The LMP has been prepared by Ryder Environmental Ltd and seeks to manage the lizard values of the projects' footprint as a single endeavour across both Port Otago and Dunedin City Council's projects<sup>4</sup>, so as to

<sup>3</sup> Tocher, M. (October 2020). *Lizard Management Plan for Te Rauone Beach*.

<sup>4</sup> DCC intend to upgrade the Te Rauone Beach Reserve. The reserve upgrade is likely to include carparks, accessways, amenities, boardwalks and a maintenance vehicle track (to manage beach access), and dune building and planting landward of the beach. The reserve upgrade, is presently still at an early concept stage and does not form part of this application but will need to interface with the proposed beach management works.

achieve a no net loss outcome over the footprint, post projects. This is broadly consistent with Policies 3.2.1 and 3.2.2 relating to habitat of indigenous fauna of the partially operative RPS; and consistent with objective 2.2.3 of the DCC 2GP. The LMP is currently being reviewed by DoC under an application for a Wildlife Act permit. A Wildlife Act permit is required prior to works commencing on site. I consider that the implementation of the LMP and the Wildlife Act permit will sufficiently protect lizards, particularly the southern grass skink, from adverse effects.

- 58 On the basis of the above assessment, including Dr Tait's evidence, I consider that the ecological effects of the project have been appropriately addressed and will be no more than minor/ satisfactorily avoided, remedied or mitigated.

### **Visual amenity and natural character of the coast**

- 59 I recognise that the rock groyne structures located on the beach may detract from the visual amenity in the area. This is due to their size and the visual amenity associated with engineering structures in the coastal marine area. The visual impacts of the rock groynes were considered during the design phase. The design only proposes the absolute minimum bulk, length and number of groynes required to ensure re-establishment of the beach is achieved. The seaward end of the groynes will also only be constructed to the height of Mean Sea Level to reduce visual impacts. I also consider that when assessing the visual impact of the rock groynes, that it is important to recognise that the coastline of the Otago Harbour, and particularly along Harington Point Road, is highly modified.
- 60 I concur with DCC's Consultant Landscape Architect, Mr Mike Moore, that the proposed groynes will integrate acceptably in the already modified coastal context, and will be seen as elements protecting the adjacent land and providing for a usable beach.
- 61 The re-nourished foreshore will restore much of the amenity lost through the advanced erosion experienced in the area through re-establishment of the beach berm and protection from further erosion and as such, this enhanced amenity will be the key influence when the community is experiencing the visual impacts of the works, in my opinion.
- 62 I also consider that the above points address Mr James' submission.

### **Amenity of surrounding properties**

- 63 I concur with Mr Buxton's assessment in that the proposed construction works will be temporary and managed through the EMP and Construction Management Plan.
- 64 Mr Buxton has requested clarification in regard to ongoing access to the beach for the proposed beach replenishment top ups. Permanent access to the beach for vehicles will be part of the DCC Reserve works and is not part of this application, however the Port Otago construction design is complimentary to the initial draft DCC plans.

### **Biodiversity values**

- 65 The removal of small areas of indigenous vegetation, namely pohuehue vineland, to construct access tracks will reduce the amount of indigenous vegetation over the Te Rauone Reserve. This effect as it relates to the vegetation itself, I consider is less than minor, but the effect on potential habitat of the southern grass skink (lizards) is considered more than minor, if not mitigated.
- 66 As a result of this potential effect, the LMP was drafted to mitigate effects on the southern grass skink. I note that Mr Buxton and DCC's Biodiversity Advisor, Mr Richard Ewans state that care should be taken when widening access routes into the reserve and to the private property used as a construction yard/temporary lay-down area to avoid effects on lizards. I consider that the LMP adequately addresses these concerns through the use of 'no go zones' as described in detail in section 7 of the LMP and further imposed within condition 46 as recommended in the DCC s42A report. I also note that the LMP addresses access to 957 Harington Point Road.
- 67 DCC's Parks and Recreation Planner, Mr Angus Robertson, has some uncertainty over final access arrangements, public health and safety, and vegetation removal. I concur with Mr Buxton that these matters can be addressed through the proposed conditions of consent, notably condition 35 as recommended by him.
- 68 Ms Hart's evidence has addressed Mr Buxton's comments in regard to the effects of microplastics being released from the geotextile cloth used within the groynes and under gravels for temporary access.

### **Public access**

- 69 As discussed by both Ms Lennox and Mr Buxton, whilst public access will be limited during construction, I consider this temporary and necessary from a health and safety viewpoint.
- 70 Post construction works, access to the southern beach will be provided via the proposed boardwalk and beach access will be significantly enhanced through the project.

### **Transportation**

- 71 I consider that traffic effects will be mitigated through the proposed Traffic Management Plan which will address safety issues particularly around narrow points along Harington Point Road and at the access to the site.
- 72 I can confirm that the sight lines from the temporary construction access point at 957 Harington Point Road are adequate and comply with Rule 6.6.3.2.b of the 2GP. A diagram showing the distances is provided within Appendix B.

### **Cultural Values**

- 73 As discussed within paragraphs 31-32 above, Te Rūnanga o Ōtākou are in support of the project subject to conditions which have been incorporated

appropriately within the draft consent conditions. I consider that their support addresses effects on cultural values, along with the assessment of the Kai Tahu ki Otago Natural Resource Management Plan discussed in paragraph 33 above.

### **Stability of land, buildings and structures**

- 74 I consider that the proposed earthworks are minimal and are required to establish laydown areas and construction vehicle access within the reserve and onto the beach. Earthworks are limited to:
- Temporary accessways, expected to comprise a running course of clean AP65 aggregate (approximately 1500m<sup>2</sup> area and 300m<sup>3</sup> in situ volume) placed over geogrid/geofabric, with minor grading of the sandy backshore at the beach accesses to provide a smooth transition between land and beach (up to 400m<sup>2</sup> area and 300m<sup>3</sup> in situ volume of grading);
  - Temporary disturbance of the beach surface by vehicle tracks and excavation; and
  - Minor stockpiling of sand and rock for beach nourishment and groyne construction.
- 75 In respect of Mr Buxton's comments in regard to the effects that the groynes might have on neighbouring properties during a tsunami event, Ms Hart has provided some comment within her evidence. I concur with Ms Hart's statement.

### **Positive effects**

- 76 I concur with both Ms Lennox and Mr Buxton that there are significant positive effects associated with the project. This includes enhanced beach amenity providing a much-needed community recreation area and enhanced ecological habitat which includes a new haul-out location for sea lions and tidal flat habitat for indigenous birds and benthic communities including native seagrass beds.
- 77 The positive effects are also reflected in the significant amount of submissions in support of the application.

### **Effects Assessment Conclusion**

- 78 I consider that any adverse effects can be appropriately managed through the proposed conditions of consent and adaptive management approach and that there will be significant positive effects for the environment and the local community will arise as a result of the proposed beach renourishment.

### **POLICY AND PLANNING DOCUMENTS**

- 79 The general themes from the objectives and policies contained within the planning documents is to safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems.
- 80 Since assessing the relevant objectives and policies within the planning documents, no changes have been made to these. The AEE submitted with the application concluded that the project is able to meet the relevant objectives and policies of the following relevant planning documents:

- New Zealand Coastal Policy Statement 2010
- Partially Operative Regional Policy Statement 2019
- Regional Plan: Coast for Otago
- Second Generation Dunedin City District Plan (2GP)

I still consider this conclusion to be valid and therefore will not repeat a detailed assessment within my evidence, however would reiterate that the project is consistent with Policy 11 of the NZCPS.

81 Policy 11 is as follows:

*To protect indigenous biological diversity in the coastal environment:*

- a. *avoid adverse effects of activities on:*
  - i. *indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;*
  - ii. *taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;*
  - iii. *indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;*
  - iv. *habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;*
  - v. *areas containing nationally significant examples of indigenous community types; and*
  - vi. *areas set aside for full or partial protection of indigenous biological diversity under other legislation; and*
- b. *avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:*
  - i. *areas of predominantly indigenous vegetation in the coastal environment;*
  - ii. *habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;*
  - iii. *indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;*
  - iv. *habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;*
  - v. *habitats, including areas and routes, important to migratory species; and*
  - vi. *ecological corridors, and areas important for linking or maintaining biological values identified under this policy.*

82 I consider Policy 11 most applicable given the presence of ‘at risk declining’ southern grass skink and indigenous ecosystems and habitats that are ‘particularly vulnerable to modification’, including eelgrass<sup>5</sup>.

<sup>5</sup> *Zostera Marina* (Seagrass), is commonly referred to as eelgrass.

- 83 As discussed within paragraph 57 above, the LMP's objective is to achieve a no net loss of southern grass skink over the footprint, which is directly consistent with Policy 11(a)(i).
- 84 As discussed in paragraphs 51-52 above, the proposed monitoring and mitigation methodology is adequate to ensure that if there are any effects on the seagrass beds found within the vicinity of the project footprint, that these effects will be detected quickly and interventions put in place to mitigate any significant adverse effects on the seagrass beds. I consider this consistent with Policy 11(b)(iii).
- 85 I also note that Ms Lennox and Mr Buxton have both undertaken an assessment of the relevant planning documents within their s42A reports and have both concluded that the application is consistent with the relevant objectives and policies.
- 86 Overall, I consider the proposal aligns well with the relevant objectives and policies in the 4 statutory planning documents applicable to this proposal.

## **PART 2 ANALYSIS**

- 87 Recent case law has confirmed that where a plan has been prepared having regard to Part 2, and with a coherent set of policies designed to achieve clear environmental outcomes, then reference to Part 2 in considering a resource consent does not add anything to the evaluative exercise. This is because s5 - purpose, s6 - matters of national importance, s7 - other matters and s8 - Treaty of Waitangi, have already been considered in the formulation of the plan. I agree with Ms Lennox and Mr Buxton that the RCP and 2GP plans are valid planning documents that give effect to the higher order planning instruments. For this reason, no Part 2 assessment is required.
- 88 However, I note at a high level, the RMA seeks to enable development where the sustainable management of natural and physical resources is able to be achieved. In my view, the sustainable management purpose of the RMA is achieved through this project. The project will enable people and communities to provide for their social, economic and cultural wellbeing and health and safety, in particular through providing for the continued enjoyment of the beach by current and future generations through the regeneration of a beach which will be lost if left to erode further whilst the effects of the project will be mitigated through the proposed management plans and the adaptive management approach.

## **CONDITIONS**

- 89 Port Otago has worked closely with ORC to draft the proposed conditions attached to Ms Lennox's S42A report. Whilst Port Otago agree with these conditions, Port Otago do not agree to proposed Condition 25 of proposed permit RM19.441.01. I consider that this consent condition is probably ultra vires (the condition relies on a further resource consent to be granted for removal of those parts of the structure that remain in the coastal marine area and the ORC has no jurisdiction over those parts which are removed from the coastal marine area) and, in any event, is extremely onerous because of the large cost, difficulty and environmental effects associated with the removal of these structures. I recommend that this consent condition is removed.



- 90 In relation to the proposed DCC consent conditions, whilst I agree with the majority of these, they are however repetitive of the conditions of the ORC and have no relevance in relation to the DCC consent triggers. These would make DCC approvers of some requirements that DCC have no jurisdiction on including bathymetric surveys, seagrass monitoring etc and require additional administration by Port Otago. I recommend that any monitoring and reporting requirements that are for activities solely within the jurisdiction of the CMA should be deleted.

## **CONCLUSIONS**

- 91 I consider the effects of the rock groyne construction and beach replenishment activity can be appropriately managed within the environmental confines established by the consent conditions attached to the reporting officers' s42A reports subject to the proposed changes above.
- 92 Overall, I consider the proposal, subject to the conditions of consent, represents sustainable management of natural and physical resources.
- 93 I am happy to answer any questions that the hearing panel may have in relation to my evidence.

***Appendix A – DoC Letter***

***Appendix B – Sight Distance Diagrams***

***Appendix C – DCC Conditions***

## Appendix A – DoC Letter



Our Ref: NC147, NC148  
Date: 24<sup>th</sup> November 2020

Otago Regional Council  
70 Stafford St  
Private Bag 1954  
DUNEDIN  
Attn: Karen Bagnall

Dear Karen

**JOINT HEARING: PORT OTAGO LIMITED - OTAGO REGIONAL COUNCIL RM 19.441 AND DUNEDIN CITY COUNCIL LUC-2019-658 - WITHDRAWAL OF REQUEST TO BE HEARD**

The Director-General of Conservation lodged a submission on these applications.

Following that, Department of Conservation staff have consulted with the applicant and council staff, and have been able to address the concerns raised in the submission. The outcomes of that are reflected in the conditions which are recommended in the s42A reports.

On that basis I advise that the Director-General no longer wishes to be heard on these applications.

I would appreciate if you could pass this letter on to the hearing commissioner, and a copy has also been sent to Rebecca McGruther for the applicant's records. If you or the commissioner have any questions regarding this, please contact Murray Brass at (027) 213 3592 or [mbrass@doc.govt.nz](mailto:mbrass@doc.govt.nz).

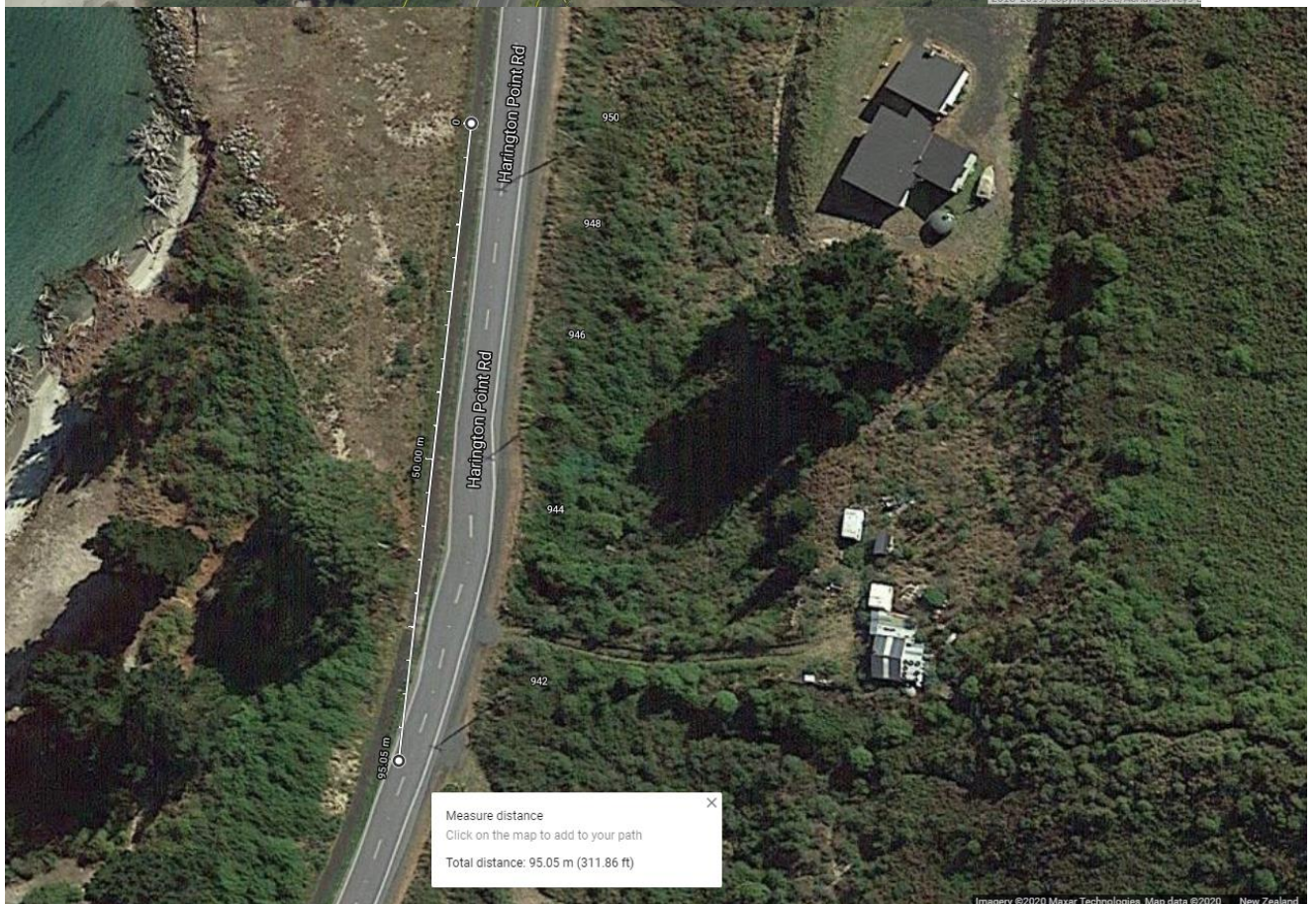
Yours sincerely,

Craig Wilson  
**Operations Manager, Coastal Otago**  
Pursuant to a delegation for the Director-General of Conservation<sup>1</sup>

cc: Port Otago Ltd, 15 Beach St, Port Chalmers 9023, [rmcgruther@portotago.co.nz](mailto:rmcgruther@portotago.co.nz) →

<sup>1</sup> Note: A copy of the Instrument of Delegation may be inspected at the Director-General's Office at Conservation House, *Whare Kaupapa Atawhai*, 18/32 Manners Street, Wellington 6011.

## Appendix B – Sight Distance Diagrams



## Appendix C – DCC Conditions

**Consent Type:** Land Use Consent  
**Consent Number:** LUC-2019-658

**Purpose:** The construction and maintenance of three rock groynes with a boardwalk over the southernmost groyne, the deposition of sand for the purpose of beach renourishment, and earthworks and vegetation clearance during construction at Te Rauone Beach, Otago Peninsula.

**Location of Activity:** 935 and 957 Harington Point Road, Otago Peninsula.

**Legal Description:** Lot 1 Deposited Plan 6468 (Record of Title 99423), Lot 2 Deposited Plan 375006 (Record of Title 307226), Lot 2 Deposited Plan 18598 (Record of Title 40236) and Part Otakou Blk A2 Lot 47 Blk (Record of Title 518540)

**Lapse Date:** *Insert date five years from decision, unless the consent has been given effect to before this date.*

### Conditions:

1. *The proposed activity must be undertaken in general accordance with the approved plans attached to this certificate as Appendix One, and the information provided with the resource consent application received by the Council on 9 December 2019, and updated in further information received on 3 April 2020, except where modified by the following conditions.*
2. *The activity authorised by this consent must only be exercised in conjunction with Otago Regional Council Coastal Permit RM19.441.01 and Coastal Permit RM19.441.02.*
3. *This consent must not be exercised until an Archaeological Authority is in place from Heritage New Zealand Pouhere Taonga.*
4. *This consent must not be exercised until a Department of Conservation Wildlife Authority is in place for the management of lizards.*
5. *The Consent Holder must notify the Consent Authority ~~and the Otago Harbourmaster~~ in writing of the commencement date of the initial groyne construction and beach renourishment stage, and any subsequent beach renourishment works, no less than 10 working days prior to the commencement of these works.*
6.
  - a) *The Consent Holder must notify the Consent Authority in writing of the completion of the initial groyne construction and beach renourishment stage, and any subsequent beach renourishment works, and provide photographs of the area/s where work has been undertaken, no less than 10 working days following the completion of works.*
  - b) *Photographs must be in JPEG form.*

### Environmental Management Plan

7.
  - a) *The Consent Holder must ensure that all staff (including all sub-contractors) involved in, or supervising, works onsite have attended an Environmental Site Induction before they begin working on-site.*
  - b) *The Consent Holder must maintain a register of all those who have attended an Environmental Site Induction and make this register available to the Consent Authority upon request.*

- c) *The Consent Holder must ensure that all personnel working on the site have access at all times to the contents of this consent document and the Environmental Management Plan at all times.*
- 8.
- a) *The consent holder must provide the Consent Authority with a finalised Environmental Management Plan for review and acceptance at least 15 working days prior to the exercise of this resource consent. The Consent Authority's review and acceptance is for the purpose of checking consistency with the conditions of this consent and for those matters only outlined below.*
- b) *The finalised Environmental Management Plan must be prepared with guidance from a suitably qualified and experienced person.*
- c) *The objectives of the Environmental Management Plan must be to incorporate industry best practice, guide environmental management for the duration of consented activities, and to establish measures to avoid, remedy or mitigate any adverse environmental effects associated with the consented activities, including (but not limited to) adverse effects on marine wildlife and lizards ~~and seagrass beds.~~*
- d) *The Environmental Management Plan must be based on the draft Environmental Management Plan dated XX November 2020 and include, but not be limited to:*
- i. *A list of key personnel and points of contact during the project;*
  - ii. *A description of how stakeholders will be kept informed and involved during the project and how complaints will be managed;*
  - iii. *A copy of the Construction Management Plan, which must include a description of the staging for the project identifying the likely duration of each stage, plus a description of the construction methodology;*
  - iv. *A monitoring plan that describes the scale and intensity of monitoring of actual and potential adverse effects on ~~seagrass beds~~, marine wildlife, public access, lizards, and noise;*
  - v. *A description of what actions will be taken to adaptively manage the actual and potential effects of the works authorised by this consent (including those in relation to ~~seagrass beds~~, marine wildlife, public access, lizards, and noise) to satisfy consent conditions.*
  - vi. *This consent must be exercised in accordance with the Environmental Management Plan at all times.*

## **Maintenance and Operation Plan**

- 9.
- a) *A Maintenance and Operation Plan must be prepared based on the Outline Maintenance and Operation Plan provided within the BECA Detailed Design Report dated 12 March 2020. This Maintenance and Operation Plan must be submitted to the Consent Authority within 2 months following the completion of the initial beach renourishment stage. The Maintenance and Operation Plan must include the following:*
- i. *Details of beach ~~and bathymetric~~ surveys to be undertaken, which must be at the frequency set out in Condition 10. This must include the method of survey to enable assessment of changes in vertical level;*
  - ii. *Details of the survey area for beach and nearshore surveys, which must extend 150m north and south of the project site. The survey area for the nearshore surveys must extend 50m seaward of the seaward end of the groynes;*
  - iii. *An outline of beach nourishment maintenance and actions post significant storm events, and an outline of methodologies associated with these;*

- ~~iv. Details of inspections of rock structures, markers and signs to be undertaken, which must be at the frequency set out in Condition 10;~~
  - ~~v. An outline of rock structure maintenance and actions post significant storm events, and an outline of methodologies associated with these;~~
  - vi. Mechanisms for gathering community feedback in regard to ~~groynes and~~ beach conditions with reporting of this feedback provided in line with the beach survey frequency outlined in Condition 10 below.
- b) This consent must be exercised in accordance with the Maintenance and Operation Plan at all times.
10. Post construction monitoring must be included in the Maintenance and Operation Plan and must be undertaken at no less than the following frequencies:
- a. Post-storm inspections of the ~~groynes and~~ renourishment following significant storm events (events with 10% or less AEP) throughout the duration of this consent;
  - b. Quarterly beach and nearshore surveys for the first year following completion of the initial construction stage;
  - c. Annual beach and nearshore surveys to be undertaken at 2 and 3 years following completion of the initial construction stage. Any subsequent surveys must be carried out as detailed in a report prepared by a suitably qualified and experienced person. This report must assess and provide recommendations for monitoring frequency going forward, and be provided to the Consent Authority and Te Rūnanga o Ōtākou within 6 months of the 3-year beach and nearshore survey;
  - ~~d. A bathymetric survey within one month following completion of the initial construction stage, and then at six months and twelve months after completion of the initial construction stage. Any subsequent surveys must be carried out as detailed in a report prepared by a suitably qualified and experienced person. This report must assess and provide recommendations for monitoring frequency going forward, and be provided to the Consent Authority and Te Rūnanga o Ōtākou within 6 months of the 12-month bathymetric survey;~~
  - ~~e. Annual inspections of the rock groynes, markers and signs for the first three years following completion of the initial construction stage. Any subsequent inspection must be carried out as detailed in a report prepared by a suitably qualified and experienced person. This report must assess and provide recommendations for monitoring frequency going forward, and be provided to the Consent Authority and Te Rūnanga o Ōtākou within 6 months of the 3-year inspection;~~
  - ~~f. Annual surveys of water depths at Wellers Rock jetty for the first three years following completion of the initial construction stage. Any subsequent surveys must be carried out as detailed in a report prepared by a suitably qualified and experienced person. This report must assess and provide recommendations for monitoring frequency going forward, and be provided to the Consent Authority and Te Rūnanga o Ōtākou within 6 months of the 3-year depth survey.~~
  - g. Results of each monitoring event must be submitted to the Consent Authority within three months of the monitoring being undertaken. Monitoring results must also be forwarded to Te Rūnanga o Ōtākou, Department of Conservation and Te Rauone Beach Coast Care Committee (TRBCCC).
- 11.
- a. The Maintenance and Operation Plan must be updated as required based on the post-construction monitoring for the maintenance requirements, actions and methodologies (including top up and recycling methods).
  - b. Following the completion of any update, a copy of the updated Maintenance and Operation Plan must be submitted to the Consent Authority and Te Rūnanga o Ōtākou within 5 working days for information.

## Seagrass Monitoring and Adaptive Management

- ~~12. Seagrass baseline and ongoing monitoring must be carried out by a suitably qualified ecologist for Te Rauone and Omate Beaches in accordance with the report entitled Managing and mitigating impacts to seagrass beds—Te Rauone erosion remediation, prepared by NIWA, dated October 2020 to monitor and assess the effects of the construction and beach renourishment works on seagrass beds and to indicate when adaptive management trigger levels are met, as follows:~~
- ~~a. Seagrass baseline monitoring must be undertaken prior to the first exercise of this consent.~~
  - ~~b. Aerial imaging monitoring of Te Rauone and Omate Beaches must be carried out during construction activities at a minimum of once per month, unless additional monitoring is required as part of the management trigger thresholds as outlined in Condition 12c) below.~~
  - ~~c. Where any of the adaptive management thresholds are triggered, increased monitoring in accordance with the report entitled “Managing and mitigating impacts to seagrass beds—Te Rauone erosion remediation” prepared by NIWA, dated October 2020 must commence.~~
  - ~~d. Post completion of the initial groyne construction initial and beach renourishment stage, monitoring frequency may be reduced to three monthly for one year. The need for ongoing monitoring beyond this must be re-assessed within the reporting required by Condition 13.~~
- ~~13. A short report summarising the results of the seagrass monitoring required by Condition 12 must be prepared by a suitably qualified ecologist(s) and submitted to the Consent Authority and Te Rūnanga o Ōtākou within two weeks of monitoring occurring. The report must analyse each new set of results (in isolation and in the context of previous results), apply the adaptive management framework described in the report entitled Managing and mitigating impacts to seagrass beds—Te Rauone erosion remediation, prepared by NIWA, dated October 2020, report on differences between impact and control sites, discuss any trends between successive surveys and review overall effects. The report must also review the suitability of the 10%, 30% and 50% triggers for the adaptive management process and advise on any adjustments for future monitoring.~~
- ~~14. Where the thresholds for adaptive management are triggered, the management actions for either the 10%, 30% or 50% trigger levels must commence in accordance with the report entitled Managing and mitigating impacts to seagrass beds—Te Rauone erosion remediation, prepared by NIWA, dated October 2020.~~
- ~~15. Groyne construction and/or beach replenishment activities must not re-start until the thresholds identified within the report entitled Managing and mitigating impacts to seagrass beds—Te Rauone erosion remediation, prepared by NIWA, dated October 2020, are met.~~

## Marine Mammals and Wildlife

16. The consent holder must take all reasonable efforts to minimise harm to marine mammals, wildlife and lizards whilst undertaking construction, monitoring and maintenance activities associated with the exercise of this consent. This includes, but is not limited the following measures:
- a. No works are to be undertaken in the Coastal Marine Area sea lion haul out areas during mid-December to early February each year to avoid the sea lion breeding season.
  - b. Contractors must be trained by a suitability qualified expert on how to identify, record and respond to marine mammals and wildlife that may frequent pre-determined monitoring zones.

- c. *In the event that marine mammals are sighted within the pre-determined monitoring zone, the following actions must be taken:*
  - i. *No vehicles may come within 50m of a sea lion or other marine mammal.*
  - ii. *Contractors must withdraw to at least 50m of an approaching sea lion (or to a greater distance if 50m allows human/sea lion interaction).*
  - iii. *If required, Department of Conservation must be called for assistance and no attempts may be made to interact/move/scare any marine mammal/bird from the project area without guidance from the Department of Conservation.*
  - iv. *If a sea lion or other marine mammal is spotted in the harbour/on land within the pre-determined monitoring zone, all construction activities must be stopped until the location of the sea lion/marine mammal is ascertained and/or has been confirmed to have moved away.*
- d. *If any marine mammals or wildlife are found in a distressed state, the Department of Conservation must be contacted in the first instance to assess the animal/bird and undertake necessary action. An appropriate wildlife facility can be contacted if the Department of Conservation is unavailable.*
- e. *Sightings and any management actions undertaken must be recorded, including the species, the type of interaction(s) with the works (if any) and other relevant details required by the Environmental Management Plan. This record must be submitted to the Consent Authority, the Department of Conservation, Te Rūnanga o Ōtākou and TRBCCC by 1st of April each year during the exercise of this consent.*

## **Beach Renourishment**

- 17.
  - a. *The volume of sand deposited as part of the initial beach renourishment stage must be in accordance with the application titled "Port Otago Ltd, Te Rauone Beach Rock Groynes and Sand Re-nourishment Resource Consent Application, dated April 2020. This must be deposited generally as illustrated on drawing number 3331121-CA-103 Rev G prepared by Beca, dated 06.03.20, attached as Appendix 1.*
  - b. *An updated survey prior to construction works must be undertaken to determine the final amount of sand required and that volume provided to the Consent Authority no less than 5 working days prior to the start of initial beach renourishment stage.*
- 18. *Sand deposited onto Te Rauone Beach must only be derived from dredging material sourced from the Port Otago Harington Bend claim area as authorised by the Regional Plan: Coast for Otago or by Resource Consent 2010.193.*
- 19. *Sand with an average grain size of no less than 0.2mm and with less than 2% fines must be used for beach renourishment.*
- 20. *Within one month following the completion of the initial beach renourishment stage, a final as-built survey must be completed to determine an estimation of the actual volume of sand imported with this being provided to the Consent Authority.*
- 21. ~~*The discharge, after reasonable mixing, must not give rise to all or any of the following effects in the receiving water:*~~
  - ~~a. *The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or*~~
  - ~~b. *Any conspicuous change in the colour or visual clarity; or*~~
  - ~~c. *Any emission of objectionable odour; or*~~
  - ~~d. *Any significant adverse effects on aquatic life.*~~

## **Groynes**



- ~~22. The occupation of the Common Marine Area and Coastal Marine Area must be restricted to the area occupied by the groynes and their appurtenant component and accessory structures as illustrated on the plans provided with the Resource Consent Application dated April 2020.~~
- ~~23. The groynes and all their appurtenant component and accessory structures must be maintained in a tidy, safe and structurally sound condition at all times.~~
- ~~24. The assigned coastal permit number plaque (RM19.441.01) must be affixed and clearly displayed on the landward side of each groyne.~~
- ~~25. Within one month of the fifth anniversary date of the commencement of this consent and thereafter on the same date every five years, the Consent Holder must submit to the Consent Authority a structural integrity assessment from an independent and suitably qualified engineer that assesses the structural integrity of the structures.~~
- ~~26. Unless a replacement consent is applied for and granted, If, under Otago Regional Council Coastal Permit RM19.441.01 the Consent Holder is required to remove the structures and all associated materials from the CMA, the Consent Holder, at the Consent Holder's expense, must remove the structures and all associated materials from the landward side of the CMA and provide written confirmation of this to the Consent Authority, within 40 working days of any of the following events occurring:~~
- ~~a. The expiry of a resource consent Permit RM19.441.01; or~~
  - ~~b. The consent Permit RM19.441.01 being surrendered or cancelled; or~~
  - ~~c. The structures becoming derelict or abandoned.~~

## **General**

27. Disturbance of the beach surface by vehicle tracks and excavation activities must be limited as far as possible.
28. The general public or any person(s) must not be excluded from the area or any part of the area to which this consent applies, unless necessary for the primary purpose of constructing, maintaining and repairing the structures and beaches, and only to the extent necessary to enable the construction, maintenance and repair works to be undertaken.
29. All work must be undertaken between the hours of 7am to 7pm, Monday to Saturday, excluding public holidays.
30. The Consent Holder must maintain a record of any complaints relating to the exercise of this consent. The register must include, but not be limited to:
- a. The date, time, location and nature of the complaint;
  - b. The name, phone number, and address of the complainant, unless the complainant elects not to supply this information;
  - c. Action taken by Consent Holder to remedy the situation and any policies or methods put in place to avoid or mitigate the problem occurring again.
- A record of the complaints must be made available for inspection by the Consent Authority upon request.
31. The site must be left in a clean and tidy state on completion of the authorised works. Disestablishment, including removal of temporary accesses, site offices, plant and any surplus materials and reinstatement of the contractor's site area must be completed at the end of the works authorised by this consent. All machinery, fencing, signs, chemicals, rubbish, debris and other materials must be removed upon completion of the works.
32. For the duration of all works authorised by this consent:

- a. All machinery must be clean, free of contaminants and in good repair, prior to entering the common marine and coastal area;
- b. No construction materials may be left in a position where they could be carried away by storms, floods, waves or other natural events;
- c. The Consent Holder must take all practicable measures to prevent spills of hazardous substances being discharged into the common marine and coastal area. Such measures may include, but not be limited to;
  - i. all practicable measures must be undertaken to prevent oil and fuel leaks from vehicles and machinery;
  - ii. fuel storage tanks and machinery must be maintained at all times to prevent leakage of oil and other contaminants into the common marine and coastal area;
  - iii. no refuelling of machinery or equipment must occur in the common marine and coastal area;
  - iv. there must be no storage of fuel within 50 metres of the common marine and coastal area;
  - v. a spill kit, that is capable of absorbing the quantity of oil and petroleum products that may leak or be spilt must be kept on-site at all times.
- d. The Consent Holder must inform the Consent Authority immediately and no later than 24 hours of a leak or spill that is greater than 50 litres and must provide the following information;
  - i. the date, time, location and estimated volume of the spill;
  - ii. the cause of the spill;
  - iii. the type of contaminant(s) spilled;
  - iv. clean up procedures undertaken;
  - v. details of the steps taken to control and remediate the effects of the spill on the receiving environment;
  - vi. an assessment of any potential effects of the spill; and
  - vii. measures to be undertaken to prevent a recurrence.
- e. All damage and disturbance ~~to the foreshore and / or seabed~~ caused by vehicle traffic, plant and equipment must be remedied as soon as practicable;
- ~~f. All machinery, equipment, construction materials, surplus spoil, or cut vegetation must be removed from the common marine and coastal area at the completion of each day's work and/or when the incoming tide dictates that work must cease.~~

33. In the event that an unidentified archaeological site is located during works, the following will apply;

- a. Work must cease immediately at that place and within 20 metres around the site.
- b. All machinery must be shut down, the area must be secured, and the Heritage New Zealand Pouhere Taonga Regional Archaeologist and the Consent Authority must be notified.
- c. If the site is of Maori origin, the Consent Holder must also notify the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, as long as all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act 2014, Protected Objects Act 1975).
- d. If human remains (koiwi tangata) are uncovered the Consent Holder must advise the Heritage New Zealand Pouhere Taonga Regional Archaeologist, NZ Police, the Consent Authority and the appropriate iwi groups or kaitiaki representative and the above process under (c) will apply. Remains are not to be disturbed or moved until such time as iwi and Heritage New Zealand Pouhere Taonga have responded.
- e. Works affecting the archaeological site and any human remains (koiwi tangata) must not resume until Heritage New Zealand Pouhere Taonga gives written approval for work to continue. Further assessment by an archaeologist may be required.
- f. Where iwi so request, any information recorded as the result of the find such as a description of location and content, must be provided for their records.

34. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent during the period of three months either side of the date of granting

of this consent each year, or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this consent, for the purpose of:

- a. *Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment that may arise from the exercise of the consent and is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;*
  - b. *Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant regional plans, and/or the Otago Regional Policy Statement;*
  - c. *Reviewing the frequency of monitoring or reporting required under this consent;*
  - d. *Amending the monitoring programme set out in accordance with Conditions 10 and 12.*
35. *The Consent Holder must submit final plans and details of proposed works to be undertaken on the DCC Reserve land (935 Harington Point Road) to the Dunedin City Council Parks and Recreation Services Department (DCC PARS) for review before any work is carried out on the reserve land. As part of this review, the following must apply:*
- a. *Any damage to the reserve as a result of access formation and/or occupation for construction work must be remediated by the Consent Holder.*
  - b. *Prior approval must be obtained from the DCC PARS Urban Forest Officer for any proposed pruning or removal of trees on the reserve land by the Consent Holder*
  - c. *Prior approval must be obtained from a DCC PARS Parks Officer for any vegetation clearance in addition to what is shown in drawing number 3331121-CA-103 Rev G prepared by Beca, dated 06.03.20.*
36. *Signage must be erected by the applicant at all reserve entrances advising on work, likely hazards and proposed duration.*
37. *The Consent Holder must adopt all practicable measures to mitigate dust and to control and contain sediment-laden run-off.*
38. *All activities must be planned and managed in accordance with the provisions contained in New Zealand Standard NZS 6803:1999 "Acoustics-Construction Noise".*
39. *If, with the agreement of the DCC PARS Parks Officer, any fill material used for the construction site or access that is to remain on the sites, it is to be recorded on a plan showing extent and depth, and provided to the Consent Authority with a month of the completion of the construction phase.*

## **Transport**

40. *The Consent Holder must prepare and submit a comprehensive Traffic Management Plan (TMP) to DCC Transport for acceptance, to ensure that the safety and efficiency of the transport network throughout the duration of the project is maintained to an appropriate standard. The TMP must include, but not be limited to, the following:*
- a. *Management of traffic along Harington Point Road adjoining the construction areas;*
  - b. *Access and parking for contractors; and*
  - c. *Specification of any additional measures necessary during periods of activities which involve high levels of truck movements and construction vehicles, including portions of Harington Point Road where the carriage is narrow (including communication and any necessary physical management steps).*
41. *Heavy vehicles associated with the transportation of material as proposed must use the haul route identified in the revised resource consent application (Traffic Impact Assessment, dated 19 November 2019), unless otherwise approved by DCC Transport.*

42. *Any damage to any part of the footpath or road formation as a result of the project works must be reinstated at the Consent Holder's cost.*
43. *The Consent Holder must prepare and submit detailed engineering plans for the construction vehicle accesses to DCC Transport for approval. The plans must include, but shall not be limited to the following matters:*
  - a. *Suitable construction/engineering details for the vehicle crossings, between the Harington Point Road carriageway and the property boundary*
  - b. *Suitable construction/engineering details for the vehicle accesses within the site, such that the potential effects relating to migration of loose material from the site onto the footpath/road carriageway are avoided.*
44. *The construction vehicle accesses must be constructed in accordance with the approved engineering plans required by Condition 43.*

### **Lizard Management Plan**

45. *A Lizard Management Plan (LMP) must be developed for the DCC Te Rauone Recreation Reserve that includes the project footprint, in collaboration with DCC PARS, and submitted to the Consent Authority, Department of Conservation (DOC) and Otago Regional Council – Compliance, 20 working days prior to construction commencing. All work undertaken under this consent must be in accordance with the LMP. The LMP must outline the actions required to minimise adverse effects on lizards and include:*
  - a. *The Lizard Management Plan must be developed by a suitably qualified and experienced herpetologist;*
  - b. *The Lizard Management Plan must include, but need not be limited to, the following actions:*
    - i. *A description of the lizard values of the footprint and adjacent reserve and the actual and potential effects of the construction on these values;*
    - ii. *The Wildlife Permit from the Department of Conservation under the Wildlife Act 1953 required in Condition 4;*
    - iii. *Creation of specific lizard habitat areas at least commensurate to the area of habitat for lizards likely to occur within the footprint.*
    - iv. *Identification of a 'no go' zones*
    - v. *Capture and relocation of lizards;*
    - vi. *Protection of lizards in relation to construction activities and predators;*
    - vii. *Monitoring to determine baseline relative abundance of lizards pre-works and survival and population establishment/growth during the works and post-works.*
    - viii. *Reporting requirements including, salvage report, monitoring reporting and requirements to report lizard sightings.*
46. *Prior to the commencement of works, any 'no-go' zones identified in the Lizard Management Plan must be conveyed to the contractor and marked on the ground for avoidance. No work shall commence until no-go zones are marked. In addition to any no-go zones requiring marking, laydown areas and construction vehicle tracks/parking must only use the tracks and laydown areas as shown on the Beca plan referenced 3331121-SK-002 to further minimise the potential impact on indigenous lizards.*