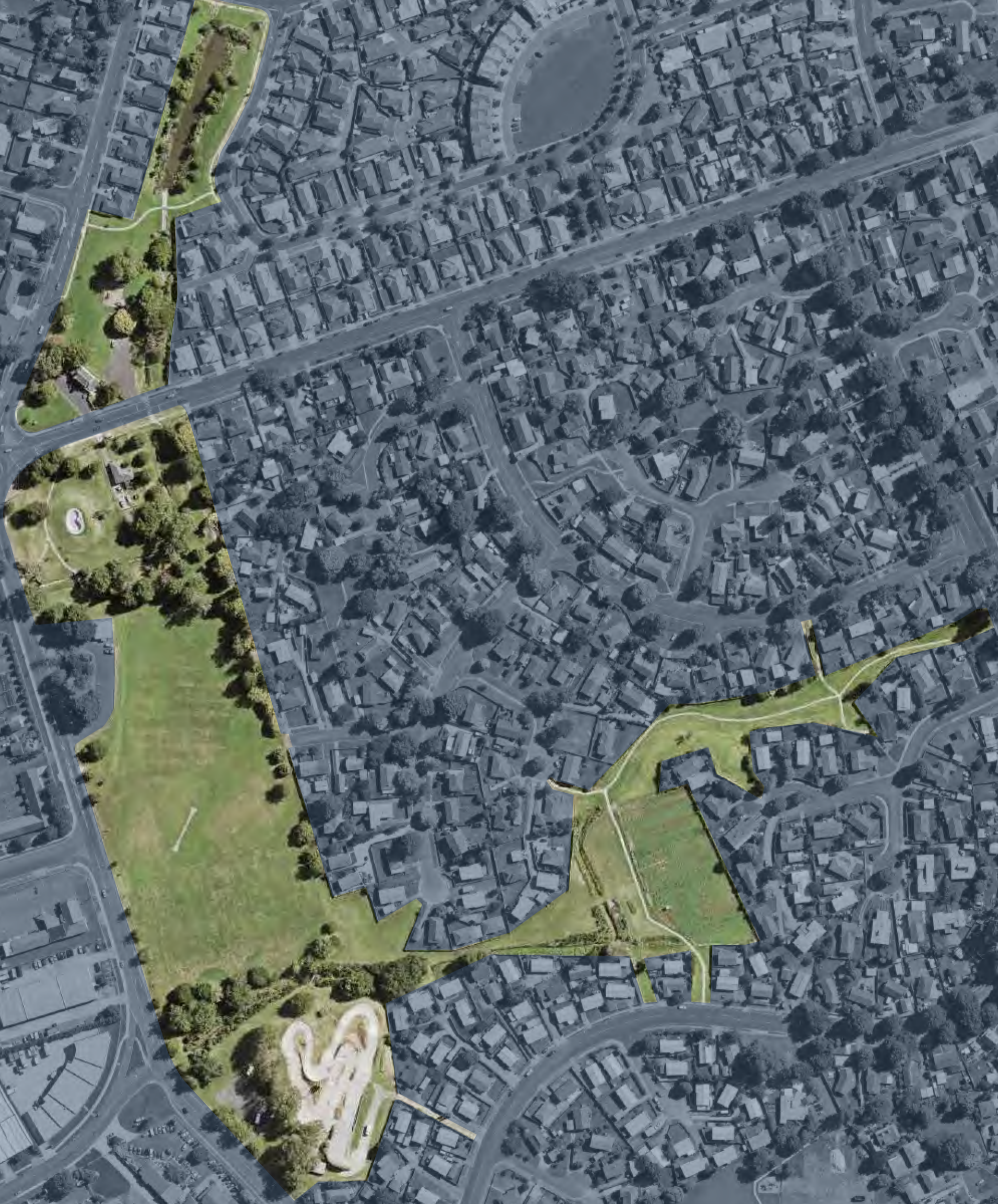


Concept Report

KERI DOWNS PARK + CARISBROOK RESERVE CONCEPT DESIGN REPORT

REV5 | March 2019



Revision Table

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1.0_ Introduction and Background

1.1_ Introduction

The Keri Downs Park and Carisbrook Reserve Concept Design Report has been commissioned by the Papakura Local Board / Te Poari ā-Rohe o Papakura.

Keri Downs Park and Carisbrook Reserve present numerous opportunities to enhance the ecological and cultural values of the site and to significantly increase the amenity and recreational functions for the community. This report presents a design for Keri Downs Park and Carisbrook Reserve that is responsive to community needs and desires that considers the two reserves as one continuous area of open space over the next 10+ years.

This concept design report is organised into three parts.

Part one - Introduction and Background provides an overview of the consultation undertaken through the development of the concept design, sets out the vision for the site, and outlines the design principles informing the concept design and subsequent design phases.

Part two - Site Analysis maps out the regional and local context of Keri Downs Park and Carisbrook Reserve and presents an overview of the site features and characteristics. Part two concludes with an overview of the site through 13 character areas that each have their own unique qualities, design objectives and desired outcomes.

Part three - Concept Design presents an overall 'flexible master plan' for Keri Downs Park and Carisbrook Reserve which enables the site to be organized into discrete and manageable projects that can be implemented sequentially in any order and/or in parallel. The flexible master plan is organized into 6 distinct themes - Path Network, Planting Strategy, Furniture - Kit of Parts, Play Spaces, Events Spaces, and Arts Integration. Each theme includes an overview of the design strategy and an 'Action Plan' which outlines the scope and outline cost of potential projects.

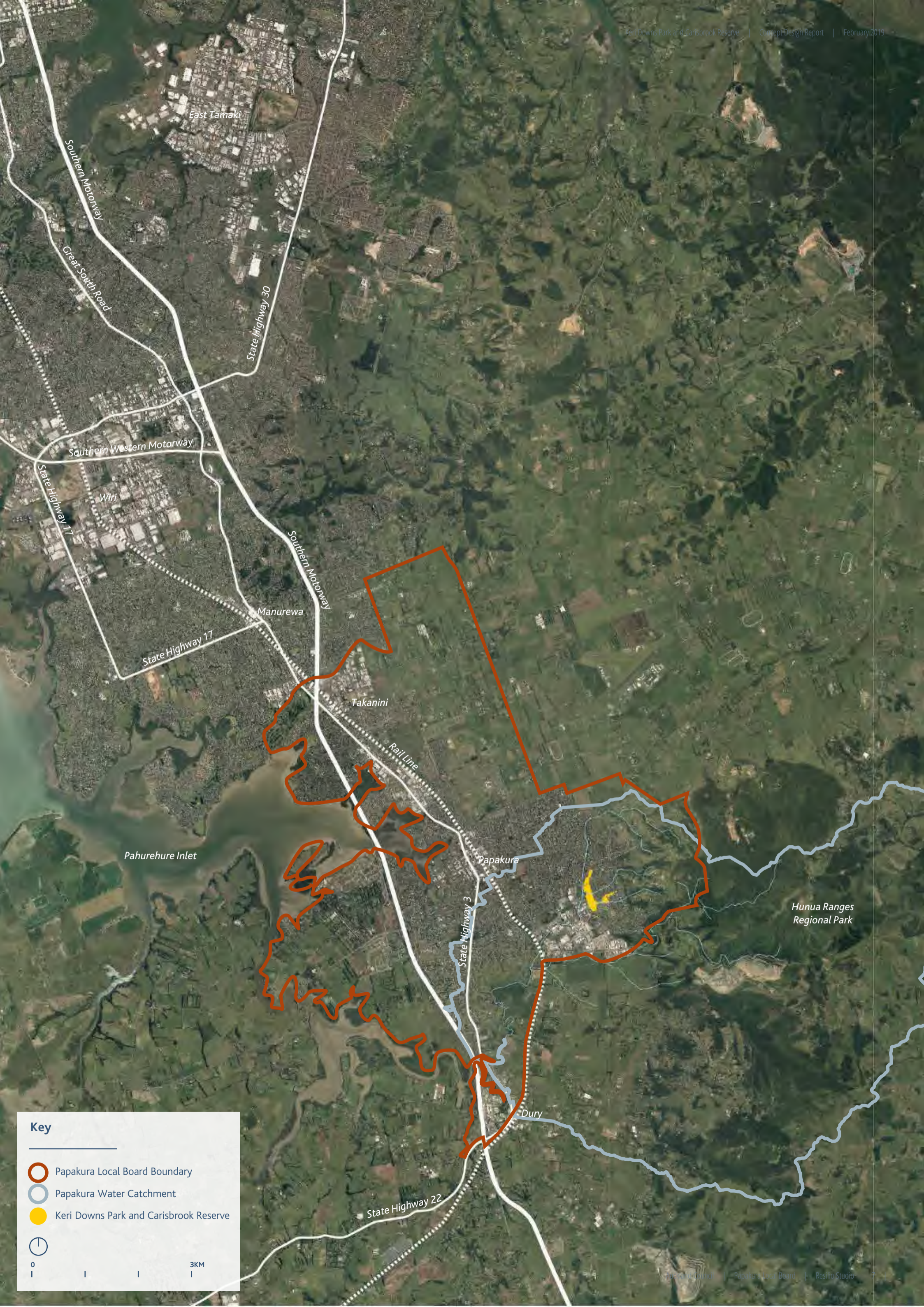
1.2_ Site Location

Keri Downs Park is located at 200R Dominion Road, 17R Redcrest Avenue and 25R Fairdale Avenue. Carisbrook Reserve is located at 1R Carisbrook Crescent and 148 and 152 Dominion Road. Both the park and reserve are located in the Otūwairoa catchment and Papakura Local Board area.




Keri Downs Park and Carisbrook Reserve form part of a network of open spaces and facilities which include Te Koiwi Park, Children’s Forest, Scenic Reserve, Graham Tagg Park and the Hunua Ranges. Keri Downs Park is significant for its community garden, passive recreation and large areas of open space. Carisbrook Reserve includes an existing playground, online wetland and stream. Both have significant physical and visual links to the Pukekiwiriki Pā and the surrounding landscape.

Keri Downs Park is approximately 7.5ha and is zoned Open Space Sport and Active Recreation Open Space Informal Recreation.

Carisbrook Reserve is approximately 1.7ha and is zoned Open Space Informal Recreation.



Key

-  Papakura Local Board Boundary
-  Papakura Water Catchment
-  Keri Downs Park and Carisbrook Reserve



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1.3_ Summary of Consultation and Engagement

The consultation process involved a wide range of participants. Utilizing the International Association for Public Participation (IAP2) Spectrum of Participation¹ as a reference, people involved in the Development Plan fall into two distinct groups with corresponding levels of engagement.

Project Partners, formed by Mana Whenua iwi authorities have been involved in key decisions regarding the design - their concerns and aspirations have been understood and considered in the decision-making process.

Key Stakeholders, who include existing park users and the general public, have been consulted to ensure that their concerns and aspirations have been understood and considered. Stakeholder feedback is captured and incorporated into the developing design and provided with information to assist them in understanding the opportunities and constraints associated with the site.

The consultation process has been utilised to develop this concept design stage and involved pre-concept engagement and consultation to gain a deeper understanding of the site and the concerns, needs and desires of Mana Whenua, council and community.

The diagram on the facing page for an overview of the Consultation and Engagement Strategy compiled for this project.

Pre-Concept Consultation and Engagement

The purpose of the pre-concept consultation was to ensure that key concerns and desires were expressed and shared prior to developing a design for the park and reserve. The pre-concept consultation involved several methods - presentations and meetings, a site walkover, a public open day as well as manual and digital submissions. The site walkover involved Mana Whenua representatives and an Auckland Council member. The presentations and meetings involved Mana Whenua, the Papakura Local Board and a range of council staff with different areas of expertise. A public open day was held on the Saturday 6th October at the Redhill Community Centre, Dominion Road, Papakura.

Mana Whenua involved in the meetings and/or the site walkover included Ngāti Te Ata, Ngāti Whanaunga and Ngāti Tamaoho. The site walkover also involved Auckland Council staff.

The public open day was advertised through letterbox drop to local residents, and existing Auckland Council and local board channels of social media such as "Have your say" online engagement and via email and phone to known stakeholders. The event was attended by council staff and design consultants to discuss the reserve and the development plan process. Attendance by the public was relatively low, however, the people who did attend stayed for the majority of the two hours and spoke extensively with staff and consultants about the park. Twenty-one digital submissions were also received. As with the open day, while the number of respondents was low, the quality of the information from the online submissions was high.

The first phase of consultation revealed:

- The existing users are passionate about the reserve.
- There is a strong desire to:
 - Maintain and enhance the ecological values and water quality of the reserve.
 - Improve the access to and circulation through the park and reserve.
 - Create a community space for families and events including BBQ's and associated infrastructure and facilities.
 - Improve and implement playgrounds/play spaces suitable for all ages.
 - Integrate art and artistic expression through the park and reserve.
- Improving safety and security is a key issue.
- The functionality of the open space can be improved by improving drainage and managing/removing Onehunga weed from the lawn.

Community Feedback from Surveys



¹ www.iap2.org.au/About-Us/About-IAP2-Australasia-/Spectrum

Consultation and Engagement Overview



Concept Design Consultation + Engagement

It is recommended that a second phase of community consultation and engagement is undertaken prior to implementing the projects outlined in Section Three of this report.

The method for the second phase of consultation and engagement will involve liaising with Mana Whenua, sharing the draft concept design with the same organisations and users groups engaged through the first phase of consultation to gather feedback to inform the final concept design and projects to prioritise for implementation. Methods of engagement for the second phase of consultation should also include but not be limited to an online survey and public open day.

Further engagement with Mana Whenua will also need to be undertaken to further develop and refine the Place-Base Application of the Te Aranaga Design Principles and final concept design.



Public Open Day Engagement 27.10.18 at Redhill Community Centre

Summary of Community Feedback from Public Open Day



1.4_ Vision

Keri Downs Park and Carisbrook Reserve are spaces:

- Where the ecological values of the site are maintained and enhanced
- Highly valued for their open spaces and parkland amenity
- Enjoyed by people of all ages and abilities for events, active sports, play spaces, walking, running, and other recreational activities
- Where the values of the community and qualities of the environment are expressed through a range of artistic interventions/installations

1.5_ Design Principles

The following design principles are proposed to guide the possible future development of Keri Downs Park and Carisbrook Reserve. The design principles are organised under two headings, the Te Aranga Design Principles and Supplementary Principles.

Te Aranga Design Principles

The Auckland Design Manual (ADM)² notes that the key objective of the Te Aranga Māori Design Values and Principles is to enhance the protection, reinstatement, development and articulation of Mana Whenua cultural landscapes and to enable all of us (Mana Whenua, mataawaka, tauiwī and manuhiri) to connect with and to deepen our collective appreciation of 'sense of place'. The following core Māori values have informed the development of the outcome-oriented Te Aranga Māori Design Principles:

- Rangatiratanga
- Kaitiakitanga
- Manaakitanga
- Wairuatanga
- Kotahitanga
- Whanaungatanga
- Matauranga

Te Aranga Māori Design Principles are outlined below.

- 
Mana Rangatiratanga - Authority
 The status of iwi and hapū as Mana Whenua is recognised and respected.
- 
Whakapapa - Names and Naming
 Māori names are celebrated.
- 
Taiao - The Natural Environment
 The natural environment is protected, restored and/or enhanced.
- 
Mauri Tū - Environmental Health
 Environmental health is protected, maintained and/or enhanced.
- 
Mahi Toi - Creative Expression
 Iwi/hapū narratives are captured and expressed creatively and appropriately.
- 
Tohu - The Wider Cultural Landscape
 Mana Whenua significant sites and cultural landmarks are acknowledged.
- 
Ahi Kā - The Living Presence
 Iwi/hapū have a living and enduring presence and are secure and valued within their rohe.

Supplementary Principles

Engagement

Work with the public throughout the Keri Downs Park and Carisbrook Reserve redesign process to ensure that public concerns and aspirations are consistently understood and considered.

Leisure + Recreation

The Keri Downs Park + Carisbrook Reserve redevelopment ensures that park users can access and enjoy the park for a range of informal leisure and recreation activities such as picnicking/BBQ, hanging out with friends and whānau, and informal sport.

Connectivity

Keri Downs Park and Carisbrook Reserve have the opportunity to start connecting the local community together.

Accessibility

Keri Downs Park and Carisbrook Reserve are accessible to as wide a user group as possible, including children and people with disabilities.

Safety

Keri Downs Park and Carisbrook Reserve provide a safe network of paths with clear sightlines and multiple routes to avoid issues of entrapment.

Activate

Keri Downs Park and Carisbrook Reserve provide places for community and cultural activation including activities such as community events, markets, and cultural and seasonal celebrations.

Viability

The Keri Downs Park and Carisbrook Reserve redevelopment provide value for money outlining a wide range of realistic projects with multiple pathways for implementation.

Resilience + Adaptation

The Keri Downs Park and Carisbrook Reserve redevelopment have strategies in place to adapt to the effects of climate change, particularly drought, flooding and extreme weather events.

Stewardship

Local residents and community groups are encouraged/supported to lead park-wide initiatives including but not limited to community planting groups, Spring Clean events, citizen science groups, cycle safety events etc.

² http://www.aucklanddesignmanual.co.nz/design-thinking/maori-design/te_aranga_principles

2.0_ Site Analysis

2.1_ Introduction

Part two - Site Analysis:

- Regional context with a focus on people and landscape
- Site features and characteristics
- Papakura and Redhill neighbourhood open space network
- Place-based application of Te Aranga Design Principles
- Character Areas including desired outcomes

2.2_ People and Landscape

Mana Whenua

This site is part of a larger cultural landscape recognised by Mana Whenua as having significant cultural value.

The main waka route used by all tribes traversing North and South was via the Waikato River then onto the Manukau Harbour via the Awaroa River. Wahi nohoanga (encampments) are still known among Iwi today in the headlands, promontories around the Harbour. From these vantage points, access to kaimoana was good and it was possible to observe waka movements and receive early warning of the approach of friend or foe³.

There were known battles within this area. The cultural landscape is also one of interconnectedness of pā and the wider landscape of the Tāmaki Area⁴.

This site is set within the known cultural landscape of Pukekiwiriki pā, a site of cultural significance to many local iwi.

Current Users + Potential Users

The current users of Keri Downs Park and Carisbrook Reserve are primarily focused on passive uses, including walking (with dogs), running and cycling as well as active users associated with the playground in Carisbrook Reserve and the community garden in Keri Downs Park. The scale of Keri Downs Park and Carisbrook Reserve mean that there is an opportunity to expand the existing uses and cater for a range of new and different uses.

Values + Perception

The first phase of consultation revealed that the existing users are passionate about the park and reserve. It also highlighted safety and security is a key issue for the community. One of these areas is the unused BMX track.

Observation identified refuse and debris such as litter, trollies, household rubbish and garden waste in the streams and over back fences or residential houses, suggesting at least to some degree, a lack of ownership in Keri Downs Park and Carisbrook Reserve. Research suggests⁵ that spaces that look and feel neglected tend to be neglected further, potentially unfolding into a vicious cycle of degradation. Conversely, landscape and spaces that exhibit and/or express care and attention engender more care and attention, creating a virtuous cycle of regeneration.

Design Considerations

- Enhance physical and visual links with the wider landscape, enhance the sense of 'natural environment' and improve feelings of safety.
- Explore strategies to resolve the issues between neighbouring properties and the park and reserve regarding the disposal of rubbish and passive surveillance.
- Where possible, improve visual links into and through the space.

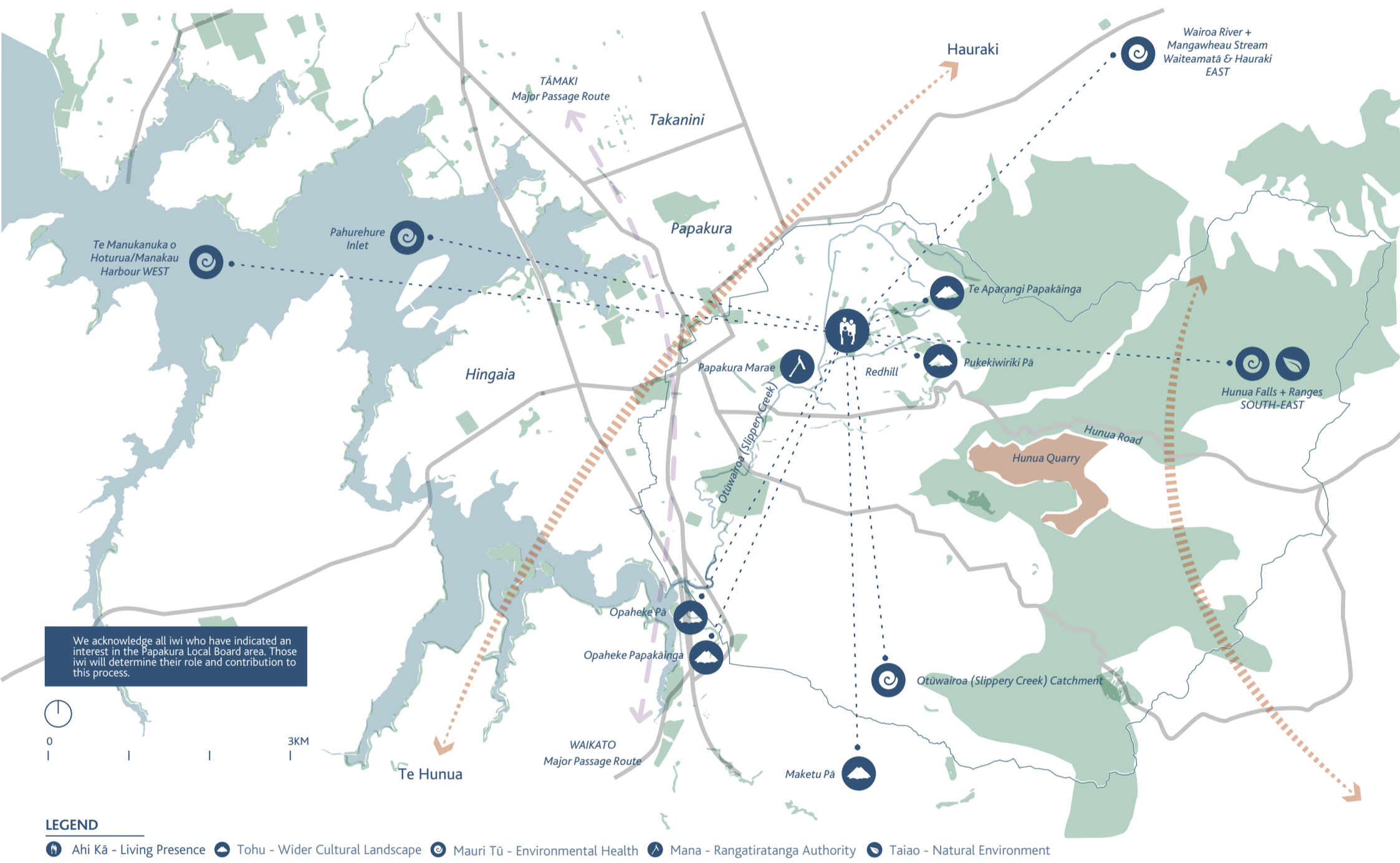
Strategic Questions

- How does the local community currently perceive Keri Downs Park and Carisbrook Reserve?
- What site features and characteristics, if any, are valued most by the community?
- How will the Papakura/Redhill community change over the coming decades and how will this influence the character and function of Keri Downs Park and Carisbrook Reserve?
- How can the local community be engaged to support the development and ongoing maintenance of Keri Downs Park and Carisbrook Reserve?

³ Reference from Ngāti Te Ata's Carisbrook Park Pukekiwiriki report.

⁴ Reference from Ngāti Te Ata's Carisbrook Park Pukekiwiriki report.

⁵ 'Cues of Care' is a term coined by Joan Nassauer to describe this phenomenon - Landscape journal, 1995



2.3_ Site Features and Characteristics

The Keri Downs Park and Carisbrook Reserve are characterised by large open spaces, mature parkland trees and two streams with sporadic riparian plantings. An unnamed stream runs along the eastern boundary of Carisbrook Reserve, under Settlement Road and through the northern end of Keri Downs Park. Hayes Stream runs through the southern end of Keri Downs Park, creating a connection between Dominion Road and Redcrest Avenue while framing the southern edge of the large open space and creating the space of the now disused BMX track. The section of Keri Downs Park extending to the east along Hayes Stream also contains a large community garden which is currently registered under the Papakura Tongan Otu Motu Anga'ofa Society Incorporated⁶.

Carisbrook Reserve

Carisbrook Reserve is located north of Keri Downs Park. The site houses a dairy (the Redhill Superette) and car park on the corner of Dominion and Settlement Roads. The unnamed stream runs down the eastern boundary from a pond at the northern end of the reserve. The middle of Carisbrook Reserve has a small playground that includes two different swing sets, a climbing frame with slide and separate stand-alone slide, with some metal seating and a traditional picnic table.

Carisbrook Reserve has an area of open space with grass, large exotic trees along the stream with exotic shrubs and a few self-seeded native species. The pond has a boundary of native plant species and is home to ducks and there is often refuse in the stream bed.

Keri Downs Park

Keri Downs Park is characterised by a large central open space. The area is prone to flooding and has poorly draining soils and has significant areas of Onehunga weed - *Cotula australis* (prickles). Both the drainage and prickles significantly compromise the functionality of the space. There is a kilikiti pitch the middle of the open space. A rugby post is located along the eastern fence line towards Hayes Stream.

The northern end of the park is characterized by gentle rolling landforms that sculpt the site around the northern stream and includes clusters of mature parkland trees. The stream bed sits approximately 0.5-1m below the surrounding ground level. In large storm events, the stream floods the entire riparian zone and deposits debris on the bridge next to Dominion Road. A skate-park north of the stream is visually isolated from surrounding uses and only caters to advanced skateboarders, which both contribute to its lack of use and poor condition including significant amounts of 'tagging'.

Hayes Stream to the south of the open space has been enhanced through community planting coordinated by council park services and Redhill School. The area to the south of Hayes Stream contains a disused BMX track that sits approximately 3 metres above the rest of the park. The bike track has been contoured to suit the needs of the bike track users which also includes a watchtower, lights and a concrete start ramp. At the time of writing, the concrete start ramp and associated structure are scheduled to be removed. This area of the of the park is visually isolated from the rest of Keri Downs Reserve and Dominion Road and there is limited casual surveillance from adjacent private residential properties.

The eastern section of Keri Downs Park provides connectivity and access to the surrounding street network and is characterized by closed board fences at the rear of residential properties and a large community garden. The community garden is one of the largest in Auckland and hosts a range of events throughout the year.

Design Considerations

- Maintain and enhance the existing parkland character of Keri Downs Park and Carisbrook Reserve.
- Maintain and enhance the character and amenity of the two streams.
- Where possible improve sight-lines and visibility within Keri Downs Park and from adjacent public spaces and private residential properties.
- Maintain and enhance the existing character of Keri Downs Park and Carisbrook Reserve.

⁶ Papakura Local Board. Open Agenda. 28 February 2018.



Key

- | | | | |
|---|--|--|--|
| <ul style="list-style-type: none"> ● Keri Downs Park + Carisbrook Reserve Boundaries - - - Contours - Property Boundaries - Kerb Lines - - - Site Boundary - High Wooden-Slatted Fences - High Wire Fences - Low Wooden Fences - Low Wooden Bollards = Existing Pathways → Stormwater Pipes → Wastewater Pipes → Water Pipes | <ul style="list-style-type: none"> ● Water ● Overflow Culvert ● Flood Plains ● Flood Prone Areas ● Overland Flow Paths ● Community Garden ● Informative Signage ● Existing Bridges ● Pump Track ● Skate Bowl ● Kilikiti Pitch ● Rugby Post ● Playground | <ul style="list-style-type: none"> ● Drain ● Power Pole Lines ● Seating/Picnic Area ● Lighting ● Toilet + Changing Room ● Bus Stops ● Dairy ● Parking ● Native Community Planted Areas ● Trees ● Boggy Area ● Weed/Grass Areas | <ul style="list-style-type: none"> ① Redhill Kindergarden ② Redhill Primary School ③ Redhill Community Center ④ The High Wire Charitable Trust ⑤ Papakura Wesleyan Church ⑥ Auckland Sri Ganesh Temple |
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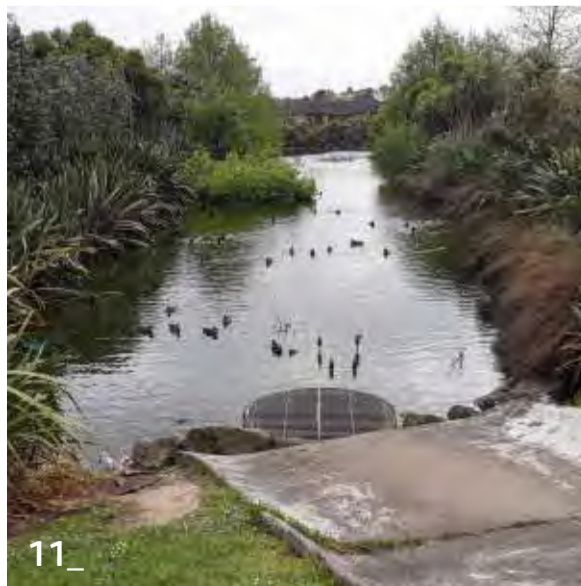
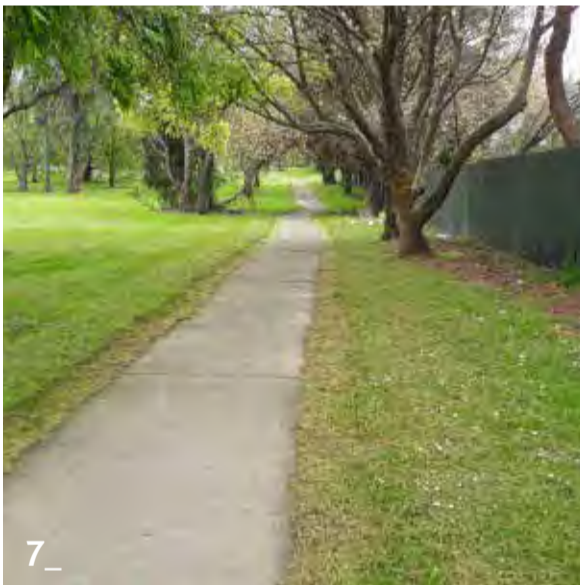
2.3_ Site Feature and Characteristics Continued

A photo essay on the opposite page provides an overview of the character and amenity Keri Downs Park and Carisbrook Reserve.

Key

1. View looking south across the disused bike track
2. Blocked stream at the southern end of Keri Downs Park
3. Stream near community garden
4. Community garden area
5. Riparian planting on stream edge running through southern end of Keri Downs Park
6. Access way to open fields on Keri Downs Park
7. Pathway along eastern edge of Keri Downs
8. Bridge across Keri Downs Park northern stream (note level of debris on bridge)
9. Skate bowl and amenity in Keri Downs Park
10. Stream at southern end of Carisbrook Reserve
11. 'Wetland pond' at Carisbrook Reserve
12. Existing Playground at Carisbrook Reserve

1	2	3
4	5	6
7	8	9
10	11	12



2.4_ Papakura and Redhill Neighbourhood Open Space Network

Open Space Network

Keri Downs Park and Carisbrook Reserve form part of a network of open spaces and facilities which include Te Koiwi Park, Children's Forest, Scenic Reserve, Graham Tagg Park and Hunua Ranges. Keri Downs Park is significant for its community garden, passive recreation and open space. Carisbrook Reserve contains a playground for school-age children, an online wetland and stream. Both sites have significant physical and visual links to the Pukekiwiriki Pā and the surrounding landscape.

The diagram to the right provides an overview of the existing open space and park assets in the Papakura and Redhill communities and a preliminary investigation of the activities they provide for the supporting assets.

Landscape Ecology

Keri Downs Park and Carisbrook Reserve are relatively flat spaces within the Otūwairoa catchment and form part of the broader ecosystem connecting the Hunua Ranges with the Manukau Harbour which includes puriri forests; kahikatea and pukatea forests; taraire and tawa forest; and tawa, kohekohe, rewarewa and hinau forest. Land cover in this area has been heavily modified by human activity in the past 150 years with approximately 3% native vegetation remaining and approximately 60% total of the land is now covered in some form of urban land use. The potential long term forest type at Keri Downs Park and Carisbrook Reserve includes puriri forests and kahikatea and pukatea forests.

Within this context, the scale and location of Keri Downs Park and Carisbrook Reserve offer the opportunity to contribute significantly to the broader ecological network. While the park and reserves surrounding Keri Downs and Carisbrook are small in nature, Keri Downs and Carisbrook offer a larger scale area to support a greater diversity of habitat with greater resistance to disturbance.

At the time of writing, there has been some joint council, community and Red Hill School engagement and initiative through the Volunteer and Programmes Team in Auckland Council Parks Services to enhance the riparian corridor for the Hayes Stream running through the southern section of Keri Downs Park.

Network Connectivity

Keri Downs Park and Carisbrook Reserve are located on the corner of two collector roads (Dominion Road and Settlement Road) and have large road frontages. The eastern edge and extension of Keri Downs Reserve have several access points to the surrounding local streets. The sites are therefore relatively well connected and accessible to surrounding communities.

As noted below, however, the internal circulation of Keri Downs is poor so while it is relatively easy to get to Keri Downs Reserve, the site does not allow for easy through movement and does not contribute to the broader pedestrian and cycle network.

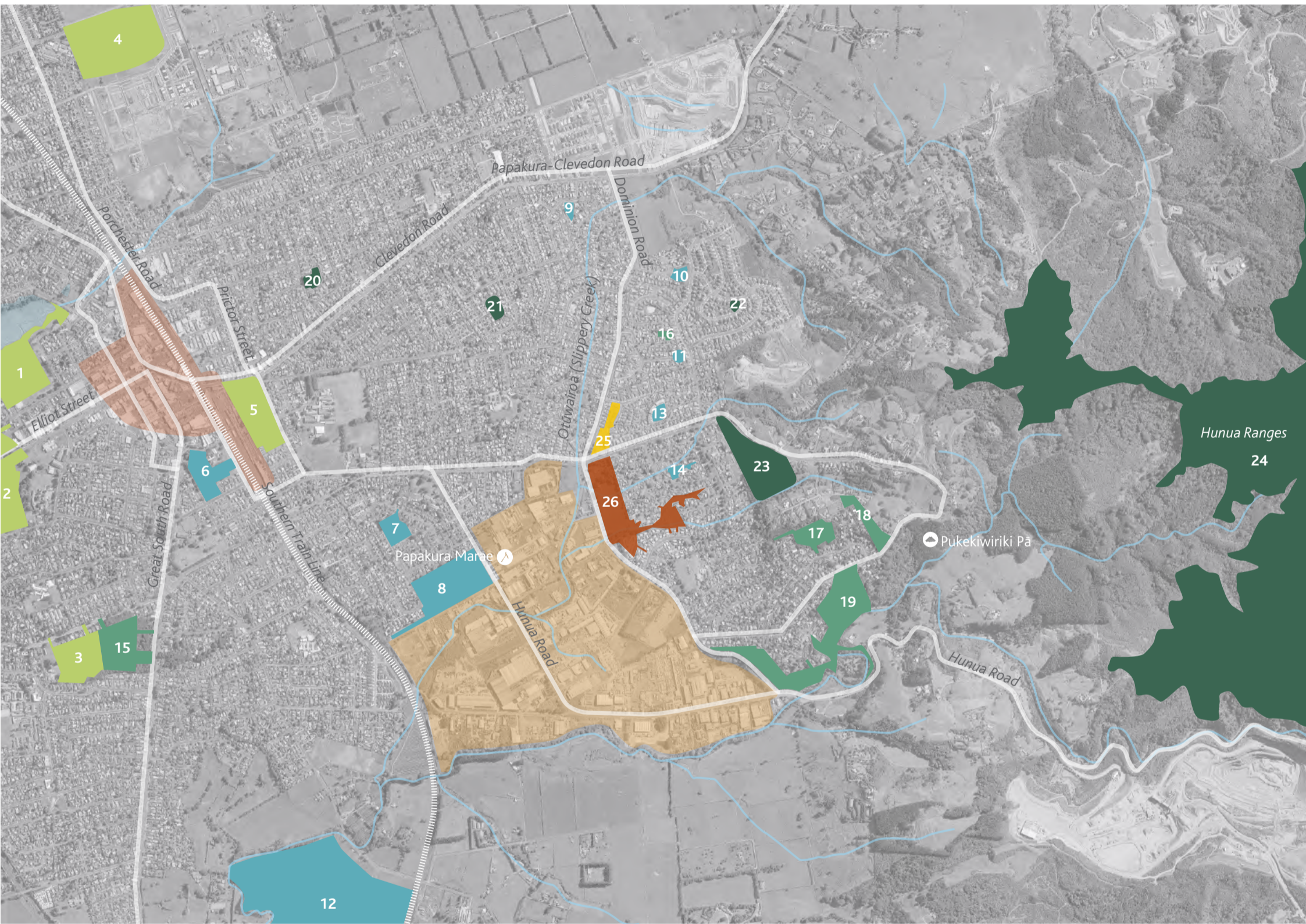
Design Considerations

- Integrate passive and active recreation facilities and spaces into Keri Downs Park and Carisbrook Reserve that complement existing uses in the Papakura and Redhill open space network.
- Maintain and enhance Keri Downs Park and Carisbrook Reserve's ecological values.
- Improve access and connectivity through Keri Downs Park and Carisbrook Reserve.

Strategic Questions

- Should Keri Downs Park and Carisbrook Reserve aspire to be a regionally significant park or should it focus on serving the immediate local community?
- Why type of assets could Keri Downs Park and Carisbrook Reserve provide to the local community that are either under-represented or currently absent from the existing open space network?
- How can the Papakura and Redhill community be engaged and involved in the ongoing maintenance and enhancement of Keri Downs Park and Carisbrook Reserve?
- Is there enough demand for the large open space in Keri Downs Park to justify improving the drainage to increase the usability of the space?

⁶ Papakura Local Board. Open Agenda. 28 February 2018.



Key

- Carisbrook Reserve
- Keri Downs Park
- Papakura Metropolitan Centre Zone
- Light and Heavy Industrial Zone

Sports + Active Recreation Zone

- 1 Prince Edward Park
- 2 Ray Small Park
- 3 Southern Park
- 4 Pulman Park
- 5 Massey Park

Informal Recreation Zone

- 6 Central Park
- 7 Smiths Ave Reserve
- 8 Te Koiwi Park
- 9 Cargill Reserve
- 10 Elsie Morton Park
- 11 McIntosh Park
- 12 Graham Tagg Park
- 13 Lime Reserve
- 14 Sheralee Reserve

Conservation Zone

- 15 Kirks Bush
- 16 Hatton Lane Reserve
- 17 Margans Bush
- 18 Pukekiwiri Pā
- 19 Scenic Reserve

Informal Recreation + Conservation Zone

- 20 Scenic Reserve
- 21 Rolleston Park and Community Garden
- 22 Kirikiri Reserve
- 23 Childrens Forest
- 24 Hunua Ranges

2.5_ Site Features - Prevailing Weather Conditions

Keri Downs Park and Carisbrook Reserve have a subtropical climate, with warm humid summers and mild winters.

Prevailing winds come from the southwest.

Subtropical rain storms come from the northeast, which typically comes during summer and autumn.

Keri Downs Park is susceptible to flooding and has poor drainage which limits the usability of the open space area.

The area of open space between the unnamed stream and large open space in the middle of Keri Downs Park is a popular summertime location due largely to its cool micro-climate created by the large parkland trees.

Design Considerations

- Maintain and enhance existing microclimates and create new microclimates offering cool spaces during summer.

Prevailing Weather Conditions

- Site Boundary
- Overland Flow Paths
- Water
- Flood Plain
- Flood Prone Areas
- Trees
- Shaded Summer Micro-climate



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2.6_ Site Features - Water and Vegetation

Water

Keri Downs Park and Carisbrook Reserve are low lying, relatively flat spaces within the Otūwairoa catchment. As noted above, an unnamed stream runs along the eastern boundary of Carisbrook Reserve, under Settlement Road and through the northern end of Keri Downs Park and Hayes Stream runs through the southern end of Keri Downs Park.

The low lying nature of the site means that floodplains extend over approximately 70% of the park and reserve, combined with the poorly draining soils associated with the WF 8 Kahikatea pukatea forest type means that Keri Downs Park becomes boggy which limits the usability of the open space.

While there is no specific information available for the water quality within the sites, the fact that most of the Otūwairoa catchment is urbanised it is safe to assume that the impervious surface coverage is 40% or more meaning that the water quality entering the site will be compromised. The three car parks onsite also contribute to the site's imperviousness. Onsite observations also identified significant quantities of debris within the stream in the way of litter, trollies and household rubbish and some topsoil runoff from the community garden in Keri Downs Park.

Existing Vegetation

Keri Downs Park and Carisbrook Reserve have a range of large exotic and native parkland trees spread throughout the park but are primarily located along the eastern boundaries and clustered along the stream edges. The community have planted native shrubs, flaxes and grasses along Hayes Stream to create an improved riparian corridor. The Papakura Tongan Otu Motu Anga'ofa Society Garden is located on the eastern offshoot of Keri Downs Park.

The site sits across two different ecosystem types: WF 7_ Puriri forest and WF 8_ Kahikatea, pukatea forest. A third ecosystem type, WF 9_ Taraire, tawa, podocarp forest resides north-east of Carisbrook Reserve.

WF 7_ Puriri forest

This forest type grows on the North Island's most fertile soils of alluvial and volcanic origin within the warm climatic zone. Remaining examples suggest that this forest type occurred on alluvial terraces with moderate to highly free-draining fertile soils that are rarely if ever, flooded. Typical plant species of this forest type include puriri with occasional totara, matai, kahikatea and titoki, locally with kōwhai and taraire. This forest would have supported a large population of birds, essential for pollination and seed dispersal for most species present.

WF 8_ Kahikatea, pukatea forest

This ecosystem is essentially a swamp forest growing on poor-draining alluvial, organic and gley soils with seasonally high water table in warm to mild and humid to sub-humid areas. It is found throughout the Auckland region where frosts are minimal, but is heavily reduced in its former extent and now restricted to small remnants. Typical species include kahikatea and pukatea, and locally, matai.

Design Considerations

- Maintain and enhance ecological values of the site through the planting of vegetation appropriate to the underlying ecology - Puriri forest and Kahikatea, pukatea forest types.
- Ensure that new planting balances ecological outcomes with park safety by ensuring sight-lines are maintained into and throughout the park and reserve.
- Explore the opportunity to integrate water sensitive design features into the existing car parks.
- Explore the feasibility and desirability of mitigating the floodplains to improve the functionality of the large open space area at Keri Downs Park.

Detailed Investigations Required

- Assess the feasibility of retrofitting online wetland in Carisbrook Reserve to improve water quality.
- Assessment of the health and integrity of the existing parkland trees in Keri Downs Park and Carisbrook Reserve.

Strategic Questions

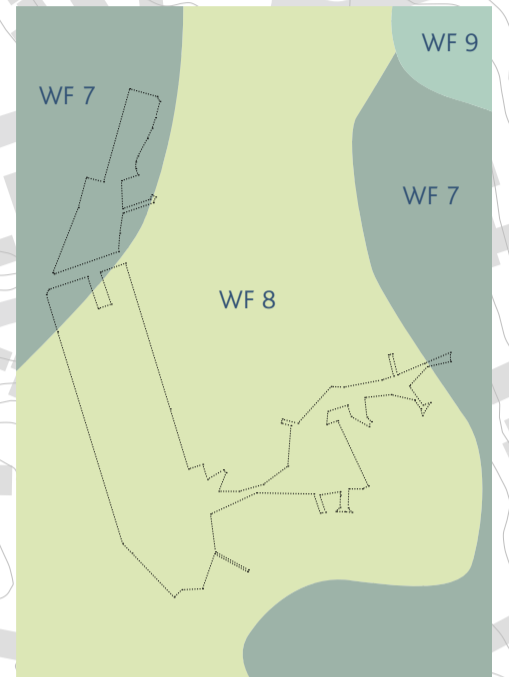
- How can the Papakura and Redhill community be engaged and involved in the ongoing maintenance and enhancement of Keri Downs Park and Carisbrook Reserve?

Water and Vegetation

- Site Boundary
- Overland Flow Paths
- Water
- Flood Plain
- ▨ Flood Prone Areas
- Shrub Vegetation
- Trees
- Community Garden

Ecosystems of Papakura Insert

- WF 7_ Puriri forest
- WF 8_ Kahikatea, pukatea forest
- WF 9_ Taraire, tawa, podocarp forest



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2.7_ Site Features - Access and Circulation

Keri Downs Park and Carisbrook Reserve are situated in suburban Papakura. Carisbrook Reserve is bound by Dominion Road to the west, Settlement Road to the south, Milson Drive to the north and Carisbrook Crescent to the east. Large sections to the northwest and southeast of the park are bound by residential properties. There are car parks for approximately 8 - 10 vehicles off Settlement Road which provides access to the existing playground.

Keri Downs Park is bound along the western edge by Dominion Road and the northern edge by Settlement Road. The eastern edge of the park is bound by residential properties. There are two car park areas at Keri Downs Park, both accessed off Dominion Road. The northern car park provides unmarked parking and doubles as a drop off zone. It also offers access to the existing toilet block and sports fields. The southern car park provides parking for approximately 24 cars and access to the now disused BMX track.

There is limited formed internal circulation in both parks. Keri Downs Park has a 1.5m path that runs through the eastern 'arm' of the reserve, connecting Redcrest Avenue (at two points), Igloo Place, Fairdale Avenue, Dulcie Place and Citril Place with the existing community garden and Keri Downs. Another 1.5m path runs along the eastern boundary, connecting Settlement Road with Palisade Place. The north-west corner of the park has a short path linking the existing toilet block and skate park with Dominion Road and Settlement Road.

Design Considerations

- Improve external access to the Keri Downs Park and Carisbrook Reserve.
- Improve internal access and circulation throughout Keri Downs Park and Carisbrook Reserve.
- Incorporate wayfinding and interpretive signage around the park and reserve.

Access and Circulation

- Low Railing/Boundary Fence
- Fence Line
- Green Space
- Designated Pathways
- - - No Parking
- Stream Paths
- P- Car Parking + Free Parking Space
- V Vehicle Access
- E Pedestrian Access
- ⌂ Pedestrian Bridge



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2.8_ Te Aranga Design Principles - Place Based Application


Mana Whenua representatives have confirmed that Te Aranga Design Principles are a useful and desired framework and starting point to identify and explore opportunities for this project. During on-site conversations, Mana Whenua have identified multiple opportunities to apply Te Aranga Design Principles, most explicitly through the principles of Mana, Whakapapa, Tohu, Taiao, and Mauri Tū.


Through further engagement, co-design processes and detailed discussion with Mana Whenua, the range of opportunities identified will be prioritised and refined and the details of how Te Aranga Design Principles will be specifically applied to this project will be agreed on by Mana Whenua and other project partners.


Place Based Applications


 Ahi Kā development of Keri Downs Park and Carisbrook Reserve to enhance community ownership, presence and ongoing engagement.


ā Whakapapa opportunity for re-naming Keri Downs Park and Carisbrook Reserve.


 Mana Rangatiratanga - Mana Whenua groups are engaged as early as possible to ensure that the status of iwi and hapū as Mana Whenua is recognised and respected.


 Environmental health is protected, maintained and/or enhanced.


 Iwi/hapū narratives are captured and expressed creatively and appropriately.

 Environmental health is protected, maintained and/or enhanced.

 Iwi/hapū narratives are captured and expressed creatively and appropriately.

 Mana Whenua significant sites and cultural landmarks are acknowledged.


 Environmental health is protected, maintained and/or enhanced.

 Iwi/hapū narratives are captured and expressed creatively and appropriately.

 Iwi/hapū narratives are captured and expressed creatively and appropriately.


 Te Aparanai Papakāinga


 Puhurehure Inlet


 Iwi/hapū narratives are captured and expressed creatively and appropriately.


 Hunua Falls + Ranges

 Pukekiwiriki Pā Site


 Environmental health is protected, maintained and/or enhanced.

 Iwi/hapū narratives are captured and expressed creatively and appropriately.

 Iwi/hapū have a living and enduring presence and are secure and valued within their tribe.

 Iwi/hapū narratives are captured and expressed creatively and appropriately.

 Otūwairoa (Slippery Creek) Catchment

 Mana Whenua significant sites and cultural landmarks are acknowledged.

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2.9_ Character Areas

There are 13 'character areas' at Keri Downs Park and Carisbrook Reserve with distinctive uses, spatial characteristics, environmental patterns and aesthetic experiences. Defining character areas helps to frame and organise the sites into areas with similar opportunities and constraints which require similar management and maintenance, which in turn allow the site to be considered a series of discrete projects that collectively contribute to the overall vision for Keri Downs park and Carisbrook Reserve.

1. Carisbrook Crescent Wetland Park

A long narrow reserve characterised by an online wetland with a mix of native and exotic plants around the perimeter. There is a street frontage on the north and eastern boundary. Single story residential buildings with low transparent fencing along the western edge of the park. A narrow access point links to the remainder of Carisbrook Reserve to the south.

Desired Outcomes

- Assess the feasibility of retrofitting online wetland in Carisbrook Reserve to improve water quality.
- Enrich planting where appropriate, to improve water quality, visual amenity, and to increase wildlife.

2. Carisbrook Play Space

A flat open space framed by an unnamed stream along the eastern boundary with road frontage onto Dominion Road along the western boundary. The carpark has room for approximately 20 cars and can be accessed from Settlement Road which is adjacent to the Redhill Superette. The Redhill Superette is a single story residential building with low transparent hurricane style fence along the southern edge of Carisbrook play space character area. There is a small school-age playground in moderate condition in the middle of the park. Medium to large exotic trees frames the southern edge of the park.

Desired Outcomes

- Expand and enhance existing play space to accommodate early childhood and school-age play.
- Upgrade shared path connections.
- Maintain and enhance existing native species with the potential removal of exotic trees.
- Investigate options to either remove the existing carpark to reduce impervious surface and improve connectivity between Carisbrook Reserve and Keri Downs Reserve.
- If the above point is not possible, investigate options to integrate water sensitive design elements into the existing car park.

3. Carisbrook and Keri Downs Stream

An incised stream with steep grass banks and sporadic medium to large exotic trees growing along its banks. The Carisbrook Reserve section is bound by close-board residential fences along the eastern edge. The Keri Downs section of the stream runs south for approximately 75 meters before turning sharply to the west for further 100 meters. There is a small pedestrian bridge crossing the stream approximately 30 meters from the Dominion Road Boundary. The internal corner of the stream frames a single story residential dwelling with high open fences on all sides. The Carisbrook and Keri Downs Stream is located within the Puriri forest ecosystem type.

Desired Outcomes

- Maintain and enhance existing riparian corridor planting while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Clean up the stream by removing rubbish.
- Explore opportunities for integrating nature play.
- Create new shared path connections.
- Provide information to site users about the stream's fauna and flora species.
- Engage the community in the maintenance and enhancement of the stream.

4. Red Hill Superette

The Redhill Superette is located on the corner of Dominion and Settlement Road. A slip lane provides access to the superette and creates an isolated area of grass with two mature deciduous trees. The superette building is a stand alone two story building with a private yard to the south adjacent to Settlement Road and a cluster of mature to the northwest.

Desired Outcomes

- Enrich planting while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Investigate options to integrate water sensitive design elements into the existing slip lane and car park.
- Create opportunities for public art integration.

5. Keri Downs Skate-park

The Keri Downs Skate-park is an open space area bound by Dominion Road to the west Settlement Road to the north and the unnamed stream to the east and south. There is a large mound in the centre which appears to have been created to construct a skate bowl that sits in the centre of the space. There are several clusters of mature and young deciduous trees planted around the area.

Desired Outcomes

- Create youth play zone to potentially include skate, bike, scooter facilities and basketball 1/2 court - this could be a new structure or a retrofit of the existing skate bowl.
- Enrich planting while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Create opportunities for public art integration.

6. Keri Downs Nature Park

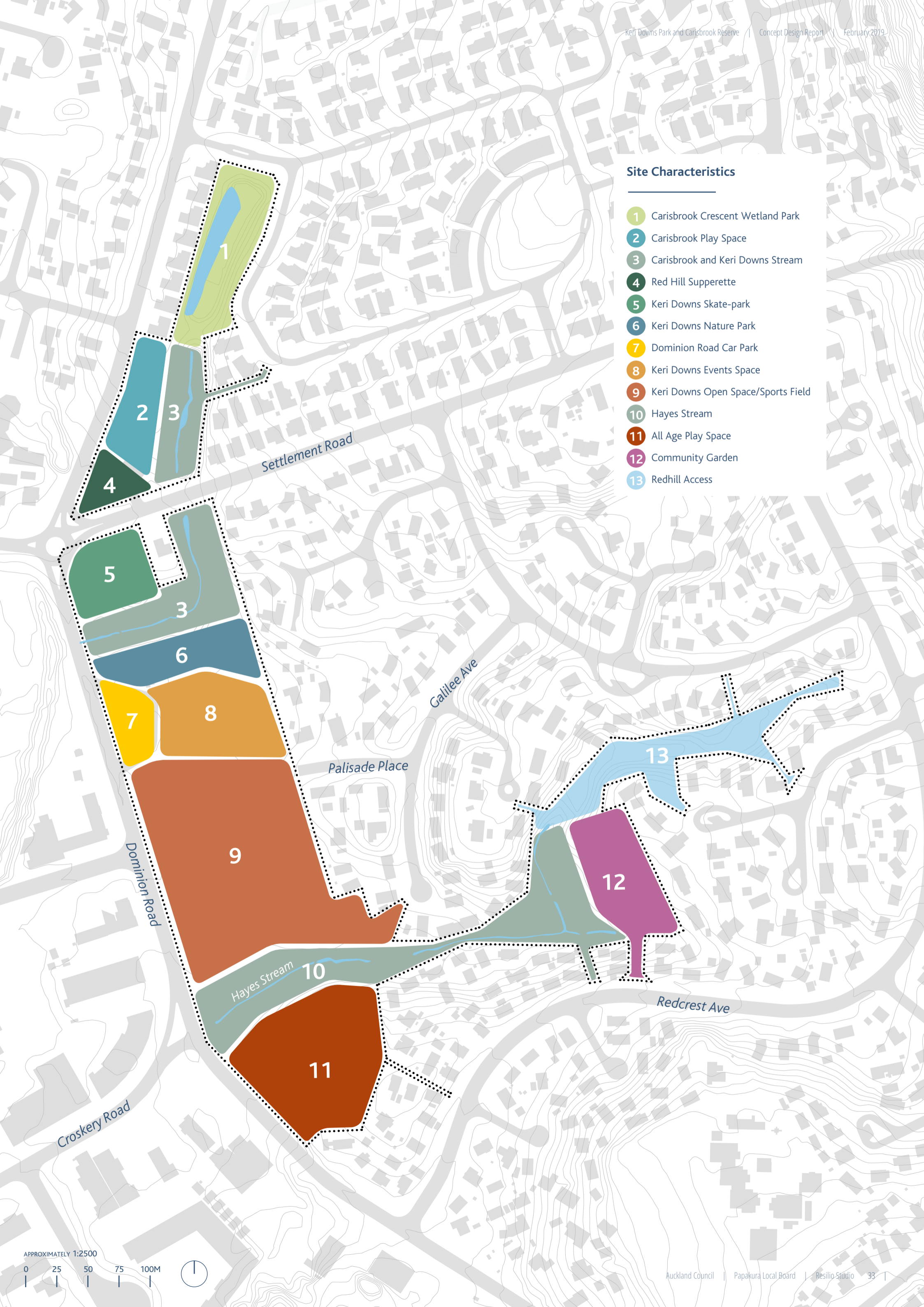
A large cluster of mature deciduous trees sits to the south of the stream within the flood-prone area. The land form is gently undulating and is framed by close-board residential fencing along the eastern edge.

Desired Outcomes

- Integrate BBQ's, picnic tables, shelter and shade.
- Explore opportunities for nature play.
- Create new shared path connections.

Site Characteristics

- 1 Carisbrook Crescent Wetland Park
- 2 Carisbrook Play Space
- 3 Carisbrook and Keri Downs Stream
- 4 Red Hill Supperette
- 5 Keri Downs Skate-park
- 6 Keri Downs Nature Park
- 7 Dominion Road Car Park
- 8 Keri Downs Events Space
- 9 Keri Downs Open Space/Sports Field
- 10 Hayes Stream
- 11 All Age Play Space
- 12 Community Garden
- 13 Redhill Access



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2.9_ Character Areas Continued

7. Dominion Road Car Park

A carpark for approximately 20 cars is accessed off Dominion Road. There are two entry/exit points which create a 'loop road' and landscape island with a cluster of mature deciduous and evergreen trees along the Dominion Road boundary. There is a public bathroom located on the northern edge of the car park, which remains locked most of the time. Another cluster of deciduous trees is located north of the access way between the public bathroom and Dominion Road.

Desired Outcomes

- Enrich planting while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Investigate options for making the public bathroom more accessible more often.
- Investigate options to integrate water sensitive design elements into the existing car park.

8. Keri Downs Events Space

A large flat open space east of the Dominion Road carpark and public bathroom framed by large deciduous and evergreen trees and closed board residential fencing along the eastern boundary. The area is subject to flooding and has poor drainage associated with the Kahikatea, pukatea forest type. The lawn has large areas of Onehunga weed which reduces the functionality of the open space.

Desired Outcomes

- Provide facilities for public events including trees and structures for shade and infrastructure such as power outlets.
- Provide shelter/shelters areas and enhance amenity.
- Create opportunities for public art integration.
- Create new shared path connections.
- Improve functionality of lawn by managing/removing Onehunga weed.

9. Keri Downs Open Space/Sports Fields

A large open space area similar to the Keri Downs Events Space only much larger and with frontage onto Dominion Road and access via Palisade Place.

Desired Outcomes

- Maintain and enhance existing open space through amenity planting and management/removal of Onehunga weed.
- Create new shared path connections.
- Investigate interest/demand for formal sports facilities.
- Enrich planting in the area next to carpark while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.

10. Hayes Stream

An incised stream similar to the unnamed stream running through the north of Keri Downs with two primary differences - the stream is located within the Kahikatea, pukatea forest ecosystem type and there has been significant re-vegetation along the stream banks through community and council efforts.

Desired Outcomes

- Desired Outcomes - see *Carisbrook and Keri Downs Stream*

11. All Age Play Space

An undulating land form bound by Hayes Stream to the north, Dominion Road to the west and closed board residential fences along the eastern and southern boundaries of the park. An area of level land adjacent to Dominion Road contains a carpark for approximately 20 cars. East of this area the land slopes up approximately 3m to a large disused BMX track which includes a watchtower and a constructed starting gate, both of which are visible from Dominion Road. The elevated area has good inter-visibility with adjacent residential properties. There is a narrow access way from Redcrest Avenue.

Desired Outcomes

- Create new shared path connections.
- Improve sight lines into the raised terrace containing the BMX track.
- Create play spaces for young children school-age children and youth.
- Retrofit existing BMX track into a pump track to allow for all age use.
- Investigate options to either remove the existing carpark to reduce impervious surface and improve connectivity between Carisbrook Reserve and Keri Downs Reserve.
- If the above point is not possible, investigate options to integrate water sensitive design elements into the existing car park.
- Create opportunities for public art integration.

12. Community Garden

A large community garden gently sloping to the west, bound by close-board residential fences. The western edge of the garden is bound by a concrete pedestrian path which provides access from Redcrest Avenue and Igloo Place.

Desired Outcomes

- Maintain and enhance community garden through investment in infrastructure and support of social capital.
- Enrich planting to improve micro-climates, mitigate the effects of soil runoff and to provide habitat for beneficial insects while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Encourage cultural activities and community events.
- Create opportunities for public art integration.

13. Redhill Access

A long, narrow open space framed by closed board fences on all sides. A grassed overland flow path runs the length of the area along the northern boundary and feeds into Hayes Stream. The character area is accessed via narrow lanes off Redcrest Avenue (at two points), Igloo Place, Fairdale Avenue, Dulcie Place and Citril Place.

Desired Outcomes

- Upgrade shared path connections.
- Enhance existing overland flow path with new native planting.
- Maintain and enhance existing shared path connections.
- Enrich planting to improve micro-climates, mitigate the effects of soil runoff and to provide habitat for beneficial insects while balancing ecological outcomes with park safety by ensuring sightlines are maintained and/or enhanced.
- Explore options for community orchard.

View across vegetated stream to the Peteli Community Garden



3.0_ Concept Design

3.1_ Introduction

Part three - Concept Design presents a 'flexible master plan' which enables the site to be organised into discrete manageable projects that can be implemented sequentially, in any order in parallel. The flexible master plan is organised into distinct themes:

- Path Network
- Planting Strategy
- Furniture - Kit of Parts
- Play Spaces
- Events Spaces and Arts Integration

Each theme includes an overview of the design strategy and an 'Action Plan' which outlines the scope and high level cost of potential projects.

While this report advises that the primary path network be implemented as part of the first phase of implementation, it is recommended that this report is used as a basis for another round of community engagement to help determine the communities priorities for Keri Downs Park and Carisbrook Reserve.

3.2_ Flexible Masterplan

The master plan provides an overview of the possible future use of Keri Downs Park and Carisbrook Reserve.



Key

CARISBROOK RESERVE ACTIVITY AREAS

- Carisbrook Early Childhood/School Play Space

KERI DOWNS PARK ACTIVITY SPACE

- Keri Downs Youth Space
- Keri Downs Nature Space
- Keri Downs Events Space
- All Age Play Zone - Early Childhood
- All Age Play Zone - School Age Play
- All Age Play Zone - Youth/Young Adult
- Peteli Tongan Community Garden

VEGETATION

- Mown Grass
- Proposed Riparian Planting
- Existing Riparian Planting
- Parkland Trees

PATHS + ACCESS

- Shared Paths
- Boardwalk
- Pedestrian Crossing
- Residential Fencing
- Existing Bollards

FURNITURE + INFRASTRUCTURE

- Picnic + BBQ Areas
- Bench Seat
- Wayfinding Signage
- Interpretive Signage
- Public Toilet
- All Age Pump Track
- Car Park
- Bridges
- Youth Area - Skate Park, Basketball 1/2 Court
- Existing BMX Track
- Community Garden Utility Shed

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3.3_ Path Network

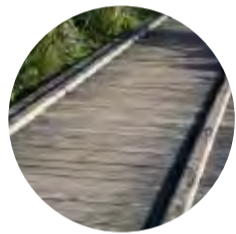
The path network seeks to create a well-connected network of shared paths throughout Keri Downs Park and Carisbrook Reserve. This is achieved through the upgrade of the existing paths and creation of a wide range of new paths. The surface treatment of the paths will determine the accessibility, safety, comfort and experience of Keri Downs Park and Carisbrook Reserve. It is also the key factor determining the durability, life expectancy and maintenance requirements of the path. The predominant material for Keri Downs Park and Carisbrook Reserve is a lightly exposed aggregate 10mm basalt path. This material

is recognisable across Auckland and ties in well with many of Auckland's existing footpaths and paved surfaces. It is long lasting and suitable for high traffic volumes. It has very good slip resistance, is not glary at implementation and utilises regionally sourced aggregates. The path network also includes constructed boardwalks, bridges and associated timber kick rail and balustrades to cross streams and low lying areas and a raised pedestrian table on Settlement Road to connect the two open spaces.



Shared Paths_ 2m | 3m

10mm basalt chip mix. Mid-grey (6% Oxide) matrix. Lightly exposed aggregate finish. To be installed over a compacted base and sub-base to engineering specifications.



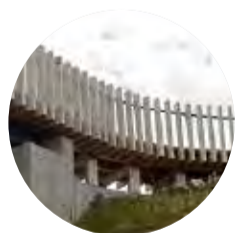
Timber Boardwalk + Bridges

Timber surface to be used on all bridges and boardwalks. FSC certified hardwood or H4 treated pine decking boards with treatment to achieve required slip resistance coefficients. Planks to be run perpendicular to the line of travel and gaps between boards are to be 6mm. Tamper-proof screw fastenings to be countersunk and sized to suit timber dimensions and loadings. Large countersunk fixings e.g. Large screws and bolts to be filled with a black flexible sealant finished flush with the timber surface.



Timber Kick Rail

A 75mm high x 100mm wide timber kick rail to be included along the edge of all boardwalks presenting a fall height less than 500mm high. Tamper-proof screw or bolt fastenings to be countersunk and sized to suit timber dimensions and loadings. Large fixing holes to be filled with black flexible sealant.



Balustrades

All balustrades to be constructed from 75 x 100mm profile timber. Timber members to be run vertically and sized to provide a 1200mm effective balustrade above the deck surface. Tubular stainless steel handrail to be provided along the entire length of the balustrade and following the line of the balustrade. All horizontal support members to be concealed and recessed to emphasise the vertical members and reduce visual clutter.



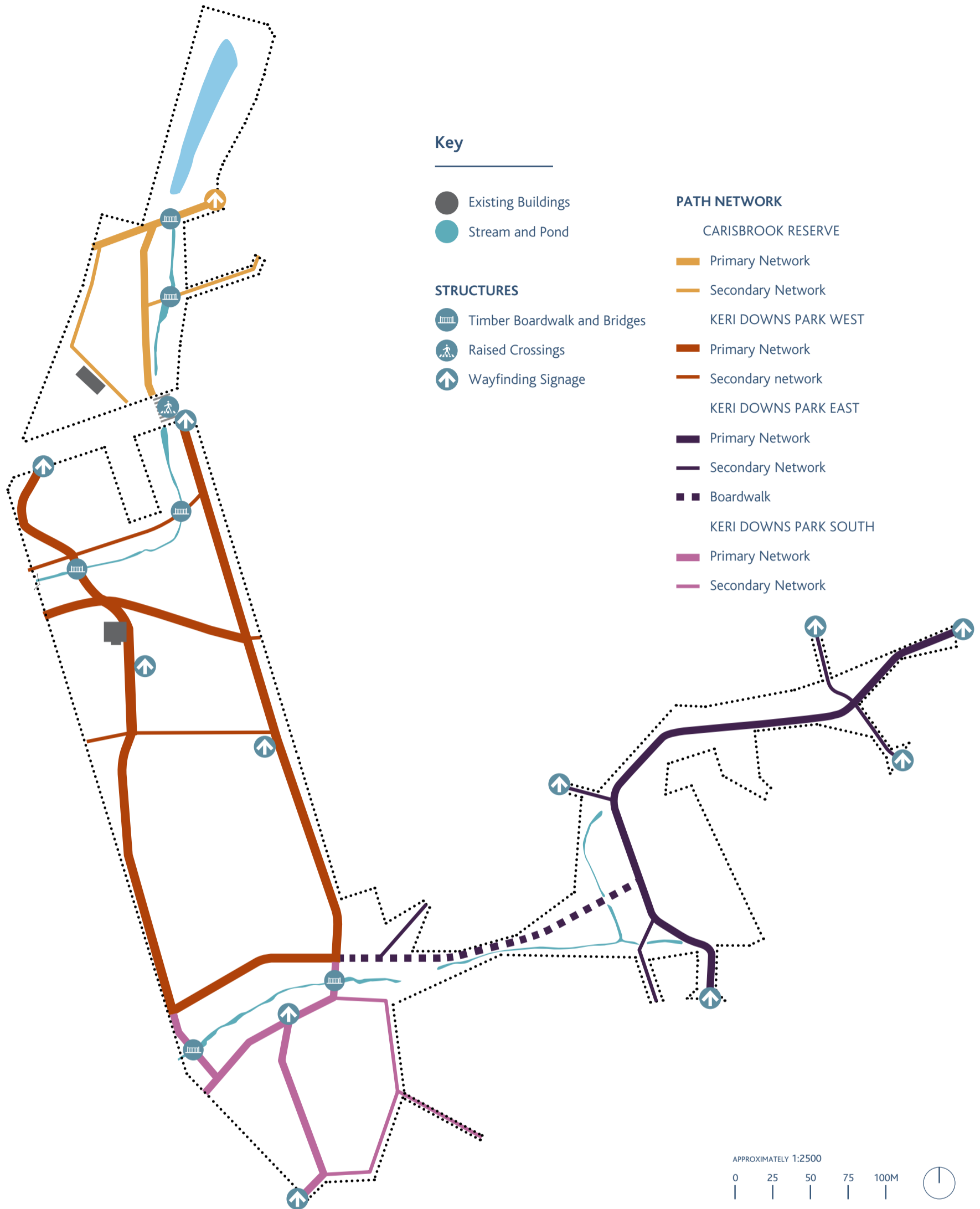
Raised Crossings

A concrete raised crossing is located at the existing zebra crossing on Settlement Road. The raised crossing reduces the vehicle approach speed and provides a visibly prominent flush crossing point for pedestrians and people on bikes. The level crossing surface should reflect the concrete path surface selection either side of the crossing point.



Signage_ Wayfinding

Wayfinding signs provide users with direction and distances to key destinations and are placed at entry and exit points and at intersections and key "decision points" throughout the reserve.



Action Plan

Dependencies

- Primary Path (3m concrete path) and Boardwalk - No dependencies
- Secondary Path (2m concrete path) - Primary path needs to be completed first

3.4_ Planting Strategy

The planting strategy provides a general overview of the different plant communities for Keri Downs Park and Carisbrook Reserve. The plant communities are based on a combination of their ecological niche and desired amenity and functions. All of the proposed vegetation is intended to maintain and enhance the existing biodiversity of the site by creating habitat for native wildlife (insects, reptiles and birds); maintain and enhance the existing parkland function, character and amenity of the park and reserve and to support and enhance the existing community gardens.

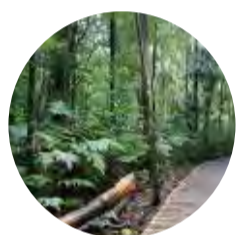
The plant communities are grass, stream planting, bio-retention planting, parkland trees, and community garden.

It is anticipated that planting will be delivered through various means, including but not limited to, direct local board investment, local improvement projects, and community/volunteer groups etc.



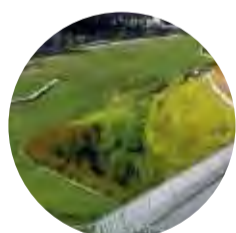
Grass

- Maintenance/removal of existing Onehunga Weed.
- Easy to maintain lawn (Chewings fescue, Creeping fescue, Colonial browntop - to Auckland Council Parks Specification).



Stream Planting

- Stream planting refers to the 'riparian' planting along the edge of the stream which forms the interface between land and water ecosystems.
- Stream planting performs a number of important ecological functions such as filtering runoff, stabilising the stream banks, and providing habitat for native animals.
- Stream planting helps to support aquatic ecosystems by regulating light, oxygen levels and the temperature of the water.
- WF7 - unnamed stream situated at the northern end of Keri Downs Park and eastern side of Carisbrook Reserves typical species include pūriri with occasional tōtara, mataī, kahikatea and tītoki, locally with kōwhai and taraire.
- WF9 - Hayes stream located east and south in Keri Downs Park's typical species include taraire, tawa, rimu, kohekohe, rewarewa, pūriri and hīnau.



Bio-retention Planting

- Low lying areas prone to ponding and along overland flow paths are planted with a mix of water-tolerant plants.
- Bio-retention planting performs a number of important ecological functions such as filtering runoff, stabilising the stream banks, and providing habitat for native animals.
- Typical species include planting spreading swamp sedge (*Carex lessoniana*), oioi (*Apodasmia similis*) hebe (*Hebe speciosa*), wiwi (*Ficinia nodosa*), and harakeke (*Phormium cookianum*).



Parkland Trees

- Parkland trees contribute to the overall amenity and character of the reserve by framing views, providing shade and by creating outdoor spaces.
- Parkland trees can be planted either as single specimen trees or clustered in groves, with understory planting with of low height amenity planting to allow clear sightlines through the reserve.
- Typical species include flat leaved sedge (*Carex dissita*); toetoe (*Austroderia fulvida*); kiokio fern (*Blechnum novae-zelandiae*); rengarenga lily (*Arthropodium cirratum*); kowhai (*Sophora microphylla*).



Low Lying Amenity Planting

- Low lying amenity planting includes planting adjacent to or near to entry and exits points and near paths where it is important to maintain sight lines between users and where passive surveillance is required.
- Typical species include *Apodasmia similis*, *Arthropodium cirratum*, *Carex* spp, *Hebe* spp, *Libertia grandiflora*, *Muehlenbeckia astonii* and *Phormium* 'Green Dwarf'.



Community Garden

- The community garden contains seasonal and cultural vegetable and herbs that provides produce to the local community.
- The community garden enhances the local environment and community by having ownership and responsibility for the garden, growing produce for the whole community and strengthening community relationships with each other and the land.
- Using a combination of parkland trees, bio-retention planting and low-level amenity planting enrich planting to improve microclimates, mitigate the effects of soil runoff and to provide habitat for beneficial insects while balancing ecological outcomes with park safety by ensuring sight-lines are maintained and/or enhanced.



Action Plan

Dependencies

- Planted areas near to the path network will need to be planted either after or as part of the path network.

3.5_ Furniture - Kit of Parts

The 'kit of parts' includes all the furnishings and fixtures recommended for Keri Downs Park and Carisbrook Reserve. The seating, signage bollards, bike racks, drinking fountains, BBQ, and lighting, and other dog park facilities. The kit of parts for Keri Downs Park and Carisbrook Reserve is understated and durable to fit with the parkland character and environmental context of Keri Downs Park and Carisbrook Reserve.



Picnic Tables

- Proprietary FSC certified hardwood or H4 treated pine picnic tables. Eight seater picnic table or similar.



BBQ

- Durable and efficient outdoor BBQ for families and small groups.



Bench Seats

- Bench seats to be constructed using matching timber species and profile to that used to form the base of the picnic tables. Seats should include back and armrests.



Lighting

- Lighting in Keri Downs Park and Carisbrook Reserve will be required in the existing car parks and may be required along the main select shared paths.
- Lighting Columns - Advanced Lighting Technologies PS Series Crown-Weld Square Straight Steel Pole PS4S25SBK 8m Pole (Black) <http://adlt.co.nz/products/ps-pole-series/>
- Luminaires - Advanced Lighting Technologies Cree Edge High Output LED Area & Flood Luminaire XAK Series - Direct/Surface Mount (Black) <http://adlt.co.nz/products/xak-edge-ho-series/>



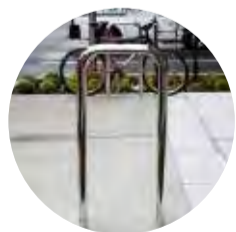
Signage_ Interpretive

- Interpretive signage to reveal, explain and where appropriate, celebrate the intrinsic value of the diverse geological, Māori and colonial history of the site. In its most basic manifestation, this could be achieved through interpretive signage. However, this brief could be expanded to include interactive/ spatial signage and/or place-based interpretive artworks.



Bollards

- Bollards are located along all road frontages and lining the inside of the existing car parks to prevent vehicles accessing the site.



Bike Racks

- Bike racks located at the three existing car-parks, at the youth zone on the corner of Dominion and Settlement Road and potentially at the Redcrest Avenue entry to the community gardens.



Drinking Fountains

- Drinking fountains will be located next to bike racks.

Rubbish Bins

- Research suggests that an absence of rubbish bins in parks and natural places encourages people to take care of their own waste and take it with them when they leave the site.



Action Plan

Dependencies

- Primary Path Network

3.6_ Formal Play Spaces

Five types of play spaces are proposed for Keri Downs Park and Carisbrook Reserve - Preschool Play Space, Child Play Space, Youth Zone Nature Play and Open Sports Field. The current park playground at Carisbrook Reserve caters primarily for 7-12-year-olds.



Preschool Play (0 - 6 years)

Playspace for preschool-aged children including opportunities for adventurous and creative play for physical and cognitive development appropriate for children aged 0 - 6. Features could include:

- Sandpit or sensory garden
- Small, well-defined and contained spaces for group play
- Outdoor blackboards
- Intricate obstacle course
- Area for role-playing
- Seating area adjacent to the playground and under shade cloth
- Opportunities to walk on various surfaces
- Safe and carefully positioned equipment – fixed and moveable



Nature Play (0 - 100 years)

Nature play refers to a wide range of activities that foster and enhance connection and interactions with the natural world. While opportunities for nature play already exist in the park these can be significantly enhanced through the thoughtful integration of natural features and elements into the play area. Features could include:

- Habitat for native plants and animals
- Installations for fauna such as insect hotels, pollinator pathways and bird feeders
- Ecotecture, vegetated 'mazes' and other natural play spaces
- Water and water play features
- Sensory gardens



School Age Play (7 - 12 years)

Opportunities for adventurous and creative play for physical and cognitive development appropriate for children aged 7 – 12 years. Features could include:

- Areas for girls and boys to play separately
- Obstacle course
- Area for role-playing
- Integrate words and numbers in both English and Māori
- Seating area adjacent to the playground and under shade cloth
- Climbing pieces, overhead ladders, chinning bars, balance beams, equipment with distances, items to travel on and to create direction



Sports Field

The sports field provides opportunities for informal and formal games and large community events. Features could include:

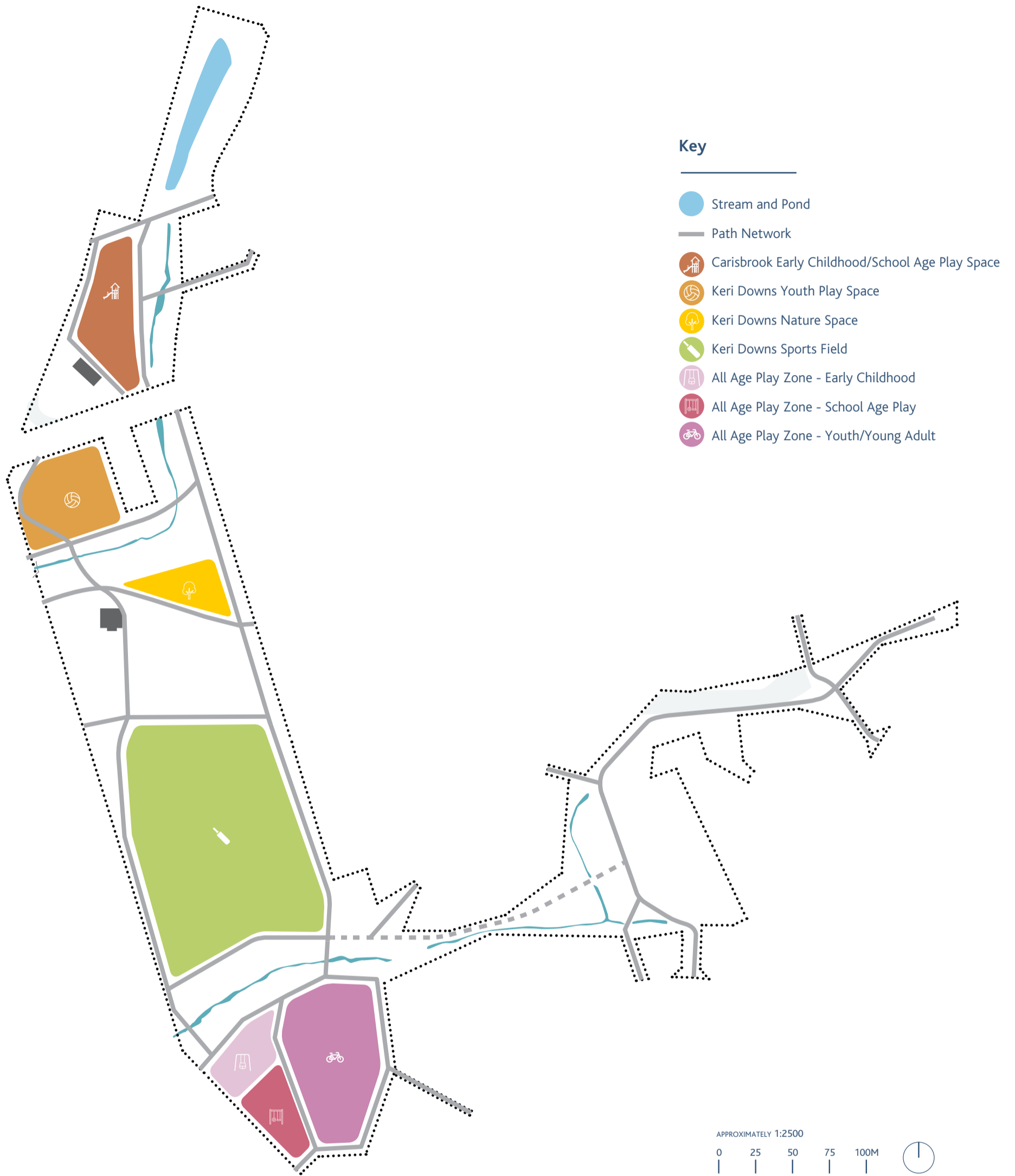
- Sports equipment
- Field infrastructure including painted white lines, goal posts etc
- Mown and maintained playing fields
- Removal of Onehunga weed



Youth Zone (12 + years)

Youth/teen-focused play space offering areas for sport, socialising and some privacy. Features could include:

- Adventure and physical/extreme challenge opportunities
- Multi-play and interactivity
- Seating and space for 'hanging out' / Chill out space
- Fitness and agility 'gym' equipment/features
- Skate-park
- Half court
- Swing
- Pump track



Action Plan

Dependencies

- Carisbrook Playspace - Primary Path Network
- Keri Downs Youth Space - Primary Path Network
- Keri Downs All Age Play Zone - Implementation of path network and management and enhancement of sightlines from adjacent spaces will need to occur either before or in parallel to the design and implementation the Keri Downs All Age Play Zone.
- Nature Play - Implementation of the stream and bio-retention planting will need to occur either before or in parallel to the design and implementation of the nature play spaces.
- Sports Field - Primary Path Network and the removal of Onehunga weed.

3.7_ Community and Events Spaces

The events space is an open space area designed to enable community events and performances to be hosted in Keri Downs Park. The events space could include but may not be limited a power outlet, stage, shelter and/or storage.



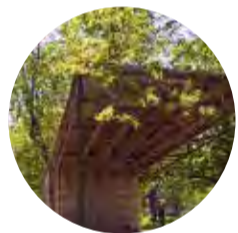
Power Outlet

- Power outlet(s) with sufficient supply to allow for vendors and event space functions. Power supply location TBC.



Platform / Stage

- A large platform between 400 - 600mm high allows for seating, gathering and small performances. Materials and dimensions TBC.



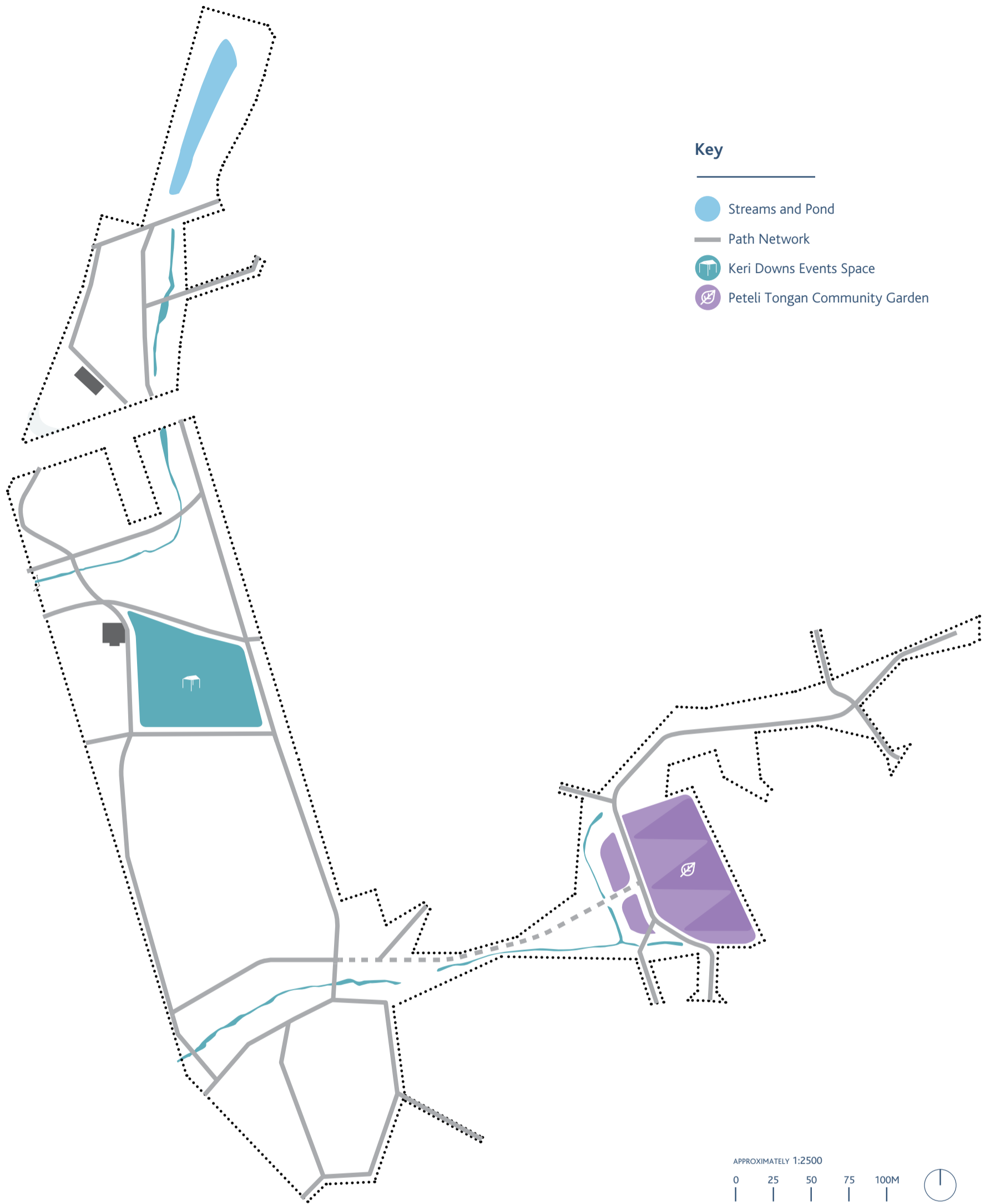
Shelter

- An outdoor shelter connected to the platform/ stage to provide shelter from rain and sun. Materials and dimensions TBC.



Storage

- A secure structure for storage of movable items to support community gatherings and events such as desk chairs, gazebos, play equipment etc. While the materials and dimensions are to be confirmed, a shipping container is a readily available and fit for purpose option.



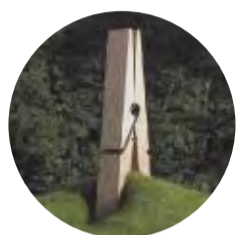
Action Plan

Dependencies

- • Primary Path Network

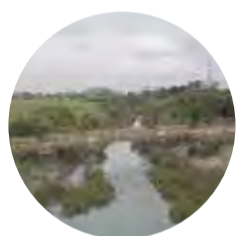
3.8_ Public Arts Integration

There were three general approaches to integrating Public Art into Keri Downs Park and Carisbrook Reserve - artist-led, design-led and community co-creation.



Artist Led

An 'artist led approach' involves bringing the artist into the project team early enough in the process so that they can help to identify opportunities for art integration from the outset. The artwork may be integrated into functional elements as per the design-led approach outlined below. However, the approach is more 'conceptual' and the brief is likely to be more 'open' to artistic interpretation than the design-led approach. The artist-led approach will be procured and managed through Auckland Council Arts and Culture Team and will involve a professional artist.



Design Led

A 'design led approach' is lead by the designer of a particular project and is effective for integrating art into structures and spaces where there is a high degree of constraints on the project - for example, engineered structures with specific functional requirements. The design lead approach is also effective when working with traditionally trained artists such as carvers, or where the project programme does not permit an artist to be brought into the project team during the early stages of the project to enable an artist-led approach to be taken.



Community Co-creation

The 'community co-creation approach' involves working directly with the community to implement public art in the project. The co-creation approach to public art can involve the community in the process of developing the artwork, the implementation of the artwork, engagement with the artwork or all three. Community involvement during the process engages the community directly in conceptualizing the artwork and is often facilitated by a professional artist or designer. Community involvement in the implementation of the artwork involves the community physically creating part all or part of the artwork - for example, a community mosaic or a de-paved community space⁷. An artwork that engages the community is usually an interactive artwork that enables community to be involved in the artwork once it is complete - for example a legal graffiti wall that allows people to paint the wall as they see fit with the understanding that the work is impermanent and will be painted over with a new work at some stage.

⁷ This community activity focuses on de-paving areas of unused asphalt to increase rainwater's ability to soak into the landscape and opening up soil. One of the primary issues with our water systems is impervious surfaces – primarily concrete and asphalt. While these surfaces are good for transport and some public spaces, almost without exception, impervious surfaces negatively affect water quality, quantity and riparian habitats. The removal of unnecessary impervious surfaces is one of the most effective ways of reducing stormwater runoff, improving water quality, while increasing the amount of land available for habitat restoration, urban farming, trees, and native re-vegetation. The de-pave movement engages directly with communities to reconnect people and urban landscapes to nature through action-oriented projects, education, advocacy and stewardship.



Action Plan

Dependencies

- Arts strategy for Keri Downs Park and Carisbrook Reserve.

4.0_ Footnotes

4.1_ Footnotes

1. www.iap2.org.au/About-Us/About-IAP2-Australasia-/Spectrum
2. http://www.aucklanddesignmanual.co.nz/design-thinking/maori-design/te_aranga_principles
3. Reference from Ngāti Te Ata's Carisbrook Park Pukekoiwiriki report.
4. Reference from Ngāti Te Ata's Carisbrook Park Pukekoiwiriki report.
5. 'Cues of Care' is a term coined by Joan Nassauer to describe this phenomenon - Landscape journal, 1995
6. Papakura Local Board. Open Agenda. 28 February 2018.
7. This community activity focuses on depaving areas of unused asphalt to increase rainwater's ability to soak into the landscape and opening up soil. One of the primary issues with our water systems is impervious surfaces – primarily concrete and asphalt. While these surfaces are good for transport and some public spaces, almost without exception, impervious surfaces negatively affect water quality, quantity and riparian habitats. The removal of unnecessary impervious surfaces is one of the most effective ways of reducing stormwater runoff, improving water quality, while increasing the amount of land available for habitat restoration, urban farming, trees, and native re-vegetation. The de-pave movement engages directly with communities to reconnect people and urban landscapes to nature through action-oriented projects, education, advocacy and stewardship.

