



KCAPE DESIGN LTD  
LANDSCAPE ARCHITECTS  
0272810640  
kcape@xplornz.co.nz

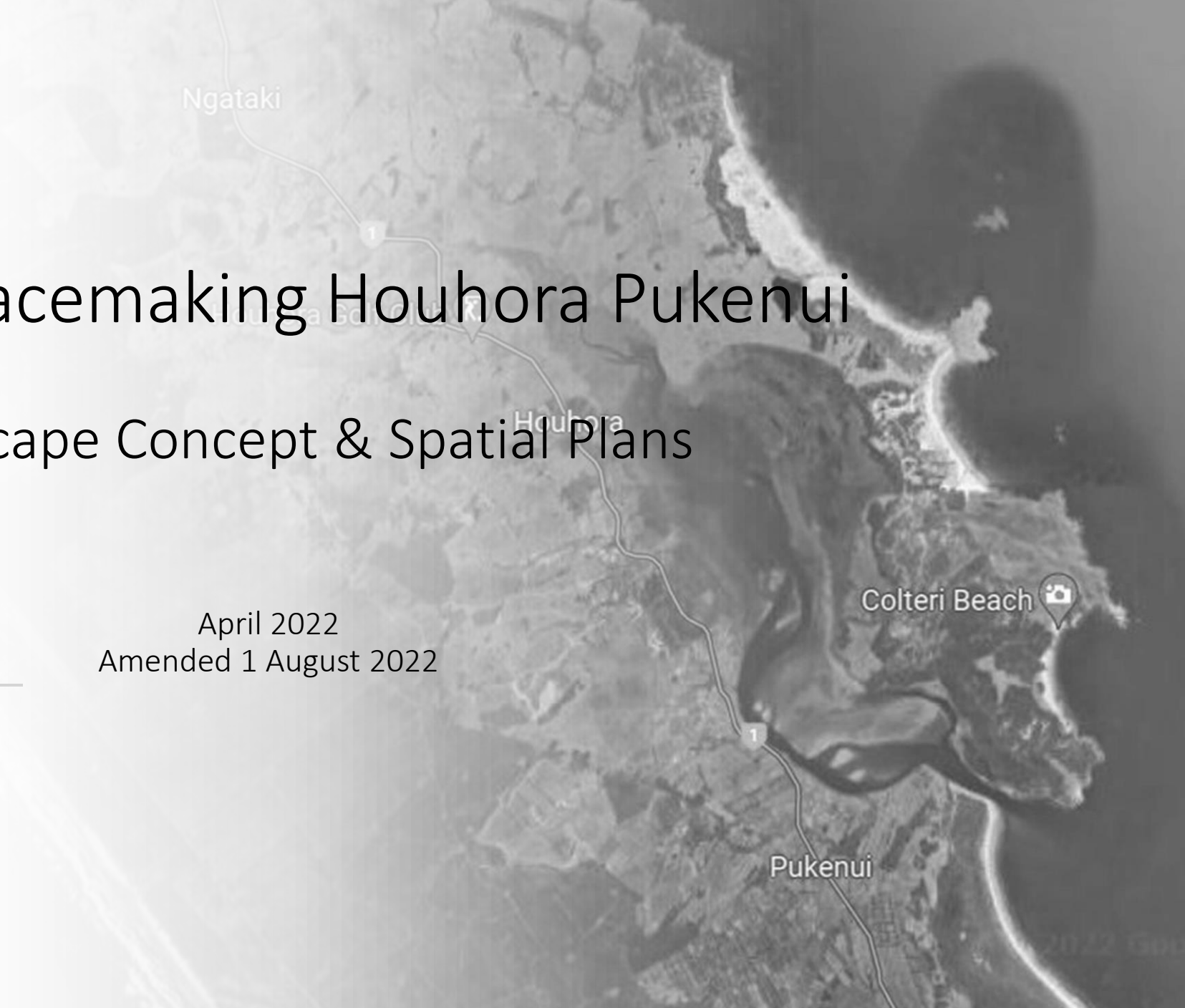


Te Hiku  
Community Board

# Te Hiku Placemaking Houhora Pukenui

## Landscape Concept & Spatial Plans

April 2022  
Amended 1 August 2022



# Te Hiku Placemaking Houhora Pukenui

## Landscape Concept and Spatial Plans

Landscape concept and spatial plans have been prepared for the Te Hiku Community Board.

### **Vision for the future / Matakite mo te heke mai**

*To plan for the next 10 years of recreational community living at Houhora and Pukenui*

### **Principles / Ngā Wariu**

***1 People / Ka tauawhi i te tangata)***

***2 Sustainable Environmental Practices / Ngā mā tāpono, toitu o te taiao***

***3 Cultural Celebration / Ka whakanuia ngā momo ahurea katoa)***

# Content

• Cultural Gateways Houhora Pukenui	page 4	• Footpaths Walkways & Future Paths	page 18
• Overview Concept	page 5	• Arethusa Reserve Footpath Pukenui	page 19
• Houhora Bowling club & Sports Hub Reserve	page 6	• Harbour View Road & Reserve Footpath	page 20
• Photo Montage	page 7	• Northwood Avenue Pukenui Footpath	page 21
• Waterfront Road & Monkey Point Reserve	page 8	• Northwood Ave Pukenui to Houhora Heads	page 22
• Waterfront Road & Monkey Point Reserve	page 9	• Coastal Scenic Walkway by John Stewart	page 23 -27
• Photo Montage	page 10	• Planting Plan Houhora Pukenui	page 28 -30
• Waterfront Road & Southern Estuary Reserve	page 11	• Public Consultation Feedback	See Appendix
• Raio Creek Walkway	page 12		
• Pukenui Park Houhora Reserve	page 13		
• Photo Montage	page 14		
• Commercial Wharf Pukenui Reserve	page 15		
• Harbour View Coastal Reserve	page 16		
• Houhora Heads Reserve	page 17		

Cultural Gateways Houhora Heads /Pukenui

The plan proposes that Mana Whenua are considered to provide cultural artworks at the gateway entrances to Houhora and Pukenui. To create a sense of identity and a sense of place for the area. Along the proposed coastal walkway paths and within open spaces plaques will feature to tell the purakau/stories and history of local iwi. The locations to be determined with one artwork at the southern end of Houhora and one artwork at the northern approach to Pukenui.



 Possible Locations of Cultural Artwork and Gateways

Cultural Gateways  
Houhora Pukenui

Sheet 13  
April 2022

  
XCAPE DESIGN LTD  
LANDSCAPE ARCHITECTS  
0272810640  
dave@xcape.co.nz







Houhora Bowling Club & Sports Hub Reserve Concept







- Key & Park Concept**
-  Natural play style small playground  
Swings, Balance bars, Climbing ropes.  
This will enable families to play tennis by providing a playground for the children.
  -  Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.
  -  Large concrete tables with coloured tops and seats . These will feature in pairs under umbrella.
  -  The proposed pump track has a total area of 1200 square meters. A combination of asphalt track with green spaces incorporated into the track design.
  -  A new public footpath will connect the car park to the playground and the tennis courts. This footpath will also connect to the existing footpath along North Road. Enabling parents and children to ride bikes, scooters and skateboards to the park.
  -  New Public Toilets will be built within the Bowling club site. These will be available to the general public and Bowling club members. FNDC will manage the public toilet facility.
  -  Pohutukawa trees will be planted between the existing footpath and the tennis court and play ground area.



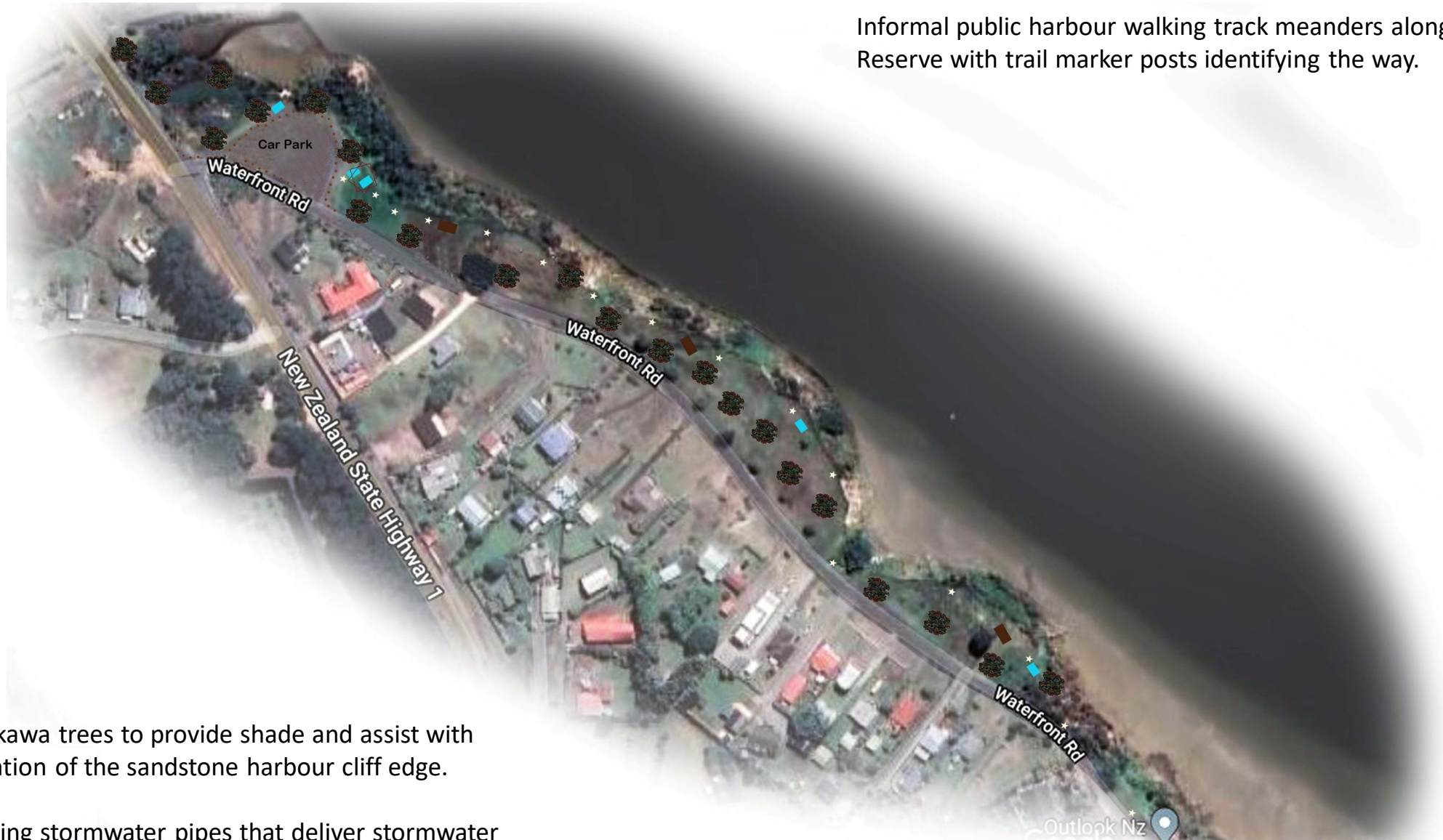




Photo montage of proposed Natural Play playground and improvements.

## Waterfront Road Green Spaces

Informal public harbour walking track meanders along the Reserve with trail marker posts identifying the way.



Pohutukawa trees to provide shade and assist with stabilisation of the sandstone harbour cliff edge.

Armouring stormwater pipes that deliver stormwater into the harbour reduces erosion and sedimentation.



Waterfront Road and Monkey Point Reserve Concept



Key & Park Concept

-  A formed carpark in this location providing overflow parking for the fishing club on busy days. The carpark will have bollards to control parking deter boy racers and separate pedestrian creating a safer space.
-  A new pedestrian path is planned to connect Houhora Heads to Pukenui providing a scenic waterfront path where possible. The pathway will use timber trail markers to guide walkers.
-  Timber bridges over the existing deep drains along the new walkway.
-  Large concrete tables with coloured tops and seats. These will feature in pairs under umbrella.
-  Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.
-  Pohutukawa trees will be planted replacing pine trees and to help stabilise eroding sandstone banks and cliff sides. These trees will not block view shafts from residents homes of the harbour and sea views, they will provide shade and provide habitat for native birds.

Photo of Waterfront Road Reserve.

Images of products that could be used.







Photo montage Waterfront Road looking north towards the Houhora Big Game & Sports Fishing Club.

Waterfront Road Southern Estuary Reserve Concept

Key & Park Concept



- \*\*\* A new pedestrian path is planned to connect Houhora Heads to Pukenui providing a scenic waterfront path where possible.
- Timber bridges over the existing deep drains along the new walkway.
- Large concrete tables with coloured tops and seats . These will feature in pairs under umbrella.
- Pohutukawa trees will be planted replacing pine trees and to help stabilise eroding sandstone banks and cliff sides. These trees will not block view shafts from residents homes of the harbour and sea views, they will provide shade and provide habitat for native birds.



Estuary Access.

Paper road public access and Marine reserve.



Images taken along the southern part of Waterfront road. In some of these locations the footpath will be adjacent to the road.



Waterfront rd Southern Sheet 4  
& Estuary Reserve March 2022



XSCAPE DESIGN LTD  
LANDSCAPE ARCHITECTS  
0272810640  
delaysi@stephen07@gmail.com



# Supporting a FNDC Infrastructure Project 2022/2023 – Coastal Walkway

Coastal Walkway Waterfront Road Raio Creek Extension Concept





Pukenui Park, Houhora Reserve Concept



Key & Park Concept

Car Park

A new carpark to the north of the playground for safe access which should reduce congestion at the existing fishing club carpark avoiding inappropriate parking on the footpath at the corner.



Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.



Large concrete tables with coloured tops and seats to replace old timber tables as renewal funds become available. More tables need to be added to this park as demand from use increases.



Replace old playground with a new purpose built playground that will meet the needs of future generations of tamariki.



Bollards will be used between the road and footpath to create a safe pedestrian path.



Pohutukawa trees will be planted replacing pine and wattle trees. Pohutukawa trees help stabilise eroding sandstone banks and cliff sides. These trees will not block view shafts from residents homes of the harbour and sea views, trees will provide shade and provide habitat for native birds.

Photos of new playgrounds made recently in Aotearoa





Photo montage of Pukenui Park Houhora Reserve with additional picnic tables and shade sails . Bollards along the footpath to make it safer for whanau and tamariki to walk.



Commercial Wharf Pukenui Reserve Concept




Photo Montage of Harbour Waterfront Coastal Walkway (John Stewart image)









Photo of products that could be used





### Key & Park Concept

-  A timber Coastal Waterfront Boardwalk and path will connect the Commercial Wharf to Lamb Bridge providing a unique experience with the intertidal zone of the Houhora Harbour.
-  Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.
-  Large concrete tables with coloured tops and seats . These will feature in pairs under umbrella.
-  Park benches x 3 along cliff area to enjoy the views.
-  Local art work will upgrade the existing bus shelter on the corner of Wharf road and State highway 1.
-  Pohutukawa trees will be planted replacing pine and wattle trees .Pohutukawa trees help stabilise eroding sandstone banks and cliff sides. These trees will not block view shafts from residence homes of the harbour and sea views, trees will provide shade and provide habitat for native birds.

Supporting John Stewart’s Coastal Walkway from the Commercial Wharf to Lamb’s Bridge.

Public bus shelter features local art work










Harbour View Coastal Reserve Concept

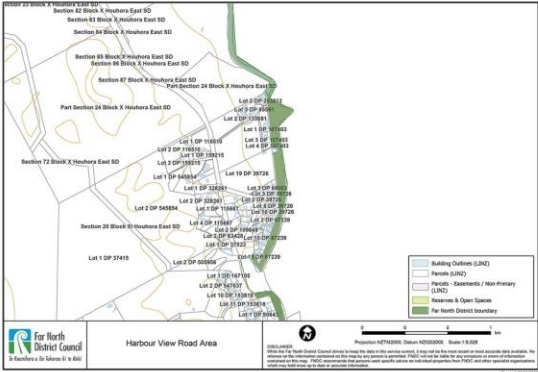


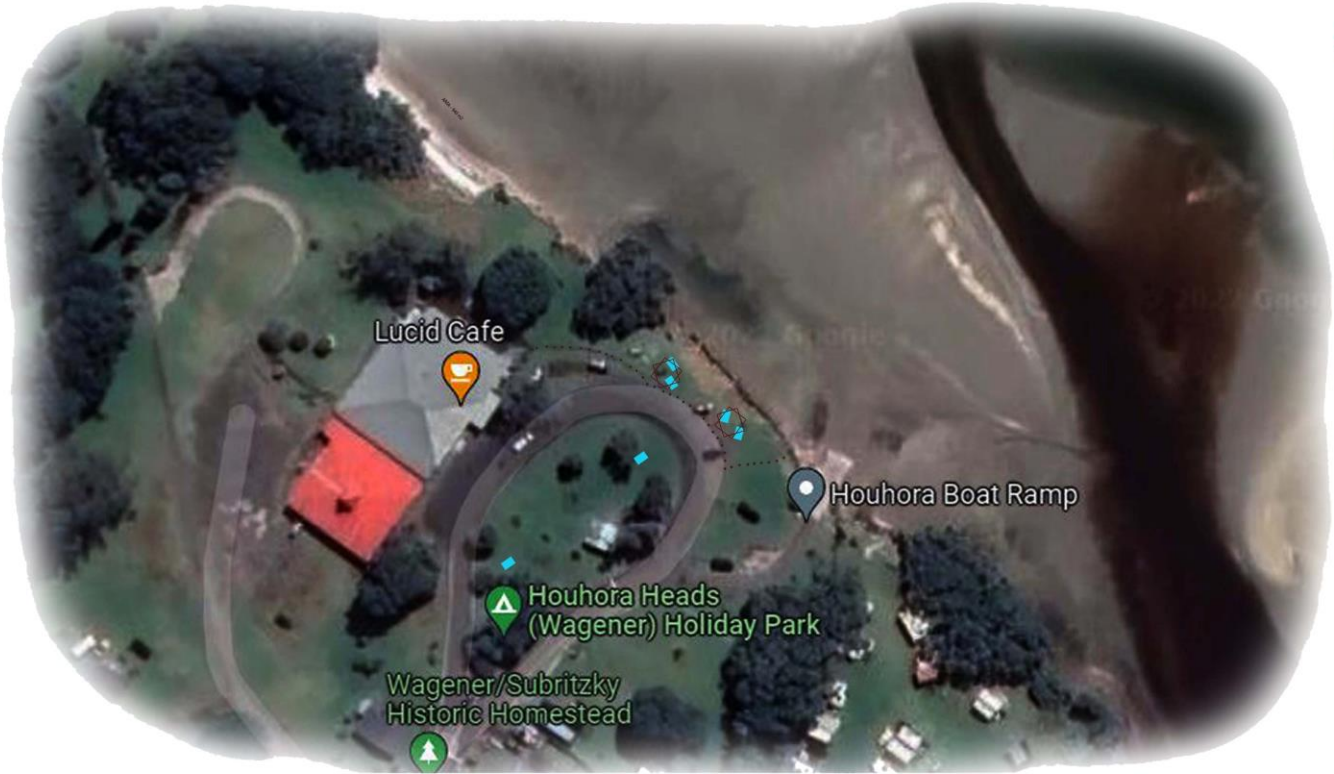
Key & Park Concept

-  A possible future coastal walkway could start partway along Harbour View Road providing a unique experience with the intertidal zone of the Houhora Harbour.
-  Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.
-  Large concrete tables with coloured tops and seats . These will feature in pairs under umbrella.
-  A new pedestrian path will loop around Harbour View Road. This path will be built to accomodate wheelchair and pushchair providing safe pedestrian walking.
-  Pohutukawa trees will be planted replacing pine and wattle trees .Pohutukawa trees help stabilise eroding sandstone banks and cliff sides. These trees will not block view shafts from residents homes of the harbour and sea views, trees will provide shade and provide habitat for native birds.

**Harbour View Road Reserve**  
This reserve has some semi mature trees for shade. There is an existing set of steps down to the waters edge. These steps need upgrading. A concrete footpath will give safe pedestrain access to the pocket park . The access lane is not sign posted making it a local destination.

**Harbour View Road Lamb Creek Reserve**  
This reserve has a concrete picnic table an additional table and shade umbrella will be put into this reserve. A concrete footpath will give safe pedestrain access to the pocket park and along Harbour View road.





Key & Park Concept



Architectural Shade sails to provide all year round protection from the sun. Providing a safe place for people to relax and have picnics.



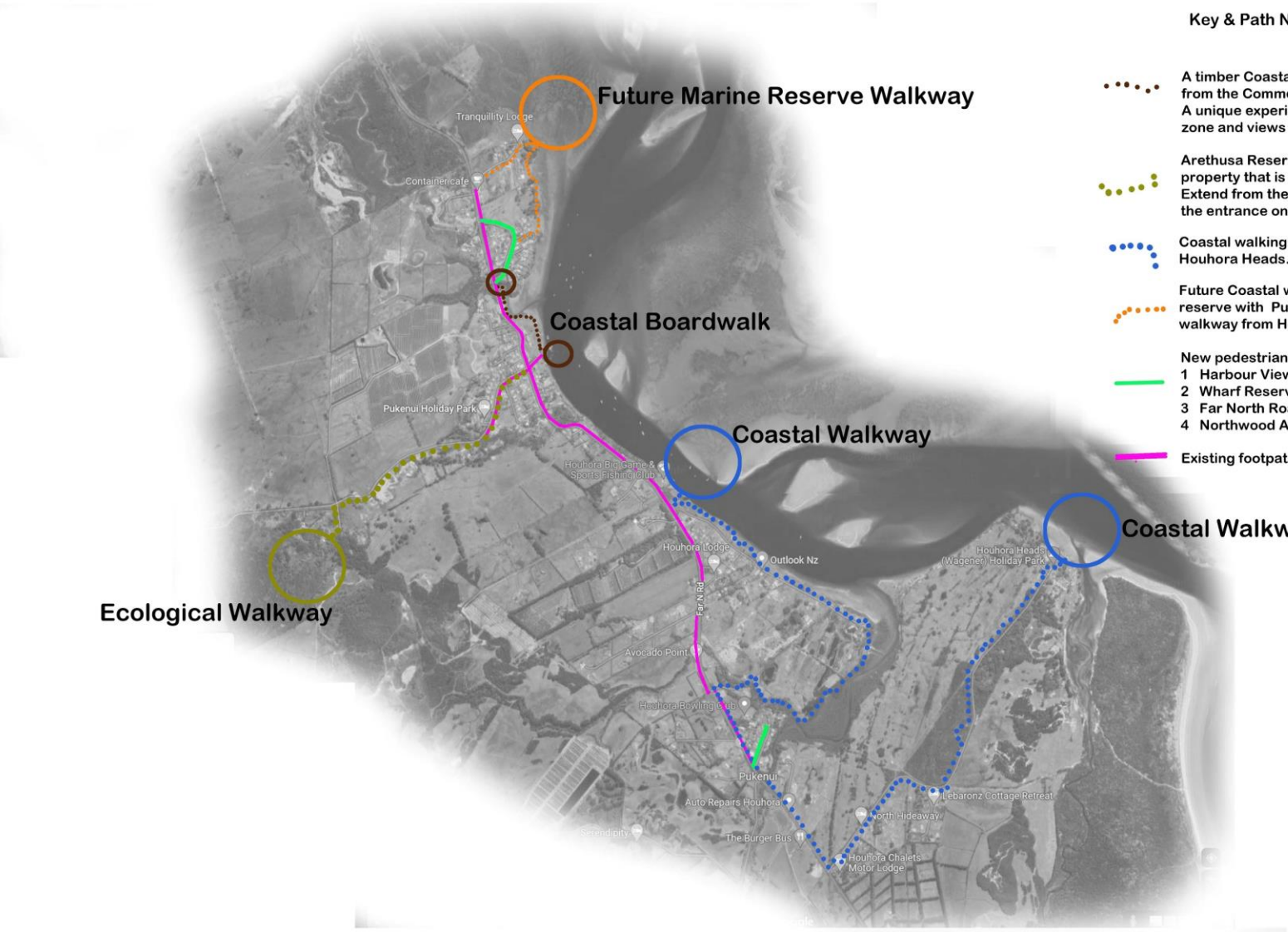
Large concrete tables with coloured tops and seats . These will feature in pairs under umbrella.









Bollards create a safe space for park user within the reserve space while using picnic tables.





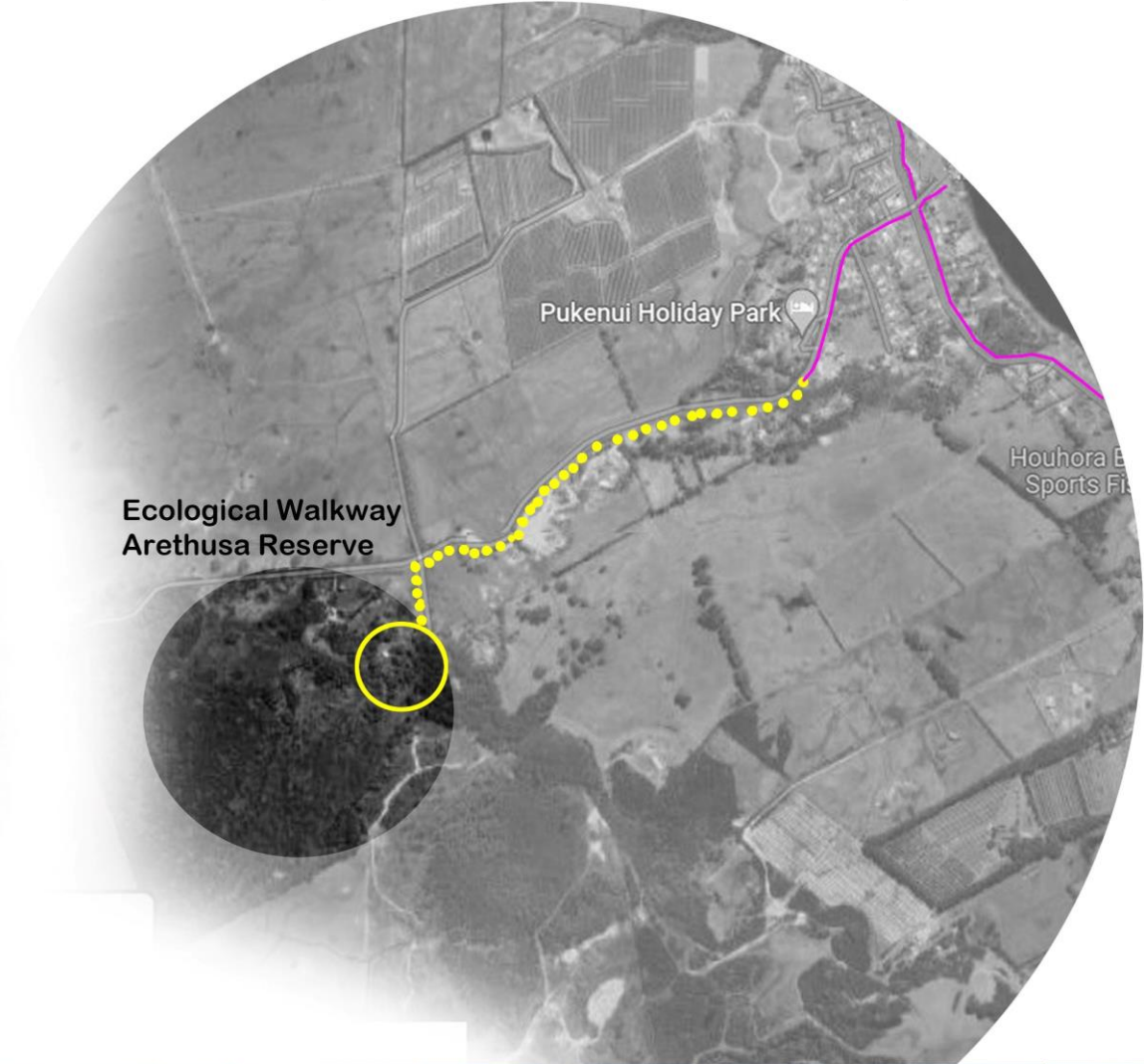


Key & Path Networks

-  A timber Coastal Waterfront Boardwalk and path from the Commercial Wharf to Lamb Bridge. A unique experience with the intertidal zone and views of Houhora Harbour.
-  Arethusa Reserve walking path a Northland Forest & Bird property that is 2km from Houhora Harbour. Extend from the existing footpath on Lamb Road to the entrance on May Road. A distance of 1.1km.
-  Coastal walking path to safely connect Pukenui to Houhora Heads.
-  Future Coastal walking path connect northern coastal reserve with Pukenui town and wharf. Continuing the walkway from Houhora Heads to the northern end of Pukenui.
-  New pedestrian paths to finish footpaths within the town,
  - 1 Harbour View Road
  - 2 Wharf Reserve
  - 3 Far North Road
  - 4 Northwood Avenue
-  Existing footpaths .

Supporting a FNDC Infrastructure Project 2022/2023 – Coastal Walkway. This connects into existing and proposed Footpaths within Houhora and Pukenui.

Arethusa Reserve Footpath Connecting to Pukenui Town Concept



Key & Path Networks



Existing concrete footpaths.



Arethusa Reserve walking path Northland forest & Bird Two 2km from Houhora Harbour.  
Extend from the existing footpath on Lamb Road to the entrance on May Road. A distance of 1.1km.

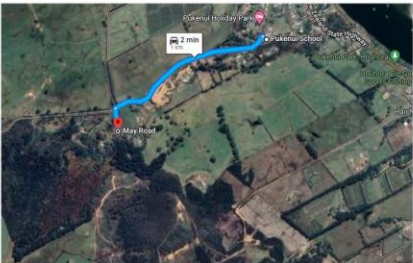


Footpath Details

Image of a timber edged and gravel shared footpath.

Minimum footpath width 1.8m and maximum width 3m.

Distance of new footpath 1.1km.



Footpath currently finishes at School.

Images of Lamb Road area of proposed new footpath to Arethusa Reserve in May Road off Lamb Road. 1.1km of new footpath.





Key & Path Networks

- Existing concrete footpaths.
- Harbour View Road will have a concrete footpath this footpath will connect to the existing public footpath on Far North Road. The connections will be at Lamb Bridge south end and Far North Road north end before the Container cafe.

Footpath Details



- Image of a standard concrete shared footpath.
- Minimum footpath width 1.8m and maximum width 3m.
- Distance of new footpath 900 meters (0.9km).



Distance 900metres.

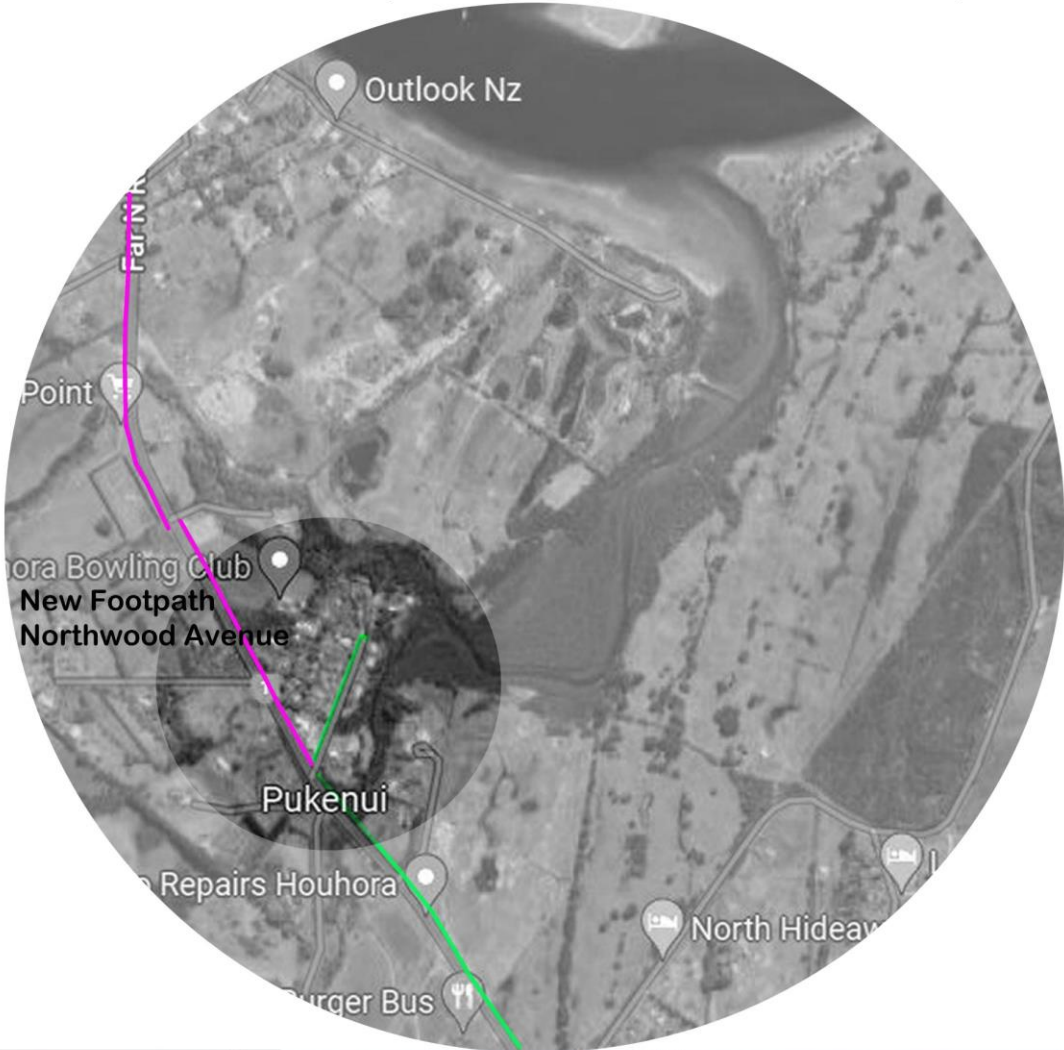


Harbour View Reserve Image.



Southern end Harbour View Road from Far North Road entrance. Images of Harbour View Road , the footpath will meander through Harbour View Reserve, follow road to connect at the northern end of Far North Road, distance 0.9km.

Northwood Avenue New Footpath connecting to Pukenui Town Concept



Key & Path Networks

- Existing concrete footpaths.
- Northwood Avenue will have a concrete footpath this footpath will connect to the existing public footpath on Far North Road.

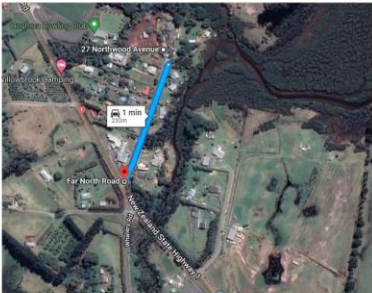
Footpath Details



Image of a standard concrete shared footpath.

Minimum footpath width 1.8m and maximum width 3m.

Distance of new footpath 250 meters (0.25km).



Distance 250 metres.



View from Far North Road entrance into Northwood Avenue.

Images of Northwood Avenue the new footpath will be on the north side of the avenue to the bottom of the turning circle a distance of 250 meters.

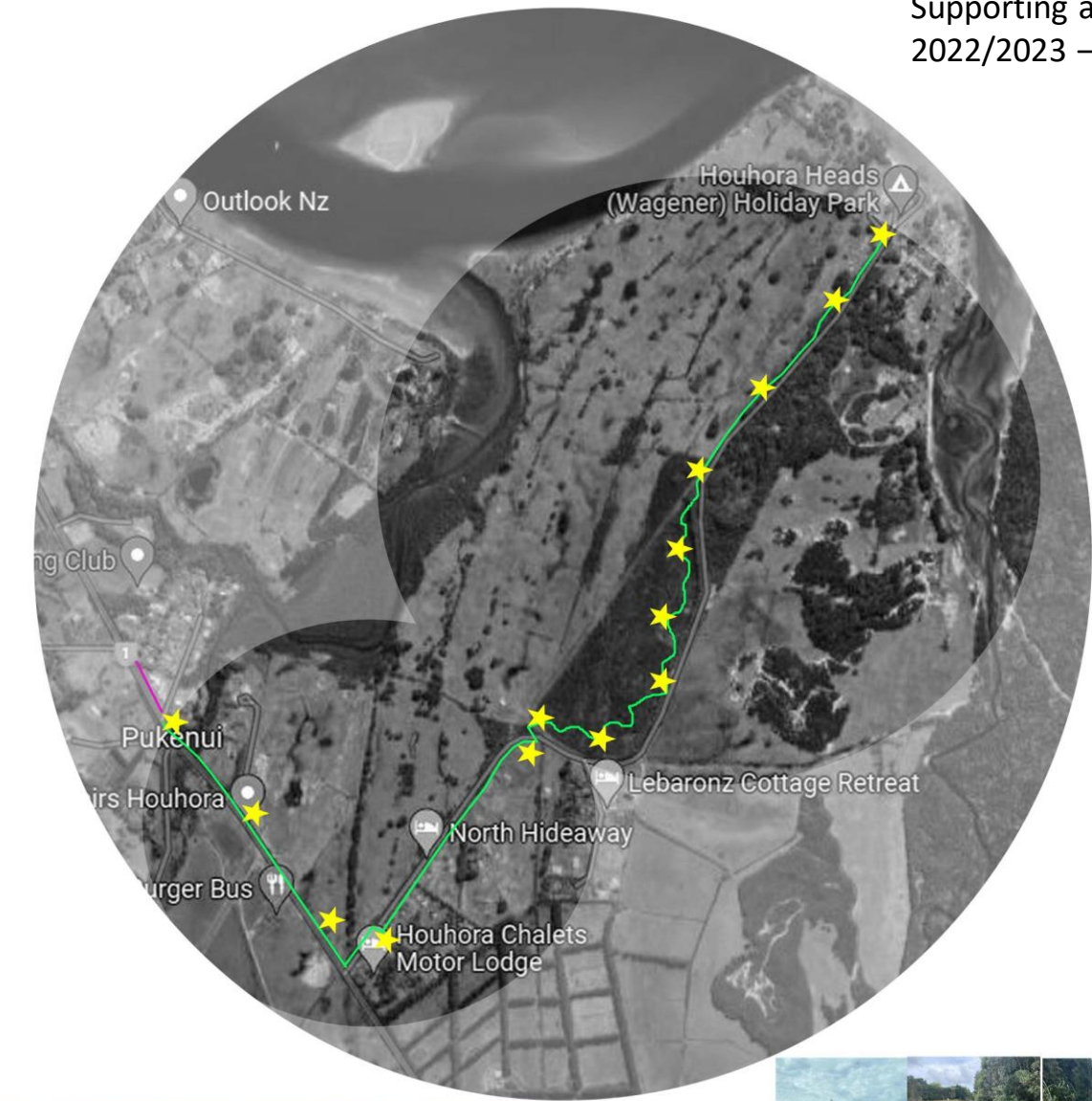
New Footpath  
Northwood Ave

XSCAPE DESIGN LTD  
LANDSCAPE ARCHITECTS  
0272810640  
delaysi.stephen@xscape.co.nz




Sheet 12

April 2022





Key & Path Networks

-  Existing concrete footpaths.
-  Northwood Ave footpath will connect to State Highway 1 with a new wide footpath. This footpath will connect to Houhora Heads along the public road. The footpath will meander through the FNDC reserve ending at the Houhora Heads waterfront.
-  Timber Trail makers will guide the users when walking through the trees.

Footpath Details



Image of a standard concrete shared footpath.

Minimum footpath width 1.8m and maximum width 3m.

Distance from existing footpath to Houhora Heads. Distance 2.8km.



Once the footpath reaches Houhora Heads Road it will use trail makers and be a mix of grass and gravel path.



A trail marker on the Ed Hillary walking track



Photo's of current Far North Road and Road Reserve.



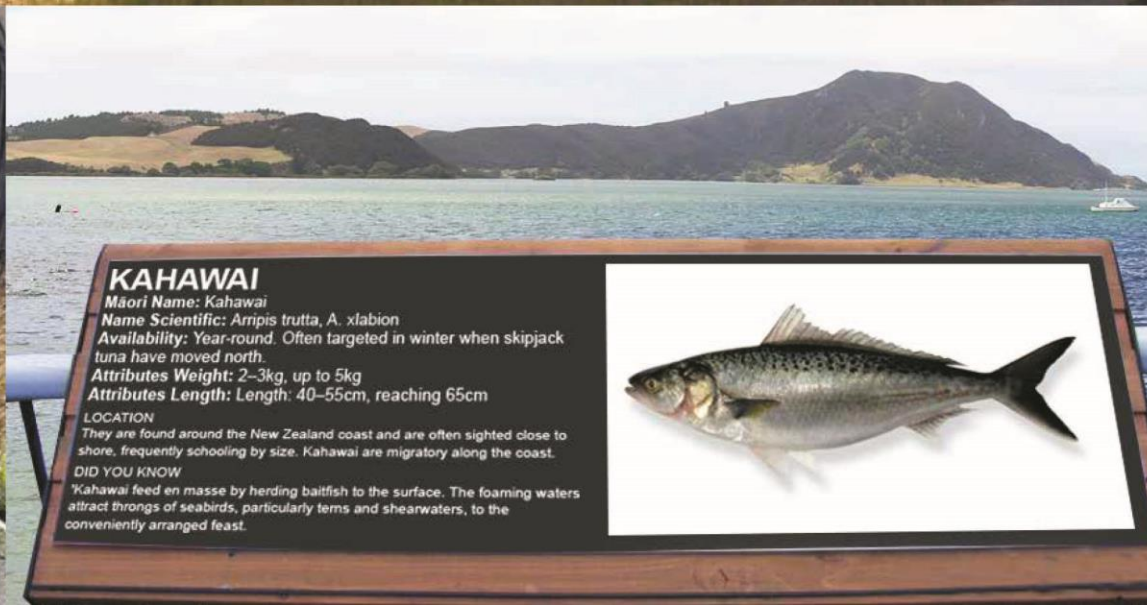
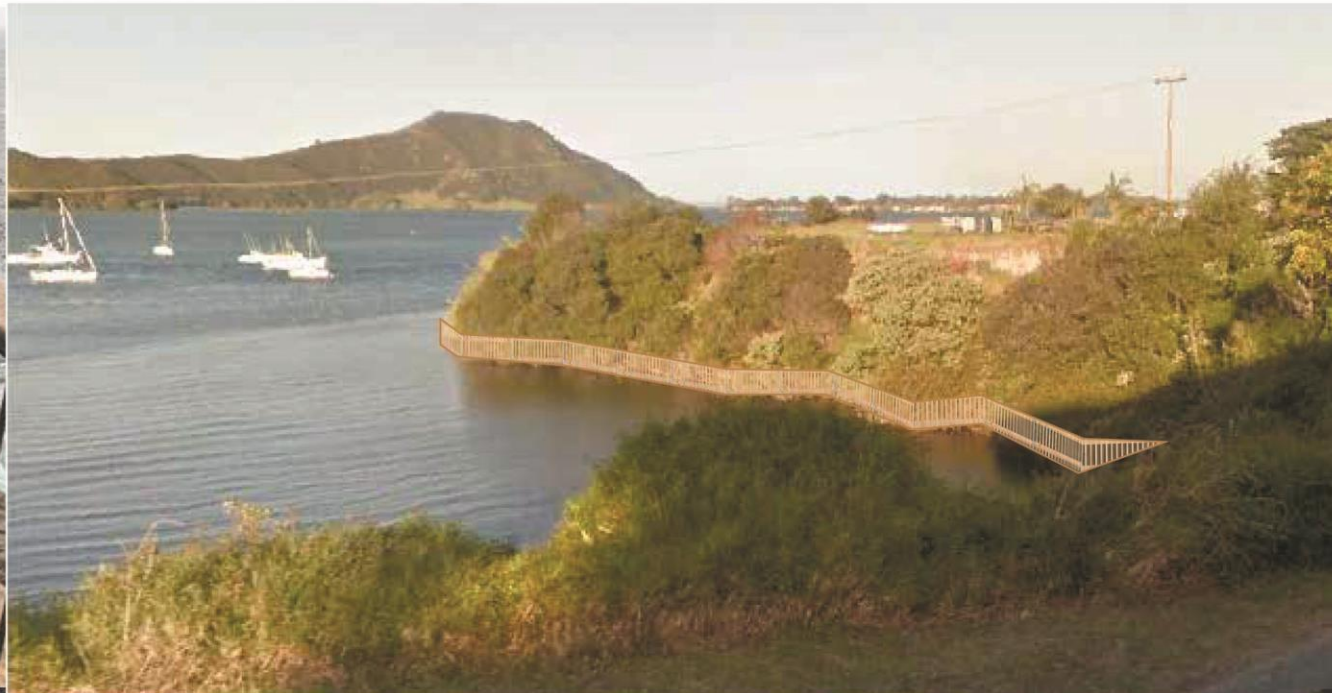
# **PROPOSED PUKENUI SCENIC WALKWAY**

Designed by John Stewart



# PROPOSED PUKENUI SCENIC WALKWAY

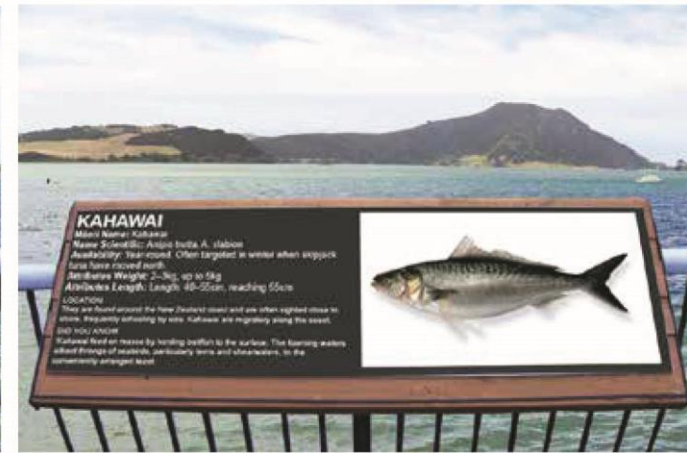
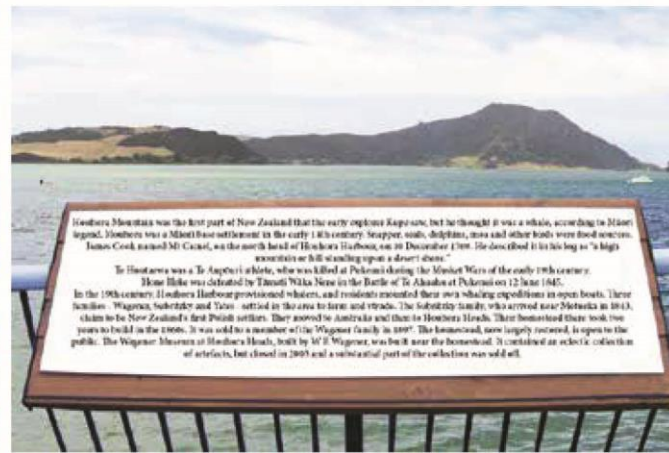
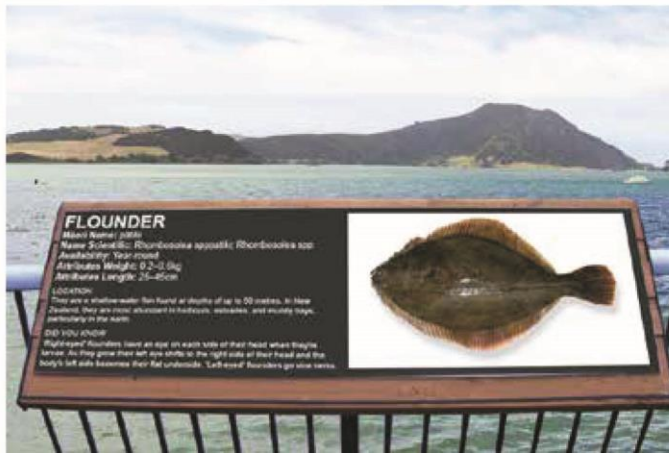
LINKING ARETHUSA RESERVE WITH COASTAL BOARDWALK AND CONTAINER SHOPS NORTH OF HARBOUR VIEW ROAD





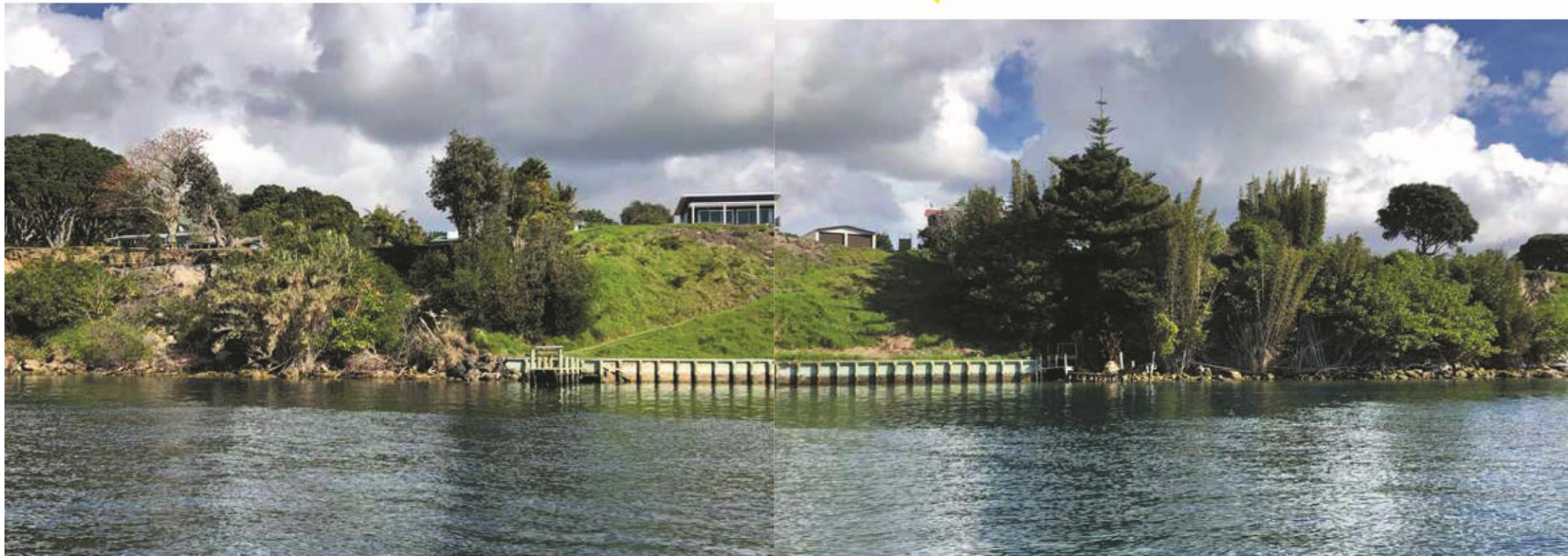
# BOARDWALK FROM COMMERCIAL WHARF - LAMB ROAD BRIDGE RESERVE 465m

To include possible fishing platform. Information plaques of local history and fish species





## Any foundations for the Boardwalk will reduce future erosion



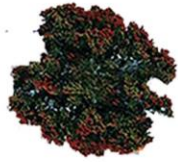


# PUKENUI BOARDWALK APPROX 465 METRES

Proposed Boardwalk  
Distance = Approx 465m



# Planting Plan Houhora Pukenui



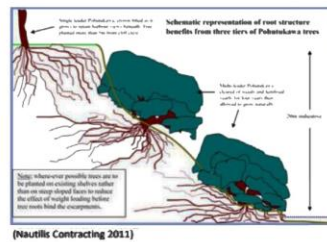
*Metrosideros excelsa* Pohutukawa are to be planted as per concept plans for the different locations.

These trees should be eco-source grown from seeds of Pohutukawa found in Te Apouri peninsula

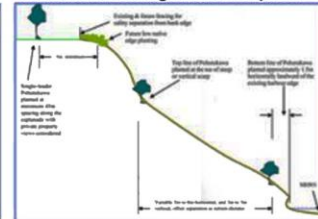
Current FNDC policy only maintains trees and shrubs. Therefore only Pohutukawa trees have been selected as these trees are very resilient and occur naturally within the area.



## Tree Root Stabilization - Pohutukawa



### Pohutukawa Planting Profile Escarpment Position



- "Pohutukawa, the combination of its structural attributes causes Pohutukawa to stand out as an instrument of choice for soft engineering on unstable coastal escarpments. (Nautilus Contracting Ltd 2011)
- It is critical that the correct layout location of Pohutukawa occurs along the top of the existing escarpment this will have long term benefits to this property physically and ecologically adding to the natural character of this site.
- A unique and crucial characteristic of these climax trees is their ability to form vegetation islands Pohutukawa trees are adapted to establish directly into sand and rock without soil.

### Pohutukawa Tree Selections

- Cliff top select Pohutukawa trees that have single strong trunks, these trees will need to be prune to ensure that each tree only has one main trunk.
- Pohutukawa trees selected for the toe (base) of scarp and vertical scarp must be multi trunked (refer to Nautili's Contracting Ltd 2011 Schematic representation of Tree Root Stabilization above).
- A planting regime designed to maximise slope stability utilising indigenous plant species. Planting of Pohutukawa in suitable locations –toe of scarp or vertical scarp,(there are many opportunities to maximise planting adding to the long term stability of this area). Pohutukawa trees planted at the top of the escarpment must be planted five (5) meters back from the cliff edge at eight (8) meter centre's spacing (See above Pohutukawa Cliff Escarpment Planting Detail).
- Interception of surface water on the land above

The community should seriously consider using the method of Pohutukawa tree root stabilization for the eroding sandstone cliffs around the harbour. That has been included on this page. This method has been successful in the Tauranga harbour on their eroding sandstone cliff edges.





# Pohutukawa Trees and Tree Root Stabilisation



*Matakite mo te heke mai*

*The vision for the future is to use sustainable environmental practices*



Images of existing Pohutukawa on Waterfront Road Reserve Cliff edge in these locations the cliff edge has stabilised and other vegetation is now growing.



# Omokoroa Tauranga Harbour *Sandstone Cliff Restoration*

Tauranga Council engaged Nautilus Contracting in 2011 to carry out erosion prevention works on the sandstone cliff edge that was threatening the cliff top dwellings due to erosion.

Below are images taken 18 May 2022 of these cliff edges.

By armouring the toe (base) with large rocks in conjunction with planting Pohutukawa trees The cliff face has stabilised.

Other indigenous fast growing species such as Harakeke(flax) Taupata (Coprosma repens) Ngaio (myoporum laetum) were also planted. However it is the tree root stabilization (structure) that is doing the real work once the cliff base is protected.

## Tree Root Stabilization - Pohutukawa

