

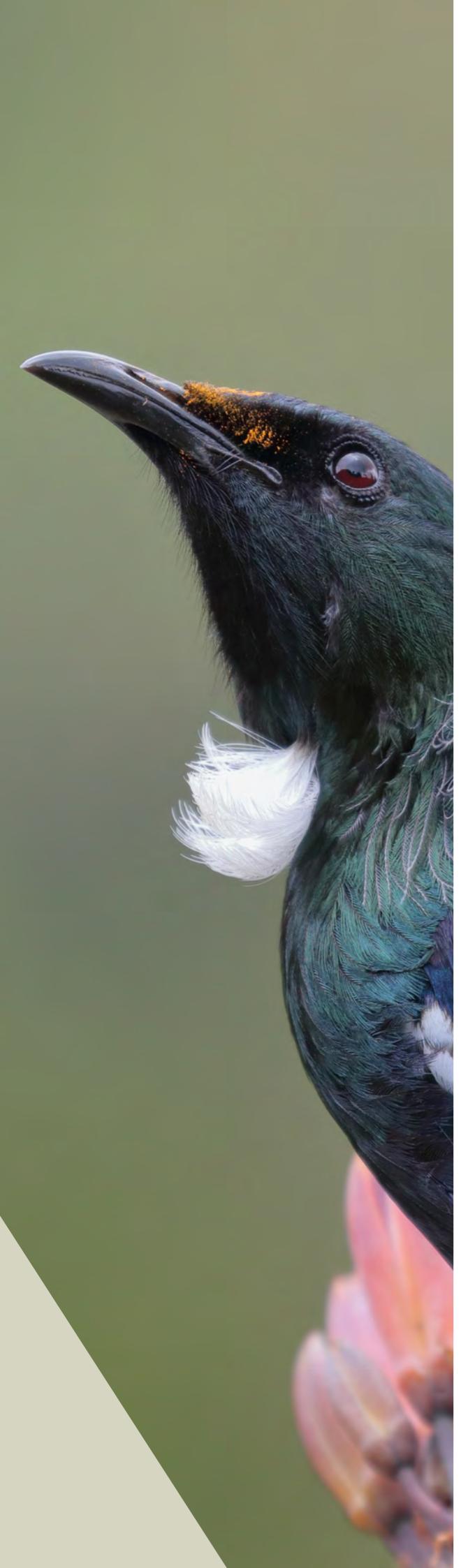


Blackpool

Stormwater Improvement

Planting Plan - December 2024

WRT WAIHEKE
RESOURCES
TRUST



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Introduction

WRT is a not-for-profit organisation that has been serving Waiheke for over 25 years.

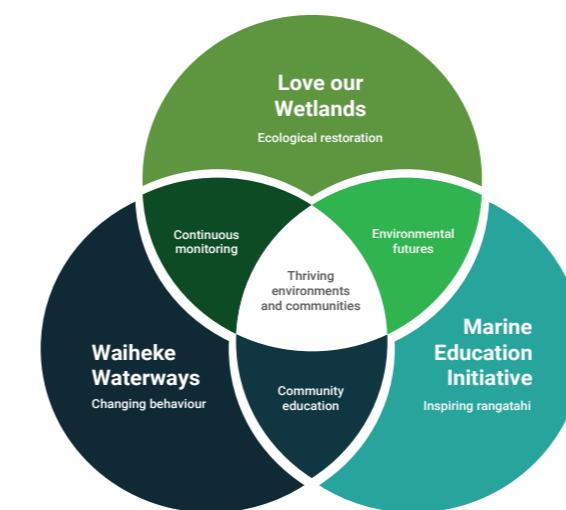
WRT aspires to work more closely with Auckland Council to support the delivery of the ecological restoration targets for Waiheke Island in alignment with the Waiheke Local Climate Plan, the Waiheke Urban Ngahere Plan and the Wetland Prioritisation report.

Through our Love Our Wetlands project, WRT is currently working to restore eight wetland areas on Waiheke – Matiatia wetland, Owhanake, Te Huruhia Bay awa, Okahuiti, Rangihoua, Awaawaroa Reserve and Te Matuku – each of which has unique historical, cultural, ecological and environmental value. Through this mahi, we are creating vibrant habitats where our native species can thrive.

WRT's social procurement model ensures maximum community engagement and increased local employment. Our connections with local nurseries and experts with many years of experience in restoration within the Waiheke context means that our team utilises best-practice restoration methodologies. Year after year, the team builds their proficiency in species identification and restoration techniques and is supported by extensive knowledge of flora and fauna.

WRT Vision

Waiheke Resources Trust (WRT) works to celebrate and protect the resources we already have and build capacity and knowledge in the community toward the creation of a resource-full future for all. We seek to provide the Waiheke community with information, inspiration, innovation and education to make ethical, effective and powerful decisions with respect to sustainability.



WRT's projects work together to support thriving environments and communities

Love Our Wetlands

Toitū te Marae a Tāne, toitū te Marae a Tangaroa,

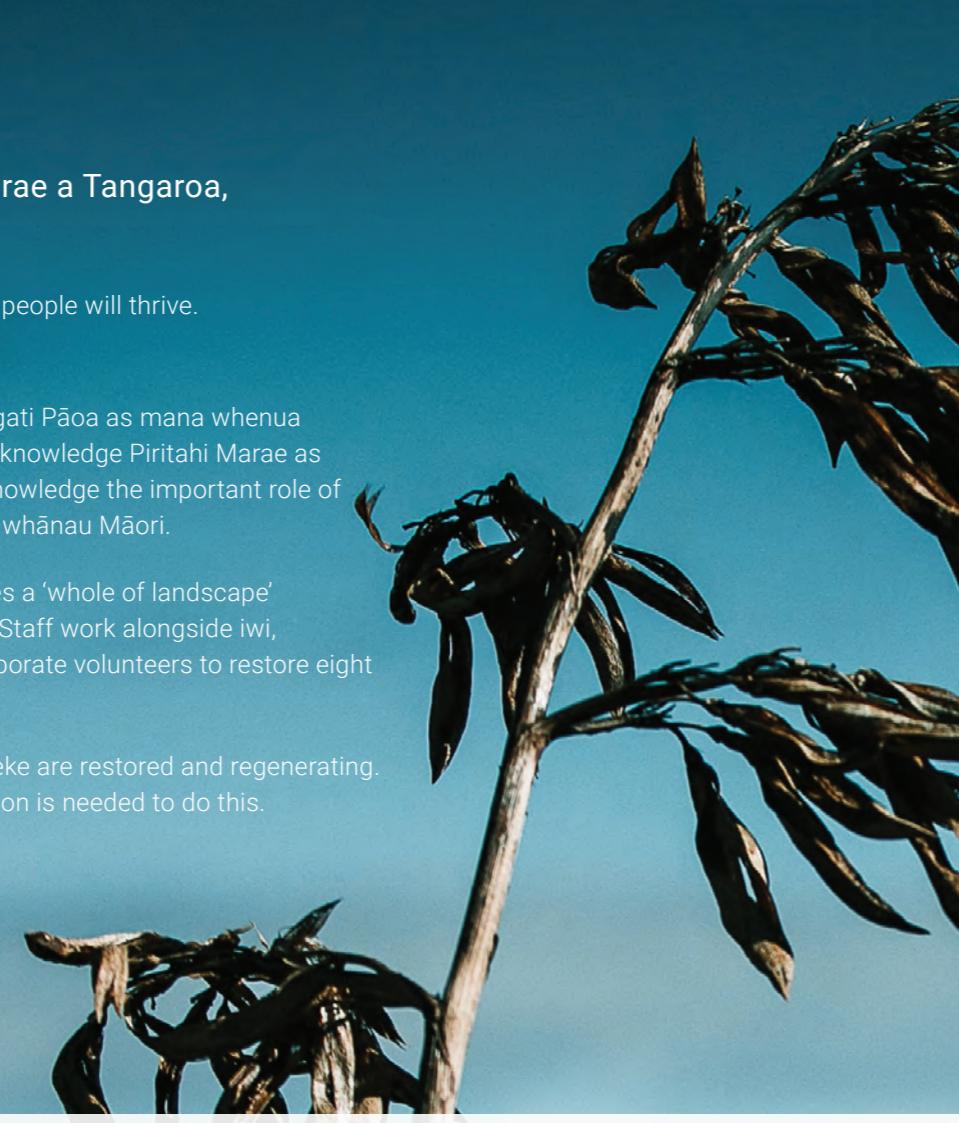
Toitū te Marae a Iwi.

If the land is well and the sea is well we the people will thrive.

Waiheke Resources Trust acknowledges Ngati Pāoa as mana whenua of Te Motu-arai-roa | Waiheke Island. We acknowledge Piritahi Marae as the Marae for our community. We also acknowledge the important role of repo | wetlands as taonga for iwi, hapū and whānau Māori.

The Love Our Wetland Waiheke project takes a 'whole of landscape' ecological approach to restoring wetlands. Staff work alongside iwi, mātāwaka, locals, schools, visitors and corporate volunteers to restore eight significant wetlands across the motu.

We have a vision that all wetlands on Waiheke are restored and regenerating. The principle of kotahitanga | collective action is needed to do this.



Our key project aims:

- Long-term ecological restoration of Waiheke Island's threatened wetland environments.
- Project delivery that engages volunteers, nurtures community partnerships and provides sustainable ecological education.
- Community empowerment through education and leadership.
- Providing local residents with employment opportunities in environmental restoration and transferable skills.

Our commitments:

- Partner with the Waiheke Local Board to deliver agreed outcomes.
- Use local expert knowledge on plants and ecosystems.
- Use only locally eco-sourced plants.
- Consult with iwi, Piritahi Marae, local organisations, private landowners and the wider Waiheke community.
- Engage local and offshore volunteers wherever possible to build ecosystem awareness and relationships between restoration sites and people.
- Celebrate and acknowledge volunteers.
- Develop sponsorship and funding relationships to advance project work.
- Employ local contractors for mechanical and dangerous site work.
- Have a methodical weed management plan, uses minimal herbicide gel and prioritises manual control where possible.
- Prioritise weed eradication for moth plant, Japanese honeysuckle, asparagus, tobacco, privet, pampus and blackberry.
- Safety as a top priority.

Delivery Team

The Waiheke Resources Trust in partnership with local nurseries and subject matter experts, forms a highly skilled group responsible for delivering the planting plan for the Blackpool stormwater upgrade project. The team comprises environmental professionals, community stakeholders, and volunteers, working together to achieve optimal ecological outcomes. This collaborative approach ensures the successful execution of the project building on extensive local knowledge.

Kym Rawson Restoration Manager

Kym has been WRT's restoration manager since 2016. Kym is an experienced and passionate local bringing a superior knowledge base to action for restoration on Waiheke. He has worked for 13 years under the tutelage of the advisory team both professionally and voluntarily. Kym is a huge asset secured for the benefit of Waiheke's wetlands and their legacy.

Marta Oriheula Assistant Restoration Manager

Marta is an experienced biologist, specialising in rural development projects and nature guiding. Marta joined the wetlands team in 2022. Her passion and leadership skills led her to become the team's assistant restoration manager in 2024. Marta is passionate about issues related to the environment and is able to apply her global knowledge locally here on Waiheke.

Michael Maahs CEO

Michael has led WRT for the past 8 years, growing the organisation to meet the needs of the community. Wetland restoration in particular has expanded through his brokering of many partnerships, tenders, and grants. Michael has managed or run successful NGOs for the past 13 years. Guiding a growing team of 30+ employees with low turnover at WRT demonstrates his commitment to a community focused ethos, providing training and meaningful work to locals.

Kristin Busher Partnership Manager

Originally from Waiatarua in the Waitakere Ranges, Kristin moved to Waiheke in 2001. Working for various not-for-profit organisations on Waiheke Island since 2010, she has a deep knowledge of and connection to the community. Kristin is the project lead for Love Our Wetlands, Waiheke Climate Plan Activation and Marine Education Initiative, and is the WRT Partnerships Manager.

Kim Patterson Waiheke Native Plant Manager

Kim holds a BSc in Ecology from the University of Auckland and has been a revegetation consultant and landscape designer with Waiheke Native Plants for 8 years. Recently promoted to operations manager, Kim combines extensive knowledge of native plants with design skills using Sketchup and Twinmotion. A resident of Waiheke Island for 14 years, Kim is passionate about growing plants and is particularly focused on rescuing rare native species.

Project Advisors

Ivan Kitson — Waiheke Native Plant Nursery founder. Co-writer of Greening our Gulf, a manual for restoration on Waiheke.

Rob Morton — Owner of Gulf Trees nursery. Involved in ecological restoration on Waiheke for over 25 years.

Love Our Wetlands is guided by knowledge handed down from the late Don Chappel.



Our Services

Health and Safety

The Waiheke Resources Trust is Totika Gold Member Scheme Provider pre-qual certified.

Community Engagement and Volunteer Coordination

Engaging with our community is what WRT does best. We see one of the most important parts of this project is to support the Blackpool community to understand and be engaged in this project.

We propose a set of two resident engagement events to develop planting plans using the resident menu developed by Waiheke Native Plant Nursery giving residents an opportunity to feed into how their area will take shape. Alongside this we engage and mobilise corporate and community volunteers. Volunteer contributions increase our workforce and could contribute to the planting efforts in Blackpool.

Restoration Planning and Services

In the development of the Blackpool Upgrade Planting Plan, WRT will work alongside Kim Patterson and Ivan Kitson, Waiheke Native Plant Nursery, Rob Morton Gulf Trees and Kim Rawson WRT Restoration Manager.

Set plans based on location will be created alongside a menu of plants residents can select from to support

the inclusion of their input into the overall look of the road frontage of their property. These will be delivered, discussed and selected at the community engagement meetings.

Use of GiS Technology

WRT develops custom Arc GiS tools to support planning, recording and reporting our work programmes. Our field maps are custom-designed, comprehensive interactive maps that allow us to plan, track progress and showcase our work in great detail. We take photos of key areas to keep track of progress. All of this data is captured using ipads and uploaded to the server each day, allowing us to not only assemble totals, but also to view the developments in real time.

Purpose of GiS for Blackpool Stormwater upgrade

- to be able to share information about the planting plans for each area in Stage 1
- to track progress once planting commences (numbers planted, types etc)
- to track growth of the plants through photo points before, during, and after
- to track community engagement through the GiS
- Contract Managers have real-time access to progress and data

Products required

- Dashboard (primary vehicle for data tracking and sharing. Contains map component with Stage 1 Polygons, photo points, planting plans; indicators for tracking trees planted, graphs of trees by type etc, other indicators/dashboard elements as desired
- GIS data collection method (TBC - Survey123, or Field Maps collection web app)
- Photo Points data setup, field visits (initial + during+ after)
- Survey123 survey for public engagement and any other information collected about the project

Ongoing Maintenance

Our planting maintenance service ensures young native trees and plants are free from competing weeds, promoting healthy growth. Releasing is conducted at least once per year for two to four years or until a 90%+ success rate is achieved.

Ecological Monitoring

We are able to employ ecological monitoring techniques to track waterway health, providing critical data to inform ongoing restoration and conservation strategies.

Working at Heights

Our certified working at heights team has access to full fall restraint and safety equipment to support coastal and steep access planting and weed control.

Methodologies

Planting

Eco-sourced plants will be supplied by Waiheke's local nurseries, Gulf Trees and Waiheke Native Plant Nursery.

Careful consideration of view shafts and shadowing will be taken into account to ensure the restoration and functionality plantings are not impacted.

Tree guards can be used to reduce effects on plants from pest species such as rabbits and pūkeko.

Releasing of plants can be done at least twice per year for two to four years or until a 90% success rate has been achieved.

Manual Control of Pest Plants

Hand pulling/manual removal is the preferred method of removal in alignment with WRT's best practice methodology, which reduces the use of agrochemicals. This will be done by the restoration team using Nawashi, secateurs and spades prioritised through volunteer use.

Cut and Paste Herbicide Removal

Cut and Paste, the least invasive form of agrochemical use, will be used to control tobacco, Japanese honeysuckle roots and pampus knuckles. Cut and paste will also be used in conjunction with manual hand pulling of weeds where the source roots of the infestations are found. Cut and paste will not be used during wet weather, or in close proximity to waterways or existing native species.

Ring Barking, Drill and Fill, or Full Removal

Larger pest species can be ring barked or drilled and filled with agrochemicals and left in situ. If for aesthetic or safety reasons these trees cannot be left in place, an additional quote can be provided for full removal.

Spraying

If spraying is necessary it will be done by Grow Safe approved handlers, and will be done in careful planning between the project managers and the spray contractor. No chemical sprays will be used to eradicate grasses/non-invasive ground covers.





Planting Plans

28 Manuka and 17 Moa Ave



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 17 Moa Ave Waiheke Island 1081

Legal Description: Lot 386 DP 22849

Record of Title Number: NA988/260

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181. References to kainga and urupa have been found in an Auckland City Council walkway document.

Considerations

New channel and planting area almost entirely on private land. Existing specimen cabbage and nikau trees will need to be removed to allow scraping and excavation. Idea is to reinstate similar trees to the existing private planting to give continuity. Border

planting in 3rd zone to be conscious of kids/pedestrian traffic i.e softer plants at outer edges.

Partially on private land up to the corner, where it then transitions onto mostly road reserve, the planting area is on the eastern side of a mixture of larger mature trees and privet/invasive species. With a relatively thin channel but steep banks on a road corner, the idea is to use good planting for stabilisation without affecting the visibility of traffic turning the corner. As the private boundary is fenced/planted out already, there is no need for additonal low border planting on the inside bank, while the outside bank (roadside will be planted with low and pedestrian friendly plants.

Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimize erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



Plant List

Zone Type	Tree / Plant Species	17 Moa Ave		
		%	m2	Total
Channel	Kukuraho	100.00%	3.91	50
Channel Subtotal		100.00%	3.91	50
Riparian	Carex Secta	30.00%	3.11	14
Riparian	Carex Vergata	70.00%	7.26	33
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	0.00	0	0
Riparian	Juncus Maritimus	0.00	0	0
Riparian Subtotal		100.00%	10.37	48
Middle	Manuka	5.00%	0.47	1
Middle	Harakeke	5.00%	0.47	1
Middle	Karamu	15.00%	1.42	2
Middle	Toetoe	2.00%	0.19	0
Middle	Coprosma Propinqua	5.00%	0.47	1
Middle	Carex Flagellifera	34.00%	3.21	4
Middle	Cyperus Ustulatus	34.00%	3.21	4
Middle	Makaka	0.00	0	0
Middle	Olearia Solandri	0.00	0	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00	0	0
Middle Subtotal		100.00%	9.44	11
Border	Rengarenga	48.00%	4.56	21
Border	Koromiko	25.00%	2.37	11
Border	Carex Flagellifera	25.00%	2.37	11
Border	Carmichaelia	2.00%	0.19	1
Border	Wiwi Ficinia Nodosa	0.00	0	0
Border Subtotal		100.00%	9.49	44
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0	0	0
Specimen Tree	Karaka	0	0	0
Specimen Tree	Mahoe	0	0	0
Specimen Tree	Ngalo	0	0	0
Specimen Tree	Nikau	1	0	1
Specimen Tree	Pohutukawa	0	0	0
Specimen Tree	Swamp Maire	0	0	0
Specimen Tree	Taupata	0	0	0
Specimen Tree	Ti Kouka	2	0	2
Specimen Tree Subtotal		0.00%	3	3
Total Plants Per Area				155

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in Decmeber an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Nagti Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in Feburary 2025.

Waeroa Basin



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Property information

Address: 19 Moa Ave Waiheke Island 1081

Legal Description: Lot 414 DP 22849

Record of Title Number: Not Available

Property Type: Reserve

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

A broadly blank slate, with some remnants of previous planting efforts on the western banks which should be retained where possible. 3 different culverts drain into the area, with one to the south to drain the reserve into the stormwater system. With the functionality of the reserve as a water collection point, and its wide banks, it is perfect for a damp forest wetland area.

with wide channels. Existing access (pedestrian gate) and view point from 21 Moa onto the reserve should be maintained with low planting. Existing park bench should be retained and accessible.

Current Street Views



Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimize erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	161.48	2070
Channel Subtotal		100.00%	161.48	2070
Riparian	Carex Secta	30.00%	49.51	227
Riparian	Carex Vergata	70.00%	115.53	530
Riparian	Toetoe		0.00	0
Riparian	Baumes Articulata		0.00	0
Riparian	Oioi		0.00	0
Riparian	Juncus Maritimus		0.00	0
Riparian Subtotal		100.00%	165.04	757
Middle	Manuka	5.00%	8.91	10
Middle	Harakeke	5.00%	8.91	10
Middle	Karamu	15.00%	26.73	31
Middle	Toetoe	2.00%	3.56	4
Middle	Coprosma Propinqua	5.00%	8.91	10
Middle	Carex Flagellifera	34.00%	60.60	70
Middle	Cyperus Ustulatus	34.00%	60.60	70
Middle	Makaka		0.00	0
Middle	Olearia Solandri		0.00	0
Middle	Tauhinu Ozothamnus leptophyllus		0.00	0
Middle Subtotal		100.00%	178.23	205
Border	Rengarenga	48.00%	88.16	313
Border	Koromiko	25.00%	35.50	163
Border	Carex Flagellifera	25.00%	35.50	163
Border	Carmichaelsia	2.00%	2.84	13
Border	Wiwi Ficinia Nodosa		0.00	0
Border Subtotal		100.00%	141.99	651
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea		3	
Specimen Tree	Karaka		0	
Specimen Tree	Mahoe		0	
Specimen Tree	Ngaio		0	
Specimen Tree	Nikau		7	
Specimen Tree	Pohutukawa		0	
Specimen Tree	Swamp Maire		5	
Specimen Tree	Taupata		0	
Specimen Tree	Ti Kouka		0	
Specimen Tree Subtotal		0.00%	15	
Total Plants Per Area				3699

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in Feburary 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



21 Moa Ave

Blackpool Stormwater Improvement

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Current Street View



Property information

Address: 21 Moa Ave Waiheke Island 1081

Legal Description: Lot 415 DP 22849

Record of Title Number: NA640/125

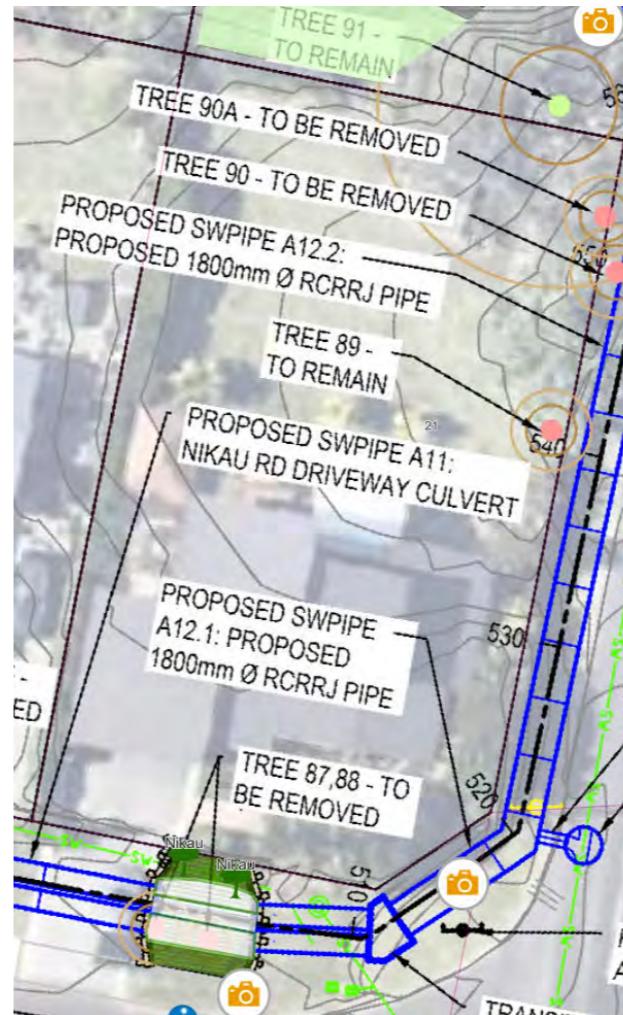
No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Small area of open channel between long section of buried culvert and culvert which crosses the road to Waeroa Reserve. Relatively thin section, so middle planting layer not used. Existing Nikau will need to be removed and re-homed elsewhere. Nikau proposed as replacement specimens, but alternative offered.



Planting Zones



Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

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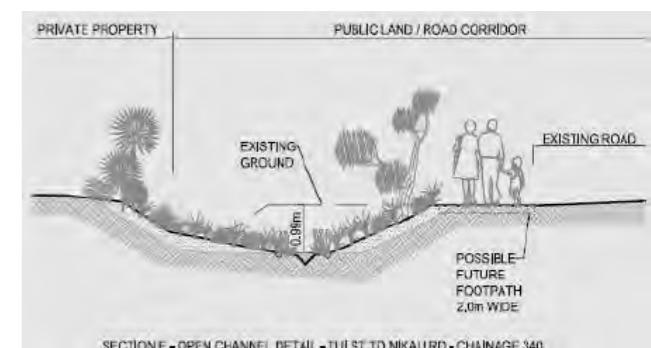
Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.

Channel and Culvert Design

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Open Channel Detail



Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	5.45	70
Channel Subtotal		100.00%	5.45	70
Riparian	Carex Secta	30.00%	3.93	18
Riparian	Carex Vergata	70.00%	9.17	42
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	0.00	0	0
Riparian	Juncus Maritimus	0.00	0	0
Riparian Subtotal		100.00%	13.10	60
Middle	Manuka	0.00	0	0
Middle	Harakeke	0.00	0	0
Middle	Karamu	0.00	0	0
Middle	Toetoe	0.00	0	0
Middle	Coprosma Propinqua	0.00	0	0
Middle	Carex Flagellifera	0.00	0	0
Middle	Cyperus Ustulatus	0.00	0	0
Middle	Makaka	0.00	0	0
Middle	Olearia Solandrii	0.00	0	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00	0	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	5.80	27
Border	Koromiko	25.00%	3.02	14
Border	Carex Flagellifera	25.00%	3.02	14
Border	Carmichaelia	2.00%	0.24	1
Border	Wiwi Ficinia Nodosa	0.00	0	0
Border Subtotal		100.00%	12.08	55
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0	0	0
Specimen Tree	Karaka	0	0	0
Specimen Tree	Mahoe	0	0	0
Specimen Tree	Ngao	0	0	0
Specimen Tree	Nikau	0	2	2
Specimen Tree	Pohutukawa	0	0	0
Specimen Tree	Swamp Maire	0	0	0
Specimen Tree	Taupata	0	0	0
Specimen Tree	Ti Kouka	0	0	0
Specimen Tree Subtotal		0.00%	2	2
Total Plants Per Area				187



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



34 - 36 Nikau Street

Blackpool Stormwater Improvement

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The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 36 Nikau Street Waiheke Island 1081

Legal Description: Lot 417 DP 29172

Record of Title Number: NA917/10

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181. References to kainga and urupa have been found in an Auckland City Council walkway document:

Considerations

Similar environment to the rest of the north side of Nikau Rd. No need for the middle planting zone, and the existing Nikau should be removed and reinstated or replacement trees put in.

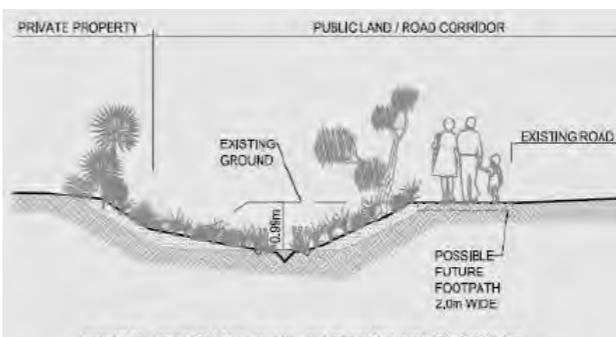
Planting Design renders



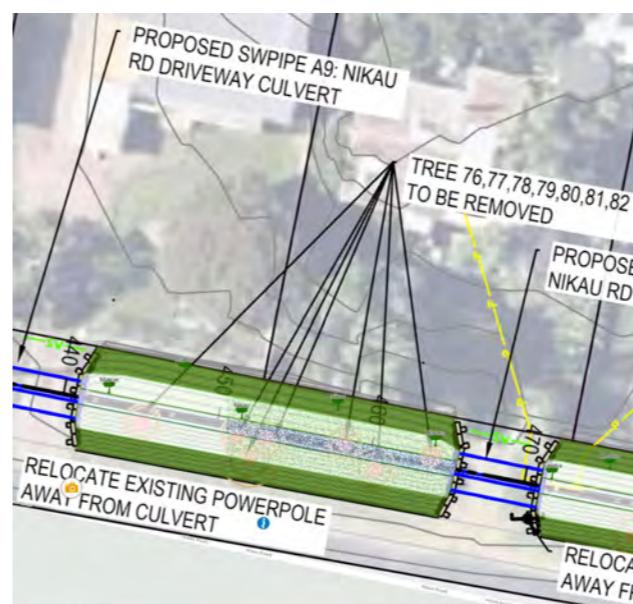
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Open Channel Detail



Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	24.53	314
Channel Subtotal				
Riparian	Carex Secta	30.00%	20.20	93
Riparian	Carex Vergata	70.00%	47.14	216
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	0.00	0	0
Riparian	Juncus Maritimus	0.00	0	0
Riparian Subtotal				
Middle	Manuka	0.00	0	0
Middle	Harakeke	0.00	0	0
Middle	Karamu	0.00	0	0
Middle	Toetoe	0.00	0	0
Middle	Coprosma Propinqua	0.00	0	0
Middle	Carex Flagellifera	0.00	0	0
Middle	Cyperus Ustulatus	0.00	0	0
Middle	Makaka	0.00	0	0
Middle	Olearia Solandrii	0.00	0	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00	0	0
Middle Subtotal				
Border	Rengarenga	48.00%	32.98	151
Border	Koromiko	25.00%	17.18	79
Border	Carex Flagellifera	25.00%	17.18	79
Border	Carmichaelia	2.00%	1.37	6
Border	Wiwi Ficinia Nodosa	0.00	0	0
Border Subtotal				
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal				
Specimen Tree	Kahikatea	0.00%	0	0
Specimen Tree	Karaka	0.00%	0	1
Specimen Tree	Mahoe	0.00%	0	2
Specimen Tree	Ngao	0.00%	0	0
Specimen Tree	Nikau	0.00%	0	2
Specimen Tree	Pohutukawa	0.00%	0	0
Specimen Tree	Swamp Maire	0.00%	0	0
Specimen Tree	Taupata	0.00%	0	0
Specimen Tree	Ti Kouka	0.00%	0	0
Specimen Tree Subtotal				
Total Plants Per Area				
		0.00%	0.00	944

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



32 Nikau Street

Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 32 Nikau Street Waiheke Island 1081

Legal Description: Lot 419 DP 29172

Record of Title Number: NA829/295

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Similar environment to the rest of the north side of Nikau Rd. No need for the middle planting zone, and the existing Nikau should be removed and reinstated or replacement trees put in.

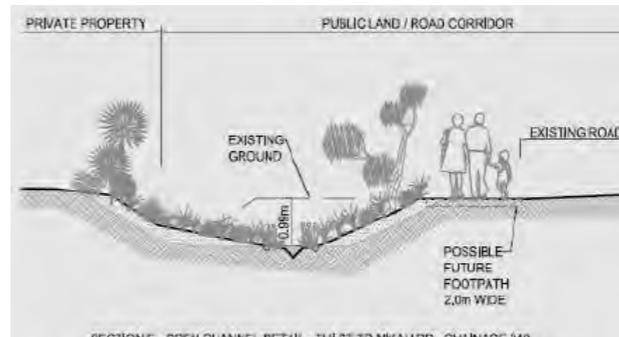
Planting Design renders



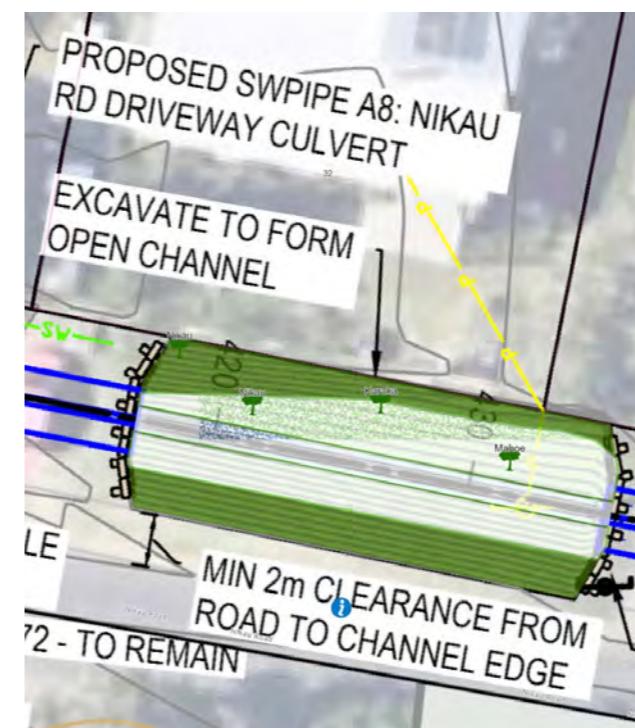
Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	18.68	239
Channel Subtotal		100.00%	18.68	239
Riparian	Carex Secta	30.00%	16.93	78
Riparian	Carex Vergata	70.00%	39.49	181
Riparian	Toetoe	0.00%	0.00	0
Riparian	Baumea Articulata	0.00%	0.00	0
Riparian	Oioi	0.00%	0.00	0
Riparian	Juncus Maritimus	0.00%	0.00	0
Riparian Subtotal		100.00%	56.42	259
Middle	Manuka	0.00%	0.00	0
Middle	Harakeke	0.00%	0.00	0
Middle	Karamu	0.00%	0.00	0
Middle	Toetoe	0.00%	0.00	0
Middle	Coprosma Propinqua	0.00%	0.00	0
Middle	Carex Flagellifera	0.00%	0.00	0
Middle	Cyperus Ustulatus	0.00%	0.00	0
Middle	Makaka	0.00%	0.00	0
Middle	Olearia Solandrii	0.00%	0.00	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00%	0.00	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	23.89	109
Border	Koromiko	25.00%	12.34	57
Border	Carex Flagellifera	25.00%	12.34	57
Border	Carmichaelia	2.00%	0.99	5
Border	Wiwi Ficinia Nodosa	0.00%	0.00	0
Border Subtotal		100.00%	49.36	226
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00%	0.00	0
Specimen Tree	Karaka	0.00%	0.00	1
Specimen Tree	Mahoe	0.00%	0.00	1
Specimen Tree	Ngaio	0.00%	0.00	0
Specimen Tree	Nikau	0.00%	0.00	2
Specimen Tree	Pohutukawa	0.00%	0.00	0
Specimen Tree	Swamp Maire	0.00%	0.00	0
Specimen Tree	Taupata	0.00%	0.00	0
Specimen Tree	Ti Kouka	0.00%	0.00	0
Specimen Tree Subtotal		0.00%	0.00	4
Total Plants Per Area				729

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>

38 Nikau Street



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current street view



Property information

Address: 38 Nikau Street Waiheke Island 1081

Legal Description: Lot 417 DP 29172

Record of Title Number: NA917/9

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Larger open channel. Removed middle layer of planting due to relatively thin strips along verge. Re-home existing Nikau (or look after and bring back).

Planting Design Renders

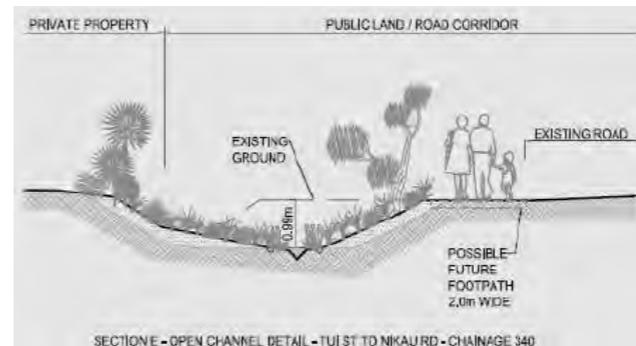


Channel and Culvert Design

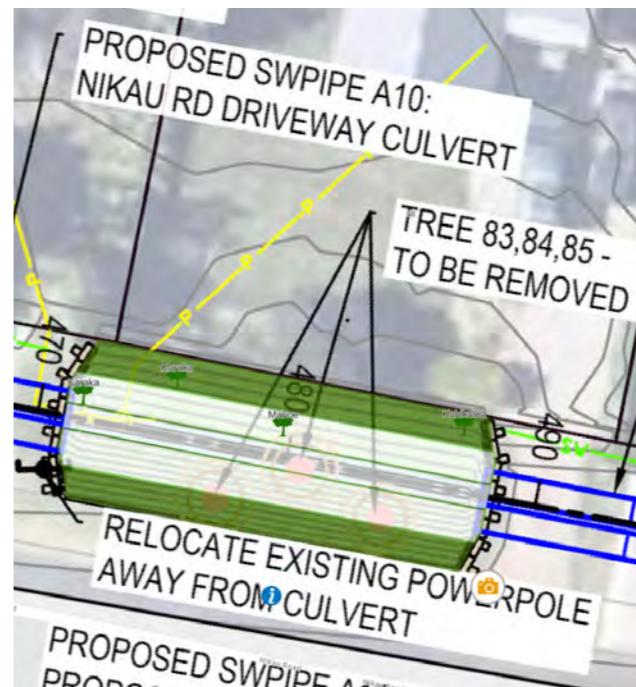
The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability.

These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	17.04	218
Channel Subtotal		100.00%	17.04	218
Riparian	Carex Secta	30.00%	13.69	63
Riparian	Carex Vergata	70.00%	31.95	147
Riparian	Toetoe	0.00%	0.00	0
Riparian	Baumea Articulata	0.00%	0.00	0
Riparian	Oioi	0.00%	0.00	0
Riparian	Juncus Maritimus	0.00%	0.00	0
Riparian Subtotal		100.00%	45.64	209
Middle	Manuka	0.00%	0.00	0
Middle	Harakeke	0.00%	0.00	0
Middle	Karamu	0.00%	0.00	0
Middle	Toetoe	0.00%	0.00	0
Middle	Coprosma Propinqua	0.00%	0.00	0
Middle	Carex Flagellifera	0.00%	0.00	0
Middle	Cyperus Ustulatus	0.00%	0.00	0
Middle	Makaka	0.00%	0.00	0
Middle	Olearia Solandrii	0.00%	0.00	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00%	0.00	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	20.63	95
Border	Koromiko	25.00%	10.74	49
Border	Carex Flagellifera	25.00%	10.74	49
Border	Carmichaelia	2.00%	0.86	4
Border	Wiwi Ficinia Nodosa	0.00%	0.00	0
Border Subtotal		100.00%	42.97	197
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	1	1	1
Specimen Tree	Karaka	2	2	2
Specimen Tree	Mahoe	1	1	1
Specimen Tree	Ngao	0	0	0
Specimen Tree	Nikau	0	0	0
Specimen Tree	Pohutukawa	0	0	0
Specimen Tree	Swamp Maire	0	0	0
Specimen Tree	Taupata	0	0	0
Specimen Tree	Ti Kouka	0	0	0
Specimen Tree Subtotal		0.00%	4	4
Total Plants Per Area				629

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



26 - 28 Nikau Street

Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 28 Nikau Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA874/259

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Similar to the rest of Nikau Rd. Existing specimen and fruit trees will need to be moved and saved if possible. Large pohutukawa - Auckland Council is in communication with Ngati Paoa with regards to this tree.

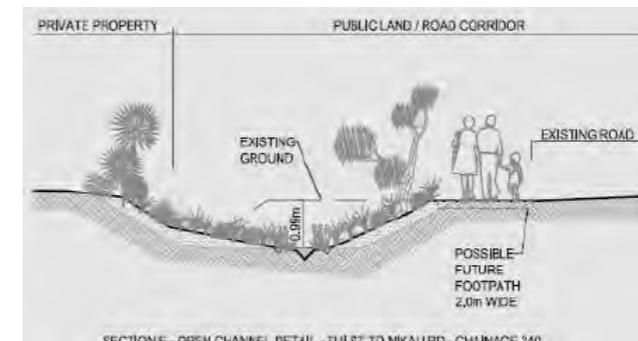
Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	29.11	373
Channel Subtotal		100.00%	29.11	373
Riparian	Carex Secta	30.00%	22.81	105
Riparian	Carex Vergata	70.00%	53.21	244
Riparian	Toetoe	0.00%	0.00	0
Riparian	Baumea Articulata	0.00%	0.00	0
Riparian	Oioi	0.00%	0.00	0
Riparian	Juncus Maritimus	0.00%	0.00	0
Riparian Subtotal		100.00%	76.02	349
Middle	Manuka	0.00%	0.00	0
Middle	Harakeke	0.00%	0.00	0
Middle	Karamu	0.00%	0.00	0
Middle	Toeloe	0.00%	0.00	0
Middle	Coprosma Propinqua	0.00%	0.00	0
Middle	Carex Flagellifera	0.00%	0.00	0
Middle	Cyperus Ustulatus	0.00%	0.00	0
Middle	Makaka	0.00%	0.00	0
Middle	Olearia Solandrii	0.00%	0.00	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00%	0.00	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	34.08	156
Border	Koromiko	25.00%	17.75	81
Border	Carex Flagellifera	25.00%	17.75	81
Border	Carmichaelia	2.00%	1.42	7
Border	Wiwi Ficinia Nodosa	0.00%	0.00	0
Border Subtotal		100.00%	71.00	326
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00%	0.00	3
Specimen Tree	Karaka	0.00%	0.00	2
Specimen Tree	Mahoe	0.00%	0.00	2
Specimen Tree	Ngaio	0.00%	0.00	0
Specimen Tree	Nikau	0.00%	0.00	0
Specimen Tree	Pohutukawa	0.00%	0.00	1
Specimen Tree	Swamp Maire	0.00%	0.00	0
Specimen Tree	Taupata	0.00%	0.00	0
Specimen Tree	Ti Kouka	0.00%	0.00	0
Specimen Tree Subtotal		0.00%	0.00	8
Total Plants Per Area		0.00%	0.00	1056

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



22 - 24 Nikau Street

Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 24 Nikau Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA1035/111

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Similar to the rest of Nikau Rd. Existing native specimen and fruit trees will need to be moved and saved if possible.

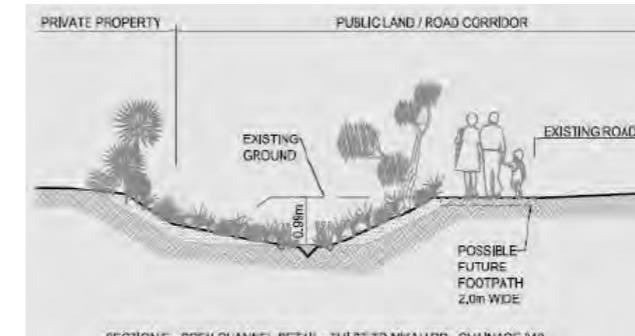
Planting Design Renders



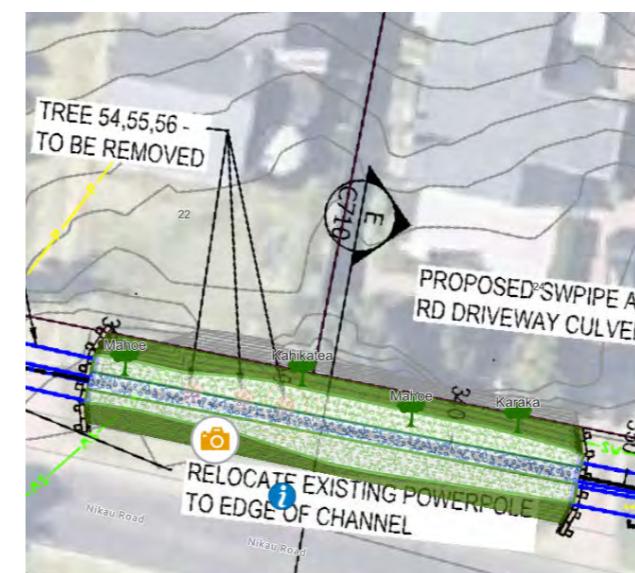
Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Channel Zone
Riparian Zone

Middle Zone
Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	28.03	359
Channel Subtotal		100.00%	28.03	359
Riparian	Carex Secta	30.00%	18.99	67
Riparian	Carex Vergata	70.00%	44.32	203
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	0.00	0	0
Riparian	Juncus Maritimus	0.00	0	0
Riparian Subtotal		100.00%	63.31	290
Middle	Manuka	0.00	0	0
Middle	Harakeke	0.00	0	0
Middle	Karamu	0.00	0	0
Middle	Toetoe	0.00	0	0
Middle	Coprosma Propinqua	0.00	0	0
Middle	Carex Flagellifera	0.00	0	0
Middle	Cyperus Ustulatus	0.00	0	0
Middle	Makaka	0.00	0	0
Middle	Olearia Solandrii	0.00	0	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00	0	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	28.21	129
Border	Koromiko	25.00%	14.69	67
Border	Carex Flagellifera	25.00%	14.69	67
Border	Carmichaelia	2.00%	1.18	5
Border	Wiwi Ficinia Nodosa	0.00	0	0
Border Subtotal		100.00%	58.77	270
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	1	1	1
Specimen Tree	Karaka	1	1	1
Specimen Tree	Mahoe	2	2	2
Specimen Tree	Ngalo	0	0	0
Specimen Tree	Nikau	0	0	0
Specimen Tree	Pohutukawa	0	0	0
Specimen Tree	Swamp Maire	0	0	0
Specimen Tree	Taupata	0	0	0
Specimen Tree	Ti Kouka	0	0	0
Specimen Tree Subtotal		0.00%	4	4
Total Plants Per Area				923

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



20 Nikau Street

Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 20 Nikau Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA1117/3

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Similar to the rest of Nikau Rd. Existing specimen and fruit trees will need to be moved and saved if possible.

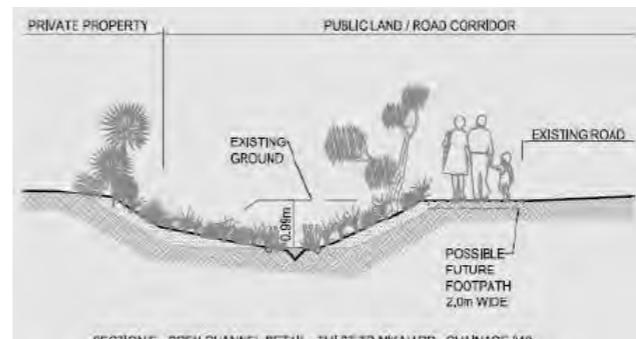
Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	13.05	167
Channel Subtotal		100.00%	13.05	167
Riparian	Carex Secta	30.00%	7.70	35
Riparian	Carex Vergata	70.00%	17.96	82
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	0.00	0	0
Riparian	Juncus Maritimus	0.00	0	0
Riparian Subtotal		100.00%	25.65	118
Middle	Manuka	0.00	0	0
Middle	Harakeke	0.00	0	0
Middle	Karamu	0.00	0	0
Middle	Toetoe	0.00	0	0
Middle	Coprosma Propinqua	0.00	0	0
Middle	Carex Flagellifera	0.00	0	0
Middle	Cyperus Ustulatus	0.00	0	0
Middle	Makaka	0.00	0	0
Middle	Olearia Solandrii	0.00	0	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00	0	0
Middle Subtotal		0.00%	0.00	0
Border	Rengarenga	48.00%	12.67	58
Border	Koromiko	25.00%	6.60	30
Border	Carex Flagellifera	25.00%	6.60	30
Border	Carmichaelia	2.00%	0.53	2
Border	Wiwi Ficinia Nodosa	0.00	0	0
Border Subtotal		100.00%	26.40	121
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00	0	0
Specimen Tree	Karaka	0.00	0	0
Specimen Tree	Mahoe	0.00	0	0
Specimen Tree	Ngaio	0.00	0	0
Specimen Tree	Nikau	0.00	0	3
Specimen Tree	Pohutukawa	0.00	0	0
Specimen Tree	Swamp Maire	0.00	0	0
Specimen Tree	Taupata	0.00	0	0
Specimen Tree	Ti Kouka	0.00	0	0
Specimen Tree Subtotal		0.00%	0.00	3
Total Plants Per Area		0.00%	409	

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>

15 Nikau Street



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 15 Nikau Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA54A/783

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Similar environment to the rest of the north side of Nikau Rd. No need for the middle planting zone, and the existing Nikau should be removed and reinstated or replacement trees put in.

Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail D

Planting Zones



- Channel Zone
- Riparian Zone
- Middle Zone
- Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	13.76	176
Channel Subtotal		100.00%	13.76	176
Riparian	Carex Secta	30.00%	10.85	50
Riparian	Carex Vergata	70.00%	25.31	116
Riparian	Toetoe	0.00%	0.00	0
Riparian	Baumea Articulata	0.00%	0.00	0
Riparian	Oioi	0.00%	0.00	0
Riparian	Juncus Maritimus	0.00%	0.00	0
Riparian Subtotal		100.00%	36.15	166
Middle	Manuka	5.00%	0.57	1
Middle	Harakeke	5.00%	0.57	1
Middle	Karamu	15.00%	1.72	2
Middle	Toetoe	2.00%	0.23	0
Middle	Coprosma Propinqua	5.00%	0.57	1
Middle	Carex Flagellifera	34.00%	3.89	4
Middle	Cyperus Ustulatus	34.00%	3.89	4
Middle	Makaka	0.00%	0.00	0
Middle	Olearia Solandri	0.00%	0.00	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00%	0.00	0
Middle Subtotal		100.00%	11.45	13
Border	Rengarenga	48.00%	4.05	19
Border	Koromiko	25.00%	2.11	10
Border	Carex Flagellifera	25.00%	2.11	10
Border	Carmichaelia	2.00%	0.17	1
Border	Wiwi Ficinia Nodosa	0.00%	0.00	0
Border Subtotal		100.00%	8.43	39
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00%	0.00	0
Specimen Tree	Karaka	0.00%	0.00	0
Specimen Tree	Mahoe	0.00%	0.00	0
Specimen Tree	Ngaio	0.00%	0.00	0
Specimen Tree	Nikau	0.00%	0.00	0
Specimen Tree	Pohutukawa	0.00%	0.00	0
Specimen Tree	Swamp Maire	0.00%	0.00	0
Specimen Tree	Taupata	0.00%	0.00	0
Specimen Tree	Ti Kouka	0.00%	0.00	0
Specimen Tree Subtotal		0.00%	0.00	0
Total Plants Per Area				394

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>

13 Nikau Street



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 13 Nikau Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA49A/1201

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Thin are for planting means that the middle planting zone is removed. No specimen trees to preserve light and visual safety at the corner, start to increase more salt tolerant planting as we get closer to the sea.

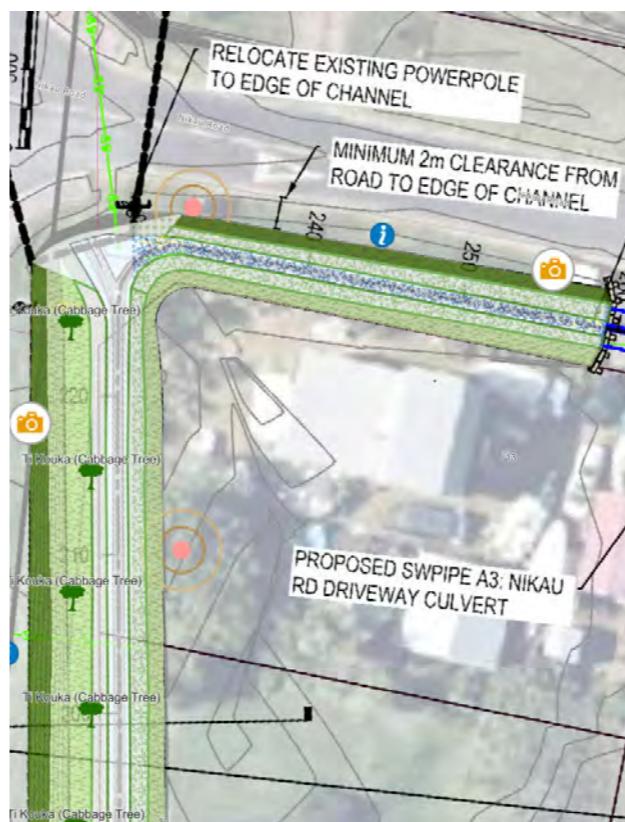
Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	31.66	406
Channel Subtotal		100.00%	31.66	406
Riparian	Carex Secta	30.00%	15.38	71
Riparian	Carex Vergata	70.00%	35.88	165
Riparian	Toetoe	0.00%	0.00	0
Riparian	Baumea Articulata	0.00%	0.00	0
Riparian	Oloi	0.00%	0.00	0
Riparian	Juncus Maritimus	0.00%	0.00	0
Riparian Subtotal		100.00%	51.25	235
Middle	Manuka	5.00%	1.56	2
Middle	Harakeke	5.00%	1.56	2
Middle	Karamu	15.00%	4.69	5
Middle	Toetoe	2.00%	0.62	1
Middle	Coprosma Propinqua	5.00%	1.56	2
Middle	Carex Flagellifera	34.00%	10.62	12
Middle	Cyperus Ustulatus	34.00%	10.62	12
Middle	Makaka	0.00%	0.00	0
Middle	Olearia Solandrii	0.00%	0.00	0
Middle	Tauhinu Ozothamnus leptophyllus	0.00%	0.00	0
Middle Subtotal		100.00%	31.24	36
Border	Rengarenga	48.00%	11.89	55
Border	Koromiko	25.00%	6.19	28
Border	Carex Flagellifera	25.00%	6.19	28
Border	Carmichaelia	2.00%	0.50	2
Border	Wiwi Fimia Nodosa	0.00%	0.00	0
Border Subtotal		100.00%	24.77	114
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00%	0.00	0
Specimen Tree	Karaka	0.00%	0.00	0
Specimen Tree	Mahoe	0.00%	0.00	0
Specimen Tree	Ngao	0.00%	0.00	0
Specimen Tree	Nikau	0.00%	0.00	0
Specimen Tree	Pohutukawa	0.00%	0.00	0
Specimen Tree	Swamp Maire	0.00%	0.00	0
Specimen Tree	Taupata	0.00%	0.00	0
Specimen Tree	Ti Kouka	0.00%	0.00	0
Specimen Tree Subtotal		0.00%	0	0
Total Plants Per Area				791

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>

30 Tui Street



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 30 Tui Street Waiheke Island 1081

Legal Description: Lot 430 DP 33180

Record of Title Number: NA1119/38

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

Channel is brought slightly closer to the road although still within private land, and still only allowing a thin layer of planting on the far bank. Wider verge allows for wider middle layer of planting, and the mix of plants becomes more salt tolerant from now onwards to the Urupa to cope with the incoming tide.

Planting Design Renders

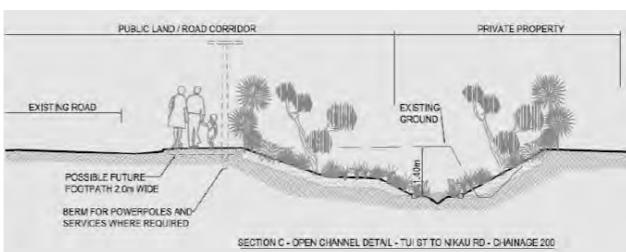
The above and following renders are an indication of the overall look of the planting. Because of the small nature of this site there will only be one specimen tree within this area.



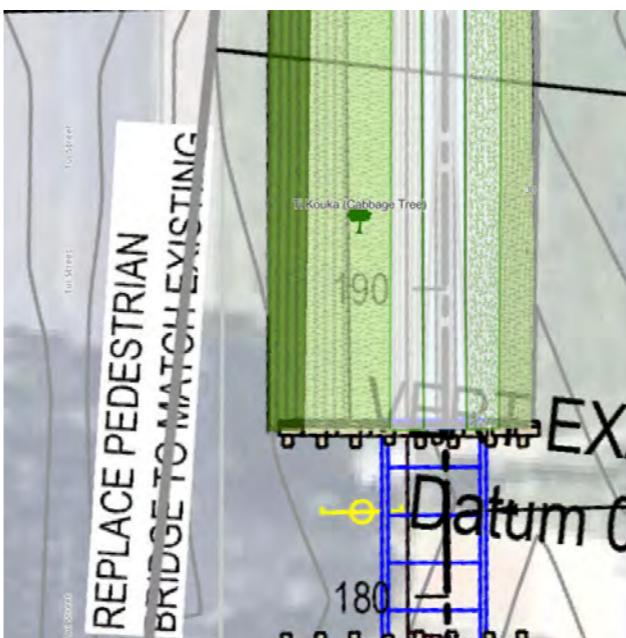
Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimise erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Plant List

Channel	Kukuraho	100.00%	70.00	897
Channel Subtotal		100.00%	70.00	897
Riparian	Carex Secta	20.00%	17.39	80
Riparian	Carex Vergata	20.00%	17.39	80
Riparian	Toetoe	20.00%	17.39	80
Riparian	Baumea Articulata	20.00%	17.39	80
Riparian	Oioi	20.00%	17.39	80
Riparian	Juncus Maritimus		0.00	0
Riparian Subtotal		100.00%	86.93	399
Middle	Manuka	10.00%	15.28	18
Middle	Harakeke	5.00%	7.64	9
Middle	Karamu	5.00%	7.64	9
Middle	Toetoe	0.00%	0.00	0
Middle	Coprosma Propinqua	10.00%	15.28	18
Middle	Carex Flagellifera		0.00	0
Middle	Cyperus Ustulatus	38.00%	58.06	67
Middle	Makaka	30.00%	45.84	53
Middle	Olearia Solandrii	1.00%	1.53	2
Middle	Tauhinu Ozothamnus leptophyllus	1.00%	1.53	2
Middle Subtotal		100.00%	152.79	176
Border	Rengarenga	43.00%	23.12	106
Border	Koromiko	25.00%	13.44	62
Border	Carex Flagellifera	25.00%	13.44	62
Border	Carmichaelia	2.00%	1.08	5
Border	Wiwi Ficinia Nodosa	5.00%	2.69	12
Border Subtotal		100.00%	53.76	247
Safety Zone	Harakeke	100.00%	9.69	124
Safety Zone Subtotal		100.00%	9.69	124
Specimen Tree	Kahikatea		0	0
Specimen Tree	Karaka		0	0
Specimen Tree	Mahoe		0	0
Specimen Tree	Ngaio		0	0
Specimen Tree	Nikau		0	0
Specimen Tree	Pohutukawa		0	0
Specimen Tree	Swamp Maire		0	0
Specimen Tree	Taupata		0	0
Specimen Tree	Ti Kouka		5	5
Specimen Tree Subtotal		0.00%	5	5
Total Plants Per Area				1848

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.



Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>

11 Rata Street



Blackpool Stormwater Improvement

The Blackpool stormwater improvements aim to enhance flood management, ecological health, and system stability by modifying open drains and watercourses along the road berms. Native planting plays a crucial role in these upgrades, stabilising soil, improving water absorption, and supporting natural water movement. Combined with culvert upgrades, these changes will increase capacity for flood flows, reduce erosion, and create a more resilient and sustainable stormwater network for the community and local biodiversity.

The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Current Street View



Property information

Address: 11 Rata Street Waiheke Island 1081

Legal Description: Lot 454 DP 33180

Record of Title Number: NA954/82

No recorded archaeological sites within the planting area of the proposal are listed with Auckland Council Cultural Heritage Inventory except for a nearby midden CHI=11181.

Considerations

A total of 4 specimen trees will be located in this area. Property owners can choose between Kaihikatia and Swamp Maire. Below is a map showing planting zones, location of specimen trees and the suggested species.

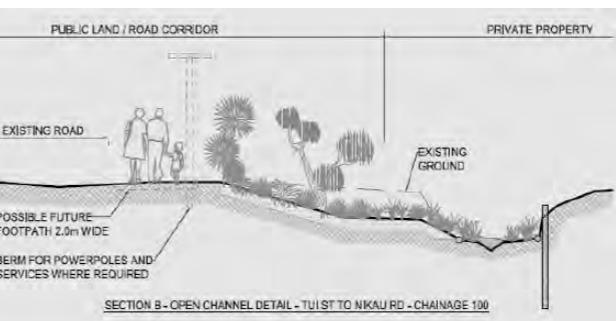
Planting Design Renders



Channel and Culvert Design

The culvert and channel design is a critical component of the Blackpool stormwater improvement plan. By upgrading culverts and reshaping channels, the design will increase capacity for flood flows, improve water movement, and enhance overall system stability. These modifications aim to reduce flooding risks, minimize erosion, and support ecological restoration, creating a stormwater network that balances functionality with environmental resilience.

Open Channel Detail



Planting Zones



Channel Zone

Riparian Zone

Middle Zone

Border Zone

Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	149.55	1917
Channel Subtotal				
Riparian	Carex Secta	0.00	0	0
Riparian	Carex Vergata	0.00	0	0
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	50.00%	104.26	478
Riparian	Oioi	50.00%	104.26	478
Riparian	Juncus Maritimus	100.00%	208.52	957
Riparian Subtotal				
Middle	Manuka	5.00%	41.85	48
Middle	Harakeke	5.00%	41.85	48
Middle	Karamu	15.00%	125.56	144
Middle	Toetoe	0.00%	0.00	0
Middle	Coprosma Propinqua	0.00	0.00	0
Middle	Carex Flagellifera	43.00%	359.94	414
Middle	Cyperus Ustulatus	30.00%	251.12	289
Middle	Makaka	1.00%	8.37	10
Middle	Olearia Solandrii	1.00%	8.37	10
Middle	Tauhinu Ozothamnus leptophyllus	100.00%	837.08	963
Middle Subtotal				
Border	Rengarenga	43.00%	110.31	506
Border	Koromiko	25.00%	64.13	294
Border	Carex Flagellifera	25.00%	64.13	294
Border	Carmichaelia	2.00%	5.13	24
Border	Wiwi Ficinia Nodosa	5.00%	12.83	59
Border Subtotal				
Safety Zone Subtotal				
Specimen Tree	Kahikatea	0.00%	0.00	0
Specimen Tree	Karaka	0.00%	0.00	0
Specimen Tree	Mahoe	0.00%	0.00	0
Specimen Tree	Ngaio	0.00%	0.00	0
Specimen Tree	Nikau	0.00%	0.00	0
Specimen Tree	Pohutukawa	0.00%	0.00	0
Specimen Tree	Swamp Maire	0.00%	0.00	0
Specimen Tree	Taupata	0.00%	0.00	0
Specimen Tree	Ti Kouka	0.00%	0.00	0
Specimen Tree Subtotal				
Total Plants Per Area				
0.00%				
5018				

Planting Plan Development

Site visits were conducted during October 2024 by the Waiheke Resources Trust restoration management team, Ivan Kitson and Kim Patterson from Waiheke Native Plant Nursery and the Auckland Council team delivering this upgrade project and in December an initial site visit was conducted with Ngati Paoa.

These plans can be adapted through feedback from Ngati Paoa.

Extensive local knowledge of appropriate native tree species for the area have been taken into account in the development of this plan. All trees will be eco-sourced, meaning that the seeds have been sourced and grown on Waiheke to ensure we protect local biodiversity.

Consideration has also been made to view shafts, shading and visual safety for each property.

Consultation with landowners will take place in February 2025.

Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



Tui Street - Reserve Near Urupa



Blackpool Stormwater Improvement

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The following planting plans have been prepared by the Waiheke Resources Trust on behalf of Auckland Council and with the support of Waiheke Native Plant Nursery and Gulf Trees.

Property information

Address: 36 Tui Street Waiheke Island 1081

Legal Description: Lot 455 DP 33180

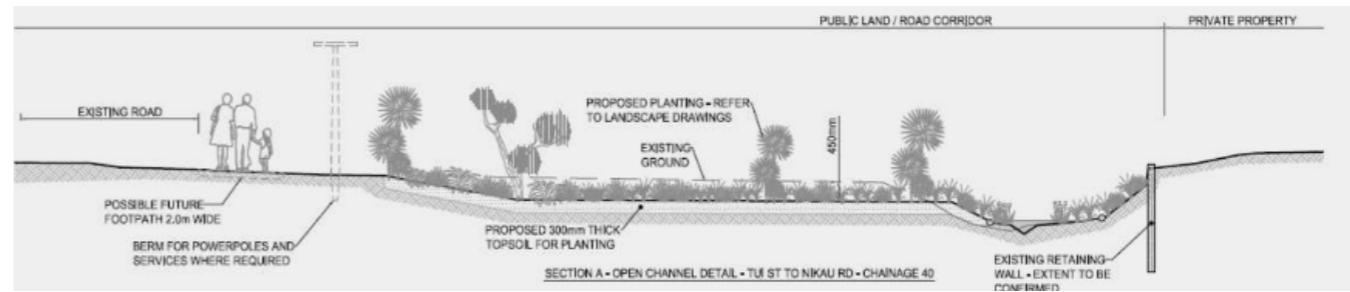
Record of Title Number: NA1362/74

Property Type: Reserve



Current Street View

Open Channel Detail



Planting Zones



Plant List

Zone Type	Tree / Plant Species	%	m2	Total
Channel	Kukuraho	100.00%	149.55	1917
Channel Subtotal		100.00%	149.55	1917
Riparian	Carex Secta	0.00	0	0
Riparian	Carex Vergata	0.00	0	0
Riparian	Toetoe	0.00	0	0
Riparian	Baumea Articulata	0.00	0	0
Riparian	Oioi	50.00%	104.26	478
Riparian	Juncus Maritimus	50.00%	104.26	478
Riparian Subtotal		100.00%	208.52	957
Middle	Manuka	5.00%	41.85	48
Middle	Harakeke	5.00%	41.85	48
Middle	Karamu	15.00%	125.56	144
Middle	Toetoe	0.00%	0.00	0
Middle	Coprosma Propinqua	0.00	0.00	0
Middle	Carex Flagellifera	43.00%	359.94	414
Middle	Cyperus Ustulatus	30.00%	251.12	289
Middle	Makaka	1.00%	8.37	10
Middle	Olearia Solandrii	1.00%	8.37	10
Middle	Tauhinu Ozothamnus leptophyllus	100.00%	837.08	963
Middle Subtotal		100.00%	256.53	1177
Border	Rengarenga	43.00%	110.31	506
Border	Koromiko	25.00%	64.13	294
Border	Carex Flagellifera	25.00%	64.13	294
Border	Carmichaelia	2.00%	5.13	24
Border	Wiwi Ficinia Nodosa	5.00%	12.83	59
Border Subtotal		100.00%	256.53	1177
Safety Zone	Harakeke	0.00%	0.00	0
Safety Zone Subtotal		0.00%	0.00	0
Specimen Tree	Kahikatea	0.00	0	0
Specimen Tree	Karaka	0.00	0	0
Specimen Tree	Mahoe	0.00	0	0
Specimen Tree	Ngaio	0.00	0	0
Specimen Tree	Nikau	0.00	0	0
Specimen Tree	Pohutukawa	0.00	0	0
Specimen Tree	Swamp Maire	0.00	0	0
Specimen Tree	Taupata	0.00	0	0
Specimen Tree	Ti Kouka	0.00	0	0
Specimen Tree Subtotal		0.00%	0.00	0
Total Plants Per Area		0.00%	5018	5018

Channel Zone

Riparian Zone

Middle Zone

Border Zone

Scan the QR code below to view the planting plan online or visit <https://shorturl.at/mqtuc>



**Email**

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Waiheke Resources Trust

Waiheke Sustainability Centre
1A Mako Street, Oneroa Auckland 1081

WRT