KINGS PARK Masterplan Report

Prepared by Umbaco Landscape Architects October 2018

Q City of Ryde

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Kings Park Masterplan Report





UmbaCo LANDSCAPE ARCHITECTS









Umbaco Landscape Architects Suite 104, 283 Alfred Street North Sydney NSW 2060

SESL Australia 16 Chilvers Road Thornleigh NSW 2120

CUBITIC Consulting Suite 3, 34 Albert Street North Parramatta NSW 2151

HORTICULTURAL Management Services 9 Hickson Circuit Harrington Park NSW 2567



Prepared for City of Ryde / October 2018

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INTRODUCTION



FOREWORD

This report details the analysis and investigations related to the former Denistone East Bowling Club site that have informed the design outcomes in the proposed masterplan for the site. The masterplan responds to the extensive community consultation undertaken by City of Ryde and increasing pressures for quality open space in the local area.



Kings Park Masterplan Report

MASTERPLAN STRATEGIES

Kings Park is located on the site of the former Denistone East Bowling Club which ceased operating in 2012. The site has considerable local, community and resident interest.

The first signs of formalised use of Kings Park occurred in the early sixties when the bowling club was established. Until then, Kings Park remained green open space amid the project homes established under the government'"Homes in the Sun" scheme.

Over the years the neighbourhood has retained its residential character. Currently, the suburb of Denistone has a large number of very small green public spaces but only two parks of considerable size; that is why it is important to create a larger open space that can more adequately meet the requirements of the community.

In 2015 City of Ryde commenced an extensive consultation process with the community to resolve the best use of the Denistone East Bowling Club site. In early 2017 Cred Consulting was engaged to conduct a two stage community consultation. A number of options were presented during consultation process with Option 2 identified as the preferred option. This option identified the use of the site as a "passive and active open space". The community clearly expressed their need for a recreation space for the whole community, including children, families and young people as well as older people. Minimal traffic and parking impact, a need for a meeting place and benefit to Denistone East Public School were also important factors.

Following completion of the consultation report City of Ryde engaged Umbaco Landscape Architects to undertake the development of the Kings Park Masterplan.

This report presents a landscape analysis of the urban and natural attributes of Kings Park. The analysis includes elements such as the use of the park, circulation within the park and connections through and beyond, assessment of existing conditions and proposals for the development.

SESL Australia were commissioned to undertake an environmental and geotechnical investigation on site. Further, Cubitic Consulting prepared a Structural Report of existing infrastructure. Horticultural Management has undertaken an arboricultural assessment of existing trees.

Following a thorough analysis of the key aspects of the park, opportunities and constraints were identified to lead to key recommendations that inform potential design options leading into the masterplan.

The key strategies for Kings Park were identified as follows:

- Kings Park as a 'thoroughfare'
- Kings Park as a new community destination
- respecting Kings Park history

and

• Kings Park as a community green space

Masterplan.

community ..."

The assessment process involved a desktop study of the history of the park using data supplied by Council, site survey including services and utilities, review of historical aerial photographs and visual assessment based on numerous inspections of the site analyzing existing infrastructure of the site.

The results of community consultation lead by Cred Consulting assisted Umbaco Landscape Architects in determining the priorities for the design development of the Kings Park

"... something that engages the whole

" The site is within a small community and next to the school. I would like to see the site become a beautiful garden or a park for kids play and family gathering ..."

"... recreational area, sports fields and play area that local schools can use as well as all members of local community ... "

> DENISTONE EAST BOWLING CLUB SITE COMMUNITY ENGAGEMENT OUTCOMES REPORT by Cred Consulting

SITE AS A PEDESTRIAN THOROUGHFARE



Establish generous pathway system through the park

Ensure sufficient parking

Consider allocating disabled parking

Establish accessible pathways

Install directional signage

Ensure safe thoroughfare for school children

SITE AS A COMMUNITY DESTINATION



RESPECT SITE HISTORY



Consult with appropriate stakeholders

Protect significant trees

Celebrate Blue Gum Forest (likely original plant community)

Interpret and strengthen awareness about site history through public art or signage

Denistone East Bowling Club Government Housing

Scheme the "Homes in the sun"

RETURN SITE TO COMMUNITY GREEN SPACE



Establish new pathways into the park's facilities

Include equitable access to key facilities

Buffer parkland from traffic

Provide easily identified park entries

Provide new community meeting place

Provide passive and active open spaces with facilities for use by all including students of Denistone East Public School

Provide new playspace

Plant additional trees both feature and locally native to provide shade, buffer roads and increase general wellbeing

Provide informal lawn areas

Protect existing significant trees

Include native groundcovers, grasses and feature shrubs to enhance environment

KEY STRATEGIES







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KINGS PARK 1943



KINGS PARK 1961



In 1943 Kings Park site has already been cleared

Main roads were established

It appears that a small watercourse was joining a larger watercourse in southern part

KINGS PARK 1956



KINGS PARK 1970



Kings Park site remains green open space among new housing established under government housing scheme "The Homes in the Sun"

It is possible that trees in southern part of the park still exist today

It appears that the northern bowling green was established

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maps supplied by SESL

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KINGS PARK 1982



Denistone East Club house retained

KINGS PARK 2016

Denistone East Bowling Club ceased operations in 2012. The club building has been used for some community events since the closure. The site is currently used as an informal green space / dog park / thoroughfare .



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Assessment of existing site conditions

Generally built facilities found in Kings Park appear dated and tired and are uninviting for general public. The substantial exavations that were carried out in order to accommodate the two bowling greens present construction challenges.

The summary of conditiions are :

Challenges

- All facilities were built for the purpose of the Bowling Club not for general public
- Furniture is dated; approximately 30 + years old, uninspiring and uninviting
- Existing stair access from Kings Road is not complying with the relevant codes
- Fencing and handrails are are out dated, some falling apart
- Some sections of walls have deteriorated
- Site generally inhospitable and too hot / unprotected

Opportunities

- Re-build everything to fit new purpose
- Re-use existing walls where possible / repair where necessary
- Bury existing walls without demolition to reduce construction costs
- Provide new pathways (see circulation)
- Provide additional shade through broad canopy trees and adequate shelters
- Develop a suite of materials and furniture suitable for Kings Park
- Provide bike stands, water stations and rest areas suitable for all users



Existing walls at upper end of Kings Road and Salter Crescent will be buried under required new fill



Existing stairs leading from Kings Road will be rebuilt.



Existing water tank and associated infrastructure will be removed along with the building



Existing retaining wall along north end of the building will be re-used and re-surfaced



Existing walls at lower end of Salter Crescent are in reasonable condition and will be re-used



Club building will be demolished



Some existing fencing will require repair



There is a potential for the re-use of existing sandstone cladding

SITE ENGINEERING INVESTIGATIONS - SUMMARY

Preliminary environmental site assessment

Investigations were carried out by SESL Australia.

SUMMARY OF FINDINGS :

Fill materials of varying depths were identified in all areas of intrusive investigation. The identified fill varied in depth across the site, with fill observed to a maximum depth of 2.2 metres. Based on site observations, fill materials of unknown origin have been used to bench the naturally sloping site, to allow the development of level bowling greens. The fill material profiles were relatively consistent across the investigation area, consisting primarily of sandy loam topsoils, drainage sands and silty mottled clays.

A total of twelve primary soil samples were collected from surface soils and subsoils at the site, for the purpose of analysis for contaminants of potential concern. This investigation has determined historical and current land uses of the site have not impacted upon the contamination status of the site. All contaminants of potential concern identified for the site were observed to be within the acceptance criteria adopted for the site.

Geotechnical investigation of site

Investigations were carried out by D. Katauskas

SUMMARY OF FINDINGS :

The purpose of the investigations was to determine the nature of the subsurface soil and ground water conditions to enable an understanding of the geotechnical limits and opportunities site presents.

Available geological information indicates the regional geology to comprise Ashfield Shale of the Wianamatta Group.

The report details recommendations related to the re-use of site fill, specifies the geotechnical treatment of the foundation layers and its required bearing pressure for the proposed development in the park.

Assessment of existing infrastructure

Investigations were carried out by Cubitic Consulting

SUMMARY OF FINDINGS :

The report details condition of site's existing infrastructure including concrete surfaces, retaining walls and associated elements. The report concludes that there is no major structural problem with external structures. The retaining walls can be buried without being affected. The walls that are proposed for the re-use can be repaired to suit the proposed park development proposal.

Access and circulation / parking

Currently Kings Park is used as a thoroughfare. Some residents are using the site for informal dog walking and ball games.

Entry and Arrival

Challenges:

- No clear entry or arrival points to the park
- Limited wayfinding cues to orientate non locals •
- Site had private use •

Opportunities:

- Strenghten entry from Kings Park road accross the site to assist school children
- Create new entries at appropriate locations •
- Provide equitable access for less able, elderly and • people with prams
- Provide new entry at eastern end to connect tennis • courts area to the site
- Provide maintenance access for Council vehicles •

Wayfinding

Challenges:

• Poor connectivity across the site

Opportunities :

- Effective directional signage
- Provide new pathways sufficiently wide ensuring • comfort for all users
- Consider improving street pathways around perimeter ٠

Parking

Challenges:

- There is no parking along Kings Road (School zone)
- There is limited parking along Salter Crescent (one side • only)

Opportunities :

- Improve existing parking
- Consider allocating disabled parking
- Install bike racks to encourage use of bicycles



Poor visibility into site



Existing access stairs from Kings Road



Existing maintenance access at lower end of Salter Crescent



Existing pathway leading to tennis courts at eastern end There is parking on one side of Salter Crescent only



Currently there is no access though eastern retaining wall





Existing maintenance access at top end of Salter Crescent



Current access from Colvin Park

There is no parking along Kings Road

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Arboricultural assessment

The site contains almost no trees within its boundaries due to the nature of the past use. The most significant trees are on neighbouring properties and on nature strip

Challenges :

• Site is practically treeless

Opportunities :

- Introduction of new appropriate plant species
- A layer of feature groundcovers and native grasses to be added to select areas to provide interest, colour and texture and to support sustaninable environment
- Addiition of substantial shade trees



Moreton Bay Fig, Ficus macrophylla (T4) - the most significant tree on the south - western boundary, approximately 60 years old.



Western Australian Flowering Gum near tennis courts



Existing Flooded Gum, *Eucalyptus grandis* (T3) over the south - eastern boundary, this tree ranges from south east Queensland to wet sclerophyll forests of Central Coast and have most likely been planted in early 1950s. Moreton Bay Fig (T1) located behind the large Camphor laurel, *Cinnamomum camphora* (T2) - maybe over 100 years old.



Lemon Scented Gum, *Eucalyptus citriodora (T15)*, a potentially self seeding tree near the water tank - but can be retained.



A street view of Moreton Bay Fig (1)



Existing Photinia hedge prevents a clear sightline into the site and will be removed

Microclimate and environmental comfort

The open character of the site does not provide much environmental comfort. Existing trees around perimeter will however provide some valuable shading and shelter from winter winds.

Challenges :

- Currently site completely lacks shade
- Establishment of new plantings will require substantial new soil and landscape systems

Opportunities :

• Establish new landscape including trees for shade and shelters to provide cover in rain





Current dry state of bowling green





BEST PRACTICE DESIGN

Site layout New park infrastructure Play experience Landscape

Safety

LIVING COMMUNITY

Comfortable and equitable Local connections Equal access through park Something for everyone All weather shelter

integrated public spa

SUSTAINABLILITY

Re-use & re-cycle Water sensitive design Use of native species Minimise cut and fill Minimise costs



DESIGN PRINCIPLES

Kings Park Masterplan Report

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SUSTAINABILITY

Environmental sustainability was a major part of our design.

Topography of the site reflected its past use. From the outset we examined the optimal layout of the site to achieve a balance between accessibility, volume of imported fill required to achieve desired levels and associated costs.

Refer to the Figure 1. representing the design process.

Soft engineering is a preferred method to deal with on site stormwater. Vegetated swales using native grasses will slow down the stormwater runoff on site and off the site through the natural filtering and use of soakers gravel trenches in appropriate locations. This will also provide an added visual and environmental onterets and additional play opportunities such as use of bridges, swales, rock and feature native plants.

It is proposed that predominantly native plant species would be used throughout the project. The ecological diversity will be enhanced through the plant groupings, use of native trees and provision of habitat for insects, invertabrates and birds. Select feature plant species will also be used to add colour texture and cultural interest.

Refer to Appendix for suggested plant species. Plants were selected from Darwall Park species list and are consistent with Blue Gum High Forest species, the most likely original plant community on site.

Water conservation will be addressed through appropriate use of suitable species for each situation, through groupings in accordance with their water demand characteristics and sun / shade specifics.

Following a thorough analysis by our project team a number of existing site structures were identified for retention, re-use or repair. These included retaining wall at north west corner of the existing Club building, perimeter retaining walls and southern retaining wall. Some materials such as sandstone cladding on Club building was marked for storage and re use in the new design.



OPTION with fill volume maximised







Figure 1. Cut & Fill optimisation

LIVING COMMUNITY

Key elements of our design process included equal access and use opportunities for the broader community. Once equal access from Kings Road was established the upper area was formed into a generous open lawn area suitable for ball games and informal gatherings or community events. A greater level of detail was given to cater for a broader range of users including people with disabilities and their carers, seniors and families with small children. Despite the challenging existing topography accessible route was established from Kings Road through to central area down to the southern part. Importantly, a number of rest areas, landings and seats are proposed along the way, including a large sheltered community space.

The design provides for family recreation, so the central part of the site was selected for a play area - replacing existing club house building. This was done because

- Play area would be shaded by existing Moreton Bay Fig in the affternoons
- While occupying the most steep part of the site it will provide play challenges and unique experiences
- It allows for a good connection with winding pathway with accessible points
- It is located away from the road
- Maximises use of site
- This location works well with south-west boundary levels
- This layout can utilise existing retaining wall in north west corner of the Club house

A large community space is located off Salter Crescent in a comanding position overlooking the park. The space is sheltered with a solid structure providing all weather protection suitable for a meeting place for the community.

Lovely winding pathway will provide not only a connection between upper and lower parts of the park but a 'journey ' through.

The southern part of the park contains a multipurpose court and a smaller informal lawn area.



Figure 2. Preferred layout



Winding pathway will provide accessible connection and offer an interesting journey from the shelter to the lower part of park



Both natural and built shade are important to create comfortable environment



Sports court will provide for multiple games settings

BEST PRACTICE DESIGN

The following best practice design principles were applied :

SITE LAYOUT

- Allowing for appropriate and clear entry zones
- Accessible pathways with sufficient hard surfaces around • rest points
- Allowing for amphitheater type of seating ٠
- Allowing for vantage point / lookout / community meeting • place
- Allowing for both active and passive zones
- Accommodating the whole community including children, families, young people as well as older people and less mobile

PLAY EXPERIENCE

- Creating flexible, imaginative and unique playspace •
- Inclusion of range of dynamic play options to balance, • climb, rock, slide, swing or spin
- Provision of multiple play opportunities for all abilities and • ages
- Sense of distinction between ages and passive and active • play
- Inclusion of both natural and built shade near activities
- Provision of seating both incidental and formal
- Inclusion of accessible surfacing to all abilities equipment
- Inclusion of site specific public art or play elements

LANDSCAPE

- Inclusion of smaller turf areas to provide for informal play • opportunities
- Inclusion of locally native species
- Use of natural materials such as stone and timber
- Inclusion of large canopy shade trees
- inclusion of variety of textures, seasons and colours in • landscape

SAFETY

- Ensuring clear sight lines for passive surveillance
- Provision of informal boundaries or sense of enclosure
- Inclusion of new lighting

NEW PARK INFRASTRUCTURE

- Inclusion of a gathering / meeting point with all weather • shade
- Provision of all type of seating
- Provision of bike racks, water stations, bins etc



Amphitheater seating at the stair access from Kings Road will provide outdoor community gathering space or simply spectator seating



Sandstone is a suitable natural material to build the steps and retaining walls



Challenging and dynamic play will be included for older children





Site specific play elements could be added to enlighten play experience



Including native trees will ensure environmental sustainability



A shelter to accommodate for a larger group of people will be included



Small bridges can provide additional interest





Both incidental and formal types of seating are important



Younger children will enjoy traditional play elements such as swings, small slide and spinning or rotating elements

Provision of informal spaces allowing for variety of community activities







KINGS ROAD

LANDSCAPE MASTERPLAN

SK-01

ISSUE

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DRAWING NO.

EXTENT OF EXISTING CLUB BUILDING

DATE OCT 2018

	WINDING PATHWAY WILL PROVIDE ACCESSIBLE CONNECTION AND OFFER AN INTERESTING JOURNEY FROM THE SHELTER TO THE LOWER PART OF THE PARK. A NUMBER OF REST SPOTS WILL BE PROVIDED ALONG THE WAY
	EXISTING RETAINING WALL WILL BE RETAINED. NEW PLANTINGS WILL BE ESTABLISHED.
	MULTIPURPOSE COURT WILL PROVIDE FOR MULTIPLE GAMES SETTINGS
	MAINTENANCE ACCESS WITH GATE
	ADDITIONAL INFORMAL LAWN AREA ALLOWING FOR LESS STRUCTURED GROUP ACTIVITIES OR SIMPLY A 'KICK ABOUT'.
	A NEW CONNECTION WILL BE CREATED INTO EXISTING TENNIS COURTS AREA.
	TREES ON SOUTH-WEST BOUNDARY WILL PROVIDE A BUFFER TO ADJOINING RESIDENTIAL PROPERTIES.
The second second	SHELTERED JUNIOR PLAY MAY INCLUDE SWINGING, ROTATING AND SLIDING PLAY ELEMENTS WITH ROCK ACCESS TO UPPER PLAY AREA.



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CENTRAL CORRIDOR WILL BE PLANTED WITH NATIVE TREES, GROUNDCOVERS AND NATIVE GRASSES.





VIEW 1 ACROSS BALL GAME AREA TOWARDS MAIN STAIR LEADING TO KINGS ROAD



VIEW 2 FROM THE SHELTER SHOWING THE PATHWAY WINDING THROUGH THE GRASSLANDS DOWN TO THE MULTI COURT AREA



VIEW 3 OF UPPER PLAY AREA CAPTURING THE SHELTER IN THE BACKGROUND

ISSUE

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KEY MASTERPLAN VIEWS

DRAWING NO. SK-02

OCT 2018

DATE





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NATIVE PARKLAND TREES

FEATURE TREES





Lemon Scented Gum





Acer freemanii 'Autumn Blaze Maple 'Autumn Blaze'

Quercus palustris Pin Oak

PROPOSED PLANT SCHEDULE

Sydney Blue Gum

Botanical Name	Common Name	Size	Height at planting			
NATIVE PARKLAND TREES up to 20 m height						
Angophora costata	Sydney Red Gum	150 L	2.5 m			
Eucalyptus citriodora	Lemon Scented Gum	150 L	2 .5m			
Eucalyptus saligna	Sydney Blue Gum	150 L	2.5 m			
FEATURE TREES SMALL /MEDIUM up to 12 m height						
Acer freemanii 'Autumn Blaze'	Maple Autumn Blaze	200L	2.5m			
Corymbia ficifolia	Flowering Gum	100L	1m			
Elaeocarpus reticulatus	Blueberry Ash	100L	1.8m			
Quercus palustris	Pin Oak	100L	2.5m			
Tristaniopsis laurina 'Luscious'	Water Gum	75L	1.8m			
Melaleuca styphelioides	Prickly-leaved Paperbark	45L	1.8m			
Callistemon salignus	Willow Bottlebrush	300mm	1.2m			
Cyathea cooperi	Coin Spot Fern	45L	1m			
Backhousia myrtifolia	Grey Myrtle	300mm	1.2m			
ORNAMENTAL SHRUBS/ FEATURE PLA	ANTS (up to 3 m high)					
Acmena smithii	Lillypilly	300mm	1.2 m			
Alocasia brisbaniensis	Elephant Ears	200mm	0.6m			
Asplenium australasicum	Birds Nest Fern	200mm	0.3m			
Anigozanthos flavidus 'Big Red'	Kangaroo Paw	150mm	0.3m			
Callistemon 'Green John'	Bottlebrush 'Green John'	200mm	0.25 m			
Callistemon citrinus	Bottlebrush	200mm	0.4m			
Doryanthes excelsa	Gymea Lily	300 mm	0.6 m			
Kniphophia spp.	Red Hot Poker	150mm	0.3 m			
Loropetalum chinense 'Burgundy'	Chinese Fringe Flower	200 mm	0.3 m			
Philodendron Xanadu	Dwarf Philodendron	200 mm	0.5m			
Macrozamia communis	Burrawang	300mm	0.6m			
Raphiolepis indica 'Snow Maiden'	Indian Hawthorn 'Snow Maiden'	200mm	0.3 m			
Santolina chamaecyparissus 'Nana'	Curry Plant	150mm	0.2m			
Westringia fruticosa 'Mundi'	Dwarf Coastal Rosemary	200 mm	0.3 m			
GROUNDCOVERS / GRASSES		4				
Hardenbergia violacea	False Sarsaparilla	150mm	0.2m			
Microlaena stipoides	Weeping Grass	100 mm	0.2 m			
Dianella caerulea	Blue Flax Lily	100 mm	0.2 m			
Juncus usitatus	Common Rush	100mm	0.2 m			
Lomandra Tanika	Dwarf Lomandra	100mm	0.3 m			
Lomandra Hystrix	Green Mat Rush	100mm	0.3m			
Tulbaghia violacea 'Silver Lace'	Silver Wild Garlick	150mm	0.2 m			
Viola hederacea	Natiev Violet	100mm	0.1 m			
Zieria smithii	Sandfly Zieria	150 mm	0.2 m			



Macrozamia communis Burrawang

Doryanthes excelsa Gymea Lily

ORNAMENTAL SHRUBS



Santolina chamaecyparissus 'Nana' Curry Plant

Dianella caerullea Blue Flax Lilly



Westringia fruticosa 'Mundi Dwarf Coastal Rosemary

NATIVE GRASSES AND GROUNDCOVERS

Microlaena stipoides Weeping Grass



Asplenium australasicum

Birds Nest Fern





Lomandra Tanika Dwarf Lomandra





DRAWING NO. SK-03

Juncus usitatus

Common Rush

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Chinese Loropetalum





Tristaniopsis laurina luscious , Water Gum





Anigozanthos flavidus Kangaroo Paw



Loropetalum chinense 'Burgundy'



Philodendron xanadu Philodendron

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Hardenbergia violacea False Sarsaparila

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