

Prepared by

GALLAGHERSTUDIO

in collaboration with



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Introduction

Project Overview

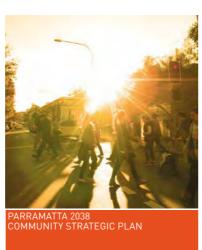






Parramatta Development Control Plan 2011

Parramatta DCP and LEP, 2011



Parramatta 2038 Community Strategic Plan, 2013



Community Land Plan of Management, 2014





Report to
Parramatta Council

Cately & Lowe Phy Ltd Archaeology and Heritage Consultant S1 Revus Street, Leichhardt NSW 2040 ABr. 22 101 370 129 (02) 9549 1130



Archaeological Assessment & S139(4) Exception Methodology Parramatta War Memorial, Prince Alfred Square, Church Street, Parramatta, 2014



Prepared for Parramatta City Cou February 2 Lance Syme and Natalie S





Parramatta River Darug Cultural Values Mapping, 2015



Parramatta City River Strategy Design and Activation Plan, 2015

Gallagher Studio and Casey & Lowe have been commissioned to prepare a landscape master plan for Prince Alfred Square. The objectives of the project as listed in the briefing document is to:

- 1. Provide an achievable strategic plan for the future enhancement and development of Prince Alfred Square;
- 2. Identify constraints, issues and opportunities;
- 3. Improve amenities to optimise the experiences and enjoyment of visitors;
- 4. Utilise sensitive and sustainable design principles to promote environmental and cultural/ historical values;
- 5. Provide a prioritised implementation strategy (including cost estimates)
- 6. Ensure consistency with the relevant adopted Plans of Management, Council's Community Strategic Plan (Parramatta 2038) and other relevant planning instruments.

This report summarises the analysis work, principles, master plan options and draft master plan for the Square. Options have been presented to a PCG meeting held on the 23rd February 2016 and the draft master plan presented to a PCG meeting on the 2nd May 2016.

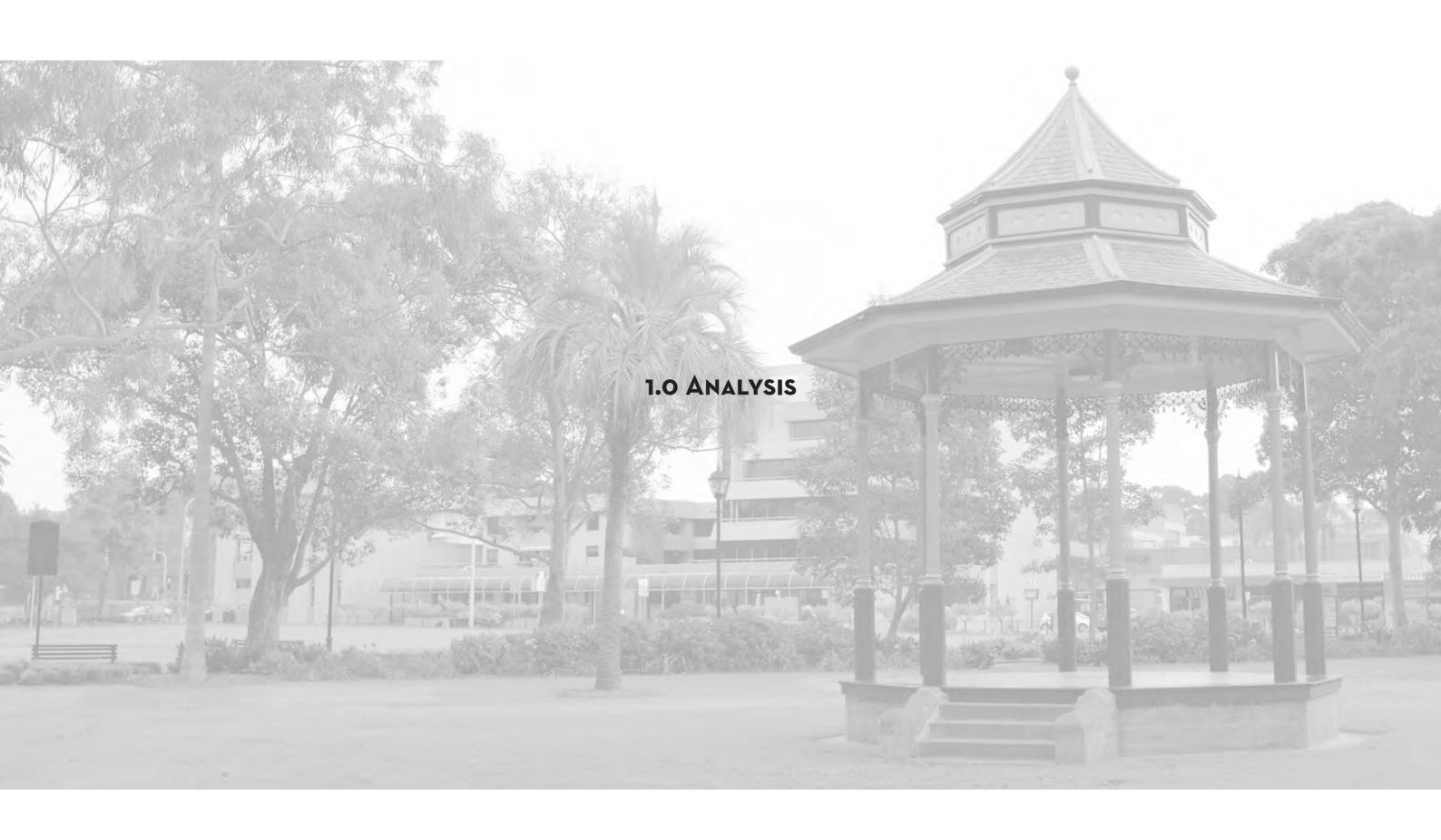
A range of documents have been reviewed; these include;

- Parramatta Open Space Plan, 2003
- Parramatta DCP and LEP, 2011
- Parramatta 2038 Community Strategic Plan, 2013
- · Community Land Plan of Management, 2014
- Archaeological Assessment & S139(4) Exception Methodology:
 Parramatta War Memorial, Prince Alfred Square, Church Street, Parramatta, 2014
- Parramatta River Darug Cultural Values Mapping, 2015
- Parramatta City River Strategy Design and Activation Plan, 2015

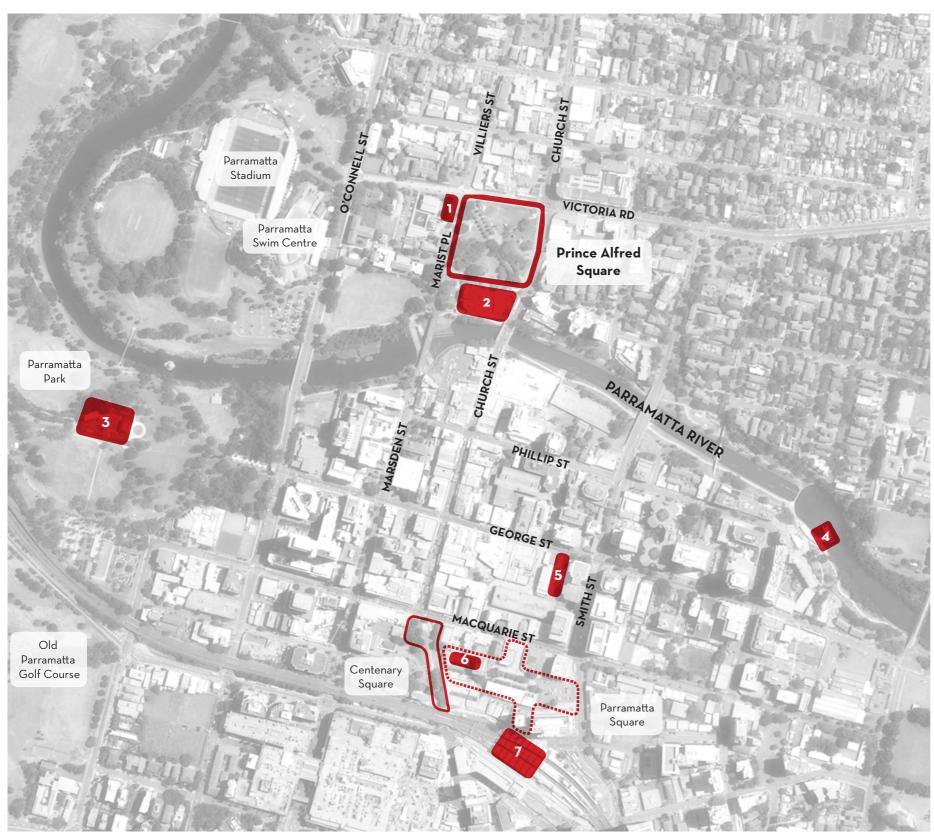
The project team undertook the following meetings during development of the plan including;

- Inception Meeting; Tuesday 19th January
- City of Parramatta Events staff: Tuesday 2nd February
- City of Parramatta Arborists & Maintenance staff: On-Site Friday 5th February
- City of Parramatta Interpretation staff: Tuesday 2nd February
- PCG meetings: 23rd February 2016 and 2nd May 2016
- Meeting with NSW Heritage 2nd May 2016





Location & Significance



Prince Alfred Square is located to the north of Parramatta River and the Parramatta CBD. The site is approximately 1.5ha, and is bound by Victoria Road to the north, Church Street to the east, Market St to the south and Marist Place to the west.

Prince Alfred Square is listed on the LEP as an item of state significance (item 22), and has been identified to have 'high archaeological research potential', due to the Square being the location of Parramatta's first and second gaol and Australia's first female factory. There are several items of heritage interest located in the park such as the War Memorial, the Bandstand, the Gollan Clock, Anderson Fountain and a horse trough.

The Riverside Theatre is located to the south of the Square on Market Street. St Patricks Cathedral is located on the Square's north western boundary on Marist Street, opposite Our Lady of Mercy College on Victoria Road.

KEY:

- 1. St Patricks Cathedral
- 2. Riverside Theatre
- 3. Old Government House
- 4. Parramatta Ferry Wharf
- 5. Roxy Theatre
- 6. Parramatta Town Hall
- 7. Parramatta Train Station



Existing Public Space



Proposed Public Space



Local Landmarks





Future Development - Land Use



Prince Alfred Square is located in the northern precinct of Parramatta CBD. The Parramatta LEP 2011 indicates B4 Mixed Use in the immediate vicinity of the square, with large portions of high density amd medium residential uses (R3, R4) proposed in neighbourhoods to the east.

A light rail network is proposed for the Parramatta CBD. While the route is to be determined, preliminary information indicates that the route may link to Parramatta North on Church Street, directly adjacent to the square.

KEY:

Potential Light Rail Route
 Existing Public Space

Proposed Public Space

Low Density Residential

Medium Density Residential

High Density Residential

Mixed Use

Offices / Employment Uses

Retail Strip

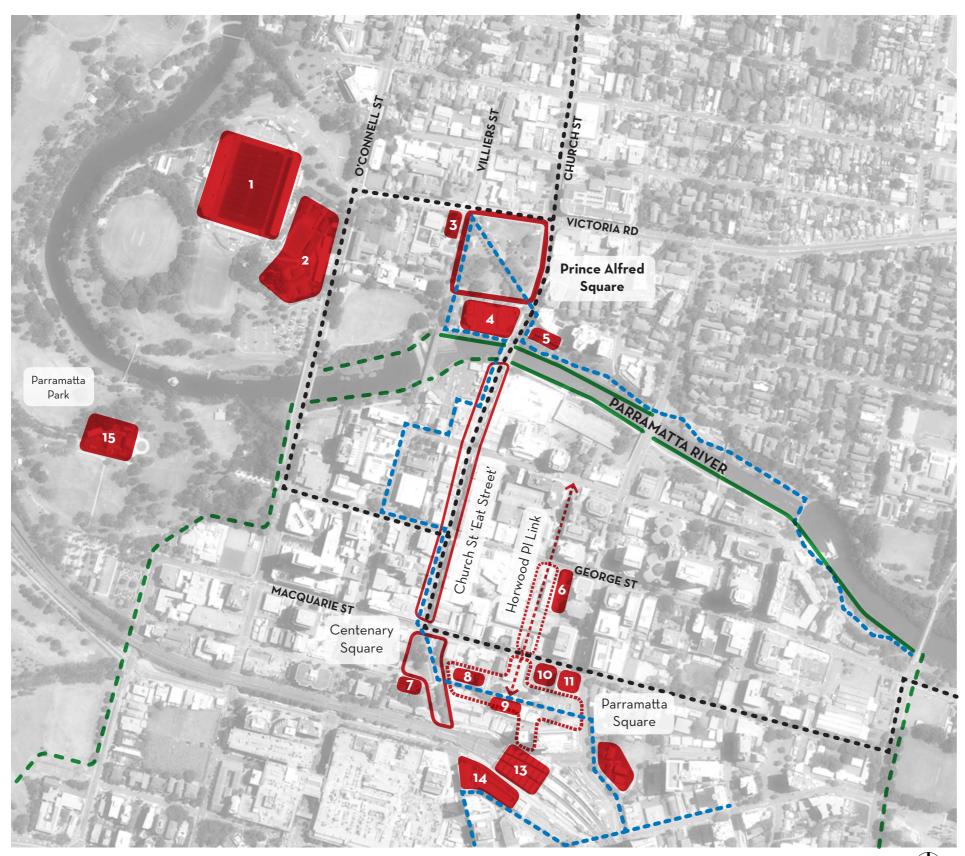
Entertainment, Cultural, Sporting and Recreational Uses

State and Federal Government Uses

Educational Uses



Connections & Cultural Facilities



Prince Alfred Square is located on the route of the Parramatta Art Walk, which links major cultural attractions and institutions in the Parramatta CBD. The square is within 500 metres walking distance from Parramatta Stadium and Parramatta Swim Centre.

Cultural organisations such as the Sydney Festival often hold events in the Riverside Theatre and in the Square. Market Street has been used as an outdoor market and event space.

KEY:

- 1. Parramatta Stadium
- 2. Parramatta Swim Centre
- 3. St Patricks Cathedral
- 4. Riverside Theatre
- 5. Parramatta Heritage Centre
- 6. Roxy Theatre
- 7. St John's Anglican Cathedral Church
- 8. Parramatta Town Hall
- 9. Parramatta Library (Current)
- 10. Planned Community Centre, Library & Civic Building
- 11. Planned University/Educational Tower
- 12. NSW Lancers Memorial Museum
- 13. Parramatta Train Station
- 14. Event Cinemas
- 15. Old Government House

Parramatta River Foreshore Link (Existing)

Parramatta River Foreshore Link (Desired)

Parramatta Art Walk Route Potential Light Rail Route

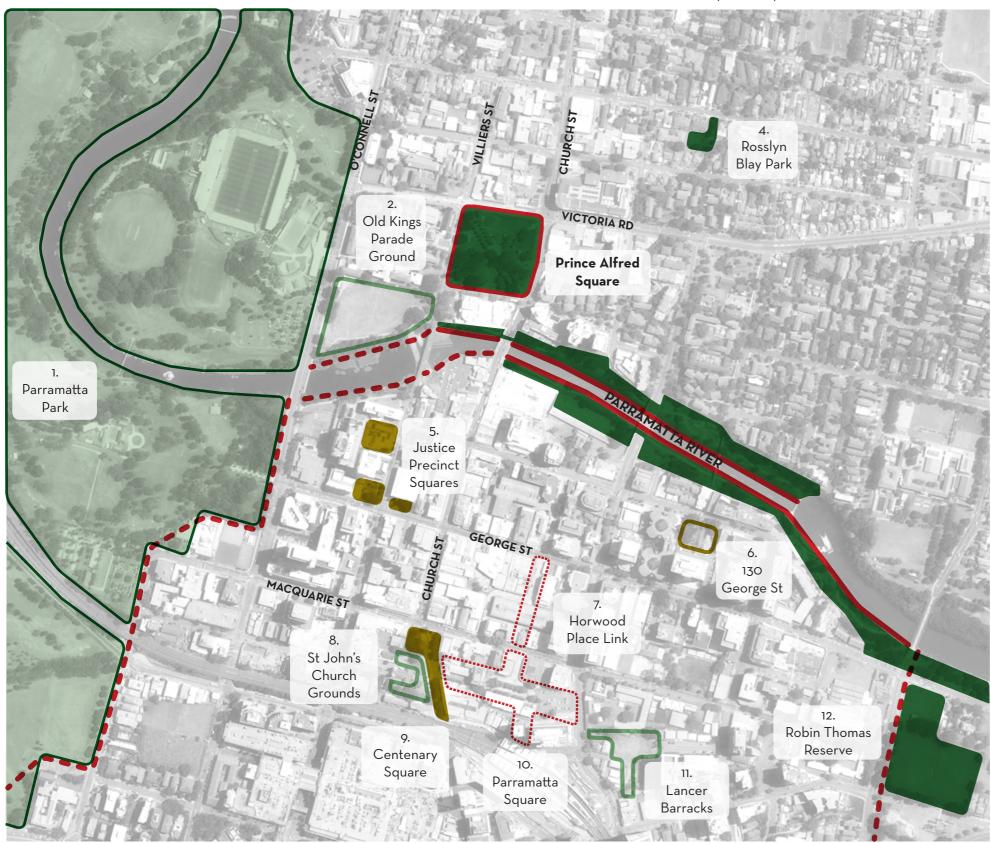
Existing Public Space

Proposed Public Space

Public Facilities



Public Open Space



Prince Alfred Square is the third largest consolidated park in the CBD. Whilst Parramatta Park is under 1km away, it is a privately owned destination parkland, that caters for regional visitors as well as local residents.

The Square provides green space to meet the future open space demands from the projected incresaed population that will be living and working in North Parramatta.

(Open spaces are ranked according to size)

PARK / RESERVE	TYPE OF OPEN SPACE	AREA
1. Parramatta Park	Public Green Space	85ha
12. Robin Thomas Reserve	Public Green Space	2.3ha
2. Old Kings Parade Ground	Private Green Space	1.65ha
3. Prince Alfred Square	Public Green Space	1.6ha
5. Justice Precinct Squares	Public Civic Space	1.Oha
11. Lancer Barracks	Private Green Space	0.7ha
9. Centenary Square	Public Civic Space	0.5ha
8. St John's Church Ground	Private Green Space	0.45ha
7. Horwood Pl Link	Proposed Public Civic Link	0.4ha
6. 130 George St	Private Civic Space	0.3ha
4. Rosslyn Blay Park	Public Green Space	0.15ha

KEY:

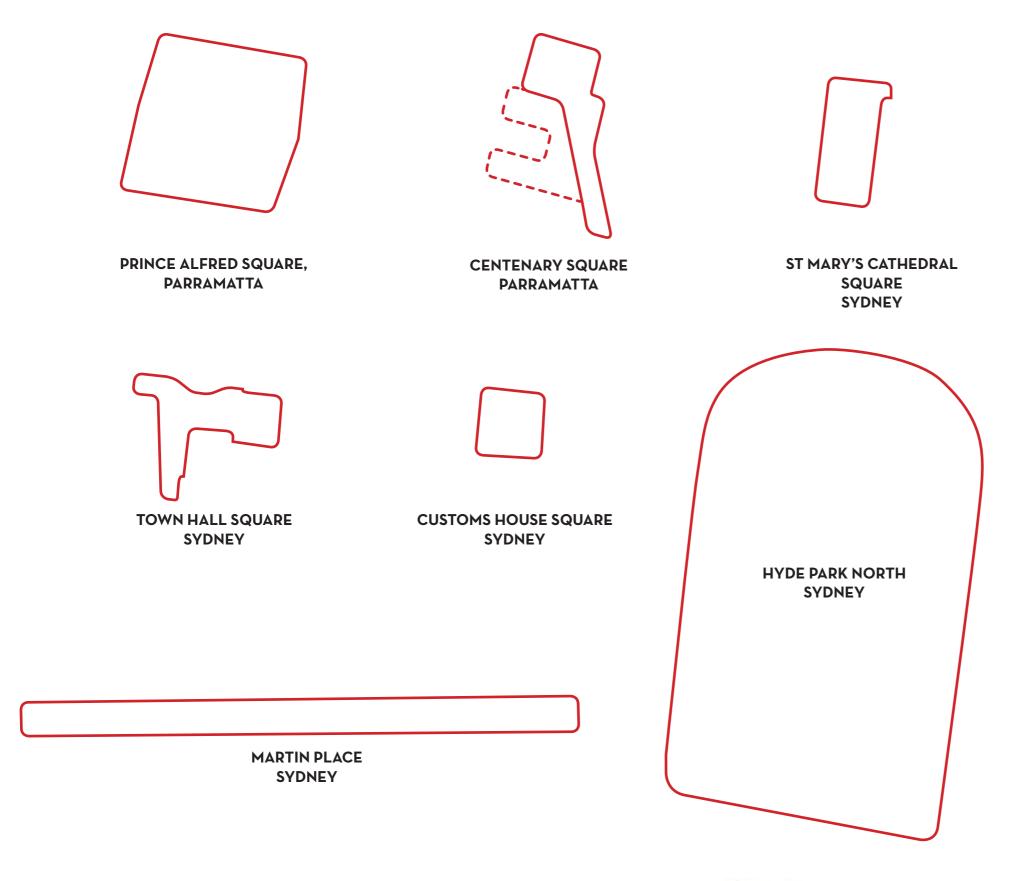








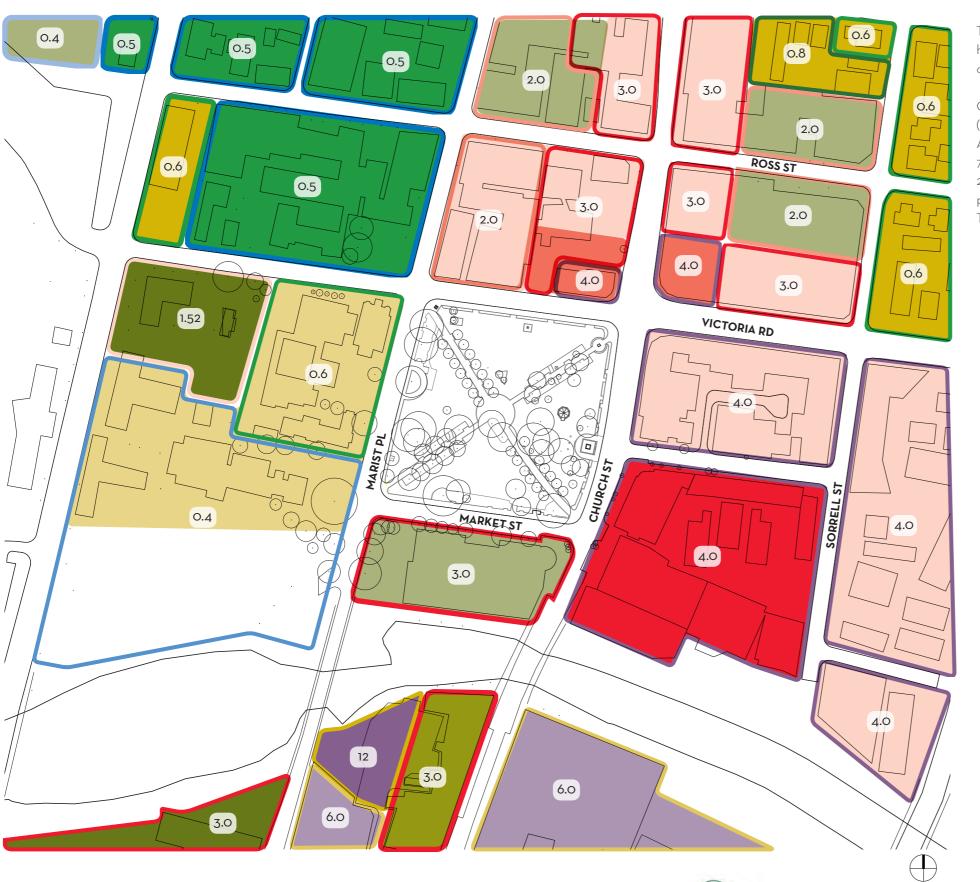
ContextScale Comparison - Public Open Space



Prince Alfred Square is approximately one quarter the size of the northern section of Sydney's Hyde Park, and is approximately three times the size of Parramatta's Centenary Square.



Future Built Form



The Parramatta LEP 2011 nominates an increase to density and permissible heights for future built form on the northern, eastern and southern boundaries of the Square.

On the square's northern boundary, future heights controls are 34 metres (approximately 11 storeys) on the Victoria Road / Church Street intersection.

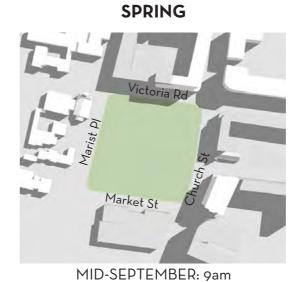
Adjacent lots have a permissible building height of 24 metres (approximately 7 storeys). To the east on Church Street, permissible heights are between 24 metres (on the northern block) and 36 metres (for the southern block). A permissible future height of 15 metres is nominated on the Riverside theatre site. The Riverside Theatre is under review and current controls may change.



Sun and Shade Diagrams

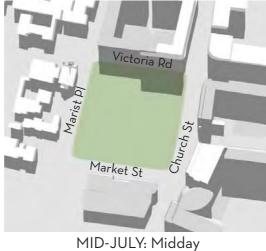
SUMMER MID-DECEMBER: 9am Victoria Rd

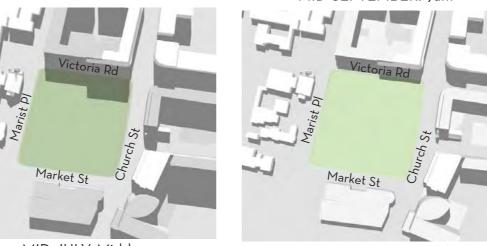




The solar access to the square has been explored, based on current LEP development controls and built form. The square receives sunlight to all areas for 9 months of the year. There would be some minor overshadowing to northern sections of the square from buildings on Victoria Road during winter mornings, however by midday this shadow is significantly reduced and the overshadowing from adjacent buildings is minimal.

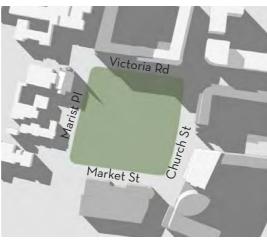


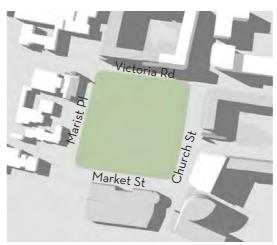












MID-SEPTEMBER: 3pm

MID-DECEMBER: 3pm

MID-JULY: 3pm

Parramatta City River Strategy



1. KINGS SCHOOL

The Kings School precinct should be adaptively re-used to provide both a multi-purpose ground and public recreational space for the Parramatta community. Defining this new space would be multi-functional terraces, a primary wetland and an accessible network of footpaths that can link the precinct to the local stadium, Parramatta Park and river edge.

3. RIVERSIDE THEATRE

A new Riverside Theatres would be proposed that fronts onto the river corridor providing a variety of active retail and cafe uses. A key initiative along the river corridor would be a Water Terrace that supports a range of outdoor cultural events.

5. PRINCE ALFRED SQUARE

Prince Alfred Square's current recreational function and historic character would be retained. A key initiative introduced to enhance the park's relationship with the Riverside Theatre would be the transformation of Market Street as a pedestrian plaza and shared space.

The Parramatta City River Strategy proposes that Prince Alfred Square retain its recreational function and character. The strategy recommends connectivity between the Riverfront and Prince Alfred Square be explored and that Market Square be utilised as a share zone for markets and events. Excerpts from the River Strategy are listed above.



Pre 1790's: Aboriginal Community



It is not currently known whether the site of Prince Alfred Square was used by the Darug people, however we do know that the surrounding landscape of Parramatta had a high level of activity.

The diagram below, an excerpt from the Parramatta River Darug Cultural Values Mapping Parramatta document, shows the significance of the surrounding landscape to the local Darug community.

Whilst the site of Prince Alfred Square may not have been directly used by the Darug people, the plantings of gum trees may be of symbolic significance, representing the idea of country and a connection to the natural landscape.

Pre 1790's

1790 to 1820's

1950's onward



Parramatta River Darug Cultural Values Mapping Parramatta, Parramatta City Council LGA, NSW, Cultural Values Mapping. Prepared for Parramatta City Council by Kayandel Archaeological Services, Feb 2015.



1790's to 1830's: European Settlement, Gaols and the First Female Factory



'A view of part of Parramatta Port Jackson', c1809

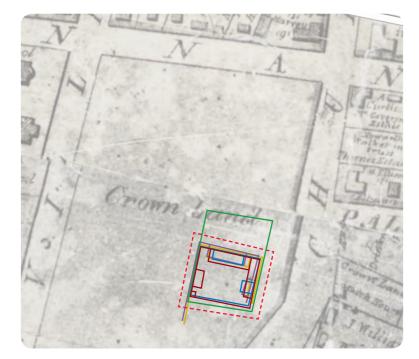


Diagram above based on a overlay compiled by Casy & Lowe on 24th Feb 2016. Estimated uncertainty is +-4m. Base Map used is "Plan of the Town of Parramatta, Meadows Brownrigg, 1844" SL: M4 811.1301/1844/1



Larger view of the Gaol building 'A view of part of Parramatta Port Jackson', c1809



'A View of Parramatta', 1819, by Joseph Lycett

The following text provides a summary of key events in the evolution of the square.

• The site is reserved for a Gaol at Parramatta (First Gaol).

• The first Gaol on the site is erected, constructed by convicts in timber with a thatched roof.

 The timber Gaol is 'willfully and maliciously' destroyed, burning down in a fire in December.

• A second Gaol is ordered to be built by Govenor King, this time from more durable materials.

• The second Gaol is completed, a two-storey structure made from local sandstone.

• Australia's first Female Factory openson the second storey of the Gaol building.

• The Female Factory is moved to a new site due to the deteriorating condition of the building.

1830 • Part of the Gaol's surrounding sandstone stone wall collapses.

• The decision is made to build a new Gaol structure at a new site in North Parramatta.

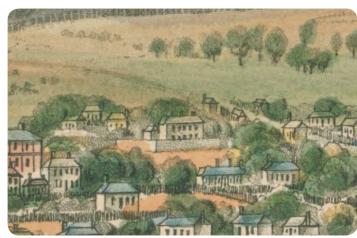
• Surveyor General Mitchell confirms the site will be "reserved for Government and other public purposes"

1790 to 1820's

1830's to 1900

1900's to 1940's

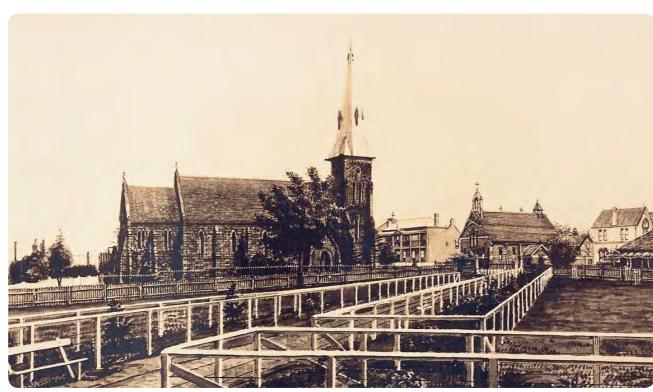
1950's onwards



Larger view , with the Gaol and surrounding wall clearly visible. 'A View of Parramatta', 1819, by Joseph Lycett

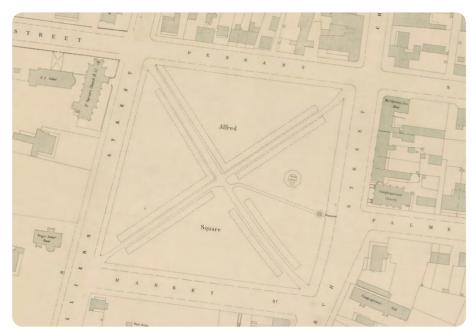


1830's to 1890's: The Gaol Green becomes Alfred Square



Painting of the view of St Patricks Church from Prince Alfred Sq. c1885. The picket fencing, garden beds and a Moreton Bay Fig are visible in the north-western corner.

http://www.puginfoundation.org/parramatta_gallery/?item=540



1895 Map of Parramatta, Sheet 33, 34, 39 & 40.

The following text provides a summary of key events in the evolution of the square.

• Govenor Bourke declares the site should be given to the townspeople as a reserve.

1840's • The old stone Gaol building is demolished and the site is levelled

• The site becomes commonly referred to as "Gaol Green"

• A fence is erected around the perimeter, and games such as cricket are played.

• Public complaints are recorded regarding the dumping of rubbish on the site.

1858 • St Patricks Church is completed on the corner of Victoria Rd and Marist Pl

• The green is officially named "Alfred Square" to comemmorate Prince Alfred's visit to Australia.

• The site is planted with its first trees (likely Moreton Bay Figs) by councillors and children.

• St Peter's Church is erected on the corner of Church & Palmer Streets.

1874 • Council is gazetted as trustees of the reserve (the site is Crown Land)

1870's • Parramatta Cricket Club leases the park and plants more trees (also likely to be Moreton Bay Figs), also surrounding the park with a picket fence.

• 'Fullers Map of Parramatta' depicts diagonal pathways and trees around the periphery.

• The Anderson Fountain moves into Alfred Square from Centenary Square

 Maps and imagery depict Moreton Bay Figs, boundary fences, and cross axial gardens and paths. Maps also depict a smaller path leading from the Anderson Fountain towards the centre of the Square.

• The Bandstand is constructed and opens on the 12th Jan, 1891.



Photograph of St Patricks Church (spire under construction) and the north-west corner of Prince Alfred Square, c1880. The boundary fence is visible, however no trees are yet to be planted.

State Library: Isp00248



View of the Bandstand and the Anderson Fountain (where the War Memorial now stands) c1900-1910's



1830's to 1900's

The following diagrams summarise the key elements evident from each era.





1900's to 1950's: Cultural Tree Plantings

The following text provides a summary of key events in the evolution of the square.



View of the Bandstand with the young Canary Island Date palms along the cross axis visible. c193'0's

- Alfred Square is dedicated and surveyed for public recreation (14th Jan 1905)
- Our Lady of Mercy college opens on the corner of Victoria Rd and Villiers St.
- A trophy gun from WWII is placed on the north-western corner of the park.
 - The Anderson Fountain is moved to the north-eastern corner
 - Foundation stone for the War Memorial is laid at head of Palmer St on 25 Nov 1922.
- The War Memorial is unveiled by the Govenor General, Lord Foster in May 1923. It is likely that Poplar trees are planted around the new War Memorial at this time.
- 1930's Canary Island Date Palms are planted on the north-west to south-eastern cross axis.
 - The Bills Horse Trough is placed on Victoria Rd around this time.
- The founder of Rotary International, Paul Harris, plants an Illawarra Flame tree in the Square on 10th April 1935 to commemmorate his visit to Australia.
- One of the Bunya Bunya Pines at the South-western entrance to the square (likely one of the first plantings on the site) is blown down in a storm in Jan 1949)
 - A disused water fountain is removed from the south-eastern corner of the Square.
- Additional playground equipment is purchased for the park at the public's request.

1900's to 1940's



1943 Aerial Imagery (Six Viewer)



Aerial view of Parramatta, 1930's, looking south-west. http://www.parramattamaristobu.org.au/index.php/history/staff/2-bricks-mortar/detail/340-1938-aerial-view-of-parramatta-including-prince-alfred-park-parramatta-marist-kings-school html?tmpl=component



Aerial view of Parramatta, c1949-1954, looking south.





1950's to today: An Appreciation of the Australian Landscape



War Memorial with the Bandstand in the background, c1980

The following text provides a summary of key events in the evolution of the square.

• The Anderson Fountain is again moved to the north-western corner of the Square.

- The removal of some Moreton Bay Figs is necessetated to install the new
- The trophy gun is also removed from the north-eastern corner of the Square
- The Gollan Clock Tower is installed to commemmorate G.C. Gollan.

- A new entrance to the Square is installed on Market St, at the request of the public.
- The Parramatta Children's Library is constructed in the southern quadrant
- Poplar Trees are removed from the surrounds of the War Memorial due to 1958

• Lemon Scented Gums are planted, as a reflection of the Australian landscape.

• Power is installed within the Bandstand, to allow playing of music by 1959 community groups.

1960's • The Church St frontage is improved - stone kerbing, seating and removal of rose bushes.

• The old Children's Library building is reopened as an information bureau.

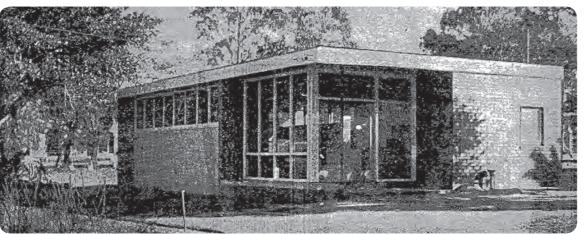
• Buildings along Market St are demolished to make way for the new Riverside Theatre.

1990's • Upgrades to the park include new brick paving, seating, picnic tables and the removal of the old Children's Library / information bureau building,

1950's onwards



Aerial Image of Prince Alfred Square, 1978



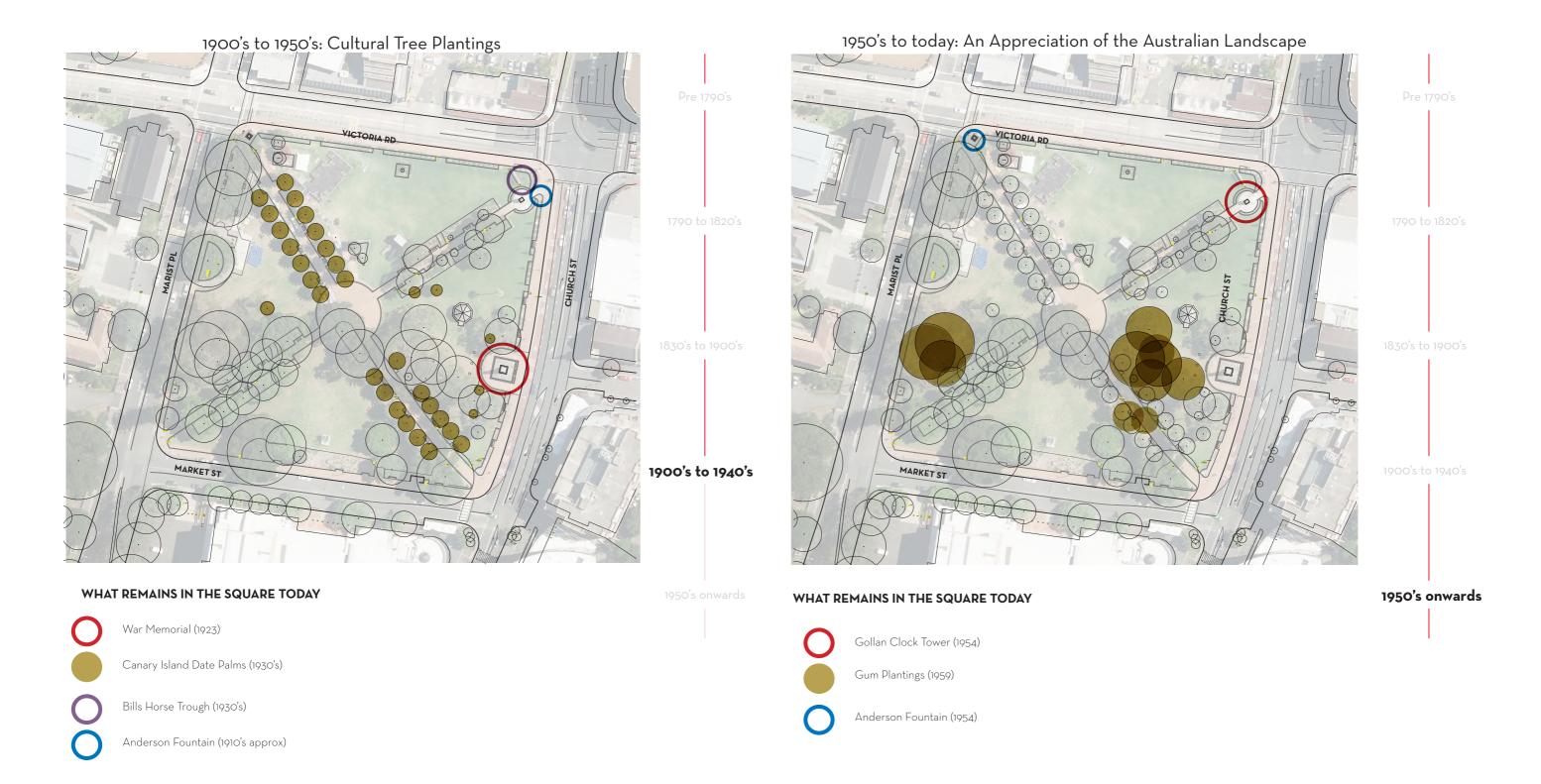
Parramatta Childrens Library, as shown in the Daily Mirror newspaper on 11th Nov, 1958



An aerial view of Prince Alfred Square, looking west. 'Aerial view of Parramatta'. late 1950's



The following diagrams summarise the key elements evident from each era.





Tree plantings

The evolution of planting in the square mirrors the historical trends in street tree planting in New South Wales. Listed below are key events in the evolution of Prince Alfred Square compared to the chronology of street tree eras in New South Wales as prepared by Professor Helen Armstrong.

CHRONOLOGY OF STREET TREE ERAS & THE EXTENT OF SPECIES USED IN NSW CHRONOLOGY OF TREE PLANTING IN PRINCE ALFRED SQUARE ERA PERIOD AVENUE/STREET TREES PERIOD OF SPECIES PRIVATE AVENUES Trees outside



Diagram from 'Street Trees in NSW, Guidelines for Conservation and Management', 1990

(Source: H. Armstrong, 1986)



Summary of phases & items

The key historical eras and elements are listed below;

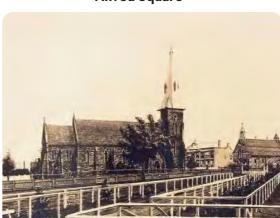
1790's to 1820's

European Settlement, Gaols and the First Female Factory



1830's - 1890's

The 'Gaol Green' becomes 'Alfred Square'



1900's - 1940's

Cultural plantings reinforce the Victorian Era design



1950's - Onwards

An appreciation of the Australian Landscape



Current

Prince Alfred Square



RETAIN

RETAIN





RETAIN







RETAIN









ARCHAEOLOGY



STREET ALIGNMENTS



CROSS-AXIAL DESIGN



SIGNIFICANT TREES

RETAIN



THE BANDSTAND, WAR



ANDERSON FOUNTAIN &

REVIEW LOCATION





Themes

There are opportunities to interpret the historical significance of the events that have occurred in Prince Alfred Square. Interpretation themes could address the significance of the Square as the location for the first female factory, symbolic of early female emancipation and employment in the colony. This could be embodied through referencing the weaving materials (flax) and products through the design of planting, lighting, paving and furniture. Alternatively the focus of key individuals such as Anderson and George and Bill Annis was on availability of fresh water. This could be interpreted explicitly (through restoration of the drinking fountains) and symbolically (through planting proposals).









GEORGE MEALMAKER Scottish Weaver











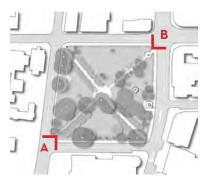
GEORGE & ANNIS BILLS

Animal Activists



ANDERSON FOUNTAIN





Current conditions: Square Structure Views & Entrances

An analysis of views and visual landmarks from surrounding streets was undertaken. The cross axial square structure has defined key entrances at street corners. These entrances are or have been historically framed by trees or columns. Significant heritage buildings surrounding the square contribute to the open space character. A series of observations and recommendations have been included in the following text.

A: Views framed by the Bunya Pine and the sandstone fence posts to the axial pathways



Heritage plans and photographs indicate that this view looking north east was framed by two bunya pines.

B: Views to the Gollan Clock and Saint Patrick's Cathedral



The view along the axial path looking south west is aligned to the Gollan Clock. Saint Patrick's church tower terminates the Victoria Road view.

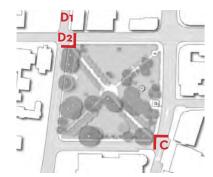
Recommendation:

• Reinstate Bunya Pine to the eastern entrance to signify axial pathway & entrance;

Recommendation:

• Reduce visual clutter at square entry (signage, poles, service boxes)





Current conditions: Square Structure Views & Entrances

C: Views framed by the Fig tree to the axial pathways and to the War Memorial



The existing large fig frames the southern edge of the axial pathway. The war memorial, opposite the church tower is a visual landmark from Church Street.

Recommendation:

- Retain figs to signify axial pathway & entrance;
- Maintain gums framing views to the War Memorial
- Design new planting to maintain street views to the War Memorial

D: Views to Saint Patrick's Cathedral, Fig trees and the axial pathways





The western entrance to the park, like the Church Street entrance is framed by a large fig tree on the southern boundary.

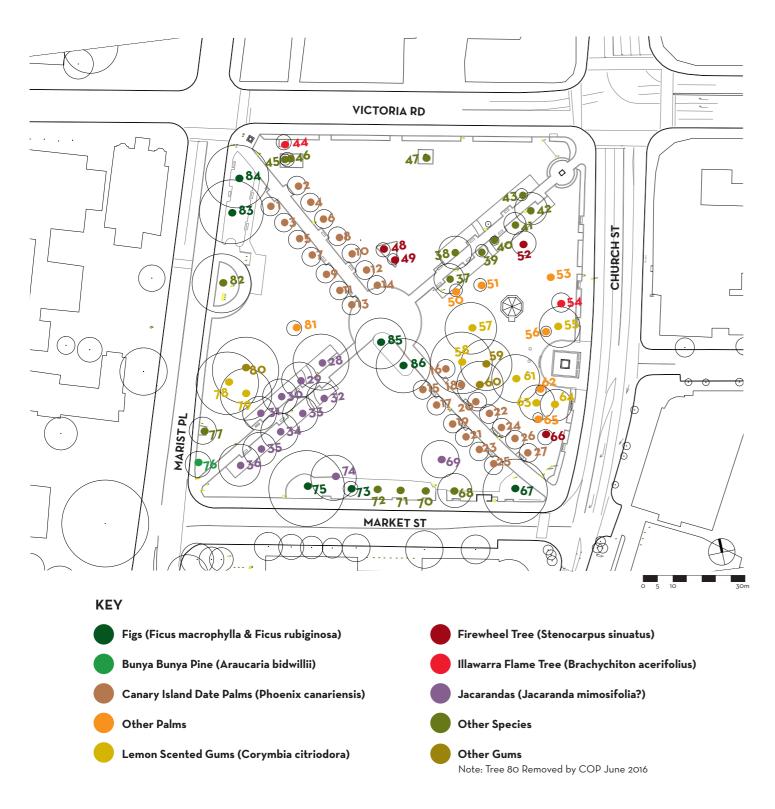
The remnants of a sandstone column are evident at this entrance.

Recommendation:

- Retain Fig to signify axial pathway & entrance;
- Relocate Anderson fountain to within the square
 - Reinstate the sandstone columns



Trees and Vegetation



An audit was undertaken of the existing tree planting in the square. The species and estimated date of plantings are nominated in the table below.

RECENT PLANTINGS

EARLIEST PLANTINGS EARLY 1900's

	(LATE 1800'S)	1940's (1900-	(1950-1970's)	(1980's - NOW)
TREE # ON REPORT	COMMON NAME	SPECIES	PLANTED DATE	NOTES
1 - 27	Canary Island Date Palm	Phoenix canariensis	1930's	Canary Island Date Palms are a popular planting from 1920's to 1940's
18	Pygmy Date Palm	Phoenix roebelini	After 1981	
28	Camphor Laurel	Cinnamomum camphora	Likely late 1800's	Planted in late 1800's as shade trees in Australia. Listed as a noxious weed.
29 - 30	Jacaranda	Jacaranda mimosifolia	1940's	Jacaranda's are popular planting from 1940's to today.
31	Jacaranda	Jacaranda mimosifolia	1980's	Jacaranda's are popular planting from 1940's to today.
32 - 36	Jacaranda	Jacaranda mimosifolia	1940's	Jacaranda's are popular planting from 1940's to today.
37 - 43	Brush Box	Lophostemon confertus	1980's	Some have been replaced and are smaller trees
44	Illawarra Flame Tree	Brachychiton acerifolius	After 1995	
45 & 46	Crepe Myrtle		After 1995	
47	Lebanese Cedar	Cedrus libani	After 1995	Issues with vandalism. Repeatedly replaced.
48	Firewheel tree	Stenocarpus sinuatus		
49	Firewheel tree	Stenocarpus sinuatus	D (
50	Mexican Fan Palm	Washingtonia robusta	Before 1995	Suspect the original planting (below) was replaced
	Brahea Palm		Pre 1979	Marked as a Brahea on the 1979 plan of park, however current Palm on site is a tall Palm
51	Jelly Palm	Butia capitata	Before 1995	Suspect the original planting (below) was replaced
J.	Cocos Yatay Palm	Data capitata	Pre 1979	Marked as a Cocos Palmon the 1979 plan of park, however
	22300 rata, raili			current Palm on site is a short Palm
52	Firewheel tree	Stenocarpus sinuatus	Pre 1979	
53	Mexican Fan Palm	Washingtonia robusta	Before 1995	
54	Illawarra Flame Tree	Brachychiton acerifolius	1935	Commemmorative planting by the founder of Rotary
55	Lemon Scented Gum	Corymbia citriodora	1950's	
56	Jelly Palm	Butia capitata	Before 1995	Suspect the original planting (below) was replaced
	Cocos Yatay Palm			Marked as a Cocos Palm on the 1979 plan of park, however
				current Palm on site is a short Palm
57	Lemon Scented Gum	Corymbia citriodora	1950's	
58	Lemon Scented Gum	Corymbia citriodora	1950's	
59	River White Gum	Eucalyptus elata	Pre 1979	
60	Manna Gum	Eucalptus viminalis	Pre 1979	
61	Lemon Scented Gum	Corymbia citriodora	1950's	
62	Jelly Palm Cocos Yatay Palm	Butia capitata	Before 1995 Pre 1979	Suspect the original planting (below) was replaced Marked as a Cocos Palm on the 1979 plan of park, however current Palm on site is a short Palm
63	Lemon Scented Gum	Corymbia citriodora	1950's	Current Full of site is a short Full
64	Lemon Scented Gum	Corymbia citriodora	1950's	
65	Mexican Fan Palm	Washingtonia robusta	Before 1995	Suspect the original planting (below) was replaced
-5	Brahea Palm	, some ground rouders	Pre 1979	Marked as a Brahea on the 1979 plan of park, however the current Palm on site is a tall Palm
66	Firewheel tree	Stenocarpus sinuatus	Pre 1979	
67	Moreton Bay Fig	Ficus macrophylla	late 1800's	
68	Cedar	Cedrus deodara	Likely late 1800's	Popular planting from 1850's to 1910/1930's
69	Jacaranda	Jacaranda mimosifolia	1940's	Jacaranda's are popular planting from 1940's to today.
70 - 72	Magnolia	Magnolia grandiflora 'Exmouth'	Recent	Recent planting of 3 x Magnolias
73	Port Jackson Fig	Ficus rubignosa	Recent	Replacement of older Fig
74	Jacaranda	Jacaranda mimosifolia	Pre 1979	Jacaranda's are popular planting from 1940's to today.
75	Moreton Bay Fig	Ficus macrophylla	Late 1800's	
76	Bunya Bunya Pine	Araucaria bidwillii	Likely late 1800's	Pines were popular planting from 1788 to 1910's
77	Pepper Tree	Schinus areira	Likely late 1800's	Popular planting from 1870's to 1910's.
78	Lemon Scented Gum	Corymbia citriodora	Pre 1979	
79	Lemon Scented Gum	Corymbia citriodora	Pre 1980	N.I. T. II. COD.
80	Tasmania Blue Gum	Eucalyptus globulus	Before 1995	Note: Tree removed by COP June 2016
81 82	Cocos Yatay Palm Camphor Laurel	Syagrus romanzoffianum Cinnamomum camphora	Pre 1979 Likely late 1800's	Planted in late 1800's as shade trees in Australia. Listed as a noxious weed.
87	Moreton Bay Fig	Ficus macrophylla	Late 1800's	nonious weed.
83 84	Moreton Bay Fig	Ficus macrophylla	Late 1800's	
85	Moreton Bay Fig	Ficus macrophylla	Late 1800's	
	o.o ou, i ig		Euto 1000 3	



Trees and Vegetation



Canary Island Date Palms form a strong cross axis from the south east to north western corners of the Square. (Trees 1 - 27)



Large Jacarandas provide a shady canopy for the south west to central cross axis. (Trees 28 - 36)



Newer plantings of Brush Box form the north eastern cross axis.(Trees 37 - Crepe Myrtle, Figs and an Illawarra Flame Tree are planted in 43). These are not performing well which may be due to drainage issues in the north western entrance. (Trees 44-46 & 84 -83).





Lemon Scented Gums and Palms surround the War Memorial in the eastern quadrant. A commemmorative Illawarra Flame Tree also features. (Trees 50 - 66)



Southern boundary trees include large figs and newer replacement figs, and jacaranda's. (Trees 70 - 75)



A large Bunya Bunya Pine features on the south western entrance. (Tree 76)



Three large Gums are located in the western quadrant. (Trees 78 - 80)



Large Figs are located within the central circle (a later design addition to the Square) (Trees 85 & 86)

KEY FINDINGS

- Significant plantings dating from the late 1800's are located around the periphery of the Square. (Moreton Bay Flgs, Cedar, Pepper and Bunya Bunya Pine).
- The iconic Canary Island Date Palms dating from the 1930's feature along the south-east to north-west cross axis pathway. These mature specimens are in good health.
- Large Jacaranda's dating from the 1940's (approx) are located on the southern cross axis and form a dense canopy across the pathway.
- Several large species of Gums reflect the increased interest in reflecting the Australian landscape within park plantings in the 1950's and 1960's. These are significant features and should be retained.
- Brush Box planted along the north-eastern cross axis are in poor condition due to groundwater and drainage issues.
- Succession planting will need to be considered in order to maintain the current and historical character of the Square.
- The very significant landmark Tasmania Blue Gum (Eucalyptus globulus) has been compromised by soil compaction.



Trees and Vegetation: Tree Protection Zones



KEY:



Potential to be removed



Potential to be relocated



Compromised by soil compaction & disturbance



Tree Protection Zone (TPZ)

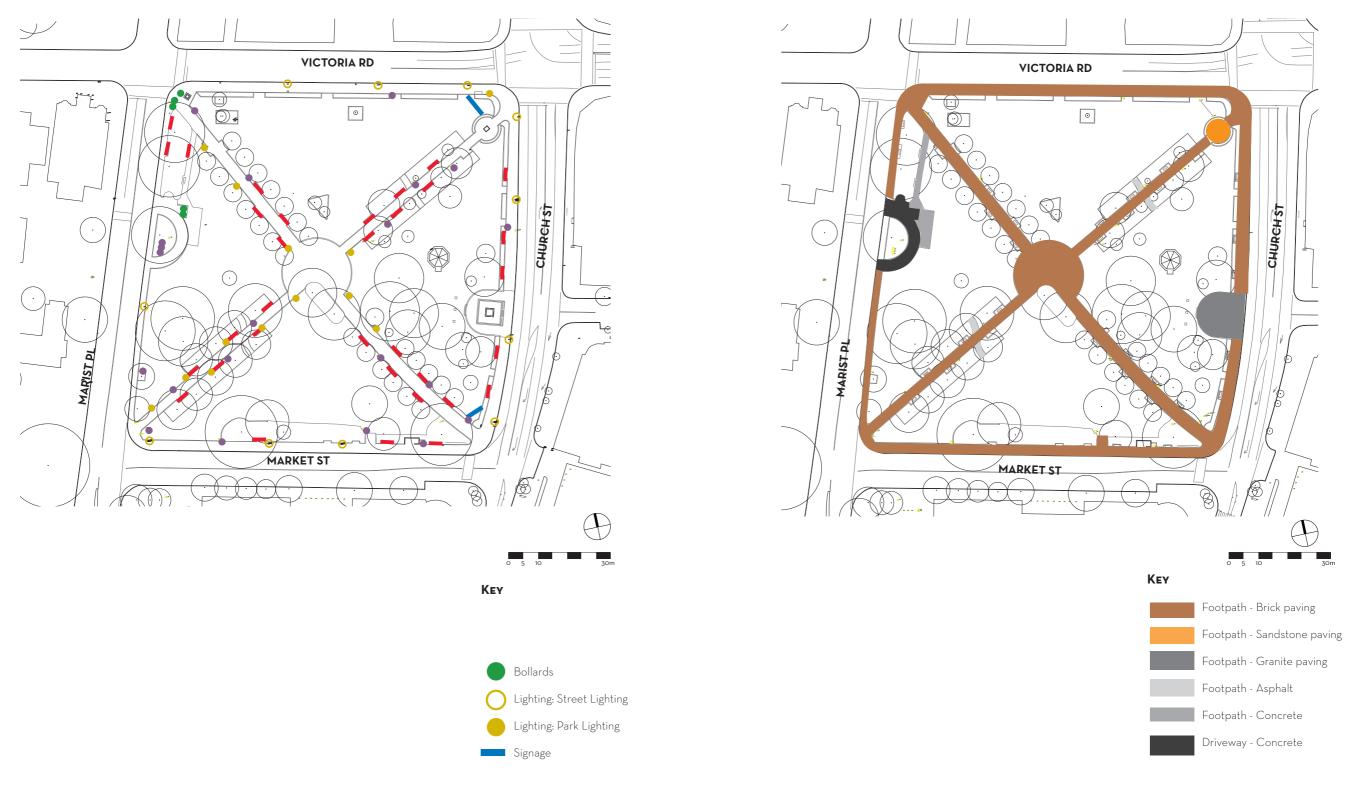
KEY FINDINGS

- Tree protection zones should be adhered to when planning and locating events
- · There is potential for removal / relocation of juvenile and underperforming specimens in the northern quadrant, which could improve capacity for large-scale events



Furniture and Paving

The plans illustrate the existing paving materials and furniture within the square.





Furniture and Paving



Seating is located along the cross-axis pathways within the Square



Seating along the cross axis pathways.



1920 - 1930's seating alcoves and stonework



Bins within the Square



Signage south-eastern corner opp. Church St



Large banner signs at the northeastern corner, along Victoria Road



Recent upgrades have been undertaken to the War Memorial and surrounding paving



Much of the sandstone edging is damaged from vehicles and the nature of the soft material



Sandstone paving surrounds the Gollan Clock



Concrete paving provides an entrance and parking space for maintenance vehicles



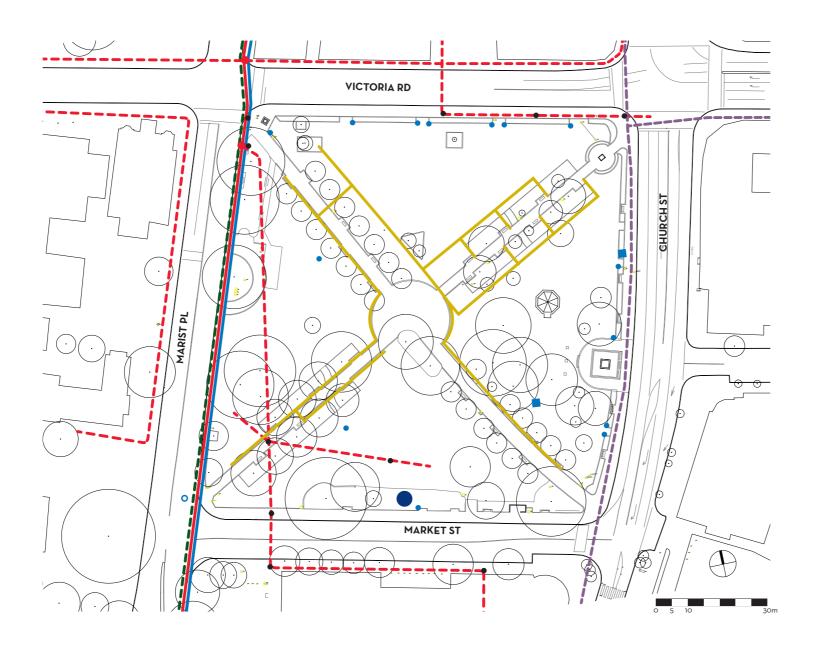
Lighting within the Square

KEY FINDINGS

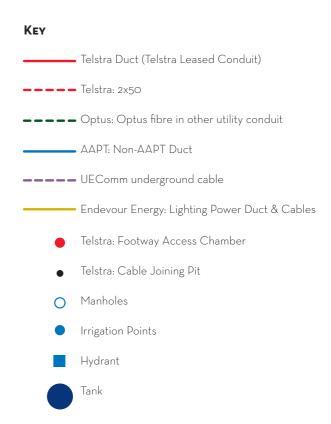
- Large number of seats located along the pathways and on the outer edges of the square facing adjacent streets with limited seating looking into the Square.
- Park furniture generally reflects the 'heritage' nature of the Square.
- Many seating alcoves are missing their seats.
- Large banner signage on the north-west corner detracts from the character of the Square.
- The predominant paving material is brick. The circular paving at the junction of the axial pathways is a more recent addition and detracts from the square character. This paving is in poor condition. New granite paving is evident to War Memorial surrounds and is in good condition.
- · Sandstone edging is evident on most pathways and garden beds. Sandstone edging is damaged; feedback from staff indicates this has occurred during event bump in and out.
- The vehicle access point and concrete paving on the western edge is used as an service access point.



Services



The plan indicates the existing services located in the square. This is an indicative layout only based on Dial Before your Dig information. Detailed investigation is required.





Services









Water tank, located along the Market St frontage

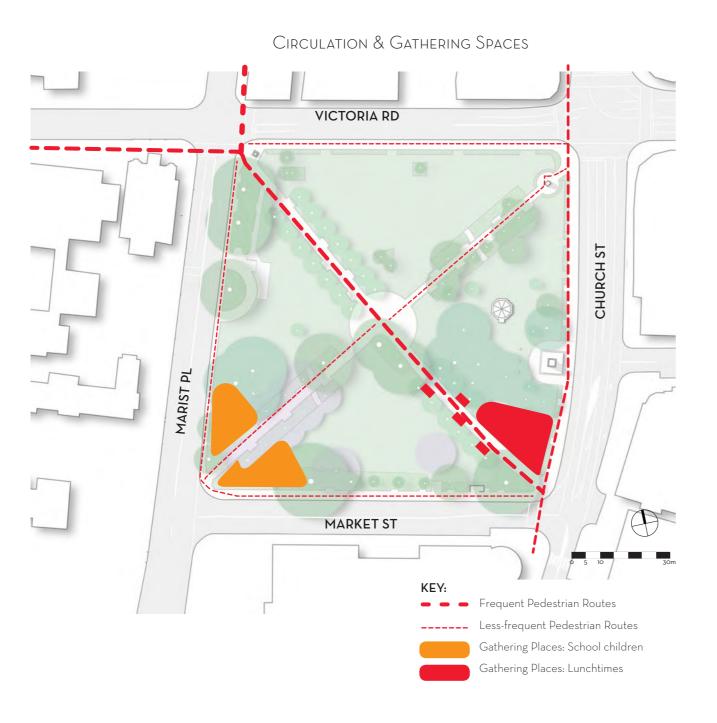
Power outlet on the Flag pole

KEY FINDINGS

- Current power source is located near the northern boundary of the Square (Victoria Road).
- Power points are also located in the bandstand and at the flag pole (Church St).
- Locks have been being broken off the Bandstand and flag pole power outlets.
- Current capacity is unable to supply power required for larger events. Events currently require generators to be brought on to site to service the vendors and infrastructure (stages, ice rink etc).
- New substation proposal by Parramatta City Council shows new substation to be located on the Victoria Road (northern) boundary.
- Irrigation has been installed throughout the Square and is critical for maintenance of heritage trees and for drought resilience.
- Current water tank located on the southern boundary is insufficient in capacity, and is unattractive .



Daily activities



Social Services & Outreach



The square is most intensively used on a daily basis by school children who walk through the square in mornings and afternoons and congregate in the southern area of the park to wait for public transport. There is occassional use by individuals and small groups at lunch times and parents with small children often use the bandstand as an infromal play space.

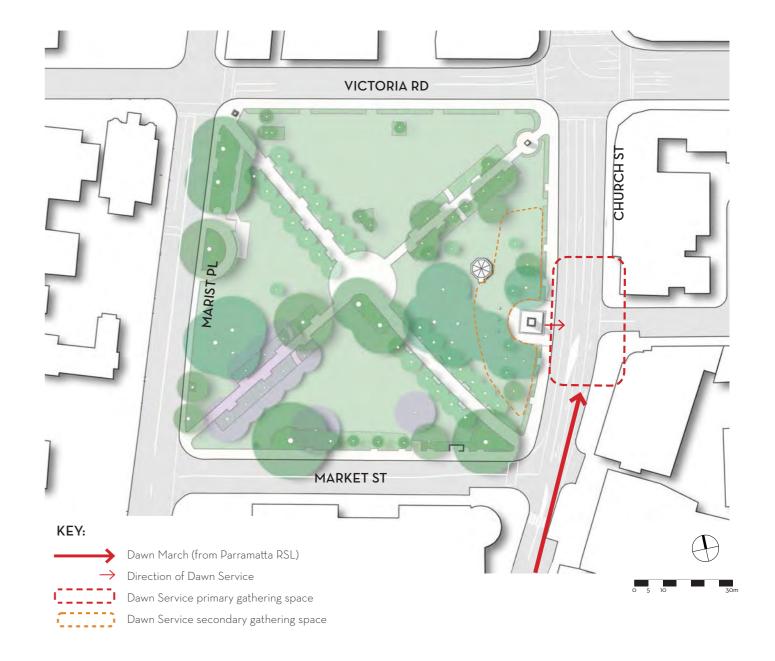
Mealservice operators visit the square daily to provide food meals for the homeless community of the area. These services are primarily located around the Marist Street entrance.



ANZAC Commemoration



Above: Anzac Day dawn services held at Prince Alfred Square 2016. Image source: Geoff Jones



The square is an important commemorative space. It's been used continuously as a space for Anzac Day Services since the construction of the war memorial in 1922. Participants march along Church Street before gathering at the Anzac Memorial on the eastern boundray of the square for the dawn service.



Summary



School girls sit in the shade of the southern quadrant to wait for busses



Visitors sit at the north-western corner in the shade of the large figs



Fencing has helped to protect the gardens around the Jacarandas from the route of travel taken by the school girls.



The Square is frequented by several homeless, particularily in the afternoons before the mealservice operators arrive



ANZAC Day at the War Memorial



Winterlights involves a large ice skating rice located in the northern quadrant Parramasala & Market Stalls of the Square





Parramasala

KEY FINDINGS

- · While the square is well used in event times, it is less visited on a daily basis. It is used most regularly as a through fare, with the south-east to north-west diagonal the most well used path. Many people walk past the Square along Church Street but do not enter into the park.
- The square is most intensively used on a daily basis by school children who walk through the square in mornings and afternoons and congregate in the southern area of the park to wait for public transport. There is occassional use by individuals and small groups at lunch times and parents with small children often use the bandstand as an infromal play
- Mealservice operators visit the square provide food meals for the homeless community of the area.
- The Square is an important commemorative space, and has been used continuously as a space for Anzac Day Services since the construction of the war memorial in 1922.
- Increased pressures on public space in Parramatta is leading to more events being held in Prince Alfred Square. Additional power sources are required to service the events in the Square. Some events have damaged the square edging, paving and features, requiring require repairworks to be undertaken.
- Market St is temporarily closed during some major events to provide additional event space. Access to Market Street is problematic during events with many visitors accessing through garden beds to connect to the street and the Riverside Theatre.



Post-event Maintenance Issues





Damage to the sandstone edging due to vehicles drtiving over the edging.

Event bump-out process





Damage after the Bump-Out process for Winterlights.

Damage after the Bump-Out process for Winterlights. Wet weather and vehicle traffic on the grassed areas lead to significant damage

Event bump-in and out requires different vehicles to install the required infrastructure.

The images above provided by council show the impact of events bump in and out on turf areas. Vehicle tyres can damage the surface roots of trees. Sub-surface roots can be damaged over time due to soil compaction. Vehicle movements can result in damage to tree canopies. The placement of heavy event infrastructure such as containers, within tree root zone can impact on tree health.



Major Events Access









1: Canopy clearances from existing trees: corner of Marist Place and Victoria Rd (1), Marist Place (2 & 3), and in the central circular space (4)

VEHICLE SIZE CHART

VEHICLE SIZE SHARI					
Vehicle Type	Length	Height	Max Capacity		
Small Rigid	6.4m	3.5m	4.0 tonnes		
Medium Rigid	8.8m	4.5m	8.0 tonnes		
Heavy Rigid	12.5m	4.5m	12.0 tonnes		
Articulated	19m	4.5m	> 12.0 tonnes		

Source: AS 2890.2 - 2002

Information provided by City of Parramatta staff indicate that trucks for some events have been accessing the park from Marist Place, traversing across lawn areas and using the paved circular space as a manoeuvring zone. Capacity for reverse manoeuvring of Medium Rigid Vehicles (MRV) and Heavy Rigid Trucks (HRV) in the central circular area is limited by the existing tree canopy cover and branches. HRV and MRV trucks can use the existing circular driveway entrance from Marist Place as this allows adequate height clearance from existing tree canopies, and would not damage trees.



Current Conditions: Square Use

Major Events Access

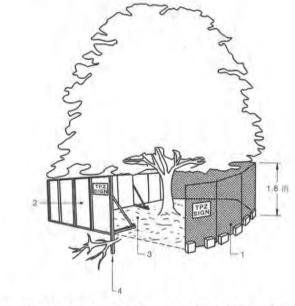


Top: Tasmania Blue Gum to be removed due to a significant decline in health. due to soil compaction and dripline disturbance.





top right and bottom right: Failures in Tasmania Blue Gum



LEGEND:

- 1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
 2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building material
- 3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation construction activity, grade changes, surface treatment or storage of materials of any kind is permitted with the TPZ.

Above: Tree Protection Zone Requirements as nominted in the S 4970-2009 Australian Standard for Protection of Trees on development Sites A precedent review has been undertaken into event management in other parks. A detailed discussion of this research is attached in the Appendix of this report. The key findings from other parks are as follows:

- All surveyed precedents did not permit any vehicles on lawn zones without some protection measures.
- Events in Hyde Park require large vehicle load drop off on park hardstand boundaries including footpaths and loads split into smaller trucks to limit impact to tree canopies.
- In Hyde Park turf protection is required for all vehicles on turf. Manitou forklifts with all terrain tires are required for loading and unloading in these zones.
- Event Guidelines for all City of Sydney Parks state that vehicles are not permitted to drive or park beneath the dripline of any tree within the venue under any circumstances.
- Articulated vehicles are not allowed in the grounds of Centennial Parklands or in the Botanic
- All surveyed precedents for event management in parks required Tree Protection Zones to be fully adhered to.

The precedent research into event management in parks found that municipalities and authorities nominated vehicular management as a key concern. Adelaide City Council in their Standard Operating Procedure for Park Lands Events notes that;

As vehicles are the single biggest cause of damage to turf and trees during events the restriction of vehicle movements is imperative to protect the Park Lands.

Root damage is the most common cause of damage to trees on event sites, as roots are far more extensive and closer to the surface than commonly thought...

All event organisers are responsible for ensuring that events do not place undue stress on trees in the Park Lands. Adelaide City Council complies with the Australian Standard for Protection of Trees on development Sites (AS 4970-2009).

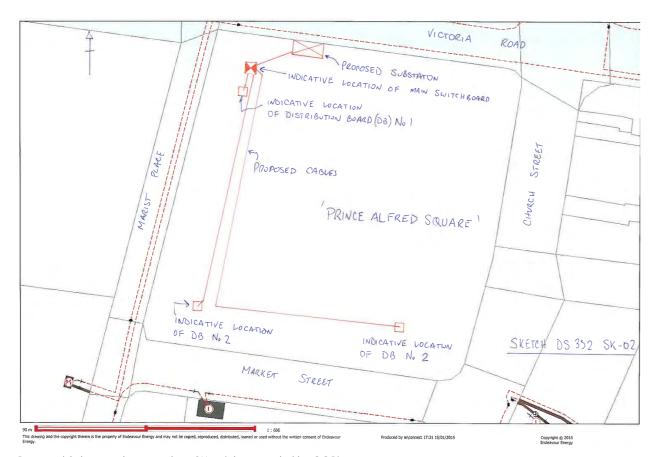
There is evidence of disturbance and soil compaction on the site. Council's Arborist Paul Berwick has advised in May 2016 that the existing Tasmania Blue Gum should be removed.

there has been dripline disturbance which would have been caused by pedestrian and vehicular traffic causing soil compaction leading to decline in tree health.



Current Conditions: Square Use

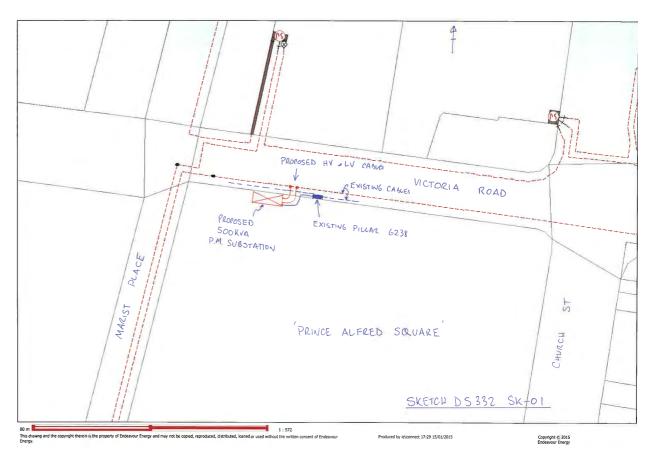
Power Upgrade Proposal



Proposed Substation location plan - SKO2 (plan provided by COP)



Visualisation of the proposed Substation along the Victoria Road frontage (image provided by COP)



Proposed Substation location plan - SK01 (plan provided by COP)

Council has sought advice on providing improved electrical supply to the square. These show a proposed substation to be located on the Victoria Road interface with trenching connecting through the southern and eastern areas of the square.

Careful consideration should be given to ensure trenching does not impact on areas of high archaeological significance as well as ensuring adequate clearance for root balls of existing significant trees. Trenching should be located outside of tree protection zones. Proposed substations should be visually integrated into the square, or concealed by planting/ and or walls.



Precedents

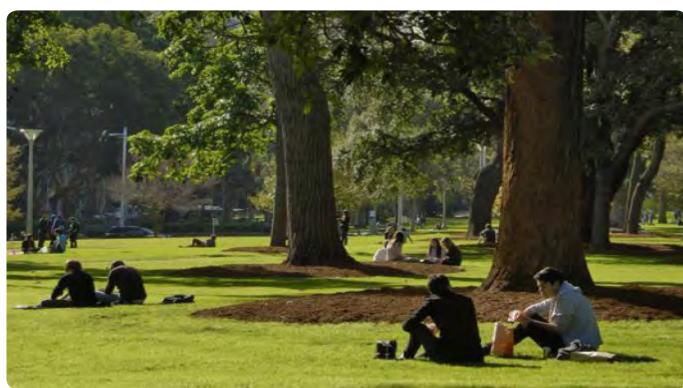
Urban Heritage Parks: Spaces and Places

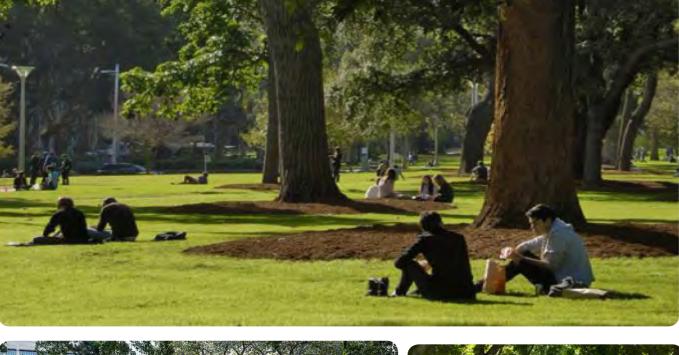
HYDE PARK, SYDNEY

Size: 16.2ha

BYRANT PARK, NEW YORK

Size: 2.2ha















Investigations and research into comparable civic and heritage parks has been undertaken in the analysis phase of this project. Hyde Park in Sydney and Bryant Park in New York provide a range of possibilities that can inform the Prince Alfred Square Landscape Master Plan. The parks provide;

- a range of spaces of varying scales; these provide capacity for large events as well as more quiet park spaces;
- · lawn areas with shade trees along side smaller secondary spaces, defined by gardens and low edging;
- a layout that provides spatial diversity allowing for park use for gathering, prospect and solitude



Precedents

Urban Heritage Parks: Edges and Entrances

HYDE PARK, SYDNEY







BYRANT PARK, NEW YORK





Hyde Park in Sydney and Bryant Park in New York, like Prince Alfred Square are formal in layout. These parks provide a clear demarcation between the park and the surrounding busy streets and provide multiple entrance and opportunities to use the park. The parks provide;

- Defined boundaries and edges through the use of gardens and low walls, often with modest level change
- Provide generous and clearly defined entrances from multiple locations.



Current Conditions: Summary

Issues & Opportunities

It is evident that there are a range of issues within the square. These are summarised in the diagrams below. These issues and opportunities have subsequently informed the principles and the development of the landscape master plan for Prince Alfred Square.



COMPROMISED TREES Trees are compromised in the northern quadrant



SERVICING Additional services are required



STREET FRONTAGES Poor visual address to Victoria Road and Church Street north



SEATING AND GATHERING SPACES Limited seating options within the Square

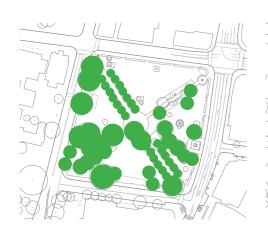


PARK FURNITURE Paving, furnture & edging is in need of replacement



DAMAGE FROM EVENTS Large-scale events have a negative impact on the Square in its current

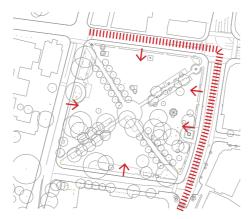
OPPORTUNITIES



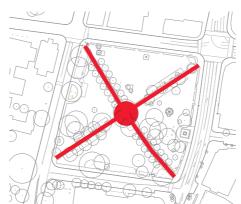
PROTECT & ENHANCE TREES



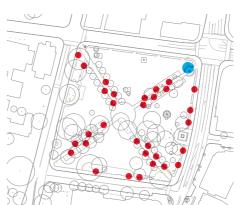
IMPROVE EVENT SPACE & FACILITIES



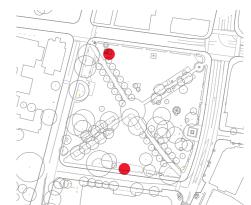
IMPROVE CIRCULATION AND STREET INTERACE



IMPROVE PAVING & EDGING



IMPROVE FURNITURE & SIGNAGE



INTEGRATE PARK SERVICES



Protect exsiting significant trees and consider selective removal and relocation of some specimens.



Reconfigure northern lawn to maximise event space.



Provide new edges / access to streets



Replace and upgrade the Square's paving, edging and furniture



Provide additional seating and gathering spaces including picnic tables and explore use of temporary furniture



Conceal services including tanks and kiosks







Landscape Master Plan: Principles

Four key principles have been developed that have informed the development of the master plan. These are summarised in the following pages.







1. Canary Island Date Palms create a distinct character to the Square 2. The Anderson Fountain should be relocated from its current location in order to better integrate 3. The Bandstand is currently undergoing an upgrade and enhances the Victorian character of the Square

#1: REINFORCE THE "GREAT BONES" OF THE SQUARE

The Square is a significant park, representative of a range of cultural landscapes from the Victorian to the modern. The square's formal structure, tree plantings and memorials all contribute to this character, and these should be preserved, enhanced and reinforced. The key recommendations are listed below:

- Maintain the Victorian era cross-axial design
- Upgrade and improve the existing pathways (paving and edges)
- Retain and maintain the significant and successful items in the Square including the Bandstand, War Memorial and Gollan Clock.
- Remove or relocate the Anderson Fountain and the Bills Horse Trough to be more integrated into the square
- Protect the existing trees and provide a strategy for effective succession planting







1. Visitors enjoy the shade, lush gardens and many seating options in Bryant Park (New York) 2. Colourful planting and seating (High Line, New York) provides amenity for users. 3. Moveable chairs can enhance everyday use.

#2: A SQUARE FOR ENJOYING

The Square is an important passive recreational resource for the city, providing spaces for existing and future residents. Subtle modifications to the square layout and elements can improve the amenity of the square. The key recommendations are listed below;

- Create an enjoyable destination, not a thoroughfare
- Create memorable park spaces and places
- Create a Square for daily enjoyment
- Consider appropriate night time use
- Provide spatial diversity and interest



Landscape Master Plan: Principles







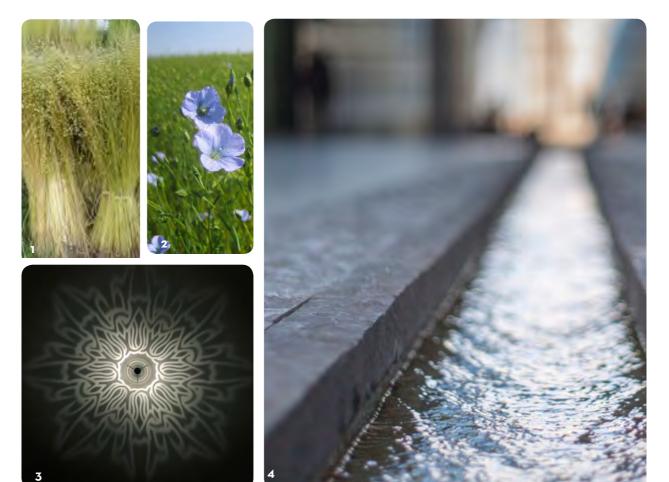


1. Parramasala is a major annual event for Parramatta 2, 3 & 4. Community events are an important part of Parramatta's future

#2: A SQUARE FOR EVENTS

The Square is an important event space for the city, reflecting and celebrating the cultural life of Parramatta. The Square requires careful event management to minimise negative impacts and maintain its iconic features and landscape elements. The key recommendations are listed below;

- Develop a sustainable events program that allows for recovery period for park landscapes and turf zones
- · Refine the park layout to maximise the usable space in specific locations, where there is limited impact on existing trees. This may require the removal or relocate of selected specimens.
- Refine park materials and circulation to provide appropriate access points with minimal impact on park features.
- Explore opportunities for upgraded services, power and amenities, in locations that have minimal impact on park views and elements
- Improve access to the Riverside Theatre
- · Develop management strategies including temporary and permanent protection measures for existing trees



1. Bundles of harvested Flax, ready for working to create linen 2. 'Mass plantings of Linum usitatissimum (commonly known as Flax) 3. Lighting installations provide opportunity for interpretation 4. Water features provide an opportunity to evoke the history of several of the Square's historical objects

#4: EVOKING THE HISTORY OF THE SQUARE

The Square has a rich history. This history includes celebrating its location and use including the location for the first female factory, symbolic of early female emancipation and employment in the colony, its commemorative role, in recognising the contributions of groups and key individuals such as Anderson and George and Bill Annis. There are opportunities to interpret this history explicitly and symbolically. The key recommendations are listed below;

- Create memorable and unique park spaces that evoke the history of the square
- Design spaces for contemplation and reflection, that respond to the themes and contributions of important local individuals or groups
- Translate the stories of the Square in evocative park elements
- Preserve and celebrate the important archaeology of the site



Current Conditions

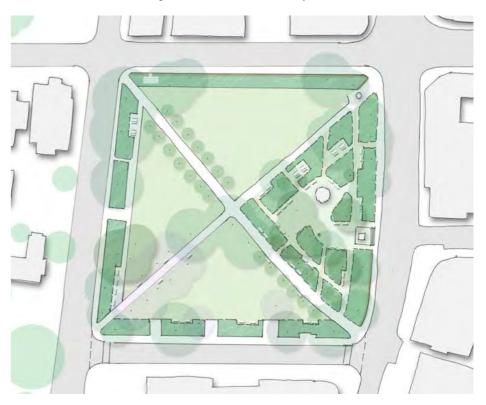




Option 1: Re-configured Square



Option 2: Garden Square



The project brief prepared by the City of Parramatta stated that the master plan was to accommodate the typical activities and infrastructure required to facilitate large events whilst acknowledging and protecting the historical and archaeological sensitivity of the site. The sketch master plan options address these objectives by;

- 1. Improving functional use and facilities for events
- 2. Protecting heritage assets including significant trees
- 3. Improving overall amenity and passive recreational use

Two sketch master plan options have been developed for the square that protect the heritage and archaeological elements of the square, while also allowing for event use and everyday use.

Key features that are evident in both options are;

- Retention of significant trees including the Palms, Figs Gums and Jacarandas
- Retention and restoration of the original axial path layout
- Retention of heritage features including the Gollan Clock, The Bandstand, the War Memorial
- Relocation of the Anderson Fountain and the water trough into the centre of the park

- Re-design of the northern lawn to allow for more intensive use as an event space.
- Removal of selected trees that are in poor condition and relocation of selected specimens to improve use of
- Provision of new infrastructure include a substation, distribution board and irrigation tanks in the northern boundary of the park, concealed through new walls and edge treatment.
- Provision of access route for heavy vehicles to minimise compaction around existing significant trees and damage to pathways, edging, and park features.
- Improved paving, edging and furniture treatments
- Relocation of axial garden beds to open up views within the square
- Improved access to Market Street
- Creation of a shareway on Market Street
- Improved access paths into the Square from Marist Place, Victoria Road and Church Street.

The following provides a more detailed discussion of the options/ ideas.



Re-configured Square



- 1. Raised garden bed (approx 800mm high) with steps overlooking lawn
- 2. Proposed substation location
- 3. Permeable pathway
- 4. Vehicle access points
- 5. Tables and benches for outdoor dining and study
- 6. Wide stairs to Market
- 7. Gardens with low planting
- 8. Bench seating
- 9. 800mm high sandstone wall to Victoria Road and Church
- 10. Trees to be removed / relocated
- 11. Garden beds to be removed
- 12. The Anderson Fountain (relocated)
- 13. Upgraded paving and edging
- 14. Additional shade tree plantings











New access stair and sandstone wall to Church St & Victoria Rd

Shareway to Market street

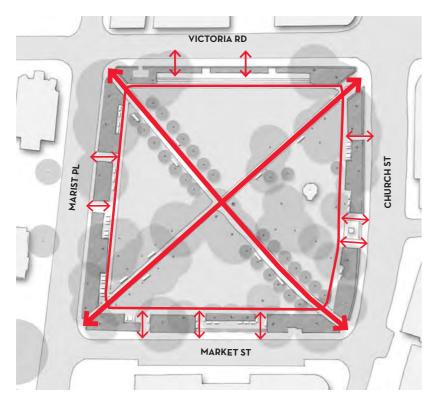
Option 1: Reconfigured Square proposes a subtle modification to the layout to enhance the use of the square and to enhance at as a 'destination' rather than a thoroughfare. This is achieved by introducing a perimeter edge comprised of pathways, gardens with low planting and seating. This would provide additional circulation as well as places for prospect and overlook. Multiple access points would connect into this pathway, and a wide stair would be provided on Market Street. Garden beds under existing axial trees would be removed to improve views.

The northern lawn would be expanded through selective removal and relocation of selected trees. This would also allow for improvements to drainage to be made. A low sandstone wall, similar to low walls around Hyde Park is proposed for the northern and eastern edge of the square, reflecting the significance of Church Street and Victoria Road. On Victoria Road a modest level change would elevate the square from the busy arterial road. Service facilities such as a substation and irrigation tanks could be concealed by the proposed wall. Low gardens would allow for views into the square, whilst providing a green edge to the park. The Anderson Fountain would be relocated to the centre of the park, and restored as a working water source. The trough would be relocated close to this central location.



Re-configured Square

SQUARE STRUCTURE & CIRCULATION



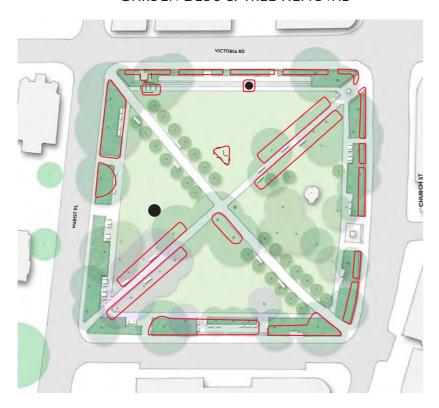
SQUARE CIRCULATION



Primary Path Secondary Paths

Access

GARDEN BEDS & TREE REMOVAL



AREA OF GARDEN BEDS:

Current = 2650 m²

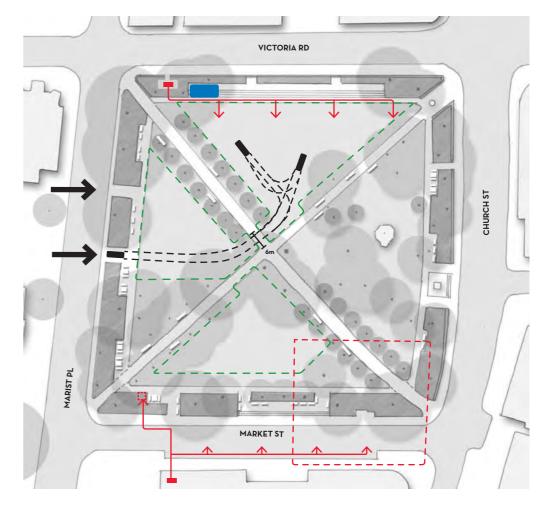
Proposed = 2520 m² (5% reduction)

Current Gardens Proposed Gardens

Trees proposed for removal

Trees proposed for relocation

SQUARE SERVICES & INFRASTRUCTURE



SERVICES & INFRASTRUCTURE

Potential New Substation and Distribution

2.7m (length) x 1.5m (width) x 1.75m (high)

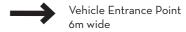
Potential Distribution Board No.2

Potential Trenching Location Events use

Irrigation Tank 10m (length) x 5m (width) x 5m (deep)

Heavy Vehicle 6.4m rigid heavy vehicle



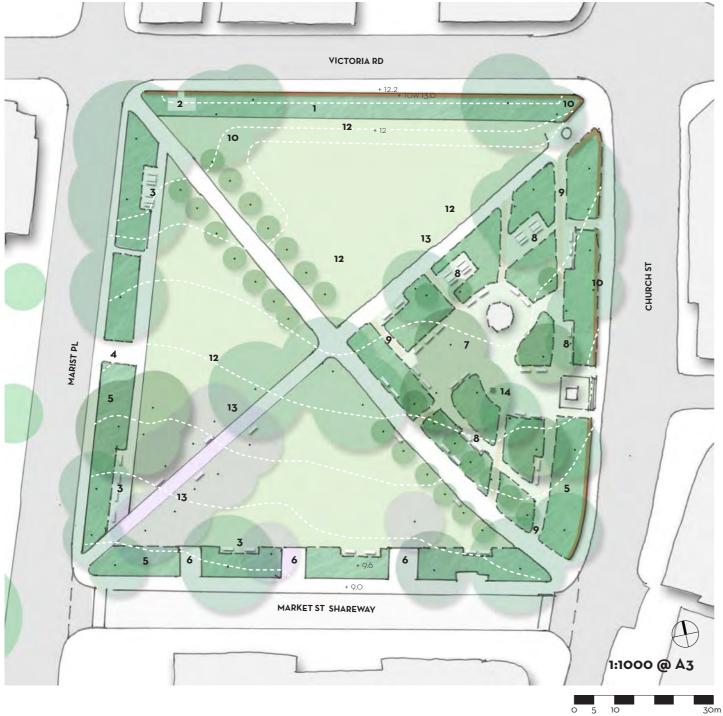








Garden Square



KEY

- Raised garden bed (800mm high)
- 2. Proposed substation location
- 3. Tables and benches for outdoor dining, study or gatherings
- Generous gardens and planting zones surround the Square
- 6. Access ramps
- 7. Open lawn areas for events and gathering
- 8. Seating zones and tables
- 9. Informal pathways
- 10. Garden edge to Church Street
- 12. Trees to be removed
- 13. Garden beds to be removed
- 14. The AndersonFountain (relocated)





Retain existing lawn spaces

Expand northern lawn for events







Provide gardens to eastern quadrant with capacity for smaller events such as weddings or small commemorative gatherings and passive recreational space for visitors.

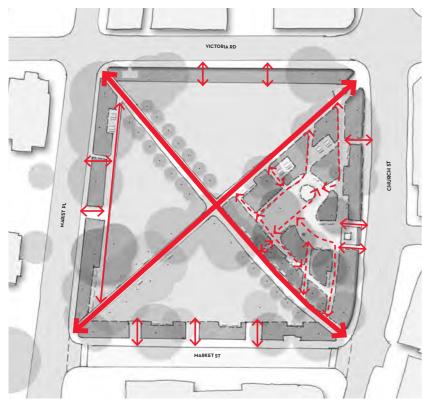
Option 2: Garden Square proposes that the eastern quadrant of the square be re-established as formal gardens with smaller seating zones, gathering spaces and opportunities for sculptural displays. The garden would provide capacity for smaller events such as weddings or small commemorative gatherings and would provide passive recreational space for visitors. Roses would be relocated into these garden zones, providing a floral display and backdrop for the Bandstand and the War memorial. Plantings including poppies commemorating the War memorial history would be included. The Anderson Fountain and water trough would be located within these gardens.

The rest of the square would be retained as lawn with shade tree plantings. The garden beds under existing trees adjacent to the axial paths would be removed and replaced with mulch and low groundcovers to improve views across the square. The northern lawn would be reconfigured to provide expanded lawn areas for events. Selected trees in poor condition would be removed and selected specimens relocated to expand event capacity. A modest gradient change on the Victoria Road Boundary would be incorporated to reduce impact of the busy arterial road on the square. Service facilities such as a substation and irrigation tanks could be concealed by shrub planting. Three access points would be provided along the Market Street edge.



Garden Square

SQUARE STRUCTURE & CIRCULATION



SQUARE CIRCULATION



Primary Path

Secondary Paths

Access



AREA OF GARDEN BEDS:

Current = 2650 m²

Proposed = 4276 m² (160% increase)



Current Gardens



Proposed Gardens

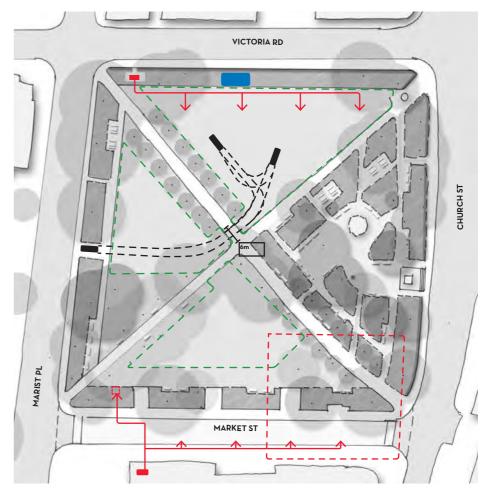


Trees proposed for removal



Trees proposed for relocation

SQUARE SERVICES & INFRASTRUCTURE



SERVICES & INFRASTRUCTURE



Potential New Substation and Distribution



2.7m (length) x 1.5m (width) x 1.75m (high)

Potential Distribution Board No.2



Potential Trenching Location Events use



Irrigation Tank 10m (length) x 5m (width) x 5m (deep)



Heavy Vehicle 6.4m rigid heavy vehicle



Swepth Path of 6.4m rigid heavy vehicle



Vehicle Entrance Point



Reinforced Lawn Zone for vehicle & events access



Archaeological Zone potenial for archeological remains



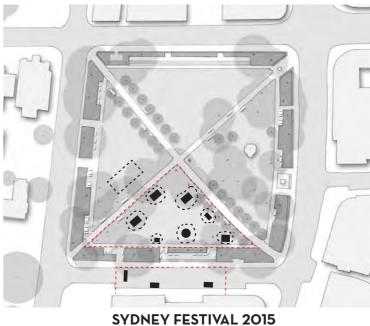
Event Mode

These overlays indicates how the re configured could accommodate the various facilities as shown in the 2015 event plans for Parramasala, Winter Lights, and the Sydney Festival. Refer to page 32 for further detail.

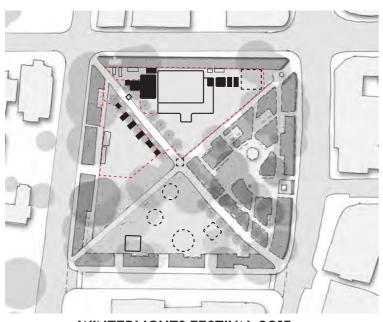
OPTION 1: Re-configured Square

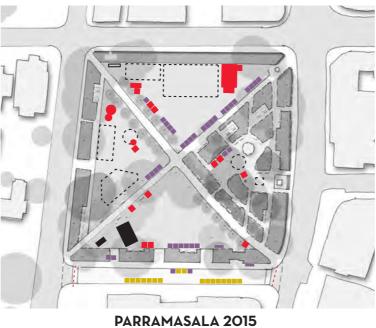


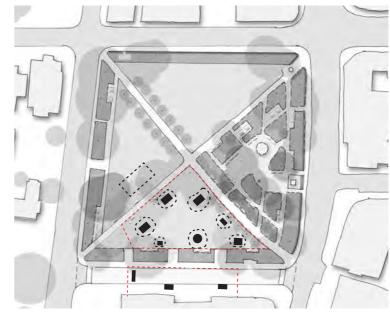




OPTION 2: Garden Square



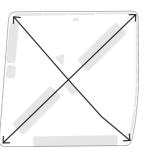




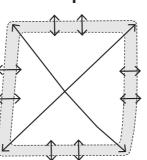
WINTERLIGHTS FESTIVAL 2015

SYDNEY FESTIVAL 2015

Existing: Fragmented

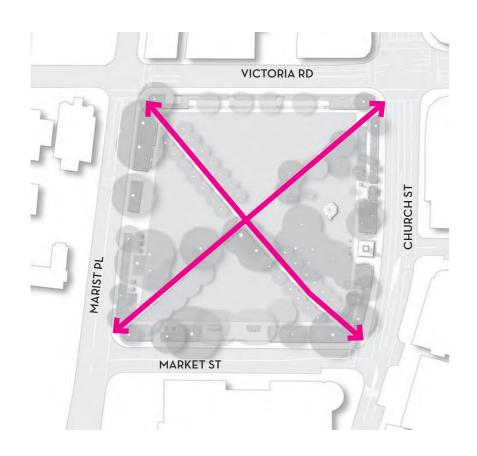


Proposed

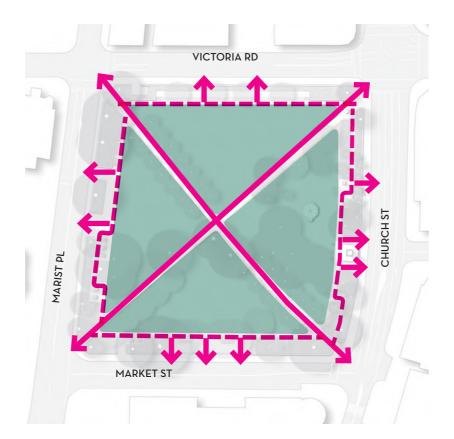


The master plan proposes a subtle modification to the square layout to enhance it as a 'destination' rather than a thoroughfare. As the diagrams to the left indicate, the existing square is bisected by the diagonal pathways and fragmented by garden beds. By adding a new perimeter path and reconfiguring the existing garden beds to open up views, a consolidated square is created. This structure retains the diagonal paths whilst providing a square layout that provides multiple access points and spaces for park users. The key structural changes are summarised in the diagrams below.

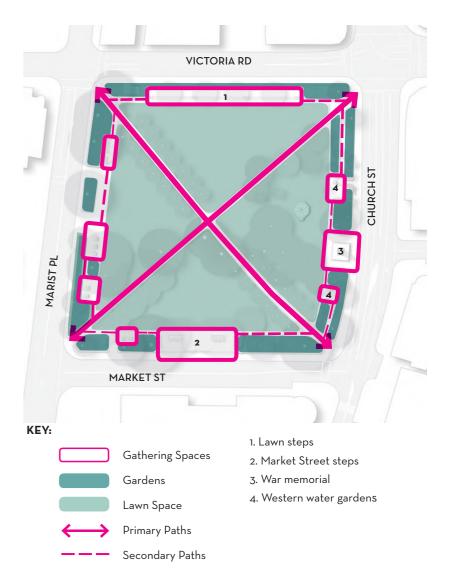
1. RETAIN AXIAL PATHS



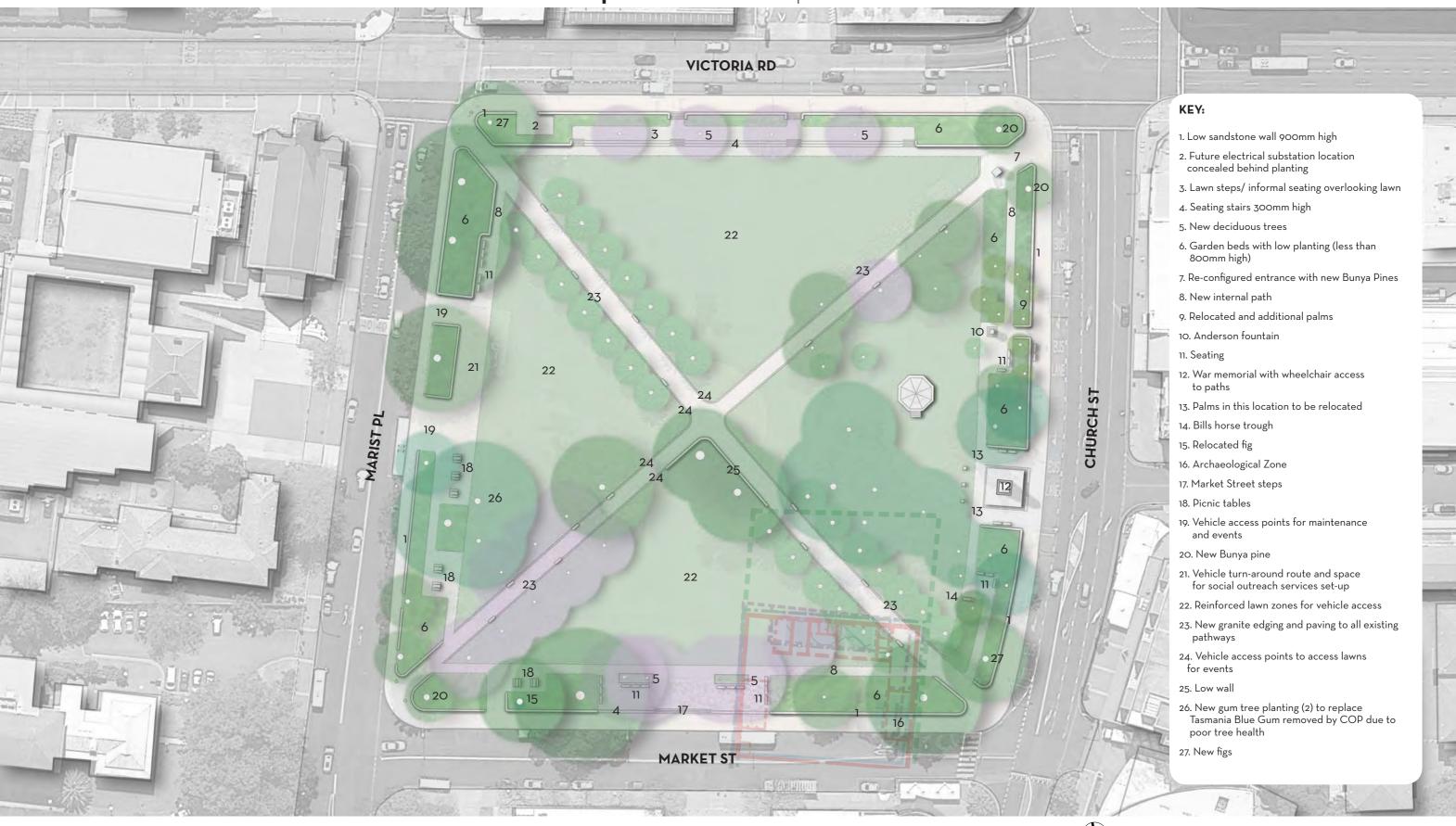
2. Consolidate Open Lawn
Provide Secondary Circulation Path & Access

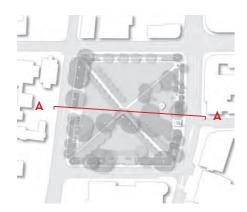


3. Create seating and gathering spaces overlooking the lawn

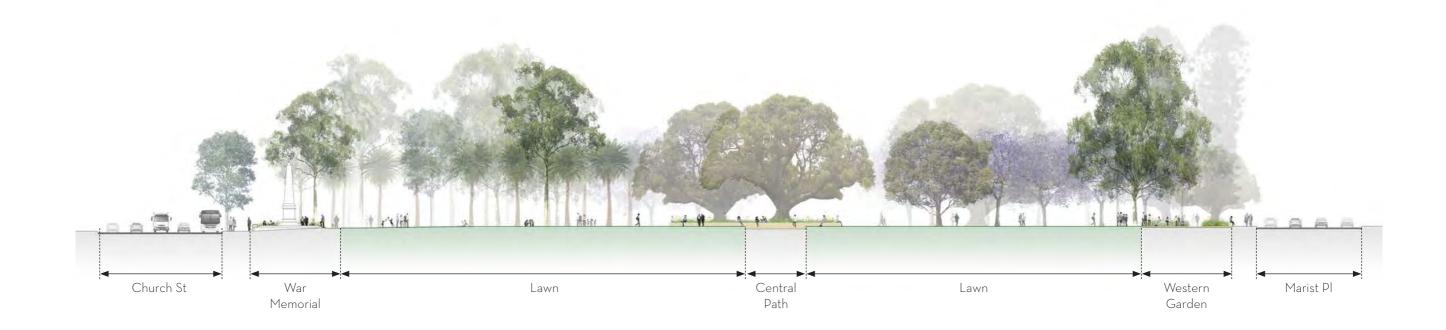








Sections: East-West

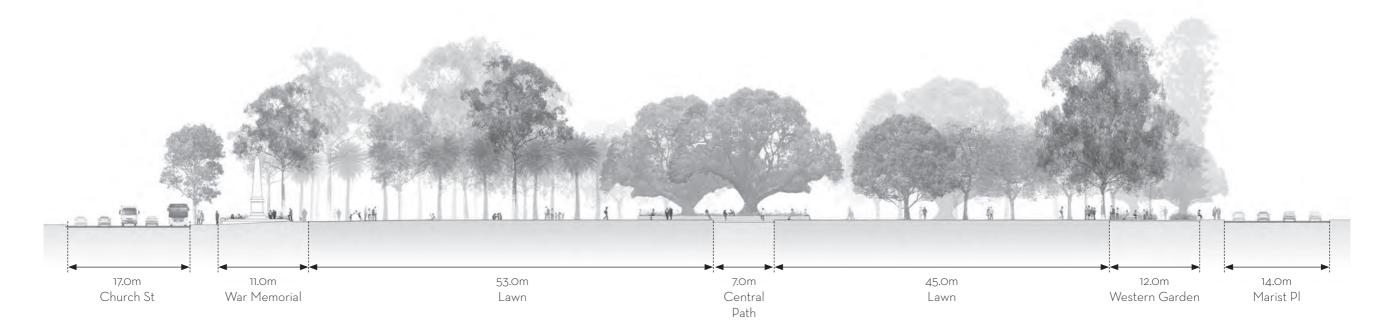




Landscape Master Plan: Square Structure Sections: East-West

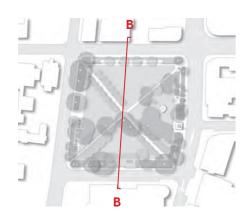




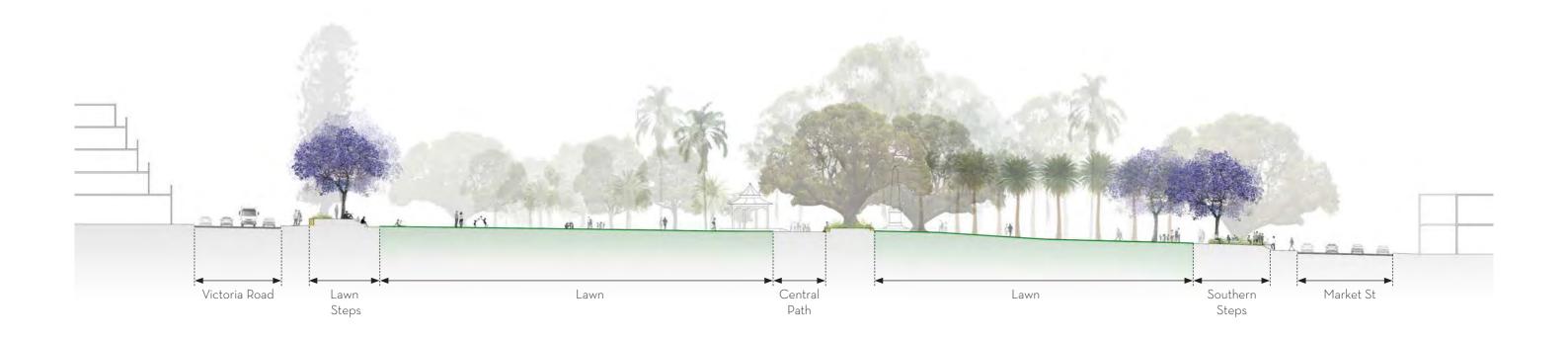




1:500 @ A3



Sections: North - South









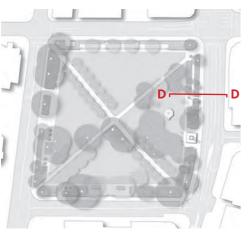












Sections: Eastern Gardens







View: Eastern gardens looking south

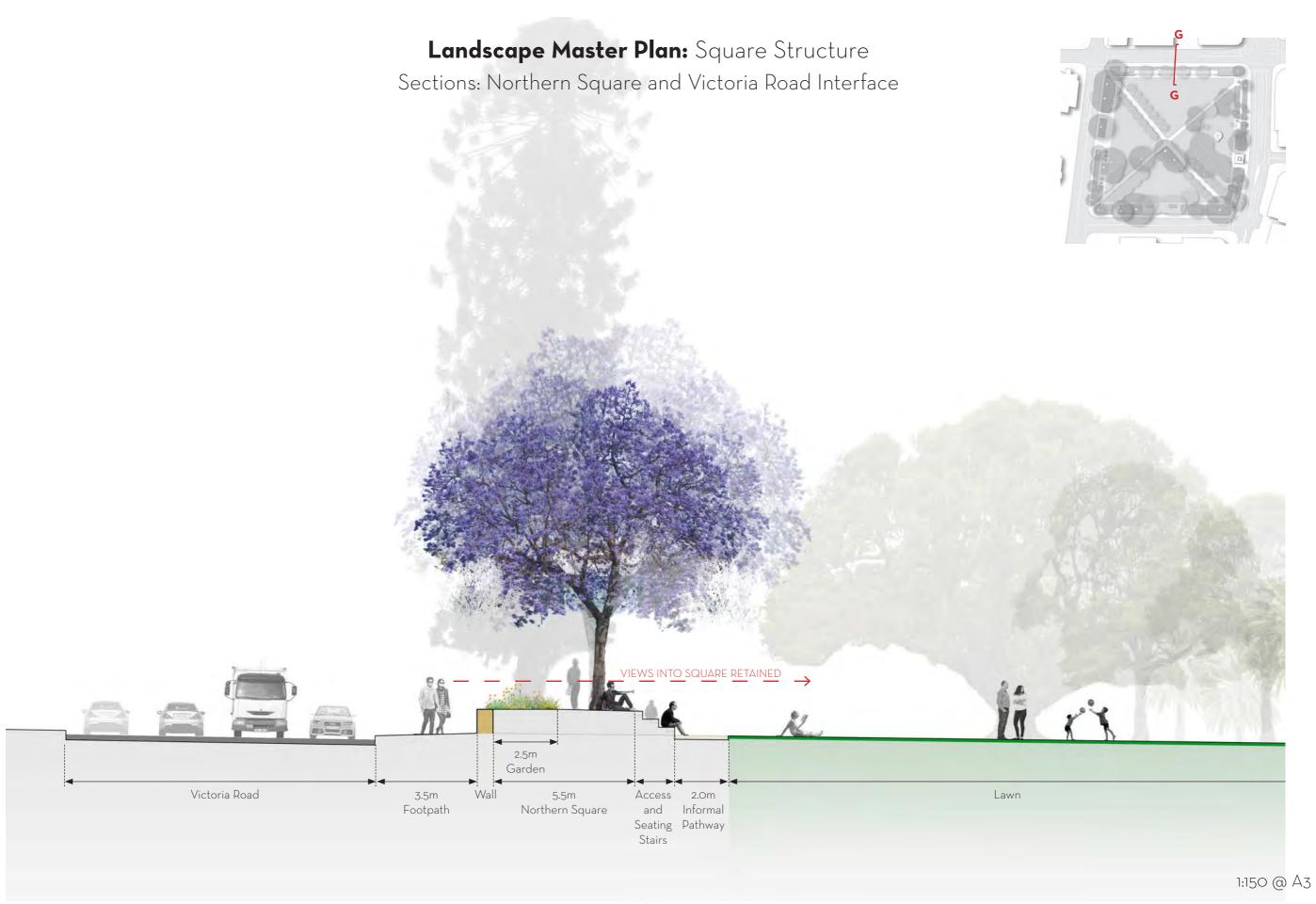






Landscape Master Plan: Square Structure Sections: Southern Square and Market Street Interface 2.Om Tree Pit Lawn Market Street 4.0m 3.5m Access Informal Southern Square ${\sf Footpath}$ and Pathway Seating 1:150 @ A3





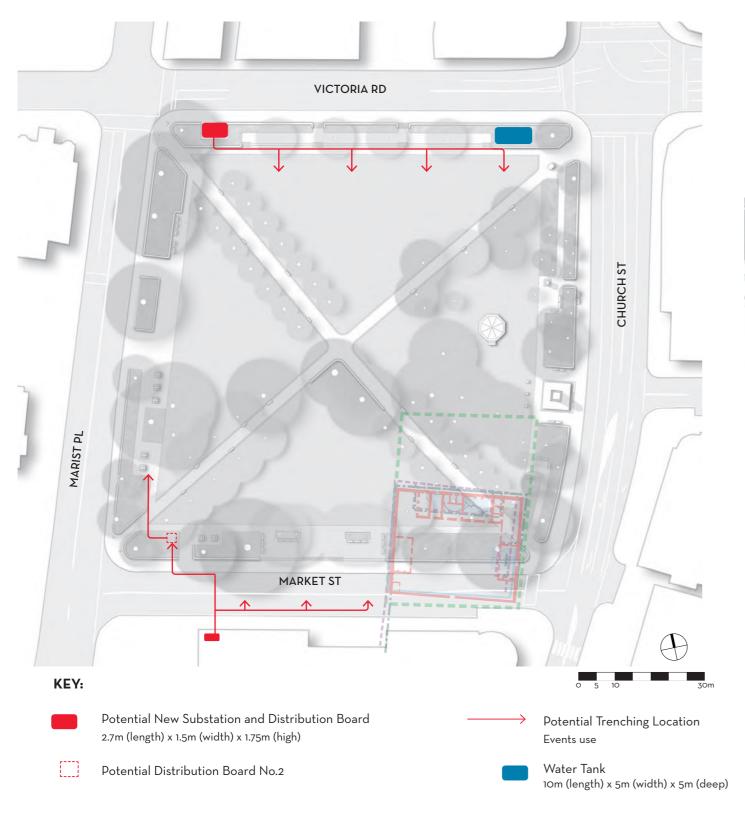




View: Northern Square and lawn looking west



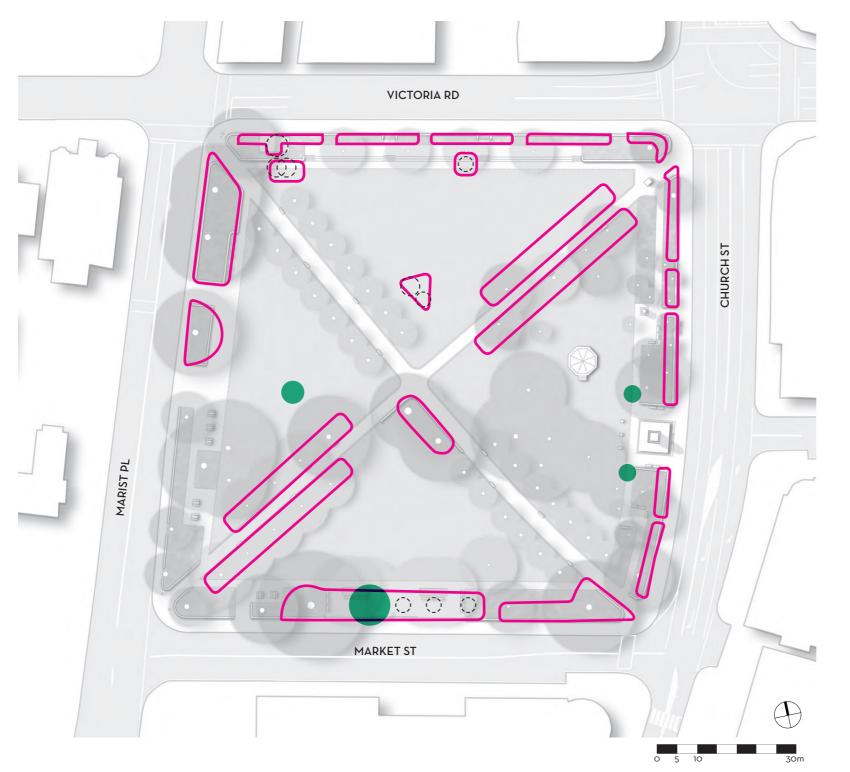
Services





The concept plan nominates a location for a proposed substation at the north western corner concealed behind a raised planting bed, should this be required to be located within the square. An alternative location for a substation is nominated in the Riverside theatre. This would be a preferable location as it would have minimal impact on the square. Recommended trenching locations have been nominated; these should be kept clear of tree protection zone and areas of high archaeological significance.

Landscape Master Plan: Square Structure Garden Beds and Tree Removals & Relocations



The design proposes that the existing garden beds be reconfigured to open up views within the square. Gardens with low planting have been located to the perimeter of the square, allowing views into the square as well as providing an interface to busy surrounding streets. There would be a minor reduction in garden zones. In locations where gardens are to be relocated and there are concerns regarding pedestrian damage, it is recommended that low steel garden edging be used. Refer to Edging for further detail.

AREA OF GARDEN BEDS:

Current = 2650 m²

Proposed = 2500 m^2 (5% reduction in area)

KEY:



Current Gardens



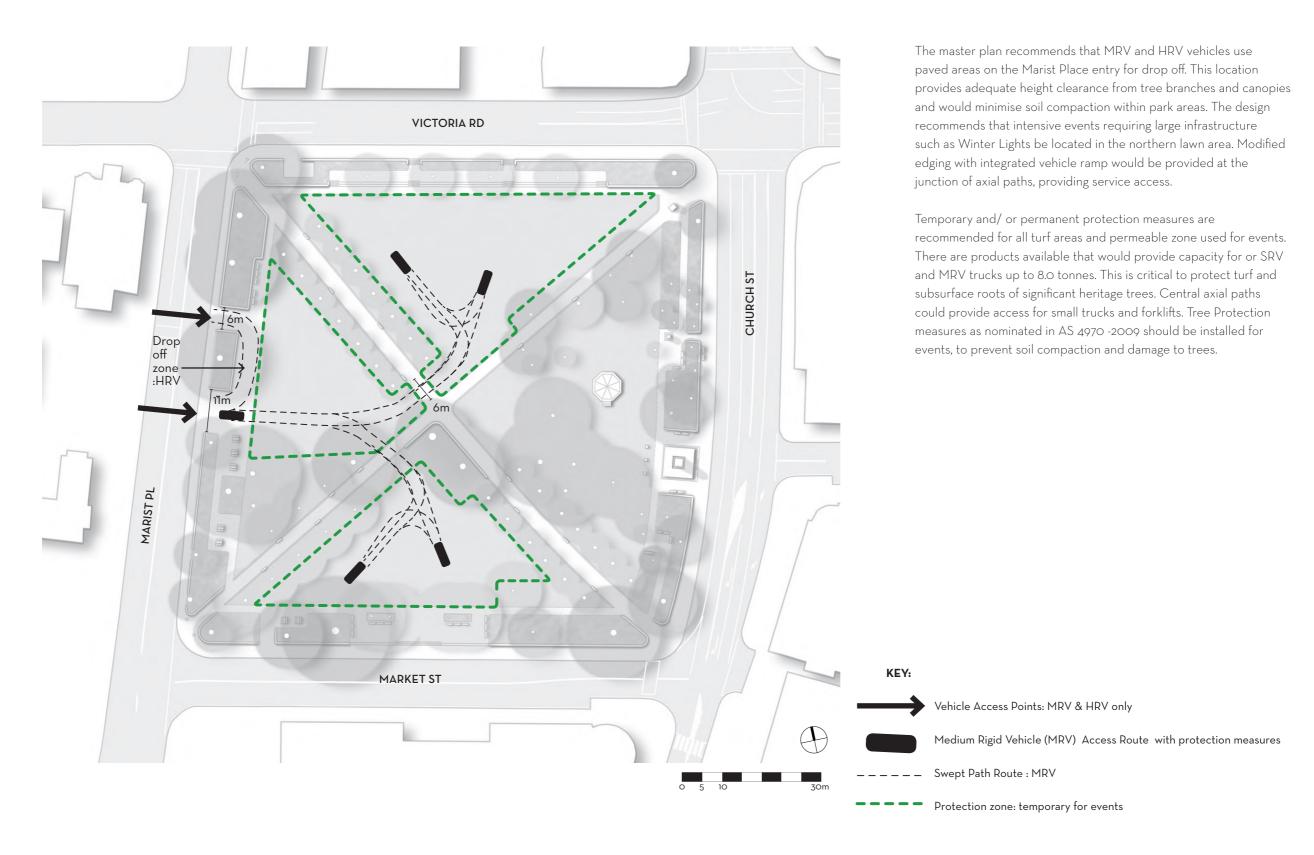
Trees to be removed



Trees to be relocated



Event access



Events Access



Examples of ground protection during events: Ground protection used at Hyde Park, Sydney (1) Terra plas (2), Zigma (3) Terratrak plus (4 and 5) and. Grass Reinforcement Mesh before and after installation at Parramatta Park Trust, Crescent Amphitheatre (6) Manitou Forklifts with all terrain tire required to be used on turf areas in Hyde Park (7)

RECOMMENDED PROTECTION MEASURES: LAWN AND PERMEABLE ZONES

Vehicle Type	Length	Height	Max Capacity	Recommended Protection Measures Lawn and permeable zones
Small Rigid	6.4m	3.5m	4.0 tonnes	Temporary ground protection Grass Reinforcement Mesh GR 14
Medium Rigid	8.8m	4.5m	8.0 tonnes	Heavy Duty Temporary Ground Protection such as terratrak plus Grass Reinforcement Mesh GR 14
Heavy Rigid	12.5m	4.5m	12.0 tonnes	Hardstand areas & streets only.
Articulated	19m	4.5m	> 12.0 tonnes	Hardstand areas & streets only.

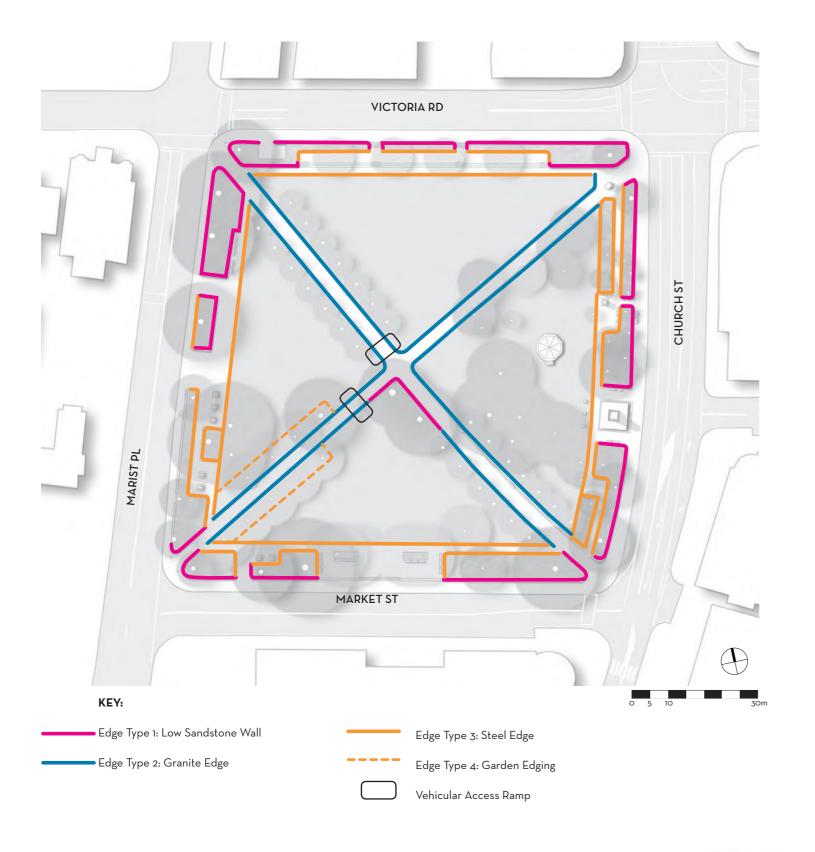
Vehicle Data Source: AS 2890.2 - 2002

A range of different protection measures are illustrated above. These include temporary and permanent measures to minimise soil compaction and damage to turf. These products provide a range of capacities and capacities for point load and spread load weights.

Permanent protection measures such as Grass Reinforcement Mesh have been used at the Crescent Amphitheatre at Parramatta Park to allow for service vehicle access during community events without destroying the turf. The maximum load for this mesh (14mm thick) would provide approx. 8 tonne per axle load tolerance which would allow access for Medium Rigid Vehicles. This would not be appropriate for use in locations where there are existing sub-surface tree roots.



Walls & Edges









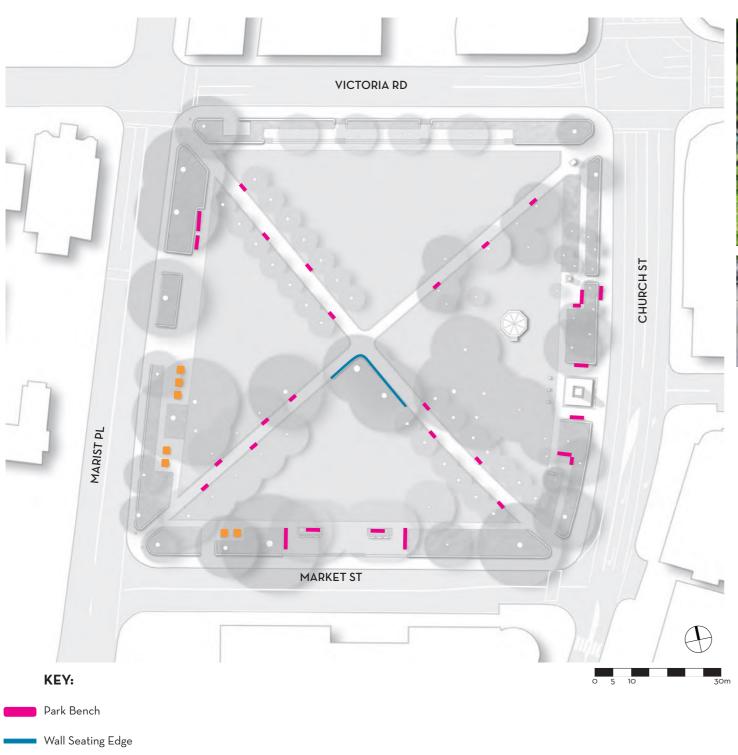


A low sandstone wall, similar to low walls around Hyde Park is located on the northern and eastern edge of the square, reflecting the significance of Church Street and Victoria Road. On Victoria Road a modest level change elevates the square from the busy arterial road. Service facilities such as a substation and irrigation tanks can be concealed by the proposed wall.

Granite edging is nominated for the existing axial pathway edging, incorporating vehicular access ramps at locations where service access is proposed. Refer to Square Structure: Swept Paths for further detail. Steel edging to secondary paths and gardens is proposed.



Furniture

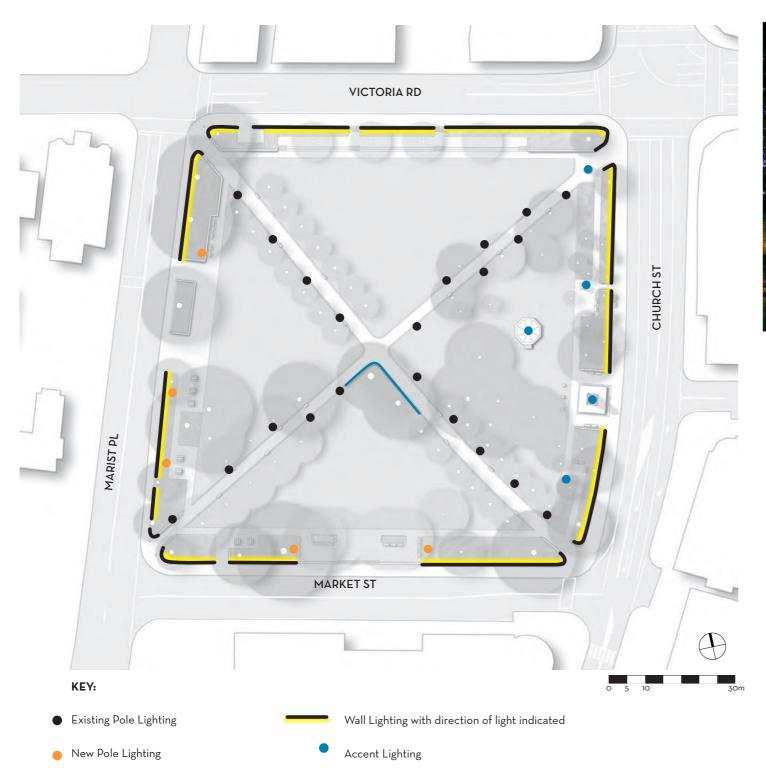




New furniture is proposed for the square. This is comprised of a combination of park benches, picnic tables and individual seats providing use for a range of users. Low steps and walls provide informal seating spaces throughout the square.

Picnic Tables

Lighting

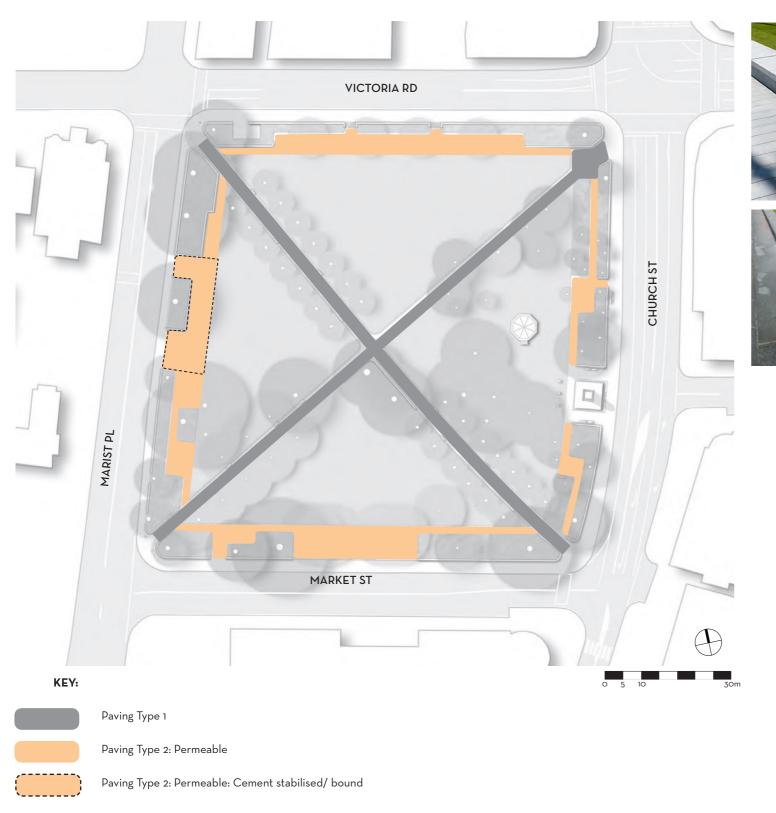




Lighting is to be upgraded across the square. New column poles with luminaires are recommended for axial pathways. Additional poles with luminaires are recommended on the western edge of the square, adjacent to circulation paths and picnic tables. This would provide lighting in locations where service food providers and charities operate in the evening. Accent lighting to key features including the Anderson Fountain is recommended. Proposed walls to square surrounds could incorporate recessed light fittings providing accent lighting to garden beds and adjacent features.



Paving

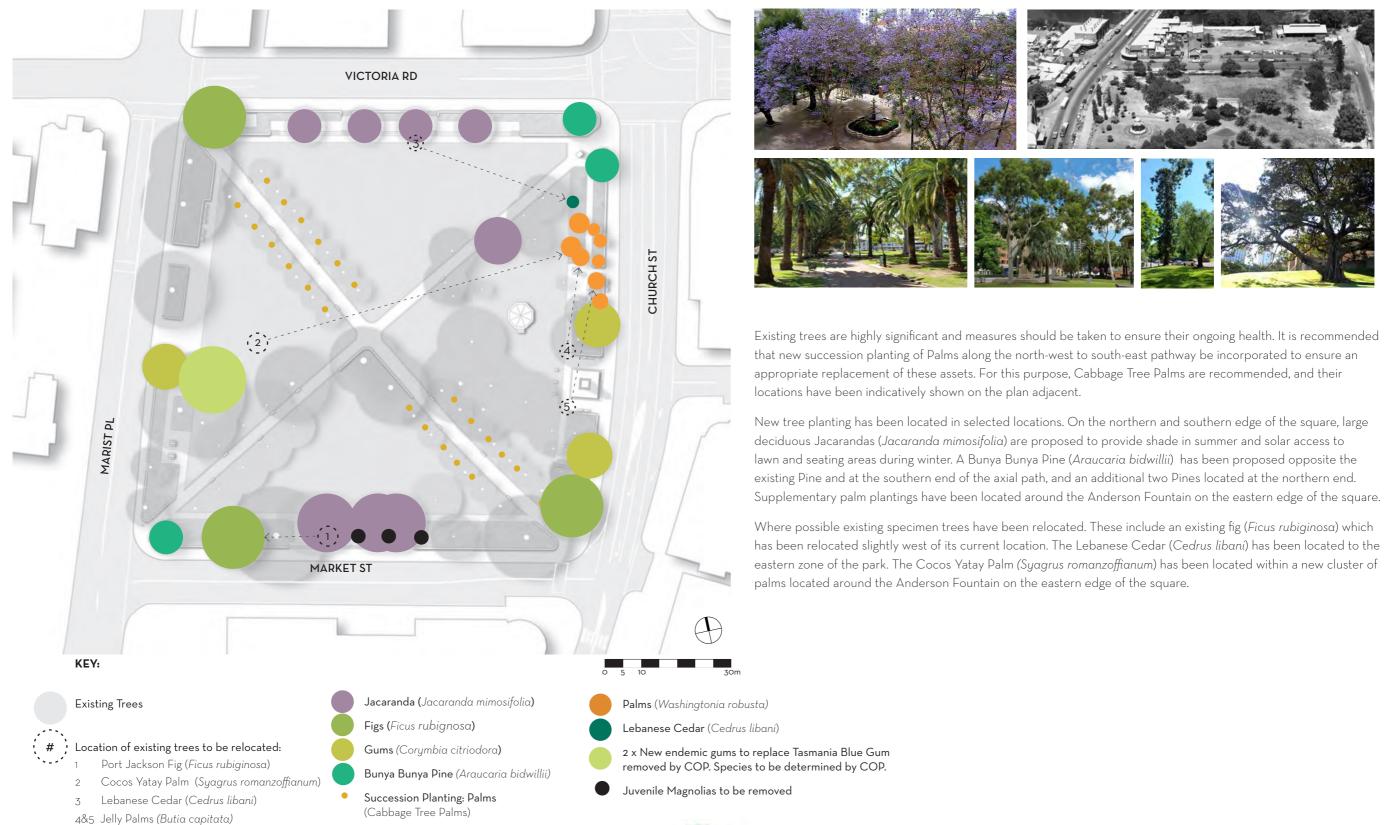




The current brick paving on the axial paths is in poor condition and it is recommended that this would be replaced with a stone paving such as granite suitable for occasional use by Medium Rigid Vehicles (max 8.0 tonnes capacity). Secondary pathways can be designed as permeable zones, using stabilised sandstone or gravel to allow for storm water infiltration. Locations where there will be higher levels of use, such as the Marist Avenue entrance may incorprate higher specifications or cement in the sandstone mix.



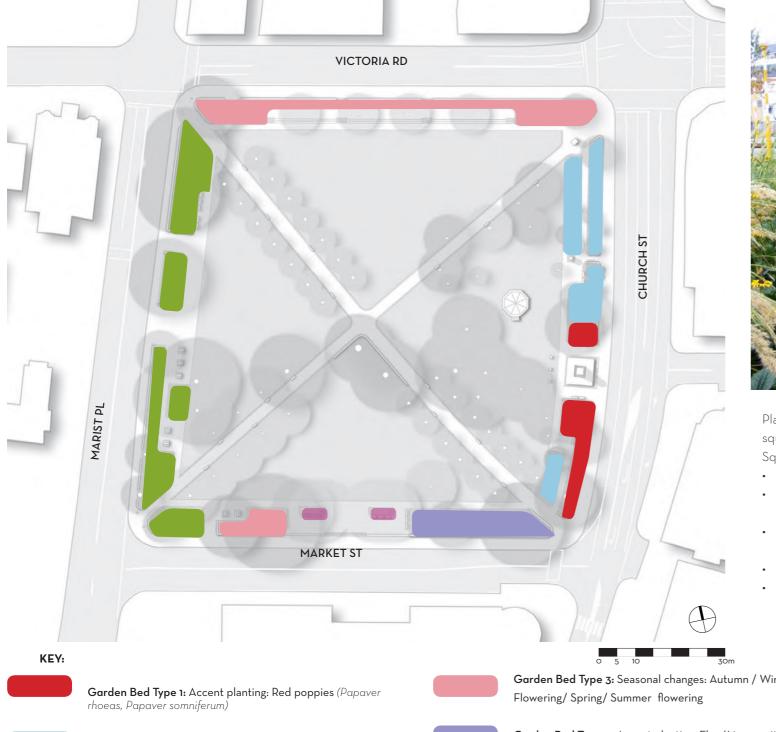
Trees





Landscape Master Plan: Square Materials

Gardens











Planting within the garden beds is to be predominately low shrubs and groundcovers to retain views into the square from surrounding streets. A mix of plant species are proposed, reflecting the various eras and use of the Square. Accent planting can be incorporated into these garden zones reflecting various themes as listed below;

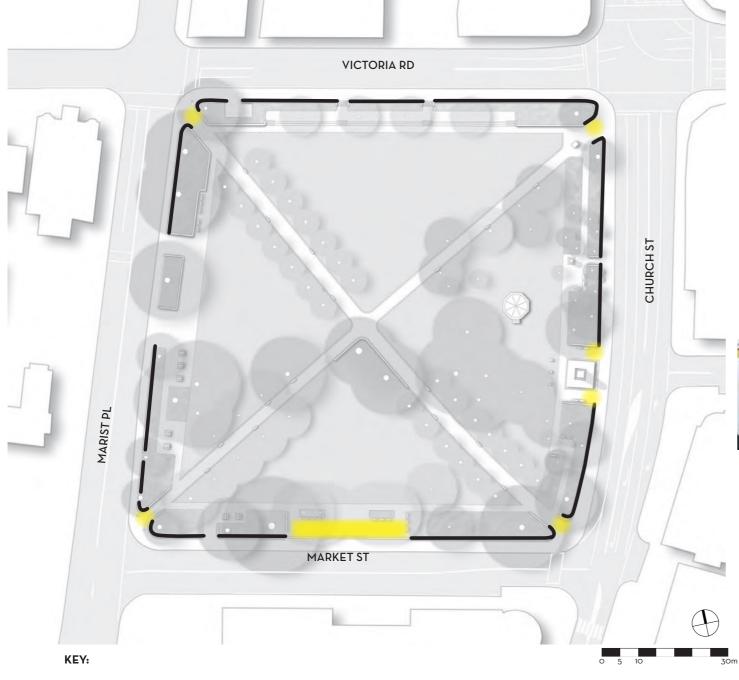
- First female factory reflected in accent planting of flax (Linum usitatissimum) used in weaving
- War memorial reflected in accent planting of red poppies (Popaver rhoeas) recognized as a sign of
- Anderson fountain and Bills Horse Trough -water theme reflected in accent planting of Iris (Iris versicolor) and Native Violets (Volia Hederacea)
- Performance and celebration reflected in accent planting with seasonal variation
- Native and indigenous character reflected in accent planting of native grasses (Lomandra hystrix, Dianella revoluta)

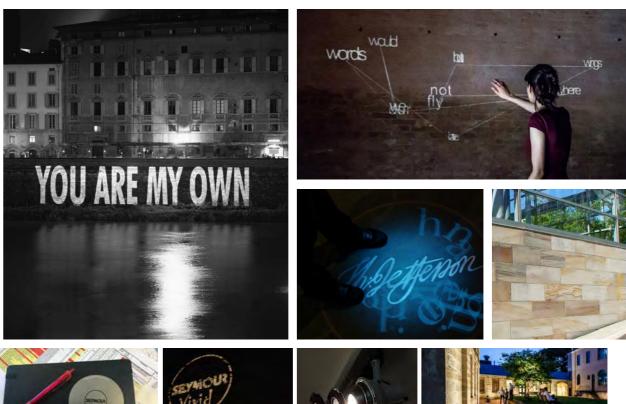
Garden Bed Type 3: Seasonal changes: Autumn / Winter Garden Bed Type 4: Accent planting: Flax (Linum usitatissimum) Garden Bed Type 2: Accent planting Water theme -Blue Iris, (Iris versicolor) and Native Violets (Volia Hederacea) Garden Bed: Natives and Indigenious Accent Planting (Lomandra hystrix,)



Landscape Master Plan: Square Heritage

Interpretation





The landscape master plan proposes a changing signage/ artwork component for the square. Gobo light projectors mounted on standard light poles would provide capacity to provide a changing display of content related to the history or the events in around the square. A gobo (or GOBO) is a physical stencil or template placed in front of a lighting source, used to control the shape of emitted light. Multiple patterns or images can be used in the projector creating a changing artwork. These projections can be oriented to address multiple elements including walls, lawn zones, paved areas and entrances. Feedback from Heritage NSW indicates that a permanent electronic sign would not be endorsed as it would impact on the sensitive heritage context of the square.

Interpretive lighting on boundary wall

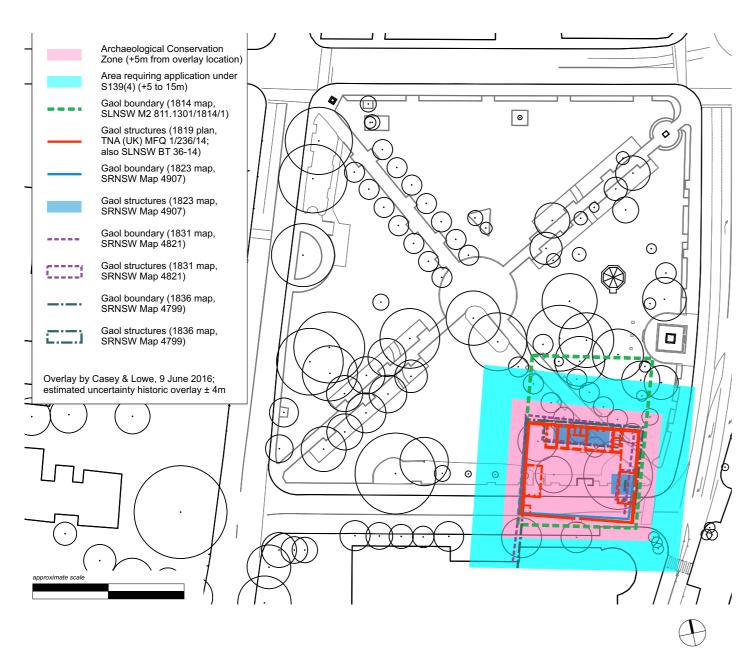


Interpretive lighting/projection on the ground at entrances to the Square



Landscape Master Plan: Square Heritage

Archaeology



The archeology zoning map to the left has been prepared by Casey & Lowe. The results of the research and recommendations are discussed below;

• Prince Alfred Square is a significant heritage item and open space. The square, as the location of the first and second goal, and the location of Australia's first female factory, should contain items of exceptional archaeological significance. The square's role as a public recreational space, with layout and features representative of various eras, reflects the evolution of open space and park design in

New South Wales.

- Prince Alfred Square is likely to contain remains of potential State significant archaeology which is protected under the NSW Heritage Act 1977.
- Heritage Council policy considers that all State significant archaeology should be conserved in situ.
- Archaeological relics within Prince Alfred Square are protected under S139/140 of the NSW Heritage Act 1977. This means there should be no impact on these potential remains prior to obtaining an approval from the Heritage Council of NSW.
- The proposed works for Prince Alfred Square Landscape Master Plan identify potential new bedding and low retaining walls to be located within the areas of identified archaeological potential and significance.

RECOMMENDATIONS

- . Archaeological Testing will need to be undertaken in areas of proposed impacts so it can be clearly determined if and where archaeology might survive and the likely impacts from the proposed landscaping works on archaeology and if the proposed works can be undertaken.
- 2. An application should be made to the Heritage Council under S139/140 of the Heritage Act 1977 so as to allow for archaeological testing. The identified archaeologist must be able to obtain permits for State significant sites.
- 3. At the same time as the testing is being undertaken, Parramatta City Council should engage the archaeologist to write an Archaeological Management Plan for Prince Alfred Square. The archaeological testing outlined above should inform the writing of the Archaeological Management Plan, reflecting the actual potential archaeology of the area and its significance.
- Additional primary historical research should be undertaken to add to our understanding of operations of the gaol and Female Factory, who its residents were and further information on the workings of the Female Factory and the goods it produced.
- 5. The Archaeological Management Plan will provide clear strategies for managing the archaeology of the site in association with the Landscape Master Plan. A services plan should be developed in conjunction with the Archaeology Management Plan to ensure the archaeology of the site is avoided. Consideration should be given to the bundling of services to minimise impacts.
- 6. Artefacts recovered during the archaeological testing will need to be stored by Council in perpetuity. They will need to be catalogued in accordance with the approval.
- 7. Prior to the completion of the archaeological testing and the writing of the Archaeological Management Plan which will allow the archaeology of the place to be more correctly identified and protected, the existing zoning map provides some strategies for managing the site:
- The pink zone: area of potential State significance. No works can be undertaken within this are without a \$139/140 approval from the Heritage Division.
- Blue buffer zone, all proposed sub-surface works within this area require an Exception S139(4) approval from the Heritage Division
- Sub-surface ground works beyond this zone do not require an approval from the Heritage Division.



Landscape Master Plan: Square Heritage

Preliminary Statement of Significance

- 1. The square is the location of the first and second goal, and the location of Australia's first female factory. The factory is thought to be where the first cloth manufacturing in Australia was undertaken. By 1804 the factory contained nine looms which produced linen, canvas, woolen fabric, sail cloth and sacking and made rope. Between 1803 and 1807 between 50 and 106 women were working within the factory. Many of the convict women were considered to be 'thoroughly depraved and abandoned'. New female arrivals were placed in the manufactory until they could be assigned to settlers as wives, housekeepers or servants. In 1806 72 'incorrigibles' were employed at the factory. The factory occupied the upper floor until 1821 with the goal operating until 1842 when a new gaol was opened in North Parramatta.
- 2. Prince Alfred Park is Parramatta City's only civic park. Known first as 'Gaol Green" then as "Alfred Square" to commemorate the visit of Prince Alfred to Parramatta in 1868, the Park was declared a public reserve in 1837 and officially gazetted for public recreation in 1905.
- 3. The square is an important passive recreational space; the square is representative of formal parks developed in NSW in the early 19th Century. Its structure including axial pathways reinforced by formal tree plantings, fountain and bandstand reflect the importance of park as space for ceremony and small gatherings.
- 4. The square is located at the junction of Church Street and Victoria Road creating notable streetscapes along these two frontages. There is a strong view to Parramatta Catholic Cathedral along Church Street which sees the spire of the cathedral surrounding by green tress and creating a strong setting for views along Victoria Road to the cathedral.
- 5. The square is representative of a range of cultural landscapes from the Victorian to the modern. The tree plantings represent chronological trends in planting themes, including the use of Moreton Bay Figs and Pines (1870 1880's), Canary Island Palms (1930's) and Gums (1950's and 1960's).
- 6. The square is an important commemorative space. It's been used continuously as a space for Anzac Day Services since the construction of the war memorial in 1922. The items within the park, including the clock tower, the Anderson fountain, the horse trough and several plantings reflect the contribution of various prominent local individuals.

- 7. The site also commemorates, through its relationship to the gaol and factory and individuals within the factory, the spirit of resistance to authority, and the concepts of civil rights and freedom of assembly that pervaded the early history and life of Parramatta as evidence by the burning of the jail, the characters of the overseers and prisoners and later rebellious episodes involving Rev. Samuel Marsden.
- 8. The Park interfaces with the many key historic buildings in its immediate vicinity, all of which have played a significant role in the evolving culture of the town. The ensemble of heritage buildings and structures: St Patricks Cathedral, Linden House, The Old Kings School, St Peters Church of Australia, and Lennox Bridge. The Park's corner at Marist Place and Victoria Road associated with the surrounding key Catholic institutions and buildings, and underlines the long associations of this site with the development of Catholicism in Australia.
- 9. Significant individuals associated with the factory site include:

George Mealmaker, Scottish 'martyr', master weaver and convict who ran the factory between 1803 unt he died in 1808 following the 1807 fire which partially destroyed the gaol.
Francis Oakes, Chief Constable and Superintendent of the Female Factory in 1814 and former missionary.
Governor King established the manufacture of textiles within the factory and was responsible for the erection of the stone gaol buildings in 1802-1804.
Hundreds of women convicts and male weavers who worked in the factory as well as male convicts and keepers who lived and worked in the gaol.

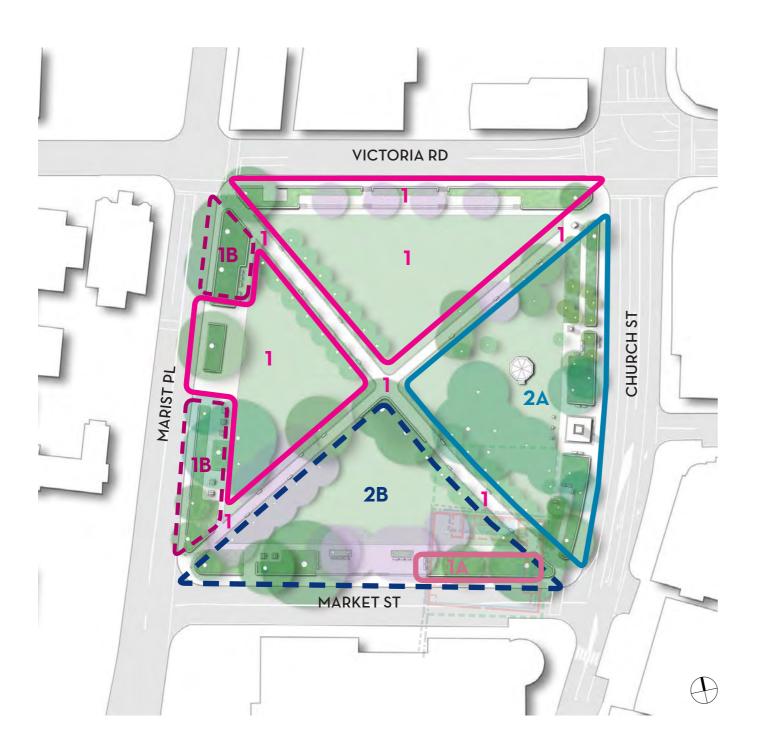
10. The potential archaeological remains of the two gaols and the first factory are of exceptional significance and have the ability to add to knowledge through further historical research and archaeological excavation, recording and analysis. Such research questions relate to colonial government, crime and punishment, the rule of law, lives and work of female and male convicts and the manufacture of textiles in early Parramatta. Research questions would relate to the material evidence of convictism in Australia; early textile manufacturing practices and technology; the use of the gaol and factory and evidence for the activities of the convicts. Further understanding of the nature of gendered behaviors and the construction of gender identifies within the gaol and factory; material construction of institution life and other research questions.

The archaeological	I remains of the	gaols and factor	v are of	potential S	tate significance

☐ The heritage significance of Prince Alfred Square is likely to be of local significance.



Landscape Master Plan: Square Staging



The following details the recommended staging for the works within the Square. Stage 1 works are recommended as a priority to address event usage and maintenance issues. Stage 2 works could occur later; either stage 2 or 2B could be delivered if and when adjacent sites develop or when budgets are available.

PRIORITY #1: NORTH & WEST LAWNS, MAIN PATHWAYS

- Install wall / substation / services / tank to Victoria Road
- Undertake drainage and turf improvement works (northern lawn)
- Upgrading paving and edging to axial paths
- New seating on main access paths
- Provide improved vehicle access to Marist Place
- Succession planting and tree relocation
- Relocate Anderson Fountain and Horse Trough

PRIORITY #1A: ARCHAEOLOGY

Undertake archaeological investigation

PRIORITY #1B: MARIST PLACE

- · Install paths, gardens, benches and lighting
- Install sandstone wall
- Succession planting and tree relocation

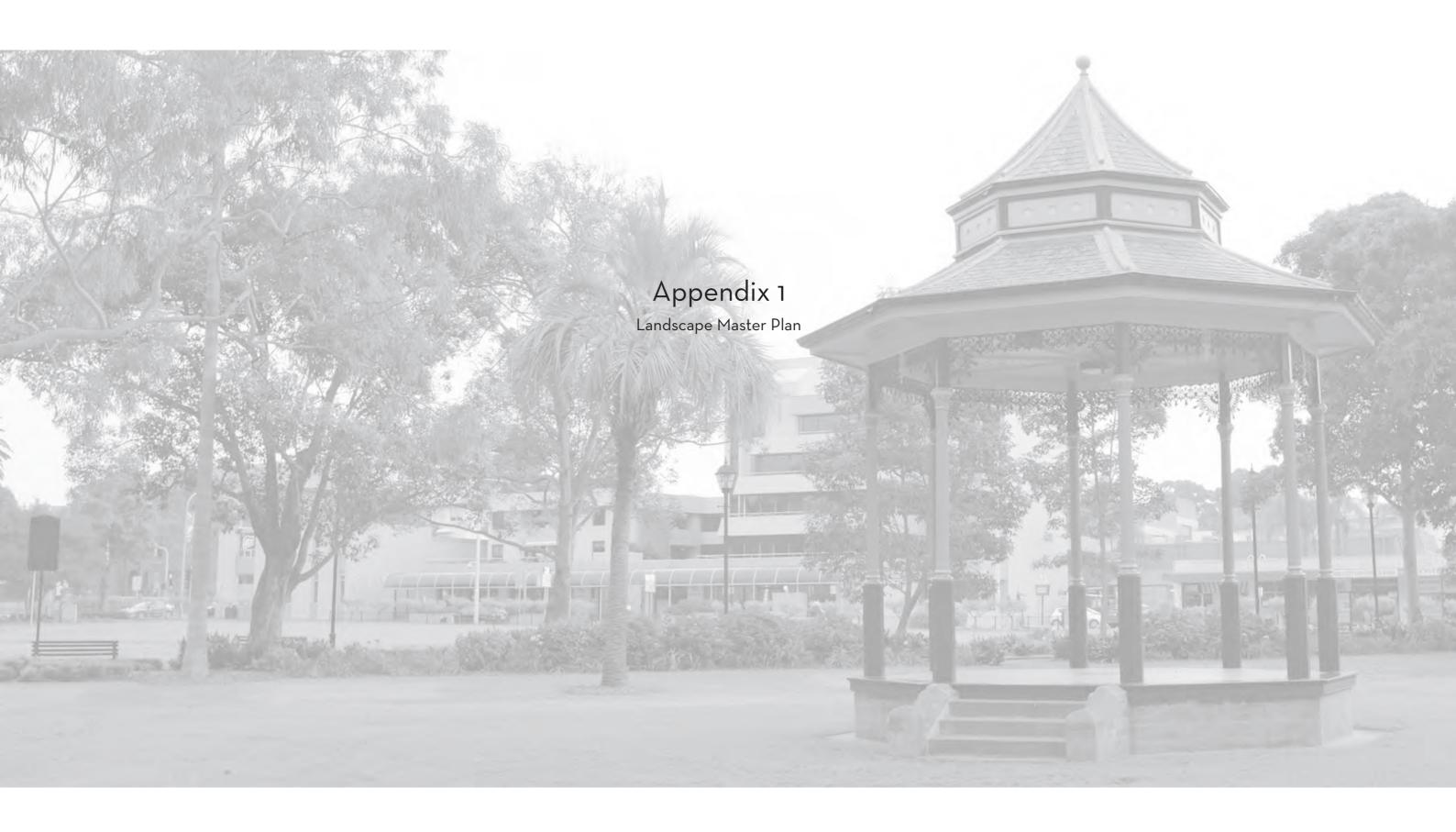
PRIORITY #2A: CHURCH STREET

- Install paths, gardens, benches and lighting
- Install sandstone walling
- Reinstate the Anderson Fountain

PRIORITY #2: MARKET STREET

- Install new pathways, steps and entrance to Market Street
- Investigate the provision of shareway on Market Street in collaboration with PCC urban design team
- Provide services including electrical connections and outlets
- Succession planting and tree relocation







Prince Alfred Square: Landscape Master Plan



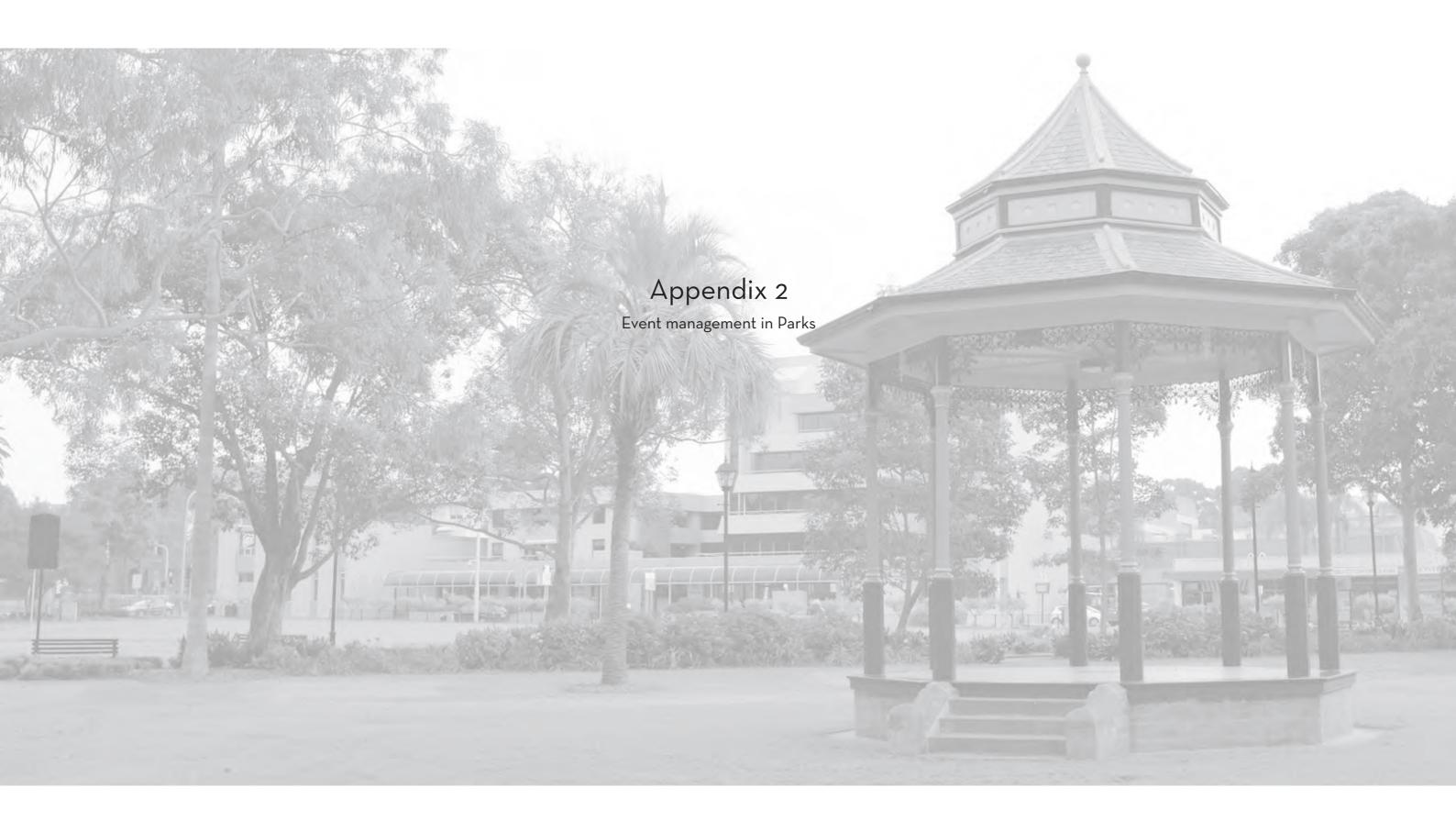
Prince Alfred Square Landscape Master Plan

For City of Parramatta

Prepared by GALLAGHERSTUDIO in collaboration with

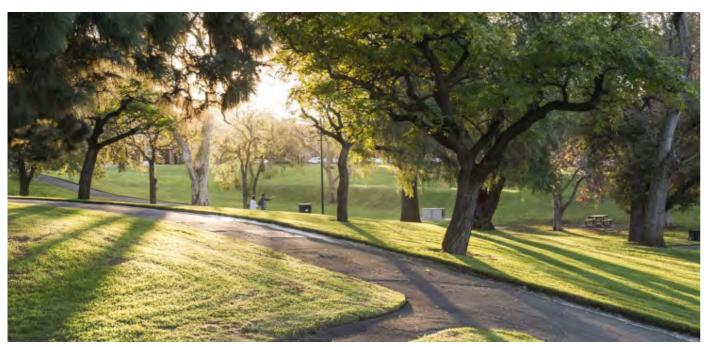








Precedent Review: Event Management in Public Parks





Above right and left: Image of Adelaide Parklands and Australia day events in Hyde Park North

As part of the analysis phase for the development of Prince Alfred Square Master Plan, event management protocols were explored for a range of existing public parks. Where possible, information was collated on public parks that have high heritage and cultural significance. The following report includes a selection of park and an overview of their management procedures and event requirements. Information on vehicular access and protection measures has been included.



Precedent review: Event management in Public Parks			
Location	Hyde Park, Sydney Managed by City of Sydney	Protocols	
Elizabeth Street, Sydney	 Issues identified in Hyde Park Plan of Management include Damage to tree roots, paving, walls, grass and park service infrastructure from event vehicles. Damage by event attendees and operators walking through planting beds. Visual impacts of event related vehicles, fencing, structures and temporary infrastructure. Parts of the park can be alienated by OH & S requirements for controlled access during 'bump-in' and 'bump-out' for major events. During some parts of the year major events in the park follow each other within a short timeframe. Where this coincides with extended wet weather this can result in significant impacts on the park's lawns and gardens in particular Inadequate recovery times allowed for open grass areas after major events 	A comprehensive Events Management Policy for the park is currently being developed that addresses the park's cultural heritage, social significance and fits within a broader events strategy for the city. Feedback provided by City of Sydney events management stated that a sustainable calendar of events is under development for Hyde Park. this includes • The 2 primary events Noodle market and Sydney Festival require 6 months recovery period in their locations • No new event approvals are being accepted for the park of events • No replacement of events if they are cancelled Current requirements are as follows; • Turf protection required for all vehicles on turf • large vehicle load drop off on park hardstand boundaries and load split into smaller trucks to limit impact of tree canopies • Use of terra plas temporary surfacing or equivalent on all turf; Manitou Forklifts with all terrain tire required to be used on turf areas • Tree protection fencing required • Grass areas are treated with perma track to reduce wear and tear on the grass. • Turf replacement for all damaged areas after events, these areas are then cordoned off until turf establishment	



Location	All parks managed by City of Sydney	Event Guidelines City of Sydney Version 2.3, April 2015 : Protocols
All parks in the	Event Guidelines Version 2.3, April 2015	The protocols include a range of requirements as listed below;
LGA	These guidelines are designed to assist organisations with the regulations and procedures associated for staging events in parks, open spaces or streets under the ownership and/or control of the City of Sydney Council. This provides an outline of the process required for approval.	 Protection of grass through the use of pro-floor or a similar product to protect all high traffic areas including stalls, food, beverage and merchandise sale areas. Protection of sensitive garden beds and plantings through use of barricading to prevent public access. Protection of trees by not placing any structures within 5 metres of each tree trunk. Tree protection fencing (e.g. bicycle racks) to be installed, prior to bumpin, around all significant trees. Tree pruning and or trench digging is not permitted in any park/open space. Paved pathways only to shall be used for vehicles entering and leaving venue. Vehicles are not permitted to drive on grassed areas within the venue unless turf protection measures such as Protrack, plywood boards or similar measures are used for all vehicle movements. No vehicle is to be parked within the confines of the venue during the event unless approved by Council.
		Vehicles are not permitted to drive or park beneath the dripline of any tree within the venue under any circumstances.

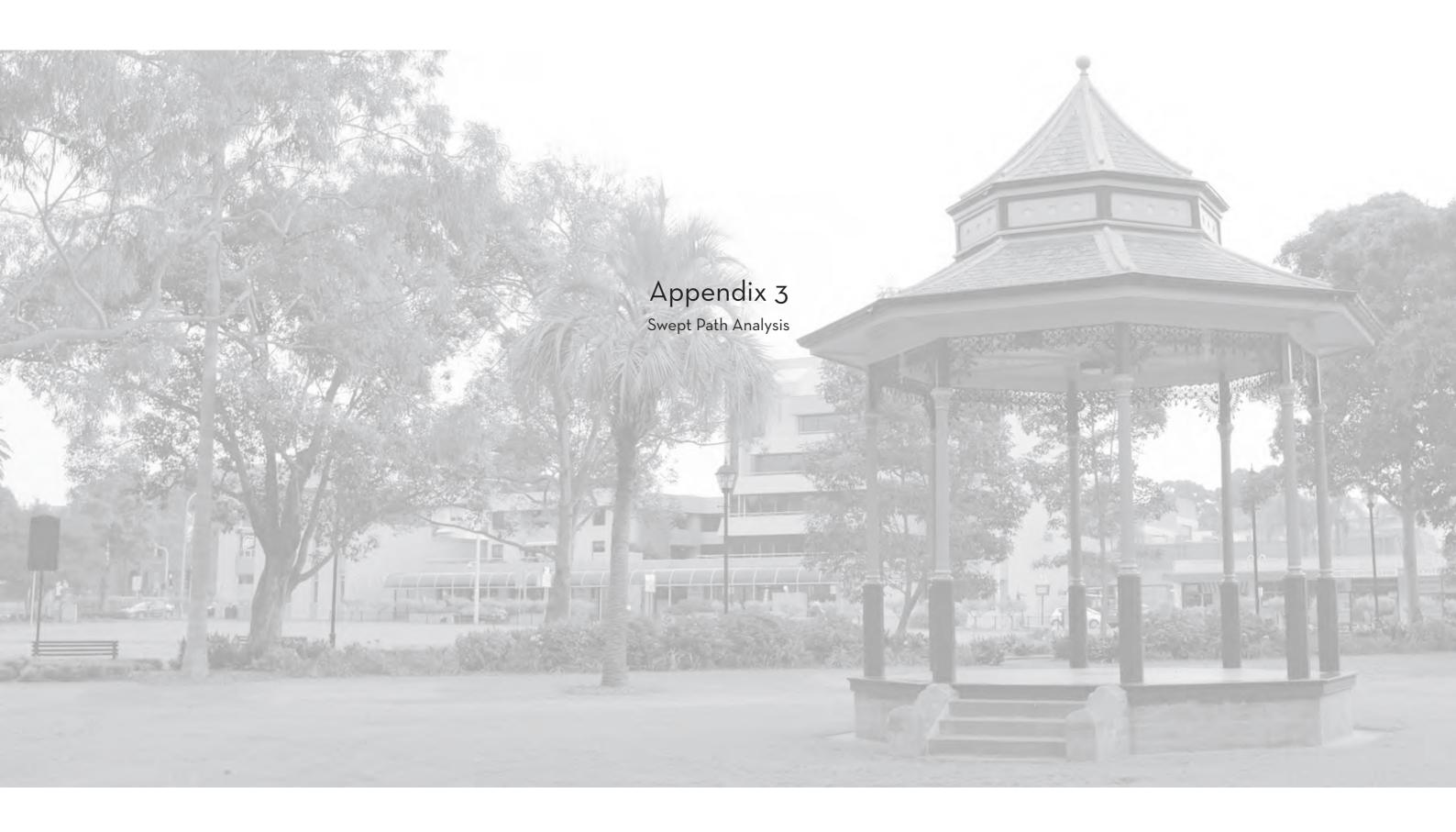


Location	The Royal Botanic Gardens Sydney	Outdoor Public Event Proposal Guidelines Protocols
Sydney CBD	This guide has been developed to assist in developing and submitting a proposal to hold an outdoor public event on Royal Botanic Gardens and Domain Trust (Trust) lands.	 The protocols include a range of requirements as listed below; The Trust does not allow structures to be erected or equipment to be located under the drip line of a tree canopy. No pegging of structures, perforating the ground, or vehicles driving over grass is allowed. Grass needs to be protected at all times, in particular in high use areas. Vehicle Access to Event Site Access to event sites often traverse pedestrian pathways and as a result have weight and height restrictions. Trucks over 4.3 m in height and deemed to be oversized by the RTA or weighing more than 8T per axle are not allowed on Trust lands. Turf has irrigation under it which can be crushed and therefore vehicles are not allowed to drive over grass unless placed on boards. Access to event sites requires clear scheduling to prevent congestion and often have a one way access system. Depending on the event site, there may also be restrictions of access during peak pedestrian access. Vehicles cannot be parked on site, access is for delivery and pick up purposes. There is no staff parking on site and no vehicles are allowed to drive over grass. Information is to be provided on infrastructure to be brought to the event site.

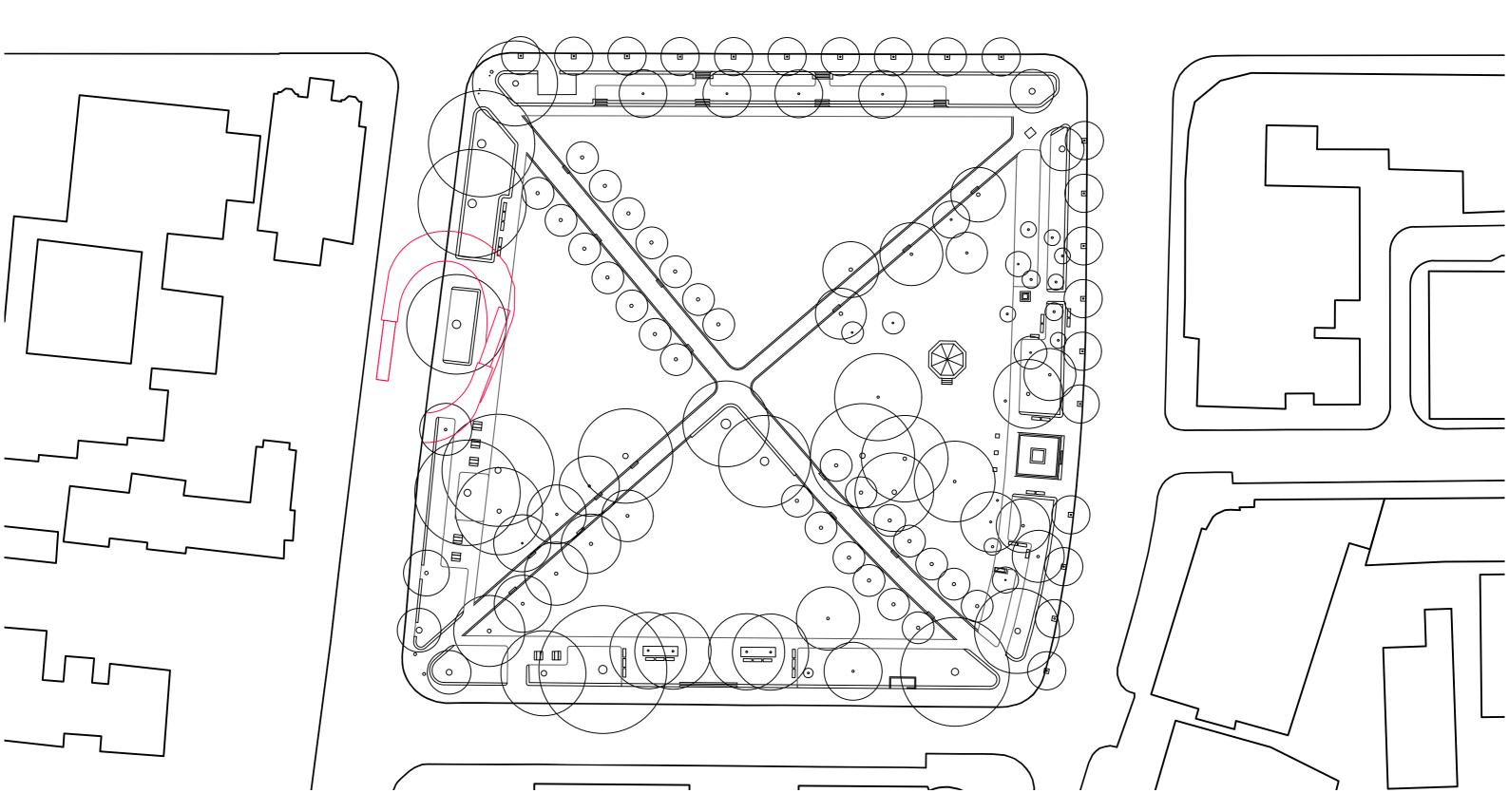


Location	Adelaide City Council	Adelaide Park Lands Standard Operating Procedures Protocols
Adelaide CBD	The purpose of the Standard Operating Procedures for Events in the Park Lands is to help event organisers understand their responsibilities and develop event plans that ensure the values and amenity of the Park Lands are protected.	 Vehicle movements or vehicle parking within the root zone of trees are not permitted The placement of heavy event infrastructure such as containers, staging and toilets blocks is not permitted within the root zone of trees. Tree Protection zones must be set up around all significant trees during build and dismantle. A tree protection zone is a restricted area delineated by protective fencing which is set up before the commencement of the event build and again prior to dismantle. The site criteria identify trees within each Park that must have a tree protection zone installed. No tree pruning is permitted by event organisers.









12.5M HEAVY RIGID VEHICLE: ENTRANCE FROM NORTHBOUND LANE

WITHOUT TREE PROTECTION ZONES

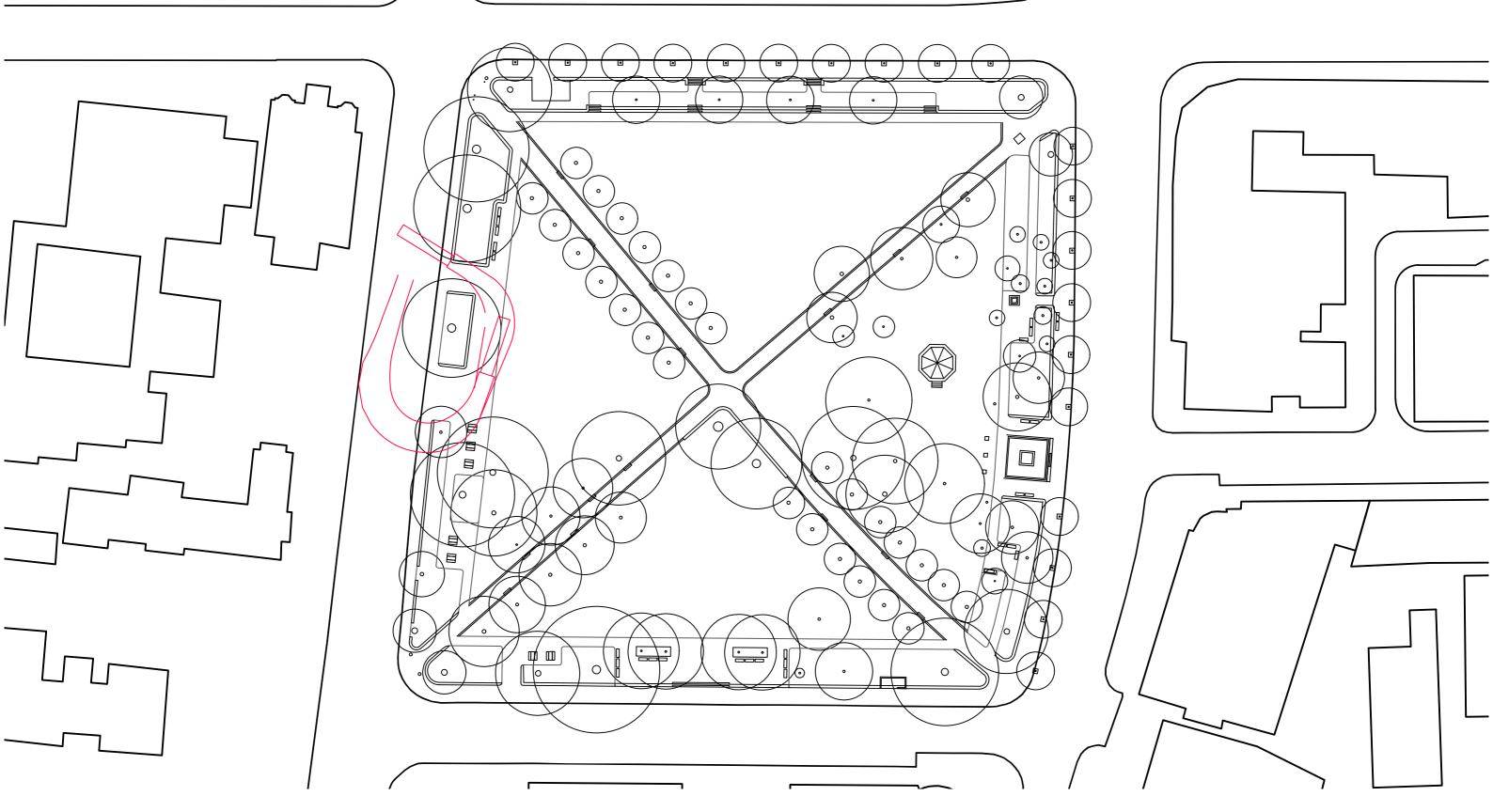
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12.5M HEAVY RIGID VEHICLE ENTRANCE FROM SOUTHBOUND LANE

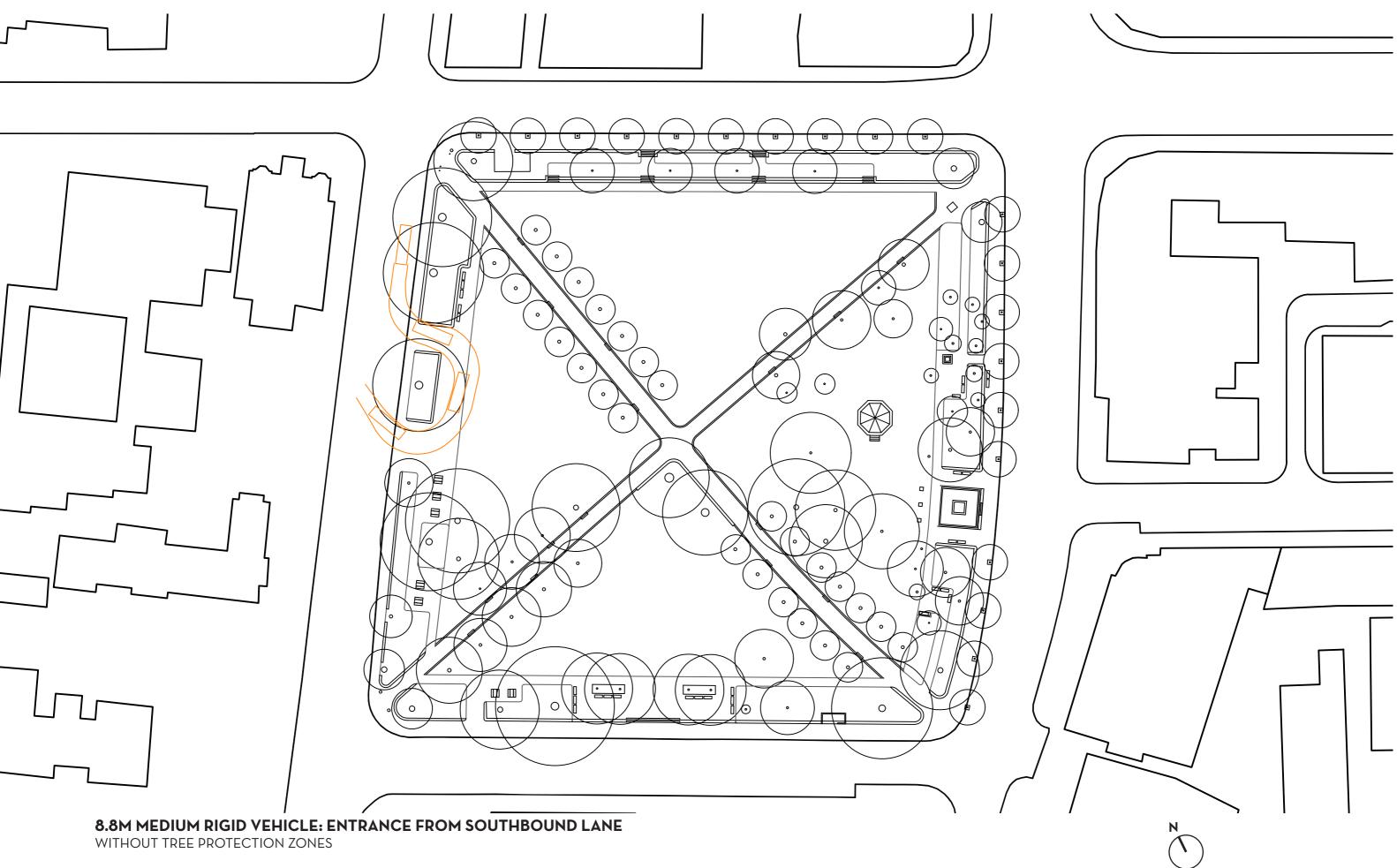
WITHOUT TREE PROTECTION ZONES

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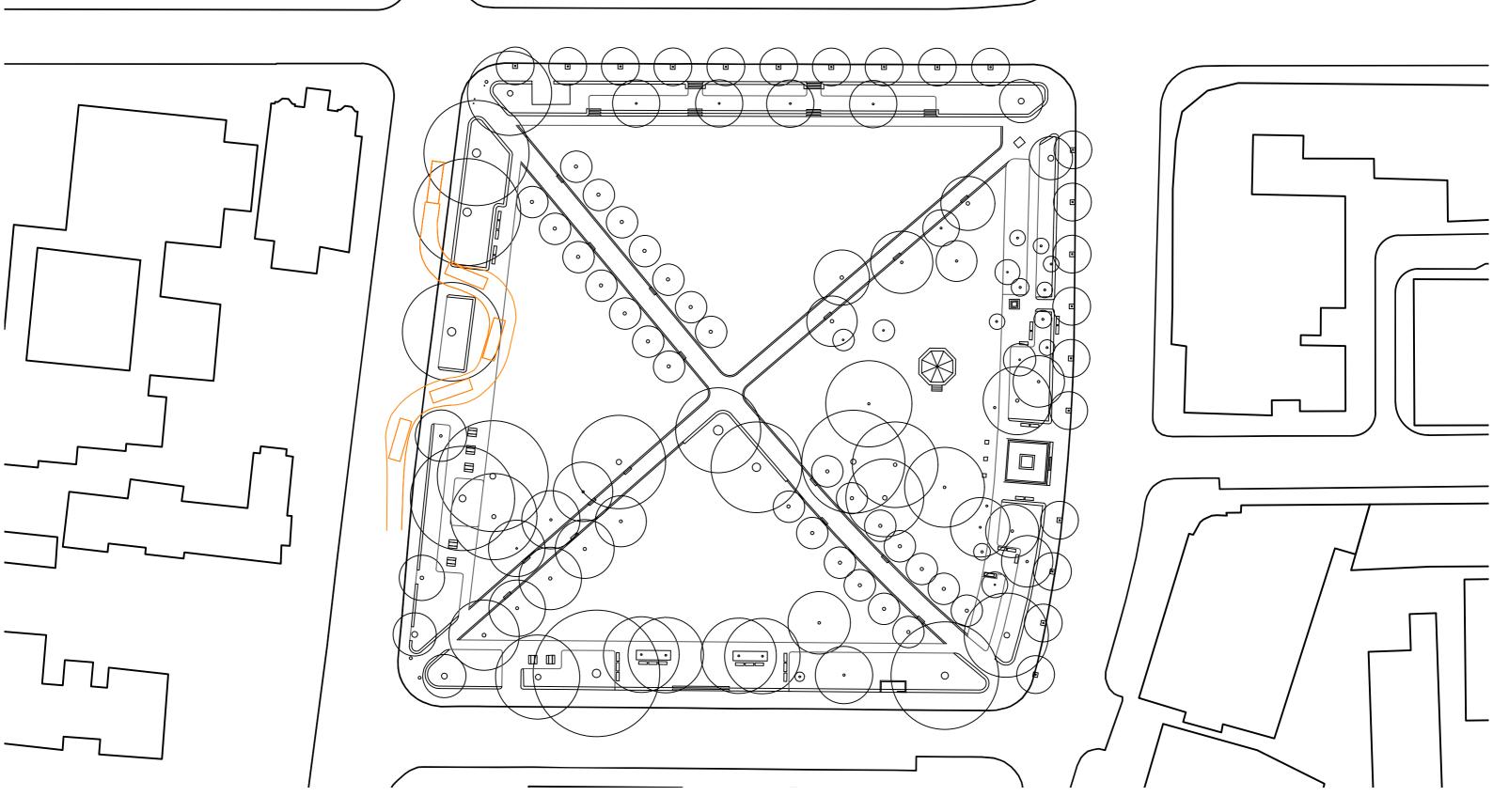


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8.8M MEDIUM RIGID VEHICLE: ENTRANCE FROM SOUTHBOUND LANE

WITHOUT TREE PROTECTION ZONES

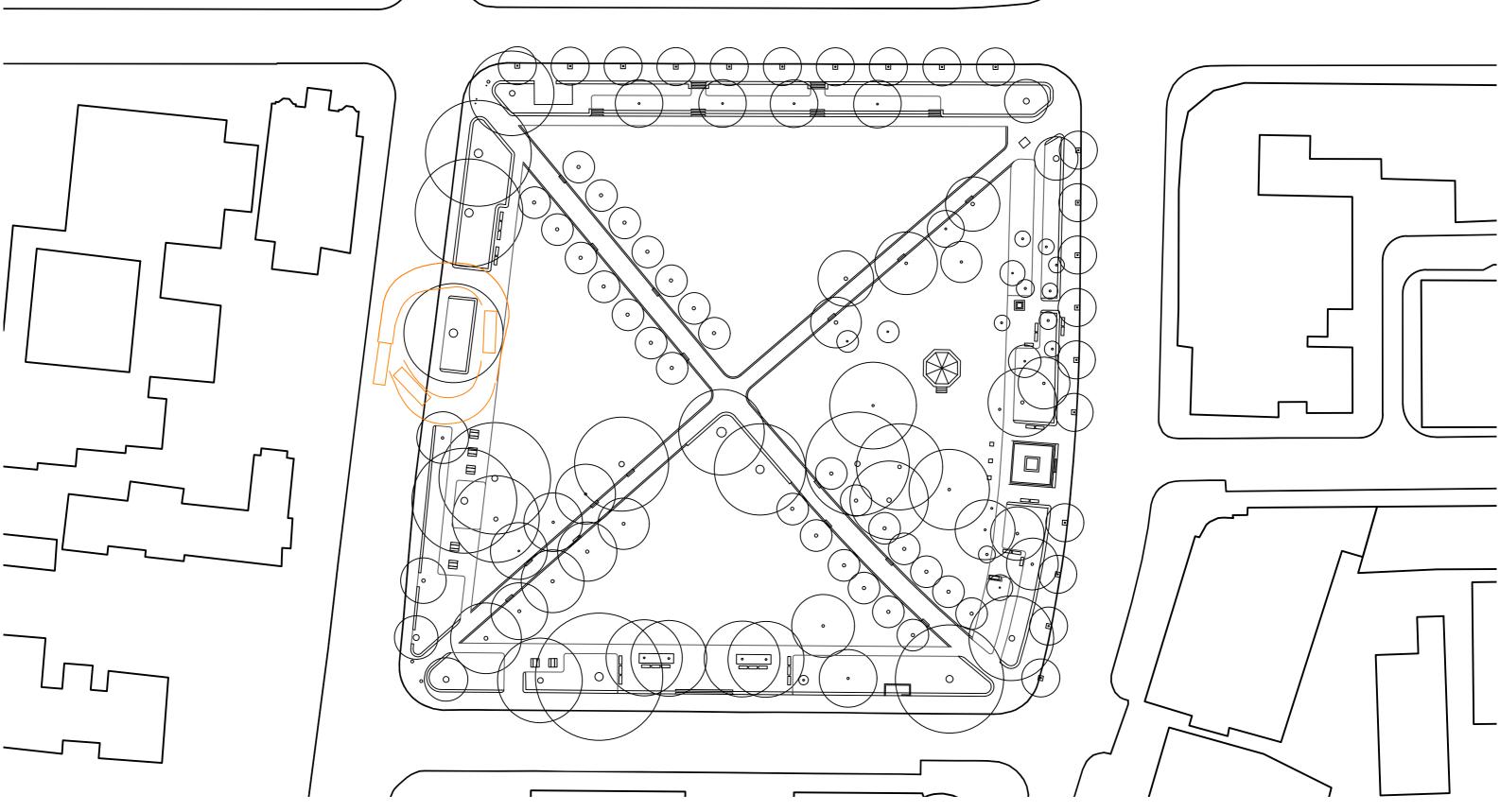
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8.8M MEDIUM RIGID VEHICLE: ENTRANCE FROM NORTHBOUND LANE

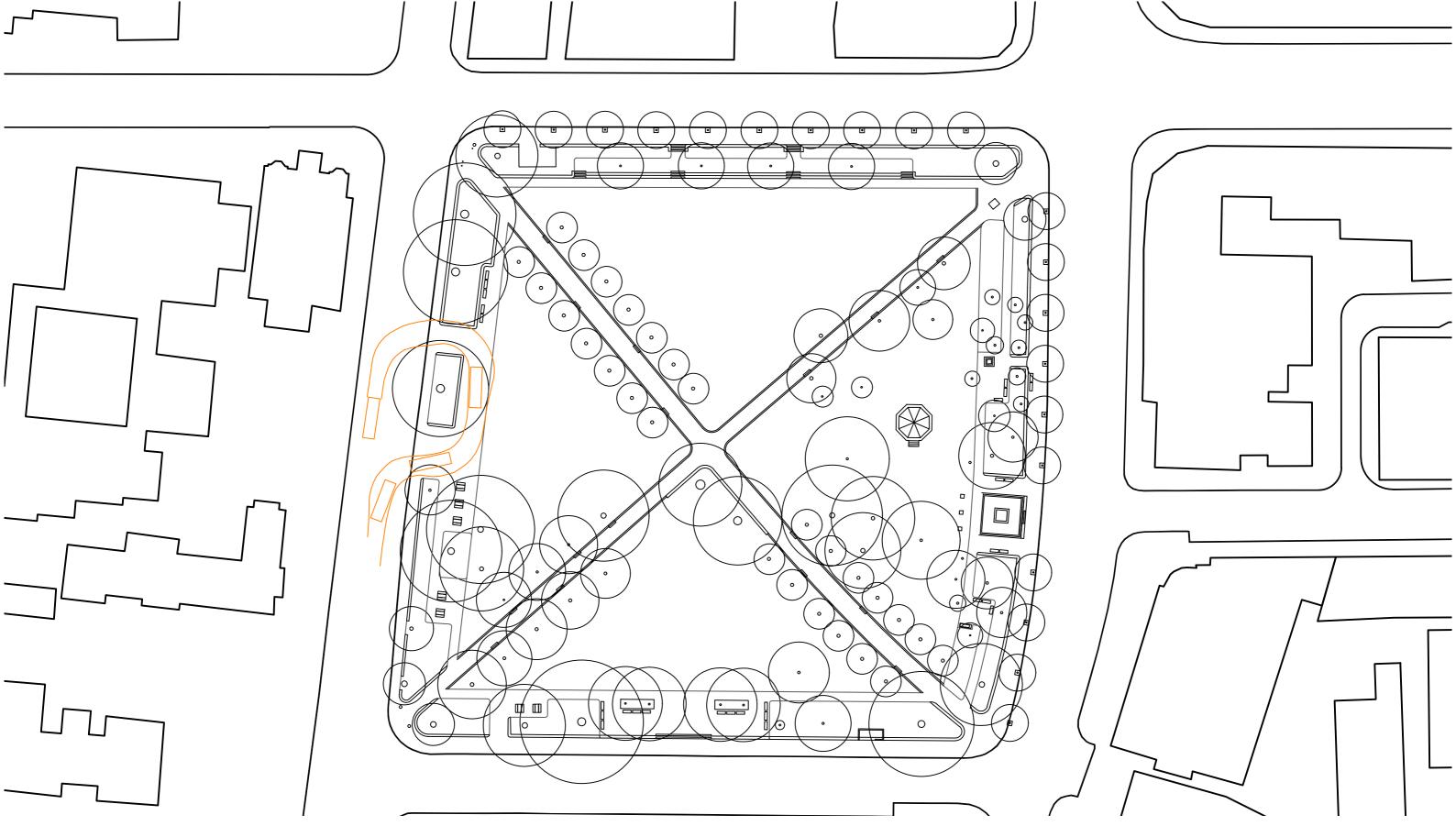
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