



SCARBOROUGH PARK

Masterplan report

Adopted 24 September 2025

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Prepared by



On behalf of





Bayside Council acknowledges the Bidjigal Clan, the traditional owners of the land on which we meet and work, and acknowledges the Gadigal people of the Eora Nation. Bayside Council pays respects to Elders past and present.

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01 INTRODUCTION

1.1 Introduction

1.1.1 Site area

The masterplan area comprises a linear open space running approximately north south from President Avenue in the north to Park Road in the south. The park is located within the suburbs of Kogarah, Monterey and Ramsgate, with Brighton Le Sands and Ramsgate Beach bordering the park in the north and south.

For the purposes of the masterplan, the park has been split into three precincts (shown opposite). The open space corridor is bisected by two roadways, Barton Street and Ramsgate Road.

Scarborough Park is located within the Rockdale Wetlands Corridor. To the north, this broader open space includes Rockdale Bicentennial Park and its ponds, and Barton Park, Riverine Park and Pemulway Park alongside Muddy Creek. The wetland corridor terminates at the Cooks River, in Arncliffe and at the south where Bado-Berong Creek meets the Georges River.

The ponds within Rockdale Bicentennial Park to the north of Scarborough Park have been partly demolished as part of the construction of M6 Stage 1. Following completion of the M6 Stage 1, the park will be reinstated in accordance with the Urban Design and Landscape Plan prepared as part of the road project.

1.1.2 Purpose

The revised masterplan will enable Bayside Council to confidently and effectively manage the future development of Scarborough Park to achieve its long term objectives to:

- Facilitate access,
- Protect natural environments,
- Protect and enhance biodiversity, and
- Provide diversity in recreation.

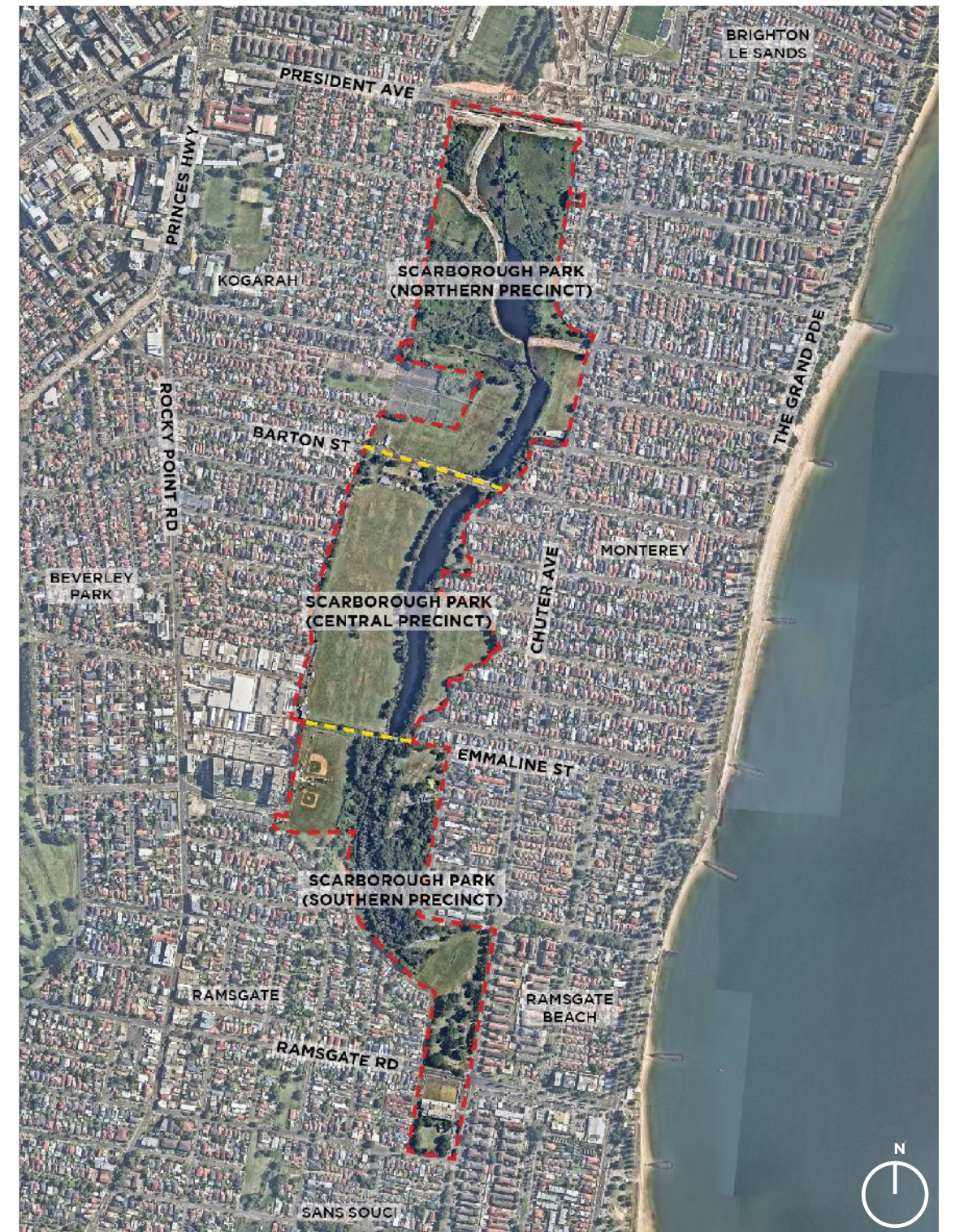
The masterplan maps current conditions and identifies scope for future investment by council. Any future projects would be subject to detailed investigations and design processes, with community engagement as appropriate.

Meaningful engagement with stakeholders, sporting groups, the local community, and Council members will generate an authentic, appropriate and sustainable direction to guide the park's future.

The northern portion of the park is currently impacted by the construction of M6 Stage 1. The construction of this major infrastructure has resulted in significant impact to the northern precinct of Scarborough Park including the loss of many trees and impacts to the remnant wetland due to modifications to the stormwater and drainage system, widening of the President Avenue carriageway and associated level changes.

A new overhead bridge crossing to President Avenue and linked elevated structures deliver an important link in a wider active transport network that is beyond the scope of this masterplan.

The Scarborough Park masterplan identifies strategies and plans to best integrate the M6 Stage 1 works into the existing park fabric as part of the large park area.



1.2 Vision

1.2.1 Scarborough Park vision

The vision is to create a dynamic and engaging park that enhances the existing assets, building on the rich layers of history and the unique setting to satisfy a wide variety of social and recreational needs whilst protecting and enhancing the ecological integrity of the site and surrounding area.

The park has a strong ecological land and water framework, contributing to local and regional biodiversity and providing habitat for a large variety of flora and fauna, including endangered ecological communities and individual species.

Scarborough Park is both a recreation and ecological asset for the region, contributing to the lives of the local community by providing valuable open space resource for a variety of uses and activities.

1.2.2 Green grid corridors vision

As part of the Rockdale Wetlands Corridor, Scarborough Park is encompassed by the wider vision of the Bayside Priority Green Grid Corridors Spatial Framework (2021). The overall vision states:

‘The role of water within the Bayside LGA is intrinsic to its local identity. Identifying and celebrating each corridor’s unique waterscapes, flora, fauna and cultural heritage will enable a clear future direction for interventions.’

The vision statement for this specific wetland corridor states:

‘Rockdale Wetlands Corridor will be focused on protection and rehabilitation of the wetland and saltmarsh landscapes, protecting and enhancing remnant vegetation and habitat areas, whilst ensuring that it remains a people focused open space corridor that encourages community interaction with landscape and water.’

The green grid document also highlights the specific opportunities for connecting to Country, establishing three key Country narratives to guide the development of the corridor.

- **Living in water landscapes**
Acknowledging that the wetlands corridors were likely used for camping, fishing, resources, manufacturing and ceremony by Aboriginal people over thousands of years prior to British settlement in the area.
- **Berewalgal (people from far away) arrive (Europeans)**
Accepting continuing Aboriginal connection to Country and the differing world views of ownership, kinship, belonging and relationships to the natural world.
- **Preserved Places**
Identifying the aspects of the wetlands corridor that remain largely unchanged, having been protected from development in modern Sydney.

Community consultation was carried out by the Green Grid Corridors project team with La Perouse Local Aboriginal Land Council in May 2021. Cultural significance, key values, concerns and integrity enhancement components discussed within the session in respect to the Rockdale Wetland Corridor included:

- Re-instating rock oyster reefs.
- Importance of access, particularly within National Reserves that contain places of cultural significance. Promoting better access through incorporating it into National Reserves Management Plans.
- Promoting initiatives to improve water quality to make local food supply such as mullet, rock oyster reefs and blue-summer crab edible and accessible to community.
- Considering local habitats for local species such as sea grass and wetlands for crab.
- Gaining local information such as mapping crab and mullet movement throughout the seasons.
- Wurridjal Festival by Bayside Council, Canterbury Bankstown, Inner West and Strathfield Councils and the Cooks River Alliance. Seen as good community initiative.
- Improvement of water quality by managing run off from industrial areas

1.2.3 Success measures

To implement the vision statements, the following key success measures have been established to guide both the masterplan as well as any future detailed design works for smaller projects within the park.

Scarborough Park must be:

- A distinctive and unique park with quality recreation and sporting destinations.
- A balanced place with strategically located and managed open space settings and facilities.
- An appealing destination with well-designed and accessible open spaces and facilities.
- An activated precinct, with a range of activity and lifestyle opportunities for all ages and cultural groups, extending beyond organised sport to embrace casual community use and engagement.
- Well-connected, with safe and accessible active transport links that support movement and activity within and beyond the park extents. The network should be easily navigated by locals and visitors alike.
- An environmentally sensitive place which celebrates the park’s natural assets and protects and enhances biodiversity and ecosystem functions.
- An open space asset which respects and encourages connection to Country, providing learning and connection to community and place through varied interpretation opportunities.
- A park that honours its history and heritage to enhance the unique sense of place.
- A well-managed open space, which facilitates community use and engagement whilst protecting key biodiversity assets.



1.3 Regional context

Scarborough Park is located approximately 14 km south of the Sydney CBD, near the shores of Botany Bay.

It is part of the St George region, comprising the southern suburbs of the city. The park is in the local government area of Bayside Council and is surrounded by residential land in the suburbs of Kogarah, Monterey, Ramsgate and Ramsgate Beach.

The northern edge of the site borders the suburbs of Rockdale and Brighton Le Sands. Rockdale straddles the Princes Highway, the primary north-south vehicular route between Sydney and its southern suburbs, and forms one of the main town centres of the LGA.

To the west of the park is Kogarah, the largest local centre in the area, and the closest train station to the park. Kogarah is home to a number of schools, hospitals and supporting health care services.

The name Kogarah derives from the Aboriginal word meaning ‘place of reeds’, and its siting on the fertile plain of the Georges River, historically allowed for the provision of fruit, vegetables and oysters for Sydney.

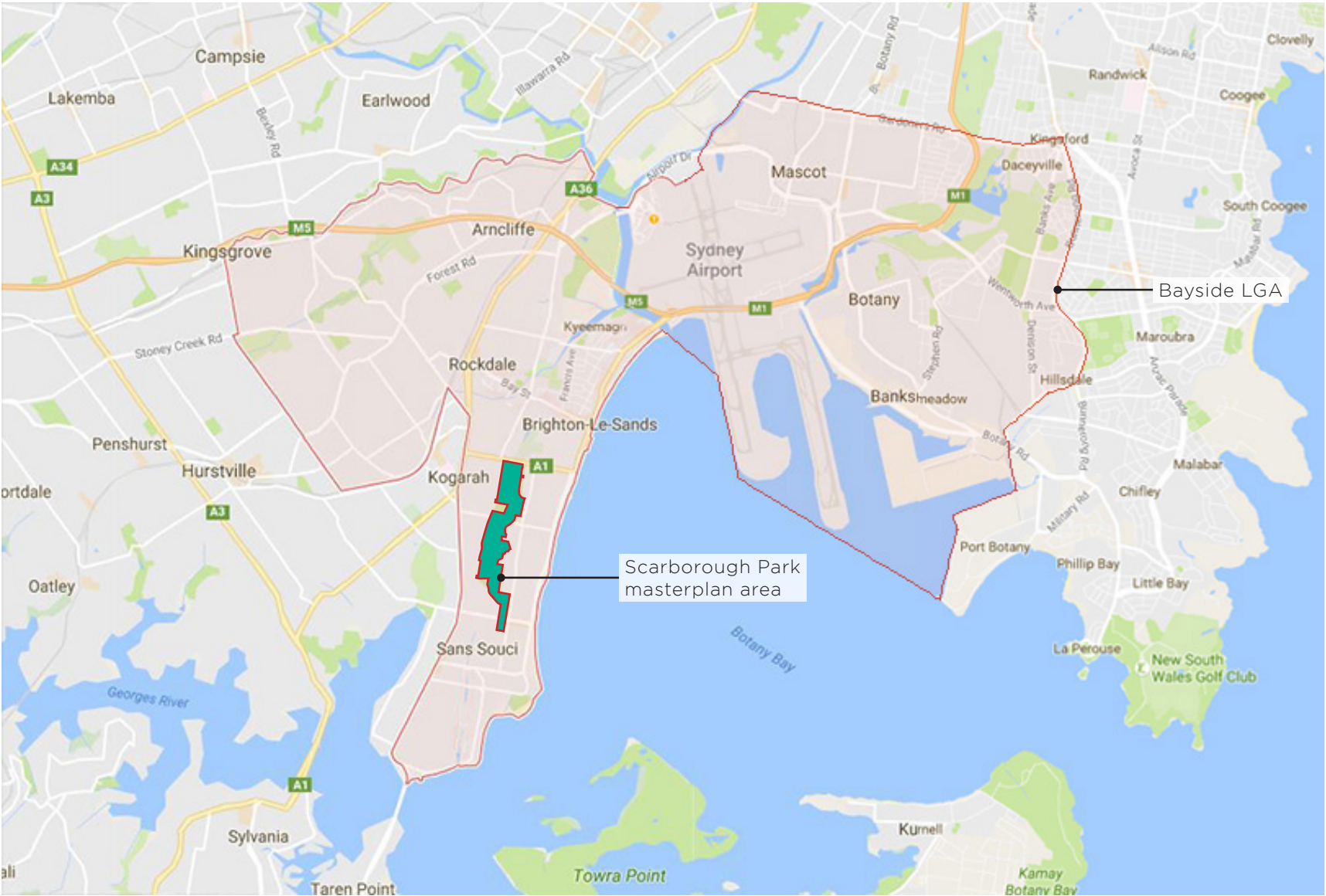
Kogarah's main shopping area is located around Kogarah railway station on Railway Parade, approximately 1 km from the park. Buses service the train station to the surrounding suburbs, running directly past the park.

East of the park, the residential suburbs of Monterey and Ramsgate Beach extend to the Grand Parade and the western shores of Botany Bay, the site of European landings in Australia in 1770. Cook Park runs along the shores of the bay, accommodating a shared path and pedestrian promenade extending from Sans Souci and Dolls Point in the south to Kyeemagh in the north, a key attraction for the local community.

The suburbs of Monterey and Ramsgate Beach have street names bearing a Californian influence, such as Hollywood, Monterey, Pasadena and Culver. In contrast, Scarborough Park was named by the Honourable Thomas Holt after the English coastal town of Scarborough, North Yorkshire.

The route through these suburbs is easily walkable, complemented by bus services running along the surrounding roads of Rocky Point Road, Chuter Avenue and The Grand Parade.

Scarborough Park occupies a significant portion of the Rockdale wetlands corridor which connects south to the Georges River, and north to the Cooks River. The wetlands corridor connects a number of important open spaces and provides an alternate north-south active travel route to Cook Park.



1.4 Local context

To the north, Rockdale Bicentennial Park continues the Rockdale Wetlands Corridor, with linear wetlands and ponds flanked by open space to both sides. Construction of the M6 Stage 1 motorway through Bicentennial Park began in early 2022. The M6 Stage 1 motorway tunnels terminate at President Avenue, resuming a section of Rockdale Bicentennial Park and reconstructing the wetland ponds over the new roadway tunnels.

The NSW Super League team Rockdale Ilinden Football Club currently play at the Rockdale Bicentennial Park South Football Stadium, built in 2009. There are current plans to create several additional sports pitches to the east of the area in conjunction with the M6 Motorway project.

Whilst there is a direct hydrological link between Rockdale Bicentennial Park and Scarborough Park, President Avenue and the M6 extension create a physical barrier to park users at ground level. A new, elevated bridge crossing over President Avenue will improve connectivity between the two open space areas and allow safe active transport across President Avenue for the first time.

Directly west of the northern region of Scarborough Park, there are four schools which fall within around 700m of the park and easy walking distance. Despite this, safe links between the sites are very limited, with the main route along President Avenue in the north or Marshall Street further south.

Slightly further afield, St George Public Hospital and St George Private Hospital lie within the local catchment, but again, connections are poor for pedestrians and cyclists due to the barriers created by the busy Princes Highway and large landholdings to either side. Kogarah Town Centre beyond has a lively retail centre and provide train connections to the CBD and south to the Sutherland Shire.

The southern portion of the park is made up of several sites - the central sports fields, Phil Austin Baseball Field, Hawthorne Street Natural Area, Leo Smith Reserve, Tonbridge Street Reserve and Pemberton Reserve.

The sports fields, formal recreational assets and natural amenity make up a large swathe running from Barton Street in the north to Ramsgate Road in the south.



Hawthorne Street Natural Area boasts high ecological value, with an integrated nature walk and playground nearby in Leo Smith Reserve. The tennis courts located within the natural area have been recently refurbished, with two of the six courts being converted to a multi-court to accommodate other sporting uses in conjunction with tennis.

The neighbouring Tonbridge Street Reserve is used as a formal sports area with recreational facilities and easy access to Ramsgate Beach Town Centre.

Ramsgate Beach Town Centre is located directly south-east of the park and accommodates several sites which have been developed to provide higher density housing on mixed-use sites.

Ramsgate Memorial RSL Club, on the edge of the town centre is a large building to the south of Scarborough Park. The RSL site was formerly part of Scarborough Park, with Pemberton Reserve being separated from Scarborough Park when the club was developed.

Pemberton Reserve consists of a central grassed basin with boundary canopy trees and a small playground to its north-east corner.

The Rotary Park area directly north of the club provides additional informal recreation space.

To the east of the park, Cook Park runs parallel to Scarborough Park along the foreshore of Botany Bay and forms part of a comprehensive green network in the local area. It is popular due to its beach side location and lengthy off road cycle route.

Calvary Hospital is within walking distance of the park, although the closest area contains primarily active recreation, so offers little in terms of direct access to high quality passive recreation.

LEGEND

- Master plan area
- Green Open Space
- Sports Pitches / Clubs
- Local Town Centre / Mixed Use
- High Density Residential
- Medium Density Residential
- Low Density Residential
- Industrial
- School
- Bus route & bus stop
- Cycle route
- Railway (T4 line)
- Kogarah Station
- 500m radius from park (approx 10min walk)
- Join line
- M6 Stage One Extension



1.5 Historical context

1.5.1 Origins (Pre-European Settlement)

The traditional owners of the area are the Aboriginal people of the Eora nation from the Gamaygal, Gwegal, Bidjigal and Gadigal clans (Rockdale Community Strategic Plan 2013-2025). These tribes were known as “water people” and the traditional owners had an intimate spiritual and cultural connection to the land for many thousands of years. Among the Bidjigal clan was Pemulwuy (1750-1802), an Aboriginal warrior born near Botany Bay and was known for his resistance against the European settlement. During the 1780s, Pemulwuy and other tribe members participated in multiple guerrilla wars against the settlers. It is believed that the densely vegetated Scarborough Swamp was one of the hiding spots of the tribe.

Prior to European settlement Rockdale was comprised of a distinctive combination of coastline, wetland, waterway and bushland environments which over thousands of years supplied the Eora nation with abundant resources to survive and support a rich and spiritual culture. A series of north-south beach sand-ridges interspersed with wetlands extended one kilometre inland from Lady Robinsons Beach (Monterey) in a broad corridor from Cooks River in the north to the Georges River in the south, likely forming the Scarborough Ponds at the back of the sand dunes. ‘Rockdale’ was named after the steeper sandstone country further inland, with Turpentine Ironbark Forests growing on the richer soils at the south western edges of the municipality.

1.5.2 Development (1800 - 1900)

Patrick Moore, a convict with highly valued skills as a blacksmith and wheelwright, was granted 60 acres of land in 1812 - consisting primarily of sandhill and wetland. This area in the north of the site retains its name at ‘Pat Moore Swamp’.

Scarborough Park was formally created in 1879 in the central portion of the site, arguably as a response to impending residential development. A petition was presented to the minister of lands by Samuel Cook, asking for the dedication of a public reserve at Scarborough. It was named by the Hon. Thomas Holt, after the English coastal town of Scarborough, Yorkshire and the First Fleet convict ship which was briefly anchored in Botany Bay in 1788.

The establishment of the surrounding settlement was hastened by the introduction of both Rocky Point Road (1843) and steam tram services from the north in 1887. The flourishing development led to the creation of Moorefield Racecourse (opened 1888) on President Avenue, part of the Moorfield Estate.

By 1888 Scarborough Park was planted with between 1100 and 1200 ornamental shrubs and trees, as well as being extensively landscaped.

1.5.3 Recent Times (1900 - Present Day)

In more recent history, Scarborough Park, once a tidal wetland, was dredged in 1933, as part of a longer term project to provide level playing fields, to resolve frequent flooding issues and proliferation of mosquitoes and improve sanitation in the area. The consequences of these improvements saw the loss of an ornamental lake where Tonbridge Street Reserve is today.

In the 1950’s the estate was subdivided and the Department of Education purchased part of the park, where it built two high schools and college of further education. Moorefield Girls High School was erected on the former site of Moore’s farm. Much of the ornamental planting was removed.

There is very little of the native vegetation remaining, much of the wetlands corridor has been filled and replaced with parks and sports fields, bushland areas replaced with housing and roads, and many natural drainage lines have been channelised. Fortunately however, some of Rockdale’s natural areas remain, many of which have high conservation value because they provide habitat for internationally significant migratory shorebirds birds, threatened plant and animal species, and juvenile fish nursery for Botany Bay.

A section of park to the south of Ramsgate Road historically belonged to Scarborough Park but is now occupied by lease as the Ramsgate RSL Club, with Pemberton Reserve further to the south effectively alienated from the rest of the park.





Pat Moore Swamp 1961



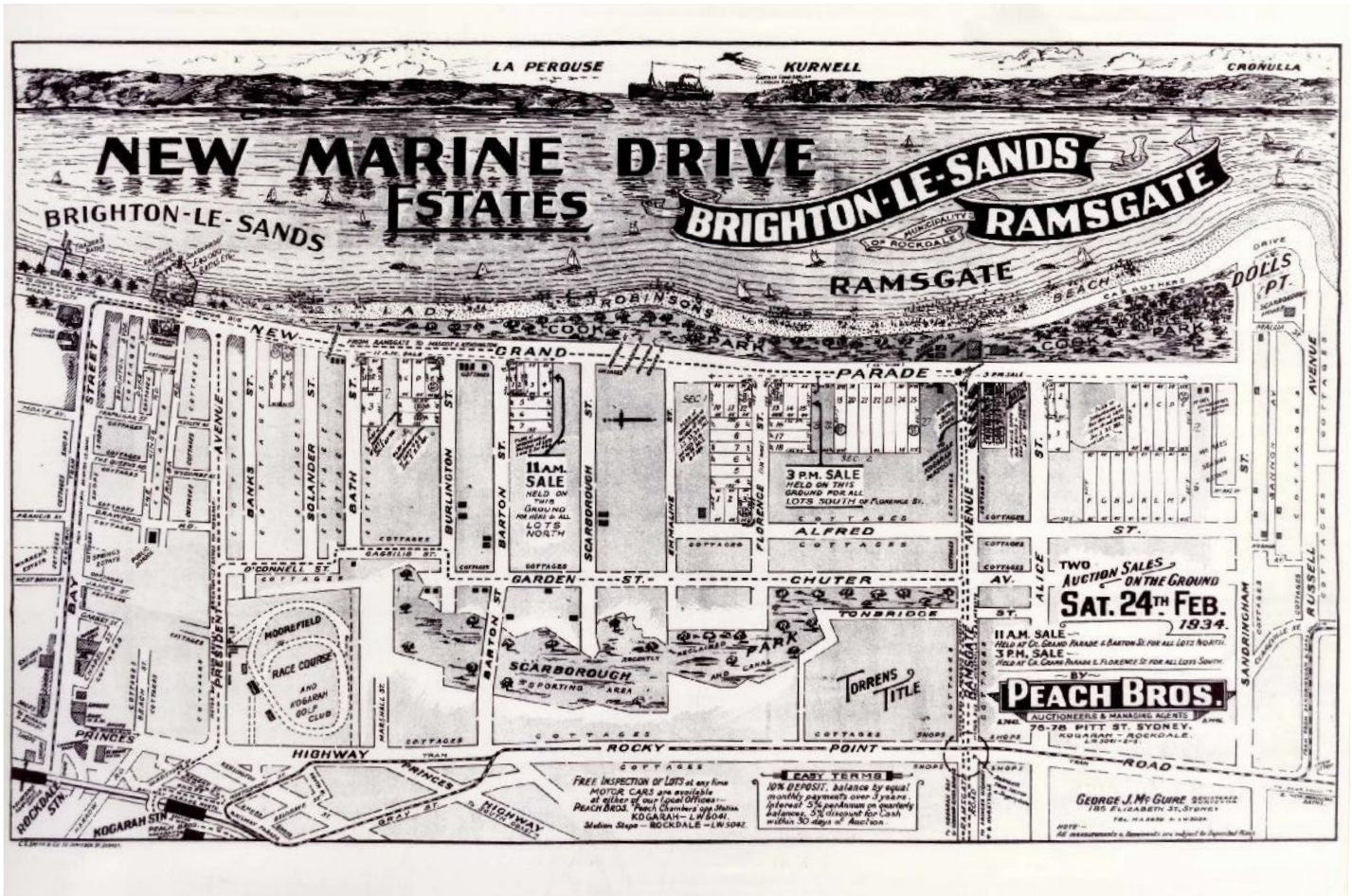
Walking trail in Scarborough Park 1891



Ramsgate Public School from Scarborough Park 1891



Aerial photo (c.1945) showing extent of landscaping / ornamental planting to the park



New Marine Drive Historical Map (1934), Bayside Council
Source: Bayside historical photos collection archives

1.6 M6 motorway

1.6.1 Stage 1 works

The M6 Motorway (previously F6 Extension) is a proposed multi-lane road link that aims to give better connections to Sydney's south. Three (3) stages are planned, with stage 1 currently under construction. Stage One comprises continuous twin tunnels connecting the New M8 at Arncliffe to President Avenue at the northern edge of Scarborough Park.

A tunnel portal is being constructed on the northern side of President Avenue, triggering road widening on President Ave and an upgrade of the intersection of Princes Highway and President Ave to the west of the park.

As part of the stage 1 works, a new active transport corridor is being established through an open space corridor, linking Kyeemagh in the north to Monterey in the south.

The works undertaken as part of the M6 Stage 1 project have removed a portion of Scarborough Park along its northern edge, at the interface with President Avenue. There has been loss of some coastal wetlands and area of high water table to facilitate road widening, resulting in a loss of some heritage fabric within the park.

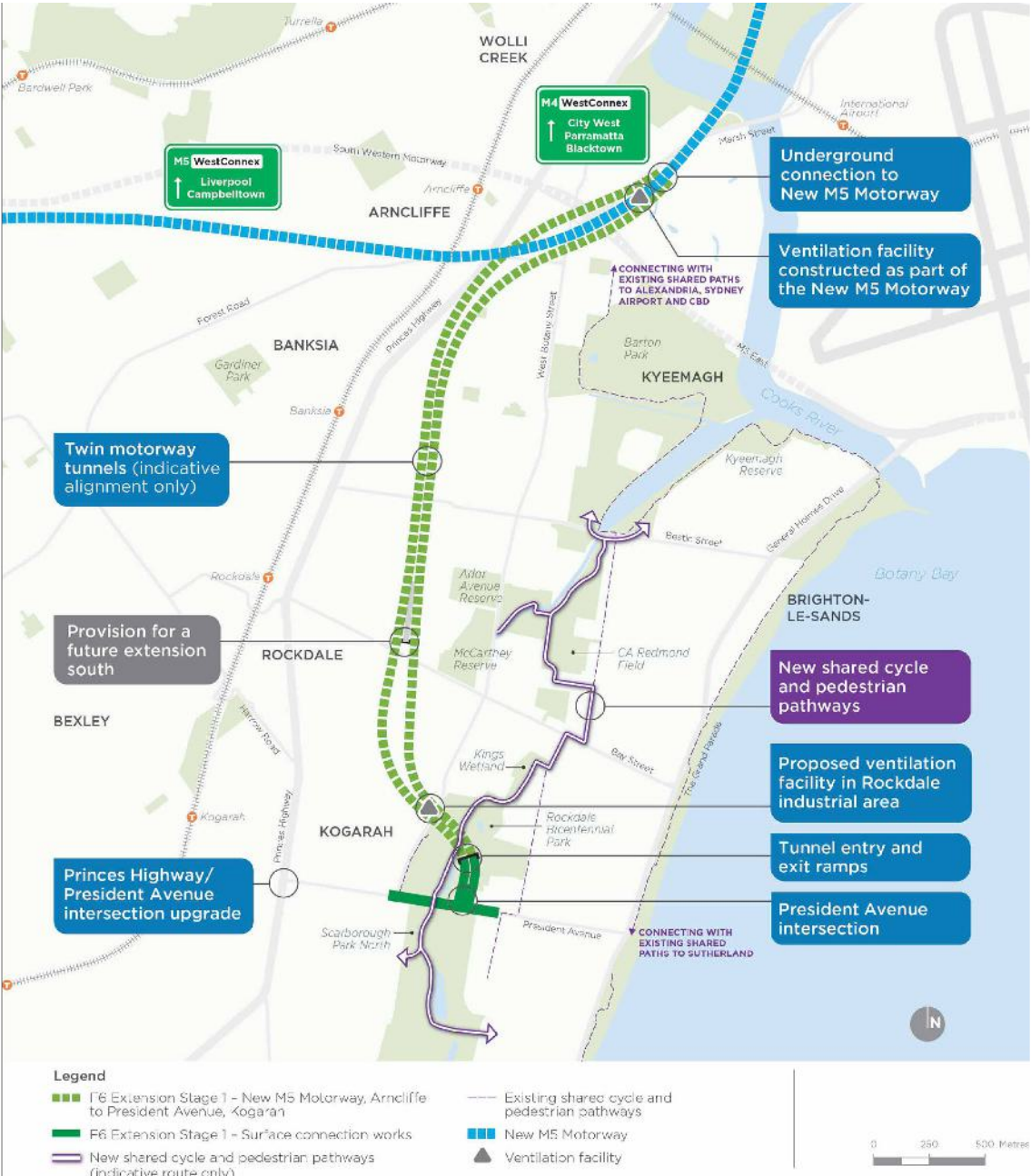
1.6.2 Stage 2 & 3 works

Currently two further sections of the M6 motorway are proposed, Section B linking from the stage one tunnels south to Taren Point, and Section C linking from Taren Point to Loftus. Details on tunnel portals for future stages are not publicly available at this stage.

There is currently no timeline, funding commitment or planning approval for Section B or Section C of the Corridor Reserve. However, the road corridor reserved since 1951 for future stages of the M6 remains in place



M6 Project map.
Source: TfNSW



M6 Stage 1 Project map.
Source: TfNSW

1.6.3 Impacts on Scarborough Park

The stage 1 works of the M6 motorway will be primarily underground, emerging to the north of Scarborough Park within Rockdale Bicentennial Park and exiting on to President Avenue. Road widening and upgrades along President Avenue have impacted on the northern park boundary, with changes to hydrology and earthworks at the northern edge of the wetlands system.

The M6 stage 1 works include an extended network of cycle and shared paths which links north through Rockdale Bicentennial Park, and east-west across Scarborough Park, increasing local connectivity. A new pedestrian & cycle bridge is to be constructed over President Avenue, providing a link between Scarborough Park and Rockdale Bicentennial Park, improving connectivity throughout the regional open space network.

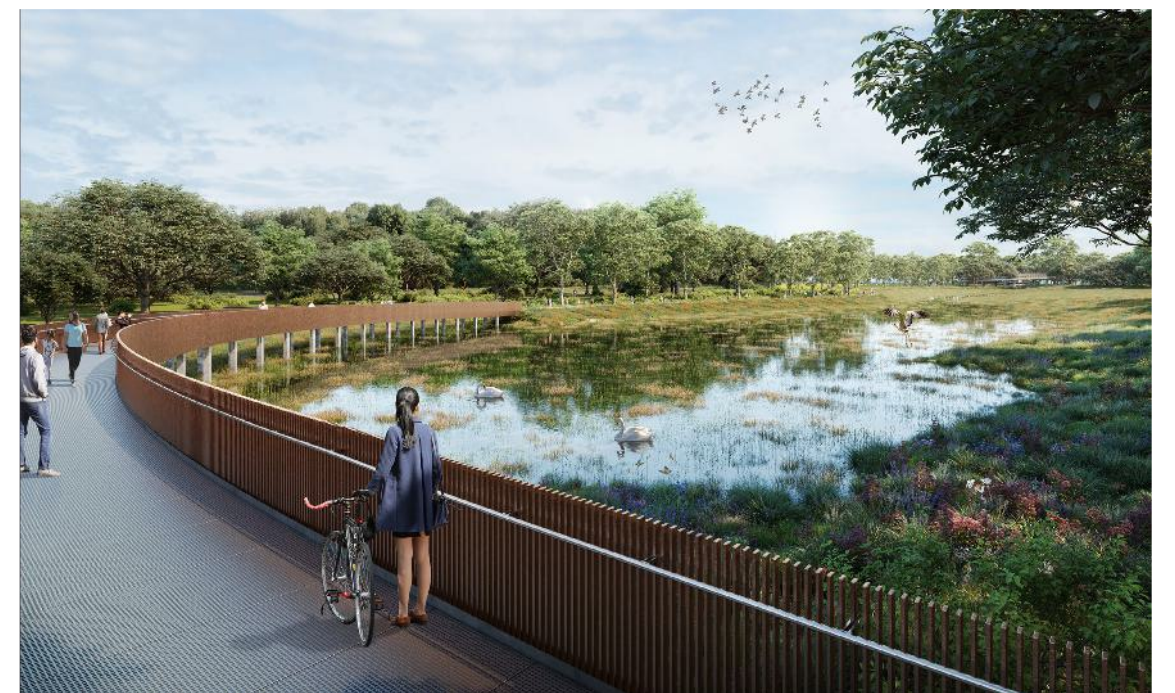
A reservation for future road works still exists within Scarborough Park, occupying a swathe through the centre of the park (illustrated right). Although a future at-grade or elevated road connection is unlikely, the road corridor reserved since 1951 for future sections of the M6 will remain in place until further decisions are made by the NSW Government.



Land reserved for M6 road corridor through Scarborough Park (highlighted yellow). Mapping by GroupGSA



Artist's impression looking north over Scarborough Park showing new path links
Source: M6 Motorway Stage 1, Urban Design and Landscape Plan



Artist's impression showing bridge over Scarborough Ponds
Source: M6 Motorway Stage 1, Urban Design and Landscape Plan

1.7 Planning & legislative framework

The Scarborough Park Masterplan will take into account existing strategies and guidelines at a National, Regional and Local scale in order to maximise the potential of the park proposals and ensure the park is designed to provide the best possible public open space environment for the area.

Bayside Council's responsibilities under the Local Government Act 1993 are to:

'Properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development.'

State legislation	Area of relevance	Refer to section
Biodiversity Conservation Act 2016	Conservation and biodiversity	2.7
Coastal Management Act 2016	Requirements for works within or impacting coastal areas	2.2
Fisheries Management Act 1994	Waterways and marine environments	2.2
Bayside Local Environmental Plan (2021)	Heritage assets	2.9 & 2.10
State policies, strategies & guidelines	Area of relevance	Refer to section
State Environmental Planning Policy (Resilience and Hazards) 2021	Chapter 2 - Hydrology and management of coastal ecological communities and function (mapped within Scarborough Park), coastal wetlands, coastal environment area and coastal use area.	2.2 & 2.7
	Chapter 4 - Remediation of contaminated (and potentially contaminated) land	
Greater Sydney Region Plan: A Metropolis of Three Cities (2018)	Planning framework for Greater Sydney	1.8
Our Greater Sydney 2056: Eastern City District Plan (2018)	Planning framework for Eastern City	1.8
NSW The Green Grid	Green infrastructure network	1.8
Living Cities report (2016)	Five point national green infrastructure plan	1.8
NSW Policy & Guidelines for Fish Habitat Conservation and Management (2013)	Management of estuaries, marine habitats and fish stock	2.2
GRCCC Georges River Estuary Coastal Zone Management Plan (2013)	Hydrology and habitat management (catchment wide)	2.2
Walking Space Guide Summary V4 (2023), TfNSW	Recommended walking path widths for varying categories of use	1.8
Cycleway Design Toolbox: Designing for cycling and micromobility (2020), TfNSW	Guideline document for design of dedicated cycleways and shared paths	1.8

Local policies, strategies & guidelines	Area of relevance	Refer to section
Bayside 2035, Community Strategic Plan 2025-2035	Overall vision and strategy for the management of Bayside LGA	1.9
Bayside Local Strategic Planning Statement (2020)	Planning parameters for Bayside LGA	1.9
Bayside Water Management Strategy (2020)	Overall vision for water management within Bayside, including key goals and success measures to improve outcomes.	2.3 & 2.8
Bayside West Floodplain Risk Management Study and Plan (2023)	Summary of existing floodplain risks and high level assessment of possible installations to reduce risk and/or improve management outcomes.	2.3
Scarborough Park Conservation Management Plan (2014)	Biodiversity, maintenance and conservation principles and goals (Scarborough Park specific)	2.9 2.11 - 2.14
Bayside Priority Green Grid Corridors Spatial Framework (2021)	Rockdale Wetlands corridor vision and management goals	2.8
Environment and Resilience Strategy 2032 (2024)	Strategy to improve environmental and social resilience across Bayside LGA	2.8
Rockdale City Council Natural Areas Restoration Plan (2015)	Site specific assessment of park land quality and management needs (district wide)	2.8
Rockdale City Council Biodiversity Strategy (2014)	Biodiversity, maintenance and conservation principles and goals (district wide)	2.8
Rockdale City Council Bio Links Study (2007)	Creation of green links between habitats, biodiversity, threats, management, assets (district wide)	2.8

1.8 NSW Government overarching policies

Greater Sydney Region Plan: A Metropolis of Three Cities (March 2018)

Prepared by the Greater Sydney Commission, *A Metropolis of Three Cities* is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

To meet the needs of a growing and changing population the vision seeks to transform Greater Sydney into a metropolis of three cities:

- the Western Parkland City
- the Central River City
- the Eastern Harbour City

Bayside LGA is located with the established Eastern Harbour City. The focus of the plan for the eastern city is to build on its recognised economic strength and addressing liveability and sustainability.

‘Green infrastructure such as urban tree canopy, green ground cover, bushland, waterways, parks and open spaces will be valued for its economic, social and environmental benefits and will help to establish the Greater Sydney Green Grid, a network of walking and cycling links that will become increasingly important in daily travel arrangements improving sustainability and the wellbeing of residents.’

Our Greater Sydney 2056: Eastern City District Plan (March 2018)

Prepared by the Greater Sydney Commission, the *Eastern City District Plan* sets out parameters for the evolution and future of the eastern city as identified in *A Metropolis of Three Cities*.

A number of key principles are established by the plan, with the following most relevant to Scarborough Park

- Sustaining communities through vibrant public places, walking and cycling, and cultural, artistic and tourism assets
- Aligning growth with infrastructure, including transport, social and green infrastructure, and delivering sustainable, smart and adaptable solutions
- Being innovative in providing recreational and open space areas, and increasing urban tree canopy
- Building effective responses to climate change and natural and urban hazards.

‘A strategic approach to protecting the biodiversity in the Eastern City District involves investing in connected bushland corridors and protecting larger pockets of remnant vegetation, as large and connected areas of bushland give the District’s wildlife the greatest chance of survival... Selected species of trees and understorey plants for parks and street planting in targeted areas support the movement of wildlife and help strengthen connections between areas of habitat.’

NSW Green Grid

The Green Grid sets out national objectives for the improvement of open space throughout the greater Sydney region. The plan takes inspiration from the East London Green Grid which aimed to green the gateway of the Thames estuary into the city. The main principles of the document are to:

- Increase access to open space at a local district and regional scale.
- Conserve the natural environment and heritage landscapes while improving access to nature and enhancing visitor destinations
- Adapt to climate extremes, improve air quality and increase urban greening
- Encourage sustainable transport connections and promote active living
- Promote sustainable food production
- Promote green skills - improve management, maintenance and sustainable greenspace design

‘As Sydney grows, the metropolitan strategy sets out a vision for Sydney to remain distinctive and inspiring and one of the most liveable cities in the world’

Living Cities report (2016)

Created in 2016, the alliance is made up of over 50 organisations in urban planning, infrastructure, utilities and greening sectors. Their aim is to develop key policy recommendations to inform the greening of Australian cities and the Governments future cities policies.

A five point national living infrastructure plan was the result of the initial workshop, the most relevant of which to Scarborough Park was the promotion of green infrastructure in urban areas as well as provision of funding for renewal and improvement.

‘We must prioritise the health of our parks, open spaces and urban waterways.’

Adam Bandt MP, Member for Melbourne, Living Cities Workshop (2016)

Walking Space Guide Summary, V4 (2023)

The Walking Space Guide is based on research into Australian walking comfort norms. It sets standards that will ensure that a comfortable amount of walking space is provided on streets which will encourage people to walk.

The required amount of space is determined relative to the number of people using or predicted to use the footpath.

The Guide works with the Movement and Place framework by helping to understand the effects of balancing competing space allocation priorities on pedestrian comfort.

Cycleway Design Toolbox (2020)

The Cycleway Design Toolbox provides guidance to practitioners on how to design for cycling and micromobility in the context of NSW and Greater Sydney. It considers existing users such as conventional bicycles, share bikes, and e-bikes, whilst also aiming to future-proof infrastructure to cater for e-scooters, delivery robots and other innovation personal mobility devices,

The document describes guiding design principles and details varying different types of design solutions for cycleways and shared paths, including intersection treatments. Requirements for bicycle parking and opportunities for temporary measures are also addressed.

1.9 Overarching Council policies

Bayside 2035, Community Strategic Plan 2025-2035

The Community Strategic Plan sets a vision for the Bayside LGA in relation to the social, environmental and economic future of the area. The document sets out four key themes for the community:

- **Theme 1:** In 2035 Bayside will be a vibrant and liveable place
- **Theme 2:** In 2035 our Bayside community will be connected and feel that they belong
- **Theme 3:** In 2035 Bayside will be green, resilient and sustainable
- **Theme 4:** In 2035 Bayside will be financially sustainable and support a dynamic local economy

Key strategies identified in the plan which are relevant to Scarborough Park include:

- Create spaces, places and interactions that are safe and accessible
- Maximise opportunities for safe, accessible, green open space with a range of active and passive recreation opportunities for all ages and abilities
- Create engaging, safe, walkable experiences that leverage green corridors across Bayside
- Facilitate greater connectivity to open space, schools, shops and services through active transport
- Plan for growth and provide infrastructure that will serve our future population as well as our current needs
- Improve opportunities for people to easily and safely choose to walk or ride to get where they need to go

- Reflect and celebrate cultural diversity in Bayside's activities and events, which are accessible to people of all abilities
- Promote access to active recreation, health information and education services to support a healthy community
- Work with our partners to ensure flexible care/support arrangements for seniors, people with disabilities, and vulnerable community members
- Foster a sense of community pride in and satisfaction with Bayside
- Design, build and/or maintain Council infrastructure and natural assets to withstand and recover from disasters and disruptions
- Provide educational tools about the local impacts of climate change to promote community awareness and agency
- Expand Bayside's carefully selected and well-maintained tree canopy
- Involve community in the preservation and growth of natural habitat and biodiversity
- Enhance and extend green grid corridors
- Respect, manage and protect the natural environment, including our fragile coastlines
- Manage Council assets (including digital) to meet community expectations within available resources

Bayside Local Strategic Planning Statement, March 2020

The Bayside LSPS has 24 Planning Priorities and 148 Actions. Key planning priorities relevant to the Scarborough Park masterplan include:

- **Planning Priority B19** Protect and improve the health of Bayside's waterways and biodiversity
- **Planning Priority B20** Increase urban tree canopy cover and enhance green grid connections
- **Planning Priority B21** Deliver high quality open space
- **Planning Priority B22** Protect and enhance scenic and cultural landscapes
- **Planning Priority B24** Reduce community risk to urban and natural hazards and improve community's resilience to social, environmental and economic shocks and stressors.

'Public open space enhances our neighbourhoods and supports a healthy and active lifestyle and increases social connectedness through bringing people together. As Bayside grows, the demand for open space and sport infrastructure will increase.... Council will need to place an emphasis on the delivery of high quality spaces that are linked by a network of paths and cycleways and public transport to increase accessibility.'





02 SITE ANALYSIS

2.1 Hydrology

2.1.1 Overview

The Scarborough Park and Bicentennial Ponds act as a chain of retention ponds, providing an important wetland corridor and valuable fish habitat. The ponds are now predominantly artificial, and lie along the natural drainage corridor behind the original dune line of Botany Bay, which is no longer evident.

There are three main ponds or wetlands; from England Street to President Avenue (Bicentennial Ponds), from President Avenue to Barton Street (Northern Scarborough Pond), and downstream of Barton Street (Central and Southern Scarborough Ponds).

The day-to-day water levels of each pond are controlled at the downstream end by a weir at President Avenue, stormwater pipes at Barton Street and outlet structure at Florence Street. The Florence Street outlet structure connects the ponds underground to Botany Bay, allowing the tide to penetrate into the downstream ponds, resulting in a brackish mix of water through much of the watercourse.

2.1.2 Relevant legislation

The following NSW government legislation & policy applies to the Scarborough Park site due to its mapped Coastal Wetlands ecosystem.

- Coastal Management Act 2016 (NSW)
- Fisheries Management Act 1994 (NSW)
- State Environmental Planning Policy (Resilience and Hazards) 2021

The following NSW government policy is also relevant to the masterplan document:

- Policy & Guidelines For Fish Habitat Conservation and Management (2013), NSW Department of Primary Industries

2.1.3 Council policies

The masterplan builds on current council policies and past studies to determine a framework for the management of park hydrology into the future.

Key council policies include:

- Georges River CCC Estuary Coastal Zone Management Plan (2013). This document will be replaced by the Georges River Catchment Coastal Management Plan (GRCCMP) once completed, which is currently scheduled for 2025

2.1.4 Existing studies

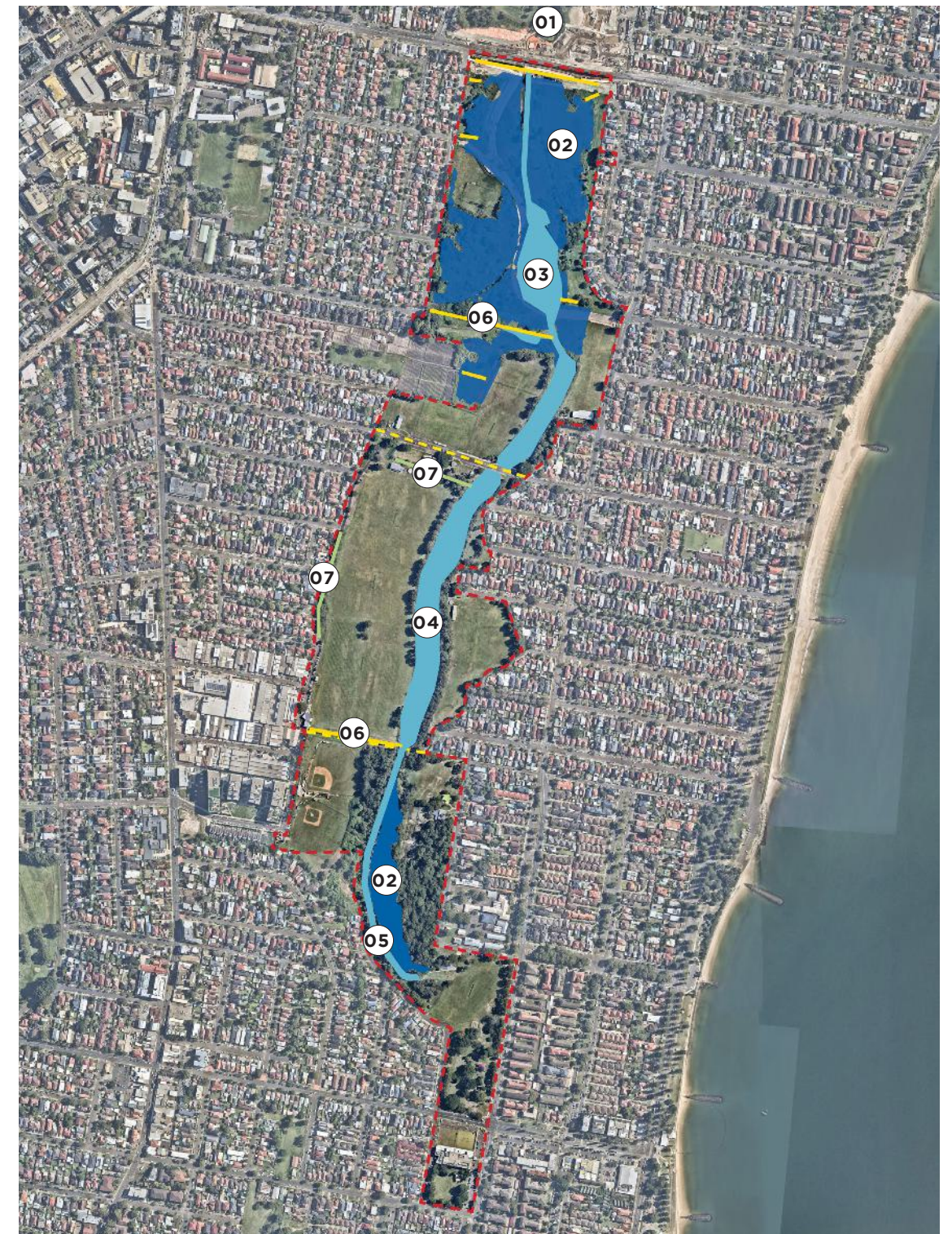
The following completed studies have been reviewed and appropriate recommendations have been incorporated into the masterplan.

- Bayside West Floodplain Risk Management Study and Plan (2023)
- Bayside Water Quality Monitoring and Management Review, Annual Report 2016-17
- Bayside Water Management Strategy (2020)

In addition to the formal studies listed above, Storm Consulting was engaged to review and provide input to the Scarborough Park Masterplan document in 2017. Their knowledge and analysis has been incorporated into the masterplan document. The following information in this section is based on this assessment.

Legend

- 01 ROCKDALE BICENTENNIAL PARK PONDS
- 02 WETLAND AREAS
- 03 NORTHERN SCARBOROUGH POND
- 04 CENTRAL SCARBOROUGH POND
- 05 SOUTHERN SCARBOROUGH POND
- 06 OPEN INLET CHANNELS
- 07 CONCRETE-LINED INLET / DRAIN



2.2 Key state hydrology legislation & policies summary

Coastal Management Act 2016

The Coastal Management Act provides for the integrated management of the coastal environment of New South Wales and is consistent with the principles of ecologically sustainable development. It sets out the objectives for coastal management in NSW including:

- To protect and enhance natural coastal processes and coastal environmental values including natural character, scenic value, biological diversity and ecosystem integrity and resilience, and
- To support the social and cultural values of the coastal zone and maintain public access, amenity, use and safety.

It also outlines the mandatory management objectives for coastal wetlands:

- To promote the rehabilitation and restoration of degraded coastal wetlands,
- To protect and enhance the coastal environmental values and natural processes of coastal waters and estuaries and enhance the natural character, scenic value, biological diversity and ecosystem integrity,
- To maintain and improve water quality and estuary health.

It also sets up the procedure and requirements for Coastal Management Programs (CMPs). Scarborough Park Masterplan Area is covered by the Georges River Catchment Coastal Management Program (GRCCMP).

The Coastal Zone Management Plan and its associated legislation has been superseded. It is will be replaced by the Georges River Catchment Coastal Management Plan (GRCCMP) once completed. This will affect the design of works in the area, what CMP actions are proposed in the area and what works will require development consent.

Fisheries Management Act 1994

This the primary legislative framework governing the management of fish and their habitat in NSW.

The objectives of the Act are 'to conserve, develop and share the fishery resources of the State for the benefit of present and future generations and, in particular to:

- to conserve fish stocks and key fish habitats, and
- to conserve threatened species, populations and ecological communities of fish and marine vegetation, and
- to promote ecologically sustainable development, including the conservation of biological diversity,

and, consistently with those objects—

- to promote viable commercial fishing and aquaculture industries, and
- to promote quality recreational fishing opportunities, and
- to appropriately share fisheries resources between the users of those resources, and
- to provide social and economic benefits for the wider community of New South Wales, and
- to recognise the spiritual, social and customary significance to Aboriginal persons of fisheries resources and to protect, and promote the continuation of, Aboriginal cultural fishing.'

The Act has specific requirements in relation to works on embankments, impacting any proposals for embankment stabilisation, pontoons, jetties, waterway crossings, dredging, or reclamation activities within the park.

Impacts of any works on marine vegetation (including mangroves and salt marsh) must be considered in relation to fisheries and waterways also.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 2 of the Resilience and Hazards SEPP addresses Coastal Management, replacing the Coastal Management SEPP (2018). The aim of Chapter 2 is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area.

Coastal Wetlands and Coastal Wetland Proximity Areas are identified for additional development controls. Both of these land uses are mapped within Scarborough Park (refer to mapping adjacent).

Chapter 2 of the Resilience and Hazards SEPP requires that works are consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area including Coastal Wetlands and their Coastal Wetlands Proximity Area. This requires development consent for clearing native vegetation on land mapped as coastal wetlands, harm of native vegetation, earthworks, constructing a levee, environmental protection works and other development. This applies even if the clearing or works are not associated with any other development. The development controls for land mapped as coastal wetlands apply to all land use zones, including rural and urban zoned land.

In addition, as the clearing of native vegetation on land mapped as a coastal wetland is 'designated development' under the EP&A Act, it will require an environmental impact statement and public consultation before the relevant consent authority can determine the development application.

Any clearing of coastal wetlands would also trigger a requirement for an assessment under the Biodiversity Conservation Act 2016.



NSW Policy & Guidelines For Fish Habitat Conservation and Management (2013)

This document outlines policies and guidelines aimed at maintaining and enhancing fish habitat for the benefit of native fish species, including threatened species, in marine, estuarine and freshwater environments. It includes details on fish habitat conservation, mitigation, compensation, and rehabilitation measures to support the sustainable management of fish in NSW.

Identified issues

Aquatic habitats differ from terrestrial habitats and are more susceptible to degradation and loss. The reasons for this include:

- Disturbances on land can translate to disturbances to aquatic habitats, but the reverse is very rare. For example, sediments and pollutants carried by overland flow can enter aquatic environments, smothering habitats and reducing water quality.
- Aquatic habitats are much more prone to impacts from intense rainfall events or pollution incidents than are terrestrial habitats.
- Direct impacts on aquatic habitats at one site can result in indirect impacts occurring large distances upstream or downstream. For example, a chemical spill can impact aquatic environments both at the spill site and downstream, while a weir can impact on fish passage and recruitment both at the site of the weir and for many kilometres upstream.

The masterplan will ensure that preservation and improvement of existing fish habitat is prioritised. Any proposals that are carried through to detailed design should be assessed for their impact upon these habitats and designed to accommodate and improve them.

2.3 Key local hydrology policies & studies summary

Georges River CCC Estuary Coastal Zone Management Plan (2013)

This plan provides a co-ordinated approach to the management and improvement of the Georges River Estuary waterway and associated waterways (including Scarborough Ponds).

Principles relevant to Scarborough Park:

- Downstream habitat management can impact ponds, for example if mangroves at Botany Bay restrict outfalls to the bay, they may limit the speed at which water can leave the catchment.
- Support the establishment/continuation of local bushcare and groups to assist with revegetation works.

Policy relevant to Scarborough Park:

- A1 Reduce the volume & pollutant load of stormwater runoff through the catchment
- A3 Improve the performance of sewer overflows
- A5 Strive to protect undeveloped areas of the broader catchment that act as a buffer to water quality
- A4 Minimise build-up of gross pollutants and illegal dumping of waste into and along the estuary foreshore and waterways
- B3 Protect and improve the extent and condition of estuarine and riparian vegetation
- B2 Minimise the cause and spread of invasive species in aquatic and terrestrial habitats
- Targeted habitat establishment and enhancement (mangroves, saltmarsh, mudflats)

This document will be replaced by the Georges River Catchment Coastal Management Plan (GRCCMP) once completed, which is currently scheduled for 2025. A list of projects is currently being developed.

Bayside West Floodplain Risk Management Study and Plan (2023)

Prepared by WMA Water.

The Bayside West Floodplain Risk Management Study and Plan (FRMS&P). was study is jointly funded by the NSW Department of Planning and Environment (DPE) and Council and was undertaken in accordance with the NSW Government's Flood Prone Land Policy and the NSW Government document "Floodplain Development Manual: the management of flood liable land".

The primary aim of the FRMS&P is to provide a more informed understanding of flood risks and impacts across the study area and develop a long-term strategy to manage this risk.

Key floodplain risk factors relevant to Scarborough Park:

- Scarborough Ponds form a trapped low point within the larger Muddy Creek catchment area.
- It is notable that the flood conditions of the Scarborough Ponds system are driven by total catchment runoff volume rather than peak flows and as such display a significantly different critical storm duration to the rest of the study area. The critical storm duration for this peak storage volume is typically 30-hours and 48-hours, depending on the adopted design conditions.
- There are numerous properties surrounding Scarborough Ponds that are affected by flooding up to H3 hazard in the 1% AEP event (refer to flood hazard map in section 2.4.9). Due to the long duration storm that would fill the ponds and cause this flooding, it is assumed that evacuation would be possible as floodwaters rise slowly, but that roads would already be inundated and that it would be conducted on foot (overland escape route).

The report considered a number of flood modification options to reduce flood risks. The following options relevant to Scarborough Park were rejected following assessment:

- Drainage improvements in Scarborough Central near Phillips Rd targeted at minor storm events. Determined to have little impact and low cost benefit ratio.
- Outlet modification to install automatic tidal gates to prevent backflow into Scarborough Ponds. Determined to have ecological impacts which required separate assessment, converting the pond system from brackish, estuarine water into fresh water.
- 2m high levee to rear of Colson Crescent properties. Difficult to implement (no high ground nearby to tie into) and having a poor cost benefit ratio in only protecting a small number of houses.

Recommendations identified in the report which are relevant to Scarborough Park include:

- Installation of flood information signage, which may take the form of depth markers of historical floods to indicate potential hazards.

Bayside Water Quality Monitoring and Management Review, Annual Report 2016-17

Prepared by GHD

Council engaged GHD to undertake a comprehensive water quality and sediment testing over 8 months from Bicentennial Ponds to Tonbridge Creek. Recommendations are detailed in the Bayside Water Quality Monitoring and Management Review 2017.

No further water quality testing reports are available at the current time.

Bayside Water Management Strategy (2020)

Bayside's Water Management Strategy builds on a key strategic direction included in the *2018-2030 Community Strategic Plan* that "Waterways and green corridors are regenerated and preserved".

The Water Management Strategy identifies six key challenges as follows:

- Groundwater contamination and restrictions on groundwater extraction.
- Increasing impacts of coastal erosion.
- Ongoing challenges managing flooding in low-lying areas, and drainage systems which are tidally affected.
- Impacts of significant development – sediment loads from construction are a particular concern.
- Increasing pressure on open space, particularly sports fields – and therefore increasing irrigation demands.
- Chronic water quality problems in waterways and the Bay, largely linked to past contamination.

The document also identified six key goals to meet the identified challenges, summarised below.

GOAL 1: The bayside community is actively engaged in water management

Share information with the community, invite consultation, run community events, and explore and develop relationshipd with educational and community groups.

GOAL 2: Bayside is recognised as a water smart city

Establish a strong vision, build leadership and capability with council's team, identify additional funding sources, and integrate IT into water management systems.

GOAL 3: Improve flood risk management and drainage outcomes

Prepare stormwater drainage asset condition assesment and update flood risk assessment across the whole LGA (noting

that the flood risk assessment for Bayside West has since been completed).

GOAL 4: Improve the waterways and foreshores of Bayside LGA

Protect existing values, improve public connection and access along waterways, restore degraded sites, improve public and private catchment management, and monitor waterway and ecosystem health.

Specific outcomes relevant to Scarborough Park include:

- Identify and prioritise water quality improvement projects in Bayside's catchments, including SQIDs, constructed wetlands and bioretention systems
- Identify locations for and undertake targeted rehabilitation, creation and enhancement of estuarine wetland communities (saltmarsh, mangrove, seagrass) and adjacent riparian vegetation. Consider impacts of sea level rise – identify areas of estuarine vegetation where there is the potential for retreat
- Complete waterway and wetland restoration works, prioritising works in the Georges River Coastal Zone Management Plan (including Scarborough Park ponds).

GOAL 5: Bayside council to minimise impact on groundwater resources, including the Botany Sands aquifer within the LGA, and advocate for its protection

Increase knowledge, audit existing information and explore opportunities to use ground water for irrigation in suitable locations.

GOAL 6: No net increase in council or total LGA water use in 2030, compared to 2016 baseline levels

Develop benchmarked targets, increase efficiency, and explore alternate water sources such as rainwater harvesting and wastewater reuse.

2.4 Hydrology infrastructure

2.4.1 Inlets

There are multiple inlets which feed into the main watercourse from the surrounding urban areas, many of which are in poor condition. Often stormwater inlets are missing gross pollutant traps (GPTs) which would normally capture larger particles or objects.

Despite often being in clear view, those inlets with GPTs often have poor maintenance access and difficulties carrying out routine maintenance due to requiring applications to be made to DPE Fisheries. Council is currently in the process of developing a Plan of Management for the LGA to assist in carrying out maintenance activities such as clearing channels.

Numerous open drainage channels connect to the ponds from the West, fed by outfalls from underground stormwater pipes. These are typically a straight artificial channel that becomes choked with weeds which often help trap gross pollutants in the case where there is no trap upstream.

There are opportunities for these channels to be naturalised to some degree and made into a pleasant feature rather than an aesthetically undesirable drain. This will be subject to further hydraulic investigation and detailed design. Planting of canopy vegetation adjacent would help manage aquatic weeds in the long term.

In the north, three piped inlets feed stormwater into the wetlands adjacent to President Avenue. The wetland then allows the water to be filtered and slowed before reaching in the main pond.

Two additional stormwater inlets are being constructed as part of stormwater upgrades associated with the M6 works along President Avenue. These inlets will enter constructed swales which then discharge into the main channel immediately south of President Avenue.

Adjacent to Civic Avenue and Marshall Street, piped inlets feed into naturalised

channels/swales which connect to the main ponds.

A concrete channel runs west to east parallel to Barton St at the northern end of Scarborough Park Central. The channel is fenced, impacting visual connectivity and restricting pedestrian movement within the park, and there is currently no opportunity for water to be naturally slowed and infiltration encouraged from this inlet.

Within Scarborough Park central, a concrete channel runs from Scarborough Lane to Margaret Street before disappearing beneath the park briefly and joining the Production Avenue inlet channel.

At the southern end of the central precinct, an open swale / channel connects to the ponds from the Production Avenue light industrial area. This inlet is large in capacity but upon review by Storm Consulting appears to be damaged. There are signs of fast flowing water along this channel.

Alongside the main ponds, there are several inlets which are piped under playing fields and feed directly into the water body. These inlets are often visually intrusive and many are damaged and in need of maintenance or renewal.

With approximately 30 stormwater outlets releasing water into the channels and ponds, it is not currently feasible to install pollutant traps to every inlet point, particularly with access requirements making maintenance operations difficult.

Future investigations or studies could complete analysis work to identify outlets with large upstream catchments and those with typically higher gross pollutant loads. These inlet points could then be targeted for strategic upgrades and installation of pollutant traps at sensible locations (such as at the park/urban interface) to improve water quality within the ponds.

2.4.2 Outfall

The ponds are an integral part of the urban drainage system for this area and drain to Botany Bay from Tonbridge Reserve through three (3) 1350mm outfall pipes.

The restricted nature of the piped connection to Botany Bay from Scarborough Ponds and periodic tidal influences mean that the Tonbridge Reserve area is prone to flooding.



Typical stormwater inlet on Civic Ave



Naturalised drainage channel near Civic Ave



Damaged concrete inlet pipe empties directly into southern Scarborough Pond



Fenced concrete drainage channel at Scarborough Lane / Wilson Street



Open drainage channel from Production Lane in Scarborough Park Central



Outfall towards Botany Bay in Tonbridge Reserve

2.4.3 Tidal influence

The Scarborough Ponds are brackish and subject to tidal influence. The tidal waters assist in mixing and re-oxygenation of the ponds, although stratification and limited amplitude restrict the effectiveness of this process.

The southern areas receive the greatest benefit from tidal mixing and this reduces towards the north. Downstream flow is periodically restricted by incoming tidal flows moving in the opposite direction to the freshwater that discharges from the catchment.

When combined with the capacity limits of the outfall to Botany Bay, tidal influences in the system trigger slow discharge and causes flood waters to be held in the system for long periods. This may cause elevated water levels and exacerbate flooding at certain times.

2.4.4 Geotechnical influence

The borelog information examined in the Geotechnical reports provided describe the typical profile to be comprising primarily sands and silts with varying degrees of peats and clays. The classification is typically silty sand to clayey sands and is overlain by fill in some areas.

Sands generally have a relatively high hydraulic conductivity ideal conditions for infiltration. Council has recognised this and encourages infiltration in new developments in their Stormwater Design Code. Within the park, the infiltration rate is significantly reduced by compaction of the surface through vehicular or pedestrian traffic, including the playing fields. This must be taken into account when developing long term maintenance plans or strategies.

2.4.5 Groundwater table

The ground water table in Scarborough Park is relatively high with the depth typically being in the vicinity of 1m to 2m, depending on the elevation. The groundwater appears to be generally linked to the water levels in Scarborough Ponds.

No evidence of this has been cited to confirm this, however, the sandy soils below the surface typically yield a low groundwater table gradient. The high groundwater table will limit opportunities to improve drainage by piping. Infiltration or overland flows would likely be the most effective drainage solution employed at this site.

2.4.6 Site drainage

Historically, some areas of sporting fields have been poorly drained which limits playability. Improvements have been made to sports field drainage in recent years which appears to have improved conditions.

The high water table challenges traditional drainage solutions however the sandy soils will facilitate infiltration to manage nuisance ponding. Slit drainage remains a feasible option as it also overcomes soil compaction issues. The compaction may also be managed with other field management techniques such as aeration.

Alternative field drainage may include sand grooving of overland flow routes towards pits where it could then filter into groundwater or be piped to the waterway (noting the limitations of the high water table).

2.4.7 Flood Storage

As previously noted, Scarborough Park is a flood storage area due to the low lying nature of the area combined with restricted outlet capacity, and flooding is also observed periodically in neighbouring properties. Therefore, any filling in the park area will reduce flood plain storage and may have adverse impacts on surrounding properties and should be avoided.

Providing additional flood storage within the park may reduce flooding on surrounding properties and should be investigated in any future projects in the open space area.

2.4.8 Flood Conveyance

Increasing urbanisation of the catchment in the past has exceeded the capacity of stormwater infrastructure to drain the rare storm events to Botany Bay without inundating private property. The Bayside West Floodplain Risk Management Study and Plan conducted high level investigations of a number of options to reduce flood risk, but these were rejected after assessment and no proposals other than additional signage and information were recommended within the park.

A key success factor of this masterplan is maintain the current capacity to convey flood flows. Therefore, there must be no restriction to the floodways that may cause an increase in flood levels during flood events. Since Scarborough Ponds acts as a large detention basin, the velocities are expected to be low and therefore increases in flood levels will be more sensitive to a reduction in flood storage.

Generally, landscape installations such as furniture, pathways and planting in the Scarborough Ponds area will be acceptable if they do not reduce the overall flood capacity of the system. Detailed design proposals should ensure that there is no overall loss of floodplain storage throughout the open space area, and no encroachment into floodway areas.

2.4.9 Flood risk

Development within the catchment is predominantly low to medium density residential development with localised commercial and industrial development. The areas adjacent to the ponds have been landscaped into open spaces suitable for passive recreational activities. Some residential development on the eastern side of the ponds comes very close to the ponds with minimal vegetative buffer.

Storm Consulting has provided a thorough analysis and made recommendations after an on-site study.

Current Issues

- The entire open space area within Scarborough Park is subject to flooding during flood events, with flood waters also extending into neighbouring properties. Whilst periodic flooding within open space areas is not a problem itself, the design of the open space should consider safe routes for pedestrians and encourage community awareness of possible risks.
- Slow discharge of floodwaters from the wetland and ponds system exacerbates flooding within the park. Capacity limits of the outfall to Botany Bay and tidal influence causes flood waters to be held in the system for long periods.
- Flooding and water ponding in the west of Tonbridge Reserve is a regular issue due to low lying land and the congested outfall. Several pavilions which fall within the flood zone are not well-used due to disrepair and their location on wet ground. Replacement pavilions should be relocated to improve functionality. Any proposals in this area must not reduce capacity of the water channel and surrounding flood zone.
- Water ponding to the western side of the pitches in central Scarborough Park due to compaction and landform preventing water running off into nearby drainage channel.

Recommendations

Improve infiltration

Bayside Council's Stormwater Design Code seeks to limit any increase in runoff due to new development. This is to be achieved by either on-site detention, or infiltration. Much of the Scarborough Ponds catchment is on sandy soils and facilitates efficient infiltration. Future development in Scarborough Park should maximise infiltration and minimise hardscape surfaces that prevent localised infiltration of water.

Channel / Outflow improvements

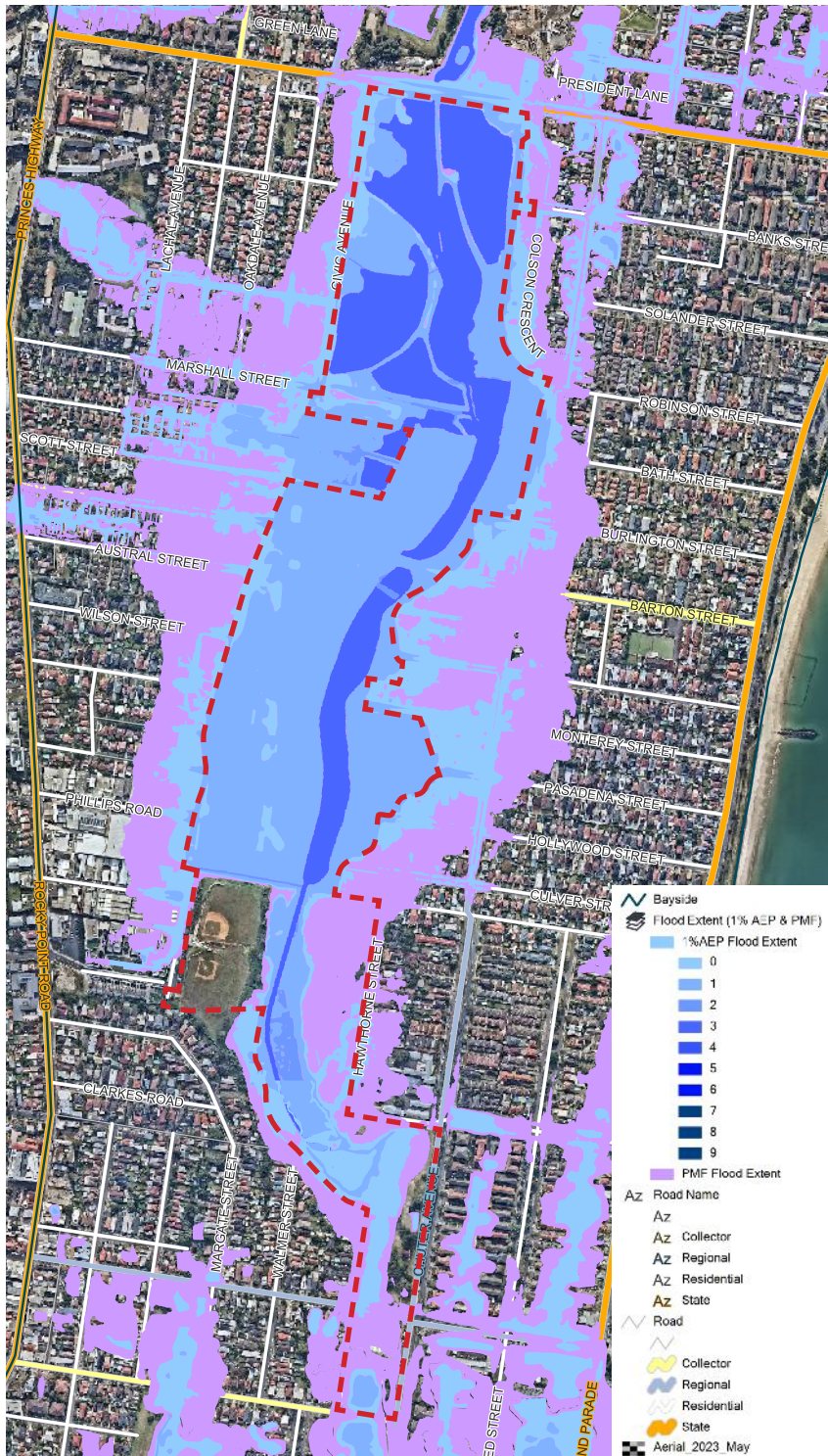
There is little scope for channel improvements in the Scarborough Ponds catchment. Because of the nature of flooding in this catchment, the main flow path has wide overbank areas which provide adequate capacity for excess flows.

Flood Protection Levees

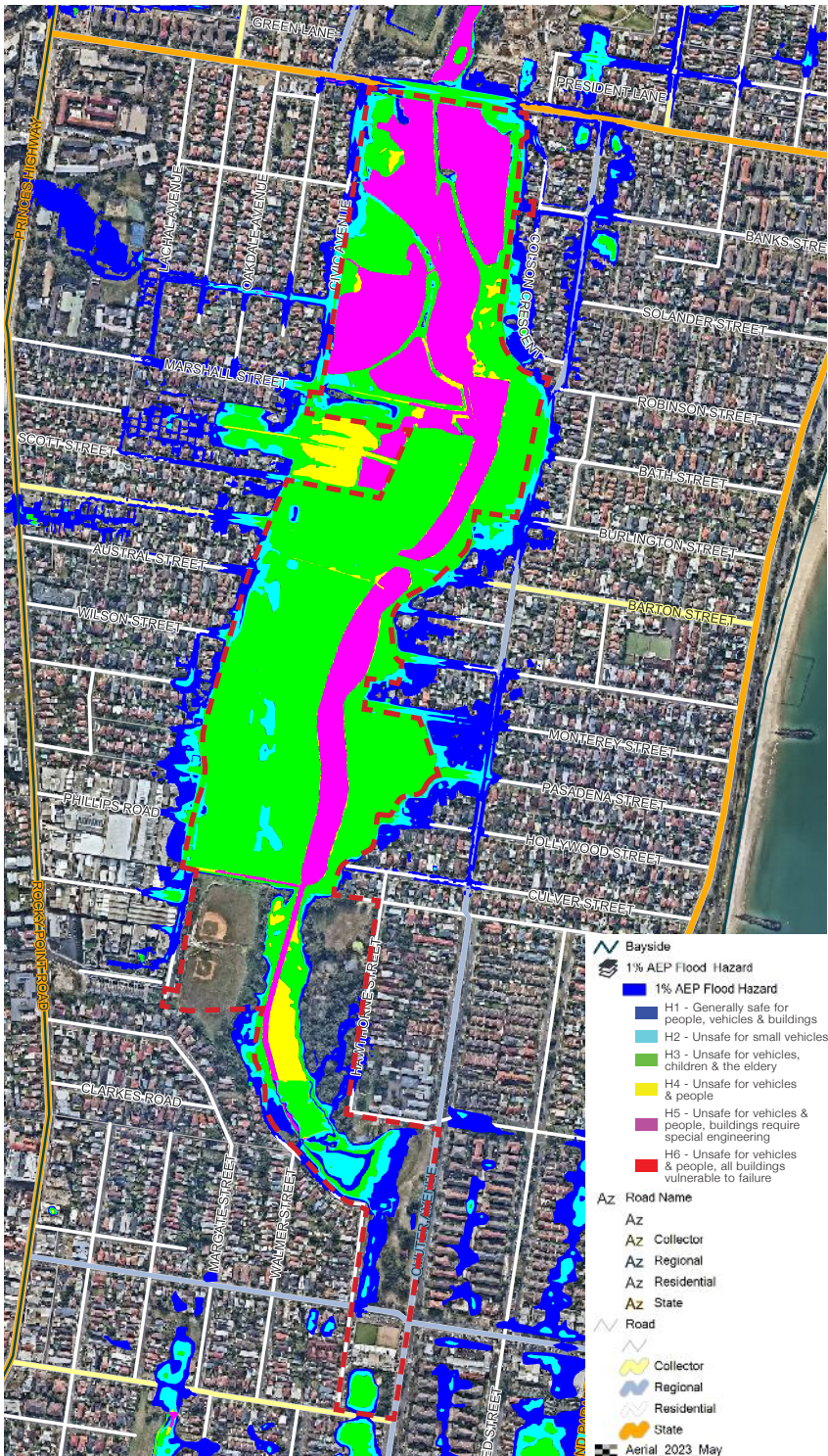
Levee banks are typically constructed to exclude floodwaters up to a pre-determined design level. In built-up areas levees may take the form of floodwalls built of reinforced concrete or other materials.

- Phillip Road Levee - Option 18B (Floodplain Management Study)
This option would involve constructing a levee at the back of the houses and industrial properties at the eastern end of Production Avenue, Phillips Road, Sunbeam Avenue, Margaret Street and Maders Avenue.

Flood protection levees can be a high cost solution, made more difficult to implement within Scarborough Park due to the demand for sporting and general open space amenity and the amount of space required to construct a levee. This option is covered in more detail within the Floodplain Management Study, but is not currently considered an appropriate solution for Scarborough Park and has been excluded from the masterplan at this stage. A future study may investigate feasibility for future inclusion.



Bayside flood extent mapping



Bayside flood hazard mapping

2.4.10 Water quality

Previous reports note water quality issues within these ponds including temperate inversions. Temperature inversion is when water low in oxygen located at the bottom of the ponds flip to the surface which typically causes fish kills and noticable odour. Council has installed mechanical aerators within the ponds to try and reduce the risk of temperature inversions. A lack of oxygen is a key issue for the pond water quality which is exacerbated by stratification and stormwater inflows high in nutrients. Stratification is managed to some degree by mechanical aerators and passively with tidal mixing.

Some measures have been undertaken by Council to manage pollutants including installation of nets on stormwater outlets, gross pollutant traps (GPTs) in some areas, floating traps (Bandalong) as well as floating wetlands in Bicentennial Park upstream.

Storm Consulting provided analysis and made recommendations as follows after a 2017 on-site study.

Current issues

- Stormwater inflows from urban catchments bring more organic materials which consume oxygen and bring sediments, nutrients, litter, heavy metals and hydrocarbons.
- Lack of oxygen within the pond waters
- Limited success of installations such as GPTs due to difficulty and/or infrequent maintenance. Bandalong traps have significant visual impact and specific maintenance requirements which impact park surrounds. Opportunities for works within the larger catchment should be explored, utilising recent technological improvements to help manage water quality.

Recommendations

- Review the performance of the existing GPTs and implement a GPT strategy that is palatable to the state government stakeholders as well as Council.
- Restoration and optimisation of the performance of existing deteriorated wetlands. This may be enhanced by constructing semi-natural wetlands upstream of the main ponds (just south of President Avenue) where there are significant stormwater inlets draining to the ponds. This will then afford some protection downstream by delivering better water quality to the existing systems where habitat opportunities could be improved.
- Creation of shallower banks and linear wetlands along some of the pond will provide valuable marginal habitat to the pond edges and may increase flood capacity. Installing this at stormwater outlets before water is directed to the wetland is likely to improve the quality of the inflows and create diversity of habitat.

Further recommendations on water quality must be made in parallel with the requirements in the Coastal Management Act and Resilience and Hazards SEPP.

Scarborough Park is covered by the Georges River Catchment Coastal Management Program (GRCCMP) which is currently being developed by the Georges Riverkeeper councils group.

2.5 Climate change

2.5.1 Overview

Climate change has the potential to impact Scarborough Park in many ways, including:

- Increasing temperatures, including more extreme heat days
- Variable rainfall, including more rain in autumn and less rain in winter and spring, and less rainy days overall, with more extreme rain events
- Rising sea and waterway levels
- Ocean acidification

If not arrested, long term impacts of climate change and increased sea levels may see much of the park become unusable due to its low-lying nature.

2.5.2 Expected climate change impacts

Increasing temperatures

Temperature increases impact the natural environment, putting pressure on established ecosystems. Some tree species will start to see a decline in health and longevity, impacting canopy coverage and maintenance demands.

Increased temperatures in the marine ecosystem impact water quality and can exacerbate problems with oxygen content and chemical availability. This warming may lead to big changes in coastal ecosystems, affecting both flora and fauna species that inhabit these areas, potentially causing extinction of some species.

Variable rainfall

Coastal areas are vulnerable to increases in the intensity of storm surge and heavy precipitation, with climate change likely to bring heavier rainfall events within the Sydney metropolitan area, increasing runoff and flooding.

The increased variability in rainfall will lead to longer wet and longer dry spells and put pressure on established plants and landscapes, particularly when combined

with increased temperatures in summer.

Increased chance of more significant drought conditions into the future may change salinity levels within the wetland due to reduction in stormwater flows entering the system. An increase in extreme rain events will put pressure on the estuarine system, flushing additional pollutants into the ponds and risking damage to pollutants control devices.

At a social level, extreme rain events put organised sport on hold and create problems with waterlogged fields remaining unplayable for community sport

Rising sea levels

The Scarborough Park ponds system is a tidal system, and as such, is highly vulnerable to sea level rises and catchment in-flows. The projected increase in sea levels will see additional salt water incursion into the pond system, impacting water quality, potentially creating erosion problems and impacting freshwater ecosystems upstream.

When combined with extreme rainfall events, a high groundwater table will lead to much of the park area being waterlogged and unusable for longer.

Longer term, increasing levels of inundation may eventually require some facilities to be relocated to higher ground outside the park boundaries. Migration of the coastal wetlands ecosystem may need to be considered, particularly in regard to the requirements of the Coastal Management Act

Ocean acidification

The impacts of ocean acidification in Scarborough Park may be minimal, but with increased tidal flows, the system may no longer be able to buffer changes and ‘resist’ further acidification.

Run-off from large rainfall events traditionally carries a high nutrient load which also contributes to acidification in waterways, further concentrating the problem.

2.5.3 Climate change projections

The following projections data is extracted from the Interactive climate change projections map provided by AdaptNSW. Data is for metropolitan Sydney.

Projected change in rainfall

	Annual	Summer	Autumn	Winter	Spring
Near future 2020-2039	+0.4%	-0.2%	+11.8%	-4.7%	-5.7%
Far future 2060-2079	+6.5%	+10.7%	+13.9%	+1.0%	-4.9%

Projected change in temperature

	Annual mean	Annual max	Annual min	Summer	Autumn	Winter	Spring
Near future 2020-2039	+0.68°C	+0.70°C	+0.66°C	+0.90°C	+0.61°C	+0.42°C	+0.77°C
Far future 2060-2079	+2.08°C	+2.10°C	+2.11°C	+2.41°C	+2.02°C	+1.66°C	+2.24°C

Projected sea level rises

The high scenario is in line with recent global emissions and observations of sea-level rise. This high scenario aligns to RCP 8.5, which has a median sea level rise of 0.84 metres by 2100.

The very high scenario represents a Global mean sea level rise above the likely range – approaching 2 m by 2100 and 5 m by 2150 under a very high Green House Gas emissions scenario (SSP5-8.5) (low confidence) which cannot be ruled out due to deep uncertainty in ice sheet processes.

Scarborough Park is covered by the Georges River Catchment Coastal Management Program (GRCCMP) which is currently being developed and is due for completion in late 2024. The GRCCMP will include a hazard risk assessment for sea level rise and coastal inundation, and coastal flooding, identifying impacts to these areas in more detail.

2.5.4 Adapting to climate change

Open space provides an important asset to adapt to climate change. Scarborough Park can contribute to climate change reduction in the following ways:

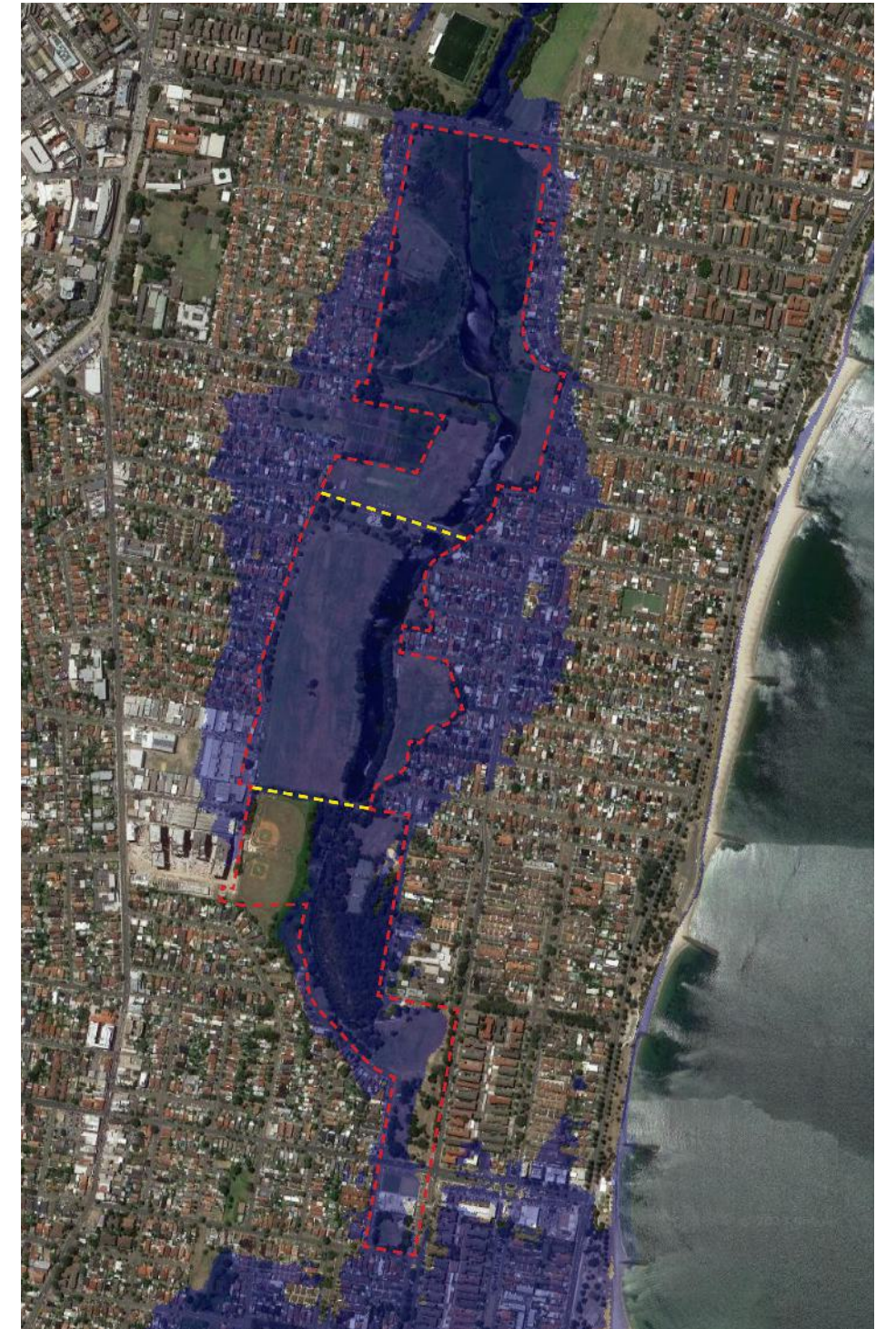
- Encourage active transport by providing safe, comfortable and connected routes for locals and visitors, reducing reliance on cars by local residents.
 - Increase tree canopy cover to enhance biodiversity, increase comfort for park users and provide a cooling effect to the surrounding area.
 - Preserving the coastal wetland ecosystem and allowing for increased storage of water in the estuarine system where possible.
 - Locating new facilities on higher ground to maximise climate resilience.
 - Provide diverse facilities which serve the local community, reducing the need for residents to travel to other open space areas for their recreation needs.
 - Enabling retreat of coastal wetlands into a planned area (CMAAct and Chapter 4 Resilience and Hazards SEPP requirement)
- Council will need to consider the ongoing management impacts of climate change on its assets. Considerations may include:
- Emissions created through maintenance regimes e.g. regular mowing of grass surfaces.
 - Cost of replacement or repairs required to infrastructure damaged by storm events or tidal surges.
 - Increased maintenance needs such as watering during the establishment of landscaped areas.
 - Planting palletes with a preference for native plants which allows for future warming and varied rainfall patterns.



Current high tide
Mapping obtained from Coastal Risk Australia, June 2023 (coastalrisk.com.au/viewer)



Projected highest tide in 2100 with a 0.84m increase (medium confidence)
Mapping obtained from Coastal Risk Australia, June 2023 (coastalrisk.com.au/viewer)



Projected highest tide in 2100 with a 2m increase (low confidence)
Mapping obtained from Coastal Risk Australia, June 2023 (coastalrisk.com.au/viewer)

2.6 Environment & biodiversity

2.6.1 Overview

Despite the vast reduction in the original extent of the area's native vegetation due to channelisation of drainage lines and dredging of wetlands, its diverse landscape character has resulted in habitat for a surprising variety of native plants and animals in remaining natural and open space areas.

Traditionally, urban areas have been regarded as locations of low biodiversity. However, there is increasing evidence that urban waterways, native vegetation remnants, and native and exotic trees in parks, streets and gardens provide habitat for a range of fauna species which are resident (eg frogs and possums), migratory (some shorebirds and microbats), and transitory (Grey-headed Flying Fox).

Many of Bayside's open spaces, including Scarborough Park, have high conservation values because they provide habitat for internationally significant migratory shorebirds, threatened plant and animal species, and fish spawning grounds for Botany Bay. Tonbridge Creek is the second-most important fish nursery in Sydney, with significant diversity of species.

Hawthorne Street Natural Area is a particularly important ecological area and is recognised as the best example of Kurnell Dune Forest remaining in Sydney. It is also home to three species of ferns, two of which do not occur elsewhere in the St George area.

Local biodiversity also contributes significantly to the quality of life for urban dwellers and the sustainability of the City in many ways.

2.6.2 Relevant legislation & planning policies

The key NSW government legislation and policies which impact the masterplan and ongoing management of the park include:

- Biodiversity Conservation Act 2016
- Coastal Management Act 2016
- Fisheries Management Act 1994
- State Environmental Planning Policy (Resilience and Hazards) 2021

2.6.3 Local policies

The masterplan draws on a number of existing studies and council policies to establish the key ecological values of the park and help determine the direction of the masterplan document.

Key council policies include:

- Bayside Priority Green Grid Corridors Spatial Framework (2021)
- Environment and Resilience Strategy 2032 (2024)
- Rockdale City Council Natural Areas Restoration Plan (2015)
- Rockdale City Council Biodiversity Strategy (2014)
- Scarborough Park Conservation Management Plan (2014)

2.6.4 Endangered Ecological Communities

The following vegetation communities are listed under the NSW Biodiversity Conservation Act as Endangered Ecological Communities (EECs).

- Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Kurnell Dune Forest in the Sutherland Shire and City of Rockdale
- Sydney Freshwater Wetlands in the Sydney Basin Bioregion

Legend

- 01 TERRESTRIAL BIODIVERSITY AREA (BAYSIDE LEP MAPPING)
- 02 WETLAND AREA (COASTAL SEPP MAPPING)
- 03 WETLAND PROXIMITY AREA (COASTAL SEPP MAPPING)

2.6.5 Vulnerable fauna

A colony of Southern Myotis (*Myotis macropus*) roost in the forest of the Hawthorne Street natural area and forage over Scarborough Ponds and Tonbridge Creek at night, typically catching insects and small fish by raking their feet across the water surface.

The bats are listed as a Vulnerable species under the NSW Biodiversity Conservation Act 2016.



2.7 Key environmental legislation summary

Biodiversity Conservation Act 2016 (NSW)

The purpose of the Act is to ‘maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development’.

Key outcomes of the legislation relevant to this masterplan include:

- Maintain diverse ecosystems and quality of those ecosystems
- Support conservation in the context of a changing climate
- Assess the extinction risk of species and ecological communities, and identify key threatening processes
- Support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature
- Establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity
- Support public consultation and participation in biodiversity conservation

Three ecological communities present on site are listed as endangered within the Act. ‘An ecological community is eligible to be listed as an endangered ecological community if, in the opinion of the Scientific Committee it is facing a very high risk of extinction in Australia in the near future, as determined in accordance with criteria prescribed by the regulations.’

The masterplan and any detailed design work following the masterplan must consider impacts on the identified ecological communities and design to protect these areas and enhance their health, stability and resilience where possible.

One fauna species present on site is listed as vulnerable within the Act. ‘A species

is eligible to be listed as a vulnerable species if, in the opinion of the Scientific Committee it is facing a high risk of extinction in Australia in the medium-term future, as determined in accordance with criteria prescribed by the regulations’.

The masterplan and any detailed design work following the masterplan must consider impacts on identified fauna species and design to protect habitat and/or feeding areas to help ensure the ongoing survival of these native animals.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 2 of the Resilience and Hazards SEPP addresses Coastal Management, replacing the Coastal Management SEPP (2018). The aim of Chapter 2 is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area.

Coastal Wetlands and Coastal Wetland Proximity Areas are identified for additional development controls. Both of these land uses are mapped within Scarborough Park (refer to mapping adjacent).

Chapter 2 of the Resilience and Hazards SEPP requires that works are consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area including Coastal Wetlands and their Coastal Wetlands Proximity Area. This requires development consent for clearing native vegetation on land mapped as coastal wetlands, harm of native vegetation, earthworks, constructing a levee, environmental protection works and other development. This applies even if the clearing or works are not associated with any other development. The development controls for land mapped as coastal wetlands apply to all land use zones, including rural and urban zoned land.

In addition, as the clearing of native vegetation on land mapped as a coastal wetland is ‘designated development’ under the EP&A Act, it will require an environmental impact statement and public consultation before the relevant consent authority can determine the development application.

Any clearing of coastal wetlands would also trigger a requirement for an assessment under the Biodiversity Conservation Act 2016.

Threatened flora mapping

Source: Biodiversity Strategy (2014). Mapping prepared by Ecological Australia.

Legend

○ Threatened Flora Locations (ELA 2012 and Smith 2012)

Potential threatened flora habitat

▨ *Acacia pubescens* and *Dillwynia tenuifolia* habitat

Endangered Ecological Communities

■ Sydney Freshwater Wetlands in the Sydney Basin Bioregion

■ Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner bioregions

■ Kurnell dune forest in the Sutherland Shire and the City of Rockdale



Threatened fauna mapping

Source: Biodiversity Strategy (2014). Mapping prepared by Ecological Australia.

Legend

Potential threatened fauna habitat

□ Grey-headed Flying Fox, select Microbats and Powerful Owl habitat

■ Green and Golden Bell Frog habitat



2.8 Key environmental policies summary

Bayside Priority Green Grid Corridors Spatial Framework (2021)

The Green Grid Corridors Spatial Framework has been undertaken in alignment with the Sydney Green Grid Strategy to strengthen and enhance Bayside’s priority ecological corridors, along which open space and significant native vegetation is concentrated.

The Rockdale Wetlands Corridor is one of three key green corridors identified in the document. Scarborough Park

The Spatial Framework focusses on three key green grid corridors, of which the Rockdale Wetlands Corridor is located centrally, linking Georges River north to Cooks River via the Ramsgate and the Rockdale Wetlands.

Key Green Corridors are linked east-west by Green Street Connectors where WSUD initiatives and an increased tree canopy will aid revitalisation of isolated ecological spaces, by strengthening connection to the wider open space network. The Framework is driven by four key overarching corridor objectives.

- Bio-Cultural Objectives
- Movement: all the ways people move through their environment
- Blue Green Networks: all hydrological elements, natural and manmade
- Places for People: comprises of different places within the environment which the community needs to access day-to-day

There is opportunity identified to implement cultural narratives into open space within Green Corridors, integrating significant Aboriginal cultural heritage themes and Country narratives into the wider region.

Environment and Resilience Strategy 2032 (2024)

The Bayside Environment and Resilience Strategy 2024-2032 identifies and addresses the key environmental and resilience issues facing Bayside Council in order to deliver on the Community Strategic Plan theme of a “green, resilient and sustainable” Bayside.

This policy is designed to complement state and greater Sydney policies and vision documents, incorporating community feedback and applying these to the Bayside LGA.

The Environmental and Resilience Strategy:

- Proposes an environmental and resilience vision for Bayside
- Identifies priority environmental and resilience issues for Council to address

Rockdale Wetlands Corridor and Scarborough Park are identified as key open space corridors within the strategy.

The report identifies two categories of resilience risks - acute shocks and chronic stresses.

Acute shocks relevant to Scarborough Park include bush fire, heatwaves, coastal flooding, storms, and drought. Chronic stresses include sea level rise, loss of biodiversity, urban heat islands, and transport diversity.

Appropriate management strategies for Scarborough Park may include

- Increasing tree canopy cover
- Providing active transport infrastructure within the park
- Allow for and manage storms and flooding within the park system while maximising user safety
- Protect habitat and biodiversity, including monitoring and education programs if appropriate
- Consider impacts of sea level rises on wetlands system within the park

RCC Natural Areas Restoration Plan 2015-2020 (2015)

The Rockdale City Council Natural Areas Restoration Plan 2015-2020 (2015), details species which currently inhabit each area of the park as well as a management strategy to support their habitat. The key findings are that:

- The Scarborough Park natural area supports Low-Moderate terrestrial fauna habitats but high quality aquatic habitat and is identified as Key Fish Habitat under the NSW Fisheries Management Act.
- The open water and wetland vegetation also provide hunting, foraging and shelter habitats for the threatened micro-bats including *Myotis macropus* Fishing Bat (recorded within the Reserve), and aquatic and terrestrial species of birds (listed as a vulnerable species under Schedule 2 Part 1 of the NSW TSC Act, 1995.)
- Dense ground layer vegetation provides shelter and foraging recourses to reptiles. The lack of trees means habitat for arboreal mammals is scarce.
- Flora habitats supported by the park are quite unique within the locality with *Melaleuca* Scrub vegetation found nowhere else in the LGA, and no other natural areas supports as large an occurrence of Sydney Freshwater Wetland vegetation.
- Flora and fauna habitats supported by Hawthorne Street Natural Area are of moderate to high value to native species.
- Thickets of dense exotic vegetation (e.g. *Lantana camara*) provide perching and foraging habitat for small birds, and blossom produced by eucalypt and banksia species provide birds and bats with food resources. Mature eucalypts bearing, or with the future potential to bear, hollows provide habitat for arboreal mammals and larger birds.

- Open spaces provide skinks and geckos with basking opportunities.
- As with the remainder of the Scarborough Ponds system, the watercourse is identified as a key fish habitat (WetlandCare Australia 2011) and a pipe running between the southern extent of the watercourse and Botany Bay provides for fish passage and exchange of tidal waters.
- The majority of the remnant vegetation within the Hawthorne St Natural Area is considered to be habitat for the threatened flora species *Syzygium paniculatum* (ELA 2014). The species has previously been recorded in the area, with the most recent confirmed recording in 2013 (Ecological Australia 2013). *S. paniculatum* is not known to persist as a soil stored seed bank for a significant period of time, therefore if the mature specimens are no longer present, the likelihood of the species occurrence in the Reserve is greatly reduced.
- As a result confirmation of the plants presence is required to ensure appropriate levels of management are undertaken, and resources are not wasted should the plant no longer be present.

Other information collected on site:

- European Honey Bees were evident on site. Although bees are great for biodiversity, non-native bees pose a risk to native flora and fauna. The *Tetragonula carbonaria* native bee should be promoted through the site.

Recommendations

- Due to the rarity of the communities it is important that resources are allocated to ensure their decline in ecological heath is arrested, and eventually the vegetation is improved.
- Staged weed removal and revegetation within and surrounding the large expanses of Sydney Freshwater wetland vegetation within the northern

portion of Scarborough Park, should be undertaken following the consolidation and improvement of the areas of *Melaleuca* Scrub vegetation.

- Vegetation condition mapping is to be updated yearly as part of monitoring activities

Note

Since completion of the Rockdale City Council Natural Areas Restoration Plan, Bayside Council has implemented a program where stingless *Tetragonula carbonaria* native bees hives are provided to residents. The bees contribute to the local biodiversity by pollinating plants as they feed on pollen and nectar.

Bayside Water Management Strategy (2020)

Refer to section 2.3 for document summary.

Rockdale Biodiversity Strategy (2014)

The Biodiversity Strategy will play a central role in the thinking behind the park masterplan. It will act as a high level guide to how the open spaces should be shaped, with an emphasis being placed upon reducing the vulnerability of Rockdale’s biodiversity through restoration of natural areas, improvements to waterway conditions and creation of better ecological linkages. The strategy identifies Central Scarborough Park as an:

“important link in the central section of the Wetlands Corridor with significant potential to improve riparian habitat through revegetation with indigenous species. Consists primarily of filled land comprising of mown open space/parkland and large areas of weeds surrounding open water areas fringed with highly degraded wetland vegetation. Habitat for waterbirds such as ducks and moorhens and identified as an important nursery/breeding area for fish entering the Wetlands Corridor from Botany Bay via large underground pipes at Florence Street.”

The goals and targets set out in the strategy will influence the design in an effort to significantly improve biodiversity quality in the park and surrounding area.

The key points identified in the report are that:

- Scarborough Park is an important link in the central section of the larger Wetlands Corridor with significant potential to improve riparian habitat through revegetation with indigenous species, between the Cooks River in the North and Georges River in the South.
- The park consists primarily of filled land comprising of mown open space/parkland and large areas of weeds surrounding open water areas fringed with highly degraded wetland vegetation.
- Scarborough Park provides valuable habitat for waterbirds such as ducks

and moorhens and is identified as an important nursery/breeding area for fish entering the Wetlands Corridor from Botany Bay via large underground pipes at Florence Street.

- The north of the park is characterized by Freshwater wetlands, identified as an Endangered Ecological Community of the Sydney Basin Bioregion. Mangroves, interspersed with coastal saltmarsh species line sections of the creek line. It supports a diverse range of fauna habitat, including estuarine habitat for aquatic species such as fish and hollows for mammal and bird species.
- Hawthorne Street Natural Area supports two endangered vegetation communities: Kurnell Dune Forest and Swamp Oak Floodplain Forest in good to very good condition. It is also known habitat for the threatened plant species Syzygium paniculatum.

Rockdale Biolinks Study (2007)

This report builds on information completed by various consultants over the last decade and provides a thorough overview of the characteristics and condition of various remnant areas and potential linkages throughout the city.

“In a tough urban environment, it is envisaged that BIO-LINKS will enhance biodiversity protection directly by providing habitat, food, nesting resources and movement pathways for fauna. The enhanced landscape also has the potential to provide recreational and social benefits for the community.”

The study identifies that simple changes to management processes and treatment of watercourses focussing on good ecological output create the broad linkages required between habitat areas for biodiversity to flourish.

Identified threats

- Weed invasion.
- Pest animals, including exotic ducks, black rats, foxes & plague minnows.
- Uncontrolled public access & trampling.
- Polluted stormwater reducing water quality in wetlands.
- Poor water circulation creating anoxic conditions in some ponds.
- Too frequent fires.
- Refuse dumping.
- Mowing & removal of leaf litter.

Recommendations - Barton Street area

- Improvement of fish passage through culvert retrofit on Barton St - wet/dry culvert liaise with Fisheries (DPI), improvement of Water Quality (WQ) with Stormwater Quality Improvement Devices (SQID) on Barton St
- Additional planting in Scarborough Pk north and south of Barton St to improve linkage, (2,500m2 landscape planting)
- Clump plantings intermittently within

park

- Enforce no duck-feeding rule to improve water quality

Recommendations - Scarborough Park, central precinct

- Improve lateral connectivity to Botany Bay via Pasadena, Hollywood, Monterey, Scarborough, Chuter Ave

- Street tree planting/retro-fitting, Island planting

Recommendations - Leo Smith Reserve

- Improve edge/interaction with Hawthorn St Natural Area via review of management practices and strategic planting

Recommendations - Hawthorne St natural area

- Review of management regime in adjoining areas
- Weed control
- Engagement of Ramsgate Public School
- Improvement of corridor to south including secondary corridors and street planting
- Review culvert at Ramsgate to improve fish passage and general fauna passage - wet/dry culvert
- Island plantings for bat and possum species present

Recommendations - Tonbridge Reserve

- Extend Hawthorne Street Natural Area
- Clumping plantings
- Secondary corridors with adjoining houses

Habitat and vegetation management strategies

The report identifies that:

“The management of vegetation with both public reserves / open space areas and private lands is a key component of the overall biodiversity issues in the LGA and the establishment of bio-links.

Maintenance of appropriate levels of vegetation structure, functions and species composition is critical for maintaining a diverse range of habitats for fauna and flora species. Generally the more diverse the vegetation structure and habitats are within an area the more diverse the fauna diversity will be.

Vegetation outside of designated bushland reserves, such as areas landscaped with native species, treed roadways and open space areas provides a variety of foraging and shelter features for a large variety of fauna. These areas may provide the only vegetated linkages to bushland reserves and therefore the maintenance or improvement of the vegetation connection might be an important component for fauna species dispersing from or to the bushland area.”

The masterplan which follows takes this into account, offering a variety of extension and re-establishment opportunities to create and improve biolinks through the park.

2.9 Heritage and conservation assets

2.9.1 Policy framework

Bayside Local Environmental Plan 2021

The following items are identified in the Heritage Map contained within the LEP document.

Scarborough Park Conservation Management Plan (2014)

All of the key conservation assets, including valuable trees are discussed in depth within the Scarborough Park CMP. Included within the document (and referenced below) is an assessment of each asset's value and tolerance to change. This information will significantly influence the design of the masterplan.

2.9.2 Overview

Scarborough Park is a historic park in Sydney, retaining significant post-settlement heritage assets within the park boundaries. The most notable heritage items are located in the northern and southern precincts, with the central precinct undergoing the most drastic changes over time. Patmore Swamp, Hawthorne St Reserve and various fig tree plantings are all heritage listed at local level.

In addition, state heritage listed Toomevara Lane Chinese Market Gardens are located immediately adjacent to the park in the northern precinct. Although currently visually separated and screened from the park, potential impacts on this item must be considered at both masterplan and future detail design stages.

Legend

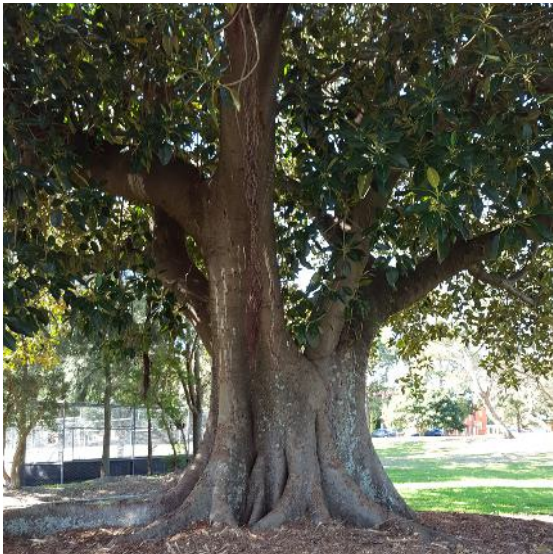
- 01 RAMSGATE FIG TREES
- 02 HAWTHORNE ST RESERVE
- 03 PATMORE SWAMP
- 04 TOOMEVARA LANE CHINESE MARKET GARDEN

2.9.3 LEP heritage table summary

Item	Item name	Address	Property Description	Significance
I334	Patmore Swamp	99 President Avenue (part of North Scarborough Park)	Lot 14, DP 20365; Lot 7072, DP 93145; Lots 199, 473 and 536, DP 752056; Lots 1 and 3, DP 1113262	Local
I256	Toomevara Lane Chinese Market Garden	29A Toomevara Street	Lot 5, DP 568192; Lot 1, DP 723897	State
I339	Hawthorne Street Reserve/ Leo Smith Reserve	99 President Avenue (Scarborough Park, off Hawthorne Street)	Lot 14, DP 20365; Lot 7072, DP 93145; Lots 199, 473 and 536, DP 752056; Lots 1 and 3, DP 1113262	Local
I340	Fig trees	99 President Avenue (South Scarborough Park, immediately north of Ramsgate Road)	Lot 14, DP 20365; Lot 7072, DP 93145; Lots 199, 473 and 536, DP 752056; Lots 1 and 3, DP 1113262	Local



2.10 Listed heritage items



01/
Ramsgate Fig Trees

Many of the Fig trees immediately north of Ramsgate Road are historically and aesthetically significant. The planting of large specimen trees in this park is representative of the Garden City movement which influenced planned public parks and garden suburbs in Australia during the 1920's and 30's. By the late 1930s Rockdale Council had established a nursery in Scarborough Park where they raised trees for planting throughout the municipality.

The Fig trees are identified in the CMP as having high heritage significance, with low tolerance for change, and must be protected as an integral part of the park fabric.

Other early tree plantings including Norfolk Island Pines, Strawberry Trees, and various Pines & Cypress species remain within Rotary Park, likely dating from a similar period as the protected Fig trees.



02/
Hawthorne St Reserve

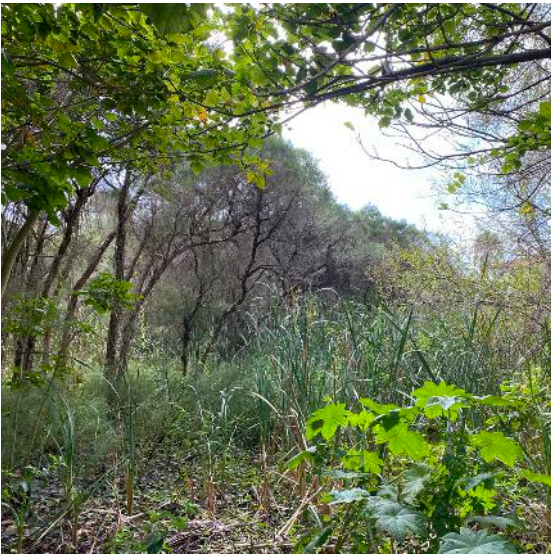
This natural area contains remnant Kurnell Dune Forest and Swamp Oak Floodplain Forest, both listed as an Endangered Ecological Community in the Biodiversity Conservation Act 2016 (replacing the Threatened Species Conservation Act 1995). It is subsequently considered to be of high conservation value due to the small areas of these vegetation communities left within the Sydney Bioregion. This natural area contains a record of the threatened flora species *Syzygium paniculatum* (Magenta Lilly Pilly) (National Trust 1988). The reserve is historically significant for providing an example of the type of landscape which pre-dated 19th century European settlement.

The small area of Kurnell Dune Forest at Hawthorne Street, Ramsgate "is the sole remnant of native sand vegetation of the beach ridge system (Outer Barrier) of western Botany Bay." Source: NSW Heritage Register.

The Tonbridge Creek channel carries additional importance for the unusual diversity of indigenous fish species –

both freshwater and saltwater – and is recognized by State Government as important habitat for fish breeding.

Urban development along the eastern boundary facilitates the influx of weeds into the area.



03/
Patmore (Pat Moore) Swamp

The northern section of Scarborough Park was once known as Pat Moore's Swamp ('Patmore Swamp'), part of 60 acres (240,000 m2) of land, granted to Patrick Moore in 1812. Converted to a public park in the 1870's. It was a former tidal wetland that was drained, filled and artificial lakes created with the assistance of the government relief programme during the 1930s depression.

The area is historically significant as part of a depression public works programme and technically significant for its contribution to the Central Scarborough wetland area which is an integral part of the wetlands corridor.

The M6 Stage 1 works have impacted the extent and context of Patmore Swamp, by raising levels along President Avenue, removing some portions of wetland and low-lying ground, and creating new structures within the park as part of the active transport corridor. Screen planting has also been removed from the northern boundary, adding to the visual impacts of the new works.



04/
Toomevara Lane Chinese Market Garden

The Toomevara Lane Chinese Market Gardens are of State significance as one of only few surviving 19th century market gardens in the Sydney metropolitan region. They remain largely in their original form and still employ traditional cultivation practices. The site is of significance for its association with the Chinese, German, Irish and Cornish communities and for its demonstration of a continuing pattern of land usage since the mid-19th century. The site is of further significance as containing one of five surviving 19th century market gardener's cottages in the Sydney metropolitan region and one of only four such cottages still attached to operating market gardens.

The garden is located to the North of Barton Street and can be seen from the southern side of the Civic Avenue Reserve.

2.11 Heritage & conservation management (Overall park)

2.11.1 Grading of Significance

The Conservation Management Plan (CMP) for Scarborough Park identifies individual elements of the park and provides gradings to assess cultural significance and contribution to the overall value of the park. A series of significance tables are included whcih have been replicated in this reort to help guide the development of the masterplan for the park.

The CMP provides the following infomation in regards to significance ratings.

Individual elements of the Scarborough Park are considered below where relative values are attached to each component based on their contribution to cultural significance. The five relevant ratings of High, Moderate, Low, Neutral or Intrusive relate directly to management obligations where items of High cultural value mean they should be conserved using best practice and their corresponding tolerance for change would be low. Those items assessed as having Low cultural value have a corresponding higher tolerance for change though always with respect to the overall context of the park setting that is of high significance (and reinforced by Council's relevant listings for the park as heritage items).

An explanation of each ratings is provided below.

- *High significance (item demonstrates an early or key phase in the park's development or closely associated with a key person or event) means that retention of the item is required;*
- *Moderate significance (item is a more recent introduction or is substantially altered but clearly contributes positively to or reinforces the park's landscape character): means that retention is desirable;*
- *Low significance (item is an introduction from the last 20-30 years, contributes little to the park's intrinsic landscape*

character or is difficult to interpret) means that retention is discretionary;

- *Neutral means that an item (usually of low significance) has little influence (positive or negative) on an appreciation of the park's intrinsic landscape character and its removal is discretionary; and*
- *Intrusive (item is detrimental to significance) means that the item should be removed or modified so that significance is less affected.*

2.11.2 Obligations arising from Significance

On the basis of a consideration of information mentioned in Sections 3 to 6, Scarborough Park has been found to hold considerable cultural significance for the State of NSW, a regional area as well as contributing to the broader network of community open space within the City of Rockdale (c/- Section 6). A consequence of this significance is that it carries an obligation to properly conserve Scarborough Park, particularly those aspects of the park that have been assessed as having a high cultural value. But what constitutes proper conservation in this case?

Conserving Scarborough Park entails ensuring that all of the tangible and intangible aspects of significance - including its extent, fabric, setting, amenity, uses, associations and meanings - are fully retained as part of its long-term management. In order to retain the recognised cultural significance of the park, sound conservation policies and management processes will need to be established. All future management of Scarborough Park must be based on its assessed significance and all future decisions regarding uses, events, activities, the introduction of structures and services must be with respect to the significance of individual components as well as that of the park as a whole.

2.11.3 Significance table

Overall park significance table (extracted from Scarborough Park Conservation Management Plan).

Site component	Significance	Tolerance for change
High archaeological sensitivity for Aboriginal cultural resources away from areas that have been dredged, drained by channels and levelled – should any such resources be found, their value would be:	Exceptional	Low
Original gazetted 1879 extent	High	Low
Scarborough Park as a community open space and recreational resource	High	Low
Scarborough Park as a wetlands resource	High	Low
Scarborough Park as a biodiversity resource	High	Low
Appropriate park areas as a focus for community festivals	High	Moderate
Car parks generally within Scarborough Park	Low	High
Existing amenities buildings/halls	Low	High
Environmental weeds & self-sown exotic vegetation	Intrusive	Remove

2.11.4 Significant conservation elements

Scarborough Park as a community parkland

The overall value of Scarborough Park as a community resource is highlighted in relation to the provision of general open and space and recreation resources. The park has a long history of community use, dating back to its gazetting in 1879.

Whilst car parking and amenities buildings and halls help facilitate community use of the park, these items have low significance individually and can be modified as required to facilitate community use into the future.

Aboriginal cultural resources

High levels of ground disturbance within the park for dredging, filling and levelling limits the likelihood of finding remnant items of cultural significance within the park. The overall park contains elements of cultural importance, with remnant coastal wetlands and terrestrial ecological communities. The ponds system is also an important fish nursery, with significance related to cultural fishing practices.

Biodiversity and ecology

The park contains remnant ecological communities, including three endangered ecological communities. These are important biodiversity resources which contribute to environmental values on both a site-specific and regional scale.

2.11.5 Impacts on masterplan

Community use

Scarborough Park should continue to provide diverse community appeal, including a variety of uses and recreation offerings to appeal to a wide section of the community. Large areas of the park are currently devoted to organised sports, but it is important that the park provides diverse recreation offerings to facilitate use by a wide cross-section of the community into the future.

Biodiversity

Existing valuable ecological areas are to be protected and enhanced where possible. Expansion of these communities may be considered where suitable areas are available adjacent. Any revegetation or regeneration projects should be undertaken with respect to naturally occurring species mixes and utilise local seed banks wherever possible.

Weed management

Weeds and self-sown exotic vegetation are identified as intrusive elements within the park. An ongoing program of weed removal should be implemented to manage weeds in a responsible manner, noting that in some areas of the park, dense weed cover is currently providing soil stabilisation and habitat for small birds and invertebrates.

New Buildings

The CMP states: *It is also desirable that no new buildings are introduced within the park unless it is strictly for the benefit of the park as a public recreational resource, is to replace an existing structure or structures and has a historical precedent for being in the park.*

Amenities buildings facilitate recreational use of the park and are generally acceptable. Any disused building should be removed from the park.

2.12 Heritage & conservation management (Northern Precinct)

2.12.1 Significance table

Northern precinct significance table (extracted from Scarborough Park Conservation Management Plan). Refer also to mapping adjacent.

Site component	Significance	Tolerance for change
Remnant Toomevara Lane market gardens site	Exceptional	Low
Park area within this precinct	High	Low
Moorefield Racecourse remnants	High	Low
Remaining areas of high watertable	High	Low
Regenerating wetlands vegetation (indigenous)	High	Low
Surviving plantings from interwar period (Barton St)	High	Low
Vistas along east-west streets to Botany Bay	High	Low
Broad and long ponds as a scenic resource	High	Low
Inclusion of playgrounds within precinct	High	Low
Current design of playgrounds	Low	High
Surviving plantings from 1950s/1960s period	Low	High
Surviving plantings from later 20th century period	Low	High
Lateral drainage trenches generally	Low	High
Amenities buildings	Low	High
Current locations of playgrounds within precinct	Neutral	High

2.12.2 Significant conservation elements

Moorefield Racecourse

Whilst most of the original racecourse, located to the south of President Avenue, was subdivided in the 1950s and built over with housing and educational facilities, the original route of the eastern segment of track is still walkable and lies within the park. There are also various low lying remains of buildings which were not completely removed which can be found amongst the overgrown vegetation.

Chinese Market Gardens

The heritage-listed Toomevara Lane Chinese Market Gardens are an important heritage asset located adjacent to Scarborough Park. The gardens are well-screened from the park, with little visual connectivity between the two.

Wetlands & ponds

The existing pond and wetland system has both ecological and heritage value, including both remnant coastal wetlands ecosystems, and dredged ponds created as part of early works in the history of Scarborough Park.

2.12.3 Impacts on masterplan

The line of the Moorfield Racecourse remains visible in the park and the current shared path works being delivered as part of the M6 upgrade works pick up the alignment of a portion of the race track. The southern section of the track is to highlighted with an informal pedestrian pathway to maintain public access along this route.

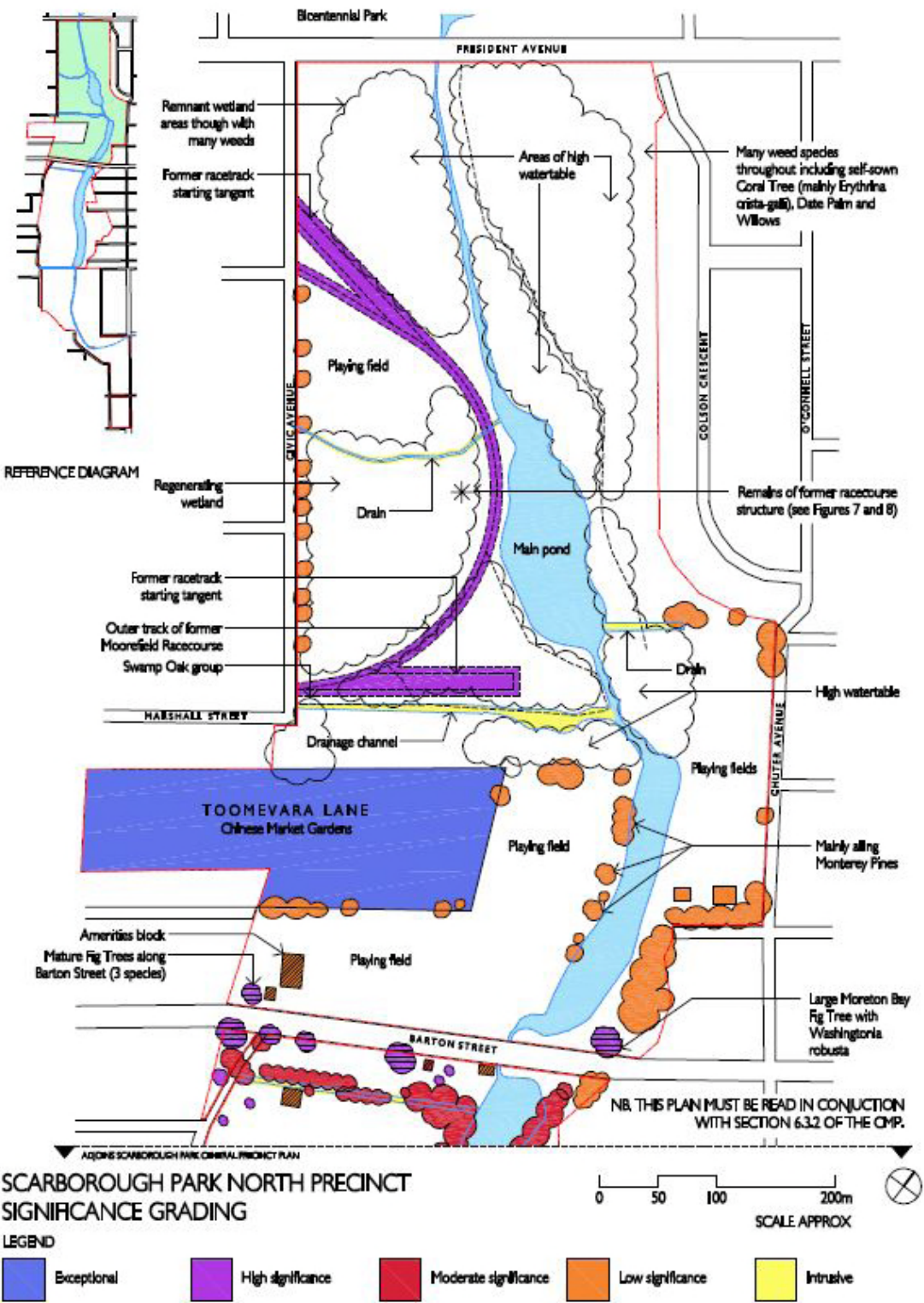
Some remnant exotic tree planting remains within the park which marks this route. Opportunity exists for additional avenue tree planting to reinforce the line of the historic track with vertical markers. Species selection for any tree planting needs to consider the ecological value and sensitivity of the adjacent coastal wetlands to prevent movement of tree species into this zone.

In addition to the racecourse, remnant structures and historic planting have been identified in the precinct. The masterplan proposes minimal changes in these areas.

M6 works

The works undertaken as part of the M6 Stage 1 project have removed a portion of coastal wetlands and area of high water table adjacent to President Avenue to facilitate the road project, resulting in a loss of some heritage fabric. Care needs to be taken into the future to protect what now remains of the park.

Replacement planting in the northern precinct of Scarborough Park included as part of the works should be protected into the future to as a general community resource and to mitigate visual and acoustic impacts on the park.



2.13 Heritage & conservation management (Central Precinct)

2.13.1 Significance table

Central precinct significance table (extracted from Scarborough Park Conservation Management Plan). Refer also to mapping adjacent.

Site component	Significance	Tolerance for change
Park area within this precinct	High	Low
Surviving plantings from interwar period (Barton St)	High	Low
Large Port Jackson fig near end of Scarborough St	High	Low
Vistas along east-west streets to Botany Bay	High	Low
Long ponds as a scenic resource	High	Low
Inclusion of playgrounds within precinct	High	Low
Surviving plantings from 1950s/1960s period	Moderate	Moderate
<i>Melaleuca quinquenervia</i> plantings along pond	Moderate	Moderate
Water Board building	Moderate	Low
Surviving Monterey Pine plantings	Low	High
Surviving plantings from later 20th century period	Low	High
Lateral drainage trenches generally	Low	High
Current design of playgrounds	Low	High
Current locations of playgrounds within precinct	Neutral	High

2.13.2 Significant conservation elements

Tree plantings

The precinct immediately south of Barton St contains several historic tree plantings with identified heritage value in the CMP:

An Oleander-lined drainage ditch, parallel with Barton Street, separates a narrow finger of land from the playing fields and within this space are four old fig trees (one Ficus macrophylla and three F. watkinsiana)... and palm groups including Washingtonia robusta, W. filifera... and Livistona australis. At the northwestern corner there is a mixture of mature and maturing plantings including one of the fig trees with a struggling English Oak

(Quercus robur) under it, another English Oak to the south, Brush Box (Lophostemon confertus), Casuarina glauca and a lone Phoenix sylvestris opposite Austral Street

Scarborough Park as a community parkland

There are several conservation values that relate to the function of Scarborough Park as a general community asset. Particular mention is made of the scenic value of the ponds, historic plantings from various periods in the park's history, and the general conservation of the park as an open space resource.

Another item relevant to this precinct is the inclusion of playgrounds within the park. The general inclusion of playgrounds is considered to be of high value, but it is noted that the current locations and design of playgrounds are not significant.

Therefore, there remains flexibility to ensure playgrounds are upgraded to meet current community requirements, including potentially relocating playgrounds to other areas within the park if the need arises in the future.

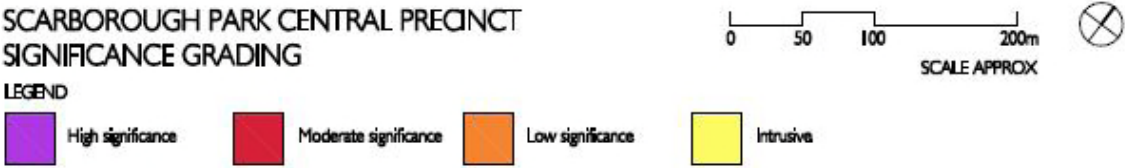
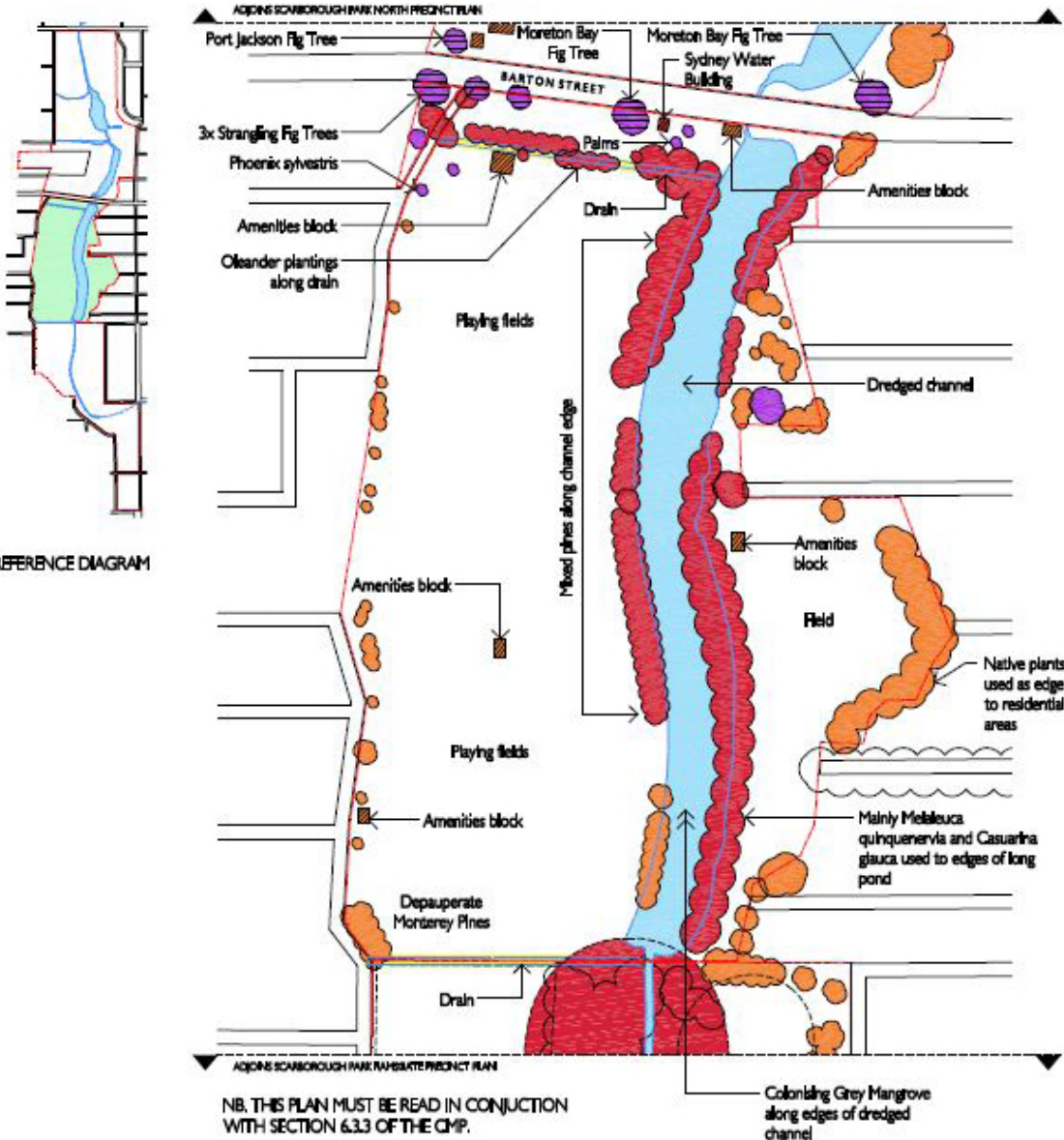
2.13.3 Impacts on masterplan

The central precinct retains no high significance heritage assets and has little restriction placed on the masterplan design.

Notwithstanding the heritage grading, the established tree plantings identified south of Barton Street should be retained where possible for both their historic and visual significance. Any new interventions within this areas should be located outside the impact zone of the established trees.



Water Board building on Barton St



2.14 Heritage & conservation management (Southern Precinct)

2.14.1 Significance table

Southern precinct significance table (extracted from Scarborough Park Conservation Management Plan). Refer also to mapping on following page.

Site component	Significance	Tolerance for change
Remnant Kurnell Dune Forest	Exceptional	Low
Remnant Coastal Sands Swamp Forest	Exceptional	Low
Resident Mouse-eared Fishing Bat or Large-footed Myotis (<i>Myotis macropus</i>) colony	Exceptional	Low
Scarborough Park as a regional fish nursery	Exceptional	Low
Indigenous fish diversity in Tonbridge Creek channel	High	Low
Park area within this precinct	High	Low
Those parts of Scarborough Park (and Pemberton Reserve) that correspond to Thomas Holt’s 1877 town plan	High	Low
Surviving 1880s plantings in Tonbridge St Reserve	High	Moderate
Surviving 1880s plantings in Rotary Park	High	Moderate
Surviving 1880s plantings in Pemberton Reserve	High	Moderate
<i>Ficus superba</i> var. <i>henneana</i> (rarity within the City of Rockdale as a large, mature tree)	High	Low
Remnant indigenous vegetation within Tonbridge Street Reserve and Rotary Park – includes <i>Banksia integrifolia</i> , <i>Eucalyptus robusta</i> , <i>E. botryoides</i> , <i>Monotoca elliptica</i> , <i>Glochidion ferdinandi</i> , <i>Casuarina glauca</i>	High	Low
Three Bunya Pines within natural area (see policy)	High	Moderate
Discrete group of Maritime Pines south of school (including the exceptionally large pine)	High	Moderate
Inclusion of playgrounds within precinct	High	Low
Remnant Monterey and Maritime Pines within the natural area and along the western edge of Hawthorne Street impinging on the natural area	Low	High
Current design of playgrounds	Low	High
Current locations of playgrounds within precinct	Neutral	High
Tennis court group within natural area	Intrusive	High

2.14.2 Significant conservation elements

Hawthorne Street natural area

The Conservation Management Plan (CMP) identifies the remnant ecological communities and the fauna they support as exceptional conservation resources for the park.

The CMP proposes an expanded area for conservation, including the ‘core’ area usually recognised as the Hawthorne Street natural area and expanding it to include a broader tract of related remnant vegetation, primarily to the west of the main ponds channel. This reflects a larger part of the earlier extensive wetlands complex that would have existed on the site prior to development.

Scarborough Park Tennis Courts

The CMP identifies the Scarborough Park Courts Facility as an intrusive element within the park due to its impact on the Hawthorne Street Natural Area.

Rotary Park

The southern part of this precinct represents a juxtaposition of the former 19th century park and persistent locally indigenous species that indicate the local extent of the former natural areas. Locally indigenous vegetation of importance includes a large old Bang Alley (Eucalyptus botryoides), Coastal Honeysuckle (Banksia integrifolia), a Cheese Tree (Glochidion ferdinandi) and an old Monotoca elliptica, all of which species can also be found in the natural area.

Of the remaining early plantations likely relating to the declaration of Scarborough Park in the 19th century there is a large Camphor Laurel south of the school and,

within Rotary Park, various large Moreton Bay and Port Jackson fig trees, two Stone Pines (P. pinea), a Norfolk Island Pine (Araucaria heterophylla), several old Arbutus unedo, two Juniperus virginiana, a Cupressus macrocarpa and a Plum Pine (Podocarpus elatus).

Closely associated with these, though now no longer considered part of Scarborough Park, is Pemberton Reserve with more Ficus rubiginosa and a Deciduous or Cedar fig (Ficus superba var. henneana) (southeastern corner) as well as Bunya (Araucaria bidwillii) and Hoop Pines (A. cunninghamii). It is not known if the Flame Tree (Brachychiton acerifolius) north of the bowling greens also relates to this phase.

Scarborough Park as a community parkland

There are several conservation values that relate to the function of Scarborough Park as a general community asset. Particular mention is made of the scenic value of the ponds, historic plantings from various periods in the park’s history, and the general conservation of the park as an open space resource.

Another item relevant to this precinct is the inclusion of playgrounds within the park. The general inclusion of playgrounds is considered to be of high vaue, but it is noted that the current locations and design of playgrounds are not significant. Therefore, there remains flexibility to ensure playgrounds are upgraded to meet current community requirements, including potentially relocating playgrounds to other areas within the park if the need arises in the future.

Ramsgate RSL Memorial Club

The Ramsgate RSL Memorial Club and adjacent council car park running parallel to Chuter Avenue are identified in the CMP as intrusive items as they occupy land which was formerly part of Scarborough Park.

The significant built form of the club blocks views and connections to Pemberton Reserve, cutting this portion of the park off from the remainder of Scarborough Park. This is deemed to be at odds with the conservation of Scarborough Park as a whole.

2.14.3 Impacts on masterplan

Hawthorne Street natural area

The need for a well-connected active transport network within the local area and specifically Scarborough Park, must take into account the importance of the Hawthorne Street natural area and exclude works which would have a detrimental impact on the existing ecological communities.

It is not considered appropriate to provide a hard-paved path connection through this area, or to encourage cyclists through this environment. An alternative route has been proposed utilising the existig road network around the edges of the park.

The additional of the wetland area to the west of the ponds channel as part of an expanded natural area is supported but must be balanced with the need for pedestrian circulation throughout the park. One option for minimising impacts through this area could be a raised wakway, minimising impacts on vegetation and improving flood resilience of the pathway connection.

It is noted that much of the area west of the ponds is subject to weed infestation, and an ongoing program of weed removal and regeneration should be implemented to improve the ecological value of this area.

Scarborough Park Tennis Courts

The Scarborough Park Court Facility was renovated and upgraded by Bayside Council in 2024 after falling into disrepair. Whilst it is preferable from a heritage conservation perspective to remove the courts, community consultation prior to the upgrade indicated that there was strong community support for the facility to remain in its current location.

It will be a future generation that needs to reconsider its values when the courts are next up for renewal.

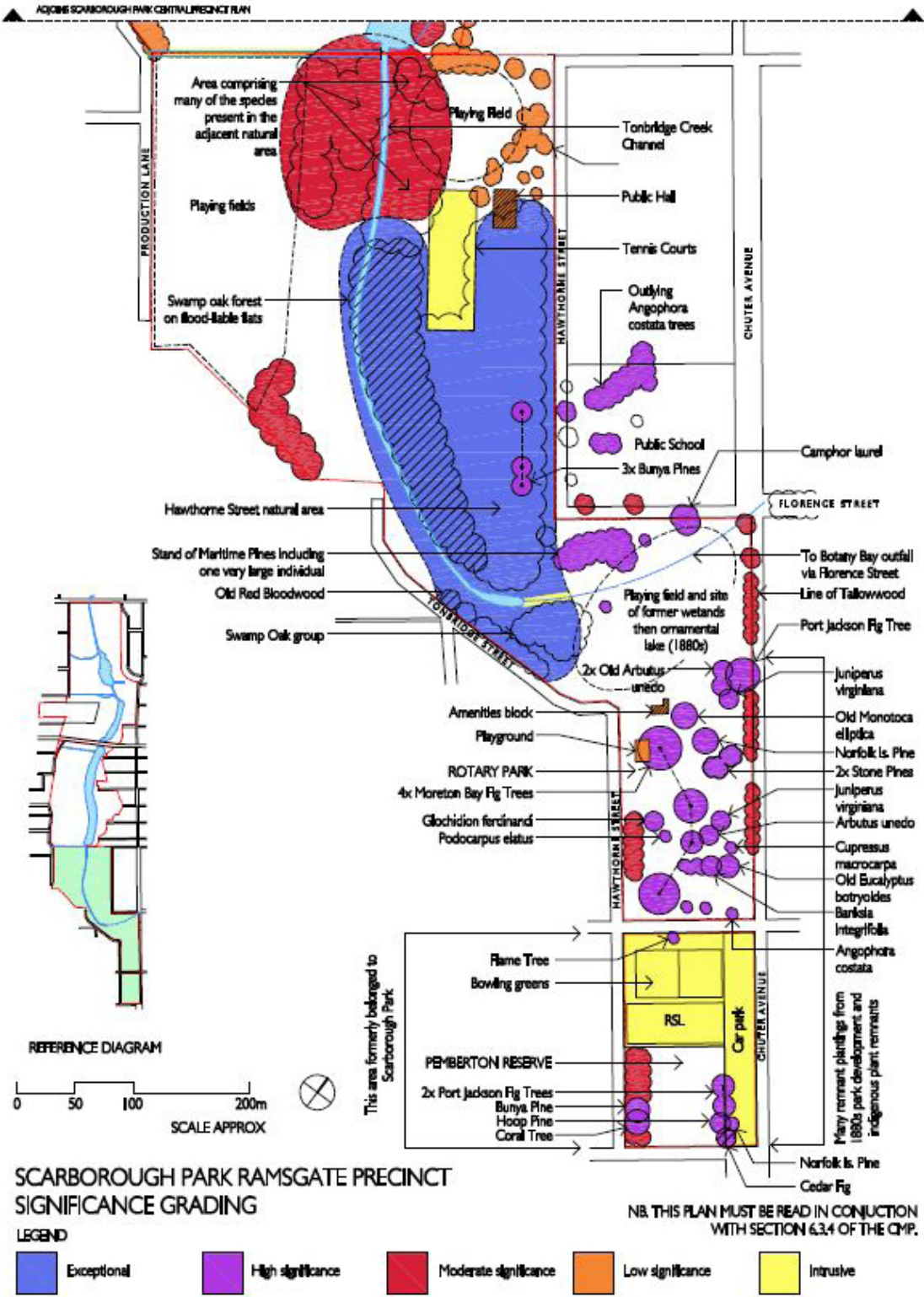
Rotary Park

The masterplan must be sensitive to the heritage significance of historic tree planting within Rotary Park and carefully locate any new installations outside impact zones for trees.

Ramsgate RSL Memorial Club

Whilst it is preferable from a conservation perspective to remove this facility and restore the original Scarborough Park extents, the land on which the club site is currently privately owned which makes the resumption of this land difficult both now and into the future.

The car park running parallel to Chuter Avenue remains within council ownership and could potentially be restored to parkland, however it is expected that there would be strong community support to retain the car parking around the club and the Ramsgate Beach Town Centre due to existing parking demand in the area.



2.15 Heritage & conservation policies for ongoing management

2.15.1 Conservation management plan policies for management

The Conservation Management Plan (CMP) for Scarborough Park has outlined a list of policies to guide future use and conservation of the park. Those application to the preparation of the masterplan include:

Policy 1: Conservation of Scarborough Park

On the basis of the current version of the Australia ICOMOS Burra Charter and this CMP, ensure the proper conservation of Scarborough Park, where components of its pre-historic formation, initial planning and infrastructure and early development, plantings and structures of high cultural significance are maintained and interpreted.

Policy 2: Use

Ensure that Scarborough Park remains as community open space and continues to fulfil the purpose for which it was originally acquired for amenity and the recreational benefit of the whole community.

Policy 3: Wetlands

Ensure those areas within Scarborough Park functioning as wetlands are conserved as such and explore options for potential additional wetlands reconstruction in other areas of the park to enhance the value of the Rockdale Wetlands and Recreation Corridor.

Policy 4: Layout and Fabric

Protect the integrity of Scarborough Park by ensuring there are no further land excisions such as that south of Ramsgate Road.

Policy 9: Cultural Vegetation

Existing plantings that are assessed as being of little cultural significance could be replaced by locally indigenous vegetation on a discretionary basis though where this is undertaken it should be accompanied by appropriate material to inform the local community.

Policy 12: Weeds

Ensure the continued management of weeds within Scarborough Park through an appropriate prioritised management plan.

Policy 14: Scarborough Park as a Scenic Resource

Retain the views of Botany Bay from Scarborough Park and, where appropriate, reinforce the landscape links between the two features by planting more street trees.

Policy 16: Interpretation

A comprehensive and integrated interpretation strategy for Scarborough Park that uses Section 4 (Historical Background of Scarborough Park) and Section 6 (Assessment of cultural significance of Scarborough Park) of this CMP should be considered as its basis.

Policy 19: Management

Ensure appropriate professional expertise in open space management, planning, design, construction and maintenance within Council so that Scarborough Park can be effectively conserved and managed for the long-term benefit of the community.

Policy 23: New Commemorative Structures and Features

Do not introduce any permanent monuments, memorials or artworks within Scarborough Park unless they have a direct and compelling relevance to the place and have received the strong endorsement of a broad community.

Policy 24: New Buildings

No new buildings are to be introduced within Scarborough Park unless they replace existing public recreational structures and have a prior (historical) recreational precedent to be there. Where permitted, new structures must be planned and designed to respect the park landscape and its culturally significant context.

Policy 25: Temporary Structures in the Park

The temporary installation of structures such as marquees should be allowed in Scarborough Park where such use is strictly temporary (an appropriate timeframe determined by Council), does not compromise the ongoing community recreational use of the park and there is no risk of the park's significant fabric being damaged.

Policy 26: Adaptation for Equal Access

Use discretion in the retrofitting of Scarborough Park for equal access and where it is decided to do so this should be planned in conjunction with people with appropriate skills and experience, including a heritage consultant or advisor, to ensure the park context is fully taken into account.

Policy 27: New Services, Infrastructure and Facilities

Ensure all new services, infrastructure and facilities proposed within and adjoining Scarborough Park are planned and designed on the basis of this CMP taking into account the cultural significance of the park and the need to ensure that significance is not compromised. For any new buildings within the park, ensure they are also planned and designed to make a positive contribution to the character of the park while respecting that the site is highly valued by its local community.

Policy 28: Vehicular Access within the Park

Ensure that vehicular access within Scarborough Park remains strictly limited to maintenance, and occasional construction, vehicles only.

Policy 29: Archaeological Finds within the Park

In the event of archaeological material being found during any future construction work at the park, the work in that area should cease and the appropriate senior Council staff and Council's Heritage Advisor should be notified in order to assess the nature of the find before allowing work to recommence.

Source: Conservation Management Plan for Scarborough Park for Rockdale City Council, April 2014, Nicholas Jackson & Geoffrey Britton.

2.16 Existing site conditions (Northern Precinct)

2.16.1 Boundaries & entry points

President Avenue forms the northern boundary of the masterplan area, providing a hard edge to the park, and isolating Scarborough Park from Rockdale Bicentennial Park to the north. The M6 roadway link will resume a portion of Rockdale Bicentennial Park and establish an overhead pedestrian crossing between the two parks. Drainage channels prevent pedestrian access into Scarborough Park directly from President Avenue.

The north-eastern and south-eastern boundaries of the park are bordered by the rear of residential blocks to Colson Cres, or the side of properties to Burlington St and Barton St, limiting access and passive surveillance opportunities. The portion of the site at AS Tanner Reserve is bordered directly by Chuter Ave, opening up views into the park at this location.

The western side of the park is edged by Civic Ave and the Toomevara Lane Market Gardens, visible through chain link fencing.

Barton St marks the transition from the northern precinct to the central precinct in the south.

2.16.2 Community infrastructure

The main formal recreational feature in the north of this precinct consists of a fenced, off leash area for dog exercise of approximately 2,800m², located adjacent to Civic Avenue.

A recently upgraded playground exists on Colson Cres opposite Banks St, featuring a small climbing structure, swing, springer and nature play elements. Other site elements include seating, bollards, a drinking fountain, bin, and small loop path.

There are no formal pathways running through the northern precinct of the park. The routes all consist of mown or well trodden turf, often edged with mounds of

deeper grass. On the eastern side of the park, a wide, mown grass expanse abuts the rear boundaries to properties along Colson Crescent. This route leads directly south and connects to AS Tanner Reserve.

The main route through the western section of the park follows the historic line of the Moorefield Racecourse and is a simple mown swathe through stands of dense vegetation of the Swamp Oak Floodplain Forest endangered ecological community and open, maintained grassland.

A shared path is currently under construction from President Ave, looping south-east to link to Chuter Ave near Robinson St. A new elevated crossing over the waterway will be constructed as part of the works.

AS Tanner Hall is located off Burlington St in AS Tanner Reserve and is available for community hire, comprising an open community hall with kitchenette.

In addition to standard street parking, 90° street parking is provided along portions of Burlington St and Barton St.

2.16.3 Organised sports

Two areas of the precinct are currently used for organised sports - AS Tanner Reserve in the east, and Scarborough Park North (adjacent to Barton St) in the south-west.

The Scarborough Park North area near Barton St is currently used for organised sport and comprises mown turf, artificial cricket wickets, flood lighting, fencing and tiered seating to one field. An amenities building, irrigation storage tank and fenced storage area support this use.

AS Tanner Reserve is currently used for organised sports and comprises mown turf and flood lighting. AS Tanner Hall is located off Burlington St and accommodates tiered seating, public toilets and a drinking fountain external to the building.

Legend

- 01 OFF-LEASH DOG EXERCISE AREA
- 02 COLSON AVE PLAY AREA
- 03 FUTURE SHARED PATH
- 04 NATURAL AREAS
- 05 AS TANNER RESERVE
- 06 AS TANNER HALL
- 07 SCARBOROUGH PARK NORTH
- 08 SPORTS AMENITIES BUILDING

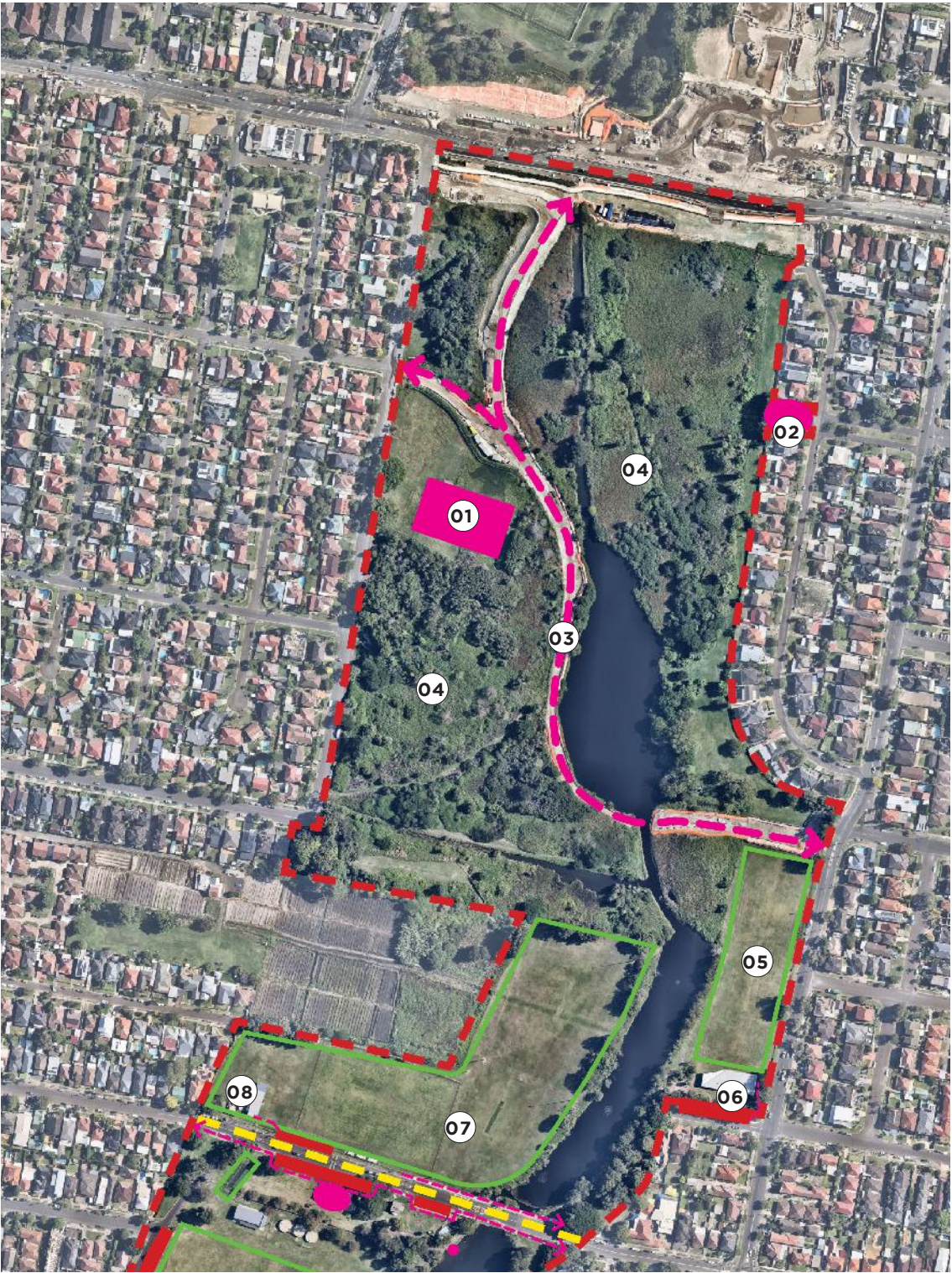
2.15.2 Boundaries & entry points

President Avenue forms the northern boundary of the masterplan area, providing a hard edge to the park, and isolating Scarborough Park from Rockdale Bicentennial Park to the north. The M6 roadway link will resume a portion of Rockdale Bicentennial Park and establish an overhead pedestrian crossing between the two parks. Drainage channels prevent pedestrian access into Scarborough Park directly from President Avenue.

The north-eastern and south-eastern boundaries of the park are bordered by the rear of residential blocks to Colson Cres, or the side of properties to Burlington St and Barton St, limiting access and passive surveillance opportunities. The portion of the site at AS Tanner Reserve is bordered directly by Chuter Ave, opening up views into the park at this location.

The western side of the park is edged by Civic Ave and the Toomevara Lane Market Gardens, visible through chain link fencing.

Barton St marks the transition from the northern precinct to the central precinct in the south.



2.15.3 Community infrastructure

The main formal recreational feature in the north of this precinct consists of a fenced, off leash area for dog exercise of approximately 2,800m², located adjacent to Civic Avenue.

A recently upgraded playground exists on Colson Cres opposite Banks St, featuring a small climbing structure, swing, springer and nature play elements. Other site elements include seating, bollards, a drinking fountain, bin, and small loop path.

There are no formal pathways running through the northern precinct of the park. The routes all consist of mown or well trodden turf, often edged with mounds of deeper grass. On the eastern side of the park, a wide, mown grass expanse abuts the rear boundaries to properties along Colson Crescent. This route leads directly south and connects to AS Tanner Reserve.

The main route through the western section of the park follows the historic line of the Moorefield Racecourse and is a simple mown swathe through stands of dense vegetation of the Swamp Oak Floodplain Forest endangered ecological community and open, maintained grassland.

A shared path is currently under construction from President Ave, looping south-east to link to Chuter Ave near Robinson St. A new elevated crossing over the waterway will be constructed as part of the works.

AS Tanner Hall is located off Burlington St in AS Tanner Reserve and is available for community hire, comprising an open community hall with kitchenette.

In addition to standard street parking, 90° street parking is provided along portions of Burlington St and Barton St.

2.15.4 Organised sports

Two areas of the precinct are currently used for organised sports - AS Tanner Reserve in the east, and Scarborough Park North (adjacent to Barton St) in the south-west.

The Scarborough Park North area near Barton St is currently used for organised sport and comprises mown turf, artificial cricket wickets, flood lighting, fencing and tiered seating to one field. An amenities building, irrigation storage tank and fenced storage area support this use.

AS Tanner Reserve is currently used for organised sports and comprises mown turf and flood lighting. AS Tanner Hall is located off Burlington St and accommodates tiered seating, public toilets and a drinking fountain external to the building.

2.15.5 Arrival and gateways

The main public frontages to the park are along President Ave, Barton St and Chuter Ave. Standard Bayside park identity signage is currently located at:

- Civic Ave, opp. Annette Ave
- Barton St (west)
- Chuter Ave, opp. Bath St
- Colson Cres, opp. Banks St

Locked maintenance access points are provided at:

- Civic Ave, corner Marshall St
- Scott St
- Barton St, immediately west of bridge
- Burlington St

2.15.6 Natural environment

Civic Avenue Reserve, located south of President Avenue consists of a centralised watercourse which runs from President Avenue in the north to a large pond in the south, which subsequently splits into a smaller channel before it enters the central region of the park and main pond. Much of the area in the region south of President Avenue is classified as Coastal Wetlands (a protected community) or forms part of the immediate surrounding catchment for the wetlands and has a high ecological value.

Within the centre of what was once the racecourse, there are mature stands of native trees representing remnant Swamp Oak Floodplain Forest and Swamp Sclerophyll Forest Endangered Ecological Vegetation Communities, protected under state legislation. In addition, there remains some evidence of earlier structures and pavements. Some remnant vegetation may be the progeny of earlier racecourse plantings such as the Cupressus sempervirens, Phoenix canariensis and Erythrina x sykesii.

The site is heavily weed infested and environmental restoration works addressing weed control need to continue. There are encouraging signs of wetland regeneration in some areas, where typical taller wetlands species such as Melaleuca linariifolia dominate.

Contaminated Land

The site has a history of being filled with soil of unknown origin for use as a racecourse and for recreational uses. This fill is potentially contaminated and requires consideration during any detailed design for proposals in this precinct.

2.15.7 Hydrology

A drainage culvert flows into the park from under President Ave in the north, forming an approximately 280m long open channel before opening into the main water body to the south - a large, open pond area fringed with wetland planting.

At the southern end of this pond, the waterway narrows again to a channel in line with Robinson St. This channel flows south-east for approximately 100m before opening into a linear, open pond area. Approximately halfway along the narrow channel, a secondary channel enters from the west, in line with Marshall St.

The linear pond area stretches south into the Scarborough Park central precinct under the Barton St bridge. Water quality is managed in the linear, open pond section by three aeration devices and a floating containment boom immediately north of Barton St.

2.15.8 Furniture & fixtures

Furniture and fixtures throughout this precinct are limited, with much of the area being wetland with limited access to pedestrians due to the informal path network.

Existing seating in a good condition is located around the dog off-leash area off Civic Ave.

A dated picnic setting and separate bench seating is located in a turf area off Barton St, adjacent to Bambino’s Kindergarten.

The organised sports zone at Scarborough Park North, off Barton St, features three (3) tiered spectator stands, a double layer of fencing to Barton St, and two (2) dated bench seats which appear to offer limited functionality. The flood lighting columns around this area act as a way marker for the northern precinct due to their height and visibility on the horizon.



Civic Park dog exercise area



Public access to edge of northern pond



Scarborough Park North sports field

2.17 Existing site conditions (Central Precinct)

2.17.1 Boundaries & entry points

Barton St marks the transition from the northern precinct to the central precinct.

The western boundary of the central precinct is bordered by Scarborough Lane in the north and Margaret St in the south. The section in between is defined by rear residential boundaries from houses on Maders Ave.

The eastern boundary is primarily defined by side boundaries to residential properties, punctuated regularly by streets that terminate in a cul-de-sac at the park edge. A portion of Monterey St forms the only significant street frontage on the eastern side of the central precinct.

The central precinct transitions to the southern precinct in line with Emmaline St, and the pedestrian bridge crossing over the central water body.

2.17.2 Community infrastructure

A large play area on Barton St provides swing set, toddler climbing structure, springers, carousel, larger climbing structure, and loop path, all under a series of shade sails.

A portion of the central pond immediately south of Barton St is dedicated to recreation, with pontoon access to the water from the west.

A newly constructed building with storage and covered picnic shelter adjacent to Barton St and the central pond provides facilities for the general community, serving both the playground and recreation pond.

Pathways through the area are, for the most part, informal routes across the fields and alongside the ponds. Despite being informal, they are well worn and show signs of needing a permanent surface, particularly during wet weather.

A footbridge crosses the Scarborough Ponds at the boundary of the central and southern precinct, providing a valuable east-west connection through the park. The bridge and associated wing walls and abutments are in disrepair, with evidence of undermining and partial collapse evident to edges.

Secondary pedestrian routes around the site are also in need of improvement, with several small links spanning fenced drainage channels offering impractical access due to their narrow width and intermittent locations.

In addition to standard street parking, 90° street parking is provided along portions of Barton St, Scarborough Lane and Margaret St.

An existing building at the end of Phillips Rd appears to be underutilised, creating a negative visual intrusion into the park at a key location. Visually, the building blocks passive surveillance into the park, and the toilets are often left open which can invite anti-social behaviour. Given the proximity to the large amenities building at the southern end of Scarborough Central, it would be desirable to remove this building to consolidate built form in one location and minimise visual impact.

2.17.3 Organised sports

The western side of the precinct is dominated by a large, open area dedicated to organised sports. The area features mown turf, artificial cricket wickets, enclosed cricket nets, goal post infrastructure, irrigation tanks, safety fencing and flood lighting.

Two amenities buildings support the use of this area for organised sports. The northern building is located immediately south of a fenced drainage channel near Scarborough Lane and also accommodates public toilets for the community. The southern building is located off Midjuburi Lane, at the very south-western corner of the central precinct.

Legend

- 01 PLAY AREA
- 02 PONTOON
- 03 ENCLOSED CRICKET NETS
- 04 PICNIC SHELTER WITH SMALL STORAGE AREA
- 05 SCARBOROUGH PARK CENTRAL
- 06 SCARBOROUGH PARK EAST
- 07 SPORTS AMENITIES BUILDING
- 08 EXISTING FOOTBRIDGE
- 09 UNDERUTILISED BUILDING

The eastern side of the precinct provides a large, open space for organised sport featuring mown turf, artificial turf wicket, irrigation tank and flood lighting. An amenities building south of Monterey St supports the use of this area for organised sport.



2.17.4 Arrival and gateways

The main public frontages to the park are along Barton St, Scarborough Lane, and Margaret St. No significant signage or gateways exist in these locations.

Standard Bayside park identity signage is currently located at:

- Barton St (west)
- Scarborough Lane, opp. Wilson St
- Scarborough St
- Monterey St
- Pasadena St
- Hollywood St
- Culver St

Locked maintenance access points are provided at:

- Barton St (central)
- Barton St (east)
- Scarborough Lane, opp. Austral St
- Midjuburi Ln, opp. Sunbeam Ave
- Pasadena St
- Culver St

Barton Street provides the only vehicular route across the park and watercourse. It is flanked by off street parking to either side which gives good access to facilities on either side.

Upon approach to the park along Barton Street there is a poor sense of arrival, with the street lined by formal and informal parking. The edge of the central precinct is dominated by a large Fig Tree which acts as a key visual marker for the park.

In general roads leading to the park end abruptly, particularly in the east, with very little to announce the presence of such a large park or gateway to the facilities within.

2.17.5 Natural environment

The central pond cuts the site in two, with a large, flat area of amenity grassland in the west (Scarborough Central) and smaller area in the east (Scarborough East). Both sides of the watercourse are heavily vegetated and feature informal, but well trodden footpaths, with occasional breaks in vegetation providing picturesque views out over the water. The banks of the water body, although relatively low, are quite steep and make access and maintenance difficult.

The long pond is mainly lined by Melaleuca quinquenervia (some of which have attained impressive dimensions) and Casuarina glauca, along with various weedy species which have potential to become a nuisance. Occasional Grey Mangroves (Avicennia marina) provide evidence of the brackish nature of the ponds. Planting of pine trees are evident along the side of the pond which is likely evident of an attempt at formalisation of the park in years gone by. Full species listings and descriptions can be found in the Scarborough Park CMP (2015).

Due to the lack of notable landscape features, the western playing fields offer little in terms of character. Along the western periphery, occasional, heavy lines of trees form a buffer between adjacent industry or residential properties and along Barton Street, a large Moreton Bay Fig (Ficus macrophylla) is a key feature to the main gathering space, providing shade and character.

In the east, the compact and enclosed nature of the field provides a more intimate environment. Several properties near Barton Street remain fenceless, with doors facing out onto the park. Heavily treed, this area merges well with the adjacent suburbia.

Contaminated Land

The site has a history of being filled with soil of unknown origin for use as a racecourse and for recreational uses. This

fill is potentially contaminated and requires consideration during any detailed design for proposals in this precinct.

2.17.6 Hydrology

Several piped stormwater inlets feed into the main water body, typically emerging from pipes at the interface with the main water body. An open, fenced, concrete drainage channel runs parallel to Barton St between the organised sports precinct and community zone abutting Barton St.

A second inlet in the south adjacent to Production Avenue takes the form of a naturalised channel which shows evidence of a varying water level caused by both tidal flows and heavy rain. The banks of the channel are heavily overgrown and very steep, making maintenance difficult.

Elsewhere, stormwater inlet points along the waters edge are in poor condition and often located where there is a break in the vegetation, detracting from the natural aesthetic of the area. Steep banks make them difficult to maintain and their condition varies, with many not functioning to capture pollutants.

Another open, fenced concrete channel runs north-south along the western edge of the park from Wilson St to Sunbeam Ave. It is separated from the residential boundary by a pedestrian footpath linking the nearby streets.

2.17.7 Furniture & fixtures

There is little furniture provided throughout the central precinct, with the offering limited to isolated benches throughout passive use areas. The few benches available are often mismatched and deteriorating in condition.

Additional fixed seating is located at the amenities buildings.



Informal path near Scarborough Park East



Barton St interface



Pontoon for model boat club



Adjacent footpaths typically terminate at the park edge



Scarborough Park East sports fields



Scarborough Park Central sports fields

2.18 Existing site conditions (Southern Precinct)

2.18.1 Boundaries & entry points

The central precinct transitions to the southern precinct in line with Emmaline St, and the pedestrian bridge crossing over the central water body.

The western edge of the park is defined by Midjuburi Lane, Tonbridge St, and the rear of residential lots between the two streets. Informal pedestrian access is provided along the street frontages.

The eastern edge of the park is defined by roadways, Hawthorne St, Florence St, and Chuter Ave, with easy access into the cleared portions of the site. Bushland along Hawthorne Avenue restricts access into the park from much of this edge.

The southern extent of the masterplan area is bound by Park Rd and includes the site occupied by Ramsgate RSL Memorial Club and Pemberton Reserve. The RSL site contains significant built form and visually separates Pemberton Reserve from the remainder of the masterplan area.

A signalised pedestrian crossing is provided at the intersection of Ramsgate Rd and Chuter Ave, providing a safe link across the busy roads and linking to the Ramsgate Beach Town Centre.

2.18.2 Community infrastructure

Three play areas exist within the southern precinct, at Leo Smith Reserve, Tonbridge Reserve and Pemberton Reserve.

The Leo Smith play area offers a swing set, carousel, springers, climbing structure and loop path beneath a large shade sail structure. The play is supported by a drinking fountain and seating.

Tonbridge Reserve play area comprises a swing set, accessible carousel, large climbing structure, nature play elements, and a springer under a large shade sail canopy. The play area is supported by seating and a portion of hardstand area. A

low fence running parallel to Chuter Ave is located within the park between the play area and the road edge to provide some protection.

The Pemberton Reserve play area offers swing set, play tower, carousel, springer and see-saw beneath a shade sail. A table setting on hardstand is located adjacent.

Formal path links exist only in two areas - near Hawthorne St, linking the Syd Frost Memorial Hall, Leo Smith play area, and the Scarborough Park Tennis courts, and also in Tonbridge Reserve, linking Florence St to Tonbridge St via the amenities building.

The informal path network links along both sides of the central water body, passing through the Hawthorn St Natural Area in the east. Within the natural area, there is no direct contact with the waters edge, instead the pathway meanders through the trees and is a short but pleasant nature walk until reaching the nearby tennis courts, at which point the formal trail and educational signage disappear. There is no formal entrance to the natural area from the north.

In addition to the north-south pedestrian path, a partly overgrown path links the Phil Austin Baseball Fields to the waters edge along Tonbridge Creek, providing a sense of tranquillity and escape.

Unprogrammed open space is provided for passive community recreation at Leo Smith Reserve, Rotary Park and Pemberton Reserve. Leo Smith Reserve is sometimes used by picnickers and families utilising the nearby play area, and is also used as a key link into the wider informal path network within the park.

Rotary Park is not well-used other than by dog walkers as it is exposed to traffic and vehicular noise from the surrounding roadways, Pemberton Reserve is regularly used for events run by the adjacent Ramsgate RSL Memorial Club.

Significant stretches of 90° car parking exist on the park edges along Hawthorne St, Midjuburi Lane, Tonbridge St, and Florence St. The Ramsgate RSL site also

Legend

- 01 LEO SMITH RESERVE PLAY AREA
- 02 SYD FROST MEMORIAL HALL
- 03 PHIL AUSTIN BASEBALL GROUND
- 04 SCARBOROUGH PARK TENNIS COURTS
- 05 HAWTHORNE ST NATURAL AREA
- 06 SPORTS AMENITIES BUILDING
- 07 TONBRIDGE RESERVE
- 08 TONBRIDGE RES. CRICKET NETS
- 09 TONBRIDGE RES. PICNIC SHELTERS
- 10 TONBRIDGE RES. PLAY AREA
- 11 ROTARY PARK
- 12 RAMSGATE RSL MEMORIAL CLUB
- 13 PEMBERTON RESERVE
- 14 PEMBERTON RESERVE PLAY AREA
- 15 WAR MEMORIAL
- 16 RAMSGATE BEACH TOWN CENTRE
- 17 CONTAMINATED LAND (SUBJECT TO EMP)

has significant parking infrastructure located within the site along the Chuter Ave and Ramsgate Rd frontages.

Ramsgate RSL Memorial Club

The site occupied by the RSL club is part of the historic extents of Scarborough Park as established in 1879. The site, including parking off Ramsgate Road, is currently owned by the club. The parking areas of Chuter Ave and Tonbridge St are owned by council.

The built form of the club acts as a significant barrier, separating Pemberton Reserve from Scarborough Park / Rotary park. There is little activation towards Pemberton Reserve, with only a few windows and egress doors facing the park.



2.18.3 Organised sports

The western area is occupied by Phil Austin Baseball Fields, with significant sporting infrastructure including mown grass, baseball diamonds, high fencing, batting cages, shelters, and linking paths. An amenities building off Midjuburi Lane supports the use of this area for organised sport

Nestled within the Hawthorne St Natural Area, the Scarborough Park Tennis Courts are to be upgraded in 2023 to provide a facility which accommodates three (3) multi-courts (or six tennis courts). Upgrade works are limited primarily to replacing fencing, court surfacing and provision of bench seating and shelter. No changes are proposed to existing lighting.

Tonbridge Reserve accommodates an area for organised sport near the corner of Chuter Ave and Florence St. The area comprises mown grass, goal posts, synthetic cricket wicket, crickets nets, and irrigation tanks.

A large amenities building supports the use of this area for organised sports, also accommodating tiered seating and public toilets for the community.

The Ramsgate RSL Memorial Club site includes two natural grass bowling greens with supporting infrastructure to allow for the playing of lawn bowls.

2.18.4 Arrival and gateways

The main public frontages to the park are along Chuter Ave, Ramsgate Rd, and Hawthorne St, with secondary frontages along Park Rd, Tonbridge St, Florence St, and Midjuburi Lane. No significant signage or gateways exist in any of these locations.

Standard Bayside park identity signage is currently located at:

- Hawthorne Ave, near Syd Frost Hall
- Florence St, near Hawthorne Ave
- Ramsgate Rd at Chuter Ave

Locked maintenance access points are provided at:

- Midjuburi Ln, south of Garrigarrang Ave
- Hawthorne St, opp. Emmaline St
- Tonbridge St, opp. 24 Tonbridge St
- Tonbridge St, opp. 28 Tonbridge St
- Tonbridge St, opp. 43 Tonbridge St

In general the southern region of Scarborough Park is well defined but still lacks appropriate connections between the east and west, other than a single pedestrian bridge. North-south connections are also very informal. Gateways into the park are difficult to identify and zone boundaries are blurred.

2.18.5 Natural environment

The most valuable asset within this area is the Hawthorne Street Natural Area, located to the eastern side of the watercourse and consisting of a nature trail through remnant Kurnell Dune Forest and Swamp Oak floodplain forest (both listed as an Endangered Ecological Community under Schedule 1 Part 3 of the current version of the NSW Threatened Species Conservation Act, 1995).

This area has inherent scientific and fauna habitat values. Various information signposts describe flora and fauna which could be encountered on the route.

There are historical incursions into the heritage listed natural area with 6 tennis courts within a fenced complex of associated facilities. These courts are identified as an intrusive element from a heritage perspective in the Scarborough Park Conservation Management Plan with an opportunity to remove or reduce them being desirable. However these facilities are well used by the community and were recently upgraded. The option to remove them remains for future generations.

Several pine species planted in the vicinity threaten the integrity of this natural area with prolific self-seeding. Over time a

number of these pines have been removed and bush regenerators work in this area.

Around Tonbridge Creek, the ground is often inundated with water due to tidal flows and stormwater levels. The Tonbridge Creek channel itself features the colonising native Grey Mangrove (Avicennia marina), and is of particular interest because it supports a surprising number of indigenous freshwater fish species as well as some saltwater species.

Large Fig trees located within Rotary Park create a leafy character to the southern region and are heritage listed due to their relevance to the Garden City Movement of the early 1900s.

Detailed descriptions of the locally indigenous vegetation of importance in the south can be found within the Scarborough Park CMP (2015).

Contaminated land

Scarborough Park South (Phil Austin Baseball Ground and surrounding area) is an old landfill that is managed under a current Long-Term Environmental Management Plan (EMP). Any works other than maintenance require approval and an environmental site investigation for contamination related to the specific works.

Additionally the remainder of the site has a history of being filled with soil of unknown origin for use as a racecourse and for recreational uses. This fill is potentially contaminated and requires consideration during design.

2.18.6 Hydrology

The creek channel is terminated at the Tonbridge Street Reserve and piped under Florence Street to a substantial outfall structure at Botany Bay, Ramsgate Beach. Several inspection chambers on the reserve limit the extent to which sports can be played safely.

2.18.7 Furniture & fixtures

Tonbridge Reserve features several shelters with seats and table, set amongst the trees, which are often prone to flooding. These shelters are dated and positions should be reconsidered as part of the masterplan.



Pemberton Reserve



Tonbridge Reserve picnic shelters & low lying land



Hawthorne Lagoon



Phil Austin Baseball Ground



Tonbridge Creek

2.19 Furniture & Fixtures

2.19.1 Signage & Art

Signage throughout the park has been updated over the past 5 years. Most park entry points have signage that matches the current Bayside suite. In some locations, there are old signs that should be updated to match.

Key site entries have low signage with large format lettering that can be read by pedestrians and vehicles passing on nearby streets. Secondary park entries have signage posts which include park regulations.

There is limited wayfinding and interpretation material throughout the park to assist visitors navigating the open space areas and highlighting the connectivity of the various park areas. There are opportunities to provide additional educational and interpretive signage throughout the park to highlight key ecological, historical and/or first nations stories.

Subject to an appropriate community engagement process, there may be opportunity to install public art in high use areas within the park.

2.19.2 Fencing

Fencing is used in some areas to improve safety, prevent vehicular access and to create a safe environment for park users. The most commonly used fence types within the park are:

- Low, timber log fencing installed as a vehicular barrier to park edges (e.g. Tonbridge Reserve, Scarborough Park Central and Scarborough Park East)
- Low, weld-mesh fencing where sports fields are adjacent to roads (e.g. Tanner Reserve and Scarborough Park North) and to edges of concrete drainage channels (e.g. Scarborough Park Central).
- Tall, chain mesh fencing to sports fields (e.g. Scarborough Park North)

2.19.3 Picnic shelters

The only dedicated picnic shelters within the park are located within Tonbridge Reserve and Pemberton Reserve.

The Tonbridge Reserve shelters have minimal appeal to the community due to their dated condition and location away from other activity hubs.

The Pemberton Reserve shelter accommodates one table setting and is used casually as an extension of the Ramsgate Beach Town Centre. Another two uncovered table settings existing within the reserve.

A new covered seating area has been included in a recently constructed storage building off Barton Street in Scarborough Park Central.

A few isolated picnic tables exist in other locations within the park, but these are not well-used.

Opportunities for new shelter locations should be considered in conjunction with other park attractors such as playgrounds and sporting uses.

2.19.4 Seating

Throughout the site there is a mixture of seating styles used, from aged steel tube frames with painted timber battens, to more modern seats installed around recently updated facilities.

Some consistency in the application of seating styles throughout the park would help to unify the appearance of the public domain and simplify maintenance activities.

The position of benches are often found to be in appropriate places, providing views across the parkland, however, there are very few offering views across the water. Many of those placed near the water are now facing established vegetation which has presumably grown since the seating was installed.



01/ Signage & Art

Park signage now largely conforms to the Bayside standard suite of signs, with large, landscape format signage to key frontages, and signage posts to smaller entries and feature elements such as playgrounds.

Interpretive signage is located in isolated locations such as the Hawthorne Street natural area as is in an aged condition.

No public art currently exists within Scarborough Park.



02/ Fencing

The most common fencing within the park is low, timber post and rail fencing to park edges, installed primarily to prevent vehicle access into the park.

Regular gaps should be provided in the fencing to facilitate pedestrian access into the park for all users. Permeable park edges allow the local community to make the best use of available open space and encourages active transport and activation of the park.



03/

Shelters

The only dedicated picnic shelters within the park are located in Tonbridge Reserve and Pemberton Reserve. The shelters in Tonbridge Reserve are aged and should be replaced as part of future park upgrades.

The location of new shelters should be considered as part of the overall site masterplan, with an aim to create activity hubs in particular locations.

04/

Seating

Seating styles and condition vary significantly around the park. Examples of the typical styles found around the park have been included below.

1. Single post steel & painted timber seat in Scarborough Park Central
2. Double post steel and painted timber seat in Scarborough Park Central
3. Steel frame seat with composite battens in Leo Smith Reserve
4. Steel frame & timber batten picnic table near Barton St in Scarborough Park North
5. Painted timber bench in Scarborough Park Central
6. Steel frame & timber batten picnic table with shade umbrellas at Phil Austin Baseball Fields
7. Aluminium picnic table in Pemberton Reserve



2.20 Playgrounds

2.20.1 Play provision

The playgrounds currently located throughout the park are in good condition and will continue to serve the community into the medium and long term.

A range of ages is catered for within the park, with Barton St and Tonbridge Reserve offering the widest age range in equipment. The play areas currently serve toddler, preschool and primary age children fairly well, but none of the play areas caters to the upper range of primary school and beyond. Additional recreation opportunities for this age group could be explored in the masterplan.

The play areas generally rely heavily on standard play equipment, missing an opportunity to provide more diversity in play experiences. Opportunities for more creative play such as nature play may be considered for any future upgrade projects.

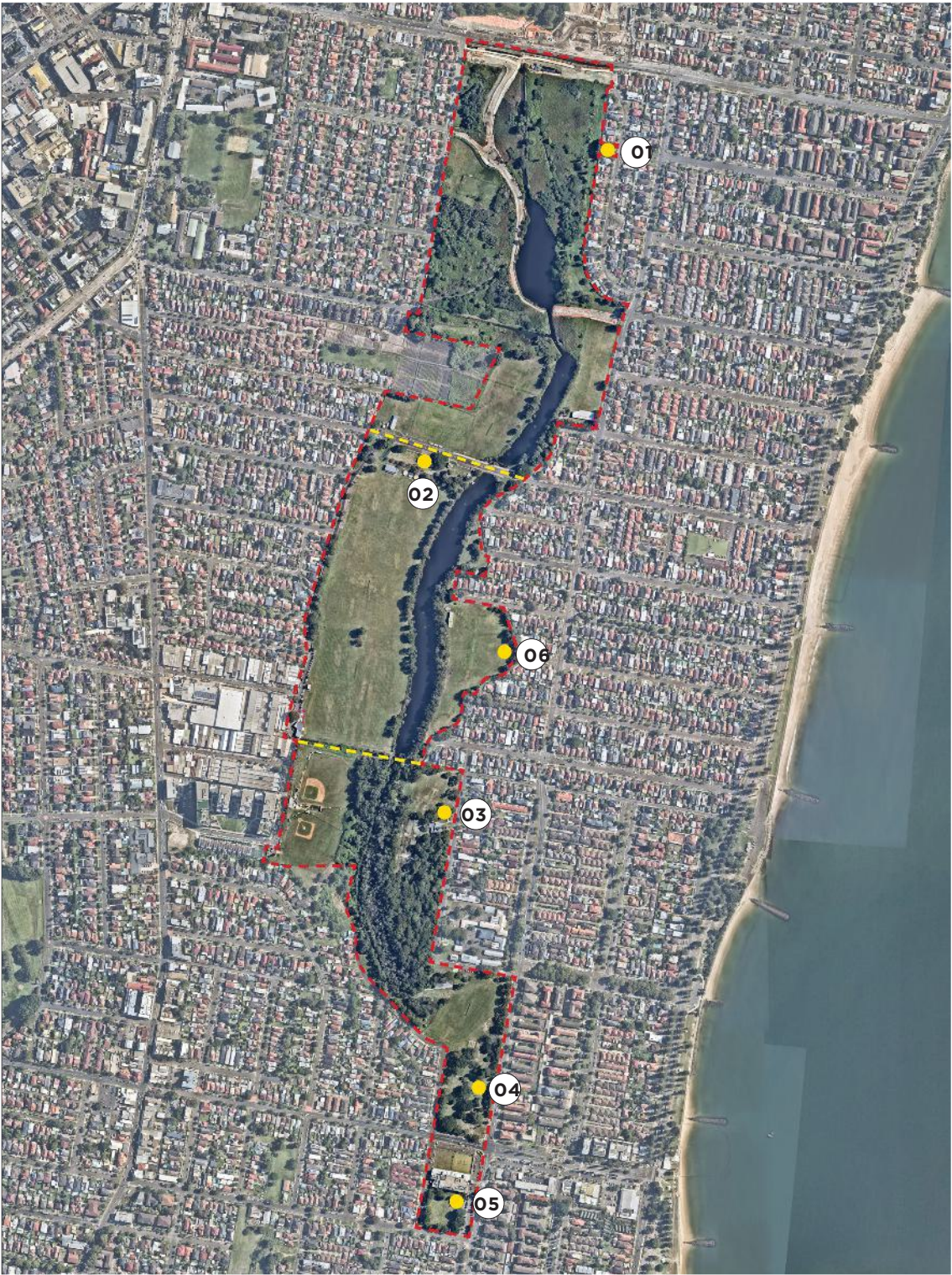
Dated play area to be removed

Scarborough Park East currently contains some remnant play equipment. The swing set and two springers lack safety surfacing and offer little appeal to visitors, and their removal is recommended.



Legend

- 01 COLSON CRESCENT RESERVE
- 02 BARTON ST
- 03 LEO SMITH RESERVE
- 04 TONBRIDGE RESERVE
- 05 PEMBERTON AVE
- 06 SCARBOROUGH EAST (TO REMOVE)





01/

Colson Crescent Reserve

This play area was installed in 2021 as a local playground. The playground primarily addresses Colson Cres, with a secondary entrance to the wider park behind. The playground design incorporates a concrete loop path enclosing a number of pieces of play equipment including:

- Basket swing
- Play tower (toddler & preschool age)
- Springer
- Spinner
- Balance beams
- Nature play elements

The equipment caters for young children only. The surfacing is primarily play mulch, with a portion of rubber softfall under the swing. Seats are provided for caregivers and a drinking fountain is also included. No shade structure is provided. Significant planting around the play area softens the overall feel of the play space.



02/

Barton St

This play area was installed in 2014 and is popular due to its location along Barton St, the only east-west connection through the park. The playground design incorporates a concrete loop path enclosing a number of pieces of play equipment including:

- Swing set
- Play tower (toddler & preschool age)
- Climbing frame (primary school age)
- Carousel
- Springer

The equipment caters for a range of ages and types of play. The surfacing is sand and shade sails provide shade to the play area. Seats are provided for caregivers.



03/

Leo Smith Reserve

This play area was installed in 2015 and is located adjacent to Syd Frost Memorial Hall on Hawthorne St. The playground design incorporates a concrete loop path enclosing a number of pieces of play equipment including:

- Swing set
- Play tower (preschool & primary school age)
- Carousel
- Springers

The equipment caters best for children from preschool age. The surfacing is sand and shade sails provide shade to the play area. Tree plantings will provide additional future shade. Seats are provided for caregivers and a drinking fountain is located nearby.



04/

Tonbridge Reserve/ Rotary Park

This play area was installed in 2021 and is located within Tonbridge Reserve, in the vicinity of Rotary Park. The playground design incorporates an area of concrete hardstand partially enclosing a number of pieces of play equipment including:

- Swing set, including basket swing
- Play tower (toddler, preschool & primary school age)
- Accessible carousel
- Springer
- Sandstone climbing blocks

The equipment caters for a range of ages and types of play. The surfacing is a mix of rubber softfall and play mulch, and shade sails provide shade to the play area. Tree plantings will provide additional future shade. Seats are provided for caregivers and a low fence offset from the play area provides a barrier to Chuter Ave.



05/

Pemberton Reserve

This play area was installed in 2013 and is located within Pemberton Reserve, immediately south of Ramsgate RSL. The playground design is edged in timber sleepers, enclosing a number of pieces of play equipment including:

- Swing set
- Play tower (toddler & preschool age)
- Carousel
- Springer
- See Saw

The equipment caters for a range of ages and types of play. The surfacing is sand, and shade sails provide shade to the play area. Established trees provide additional shade. A seat and nearby picnic setting are provided for caregivers.

2.21 Community open space

2.21.1 Path network

An extensive informal path network exists throughout the park, allowing the community to move throughout the open space network from north to south. Limited connections exist across the park east to west, with one pedestrian/cycle bridge near Emmaline St in the southern precinct. Barton Street provides the only east-west connection in the northern and central precinct, allowing vehicles and pedestrians to cross the park.

The path network is used for general walking, running, dog walking, and sometimes bike riding.

Path quality

The quality of paths is mixed across the park, presenting opportunities for upgrade in many locations. The upgrade of paths or provision of new paths in strategic locations would assist in improving accessibility and ease of movement within and across the park.

Some areas of erosion are evident within the park, but the main difficulties with maintaining access appear to be boggy ground after periods of rainfall, and trip hazards caused by protruding roots.

Path surfacing

The current path network consists of varying materials, with soft surfacing making up the vast majority of walkways and access routes. Existing path surfaces include the following.

- Soil & mulch
- Gravel and crushed gravel
- Mown grass
- Concrete and asphalt
- Boardwalks and bridges

2.21.2 Passive open space

Throughout the park, there are many areas of passive open space which are available for general community use. These areas are typically the 'leftover' spaces between residential lots and water bodies or wetlands and too small or awkwardly shaped to be utilised for organised sports.

These passive open space areas are generally highly valued by local communities and perceived as shared assets for locals. The use of these spaces vary depending on location and type, however, a consistent use repeated across the site is dog walking, exercise and for active transport. They also see occasional use by locals for picnics or informal recreation such as a kickabout space.

Tennis courts

The existing tennis courts at Hawthorne St Natural Area were upgraded in 2023 and converted into shared tennis & multi-use courts for community use.

2.21.3 Community buildings

Two building are available for community use through Bayside Council's online booking platform. These are available to book by community groups but not for private functions.



AS Tanner Hall

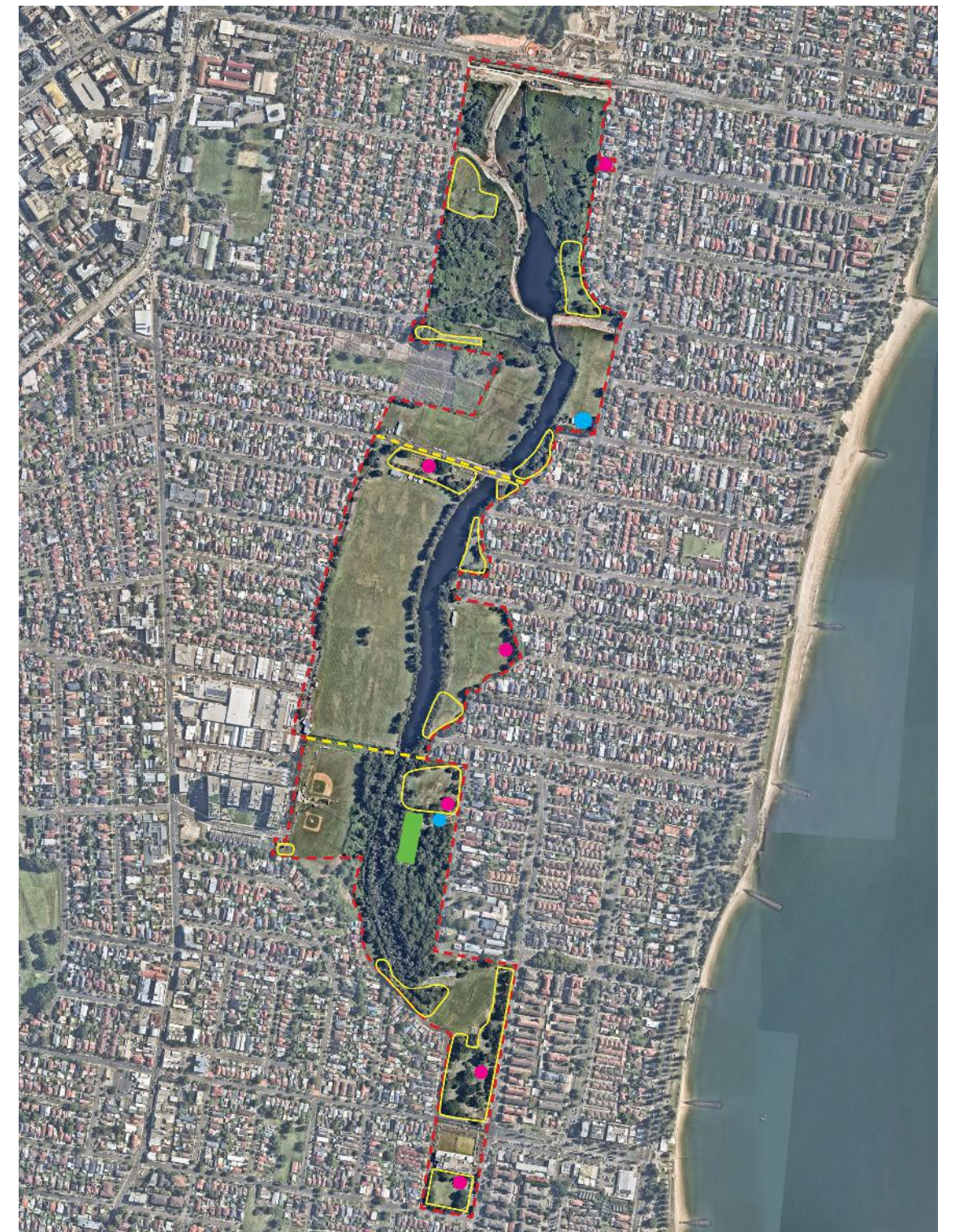
Located at 55 Chuter Ave, Monterey, AS Tanner Hall is a modern, flexible building with kitchenette, adjacent to AS Tanner Reserve. The hall is used by the community and local sporting groups for meetings, seminars and courses.

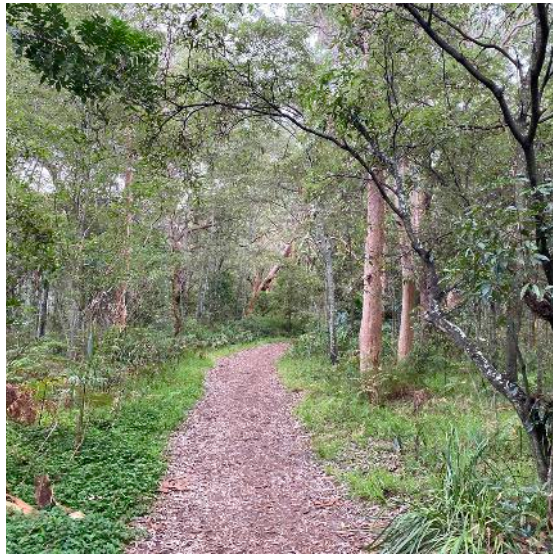
Syd Frost Hall

Located at 7 Hawthorne St, Ramsgate, within the Central precinct, Syd Frost Hall offers a basic kitchen, floorboards and a small stage. It's also used for meetings, community programs and education programs.

Legend

-  PASSIVE OPEN SPACE
-  PLAYGROUND
-  COMMUNITY BUILDING
-  TENNIS COURTS





01/

Soil & mulch paths

Soil and mulch paths are primarily located in areas that are densely vegetated such as Hawthorne St Natural Area, and along the banks of Tonbridge Creek in the southern precinct. Narrow dirt paths are also located within the wetland in the northern precinct.

The paths show signs of high pedestrian activity, being generally well-compacted and firm underfoot outside of boggy areas.



02/

Gravel & crushed gravel

Small sections of gravel or crushed gravel paths are provided in areas where erosion appears to have occurred in the past, or access routes have been stabilised for vehicular access or on well-worn pedestrian access routes.

There is little consistency in the application of this surfacing and no formal edges, meaning that the paths are difficult to maintain and tend to peter out into the grass adjacent.



03/

Mown grass paths

Many of the key north-south paths are maintained as mown grass, often with a focussed area of high wear, where turf is patchy or missing.



04/

Concrete & asphalt paths

Hardstand paths are generally limited to areas of high activity or where facilities such as playgrounds and buildings have been recently upgraded.

Additional paths at Barton St provide footpath linkages along the road network, with only limited connections into the park.

Tonbridge Reserve has a section of hard surfaced footpath linking Tonbridge St (opp. Walmer St) with Florence St and the Tonbridge Reserve amenities building.



05/

Boardwalks & bridges

A bridge crossing exists over Tonbridge Creek, approximately in line with Emmaline St, forming the transition between the central and northern precincts.

A short section of raised boardwalk exists in the northern precinct, linking Scarborough Park North with a pedestrian connection to the corner of Marshall St and Civic Ave.

2.22 Organised Sport

2.22.1 Current User Groups

The park is heavily utilised by formally organised sport and community groups. Scarborough Park currently caters to the following organised sports through community clubs and/or local sports associations:

- Football (soccer)
- Rugby League
- Touch Football (Oz Tag)
- Australian Rules Football (AFL)
- Cricket
- Baseball
- Tennis
- Archery
- Athletics
- Lawn Bowls

The sports facilities are utilised less frequently by local schools for school sports or carnivals, and also by the community for outdoor fitness training, typically individually or in small groups.

The Tennis courts on Hawthorne St are currently undergoing an upgrade and will be available for community use in the near future.

2.22.2 Key locations

Different user groups associated with the site identify with specific areas of the park that have traditionally been utilised by their club/association. Each of these areas has a specific name and has been identified on the mapping adjacent.

2.22.3 Run Club Race Routes

Scarborough Park is currently well used for both formal and informal running, with races regularly held by St George District Athletic Club. The club shares the path network with the community and does not have exclusive use of the park paths.

There are various length races and routes including 1 km, 2 km, 4 km, 7 km, 10 km, 1 mile, 2 miles, 3 miles, 5 miles and 7 miles. Whilst the length of the routes vary they are all contained within the central and southern precincts of Scarborough Park. Syd Frost Memorial Hall is currently used as a start and finish point for most formal running events.

Opportunities

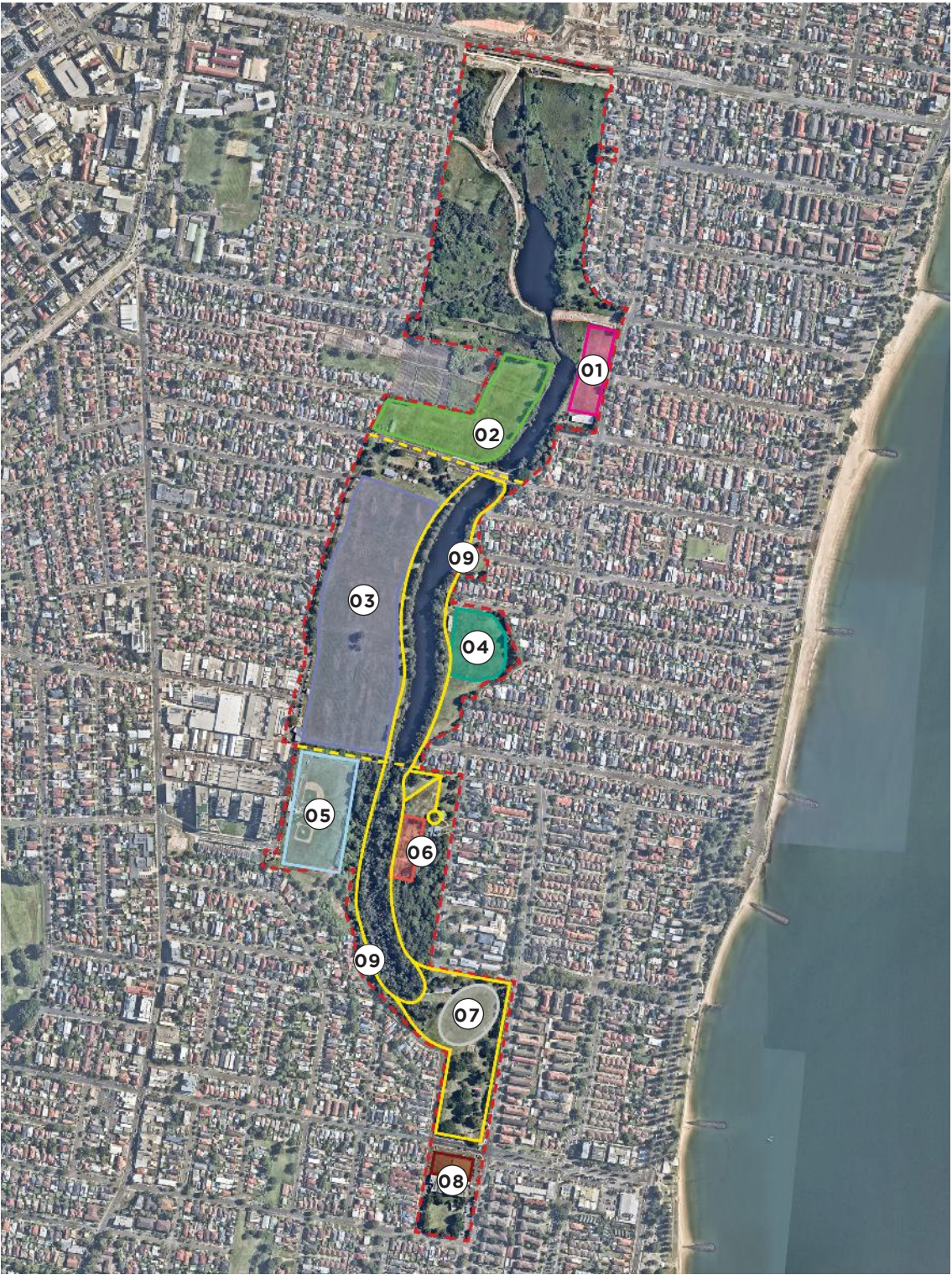
By extending formal routes into the northern precinct of the site, it would be possible to create a varied circuit without the need to repeat laps as often. Safety at the Barton St road crossing would need to be managed.

Formalised pathways would make for safer and well-delineated routes, with decomposed granite a good option for surfacing in more sensitive ecological areas due to its porous nature and reduced excavation and compaction requirements.

New pathways around Scarborough Park Central would mean that circuits could also be extended to use formal paths on the outside of the sports fields, extending lengths without requiring road crossing.

Legend

- 01 TANNER RESERVE
- 02 SCARBOROUGH PARK NORTH
- 03 SCARBOROUGH PARK CENTRAL
- 04 SCARBOROUGH PARK EAST
- 05 PHIL AUSTIN BASEBALL GROUND
- 06 SCARBOROUGH PARK TENNIS COURTS
- 07 TONBRIDGE RESERVE
- 08 RAMSGATE RSL MEMORIAL CLUB
- 09 RUN CLUB ROUTES





01/

Lighting

In the past, some investment has been made in sports lighting infrastructure. Without undertaking a detailed lighting asset review and measuring each of the lighting systems for their current lux levels, it is assumed that most (if not all) of the existing sports lighting schemes are below the necessary standards (for both lux levels and uniformity) for both training and competition use. At detail design stages further work will need to determine the appropriate standard of lighting for each sport and appropriate locations, keeping all above ground infrastructure clear of playing areas and runoff zones.

Site specific planning requirements will need to be considered, and adherence to AS 4282-1997 – Control of the obtrusive effects of outdoor lighting, needs to be addressed during the preparation of detailed drawings / concepts.



02/

Buildings

Over the last 8 years, council has completed a program of amenity building replacement throughout Scarborough Park, replacing buildings at Tanner Reserve, Scarborough Park Central (Barton St), Scarborough Park Central (Production Ave), Scarborough Park East, and Tonbridge Reserve.

An additional amenities building was also constructed at Leo Smith Reserve, adjacent to the renovated Syd Frost Memorial Hall. A storage shed with covered seating area was also constructed adjacent to the Scarborough Pond at Barton St.

Amenities upgrades appear to have made the building at the end of Phillips Road (in Scarborough Central) surplus to organised sporting needs, with toilets that are no longer functional. This building should be considered for removal as it is poorly located, interferes with good north/south movement, is visually intrusive and encourages anti-social behaviour.

Opportunities exist to construct additional shade structures with picnic/BBQ facilities at key locations to facilitate community gathering and casual recreation use.



03/

Parking

Many of the car parking facilities around the park are inadequate and would struggle to cater for heavy demand days during intense competition events. Staggered programming of use and alternate starting times can relieve some of the pressure in this area, but for the purpose of building club inclusiveness, and catering for families that are club members with siblings spread across a number of teams, most clubs would prefer to tighten their window of activities as opposed to stretching it out over more of the day or the weekend.

Opportunities exist to formalise car parking at key sporting precincts. In some locations, boundary fencing may need to be shifted to accommodate 90 degree angle parking along the park edge. Formalising car parking with hard surfacing and linemarking maximises efficiency and can also enable protected tree planting for shade.



04/

Sports fields

The ability to sustain good turf health and for the turf to recover adequately after periods of high use and wear is hindered without good drainage and irrigation. Over recent years, council has implemented a program of sports field renovation to improve turf quality and drainage for improved playability.

Irrigation systems have been installed in key locations such as Scarborough Park Central (whole area), Scarborough Park East (main field), and Tonbridge Reserve to maintain turf in dry periods.



05/

Supporting infrastructure

Many of the sports fields within Scarborough Park have supporting infrastructure such as fencing and seating which is aged or in poor condition.

Fencing is generally not encouraged to sportfields within Scarborough Park. Exceptions can be made for the following:

- Fields where the level of play requires access control (low, 1m fence)
- Areas where ball control is required due to limited access to surrounding areas
- Areas where fencing is required for safety due to proximity of hazards such as roadways

Other than tiered grandstand seating in Scarborough Park North, little seating is provided to sportfields within the park. Opportunities exist to offer increased spectator seating in conjunction with seat upgrades/replacement throughout the park.

Consistency in materials and design is desired to maintain the overall character of Scarborough Park.

2.23 Land ownership

2.23.1 Missing links

The following areas have been identified as 'missing links' in the Scarborough Park masterplan, being lots which are not owned by or under management of council.

1. Land owned by Department of Planning (Council has care and control)
2. Land owned by TfNSW (reserved for road corridor)
3. Land owned by Ramsgate Memorial RSL Club

2.23.2 'Borrowed' land

The masterplan has also identified the following locations of 'borrowed land' within the masterplan area.

4. Ramsgate RSL Memorial Club - built form extends into council-owned car park, creating a sense of private ownership over the council asset.
5. Northern section of council car park is a one-way system which forces cars to exit through the Ramsgate RSL Club car park area.
6. Tonbridge Reserve extends into the Chuter Avenue road reserve. Currently this land is unused for road infrastructure, but it could possibly be resumed for road widening in the future.

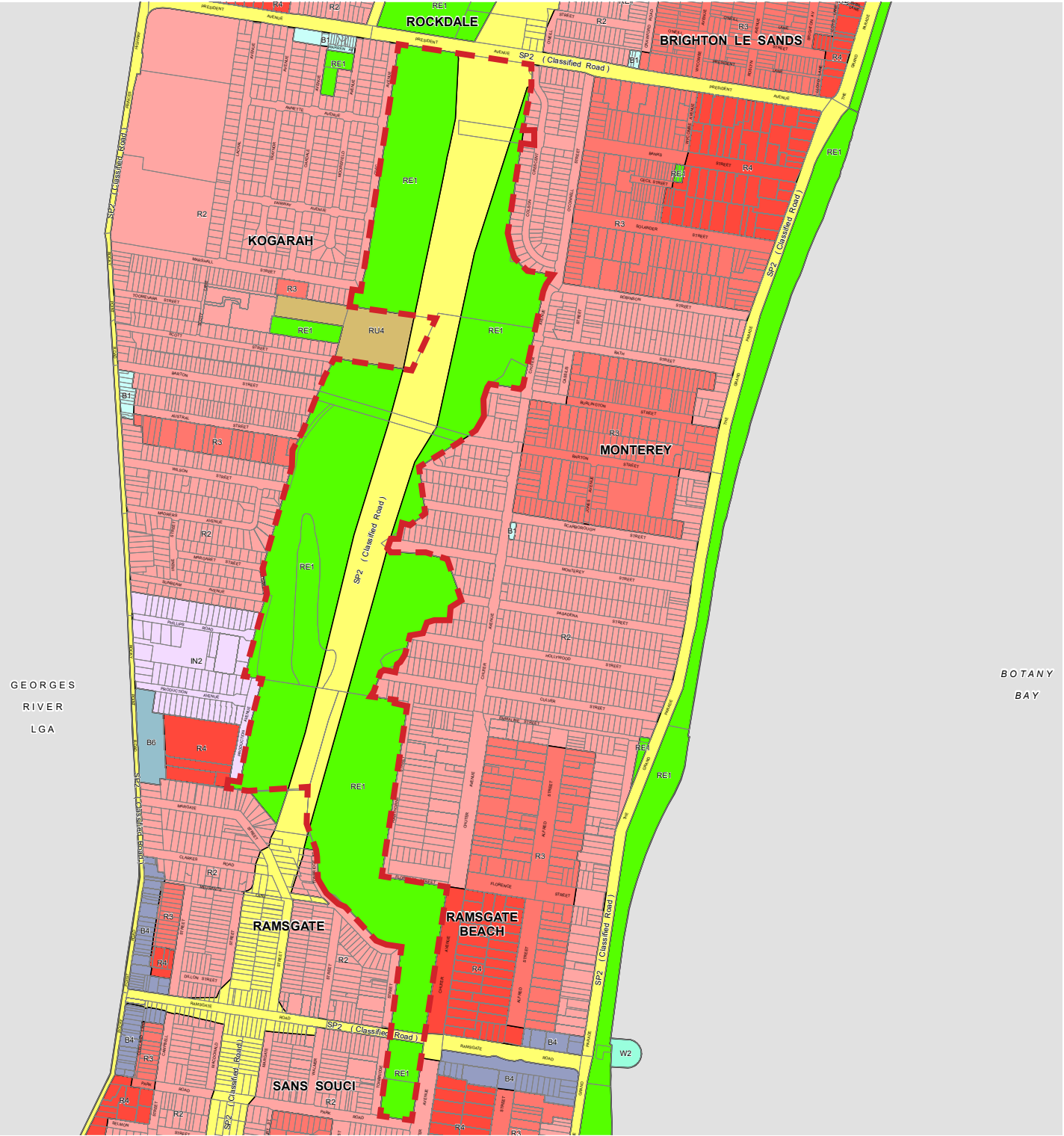


2.23.3 LEP Zoning Map

– Bayside Council - Local Environment Plan 2021_Land Zoning Map

Legend

- Site Boundary
- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor
- B7 Business Park
- E1 National Parks and Nature Reserves
- IN1 General Industrial
- IN2 Light Industrial
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU4 Primary Production Small Lots
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist
- W1 Natural Waterways
- W2 Recreational Waterways
- W3 Working Waterways
- UL Unzoned Land
- SEPP (Three Ports) 2013
- SREP 33 - Cooks Cove





2.24 Site analysis mapping

2.24.1 Northern precinct

The key items and site issues identified during the site analysis phase were as follows:

- Coastal Wetlands and Coastal Wetland Proximity Areas cover the majority of the northern precinct. All works are required to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the wetland and numerous works will require a development application.
- Sense of arrival from key entrance points into the park does not befit the scale and significance of the park.
- Missing path connections, with no hard-surfaced paths in the northern precinct. Informal path links are vague and do not encourage exploration.
- The new shared path under construction will provide an important east-west pedestrian and cycle link and open up views over the northern pond.
- President Avenue forms a major visual and physical buffer to north, separating the park from Rockdale Bicentennial Park. The future overhead bridge link will improve connectivity throughout this important open space link.
- Stands of mature, native trees are often isolated by a blanket of weeds alongside the informal pathways.
- Lack of established recreational routes means the area is under utilised. The new active transport link will improve access and connectivity.
- The main pond is a natural asset which is under utilised, with little opportunity for interaction or recreation.
- Wetland biodiversity is flourishing in some areas.
- Management of weeds is difficult due to size, numerous stormwater inlet pipes, and extensive urban encroachment.

- The historic route of the racecourse is recognised in the shape of pathways, but is not identified to the community with signs or interpretation.
- Tree planting along the racecourse route create a pleasant pedestrian environment.

LEGEND

- Site boundary line
- Land reserved for M6 corridor
- Open creek/channel
- Concrete lined drainage channel
- Playground
- Open, managed grassland
- Wetland
- Dense vegetation
- Heavy canopy tree cover
- Private open space / conservation area
- Stands / significant trees
- Area subject to weed infestation
- Entries into park
- Constrained pedestrian access
- Formal pathway (hard surface)
- Formal pathway (dirt path)
- Informal paths
- Pedestrian & cycle bridge crossing
- Key vehicular routes & park interfaces
- Existing cycle routes
- Parking areas for park users
- Long range / expansive view
- Area with periodic flooding
- Coastal wetlands area
- Coastal wetlands proximity area

0m 50m 100m 200m



2.24.2 Central precinct

The key items and site issues identified during the site analysis phase were as follows:

- Sense of arrival from key entrance points into the park does not befit the scale and significance of the park.
- Missing path connections, with few hard-surfaced paths in the central precinct. Informal path routes limit use by some park users, e.g. those with mobility difficulties or prams/wheelchairs.
- Formal pedestrian crossing to be investigated for any future path connections across Barton St to improve safety and connectivity throughout the park spaces.
- Lack of casual sports / community recreation facilities due to dominance by organised sports.
- Playground and model boating facility form a community recreation node at Barton Street. Adjacent water board building is an identified conservation asset.
- Concrete lined stormwater channel and fencing form a physical barrier and visual impact the park green space. Opportunity for improved fencing and landscape treatments.
- The space is framed by stormwater channels but these are not taken advantage of and offer little to the existing environment.
- Vegetation is generally limited to the periphery of the park or areas where steep grades preclude other uses.
- The water course is a natural asset which is under utilised, with little opportunity for interaction or views over water.
- Existing cycle routes are all on road and do not utilise the park. Opportunity exists for paths within the park to be utilised for slower cycling / family groups.

- Scarborough Park South (including the Phil Austin Baseball Ground) is an old landfill that is managed under a current Long-Term Environmental Management Plan (EMP). Any works other than maintenance require approval and an environmental site investigation for contamination related to the specific works

LEGEND

- Site boundary line
- Land reserved for M6 corridor
- Open creek/channel
- Concrete lined drainage channel
- Playground
- Open, managed grassland
- Wetland
- Dense vegetation
- Heavy canopy tree cover
- Private open space / conservation area
- Stands / significant trees
- ★ Area subject to weed infestation
- Entries into park
- Constrained pedestrian access
- Formal pathway (hard surface)
- Formal pathway (dirt path)
- Informal paths
- Pedestrian & cycle bridge crossing
- Key vehicular routes & park interfaces
- Existing cycle routes
- Parking areas for park users
- Long range / expansive view
- Area with periodic flooding
- Coastal wetlands area
- Coastal wetlands proximity area

0m 50m 100m 200m



2.24.3 Southern precinct

The key items and site issues identified during the site analysis phase were as follows:

- Coastal Wetlands and Coastal Wetland Proximity Areas cover a large area within the southern precinct. All works are required to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the wetland and numerous works will require a development application.
- Scarborough Park South (including the Phil Austin Baseball Ground) is an old landfill that is managed under a current Long-Term Environmental Management Plan (EMP). Any works other than maintenance require approval and an environmental site investigation for contamination related to the specific works
- Sense of arrival from key entrance point at Ramsgate Road does not befit the scale and significance of the park.
- Missing path connections, with few hard-surfaced paths in the southern precinct. Informal path routes limit use by some park users, e.g. those with mobility difficulties or prams/wheelchairs.
- Rotary Park features many heritage trees and provides a good opportunity to create a community recreation node, building on the existing playground and linking to the town centre zone.
- Hawthorne Street Natural Area and the southern Scarborough Pond provide important habitat and biodiversity areas.
- Existing degraded tennis courts recently upgraded and multi-court added.
- Poor east-west connectivity across southern pond and to Phil Austin Baseball Fields. A portion of the park owned by others limits pedestrian connection options.
- The western watercourse bank provides a tranquil walking route but can be impacted by flooding.

- Existing picnic shelters in Tonbridge Reserve are subject to flooding and are dated.
- The southern Scarborough Pond watercourse and its outfall to Botany Bay are prone to periodic flooding.
- Perception of private ownership of council car park adjacent to Ramsgate RSL club due to built form extending into council land.
- Opportunity to upgrade play offering at Pemberton Reserve.

LEGEND

- - - Site boundary line
- - - Land reserved for M6 corridor
- - - Open creek/channel
- - - Concrete lined drainage channel
- - - Playground
- - - Open, managed grassland
- - - Wetland
- - - Dense vegetation
- - - Heavy canopy tree cover
- - - Private open space / conservation area
- - - Stands / significant trees
- - - Area subject to weed infestation
- - - Entries into park
- - - Constrained pedestrian access
- - - Formal pathway (hard surface)
- - - Formal pathway (dirt path)
- - - Informal paths
- - - Pedestrian & cycle bridge crossing
- - - Key vehicular routes & park interfaces
- - - Existing cycle routes
- - - Parking areas for park users
- - - Long range / expansive view
- - - Area with periodic flooding
- - - Coastal wetlands area
- - - Coastal wetlands proximity area







03 OPPORTUNITIES

3.1 Key opportunities

Habitat

- While retaining a reasonable complement of open space for playing fields and general community recreation, reconstruct more of Scarborough Park as a wetlands environment to enhance the extent and quality of the park as a wetlands corridor.
- Extension of the existing wetland area in the Civic Avenue Reserve to incorporate existing flood prone areas (subject to compliance with legislative requirements for coastal wetlands).
- Promotion of the park as a wetlands park and nature reserve.
- Improvement of biodiversity around activity hubs through appropriate planting, which will also provide screening and create more pleasant social environments.
- Protect and retain existing valuable habitat in Hawthorne Street Natural Area by minimising impacts on existing ecosystems.
- New planting to favour re-establishment of local vegetation communities to strengthen existing natural features.
- Other than along the Barton St corridor, replace exotic plantings (including those considered as high significance in the CMP) with native species when planting succumb to natural attrition.

Connectivity

- Creation of a clear path hierarchy to provide new, durable routes around the park through various environments and habitat year round. The path network will encourage park users to explore other areas of the path and facilitate safe active transport for all park users. Some informal, low volume path connections will be retained.
- Establishment of an additional east-west pedestrian connection linking Phil Austin baseball fields with Scarborough Pond south and Tonbridge Street.
- Consideration of an additional north-south link from Scarborough Park North across the drainage channel to link to the new shared path connecting Chuter Ave with Civic Ave.
- Creation of formal routes and wayfinding signage at key locations to improve navigation throughout the park and encourage users to explore more widely within the open space corridor.
- Creation of a hierarchy of gateways into the park, with feature entrances creating a recognisable identity.
- Use of boardwalks across wetland areas to allow access to and movement through currently unused areas.

Sports & Activity

- Rationalisation of sports fields where necessary to increase efficiency, reduce wasted space and reduce conflicts between varied sports.
- Provision of additional activities for casual use such as basketball and play spaces along key routes to provide additional general community activation. Consider school access routes in particular.
- Promotion of fitness for the wider community through introduction of fitness stations and cycle or running routes around the park.
- Provision of lighting strategically at key locations to create safe, usable routes and facilities.
- Upgrade the existing pontoon to a formal pier and activity hub along Barton Street to facilitate wider use.
- Provide additional facilities for groups around the perimeter of sporting pitches.
- Consider provision of decks to the watercourse and wetlands in order to improve access to the water and create pleasant seating opportunities.

Sustainable drainage

- Promotion of reed planting around stormwater outlets to provide natural cleaning and improvement of water quality.
- Explore options for de-channelisation of watercourses and inlets to re-establish wetlands in appropriate locations throughout the park.
- Investigate creation of rocky wetlands within selected swale areas to allow for exploration and activation of otherwise inaccessible locations.
- All stormwater and drainage modifications to be subject to detail design and modelling to ensure there are no reductions in drainage discharge into the park system, and no loss of overall flood storage.

Management

- Reduction in mown grassland in areas which are not currently used for either formal or informal sports, replaced with native planting and trees.
- Protection of the park through creation of formal pedestrian/cycle routes in order to prevent damage to grass and conservation areas.
- Creation of elevated pathways through wetlands and/or flood-prone areas to increase usability for park users after inclement weather. Some existing routes have poor drainage and create maintenance problems in wet weather.
- Weed management to be carried out in accordance with a prioritised management plan to maintain the scenic qualities of Scarborough Park.
- Strategically reduce invasive species throughout the site. Council to collaborate with community bushcare groups to manage invasive species.
- Improvement of water quality through introduction of wetland areas at suitable outlets without impacting overall drainage and system capacity.
- Create strategic nodes of activity throughout the park to group facilities with higher management requirements together to streamline maintenance activities.

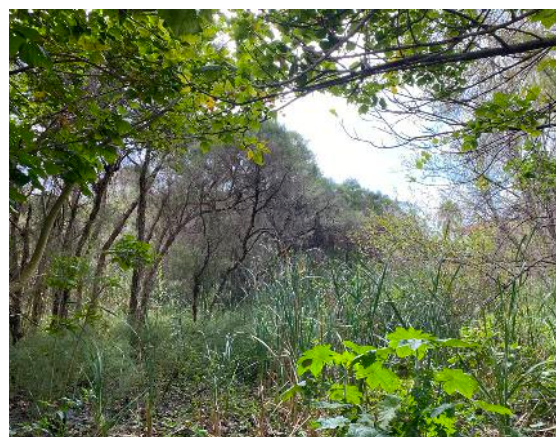


Image: Jane Irwin Landscape Architecture



3.2 Opportunities mapping

3.2.1 Northern precinct

Key opportunities have been mapped adjacent.

LEGEND

- Site boundary line
- Land reserved for M6 corridor
- Open creek/channel
- Channelised drain
- Potential water management basin
- Freshwater lagoon
- Playground
- Open, managed grassland
- Wetland
- Dense vegetation
- Heavy canopy tree cover
- Stands / significant trees
- Community space
- ⊗ Definition of key gateway / threshold
- Shared pedestrian & cycle route
- Formal park loop
- Informal paths
- Pedestrian & cycle bridge crossing
- Activity, recreation or social node
- Desired pedestrian crossing
- Key vehicular routes & park interfaces

0m 50m 100m 200m



3.2.2 Central precinct

Key opportunities have been mapped adjacent.

LEGEND

- Site boundary line
- Land reserved for M6 corridor
- Open creek/channel
- Channelised drain
- Potential water management basin
- Freshwater lagoon
- Playground
- Open, managed grassland
- Wetland
- Dense vegetation
- Heavy canopy tree cover
- Stands / significant trees
- Community space
- ⊗ Definition of key gateway / threshold
- Shared pedestrian & cycle route
- Formal park loop
- Informal paths
- Pedestrian & cycle bridge crossing
- Activity, recreation or social node
- Desired pedestrian crossing
- Key vehicular routes & park interfaces

0m 50m 100m 200m



3.2.3 Southern precinct

Key opportunities have been mapped adjacent.

- LEGEND
- Site boundary line
 - Land reserved for M6 corridor
 - Open creek/channel
 - Channelised drain
 - Potential water management basin
 - Freshwater lagoon
 - Playground
 - Open, managed grassland
 - Wetland
 - Dense vegetation
 - Heavy canopy tree cover
 - Stands / significant trees
 - Community space
 - Definition of key gateway / threshold
 - Shared pedestrian & cycle route
 - Formal park loop
 - Informal paths
 - Pedestrian & cycle bridge crossing
 - Activity, recreation or social node
 - Desired pedestrian crossing
 - Key vehicular routes & park interfaces







04 CONCEPT DESIGN

4.1 Design objectives

4.1.1 Overview

The following design objectives have been established to guide the masterplan and the future detailed design of all projects within the park boundaries.

These objectives are based on key outcomes and opportunities identified in the analysis stage, drawn from our studies of site conditions and relevant council and governmental policies.

4.1.2 Promote access and connectivity

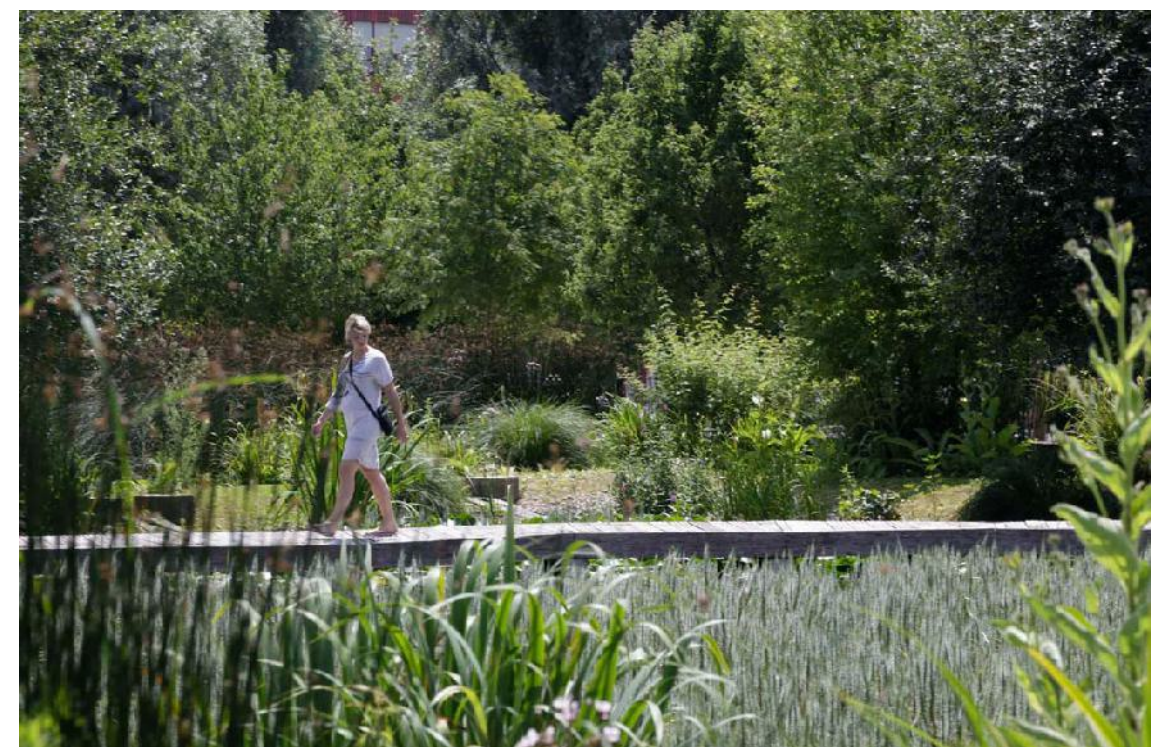
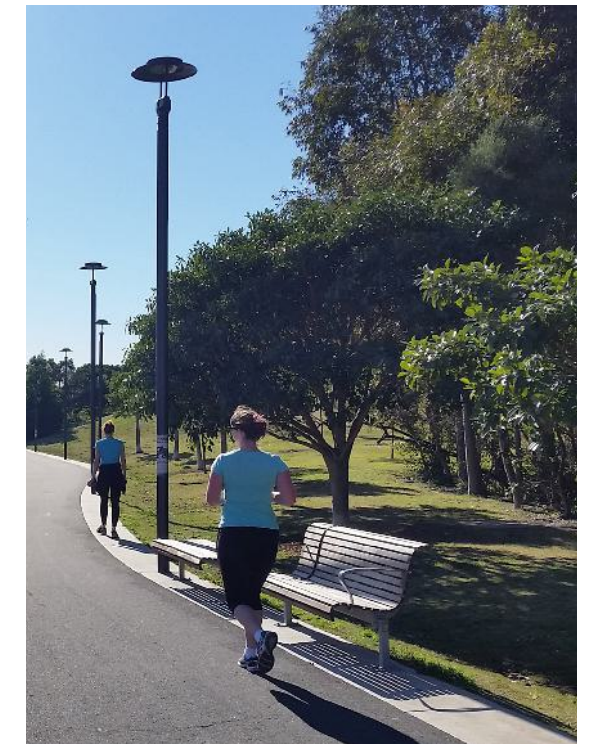
The masterplan identifies new and improved connections through the park and between local centres for pedestrians and cyclists. Portions of Scarborough Park are activated by varied users, but there is limited activation and movement throughout the whole parkland corridor. Improving access and circulation routes will make the park more accessible to the local community, encouraging visitors to use different facilities within the park and explore areas beyond their usual visiting nodes.

With improved accessibility, Scarborough Park can become a hub of recreation activity throughout the year, offering opportunities for both formal and informal play, recreation and relaxation to all genders, ages and abilities.

Limited east/west connections across the park, and informal paths running north/south within the park have historically stymied community access into and across the park. New connections identified within the masterplan, and a new active transport link being constructed as part of the M6 works will significantly improve the permeability of the park and encourage additional visitors to explore the open space network to better interact with the natural environment.

Key outcomes

- Establishing formal pedestrian routes throughout the park will help to improve accessibility for the community.
- Improved path networks create a perception of a safe and welcoming open space network.
- Encouraging visitors to explore other areas within the park encourages a greater recognition of the open space network and available facilities.
- Opportunities for all ages and abilities to interact and socialise improves mental health outcomes for the community.
- Provide recognisable thresholds into the park to encourage use of the park and provide a sense of arrival to visitors.
- To address the flood-prone nature of the park, safety for park users and neighbouring residents should be enhanced by ensure that the access and circulation network provides logical wayfinding, clear messaging regarding flood hazards, and promotes safe park use.

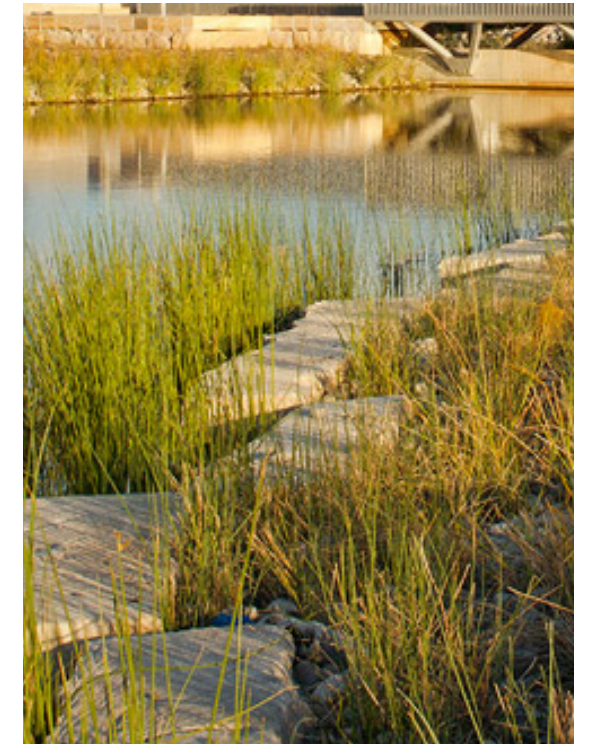


4.1.3 Protect natural environments

In order to protect both the existing and re-established natural environments, along with the flora and fauna inhabiting them, measures will be taken to restrict further development or encroachment on these areas.

Key outcomes

- Community awareness and support is vital to ensure protection of vulnerable systems. Promotion of existing and new community initiatives such as bush care and educational forums increases awareness and promotes a sense of ownership within the community.
- Physical interaction with nature and passive recreation such as walking is important but needs to be effectively managed. Creation of activity hubs which contain or reduce the amount of damage caused by pedestrians by restricting pedestrian movement along designated footpaths in ecologically sensitive areas.
- Creation of habitat which would have originally existed in this area eg fallen logs for insects to improve natural and native biodiversity of the park.
- Limit and police the areas in which off leash dog walking is allowed to protect the natural assets of the park from damage and protect the fauna and habitats that share the space.
- Increase educational signage in key natural areas to provide engaging signs which inform the community and encourage engagement with the natural environment.



4.1.4 Protect and enhance biodiversity

Scarborough Park is one of the most environmentally significant areas within Bayside Council. To protect and enhance its environmental significance, one focus will be on the re-establishment of key areas of the park as ecological zones.

The ongoing viability and protection of these areas is dependent on maintaining a balance with the formal and informal recreation needs of the local community, ensuring no net loss of recreation and community assets. Maintaining and improving facilities for the community encourages the protection of ecological areas by reducing pressures on these spaces and allowing them to retain maximum footprint and critical mass.

The ecological zones within the park are assets for the community at a local and district level, maintaining important ecological communities and reducing the risk of losing habitat types forever. Opportunities exist for these areas to provide casual and/or formal education by partnering with relevant community groups or educational institutions.

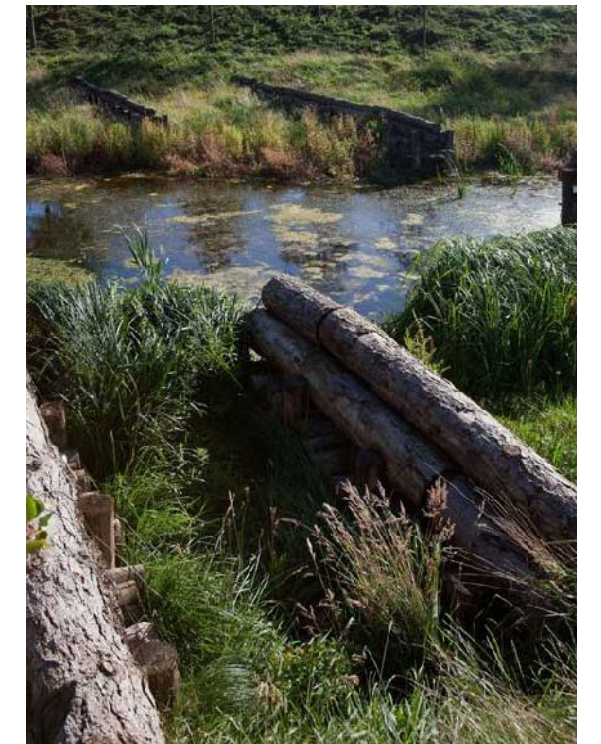
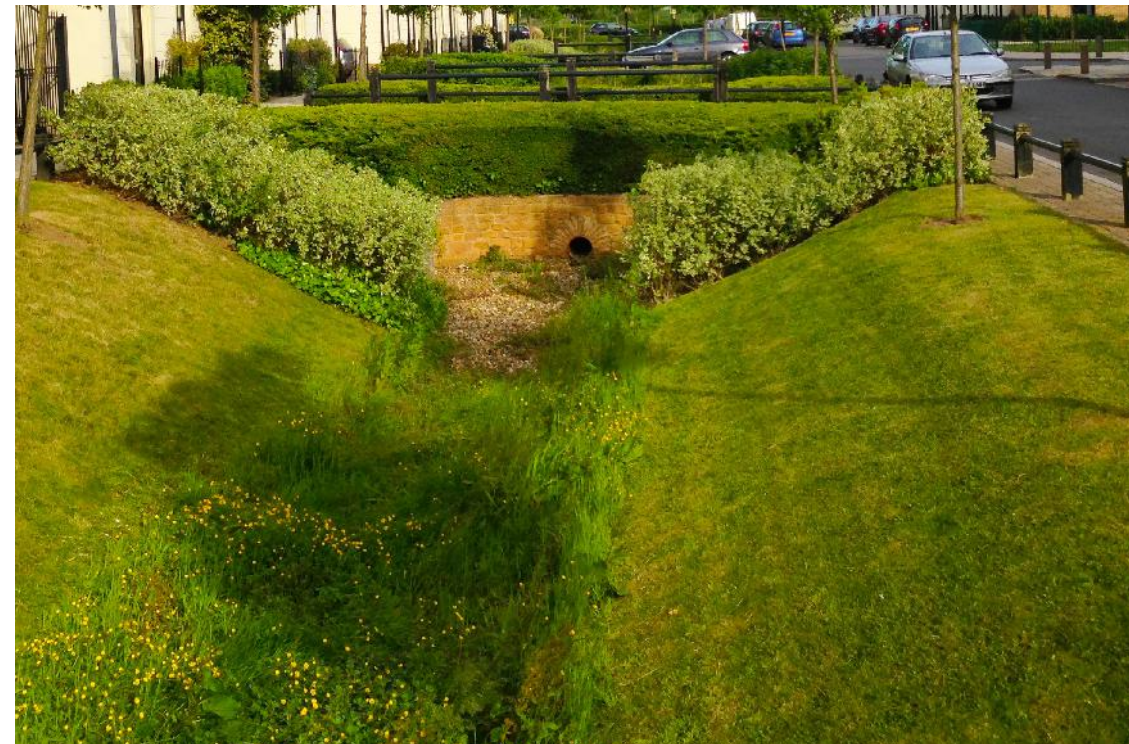
Natural areas also act as spaces to encourage connection to Country, allowing the community an opportunity to build links to local Indigenous history and culture.

The upgraded park will reassert itself as a major asset to the community, providing them with improved passive recreational opportunities to complement the established active recreation, as was desired by the parks creator.

Key outcomes

- Implementation of water quality improvement and habitat restoration projects will enhance the ecological value of the wetlands, increasing habitat and biodiversity, and providing a valuable resource and source of pride for the local community.

- Extend predominately native freshwater wetland community outcrops around the periphery of the northern pond with a view to self seeding in the future.
- Maintain ecological value with regular weed removal programs for biodiversity areas.
- Re-establish an identity for the park and embed it within the community to give local residents a sense of ownership and make Scarborough Park a recognised asset within the wider region.
- Provide opportunities for expansion of endangered ecological communities to improve their resilience and ongoing viability.
- Educate the local community on the importance and value of the ecological areas within the park.
- Limit the expansion of off leash areas within the park.
- Ensure that lighting does not impact ecologically sensitive areas.



4.1.5 Promote active lifestyle and recreation

Whilst the park provides excellent amenity at an active recreation level, there are still gaps in the provision of fundamental infrastructure such as footpaths. This tends to preclude users with limited mobility or parents/carers with strollers, and groups who wish to use the park for informal recreation.

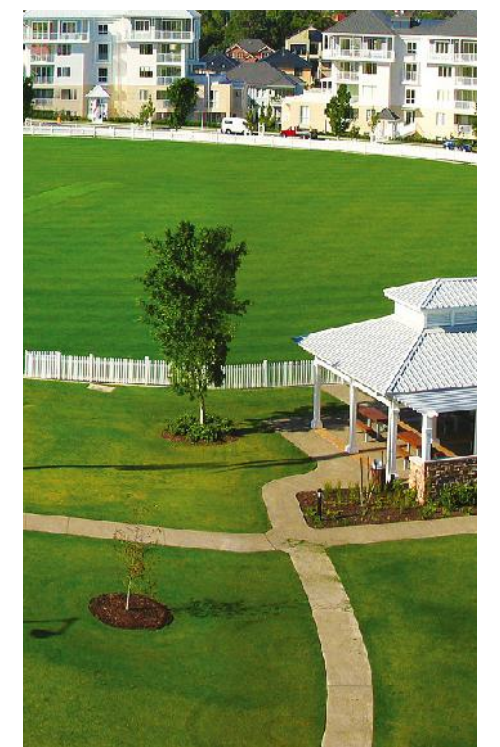
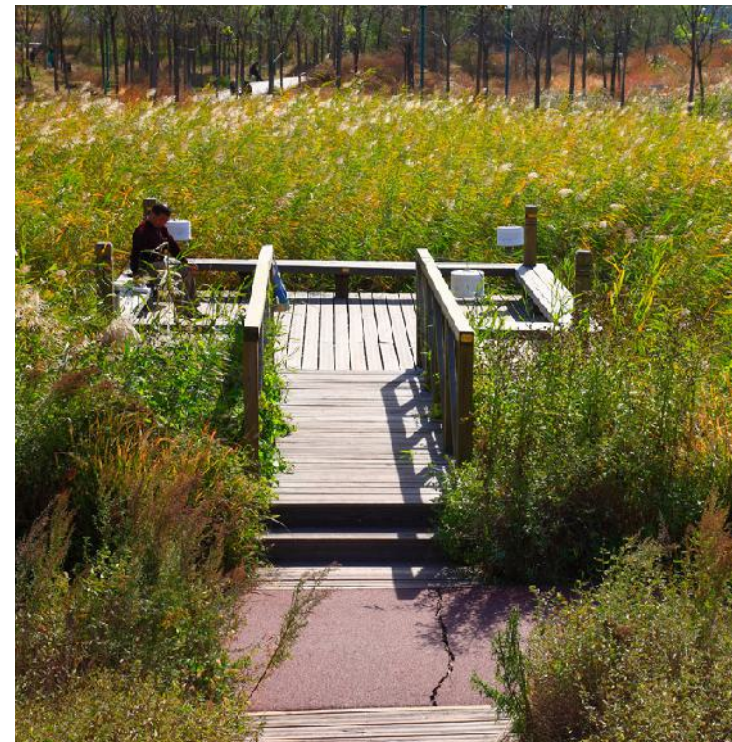
Objectives for the park should aim to cater to the wider community in terms of provision of passive, active and specialised recreational activities as well as ensuring the legacy of the park as a valuable ecological asset.

Key outcomes

- To complement active recreation, passive recreation that promotes relaxation, contemplation and socialisation will provide opportunities for a more diverse cross-section of the community.
- Provision of high quality facilities for public use will encourage daytime activation of the space, fostering passive surveillance and increased sense of safety within the community.
- Improving sports facilities to mitigate the impacts of adverse weather will aid in facilities being able to be utilised more frequently.
- Provide points of interest which are appropriately placed for ease of community access.
- Diversify the recreation offering within the park by providing additional activities such as
 - + basketball court/s
 - + a small learn to ride facility
 - + bouldering rocks
 - + outdoor fitness equipment station/s
 - + opportunity to participate in

community garden space.

- Investigate opportunities to improve quality and functionality of existing car parking without unnecessary incursions into parkland.
- Aim to ease congestion, and increase safety for pedestrians around Scarborough Park.
- Consider increased enforcement of illegal parking.



4.2 Zoning strategy

4.2.1 Conservation and biodiversity

Scarborough Park North and Hawthorne Street Natural Area will be designated as areas of conservation and biodiversity. Protection and improvement of ecological communities will be their primary purpose, although footpaths will allow these areas to be enjoyed by the public.

The location of these areas corresponds with existing endangered ecological communities. Formalising these as conservation and re-establishment zones defines their boundaries and helps to ensure their ongoing protection.

MAIN FEATURES

- 01. Scarborough Park North is recommended for expansion of the existing Coastal Wetlands ecosystem, with an improved management plan to achieve a high quality ecological environment.
- 02. Explore the permissibility and feasibility of the creation of a weir within the Coastal Wetland areas of northern Scarborough Park to allow control of water levels in the area - allowing better management and establishment of wetlands (subject to flood modelling to ensure no adverse impacts to surrounding areas, and permissibility under Chapter 2 of the Hazard and Resilience SEPP).
- 03. Hawthorne Street Natural Area to have ongoing care and management of Kurnell Dune Forest and Swamp Oak Floodplain Forest endangered ecological communities. Access paths and other facilities will be maintained to allow community access and appreciation.



4.2.2 Organised sport

Scarborough Park provides significant open space for organised sports activities. A variety of sporting codes are accommodated within the precinct, including football (soccer), rugby league, cricket, AFL, baseball, tennis and archery.

Existing areas of formal sports use are retained in the masterplan. No expansion of facilities is proposed due to the constrained nature of the site and competing demands for other uses.

MAIN FEATURES

- 01. Existing sports fields to be retained for use by organised sport and passive community use. Ongoing management and maintenance of grass surfaces and drainage / irrigation systems.
- 02. Existing spectator facilities to be upgraded at Scarborough Park North, with consideration of a new pedestrian and cycle link along the northern side of Barton Street.
- 03. Courts upgraded in 2024 including provision of multi-courts within tennis court facility.

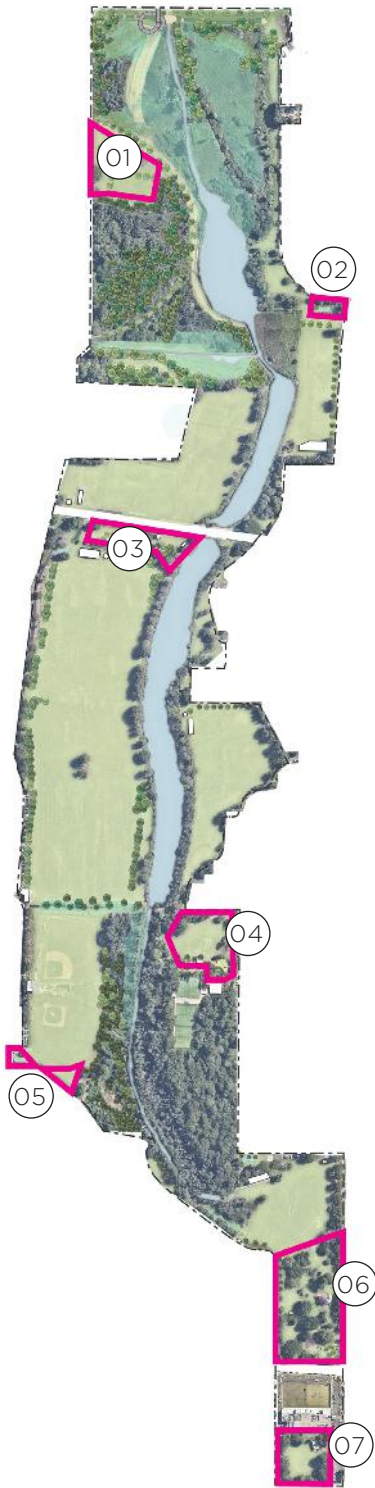


4.2.3 Passive recreation

A variety of facilities are provided for community recreation and relaxation.

MAIN FEATURES

- 01. The Civic Avenue area provides users of Scarborough Park North with some amenity space including a fenced off-leash dog area. Providing outdoor fitness equipment and active recreation complements the existing open grass areas to enhance passive recreation opportunities and attract new park users.
- 02. The new shared path link creates an opportunity for a new community node at the northern end of Tanner reserve. Outdoor fitness could be provided to link into a wider fitness trail.
- 03. Scarborough Park Central, will become a hub for family activity, with upgraded amenities, picnic/BBQ area, playground, water-side access and junior sports pitches nearby. Minimal improvements are required to maximise community use/enjoyment.
- 04. Leo Smith Reserve provides an excellent opportunity to expand the existing play area with a learn to ride path, shelter and picnic tables. This expands the existing hall, tennis courts, amenities, kick-about space and play area.
- 05. A new community garden can be located south of Phil Austin Baseball Fields, with a nearby fitness equipment hub offering variety in recreation.
- 06. Tonbridge Reserve becomes the key open space in the south, with improved facilities for the community such as shelters and possible multi-court increasing activation and links to Ramsgate Beach Town Centre.
- 07. Pemberton Reserve remains as a community park, with improved play space and picnic facilities linking to Ramsgate Beach Town Centre.



4.2.4 Combined Zoning

- Conservation & biodiversity
- Organised sport
- Passive recreation



4.3 Circulation

4.3.1 Key routes

The primary route through the site consists of a shared path running north to south, with connections to on-road cycle routes at park edges. The paths within the park provide a pleasant off-road connection between suburbs and link into the existing surrounding network.

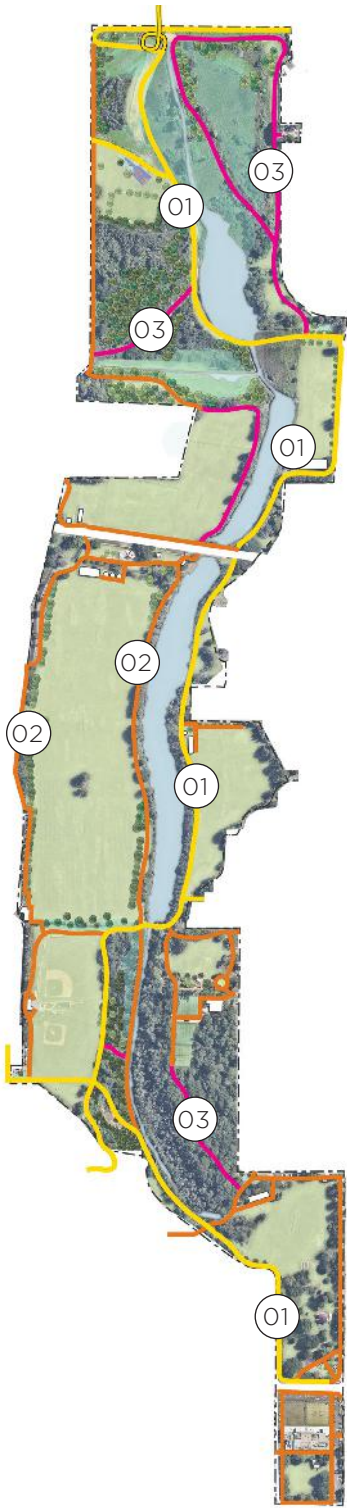
The path upgrades also improve circulation within the park and encourage the community to explore more of the open space network within the park.

Main features

- 01. Primary paths allows better access north-south and east-west, also continuing further north into Rockdale Bicentennial Park and beyond.
- 02. Secondary routes throughout the park allow for informal recreation and manage impacts in sensitive areas where primary paths may not be suitable.
- 03. Informal routes for maintenance and passive recreation. Soft surface path type minimises impacts within conservation areas and sensitive habitat zones.

Legend

- Primary path (hard surface)
- Secondary path (hard surface)
- Informal path (grass, soil, mulch or gravel surface)



4.3.2 Exercise routes

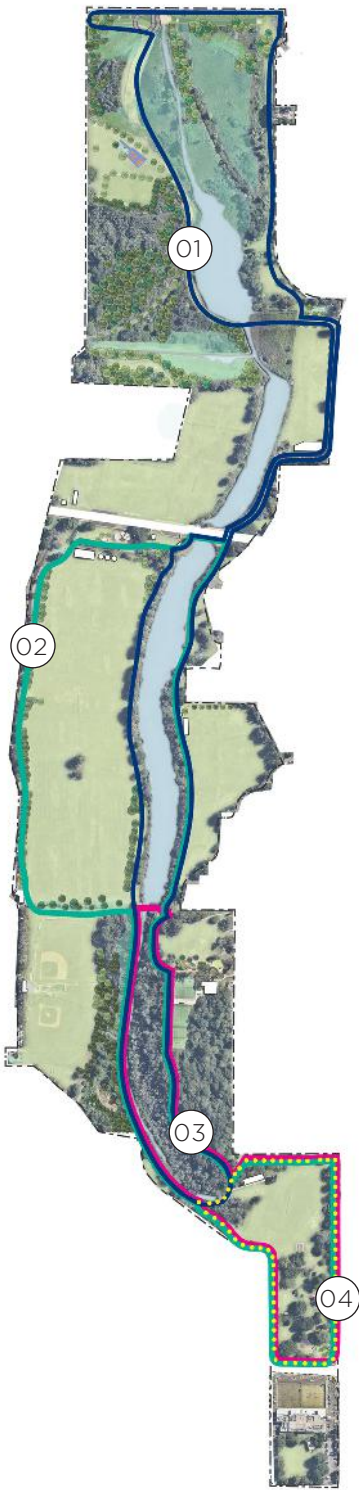
To promote fitness and health within the local area, routes around the park can be arranged to create circuits of varying lengths which can be incorporated into both formal and informal walking and running routes.

Main features

- 01. 5km route around the Scarborough Ponds waterbody, from Tonbridge Reserve to President Avenue. Requires crossing of Barton St.
- 02. 3.5km route around Scarborough Park Central, and south around Rotary Park. Fully off-road route.
- 03. 2km exercise route through Hawthorne Street Natural Area and around Tonbridge Reserve and Rotary Park. Fully off-road route.
- 04. 1km route running around Tonbridge Reserve and Rotary Park, located within close proximity of Ramsgate Beach Town Centre to encourage use. Fully off-road route.

Legend

- 5km route
- 3.5km route
- 2km route
- 1km route



4.3.3 Education trails

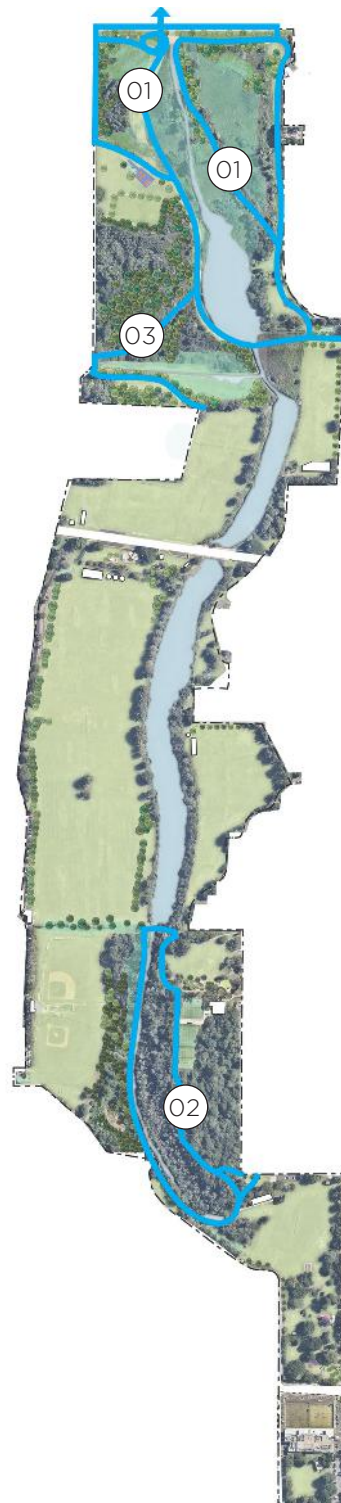
As an area of high ecological value, it is important that people are able to learn what Scarborough Park adds to the local environment and understand the value of the ecosystems present on site. The educational routes offer trails through coastal wetlands, Kurnell Dune Forest and Swamp Oak Floodplain Forest.

The northern precinct of Scarborough Park retains remnant tree planting and a path connection along the alignment of the old Moorefield Racecourse, presenting an opportunity to highlight one aspect of history within the park.

Appropriate interpretive signage may be installed along routes to facilitate casual education opportunities.

Main features

- 01. Wetland and forest trail. Allows study of stormwater water management, flood control and wetland ecology within Patmore Swamp, along with exploration and discovery of woodland adjacent to Civic Avenue.
- 02. Hawthorne Street Natural Area Trail. Exploration of established high value Kurnell Dune Forest and Swamp Oak Floodplain Forest on allocated trails. Opportunity for wildlife spotting, particularly along the water's edge.
- 03. Additional pathway / extension to educational route provides a historically relevant route through the park, picking up on the original alignment of the racetrack.



4.4 Optional Routes Assessed

4.4.1 Northern precinct

Scarborough Ponds are currently a significant physical barrier to connectivity between Monterey in the east and Kogarah in the west.

Currently, the only east-west crossing opportunities are via the footpath along the Barton St roadway or the verge alongside President Ave. As such, options have been considered to improve access between the two suburbs via a bridge crossing over the ponds.

As part of the M6 Stage 1 works, a new shared path crossing is to be constructed from Chuter Ave (near Robinson St), to Rockdale Bicentennial Park, utilising a new bridge over President Avenue. A connecting path is to link this path to Civic Ave near Annette Ave.

The masterplan identifies an additional secondary path connection to link the shared path to Civic Ave near Marshall St in the south.

A possible additional path link has been identified on the western side of the pond, linking Barton St via an additional bridge crossing to the new shared path and providing a direct north-south link.

This link was not included in the masterplan document due to site constraints, construction cost, visual and environmental impact and the difficulty of creating new wetland and pond crossings.



4.4.2 Central precinct

This pedestrian link would cut across the middle of Scarborough Park Central linking Monterey Street to the north-south pedestrian link running along the west of the park.

A proposed bridge crossing would need to be subject to detailed investigations and potentially flood modelling to ensure no impacts on upstream or downstream flood storage capacity or flows.

Benefits

- Better access for pedestrians living in Monterey to Scarborough Park Central, the key active recreation space in Scarborough Park.
- Scarborough Park East becomes more connected to the wider park, allowing sporting events to extend more seamlessly between areas.

Issues

- A formal pathway across the pitches would result in less flexibility of pitch layouts. Note: By providing a bridge only, the link could be established without the need for full connecting pathway (shown dashed on plan).
- Bridge connection does not align with connecting pedestrian and cycle routes outside the park boundaries, reducing the cost benefit ratio.
- The bridge would be subject to flood modelling and may need to be elevated significantly above adjacent park levels, with abutments intruding into the open space and reducing the field space.

Further feasibility investigation would need to be carried out prior to any detailed works being completed.



4.5 WSUD & Ecology

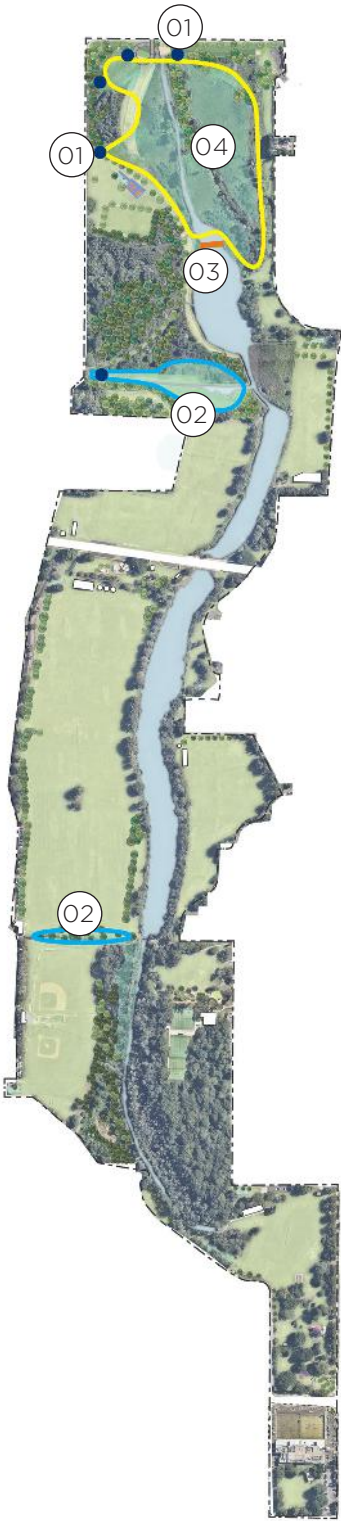
4.5.1 Wetland Improvement

The wetlands in Scarborough Park north are home to some significant endangered ecological vegetation but are currently compromised by invasive weeds species and polluted stormwater inflows, testing the resilience of the system. Any improvements that can be made to the health and quality of the wetland system will also improve the amenity value of the area and encourage community support for the area. Any proposals would need to test permissability under Chapter 2 of the Hazard and Resilience SEPP.

Storm Consulting provided a number of recommendations for further, detailed investigation which may allow water levels to be managed, improving maintenance ability and enabling reed beds to filter incoming stormwater before hitting the main watercourse. All options would be subject to flood modelling and detailed investigations to determine feasibility.

MAIN FEATURES

- 01. Potential opportunity for filtration pools created at stormwater outlets to clean incoming water before slowly passing through the wetland and into the main watercourse.
- 02. Potential opportunity for widening of channel to create wetlands area to improve water quality before stormwater reaches the main ponds system.
- 03. Potential opportunity for a new weir which could allow upstream water levels to be controlled and hold water for longer to allow additional treatment in wetland system and provide opportunity for levels within the main wetland to be modified to create a manageable wetland habitat system.
- 04. Management of wetland ecology to reduce weed invasion and improve system function.



4.5.2 Endangered Ecological Communities

The areas of endangered ecological communities within Scarborough Park are contained and the masterplan suggests that these areas are expanded as larger zones.

Circulation paths are maintained throughout these areas in order to facilitate community engagement and foster a sense of ownership. Pathways will be managed to limit their impacts and consolidate routes where possible.

MAIN FEATURES

- 01. Management of coastal wetland ecology to reduce weed invasion and improve system function.
- 02. Existing Swamp Oak Forest group extended adjacent to Civic Avenue to improve ecological community health.
- 03. Hawthorne Street natural area (contains Kurnell Dune Forest & Swamp Oak Floodplain Forest).
- 04. Extension to Hawthorne Street Natural Area to provide extended Kurnell Dune Forest & Swamp Oak Floodplain Forest habitat along Tonbridge Creek, with defined activity / routes managed within the area.
- 05. Additional Swamp Oak Floodplain Forest planting adjacent to Tonbridge Creek to reinforce endangered ecological community.

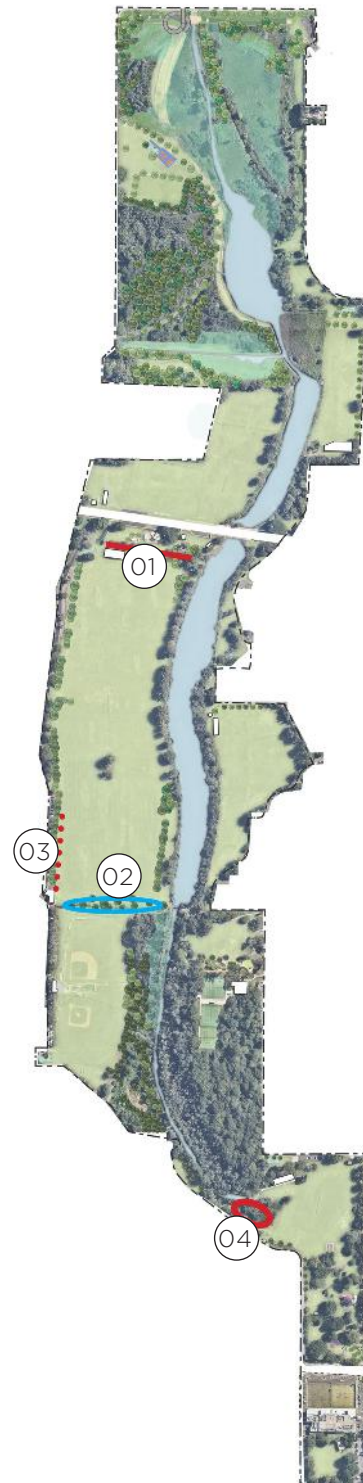


4.5.3 Additional habitat & naturalisation

Several stormwater inlets from the surrounding area are currently channelised or in poor condition, for example those running from Scarborough Lane to the main waterbody and Production Avenue to Tonbridge Creek. The direct channelised nature of these drains does not allow for filtration or habitat to be created around them and leaves them subject to erosion. The masterplan explores options to naturalise these areas.

MAIN FEATURES

01. Opportunity to improve the visual, aesthetic and habitat value of the Scarborough Lane channel and improve (possibly widen) pedestrian connections across the channel with new fencing and planting.
02. Potential opportunity for Production Avenue drain to become a creek with meandering course around sporting fields to slow water and allow filtration. Tree planting along the course stabilises banks, reduces opportunity for invasive species and encourages establishment of marginals.
03. Opportunity to consider detailed grading works to ensure overland flow is directed towards the Production Ave drain and alleviate waterlogged ground to the western edge of the playing fields. Detailed design would need to coordinate with new shared path and field layouts.
04. Waterlogged ground within Tonbridge Street Reserve is used to introduce an intermittent wetland adjacent to Tonbridge Street. Picnic facilities will be moved to less flood-prone ground.



4.5.4 WSUD options: Sports pitches

Slit Drains

Due to the need to retain as much sporting amenity space as possible in Scarborough Park, provisions of sand-filled slit drains is a possible solution to alleviate ponding. Slit drains allow infiltration of water into the subsurface and reduce the impacts of compacted ground which limits how quickly water is able to soak away.

Complete re-turf

The existing site conditions and poor quality of turf could be alleviated through the reconstruction and re-turfing of all pitches, including the insertion of a substantial depth of good quality sandy loam beneath the surface to encourage free drainage.

More detailed work would need to be undertaken by a specialist to ensure a sufficient depth of soil is replaced to ensure a suitable outcome is achieved.

Levels

The reconstruction and re-turfing of the pitches also provides opportunity to adjust their levels slightly to push water off the pitch via a gentle slope and ensure water runs towards the ponds, correcting the existing uneven surface which encourages ponding.

Sand Grooving

20mm wide x 100mm deep grooves are created within the pitch surface in order to alleviate drainage issues. This method could be combined with slit drains.

Contamination & landfill

Note that all proposals for sports fields are to be considered in relation to known contamination and previous landfill sites. Any works would need to be contained within the topsoil layer, leaving landfill capping intact.



4.5.5 WSUD options: Parking areas

Any new areas of parking proposed at park edges could incorporate swales and/or rain gardens to collect surface water and allow filtering and infiltration before excess water enters the stormwater system.

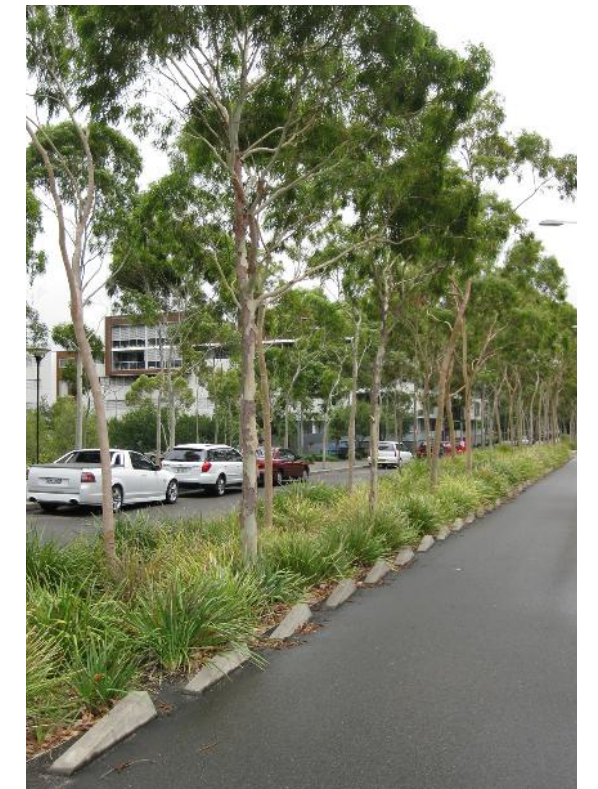
Swales

Swale design can vary to suit specific locations, from gently-graded open, turf swales, to more steeply graded and planted swales. Swales can be a low-maintenance option for collecting water, but can become boggy in periods of extended wet weather. Due to their linear nature, periodic bridge crossings may be required to facilitate pedestrian access in wet weather.

Rain gardens

Rain gardens are typically located adjacent to roadways and collect surface water via flush kerbs or raised, castellated kerbs. The finished surface of the rain gardens is set down from the adjacent road surface and planted out to maximise filtering and removal of excess nutrients from water.

Rain gardens can accommodate both tree and understorey planting (typically reeds and native grasses).



4.5.6 WSUD options: Water quality

Soakage Pits

Innovations in stormwater system design has allowed the development of many proprietary devices which can be used in either in isolation or in conjunction with street tree planting to provide passive watering to trees, filter stormwater and remove certain pollutants from the water before discharge into the downstream system.

It is recommended that these type of units are investigated further during any future detailed design projects in the local area to possibly aid in removing pollutants from incoming water sources and improve water quality within the coastal wetlands and ponds system.

Gross pollutant traps (GPTs)

With approximately 30 stormwater outlets releasing water into the channels and ponds, it is not currently feasible to install pollutant traps to every inlet point, particularly with access requirements making maintenance operations difficult.

Future investigations or studies could complete analysis work to identify outlets with large upstream catchments and those with typically higher gross pollutant loads. These inlet points could then be targeted for strategic upgrades and installation of pollutant traps at sensible locations (such as at the park/urban interface) to improve water quality within the ponds.

To improve aesthetics of stormwater outlets, rock headwalls could be built to any pipe in a prominent position (refer to image bottom right).

Where possible, deck structures should be positioned over stormwater outlets to disguise GPTs (ensuring proper maintenance access is maintained).

Wetlands at inlets

The widening of narrow channels and the creation of additional wetlands at inlets into the park system may provide opportunity to remove excess nutrients from the water before it enters the main pond system. Planted wetlands at park edges work well in conjunction with GPTs, catching any additional suspended solids at an easily accessible location for monitoring and maintenance.

Suitable locations should be identified in conjunction with an overall stormwater system analysis to ensure that wetlands do not impact drainage from surrounding areas, and there is no reduction in overall flood storage capacity within the park system.







05 MASTERPLAN

5.1 Northern precinct: Wetlands zone

The masterplan focus for this area is to become an area of wetland conservation, with controlled recreational use. Stormwater storage may be increased and released to the main watercourse will be slowed through introduction of additional wetland pools. A management focus will be on weed control and removal to ensure a healthy and biodiverse habitat is maintained.







As part of the M6 Stage 1 works, rehabilitation works will be undertaken within Patmore Swamp following completion of the project.

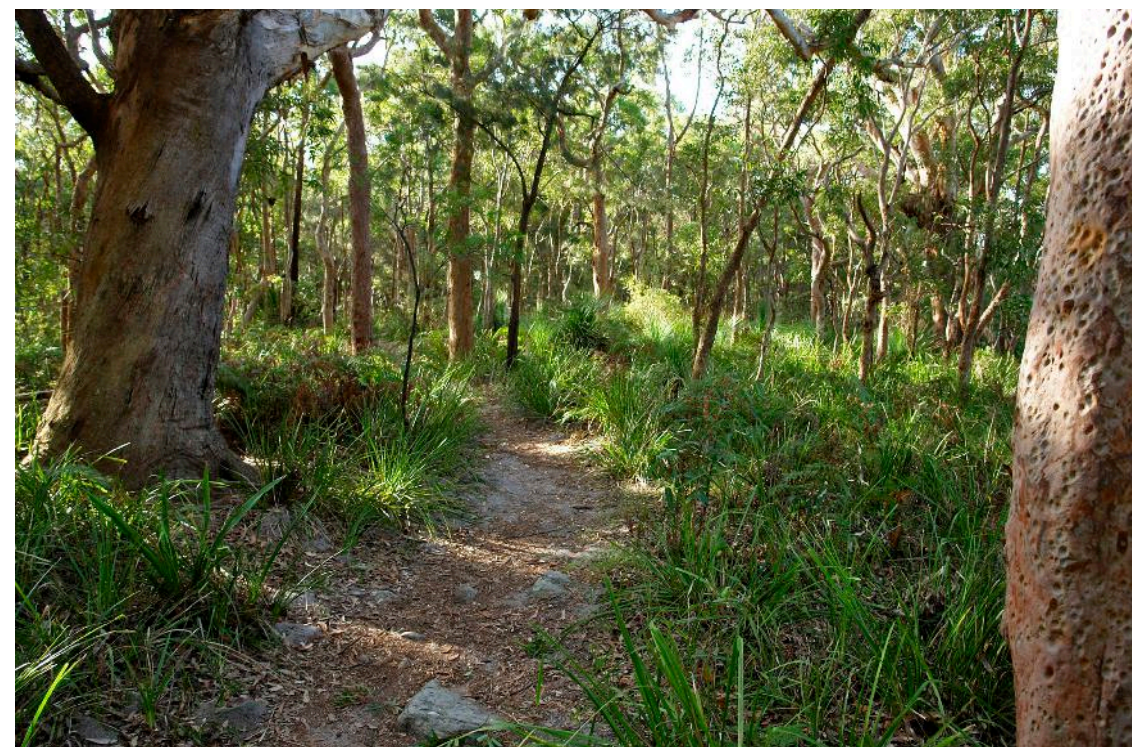
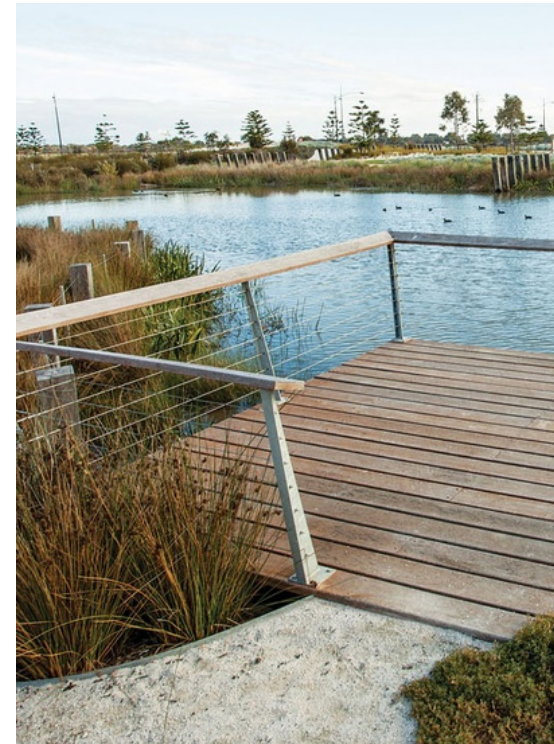
Main features

01. New shared path link through Patmore Swamp (delivered as part of M6 Stage 1 works).
02. New elevated pedestrian and cycle bridge over President Avenue, linking to Rockdale Bicentennial Park and north to Brighton Le Sands and Kyeemagh.
03. Weed management within existing estuarine wetland ecosystem.
04. Protect existing Swamp Oak Floodplain Forest and undertake weed control.
05. Extension of Swamp Oak Floodplain Forest endangered ecological community to areas within the wetland periphery.
06. Possible extension of Coastal Swamp Forest to wetland periphery.
07. Investigate opportunity to reshape and replant wetland areas to improve water treatment and strengthen Coastal Wetlands ecosystem, ensuring no adverse flood impacts to surrounding area..
08. Opportunities for viewing decks off surrounding pathways for education, contact with nature and relaxation with minimal incursion into wetlands.
09. Shared path links to Chuter Ave on-road cycle links.
10. New shared path connects south into remainder of Scarborough Park, opening up the park with improved accessibility.
11. Informal pathway connects along the route of the historic Moorefield racecourse, connecting Civic Ave with the new shared path link.
12. New footpath to be installed at the interface of Civic Avenue to improve pedestrian connectivity.
13. Fenced off-leash dog area retained with additional tree canopy planting to perimeter, and ecological planting to southern edge.
14. New fitness facility and/or opportunity for informal active recreation, possibly with 3 point basketball hoop, rebound wall and handball.
15. Improve connectivity between Colson Avenue play space and Scarborough Park trails and recreation nodes.
16. Existing walking trail retained. Overgrown sections to be managed with weed removal to reinstate access.
17. New informal walking trail connection to provide loop at end of existing path.
18. Path link to signalised crossing on President Avenue.
19. Swale to collect and filter water run-off from President Avenue (delivered as part of M6 Stage 1 works).
20. Possible widening of the existing creek / channel to take advantage of the high water table and create a structured wetland, filtering water before it enters the main ponds.



Key

- | | | | |
|---|--|---|-----------------------------------|
|  | Existing estuarine reedland - weed eradication only |  | Mix 3 - Reed and marsh land areas |
|  | Existing swamp oak forest - weed eradication only |  | Mix 4 - Coastal Swamp Forest |
|  | Mix 1 and Mix 2 - Wetland edges and open water banks |  | EIS Project Works Boundary |



Rehabilitation strategy for Patmore Swamp
Source: M6 Motorway Stage 1, Urban Design and Landscape Plan

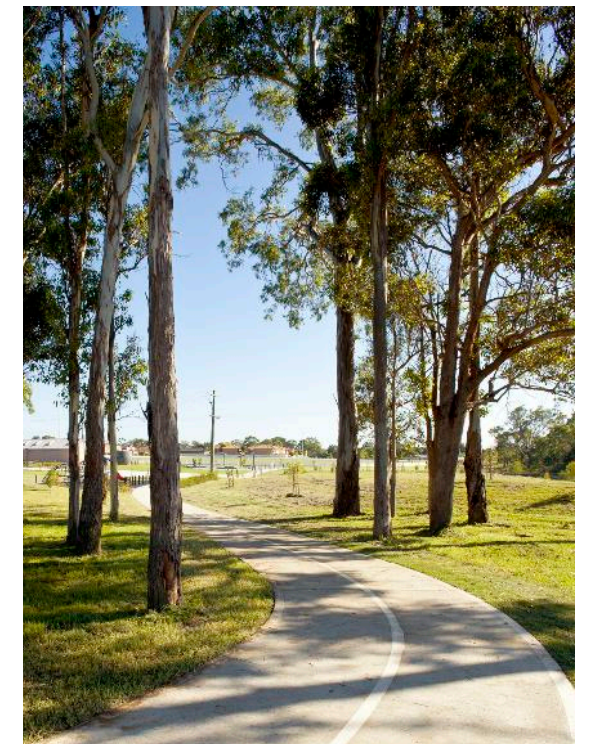
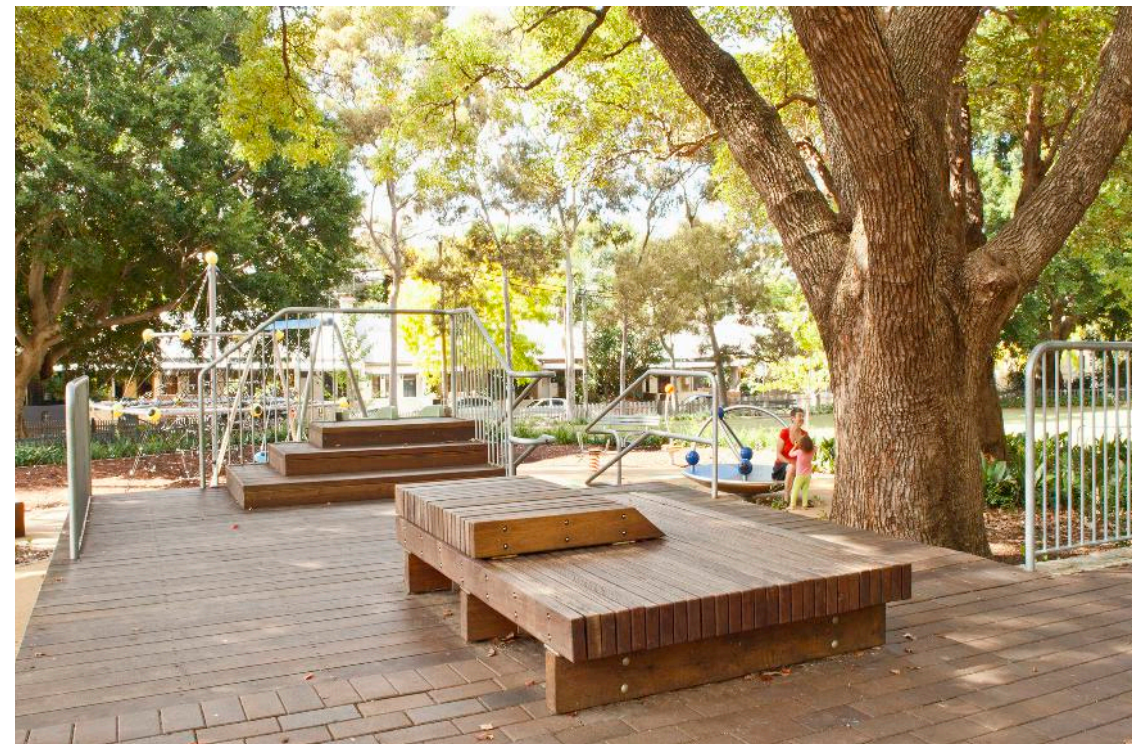
5.2 Northern precinct: Active zone

As the northern precinct nears Barton Street, the area transitions from conservation and educational uses into formal sports and recreation. It is primarily made up of grassed sporting pitches, with increased opportunity for contact with the ponds.

Main features

01. Scarborough Park North retained for organised sport.
02. Tanner Reserve retained for organised sport.
03. Scarborough Park Central retained for organised sport.
04. New shared path connects to Barton Street and south into remainder of Scarborough Park, opening up the park with improved accessibility.
05. New shared path alongside Barton St to improved pedestrian and cycle connectivity. To be installed in conjunction with reconfigured and improved spectator viewing area to Scarborough Park North. Existing car parking retained, and boundary fence between sports fields and path reinstated.
06. Desire to install pedestrian crossing at key linkage to improve pedestrian safety when travelling within the park.
07. New footpath created to back of parking bays. Path connects to existing footpath along park edge south of Wilson Street.
08. Investigate opportunity to modify banks to create shallower gradients, increasing water storage capacity, and varied habitat and ecology.
09. Opportunity for new bioretention basin to remove excess nutrients from runoff from the Market Gardens before entering the pond.
10. Extension of Swamp Oak Floodplain Forest endangered ecological community to areas within the wetland periphery.
11. Possible replacement of existing pontoon with large timber deck for recreational use (including model boating).
12. Play area retained. Expansion of family recreation value with the addition of a shade structure, and picnic and BBQ facilities. Formal path link to existing amenities building. Retain informal grass area adjacent.
13. Landscape works such as replacement fencing and new planting around concrete channel to improve visual amenity and increase habitat. Investigate options to improve pedestrian crossings with increased path widths.
14. New fitness facility.





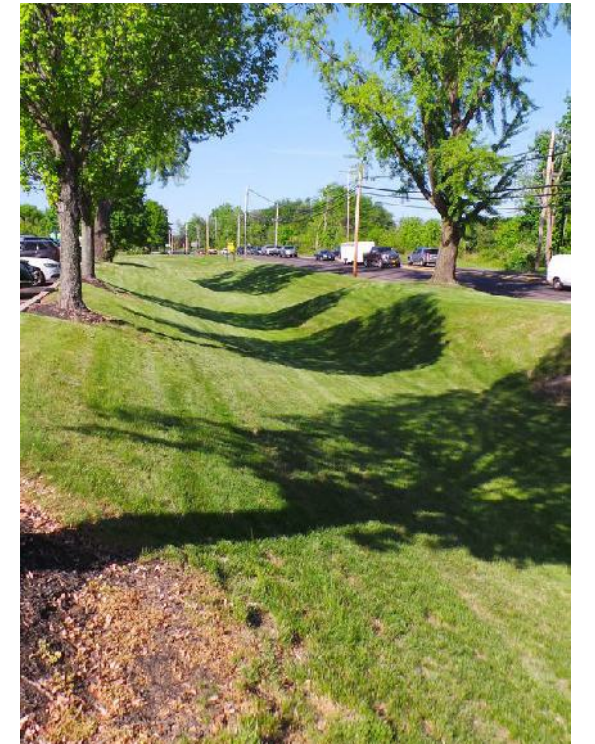
5.3 Central precinct: Scarborough Park Central & Scarborough Park East

This is the central hub of active recreation, offering opportunities for a diverse range of sports across seasons, as well as a family recreation area at the Barton Street interface.

Main features

- This is the central hub of active recreation, offering opportunities for a diverse range of sports across seasons, as well as a family recreation area at the Barton Street interface.
- ## Main features
01. Scarborough Park Central retained for organised sport.
 02. Scarborough Park East retained for organised sport.
 03. Shared paths form primary north-south circulation routes within the precinct.
 04. Secondary pathway facilitates pedestrian circulation alongside the waterway.
 05. New footpath created to back of parking bays. Path connects to existing footpath along park edge between Wilson Street and Margaret Street.
 06. Tree planting along circulation routes and around the periphery of the pitches provides shade to spectators and casual users. To be coordinated with detailed sporting layouts.
 07. Opportunity to modify banks to create shallower gradients, increasing water storage capacity, and varied habitat and ecology.
 08. Investigate options to regrade turf to fall south towards Production Avenue drainage channel to reduce waterlogging at the western edges of playing fields.
 09. New fitness facility.
 10. Formalised 90 degree parking off Monterey Street to provide additional parking for sporting users and reduce demand on street parking for residents.
 11. Investigate opportunity to widen drainage channel with wetland planting to improve water quality of stormwater inlet.
 12. New elevated crossing over inlet (or reconstructed inlet) to provide improved connection to Phil Austin Baseball Fields.
 13. Install pedestrian crossing facility at key link to improve pedestrian safety when travelling within the park.
 14. Investigate options to widen existing footpath to improve accessibility and safety.
 15. Investigate removal of existing council building to improve sight lines and pedestrian amenity.
 16. Council to investigate possible improvements to intersection of Midjiburi Lane and Phillips Road.
 17. Footbridge renewal. Design subject to flood modelling and detailed engineering requirements.





Sydney Park fitness area by Jane Irwin Landscape Architecture

5.4 Southern precinct: Hawthorne Street Natural Area & Phil Austin Baseball Fields

Opportunities for this area to include upgrade of existing sports facilities, improved east-west connectivity, enhanced passive recreation and protection of Hawthorne Street natural area.

Main features

01. Phil Austin Baseball Fields retained for organised sport.
02. Tonbridge Reserve retained for organised sport (as existing).
03. Existing tennis courts upgraded in 2024, including incorporation of multi-courts.
04. Secondary path forms primary north-south circulation route within the precinct. Opportunity to replace existing informal pathway alongside pond with an elevated walkway to improve weather durability and reduce construction impacts on sensitive riparian and wetland ecosystems (when compared to on-grade hard surface pathway).
05. Primary pathways facilitates pedestrian and cyclist circulation throughout the precinct.
06. Existing soil & mulch paths retained in Hawthorne Street Natural Area and on western side of pond.
07. Footbridge renewal. Design subject to flood modelling and detailed engineering requirements.
08. New primary pathway behind baseball fields. Weed removal to top of bank to accommodate path without modifying existing sporting boundary.
09. Opportunity for contained community garden with raised garden beds, pending demand from local community members.

10. Expanded playground offering with new learn to ride loop, shade structure and picnic tables. Design to connect to existing facilities available including amenities building, playground and tennis/multi sports courts.
11. Existing passive recreation area to be retained without addition of sports, contributing to the recreation value of the family zone adjacent.
12. New fitness facility.
13. Path on TfNSW land, aspirational link.
14. Pedestrian crossing improvements.



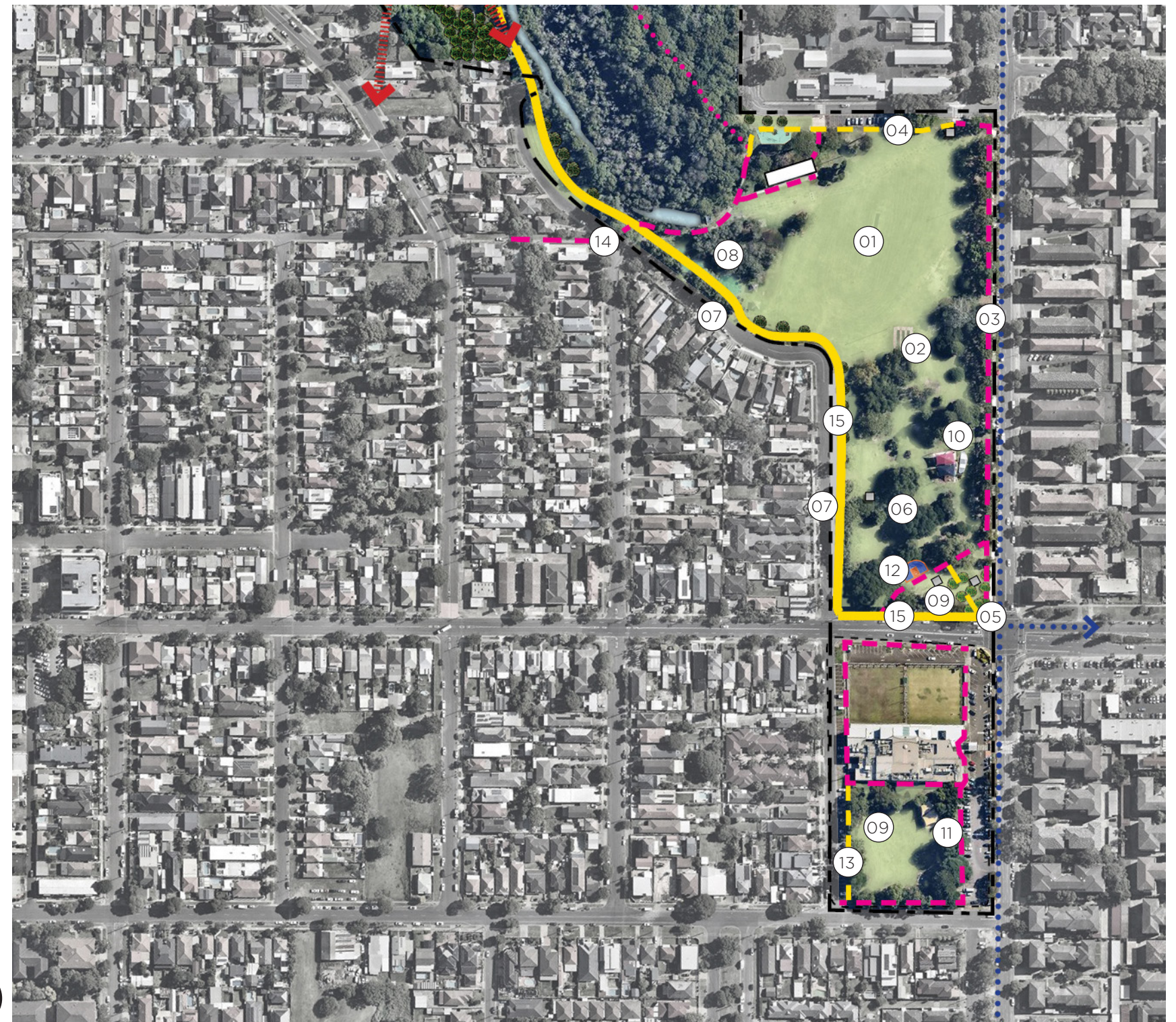


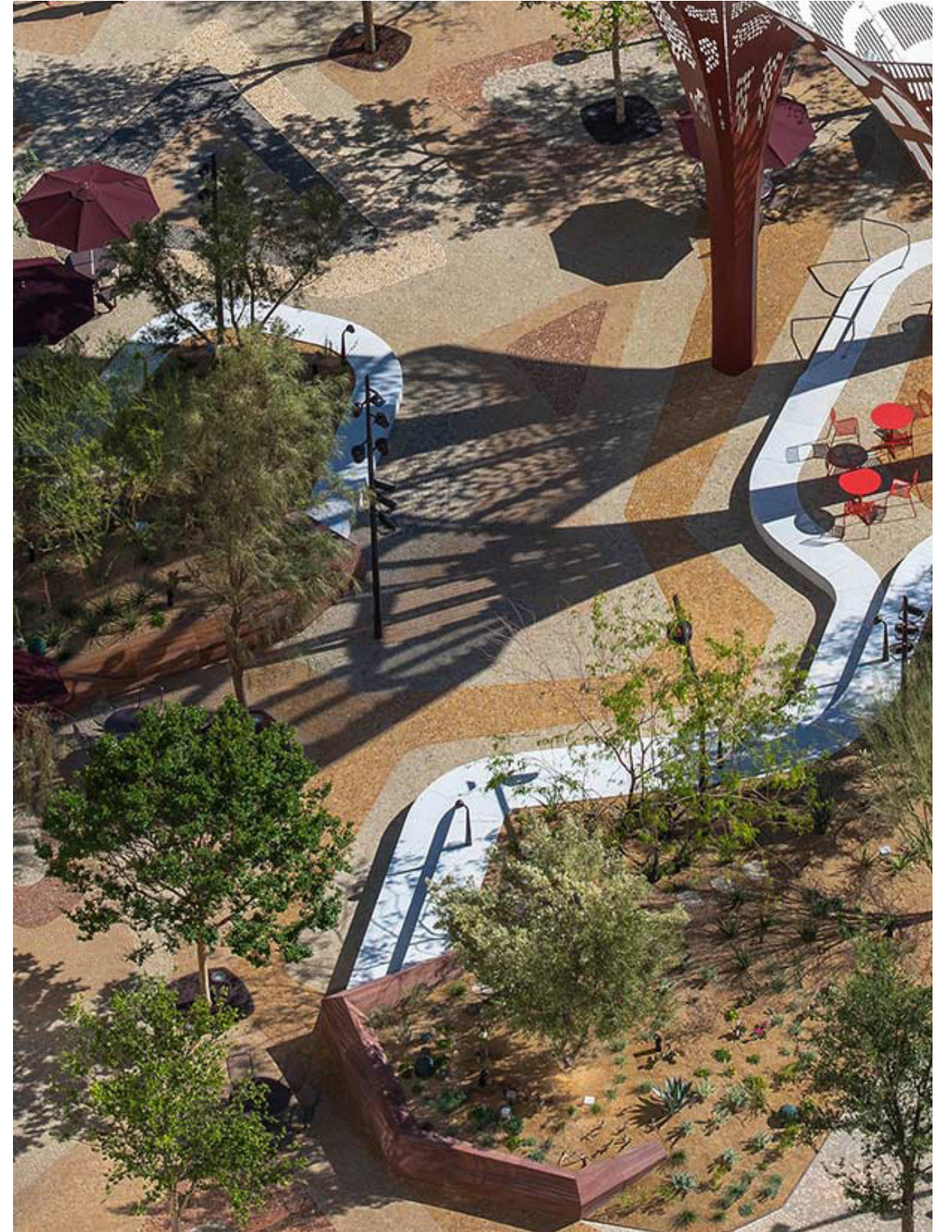
5.5 Southern precinct: Tonbridge Reserve, Rotary Park & Pemberton Reserve

This area is to become a key entrance into the park. Its close proximity to Ramsgate Beach Town Centre and medium density residential properties means that it will be highly used by a wide variety of residents.

Main features

01. Tonbridge Reserve retained for organised sport (all current uses retained).
02. Cricket nets retained.
03. Existing shared path to Chuter Ave interface.
04. New secondary loop path to the perimeter of Tonbridge Reserve and Rotary Park and extending along Florence Street, linking with existing paths. Path utilises existing footpath along Ramsgate Road frontage.
05. Opportunity for an enhanced and enlivened entrance to the park to connect to Ramsgate Beach Town Centre and encourage visitors to spill into the park from the local retail centre.
06. Protect and retain heritage trees within Rotary Park as a defining character item and important shade provision.
07. Opportunity to formalise 90 degree parking along Tonbridge Street.
08. Investigate planting intermittent wetland/swale in flood-prone area.
09. New picnic shelters with Rotary Park and Pemberton Reserve for general community use.
10. New shelter to Tonbridge Reserve/ Rotary Park play space, and new footpath linking playground to shared path alongside Chuter Ave.
11. Upgrade play offering in Pemberton Reserve, including associated facilities such as shade structure and seating.
12. Existing basketball 3-point court retained.
13. New footpath to connect to existing paths around Pemberton Reserve and Ramsgate RSL Club
14. Investigate opportunity to improve pedestrian safety near intersection of Tonbridge Street and Walmer Street where existing pedestrian link from Margate Street emerges opposite the park.
15. New primary path (hard surface).





5.6 Overall masterplan



Legend

- Master plan boundary

Paths & rest stops

 - Active transport link path (M6 works)
 - Existing primary path (hard surface)
 - New primary path (hard surface)
 - Existing secondary path (hard surface)
 - New secondary path (hard surface)
 - Existing walking trail (soft surface)
 - New walking trail (soft surface)
 - Cycle routes on surrounding roadways
- Rest spot with seating

Path on TfNSW land, aspirational link

Circulation routes

 - 01 Pedestrian & cycle bridge over President Ave (M6 works)
 - 02 New east-west bridge across Scarborough Pond (M6 works)
 - 03 Existing soft surface pedestrian paths
 - 04 New soft surface pedestrian paths
 - 05 Desired route through TfNSW owned land
 - 06 Improvements to existing crossing
- Site features**

 - A Existing open space area retained for organised sport and casual recreation
 - B Existing open space area retained for casual recreation
 - C Extended playground with learn to ride features, path loop, table tennis, shade structure and picnic table/s
 - D Existing tennis courts with multi-courts and shade shelters
 - E Potential locations for new outdoor fitness area
 - F Supplement existing playground with shelter and additional facilities
 - G Provide new picnic tables and shelters within Rotary Park
 - H Possible additional multi-court or informal active recreation facility
 - I Create entry statement/ arrival landscape at Ramsgate Beach Town Centre address
 - J Opportunity to formalise angle car parking for park users
 - K Playground renewal at Pemberton Reserve
 - L Remove dated play equipment near Pasadena St (Scarborough Park East). Do not replace in this location
 - M New pedestrian crossing facility to improve safety
 - N Opportunity to increase biodiversity and improve water quality
 - O Possible widening of the channel to create a structured wetland, filtering water before entering the main pond
 - P Existing fenced dog park retained with additional boundary planting (no expansion, no lighting)
 - Q Opportunity for youth precinct including 3 point basketball hoop, rebound wall and handball
 - R Potential location for future community garden
 - S Preserve natural space and protect Kurnell Dune Forest in Hawthorn Natural area
 - T Footbridge renewal. Smooth connection align with primary path
 - U New footbridge connection
 - V Secondary path connecting to existing around amenities
 - W Expansion of playground with table tennis, picnic tables, shade and path to amenities



06 STAGING AND FUNDING STRATEGY

6.1 Staging and funding strategy

There are a range of funding sources that could be considered to deliver this significant project. The list below provides an indication of how the project could be funded.

An Infrastructure Levy is currently collected for the area covering Scarborough Park. This funding is available to fund replacement of existing infrastructure.

Council collects contributions from developments that generate additional demand and growth of infrastructure such as recreational facilities. These funds are collected under

Section 7.11 and S7.12 of Environmental Planning & Assessment Act, 1979 (EP&A Act).

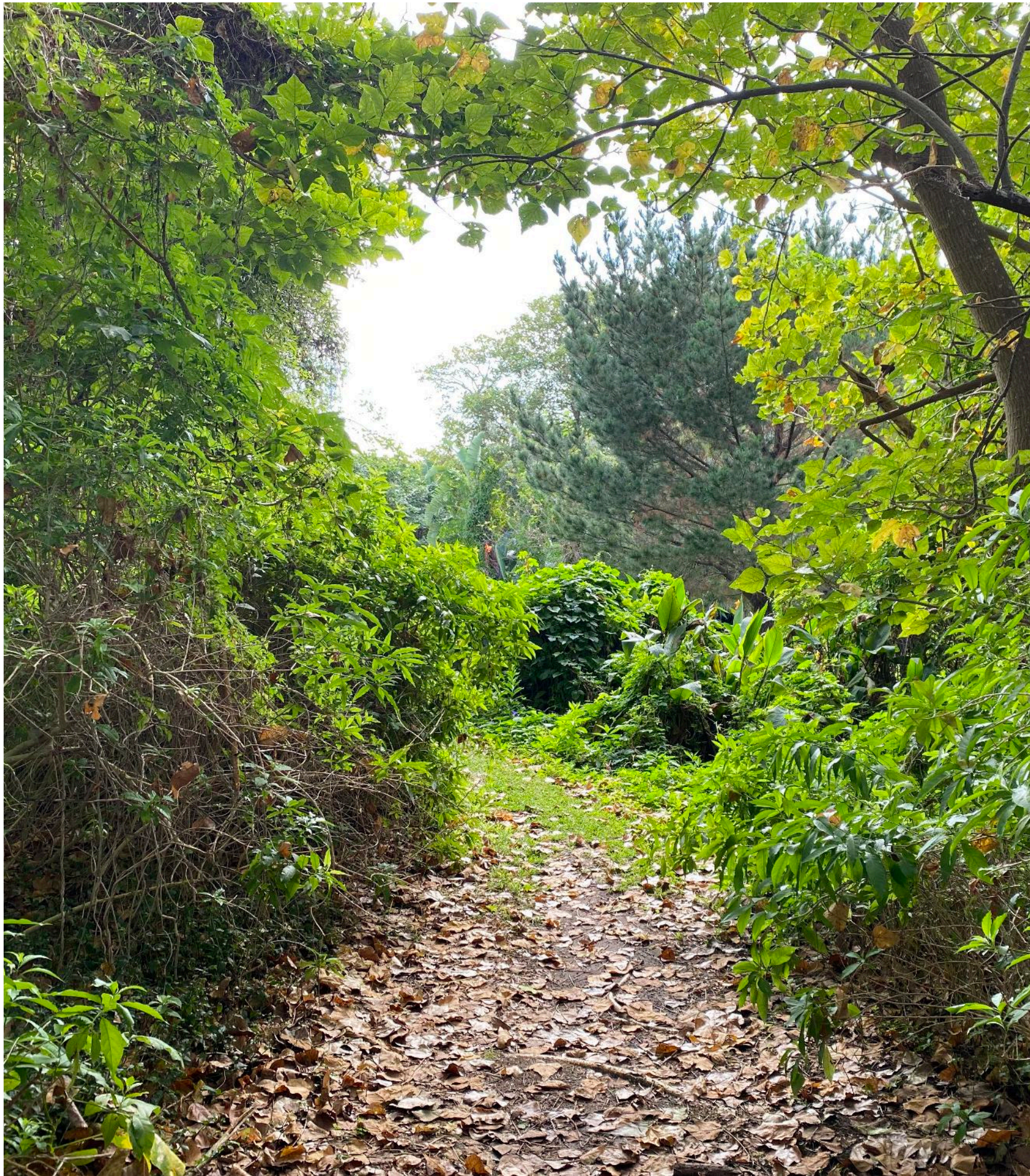
Council collects a Community Safety Levy specifically for enhancing community safety.

Council charges a Stormwater Levy to undertake significant improvements to the stormwater system to provide a cleaner and safer environment for the benefit of owners, residents and visitors.

Council will pro-actively seek grants from other government agencies to help achieve the vision for Scarborough Park. This may include:

- Metropolitan Green Space Grants
- Environmental Grants for interface with Environmental and wetland areas eg. Lookouts, interpretation, bush regeneration
- Sport and Recreation Grants
- Water quality Grants
- Coastal Grants
- Active Transport Grants
- Vegetation Management Grants
- Art and Education Grants

Works description	QS valuation	Potential funding source
Short term (0-3 years)		
New Primary and secondary walking & cycling path (linemarking, signage)	\$3,351,343	Contributions / VPA or Grant
Elevated boardwalk and bridge	\$1,958,930	SRV / Contributions / VPA or Grant
2 x outdoor fitness areas	\$200,000	Contributions / VPA or Grant
Construct recreation area with rebound wall and handwall, concrete surface with sports paint - approx 500m2	\$400,000	SRV / Contributions / VPA or Grant
Removal of existing play equipment	\$25,000	Contributions / VPA or Grant
New pedestrian crossing over Barton St	\$150,000	Contributions / VPA or Grant
Picnic shelter and table	\$500,000	SRV / Contributions / VPA or Grant
Contractor's preliminaries (8%)	\$582,822	SRV / Contributions / VPA or Grant
Contractor's margin (5%)	\$393,405	SRV / Contributions / VPA or Grant
Subtotal	\$7,467,700	
Medium term (3-6 years)		
Walking trail / mulched path	\$366,200	SRV / Contributions / VPA or Grant
Improvement to parking	\$930,040	SRV / Contributions / VPA or Grant
Earthworks to improve drainage, provide turf and mass planting	\$648,491	SRV / Contributions / Stormwater Levy / VPA or Grant
Park entry enhancement	\$200,000	Contributions / VPA or Grant
Family recreation space (new play facilities, shade structure, park furniture, BBQ, picnic sets, drinking bubblers)	\$1,050,000	SRV / Contributions / VPA or Grant
3 x outdoor fitness areas	\$300,000	Contributions / VPA or Grant
New pedestrian crossing over Tonbridge St	\$150,000	Contributions / VPA or Grant
Contractor's preliminaries (8%)	\$291,578	SRV / Contributions / Stormwater Levy / VPA or Grant
Contractor's margin (5%)	\$196,815	SRV / Contributions / Stormwater Levy / VPA or Grant
Subtotal	\$4,133,125	
Long term (6-10 years)		
WSUD (wetlands, increase biodiversity and improve water quality)	\$1,300,990	SRV / Contributions / Stormwater Levy / VPA or Grant
Allow to demolish existing bridge, build FRP bridge, pedestrian and cyclists - assumed 3.5m wide	\$700,000	SRV / Contributions / VPA or Grant
1 x playground renewal	\$250,000	SRV / VPA or Grant
New community garden - approx. 635m2	\$350,000	Grant
Contractor's preliminaries (8%)	\$152,079	SRV / Contributions / Stormwater Levy / VPA or Grant
Contractor's margin (5%)	\$102,653	SRV / Contributions / Stormwater Levy / VPA or Grant
Subtotal	\$2,949,523	
Works subtotal	\$14,550,347	
Design and Professional Fees (10%)	\$1,455,035	SRV / Contributions / VPA or Grant
Contingency (10%)	\$1,455,035	SRV / Contributions / VPA or Grant
Professional fees+authority fees (9.5%)	\$1,382,283	SRV / Contributions / VPA or Grant
Escalation 3% p.a. for 4 years	\$2,364,925	SRV / Contributions / VPA or Grant
	\$21,207,625	



07 NEXT STEPS

7.1 Next steps

The draft Scarborough Park Masterplan has been exhibited between Dec 2024 and Feb 2024.

Display boards were located in several locations on the site. Letters were sent to adjacent residents and stakeholders including sporting groups and associations, Government land owners, TfNSW, Sydney Water, operators of the Market Gardens. Information sessions were also arranged where staff can answer questions from the interested members of the public at a time to be confirmed.

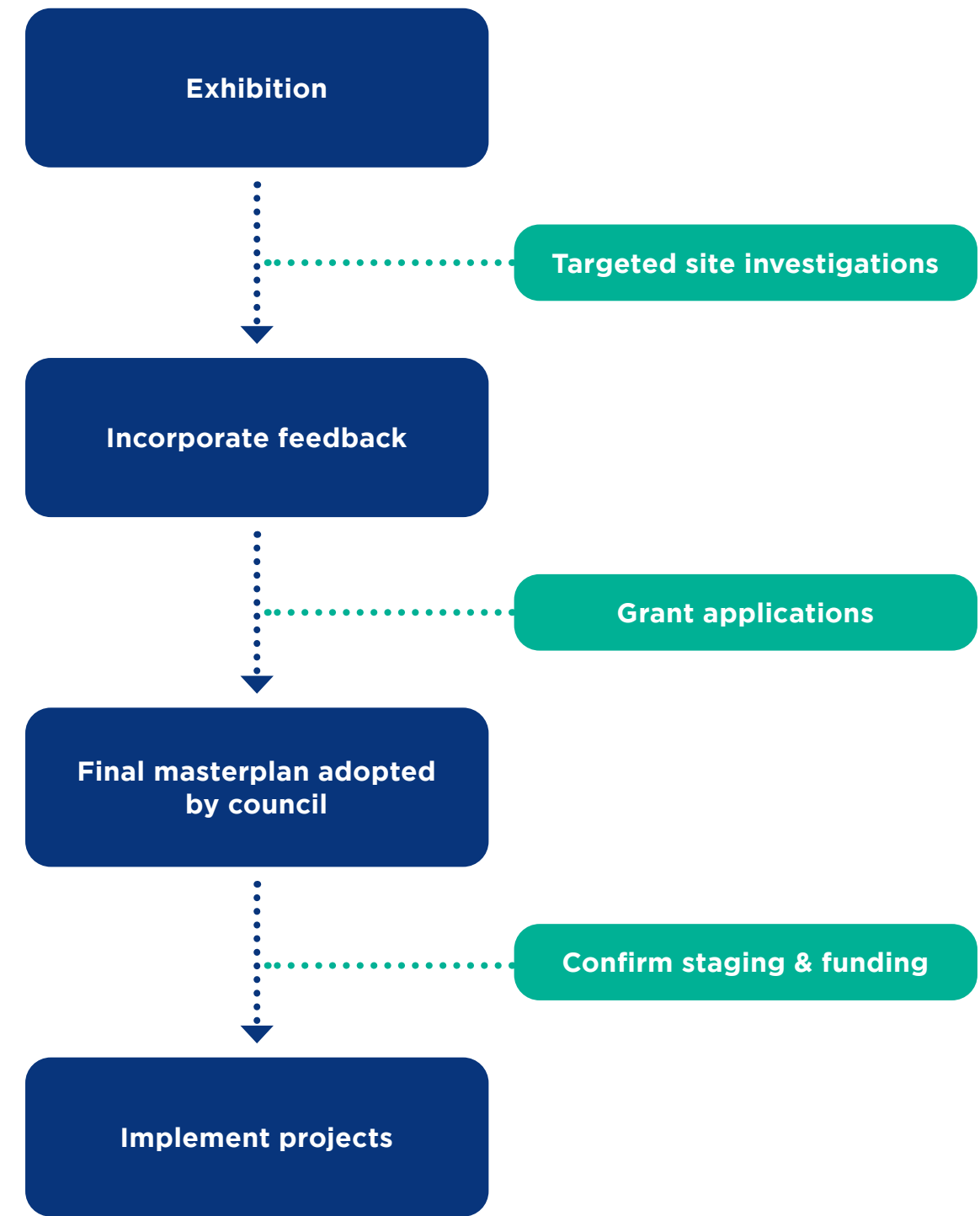
Investigations such as detail survey and geotechnical commenced soon specifically in the areas identified for areas that will impact the former landfill areas and where change will likely occur.

Council has submitted grant applications for suitable programs as they become available.

Feedback was considered and incorporated in the the final Scarborough Park Masterplan for Council endorsement.

A staging plan and funding strategy for the long term implementation of approximately 10 years will be further developed.

Priorities as determined by Council will proceed to detail design stage and implementation as identified in future capital programs to be included in the Bayside Council City Projects Program exhibited annually.



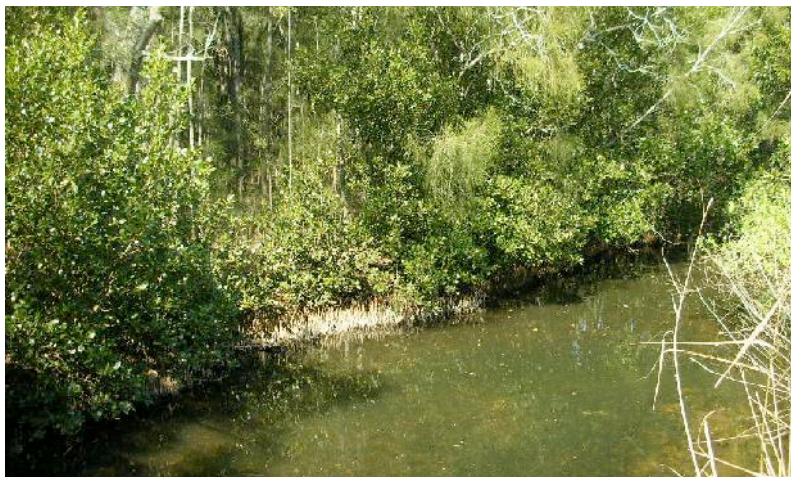


08 APPENDIX A: CONSERVATION MANAGEMENT PLAN



Conservation Management Plan for Scarborough Park

for Rockdale City Council, April 2014



GEOFFREY BRITTON ENVIRONMENTAL DESIGN & HERITAGE CONSULTANT
ABN 75 869 266 782
&
NICHOLAS JACKSON, HISTORIAN

Cover photographs from top: Model boat area of Scarborough Pond near Barton Street; Norfolk Island Pine (*Araucaria heterophylla*) and Stone Pines (*Pinus pinea*) within Rotary Park near Ramsgate Road; Colonising Grey Mangrove (*Avicennia marina*) along the Tonbridge Creek channel near the Hawthorne Street natural area

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I Executive Summary

Scarborough Park is a varied landscape of several kilometres length and forms an important central section within Rockdale's Wetlands and Recreation Corridor stretching in an almost continuous line from the Cooks River to the Georges River.

Scarborough Park is mostly Crown land with the City of Rockdale managing the park areas as trustee. The northern part from about Bath Street to President Avenue is wholly owned by the City of Rockdale as is a section next to Production Lane, Kogarah and a small portion near Burlington Street. The park adjoins other open space owned by the State Planning Authority (now Department of Planning and Infrastructure) (Toomevara Lane market gardens), Roads and Maritime Services and Department of Planning and Infrastructure (near Margate Street) and the Department of Education (Ramsgate Public School).

The park includes some of the most important and interesting landscapes within the City of Rockdale with the Hawthorne Street natural area certainly qualifying for State significance from a scientific perspective. The statement of significance in **Section 6** of this report makes the following observations about the place.

Scarborough Park is of considerable value to the City of Rockdale and a broader community beyond for its retention of two remnant vegetation communities identified and listed as endangered under the NSW Threatened Species Conservation Act, 1995 and as a sanctuary for a colony of Mouse-eared Fishing Bats (*Myotis macropus*) listed as a vulnerable species under the NSW TSC Act, 1995. Both remnant vegetation communities and the bat colony represent rare aspects of the pre-European landscape to survive within an otherwise highly urbanised local environment.

Scarborough Park also carries considerable cultural value for the following reasons as: one of the earliest parks the NSW Government established, one of the earliest and largest municipal parks in the Sydney region; it retains almost the whole extent of its considerable 1879 dedicated area; it retains some of Rockdale's earliest plantings (from the 1880s); it includes an important park component of a largely intact 1877 town plan concept directly linking it with the nearby, and culturally significant, Cook Park; and it retains remnant plantings of Strangling figs (*Ficus watkinsiana*) from the interwar period (as well as a Deciduous fig (*Ficus superba* var. *henneana*)) that are uncommon within municipal areas at this age.

On account of its long history as parkland, Scarborough Park is highly valued by a broad community of interest with connexions to it through various sporting codes, passive recreation, community projects and as local residents or visitors for whom the park holds considerable amenity value. As the park is well over 130 years old it has been the focus of esteem by many generations of people – residents and visitors – and continues as one of Council's largest and most valued public landscapes. Although now very different from its early 19th century form, those parts of Scarborough Park that retain a high watertable and related indigenous vegetation form an important contiguous wetland system within the City of Rockdale and with the potential for further rehabilitation and enhancement. This system is also an ongoing focus of much community involvement through land care, rehabilitation projects and passive recreation.

Scarborough Park holds cultural and scientific research value for its potential to reveal further information relevant to Aboriginal cultural history, regional geomorphology and local plant and fauna ecology through archaeological resources. The park also has historical associational value in relation to the 19th century Fairfax press editor (later general manager), public advocate and long time public park trustee Samuel Cook who is directly associated with Scarborough Park and, along with it, is credited with instigating the NSW Government purchase of land for Cook Park, Marrickville Park, Balmoral Park and Victoria Park (near the University of Sydney) for public recreation. He also served as a public trustee of the park for many years.

An obligation of the assessed value of Scarborough Park and its related listings on the Rockdale Local Environmental Plan is that the park will be conserved for the continuing benefit of the Rockdale community and a community of interest beyond the Rockdale area.

Scarborough Park's large size and varied landscapes represent a very substantial community asset yet, for the same reasons, it poses many management challenges. Along with the conservation obligations for the park, current issues of interest in its management include dealing with the legacy of past drainage schemes and filling using garbage and other materials (including some with potential toxicity); controlling, if not eliminating, the many environmental weeds; potential flood hazard risks associated with sea level rises; water/wetland management; natural area management; implications of the designated motorway easement through the park; and organised sports and passive recreation management.

After over 130 years the park also presents various conservation issues that require the application of accepted conservation philosophy to assist in managing the park's assessed value. The policy section in this report identifies various issues with respect to the park's management and outlines treatments and directions that address the issues. The final section of the report prioritises the recommendations and offers guidance on programming.



Figure 1 Locality Plan for Scarborough Park

2 Introduction

2.1 The Brief

This conservation management plan (thereafter CMP) was commissioned by the City of Rockdale in 2013 to provide advice for the appropriate management of Scarborough Park (1879). In this case 'the appropriate management' includes looking after the park in a way that ensures its cultural value to the whole community is retained and enhanced.

In this study, Scarborough Park extends south from President Avenue, across Barton Street and then to the south as far as Ramsgate Road encompassing reserved land within the suburbs of Kogarah, Monterey and Ramsgate. Other adjacent areas of open space were also considered as part of the study as, though they are owned by other authorities (all State government and mainly Crown Land with small sections owned by the Roads and Maritime Services), the areas are maintained by Council. A section to the south of Ramsgate Road historically belonged to Scarborough Park but is now occupied by lease as the Ramsgate RSL Club with Pemberton Reserve further to the south and effectively alienated from the rest of Scarborough Park.

While neither a master plan, open space or recreation plan, nor a plan of management, this CMP does involve reviewing some of the issues that each of these other documents would normally address. The conservation management plan chiefly focuses on finding and stating what it is that gives Scarborough Park its cultural value then providing succinct and pertinent policies with which to manage the site into the future in order to ensure that significance is retained and not lost.

As part of the process of arriving at these policies, the Brief requires all aspects of the site – area, spaces, structures, buildings, vegetation and use – to be considered. As Scarborough Park contains evidence of various layers of intervention over many decades (as well as evidence of natural processes over a much longer period) an account of the site's history has been an essential starting point.

Section 4 responds to this and includes a conservation analysis that is further developed in **Section 5** before significance is considered.

2.2 Other Related Studies

Although now over 20 years old, the 1991 Rockdale Heritage Study by Meredith Walker and Terry Kass remains the foundational benchmark study of built cultural heritage within the Rockdale local government area (thereafter LGA) and, while (necessarily) treating Scarborough Park only lightly, it provides valuable planning and development context within which to appreciate the continuing importance of the park with respect to its various neighbourhoods.¹

As Scarborough Park encompasses a variety of landscape types (including open sporting fields, ponds, natural areas and traditional parks) and represents an important and substantial contiguous recreational reserve, it has been the subject of numerous individual studies ranging from geomorphological, vegetation and fauna studies, recreational planning and, more recently, social history research.

Of the latter studies, a June 2013 research project, with implications for both historical and social value, is a Migration History relative to public places in Rockdale by professional historians Pauline Curby and Virginia MacLeod.² Implications arising from this study for Scarborough Park are further discussed in **Section 7.4.4**.

2.3 Approach

The report follows the standard approach for conservation management plans based on recommendations by the Heritage Branch of the NSW Office of Environment and Heritage and

¹ Meredith Walker and Terry Kass, *Rockdale Heritage Study*, Unpublished report including inventory, 1991

² Pauline Curby and Virginia Macleod, *Uncovering Rockdale's Migration Heritage Story*, June, 2013

follows the method described in The Conservation Plan of Dr James Kerr and the principles, process and practice of the Australia ICOMOS Burra Charter, 1999 – both of which documents are available for download from the Australia ICOMOS website.

Throughout the report the terms environmental significance, heritage significance, heritage value, cultural significance and cultural value are used at various times. They are all interchangeable as they all mean the same thing. The meaning of cultural significance in this report is taken as that defined in the Burra Charter as “aesthetic, historic, scientific, social or spiritual value for past, present or future generations”³.

The Burra Charter goes on to explain that “cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups”.

The late former Mayor of Rockdale and local historian, Ron Rathbone, wrote much about Rockdale's local history and this has provided valuable information and directions for further research. Other helpful monographs include Beverley Earnshaw's 2001 history of the St George district in the Federation period⁴ and Joan Lawrence's published compilation of archival photography⁵. While these helpful historical accounts cover a broad area and background for the Rockdale LGA, this study required more specifically focussed historical accounts relating to each of the various precincts of Scarborough Park in order to properly understand the site and how this would inform significance. This more detailed historical background is included within **Section 4** of the CMP.

The conservation management plan mainly concerns heritage values since the 19th century and does not include an Aboriginal heritage component. Recent discussions with local resident and scientist Dr Arthur White, suggested that little information is available on this subject in relation to Scarborough Park and, on the basis of the information readily available, he has written an unpublished account that considers Aboriginal associations with the place.⁶ A separate Aboriginal Heritage Study report was prepared for the City of Rockdale in April 1999 by ERM Mitchell McCotter (with Alison Nightingale as Project Manager). It indicates that few archaeological sites are known within the Rockdale LGA while others may, as yet, remain subsurface.⁷

A predictive statement given in the ERM report mentioned that, in relation to middens, “in Rockdale they may be expected to occur in the dune foreshore of Botany Bay, along the perimeters of the Cooks and Georges Rivers and on the edges of the wetland corridor”. One of the purposes of the Aboriginal archaeological study was “to provide Council with a framework for developing their response to Aboriginal heritage” and as part of this framework the study identified broad areas of archaeological sensitivity (ERM, 1999 *Figure 3*).

Of the five categories given (red = highest; orange = high; green = lesser; yellow = lesser, though different site type to green; and white = lowest sensitivity) most of Scarborough Park (following the formed ponds and Tonbridge Creek channel) is left uncoloured indicating that it is thought to have little archaeological potential on account of the level of past disturbance for dredging and levelling. However, flanking areas to the west and east of the main drainage and dredging works – and reflecting “the edges of the wetland corridor” have been coloured orange indicating a high potential for archaeological resources. The findings and advice given in the ERM report have been taken into account in **Section 6** (Significance), **Section 7** (Opportunities and Constraints) and **Section 8** (Policy) of the CMP. Further, brief, information relating to past Aboriginal cultural history in the vicinity of Scarborough Park is provided in the 2013 migration history report of Pauline Curby and Virginia MacLeod.

³ Australia ICOMOS Inc, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, 1999

⁴ Beverley Earnshaw, *The Land Between Two Rivers, The St George District in Federation Times*, Kogarah Historical Society Inc., 2001

⁵ Joan Lawrence, *St George Pictorial Memories Rockdale, Kogarah, Hurstville*, Kingsclear Books, Alexandria, 1996

⁶ Arthur White, pers. comm., 23 September, 2013

⁷ ERM Mitchell McCotter, *Rockdale City Council Aboriginal Heritage Study*, Report 9829 IRP2, April 1999

Note also that a detailed site survey was not available so the site plans provided in this report have been compiled using cadastral information, aerial photography and site recording. As a consequence, some details may not be accurate to the standards of normal surveying.

2.4 Authorship

Geoffrey Britton wrote most of the report while Nick Jackson undertook the research, wrote **Section 4** and contributed to discussions on significance. Unless otherwise noted, all recent colour photographs of Scarborough Park were taken by Geoffrey Britton in 2013. Anita Madura provided all of the report graphics.

2.5 Acknowledgements

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Louise Thom, Heritage Advisor to the City of Rockdale

Pauline Curby, Consultant Historian for Council's Migration History Project

Virginia MacLeod, Consultant Historian for Council's Migration History Project

Natalie Gray, Information Literacy & Knowledge Specialist, City of Rockdale

Ted Pirola, Senior Landscape Architect, City of Rockdale

3 Site Descriptions

Scarborough Park is a long, segmented site that encompasses a variety of landscape types extending 2.4 km from President Avenue in the north to Rotary Park, Ramsgate Road in the south. There are numerous broadacre open space areas for active sports but there are also ponds, a swamp fragment, canals, discrete park environments, depauperate wetlands and the rare Hawthorne Street natural area. A further contrast in landscape character is evident near the southern end of Civic Avenue where Scarborough Park envelops the old Chinese market garden site at Toomevara Lane. At Florence Street, Scarborough Park is less than 400m from the beach.

Highlights within the park include the remaining section of the former 1880s Moorefield Racecourse, a number of impressive fig tree plantings, the artificial ponds as well as the remnant Kurnell Dune Forest and Coastal Sands Swamp Forest along the Tonbridge Creek channel. Almost all of Scarborough Park falls within an area that was once freshwater and brackish swamps.⁸ Although much of the former indigenous vegetation has been lost, remarkably, some survives near Hawthorne Street with other sporadic plant representatives occurring in other parts of the park as well as on adjoining sites such as Ramsgate Public School.

Ponds in Bicentennial Park across President Avenue to the north drain into Scarborough Park such that this southerly catchment system is quite separate to the northeasterly draining Muddy Creek system nearby. Scarborough Park's catchment appears to have formerly drained through two separate courses – an easterly course now known as Waradiel Creek through the Peter Depena Reserve and a westerly course now known as Bado-Berong - draining into the mouth of the Georges River at Cook Park. The Tonbridge Creek channel now drains through pipes to Botany Bay via Florence Street. Virtually all of the drainage system within Scarborough Park – ponds, channels, drains and 'creeks' - is now formed or manipulated through deliberate and extensive engineering works over many decades.

Owing to the extent and variable nature of Scarborough Park it has been necessary to consider descriptions of the park by way of several precincts starting with the northern part and progressing south.

3.1 Northern Precinct

The first Scarborough Park precinct (about 300m wide and 800m long) extends from President Avenue to Barton Street and is noteworthy for retaining the eastern loop of the outer track, as well as parts of two tangential tracks, of the former Moorefield Racecourse. While the latter straight tracks are harder to see on the ground, the long outer track is noticeable as a slightly raised platform – with exposed sandstone slabs in places - ending opposite Annette Avenue and near Marshall Street.

Within, and around, the broad loop of the former track there remains evidence of earlier structures (**Figures 7** and **8**) and pavements. Some remnant vegetation may be the progeny of earlier racecourse plantings (such as the *Cupressus sempervirens* at **Figure 9**, *Phoenix canariensis*, *Erythrina x sykesii* and *Salix babylonica*). (Remnant *Pinus radiata* plantings along Civic Avenue appear to be from the post-racecourse – 1960s? – era.) Although not part of the present study for Scarborough Park, some few remnant plantings from the former racecourse period appear to remain within the educational grounds near the Princess Highway – particularly the St George TAFE College and north of the James Cook Boys Technology High.

The precinct also contains two ponds begun in the 1930s and continued into the 1980s (**Figure 6**) along with numerous associated drainage works. Yet despite the many decades of efforts to drain the precinct, there appears to remain a high watertable (especially evident in aerial photography) throughout much of the precinct that enables various indigenous swamp species (including *Melaleuca linariifolia*, *Casuarina glauca* and *Phragmites australis*) to flourish and provide valuable fauna habitat. To

⁸ Doug Benson, Danie Ondinea and Virginia Bear, *Missing Jigsaw Pieces: the Bushplants of the Cooks River Valley*, Royal Botanic Gardens, 1999

the north of the racetrack remnant there is a large area of regenerating paperbark (*Melaleuca linariifolia*) with associated Bleeding Heart Tree (*Omalthus populifolius*) and several Cheese Tree (*Glochidion ferdinandi*) and a LilliPilli (*Acmena smithii*) (**Figure 4**).

Unfortunately the high watertable has also enabled numerous weed species to flourish with large thickets of lantana and blackberry prevalent throughout much of the northern two thirds of the precinct. On the eastern side of the ponds there are many exotic species including *Yucca* sp., *Nerium oleander*, *Phoenix canariensis*, *Erythrina x sykesii*, *E. crista-galli* and *Salix babylonica*.

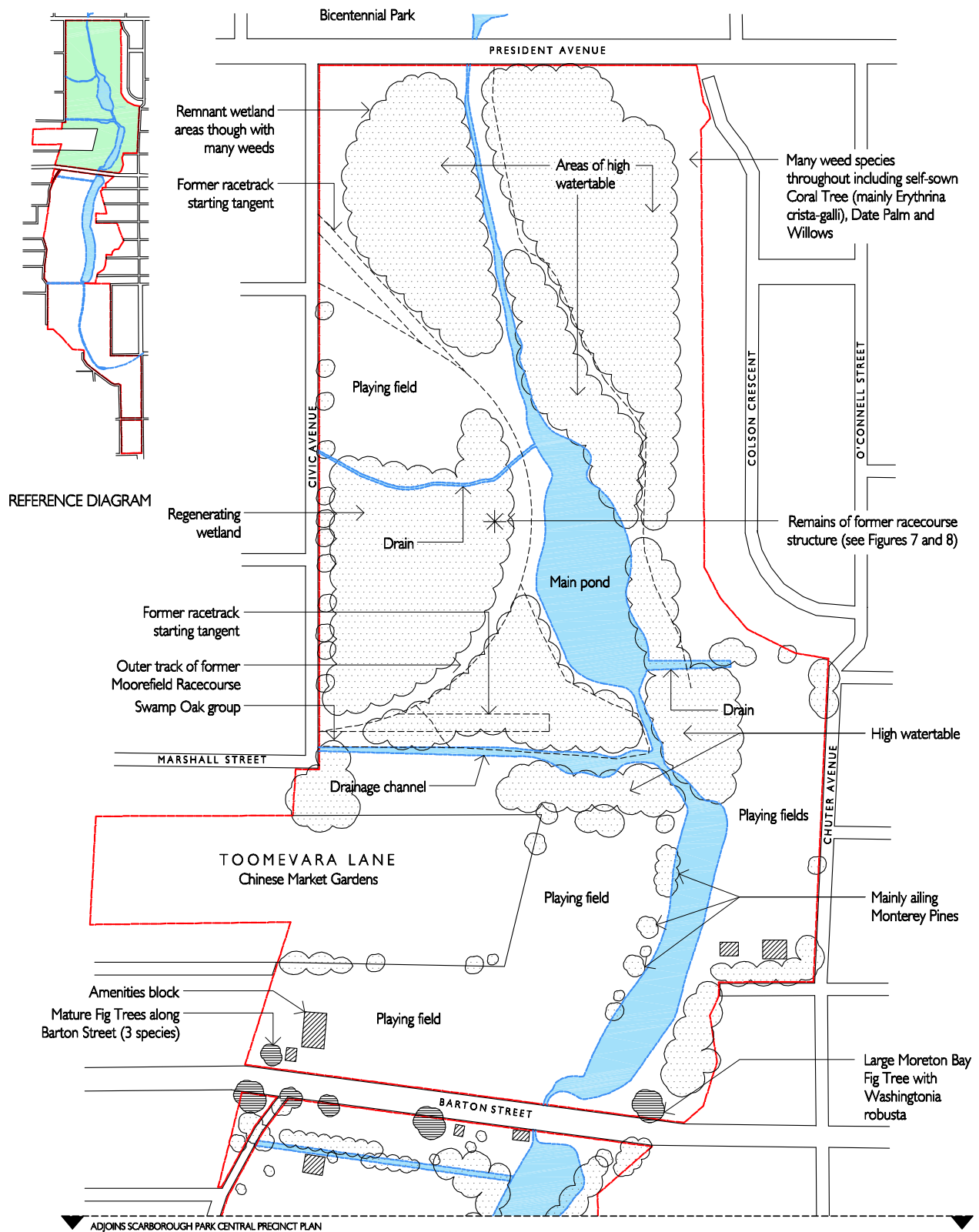
The southern section of the precinct (south of Marshall Street) includes mainly open playing fields for organised sports as well as the earlier elongated pond that drains under Barton Street. A large section of the Toomevara Lane market gardens adjoins Scarborough Park and serves as a reminder of a once extensive land use in the area from the 19th century (**Figure 13**).

On the eastern side of the second pond, between Burlington and Barton Streets, there is a concentration of more recent Australian species including *Casuarina glauca*, *Banksia integrifolia*, *Grevillea robusta*, *Melaleuca quinquenervia*, *Callistemon* sp. and various exotic species. Further south, next to Barton Street, is a large Moreton Bay fig tree (*Ficus macrophylla*) with two contemporary mature *Washingtonia robusta* palms (**Figure 14**). There is another *Washingtonia robusta* of similar age next to the pond culvert at Barton Street.

At the western corner of the precinct, also next to Barton Street, is a mature Port Jackson fig tree (*F. rubiginosa*) and *Washingtonia filifera* (**Figure 15**).



Figure 4 Encouraging signs of swamp thicket regeneration just south of President Avenue where typical taller wetlands species such as *Melaleuca linariifolia* dominate. Also prevalent (centre) is the indigenous Bleeding Heart (*Omalthus populifolius*) and, unfortunately, *Lantana camara* and Blackberry (*Rubus* sp.). Nearby are several Cheese Trees (*Glochidion ferdinandi*) and a Lillipilly (*Acmena smithii*).



SCARBOROUGH PARK NORTH PRECINCT PLAN

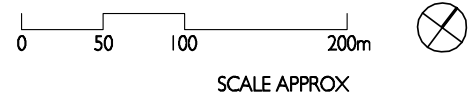


Figure 5 Scarborough Park North Precinct Plan



Figure 6 General view across the northern pond



Figure 7 Remains of a former racecourse structure



Figure 8 Detail of structure remnant at Figure 7



Figure 9 View near the eastern racetrack remnant



Figure 10 Paperbark thicket with Common Reed



Figure 11 *Pinus* spp. along Civic Avenue



Figure 12 *Melaleuca quinquenervia* near Bath Street



Figure 13 View across part of the Toomevara Lane Chinese market gardens (a remnant cultural landscape of importance within Sydney that is listed on the Rockdale LEP and the NSW State Heritage Register as an item of environmental heritage). Scarborough Park envelopes the market gardens on three sides.



LEFT Figure 14 View of the southeastern corner of the northern precinct with a Moreton Bay fig and several *Washingtonia robusta* palms near Barton Street.



Figure 15 Southwestern corner of the northern precinct with a Port Jackson fig and *Washingtonia filifera* palm close to Barton Street.

3.2 Central Precinct

This central precinct of Scarborough Park is largely a continuation of the previous precinct although there is even less variation in the characteristic landscape – it is either level, open playing fields or tree-lined pond. The precinct is a minimum of 300m wide and about 600m long extending from Barton Street to near Emmaline Street.

Most of the broadacre playing fields are on the western side of the pond which runs the entire length of the precinct. An Oleander-lined drainage ditch, parallel with Barton Street, separates a narrow finger of land from the playing fields and within this space are four old fig trees (one *Ficus macrophylla* and three *F. watkinsiana*) (Figures 16 and 17) and palm groups including *Washingtonia robusta*, *W. filifera* (Figure 16) and *Livistona australis*. At the northwestern corner there is a mixture of mature and maturing plantings including one of the fig trees with a struggling English Oak (*Quercus robur*) under it, another English Oak to the south, Brush Box (*Lophostemon confertus*), *Casuarina glauca* and a lone *Phoenix sylvestris* opposite Austral Street (Figure 21).

The long pond is mainly lined by *Melaleuca quinquenervia* (some of which have attained impressive dimensions) and *Casuarina glauca* along with weedy species – particularly *Erythrina crista-galli*, *Lantana camara* and *Phoenix canariensis* (Figure 18) – though also with occasional Grey Mangroves (*Avicennia marina*). 1950s? plantings of pine trees along the side of the pond include Slash Pine (*Pinus elliottii*) (Figure 20), Stone Pine (Figure 19) and Monterey Pine (a poor species choice here).

Other weedy species near the pond with a propensity to become an environmental nuisance include African Olive (*Olea europea* ssp. *cuspidata*), Camphor laurel (*Cinnamomum camphora*), Mulberry (*Morus* sp.) and *Ochna serrulata*. At the northern end of the pond is an area designated for model boats and, nearby, a playground, an amenities building and a Sydney Water service building.

At the northeastern edges there is only reduced parkland between suburban blocks and the pond although there are numerous mature plantings including more *Phoenix canariensis*, *Pinus radiata*, *Agonis flexuosa* and a solitary *Ficus rubiginosa* at the end of Scarborough Street (Figure 22).

Further south, a larger space opens up with a playing field, playground, amenities building and much recent screen planting (mainly *Banksia integrifolia*) to the residential edges adjoining the park. This treatment appears to be successful and achieves a near continuous treed boundary that softens the otherwise abrupt juxtaposition between parkland and suburbia.



Figure 16 Moreton Bay fig and *Washingtonia robusta* group at the playground south of Barton Street



Figure 17 Line of three strangling figs (*Ficus watkinsiana*) south of Barton Street near Scarborough Lane. The line of oleanders beyond to the left mark the line of one of numerous drains across Scarborough Park.



Figure 18 A weedy edge to the pond is common



Figure 19 Stone Pine (*Pinus pinea*)

BELOW **Figure 20** Slash Pine (*Pinus elliotii*)

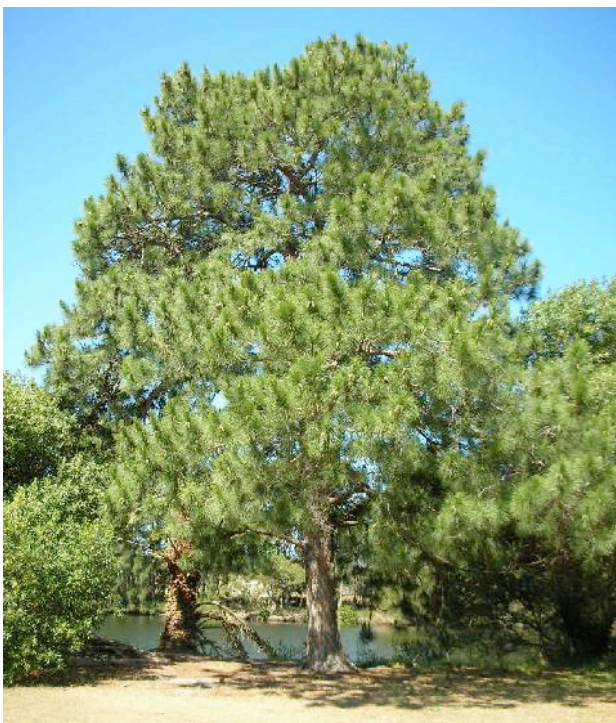


Figure 21 Silver Date Palm (*Phoenix sylvestris*)





Figure 22 Port Jackson fig (*Ficus rubiginosa*) near the end of Scarborough Street



Figure 23 Ubiquitous Monterey Pine (appropriate in the context of the USA-themed street names in the local area though, otherwise, a poor species choice horticulturally) and Coral tree

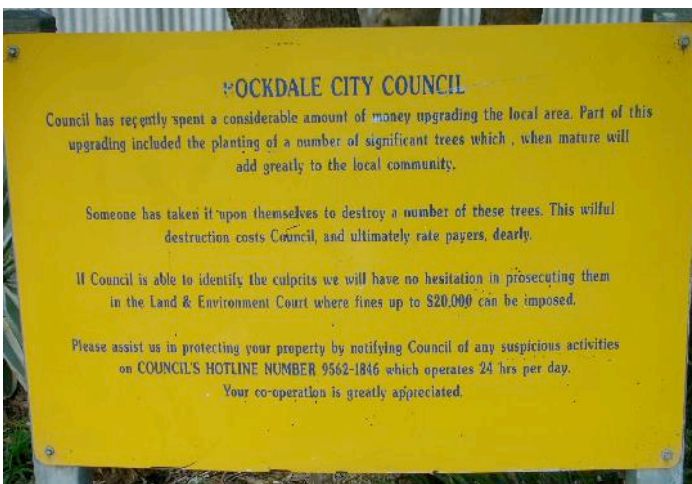


Figure 24 Council sign in the eastern field between Monterey and Hollywood Streets

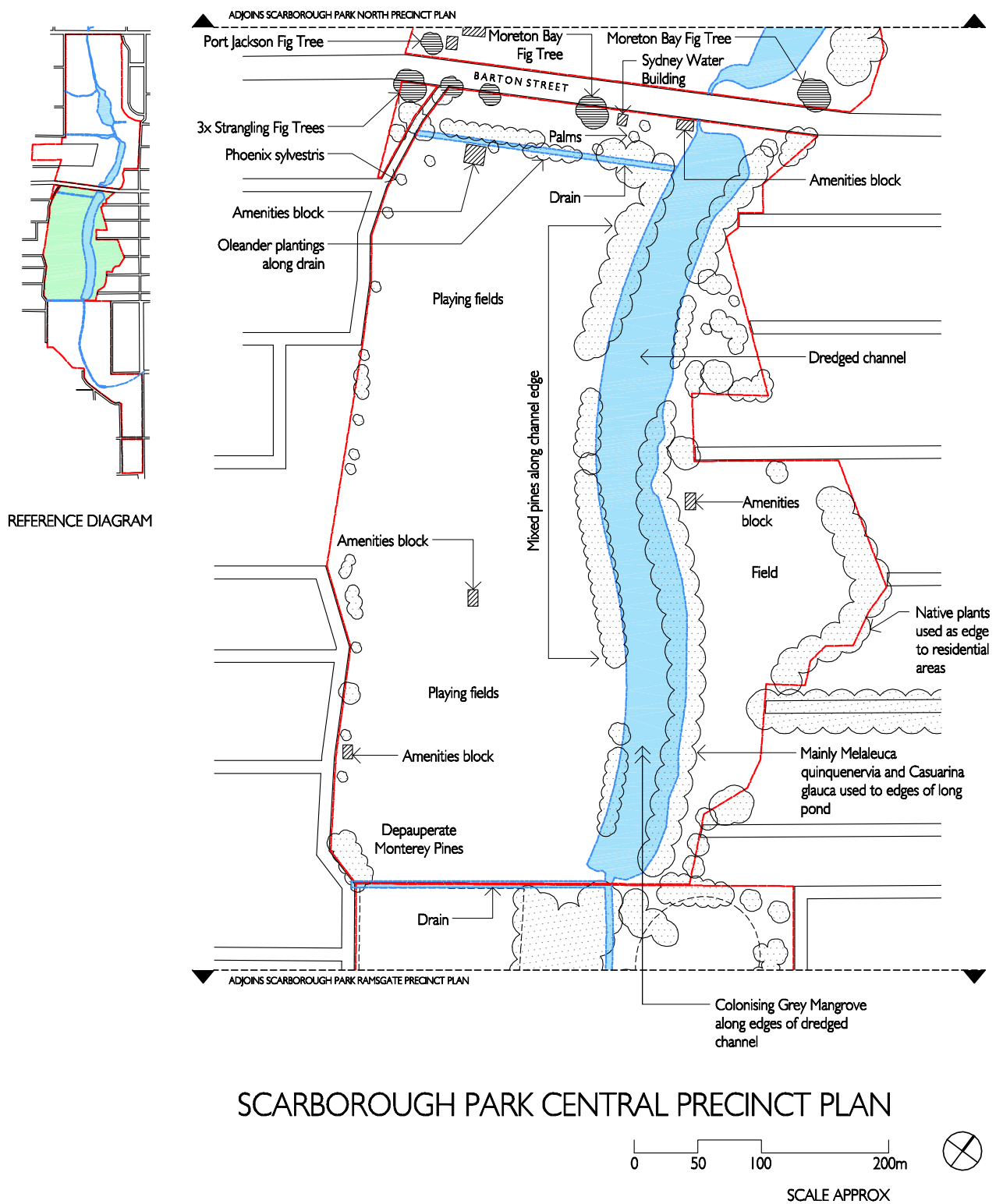


Figure 25 Scarborough Park Central Precinct Plan

3.3 Ramsgate Precinct

This final, southern precinct of Scarborough Park extends from about Emmaline Street to Ramsgate Road.⁹ It is made up of five separate land components – an elevated area of levelled land for playing fields at the northwestern corner; the rare remnant indigenous forests along with a small open space (Leo Smith Reserve) and depauperate western fringes across the central part; edge lands near Tonbridge Street owned by RMS; the Tonbridge Reserve; and Rotary Park.

In reality however, virtually all of this precinct (and those beyond) would have been characterised by the dune and swamp forests that now occupy the central area, such is the extent of persistent incursions and attempts to drain the area over many decades. It is remarkable that the indigenous forest remnants survive at all. Obvious incursions and threats currently revolve around the tennis court complex off Hawthorne Street and the pine trees planted along Hawthorne Street that have seeded into the natural area.

The core of the Hawthorne Street natural area includes Kurnell Dune Forest (listed as an endangered ecological community under Schedule 1 Part 3 of the current version of the NSW Threatened Species Conservation Act, 1995) and Coastal Sands Swamp Forest (listed, under Coastal Upland Swamp in the Sydney Basin Bioregion, as an endangered ecological community under Schedule 1 Part 3 of the NSW TSC Act, 1995).¹⁰

The Kurnell Dune Forest remnant is established over shallow Pleistocene (older than about 10,000 years BP) sand overlying peat and features *Angophora costata* as the upper canopy dominant. Some sporadic *Angophora* trees also extend further east, across Hawthorne Street, into the grounds of the adjacent public school as well as into Rotary Park to the southeast. The remnant dune forest contains much Red Ash (*Alphitonia excelsa*), *Omalanthus populifolius*, *Pittosporum undulatum* and *Breynia oblongifolia* – species typical of pioneer situations.

Apart from the Monterey Pines at the Leo Smith Reserve there are many Maritime Pines (*Pinus pinaster*) along the edge and within the natural area along with three old Bunya pines (*Araucaria bidwillii*). So far the latter appear not to have seeded much though the other pines are a definite threat to the integrity of the natural area without constant vigilance. The western fringe of the dune forest has numerous young fig seedlings that are germinating directly into the sandy soil (as opposed to germinating as epiphytes) – presumably courtesy of the many Currawongs (*Strepera gracula*) that inhabit this area.

The Mouse-eared Fishing Bat or Large-footed Myotis (*Myotis macropus*) roosts in the forest and forages over Scarborough Ponds and Tonbridge Creek at night. It is also listed as a vulnerable species under Schedule 2 Part 1 of the NSW TSC Act, 1995.

To the west of the dune forest the levels drop sharply and the vegetation changes abruptly to a forest of *Casuarina glauca* over periodically inundated ground before reaching Tonbridge Creek. The Tonbridge Creek channel, with much colonising Grey Mangrove (*Avicennia marina*), is of particular interest because it apparently supports a surprising number of indigenous freshwater fish species as well as some saltwater species.¹¹ Where it once drained out slowly through the remainder of Scarborough Park and eventually to Waradial Creek at the Peter Depena Reserve, the creek channel has been terminated at the Tonbridge Street Reserve and piped under Florence Street to the substantial outfall structure at Botany Bay, Ramsgate Beach.

⁹ The park originally extended across Ramsgate Road and encompassed the current bowling greens, RSL Club site and Pemberton Reserve within which there are older plantings – including Bunya Pine (*Araucaria bidwillii*), *Ficus rubiginosa* and *F. superba* var. *henniana* – that are contemporary with 19th century plantings in Rotary Park.

¹⁰ See also National Herbarium of NSW, Royal Botanic Gardens Sydney, *Cunninghamia* Vol. 3(4): 1994, pp. 689 and 700

¹¹ Arthur White, pers. comm., 23 September, 2013

A part of the earlier swamp, but now featuring freshwater, survives just south of the canal linking the dredged ponds and Production Lane and is intended as the focus of a future vegetation restoration project.

The area designated as Tonbridge Reserve is characterised by the southern part of the natural area – and includes the southern part of Tonbridge Creek – along with fine copses of *Casuarina glauca* and Maritime Pines (*Pinus pinaster*), including one very large and impressive pine with an epiphytic fig seedling, near the Ramsgate Primary School. An old Swamp Mahogany (*Eucalyptus robusta*) remains near Tonbridge Street and old examples of Bang Alley (*Eucalyptus botryoides*) and *Angophora costata* are just to the southeast of the pine copse. The open space/playing field at the eastern end of the reserve is actually the northern end of the former 19th century park that also included Rotary Park and Pemberton Reserve.¹²

The southern part of this precinct represents a juxtaposition of the former 19th century park and persistent locally indigenous species that indicate the local extent of the former natural areas. Locally indigenous vegetation of importance includes a large old Bang Alley (*Eucalyptus botryoides*), Coastal Honeysuckle (*Banksia integrifolia*), a Cheese Tree (*Glochidion ferdinandi*) and an old *Monotoca elliptica*, all of which species can also be found in the natural area.

Of the remaining early plantations likely relating to the declaration of Scarborough Park in the 19th century there is a large Camphor Laurel south of the school and, within Rotary Park, various large Moreton Bay and Port Jackson fig trees, two Stone Pines (*P. pinea*), a Norfolk Island Pine (*Araucaria heterophylla*), several old *Arbutus unedo*, two *Juniperus virginiana*, a *Cupressus macrocarpa* and a Plum Pine (*Podocarpus elatus*). Closely associated with these, though now no longer considered part of Scarborough Park, is Pemberton Reserve with more *Ficus rubiginosa* and a Deciduous or Cedar fig (*Ficus superba* var. *henneana*)(southeastern corner) as well as Bunya (*Araucaria bidwillii*) and Hoop Pines (*A. cunninghamii*). It is not known if the Flame Tree (*Brachychiton acerifolius*) north of the bowling greens also relates to this phase.

Both Tonbridge Reserve and Rotary Park include playgrounds and share an amenities block and cricket practice nets.



Figure 26 Tennis courts (and fringing pines beyond) built into part of the Hawthorne Street natural area

¹² The extant old plantings within this former park area probably relate to early phases of planting carried out after Scarborough Park was declared in 1879.



Figure 27 Hawthorne Street natural area



Figure 28 *Angophora costata*



Figure 29 Main track through the natural area



Figure 30 Main access track



Figure 31 *Restio tetraphyllus* var. *meioistachyus*

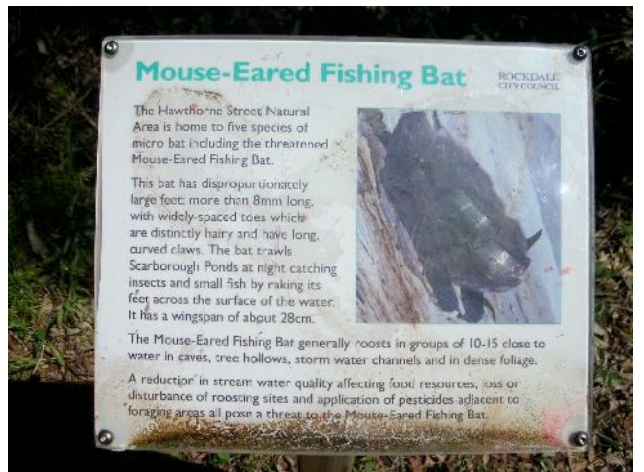


Figure 32 *Myotis macropus* sign



Figure 33 Main sign flagging the natural area



Figure 34 Swamp Oak (*Casuarina glauca*) forest



Figure 35 Tonbridge Creek channel



Figure 36 Maritime Pine grove at Tonbridge Reserve



Figure 37 Large Camphor laurel near school



Figure 38 One of many large figs in Rotary Park

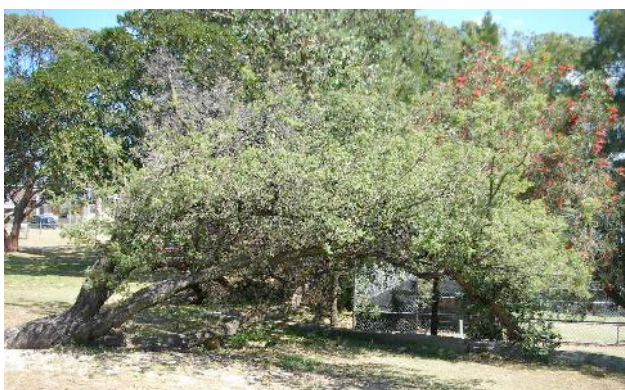


Figure 39 Old remnant *Monotoca elliptica* in Rotary Park

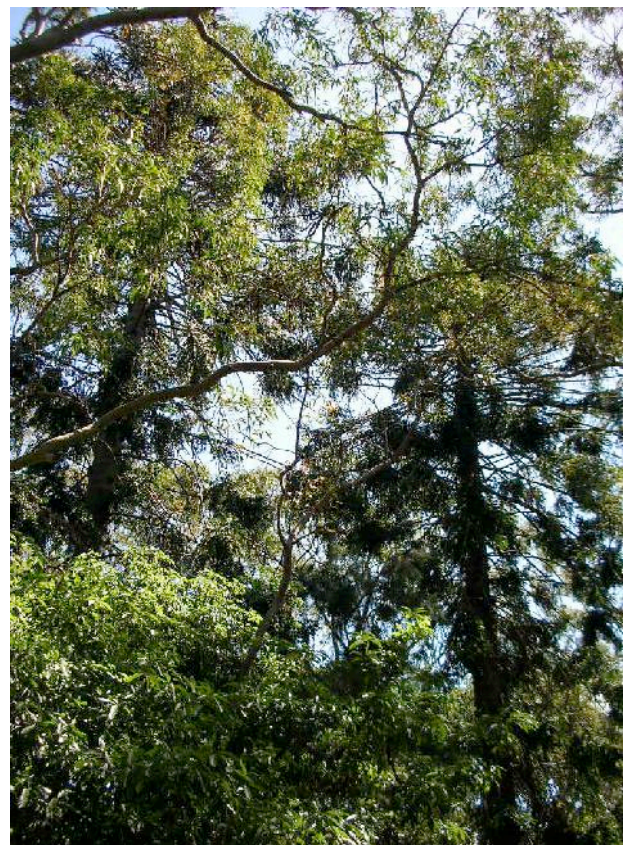


Figure 40 Plantings of Bunya Pine within the natural area



Figure 41 *Juniperus chinensis* and *Arbutus unedo*



Figure 42 Stone Pines and Norfolk Island Pine



Figure 43 Cheese tree (front) and Plum Pine (left)



Figure 44 Damaged fig tree trunk



Figure 45 Rotary sign and monument

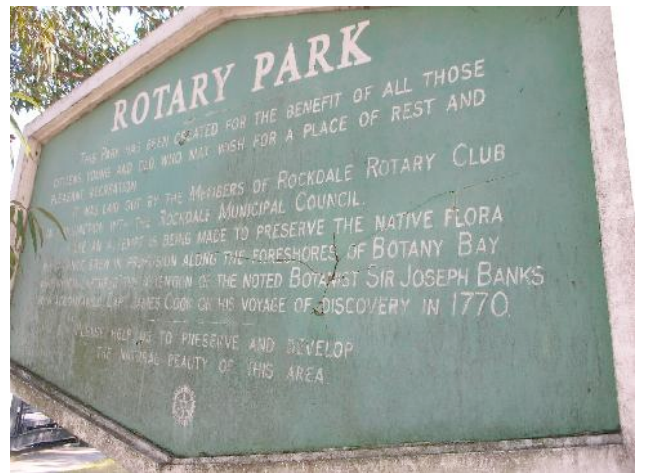


Figure 46 A well-meaning but ironically inappropriate message for the present



Figure 47 Rotarian memorial within Rotary Park (southern end)



Figure 48 Yet another memorial casually sited within the park

BELOW LEFT **Figure 49** Discrete war memorial

BELOW RIGHT **Figure 50** Ad hoc sign for weekend markets with war memorial in background



Figure 51 Monterey Cypress (*Cupressus macrocarpa*)



Figure 52 Eastern side of Pemberton Reserve with Port Jackson figs at left, both Hoop Pine (*Araucaria cunninghamii*) and Norfolk Island Pine and a Deciduous (or Cedar) fig (*Ficus superba* var. *henneana*) at the end (right)



Figure 53 Hoop Pine and Deciduous fig

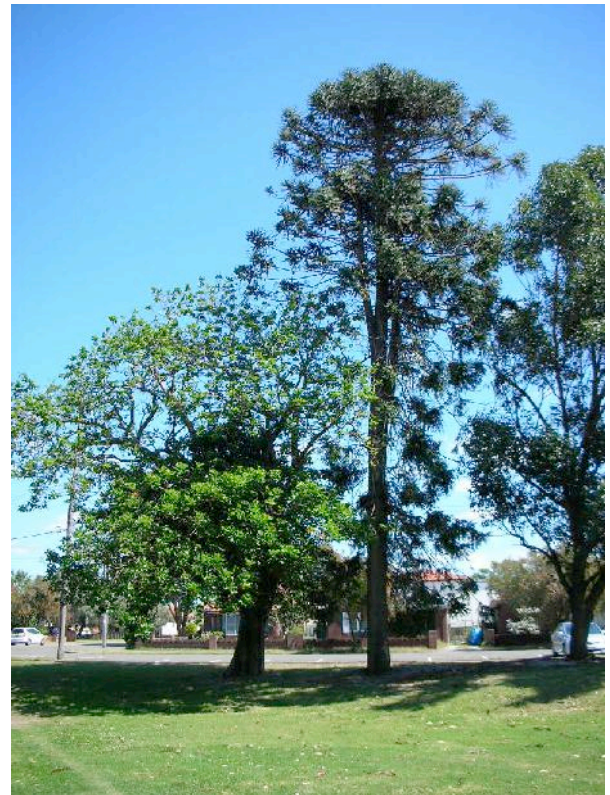


Figure 54 Coral Tree and Bunya Pine at southwestern corner of Pemberton Reserve

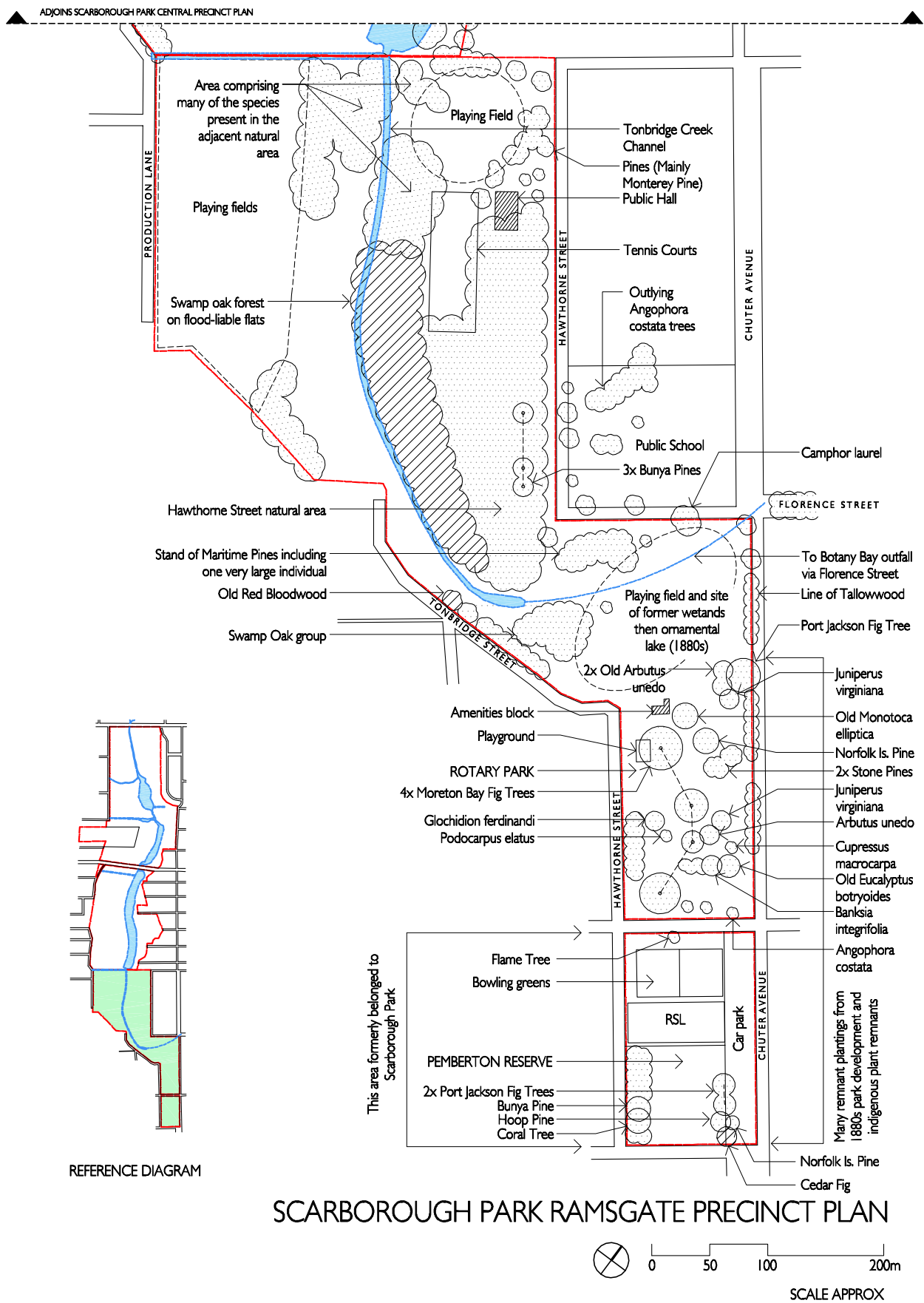


Figure 55 Scarborough Park Ramsgate Precinct Plan

4 Historical Background

4.1 Land Grants

With the sole exception of Peter Moore's 60 acres granted in 1823, the grants that took-in present day Scarborough Park, which at the time was sand hill and swamp, were made after the opening of Rocky Point Road (in 1843). The making of that road is said to have provided the stimulus for the opening up of the area when the upturn in the economy came after 1850. The whole beachfront with dunes behind was put up for sale by the Government in the early 1850s and this included the area of Scarborough Park. The sales completed in 1852 were Alfred Kennerley's 35 acres and 42 acres, and James Beehag's 54 acres, in 1854 William Henry Harding's 68 acres, William Buyers and Alexander Learmouth's 55 acres, Jacob Marks' 69 acres, John Woods' 64 acres, and George Alfred Lloyd's 42 acres.

Aside from Moore, none of the aforementioned grantees took up residence or developed the land in any way. Peter Moore's grant was located at present day Ramsgate and to the north and south of Ramsgate Road. Peter was related to Patrick Moore who had received a grant of 60 acres at the corner of present day President Avenue and Princes Highway in 1812. Patrick was a convict but possessed the valued skills of a blacksmith and wheelwright. Because of the frontage to the swamplands that was formerly Scarborough Park the area became known by the 1850s as Patmore's Swamp, Cook's River.¹³ Peter developed his grant after the making of Rocky Point Road.

4.2 The Illawarra Railway

Rockdale and neighbouring suburbs have been serviced by the Illawarra Railway since 1884. The route of this railway was determined in 1881, however there was an earlier proposed route that basically traced Rocky Point Road (inclusive of a length of present day Princes Highway) and crossed Georges River at Rocky Point. That route was determined in 1874.

A major promotor of the Illawarra Railway was Thomas Holt MLC who happened to own land at Rocky Point and the southern part of Lady Robinsons Beach. In expectation of the realisation of a railway along the 1874 route, in May 1877 Holt subdivided his property at Lady Robinsons Beach as the North and South Scarborough estates, and his son in September 1877 laid out the estates of Ellismere and St Kilda at Rocky Point.¹⁴

4.3 Scarborough Park

4.3.1 Dedication

The dedication of part of the swampland behind Lady Robinsons Beach as Scarborough Park on 23rd May 1879, arguably, was a response to the prospect of the coming of a railway (and residential development) that never eventuated.

The need to establish such a park was initiated in August 1877 by Samuel Cook who presented a petition to the Minister for Lands asking for: *the dedication of a portion of a public reserve at Scarborough, a newly laid out town near what is known as Lady Robinson's Beach, on the western shore of Botany Bay, as a place for public recreation.*¹⁵

In laying out the Scarborough estates, Holt had set aside part of the land for a public space behind Lady Robinsons Beach known as the Esplanade connected to the country behind by a wide street named the Boulevarde. Much of the Esplanade was subsequently absorbed into the Cook Park reserve in 1885 (identifiable today by Pine Park), while the Boulevarde became Ramsgate Road.

¹³ RW Rathbone, *Sans Souci Peninsula*, Rockdale City Library, 2002, p.8 (Rathbone 2002)

¹⁴ L Muir, 'Public Spending and Private Property: the Illawarra Line Cabal', in M Kelly (ed), *Sydney: city of suburbs*, UNSW Press, Kensington, 1997.

¹⁵ 'Public Park at Scarborough', *Sydney Morning Herald*, 1/9/1877, p.5

Samuel Cook reasoned that the private development at the Scarborough estates would in time be very popular with holidaymakers of Sydney's southern suburbs (Newtown, St Peters, Marrickville, Petersham, etc) in the same way that Manly had become and therefore it was: *desirable that in the vicinity of the new township suitable provision should be made for the purposes of health and recreation by vesting in trustees a portion of Crown land reserved there for public purposes, as a public park for the use of the inhabitants.*¹⁶

The area was 97 acres in extent and being swamp most of it had already been reserved from sale by the Government and no purchase was required. The Government's approval however was conditional on reserving the right to put a railway through the reserve in the future, that the local council would be represented on the board of trustees that managed the park, and that Thomas Holt would be required to gift a portion of his Scarborough estates for inclusion in the park.¹⁷ The extent of Holt's gift varies in accounts between 14½ acres and 30 acres, but the location of this area was the southeast corner of the reserve north of Park Street and west of Chuter Avenue (then named Frederick Street). As the area was swamp the decision to donate the land was not an unduly difficult one. In 1888 this portion was considered the 'best part' of the Park,¹⁸ and as recounted below was where most of the landscaped improvements were made.

Cook's petition was signed by people who had purchased allotments in the Scarborough estates and by others who owned land in the vicinity. Cook (1830-1910), however, lived at Marrickville and his motivation was simply the advancement of parks in the colony. He was born in Leicester, England and was apprenticed to the printing trade in London and there he was offered the position of compositor with the Fairfax press in 1854. He came to Sydney and within the Fairfax press he was employed shortly after as the paper's reporter in the NSW Parliament. He became the editor and later, in 1888, the general manager of the Sydney Morning Herald and the Sunday Mail. He held these positions until his retirement in 1907. Cook had many interests and had a particular interest in dedicating areas for public parks throughout Sydney in threat of private development or where they did not exist; he was directly responsible for the forming of Victoria Park in Sydney, and Marrickville and Balmoral parks. He was a friend of JH Carruthers, the local MLA for many years, and in Rockdale Cook lobbied the government to establish Cook Park at nearby Lady Robinsons Beach.¹⁹

From the outset Cook had thought the best option for the future management of the Park was the appointment of a board of trustees rather than leaving it to the local council. He thought a group of like-minded 'gentlemen' would 'be careful to preserve the natural beauties of the park and have it laid out with taste'.²⁰ The first board of trustees was appointed in July 1879 and comprised Cook, John Lucas, John Bowmer, Morrice Alexander Black, William Jolly, and William Neill.²¹ Bowmer was the then mayor of West Botany (Rockdale) and a market gardener by profession.²² Lucas was the MLA for the district and was very active in local land speculation. Jolly was a resident and magistrate of Newtown, but a keen advocate of establishing parks, and lobbied for a new Parks Act (passed in 1884).²³ Lucas was appointed chairman, Cook secretary, and Neill treasurer.²⁴ Jolly died in 1881 and Lucas resigned as trustee around this time. To replace them, Edward Jules Wahlow and James Henry were appointed trustees in 1882,²⁵ and from that time Cook was the chairman and secretary. Over the term of the Trust the trustees changed with the consent of the Lands Department; in 1891 Donald Manson was appointed,²⁶ in 1894 solicitor James Conley Gannon and former resort developer

¹⁶ 'Public Park at Scarborough', *Sydney Morning Herald* 1/9/1877, p.5

¹⁷ 'Public Park at Scarborough', *Sydney Morning Herald* 1/9/1877, p.5

¹⁸ 'Sydney and Suburban Municipalities. XVIII - West Botany', *Sydney Morning Herald* 1/1/1888, p.4

¹⁹ Rathbone 2002, pp.23-24; 'Death of Mr S Cook', *Sydney Morning Herald*, 4/7/1910, p.9

²⁰ 'Public Park at Scarborough', *Sydney Morning Herald*, 1/9/1877, p.5

²¹ NSW Government Gazette, 4/7/1879

²² 'The Late Mr John Bowmer', *Sydney Morning Herald*, 16/12/1903, p.12

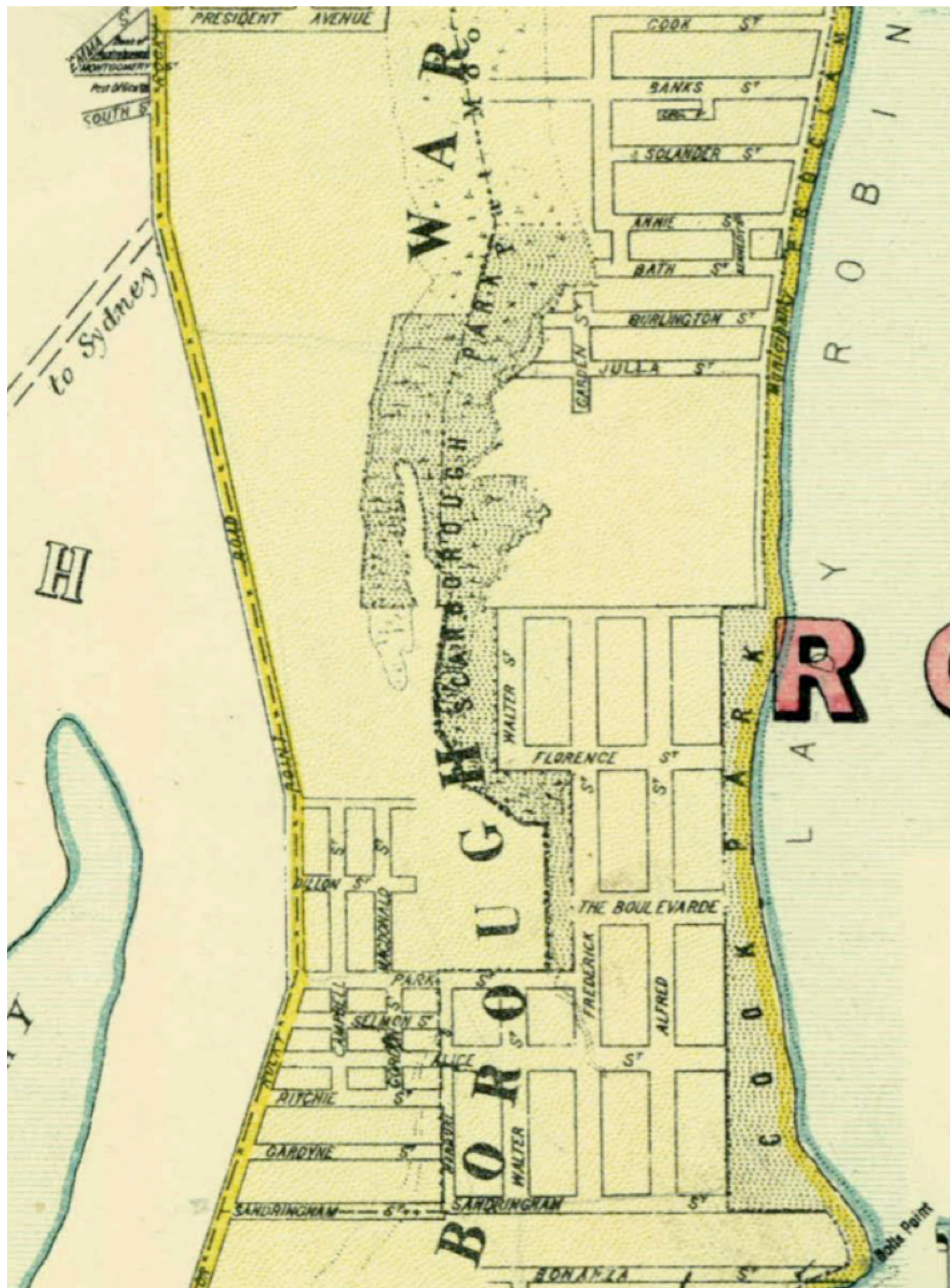
²³ Obituary: W Jolly, *Sydney Morning Herald*, 8/9/1881, p.9

²⁴ News of the Day, *Sydney Morning Herald*, 26/7/1879

²⁵ NSW Government Gazette, 27/10/1882

²⁶ NSW Government Gazette, 9/1/1891

William Edward Rust were appointed,²⁷ and in 1897 the politician Jacob Garrard and resort developer Thomas Saywell were appointed.²⁸

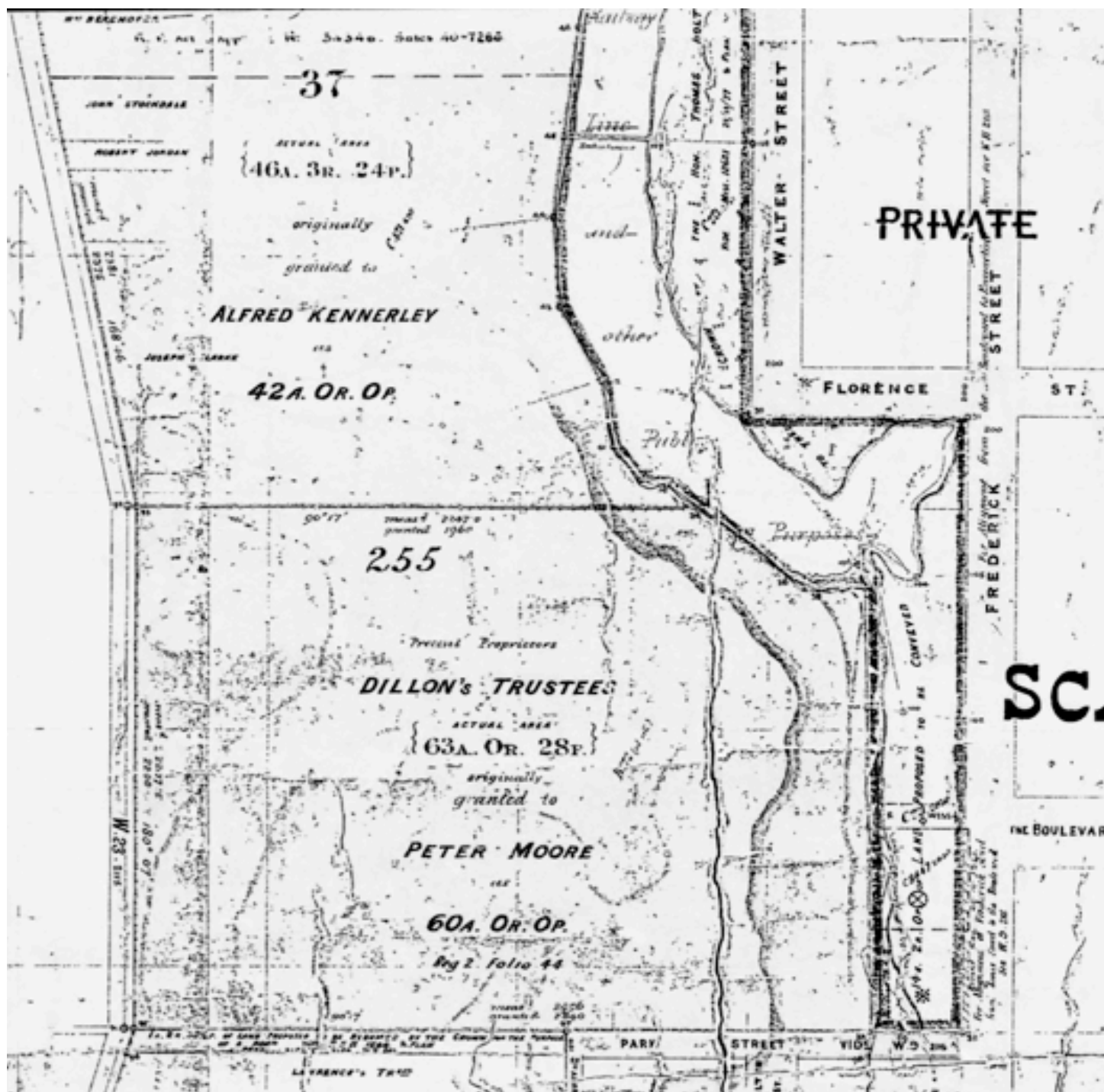


Source: Sydney City Archives

Figure 57 The extent and location of Scarborough Park are clearly demarcated in this commercial map of the municipality published around 1887. The relationship between Cook Park (present day Pine Park) and Scarborough Park can be inferred and the connection between the two provided by the Boulevard (now Ramsgate Road). Central to both parks was Thomas Holt's Scarborough estates. At that time, accessing both parks was by Park Street or along the beach and up the Boulevard.

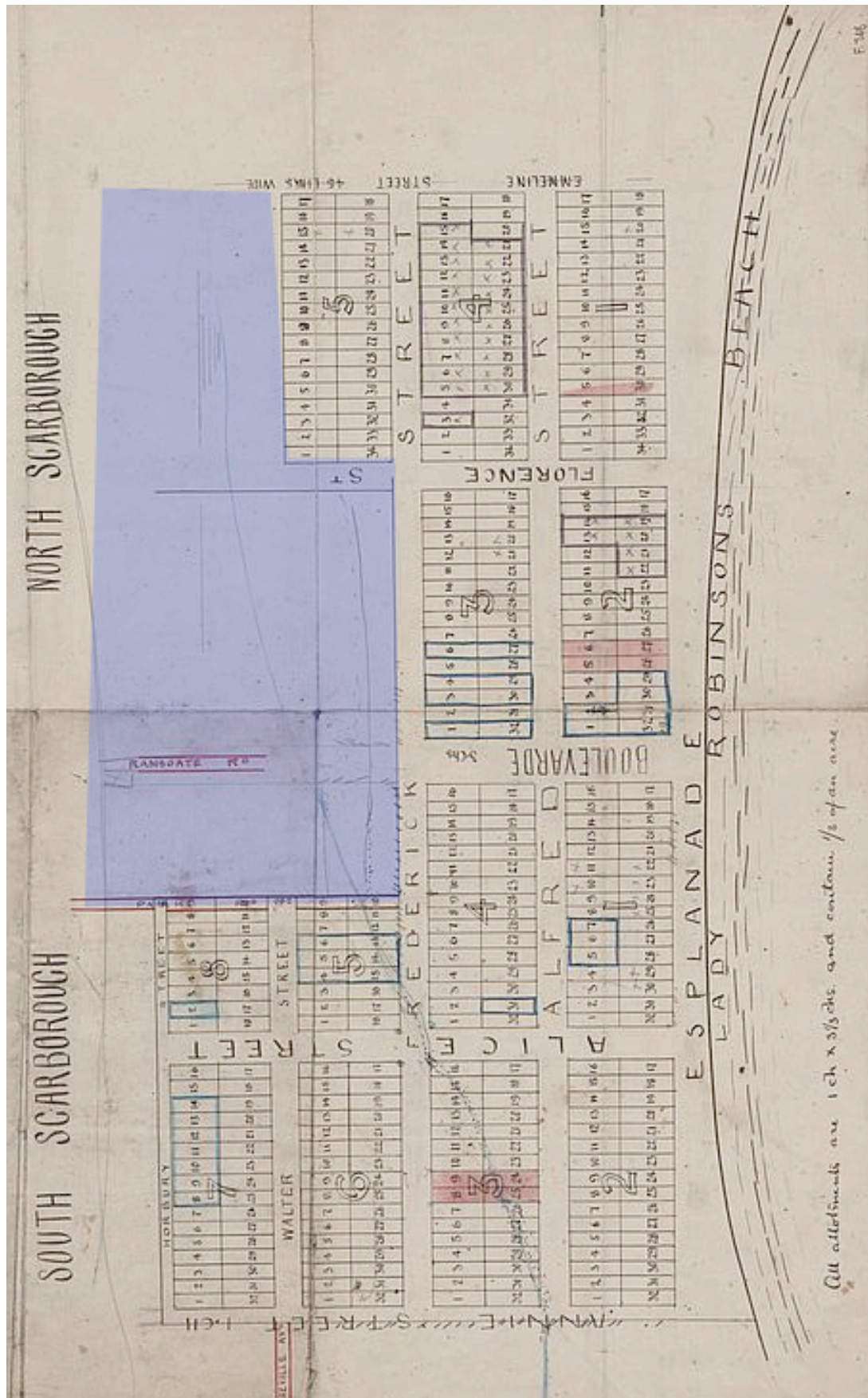
²⁷ 'Cook and Scarborough Park', *Sydney Morning Herald*, 25/9/1894, p.6

²⁸ 'Cook Park ...', *Sydney Morning Herald*, 6/9/1899, p5



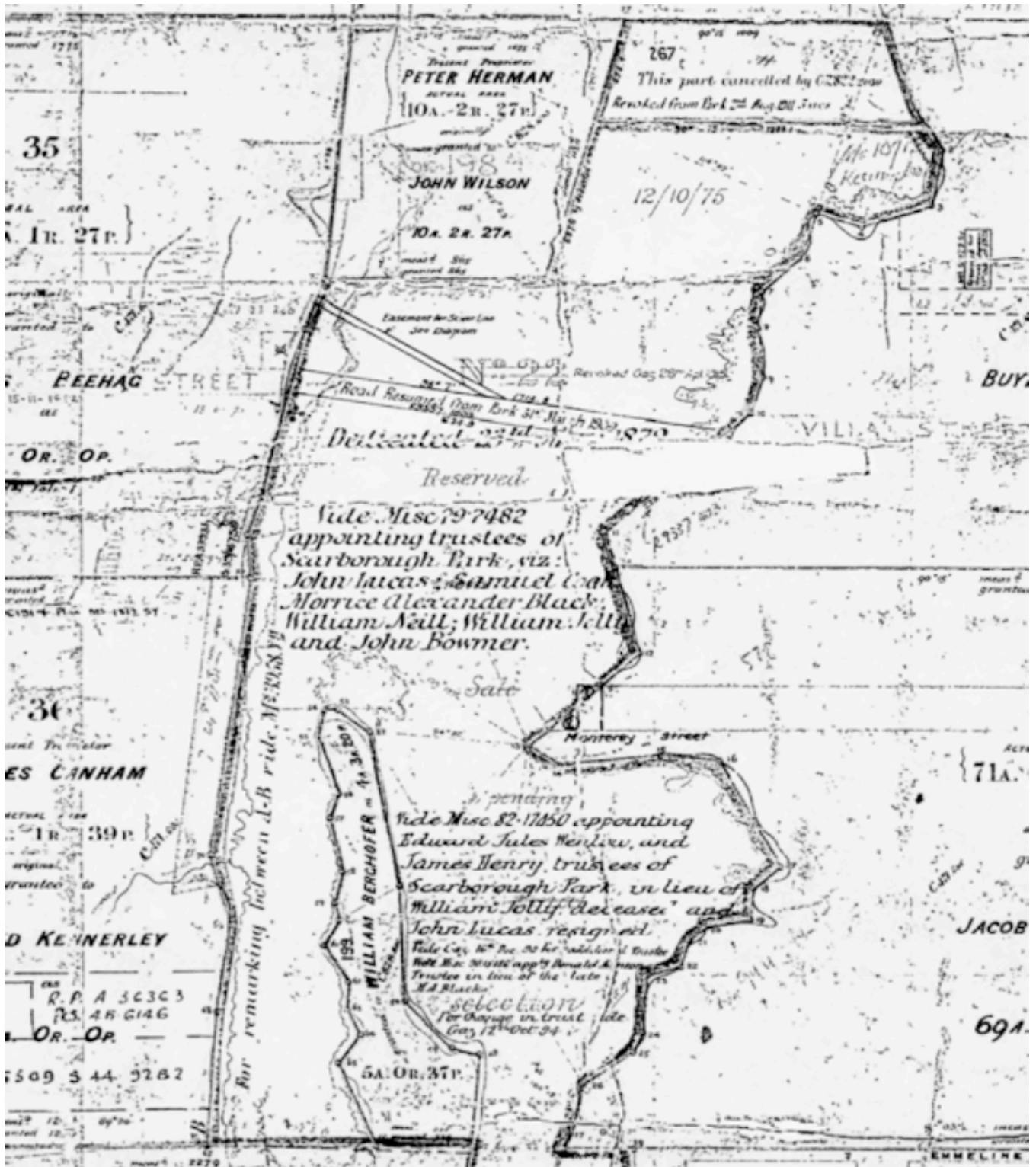
Source: Land and Property Information (226.2030)

Figure 58 Detail of the government survey of Scarborough Park (southern portion) dated 1884 with many later annotations.



Source: National Library of Australia (map-f748-v)

Figure 60 Plan of Thomas Holt's North Scarborough and South Scarborough estates subdivision of 1877 with the formation of the 'esplanade' that was incorporated into the Cook Park reserve in 1885 (Pine Park). In this plan the area (shaded) of Scarborough Park gifted by the proprietor, Thomas Holt, had been excised from the subdivision.



Source: Land and Property Information (226.2030)

Figure 61 Detail of the government survey of Scarborough Park (northern portion) dated 1884 with many later annotations.

4.3.2 Improving Scarborough Park

At the time of the dedication Scarborough Park was the only public reserve south of Victoria Park (at Broadway) to the Georges River. It was also swampland, but that did not deter Cook who considered

it an advantage for the swamp was suited to being 'converted into a lake, and thus be made a natural feature of great value and beauty' in a park setting.²⁹



Source: Land and Property Information (226.2030)

Figure 62 This sketch titled 'Pat Moore's Swamp looking north from the Embankment' was included with the government survey of Scarborough Park dated 1884. The sketch is the earliest recorded image of the Park in its formative years.

The aforementioned board of trustees went about the task of devising a plan for the park with enthusiasm by convening regular meetings.³⁰ A first priority was the making of a road to access the Park. The Government responded to this request in 1879 by the dedication of 'a good road to the park'.³¹ This road was probably Park Street leading from Rocky Point Road. The trustees undertook the clearing and stumping of this road at their own expense.³²

In the following year the trustees sought a grant of 2,500 pounds to undertake improvements to the Park. The scope of the proposed improvements included fencing the perimeter, removing the undergrowth and select trees thought not 'desirable to retain', dredging a portion of the swamp, improving the banks of the swamp, grassing some of the land, and 'in fact mak(ing) it suitable for immediate use'. The trustees' vision for the future of the Park had been formed by this time and they wanted something: *... not like any ordinary park. It would, in fact, become one of the most agreeable places of public resort in the metropolis. The lake in the centre would remain fresh water, but the park was within about 300 yards of one of the most beautiful sea-beaches in the world (and) the park would be a pleasant marine retreat.*³³

The records of the Trust have not survived, and no plan and few illustrations of the landscaped park in its formative years are known. However, from the occasional newspaper account, the extent of the trustees' work is known to have been extensive. By the mid 1880s the trustees had developed the Park into a state where a visitor could favourably report: *The trustees of the park have done well with the means at their disposal. They have fenced in their trust, sunk for and secured apparently unlimited*

²⁹ 'Public Park at Scarborough', *Sydney Morning Herald*, 1/9/1877, p.5

³⁰ 'Obituary: W Jolly', *Sydney Morning Herald*, 8/9/1881, p.9

³¹ 'News of the Day', *Sydney Morning Herald*, 26/7/1879

³² 'Scarborough Park Improvement', *Sydney Morning Herald*, 8/5/1880, p3

³³ 'Scarborough Park Improvement', *Sydney Morning Herald*, 8/5/1880, p3

*supplies of fresh water. They have also cleared a large area of land, formed plantations of ornamental trees, and have engaged labourers who are now forming an artificial lake.*³⁴

By 1888, and after nearly ten years' work, Scarborough Park had around '30 acres .. laid out and planted with between 1100 and 1200 ornamental shrubs and trees' and the trustees intended to convert 'the greater part of the swampy portion of the park into a large lake, which will have a depth of at least 3ft in the driest seasons'.³⁵

The Trust was also responsible for the management and upkeep of nearby Cook Park from 1885. The inequity in spending between the two and the disparity in visitor numbers was being noted by the late 1880s. Cook Park (with Lady Robinsons Beach beside it) by then attracted thousands of visitors and was neglected in regard to improvements, while Scarborough Park was 'beautifully kept' and attracted 'nobody'.³⁶ Another account of this situation was given in 1890 when it was claimed: *.. the trustees who have reclaimed and improved the portion of the park adjacent to the Scarborough Estate, spending hundreds, and some say thousands of pounds of public money for this purpose. This money has been expended on a piece of land seldom if ever visited by the general public.*³⁷

From that time accounts of improvements to Scarborough Park diminished and it would seem the trustees then concentrated on providing for what the people actually wanted - an improved Cook Park.

From around 1890 Council sought control of the Park and abolition of the Trust and that eventuated in 1929.³⁸



Source: Rockdale City Council Library (scarborough_p_001)

Figure 63 While some have thought this photograph represented Scarborough Park in its native state (Rathbone 2002, p.112), it more probably depicted a part of the park in its improved state. Not dated, but thought about 1891.

³⁴ 'Scarborough Park and the Water Supply', *Sydney Morning Herald*, 23/5/1885, p.15

³⁵ 'Sydney and Suburban Municipalities. XVIII - West Botany', *Sydney Morning Herald*, 1/1/1888, p.4

³⁶ 'Our Letter Box', *Evening News*, 8/10/1887, p.2

³⁷ 'Rockdale', *Evening News*, 11/4/1890, p.2

³⁸ 'Rockdale', *Evening News*, 22/3/1890, p.3



Source: NSW State Library (GPO Disc I- 01701)

Figure 64 The ornamental lake at Scarborough Park photographed in April 1934. The lake was formed in 1885 and was located where Tonbridge Street Reserve is today.

4.3.3 Draining the Swamp

The available documentary evidence indicates the southeast corner of Scarborough Park was extensively landscaped in the 1880s and it was proposed at that time to transform the northern swamps of the Park into a large lake. This swamp continued beyond the Park into an area south of President Avenue referred to as Patmore Swamp. The extent of control exercised over this northern part of Scarborough Park is now difficult to determine because it was one integrated watershed.

This vast pool of water had been considered in the mid 1880s as a potential source of potable water to supplement the City Council's reservoirs at Botany.³⁹ However, by 1890 part at least of the swamp system had become a health hazard owing to its low-lying position and water and sewage draining into it from the higher parts of Kogarah. Rockdale Council from 1890 wanted the swamp system drained by building or widening an existing channel through Scarborough Park draining into Botany Bay at Dolls Point.⁴⁰ That channel in 1892 was '6ft wide and 2ft' and thought inadequate for the purpose for it could not discharge the volume of water in periods of heavy rain,⁴¹ and was improved in that year.⁴² From the early 1890s, therefore, the trustees seem to have given up the idea of improving the northern part of the Park,⁴³ while their improvements in the landscaped southern portion were under threat from the need to improve drainage of the greater catchment.

³⁹ 'News of the Day', *Sydney Morning Herald*, 20/5/1885, p.9

⁴⁰ 'Deputations. Patmore Swamp', *Evening News*, 14/3/1890, p.5;

⁴¹ 'The Kogarah Swamp', *Evening News*, 24/3/1892, p.5

⁴² 'Rockdale', *Evening News*, 2/11/1892, p.3

⁴³ 'Rockdale', *Evening News*, 11/4/1890, p.2

Draining the northern portion of the Park was commenced in 1932 by Rockdale Council. By then the Trust had been dissolved by the Department of Lands and control of the Park transferred to Rockdale Council in trust in 1929.⁴⁴ Over the 1900s, 1910s and 1920s there were requests to drain the swamp owing to the periodic flood hazard and the proliferation of mosquitoes.⁴⁵ The drainage and reclamation was a long term project (estimated in 1932 at 15 years) and the work was done to both improve the sanitation of the area, to provide level playing fields suitable for football, cricket, etc.,⁴⁶ and to employ otherwise unemployed men in the desperate years of the Great Depression.

The first section of the Park affected by these Council improvement works was the area south of Barton Street (put through the park around 1909) and by the end of 1932 around 30 acres had been cleared of vegetation. In mid 1933 the old drainage channel was deepened and the level of the neighbouring area raised by around one metre.⁴⁷

The draining and filling of the Park was continued into the 1950s and the tragic consequence of this work was the removal of the ornamental lake where Tonbridge Street Reserve is today. The lake was visible in aerial photographs of the 1930s and 1940s and with its irregular plan and clustering of trees undoubtedly demonstrated the vision of the trustees in the 1880s.



Source: NSW State Library GPO Disc I - 01702)

Figure 65 The drainage works in progress at Scarborough Park in April 1934

⁴⁴ Rathbone 2002, p.112

⁴⁵ Rathbone 2002, p.98

⁴⁶ 'The Suburbs', *Sydney Morning Herald* 3/11/1932, p.13

⁴⁷ Rathbone 2002, p.112



Source: Rockdale City Council Library (old_wetlands_04)

Figure 66 An undated, but believed c.1945 or possibly 1937, oblique aerial photograph of the original southern portion of Scarborough Park (the area south of Ramsgate Road was excised from the reserve in 1949). The photograph recorded the extent of the ornamental plantings undertaken in that part of the Park in the 1880s, the lake of 1885, and a narrow drainage channel possibly of around the early 1890s. In the foreground is glimpsed the widened channel or pond formed in the 1930s by the Council.



Source: Rockdale City Council Library (scarborough_p_009)

Figure 67 Most of what was depicted in Figure 66 was removed by Rockdale Council in the 1950s. This photograph of Tonbridge Street Reserve recorded remnant pine trees dating from the days of the park trust. Not dated, mid 1970s

By the mid 1930s the Council maintained its plant nursery at Scarborough Park, which was said to have been one of the largest municipal nurseries in NSW.⁴⁸ However, the primary role of the Park under Council administration was for playing sport and by the 1950s it had become the primary sporting centre for the district.⁴⁹ In connexion with this role, the National Fitness Hall was opened in Scarborough Park in 1953,⁵⁰ and the headquarters of the St George Amateur Athletic Association was erected in 1951.⁵¹



Source: Rockdale City Council Library (fitness_s_001)

Figure 68 The original premises of the National Fitness Headquarters off Hawthorne Street. This centre opened in 1953 utilizing existing buildings that possibly dated from the war emergency of the 1940s. Not dated



Source: Rockdale City Council Library (scarborough_p_008)

Figure 69 A dressing shed in Scarborough Park in November 1958. These rude structures could have dated from the 1930s or earlier and possibly had been relocated from elsewhere.

4.3.4 Dismembering the Park

Prior to the Second World War some areas of the dedicated reserve of Scarborough Park were revoked by the Government. This included around one acre in 1909 for the making of Barton Street,⁵² but the major alienation was the five acres around the intersection of Burlington and Cassilis streets in 1911.⁵³ Most of this area would seem to have since been rededicated parkland as the AS Tanner Reserve.

⁴⁸ 'Trees for Hospital', *Sydney Morning Herald*, 22/8/1939, p.12

⁴⁹ Rathbone 2002, p.126

⁵⁰ '72 New Playgrounds to Open on Monday', *Sydney Morning Herald*, 1/1/1953, p.4

⁵¹ Rathbone 2002, p.139

⁵² NSW Government Gazette 31/3/1909

⁵³ NSW Government Gazette 2/8/1911

In the years following the Second World War the integrity of the original dedication of the reserve came under sustained threat by the wants of the community and government.

Under the County Cumberland Planning Scheme published in 1951 a new 'Southern Expressway', was proposed to traverse the length of Scarborough Park and cross the Georges River at Rocky Point. The bridge for this crossing, the Captain Cook Bridge, was completed in 1965, and the road reserve within Scarborough Park remains.

In 1949 an area of around three acres was excised from the Park south of Ramsgate Road and bounded by Chuter Avenue, Park Road, and Tonbridge Street for the Ramsgate branch of a returned servicemen's association. A hall was erected in 1951 and a permanent club premises in 1965.⁵⁴ The site of the demolished hall was reinstated as public reserve and is today a bowling links.⁵⁵ This area was part of the Holt gift and where extensive and expensive landscaping work was undertaken by the Park Trust in the 1880s.

Today, the old Scarborough Park which was developed by the trustees into landscaped grounds has been compartmentalized into smaller reserves named Leo Smith, Tonbridge Street, and Rotary, while the old swamp (north of Culver Street) that the Trust had little to with has retained the name Scarborough.

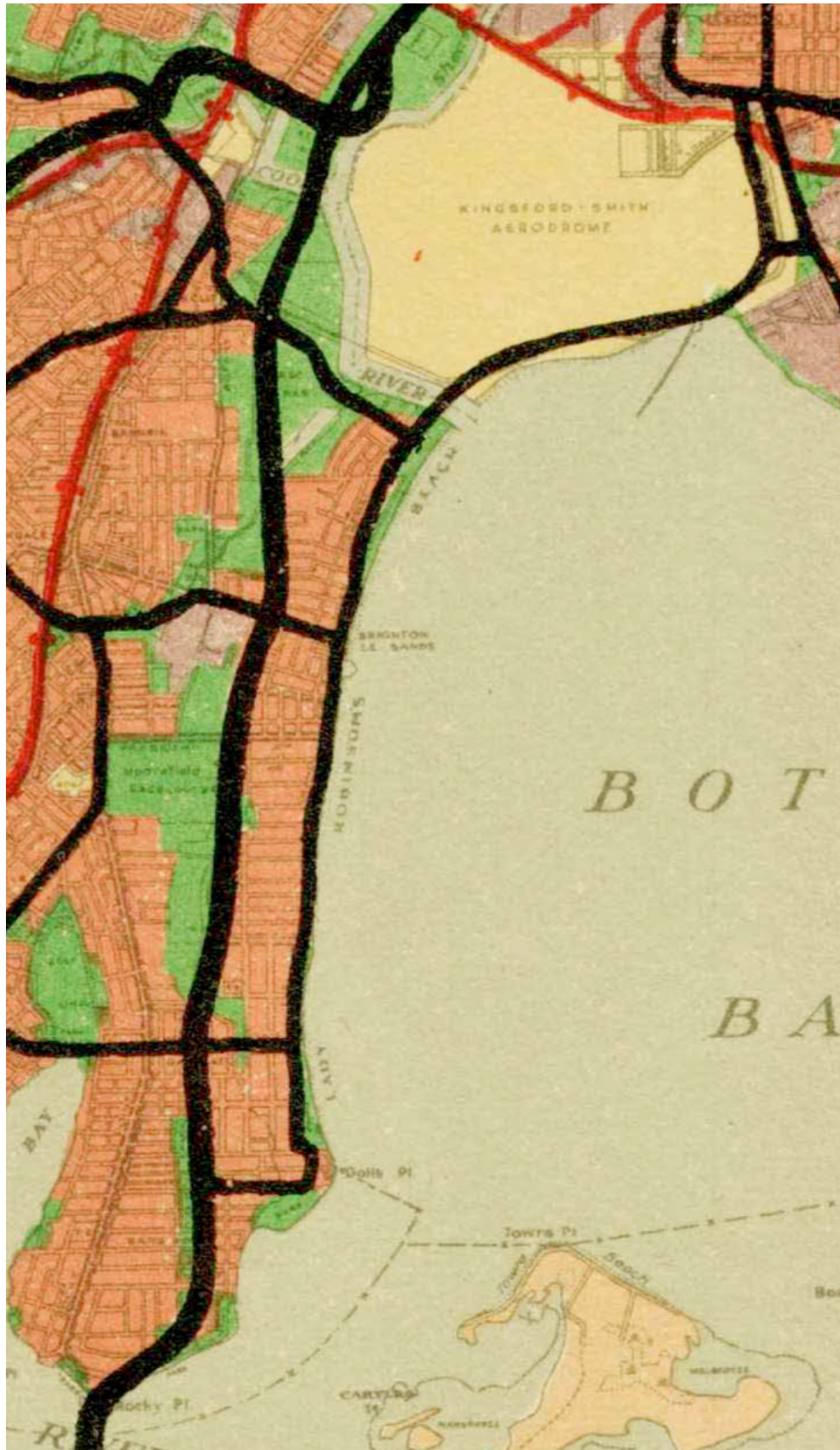


Source: Rockdale City Council Library (rsl_r_004)

Figure 70 The original returned servicemen's memorial hall opened in 1951 within land formerly part of Scarborough Park and note the remnant pine trees in the background. Today this site is occupied by a bowling club. Not dated

⁵⁴ Rathbone 2002, p.127; NSW Government Gazette 25/3/1949

⁵⁵ Rathbone 2002, p.143; NSW Government Gazette 27/7/1962



Source: City of Sydney Archives

Figure 71 The map that accompanied the publication of the County Cumberland Scheme published in 1951. It acknowledged the future would be the domain of the motorcar and planned accordingly. Significant parts of this scheme have yet to be undertaken.

4.4 Aerial Photographs



Source: Land and Property Information

Figure 72 The northern portion of Scarborough Park. The photograph recorded this area was characterised by system of swamp with a central drainage channel (visible below the Barton Street culvert). Within this photograph (and that at figure 79) the geomorphological basis of the wetlands can be seen with a series of curving dune ridges just visible where the new suburb of Monterey is being formed. Photograph is dated 1930



Source: Rockdale City Council
Figure 73 The northern portion of Scarborough Park.
 Photograph is dated 1943



Source: Rockdale City Council
Figure 74 The northern portion of Scarborough Park.
 Photograph is dated 1961



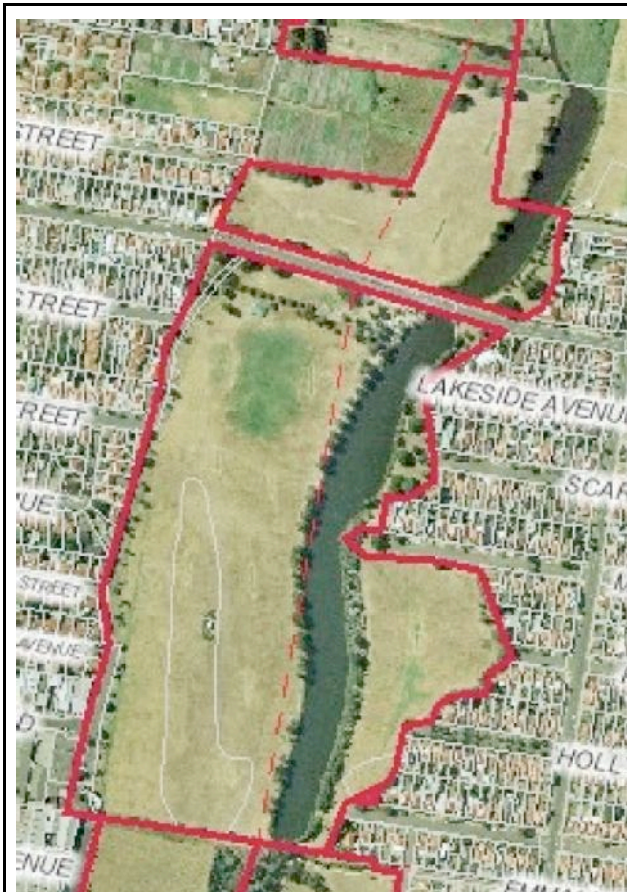
Source: Rockdale City Council

Figure 75 The northern portion of Scarborough Park.
Photograph is dated 1977



Source: Rockdale City Council

Figure 76 The northern portion of Scarborough Park.
Photograph is dated 1989



Source: Rockdale City Council
Figure 77 The northern portion of Scarborough Park.
 Photograph is dated 2000



Source: Rockdale City Council
Figure 78 The northern portion of Scarborough Park.
 Photograph is dated 2011



Source: Land and Property Information

Figure 79 The southern portion of Scarborough Park. The photograph recorded the formal landscaped area north and south of Ramsgate Road, a wilderness perhaps to the north of this, and a drainage channel traversing both and eventually discharging at Sandringham. Photograph is dated 1930



Source: Rockdale City Council
Figure 80 The southern portion of Scarborough Park.
 Photograph is dated 1943



Source: Rockdale City Council
Figure 81 The southern portion of Scarborough Park.
 Photograph is dated 1961



Source: Rockdale City Council

Figure 82 The southern portion of Scarborough Park.
Photograph is dated 1977



Source: Rockdale City Council

Figure 83 The southern portion of Scarborough Park.
Photograph is dated 1989



Source: Rockdale City Council

Figure 84 The southern portion of Scarborough Park.
Photograph is dated 2000



Source: Rockdale City Council

Figure 85 The southern portion of Scarborough Park.
Photograph is dated 2011

5 Review of Physical Evidence

5.1 Vestiges of Pre-European Landscape

Despite the past few decades of concerted suburban development combined with many decades of filling and drainage practices there remain within Scarborough Park some highly significant vestiges of ancient landscape components and evidence of earlier geological processes of considerable scientific interest. The most notable areas where this is evident are within the southern parts of the park where the Hawthorne Street natural area has re-established, Rotary Park and, as a former component of Scarborough Park, Pemberton Reserve.

The Hawthorne Street natural area retains evidence of older sands (Pleistocene) over older peat swamps that support a rare vegetation community of considerable value that also likely predates European arrival on the continent. Further vestiges of this vegetation are scattered beyond the natural area within other parts of the park, the adjacent primary school and suburban fringes. Elsewhere within Scarborough Park is evidence of later (Holocene) sands that record the process of more recent beach sand accumulation at a previous period of rising sea levels.

The approximate extent of the Pre-European wetlands area is recorded on the 1887 plan (**Figure 57**) and this area is still appreciable between the two blocks of suburban and industrial development either side (east and west respectively) of Scarborough Park. The irregular edge, for example, formed by the uneven lengths of streets in Monterey is already reflected by the drawn edge of the 'swamp' on the 1887 plan before any streets were built.

Prior to their degradation and subsequent dismissal as problematic swamps, the wetlands sustained a considerable variety of aquatic life. The 2013 migrant history report noted that by 1888 the wetlands had become a popular shooting venue with much birdlife taken including species such as "black and grey ducks, teal, bittern and snipe".⁵⁶ Arthur White's research also testifies to the extensive area of the wetlands and the richness of plant growth where the reeds and freshwater wetlands hid and sustained Aborigines during their guerrilla war against British settlers.⁵⁷

5.2 Early European Phases (19th century)

A notable attribute of the Scarborough Park tracts was that it remained an extensive and relatively intact brackish and freshwater wetland system for much of the 19th century and, over much of its area, well into the 20th century. The highly desirable and special environmental qualities of wetlands were not readily or widely appreciated and, as 'swampland', were only seen as either a nuisance and impediment to development or, perhaps at best, a ready resource to exploit to make ornamental lakes and parkland.

Even well-meaning and relatively socially attuned personalities such as Samuel Cook, JH Carruthers and Thomas Holt all retained a typical European perspective of Australian vegetation systems by not valuing the 'swamps' as anything other than land begging for a more 'useful' function. This ingrained mindset didn't begin to be challenged until about the 1970s such that by then virtually all of the former wetlands complex had been the focus of many decades of intensive drainage and filling projects. Yet despite even this large-scale assault, some remarkable fragments of the former complex remain in some form – mainly around the Tonbridge Creek channel (another constructed drain from the 1890s) and north of the Toomevara Lane market gardens.

Thomas Holt's late 1870s town planning layout that included part of the present Scarborough Park is still evident (**Figures 60 and 86**). The 1877 layout includes Pine Park (recreational area) linked to Scarborough Park (South)(recreational area) by a wide boulevard (Ramsgate Road) with intended suburban development in between to the north (Ramsgate) and south (Sans Souci). Importantly,

⁵⁶ Pauline Curby and Virginia Macleod, *Uncovering Rockdale's Migration Heritage Story*, June, 2013, p. 42

⁵⁷ Arthur White, *Rockdale's Aboriginal Past*, Unpublished research paper, July 2013

remnant plantings in the latter park contemporary with this late 19th century suburban development phase are still evident in the Tonbridge Street Reserve, Rotary Park and Pemberton Reserve. These early plantings and those that survive in Pine Park contrast with the relative age of adjacent park areas where plantings were much later.



1877 THOMAS HOLT TOWN PLAN LINKING COOK & SCARBOROUGH PARKS

NOT TO SCALE



Figure 86 Scarborough Park and 1877 Town Plan

In the northern precinct of Scarborough Park there are two major remnants of particular importance – the 1880s Moorefield Racecourse vestiges and site (including archaeology) and much of the remainder of the precinct where there is still a high water table and the potential to restore or reconstruct wetlands.

The Toomevara Lane Chinese market gardens site is outside Scarborough Park but it is an important remnant cultural landscape adjoining the park and, as such, needs to be considered as part of the park's setting.

5.3 Public Ownership Period (Trust handover – present)

The 1879 proclamation of Scarborough Park is highly significant within Sydney as it is one of its earliest public parks. Not many municipal parks in Australia have celebrated well over 130 years continuous service in providing for public recreation.

The present landscape character of Scarborough Park generally reflects those changes that have occurred to it since its management was taken over by Council (from 1929). Over a number of decades since 1930 the park was the subject of extensive drainage works and before that, under the trusteeship set up when the park was proclaimed, areas were transformed into ornamental parkland. A legacy of this phase is the extant 1880s plantings within the present Tonbridge Street Reserve, Rotary Park and Pemberton Reserve.

The road reserve through Scarborough Park initiated with the 1951 County of Cumberland Planning Scheme for a 'southern expressway' linking to the Captain Cook Bridge (1965) remains with street directories continuing to describe the easement as a 'proposed freeway'.

5.3.1 Initial Council Phase (up to 1950s)

Northern Precinct

The market gardens at Toomevara Lane may have predated the proclamation of Scarborough Park and they are certainly evident in the 1930 photography (**Figure 72**) and continue to the present.

Major drainage works – begun in the 1930s (between Barton Street and the racetrack) and continuing through into the 1950s (present southern pond, just north of Barton Street, mostly complete by early 1940s but still being completed into 1956) – and the creation of numerous playing fields dominated this early Council phase. The area east of the outer racetrack remained as wetlands until the later 1950s when the present large pond was cut and dredged although it didn't reach its present form until the early 1960s.

Most of the central racecourse area was subdivided and built over by the late 1950s with the western part developed later as an education precinct.

Central Precinct

Within the central precinct the drain parallel with, and south of, Barton Street appears to be part of the earlier attempts to drain Scarborough Park as it is shown to be already constructed by 1930. The major drainage works that followed where about 30 acres were cleared by the end of 1932, resulted in large swathes of open fields that are now used mainly for active sports. The main channel, now known as Scarborough Pond, is mainly the result of deepening in mid-1933 with completion by the early 1940s. A considerable amount of fill was used to raise the playing field areas by about one metre.

Of the line of fig trees (and accompanying *Washingtonia* palms) along Barton Street (built about 1909) only a handful remain. They appear to be 1930s plantings as they are clearly shown to be advanced by 1943 and are not obvious in the 1930 photography (though this doesn't necessarily mean they

weren't already planted by the late 1920s as seedlings). Those that remain are the large Moreton Bay fig and three Strangling figs to the west of the existing Sydney Water substation building.

The Silver Date Palm (*Phoenix sylvestris*) also appears to be present from the interwar period while the earliest pines (Slash Pines, a Stone Pine and Monterey Pines) planted along the edge of the pond appear to be from the 1950s.

Ramsgate Precinct

Thomas Holt's 1877 town plan (**Figure 60**) did eventually get built mostly as envisaged but over many decades. The 1930 aerial photo shows no Emmaline Street at that stage but a basic accessway for Hawthorne Street with (very dark-toned) plantings along it (presumably pine trees). There remain numerous Monterey and Maritime Pines as well as three Bunya pines today and these also appear in the 1945 oblique photography (**Figure 66**).

The 1930 photography also shows a largely cleared 'natural area' though with many remnant canopy trees while the 1943 photography shows the same area with considerable regeneration and, as does the 1943 photography, a distinct band between the remnant Pleistocene sand terrace and the lower flood-labile flats to the west. This sharp demarcation between the remnant dune forest and the *Casuarina glauca* forest remains a distinctive feature today.

Within two decades of the end of WW II Scarborough Park had been irreparably changed with, firstly, the loss of the mid-1880s ornamental lake and plantings within the present Tonbridge St Reserve about the 1950s, then the installation of piped drainage of the Tonbridge Creek channel through Florence Street to Botany Bay by 1961 (either late 1950s or 1960). Finally half of the park south of Ramsgate Road was excised for the RSL club in 1949 effectively alienating Pemberton Reserve from the rest of the park.

The present tennis courts built into the remnant Hawthorne Street natural area were also initiated at about this time as the area became the centre of a National Fitness Headquarters. While the latter has gone, the tennis courts and a hall remain.

5.3.2 Later Council Phases (1960s to 1980s)

Northern Precinct

During this period there was very little observable change throughout the precinct and, on the basis of aerial photography, a high watertable appears to remain over much of the area including within the remnant racetrack loop (apart from a drained and cleared playing field some time between 1965 and 1977) which largely remains as such today. The final form of the main northern pond was attained early in this period and the pond now holds value as a scenic landscape attribute.

In the late 1980s a track was pushed through the northeastern section of the precinct to the east of the main channel from Bicentennial Park and another drainage channel cut from in line with the end of Robinson Street to the southern end of the large pond effectively drying out another small area of high water table to the north of the channel.

Central Precinct

During this period the various *Pinus* species were planted along the western side of the long pond as well as another plantation initiative with *Melaleuca quinquenervia* (some of which have now attained very impressive girth) and *Casuarina glauca*. Another planting of the period included the large Port Jackson fig tree near Scarborough Street.

Apart from these perimeter plantings there appears to be little change through this period. The extensive playing fields still dominate the use of space throughout the precinct since filling and levelling of the former wetlands in the 1930s.

Ramsgate Precinct

The area south of the drain in line with Emmaline Street had a cleared space for a playing field by 1930 and this space is maintained through to the present (as the northern part of the Leo Smith Reserve) however in 1961 the first of the tennis courts is shown under construction or recently completed while the 1977 aerial photography shows the remaining two courts in a similar state. Having largely survived the earlier obsession of draining 'swamps' the Hawthorne Street natural area was now being assailed by the National fervour for the promotion of sports.

It was during this post-war period that the Ramsgate RSL Club lease and bowling greens led to the loss of the southern part of Scarborough Park – presumably remnants of the former 1880s Scarborough Park plantings were removed to clear the site for lease.

On the basis of archival aerial photography, the cleared area off Production Lane has been in a state of flux over many decades with playing fields being provided in some years then repair work evident in others.

5.3.3 Recent Council Phases (1990s to 2010s)

Northern Precinct

The eastern end of the former Moorefield Racecourse outer track remains as a slightly raised broad loop off Civic Avenue and the Toomevara Lane market garden area remains much as it was through the 20th century. Remnant wetlands in varying forms (and with many areas of weed infestations) persist over much of the precinct. Cleared playing areas also remain as they were when formed in the 1930s (southern field next to Barton Street), early 1960s (fields next to Chuter Avenue) and, probably, late 1960s (the field inside the racetrack loop).

Few plantings earlier than the post-WW II period have survived in the precinct with most of those now evident being from the 1950s through to the 1960s. Those earlier plantings that survive (mainly along the north side of Barton Street) are visible in the 1943 photography and include the large Moreton Bay fig, and probably the associated *Washingtonia robusta* palms, at the eastern end and the Port Jackson fig, and possibly its associated *Washingtonia filifera* palm, to the west.

Central Precinct

As with the northern precinct, the earliest surviving plantings within the central precinct appear to be the line of figs and associated palms along Barton Street. While it is difficult to confirm (or deny) the presence of the fig plantings in the 1930 photography, they certainly appear in the 1943 photography so confirming they are interwar period additions.

Some of the 1950s pine plantings along the western side of the pond that have survived include Slash Pine (*Pinus elliottii*), Stone Pine (*P. pinea*) and Monterey Pine (*P. radiata*) though the latter is generally in poor condition and is clearly not suited to this kind of application. The large Port Jackson fig near the end of Scarborough Street appears to be a 1970s planting. Other surviving exotic plantings within the precinct date from the 1950s to 1960s while others may be self-sown.

Between Lakeside Avenue and Barton Street a large date palm (*Phoenix canariensis*) appears to be another interwar planting while the nearby group of large *Agonis flexuosa* – a fast-growing species – are all from the 1980s. Bands of *Banksia* and *Casuarina* plantings on the eastern side of this precinct

are all within the last decade or so. Another three date palms at the end of Culver Avenue also appear to be survivors of the interwar period.

All of the extensive playing field areas within the central precinct were formed in the 1930s as reclamation works progressed and are shown complete and well in use by the 1943 photography.

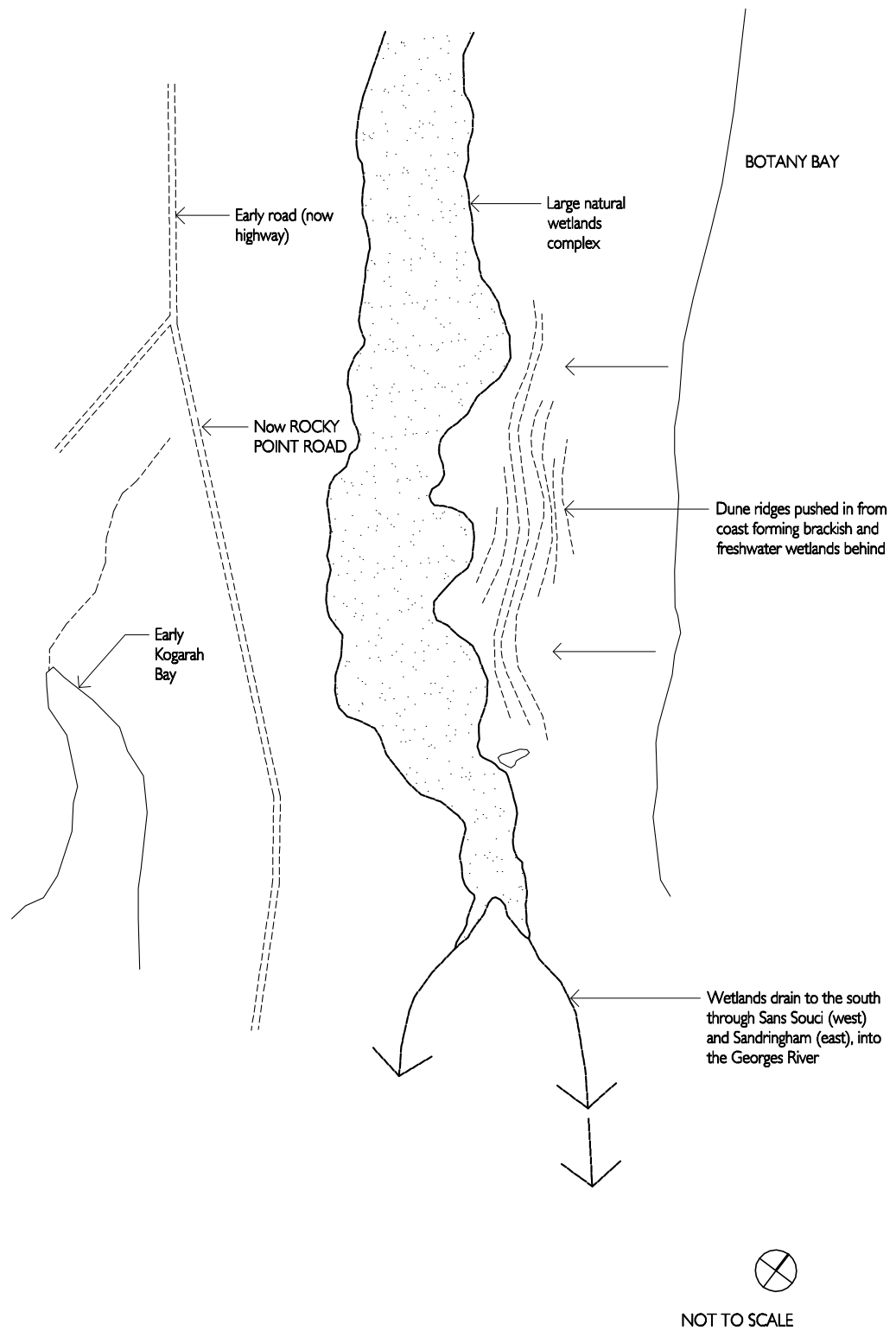
Ramsgate Precinct

This southern precinct of Scarborough Park contains some of its most outstanding landscape assets. Of these the Hawthorne Street natural area is of State importance for its rarity and the remnant 1880s plantings of the earliest park establishment period are also rare and carry value as vestiges of the formative planning of the suburbs of Ramsgate and Sans Souci.

The playing field at the northern end of the Leo Smith reserve remains from prior to 1930 as it is already well formed and used with a cricket pitch by this date. Playing fields at the western side of the precinct off Production Avenue were again repaired in the last few years.

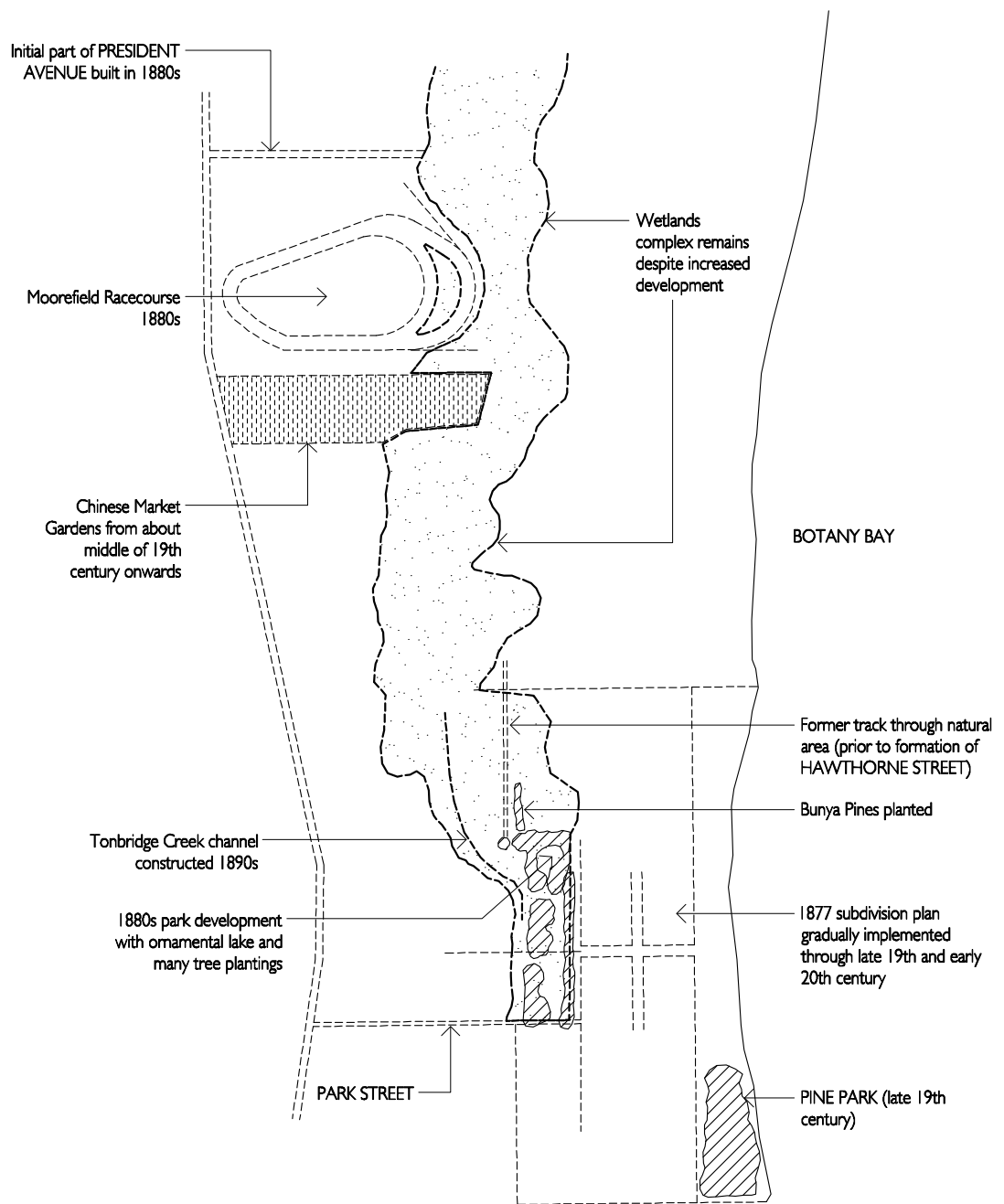
The mature copse of *Casuarina glauca* near the end of the Tonbridge Creek channel appears to be present in all of the aerial photography from 1943 and may even be present in the 1930 photography suggesting that this is an important locally indigenous group and is a natural continuation of the Swamp Oak forest from further northwest. The earlier creek channel was to the south of the group and the mid-20th century drainage construction (piping Tonbridge Creek to Botany Bay via Florence Street) was to the north of the group. The group was also located at the western end of the former mid-1880s ornamental lake. All of this makes the surviving copse an important indigenous remnant within Scarborough Park.

Just to the west of the Swamp Oak copse is the present solitary Swamp Mahogany (*Eucalyptus robusta*) at the edge of Tonbridge Street that shows clearly on the 1930 imagery as a substantial tree. This, and all of the other persistent locally indigenous vegetation within the Tonbridge Street Reserve and Rotary Park are important remnants of the earlier dune forest vegetation community.



SCARBOROUGH PARK EARLY PLAN

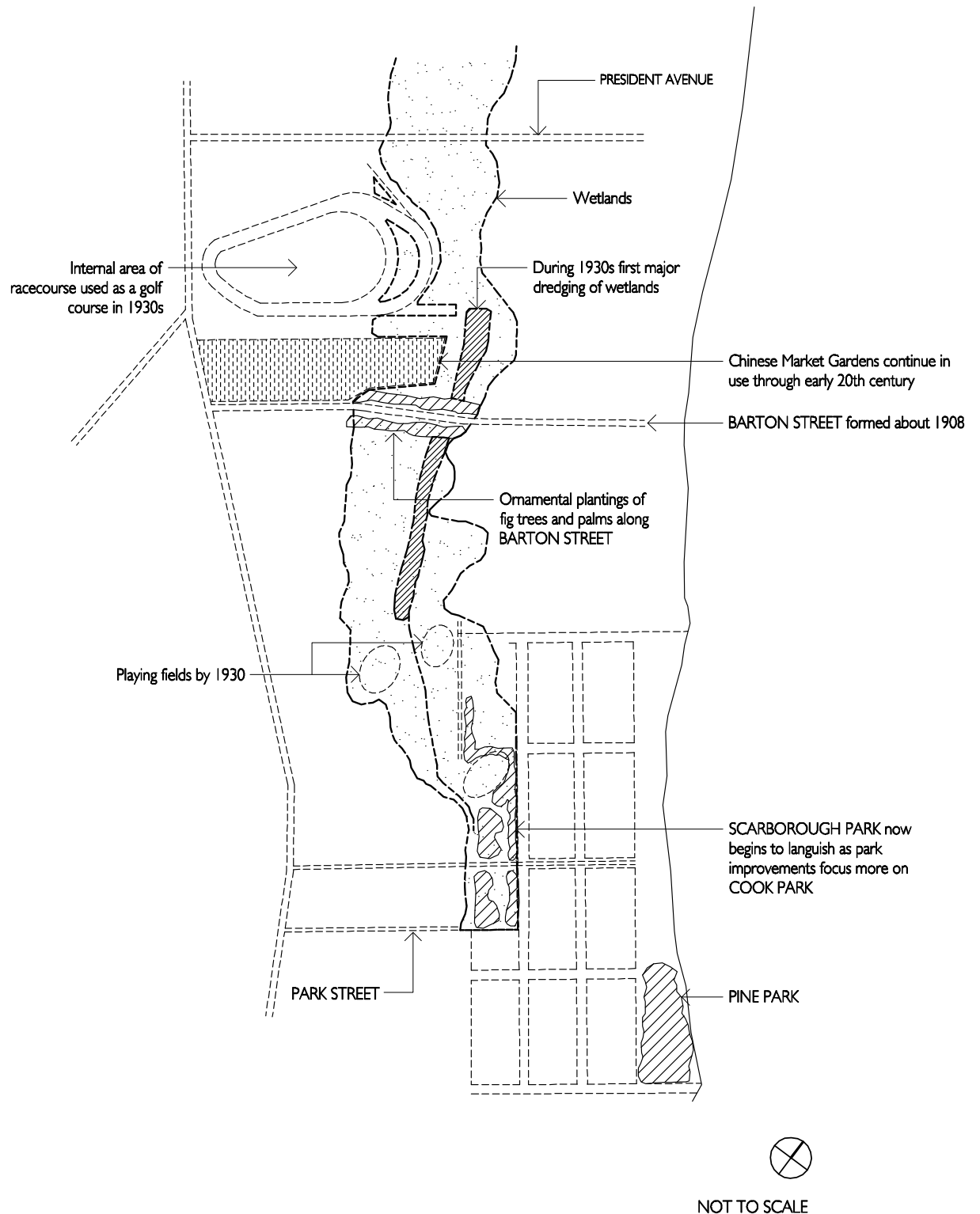
Figure 87 Site Chronology Drawing I – natural wetlands



NOT TO SCALE

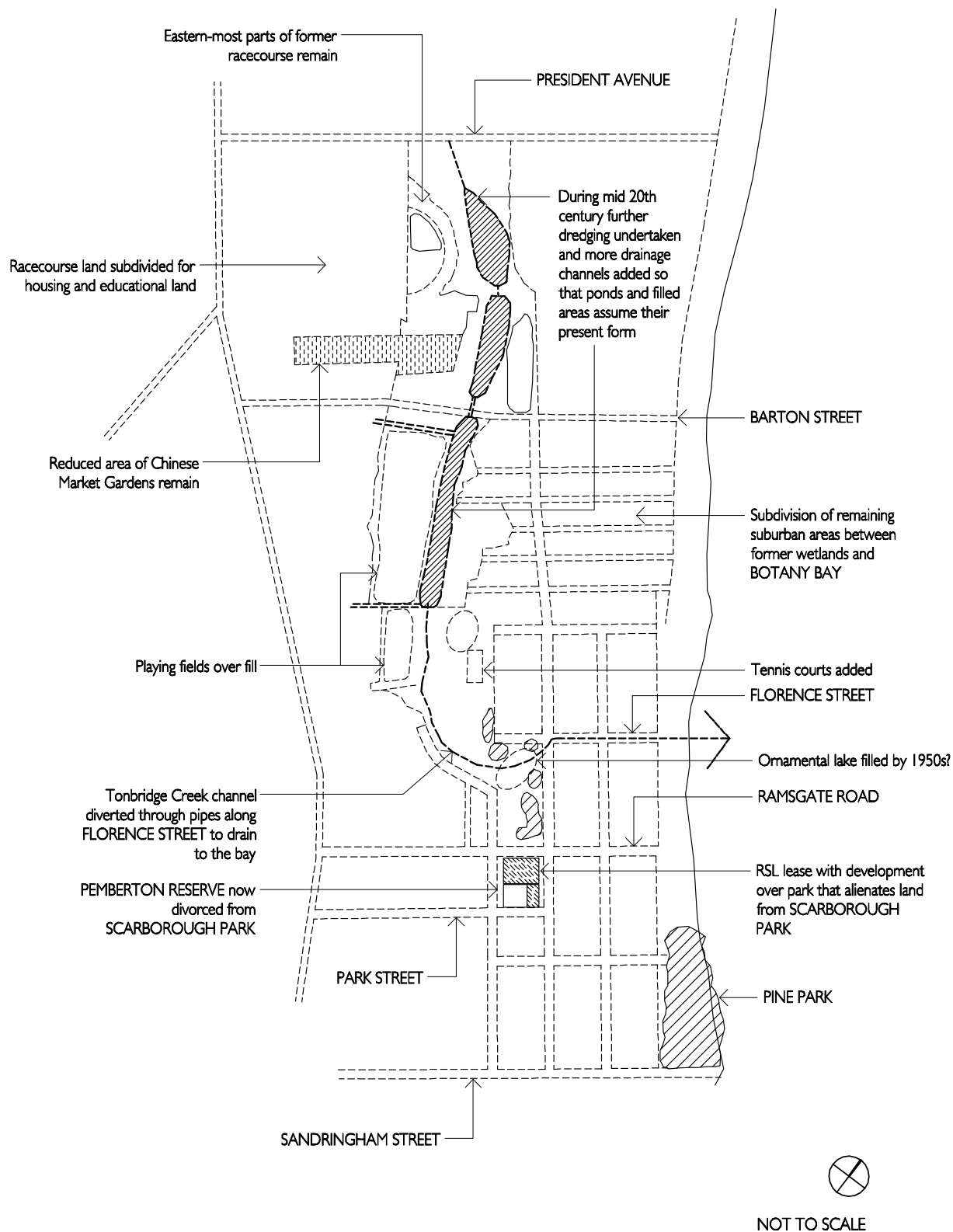
SCARBOROUGH PARK LATE 19TH CENTURY PLAN

Figure 88 Site Chronology Drawing 2



SCARBOROUGH PARK EARLY 20TH CENTURY PLAN

Figure 89 Site Chronology Drawing 3



SCARBOROUGH PARK MID 20TH CENTURY PLAN

Figure 90 Site Chronology Drawing 4

6 Consideration of Significance

This section includes an assessment of the cultural significance of Scarborough Park along with a statement and gradings for components of the Scarborough Park landscape. The Burra Charter defines cultural significance as meaning:-

Aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

The Heritage Branch of the NSW Office of Environment and Heritage has developed the *Heritage Manual* that provides a relative basis for the assessment of cultural significance. It uses various criteria and these have been adapted to the Rockdale LGA for the purposes of this CMP. The criteria are not necessarily mutually exclusive so some overlapping of information may occur as particular park attributes satisfy more than one criterion.

Some of Scarborough Park's aspects of significance arguably apply at a State level (for example at least criteria (a) because of its scientific and educational importance, (b) as one of the first and largest municipal parks in NSW and (c) as part of a long tradition in NSW of using wetlands for water-oriented public recreation) in which case the park could also be considered as being of value to NSW.

6.1 Assessment Criteria

Criterion (a) An item is important in the course, or pattern, of the Rockdale LGA's cultural or natural history.

A number of attributes within Scarborough Park have the capacity to demonstrate the course or pattern of natural history within the Rockdale LGA. These include:-

- Features such as the underlying peat beds and overlying accumulations of Pleistocene and Holocene sands that testify to early geomorphological processes forming brackish and freshwater wetlands as part of a broader estuarine complex⁵⁸;
- Now rare remnant vegetation communities that have established over these relic soils⁵⁹; and
- The uncommon colony of Mouse-eared Fishing Bat or Large-footed Myotis (*Myotis macropus*) that remains as part of the formerly diverse faunal communities associated with the once extensive wetlands.

Although an artificial drainage channel, Tonbridge Creek has now assumed the role of providing an important fish-breeding habitat for the Georges River. A 2013 Riverkeeper Program report of the Georges River Combined Councils' Committee stated that it considered Tonbridge Creek as the second most important fish nursery in the Georges River Catchment.⁶⁰

Scarborough Park (proclaimed in 1879) is an early and important example of the late Victorian phase of planning for, and providing, free public recreational resources within NSW.

Together with Cook Park and parts of the adjoining suburbs, Scarborough Park also retains part of an important 1877 town planning layout that is still readily appreciable – from Pine Park within Cook Park, its link to Scarborough Park (South) by a wide boulevard (Ramsgate Road) with the intended suburban development in between to the north (Ramsgate) and south (Sans Souci). Remnant plantings within the Tonbridge Street Reserve, Rotary Park and the Pemberton Reserve – the earliest

⁵⁸ BMT WBM, *Botany Bay Western Foreshore Coastal Hazard Risk Assessment*, Appendix B: Geomorphological Evolution of Botany Bay, Draft Report, July 2013, p. 90

⁵⁹ Benson and Howell (*Cunninghamia*, 1994) have generally described remnant dune forest communities (such as that at Hawthorne Street) occurring on Holocene sands.

⁶⁰ www.georgesriver.org.au/DownloadDocument.aspx?DocumentID=468

development of Scarborough Park as a park - are contemporary with the early implementation of this town planning scheme and remain some of the earliest surviving plantings in the Rockdale LGA.

The 1877 subdivision plan is also distinctively manifest in the local townscape of Ramsgate and Sans Souci between Culver Street and Sandringham Street through the unusually wide (boulevard-like) streets (Alfred, Walter, Florence and Alice Streets and Chuter Avenue) that contrast with the later road layout with typically narrower widths. The extra width of Alfred and Alice Streets and Chuter Avenue (formerly Frederick Street) also conveniently allowed for drainage provision from Scarborough Park to the Georges River.

Criterion (b) An item has strong or special association with the life or works of a person, or group of persons, of importance in the Rockdale LGA's cultural or natural history.

Scarborough Park holds a direct and strong historical connexion with Thomas Holt, who set aside part of his land for the purpose of public recreation, the local MLA JH Carruthers, who strongly supported its reservation, and public trustees, including Samuel Cook, who were responsible for the establishment and management of the park before Council acquired care and control of it. Samuel Cook was also responsible for lobbying the State government about the purchase of land to form Scarborough Park. This early phase of park establishment and management is also notable as the same public trust had responsibility for Cook Park at the same time. The extant early plantations within Cook Park (Pine Park) and south Scarborough Park testify to this formative phase. At 1879, Scarborough Park is also one of the earliest (and largest) municipal parks in NSW.

Criterion (c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the Rockdale LGA.

Scarborough Park is probably important in the history of public reserves in NSW as part of a long tradition of utilising water reserves and beautifying them – others being the former wetlands at Victoria Park (near the University of Sydney), Moore Park (model boating pond) and Centennial Park, which Scarborough Park predates by a decade. While the highly significant mid-1880s ornamental lake near Florence Street was, regrettably, removed there remain various channels and ponds that are now regarded as local scenic landscape attributes.

The remnant early plantings and extant layout - incorporating Scarborough Park (South), Pine Park, the Ramsgate Road boulevard and parts of Ramsgate and Sans Souci - demonstrate the realisation of the 1877 Holt town plan where designated residential areas were to have integral, linked open space and amenity as part of the development.

Criterion (d) An item has strong or special association with a particular community, or cultural group in the Rockdale LGA for social, cultural or spiritual reasons.

Apart from various sporting groups that have maintained a longstanding connexion with the place, Scarborough Park is now strongly associated with an active community with interests in passive recreation and the care and rehabilitation of the wetlands and the Hawthorne Street natural area. Attention to the latter over several decades has resulted in the retention, conservation and continuing management of this important area of distinction and rarity within the Sydney basin. Relevant local environment groups listed on Council's website include the Rockdale Wetlands Preservation Society and the Scarborough Park South – Park Volunteers Committee⁶¹.

Although not formally part of Scarborough Park, the remnant Toomevara Lane market gardens – long associated with the Chinese community and continue as such - is enveloped by the park and forms part of its immediate and traditional setting.

The 2013 migration history study documented that “On the first and third Saturday mornings from late

⁶¹ http://www.rockdale.nsw.gov.au/environment/Pages/Environment_Groups.aspx, accessed November 2013

spring until the beginning of autumn a group of about 30 people meet at the Chinese Alliance Church. After collecting free fruit, water and muesli bars, they set off for an hour and a half walk around Scarborough Park on a wide and level path. They begin at Civic Avenue and circuit around the lake returning to the church for a hearty breakfast of fried noodles, dumplings and congees. Young and old join in. Anyone who attends three consecutive sessions is awarded a cap and a Tee shirt. Conversation may be in English or Chinese. Most are new migrants who incidentally glean information about Australian and local customs. It also introduces migrants to council facilities. Although organised walks such as this are not a tradition in China, when provided they are relished by those who like to walk"⁶².

Scarborough Park remains a popular venue for people because of its "wildlife, birds, ponds, fresh air, quietness and safety"⁶³. The park is also one of two regular venues for the Bangladeshi community to celebrate Independence Day (26 March 1971) and Victory Day (16 December 1971). The Spanish-speaking, mainly South American, Trasandinos Sporting Club have been based at Scarborough Park since 1975 where soccer has been played as well as activities run such as folk dancing and charity work. Current user groups of Scarborough Park noted by Council include:-

St George Model Boat Club – every Sunday all day plus an annual regatta
St George Soccer Football Association
Georges River St George District Cricket Association
Sydney Rivers All Girls Cricket
St George junior Dragon Tag
Schools in and outside the Rockdale LGA
St George Junior Rugby
Baseball field leased to Arncliffe Scots

Also, two new baseball fields – with a full compliment of fixtures - have been recently added to the playing fields off Production Lane.

The RSL and Rotary Clubs have had an interest in the southern part of Scarborough Park in the recent past but whether there is any continuing interest is not known. Regular community markets are advertised for this area.

Criterion (e) An item has potential to yield information that will contribute to an understanding of the Rockdale LGA's cultural or natural history.

Owing to the remnant natural areas within Scarborough Park, it has the potential to reveal further information about its natural and cultural history through further scientific investigation. Potentially important areas for further study revolve around:-

- Its geological features;
- Its rare remnant vegetation communities;
- The persistent colony of Mouse-eared Fishing Bat or Large-footed Myotis (*Myotis macropus*);
- The unusual diversity of fish species in Tonbridge Creek and its importance for fish breeding; and
- Possible pre-history and, even, contact history archaeology in areas that haven't been dredged, drained by channels, excavated or levelled.

Criterion (f) An item possesses uncommon, rare or endangered aspects of the Rockdale LGA's cultural or natural history.

⁶² Pauline Curby and Virginia Macleod, *Uncovering Rockdale's Migration Heritage Story*, June, 2013, p. 40

⁶³ Curby and Macleod, 2013, p. 40-44, 58

The small area of Coastal Dune Forest at Hawthorne Street, Ramsgate “is the sole remnant of native sand vegetation of the beach ridge system (Outer Barrier) of western Botany Bay ... It is different from the Eastern Suburbs Banksia Scrub of the transgressive dunes, but has similarities to vegetation at Kurnell”⁶⁴. Within Scarborough Park, representatives of both the Kurnell Dune Forest and Coastal Sands Swamp Forest (also known as Coastal Upland Swamp in the Sydney Basin Bioregion) are both recognised as valuable ecological assets by being listed under Schedule 1 Part 3 of the current version of the NSW Threatened Species Conservation Act, 1995.

The remnant colony of Mouse-eared Fishing Bat or Large-footed Myotis (*Myotis macropus*) resident within the park is also listed as a vulnerable species under Schedule 2 Part 1 of the NSW TSC Act, 1995. While artificially created, the various ponds and creek channels within the park are important as foraging areas for the bats. The Tonbridge Creek channel carries additional importance for the unusual diversity of indigenous fish species – both freshwater and saltwater – it supports and appears to be important also for fish breeding.

Scarborough Park retains remnant 1880s trees that are among Rockdale’s earliest surviving plantings and that are part of an uncommon late 19th century town planning layout. Elsewhere in Scarborough Park there are remnant plantings of Strangling figs (*Ficus watkinsiana*) from the interwar period that are uncommon within municipal areas at this age.

While formally outside of Scarborough Park though an intrinsic part of its traditional setting, the remnant Toomevara Lane Chinese market garden site is now a rare form of cultural landscape within the Sydney metropolitan area.

Criterion (g) An item is important in demonstrating the principal characteristics of a class of the Rockdale LGA’s cultural or natural places; or cultural or natural environments.

Scarborough Park is one of a number of public landscapes in the Rockdale LGA that has been managed and maintained by the City of Rockdale over many generations and a public trust before that. The accumulated layers of interventions within the park, including late 19th century parkland, an 1880s racecourse remnant, interwar (Depression Relief Scheme) and mid-20th century drainage works and sports field construction and late 20th century and early 21st century wetlands and forest habitat rehabilitation, demonstrate each generation’s approach, understanding, priorities, taste and expectations.

6.2 Statement of Significance

Scarborough Park is of considerable value to the City of Rockdale and a broader community beyond for its retention of two remnant vegetation communities identified and listed as endangered under the NSW Threatened Species Conservation Act, 1995 and as a sanctuary for a colony of Mouse-eared Fishing Bats (*Myotis macropus*) listed as a vulnerable species under the NSW TSC Act, 1995. Both remnant vegetation communities and the bat colony represent rare aspects of the pre-European landscape to survive within an otherwise highly urbanised local environment.

Scarborough Park also carries considerable value for the following reasons as: one of the earliest parks the NSW Government established, one of the earliest and largest municipal parks in the Sydney region; it retains almost the whole extent of its considerable 1879 dedicated area; it retains some of the Rockdale LGA’s earliest plantings (from the 1880s); it includes an important park component of a largely intact 1877 town plan concept directly linking it with the nearby, and culturally significant, Cook Park; and it retains remnant plantings of Strangling figs (*Ficus watkinsiana*) from the interwar period (as well as a Deciduous fig (*Ficus superba* var. *henneana*)) that are uncommon within municipal areas at this age.

⁶⁴ Benson and Howell, Sydney Natural Vegetation in *Cunninghamia* Vol. 3(4): 1994, p. 701

On account of its long history as parkland, Scarborough Park is highly valued by a broad community of interest with connexions to it through various sporting codes, passive recreation, community projects and as local residents or visitors for whom the park holds considerable amenity value. As the park is well over 130 years old it has been the focus of esteem by many generations of people – residents and visitors – and continues as one of Council's largest and most valued public landscapes. Although now very different from its early 19th century form, those parts of Scarborough Park that retain a high watertable and related indigenous vegetation form an important contiguous wetland system within the City of Rockdale and with the potential for further rehabilitation and enhancement. This system is also an ongoing focus of much community involvement through land care, rehabilitation projects and passive recreation.

Scarborough Park holds cultural and scientific research value for its potential to reveal further information relevant to Aboriginal cultural history, regional geomorphology, local plant and fauna ecology through archaeological resources.

The park has historical associational value in relation to the 19th century Fairfax press editor (later general manager), public advocate and long time public park trustee Samuel Cook who is directly associated with Scarborough Park and, along with it, is credited with instigating the NSW Government purchase of land for Cook Park, Marrickville Park, Balmoral Park and Victoria Park (near the University of Sydney) for public recreation. He also served as a public trustee of the park for many years.

6.3 Grading of Significance

Individual elements of the Scarborough Park are considered below where relative values are attached to each component based on their contribution to cultural significance. The five relevant ratings of High, Moderate, Low, Neutral or Intrusive relate directly to management obligations where items of High cultural value mean they should be conserved using best practice and their corresponding tolerance for change would be low. Those items assessed as having Low cultural value have a corresponding higher tolerance for change though always with respect to the overall context of the park setting that is of high significance (and reinforced by Council's relevant listings for the park as heritage items). These obligations are further developed in the following policy section of the report.

6.3.1 Overall Park

<i>Site Component</i>	<i>Significance</i>	<i>Tolerance for Change</i>
High archaeological sensitivity for Aboriginal cultural resources away from areas that have been dredged, drained by channels and levelled – should any such resources be found, their value would be:	Exceptional	Low
Original gazetted 1879 extent	High	Low
Scarborough Park as a community open space and recreational resource	High	Low
Scarborough Park as a wetlands resource	High	Low
Scarborough Park as a biodiversity resource	High	Low
Appropriate park areas as a focus for community festivals	High	Moderate
Car parks generally within Scarborough Park	Low	High
Existing amenities buildings/halls	Low	High
Environmental weeds & self-sown exotic vegetation	Intrusive	Remove

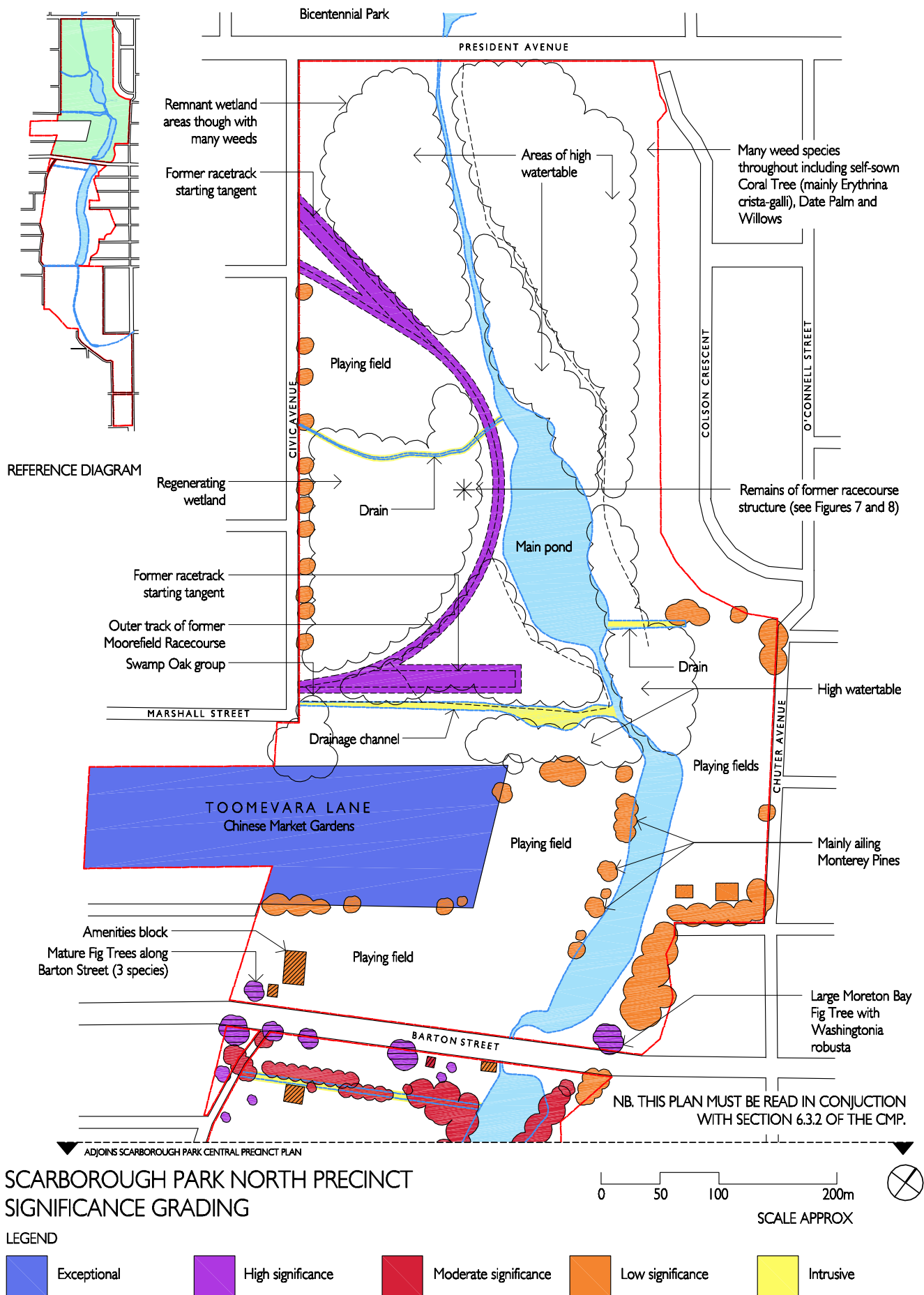


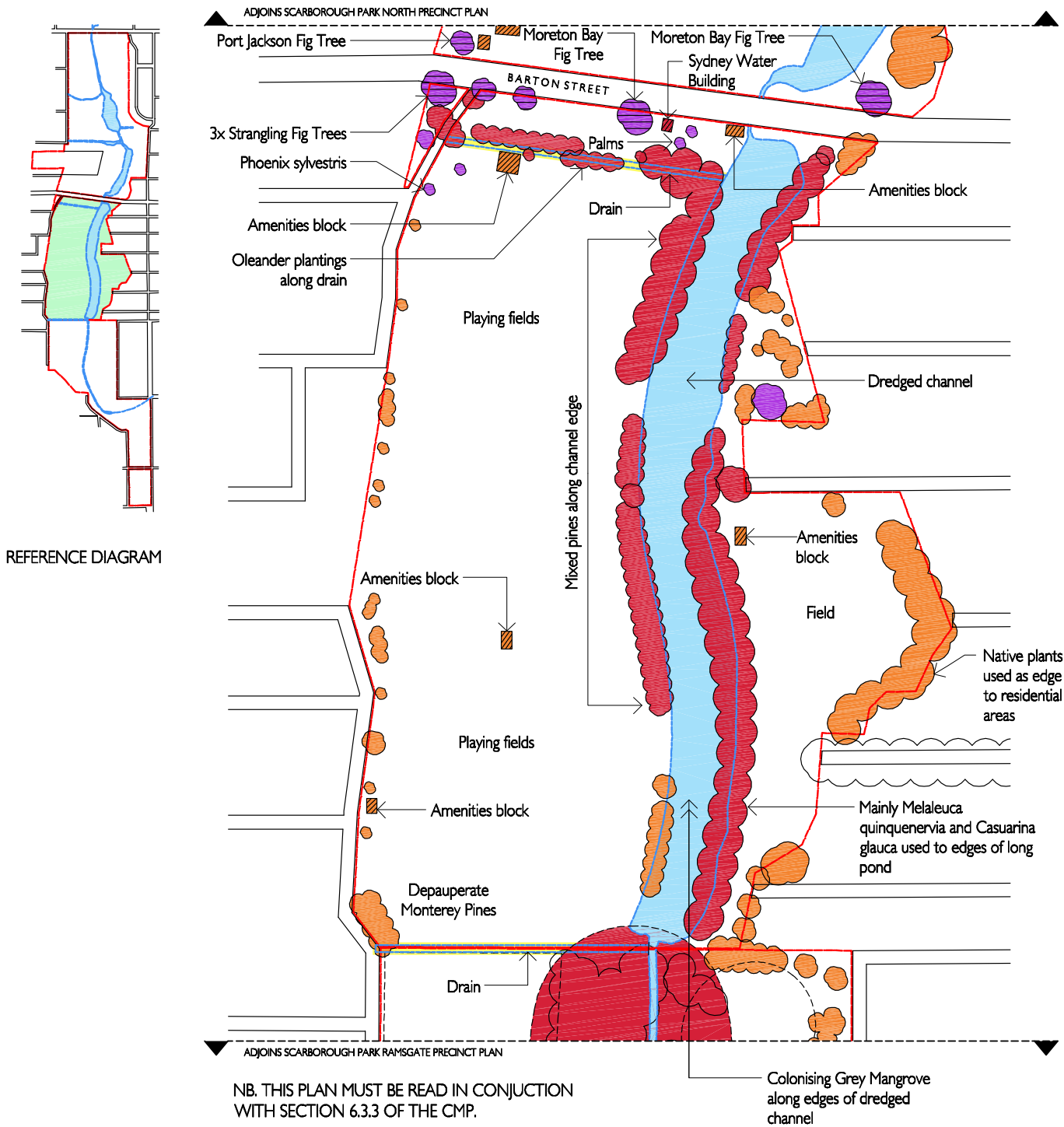
Figure 91 GRADINGS PLAN (North Precinct)

6.3.2 Northern Precinct

<i>Site Component</i>	<i>Significance</i>	<i>Tolerance for Change</i>
Remnant Toomevara Lane market gardens site	Exceptional	Low
Park area within this precinct	High	Low
Moorefield Racecourse remnants	High	Low
Remaining areas of high watertable	High	Low
Regenerating wetlands vegetation (indigenous)	High	Low
Surviving plantings from interwar period (Barton St)	High	Low
Vistas along east-west streets to Botany Bay	High	Low
Broad and long ponds as a scenic resource	High	Low
Inclusion of playgrounds within precinct	High	Low
Current design of playgrounds	Low	High
Surviving plantings from 1950s/1960s period	Low	High
Surviving plantings from later 20 th century period	Low	High
Lateral drainage trenches generally	Low	High
Amenities buildings	Low	High
Current locations of playgrounds within precinct	Neutral	High

6.3.3 Central Precinct

<i>Site Component</i>	<i>Significance</i>	<i>Tolerance for Change</i>
Park area within this precinct	High	Low
Surviving plantings from interwar period (Barton St)	High	Low
Large Port Jackson fig near end of Scarborough St	High	Low
Vistas along east-west streets to Botany Bay	High	Low
Long ponds as a scenic resource	High	Low
Inclusion of playgrounds within precinct	High	Low
Surviving plantings from 1950s/1960s period	Moderate	Moderate
<i>Melaleuca quinquenervia</i> plantings along pond	Moderate	Moderate
Water Board building	Moderate	Low
Surviving Monterey Pine plantings	Low	High
Surviving plantings from later 20 th century period	Low	High
Lateral drainage trenches generally	Low	High
Current design of playgrounds	Low	High
Current locations of playgrounds within precinct	Neutral	High



SCARBOROUGH PARK CENTRAL PRECINCT SIGNIFICANCE GRADING

LEGEND

	High significance		Moderate significance		Low significance		Intrusive
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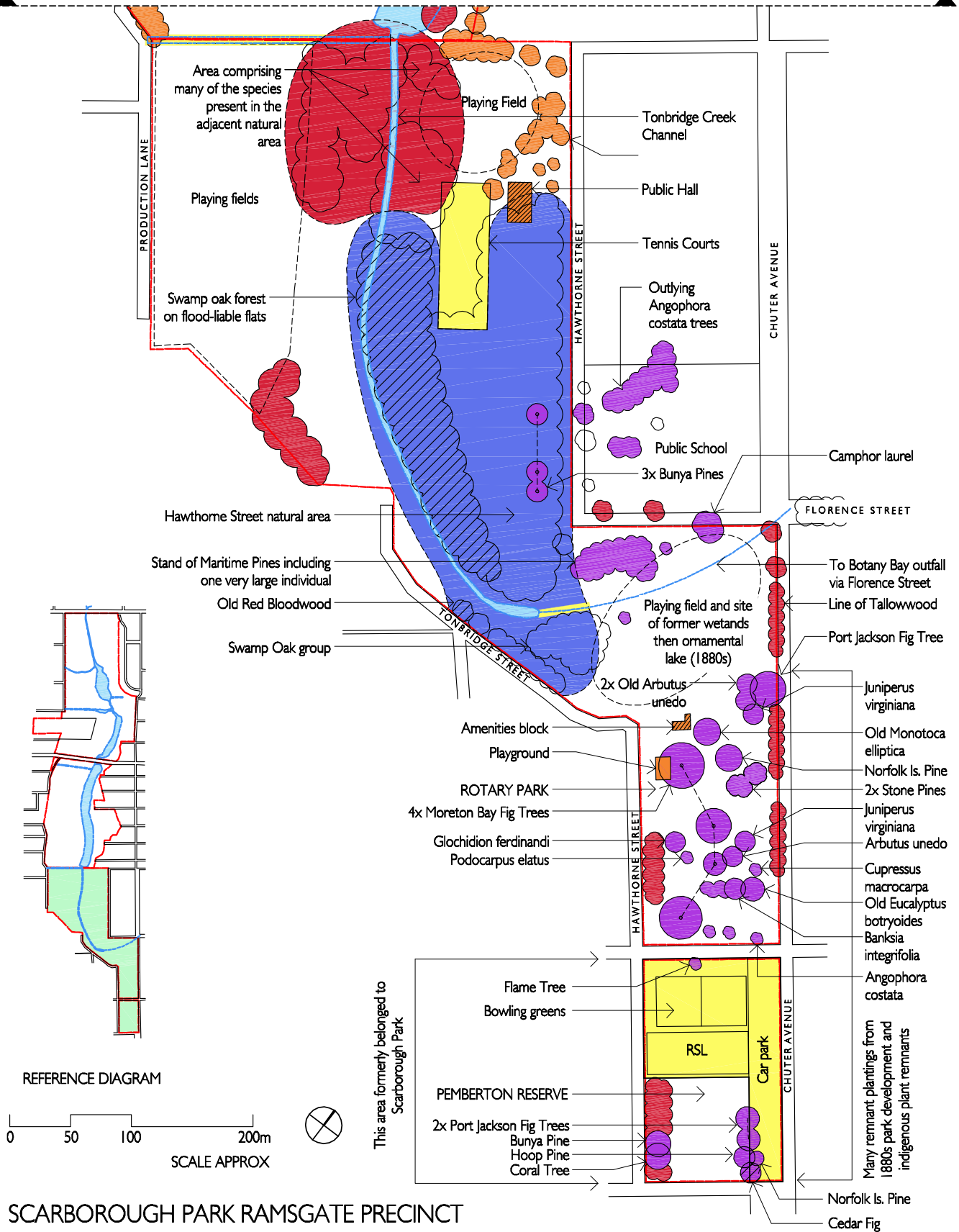
0 50 100 200m
SCALE APPROX



Figure 92 GRADINGS PLAN (Central Precinct)

6.3.4 Ramsgate Precinct

<i>Site Component</i>	<i>Significance</i>	<i>Tolerance for Change</i>
Remnant Kurnell Dune Forest	Exceptional	Low
Remnant Coastal Sands Swamp Forest	Exceptional	Low
Resident Mouse-eared Fishing Bat or Large-footed Myotis (<i>Myotis macropus</i>) colony	Exceptional	Low
Scarborough Park as a regional fish nursery	Exceptional	Low
Indigenous fish diversity in Tonbridge Creek channel	High	Low
Park area within this precinct	High	Low
Those parts of Scarborough Park (and Pemberton Reserve) that correspond to Thomas Holt's 1877 town plan	High	Low
Surviving 1880s plantings in Tonbridge St Reserve	High	Moderate
Surviving 1880s plantings in Rotary Park	High	Moderate
Surviving 1880s plantings in Pemberton Reserve	High	Moderate
<i>Ficus superba</i> var. <i>henniana</i> (rarity within the City of Rockdale as a large, mature tree)	High	Low
Remnant indigenous vegetation within Tonbridge Street Reserve and Rotary Park – includes <i>Banksia integrifolia</i> , <i>Eucalyptus robusta</i> , <i>E. botryoides</i> , <i>Monotoca elliptica</i> , <i>Glochidion ferdinandi</i> , <i>Casuarina glauca</i>	High	Low
Three Bunya Pines within natural area (see policy)	High	Moderate
Discrete group of Maritime Pines south of school (including the exceptionally large pine)	High	Moderate
Inclusion of playgrounds within precinct	High	Low
Remnant Monterey and Maritime Pines within the natural area and along the western edge of Hawthorne Street impinging on the natural area	Low	High
Current design of playgrounds	Low	High
Current locations of playgrounds within precinct	Neutral	High
Tennis court group within natural area	Intrusive	High



SCARBOROUGH PARK RAMSGATE PRECINCT SIGNIFICANCE GRADING

LEGEND

 Exceptional	 High significance	 Moderate significance	 Low significance	 Intrusive
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NB. THIS PLAN MUST BE READ IN CONJUNCTION
WITH SECTION 6.3.4 OF THE CMP.

Figure 93 GRADINGS PLAN (Ramsgate Precinct)

7 Opportunities and Constraints

A conservation policy is an essential prerequisite to making decisions about the future of Scarborough Park. However, before reaching that stage there are a number of factors that need to be considered in the development of a conservation policy and such factors are briefly reviewed in this section. A very strong implication of the factors considered in **Sections 7.1, 7.2 and 7.4** is that Scarborough Park should be conserved for the long-term benefit of a broad community of interest.

7.1 Obligations arising from Significance

On the basis of a consideration of information mentioned in **Sections 3 to 6**, Scarborough Park has been found to hold considerable cultural significance for the State of NSW, a regional area as well as contributing to the broader network of community open space within the City of Rockdale (c/- **Section 6**). A consequence of this significance is that it carries an obligation to properly conserve Scarborough Park, particularly those aspects of the park that have been assessed as having a high cultural value. But what constitutes proper conservation in this case?

Conserving Scarborough Park entails ensuring that all of the tangible and intangible aspects of significance - including its extent, fabric, setting, amenity, uses, associations and meanings - are fully retained as part of its long-term management. In order to retain the recognised cultural significance of the park, sound conservation policies and management processes will need to be established. All future management of Scarborough Park must be based on its assessed significance and all future decisions regarding uses, events, activities, the introduction of structures and services must be with respect to the significance of individual components as well as that of the park as a whole.

7.2 Planning Considerations

7.2.1 NSW Threatened Species Conservation Act 1995

This NSW legislation is relevant to Scarborough Park as two remnant indigenous vegetation communities are listed under the Act as Endangered Ecological Communities and a colony of Mouse-eared Fishing Bats (*Myotis macropus*) roost in the forest of the Hawthorne Street natural area and forage over Scarborough Ponds and Tonbridge Creek at night. The bats are also listed as a vulnerable species under Schedule 2 Part 1 of the NSW Threatened Species Conservation Act, 1995 (thereafter TSC Act, 1995).

The two vegetation communities are the remnant Kurnell Dune Forest on relict Pleistocene sands (listed as an endangered ecological community under Schedule 1 Part 3 of the current version of the TSC Act, 1995) and Coastal Sands Swamp Forest (also listed, under Coastal Upland Swamp in the Sydney Basin Bioregion, as an endangered ecological community under Schedule 1 Part 3 of the TSC Act, 1995) near Tonbridge Creek.

With respect to ecological communities, such are eligible to be listed as **endangered** if, in the opinion of the Scientific Committee:

- (a) it is facing a very high risk of extinction in NSW in the near future, as determined in accordance with criteria prescribed by the regulations, and
- (b) it is not eligible to be listed as **critically endangered** (where there is an extremely high risk of extinction in NSW in the near future, as determined in accordance with criteria prescribed by the regulations).

Objects of the TSC Act, 1995 are:-

- (a) to conserve biological diversity and promote ecologically sustainable development, and
- (b) to prevent the extinction and promote recovery of threatened species, populations and ecological communities, and

- (c) to protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and
- (d) to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and
- (e) to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and
- (f) to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.

The listing of these vegetation communities and the bat species under the TSC Act, 1995 carries an obligation in the management of Scarborough Park to ensure their conservation with implications on the extent of the remnant communities and bat habitat as well as fringing areas and their uses.

7.2.2 Rockdale Local Environmental Plan, 2011

The Rockdale LEP does not list Scarborough Park specifically or in total but confusingly includes parts of it as items of local significance under the separate item names of 'Patmore Swamp' (Item 202) and 'Hawthorne Street Reserve/Leo Smith Reserve' (Item 203). A separate, but related, listing entry is given for 'fig trees' (Item 204) immediately north of Ramsgate Road (within Rotary Park) but all three of these entries share the same confusing address of 99 President Avenue, Monterey or Ramsgate as well as the same property description (Lot and DP) numbers. The closely related Toomevara Lane Chinese Market Garden is listed as an item of State environmental heritage significance (Item 199).

As listed items within the City of Rockdale, specific provisions contained in the Rockdale LEP, 2011 carry obligations with respect to their management. LEP Section 5.10 (Heritage Conservation) stipulates that the City of Rockdale's environmental heritage is to be conserved and also the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views. An issue that needs to be addressed in the near future is to ensure all of Scarborough Park is included under Schedule 5 of the LEP and with correct address details.

Additionally, there are closely related items not covered under the present LEP listings including Pemberton Reserve and its remnant 19th century plantings, Tonbridge Street Reserve and Rotary Park (and their extant mature vegetation) that represents that part of Scarborough Park that was first developed in the 1880s and the full width of Ramsgate Road between Scarborough and Cook Parks as an extant part of the 1877 Holt town plan.

Section 5.9 (Preservation of trees or vegetation) of the Rockdale LEP is also particularly relevant as it sets out obligations with respect to trees that constitute a major part of the important fabric of the park and its immediate setting.

7.2.2 Rockdale Development Control Plan (DCP) 2011

As "Rockdale Council supports the conservation of significant buildings, landscape elements and special places within the City that contribute to its heritage significance" the Rockdale Development Control Plan (DCP) 2011 "contains controls relating to the conservation of heritage items ... and supplements the provisions of the LEP 2011 and it provides controls for development adjacent to or near heritage items". Also in Part 2 (Urban Strategy) the DCP 2011 indicates that the "indigenous and non-indigenous cultural heritage of the City" is to be conserved. An objective of the DCP 2011 is "to conserve heritage items, including significant fabric, their curtilage and settings".

The DCP 2011 sets out the requirements for development of heritage items and development in the vicinity of heritage items (Part 4.1.2) although most of these principles appear to assume that all heritage items on the LEP 2011 are buildings.

7.3 Other Council Policies

The documents in this section indicate that Council has certain expectations for Scarborough Park that need to be taken into account in any conservation management policies.

7.3.1 Open Space & Recreation Strategy, 2010

Council published an Open Space & Recreation Strategy in April 2010 as a means of achieving at least one of the four Strategic Directions nominated in the Rockdale City Plan 2009-2018. The Open Space & Recreation Strategy confirms the importance of Scarborough Park (the Rockdale Wetlands Corridor) as a vital open space component within the City of Rockdale's open space network.

The Strategy identifies a range of ways in which recreational opportunities could be enhanced within the City of Rockdale with strategic expectations summarised as:-

- * A distinctive and unique place with quality recreation and sport destinations.
- * An appealing and livable place with well-designed and accessible open space and facilities.
- * A balanced place with strategically located and managed open space settings and facilities.
- * An active place with a range of activity and lifestyle opportunities for all age and cultural groups.
- * An environmentally sensitive place with protected and enhanced natural environments.
- * A connected place with safe and accessible open space connections that support movement and activity around and beyond the City.

To achieve these desirable outcomes the Strategy notes a number of Priority Themes that need to be factored into future planning and provision for recreational opportunities. The first five Priority Themes are the most relevant to Scarborough Park:-

* Adequate Provision of Open Space

"A good provision of open space that is accessible to the community, including unique recreation and sport destinations as well as neighbourhood and local provision."

* Open Space Quality and Function

"Open space that is of high value to the community due to its quality, appeal, safety and activity opportunities."

* Sports Development Opportunities

"A balance of sports opportunities through appropriately located and developed facilities."

* Recreation Destinations

"Quality and distinctive recreation destinations that provide unique leisure and recreation opportunities for residents, visitors and workers."

* Natural Areas and the Environment

"Protected, enhanced and appropriately managed natural areas, and a general commitment to best practice with the environment."

With implications for Scarborough Park, the Strategy notes that consideration needs to be given to:-

- The potential to build on existing assets, and
- The issues and opportunities that need to be addressed to enhance open space recreation.

The remainder of the Strategy sets out an action plan for Council's open space areas involving proposed projects that focus on each of the identified Priority Themes. Various highly desirable projects are cited and Scarborough Park is mentioned numerous times throughout the action plan. The Strategy also recognises Scarborough Park as an extremely important link within Council's open space network.⁶⁵ However, given that many of Council's parks (including Scarborough Park) are either many decades old, are listed as items of environmental heritage or both, the Strategy does not mention cultural significance or the need for conservation of these values.

A major tenet of the Strategy is the enhancement of existing, or provision of new, open space or recreational resources although it does not mention or reference a social plan or community consultations as a basis of its many strategic proposals.

7.3.2 RCC Social Plan

The current City of Rockdale Social Plan is likely relevant though it was not accessible during this consultancy.

7.4 Communities and Stakeholders

7.4.1 Identified Communities and Stakeholders

The current community of interest for Scarborough Park is likely to be broad and include people from the immediate neighbourhood through to those with specifically focussed, but intermittent, involvement drawn from a broad geographic area. A list is suggested below that includes relevant communities and individuals or groups with, at least, a specific interest in Scarborough Park. Clearly there may be some overlap between a community and stakeholders. Those identified include:-

- A community/or communities local to Scarborough Park;
- A broader community that would use the park intermittently or during special events;
- Family and social groups;
- Individual recreationists (including pedestrians and cyclists);
- Schools in and outside of the Rockdale LGA including primary and high school level and both public and private schools;
- Sporting groups and clubs including St George Model Boat Club (Every Sunday All Day plus Annual Regatta), St George Soccer Football Association, Georges River St George District Cricket Association, Sydney Rivers All Girls Cricket, St George Junior Dragon Tag, St George Junior Rugby, Armcliffe Scots Baseball Club (Production Lane field leased);
- Landcare groups;
- Local volunteers;
- Rockdale Wetlands Preservation Society and the Scarborough Park South – Park Volunteers Committee;
- Local church groups (eg. Chinese Alliance Church);
- Rockdale Council personnel; and
- Local, State and Federal politicians.

7.4.2 Community Responses

Through the work of volunteers within the natural area and wetlands, local newspaper articles and a regular stream of correspondence from members of the communities using Scarborough Park, club representatives, Council staff or Councillors (and writing about particular issues), it is clear that Scarborough Park is highly valued enough that there is evidence of a custodial approach to its care, maintenance and management.

⁶⁵ *Open Space & Recreation Strategy*, Rockdale City Council, April 2010, Figure 1, p. 13

Many of Council's regular request forms concern notification about the need for specific maintenance but others relate to the misuse of the park to the detriment of all users (dogs off the leash or not using bags), evidence of vandalism, the unlawful dumping of rubbish or unsafe trees or structures. The regular use of the action request forms clearly demonstrates that the park is well used and valued by members of the local neighbourhood and club members at least. It also indicates that future works proposed for the park need to be well considered and take into account the views and expectations of the communities of interest for Scarborough Park.

7.4.3 Plan of Management

Rockdale City Council has completed a plan of management for all of its public open space areas including recreation lands such as Scarborough Park that has included a staged process of public consultation with local communities and stakeholders. Although the plan of management was not available during this consultancy, it is likely to include information about the varied nature and uses within Scarborough Park and recognise and reinforce the considerable cultural values of the park.

7.4.4 Uncovering Rockdale's Migration Heritage Story

The June 2013 report of Pauline Curby and Virginia Macleod on the use of Rockdale's recreational places by migrant community groups indicated that people have used Scarborough Park for a long time – given that it was proclaimed a park in 1879 – and that the community now using and regularly enjoying the park comprises various cultural groups.

The 2013 migration history study documented that Chinese walking groups use Scarborough Park and, unlike some Australian groups, the Chinese groups tend to be large. One such group is from the Chinese Alliance Church who use the walks through the park for socialising and conversation. The study also notes that Scarborough Park remains a popular venue for people because of its "wildlife, birds, ponds, fresh air, quietness and safety"⁶⁶. The park is also one of two regular venues for the Bangladeshi community to celebrate Independence Day (26 March 1971) and Victory Day (16 December 1971). The Spanish-speaking, mainly South American, Trasadinos Sporting Club have been based at Scarborough Park since 1975 where soccer has been played as well as activities run such as folk dancing and charity work.

Apart from conveying the importance of Scarborough Park to migrant groups the 2013 study also indicated a relationship between migrants' needs to understand their new country and their engagement with the accessible public places that mostly forms part of their perception of (or represents) their new country⁶⁷. Implications of this process include the need to ensure that Scarborough Park continues to offer a diverse range of places to accommodate groups of varying size (for both active and passive recreation), continues to provide good access to these places as well as convenient connexions throughout the park, provides appropriate facilities to encourage use of the park and includes appropriate information about park protocol and its history that is both educational and engaging.

7.4.5 Changing Demographics

According to demographers from *id.population experts* using data from the Australian Bureau of Statistics' National Census surveys, about a tenth (about 13,000 people) of the City of Rockdale's current total population (over 100,000 people) live in the suburbs immediately surrounding Scarborough Park (Kogarah, Monterey and Ramsgate). In 2013 the demographers estimated that population growth for the park's adjoining suburbs over the next 25 years would be relatively modest compared with other areas such as Arncliffe, Rockdale and Wolli owing to the scale of new residential development in those areas. Wolli, in particular, is clearly the main driver of growth with the ongoing conversion of former industrial land into high density housing.

⁶⁶ Curby & Macleod, 2013, p. 40-44, 58

⁶⁷ Curby & Macleod, 2013, p. 23

An implication of this increased population growth is that there should be a commensurate increase, over time, in recreational resources to cater for the expanding population. Scarborough Park contains a large number of playing fields and offers a diversity of passive recreational resources. There is a clear need to continue to manage Scarborough Park to cater for a growing demand for both active and passive recreation by the neighbourhoods adjacent to it as well as those drawing from a broad regional metropolitan area beyond.

Further implications are that it is also important to ensure the park is capable of a diverse range of uses well into the future as population numbers and demographic structure continue to change; that Scarborough Park and other parks and recreational resources in the locality complement one another in the range of opportunities they offer; and that, where possible, a network of recreational resources are linked in a way that encourages people to use alternate forms of transport over cars.

7.4.6 On the Go

Council has produced an informative and comprehensive map (On the Go) of destinations and links throughout the City of Rockdale for cyclists and pedestrians with related connexions to public transport options. The map shows that a designated walking trail traverses almost the entire length of Scarborough Park enabling links to the Cooks River via Kyeemagh and the Georges River via Sans Souci along the Rockdale Wetlands & Recreation Corridor. A designated off-road cycle route skirts Scarborough Park to the east. There are many opportunities to provide brief information about the park and other cultural information at strategic points along these routes.

Scarborough Park is also serviced by two bus routes via President Avenue and Ramsgate Road linking the park with railway stations to the west.

7.4.7 Local Heritage Tours

The *Rockdale Heritage Drive* self-guided tour brochure also briefly includes Scarborough Park with reference to it as “the marshlands behind the coastal sandhills”.⁶⁸ An optional extended tour is also suggested via Chuter Avenue at Ramsgate where Tonbridge Street Reserve and Rotary Park can be accessed. On the basis of the information in this CMP – particularly **Sections 4** and **6** – there is scope to update the brochure and briefly expand further on the description and significance of the Scarborough Park.

7.5 National Operational Standards

In the context of the day-to-day management of Scarborough Park several basic codes and standards are relevant in relation to safety for those who would access and use the park. There may be some overlap between these standards as, for example, issues of equal opportunity relating to access that may be activated under the Disability Discrimination Act 1992 (discussed at **Section 7.5.4**) would likely also engage at least one Australian Standard and may even be applicable to both the Building Code of Australia and the Occupational Health and Safety Act 2000.

7.5.1 Australian Standards (AS)

Australian Standards are documents setting out specifications and procedures to ensure that a material, product, method or service is fit for its purpose and consistently performs the way it is intended to and are regularly revised to accord with constantly changing technology. An example of an Australian Standard with direct relevance to Scarborough Park is AS 1428 Design for Access and Mobility that applies to the design of facilities to accommodate people with disabilities.

7.5.2 Building Code of Australia (BCA)

The Building Code of Australia (BCA) is intended to provide nationally consistent standards for building design and construction however it is only relevant to new structures and not to older

⁶⁸ A Rockdale City Council initiative for Local Government Week, August 1998.

structures unless modifications are proposed in which case the current standards would apply. All Council works proposed for Scarborough Park would be required to comply with the BCA standards and may include issues relating to fire requirements, building construction, and safety. In certain circumstances relating to heritage places and structures, exemptions to these standards may be granted for non-compliance.

7.5.3 Work Health & Safety Act, 2011

The Work Health and Safety Act 2011 (WHS Act) establishes responsibilities and obligations in relation to workplace health and safety and, in relation to Scarborough Park, carries obligations for Council for the health, safety and welfare of Council employees or visitors to the site.

7.5.4 Disability Discrimination Act, 1992

The Federal Government enacted the Disability Discrimination Act 1992 (DDA) to ensure that people with disabilities be given equal opportunity to participate in and contribute to the range of social, political and cultural activities. It requires people who consider themselves discriminated against to lodge a complaint with the Human Rights and Equal Opportunities Commission and its potential relevance to Scarborough Park may be in relation to access for recreation or to use facilities within the park.

7.6 Site Opportunities & Constraints

7.6.1 Wetlands

Scarborough Park originally comprised a biologically rich and extensive natural wetlands system that has since been degraded, polluted, excavated, dredged, drained, filled (including with garbage) and developed. Even as at 2014 it still retains the designated corridor for a major arterial roadway along most of its length as a legacy of 1950s planning for urban expansion.

In recent decades the value of Australian wetlands generally has been well recognised and this is reflected in a renewed appreciation of the intrinsic qualities of the vestiges remaining in Scarborough Park. Of the northern section, there remains a substantial area of the park with a high watertable that still supports locally indigenous vegetation and, together with the natural area between the Tonbridge Creek channel and Hawthorne Street, provides considerable scope to extend and enhance the natural systems. Council already benefits from the nature of the existing pond and channel system by promoting the park's special qualities and contribution to landscape and recreational diversity within the city area.

Much of Scarborough Park is given over to flat, elevated grassed playing fields and there remains, and will continue to be in the foreseeable future, a high demand for these for organised sports. Apart from this intensive use however, the broad open fields are a poor aesthetic and biological alternative to the complex wetlands landscape, with its rich flora and teeming aquatic life, they have replaced. While retaining a reasonable complement of open space for playing fields, it would be desirable to reconstruct more of Scarborough Park, on a staged basis, as a wetlands environment to enhance the extent and quality of the park as a wetlands corridor. There are helpful examples throughout Australia where this has been successfully achieved.

To this end, a comprehensive wetlands strategy should be planned that should include Council, local representatives and specialists as required. Issues that would need to be investigated should include (as a minimum):-

- identifying those areas within the park that could be considered for wetlands reconstruction and rehabilitation,
- the form(s) of wetlands envisaged,
- inherent toxicity of fill and acid sulfate soils,
- broader catchment issues,

- the importance of the Tonbridge Creek channel downstream as a fish nursery,
- invasive plant and fish species,
- potential for the rehabilitation of fringing river-flat and swamp sclerophyll forest,
- long-term management of the wetlands,
- access to the wetlands (eg. via boardwalks) and the associated interpretation of, and community education about, the systems.

Of course, considerations for wetlands rehabilitation at Scarborough Park need to be made within the context of the priorities for other wetlands that also form part of the Rockdale Wetlands and Recreation Corridor.

In recent years the State government has encouraged an emphasis for estuarine wetlands of conservation, land use planning and rehabilitation. In support of this direction it has published a NSW Wetlands Policy that provides a number of useful guiding principles and monitoring and performance reviews. Principle 7 is particularly relevant to Scarborough Park – *Degraded wetlands and their habitats should be rehabilitated and their ecological processes improved as far as is practicable*. The Wetlands Policy also stresses the importance of partnerships between government and community to achieve the best outcomes for wetlands management.

7.6.2 Hawthorne Street natural area

The highly significant natural area in the vicinity of Hawthorne Street should be regarded not as a discrete area confined to the site to the immediate west of Hawthorne Street, but as a part of the earlier extensive wetlands complex since elements of the natural area are still to be found further to the east (Ramsgate Public School) and south (Tonbridge Reserve and Rotary Park) with other forms of the relevant vegetation communities, albeit in a more degraded form, further to the north and west.

Of course, the major management emphasis for the Hawthorne Street natural area is, and should remain, conservation. In this CMP the extent of land understood as containing the natural area includes the 'core' area usually recognised as the Hawthorne Street natural area though, consistent with the observation above that there are also important 'outliers' indicating more of the previous extent of these vegetation communities, a broader tract is suggested. An arguably more cohesive land unit centred around the remnant wetlands would include all of the land from Hawthorne Street in the east (though vegetation with the public school should be managed sympathetically) to the edge of the playing fields in the west (including the embankment), and from Tonbridge Street in the south to a line extrapolated off Emmaline Street in the north.

In this more extensive area there is an obvious need for conservation processes beyond mere preservation. Much of this additional land beyond the nominally recognised extent of the natural area holds the potential for further wetlands and fringing forest rehabilitation. Through a number of commendable local rehabilitation projects over many years the initiative to extend the natural area has already been established. This process, in conjunction with the local community, should be further supported.

In relation to the potential to extend the natural area there is an opportunity to reconsider the location of the present group of tennis courts that represent an ill-considered mid-20th century incursion within the natural area. While the tennis courts were introduced at a time when remnant vegetation communities (or wetlands) were regarded as having little value, they could just as well function elsewhere.

As the Waradiel Creek corridor within Cook Park (Peter Depena Reserve) is, in a sense, a form of historical and ecological continuation from the natural area within Scarborough Park (as is the reconstructed Bado-Berong Creek), there is an opportunity to link the two areas by way of plant species and interpretation.

7.6.3 Environmental Weeds

One of the major issues facing the environmental management of Scarborough Park is the prevalence of invasive weed species. The issue is particularly acute in the context of managing the remnant wetland and natural areas. Further compounding the complexity of the issue is that, in some places, the weeds have since become a form of surrogate habitat for some indigenous fauna after the natural vegetation was cleared many decades ago. This is illustrated by the lantana thickets in the northern precinct of the park that currently provide valuable refuge for small birds.

The need to manage environmental weeds within Scarborough Park, and the challenges to do so, has long been recognised by Council and various land care programs have been initiated.

7.6.4 Coastal Inundation Risk

A potentially far-reaching consequence of general coastal inundation is that, on account of their low-lying nature, large areas of the Rockdale Wetlands and Recreation corridor will likely be affected. Again, this is a management issue that has been recognised by Council and investigations and planning have been commenced to address and minimise the risk associated with potential flooding.

7.7 Management Resources

In order for Scarborough Park to continue to meet the community's expectations of it as well as satisfy Rockdale City Plan 2009-2018 benchmarks, it will be necessary for the park to be given adequate resources including staff, infrastructure, equipment and funding.

7.7.1 Staff

A critical factor in Council being able to continue to provide high quality facilities, sporting grounds and recreational landscapes of considerable amenity will be the provision of personnel with the appropriate expertise and experience. Staff will continue to be required with open space management, planning and design capabilities through to those with horticultural and grounds keeping expertise.

Scarborough Park also has an active local neighbourhood community with a long history of volunteer involvement in land care, especially for the wetlands and natural area. It is highly desirable for both Council staff and local community groups to continue to plan and work cohesively and effectively together on projects of mutual interest.

7.7.2 Park Buildings

Although there are many Council-owned buildings (mainly amenity blocks and shelter pavilions) scattered throughout Scarborough Park none are of any architectural merit or built earlier than the 1950s. Some of the existing buildings are due for replacement and at least one of these is planned to be replaced in the near future. The Sid Frost Memorial Hall at Leo Smith Reserve has recently been upgraded.

7.7.3 Equipment

Scarborough Park needs to have appropriate equipment in order to be maintained to the expected standard although this does not necessarily mean that all of this equipment needs to be kept on site.

7.7.4 Funding

In order to properly manage Scarborough Park there is an expectation that Council will allocate appropriate funds for the periodic upgrading of the park as required as well as for its routine maintenance.

8 Policy

Throughout this policy section various terms are used and it would be helpful to ensure their meanings are made clear. As indicated in **Section 2.3** the definitions of these terms come from the Burra Charter.⁶⁹ The key terms used mostly in the policy are:-

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including fixtures, contents and objects.

Conservation means all the processes of looking after a place so as to retain its cultural significance. [The following describes the processes.]

Maintenance means the continuous protective care of the fabric, and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction.

Preservation means maintaining the fabric of a place in its existing state and retarding deterioration.

Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric.

Adaptation means modifying a place to suit the existing use or a proposed use. [The Burra Charter also qualifies use in Article 7.2 stating that a place should have a compatible use meaning one that retains the significance of a place.]

Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use that respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

Setting means the area around a place that may include the visual catchment.

Associations mean the special connexions that exist between people and a place.

Meanings denote what a place signifies, indicates, evokes or expresses.

Interpretation means all the ways of presenting the cultural significance of a place.

These terms are further developed, and brief, helpful discussion, is given in the subsequent sections of the Burra Charter that should be read in conjunction with this policy section.

The general structure for this section is to introduce each policy with a heading (in italics) then discuss the topic or item before the actual policy statement (in bold italics).

⁶⁹ The Burra Charter can be downloaded from the Australia ICOMOS website. The first nine pages are essential.

Conservation of Scarborough Park

Section 6, particularly the statement of significance, clearly indicates that Scarborough Park holds considerable cultural value for its local neighbourhoods, a much broader community through informal recreation, sport-related activities and cultural events as well as for the City of Rockdale. It is strongly embedded within the culture of its adjoining neighbourhoods and also carries meanings and associations for a broad community of interest. Scarborough Park is therefore a place:-

- of biological and ecological importance through its remnant wetlands and natural area and where ancient geomorphic processes can be appreciated;
- of history-making;
- of community engagement through recreation and other social activities or events;
- of considerable local amenity; and that is
- integrally associated with the local townscapes where the initial subdivisional development of its neighbourhood areas is still clearly evident.

On account of these values it is important to conserve Scarborough Park into the future. Further, parts of the park have been previously recognised as having cultural value such that they are listed as items of environmental heritage on the Rockdale Local Environmental Plan 2011 (**Section 7.2.2**). An obligation of these listings is that the park will be conserved for the continuing benefit of the Rockdale community.

Also at **Section 6** individual items within the park are noted and given a grading for their relative contribution to cultural value. Those items of high value are particularly important in making up the overall cultural value of Scarborough Park. They do this because they demonstrate something of the pre-European landscape as well as early and formative phases of park development (as well as its earlier social context and local townscape) and establish a sense of identity through history that is an important part of a community's culture. Conserving the cultural value of Scarborough Park means ensuring those items identified in **Section 6.3** are maintained and not lost, obscured or damaged.

The grading of significance in **Section 6.3** means that there are different policy implications and expectations for each level:-

High significance (item demonstrates an early or key phase in the park's development or closely associated with a key person or event) means that retention of the item is required;

Moderate significance (item is a more recent introduction or is substantially altered but clearly contributes positively to or reinforces the park's landscape character): means that retention is desirable;

Low significance (item is an introduction from the last 20-30 years, contributes little to the park's intrinsic landscape character or is difficult to interpret) means that retention is discretionary;

Neutral means that an item (usually of low significance) has little influence (positive or negative) on an appreciation of the park's intrinsic landscape character and its removal is discretionary; and

Intrusive (item is detrimental to significance) means that the item should be removed or modified so that significance is less affected.

As the Burra Charter conveniently and briefly sets out the principles, processes and practice for the conservation of places and items of cultural significance, together with this CMP, it should be used as a key basis for the future management of Scarborough Park. Any future adopted plan of management for the park would still be a useful management guide as it would mainly deal with the specific recreational context of the park and the provision of services. However, where there is a conflict

between a proposed use, structure or service upgrade with elements of Scarborough Park that are of high value, then this CMP should take precedence in order to ensure the assessed cultural significance is not compromised.

Policy 1: On the basis of the current version of the Australia ICOMOS Burra Charter and this CMP, ensure the proper conservation of Scarborough Park, where components of its pre-historic formation, initial planning and infrastructure and early development, plantings and structures of high cultural significance are maintained and interpreted.

Use

Government representations were made in the 1870s for a large public park with commitments in place by 1877 before the eventual dedication of Scarborough Park in 1879. Since this time (135 years!) the general park area has functioned as a freely accessible public recreational resource despite various drastic changes to its landscape character and some excisions to its overall area over this time. Scarborough Park and its closely related neighbouring park at Botany Bay (Cook Park) were both recognised by Samuel Cook to be potentially priceless community assets with a long-term recreational importance for a region of Sydney that would eventually become highly urbanised. That these two very large parks continue to fulfil this role is due to the visionary efforts of Cook and others and, consistent with this vision, it is highly desirable that Scarborough Park continues to be used as a freely accessible recreational resource.

Policy 2: Ensure that Scarborough Park remains as community open space and continues to fulfil the purpose for which it was originally acquired for amenity and the recreational benefit of the whole community.

Wetlands

A substantial part of Scarborough Park is comprised of ponds, channels and drains along with vestigial areas of high watertable (northern precinct) and a remnant natural area (Ramsgate or southern precinct). Broad open playing fields on fill material and components of earlier park development constitute the remaining areas (especially the central precinct).

While it is acknowledged that the extensive areas of levelled fill are scenically bland and a marked contrast to the former areas of biologically rich wetlands, they importantly assist in meeting the high demand for various active sporting codes within the City of Rockdale. Beyond these areas, the remaining park landscapes that continue to support indigenous vegetation communities – whether modified landscapes or more natural landscapes – should certainly be regarded as assets of considerable value.

With the ill-informed demise of much of the earlier natural wetlands the existing areas of Scarborough Park that effectively function as wetlands should be conserved and where there are other areas within the park that could be readily enhanced as wetlands (without removing local playing field space) these should be considered for potential wetlands reconstruction to complement and augment the existing areas.⁷⁰

Much of the northern precinct, where there is already a high watertable and where several areas of locally indigenous wetland vegetation are already well established, appears particularly suitable for rehabilitation as various forms of wetland. The central precinct offers only minimal potential to reconstruct wetlands (mainly through spatial constraints) though the southern precinct holds much more potential – especially to the west of the Tonbridge Creek channel and along the western side of

⁷⁰ Wetlands are understood here as meaning vegetation communities that are either periodically or permanently inundated by fresh or brackish water.

the tennis courts. Both Council and community groups have already embarked on this process of wetlands augmentation.

Policy 3: Ensure those areas within Scarborough Park functioning as wetlands are conserved as such and explore options for potential additional wetlands reconstruction in other areas of the park to enhance the value of the Rockdale Wetlands and Recreation Corridor.

Layout and Fabric

Most of Scarborough Park's original 1879 dedicated area remains intact – only those areas south of Ramsgate Road have been disconnected – though other areas have since been added. It is highly desirable that no further land excisions are permitted.

Policy 4: Protect the integrity of Scarborough Park by ensuring there are no further land excisions such as that south of Ramsgate Road.

Throughout Scarborough Park there are remnants of 19th century and early 20th century development that also hold considerable cultural value and should be conserved. These include the outer track (as well as two of the former starting tangents) of the former Moorefield racecourse in the northern precinct, various tree and palm plantings around Barton Street and components of Thomas Holt's subdivision plan of 1877 with late 19th century plantings illustrating the early implementation of a landscape design for the southern part of Scarborough Park. Other components of the same plan also remain (Cook Park and Ramsgate Road as the major linking boulevard) that are closely related to the park though beyond its boundaries.

Policy 5: Ensure the conservation of the layout and fabric of Scarborough Park, assessed as having high cultural significance, in order to maintain its value and intrinsic landscape character.

Both the current leased RSL site and Pemberton Reserve were integral parts of the original Scarborough Park. They formed the southern orthogonal 'finger' of land of the 1879 park as shown on the 1880s plan (**Figure 57**) and until the post-WW II period were visibly still part of the park despite Ramsgate Road being extended and dividing the site. (However, Barton Street – as an intervening roadway and despite its divisive nature - has not prevented Scarborough Park from being appreciated as continuous parkland.) It is highly desirable to reunite the reserve lands south of Ramsgate Road with Scarborough Park and recover more of its original land area.

Even though the RSL building, bowling greens and car park areas dominate the site south of Ramsgate Road, most of the original land area remains and it remains in government ownership (Crown land). The current RSL building will eventually require upgrading or replacing in which case this would be an opportunity to replan the site – potentially with underground parking - to reclaim more landscape, reinstate a more parklike character and enable a better link from Pemberton Park through to Rotary Park and Tonbridge Street Reserve.

Policy 6: Plan to reunite the reserve lands south of Ramsgate Road with Scarborough Park and, where future opportunities allow, replan the current RSL site to better relate to both Pemberton Reserve and Rotary Park.

Cultural Vegetation

Within Scarborough Park there are various remnants of earlier plantations ranging from those of the 1880s within the southern section of the park through those of the early 20th century along Barton Street to mid and late 20th century additions elsewhere. They include both Australian species (such as

various fig trees and non-locally indigenous Eucalypts) to exotic species such as several pine species, coral trees and various palms. Many of these exotic plantings (and their progeny) are of little cultural value and, depending on the site context, could be replaced with locally indigenous species. Other plantings have been assessed as having high cultural value and should be retained.

Generally, older plantings would carry a higher cultural value than more recent plantings although historical context also contributes to cultural value. For example, within Tonbridge Street Reserve there is a large Camphor laurel and a group of Maritime Pines (comprising a very large individual with smaller trees around it) just south of the public school. These are of high cultural value because of their age and their likely association with the early development of Scarborough Park under the initial trustees in the late 19th century. Likewise the three Bunya Pines within the natural area are otherwise out of place in the present context but when they were planted there was a north-south access track that formed a boundary and separated them from the natural area (which was then much less evident than it is today).⁷¹ The line of Bunya Pines was also planted at a time before Hawthorne Street was formed.

However, while there is ample justification to retain these trees while they remain viable the long-term future of all of the older planted trees needs to be considered. Again, an important basis for any consideration is context and, in the case of the natural area and even the areas of Scarborough Park further south, the broader context is an underlying ancient Quaternary sand deposit that has supported an indigenous flora for a very long time. Representatives of this flora are, of course, now very much evident within and around the natural area but they are also evident even further afield as various indigenous species persist within Tonbridge Street Reserve, Rotary Park and within the grounds of the public school as well as further beyond in neighbouring suburbs.

There is therefore within Tonbridge Street Reserve and Rotary Park an interesting conjunction of remnant 19th century plantings and persistent indigenous species and, clearly, both are highly significant and should be retained. The indigenous vegetation has the capacity to not only persist but to inexorably recolonise the southern part of Scarborough Park (probably over many decades) while the planted vegetation - although capable of surviving for about a century or so - will likely eventually succumb to natural attrition and would need to be deliberately replanted. The question then becomes one of asking whether it is appropriate to replant the species introduced in the 19th century in order to perpetuate what remains of the earliest development of Scarborough Park.

If the context of Scarborough Park was an entirely cultural one with no further traces of its earlier natural systems and vegetation communities then the answer to this question may be to accept the surviving remnants of the 19th century interventions and perpetuate these - possibly with the reconstruction of its earlier lake (if more details of it were known) and with additional plantations. However, the actual context is very different to this such that any future management of the cultural vegetation must necessarily take into account the natural propensity of indigenous vegetation communities re-establishing throughout the southern areas where the underlying sands remain.

Further, and very significantly, the context of Scarborough Park is distinctly coloured by the fact that the locally indigenous vegetation communities are recognised as being particularly important within a State setting. This observation then lends considerable weight to accepting the ultimate long-term vegetation management regime as revolving around the locally indigenous vegetation communities and not the introduced plantings - either those of the 19th century or those introduced much later (such as the Tallowwoods around the periphery of Tonbridge Street Reserve and Rotary Park).

In the meantime though, the remnant 19th century plantings should be highly valued and every effort made to keep them viable for as long as possible. When they eventually enter senescence and require removal because of public safety reasons they should not be replaced with the same species. This process may take many decades - especially in the case of the fig trees - but it should not be hastened. This approach also applies to the remnant Bunya Pines along Hawthorne Street but not to the various *Pinus* species further along Hawthorne Street or within the natural area. The latter species

⁷¹ From a review of archival photography such as **Figures 3.7 and 3.10**, but particularly the 1930s series aerials.

should be progressively removed at the earliest opportunity as they have a lower cultural value and have a greater propensity to affect the integrity of the natural area which is much more culturally valuable.

A similar approach should apply to the mixed exotic plantings along the long middle pond of the central precinct. These are mostly plantings of the 1950s to 1960s and, while having moderate cultural value, the long-term prospects of the exotic species provides a useful context in which to consider an approach to managing vegetation within the precinct. Already the Monterey Pines – despite the aptness of their name for the eponymous suburb in which they were planted and the western USA street-naming trend – are not well suited horticulturally to this location and most are in decline.

The central precinct has a fundamental wetlands context provided by the long, prominent pond. Although there is also a context of about one metre of fill either side of the pond, the dominant water form provides the main focus and it is the water setting to which the long-term vegetation character should respond. As Scarborough Park was once dominated by its natural wetlands character, so each precinct of the park that currently fulfils this role should be reinforced with the appropriate wetland vegetation types. This is especially so where the alternative exotic vegetation has little historical or narrative value. In this case the vegetation along the edges of the central pond should be progressively replaced with locally indigenous wetland species and the Monterey Pines within the precinct should be progressively removed.

Elsewhere within Scarborough Park the context is different and a different long-term vegetation management approach should be taken. This applies to the Barton Street corridor where there are remnants of substantial plantings including three species of fig trees (*Ficus watkinsiana*, *F. macrophylla* and *F. rubiginosa*) and various mature palms including *Washingtonia robusta*, *W. filifera* and *Phoenix sylvestris*. (This area extends into the northwest corner of the precinct at Scarborough Lane.)

In this case reconstructed wetlands vegetation edging the ponds either side of Barton Street should form a continuous and unifying link between the two precincts but the perpendicular road corridor should be reinforced using the existing early 20th century plantings as a basis. Here the otherwise pervasive wetlands character is less apparent, and probably less important, yet the maturing fig trees provide a strong reference point between Monterey and Kogarah. This linear landscape feature could be readily perpetuated over the long-term and, in doing so, would not unduly affect the major wetlands theme nearby.

Before the remnant 19th century plantings within Tonbridge Street Reserve and Rotary Park are lost through natural attrition they should be recorded and the archival records kept in the Local Studies Library for future reference.

Policy 7: Ensure the conservation of all plantings within Scarborough Park assessed as having high significance and while the individual plantings remain viable and do not pose a safety risk. With the exception of the plantings along the Barton Street corridor, do not replace the earlier plantings with the same species after they have succumbed to natural attrition. Under no circumstances should their natural life span be unduly shortened.

Policy 8: Adopt for the long-term vegetation management of Scarborough Park the approach of favouring the establishment of locally indigenous vegetation communities that extend the existing core natural area into adjoining areas where representative species are already present. Over many decades it is expected that this approach will see various locally indigenous vegetation types replace the cultural species throughout much of the park.

Policy 9: Existing plantings that are assessed as being of little cultural significance could

be replaced by locally indigenous vegetation on a discretionary basis though where this is undertaken it should be accompanied by appropriate material to inform the local community.

Policy 10: Ensure the conservation of the remnant interwar period plantations along the Barton Street corridor – including replacing these with the same species when they eventually succumb to natural attrition – and reinforce the linear landscape feature with more plantings of similar species such that its local landmark value is maintained for the long-term.

Policy 11: Ensure appropriate archival recording of the remnant 19th century plantings in Tonbridge Street Reserve and Rotary Park before they are lost through natural attrition. The archival record should be kept in the Rockdale Local Studies Library.

Weeds

The presence of many weed species throughout Scarborough Park was noted and represents a major issue for the management of the park. It is also noted that Council is very much aware of the situation and Council, community and volunteer groups have been active in addressing the control and removal of weeds.

Policy 12: Ensure the continued management of weeds within Scarborough Park through an appropriate prioritised management plan.

Scarborough Park as a Scenic Resource

The CMP review of the Scarborough Park landscape also noted that parts of the park have compelling scenic qualities. This is especially evident near the larger ponds but also, at a much smaller scale, within the natural area and along the Tonbridge Creek channel. This is also unsurprising as waterforms often engender such qualities. While such landscape qualities can be readily apparent they are also much harder to protect and retain. In general terms, the introduction of new structures – either permanent or temporary and including buildings, towers and signs – should be kept away from the wetlands and ponds within Scarborough Park in order to maintain the park's principal scenic attributes.

Policy 13: Avoid locating new structures – either permanent or temporary and including buildings, towers and signs (apart from interpretive ones) – in proximity to Scarborough Park's wetlands and water features.

It was also noted that many of the eastern streets adjoining, and perpendicular to, Scarborough Park end at Botany Bay and often allow views to the bay from the park. As much as possible these views should be retained and the streets planted more to reinforce the direct links between the park and the bay.

Policy 14: Retain the views of Botany Bay from Scarborough Park and, where appropriate, reinforce the landscape links between the two features by planting more street trees.

Interpretation

An important aspect of conservation is interpreting or expressing the significance of a place. This is because its cultural significance may not be readily apparent or understood or its significance has not

been passed on between generations. The surviving physical evidence of a place's history is always a direct and powerful means of gaining an understanding of the place.

Owing to Scarborough Park's early establishment, rich cultural history (as **Section 4** of the CMP testifies) and that it encompasses a diverse and important range of landscape types, there is a need for more interpretive information. An implication of the statement of significance at **Section 6.2** is that the philanthropic work of Samuel Cook should be clearly indicated at Cook Park – preferably within a broad and comprehensive interpretive program for the entire park. There is an opportunity to engage residents, visitors and children from the local area and relevant schools with the history and stories of the park, the functions of the park and its place within the greater system of open space areas within the City of Rockdale.

The form of interpretive material can vary greatly, from simple printed or digital media to installations and performance. There is the potential to publish engaging information about the park as part of a series covering this and other major parks and reserves within the City of Rockdale and encouraging further exploration of Council's considerable open space resources. The information could be conveyed through digital media (including an app), be linked to information about cycle routes, public transport access and reinforce the site's unique values as well as the encompassing City values and expectations.

Scarborough Park does currently have some educational information – mostly within and focussed on the natural area near Hawthorne Street and, while this is an excellent introduction to the importance of the natural area, the interpretive resources could be further developed and incorporated into a broader interpretation program for the whole park.

Sections 4 and 6 of the CMP could be used as a basis of a comprehensive and integrated interpretive strategy for Scarborough Park.

Policy 15: Ensure the interpretation of the significance of Scarborough Park and individual components using appropriate media and processes. Opportunities for the interpretation, commemoration and celebration of significant associations between people and Scarborough Park should be investigated and implemented.

Policy 16: A comprehensive and integrated interpretation strategy for Scarborough Park should be considered that uses Sections 4 and 6 of this CMP as its basis.

Heritage Brochures

To Council's credit there are already self-directed tour guide publications about the heritage of parts of Rockdale.⁷² One of these - *Rockdale Heritage Drive* and accessing the area from President Avenue - includes Scarborough Park to some extent (mentioning the 1879 dedication but then referring to the Muddy Creek wetlands catchment that drains to the Cooks River). The brief historical notes should be updated with the new historical information contained in this CMP.

A self-guided walking tour version of the publications should also be investigated that might also combine with the nearby Cook Park. These publications should be additional to a specific interpretive program planned and designed for use within Scarborough Park (see **Policies 15 and 16** and associated discussion).

Policy 17: Revise Council's existing self-directed tour guide publications on the heritage of Rockdale that include Scarborough Park to take into account the new historical information provided in this CMP.

⁷² A Rockdale City Council initiative for Local Government Week, August 1998.

Management

Rockdale City Council is currently responsible for the management of Scarborough Park and it is desirable that this arrangement remain and especially so where adequate management and maintenance resources can be allocated for the park to ensure that its quality and diversity as part of the public domain is sustained over the long term.

Policy 18: Ensure the continued management of Scarborough Park through the resources of Rockdale City Council.

Policy 19: Ensure appropriate professional expertise in open space management, planning, design, construction and maintenance within Council so that Scarborough Park can be effectively conserved and managed for the long-term benefit of the community.

It is also important that, while provision is made for specific sporting codes and events, the park is also managed equitably for all without it becoming the exclusive venue of any one group. In reinforcing this point the Centennial Park Trust has begun using the motto “the park is there to share” throughout its parklands and in its media programs. Consideration should be given for ways in which a similar point may be communicated within the parks of the City of Rockdale.

Policy 20: In managing Scarborough Park ensure that it remains inclusive of the whole community and all recreational user groups and prevent the perception that the park belongs exclusively to any one group.

Scarborough Park contains a substantial number of mature, and often large, trees that make an outstanding contribution to the park’s amenity and cultural and natural value and these should be conserved through careful management. A key part of this ongoing management includes regular site safety (risk management) audits through the routine arboricultural assessment of all larger trees. This should only be carried out by suitably experienced arborists with a demonstrated understanding of working within the context of significant cultural landscapes.

Policy 21: As part of the routine risk management of Scarborough Park ensure the ongoing monitoring of the larger trees by arborists, with experience and understanding working in the context of landscapes of high cultural value, in order to prolong the safe, viable life of the larger trees as valuable park assets.

Council’s Open Space & Recreation Strategy, 2010 and the Rockdale Technical Specification: Landscape 2011 are documents used as a basis for the planning and management of parks and recreational venues within the City of Rockdale. Yet as many of Council’s parks are about 100 years old (and with a few even dating from the late 19th century such as Scarborough Park) and given that most of these are listed on the Rockdale LEP as items of environmental heritage it is surprising that the documents do not mention cultural significance or the need to conserve this significance.

The Open Space & Recreation Strategy, 2010 also does not make reference to a Social Plan or extensive community consultations as a key basis for its many strategic proposals. **Section 7.4** clearly indicates that communities associated with Rockdale’s parks value the opportunity for input into their management and have a concern for their future. Scarborough Park is no exception.

Policy 22: Ensure that cultural significance and community values are demonstrably taken into account in future open space and recreational strategic planning and relevant policy documents.

New Commemorative Structures and Features

Unlike Cook and Rockdale Parks, Scarborough Park has had few commemorative installations located within it - the Rotarian sign and small memorial at the southern end of Rotary Park are examples. However there are examples in other Sydney parks where all manner of memorial installations have been introduced and where there is no compelling association or relevance to the location. While a limited number of appropriately discrete permanent monuments, memorials or artworks may be reasonable, it is desirable to ensure that none of these are installed within Scarborough Park without having a direct and compelling relevance to the place and without a substantial endorsement by the local and broader communities.

Policy 23: Do not introduce any permanent monuments, memorials or artworks within Scarborough Park unless they have a direct and compelling relevance to the place and have received the strong endorsement of a broad community.

New Buildings

It is also desirable that no new buildings are introduced within the park unless it is strictly for the benefit of the park as a public recreational resource, is to replace an existing structure or structures and has a historical precedent for being in the park. Such a structure may include an amenities building combining WCs, change rooms, kiosk and a small meeting room to avoid the unnecessary clutter of a series of separate structures.

Where permitted, new buildings should generally be planned and designed to be visually subservient to the park's landscape character and respect the specific context.

Policy 24: No new buildings are to be introduced within Scarborough Park unless they replace existing public recreational structures and have a prior (historical) recreational precedent to be there. Where permitted, new structures must be planned and designed to respect the park landscape and its culturally significant context.

Temporary Structures in the Park

It is desirable to continue to allow for a diversity of recreational uses within the park and where such use would be enhanced by the temporary installation of structures, and the park's grounds would not be unduly compromised, then this should be considered. Scarborough Park has ample space on flat ground and the capacity to allow for the installation of temporary structures when needed for functions, events and festivals.

What constitutes 'temporary' in this case would need to be defined by Council but it should take into account the primary objective of ensuring that the park is able to continue to meet its usual obligations for the provision of public recreation and that the grounds are not compromised in any way by the installation of structures.

This issue, where the above considerations are met, satisfies heritage requirements within Scarborough Park, however there may be other considerations such as proximity to residential areas, parking and access, safety issues and hours of operation that may need to be weighed before approvals are given.

Policy 25: The temporary installation of structures such as marquees should be allowed in Scarborough Park where such use is strictly temporary (an appropriate timeframe determined by Council), does not compromise the ongoing community recreational use of the park and there is no risk of the park's significant fabric being damaged.

Adaptation for Equal Access

Considerations in this case revolve around the provision of access for those with reduced mobility (including those with wheelchairs), those who are sight-impaired and access for prams. Access guidelines are provided through applicable Australian Standards and the BCA although the latter is only applicable where new work is proposed to be undertaken or where someone takes action using the Disability Discrimination Act, 1992 as a catalyst.

Where retrofitting to assist the sight impaired is contemplated, the main issue in relation to the conservation of the park is how the necessary work can be incorporated without compromising significance. Depending on the scale of work contemplated, it may be necessary to undertake a heritage impact assessment. At the very least, the kinds of helpful questions that should be asked include:-

- Will the additions visually dominate, or impinge on, Scarborough Park?
- Are the additions sympathetic to the landscape character of Scarborough Park?
- How is the impact of the additions on Scarborough Park minimised?⁷³

Policy 26: Use discretion in the retrofitting of Scarborough Park for equal access and where it is decided to do so this should be planned in conjunction with people with appropriate skills and experience, including a heritage consultant or advisor, to ensure the park context is fully taken into account.

New Services, Infrastructure and Facilities

From time to time Scarborough Park will need to have services and basic infrastructure replaced, upgraded or new services installed. These may include utilities such as stormwater and electricity, lighting structures, park furniture, steps, walls, gates, storage facilities and amenities buildings. As a general principle, utility provision should be approached solely on the basis of ensuring it does not intrude in any way on an appreciation of the place. This would usually mean that services are kept underground or otherwise out of sight.

Where the new work requires structures above ground the same principles would apply though, depending on the scale and context, the preparation of a statement of heritage impact may also be required in which case helpful test questions such as those above should be asked.

Policy 27: Ensure all new services, infrastructure and facilities proposed within and adjoining Scarborough Park are planned and designed on the basis of this CMP taking into account the cultural significance of the park and the need to ensure that significance is not compromised. For any new buildings within the park, ensure they are also planned and designed to make a positive contribution to the character of the park while respecting that the site is highly valued by its local community.

Vehicular Access within the Park

Apart from the provision of car parking along the edges of the park, access for vehicles within Scarborough Park is currently restricted to those required for the maintenance and management of the site. This should remain the case in order to provide respite from an otherwise vehicle-dominated urban environment.

⁷³ These and many other test questions are set out in Table I as part of the advice on statements of heritage impact provided by the NSW Office of the Environment & Heritage on its website.

Policy 28: Ensure that vehicular access within Scarborough Park remains strictly limited to maintenance, and occasional construction, vehicles only.

Archaeological Finds within the Park

The 1999 ERM Mitchell McCotter Aboriginal Heritage Study raised the potential issue of indigenous archaeology mentioning that “few archaeological sites are known within the Rockdale LGA while others may, as yet, remain subsurface”. The report suggested that, if anything were to be found relevant to the park, middens and burials would be the most likely form of indigenous archaeological resources.⁷⁴ In its mapping of the Scarborough Park area the flanking areas to the west and east of the main drainage and dredging works – and reflecting “the edges of the wetland corridor” - are coloured orange indicating a high potential for archaeological resources.

While there is a long history of site disturbance along much of Scarborough Park it would be wise to be aware of the potential for Aboriginal cultural evidence (and even evidence of the earlier phases of park use) to surface. Where future work requires the excavation of trenches Council staff and contractors should be advised to be aware of the possibility of archaeological resources in which case senior Council staff responsible for the work should be notified as well as Council's Heritage Advisor.

Policy 29: In the event of archaeological material being found during any future construction work at the park, the work in that area should cease and the appropriate senior Council staff and Council's Heritage Advisor should be notified in order to assess the nature of the find before allowing work to recommence.

Adoption and Review of the CMP

The adoption of this CMP by Council is an important step in ensuring the conservation of Scarborough Park. In its responsibility for the planning and management of the park on the basis of this CMP, Council will need to define and allocate particular responsibilities, roles and performance expectations to ensure that important actions are not overlooked as well as allocate sufficient resources for the management and maintenance of the park.

Policy 30: The City of Rockdale should adopt this CMP as a key basis of its planning and management of Scarborough Park.

Policy 31: In its management of Scarborough Park on the basis of this CMP, Council should ensure that appropriate staff has responsibility for the implementation of the CMP.

Policy 32: Ensure adequate resources are allocated for implementing the CMP.

It is likely that some circumstances with respect to Scarborough Park will change in the future and that aspects of this CMP will need to be reviewed and revised accordingly. Cultural significance too may change given the continuing history of the park and changing demographic composition that may bring further social values into focus.

Policy 33: Plan to review this CMP in the event of substantial new evidence or proposed substantial changes, and revise as required.

Policy 34: Once adopted, ensure the CMP remains in force until a new or revised

⁷⁴ ERM Mitchell McCotter, *Rockdale City Council Aboriginal Heritage Study*, Report 9829 IRP2, April 1999, p. 3.12

Conservation Management Plan is adopted.

Current LEP in relation to the park

Section 5.10 of the Rockdale LEP 2011 concerns heritage within the LGA. Clause 2 (Requirement for consent) discusses altering a heritage item but unnecessarily limits the understanding of such an item to a building. The clause should provide for a broader meaning to also include heritage items that are not buildings such as this park and other cultural landscapes (that might include other places such as cemeteries, civic and war memorial sites and market gardens etc.).

That this clause is now a standard provision across the State is of some concern as it is clearly inadequate. It is highly desirable to review planning control options with the Urban Strategy team to ensure this deficiency is rectified.

Policy 35: Review options that overcome the deficiency in the Rockdale LEP 2011 text at Section 5.10 Clause 2 in order to provide a broader meaning to include significant landscapes as well as buildings.

Schedule 5 of the Rockdale LEP lists heritage items within the City of Rockdale and in relation to Scarborough Park there are several relevant listings – Patmore Swamp (Item 202), Hawthorne Street Reserve/Leo Smith Reserve (Item 203) and Fig trees immediately north of Ramsgate Road (Item 204). Firstly however, the item names and addresses do not clearly indicate whether all of Scarborough Park is listed while Tonbridge Street Reserve, Rotary Park and Pemberton Park are not listed but should be and especially so as, collectively, they were the first part of the park to be designed as a park by the initial trustees in the 1880s and, even prior to being purchased by the State Government, formed that part of the park included in the 1877 subdivision plan.

As discussed above, an important function of Scarborough Park – apart from providing valuable sporting venues – is in enabling a contiguous wetland environment from beyond President Avenue to the piped connexions south of the natural area. This system is regarded with such esteem that it is the basis for much of Council's Rockdale Wetland and Recreation Corridor. The whole of Scarborough Park contributes to this system such that all of the park should be clearly listed under Schedule 5 of the LEP.

Secondly, apart from the omissions noted above, other important historical components of the park should be specifically mentioned. These include the easterly remnant of the 19th century Moorefield racecourse and surviving early 20th century plantings along Barton Street (including three different species of fig trees and palms). Thirdly, the listed Item 204 should either be augmented to include other contemporary (19th century) plantings within Rotary Park or, ideally, simply include Tonbridge Street Reserve, Rotary Park and Pemberton Park as a new collective Item 204 or as appropriate.

Policy 36: Clarify the current listings for Scarborough Park under Schedule 5 of the Rockdale LEP and, where there are gaps in the listings for the park, ensure all of the park area including Pemberton Park are included in the next edition.

The 1877 subdivision plan is also distinctively manifest in the local townscape of Ramsgate and Sans Souci between Culver Street and Sandringham Street through the unusually wide (boulevard-like) streets (Ramsgate Road, Alfred, Walter, Florence and Alice Streets and Chuter Avenue) that contrast with the later road layout with typically narrower widths. The extra width of Chuter Avenue (formerly Frederick Street) also conveniently allowed for a drainage channel from Scarborough Park to the Georges River. The generously wide local streets and general layout of streets assists in interpreting the extent of the 1877 town plan of Thomas Holt. Although only engaging partly with Scarborough Park, the current town area that corresponds with the 1877 layout should be recognised with a listing in the LEP as an item of environmental heritage value. The listing would chiefly note the enduring street layout and distinct character and would not affect dwellings within the area.

Policy 37: Recognise the distinct and enduring townscape linking Ramsgate and Sans Souci that corresponds with the 1877 town plan by listing it as an item of environmental heritage on the Rockdale LEP.

9 Implementation and Priorities

Policies	PRIORITY	TIMING
<i>Conservation of Scarborough Park</i>		
<i>Policy 1: On the basis of the current version of the Australia ICOMOS Burra Charter and this CMP, ensure the proper conservation of Scarborough Park, where components of its pre-historic formation, initial planning and infrastructure and early development, plantings and structures of high cultural significance are maintained and interpreted.</i>	High	Ongoing
<i>Use</i>		
<i>Policy 2: Ensure that Scarborough Park remains as community open space and continues to fulfil the purpose for which it was originally acquired for amenity and the recreational benefit of the whole community.</i>	High	Ongoing
<i>Wetlands</i>		
<i>Policy 3: Ensure those areas within Scarborough Park functioning as wetlands are conserved as such and explore options for potential additional wetlands reconstruction in other areas of the park to enhance the value of the Rockdale Wetlands and Recreation Corridor.</i>	High	Ongoing
<i>Layout and Fabric</i>		
<i>Policy 4: Protect the integrity of Scarborough Park by ensuring there are no further land excisions such as that south of Ramsgate Road.</i>	High	Ongoing
<i>Policy 5: Ensure the conservation of the layout and fabric of Scarborough Park, assessed as having high cultural significance, in order to maintain its value and intrinsic landscape character.</i>	High	Ongoing
<i>Policy 6: Plan to reunite the reserve lands south of Ramsgate Road with Scarborough Park and, where future opportunities allow, replan the current RSL site to better relate to both Pemberton Reserve and Rotary Park.</i>	Medium	Discretionary
<i>Cultural Vegetation</i>		
<i>Policy 7: Ensure the conservation of all plantings within Scarborough Park assessed as having high significance and while the individual plantings remain viable and do not pose a safety risk. With the exception of the plantings along the Barton Street corridor, do not replace the earlier plantings with the same species after they have succumbed to natural attrition. Under no circumstances should their natural life span be unduly shortened.</i>	High	Long-term
<i>Policy 8: Adopt for the long-term vegetation management of Scarborough Park the approach of favouring the establishment of locally indigenous vegetation communities that extend the existing core natural area into adjoining areas where representative species are already present. Over many decades it is expected that this approach will see various locally indigenous vegetation types replace the cultural species throughout much of the park.</i>	High	Ongoing

<i>Policy 9: Existing plantings that are assessed as being of little cultural significance could be replaced by locally indigenous vegetation on a discretionary basis though where this is undertaken it should be accompanied by appropriate material to inform the local community.</i>	Low	Ongoing
<i>Policy 10: Ensure the conservation of the remnant interwar period plantations along the Barton Street corridor – including replacing these with the same species when they eventually succumb to natural attrition – and reinforce the linear landscape feature with more plantings of similar species such that its local landmark value is maintained for the long-term.</i>	Medium	Ongoing
<i>Policy 11: Ensure appropriate archival recording of the remnant 19th century plantings in Tonbridge Street Reserve and Rotary Park before they are lost through natural attrition. The archival record should be kept in the Rockdale Local Studies Library.</i>	Medium	3-5 years
<i>Weeds</i>		
<i>Policy 12: Ensure the continued management of weeds within Scarborough Park through an appropriate prioritised management plan.</i>	High	Ongoing
<i>Scarborough Park as a Scenic Resource</i>		
<i>Policy 13: Avoid locating new structures – either permanent or temporary and including buildings, towers and signs (except interpretive ones) – in proximity to Scarborough Park's wetlands and water features.</i>	Medium	Ongoing
<i>Policy 14: Retain the views of Botany Bay from Scarborough Park and, where appropriate, reinforce the landscape links between the two features by planting more street trees.</i>	Medium	Ongoing
<i>Interpretation</i>		
<i>Policy 15: Ensure the interpretation of the significance of Scarborough Park and individual components using appropriate media and processes. Opportunities for the interpretation, commemoration and celebration of significant associations between people and Scarborough Park should be investigated and implemented.</i>	Medium	Within the next 3-5 years
<i>Policy 16: A comprehensive and integrated interpretation strategy for Scarborough Park should be considered that uses Sections 4 and 6 of this CMP as its basis.</i>	Medium	Within the next 3-5 years
<i>Heritage Brochures</i>		
<i>Policy 17: Revise Council's existing self-directed tour guide publications on the heritage of Rockdale that include Scarborough Park to take into account the new historical information provided in this CMP.</i>	Low	5-6 years
<i>Management</i>		
<i>Policy 18: Ensure the continued management of Scarborough Park through the resources of Rockdale City Council.</i>	High	Ongoing

<i>Policy 19: Ensure appropriate professional expertise in open space management, planning, design, construction and maintenance within Council so that Scarborough Park can be effectively conserved and managed for the long-term benefit of the community.</i>	High	Ongoing
<i>Policy 20: In managing Scarborough Park ensure that it remains inclusive of the whole community and all recreational user groups and prevent the perception that the park belongs exclusively to any one group.</i>	High	Ongoing
<i>Policy 21: As part of the routine risk management of Scarborough Park ensure the ongoing monitoring of the larger trees by arborists, with experience and understanding working in the context of landscapes of high cultural value, in order to prolong the safe, viable life of the larger trees as valuable park assets.</i>	High	Ongoing
<i>Policy 22: Ensure that cultural significance and community values are demonstrably taken into account in future open space and recreational strategic planning and relevant policy documents.</i>	High	Ongoing
<i>New Commemorative Structures and Features</i>		
<i>Policy 23: Do not introduce any permanent monuments, memorials or artworks within Scarborough Park unless they have a direct and compelling relevance to the place and have received the strong endorsement of a broad community.</i>	Medium	Ongoing
<i>New Buildings</i>		
<i>Policy 24: No new buildings are to be introduced within Scarborough Park unless they replace existing public recreational structures and have a prior (historical) recreational precedent to be there. Where permitted, new structures must be planned and designed to respect the park landscape and its culturally significant context.</i>	Medium	Ongoing
<i>Temporary Structures in the Park</i>		
<i>Policy 25: The temporary installation of structures such as marquees should be allowed in Scarborough Park where such use is strictly temporary (an appropriate timeframe determined by Council), does not compromise the ongoing community recreational use of the park and there is no risk of the park's significant fabric being damaged.</i>	Low	Ongoing
<i>Adaptation for Equal Access</i>		
<i>Policy 26: Use discretion in the retrofitting of Scarborough Park for equal access and where it is decided to do so this should be planned in conjunction with people with appropriate skills and experience, including a heritage consultant or advisor, to ensure the park context is fully taken into account.</i>	Low	Ongoing
<i>New Services, Infrastructure and Facilities</i>		
<i>Policy 27: Ensure all new services, infrastructure and facilities proposed within and adjoining Scarborough Park are planned and designed on the basis of this CMP taking into account the cultural significance of the park</i>	High	Ongoing

<i>and the need to ensure that significance is not compromised. For any new buildings within the park, ensure they are also planned and designed to make a positive contribution to the character of the park while respecting that the site is highly valued by its local community.</i>		
<i>Vehicular Access within the Park</i>		
<i>Policy 28: Ensure that vehicular access within Scarborough Park remains strictly limited to maintenance, and occasional construction, vehicles only.</i>	High	Ongoing
<i>Archaeological Finds within the Park</i>		
<i>Policy 29: In the event of archaeological material being found during any future construction work at the park, the work in that area should cease and the appropriate senior Council staff and Council's Heritage Advisor should be notified in order to assess the nature of the find before allowing work to recommence.</i>	Low	Ongoing
<i>Adoption and Review of the CMP</i>		
<i>Policy 30: The City of Rockdale should adopt this CMP as a key basis of its planning and management of Scarborough Park.</i>	High	As soon as possible
<i>Policy 31: In its management of Scarborough Park on the basis of this CMP, Council should ensure that appropriate staff has responsibility for the implementation of the CMP.</i>	High	Ongoing
<i>Policy 32: Ensure adequate resources are allocated for implementing the CMP.</i>	High	Ongoing
<i>Policy 33: Plan to review this CMP in the event of substantial new evidence or proposed substantial changes, and revise as required.</i>	Low	When required
<i>Policy 34: Once adopted, ensure the CMP remains in force until a new or revised Conservation Management Plan is adopted.</i>	High	As required
<i>Current LEP in relation to the park</i>		
<i>Policy 35: Review options that overcome the deficiency in the Rockdale LEP 2011 text at Section 5.10 Clause 2 in order to provide a broader meaning to include significant landscapes as well as buildings.</i>	High	The sooner the better
<i>Policy 36: Clarify the current listings for Scarborough Park under Schedule 5 of the Rockdale LEP and, where there are gaps in the listings for the park, ensure all of the park area including Pemberton Park are included in the next edition.</i>	Medium	Within the next 3-5 years
<i>Policy 37: Recognise the distinct and enduring townscape linking Ramsgate and Sans Souci that corresponds with the 1877 town plan by listing it as an item of environmental heritage on the Rockdale LEP.</i>	Medium	Within the next 3-5 years



Bayside Customer Service Centre

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Westfield Eastgardens, 152 Bunnerong Road, Eastgardens
Monday to Friday 8:30am - 4:30pm, Saturday 9am - 1pm

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