



Sydney Park Detailed Master Plan May 2006

Introduction

The Master Plan for Sydney Park has been revised in consultation with the community and upgraded to provide a clear strategy for the future development of the City's biggest park. Council has endorsed this Master Plan as a guiding document for future park projects and implementation planning.

The document consists of three sections:

I. The Master Plan Basis

Explains the premise and context for the study and major foci.

2. Master Plan Overview

Presents the overall vision for the park, capturing the major use zones and development strategies.

3. Detailed Master Plan Components

Provides detailed design strategies for the following components of the master plan:

- Circulation
- Park Perimeter
- Planting
- Soil
- Play Opportunities and Supportive Facilities
- Lighting
- Signage

The Master Plan Basis

Study Premise

The City of Sydney's biggest park is not yet 20 years old. Much has been achieved to transform an industrial history of clay extraction and waste disposal into 44 hectares of parkland and a vital asset for the growing communities of the southern districts of the City. With development continuing in the southern districts, there is a growing community need for access to high quality open space.

The 2003 Master Plan prepared in conjunction with the Plan of Management has largely been successfully implemented and now represents the existing situation. This updated and detailed Master Plan, builds on the foundation of the Plan of Management, addresses the need to establish a meaningful vision for further improvements to Sydney Park as part of its ongoing development.

Future works to the park will establish an improved park landscape of greater environment stability and with wider recreation opportunity, so the park can cater for the growing numbers and diversity of users.

The detailed Master Plan is a tool to formulate, budget and prioritise new projects. While the Plan provides an indicative scope of development, it is recognised that implementation programs will need to be reviewed regularly, based on an appraisal of needs and priorities for both this site and others within the City's responsibility.

Overview

The Plan recognises the enduring value of Sydney Park as a "landscape retreat" For an increasingly urbanised community, it offers experiences not available within smaller local or district parks. Retaining and developing this value relies on a significant portion of the park remaining unstructured. At the same time, community demand is clear for improved landscape quality in aesthetic, ecological and amenity terms.

The Plan has therefore focussed on developing the quality and complexity of the park's landscapes. The Plan has also sought to better integrate existing structured-uses, such as the car parks, C.A.R.E.S facility and the Oval into the larger park landscape. New sites of activity are carefully composed to ensure the parkland setting continues to predominate.

In parallel, the Plan contains a substantial supportive proposal for the development of ancillary infrastructure (seating, shelters, bbqs, café/kiosk, lighting and play environments). These are sited within the landscape to flexibly support the wide range of informal passive/active recreation and cultural activity that can be enjoyed.

The Plan builds on the clear direction of the Plan of Management, and has refined the locations of uses and their detailed briefs. The Plan does not introduce new uses not envisaged by the Plan of Management, 2003.

However, in a separate Open Space and Recreation Needs Study, due for completion in September 2006, population trends, demographics, sporting participation and available open fields will be used to decide the best utilisation of community space for local residents and particular user groups, including the provision of sports facilities for women.

An audit of the built facilities and depot areas (adjacent to the park) to determine the feasibility of future adaptive reuse, consolidation or retention is not considered within the scope of the Plan. However, a recommendation of the Plan is a comprehensive feasibility study of the Kiln Precinct to consider the adaptive reuse of the kiln buildings and surrounding area.

The Master Plan Basis

Environmentally Sustainable Development

The City has adopted best practice Environmentally Sustainable Development principles within Sydney Park. The Master Plan pursues this by:

- Adopting an endemic approach to vegetation regimes, drawing on original vegetation associations of the site and more broadly across the Sydney Basin for new planting areas to offer an enhanced sense of place to the park, and supplement the region's remnant vegetation network;
- Proposing enhancements to the habitat value of the parkland, through an improved soil system able to better sustain vegetation, and consolidation of high habitat value planting with additional buffer and understorey planting;
- Highlighting park soil condition, currently a severe constraint to successful landscape establishment, and proposes comprehensive recommendations for amelioration. Implementation of these programs will require concurrent review for site contamination and site remediation constraints; and
- Complementing a parallel investigation being undertaken by the City to implement a range of water re-use and water harvesting projects for the park. Unlocking the opportunities in these two vital areas of the park's landscape system; soil and water, is fundamental to the success of park enhancements.

Park Management Issues

Dogs

The Plan does not address current dog management measures. It is anticipated these issues will be reviewed after the completion of a municipality-wide study, the City's Companion Animals Plan. Until such time, current regulations on dogs within the park will remain in place.

Lighting

The results of a safety audit undertaken in consultation with the Police recommended that the park not be lit to discourage use at night because the site does not enjoy high natural surveillance. However, the location of the park between the Railway Station and the employment areas of Alexandria; the absence of a convenient route around the park and the lack of fencing to prevent access at night, means many people utilise the park after dark, regardless of the lighting levels provided. There is strong community demand for better lighting, which is seen as increasing safety for park users and extending the usable recreation times. As a result, the Plan proposes increasing the park lighting in key areas.

Participation Programs

The Plan will be a tool for improving the outcomes of existing community participation programs, such as Community Planting Days. The key environmental rehabilitation theme of the park could form the basis of educational programs in the future, as has occurred in other brown field parks such as Bicentennial Park, Homebush Bay.

The park is a venue for festivals, sporting events and concerts. The Plan recognises this event overlay and plans future development of certain precincts to better cater for these and other possible cultural activities.

The Master Plan Basis

Public Consultation

Process

The community were consulted in two ways during the development of the Plan.

Phase one of the community consultation was distribution (7000 copies) of a questionnaire requesting initial feedback, general requirements and ideas for the Park.

Phase two consisted of a staffed on-site display of the draft plan and strategies, where the community were given the opportunity to review and record comments. These remained displayed on site and on the City website, with comments invited over an eight week period following the onsite meeting.

All feedback received (over 700 submissions) was collated into a consultation report prepared by an independent consultant and the findings were used to inform the development of the Plan.

Results

Overall, community consultation revealed that the respondents highly value Sydney Park, welcome Council's consultation process and generally support the Master Plan proposals. Key findings are summarised in the following paragraphs.

(a) The landscape of Sydney Park, particularly its trees and wetlands, was a major concern for respondents, both as a setting for recreation and as a living ecosystem.

There was strong support for the planting of more shade trees, particularly native species, and the provision of more under-storey planting.

- (b) The views and vistas from and within the park were highly valued and identified for retention.
- (c) A small but distinct minority did not favour further development of facilities, arguing they would detract from the undeveloped character of the park.
- (d) The majority of users are keen to see more facilities provided in the park, including new playgrounds, a kiosk, an exercise track, more barbecue areas, seating and shade provision, and an adaptive re-use of the brick kilns.
- (e) Many respondents appreciated the community events already held in the park and requested that more events be held there.
- (f) There is a division within the community between those who would like to see more control exerted over dogs within the park, and those who appreciate the chance to let dogs run free. Some dog owners would like to see access to the wetlands for dog swimming permitted.
- (g) There was strong support for better lighting to increase safety for park users, extend the usable recreation times and cater for pedestrians commuting through the park between the station and employment areas.

Financial Implications

The approved Master Plan does not constitute a commitment of funds nor does it obligate the City to implement all recommendations. Rather, the Plan will be used to assist in better targeting project priorities, their detailed briefs, and as a guide for future budget allocations.

The 2005/06 Corporate Plan identified Sydney Park as a major project with a total of \$4.9 million allocated to Sydney Park in the current financial year. In addition, there is a range of environmental projects with budget allocations identified in the Corporate Plan for water re-use, treatment and harvesting initiatives within Sydney Park.

1. MASTER PLAN OVERVIEW

1 - THE PRINCES HIGHWAY ENTRY

A new tree lined vista is established between the Village Green and Highway entry precinct.

2 - KILN PRECINCT

A comprehensive study be undertaken to investigate options for the adaptive re-use of the kilns and surrounding historical precinct for community use

3 - ENTRY AND THROUGH SITE LINK

Path upgraded to cater for this major park entry point from king Street and St Peters Station.

The path network is improved through the provision of specimen shade trees, seating and wayfinding signage at major path intersections.

5 - THE CIRCUIT

A major park circuit is established in the park, linking all major precincts and providing for shared use by pedestrians, joggers and cyclists.

6 - ALL ABILITIES PLAY PRECINCT

A new play precinct, serviced by toilets and shelters is established close to public transport and car parking. Set within rolling topography and fully fenced, the diverse range of play equipment is shaded by existing and new fig trees.

7 - VILLAGE GREEN

Building on existing plantings, the slopes surrounding the Village Green are supplemented with more Fig trees. The edge path is reconstructed in a formal circle, lined with a new avenue of specimen trees, seating and lighting.

8 - KIOSK /CAFE PRECINCT

In the heart of the park, a new café/kiosk is located with new deck and outdoor seating overlooking wetland 1 and the village green. Wetland 1 will benefit from increased hydraulic flows, and landscape improvements.

9 - CARES FACILITY

The existing facility is enhanced through the provision of a publicly accessible toilet facility, barbecues and seating areas.

New tree planting throughout the facility provides shade and amenity to users, and integrates the area with the larger parkland setting.

10 - SYDNEY PARK ROAD ENTRY PRECINCT

Major tree planting to the park frontage with new low mounding providing improved soil volume and conditions.

Tree planting screens car park areas and improves car park amenity. Additional pedestrian crossing at Mitchell Road intersection advocated and entry path re-configured accordingly.

11 - WOODLANDS

Existing low woodland are as are to be ameliorated with soil improvement measures and supplemented with new plantings in adjacent areas to create accessible areas of grass under dappled canopy.

12 - COMMUNITY BUILDINGS
The existing steep hill and flat space is used to site a fenced supervised adventure play space. Grassed slopes are to be planted within open tree planting of Eucalyptus cinera.

13 - SIGHTLINES AND CONNECTIONS

Removal of poor specimens and senescent trees, together with canopy lifting, creates improved sightlines and safety between the Euston Road Car Park and Sports Oval.

14 - NORTHEASTERN PARK ADDRESS

Potential water-harvesting and stormwater treatment projects drive the development of new wetland basins in the perimeter of the park, providing a striking landscape address to the park.

15 - COUNCIL STORAGE DEPOT

Existing Depot provides potential back of house/storage area to the multi-use activity space.

16 - MULTIPLE USE ACTIVITY SPACE

This discrete area of the park with a combination of terraced grass slopes and level area of grass with hardstand creates a myriad of opportunities for programmed use: theatre, moonlight cinema and supervised play.

17 - LIGHTING

New post-top lighting provides after dark access corridors through the park, linking the station to the employment areas of Alexandria, and a north-south route through the park.

18 - PARK PLAY OPPORTUNITIES

Additional informal play opportunities are located within the park landscape along the circuit.

19 - WETLAND PRECINCTS

New marginal planting to the wetlands' perimeters and additional roosting posts improve the habitat role of the lakes. Drifts of Broad-leafed paperbark trees in drifts create picnic spots around the lake lawns.

20 - FOREST GULLY

20 - FOREST GULLY
The existing drainage line with palm trees is developed into gully woodland with the addition of gully-flora species to create a distinctive more lush-canopied environment. Additional timber walk links to existing footbridge through gully.

21 - VEGETATIVE SCREEN

The circuit path is relocated west to expand the buffer to the adjacent industrial development and planted with longer-living, hardy species to increase screening. New BBQ and Shelter facilities are provided set within new shade tree planting with north-east views over the

23 - HANGING SWAMP Subject to hydraulic capacity design, the drainage line from the Council Nursery is developed as an ephemeral wetland supporting sedges and shrubs with gravel walk.

24 - WETLAND 5 PICNIC AREA

Retained BBQ and Shelter facilities with additional seating and planting are located around the reconstructed Wetland 5.

25 - BARWON ROAD CAR PARK

The re-configured car park is set behind new mounding and boundary planting, and provides safe entry/egress from Barwon Park Road, coach/car set down and turnaround. Should visitation demand, car parking could be discretely extended south, making more areas of the park accessible.



2. CIRCULATION

Utilising the range of paths within the parkland should be an enjoyable and diverse experience intrinsically, as well as providing a logical route network to access the major park landscapes and facilities.

Building on the existing path network, a more clearly articulated path hierarchy is established to create greater legibility within the parkland, and more variety in the park journeys and recreational modes.

CIRCUIT

A circuit route is developed that links all major areas of the park and provides a generous width to cater for shared use by joggers, cyclists, 'bladers and walkers. The circuit is located on gentle grades to ensure accessibility. It is distinguished by its level of finish and edge treatment and generally enjoys a semi-shaded aspect, passing through a range of woodland, formal fig avenues and brief areas of open lawn.

MAJOR PATHS

The major paths form the majority of the remaining path network and include the entries into and commuter routes through the park.

In some areas, these are adjusted from existing alignments to respond to evident desire lines, and redundant pathways are removed.

SECONDARY PATHS

The secondary paths are additional routes that are either minor desire lines or opportunities for different experiences within the park landscape. Examples include routes within Wetland 1 and 4, within the forested gully, hanging swamp and cascades. These paths can have a greater variety of path materials such as stabilised decomposed granite, timber boardwalk or stepping stones to compliment the landscape setting.

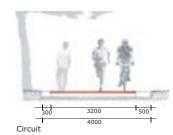
BICYCLE

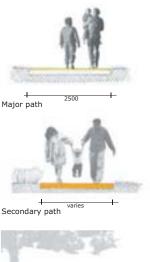
Recreational cycling within the park is catered for on the primary path system: the circuit. In addition, the existing commuter path adjacent to Sydney Park road connects Mitchell Road to the Princes Highway linking into the Marrickville Council Cycle network.

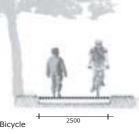
In addition, a newly designated route between Mitchell and Campbell Road (primarily utilising the circuit) establishes an off-road, north-south link that serves as an achievable alternative prior to the realisation of the Alexandra Canal Master Plan.

FUTURE CONNECTIONS

Future connections linking into the Alexandra Canal should be pursued with redevelopment through establishment of public rights of way or strategic land acquisition. Access to the park for the increasing population of southern Erskineville would be greatly enhanced with a new link across Sydney Park Road at the termination of the linear open space corridor already partially established through the major development sites on the northern side of this road.









3. PARK PERIMETER

Sydney Park should present a strong and beautiful park condition at its boundary, to proclaim the park, invite use, and also contribute to the amenity of the adjacent streets.

Currently, the park perimeter is reduced by incursions of residential and industrial land uses, further exacerbated by unsuccessful landscape treatments and unsympathetic development such as the car parks and CARES facility.

A range of measures to reverse this eroded presentation of the park is proposed.

MAJOR NEW PLANTING

Constructed soil belts establishes trees at a scale appropriate to the park's size and character, on distinctive, gently mounded grassed landforms.

Elsewhere new tree planting reinforces existing street trees and consolidates park plantings. Car parking areas are re-configured to ensure a generous planting belt along the park edge. Overall, a more consistent character of the park surrounds is achieved, and the first experience of the park for visitors is one one of high landscape amenity.

NEW LANDMARK LANDSCAPES

The landmark value of the existing iconic chimneys of the Kilns Precinct is well understood, signalling the park's presence in the King Street Vista.

However, the north-eastern corner park address at the Euston and Sydney Park Road Roundabout lacks a complimentary landmark quality at this busy intersection.

At this location, potential water-harvesting and stormwater treatment projects can drive the development of new ornamental and treatment wetland basin in this perimeter area to provide a striking landscape address to the park.

Similarly at the Princess Highway entry, views into the park are currently obscured and the edge character is dominated by the car park.

A new tree-lined vista is established between the Village Green and the Highway entry precinct and the car park is set back to allow the expansion of the kiln precinct plaza.

CONSISTENT DETAILING

At a pedestrian scale, consistent detailing of a high quality reinforces the park identity at the edge. A suite of concrete bollards, new pedestrian paths and grassland planting maintains a permeable park edge and views into the park.

Pedestrian and Vehicular entries are identified consistently, in accordance with their hierarchy and pedestrian/cycle function.



4. PLANTING

Since the establishment of the park, planting have had limited success due to a combination of variable soil profiles and intermittent water availability.

A program of significant soil improvement (see next page) is an integral part of improving the vigour of current plantings and the establishment of new planting areas. This master plan proposes an extensive program of new planting to dramatically improve park amenity through provision of shade, colour, and interest and to provide a series of new landscape settings and experiences. It also proposes an endemic approach to vegetation regimes, drawing more strongly on vegetation associations of the site and the Sydney region for new planting areas. This method will offer an enhanced sense of place to the park, and supplement the region's remnant vegetation network. The use of a broader pallete of plants and using these in a stronger design sense rather than a literal representation of the particular vegetation association. Realisation of this master plan will enhance the habitat value of the parkland, through an improved soil system able to better sustain vegetation, as well as the consolidation of high habitat value planting with additional buffer planting and understorey areas.

The major planting typologies are described below:

WOODLAND PLANTING

This planting is typified by scattered informal groups of trees that provide shaded rest areas. The density of planting varies, but generally partial views are revealed through these spaces to the landscape beyond, due to a combination of taller-trunked species, and low shrub or mown grass understorey.

PLANTING TYPE		DESCRIPTION
W1	PLAYGROUND WOODLAND	${\it Cupaniopsis anacardioides} \ ({\it Tuckeroo}) \ {\it and} \ {\it Flindersia australis} \ ({\it Crow Ash}) \ {\it for fast growth, good shade} \ {\it and reliability}.$
W2	FIG WOODLAND	Ficus rubiginosa (Port Jackson Fig) and Ficus obliqua. Ficus rubiginosa is planted from relocated stock. Ficus obliqua is supplemented as it has a higher branched structure and better form.
W3	EUCALYPT WOODLAND	Eucalyptus cinerea (Argyle Apple) is used to provide shade on mound slopes and selected for its tolerance to exposure and shallow soil. For interest, its grey foliage will contrast with existing Eucalypts.
W4	GULLY WOODLAND	Sydney Gully vegetation is planted to tie in with existing palms. Species used include <i>Tristaniopsis laurina</i> (Watergum), <i>Syncarpia glomulifera</i> (Turpentine), <i>Acmena smithii</i> (Lilly Pilly) and <i>Ceratopetalum apetalum</i> (Coachwood).
W5	MELALEUCA WOODLAND	Melaleuca quinquinervia (Broad Leaved paperbark) groves fortify wetland character as a backdrop.
	MULTI-USE PLAYGROUND	Eucalyptus microcorys (Tallowood); large growing, tall trunked tree with good quality shade. High canopy enables good vision through trunks.
W7	BBQ AREA	Eucalyptus sideroxylon (Mugga Ironbark) for shade. Generous canopy tree tolerant of exposure and shallow soil.
W8	MOGUL GARDEN	Mixed hardy species for an eclectic landscape character eg. <i>Brachychiton discolor</i> (Queensland Lacebark), <i>Melia azaderach</i> (WhiteCedar), <i>Flindersia schottiana</i> (Bumby Crow Ash), <i>Banksia serrata</i> (Old Man Banksia), <i>Acacia pendula</i> and <i>Eucalyptus leumanniana</i> .
W9	BOUNDARY PLAY CIRCUIT	Eucalyptus robusta, Banksia serrata and Banksia integrifolia (Coast banksia) groves. Eucalypts used for shade and broad shady crown. Banksia serrata and Banksia integrifolia in groves for lower branching screen and for character.
P1	EXISTING WOODLAND BANDS	$\label{thm:mixed_encoder} \mbox{Mixed \it Eucalyptus, \it Angophora} \mbox{ and \it \it Callistemon} \mbox{ species indigenous to the Sydney Basin area.}$



4. PLANTING

STREETSCAPE AND EDGE PLANTING

This planting serves to present a strong and beautiful park condition at the park boundary and contribute to the amenity of the adjacent streets. Proposals here include planting within the park landscape, sometimes in association with new gently mounded grassed landforms, and the street reserve, consolidating existing street tree planting.

Multiple avenues of trees along major streets will give a consistent and rhythmic planted edge in scale with the corridor and sufficient to screen and shade adjacent car parks.

PLANTING TYPE	DESCRIPTION
S1 BARWON PARK EDGE	Eucalyptus racemosa (Scribbly Gum). A larger Scribbly Gum for better provision of shade, while still tolerant of exposure. Stark white trunks provide distinct character. Underplanted with Poa, Themeda and Lomandra cultivars of native grasses. Mixed grasses enable a more vigorous combination of grasses.
S2 SYDNEY PARK ROAD	Eucalyptus sideroxylon (Mugga Ironbark). A large stately Eucalypt tolerant of exposure to wind and to shallow soils. Planted on mounds, good drainage will be ensured. Strong black trunks, grey foliage and pink flowers give a bold character. Understorey consists of mixed native grasses with more moisture tolerant species in the lee of the mounds. These include Carex and Juncus species.
S3 INFILL STREET TREE PLANTING ON CAMBELL AND EUSTON ROADS	Melaleuca quinquinervia (Broad Leaved Paperbark) are planted where infill opportunities arise to supplement an existing strong edge of trees.

ENTRY GROVES

Major entry points are treated with more formal arrangements (grids, avenues) of trees to distinguish them from the wider park landscape, helping to mark and identify these transitions into the park.

PLANTING TYPE		DESCRIPTION
G1	BRICK KILN + PLAZA PLATFORM	Eucalyptus racemosa (Scribbly Gum), extending from the car park, is used as a formal grove in the elevated platform.
G2	PEDESTRIAN ENTRY	Ficus obliqua (Small Leaved Fig); consistent in form with Ficus rubiginosa (Port Jackson Fig) but with a higher canopy for better clearance.
G3	HERVEY STREET ENTRY	Lophostemon confertus (Brushbox) is planted to continue implied existing (previous street tree planting) at the reconfigured entrance

EXISTING FIG AVENUES

Ficus rubiginosa is currently a characteristic tree within the park. Most existing avenues of figs are retained, with some younger specimens relocated to consolidate plantings into groves and groupings.

PLANTING TYPE	DESCRIPTION
F1 EXISTING FIGS	Ficus rubiginosa
F2 EXISTING FIG AVENUES SUPPLEMENTED	$\it Ficus\ rubiginosa$ (Port Jackson Fig) relocated to strengthen avenues that need to be continued.

WETLANDS AND WETLAND MARGINS

Wetland planting is consolidated to ensure a strong planted edge to the circumference of the lake in most cases. New planting will improve the stormwater cleansing performance of the wetlands, reduce evaporative loss, discourage inappropriate access and increase habitat value.

Opportunities can be provides for roosting for wetland birds. The wetlands have been successful in attracting water birds and simple turpentine roosting posts can be provided near to the centre of Wetland (1,2+4)

The wetlands are further buffered by new plantings of mixed native grass species, native lillies and low shrub planting above the top water level of the wetlands.

The planting character can be quite bold with wide swathes of planting echoing the water bodies.

The planting height will remain less 1m to provide dense fauna cover and maintain sight lines for people.

PLANTING TYPE	DESCRIPTION	
E1 WETLAND	Species used would be an extension of the existing palette. These include <i>Baumea articulata</i> (Jointed Twig Rush), <i>Bulboschoenus caldwellii</i> (Sea Clubrush), <i>Schoenoplectus valious</i> (River Clubrush) and <i>Juncus usitatus</i> (Sawgrass Sedge).	
M1 MARGIN PLANTING	The species used would include Carex appressa (Tassle Sedge), Lomandra longifolia (Mat Rush) and cultivars, Dianella caerulea (Paroo Lilly) and cultivars, and ground cover varieties of Kunzea, Melaleuca and Callistemon.	

MIXED NATIVE GRASSES

Belts of mixed native grasses are used on new tree planting mounds and in selected broad-scale woodland tree planting areas.

These grasslands build on the semi-wild landscape character and through a combination of grass species will be resilient to drought and weed infestation.

PLANTING TYPE	DESCRIPTION
N1 NATIVE GRASSES	Species that will be most successful are the trial developed <i>Poa, Lomandra</i> and <i>Pennisetum</i> cultivars.

SPECIMEN TREES

Large evergreen shade trees are provided at key intersections of paths, often in association with small seating areas, a bubbler, signage and the like.

Specimen shade trees at these key nodes act as markers and area a point of difference or interest in the landscape. High and spreading canopies invite a rest. Soil improvements and water availability are a priority for the success of these singular specimens.

PLANTING TYPE	DESCRIPTION
T1 SPECIMENS	Species that can fulfill this role include many Australian native rainforest species including <i>Flindersia australis</i> (Crow Ash), <i>Ficus watkinsoniana</i> (Strangler Fig), <i>Syzygium francissii</i> (Giant Watergum), <i>Castanospermum australis</i> (Blackbean) and <i>Toona australis</i> (Red Cedar).

5. SOIL IMPROVEMENT

The master plan has investigated park soil condition, currently a severe constraint to successful landscape establishment, and proposed comprehensive recommendations for amelioration. It is noted that implementation of these programs will require concurrent review for site contamination and remediation planning constraints.

A summary of the soil condition and program for improvement is noted below.

THE SOIL PROFILE

Sydney Park was formed on old landfill and quarry land in the late 1980's. Soil preparation was deficient by modern standards and generally involved 100-250mm of sandy artificial topsoil placed on extremely compact landfill cover. In soil pedology terms it is composed of an A horizon on top of a C horizon and the important B horizon is missing. The soil profile is currently not capable of supporting high status forest or woodland. Soil improvement is the highest priority for Sydney Park in order to establish vigorous healthy new planting.

SOIL PHYSICAL CONDITION

This A/C soil system suffers physical problems

- low water holding capacity;
- consequent high runoff rates leading to saturation of lower slope soils;
- · sheet erosion and topsoil loss on lower slopes, very shallow topsoil;
- consequent rapid drying and droughting of upper slope soils;
- · significant impedance of root penetration into the underlying C horizon fill;
- low available rooting volume;
- · slow growth rates consequent to low water and nutrient availability, and
- · poor root anchorage and instability of older plantings in wind.

NUTRIENT AND CHEMICAL CONDITION

With some exceptions the basic soil chemical balance is quite acceptable. They are not saline, sodic or excessively calcium rich as some "urbic" soil profiles can be. Use of green waste mulch has improved topsoil organic matter and nutrient holding ability. Nutrient deficiency has occurred through a shallow nutrient poor soil, exacerbated by leaching losses, and the nutrient uptake by vegetative growth. Of particular concern, are the soils:

- \cdot widespread potassium deficiency in established woodland areas.
- phosphorus is deficient in southern part of site especially where indicated by poor and weedy turf.
- nitrogen is only required on the village green turf on an as needed basis determined by

More detail of the nutrient and chemical conditions are described in the SESL Report attached as an appendix.

SOLUTIONS

While the profile depth problem cannot be totally solved without major soil reconstruction some practical and effective solutions arise from the study. These are:

- Fertilising and topdressing. Cost effective improvements will result from replacement of lost nutrients and use of topsoil dressings to shallow eroded areas. Most turf areas are dequate and will only require this minor intervention.
- Edaphic planting. Modifying plantings to low status woodland and heath planting more suited to shallow dry soils avoids reconstruction costs for some areas.
- Planting Techniques. Improved planting techniques for tree planting will focus on modification of the compacted subsoil, topsoil deepening and increased mulching.
- Subsoil Modification ranges from ripping for mass planted areas to subsoil replacement for valuable specimen plantings.
- Mounding. For uniform growth of major avenues soil reconstruction via mounding and development of an ABC profile is recommended.
- Reconstruction. Some areas lacking almost any topsoil will need reconstruction (ripping and importation of topsoil) to support any kind of woodland or forest sustainably.

Detailed Master Plan for City of Sydney

Information provided by Simon Leake BScAgr(HonsI), Principal Soil Scientist: Sydney Environmental and Soil Laboratory.



6. PLAY OPPORTUNITIES

Sydney Park is a playful environment. The mounds, gullies, lookouts and sheltered spaces offer a variety of opportunities for integrated play experiences. As the city's biggest park and as a regional park, Sydney Park should offer a range of play from regional playgrounds to incidental moments of play.

There are broadly six play areas described below:

A REGIONAL PLAYGROUND -1

This is a playground (minimum 2500m² footprint)for children and carers of all abilities, providing a rich and challenging play environment for children aged 1-12 years. Centrally located close to supportive facilities (toilets, BBQ, bubblers, car park, public transport etc.), the play environment is secure and visible from the street.

The play activities are provided at simple and complex intellectual levels and temporary shade structures will be superseded in time by trees.

A FLEXIBLE AMPHITHEATRE OF PLAY -2

This is a large flexibly designed space where a range of play and learning activities can take place, as well as other cultural events and sporting activities. With terraced stages overlooking a large flat space, the terraces are in themselves a play environment incorporating seating and shade. Play events can be spontaneous (eg lunch-time volleyball) or scheduled and supervised (eg play facilitator with loose-parts play props) that suits all ages.

AN ENHANCED C.A.R.E.S. CYCLEWAY & SUPPORTIVE ENVIRONMENT -3

The existing facility aims to encourage younger children to gain competency in bike-riding and familiarization with 'rules of the road'. Skilful additions of child-friendly semiotics and elements will project a message of welcome and playfulness to children and carers.

In addition, socially supportive facilities (eg BBQ and seating) will further support community use of the area. Planting will integrate the facility with the park and provide the bike track with a natural setting Additional challenging and fun bike elements could augment the attraction of the facility for older age groups.

A PLAYFUL MOUNDED LANDSCAPE -4

To provide a playful and invigorating environment in association with the 'hilltop' picnic area, a series of sculpted grassy mounds provide an 'up and over' experience or a 'weaving' experience for children. Designated areas of the mounds could provide for bike-riders, skateboarders and roller bladders.

KIOSK/CAFÉ PLAY ENVIRONMENTS -5

Play is incorporated into the kiosk/café setting to support the needs of carers and improve the weekday viability for the operator. Set adjacent the head of the wetland system, there is opportunity for natural and scientific learning spaces to the south and a playful interactive feature to the north adjacent the Village Green.

SEQUENTIAL PLAY STATIONS -6

In addition, small, sequential playful environments provide delight and sensory invigoration around the main circuit of the park. Each play station combines a movement with at least one sensory overlay and will be discreet and experiential: something extra to be discovered.



7. SUPPORTIVE FACILITIES

Currently there is a distinct lack of facilities to support the informal recreation opportunity of the park. The range of uses, the length of stay and the quality of the park experience will all be improved with the provision of seating, shade structures, BBQs and access to drinking water. These facilities have been carefully sited in the landscape to provide pleasant settings and prospect and to flexibly support a wide range of communal and individual recreation and cultural activity. At the heart of the park on the edge of Wetland 1, a social hub is established, supported by a kiosk/café, amenities, large shade structure and play opportunities.

The major components are described below:

SHELTERS/BBQ FACILITIES/TOILETS

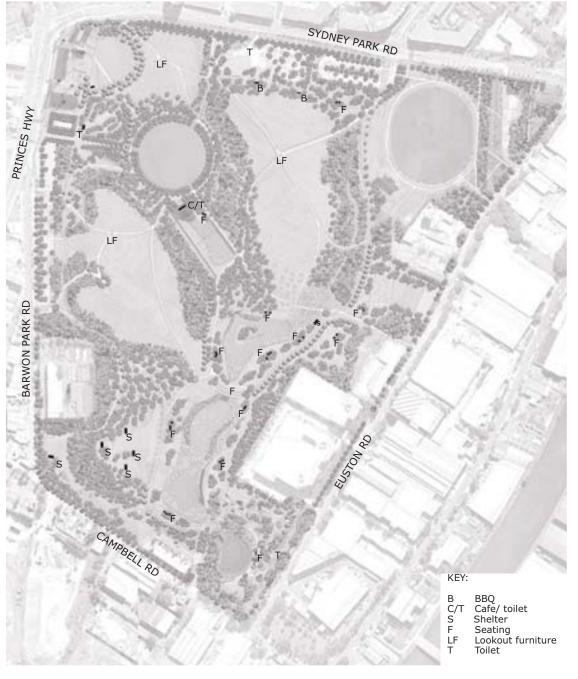
Small shade shelters are carefully located in the park and will be robustly designed and responsive to the park's character. BBQs, seating and drinking water will be selectively incorporated into these shelters. A cluster of shelters with BBQ facilities at the south of the park create a new attractor to this area and take advantage of the north-easterly view over the wetlands. Additional toilet facilities will be distributed throughout the park at key locations.

KIOSK/CAFE

The kiosk shelter is larger in size but echoes the same architectural form. The kiosk and associated shaded seating areas and decks can service discrete areas to the north and south. This could allow for some segregation of dog owners and people with children if desired. Toilets will be discretely integrated with this facility and its management.

SEATING/LOOKOUT FURNITURE

Large communal seating elements in scale with the parklands are sited throughout for users to stop and meet. Locations are selected under tree for shade, lookouts for prospect or in association with activity areas. Seating will be constructed of simple, robust and timeless materials such as concrete and timber appropriate to the character of the park. The important of the brow of the hill is recognised with seating recessed below the crest to preserve the ridgeline landscape. Park Interpretation can be integrated with this seating.



8. LIGHTING

To date, there has been only limited lighting provision of Sydney Park. Historically, this has been appropriate given the lower levels of use, limited funds and inherent lack of high natural surveillance in the central areas of the park. However, the ongoing densification of surrounding areas, and the location of the park between the Railway Station and employment areas of Alexandria mean many people do utilise the park after dark, regardless of the lighting levels provided. To date there has been a low incidence of crime in the park. Better lighting will increase safe recreation use of the park at night, extending the park's accessible times for the community.

The Master Plan proposals are described below:

THROUGH SITE PEDESTRIAN ROUTES

In recognition of the many workers (including shift workers) who use the park as a through site link, new dusk to dawn lighting will be installed along the primary east west (brick kiln to Euston Road) and north-south (Mitchell Road to Harber Street) path to create safer routes of passage. All paths within the park will be 'Category P3 lighting' and will comply with the City of Sydney standard with 6 metre high post top luminaries at 17 metre spacings.

Whilst it is acknowledged that limited passive surveillance remains an issue for the central areas of the park, the concentration of use along these routes will enhance safety.

VILLAGE GREEN

Additional high mast (Midi floodlights) lighting will enable this area to be a focus of after dark recreation. support the currently lighting on one side of the Village Green. With lighting at 15m centres and post tops 15 metres high, good lighting will be provided to the perimeter of the Village Green, with some spill light into the centre of the green. The design will minimise glare to surrounding units.

It is intended that this lighting will operate to around 11p.m., whilst the cross site lighting that passes through the Green will remain on for the remainder of the night.

WETLAND 5 PRECINCT

This area has reasonable passive surveillance from the street and is already lit as an after dark recreation area. The existing high pressure sodium lights are replaced with better and additional lighting to improve quality and efficiency. New lighting posts will be 'Category P3 lighting' at 6 metres in height and 17 metre centres, and will be supported by lighting in the shelters, ceasing operations around 11p.m. There is the opportunity to include decorative lighting of the water's edge to create a special night-time amenity.

SYDNEY PARK ROAD ENTRY PRECINCT AND CAR PARK

It is proposed that this car park be lit to support the current and proposed after dark uses for parking, particularly those associated with sports training, organised activities at the oval and informal recreation in the Village Green. The P11c lighting category is based on its criteria of low pedestrian movement and low anticipated crime, due to its proximity to Sydney Park Road and overlooking by adiacent apartments.

The proposed light fittings would be Largent at 25 metre centres. Fewer poles could be used if forward throw horizontal glass floodlights are used on higher poles (Mini-Midi).

SITE ADDRESS

Selected chimneys will be lit to act as an iconic marker for the site. Major identification signage could also be lit to improve the night awareness of the site.

The mountings of the lights will be dependent on the detail design of these signs.



Detailed Master Plan for City of Sydney

9. SIGNAGE

Given the large size of Sydney Park, its location and the unusual topography and landforms, an attractive signage system is required to promote optimum public access and use of Sydney Park. Consistency, legibility and restraint will ensure the signage is effective and compatible with the overall park character and the variety of landscape settings within it.

The system has been designed to enable visitors to navigate their way around Sydney Park, whilst at the same time make them aware of the parks' facilities and amenities. Additionally, the interpretative signage and markers provides the user with more than just directions, but an opportunity to understand the site's unique history and multiple attractions.

STREET PROMOTION

There is the opportunity to utilise adjacent streets to herald the park and its event/activities program. Banners and flags provide a sense of 'welcome' and strong visual impact and links the park back to the community in which it is located.

GATEWAY IDENTIFICATION

Located on major road frontage, it is appropriate that at these key Gateways into the park the identification signage is at a scale legible to passing vehicular traffic and with a park specific design character.

VEHICULAR ENTRY

Vehicular identification signs will be located at the entrances to the car park where visibility and clear direction is important.

VISITOR INFORMATION SIGNS

These signs will are major information points for the park, providing regulations, a map, interpretive information, features and amenities. The signs will be located inside the park near entrances and where people congregate, such as the kiosk/café precinct.

PEDESTRIAN ENTRANCE SIGNS

These signs identify secondary pedestrian entrance points and provide directional information about the park and essential regulatory information. The pedestrian signs are simplified versions of the visitor information signs.

NTERPRETIVE SIGNS

The interpretive program will vary in size and form. Positioned in key locations, these signs are versatile in size and medium to provide opportunities for interpretive stories of different content and length. Possible themes include the history of past land-use, the programs of environmental rehabilitation and the diversity of dog breeds in the community.

WAY FINDING MARKERS

Way finding markers use a pictogram, a number or a letter and are effective and efficient way to reinforce the other directional. They are situated at key decision-making points along tracks and pathways so there is no confusion as to which direction to take.



SKETCH PERSPECTIVES



View: North west along main cross site link, towards kiosk.



View: Circuit adjacent to Wetland 3 looking towards the north.