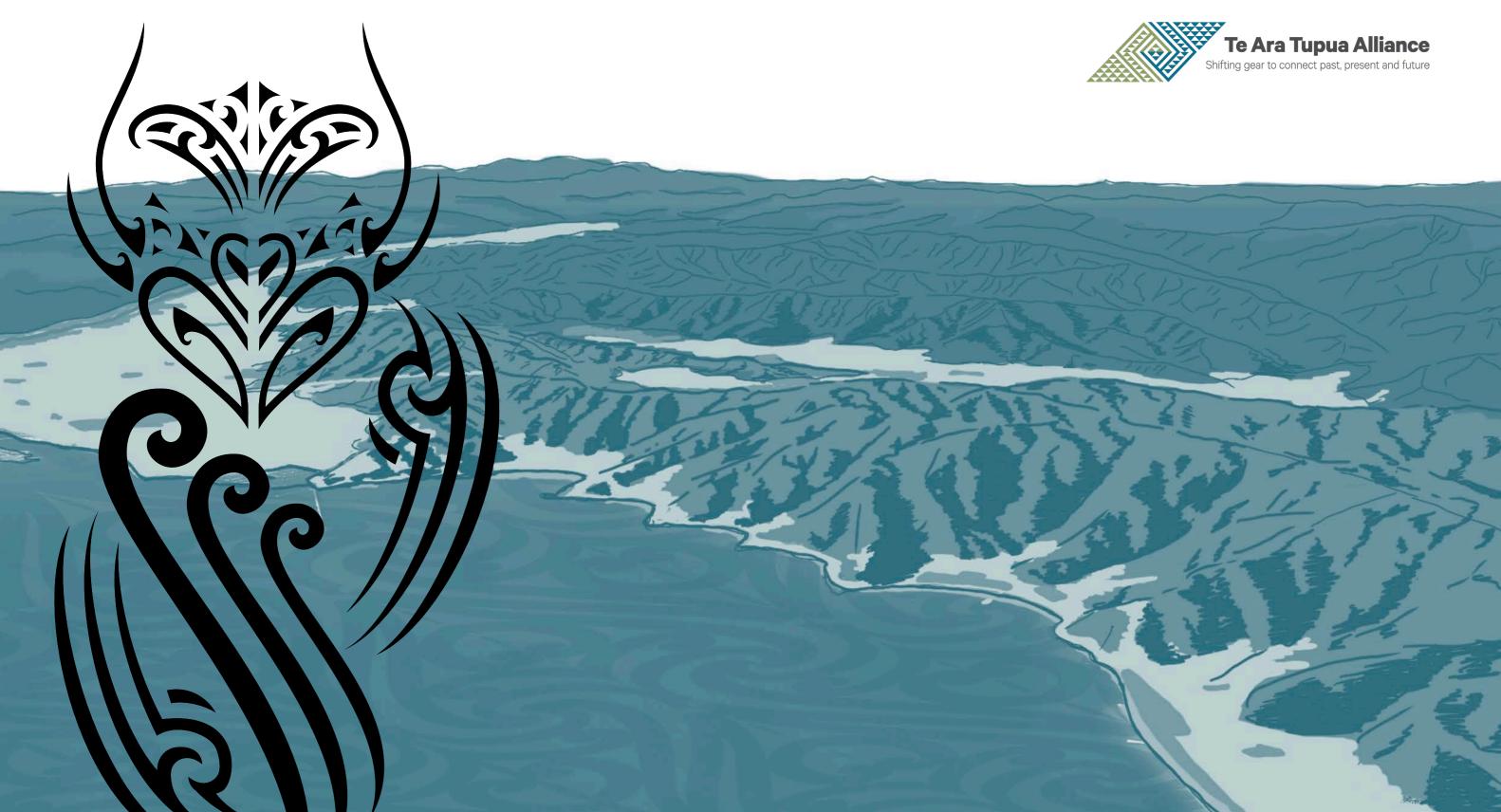
# **Tupua Horo Nuku.** York Bay - Design Protocols.

York Bay - Design Protocols. Eastern Bays Shared Path NKP-TAT-THN-PLN-LS-LS-000002











# **Contents.**

Introduction.	3
Tupua Horo Nuku.	4
Compliance Matrix	8
1. Urban Design Plan.	10
York Bay - Urban Design Plan.	11
York Bay General Arrangement Plan.	12
York Bay Site Photos.	14
Approach & Principles.	15
Priorities for York Bay.	16
Seawall Structures	16
Stormwater	17
Beach Access & Safety Barriers	18
Ecology	20
Planting	22
Urban Design	23
Cultural Landscape	26
Other Matters	27

#### Disclaimer

This bay specific plan has been prepared by the Te Ara Tupua Alliance for the benefit of Hutt City Council. No liability is accepted by Te Ara Tupua Alliance or any employee of or sub-consultant to Te Ara Tupua Alliance with respect to its use by any other person.

fulfil a legal requirement.

### Authors

Prepared by, Te Ara Tupua Alliance

Cultural Expression Artist: Len Hetet

stated

Cultural Expression Artwork: Len Hetet Tupua, Ngāke - Cover Image Tupua Horo Nuku - Page Banner

JOB ref: 4553/ 4465 ©lsthmus Group Ltd 2024

#### **Document record**

lssue HCC (Stage A) Review Community Consultation Draft for Certification Final for Certification Revised final for Certificati Revised final for Certificati

Tupua Horo Nuku. York Bay Urban Design Plans. 31 January 2024.

This disclaimer shall apply notwithstanding that the report may be made available to other persons for an application for permission or approval or to

#### Mana Whenua Advisors: Mana Whenua Steering Group BSUDP Production and Review: **Te Ara Tupua Alliance**

Graphics, photographs and maps by Te Ara Tupua Alliance unless otherwise

1.				
	Revision	Author	Approval	Date
	1	JP	MF	08.11.22
	2	JP	MF	25.11.22
	3	JP	MF	02.05.23
	4	JP	SB	18.08.23
ion	5	JP	AK	20.10.23
ion	6	JP	AK	31.01.24

### Tupua Horo Nuku. **Eastern Bays.**

The Eastern Bay area encapsulates many wahi tapu from Te kongutu o Te Awa Kairangi to Te Waha o te Ikanui. Its beginnings emanate out of the power and mana of Tupua-horo-nuku (evolving mass of solid matter), known as the tupua, Ngake.

Instructed by the mountain clan people who were summoned to the head of the fish, gathering on Pukeatua where they were gifted the appropriate incantations to prise open the mouth of the great catch of Maui-tikitiki-a-Taranga to enable it to breathe again, where they summoned from the great depths of Rua Tupua and Rua Tawhito of the fresh water lake who brought forth Tupua-horo-nuku and Tupua-horo-rangi.

> Tupua-horo-nuku, Tupua-horo-rangi Tai kukume mai takiwā ia mouri e runga Kia horo wawe mouri e raro koi ikaroa<sup>1</sup>

The narrative of the eastern bay speaks of and highlights "te ihi, te wehi me te mana nui o Tupua-horo-nuku."

Te Awa Kairangi, formed out of the raging whip lashing tail of Ngake as he wound himself up into a frenzy, generating and amassing energy and power, splitting the land mass immediately behind him lacerating Papatūānuku, imbuing "te ara mouri" inland to the Tararua and Remutaka. Whilst at the same time hurling himself towards the barriers hearing the pounding and thunderous waves smashing in the distant. Smashing his way out from his land lock imprisonment to freedom unto Hinemoana and Tangaroa. In his destructive escape came forth the islands of the harbour later to be named by Kupe the pacific navigator, and as centuries passed the peopling of Te Wai-manga arrived gifting new names later to be suppressed through imperialistic and colonial methodologies which are still impacting on us since their arrival in 1769.

> Tēnei te ara kei runga Tēnei te ara ō Ranginui e tū nei Tēnei te ara o Papatūānuku e takoto nei...<sup>2</sup>

Ripiripia te ika nui Haehaea te ika roa Ka hora, ka hora te kai ki a Tamanuiterā Ka hora, ka hora te kai ki a Tāwhiri-mātea...<sup>3</sup>

1 He karakia nō te kainga

2 He karakia nō te kainga

Immediately following the severing, Hine-wai-tootaa and Hine-kōrako went about their duties caressing and gently healing Papatūānuku. Calling upon their sister Hine-wairere they asked her if she could follow the scarification marks of Papatūānuku until she was fully covered to sooth her skin to ease the pain. To this day they still nurture and care for her.

Te Awa Kairangi like many rivers began its life through the kuia Hine-waitota, Hine-kōrako and Hine- wairere, being the ancestress of condensation, lunar droplets and water flow gathering on the many peaks on both sides of the river. Fed by melting snow, ice and rainwater running off the land, the collective of droplets follows cracks and crevices within the landscape formed out of the raging whip lashing of the tail of Ngake (seismic activity) in his attempt to escape to freedom from his land lock lake imprisonment.

The many small tributaries joining together growing larger forming the collective mass of Te Awakairangi, flowing every second of the day. The following whakatauaaki encapsulates who the people of Te Ātiawa are and our responsibility for the water and the whenua.

#### Te Ātiawa tupua rau, he auripo i te manga iti, he auripo i te manga nui rānei, he kaitiaki ki te whenua <sup>4</sup>

Te Ātiawa of many phenomena's, where there is a ripple in a small tributary or great river, there is a guardian and protector on the land.

Over time the continuous flow of Te Awa Kairangi has shaped the landscape moving and wearing away rock, carving out a network of valleys eventually reaching the lower grounds, widening and reaching the point where the fresh water meets the salt water.

Whakapakarukaru puare te waha o te ika roa Te hononga o ngā wai e rua...<sup>5</sup>

The Eastern Bay commences at the meeting of the waters.

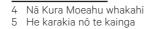
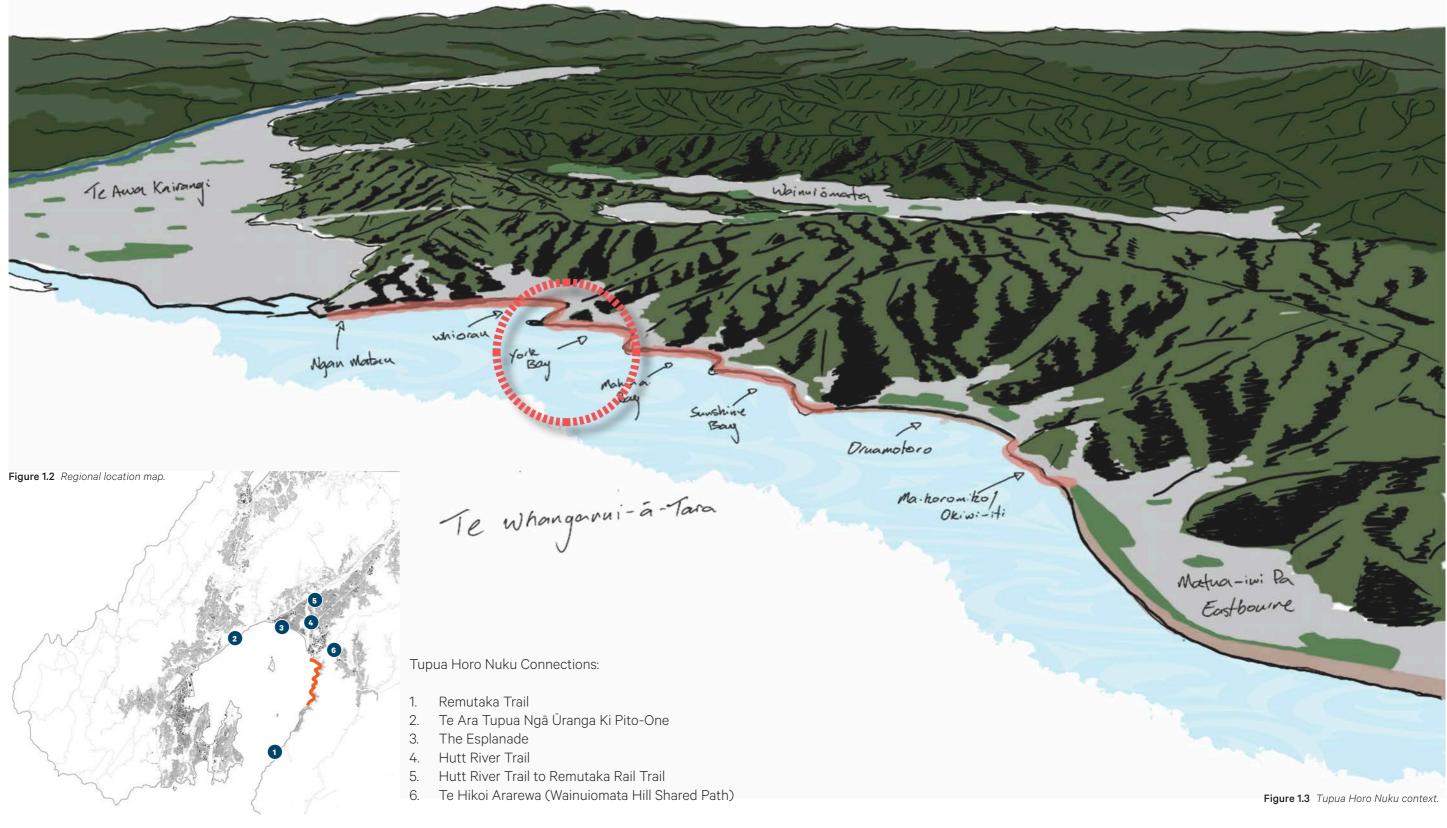


Figure 1.1 Tupua-Horo-Nuku artwork. Len Hetet, 2021



<sup>3</sup> He karakia nō te kainga

# Tupua Horo Nuku. The Pathway.



## Introduction.

## Consultation.

#### **Purpose & Objectives**

The purpose of the Bay Specific Urban Design Plan (BSUDP) is to provide bay specific detailed design for the project responding to local landscape character, identity and land use, in the broader context of the Landscape and Urban Design Plan (LUDP).

Consent conditions for the Eastern Bays Shared Path (Tupua Horo Nuku) guide the content of the BSUDP and the preceding LUDP. The conditions outline the purpose of the management plans, the contents of the plans, expert inputs, stakeholders to be consulted, the approval and certification process and how to manage disputes.

Condition LV.6 requires the BSUDP to be submitted in two stages.

Stage 1 is a draft design protocol. Building on the overall design approach and narrative set out in the LUDP. The bay specific design protocol describes the special landscape and natural character of each bay and outlines the aesthetic principles to be applied. Community comment on York Bay is being sought on the draft design protocol.

Stage 2: The final BSUDPs are to be certified either on their own (in accordance with Condition GC.5) or, if included in the initial LUDP, when the LUDP is certified under Condition LV.1. Community aspirations, engineering constraints with urban design and landscape layers are applied to achieve a unique bay specific design, integrated with the Eastern Bays Shared Pathway.

#### Structure

In satisfying Conditions LV.5 - LV.7 of the Resource Consent the Draft Design Protocol process informing the BSUDPs is:

- Illustrate bay locations and describe the landscape context.
- Ascertain draft priorities for each bay. Priorities include issues involving: safety, access and mobility; engineering; ecology; natural character; landscape; urban design; and recreational and amenity elements.
- Show visual representations of best practice through precedent examples of comparable shared path projects.
- Outline landscape and urban design approaches and principles for each bay to set the scene for design plans and details.
- Develop an illustrative schematic plan for each bay.

#### Consultation

In accordance with Condition LV.6 the Draft Design protocol for York Bay is required to be provided to the relevant Resident Association for the affected bay, the East Harbour Environmental Association, and the Eastbourne Community Board for comments. A record of the consultation and comments received, together with an indication on responses will be outlined at Stage 2 submission.

#### **Summary of Consultation Process**

The consultation process for the Northern Bays of Tupua Horo Nuku was expanded to include an extra step prior to the consultation outlined in the consent conditions. This step was added with the aim of increasing the range of engagement beyond the named organisations. Simplified versions of the Bay Specific Urban Design Plans (BSUDPs) were developed and published on the Hutt City Council website accompanied by a survey which allowed for general public feedback. The questions allowed for open comments on elements of the planned designs that were able to be influenced. The sequence of events for the consultation on the draft designs for York Bay. Mahina Bay and Whiorau Reserve was as follows:

- Simplified draft design protocols were prepared The Eastbourne Community Board and Residents Associations were given advance notice of the consultation period.
- Design protocols were shared online via the Hutt City Council website, alongside a survey on the HaveYourSay engagement website.
- A 25-working-day window for feedback was allowed, and the engagement was promoted publicly throughout this period.
- Comments summarised anonymously and shared with Residents Associations and Community Board.

Consultation then continued in accordance with consent condition LV.6:

- The BSUDPs were provided to the named organisations with a 15 working day time frame for comments.
- An In-Person Meeting was held with residents of York Bay and Mahina Bay to support the process.
- Due to the inclusion of Whiorau Reserve, the BSUDPs were also sent to the Lowry Bay resident's association for comment on that area and notification was given to the project Little Penguin Interest Group at each phase of consultation.

The comments and responses from both stages were collated into a report and the BSUDPs updated for the next stage. This report was issued back to the named organisations. In response to community feedback during the previous phases of BSUDP consultation, an extra step was added to the process to further allow for community input into specific elements of the design. This followed the completion of that which is outlined in the consent conditions and ensures the design continues to reflect the objectives and voice of the community. Option sketches were developed for areas of the design which gathered strong responses from the community and presented back to them for further comment and collaboration. The responses to these have been collated and documented in this report. Following this, the BSUDPs will be updated, finalised, and submitted to the councils for certification in line with the consent conditions.

1. Develop option sketches for elements of design. 2. Present options back to the community. 3. 15 working day window for comment.

- 4. Update BSUDP.

5. Submit for certification. project website.

#### Timeline for Mahina Bay, York Bay and Whiorau Reserve consultation

Thursday 20th October 2022 (Completed) Early draft design protocols published on website with survey.

Thursday 20th October – Wednesday 23rd November 2022 (Completed) Feedback window (25 working days).

Thursday 24th November 2022 (Completed) Draft BSUDPs sent to EHEA, ECB, York Bay Residents Association, Mahina Bay Residents Association and Lowry Bay Residents Association.

Thursday 24th November – Wednesday 14th December 2022 (Completed)

time.

6. Circulate certified BSUDPs back to consulted groups and publish on

Comments window (15 working days) - The Project team met with members of York Bay, Mahina Bay and the Eastbourne Community Board during this

<u>Wednesday 14th December – Wednesday 18th January 2023 (Completed)</u> Feedback from the community is compiled and responses are provided to the issues raised. (20 working days – including Christmas shutdown 23 December – 9 January).

<u>Wednesday 8th February – Thursday 16th February 2023 (Completed)</u> Comments and responses document provided. Development and review of option sketches for further community consultation.

<u>Friday 17th February – Thursday 9th March 2023 (Completed)</u> Final consultation with community on option sketches.

#### Friday 18th August 2023

BSUDPs finalised and submitted for certification. Once certified, BSUDPs to be circulated back to community. Note Whiorau Reserve has been separated from the York Bay BSUDP while design matters for the reserve are worked through with the Little Penguin Group.



## Consultation.

Summary Table	).		
Comment Title	Raised By	Description	Project Team Response
Atkinson Tree	York Bay Residents Association Eastbourne Community Board Online feedback	Request from community to relocate the tree with additional request for independent expert advice to explore retaining tree in current location.	<b>Not accepted.</b> Hutt City Council (HCC) have since made the decision to r consultation plan to communicate back to the community options.
Ramp location	York Bay Residents Association Eastbourne Community Board Online feedback	Concerns location may be a traffic hazard due to potential for people having to walk boats down the path. Suggestions included swapping ramp and step locations around, having them at right angles, having ramp off bus stop area or retaining current ramp location.	Not accepted. Ramp locations were investigated in response to feedback The team reviewed all options and concluded that the bes existing bus shelter.
Ramp design	York Bay Residents Association Eastbourne Community Board Online feedback	Needs to be suitable for boats and community raft – increase width. Preference for it to be at right angle to path.	<b>Not accepted</b> Ramp designs were investigated in response to feedback f The team reviewed all options and concluded that the prop
Ramp Access	Online feedback	Request for handrails to only be incorporated on roadside.	Not accepted. Handrails will be designed and installed according to the B Clause D1 of the Building Code states that "Handrail shall b where the ramp slope is steeper than 1 in 20".
Pumping station parking	Online feedback	Request to incorporate parking in same or nearby location and inclusion of a turning area. Request for removal of bollards.	<b>Not accepted.</b> Bollards will not be removed. The intention is to encourage interface with vehicles crossing the path.
Bus stop location	York Bay Residents Association Eastbourne Community Board Online feedback	Better link to the opposite path and further north to improve line of sight while allowing space for a pedestrian crossing in future. Set back from road. Propose that the path be split in two with pedestrian path in front of bus stop and bike path behind.	Accepted. The current designs allow for a pedestrian crossing to be i location has been set back from the road to improve passe the bus shelter.
Bus shelters	York Bay Residents Association Eastbourne Community Board Online feedback	Request for retention of existing bus shelter and concerns that standard GWRC bus shelter will not meet community needs. Request for new bus shelters that are safe and compliant with CPTED (Crime Prevention Through Environmental Design). Incorporation of glass panels into new shelter for safety and visibility. Request for dual Entry/Exit.	Not Accepted. The bus shelter designs will be the standard design with si suit the conditions within the bay.
Move road	Online feedback	Move Marine Drive 1m over to landward side to allow for retention of Atkinson tree and ramp to beach area.	Not Accepted. Moving the road is outside of the scope of the project. HCC have made the decision to not relocate the tree. The communicate back to the community about this decision a

o not relocate the tree. The team will develop a ty about this decision and propose alternative

ck from community. est placement would be in the location of the

k from community. roposed design was the best solution.

e Building Code. Il be provided on both sides of accessible ramps

age cyclists to slow down at this point due to

e incorporated in the future and the bus stop ssenger safety with the shared path going behind

single entry as per GWRC but will be adapted to

ne team will develop a consultation plan to n and propose alternative option.



Summary Table	9.		
Comment Title	Raised By	Description	Project Team Response
Shower	Online feedback	Request for free standing fresh water shower (similar to one at Days Bay).	Not Accepted. Construction of a fresh water shower is out of the scope o noted by Hutt City Council for future consideration.
Path width	Online feedback	Request to reduce further to minimise beach loss. Request to keep at 3m to prevent safety issues.	Not accepted. Path width will remain at 2.5m in line with previous feedbar safety previously and found to be acceptable.
Urban design and cultural narrative	York Bay Residents Association Eastbourne Community Board Online feedback	Request for community input on urban design and cultural narratives, including decorative paving, layout and art. Swap rest area to north of bus stop to improve visibility of oncoming buses.	<b>Not Accepted.</b> Working alongside our mana whenua partners the urban d decorative paving, layout and art will be conducted throug
Steps	York Bay Residents Association Eastbourne Community Board Online feedback	Need to be accessible for all age-groups and request for handrails. Retain those near bus stop. Preference for them at beach ends and bus stops. Swap proposed ramp and steps location.	Accepted. The step locations have been confirmed; one at southern hand rails as required by the Building Code
Planting	York Bay Residents Association Eastbourne Community Board	Strong preference to retain or replace all trees with any new planting considering survival likelihood and maintenance. Two new trees proposed to provide shade for beach area.	Not Accepted. HCC have since made the decision to not relocate the tree communicate back to the community about this decision a
Materials	York Bay Residents Association Eastbourne Community Board	Good quality timber should be used to ensure longevity.	<b>Accepted</b> . Hardwood timber will be used for required elements. Main materials palette for the shared path.
Balustrade	York Bay Residents Association Eastbourne Community Board	No higher than 1.1m to comply with NZBC F4.	Not Accepted. The height of the balustrades is set at 1.2m, which aligns we cycleways (Austroads Part 6a-17). It is a legal requirement to include features that prevent per where serious injuries could result – particularly to children In some places this can be achieved by using a wider 'step This takes up space and the footprint over which the share The New Zealand Building Code requires that any new structure than 1m have fall prevention measures (generally balustrate been specified on this project, there is insufficient space to used elegewhere) to be used without appricidential

of this project, but the suggestion has been

back from community. This has been assessed for

n design and cultural narratives including ugh select iwi artists.

rn end and another at northern end and will have

ree. The team will develop a consultation plan to on and propose alternative option.

intenance was considered when developing the

with minimum guidance for shared paths/

people from falling from heights of 1m or more, Iren or other vulnerable people.

tep' or ledge in the double-curve seawall design. hared path can be built is limited.

The New Zealand Building Code requires that any new structure with a potential fall from height of greater than 1m have fall prevention measures (generally balustrades). In the situation where balustrades have been specified on this project, there is insufficient space to allow for the wide fall mitigation platforms (as used elsewhere) to be used without considerable encroachment into the coastal marine area (CMA).

# **Compliance Matrix**

Consent Condition.		Response	
LV 5.			
The LUDP shall include the final BSUDPs for each bay within the address detailed design within the particular bay for the benefit of the local road network as well as the specific urban design, lands matters (including those listed in Condition LV.7) as relevant to the specific urban design.	of pedestrians, cyclists and others using cape, ecology and recreational amenity	The final York Bay BSUDP will be individually certified and attached to the LUDP on completion.	
The final BSUDPs may be prepared later and added to the LUDP Works are staged bay by bay and individually certified under Cor			
LV 6			
The BSUDPs shall be prepared by the Consent Holder in two sta	iges for each bay:		
<ul> <li>(a) Stage 1:</li> <li>A draft design protocol that sets out the priorities for the bay desaccess and mobility requirements as well as ecology, natural charrecreational amenity elements and issues. The draft design protocof best practice on comparable coastal shared path projects to d targeted. The protocol shall be provided to the relevant Resident The East Harbour Environment Association and the Eastbourne within 15 working days from receipt.</li> <li>Any comments received, and the Consents Holder's response an be provided to the Manager, Environmental Regulation, and Tear the draft design protocol, within 20 working days from receipt of</li> </ul>	racter, landscape, urban design and col shall provide visual representations emonstrate the level of design to be Association for the affected bay (if any) Community Board for comments (if any) d reasons if they are not accepted, are to n Leader, Resource Consents alongside		-
(b) Stage 2: The final BSUDPs are to be certified either on their own (in accor included in the initial LUDP, when the LUDP is certified under Co	dance with Condition GC.5) or, if	Final York Bay BSUDP to be developed and certified following completion of LV6(a).	
Consent Condition.	Response		Page ref
 LV 7.			
The BSUDPs shall include specific landscape and urban design details for:			
(a) Seawall structures, including transition zones between seawall types and transitions between natural or rocky areas and seawall structures;	•	d below mean high water springs (MWHS) and non-colonised rock will be placed above MHWS at the seawall nent of rock will occur under the guidance of the Project Ecologist and Project Landscape Architect as required.	Pg 16, 17
(b) Beach access including steps, ramps and associated handrails where required, <u>so that people wishing to access the</u>		cated along the extent of York Bay as well as an accessible ramp to access the beach. The construction of yond that shown would increase the amount of reclamation and occupation of the coastal marine area.	Pg 18, 19





Consent Condition.	Response	Page ref
(c) Safety barriers and railing;	Based on the review feedback received, we have reduced the height of the balustrade (safety barrier) to 1.2m. This height is constant with shared path safety guidance.	Pg 18
(d) The treatment of stormwater structures at the coastal interface;	Stormwater outlets will be in-situ sections between pre-cast wall units. The outlet will sit within the curved seawall via a concrete housing which visually integrates the pipe to the seawall.	Pg 17
(e) Little Penguin and Shore Forager related structures including penguin passage elements, ramps, and wooden poles for roosting;	Where rock revetment is repaired a small fence is proposed to stop penguins from accessing the path and road.	Pg 20
(f) Planting treatment;	Planting areas are located around refuge points and headlands to soften and enhance features. Plant species will be chosen from the Plant Palette within the LUDP that has been developed with the Project Ecologists.	Pg 21
(g) The treatment of existing trees and existing landscape and natural features;	vo trees are retained and two, including the Atkinson tree are to be removed to accomodate the seawall and path. The Alliance and HCC undertook a orough assessment of the various options to retain the Atkinson Tree in York Bay. An option assessment was completed, scoring the options against standard set of criteria. The options assessed included the community produced design, narrowing the path, relocating the road markings landward, locating the tree elsewhere, removing the tree. Relocation of the Atkinson Tree is under active consideration between the Alliance and HCC.	
(h) The design and area of space available for recreational amenity activities;	The BSUDP has provided the design and area of space available for recreational and amenity values in accordance with Condition LV.7(h). To mitigate an effective path width below 2.5 m at pinch points where the path splits (the minimum acceptable for a path of this type in Austroads part 6A) behavioural signage and path marking, as per Waka Kotahi guidance, will be deployed to slow users on their approach and implement a 'one-way' system for users to pass each other safely. We consider that our design provides the best solution in the circumstances as it falls within the consented footprint, does not increase the overall CMA reclamation, and provides a useable pathway.	Pg 12-13, 22-24
(i) The design and orientation of features, spaces and access points;	Refuge spaces are located to balance user needs, community preference, utilise retained existing trees for their character and amenity benefits, avoid encroachment on beaches as well as fit within CMA consented footprint. We note that creating further refuge spaces and access points would likely increase the area of the coastal marine area occupied and/or reclaimed, which is not authorised by the resource consents.	Pg 12-13, 22-24
(j) Refuge and seating opportunities, including size and arrangement of space to allow for stopping and gathering at frequent intervals distributed along the route;	In York Bay we are utilising the headlands and existing pull over spaces. This helps avoid encroachment into the CMA.	Pg 12-13, 22-24
(k) Signage ensuring their consistency along the shared path, including branding and reduction of visual clutter;	Signage will be designed so it is integrated into landscape elements to reduce visual clutter along the shared path. This approach is consistent across all bays.	Pg 22-24
(I) Storyboards;	The Alliance is taking a culturally led approach and therefore Mouri markers are used as the main interpretation method. Interpretation method used for the pathway in York Bay. Consideration of ecological and other local history as a second layer to be shared will be made through the detailed design process.	Pg 25
(m) Surface treatments; <b>and</b>	A robust palette of materials is used to ensure visual cohesiveness and quality. Predominantly asphalt with sections of concrete. Concrete will also be used for areas where cultural graphics will be applied to the path.	Pg 25
(n) <u>Consideration of a minimum 3 m path width for York Bay</u> only (for a 90 m length south of the existing bus stop; and	The Alliance considered a balanced approach, assessing the impact on the beach's and CMA vs providing a safe and consistent path width that caters for user's various needs. It was considered that a 2.5m effective path width was more appropriate South of the existing York Bay bus stop as this limits the project's impact on the beaches and provides consistency with the remaining path, which has been set to a 2.5m effective width for the majority of the project.	Pg 12-13
(o) Any other relevant matter for that bay necessary to achieve the purposes of the LUDP in condition LV.2.	Existing water fountains at Days Bay will service the path, as such waters fountains are not proposed for York Bay. Based on the feedback received, we have adjusted the number of seats with back rests.	Pg 18, 26

11.

# Urban Design Plan.



# York Bay - Urban Design Plan.

LV.6 (a)

#### York Bay is characterised by:

York Bay, like many bays along Tupua Horo Nuku, is an exposed landscape towards the shoreline. York Bay has a settlement pattern contained by low ridge lines and a comparatively deep valley that in turn appears less developed from the shore.

Along York Bay Marine Drive is constrained between the coastal escarpment and shoreline. There is a gently sloping gravelly beach just below the road at the crest of the bay, with stretches of rock outcrop further towards both ends of the bay.

In the south there is a relatively new seawall edge with low road barriers. This then transitions into an informal concrete edge with no barriers up to and along the beach. A similar but higher retaining structure continues to the north where it then transitions into a smaller beach next to the wastewater pumping station. There are some remnants of previous structures near the beach.

The landscape is calmer than the other bays, though more exposed near the shore and with distinctly coastal vegetation. The bay is more populated towards the main valley with few houses elevated on the southern escarpment. Because of this development is more prominent at the north end of the bay but more visible when approaching from the south rather than the north.

Marine Drive is sealed to the residential boundary and there are a few gravelled parking bays near each end of the bay. The residential character is strongest near the beach but many of the buildings are screened by mature trees to the road edge, with garages, driveways, and low retaining walls interspersed with pohutukawa and coastal vegetation.

The current path runs along the coastal edge. The path width varies significantly, generally being wider towards the headlands and along the recent seawall edge. The path narrows in the middle of the bay where the seal has eroded and the beach runs up to almost the edge of the road. The existing bus stop further tightens this edge. Street lights are located on the inland side of the road, but switch to coastal at the northern pumping station. Power poles are not present.

York Bays southern headland is quite pronounced, with low coastal planting and a small gravelled area with bus stop to its base. There are no mature pohutukawa trees. Alternatively, the northern headland is smaller and has a pumping station on it, well set back from the road but with minimal planting and no fencing. However there are mature pohutukawa trees. The landform extend further to the north heading into Whiorau Reserve.

The existing seawall structures in York bay include:

- Curved concrete wall with ledge.
- Sloped concrete wall.

#### Other features includes

- Bus shelter and bus stop opposite.
- Concrete steps down to beach.
- Informal concrete ramp on beach.
- The Atkinson Tree.
- Pump station.

#### Natural character:

In respect of natural character, this was discussed in detail during the resource consent process. The following discussion provides a summary of impact of the Project on natural character as well as highlights how different design features of the Project take natural character into account.

The resource consent application assessed the natural character of the Eastern Bays at a wider scale as having a moderate abiotic, biotic and experiential natural character. The Project was considered to have low effects on the wider Eastern Bays coastal landscape.

The impact of the Project at a local level on natural character was considered to depend largely on the final detailing and texture on the curved seawall faces, the material used for beach nourishment, the design response to the local landform where the walls finish at rocky outcrops, and design treatments in the more exposed, untamed areas outside of the beaches. Visual impact was considered to diminish over time because of weathering and as they become familiar features reducing to low adverse effects over time.

Within York Bay (and elsewhere) the Project is in general accordance with the consented approach and retains natural features such as rocky outcrops and pocket beaches at and around the existing pump station keeping the untamed character here intact. Two of three existing Pohutukawa are kept and beach access is replaced in a similar location to existing.

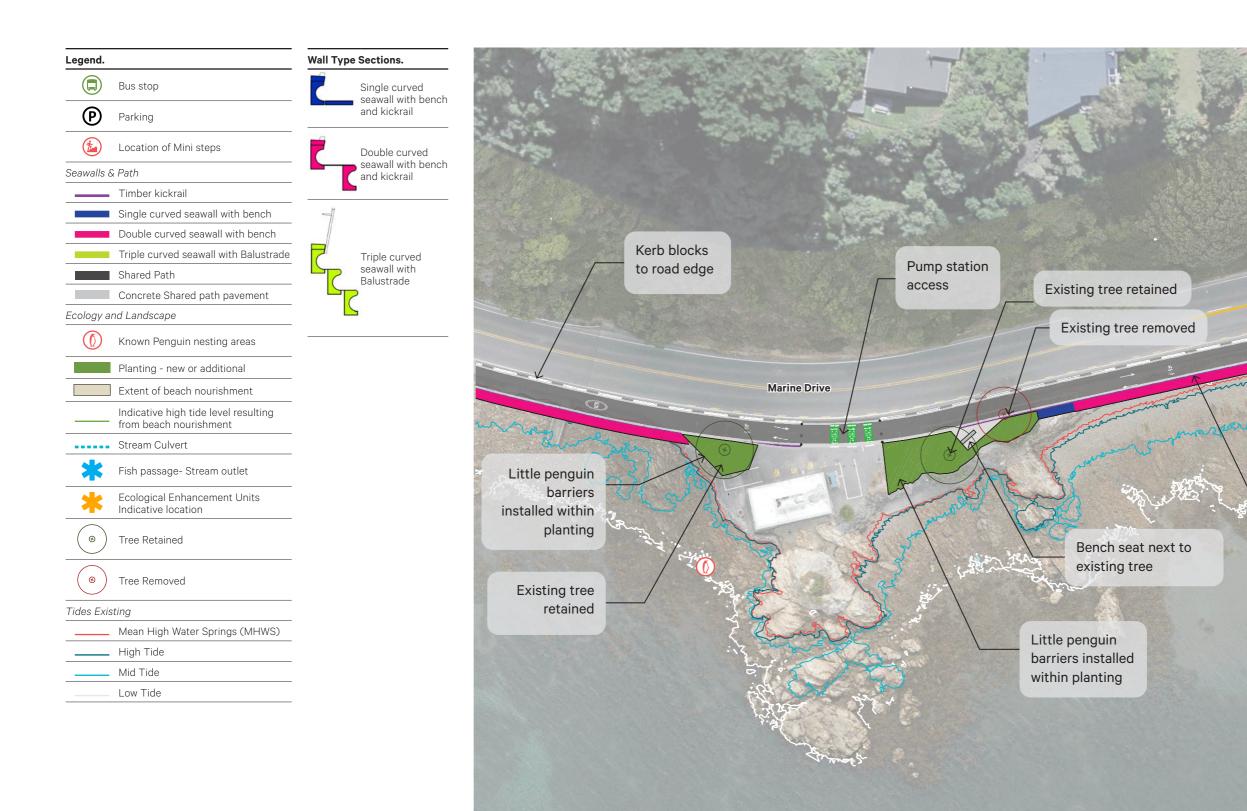
The original consent design did not resolve conflict between bus users and users of the shared path requiring a redesign of the bus stop path interface. The new design occupies existing beaches, however, beach nourishment with appropriate imported sands and fine gravels is expected to maintain the balance of natural character.

Ecological detailing is included on the curved seawall faces consistent with the consent design addressing loss of local natural character relating to perception and experience of the structure, as well as providing habitat opportunity where the wall texture is below high tide level. Marine growth will colonise these areas and it is expected the structure will weather into place. Large boulders from site will be used to ameliorate transitions between sea wall types and to cover footing concrete where it occurs. Culvert outfalls penetrate the recurve wall in two locations and require boxing in with a simple exposed aggregate concrete support flush with the recurve and are experienced as part of the greater patterned wall.

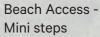
Ramps and steps are also finished with exposed pebble aggregate consistent in texture with the beach fine gravels which help to detune the engineered nature of these structures along with fit to landscape and natural character.

# York Bay General Arrangement Plan.

LV.6 (a) LV.7 (g) (h) (i) (j)



14.



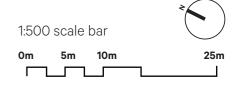
(b)

Continuous seaward timber buffer

- 17 A. A. A.



Tupua Horo Nuku. York Bay Urban Design Plans. 31 January 2024.



Atkinson Tree to be Removed.

Ramp access relocated to here for accessibility

Proposed seawall and path to tie into existing path

# York Bay Site Photos.





Figure 1.5 The Atkinson tree (proposed to be removed).



Figure 1.6 York Bay bus stop.



Figure 1.7 Existing seawall to the south of York Bay.



Figure 1.8 Existing steps down to beach area at York Bay.



Figure 1.9 Connection into Whiorau Reserve from York Bay.

# Approach & Principles.

LV.6 (a) LV.7 (f) (m)

Rugged Coastal Environment Less is more Maintain integrity of rock outcrops	<ul> <li>Reflect the wild coastal character and narrow edge through minimal disturbance and intervention at the coastal edge.</li> <li>Retain any rocky outcrops.</li> <li>Sympathetic transitions between sea walls and natural coastal edges.</li> <li>Retain fishing access at southern end.</li> <li>Features added minimise obstruction to views and beach access.</li> <li>Rock outcrops are remnants of the existing coastal edge.</li> </ul>	Maintenance	<ul> <li>The selected materials in longevity in mind, and the longevity</li></ul>
	<ul> <li>Retain the natural form of each outcrop.</li> <li>Where modification is taking place integrate transition from the outcrop to the structure in a natural way.</li> </ul>	Bay specific narratives	managing coastal erosic — To be undertaken with r expression to integrated
	<ul> <li>Retain in-situ as much of the natural colonized rock as possible during sea wall construction.</li> <li>In addition, reuse the natural colonized rock removed during construction at the base of the sea walls.</li> <li>Preserve the extent and form of the rock outcrop at the Days Bay Headland - immediately south of the project extent, meaning that the existing pumping station infrastructure, access and landscape features (planting, fencing etc.) will remain in place.</li> </ul>	Materials palette	<ul> <li>Hardwood timber - seat where required.</li> <li>Stainless steel - step ha</li> <li>Textured concrete - sea</li> <li>Asphalt - shared path, a Headland.</li> <li>Natural colonized rock - Gravel around trees reta</li> </ul>
	<ul> <li>Use natural colonized rock at seawall transitions, particularly those where the concrete sea wall ties back into the natural rocky beach, to integrate the sea wall and eliminate hard concrete edges.</li> </ul>	Plant communities	<ul> <li>Enhancement planting</li> </ul>
Retain natural coastal planting	<ul> <li>Retain two existing pohutukawa trees between north of the beach.</li> <li>Retain two existing trees by Northern Point.</li> <li>Retain and improve planting to headland areas.</li> </ul>		
Details and elements			
Consistency	<ul> <li>Features and elements a consistent suite across the project.</li> </ul>		
Simple robust forms	<ul> <li>Elements such as seating, wheel stops and steps are formed with simple block/rectangular shapes, not to detract from the wild coastal character, yet be simple and accessible to use.</li> </ul>		
Existing structures and elements	— Existing bus shelter to be replaced by a standard GWRC shelter.		

Is and patterns are durable, designed with d that are able to be replicated. ecies to self establish where conditions are

derstand maintenance requirements. oles.

cks and building rubble, previously used for psion.

h mana whenua advisors and artists. Cultural ted into the overall design in relevant areas.

eating, linear barriers, wayfinding marker posts,

hand rails, detailing into seating, cycle stands. seawall, tidepools, mini steps.

, and stopping place north of the Day Bay

ek - sea wall transition points and base of seawall. retained.

g to headland areas.

### **Seawall Structures**

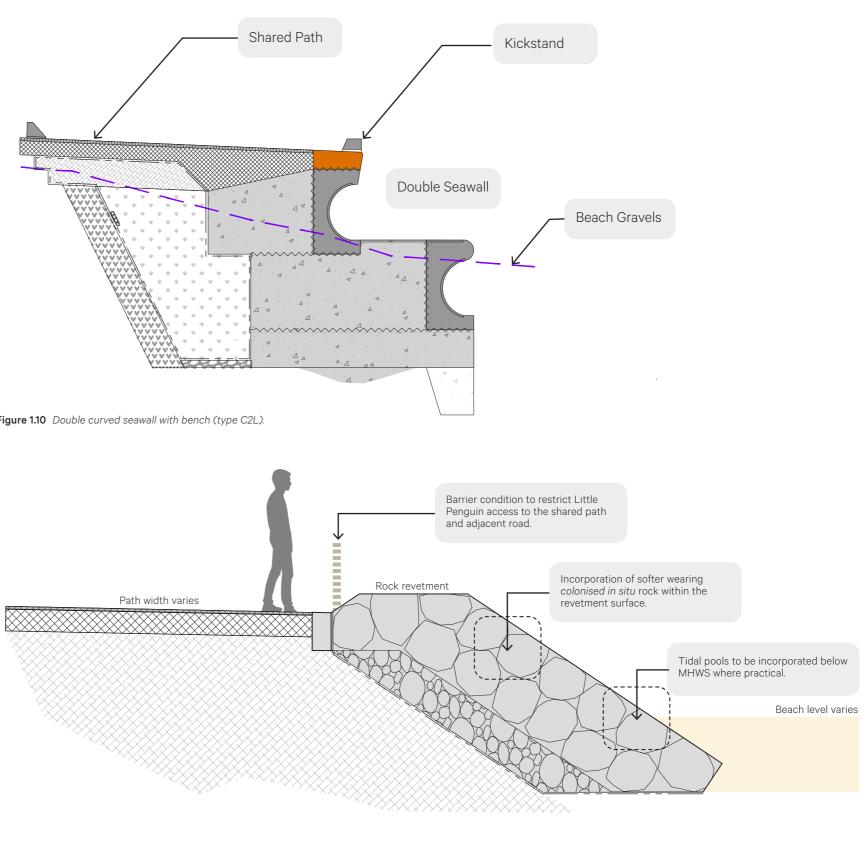
#### LV 7. (a) - Seawall types and transitions

Vertical curved seawalls have been chosen across most of the shared path including York Bay because they deflect wave overtopping most effectively and create a reduced footprint on the foreshore compared to other non-vertical seawalls. This design also offers the flexibility to adapt the design to accommodate sea level rise in the future. Seawalls are required to be rebuilt along the majority of the shared path. They are designed to prevent coastal erosion and protect against storm surge and are therefore integral to protecting the shared path.

In York Bay Rock revetment structures are limited to a small rocky shore area where it was desirable to repair and existing rock revetment to reduce wave overtopping. Whilst revetments provide a gradually sloping angle more similar to a natural shoreline, the hard revetment rock does not wear as much over time and thus is less able to be colonised by intertidal biota. The incorporation of softer wearing rock within the revetment surface and transitional areas will help to provide rock material that is more suitable for colonisation, and reuse rock that would otherwise be removed during construction or lost beneath the revetment structure.

The Design Features Report (Stantec, 2019) sets out engineering requirements for the project. The main points can be summarised as:

- The seawall design allows for adaptive pathways to address sea level rise, such as protection to be added on top of the wall in future as required.
- Achieve consistency in the seawall profile throughout the corridor.
- The seawall is to be constructed from reinforced precast concrete units. \_ Construction methodology of the seawall will be determined by site conditions.
- Resilience of the road and underground services was considered in the design.
- Replacement and extensions to stormwater pipes through the wall are to be like for like, and finish flush with the face of the seawall.
- Seawall transitions to be integrated to avoid abrupt ends/divisions. Transitions between seawall types, e.g. between single and double will be managed between access points (steps and ramps). Transitions between wall edges and the existing coastal edge, e.g. at headlands, will be softened/integrated with natural rock. Refer to the seawalls and habitats revetment plan.
- Width of the shared path is to have a 2.5m effective width.
- The path surface is to be mixed asphalt and concrete with a 300mm wide concrete strip on the 'sea side' to define the coastal edge.
- The work is to be an improvement on existing conditions throughout the corridor.
- Fall from height safety will be addressed by either a 1.2m landing, where there is room, or a balustrade where there is not.



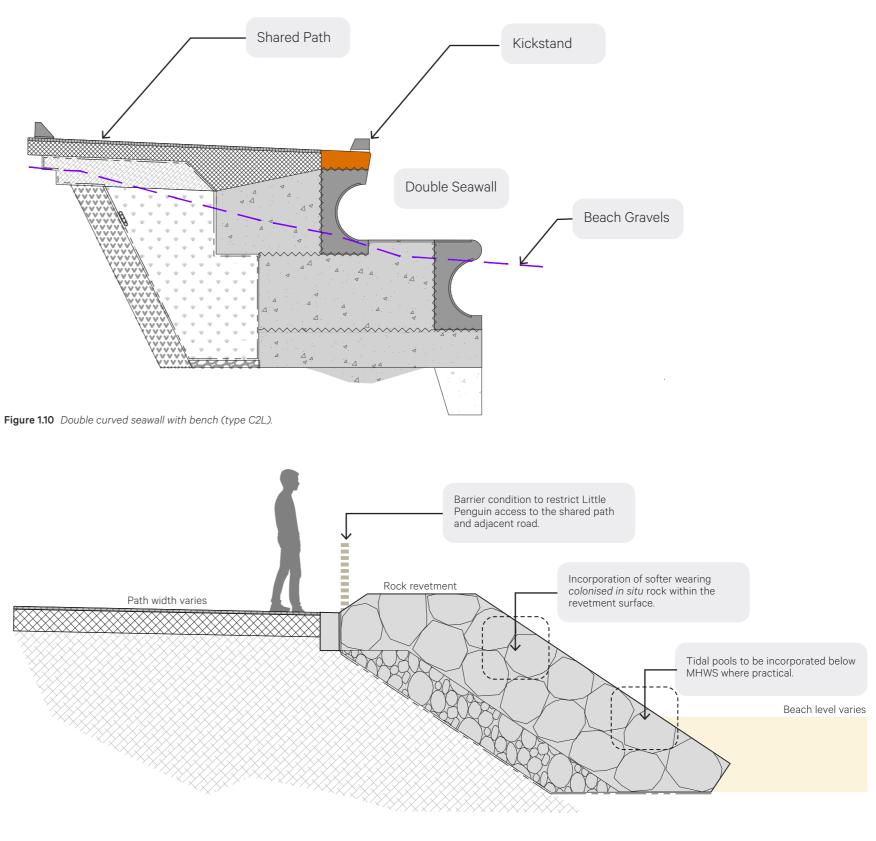
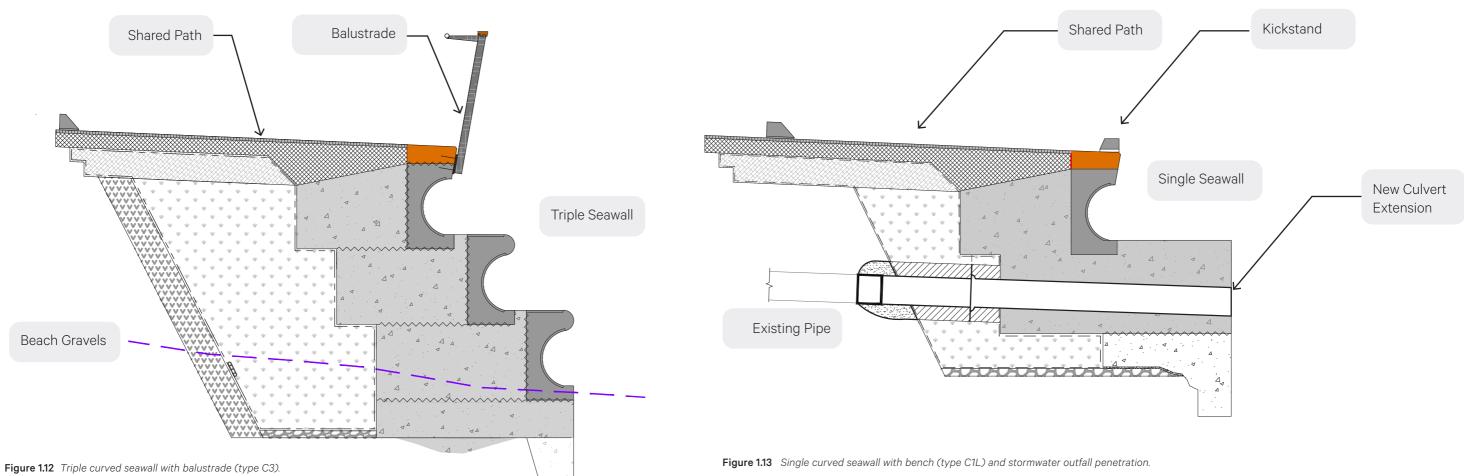


Figure 1.11 Typical rock revetment section.





**Figure 1.14** Example of existing colonised in situ rock that could be suitable to reuse in the construction of the revetments and transitional areas (stantec).

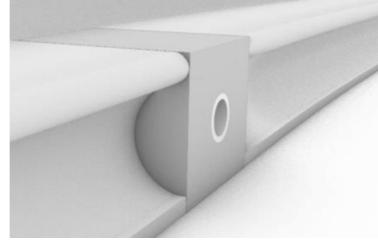


Figure 1.15 Indicative stormwater outfall penetration through seawall.

### Stormwater

#### LV 7. (d) Structures and coastal interface

Stormwater outlets will be in-situ sections between pre-cast wall units and are designed sympathetically to limit adverse effects on recreation.

### **Beach Access & Safety Barriers**

#### LV 7. (b)(c) - Steps, Ramps & Handrails

An important aspect of the Shared Path is that public access to the beach is maintained and, at certain places, enhanced. Two forms of access are provided to the coastal marine area in York Bay, these include 'Mini Steps' and 'Ramps'.

Mini steps are proposed to achieve additional access to the beach without encroaching unnecessarily onto the coastal marine area. Ramps are proposed so as to minimise encroachment onto the beach. The ramp shown in York Bay has a gradient of 1:14.

The design priorities relating to beach access are:

- Should draw people to the coastal edge, away from the main path.
- Should be inviting and intentionally separate to the main path.
- Fit for purpose, using materials suitable for the marine context.
- Safety in design, considering ease of use, surface texture/grip and handrails.
- Steps to be sited in logical, accessible locations with visual links to and from the shared path to enable their use.
- Design to reflect a distinctly Tupua Horo Nuku aesthetic, fitting in with \_\_\_\_ their surroundings while providing opportunity for unique, place based expression.
- Parallel design to seawall/coastline to reduce footprint on the beach and interference with coastal processes.
- Sight lines shall be maintained and unobscured as per CPTED guidelines.
- Fall heights and barriers must comply with NZ Building Code D1 (Access Routes) and F4 (Safety from Falling).
- Provision for safe crossing places and desire lines shall be met as per the Pedestrian Planning and Design Guide (and the Pedestrian Network Guidance (Waka Kotahi, 2021) forthcoming).
- Consideration for the safety for sea birds and animals shall be informed by designed elements and interventions.
- Where stainless steel is used, some minor staining (tea bagging) is likely to occur.

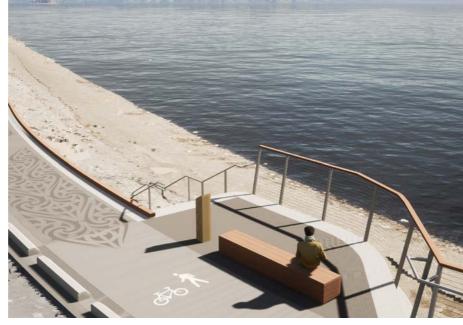


Figure 1.16 Standard access landing, indicative artistic impression.

#### **Beach Nourishment**

#### LV 7. (o) - Other matters

The effects of Tupua Horo Nuku on recreation and loss of amenity value are mitigated by placing beach nourishment at York Bay. By addressing adverse effects on this beach with 'dry' high tide areas used for sitting and other 'dry' beach activities, the proposal will maintain coastal amenity and ensure effects are no more than minor. Losses in the width of beach - where nourishment is not proposed - and at rocky areas, are minimised by relying on a narrowed path where appropriate.

- 1:4 profile to crest of new beach.
- proposed seawalls.



Figure 1.17 1.2m Balustrade indicative artistic impression.

Sand and gravel beach material brought into site.

- Approximately 10m max of beach depth. depth varies as it ties into

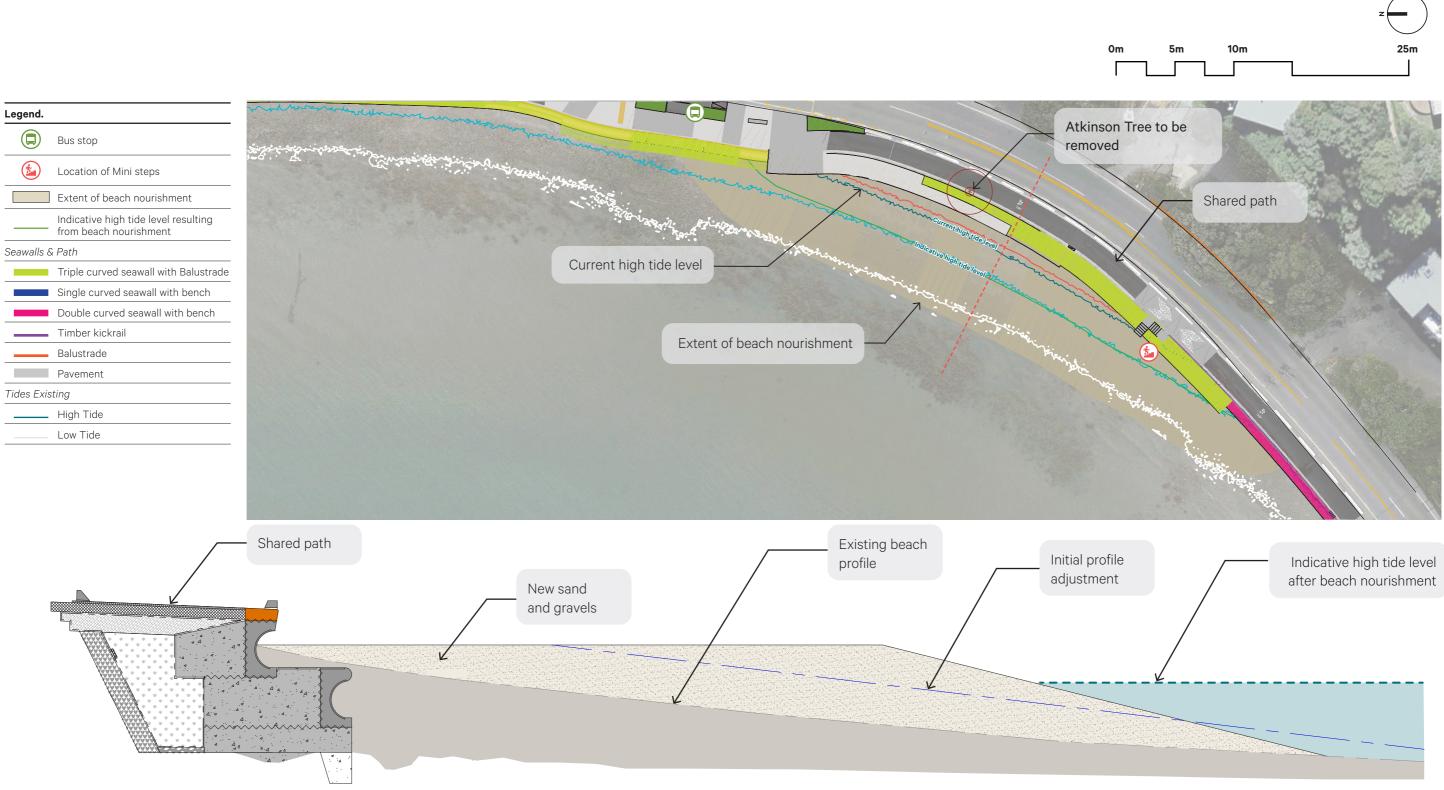


Figure 1.18 Beach nourishment construction setout section.

Tupua Horo Nuku. York Bay Urban Design Plans. 31 January 2024. 21.

### Ecology

### LV 7. (e) - Little penguins, rock pools, barriers

An ecology assessment of intertidal benthic ecology was undertaken in 2016-2017 by EOS Ecology (McMurtrie & Brennan, 2019a). The assessment found that the existing intertidal environment is currently highly modified, with seawalls along the majority of the shoreline consisting primarily of angled concrete seawalls that support low species diversity and richness. Beach areas and fish passage issues have been summarized in the LUDP. Seabird protection is detailed in the Bird Protection Plan.

The main design aspects that will help to improve intertidal ecology and fish passage include:

- A texture applied to the curved seawalls (the curved vertical surface and horizontal flat steps or 'goings'/risers and the vertical sides of access. points (steps and ramps) to provide habitat for intertidal biota and splash zone coastal species. The textures are described and shown in the LUDP, the Seawall Revetment Habitat Plan (SRHP).
- Ecological enhancements, such as tide pools, Vertipools, and Small drilled rock pools are applied to discrete locations along the coastal edge that are within the intertidal zone.
- Re-use of colonised rocky material in front of the new curved seawalls to suit condition EM.19 (c) of the Seawall Revetment Habitat Plan.
- Providing for fish passage at stream culverts to ensure the current level of fish passage for fish species migrating into upstream freshwater habitats is maintained or improved.

The number and locations of ecological enhancements may change post-construction based on suitable areas for placement to achieve the best ecological outcomes. The main ecological limitation for placement of ecological enhancements is that they need to be within the intertidal zone.





Figure 1.24 Photo of ecological enhancement texture applied to curved seawalls vertical faces.

Figure 1.23 Photo of ecological enhancement texture applied to concrete seawalls horizontal faces.



Figure 1.25 Tide pools installed in rock revetment. Ref SHRP



Figure 1.26 Little penguin barrier design



### Planting

#### LV 7. (f)(g) -Trees, planting, natural character

#### **Atikinson Tree**

A memorial tree has been planted in York Bay and is known locally as the 'Atkinson Tree'. The Alliance and HCC undertook a thorough assessment of the various options to retain the Atkinson Tree in York Bay. An option assessment was completed, scoring options against a standard set of criteria. The options included a community produced design, narrowing of the path, relocating the road landward, relocating the tree elsewhere, and removing the tree. To avoid extending the shared path and the required footprint of the new seawall further into the coastal marine area, and to mitigate effects on ecology and coastal landscape values the Alliance and HCC are proposing to remove the Atkinson tree.

Some mature trees along the coast in York Bay are to remain. The Atkinson tree is in poor health and is unlikely to survive relocation. However, there is potential to propagate cuttings from the Atkinson Tree to replant at later stages. An arborist would need to be engaged to provide further advice on such a process. A reference to the tree is being explored as a means to retain its significance and history given its importance to the community.



Figure 1.27 The Atkinson tree (proposed to be removed).

#### Planting

The planting design for the York Bay gives consideration to the dynamic coastal environment, its ecology, the various user experiences along the route, and maintenance and operations factors. Plant species have be chosen from the Plant Palette in the LUDP, which has been developed with the Project Ecologists. This includes indigenous species, which are suited to this specific coastal environment, and will encourage species of birds, lizards and insects which currently (or could potentially) inhabit areas along the route.

Proposed planting is reflective of (and reinforces) the York Bay context; planting provides a variety experiences, in response to the character, context, landscape and natural features along the route.

#### Natural Character

The overall adverse effects on natural character for York Bay are considered to be less than minor for the coastal landscape. The landscape and urban design approach and principles have been developed to mitigate effects of the project on natural character.

As outlined in the LUDP, it is expected that the effects on natural character from the Project, including the seawall and shared path will lessen over time as they weather and become established.

A list of mitigation measures related to natural character attributes is provided below. Further detail of mitigation of effects on natural character and integration with the natural landscape is provided with the description of design areas and elements in the Urban Design Outcomes Section of the LUDP.

Legibility - geomorphology:

Retention of local rock for reuse at base of the seawalls.

Legibility – wayfinding and orientation:

- Reinforcement of the undulating coastline morphology by positioning the shared path along the coastal edge.
- Opportunities for local variation/reinforcement of local identity in the form of access points from the path to the foreshore.

- the bays and associated neighbourhoods.

Visibility - public and private views: - Consistent detailing along the coastal edge and road edge to reduce the

- visual impact.
- \_\_\_\_ landscape setting.
- of the seawalls.
- reduce visual appearance.

Picturesqueness:

- - structurally stable edge.

Tupua Horo Nuku. York Bay Urban Design Plans. 31 January 2024.

- Improved access to headlands with strong natural character and natural features (such as trees, rocky outcrops and rock stacks).

Provision of wayfinding marker, street furniture and signage to reinforce

Provisions for cultural expression and naming to reinforce sense of place.

Appropriate/considered design of urban design and landscape elements such as seating, bins, handrails, seaward side linear barriers, stormwater outlets, planting, signage and path markings to integrate them with the

- Incorporation of eco-mitigation surface textures consistently applied along the lower curve and 'step' of the wall to reduce the visual presence

— Any safety balustrades to be designed as 'transparent' as possible to

- Path alignment responds to the local landform and land use patterns. - Sensitive detailing of urban design and landscape elements, that respond to Mana Whenua, community identity and sense of place.

- Removal of existing unsightly structures and infrastructure along the project site and the replacement of an eroding road with a consistent

### **Urban Design**

### LV 7. (h)(i)(j)(k) - Openspaces, features and signage

The Design Features Report (DFR) (Stantec, 2019) established a set of design principles and outlined the engineering requirements for the project. This BSUDP has been developed in general accordance with these principles and requirements. The LUDP outlines the overarching principles, palettes, and narratives for detailed design. Principles for York Bay can be summarized as:

- Reflective of rugged coastal environment materiality, robustness.
- Less is more emphasise the natural setting and views.
- Maintain integrity of natural rock outcrops.
- Retain and enhance coastal vegetation where possible along coastal edge.
- Consistency across elements a coordinated suite.
- Simple robust forms.
- Simple colour, surface texture, bespoke signage palettes.
- Maintenance considerations.
- Bay specific narratives expressed through cultural design.
- Sympathetic materials palette.

#### **Openspace and Recreational Amenity**

Tupua Horo Nuku provides a connection to a continuous coastal edge experience along York Bay. The Project will enhance existing levels of recreation and amenity values by way of the shared path improving access for people walking and cycling along the coast and between bays. This enhanced access includes new beach access points providing access to the foreshore. The main priorities identified are:

- Creating a fit for purpose shared path that provides access to the coast and to the bays between Point Howard and Eastbourne for people walking and cycling.
- Provide access to the beach, water and headlands.
- Provide stopping and resting places.
- Maintain views to the coast.
- Retain fishing access.

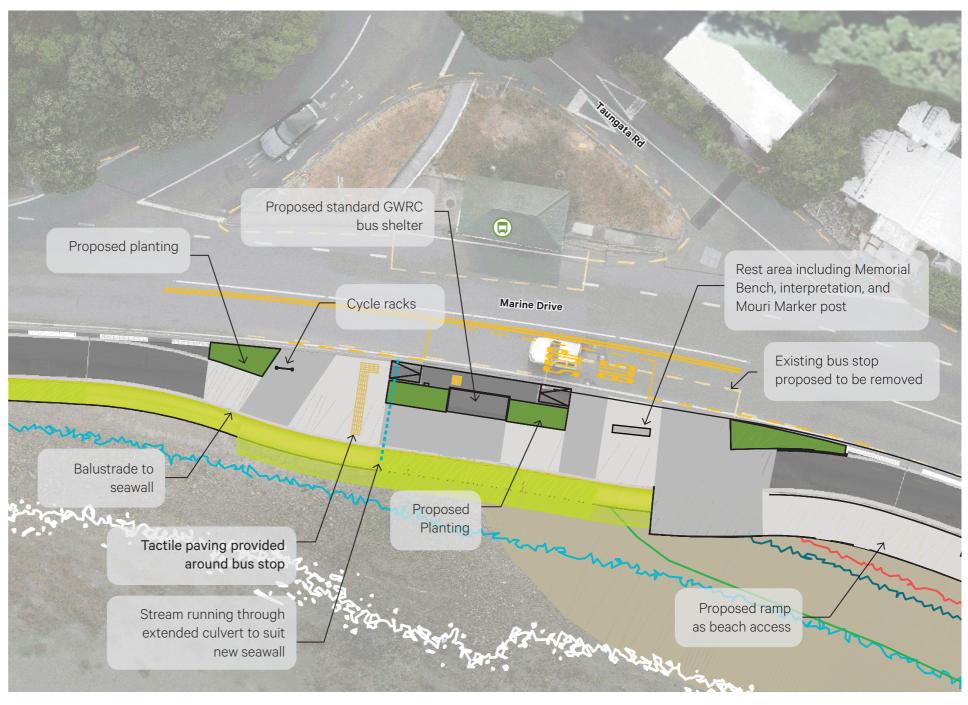


Figure 1.28 Proposed openspace arrangement at York Bay bus stop.

### **Urban Design (continued)**

### LV 7. (h)(i)(j)(k) - Openspaces, features and signage

#### **Furniture and Features**

The furniture palette for York Bay consists of interpretation signage and wayfinding, seating, bike racks and bins. The palette is to reflect the coastal setting of Tupua Horo Nuku and provide opportunities for cultural expression and narrative to some elements.

The design outcomes relating to furniture are:

- Use of standard HCC design elements where practical.
- A cohesive suite across multiple elements using robust materials suitable to the coastal environment.
- Appropriate in scale and number, avoiding visual clutter so as not to detract from their environment.
- Contribute positively to the character of Tupua Horo Nuku.
- Allow for opportunities to incorporated individual bay identities.

Formal seating is generally provided at places where stopping and gathering is encouraged and there is sufficient space. The proposed seats are made of timber which is a hard wearing material suitable for the coastal environment. There is a mixture of seating options including benches and seats with back rests and arms. The design is robust, with preference given to solid, chunky forms that are more in keeping with the coastal environment.

Bike rack are generally co-located with complimentary furniture and near bus stops and stopping location. A standard simple design with a narrow profile is proposed to reduce footprint. They have been located appropriately to assist safe and easy movement along the path.

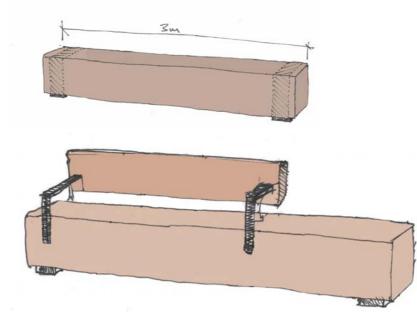


Figure 1.29 Indicative seating design.

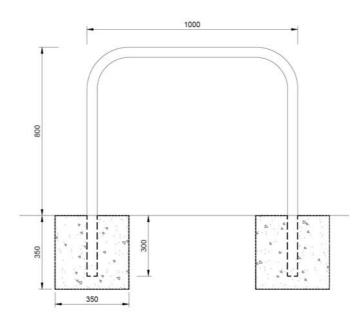


Figure 1.30 Typical cast in bike rack.

### **Urban Design (continued)**

#### LV 7. (h)(i)(j)(k) - Openspaces, features and signage

#### Signage and wayfinding

Where width allows, gathering spaces, beach access points and bus stops are appropriately separated from paths, to allow for slower and safer movement. Linemarking, symbols, and directional arrows are also considered at the approaches (thresholds) and alongside bus stops and beach access points to visually separate fast and slow movement to minimise conflict. These have been jointly expressed through cultural expression and symbols. Signage for stopping places and kickrails will have a bilingual approach.

Traffic signage and markings will form part of the detailed design stage. The position of such signage should ensure minimal visual clutter and follow a clear design logic to the positioning, combining and layout of signs.

The design priorities relating to Signage & Wayfinding are:

- Give consideration to HCC cycleways and Transport Agency standards and Great Harbour Way precedents.
- Ensure CPTED concerns inform the wayfinding design approach.
- assist in legibility of the proposed path.
- Ensure the level, format and intensity of wayfinding signage varies along the path, according to need.
- coastal environment.

- Create a visual language for the Tupua Horo Nuku which suits the needs of the project and is in line with HCC standards.
- Clearly communicate and link key destinations and named landmarks and
- Create a coherent graphic language using robust materials suited to the

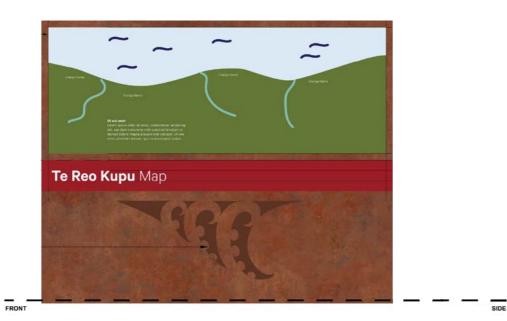


Figure 1.32 Signage design for stopping places (example only).





SIDE



Figure 1.35 Interpretative panel applied to kickrail (example only).

Figure 1.33 Signage design for habitat areas (example only).



#### **Cultural Landscape**

#### LV 7. (I)(m) - Storyboards and surface treatments

Celebration and interpretation of the cultural landscape is integral to the Project vision, design principles and design themes. The Cultural Narrative and Overlay for Tupua Horo Nuku sets out the principles and design response that will guide the cultural expression and create a foundation for the Project in partnership with Taranaki Whānui and Ngati Toa and key project groups.

The Cultural Narrative and Overlay for the Project will be reflected in all parts of the urban and landscape design process, from the overall form of the footprint, through a focus on kaitiakitanga and in the design of the seawall and other structures. This can also be realised though materials used, naming conventions, arrangement of gathering spaces, treatment of the stream crossings, signage, lighting, sculptural elements and artwork along with the consideration of options for future events, recreation and education activities.

The following imagery illustrates specific Cultural Expression design elements by Len Hetet. These elements complement and form part of the integrated approach to cultural expression as setout in the vision for the Project and outcomes for all of the components; from the underlying form to specific details.

#### **Patterns:**

Te Āti Awa tupua rau, he auripo i te manga iti, he auripo i te manga nui raanei, he kaitiaki ki te whenua.

Te Āti Awa of many phenomena's, where there is a ripple in a small tributary or great river, there is a guardian and protector on the land.

— This speaks to the connection between the tidal movements and the creation of the eastern bays land mass by Tupua Horo Nuku - Ngake.

#### Mouri Marker:

- The Mouri Marker represents an area of significance to Mana Whenua. It will highlight the Maori and English names of the bays and allow for our cultural narratives of those bays to be told.

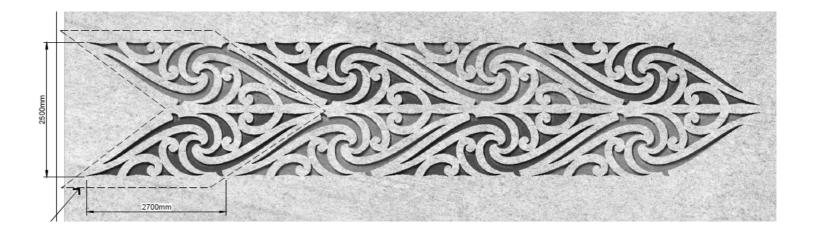


Figure 1.36 Indicative set out of cultural pattern to the path.





Figure 1.37 Mouri Marker post in timber, indicative sketch (artist supplied).

Figure 1.38 Indicative application of cultural pattern to the path.



### **Other Matters**

#### LV 7. (o) - Bus Stops & Shelters

As per the conditions bus shelters shall enhance safety and convenience, and minimises risk, for all users of the Shared Pathway and the road. Bus stops/ Shelters requiring replacement will, to the greatest extent practicable, be designed taking into account the following design principles:

- (a) A preference that the shared path run behind the bus stop/ shelter;
- (b) The bus stop / shelter will be raised (separated with a kerb from the traffic lane where possible);
- The bus stop / shelter will be designed in accordance with universal (c) accessibility principles (such as, but not limited to, wheelchair friendly ramps and tactile pavers); and
- (d) Bus stop / shelter design will be fit for purpose to appropriately protect public transport users from the coastal elements.

The Alliance is proposing to replace the existing bus stop shelter near the intersection of Marine Drive and Taungata Road with a standard GWRC shelter. The benefits of replacing this shelter are:

- Create an accessible bus stop for those less mobile.
- Improve safety by having glass shelters that allow better visibility for path users.
- Providing a raised kerb/access point for bus shelters means better safety for those boarding the bus.

A standard bus shelter is preferred by GWRC. These shelters were chosen as the design aligns well with the landscape and urban design principles with the potential for some modifications:

- Incorporate timber slats with a panel that can be painted and/or used as a community noticeboard.
- Painting of the roof fascia in a colour that matches the other urban design elements.
- Apply cultural expression onto glass or other materials.
- Potential to involve local schools in art creations.
- Modification to entrance point to avoid prevailing wind and splashback from passing vehicles when wet.

We cannot use the existing bus shelter in York Bay when creating accessible bus stops due to the depth of the shelter. Using the existing shelter would encroach on the shared path and also on the coastal marine area.

The design outcomes relating to bus shelters are:

- Fit for purpose, providing best possible shelter from wind, rain and seawater ingress during storm events.
- Bus stop location needs to be safe & convenient for users.
- Bus shelters and entrance point onto the bus should be accessible for wheelchairs.
- Bus shelters should be designed so there is enough space for wheelchairs to get under shelter.
- Design to reflect a distinctly Tupua Horo Nuku aesthetic, fitting in with their surroundings while providing opportunity for unique, place based expression.
- Coastal plantings next to bus stops to soften hardscape through the bay specific plans.



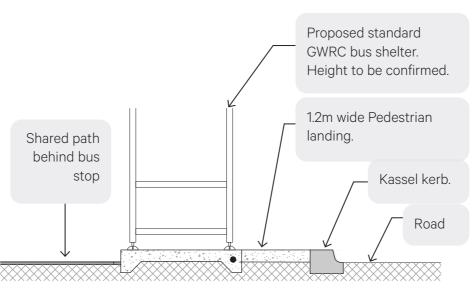


Figure 1.41 Typical bus stop side elevation showing level changes



Figure 1.40 The existing bus stop in York Bay.

Figure 1.39 Example of a standard bus shelter preferred by GWRC.



# Ngā mihi nui.

