
**Garden of Tāne Scenic Reserve
Management Plan
June 2010**



Acknowledgments

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(Front Cover Historic Photos Sourced from Jan Shuttleworth)

Foreword

The Garden of Tāne Reserve was classified as a Scenic Reserve on the 27th November 1986, subject to the provisions of section 19 (1)(b) of the Reserves Act 1977.

Therefore, the reserve is to be managed:

‘For the purpose of providing, in appropriate circumstances, suitable areas which by development and the introduction of flora, whether indigenous or exotic, will become of such scenic interest or beauty that their development, protection, and preservation are desirable in the public interest’.

The document that you are reading is a requirement under the Reserves Act 1977. A management plan sets out policies and objectives that will show the public how the Local Authority intends to manage a reserve.

The review has followed the process set down in section 41 of the Reserves Act. Public notice of the Council’s intention to prepare the draft management plan was given in June 2009 and public submissions on the draft plan were received in August 2009. A Hearings Panel then considered the submissions and recommended changes to the draft plan.

The final management plan was then recommended by the Hearings Panel to the Christchurch City Council as the operative plan, and officially adopted by the Christchurch City Council on 24th June 2010.

[Approved June 2010]

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1 OVERVIEW

1.1 Introduction

Garden of Tāne, is a classified Scenic Reserve by Christchurch City Council and is located south west of the Akaroa town centre on Banks Peninsula. It comprises a land area of 4.9 hectares that is relatively steep in topography, it consists generally of two main gullies, that run north south, parallel with the eastern and western boundaries.

The reserve is bound by Beach Road to the north and Aylmers Valley Road to the north east. The west of the reserve is adjacent the Akaroa Cemeteries including the Anglican, Roman Catholic, and the Dissenters and Public Cemeteries and Onuku Road defines the southern boundary.

Garden of Tāne provides a vegetated backdrop to the Akaroa town centre. The vegetation within the Reserve can be broadly described as a stand of mature exotic trees with a sub-canopy of native and exotic trees. Beneath is an understorey of native bush species that have naturally established within the Reserve or have been established from planted specimens.

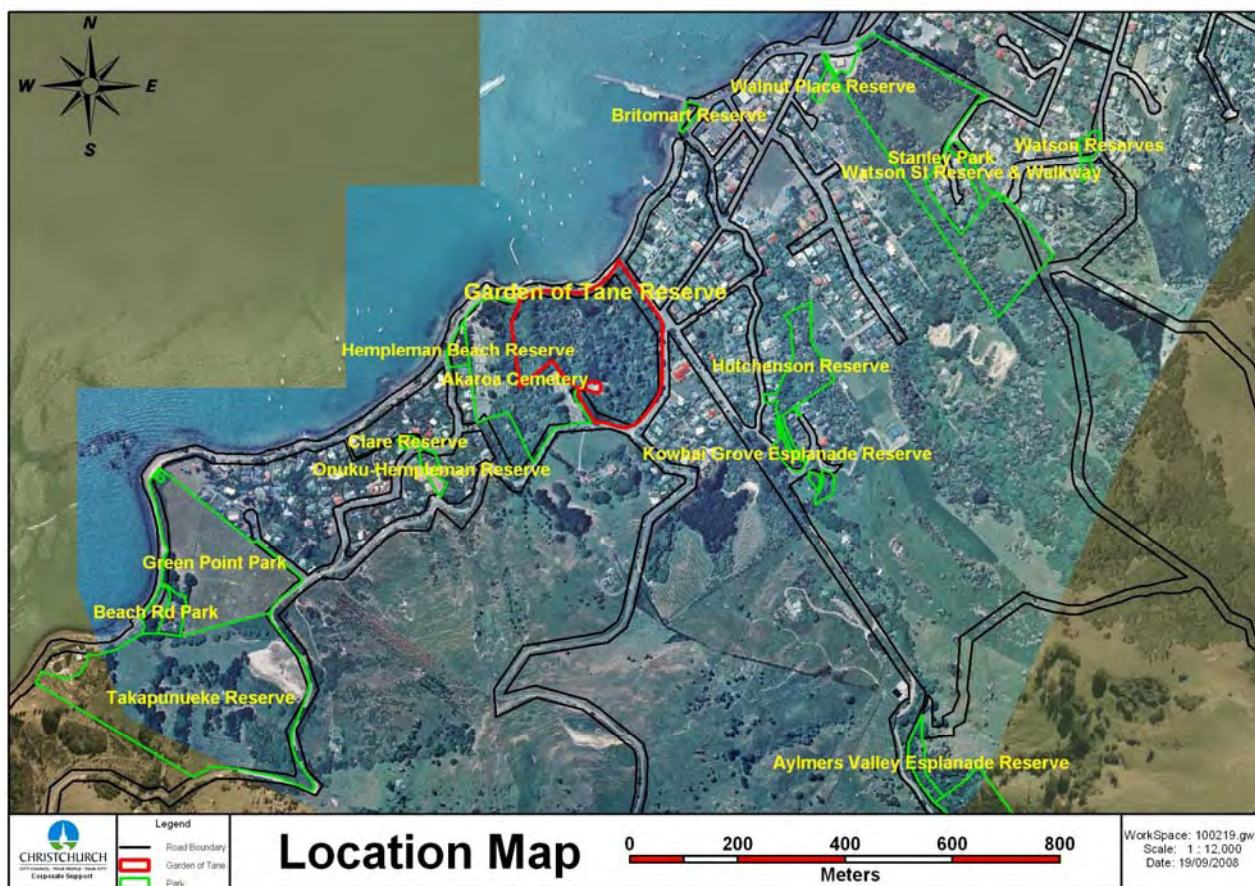
Garden of Tāne is rich in human and botanical history and has an evolving, changing character. Originally it was known as the Akaroa Domain or Domain and subsequently developed into a park like setting dominated by exotic tree species, grasslands and park structures such as a summer house, grotto, rustic bridge and fountain, etc. of which little evidence remains. As maintenance of the exotic vegetation decreased over the years, native vegetation began to establish beneath the mature exotic tree canopy. In 1964, farmer and environmentalist Arthur Ericson, over a period of 25 years began the clearance of invasive pest plant species and planted over 200 species of native plants to complement the mature exotic tree specimens within the park. Hence the reserve change of name to Garden of Tāne, in reference to Tāne-Mahuta, the atua or god of the forest in Māori mythology.

Ōnuku Rūnanga are very supportive of a management approach and plan that sustains the indigenous bush and provides habitat for native birds and other species. There will be an ongoing relationship between the Council and the rūnanga in the support and implementation of this Management Plan.

The reserve is currently used for passive recreation and has a vast network of tree-shaded paths throughout the reserve. This provides the local community and visitors with an opportunity to view the mature exotic and native specimen trees, native birds, and views to the harbour from the reserve.

1.2 Location Plan

Figure 2. Location plan illustrating the position of Garden of Tāne Scenic Reserve within Akaroa in relation to other reserves in Akaroa.



2 VISION

The Garden of Tāne Scenic Reserve will be managed to maintain and enhance the floral and faunal diversity of the reserve to comprise both native and exotic forest and to preserve the rich social, botanical and cultural heritage and to encourage passive recreational activities.

3 OBJECTIVES AND POLICIES

3.1 Flora

The Banks Peninsula Proposed District Plan lists ‘all trees’ within the Garden of Tāne as Notable Trees. Therefore, prior to any vegetation removal works the Council Arborist must be contacted to determine whether any of the specimens identified for removal would be considered a tree. If any of the plant specimens identified for removal are considered to be trees then a resource consent must be obtained prior to any works to:

- a) Cut, damage, alter, injure, destroy or partially destroy the tree (including its roots); or
- b) Within the drip-line:
 - Alter the soil levels or water table by addition or excavation;
 - Store materials, vehicles or machinery;
 - Discharge or disperse any toxic substance or put in place any weed control membrane; or
 - Undertake any use, excavation, construction work or activity.

This shall not preclude:

- The regular minor trimming or maintenance of any tree undertaken by hand operated secateurs or pruning shears in accordance with accepted arboricultural practice.
- The felling or destruction of any tree by the Council or a statutory authority, when this is required as an emergency work to maintain or restore power and communication links or to safeguard life or property. In such circumstances the authority concerned shall notify the Council, in writing, within two weeks of the felling or destruction.

OBJECTIVE: 3.1 Retain the existing mature exotic trees and maintain and enhance the native tree and understorey components.

POLICIES: 3.1.1 Historic exotic and native tree specimens along the line of the main circular walkway within the Garden of Tāne are to be highlighted by the clearance of vegetation from the immediate area of the base of the tree. The extent of these clearance works is to be determined by the Council Arborist and the Area Contract Manager.

3.1.2 The historic name plaques upon trees/shrubs are to be retained and repaired as required. New botanical signage would need to be in keeping with the natural environment and the historical context of the reserve and must not cause damage to the tree specimen.

- 3.1.3** In situations where, in the Council Arborist's opinion, any tree is in a condition that poses an immediate safety risk, the Council Arborist will exercise their right to have the tree removed as soon as possible.
- 3.1.4** Felling of trees is to be undertaken by Council Arborists and their appointed contractors. Trees should be sectionally felled and the limbs lowered to the ground to prevent un-necessary damage to surrounding trees and shrubs.
- 3.1.5** Mature tree specimens are only to be removed for tree health and/or safety risk reasons. Vegetation is to be managed and/or plantings undertaken following the removal of mature tree specimens. When specimen trees are removed, they will be replaced with the same or similar species. A guide to the species to be planted is provided in Appendix 8.2.
- 3.1.6** Species declared as pests under the Regional Pest Management Strategy will be controlled as part of Council's obligations as a landowner. A control programme for invasive plant species such as creeping asparagus and Cape ivy is to be developed and implemented. Control should be by 'best practice' techniques, including by hand tools, not by chemical control, unless as part of a Council initiative. A list of species to control is provided within Appendix 8.1. This will need to be periodically reviewed to take account of new weed species within the reserve.
- 3.1.7** New native plantings are to be made around the perimeter of the reserve, to provide control over invasive plant species, and to reduce the spread of these species into the reserve. Perimeter planting will provide a feeding resource for native birds and ensure the perimeter is visually attractive. New plantings will assist in defining the reserve edge and discourage carparking on the reserve margins. A guide to the species that should be planted is provided in Appendix 8.2 – Forest Margin.
- 3.1.8** Wildling pines upon the bank that runs along Beach Road are to be removed over time. New plants are to be planted along the bank. These will be selected to assist with bank stability without obscuring views. See the recommended planting list in Appendix 8.2 – Coastal Banks.

- 3.1.9** Tree lucerne along the bank that lines Beach Road is to be retained, to preserve the rare native mistletoe present within a number of these shrubs and as a source of food for native birds while alternative native food sources are establishing. However, management of the tree lucerne should be undertaken to ensure that views of the harbour from the view points are not obscured by this shrub.
- 3.1.10** Any exotic tree species that self establishes and/or considered a pest/invasive species will have all wildling saplings removed.
- 3.1.11** Every attempt will be made to propagate commemorative tree species (those marked by commemorative plaques), by way of seed, cutting and/or grafting from the original commemorative tree specimen to preserve the historic tree species and ensure heritage values over time are preserved and will be used for replacement plantings. The commemorative tree species are to be propagated as soon as practical and remain in the Council nursery until required.
- 3.1.12** Where existing mature specimen trees occurs, no further plantings will be undertaken within two metres from the trunk of the tree.
- 3.1.13** The perimeter planting adjacent to the existing playground area (adjacent Aylmers Valley Road), is to be managed to provide views and surveillance into the Reserve and ensure Crime Prevention through Environmental Design (CPTED) principles are achieved.
- 3.1.14** Threatened native species shall be protected in accordance with the aims of the Christchurch City Council Biodiversity Strategy.
- 3.1.15** Develop a maintenance plan for specimen trees that includes regular inspections and identifies required on-going maintenance. All tree maintenance is to be in accordance with accepted arboriculture standards, practices and procedures and approved by Council Arborists.

3.2 Birds

OBJECTIVE: 3.2 Retain and enhance the value of the reserve for native and non native bird species.

- POLICIES:**
- 3.2.1** Quiet areas are to be retained within the reserve, to provide birds with suitable nesting habitat, by not providing paths or clearing vegetation in those areas.
 - 3.2.2** Plant species that provide nectar, fruit and/or seed for native bird species are to be retained and planted, particularly around the perimeter of the reserve (refer to Appendix 8.2 – Forest Margin). A mix of species is to be planted so that nectar / fruit / seed is provided all year round.
 - 3.2.3** Consider the loss of bird nesting sites prior to mature trees specimens being removed for tree health or safety reasons. Investigate appropriate methods to manage the loss of existing bird nesting sites, through liaising with the Council ornithologist.
 - 3.2.4** Methods of predatory mammal control within the reserve are to be investigated. Any programme of control must first be approved by the Area Contract Manager of the Council. Contractors undertaking the control must be approved by the Area Contract Manager of the Council.

3.3 Invertebrates

OBJECTIVE: 3.3 Develop habitat to encourage a diverse range of invertebrates.

- POLICIES:**
- 3.3.1** A small amount of timber from felled trees should be retained (e.g. the bowl of the tree or the creation of a windrow of logs) in areas that are not visually intrusive to recreational users on the path network, to provide habitat for dead-wood invertebrates.
 - 3.3.2** Structural diversity shall be retained and created within the forest (e.g. retain understorey vegetation, create glades along the main footpath, retain shrubs) to promote a diversity of invertebrate habitat.

3.4 Landscape and Views

OBJECTIVE: 3.4 Retain and enhance existing views and viewpoints/lookouts over Akaroa Harbour and develop views into the reserve.

POLICIES: 3.4.1 The existing view points/lookouts over Akaroa Harbour are to be retained and enhanced by the provision of suitable seating, management of vegetation to ensure unobstructed views, and development of suitable surrounding vegetation to replace the area of bare earth which dominate these locations.

3.4.2 Retain and enhance existing views to the Akaroa Harbour and wider landscape by managing vegetation to ensure unobstructed views. The extent of trimming, thinning and selective clearing of vegetation is to be defined by the Council Arborist and the Area Contract Manager, and is to involve sound ecological practices.

3.4.3 Improve visibility along the main circular walkway, by maintaining vegetation immediately adjacent to the path. The extent of clearance of vegetation is to be defined by the Council Arborist and the Area Contract Manager.

3.5 Land Management and Maintenance

OBJECTIVE: 3.5 Maintain Garden of Tāne as a safe and usable space for the enjoyment of the local community, while preserving the character of the reserve.

3.5.1 In situations where a surface is in a condition that poses a risk of erosion the issue will be managed and controlled in an appropriate manner. Council staff will investigate methods and techniques for appropriate erosion control.

3.5.2 Manage and enhance the existing playground area as an open parkland area, to cater for picnicing, informal play and to reflect the historical domain character of the reserve. Enhancements are to be sympathetic to the heritage values and natural setting of the reserve.

3.5.3 Provide on-going general maintenance and respond to storm damage to ensure the reserve is safe and usable for the public, including weed control, clearance of paths, managing surface water run-off and removal of

excessive dead wood not required for invertebrate habitat.

3.6 Recreation and Access

OBJECTIVE: 3.6 Encourage use of the reserve for passive recreation by the local community and by visitors with a range of physical abilities.

POLICIES: 3.6.1 A wide circular walkway is to be constructed, to provide disabled access into the reserve. This walkway will use the existing wide footpaths within the reserve, to provide access from the main entrance on Aymers Valley Road, the playground, to one of the viewing points over Akaroa Harbour and the cemetery car park.

3.6.2 The remaining path network will be maintained as forest paths. Maintenance works are to be undertaken to ensure that these are safe to walk along and physically unobstructed by vegetation, surface water run-off damage and deadwood. However, the structure of these paths will be more natural than the main circular walkway.

3.6.3 Structures that facilitate access e.g. bridges, steps, gateways etc. are to be repaired and replaced as required. All structures are to be in keeping with the natural environment, historic context and be developed so that they require a low level of maintenance.

3.6.4 The playground facilities within the park will be replaced when the equipment can no longer be repaired or when funding becomes available. Play equipment is to be replaced on a 'like for like' basis, and is to be sympathetic to the natural and historical setting of the reserve.

3.6.5 The rocking horse is to be retained on site in working order preferably, if it can be modified to comply with New Zealand Safety Standard NZS5828, for the basis for installing and maintaining play equipment. The rocking horse structure is to be upgraded including installation of new iron horse ears, soft fall surfacing and a rust protective coating to the internal structure only (to be approved by the Council Area Contract Manager). No repainting is to be completed to the body of the horse, as the current markings are valued by the community. If the rocking horse can not be modified to

comply with the above standards then it is to be immobilised and retained on site to mark the historic playground and form part of the heritage interpretation plan.

- 3.6.6** Mature specimen trees adjacent to the playground area should undergo yearly safety inspections in accordance with Council standard requirements and conjunction with the Council Arborist and Area Contract Manager.
- 3.6.7** The three main access points to the reserve (Alymers Valley Road, Beach Road (by the Akaroa Domain sign) and the cemetery car park) are to be upgraded in a manner that is in keeping with the heritage values and natural setting of the reserve and will enable visitors to identify the reserve readily (including the name of the reserve, walkway map(s) and interpretation information). Advice shall be sought from the Council Heritage Planner and the Akaroa Museum regarding the upgrade of the Alymers Valley Road entrance.
- 3.6.8** Signs are to be installed that will aid visitors as they move around the reserve. All signs are to be sympathetic with the surrounding natural environment and the historical context of the reserve and where possible conform with Council signage guidelines, bylaws, standards and policies.
- 3.6.9** Dogs are permitted within the reserve in accordance with the Dog Control Bylaw 2008. This requires dogs in the park to be under effective control at all times, and on a leash within the adjacent cemetery.
- 3.6.10** Garden of Tāne will be considered as a litter free park, as such bins will not be provided, reserve visitors are expected to take all rubbish with them.
- 3.6.11** Parking for the reserve is available along Onuku Road and at the cemetery car park. Vehicle access and carparking along Beach Road is not to be encouraged.
- 3.6.12** No camping, (meaning to reside in or sleep in a structure, tent, caravan or campervan) shall be allowed within Garden of Tāne, in accordance with the Parks and Reserves Camping Bylaw 2008.

3.7 Social, Cultural and Botanical Heritage Values

The Garden of Tāne is located within an area registration as the Akaroa Historic Area (registered with NZ Historic Places Trust (registration number 7443)). Therefore, the methods used to signify the history connected to the Garden of Tāne are to take account of this registration.

OBJECTIVE: 3.7 Manage and enhance the social, cultural and botanical history of the reserve, and acknowledge the manawhenua status of Ngāi Tahu.

- POLICIES:**
- 3.7.1** Develop a heritage interpretation plan that investigates opportunities and identifies the historic features/values associated with the reserve in liaison with the Council Heritage Planner and the Akaroa Museum. The plan should manage, enhance and celebrate the social, cultural, botanical history of the reserve, in a manner that engages and informs the visitor.
 - 3.7.2** Consult with Ōnuku Rūnanga about appropriate ways of recognising the manawhenua status and cultural heritage of Ngāi Tahu in the management of the Garden of Tāne, which may include the use of indigenous plantings, interpretation, artwork and appropriate Māori names.
 - 3.7.3** Commemorative plaques are to be maintained by Council staff, including yearly inspections to monitor condition and maintenance requirements. In the event that a commemorative plaque requires replacement it is to be replaced with a replica in accordance with the Council (draft) Plaque Guidelines.
 - 3.7.4** If any thing of an archaeological nature is encountered (eg shells, charcoal stained soil, fire cracked stone, artefacts, structures) during any programme of work such as fencing, or planting the NZ Historical Places Trust and Ōnuku Rūnanga are to be contacted immediately and work to be stopped.
 - 3.7.5** All new structures and site furniture including interpretation elements, seats, play equipment, signs and fences shall be sympathetic to the heritage values, natural setting and the local settlement character of Akaroa. Consideration should be given to the location and placement of such items so that they do not detract from the character of the reserve, cause detriment to existing mature tree species or native plants of significance.

3.8 Reserves Management Committee

OBJECTIVE: 3.8 Establish a Reserves Management Committee for the Garden of Tāne

POLICIES: 3.8.1 A Reserves Management Committee is to be established for the Garden of Tāne in line with the Council's Reserves Management Committee Terms of Reference, Delegations and Handbook.

3.8.2 The Reserves Management Committee may involve the wider community in the management of the reserve by organising working bees. Clearance works are to be limited to those works that can be undertaken using hand tools.

3.9 Management Plan Review

OBJECTIVE: 3.9 To ensure that the management plan remains a useful tool for managers of the park.

POLICIES: 3.9.1 The management plan is to be kept under continuous review in accordance with Section 41(4) of the Reserves Act 1977.

4 ISSUES

4.1 Forest Management

Garden of Tāne has a long botanical history. Initially it was managed in favour of exotic plants and subsequently in favour of native plants. This has resulted in a forest with a mix of native and exotic tree specimens that are interesting due to the historical significance and the visual and structural diversity they bring to the Garden of Tāne. It is considered that the exotic species within the forest should be celebrated and replacement plantings should occur to ensure the mixed exotic/native character of the reserve is maintained and the heritage values are preserved for future generations. At the same time the native species will be allowed to continue their role as the dominant vegetation component of the reserve.

It is essential that structural diversity within the forest is retained and developed (i.e. canopy, sub canopy, forest floor) to provide a wide range of habitats. To ensure that the integrity of the vegetation is retained it is essential that pest plant species are controlled. In addition, if native bird species are to be encouraged, pest control of exotic mammals will need to be undertaken.

Concerns have been expressed in relation to the perimeter of the reserve looking untidy. It was identified that along the margins there are problems with invasive plant species. It is considered that the best control method would be to plant these margins with native forest margin species specified in Appendix 8.1 of this report, to shade out the invasive species and create an impervious barrier to plant invasion from adjacent properties. In addition some clearance works may be required.

4.2 Recreational Use of the Reserve

Garden of Tāne has been used for passive recreation for many years. However, vegetation encroachment and deterioration of the walkways have impaired use of some of the walkways. The community has identified that some users view the reserve as intimidating due to the complex network of paths and dense vegetation, but others value the meandering nature of the path network.

It has therefore been proposed that a formalised circular route is established using the walkways within the woodland that are already broad, to link the playground, to the car park and one of the harbour view points. This walkway would be opened up so that views in to the reserve would be available and important specimen trees along the walkway could be highlighted. Directional signage within the park, if considered necessary, would be focused on this route.

The remainder of the walkways would remain as forest paths.

View points/look outs within the reserve should be enhanced so they become attractive picnic areas. At present they are merely areas of bare earth, with small benches surrounded by tree lucerne.

4.3 Parking

There is no parking along Beach Road, which is causing problems for the boating facilities along this road, but provision of parking for these facilities is outside the scope of this management plan.

A parking bay has been cut into the reserve from Beach Road. Parking for the reserve is available in the cemetery car park and along Onuku Road. It will be investigated as to whether parking along Onuku Road could be formalised, to prevent the use of the grass bank for parking.

The area off Beach Road that is being used periodically as a car park should be replanted to prevent parking, as this is one of the entrances to the reserve. It is considered that this location does not provide safe parking due to restricted sightlines. If there is a need for parking for the boating facilities along Beach Road, users of the facilities should contact the transport section of the Council so that this issue can be addressed appropriately.

4.4 Playground

It was identified during the public consultation that the playground was valued by users of the reserve. In addition the value of the playground is historically significant as it was established by Arthur Ericson who raised funds for its establishment.

The Crime Prevention Through Environmental Design (CPTED) assessment indicated that surveillance of the playground was not available from the road and adjacent properties due to the presence of existing vegetation and site profiles. It is recommended to provide views into this area and managed it as an open parkland area for picnicing and informal play, reflecting the character of the former domain. This will require some clearance of the perimeter vegetation along Aylmers Valley Road frontage to enable views and surveillance into the reserve to ensure CPTED principles can be achieved.

When it is considered that the existing play equipment can no longer be maintained or when funding becomes available. Council recreational planners will consult with the local school and community to assess how to replace this equipment. This assessment will look at how natural/informal play can be encouraged within the reserve and be integrated into the heritage interpretation plan.

It was also identified during public consultation the importance of the iron rocking horse to the local community. The rocking horse is in poor condition and requires maintenance repairs to the steel frame. The rocking horse does not currently comply with New Zealand Safety Standard 5828 , for the basis for installing and maintaining play equipment (2004 voluntary standard) for playground equipment. The rocking horse is to be retained on site in working order, only if it can be modified to comply with the above Safety Standard

NZS5828. The rocking horse structure is to be upgraded including installation of new iron horse ears, soft fall surfacing and a rust protective coating to the internal structure only . No repainting is to be completed to the body of the horse, as the current markings are valued by the community. If the rocking horse can not be modified to comply with the above standards then it is to be immobilised and retained on site to mark the historic playground and form part of the heritage interpretation plan

4.5 Heritage Values

The Garden of Tāne has significant social, cultural and botanical heritage values, which are outlined in Section 6.5 History. It was identified during public consultation the importance of the heritage features and values within the reserve. In particular reference to the former 'Domain' character and hence the original name of the reserve - Akaroa Domain. There is some evidence of the features that once occurred within the reserve, but much has been lost. Some of the features included a summer house, rustic ridge grotto, fountain and pool, tennis courts croquet lawn and seating.

It is suggested that a heritage interpretation plan is developed to identify and manage the historical features and values associated with the reserve. The Council Heritage Planner and the Akaroa Museum should be consulted when identifying historical features in the Garden of Tāne and also for identifying appropriate management and maintenance to ensure the heritage values of the park are preserved.

The heritage interpretation plan will record and investigate opportunities to enhance and/or restore the historical features of the site. The plan will also identify ways in which the heritage features, stories and values can be celebrated and interpreted to engage and inform the visitor, for example through art and/or sculpture.

The upgrading and enhancement of the reserve should be in keeping and sympathetic to the historic values, the natural setting and the local settlement character of Akaroa.

5 DEVELOPMENT PLAN

LONG TERM COUNCIL COMMUNITY PLAN (LTCCP) DISCLAIMER
No project recommended on the indicative development plan will be implemented unless the expenditure is provided for through future Long Term Council Community Plans.

The indicative development plan below highlights the types of projects that would achieve the objectives and policies of this document. The indicative development plan will be used to identify the significant expenditure items for which Council may choose to make provision in future Long Term Community Plans.

Below are a list of projects that have been raised during the issues gathering phase of the plan's development with indicative costs for each project, in order to highlight the need for funding. It is envisaged that with the approval of these projects, the reserve will be able to achieve the vision set out in this document.

Please see following pages for the Indicative Development Plan.

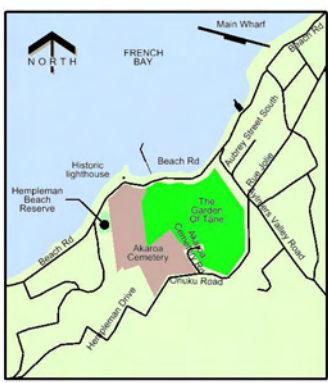
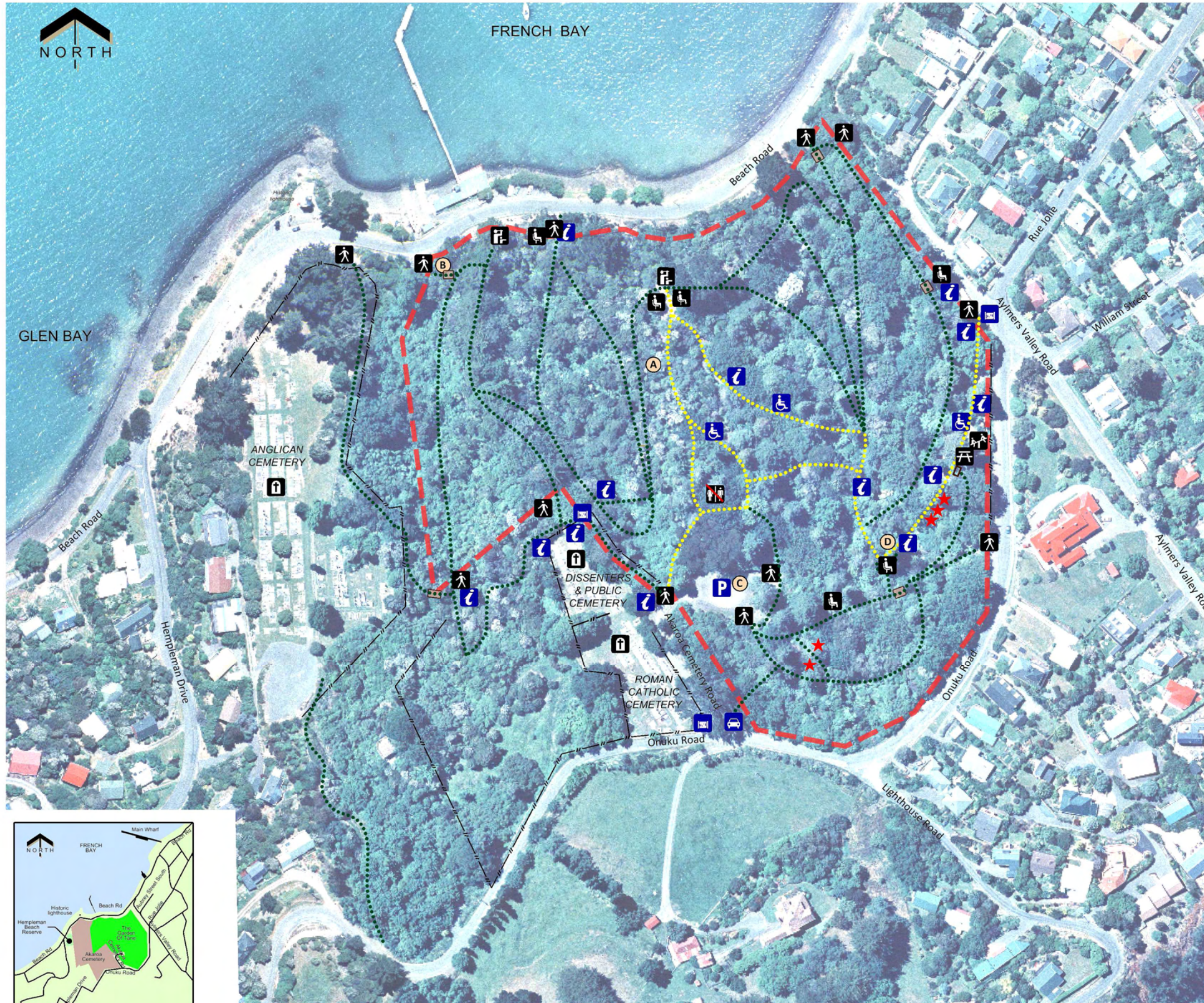
5.1 Indicative Costings as at November 2009, for the Indicative Development Plan

Project	Description	Cost
Main circular walkway and other paths	A wide circular/accessible walkway between the playground, car park and one of the view points over Akaroa Harbour.	\$39,000
	Maintenance of the remaining forest paths.	\$80,000 (for the application for gravel/crusher dust to paths)

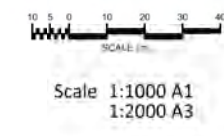
Interpretation signs / symbols	Signage on the three main entrance ways.	\$15,000
	Additional entrance signage and direction markers	\$6000
	Preparation of heritage interpretation plan to identify ways to celebrate the social, cultural, historical and botanical interest features and values	\$5,000 to investigate options – capital costs would be determined on conclusion of this stage
Planting of vegetation	Planting of native species along the forest margin.	\$37,000
	Planting of species to stabilise the earth bank	\$28,000
	Maintenance of trees (including preparing a maintenance plan for the mature specimen trees)	Trees that pose a risk to health and safety will be removed and replaced. All other tree works will occur when budgets are made available.
Development of the playground	Replacement of playground equipment to reflect the natural environment.	\$10,000 Investigation \$60,000 Equipment
Furniture	Demolition of toilet structure.	\$10-20,000
	Installation of two picnic benches plus seats within the reserve	\$1500 per piece
Total		\$303,000.00

5.1 Indicative Development Plan and Program Plan (Refer to following pages)

- Existing Site Plan and Tree Maintenance Programme
- Indicative Development Plan



LOCALITY PLAN
Not to scale



BACKGROUND

The Garden of Tāne covers an area of 5 ha and is located south west of the Akaroa town centre. Originally it was known as the Akaroa Domain and was planted with exotic trees in the late 19th century. Mature exotic trees now provide the upper canopy and include:
Spanish fir (*Abies pinsapo*), yellow pine (*Pinus ponderosa*), Japanese cedar (*Cryptomeria japonica*), English oak (*Quercus robur*), Atlantic cedar (*Cedrus atlantica*), Norfolk Island pine (*Araucaria heterophylla*), wellingtonia redwood (*Sequoiadendron giganteum*), and radiata pine (*Pinus radiata*).

A period of neglect followed by renewed management has resulted in a subcanopy dominated by kanuka (*Kunzea ericoides*), kawakawa (*Macropiper excelsum*), and mapou (*Myrsine australis*) with occasional mahoe (*Melictytus ramiflorus*). Other native trees are regenerating in places.

Existing structures in the Garden of Tāne include gates, commemorative plaques, wood footbridges and numerous wood bench seats. There is little sign of the remains of the early features in the reserve such as the Rustic Summerhouse (caretakers house), Lattice Bridge, Tennis Courts, Pavilion, Grotto, Spring fed wishing well or Fountain & Pool.

REQUIRED TREE WORK & MAINTENANCE

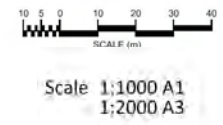
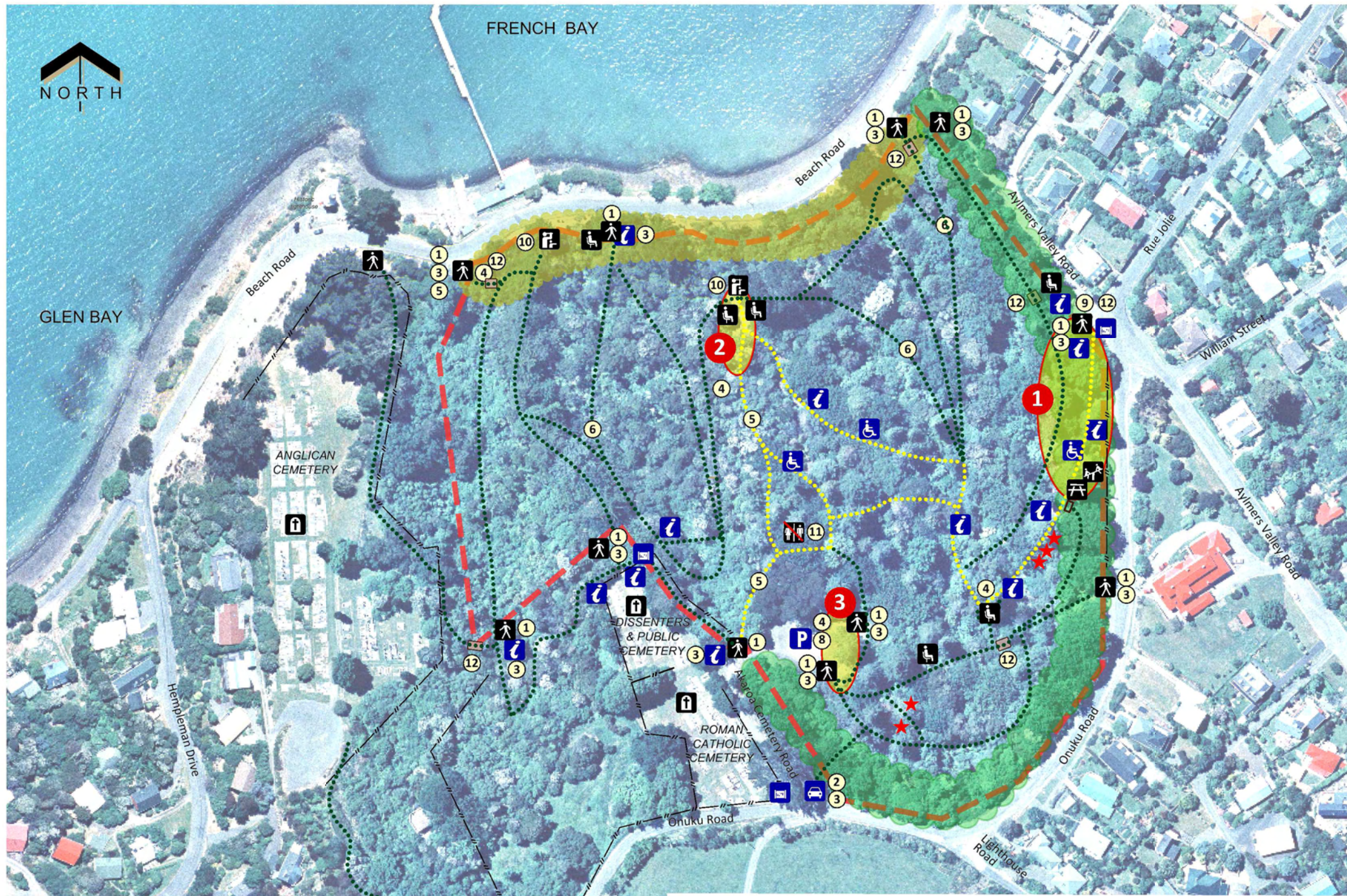
- Council will remove trees if they are identified to pose a risk to health and safety.
- Invasive exotic or native plants and shrubs are to be removed in line with the species list provided in section 8 of the management plan.
- On the main circular walkway, where necessary clear vegetation away from the immediate vicinity of the base of existing historic, exotic and native tree specimens to enhance views of the mature trees.
- Along the main circular walkway vegetation (not trees) adjacent to the path is to be trimmed, thinned and limbed to extend sightlines into the park and to eliminate entrapment spots adjacent to the walking tracks.
- Remove wilding pines and manage tree lucerne on the bank that runs along Beach Road to ensure that the native mistletoe within this shrub is retained but views of the harbour are not obscured from the viewing points / lookouts.

EXISTING FEATURES

- Existing walking track (dotted green line)
- Existing walking track (dotted yellow line)
- Existing fence (dashed black line)
- Legal boundary (red dashed line)
- Catholic Cemetry Car park (P icon)
- Derelict Toilet Block (toilet icon)
- Children's Playground (playground icon)
- Pedestrian Entrances (person icon)
- Vehicle Entrances (car icon)
- Viewing areas / lookouts (f icon)
- Cemetery (cemetery icon)
- Wood bench seats (bench icon)
- Wood Picnic table (picnic table icon)
- Pedestrian gates (gate icon)
- Wood footbridges (footbridge icon)
- Commemorative plaques (star icon)
- Signs (sign icon)

HISTORIC SITES WITHIN THE RESERVE

- Rustic Summerhouse (caretakers house) (A)
- Lattice Bridge (B)
- Tennis Courts/Pavilion (C)
- Grotto/Spring fed Wishing Well (D)



EXISTING FEATURES

- (6) Existing walking tracks
- (5) Existing walking track to be upgraded to an accessible track
- Existing fence
- Garden of Tāne Scenic Reserve Legal boundary
- P Catholic Cemetery Car park
- Derelict Toilet Block
- Children's Playground
- Pedestrian Entrances
- Vehicle Entrance
- Viewing areas / lookouts
- Cemetery
- Wood bench seats
- Wood Picnic table
- Pedestrian gates
- Wood footbridges
- Commemorative plaques
- Signs
- Main Circular Track

- 1** OPEN PARKLAND AREA ONE
Maintain and enhance the existing playground area as an open grass area to cater for play, picnics and represent the former domain character of the reserve. Provide views into the area from Aylmers Valley Road.
- 2** OPEN AREA TWO
Maintain and enhance a small open area to cater for picnics, do not remove or damage the threatened native white mistletoe (*Tupeia antarctica*).
- 3** OPEN AREA THREE
Investigate opportunity to reduce the number of carparks (refer to CCC Cemeteries Masterplan document) Maintain and enhance an area to cater for picnics.

ENTRANCES

- 1** The pedestrian entrances into the Garden of Tāne are to be enhanced. This is to include low planting (of a similar nature at each location while being sympathetic to the heritage and natural setting), and a sign. The Rue Jolie entrance is to be enhanced in a manner that is keeping with the heritage context of the reserve, in consultation with CCC Heritage Planner and the Akaroa Museum.
- 2** The existing vehicle entrance into the Garden of Tāne is the Catholic Cemetery Car Park off Akaroa Cemetery Road which is to be enhanced including, low planting and a sign (the same as at the pedestrian entrances).

SIGNAGE

- Provide a clear, consistent set of signage at all entrances and directional signage on the main circular track that conforms with council signage guidelines, by laws, standards and policies and is developed so that it is in keeping with the surrounding natural environment and the historical context of the reserve.

INTERPRETATION

- Existing features in the reserve include gates, commemorative plaques, wood footbridges and numerous wood bench seats. Little evidence of early features such as the Rustic Summerhouse (caretakers house), Lattice bridge, Tennis courts, Pavilion, Grotto, Band rotunda, Spring fed wishing well, Croquet lawn, Fountain & pool and Turnstile remain visible within the reserve.
- Develop a Heritage Interpretation Plan that identifies the social, cultural, botanical historic feature and values within the reserve. The plan will provide ways to manage, enhance and celebrate these features in manner that engages and informs the visitor.

WALKING TRACK

- Enhance the walking track network throughout the Garden of Tāne by providing and identifying a hierarchy of tracks, improving the track surface, on-going maintenance and signposting where necessary.
- Enhance the existing main track to provide a wide circular accessible track into the reserve. The track is to be suitable for mobility impaired and wheelchair use and will provide access to the majority of features.
- Retain the remaining walking track network. Maintenance works should be undertaken to ensure that these are safe to walk along and physically unobstructed by vegetation. However the structure of the path will be more natural than the main circular track.

CHILDREN'S PLAYGROUND

- Maintain existing play equipment until it is replaced by features to encourage natural play or equipment on a 'like for like' basis that complies with Council policies and is sympathetic to the natural and historical setting. Rocking horse to be retained on site in working order preferably, if it can be modified to comply with safety standard NZS5828, if the rocking horse cannot be modified to comply with the standards it is to be immobilised and retained on site to mark the historic playground.

CARPARK

- The Garden of Tāne shares the car park at the end of Akaroa Cemetery Road. Investigate reducing the size of the car park to enhance the car park area include low planting, post and cable fencing or similar to provide a grassed picnic area and seating.
- Provide disabled car parking facilities at the main entrance to the Garden of Tāne on Onuku Road and in the car park at the end of Akaroa Cemetery Road.

VIEWING AREAS / LOOKOUTS

- Retain and enhance the viewing areas looking over Akaroa Harbour. Provide or upgrade suitable seating in these locations and manage vegetation to ensure unobstructed views.

DISUSED PUBLIC TOILET

- Remove the existing disused public toilet block located adjacent to the Catholic Cemetery Car park. The toilet block is not to be replaced.

FEATURES

- Structures that facilitate access to the reserve such as bridges, steps and gateways are to be repaired and replaced as required. All structures should be in keeping with the natural environment, historical context and be developed so that they require a low level of maintenance.

PROPOSED PLANTING

- Plant native species that provide nectar, fruit and/or seed for native bird species, around the forest margin in line with the species listed in section 8.2 of the management plan. This will also assist in providing control over invasive species of plants.
- Replacement planting of large mature trees is to occur to ensure the Exotic / Native mix of vegetation and the Commemorative trees species are retained. Mature tree specimens are to be replaced with same or similar species. Section 8.2 provides a list of species for replacement plantings.
- To stabilise the earth bank along Beach Road increase species diversity and to maintain views of Akaroa Harbour planting beneath the tree lucerne should occur in line with the species list in section 8.2 of the management plan.
- Retain and repair historic name plates upon trees and shrubs and where required provide new signage.

6 RESOURCE INFORMATION

6.1 Literature Review

A number of documents / information sources were reviewed / accessed during the production of this management plan to obtain the historical and technical supporting information. These include:

- Vegetation of the Garden of Tāne, Trevor Partridge (CCC Botanist), CCCECO Report 08/12. 2008.
- Garden of Tāne. A History of Planting, Arthur Ericson, 1968.
- Akaroa Walking Routes, Suky Thompson (on behalf of CCC), 2007.
- Tree Report, Garden of Tāne, Akaroa, Arboricultural Consultancy NZ Ltd (on behalf of CCC), 2007.
- Passing Time: A Phenomenological Approach to Heritage Design, Wendy Hoddinott, Landscape Review, pp 42-53.
- Garden of Tāne, Akaroa, Warwick Harris. Abstract from RNZIH Conference “Greening the City: Bringing Biodiversity Back into the Urban Environment”.
- A Walkabout on this Historical and Public Portion of The Garden of Tāne, Arthur Ericson, 1991.
- Akaroa’s Domain or Garden of Tāne, Nigel Harrison, The Akaroa Mail, 2003.
- Canterbury Landscaping History Encapsulated at Akaroa Domain, Derrick Rooney, The Press, 1991.
- Garden of Tāne, Akaroa Village Walk Series.
- Tāne’s Domain: An Exhibition at the Akaroa Museum about the History of the Akaroa Domain / Garden of Tāne, 2004.
- The Natural History of Canterbury, Michael Winterbourn, George Knox, Colin Burrows and Isley Marsden, 2008.
- Proposed Banks Peninsula District Plan. 1997. Chapter 15 pp 85-88.
- Garden of Tāne Scenic Reserve Draft Management Plan. Banks Peninsula District Council (date unknown).
- Crime Prevention Through Environmental Design (CPTED) Report for the Garden of Tāne. 2008.
- Akaroa Historical Overview John Wilson and Louise Beaumont, report prepared for CCC June, 2009.

Any of these documents can be made available on request.

6.2 Land tenure

Garden of Tāne Scenic Reserve is made up of the following land parcels:

RES 4925 (SO 7192), RES 88 (SO 9409), RES 1724 (SO 9409) and SEC 45 (SO 9409). Together they cover an area of 4.9117 hectares.

The reserve was gazetted on 27th November 1986 (Gaz 1986 p5196). This changed its name to the Garden of Tāne and classified it as a Scenic Reserve subject to the provisions of section 19 (1)(b) of the Reserves Act 1977.



Plan of cadastral boundaries

6.3 Purpose of the Reserve

The Garden of Tāne Reserve was classified as a Scenic Reserve on the 27th November 1986, subject to the provisions of section 19 (1)(b) of the Reserves Act 1977 and was officially renamed ‘Garden of Tāne’.

Therefore, the reserve is to be managed:

‘For the purpose of providing, in appropriate circumstances, suitable areas which by development and the introduction of flora, whether indigenous or exotic, will become of such scenic interest or beauty that their development, protection, and preservation are desirable in the public interest’.

Other provisions include:

- (a) Except where the Minister otherwise determines, the flora and fauna, ecological associations, and natural environment and beauty shall as far as possible be preserved:
- (b) The public shall have freedom of entry and access to the reserve, subject to the specific powers conferred on administering bodies by sections 55 and 56 of this Act.

(c) To the extent compatible with the principal or primary purposes of the retention and preservation of the natural or scenic values, open portions of the reserve may be developed for amenities and facilities where these are necessary to enable the public to obtain benefit and enjoyment from the reserve:

(d) Where historic, archaeological, geological, biological, or other scientific features are present in the reserve, those features shall be managed and protected to the extent compatible with the principal or primary purpose of the reserve:

(e) To the extent compatible with the principal or primary purpose of the reserve, its value as a soil, water, and forest conservation area shall be maintained.

6.4 Physical Description

The topography within the Garden of Tāne can be broadly described to consist of two gullies that run horizontally to the eastern and western boundary of the reserve with a central ridge. In the gullies the land slopes steeply from Onuku Road down to Beach Road. The central ridge generally remains on a level from Onuku Road to Beach Road where it abruptly ends in an earth embankment that lines the road.

The reserve is dominated by structurally diverse woodland comprised of native and exotic species. The vegetation around the perimeter of the site is more variable including areas of bare earth, pines and scrub.

6.5 History

The Garden of Tāne Scenic Reserve has evolved from a parcel of land that the Canterbury Provincial Council set aside in July 1874 as reserve. This area was originally known as the Domain or Akaroa Domain. At this time the reserve covered approximately five acres immediately adjacent to the cemetery reserves. By 1886, when the Corporation of the Borough of Akaroa was appointed as the Domain Board, the Domain covered just over ten acres, comprising at that time pasture grassland and forest remnants in the gullies. It was extended to its present size in 1940.

The Domain Board's influence over the reserve resulted in the development of a park dominated by exotic tree species including oaks, elms, ashes, pines, cedars and cypresses set within grasslands. Through this area a network of broad well-surfaced paths were constructed and structures within the park have included a summer house, rustic bridge, grotto, fountain and pool, tennis courts, croquet lawn and seating. Evidence of some of these structures remains within the park to date, but much has been lost. During this period of development additional parcels of land were gradually added to the reserve.

The vegetation within the reserve began to change at the end of the First World War as maintenance of the exotic vegetation decreased and natives began to establish beneath the mature exotic tree canopy.

The Garden of Tāne also played an important part in the history of New Zealand Botany. Etienne Raoul, a French naval doctor was stationed at Akaroa, during 1840–43 and provided accounts of Canterbury botany including original descriptions and illustrations of many native New Zealand plants.

In 1964, farmer and environmentalist Arthur Ericson retired to Akaroa and over a period of 25 years he instigated the clearance of the invasive pest plant species, opened up the forgotten footpaths and planted over 200 species of native plants to complement the mature exotic tree specimens within the park. During this period, Arthur also successfully formed and levelled a children's playground and with funds donated by local Akaroa businesses purchased play equipment for the playground including the 'iron' rocking horse.

The complex management history of the reserve has resulted in an area that is rich in human and botanical history, which continues to be used by the local community and visitors to Akaroa. The value of the reserve was recognised by the Banks Peninsula District Council which resulted in a draft Management Plan for the reserve being produced in the 1990's. It is intended that this management plan will build on that draft by considering current community desires and will provide the objectives and policies required to enable a co-ordinated approach to the management of the reserve.



*Photo: The Bridge, Akaroa
NZ, Muir and Moodle, 1970
(Source: Jan Shuttleworth)*



*Photo: The spring and grotto,
'In the Domain, Akaroa' 1910
(Source: Jan Shuttleworth)*



*Photo: The fountain and pool, Akaroa NZ, 1909
(Source: Jan Shuttleworth)*



*Photo: The tennis court pavilion, Akaroa NZ, 1909
(Source: Jan Shuttleworth)*



*Photo: The summer house, Akaroa NZ, 1907
(Source: Jan Shuttleworth)*

6.6 Climate

Climate data collected between 1971-2000 indicates that Akaroa on average receives almost twice as much rain than Christchurch City (Akaroa 1011 mm Christchurch City Gardens 653 mm). The mean temperatures for Akaroa indicate that during the summer the temperatures experienced are similar to temperatures in Christchurch City but they typically have a slightly warmer winter. The average number of sunshine hours for the Christchurch area between 1971-2000 was recorded at 2100 hours.

7 POLICY FRAMEWORK

In the development of this management plan a number of statutory documents and local strategies and policies were taken into account including:

- Reserves Act 1977
- Christchurch City Council Biodiversity Strategy 2008-2035
- Long Term Council Community Plan
- City of Christchurch City Plan
- Proposed Banks Peninsula District Plan
- Safest City in New Zealand 2005
- Draft Public Open Space Strategy 2010-40
- Surface Water Strategy 2009
- Draft Guidelines on the commissioning, design, installation, maintenance and decommissioning of Plaques (in development)
- Christchurch City Council Bylaws 2008
- Christchurch Active Living Strategy 2004
- Healthy Environment Strategic Direction
- Canterbury Biodiversity Strategy

The management of the reserve is determined by the Reserves Act 1977, under which it is held, and by the legal responsibilities of the Christchurch City Council under the Local Government Act 2002 and the Resource Management Act 1991.

8 APPENDICES

- 8.1 List of Invasive Botanical Species for Staged Removal
- 8.2 Some Recommended Species for planting
- 8.3 List of Commemorative Trees and Plaques

8.1 List of Invasive Plant Species for Staged Removal

Species declared as pest plants under the Regional Pest Management Strategy will be removed as part of the Council's role as a landowner (e.g. broom and gorse)

The pest plants of concern are as follows:

Periwinkle (*Vinca major*): A common forest floor creeping herb that has the potential to become a much greater problem if not kept under control. Currently there are patches within the reserve, particularly around the playground, which should be removed. The patches along the perimeter of Aylmers Valley Road should be controlled and managed, as it creates a fire retardant and protects the reserve.

Climbing asparagus (*Asparagus scandens*): A forest climber so far relatively restricted, but with its weedy reputation, is a cause for concern. The sooner this plant is eliminated the better, as it is very restricted at the moment.

Cape ivy (*Senecio angulatus*): A forest margin climber that smothers trees and shrubs. As it is restricted to the margins, this species is relatively easy to control.

North Island lacebark (*Hoheria populnea*): This non-local native tree is currently restricted to areas close to the entrance and playground. It does have the ability to spread throughout the reserve as it did at Riccarton Bush before it was controlled.

Monterey pine (*Pinus radiata*): Only a problem on the lower cliff face, this comprises both older individuals and wilding juveniles. The mature plants play a major role in holding the bank, but unless it is considered desirable for the wildings to be allowed to establish there, these should be removed.

Tasmanian blackwood (*Acacia melanoxylon*): The large mature tree has been removed, but there are many seedlings in the opening and in adjacent areas. These will form a thicket if not removed.

Oak (*Quercus robur*): The mature trees are providing good litter and will eventually die, but the seedlings and saplings that appear should be removed.

Darwin's barberry (*Berberis darwinii*): A single specimen was observed. This pest plant needs to be checked for as it is a shade-tolerant shrub.

Ivy (*Hedera helix*): Presently not a major problem and confined to the margins, but this climber has the ability to become a nuisance if it establishes within the forest. Seed will be dispersed from neighbouring properties.

Boneseed (*Chrysanthemoides monilifera*): This pest plant was observed in very small numbers around the margin and needs to be removed.

Banana passionfruit (*Passiflora pinnatistipula*): This climber, along with other species of *Passiflora*, have the ability to become a nuisance, but only one small plant was seen near the upper car park. Vigilance will be necessary.

Sycamore (*Acer pseudoplatnus*):

A common self seeding tree that has the ability to establish in native forest and eventually come to dominate.

Blackberry (*Rubus fruticosus* agg.). A forest understory species that was removed by Ericson in the past, still occasionally turns up again.

The spread of exotic species and their control, should also be managed by replacement plantings. Two areas need special attention. The first is where gaps are created by fallen or removed specimen trees. These gaps are often very large and provide the ideal opportunity for the ingress of weeds, especially climbers.

The second area requiring attention is the reserve margin. This is where climbers and where incursions of exotic pest species have become a problem. This is best fixed by creating a more continuous, less pervious margin. By doing so, the margin becomes less porous to invasion by exotic pest species originating from adjacent properties.

8.2 Some Recommended Species for Planting

Species	Potential use or habitat location
Forest Margin	
nikau (<i>Rhopalostylis sapida</i>)	Is an ideal choice for large gaps around the perimeter of the site and would create a special look to the reserve
kowhai (<i>Sophora microphylla</i>)	Present in Akaroa, would be ideally established along the margins and would provide a food source to the bird population.
titoki (<i>Alectryon excelsus</i>)	Present within the reserve, but is not common
ribbonwood (<i>Plagianthus regius</i>)	Suitable if a tall, upright tree is required.
ngaio (<i>Myoporum laetum</i>)	To create a dense impervious margin, but needs a lot of space.
pittosporums (<i>Pittosporum tenuifolium</i> , <i>P. eugenioides</i>)	To create a dense impervious margin.
broadleaf (<i>Griselinia littoralis</i>)	To create a dense impervious margin.

The forest margin is to comprise of native plantings, approximately 5 metres wide of planting to protect the reserve from invasive weeds/ pests and the existing internal reserve habitat.

Within the Forest (Note: Within the forest there is little opportunity for plantings other than perhaps forest floor shade species. There would however be value in establishing more podocarps.)	
totara (<i>Podocarpus totara</i>)	Could be established on the ridges
matai (<i>Prumnopitys taxifolia</i>)	Developed in the gullies
kahikatea (<i>Dacrycarpus dacrydioides</i>)	Developed in the gullies
rimu (<i>Dacrydium cupressinum</i>)	Rare on Banks Peninsula
miro (<i>Prumnopitys ferruginea</i>).	Rare on Banks Peninsula
pokaka (<i>Elaeocarpus hookerianus</i>)	
narrow leaved ribbonwood (<i>Hoheria angustifolia</i>)	

The above list has been prepared as a guide to the type of plantings that could be planted within in the reserve, additional indigenous native species will be considered, with preference to those of form and type indigenous to the area. Many of those species will be smaller trees, shrubs and forest herbs.

Recommended Exotic Tree Replacement species

Mature tree specimens are only to be removed for tree health and/or safety risk reasons. Vegetation is to be managed and/or plantings undertaken following the removal of mature tree specimens. When specimen trees are removed, they will be replaced with the same or similar species.

The list below includes commemorative tree species and has been adopted from the *Tree Report, Garden of Tāne, Akaroa, Arboricultural Consultancy NZ Ltd (on behalf of CCC), 2007.*

Species	Common Name
<i>Abies pinsapo</i>	Spanish fir
<i>Acacia melanoxylon</i>	blackwood
<i>Araucaria heterophylla</i>	Norfolk Island pine
<i>Agathis australis</i>	kauri
<i>Cedrus deodara</i>	deodar cedar
<i>Cryptomeria japonica</i>	Japanese cedar, sugi
<i>Cupressus funebris</i>	Chinese weeping cedar
<i>Cupressus sempervirens</i>	Mediterranean cypress, pencil pine
<i>Cupressus spp</i>	cypress
<i>Cupressus toulosa</i>	Bhutan cypress, Himalayan cypress
<i>Chaemycyparis pisifera</i> f. <i>plumosa</i>	Sawara cypress
<i>Fraxinus excelsior</i>	common ash, European ash
<i>Magnolia grandiflora</i>	great laurel magnolia, southern magnolia
<i>Metrosideros excels</i>	pohutukawa
<i>Picea abies</i>	common spruce, Norway spruce
<i>Picea smithiana</i>	West Himalayan spruce
<i>Pinus wallichiana</i>	Bhutan pine, blue pine, Himalayan pine
<i>Pinus ponderosa</i>	Ponderosa pine, Western yellow pine
<i>Platanus acerifolia</i>	London plane
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Quercus coccinea</i>	Scarlet oak
<i>Quercus ilex</i>	Holly oak, Holm oak
<i>Sequoiadendron giganteum</i>	Sierra redwood, giant sequoia
<i>Thuja plicata</i>	Western red cedar
<i>Tilia europea</i>	common lime
<i>Xanthocyparis lawsoniana</i>	Oregon cedar, Lawson cypress
<i>Xanthocyparis nootkatensis</i>	Nootka cypress

Care needs to be taken in relation to the front earth bank of the reserve that aligns Beach Road. This area is currently dominated by tree lucerne and wildling pines. A list of species has been provided below that would help stabilise the front bank and allow views over the harbour. The removal of tree lucerne should be gradual as this provides a good food resource for birds, support the rare native mistletoe (*Tupeia antarctica*) and would provide protection for establishing plants.

Plants for Garden of Tāne Coastal Banks	
Latin Name	Common Name
Ground cover - scramblers, climbers, patch formers	
<i>Disphyma australe</i>	NZ ice plant
<i>Tetragonia implexicoma</i>	climbing shore spinach
<i>Scandia geniculata</i>	climbing aniseed
<i>Parsonsia heterophylla</i>	NZ jasmine
<i>Anaphalioides bellidioides</i>	everlasting daisy
<i>Helichrysum filicaule</i>	everlasting daisy
<i>Calystegia tuguriorum</i>	NZ bindweed
<i>Leucopogon fraseri</i>	dwarf heath
<i>Euphorbia glauca</i>	NZ spurge
<i>Muehlenbeckia complexa</i>	scrambling pohuehue
<i>Clematis afoliata</i>	leafless clematis
<i>Clematis 'Purity'</i>	clematis purity – (Ericson's Clematis)
<i>Rubus squarrosus</i>	taramoa
<i>Coprosma acerosa</i>	sand coprosma
<i>Microlaena polynoda</i>	bamboo rice grass
<i>Microlaena stipoides</i>	rice grass
Low shrubs	
<i>Sophora prostrata</i>	prostrate kowhai
<i>Hebe strictissima</i>	Banks Peninsula hebe
<i>Melicytus alpinus</i>	porcupine shrub
<i>Anemanthele lessoniana</i>	Gossamer grass
<i>Poa cita</i>	Silver tussock
<i>Phormium cookianum</i>	NZ dwarf flax
Herbs – tufted	
<i>Wahlenbergia akaroa</i>	Akaroa harebell
<i>Libertia ixioides</i>	mikoikoi
<i>Linum monogynum</i>	NZ linen flax

To identify species that should be planted to encourage native birds it is recommended that the following leaflets are referred to:

- Kā kai ā kererū A guide to food plants for kererū Te Pātaka a Rākaihautū / Banks Peninsula.
- Bellbird (Korimako) food sources.
- Tūi tucker attracting tūi to your garden.

8.3 List of Commemorative Trees and Plaques

(Refer to the indicative development plan for plaque locations).

***Agathis australis*, kauri**

Originally two kauri were planted by Mrs J.H Mortlock, wife of the County chairman and Mrs R. Bruce, the Mayoress to commemorate the Coronation of Queen Elizabeth II on June 2nd 1953. These original trees died soon after, and two more were planted, one of which survives today. Two identical plaques sit side by side on the left of the path just past the playground area.

***Quercus robur*, common oak**

The oak tree located by the playground was planted by the Mayor of the time, George Armstrong to commemorate the Peace of 1918.

***Quercus robur*, common oak**

The oak tree located east of the Akaroa Cemetery Road carpark was planted by Mayor and Mayoress, Mr and Mrs H.C Orbell in 1902, and bears a plaque to commemorate the Coronation of King Edward VII.

***Quercus robur*, common oak**

The oak tree located east of the Akaroa Cemetery Road carpark was planted by Mrs J.B Bruce, wife of the County chairman and bears a plaque, 'Memorial Oak planted to commemorate the Coronation of Queen Alexandra, 9th August 1902'.