

Homebush Bay West – Wentworth Point Master Plan

October 2005

Prepared for NSW Maritime Authority &
Sydney Olympic Park Authority



Master Plan

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Quality Assurance

Reviewed by

.....
Michael Harrison
 Director
 Urban Design and Planning
 Architectus Sydney Pty Ltd

.....
 Date
 This document is for discussion
 purposes only unless signed.

1 Background

The master plan site is referred to for purposes of this master plan as “Homebush Bay West-Wentworth Point”. The site is located at the western peninsula of Homebush Bay and is bounded by Burroway Road, Hill Road and the Sydney Olympic Parklands, the Parramatta River and Homebush Bay.

The total area of the master plan site is 20.4 hectares. This total area is comprised of an area of 1.8 ha located in the central section of the site, owned by SOPA and 2 parcels of 9.1 and 9.5 ha on either side, owned by NSW Maritime Authority.

The master plan will see the demolition of all buildings east of Hill Road and their replacement with a recreational maritime precinct, a mixed use retail/commercial centre and parkland. Existing uses on the site include a ferry terminal and associated car park and open space, a number of transport (freight) operations, various light industries, vacant land and an AM radio transmission tower (2GB).

The western side of Hill Road will be developed for maritime uses in the future, and is a potential location for an aboriginal cultural centre.

Figure 1.1 illustrates the location of the master plan site



Figure 1.1. Site Location



Figure 1.2. The Master Plan site

This master plan has been prepared on behalf of the site owners; NSW Maritime Authority and Sydney Olympic Park Authority. The master plan provides information required to determine appropriate strategic release and development of the site. Preparation of the master plan has directly involved the NSW Maritime Authority, SOPA and Department of Planning (formerly Department of Planning, Infrastructure and Natural Resources) throughout the process. Additionally, the Boating Industry Association, Auburn Council and other state government departments have also been consulted during its preparation.

The master plan has been prepared in accordance with the requirements of the following statutory planning instruments:

- Sydney Regional Environmental Plan No. 24 (SREP 24) Homebush Bay Area. Under SREP 24, Auburn Council is the consent authority except for 'Major Projects' under the EP & A Act 1979 for which the Minister is the approval authority.
- State Environmental Planning Policy 56 Sydney Harbour Foreshores and Tributaries (SEPP 56), in particular clause 7, Guiding Principles.
- Homebush Bay West Development Control Plan. The review of this DCP was developed concurrently with the Master Plan, with an earlier version applying to the site at the commencement of drafting. This master plan has been prepared in a coordinated manner with the revision of the DCP and also incorporates the key relevant principles contained in the original DCP, applying at the time the master plan process was commenced.
- The master plan has also been prepared in accordance with the requirements and demands of the Sydney Olympic Park Act 2001 and the Sydney Olympic Park Master Plan, in so far as they relate to the potential development of land owned by SOPA.

2 Introduction

2.1 Name of this plan

This Plan is named the Homebush Bay West Wentworth Point Master Plan 2005.

2.2 When this plan takes effect

This Plan takes effect on approval of the Minister.

2.3 Aim and purpose of the master plan

The master plan is a step in the planning process between SREP 24, Homebush Bay West DCP and development of the site. The master plan incorporates and implements the requirements and objectives of each of these documents in the context of proposed development for the site.

The purpose of the master plan is to:

- (a) guide the orderly development of the site known as Homebush Bay West-Wentworth Point in a manner that reflects the overarching environmental planning requirements and that will see the development of a vibrant and efficient maritime and mixed use area. In this respect, the master plan sets out requirements with which all development must comply, in the form of development principles and guidelines; and
- (b) amend the Sydney Olympic Park Master Plan insofar as it relates to the ferry wharf area, which is identified in Figure 5.1.1 of the Sydney Olympic Park Master Plan.

2.4 Vision and objectives

The vision for the master plan site is to create a vibrant maritime hub as a focus for the Western Harbour/Parramatta River. The north facing site, with its dual water frontage provides a unique opportunity for a recreational destination and boating centre for western Sydney. The relationship of the site to its surrounding amenities and substantial future development also provides the basis for development of a vibrant mixed use precinct incorporating retail, commercial and leisure/entertainment activities mixed with an extension of the residential community developing to the south.

The following general objectives underlie the master plan:

- Provide a boating centre for recreational craft comprising boat storage and repair, boat launching and limited casual berthing.
- Provide commercial and retail development that meets the needs and market provided by both maritime activities and eventual development of the Homebush Bay West area.
- Provide an attractive and integrated open space system that provides foreshore access, varied recreational opportunities and meets the needs and aspirations of future residents and regional users.
- Provide an efficient street and circulation system that provides high levels of accessibility for pedestrians, bicycles, public transport and private vehicles.
- Manage and reconcile potential conflicts between maritime uses and residential development planned for adjacent areas.
- Ensure that new development is of a high standard of urban design and achieves principles of environmentally sustainable development.
- Incorporate and implement the requirements of the relevant statutory planning framework.

2.5 Form and content of the master plan

The master plan is formatted into six sections:

- *Section 2* explains how to use this plan and its relationship to other planning documents.
- *Section 3 – Environmental Planning Context.* This section provides an overview of the relationship of the master plan to overarching environmental planning instruments.
- *Section 4 – Site History and Context* provides an overview of the development history of the site and its existing physical context.
- *Section 5 – Concept Plan* illustrates the concept plan for development of the site.
- *Section 6 - Urban Design Principles.* This section provides an overview of the key principles that have guided the development of the master plan and underlie its proposals
- *Section 7 – Principles and Guidelines.* This section contains more detailed provisions and guidelines that support the concept plan. Guidelines and controls are presented in the categories of:
 - Precincts
 - Activities
 - Built Form and Urban Quality
 - Landscape and Open Space
 - Access and Circulation
 - Safety and Security
 - Contamination and Remediation
 - Infrastructure Provision
 - Waste Management
 - Building Services
 - Indicative Phasing.

Appendices 1 and 2 contain a detailed analysis of key issues, which have informed development of the master plan, and provide further detail on the role and character of individual precincts.

A number of documents have informed the development and refinement of the master plan. These are listed as follows:

- Homebush Bay West Master Plan: Options Transport Assessment (October 2002 & March 2003). Prepared by Maunsell Australia Pty Ltd
- Homebush Bay West Master Plan: Preferred Option Transport Assessment (March 2003). Prepared by Maunsell Australia Pty Ltd
- Homebush Bay West Master Planning: Site Investigation Phase 1 (September 2002). Prepared by Maunsell Australia Pty Ltd
- Homebush Bay West Master Plan: Aerial Issues (October 2002). Prepared by Maunsell Australia Pty Ltd
- Homebush Bay West Master Plan Economics Assessment (March 2003). Prepared by Sphere Property Group.
- Homebush Bay West Master Plan Maritime Assessment (December 2002). Prepared by CW Henstock & Associates

2.6 Relationship to other plans

This master plan must be read in conjunction with any Environmental Planning Instrument or Policy that affects the site. These include, though are not limited to, the following:

- SREP 24 – Homebush Bay Area
- SEPP 56 – Sydney Harbour Foreshores and Tributaries
- Homebush Bay West Development Control Plan
- Sydney Harbour and Parramatta River DCP
- Sydney Olympic Park Master Plan (as amended by this Master Plan).

2.7 Amendments to the Sydney Olympic Park Master Plan

The Sydney Olympic Park Master Plan is amended in the manner specified within Appendix 4 of this master plan,

2.8 How to use this plan

The Minister for Planning is the authority for adoption of the master plan. The consent authority for all development applications relating to the site is the Auburn Council, with the exception of major projects under the EP&A Act 1979 for which the approval authority is the Minister. No development application can be determined until a master plan has been adopted for the site.

Development applications should demonstrably contribute to the achievement of the objectives, principles and guidelines and controls of this master plan. Proponents should consult this master plan at the earliest stages of design in order to ensure the compatibility of proposals with the desired outcomes for the site.

Prior to lodging a development application, applicants are encouraged to discuss their proposals with the relevant stakeholders at an early stage of the design process. This important component of the development process will help to clarify and confirm the requirements and intent of this master plan, relative to particular proposals.

3 Environmental planning context

The master plan site is part of the wider Homebush Bay West area. At the time of preparation of the master plan, Homebush Bay West was identified as a strategic foreshore site in Schedule 1 of SEPP 56. This made the site 'State significant development' for which the Minister is consent authority and required the land to be master planned. State Environmental Planning Policy (Major Projects) 2005 has since removed the Minister's consent role and master plan requirements for the site from SEPP 56. The Guiding Principles of SEPP 56 remain relevant.

The Homebush Bay West – Wentworth Point Master Plan site is also subject to the requirements of Sydney Regional Environmental Plan 24 - Homebush Bay Area (SREP 24). These provisions provide for the Minister as the consent authority and require the site to be master planned. This master plan was prepared in accordance with SREP 24 because SEPP 56 did not allow a master plan to be prepared for part of a strategic foreshore site. Under SREP 24 the master planning of part of a site is permitted.

At the time of preparation of the master plan, the *Homebush Bay Waterfront Development Control Plan 1999* applied to the site. This DCP has since been repealed by the *Homebush Bay West Development Control Plan 2004*. This master plan was concurrently prepared with the 2004 DCP for the wider Homebush Bay West area and it is consistent with this new DCP. The relationship between the master plan and the new DCP is also acknowledged in each plan. In addition, the Sydney Olympic Park Authority Act 2001 and Sydney Olympic Park Master Plan also have implications for land controlled by SOPA

3.1 Sydney Regional Environmental Plan 24 – Homebush Bay Area

The Sydney Regional Environmental Plan No. 24 (SREP 24) applies to land in the Homebush Bay area, excluding the Rhodes Peninsula, and includes the Homebush Bay West-Wentworth Point site. The relevant aims of SREP 24 are directed at replacing previous controls for the area with a more simplified system and establishing a framework for the preparation of master plans in order to provide more detailed control of development. SREP 24 also establishes the Minister of Planning and Infrastructure as the consent authority for all development within the Homebush Bay Area.

This master plan has been formulated in response to objectives of SREP 24 and incorporates proposals and controls relative to the full range of issues required. In this regard, the master plan provides:

- Design principles related to analysis of the site and its context;
- Indicative phasing of development;
- Location of all land uses and activities;
- Details regarding pedestrian, cycle and road access and circulation networks;
- Controls for the provision of parking and location of specific parking areas;
- Strategies for the provision of infrastructure;
- Proposed building envelopes and more detailed controls for built form;
- Strategies and requirements for remediation of the site;
- Potential for location of public facilities (education)

- Waterfront open space and parkland, and requirements for its function and landscaping.
- Conservation of existing identified significant vegetation and creation of opportunities for vegetation regeneration.

SREP 24 contains a number of specific objectives for the Homebush Bar area that are contributed to by this master plan:

Regional role and land use:

- The master plan establishes a major public recreation area at Wentworth Point, incorporating public day berthing.
- A major maritime facility focused on small powered craft is a key outcome of the master plan. Residential development and a commercial centre to service redevelopment of the Homebush Bay West Peninsula is also provided for.
- Existing significant vegetation is retained and opportunities provided for regeneration of bushland and saltmarsh communities.

Relationship to surrounding sites and areas

- The master plan caters for incorporation of a regional pedestrian/cycleway system linking it with Sydney Olympic Parklands, Bicentennial Park and the Rhodes Peninsula.
- Proposed development is focused on the existing ferry wharf, where future bus services will also terminate/focus.
- The proposed built form, height and scale has been integrated with the built forms proposed on the rest of the Homebush Bay West Peninsula.
- The proposed street system has been integrated with both existing and proposed streets on the Homebush Bay West Peninsula.

Quality and nature of urban form

- The master plan provides detailed guidelines for built form, landscape and other urban design issues within the area and complements those prepared for the Homebush Bay Waterfront Development Control Plan.
- ESD principles inform the proposed urban structure and the full range of controls and guidelines contained within the master plan.
- The master plan creates additional use and enjoyment of the waterfront (both physically and visually) through the creation of public access in areas that are currently under private control, including a new public open space at Wentworth Point.

Environment and heritage protection

- The master plan preserves existing significant vegetation and provides areas for the re-establishment of salt marsh and other riparian vegetation and woodland communities.
- No heritage items exist within the master plan area, however opportunities are provided for the potential location of an aboriginal cultural centre on the western part of the site in the future.

The Sydney Olympic Park portion of this master plan (adjacent to the ferry wharf) is required to be consistent with the Sydney Olympic Park Plan of Management and the environmental guidelines within the Sydney Olympic Park Authority Act. There are also specific requirements for contaminated land and for land where acid sulphate soils are present.

3.2 State Environmental Planning Policy 56 – Sydney Harbour Foreshores and Tributaries

At the time of preparation of the master plan, the site was identified as 'State Significant Development' in Schedule 1 of SEPP 56. This made the Minister consent authority for development at the site and required a master plan to be in place before development applications could be submitted. State Environmental Planning Policy (Major Projects) 2005 has removed the Minister's consent role from SEPP 56 and also removed the master plan requirement for Homebush Bay West from SEPP 56.

As noted above, a SEPP 56 master plan cannot be prepared for part of a Strategic Foreshore Site, and therefore this master plan has been prepared under SREP 24, which allows the preparation of a master plan for part of a site.

While prepared under SREP 24, the guiding principles of SEPP 56 apply to the site and as such, this master plan has been prepared to be consistent with these by providing:

- increased access to the foreshore and placement of much of the foreshore area in public ownership;
- improved public space linkages;
- conservation of significant ecological communities;
- provision of substantial public open space at Wentworth Point;
- A positive relationship between the water and foreshore activities, including the provision of working harbour and public recreation activities/facilities;
- Contextually appropriate development form and character;
- Incorporation of ESD principles throughout the built form and landscape proposals of the master plan; and
- Measures to enhance the coexistence of adjoining and adjacent land uses.

3.3 Homebush Bay Waterfront Development Control Plan

At the time of drafting this Master Plan, The Homebush Bay Waterfront Development Control Plan (DCP) applied to all land within west Homebush Bay bounded by Parramatta River, Homebush Bay, Hill Road and The Parklands, and provides a performance based framework applying to neighbourhood design, site planning and building design. The document was adopted in January 1999 by Auburn Council and the (then) NSW Department of Urban Affairs and Planning, and became effective from 10 February 1999. In light of substantial development pressures, and to both support SREP 24 and provide more detailed provisions for the Homebush Bay area, a review of the document was commenced by the Urban Design Advisory Service on behalf of Planning NSW (now Department of Planning) at a similar time to the preparation of this master plan. As a result of this timing, both this master plan and the new DCP were prepared concurrently and in a collaborative manner.

Nonetheless, the former DCP contains several principles considered to be valid at the commencement of this master plan. The key implications of the former DCP implemented within the master plan include:

- Adoption of the principles of permeability, variety, legibility and flexibility in the design of the site;
- Recognition of Burroway Road and Hill Road as key streets and their utilisation as key elements in the development of an interconnected urban structure.
- Provision of a public open space at Wentworth Point and adjacent to the ferry terminal.
- A mixed use retail/commercial centre is located at the termination of Hill Road, adjacent to the ferry terminal.
- Leisure uses are envisaged at the waterfront end of Burroway Road.
- Building heights are compatible with requirements for maximum heights between 18 and 9 metres.
- Views from and to the Silverwater Marker are incorporated within the proposed layout and massing of development.
- All buildings are set back from Parramatta River (except the existing ferry terminal).

3.4 Sydney Harbour and Parramatta River Development Control Plan

This DCP has been prepared to support SREP 22 – Parramatta River and SREP 23 – Sydney and Middle Harbours. The DCP does not apply to Homebush Bay but does have implications for the Parramatta River frontage of the Master Plan site. In this area, the DCP principally relates to the waterway and immediately adjoining land. However, the principles and performance criteria also apply to developments proposed within the areas beyond the foreshore.

The DCP identifies the master plan site as Landscape Character Type 15. Performance criteria applying to this Landscape Character Type include:

- Maintain and preserve industrial uses
- Minimise noise and amenity impacts between land uses.
- Preserve the natural screen of vegetation along the foreshore
- Vegetation is to be integrated within development in order to minimise the contrast between natural and built elements.

The DCP also particularly recognises that the form of bushland, remnant native species and cultural planting has important ecological and landscape values that require protection and enhancement. Furthermore, maritime activities are recognised as important uses for waterfront land to be retained and fostered. Continuous foreshore access for pedestrians, within a waterfront zone of 12.0 metres is also a key outcome envisaged by the DCP.

3.5 Sydney Olympic Park Authority Act 2001

The *Sydney Olympic Park Authority Act 2001* (SOPA Act) guides the development of the Sydney Olympic Park and establishes the framework for operation of the Sydney Olympic Park Authority. The Act has as its objectives:

- Ensure that Sydney Olympic Park becomes an active and vibrant town centre within metropolitan Sydney; and
- Ensure that Sydney Olympic Park becomes a premium destination for cultural, entertainment, recreation and sporting events; and
- Ensure that any new development carried out under or in accordance with the Act accords with best practice environmental and town planning standards; and
- Ensure the protection and enhancement of the natural heritage of the Parklands.

Under clause 13 of SREP 24, the consent authority is required to consider whether development within the ferry wharf precinct, controlled by SOPA, is consistent with the environmental guidelines within the meaning of the SOPA Act.

3.6 Sydney Olympic Park Master Plan

The Minister for Planning adopted the Sydney Olympic Park Master Plan on 31 May 2002. The Master Plan documents a comprehensive contextual analysis of the site and establishes a strategic vision, implemented through specific precinct guidelines and general design guidelines for all development. Key elements of the Strategic Vision of direct relevance to the master planning of Homebush Bay West include:

- Encourage innovative and high quality urban form that positively contributed to the public domain;
- Continue to be an outstanding example of sustainable urban design by implementing ESD principles in all development.
- Integrate Sydney Olympic Park with surrounding local communities through cultural, physical, social and economic interaction.
- Expand the network of pedestrian and cycleways, specifically in relation to a foreshore link around the Homebush Bay West peninsula.

The Parklands and the Ferry Wharf is identified as Precinct H in the document and are considered separately. Key precinct criteria for the Parklands include:

- Limited small scale development.
- Continued function as a major environmental resource.
- Enhance the cohesion of the Parklands and its internal and external linkages.

The master plan supports these criteria by providing the potential for greater external linkages to the site along the foreshore of Parramatta River.

The document recognises the role of the ferry terminal area in the broader master planning process for the Homebush Bay West area. As such, convenience retail, commercial or residential activities to complement the potential redevelopment of adjoining areas are identified as appropriate. Additionally, development potential for the site must accommodate ferry operations, ferry-bus interchange needs and the provision of a small commuter car park.

The Sydney Olympic Park Master Plan identifies various land use capacity limits that apply across Sydney Olympic Park. The Sydney Olympic Park Master Plan recognises that development of the ferry terminal area is to be informed by plans for redevelopment of Homebush Bay West. As such, to integrate the proposed development of the ferry wharf area (as identified in Figure 5.1.1 of the Sydney Olympic Park Master Plan) with adjacent lands of Homebush Bay West, as contemplated by this master plan, it will be necessary to amend the capacity limits for the various land uses specified in Sydney Olympic Park within the Sydney Olympic Park Master Plan to make it clear that those limits do not apply to the ferry wharf area. See Section 2.7 and Appendix 4 of this master plan.

High quality urban form and amenity are paramount in the scope of general design guidelines formulated for Sydney Olympic Park. Likewise, principles of environmentally sustainable development provide a framework, which filters through all guidelines and is a key objective for implementation within the Master Plan.

3.7 Parklands 2020 and the Plan of Management

Parklands 2020 and the Plan of Management for the Parklands at Sydney Olympic Park are central documents in a suite of instruments that will guide the evolution of the Parklands. As the master plan site is adjacent to the Sydney Olympic Parklands and part of the site is within the domain of the Sydney Olympic Park Authority (the ferry wharf area) it is fitting that these documents inform the development and connection of public spaces within Homebush Bay West.

Parklands 2020

In 2001, the establishment of the Sydney Park Authority led to the initiation of Parklands 2020, in order to consider the implications of new legislation and test the relevance of the 1997 Concept Plan for the Parkland. Emerging from this exercise, Parklands 2020 is a summary of the key components of the 1997 Concept Plan and an update of the concept through additional principles, guidelines and program concepts to inform the evolution of the Parklands into the future.

Parklands 2020 suggests how the future of the Parklands can be shaped and demonstrates how both its natural and constructed physical characteristics can be enhanced within the context of natural resources. Through the enunciation of a coordinated series of objectives, vision, values, key themes and physical plans for conceptual precincts, Parklands 2020 establishes recommendations and strategies for both physical aspects of the place and the programming of activities.

Major themes of Parklands 2020 include:

- Restoration of Homebush Bay's riverine lowlands
- Implementation of a concept of "walls and rooms" in which spaces and settings are defined by a system of woodland and forest, through which roads and pedestrian/bicycle trails connect.
- The provision of elevated landforms to afford orienting views
- A well landscaped street system, centralised parking and fostering of pedestrian and bicycle transport.
- Provide a contrast and context for the built environment that the Parklands surround.
- Provide for adaptability and flexibility.

The Sydney Olympic Parklands Plan of Management

The Sydney Olympic Park Authority Act 2001 requires the Authority to prepare a Plan of Management for the Parklands, which was adopted in January 2003. Parklands 2020 is the framework within with the Plan of Management has been prepared.

The Plan of Management for the Parklands is a detailed document that outlines future management and potential uses and activities for the Parklands as a whole and for each of its 17 management precincts. While none of these precincts are within the master plan area, two are adjacent (Wanngal Wetland and Woo-la-ra). In this respect it is important that the objectives and values of these areas are respected and integrated within the proposed use of the Homebush Bay West master plan area..

3.8 Powells Creek Landscape Design Framework

A landscape design framework for the Powells Creek Corridor, extending between Strathfield and Homebush Bay, has been prepared within the context of the Greater Homebush Living Centre Project.

The Landscape Design Framework identifies four major character areas along the corridor. One of these, *The Urban Bay*, is of relevance to this master plan.

The landscape design framework contains proposals for paths and landscape within the Homebush Bay area that are designed to help express the urban bay character. Additionally, the Framework nominates the following items within the master plan area:

- Cycle and pedestrian links
- Foreshore walk to the Bay frontages
- The potential for a bridge connection across Homebush Bay to be located to the south of the master plan site,
- Implementation of improved stormwater management objectives
- Improvement of access for recreational watercraft
- Provision of working harbour uses, a wharf and small boat launch
- A "Tidal Beacon" marker within Wentworth Point Park
- The creation of a wetlands area within Wentworth Point Park
- The design of Wentworth Point Park in line with the OCA recommendations of 1998.

4 Site History and Context

4.1 Development History

Place names within and around the master plan site owe much to the original European landowners of the area and have significant connections with early European explorers.

The first large estates in the Homebush area were established by John Blaxland and D’Arcy Wentworth, relatives of the explorers Blaxland and Wentworth, who first crossed the Blue Mountains with Lawson in 1813. John Blaxland acquired 520 hectares, which he named “Newington” after the family estate in England, and established salt pans on the edge of the Parramatta River to service the demands of Sydney. Newington House still stands today as part of the Silverwater Correction Complex. D’Arcy Wentworth acquired 370 hectares of land between Powells Creek and Haslams Creek in 1810 and named the property “Homebush”. He established Australia’s first horse stud there and it was his son, William Charles Wentworth that joined with Lawson and John Blaxland’s brother, Gregory in their journey across the Blue Mountains.

The Homebush Bay West – Wentworth Point master plan site was reclaimed from Homebush Bay and did not exist prior to the inter-war period, when Homebush Bay was dredged to contribute to the formation of what is now known as Wentworth Point (and its immediate area). Following reclamation in the 1920’s and 30’s, the site was used for a variety of industrial purposes, though was spared the heavily polluting industries that are the source of significant contamination on the Rhodes Peninsula side of Homebush Bay. Timber processing was a focus of industrial activities immediately prior and post WW2, though this has been replaced with a mix of warehousing, light industry and 2GB’s am transmission tower located on the end of Wentworth Point. Figure 4.1 provides an overview of the historic land use for the entire Homebush Bay area. In addition to these diagrams, it must be noted that residential development is also presently replacing industrial activities between Homebush Bay and Hill Road.

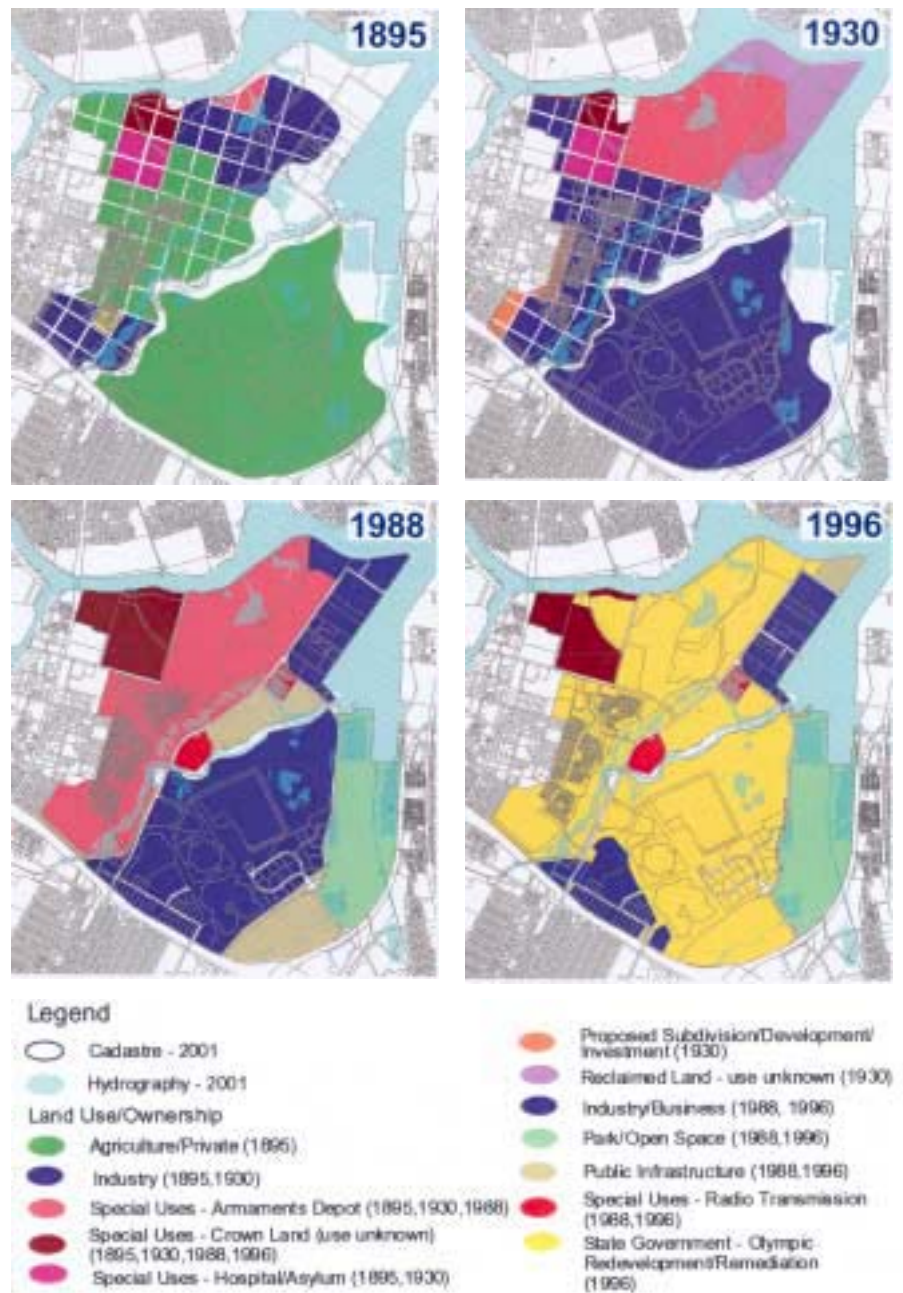


Figure 4.1. Historic development of the Homebush Bay Peninsula

4.2 Regional Context

The Master Plan site is a 20.4 hectare prime riverfront property, fronting the southern shore of the Parramatta River and the western shore of Homebush Bay. Burroway Road and The Parklands bound it on the southern and western sides. It is within 15 kilometres of Central Sydney, 5 kilometres from Auburn and approximately 5 kilometres from the Parramatta CBD, Burwood and Ryde centres (see Figure 4.2).

The site is centrally located within the Sydney metropolitan region and is surrounded by open space (The Parklands), Recreation/sporting uses (Sydney Olympic Park), residential (Meadowbank, Newington, Rhodes etc) and a variety of industrial uses on the remainder of Homebush Bay West. There are no community services located in close proximity, although Newington, Auburn and other centres provide adequate access.

The site is located approximately 3.5km from the M4 'Western Motorway', Parramatta Road and Homebush Bay Drive, and approximately 3km from Silverwater Road. It can only be accessed via Hill Road, which joins with Parramatta Road to the south. Hill Road is a wide single lane road with a number of intersections connecting with routes to Silverwater Road and Homebush Bay Drive.

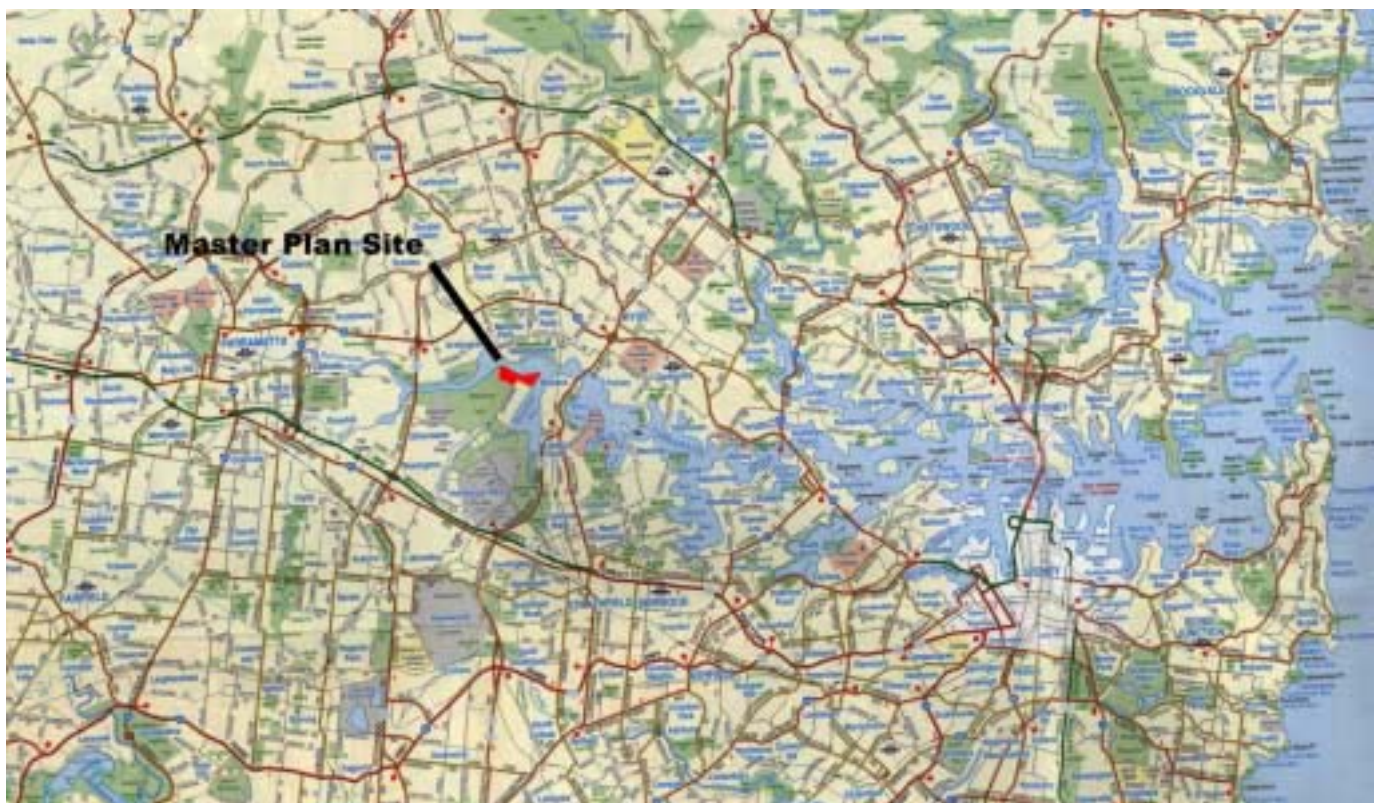


Figure 4.2. Homebush Bay West Regional Context

The Homebush Bay ferry wharf is served by ferries running between Circular Quay and Rydalmere. On weekdays, services operate at approximately hourly intervals until 4pm with two evening services after that time. At weekends, a more regular service runs hourly from 8.30am until 6.40pm.

There is a fast 'cat' ferry service along the Parramatta River between Circular Quay and Parramatta but this only calls at Rydalmere. A bus service operates between the ferry wharf and Lidcombe railway station via Olympic Park railway station on weekdays and at weekends. A further analysis of public transport services is provided in Appendix 1.

4.3 Local context

The depth of water in Homebush Bay is shallow, with the deepest sections being just a 2 metre channel along the western side of the Bay. This water depth limits the size and type of vessels that are able to use the area to shallow draft power boats and small sailing craft. As a result, there is limited recreational boating use of the waterways in this vicinity, although some rowing takes place along the Parramatta River and parts of Duck Creek.

The site adjoins The Parklands, which are linked with Sydney Olympic Park by a system of pedestrian and cycle paths. At present, these paths circulate around the NSW Maritime Authority site and other developed areas at Homebush Bay West. Future development will need to provide for connection into this system, and particularly for the extension of the Foreshore Walk. Additionally, there has been a proposal raised for the construction of a pedestrian bridge connecting Homebush Bay West and Rhodes Peninsula (although no firm commitment has been given). This bridge would have the effect of increasing the walkable catchment of the master plan site, as well as result in the location of a railway station within 400 metres of the site.

The entire Homebush Bay area is rapidly undergoing significant change. A post Olympic Master Plan has recently been adopted that will see residential and commercial development within Sydney Olympic Park. Additionally, the Newington estate is located close by and will see an additional population of approximately 3000 people and supporting services. The Rhodes Peninsula and other parts of Homebush Bay West are also currently experiencing, or are soon to experience, significant residential, business and recreational development. In this respect, a pattern of development is beginning to be established for the Homebush Bay Peninsula where a series of significant east-west streets terminate at the waterfront and structure the area into "segments". These segments are generally comprised of a low waterfront, central and park-front precincts, with an additional layering provided by the allocation of commercial and activity areas, open space linkages and spaces, and an interconnected street system on the Peninsula. The majority of the future development is adjoining areas is residential, and will result in a potential future population of around 10,000 people.

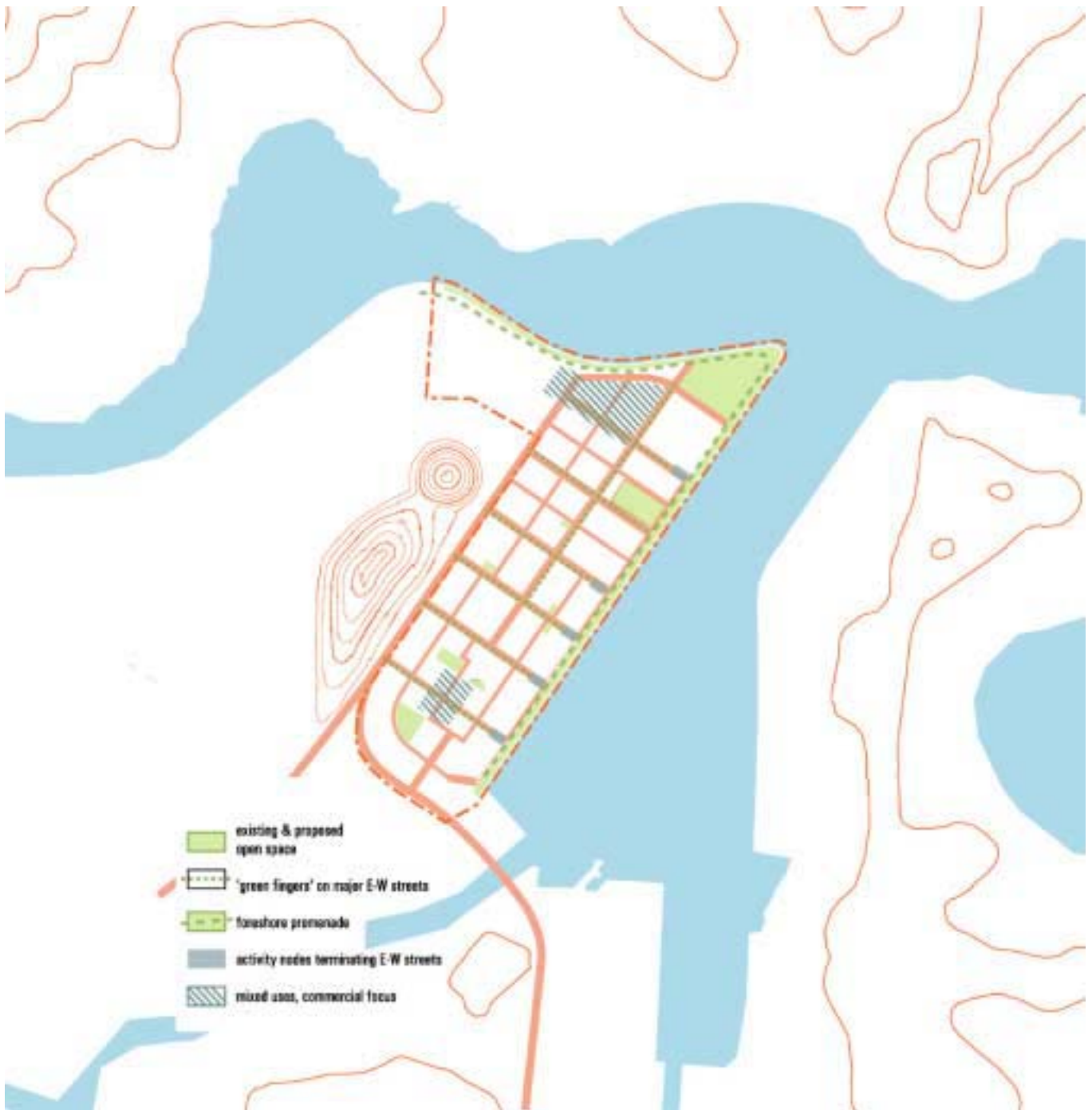


Figure 4.3. Homebush Bay West Urban Structure.
 This image represents the structural principles underlying the present and future development of the Homebush Bay West Peninsula (DIPNR 2004).

5 Concept Plan

The master plan for Homebush Bay West-Wentworth Point provides for the future development of small craft boating facilities in Sydney's west and contributes to the provision of a range of support services and facilities necessary for the efficient and sustainable development of the wider Homebush Bay West peninsula.

The master plan provides for the development of a significant maritime and recreational boating centre, which incorporates opportunities for small craft storage, launch, sales, service and repair. The maritime precinct also incorporates a range of facilities directed at sport and leisure pursuits such as rowing club, restaurants etc.

A significant open space area of approximately 4ha is provided at Wentworth Point, which forms a key destination along a continuous foreshore pedestrian/cycleway that will in time link the Sydney Olympic Parklands with the Rhodes Peninsula. This foreshore path varies in its proximity to the immediate waterfront, thereby providing opportunities for bushland restoration on the water's edge. Day berthing is also provided adjoining this parkland.

The western portion of the master plan site is retained for future maritime activities and is also considered a potential site for an aboriginal cultural centre. Foreshore access is provided to this area amounting to approximately 0.8 ha, which connects to the Sydney Olympic Parklands. This is part of a foreshore pedestrian/cycleway that will integrate the Homebush Bay Waterfront with Sydney Olympic Parklands, Bicentennial Park and Rhodes Peninsula.

The master plan also provides for the development of a retail commercial centre in close proximity to the existing ferry terminal. This centre will meet the needs of a substantial future residential population within the northern part of the Homebush Bay West area and will be closely associated with the maritime activities proposed in the vicinity. The master plan also provides for limited residential development, generally as a component of mixed use buildings.

An Illustrative Concept Plan is presented on the following page.



Figure 5.1. Concept Plan

6 Urban Design Principles

Detailed analysis of existing site conditions, opportunities and constraints has established a range of urban design principles that have informed the master plan. This analysis is presented within Appendix 1 of this document.

Urban design principles are addressed in the following sections and are divided into the categories of:

- Visual Character
- Land Use
- Built Form
- Access and Circulation
- Landscape and Open Space
- Maritime Activities
- Environmentally Sustainable Development

6.1 Visual Character

In order to conserve and improve the natural setting and visual character of Homebush Bay West-Wentworth Point, the following principles apply:

- Maintain and enhance existing significant vegetation on the site, including mangroves located along the Parramatta River frontage.
- Provide a major peninsula parkland at Wentworth Point, which maintains the present character of the peninsula as an undeveloped promontory.
- Maintain and enhance the visual character of the foreshore through the provision of significant building setbacks, provision of continuous foreshore pedestrian access and provision of opportunities for significant landscape planting of locally native plant species.
- Integrate enhanced natural foreshore values with the built environment
- Model of built form to step building height down toward the waterfront and parkland areas.
- Apply a consistent and coordinated palette of urban landscape elements.
- Preserve and protect the visual context of the Sydney Olympic Parklands.

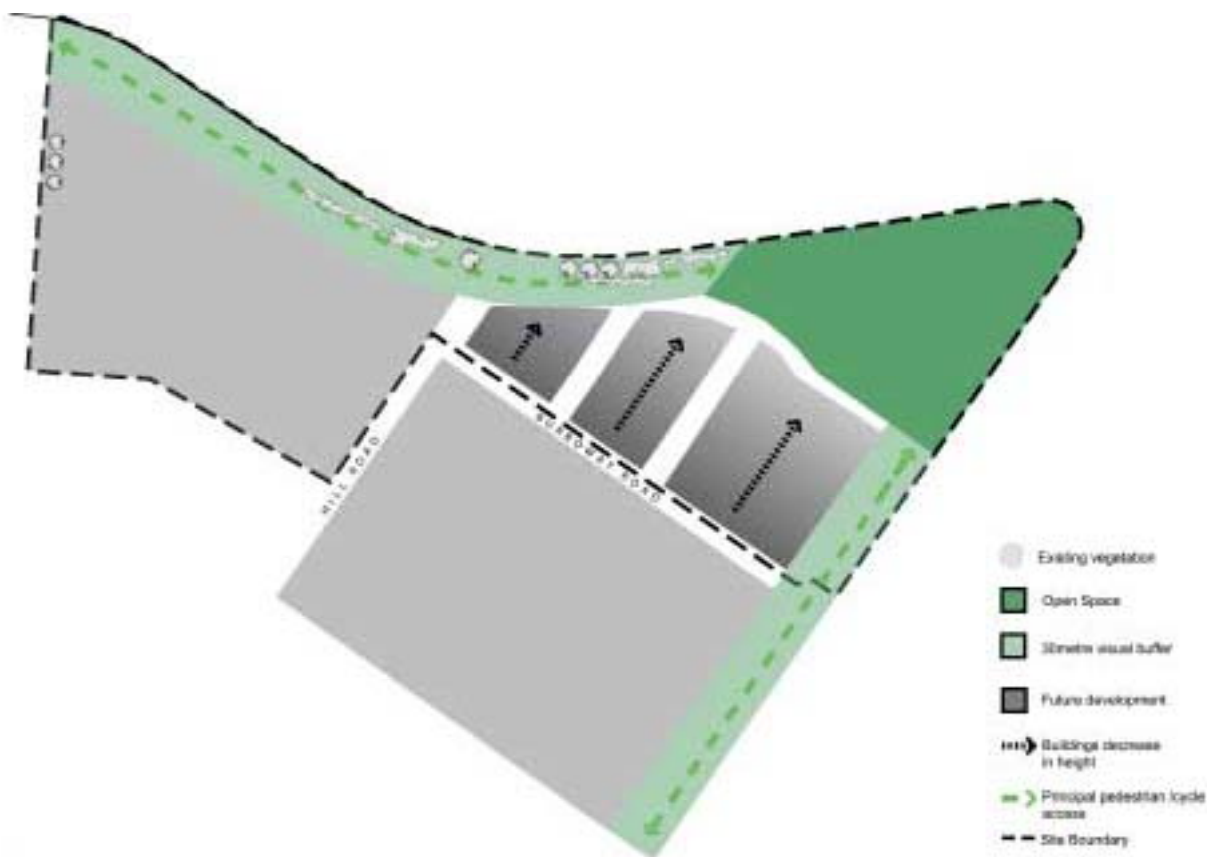


Figure 6.1. Visual Character Principles

6.2 Land Use

In order to provide for an appropriate mix and allocation of land uses on the site, the following principles will apply:

- Provide continuous foreshore access along the length of the peninsula, consistent with the setback requirements in the Homebush Bay West DCP.
- Create a defined park at Wentworth Point that provides for a variety of experiences and activities.
- Provide for a retail/commercial centre in a location adjacent to the existing ferry terminal, that services the needs of both visitors and the future resident population of the area. Additionally, the range of retail and commercial activities should reinforce the maritime focus of the area.
- Provide opportunities for north facing cafes and restaurants overlooking the Parramatta River and Foreshore Parklands
- Provide opportunities for a variety of potential maritime activities, focused on the recreational boating market, and consolidate these activities within a defined precinct oriented toward Homebush Bay.
- Provide opportunities for residential development in a mixed use format in areas adjacent to other residential, or proposed retail/commercial activities.
- Manage potential conflicts between adjoining and adjacent uses



Figure 6.2. Land Use Principles

6.3 Built Form

It is important that built form assists in defining comfortable pedestrian spaces and contributes to appropriate local environmental outcomes. As such, the following principles will guide proposed built form for the master plan site:

- Taller buildings are appropriate adjacent to Hill and Burroway Roads.
- Building height should decrease toward the waterfront and foreshore parkland areas.
- Blocks should be oriented with a maximum of northern exposure.
- Blocks should be sized to accommodate a range of uses efficiently, with a minimum potential for detrimental impact from adjacent uses to the southern side of Burroway Road.
- Buildings should address public spaces.
- Maintain important view corridors to waterfront areas, and create new views and vistas of the waterfront.



Figure 6.3. Built Form Principles

6.4 Landscape and Open Space

The master plan will provide for significant additional open space opportunities and will contribute to the creation of a continuous foreshore path. The following principles will guide the approach to landscape and open space within the master plan site:

- Provide a major parkland at Wentworth point and pedestrian/cycle connections with the surrounding area, particularly along the foreshore.
- Landscape proposals for Wentworth Point Park are to be guided by the landscape strategy for the Park, introduced in Section 7.5 of this Master Plan.
- Provide a vegetated riparian zone in Wentworth Park which:
 - Incorporates a vegetated riparian corridor of an average width of 40 metres along the foreshore area of Wentworth Point Park, or dedicates greater than 50% of Wentworth Point Park to revegetation.
 - Offers access to the foreshore at appropriate locations(Wentworth Point and other selected points providing quality views of the water and opposing foreshores.
 - Excludes development in areas identified as vegetated riparian corridor or dedicated to riparian vegetation.

-
- Provide vegetated areas that mimic the structure, form and species of the transitional vegetation types (saltmarsh, riparian to Sydney Turpentine Ironbark forest).
 - Provide a significant restored bushland component within Wentworth Point Park.
 - Maximise bushland immediately adjacent to, and overhanging the waterway.
 - Treatment of the public domain is to be consistent with the overarching strategy and details contained within the Homebush Bay West Waterfront Public Domain Strategy and Sydney Olympic Park Authority Urban Elements Design Manual.
 - Landscape treatment and management of public spaces is to be consistent with that in adjoining SOPA lands and the guiding documents at Appendix 3. The planting design should be consistent in terms of species but to achieve the broader ecological outcomes, the planting should mimic the structure, form and species of the transitional vegetation types (saltmarsh, riparian to Sydney Turpentine Ironbark forest)
 - Provide opportunities for communal open space located in the central sections of residential/mixed use blocks.
 - Ensure an appropriate relationship and transition between public and private spaces.
 - All streets should be landscaped with a diversity of appropriate locally native street tree planting. Planting should reflect and reinforce street hierarchy
 - All at-grade car parks should be landscaped with a diversity of appropriate locally native tree planting and buffer planting where adjoining public spaces.
 - Maintain and integrate existing significant planting within future landscape proposals (see appendix 1).
 - Large and bulky buildings are to be provided with adequate landscape planting of locally native species to soften their appearance.
 - All public areas are to provide for appropriate disabled access.



Figure 6.4. Landscape and open space principles

6.5 Ecological Principles

Redevelopment of the Homebush Bay West – Wentworth Point area will pay particular attention to ecological management issues. Accordingly, the following principles underscore proposals and controls of this master plan:

- Provide substantial bushland restoration areas, particularly in Wentworth Point Park;
- Provision should be made for vegetation overhanging the waterway;
- The plant species used should reflect the vegetation communities that previously occurred in the vicinity, consistent with the Olympic Coordination Authority's *Site Wide Planting Strategy*. (Note: consideration needs to be given to the site specific characteristics such as soil type, contamination, soil moisture, shade and exposure to wind, as well as interaction with land use);
- All plant species used should be of local genetic provenance;
- Consideration should be given to long term management requirements such as edge to area ratios, informal access, need for fencing, removing stormwater input and safety;
- The structure of bushland planting should make provision for canopy, mid-storey, understorey and groundcover with dense plantings in suitable locations.

6.6 Access and Circulation

The provision of an access and circulation system that integrates with the surrounding context of the site is an important objective for the master plan. The following principles will guide vehicle, pedestrian and cycle circulation systems through and within the site.

- Integrate the street system with the existing and potential surrounding street network.
- Provide a connected network of streets that demonstrate a clear hierarchy and structure appropriate to function
- Provide all public open spaces with a direct street frontage
- Provide a well connected pedestrian and cycle network, which includes continuous foreshore access.
- Potential points of conflict to continuous pedestrian foreshore access, such as may occur within the maritime precinct should be appropriately managed such that public safety is maintained and pedestrian priority promoted at all practicable times.
- Provide a focus for public transport at the existing ferry terminal and an efficient system for set-down and drop-off of passengers
- Vary the foreshore pedestrian and cycleway access so that it comes away from the immediate foreshore and provides opportunities for bushland restoration on the waters edge.

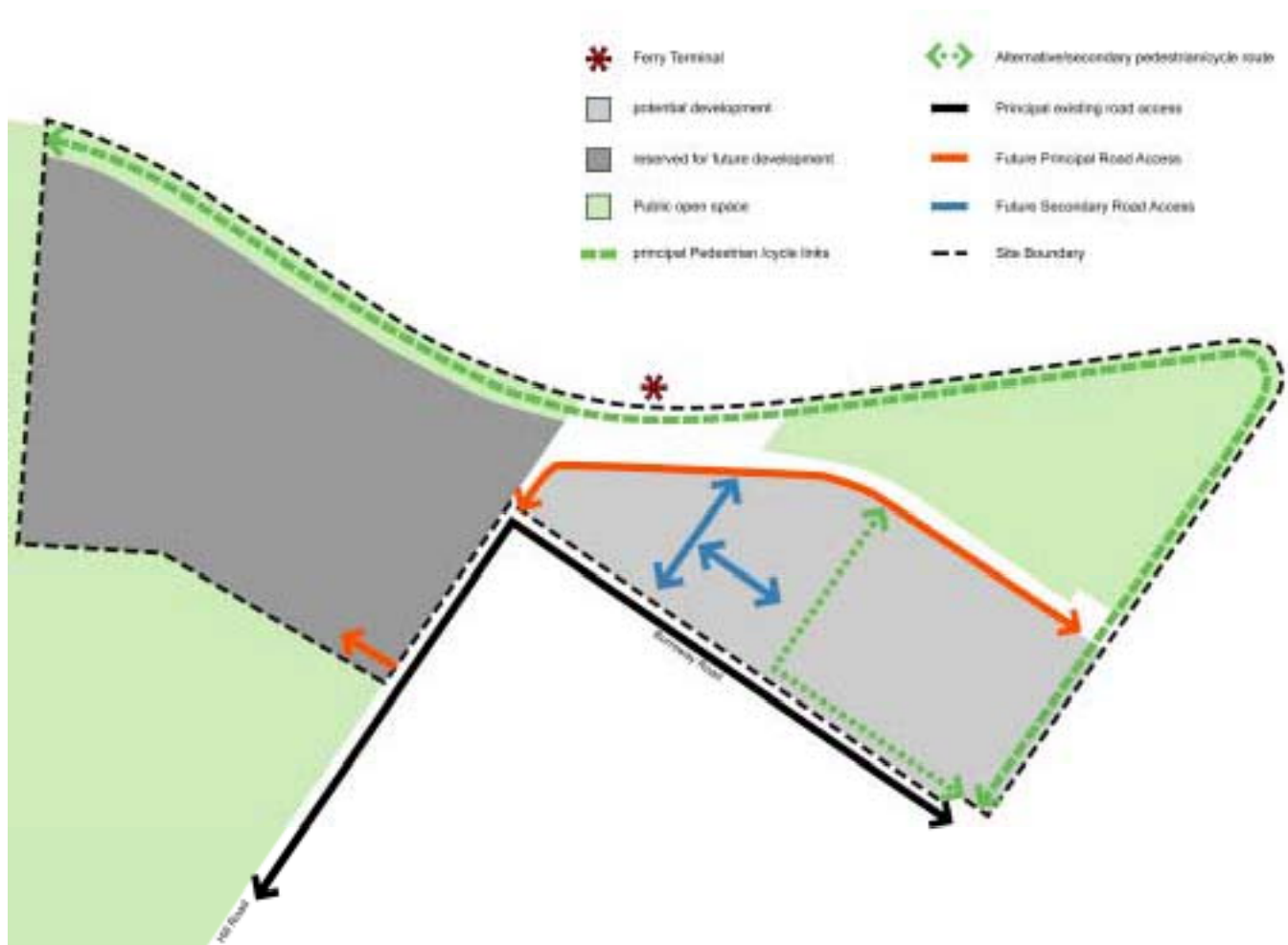


Figure 6.5. Access and Circulation Principles

6.7 Maritime Activities

The master plan directly contributes to the principles of SEPP 56 by proposing the development of a recreational maritime precinct. The following principles will guide the approach to location, function and management of maritime activities on the site.

- Provide opportunities for the development of a distinct and high quality precinct oriented toward recreational and small boat needs
- Cater for a diversity of boating activities
- Provide opportunities and flexibility for potential future expansion.
- Provide maritime buildings with a visually interesting facade where they are located adjacent to streets and public areas
- Provide for continuous pedestrian access to the foreshore, which may be managed in maritime areas. An appropriate Management Strategy for pedestrian foreshore access in line with principles of this master plan will be required as a component of a DA for the maritime precinct.
- Ensure a supportive relationship with surrounding activities and precincts.
- Orient maritime activity toward Homebush Bay.
- There should be a minimum foreshore building setback of 10 metres.

6.8 Environmentally Sustainable Development

Environmental sustainable development objectives are key elements of all overarching policy and provide a major influence on the redevelopment of the Homebush Bay West – Wentworth Point site. The following environmentally sustainable development (ESD) principles are applied to the master plan and future development of the site:

- Ensure the layout of blocks and built form and the detailed design of buildings takes place in accordance with ecologically sustainable development principles with regard to energy efficiency, resource utilisation, pollution control etc.
- Demonstrate at DA stage the manner in which any proposed development conforms to relevant environmental legislation and DEC (formerly EPA) requirements.
- Ensure a minimum 4.5 star NatHERS rating for all residential and commercial buildings. From 1 October 2004, any development application for the residential component comprising unit development will need to include a BASIX assessment.
- Prepare a comprehensive contamination assessment and remediation plan prior to approval for any development.
- Prepare and approve of a comprehensive waste management plan.
- Maximise opportunities for ground water recharge and water conservation. A site stormwater management plan is to be submitted with all development applications, which is to include provision for capture and storage of stormwater and rainwater on-site.
- Provide connection to Sydney Olympic Park's Water Reclamation and Management System (WRAMS), in accordance with Sydney Water requirements.
- Provide high level of accessibility throughout the master plan site.
- Accommodate of public transport, walking and cycling as viable transport alternatives.
- Provide a mix of potential activities on the site including employment, retail, local services, open space and residential

- Coordinate with the urban design principles and development outcomes envisaged for the surrounding area.
- Require the use of plant species that reflect the vegetation communities that previously existed in the vicinity.
- Indigenous species should be used in all landscape proposals to ensure consistency with the bushland restoration along the foreshores and landscaping carried out on the adjacent SOPA lands.

7 Guidelines

This section outlines the range of principles and guidelines that apply within the master plan area. Their purpose is to establish the general location of potential activities, and to set criteria that will achieve appropriate relationships between buildings and surrounding spaces. The master plan is reasonably definitive in relation to issues concerning the public domain. Conversely, a level of discretion is provided for issues of a “private” nature in order to provide the necessary flexibility to adapt to changing circumstances and market conditions.

7.1 Precincts

The master plan site has been divided into 5 precincts. The intended purpose for each of these is summarised in the following sections. Further detail regarding precinct activities and character is contained within Appendix 2.

Maritime Precinct

The purpose of this precinct is to provide for a range of maritime and maritime related activities, of both a public and private nature. These include activities such as boat storage, maintenance and repair, boat hire, boating retail recreational boating and educational activities. Limited club and restaurant uses are also appropriate

Retail/Commercial Centre

The purpose of this precinct is to provide for the development of a mixed use retail/commercial centre that will meet the needs of future residents in the area and visitors to Homebush Bay. The retail centre will be based on a maritime theme and provide opportunities for north facing cafes and restaurants and residential on upper floors. Proposals for this precinct build on the more general statements contained within the Sydney Olympic Park Master Plan. As such, the site capacity limits estimated in Section 3.3 of the Sydney Olympic Park Master Plan do not apply to the ferry wharf area. See Section 2.7 and Appendix 4 of this Master Plan.

Ferry Terminal

The existing ferry services are to be maintained within this precinct. Relocation of parking and road arrangements provides the opportunity for the creation of a strong and supportive street frontage relationship.

Foreshore Open Space

The purpose of this precinct is to provide for the development of both a new parkland at Wentworth Point, as well as a substantial foreshore open space area along the banks of the Parramatta River. All existing significant vegetation within this area will be conserved.

Future Development

The purpose of this precinct is to reserve land west of Hill Road for future development. This development will be predominantly for maritime related purposes, but additional uses including an Aboriginal Cultural Centre may be considered and will be described in more detail through a later amendment to this master plan. Any future development within this precinct is required to comply with SREP 24, the guiding principles of SEPP 56 and any other statutory planning documents that cover the area.



Figure 7.1. Master Plan Precincts

7.2 Activities

Explanation

This master plan is not specific in terms of the activities that are to be located within individual buildings. The master plan does however provide guidance in terms of the range of activities that are appropriate in specific areas of the site. This is addressed in terms of the identification of a range of potential uses appropriate for each precinct, in combination with diagrams expressing preferred ground floor and upper storey uses. Alternative uses may also be considered where it can be clearly demonstrated that such activities are consistent with the aims, objectives, principles and spirit of this master plan.

7.2.1 Preferred Land Uses

Precinct	Potential Activity
Maritime Precinct	<ul style="list-style-type: none"> - Boat launching and berthing facilities - Dry stack boat storage - Maritime related manufacture service and maintenance facilities - Other maritime related business (including retail) - Offices (maritime related) - Club and clubhouse facilities - Educational facilities (trade/technical/tertiary) - Community and cultural facilities - Caretakers/managers residence - Restaurants and other food premises
Retail/Commercial Centre	<ul style="list-style-type: none"> - Local convenience retail - "Destination" retail, particularly of a maritime orientation. - Cafes, Restaurants, outdoor dining and other food premises - Commercial office space - Community uses - Residential (on upper floors within mixed use buildings)
Ferry Terminal	<ul style="list-style-type: none"> - Ferry services - Limited convenience retail
Foreshore Open Space	<ul style="list-style-type: none"> - Passive and active recreation - Restaurants and other food premises - Community and cultural facilities - Short term berthing facilities (day berthing)
Future Maritime Activities	<ul style="list-style-type: none"> - Boat storage, launching and berthing facilities - Maritime related manufacture service and maintenance facilities - Other maritime related business (including retail) - Offices (maritime related) - Club and clubhouse facilities - Community and cultural facilities - Residential - Cafes, Restaurants, outdoor dining and other food premises

7.2.2 Ground Floor and Upper Storey Uses

The following diagrams provide an indication of the disposition of preferred activities for the master plan site, as they relate to proposed building footprints.



Figure 7.2(a). Proposed Ground Floor Activities



7.2(b). Proposed Upper Floor Activities

7.3 Maritime Facilities

The master plan provides for several new and significant maritime facilities. These include the following:

- A trailer boat launching area.
- A wet well and berthing structure associated with the main maritime precinct (an environmental protection licence will be required from the Department of Environment and Conservation (DEC) where the combined capacity of the berthing structure and dry storage exceeds 80 vessels. An EIS is also required to accompany a development application for boat storage of 80 vessels or more).
- Day Berthing facilities.
- Rowing storage and launch facilities, adjacent to Burroway Road.
- Dry boat storage facilities for 200 vessels, with expansion capacity for a further 100 vessels.
- A community clubhouse facility located on the northern part of the precinct, adjacent to Homebush Bay and the trailer boat launching area.

7.3.1 Trailer Boat Launching Area

This area is located adjacent to the southern boundary of Wentworth Point Park. The trailer boat launching area incorporates the following features:

- A double width boat ramp extending into Homebush Bay
- Parking for up to 50 vehicles with trailer
- Extensive landscaping, which includes shade trees within the hardstand area and mounding and landscape treatment to soften its relationship with the adjacent parkland.
- An alternative pedestrian/cycle route around the facility.

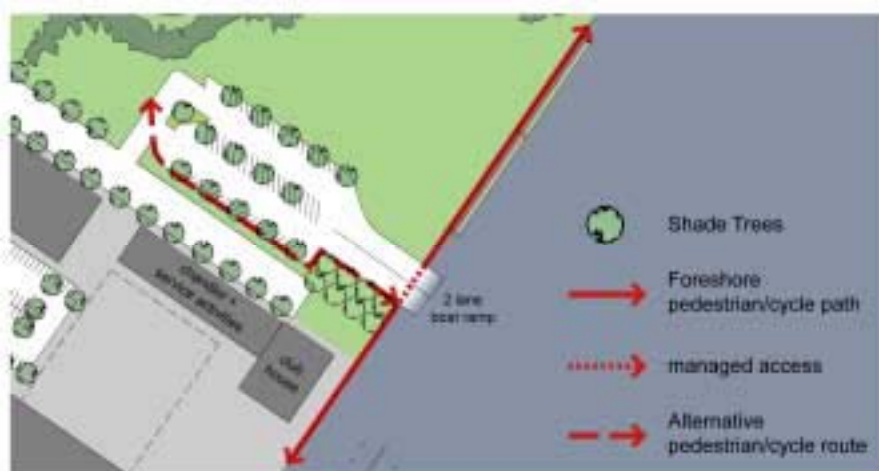


Figure 7.3. Trailer Boat Launching Area

7.3.2 Boat Launch Well and Berthing Structure

The wet well and berthing structure is located adjacent to adjacent to the maritime precinct on Homebush Bay. These facilities incorporate the following features

- The wet well will be of sufficient dimensions to allow the simultaneous launching of 2 boats of up to approximately 10 metres length.
- A pedestrian bridge will be constructed over the wet well to allow pedestrian access along the foreshore. The bridge may be opening or rotating and may be utilised for management of pedestrian movement across the launching area. In this respect, pedestrians will be given priority to use the foreshore path at all times except where boats require access to and from the wet well. An appropriate Management Strategy for pedestrian foreshore access in line with principles of this master plan will be required as a component of a DA for the maritime precinct.
- Floating pontoons will be provided adjacent to the wet well and will provide berthing for a maximum of 50 boats.
- Berthing is provided only for short term use involved in operation of the dry stack facility, maintenance, refuelling and servicing activities and use associated with a boat brokerage.



Figure 7.4. Wet well and berthing structure (Indicative/potential option)

7.3.3 Day Berthing Structure

A day berthing structure will be provided within the Wentworth Point Parklands, within Homebush Bay. This facility will provide casual berthing for vessels utilising Wentworth Point Parkland and the maritime precinct.

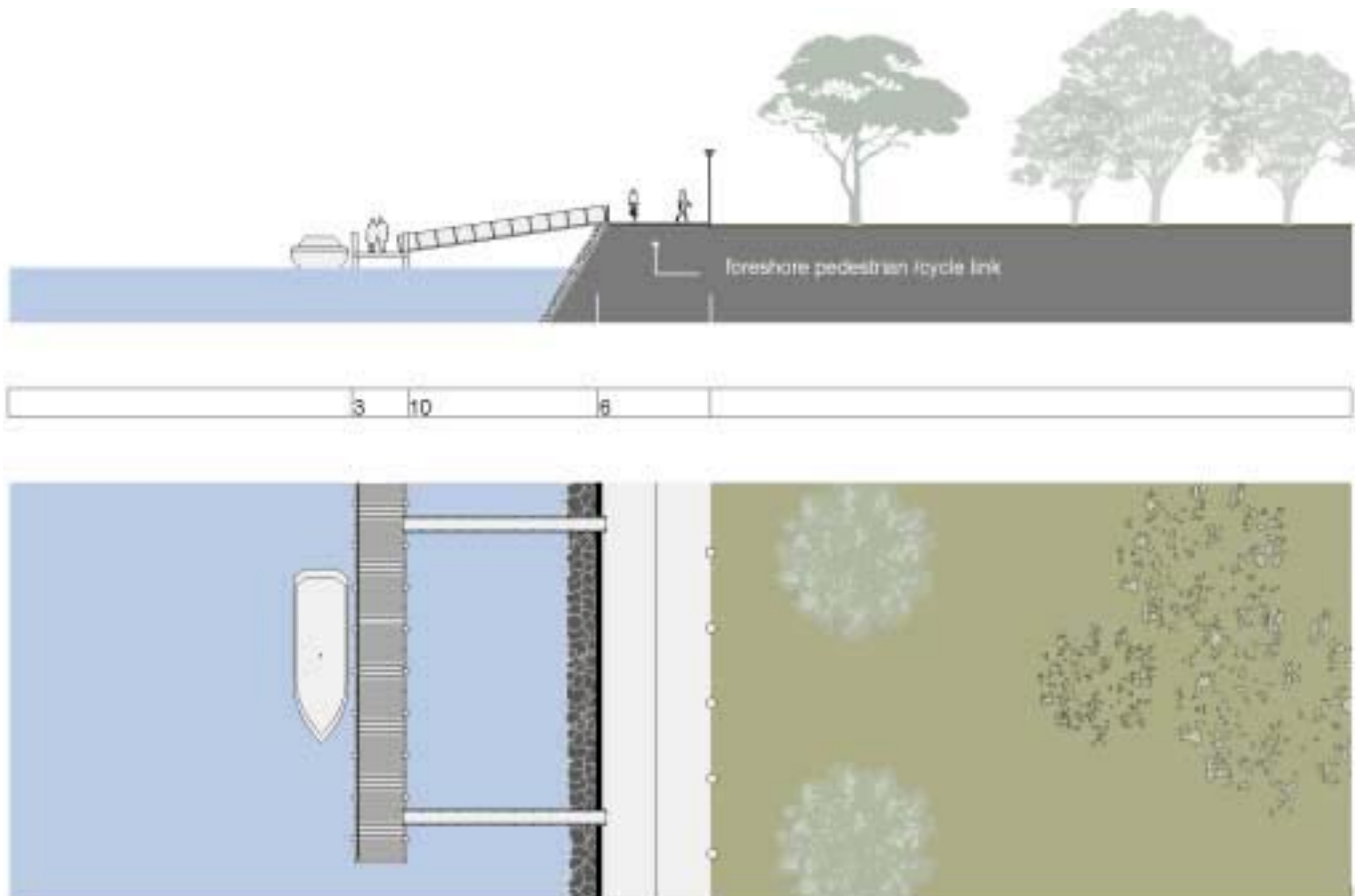


Figure 7.5 Casual Day Berthing (indicative option)

7.3.4 Other Facilities

The maritime precinct will incorporate a rowing club with dedicated boat storage and launching facilities as well as a site for small boat hire, within the main clubhouse building. This facility will utilise a proportion of the berthing pontoon structure located adjacent.



Figure 7.6 Rowing Facilities (Indicative option)

7.4 Built Form and Urban Quality

7.4.1 Building Height

The master plan identifies maximum heights for all buildings (see figure 7.7). Minor variations will however be considered, based on the merits of individual proposals.

Building height is expressed as storeys in all cases except for the Dry Stack Boat Storage facility, which is expressed in metres. A storey is defined as the vertical distance between the floor level and ceiling level of a habitable space, though does not include loft spaces where these appear as an element of a roof structure.

The following minimum floor to ceiling heights apply:

Retail, commercial, community and public buildings

- 3.3 metres for ground floor
- 3.3 metres for first floor

Residential Buildings

- 2.7 metres for all floors

Mixed use buildings incorporating residential on upper floors

- 3.3 metres for ground floor (non-residential)
- 3.3 metres for first floor, regardless of use
- 2.7 metres for upper floors (residential)



Figure 7.7. Maximum Building Heights

7.4.2 Building Location

While not specific in detailed building form, the master plan delineates a location for all buildings on the master plan site in terms of their relationship to streets, other buildings and building depth. It is intended that detailed building design will take place within the building envelopes specified within Figures 7.8, 7.9 and 7.10 (although variations may also be considered based on the merits of individual proposals). At acute street corner locations (greater than 90 degrees), envelopes may be broken in order to ensure that new buildings appropriately “turn the corner”. Variations may also be considered, based on the merits of individual proposals.

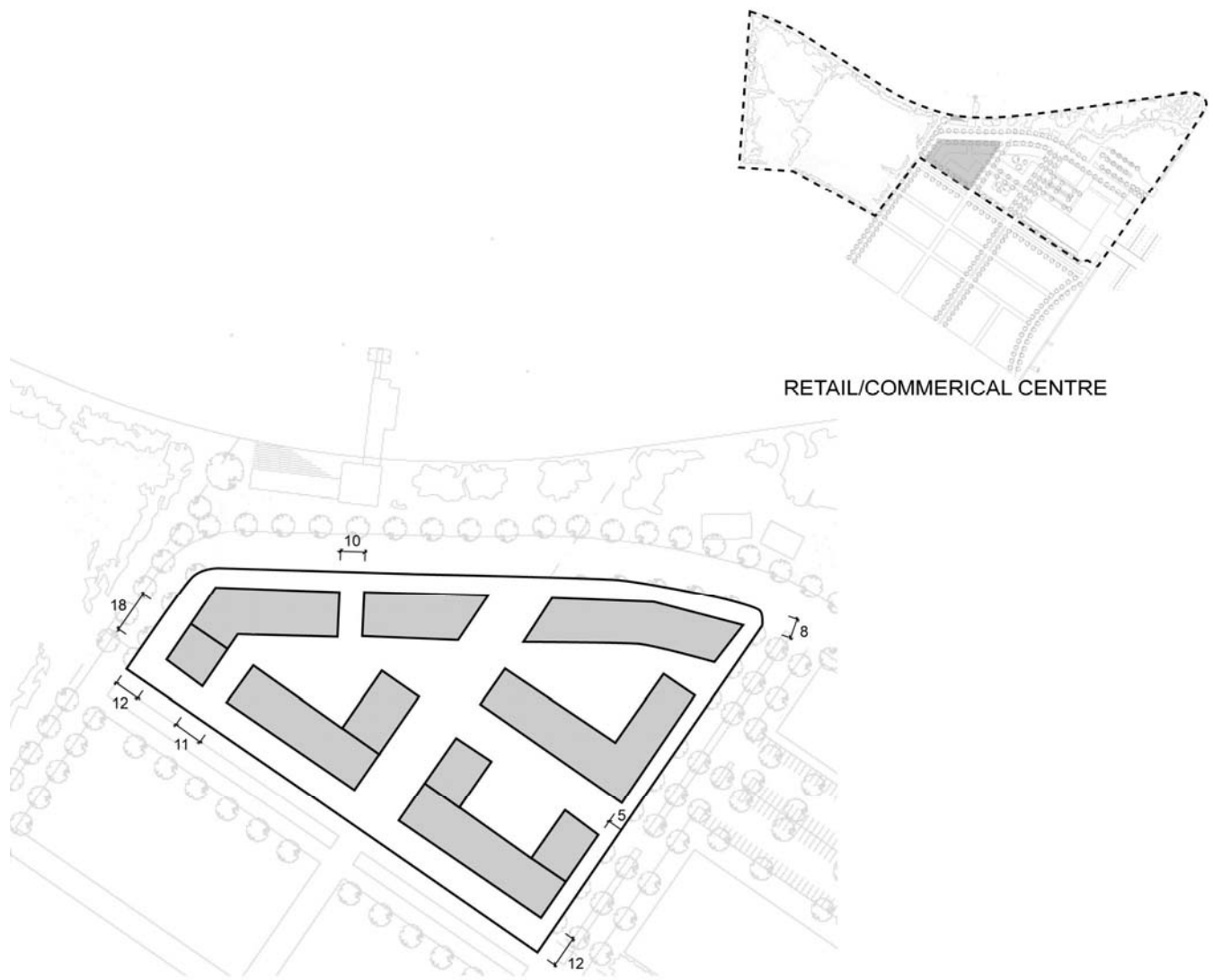


Figure 7.8 Building Location – Retail/Commercial Centre

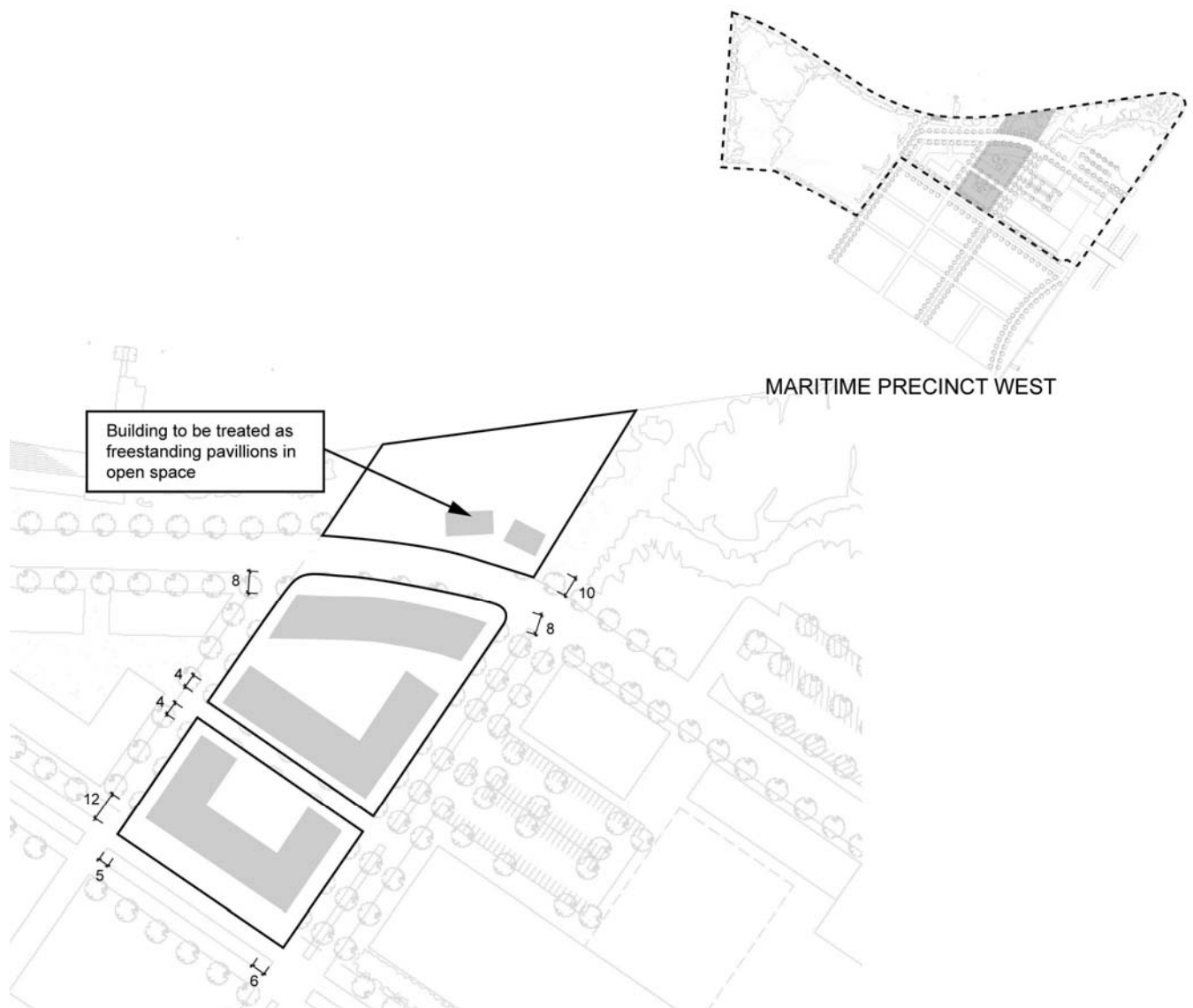
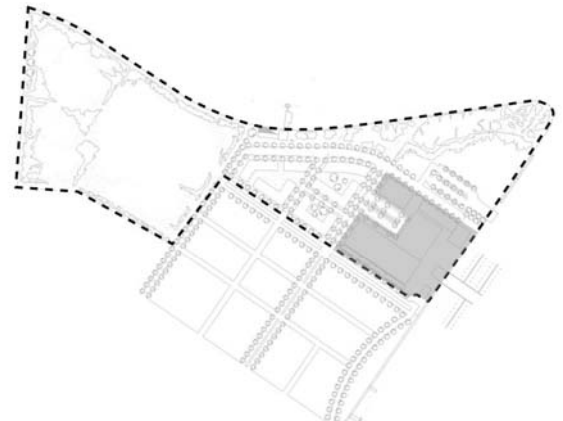


Figure 7.9 Building Location – Maritime Precinct (west)



MARITIME PRECINCT EAST

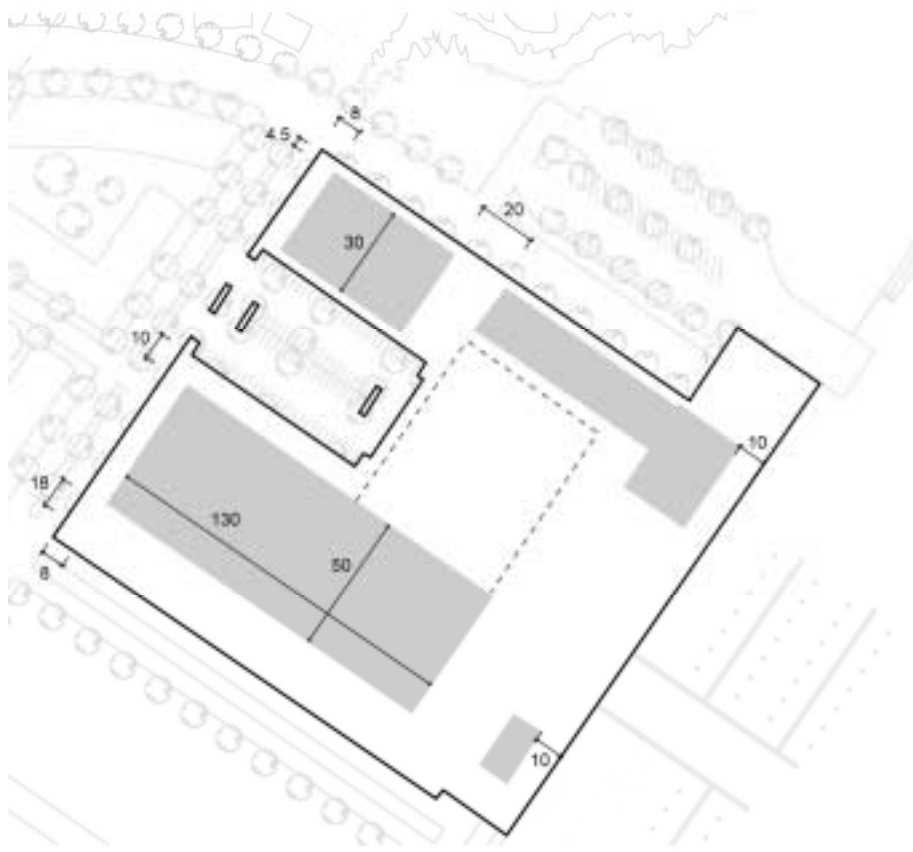


Figure 7.10 Building Location – Maritime Precinct (east)

7.4.3 Building Appearance

The detailed appearance of buildings is important if high quality urban outcomes are to be achieved. Appropriate articulation, modulation, fenestration and use of materials are required to achieve suitable character, minimise visual bulk and ensure a supportive relationship with the public domain. The following principles should inform the detailed design of all buildings proposed for the master plan site:

- The design of buildings should reflect a maritime and waterfront theme.
- The form and appearance of buildings should be coordinated between sites such that individual buildings reflect and support a greater precinct image and character.
- All buildings require modulation and articulation of facades, creating distinct elements in order to enhance visual complexity and reduce apparent bulk and scale. This may include balconies and verandahs, terraces, bay windows, shading devices, articulated wall sections etc
- The design of building facades should incorporate a combination of materials and textures that contribute to the complexity of the facade.
- Facade design should provide an appropriate scale, rhythm and proportion that responds to the building's use and contextual character.
- The choice of building materials should be based on quality, durability and environmental sustainability.
- All buildings should be designed with operable windows
- Buildings should be designed with balconies, verandah or terraces.
- With the exception of dry stack boat storage, all facades should include fenestration. Maritime servicing buildings must incorporate fenestration to at least street facades.
- It is particularly important that the design of the proposed dry stack boat storage facility include significant measures to reduce its apparent bulk and scale. Specific attention should be paid to the choice and combination of materials, expression of structural components, provision of openings and views through the building, and use of articulation in this regard.
- Plant and equipment are to be integrated within the design of the building. Any rooftop plant and equipment is to be shielded from view and integrated into the design of the roof.
- Special attention is to be paid to the ground floor spaces of buildings to ensure that they contribute to an active, high quality streetscape and provide adequate casual surveillance.
- Building entrances should be clearly defined within the design of building facades.

7.5 Landscape and Open Space

The open space system is comprised of both public and private open spaces, as well as the major linkages between them. The Master Plan proposes a major new parkland at Wentworth Point and other open space areas that will eventually comprise part of a continuous foreshore park system linking Homebush Bay, Rhodes and Sydney Olympic Park. Figure 7.11 illustrates the components of the proposed system. This is supported by principles applying to specific elements within the following sections.

7.5.1 Wentworth Point Park

With the exception of the Sydney Olympic Parklands, Wentworth Point Park will be the most significant open space in the Homebush Bay West area. The following principles will underpin its eventual design and development.

- Generally, Wentworth Point Park is to be a semi-formal space comprised of individual passive recreation spaces created through the location of avenue and screen planting.
- Maintenance and enhancement of existing locally native vegetation, including riparian vegetation.
- Incorporation of a continuous foreshore pedestrian/cycle link and a network of other paths providing direct access through the park and to significant external locations.
- Accommodation of supporting activities such as cafes, restaurants, kiosk BBQ's and the like.
- Provision of water access at appropriate locations.
- Provision of boat access for ferries and a day berthing facility oriented to Homebush Bay.
- Treatment of the public domain is to be consistent with the final Homebush Bay West Public Domain Strategy.
- The design of Wentworth Point Park is to be guided by the strategic framework provided within the Wentworth Point Park Landscape Strategy (see Section 7.5.5). The following points apply concurrently:
 - Public domain treatment and planting design within the Park is to reflect that in adjoining SOPA lands and SOPA publications. The planting design should be consistent in terms of species, while also achieving broader ecological outcomes through mimicking the structure, form and species of the transitional vegetation types (saltmarsh, riparian to Sydney Turpentine Ironbark Forest)
 - A formal agreement is to be finalised concerning who is to take responsibility for the ownership/care, control and management of public domain areas including Wentworth Point Park, prior to the lodgement of any development application for the master plan site.

7.5.2 Street Landscape

All streets are to be planted with significant street trees along their length. The following principles apply.

- Planting design should reflect that occurring within the adjoining SOPA lands and SOPA publications such as Sydney Olympic Parklands Urban Elements Design Manual
- Selected species should be clean trunked shade trees
- Trees should be consistent for each street and planted at a consistent distance along the street at no more than 14 metre centres.
- Major Streets such as Hill Road and Burroway Road should utilise landscape planting to emphasise their prominence within the landscape system of the entire Homebush Bay West peninsula.
- Trees may be planted within either the verge area or to the side of the carriageway area, with parking located between.
- Treatment of the public domain is to be consistent with the overarching strategy and details contained within the Homebush Bay West Public Domain Strategy and Sydney Olympic Parklands Urban Elements Design Manual

7.5.3 Car Park Landscaping

All at-grade car parks (including maritime precinct and boat and trailer parking areas) are to be landscaped according to the following principles:

- Landscape treatment is to reflect planting occurring within the adjoining SOPA lands.
- Provision of clean trunked shade trees that allow for at least 70% shade coverage within 10 years.
- Use of mounding and buffer planting to minimise the visual impact of extensive hardstand area as viewed from the River and adjacent public spaces such as Wentworth Point Park.
- Treatment of the public domain is to be consistent with the overarching strategy and details contained within the Homebush Bay West Public Domain Strategy and Sydney Olympic Parklands Urban Elements Design Manual

7.5.4 Private Open Space

All residential dwellings are to be provided with private open space:

- Balconies with a minimum area of 8 m² and depth of 2.4 metres, directly related to the living spaces of apartments
- Communal private open space located at ground or podium level. Such spaces should be:
 - Landscaped with appropriate hard and soft landscape materials
 - Located internally on a site and wrapped with development
 - Provided with a direct access to the street frontage
 - Provided with appropriate levels of solar access
- Treatment of the public domain is to be consistent with the overarching strategy and details contained within the Homebush Bay West Public Domain Strategy and Sydney Olympic Parklands Urban Elements Design Manual



Figure 7.11 Open Space System

7.5.5 Wentworth Point Park Landscape Strategy

Aims and Objectives

This strategy has been prepared to guide future landscape proposals for the proposed Wentworth Point Park. It aims to translate the broad principles for the area to specific requirements for Wentworth Point Park. It is supported by concept design drawings. It does not preclude the park from a detailed design and management plan.

Description

The strategy provides for 4 precincts as shown in Figure 1: 'Active Area', 'Bushland Area', 'Saltmarsh Area' and a 'Passive Area'. Each of these has distinct planting and management specifications.

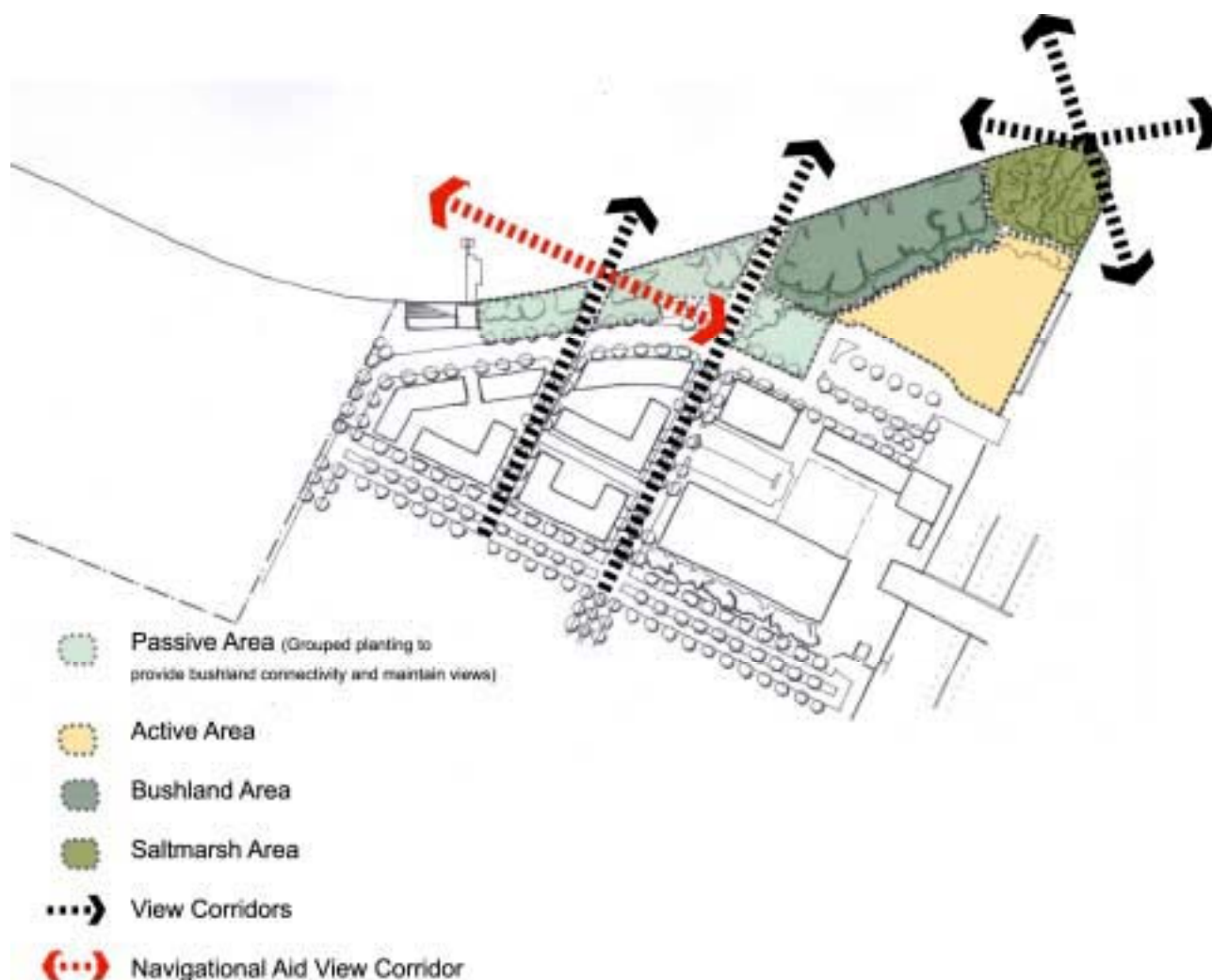


Figure 7.12. Wentworth Point Park Landscape Precincts

Principles

Provide large riparian native vegetation 'restoration' areas.

- Provision of an area greater than 50% of Wentworth Point Park to revegetation.
- Maximising the amount of bushland immediately adjacent to and overhanging the waterway. Trees and large shrubs are to be selected and located to overhang the waterway.
- The design seeks to provide consolidated patches of restored vegetation and have minimal fragmentation.
- Ecological connectivity is being provided between the Millennium Parklands and the Haslam's Creek, Bicentennial Park area (Figure 7.13 Linkages). Connectivity is also to be facilitated with adjoining SOPA landscaping, west of Bennelong Road.
- Connectivity between patches is to be achieved through appropriate landscape design. This may be in the form of dense contiguous plantings connecting the core restored patches, vegetated 'clumps' or 'stepping stones', edge plantings or individual plantings spaced close together.

Vegetated areas are to mimic the structure, form and species of the vegetation communities that used to occur in the vicinity of the site.

- The plant species selected are to reflect the vegetation communities that previously occurred in the vicinity and be consistent with the Olympic Coordination Authority *Site Wide Planting Strategy*. The vegetation communities considered most appropriate are ‘Saltmarsh’, ‘Casuarina Closed Forest’, ‘Newington Forest Association’ (a subset of the ‘Sydney Turpentine Ironbark Forest’ vegetation community).
- ‘Wetland’ species may be considered in selected locations where it is complimentary to water management needs.
- The saltmarsh and bushland precincts are to reflect the structure and diversity of species for those communities being restored.
- When selecting species, consideration needs to be given to the site specific characteristics such as soil type, contamination, soil moisture, tidal influence and saline groundwater, shade and exposure to wind as well as interaction with land use.
- There is a preference for plant species selected to be of local genetic provenance where ever possible.
- The ecological transitional zone (saltmarsh, Casuarina to Sydney Turpentine Ironbark Forest) is to be represented in the restoration areas where appropriate. Saltmarsh can be restored at the Point itself and there is an opportunity to exhibit the gradual transition of species that reflect the different salt tolerance.
- Any design that incorporates mangrove and saltmarsh vegetation needs to be designed appropriately to allow for integrity of the banks and the necessary tidal inundation regime (the right levels and bank treatment).
- The balance of the landscape planting in adjoining areas to utilise native species and is to mimic the structure and diversity of the relevant communities where ever possible.

Consideration should be given to the long term management of the park

- The design of the park needs to facilitate the longer term management of the area.
- The edge between the grassed areas and restoration area is simple and avoids a high edge to area ratio (Figure 7.12).
- The design needs to provide for control of access into restoration areas (including Saltmarsh and Bushland areas as shown on Figure 7.12 and clumps of vegetation in Passive areas). Dense plantings and appropriate species selection can act as a disincentive to individuals creating numerous informal access paths into the restoration areas. This could be supported by fencing.
- Stormwater from any urban or roadway infrastructure is to be diverted away from restoration areas.
- Pathways within or adjacent to bushland need to recognise the perceived risk of surprise attacks. Fencing, edge treatments, lighting and appropriate species selection can mitigate this risk.
- The form and structure of the pathways are to be designed to avoid sediment runoff and the potential for weed establishment along their edges.

- Lighting should not provide significant light to saltmarsh and wetlands areas where it may affect suitability for waterbird habitat.
- The restoration and its setting provide unique opportunities for interpretation of the natural and cultural values of the Bay, the River and restored foreshore.
- A comprehensive management plan is to be prepared for the site. It is to include prescriptions for the establishment and long term management of the Park and its vegetation.

Provision of niches and gaps in seawalls to promote intertidal habitat

- Design and provide niches and gaps in seawalls to promote intertidal habitat where possible.
- A number of locations around the Harbour have sought to redress the historical trend of simplification of intertidal foreshore habitat by either retrofitting or designing enhancements to intertidal habitat within seawalls.
- The simplest approach is to seek the provision of intertidal habitat where seawalls are being restored rather than pursuing retrofitting. The current approach is to lay sandbags horizontally within the walls during construction which are then removed following completion of the wall. Care needs to be taken to ensure the structural integrity of the seawall is maintained and erosion or scour avoided. A variety of sizes and levels within the intertidal area can be provided however it appears that the larger spaces are preferred.

Access

- Three categories of access have been mapped (see Figure 2) for the site: 'Restricted', 'Managed' and 'Unrestricted'.
- **'Restricted Access'** refers to the bushland and saltmarsh restoration areas. Access to the Point provides opportunities to experience a significant feature of the site with views to both waterways. The provision of raised decking and a viewing platform for pedestrian only access is to be considered to the Point. No other formal access to the 'Restricted' areas is to be provided.
- **'Managed Access'** relates to the passive recreation area and is designed to ensure vegetation linkages are provided whilst providing for the cafés, restaurants and associated facilities, visual corridors and some foreshore access.
- Access to the foreshore is to be provided at strategic locations and, as stated previously, the amount of bushland immediately adjacent to and overhanging the waterway should be maximised.
- The provision of visual access in a north-south direction from one of the adjoining streets is to be designed and incorporated with other vegetation connectivity and pedestrian linkage requirements.
- **'Unrestricted Access'** is to provide for active recreation, access to the maritime precinct and day berthing area.
- **The whole park:** Pedestrian and cycle access is to be designed in sympathy with the vegetation restoration areas and associated ecological connectivity. Cycle access is to be restricted to the through path to the south and not provided to the Point.

- Dogs are to be kept away from the Restricted access or restoration areas due to their impacts on the habitat potential of those sites.
- Navigational aids occur in the park and consultation with Waterways Authority needs to identify visual and maintenance access requirements for these structures.

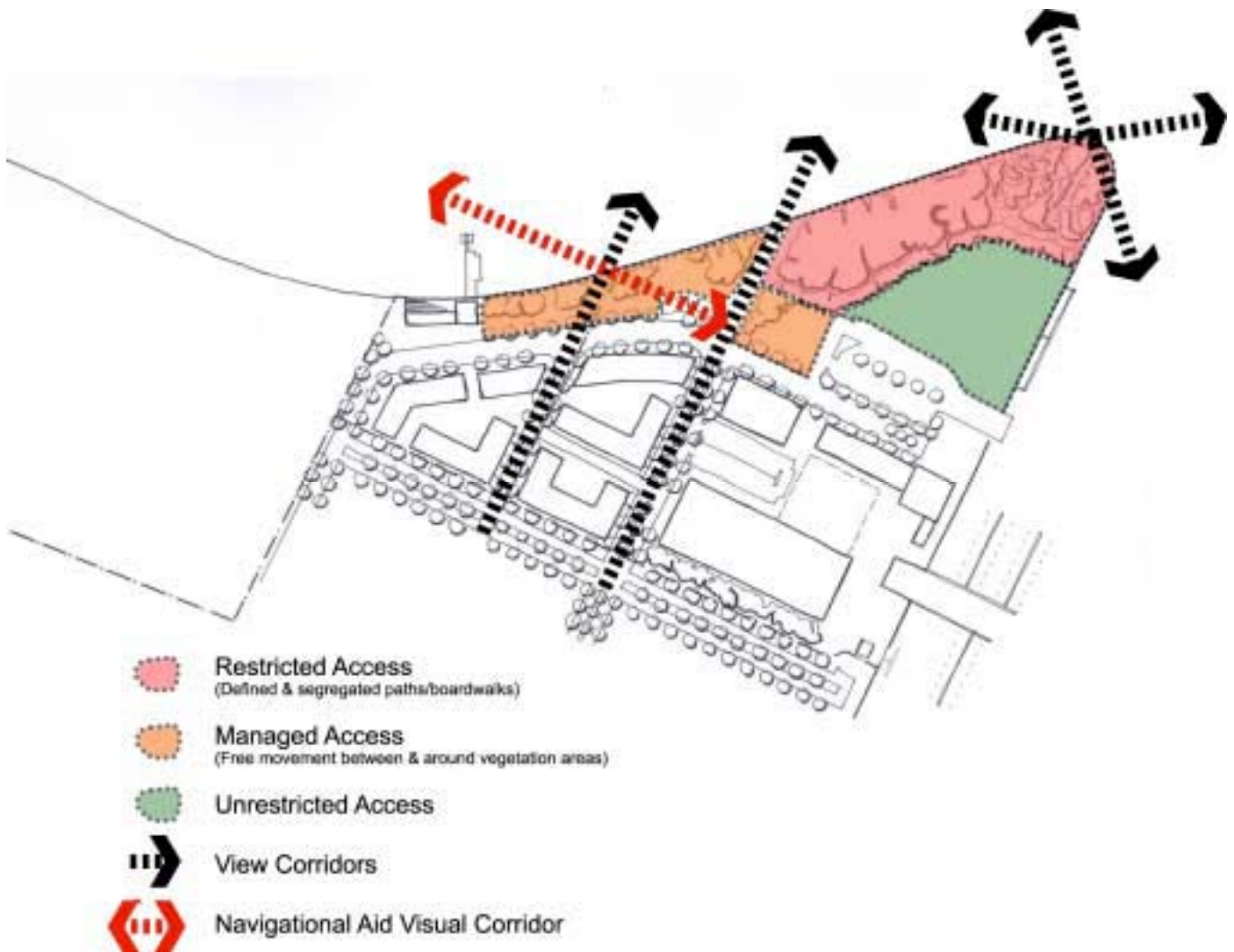


Figure 7.13. Wentworth Point Park – Access Strategy

Note: Pedestrian access to Wentworth Point Park also extends through the Ferry Terminal Area.

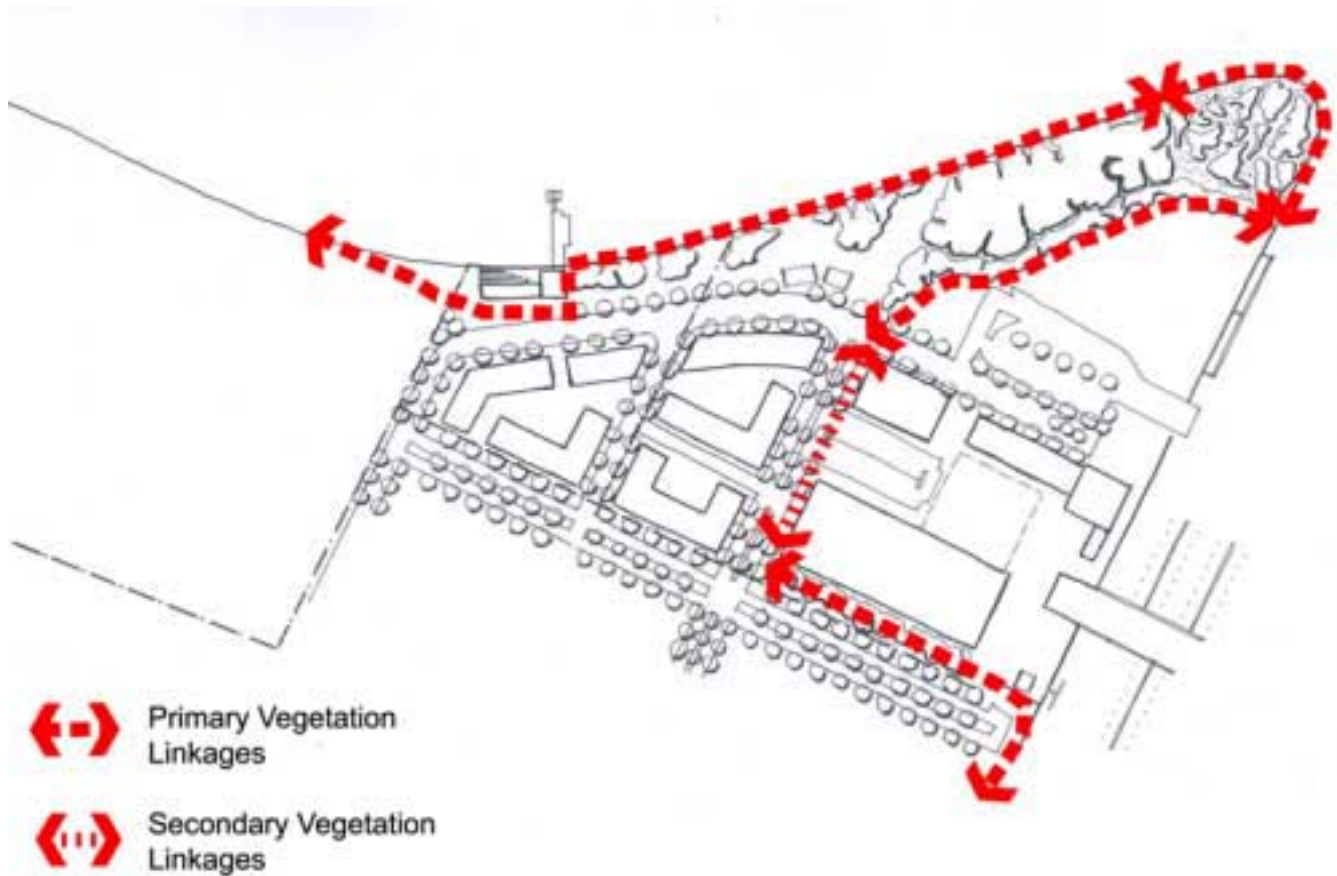


Figure 7.14. Wentworth Point Park – Vegetation Linkages

7.6 Access and Circulation System

7.6.1 The Street System

The master plan proposes an interconnected street system for the site that provides both local circulation and connects seamlessly with the surrounding district system through the Homebush Bay West peninsula. The street system has been designed as a hierarchy consisting of Major Access Street, Major Boulevard Access and Secondary Streets. The location of these is described by the following diagram.



Figure 7.15 Proposed Street System

The desired character for each street is illustrated by the sections provided in Figure's 7.17 – 7.21 for:

- Foreshore Drive (1)
- Burroway Road (2)
- Major North-South Boulevard (3)
- Secondary North-South Street (4)
- Hill Road (5)

The street sections depict required carriageway dimensions, footpath and verge dimensions and the relationship of landscape and buildings to the street. The detailed design of streets, street landscape and buildings on the Homebush Bay West site will proceed in accordance with the principles illustrated. In addition to the principles illustrated on the following street sections, the following are to be accommodated in order to achieve efficient public transport use (see section 7.6.3):

- Minimum lane width of 3.5 metres on all streets intended to carry buses.
- The curve radii of intersections on those streets intended to carry buses is to accommodate an Austroads standard 12.5m bus

Parking

On-street parking is provided on all streets within the master plan site, and contributes to the total parking requirements of potential future development.

In most cases, parking is provided in a parallel parking arrangement. However, 90 degree parking is proposed for the Foreshore Street and the Major north-south Access, as these areas are expected to generate the majority of parking demand. Parking is prohibited within 10 metres of any cross street that may accommodate buses (see Section 7.6.3)

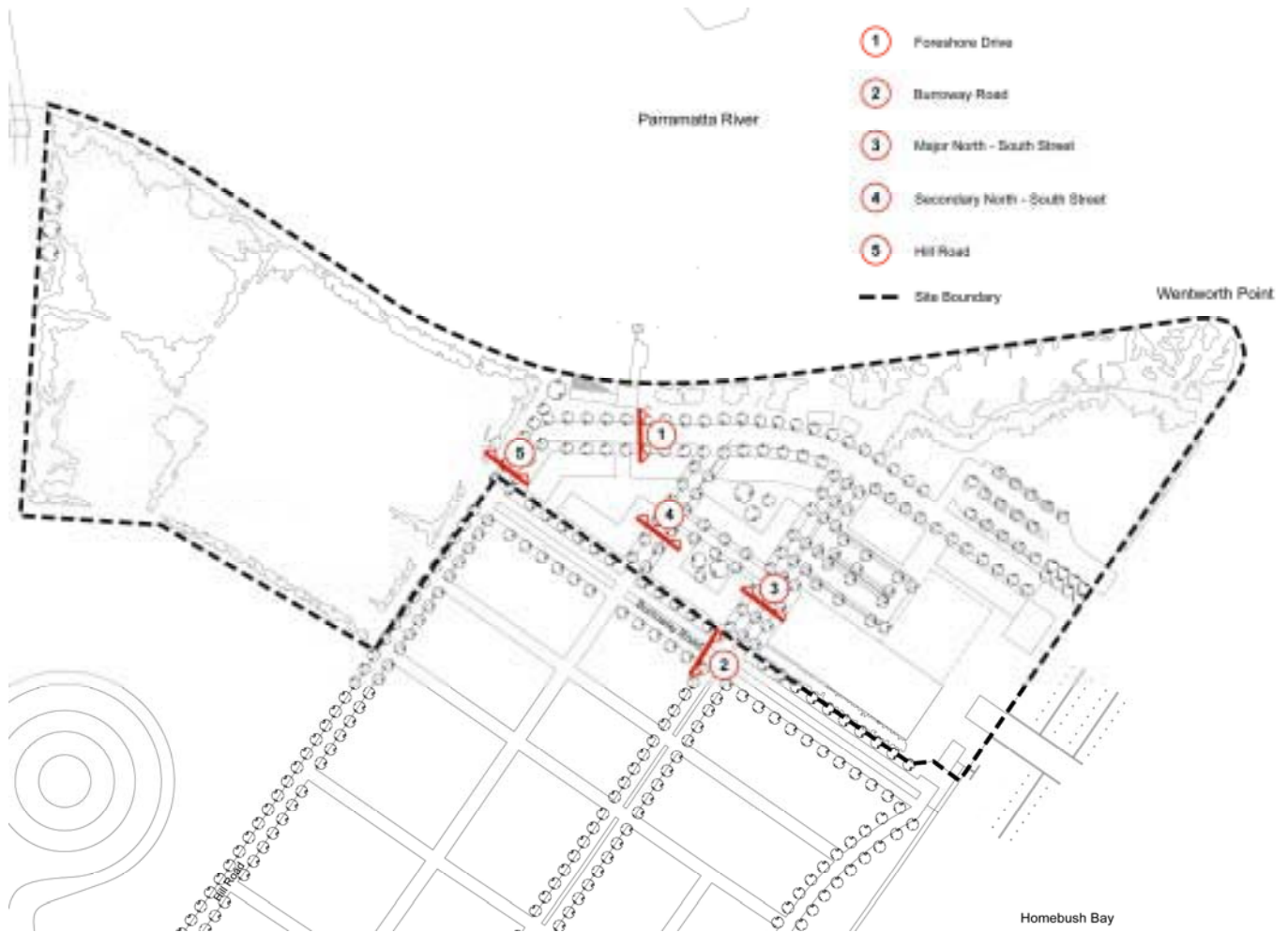


Figure 7.16 Location of Street Sections



Figure 7.17 Foreshore Drive Street Section

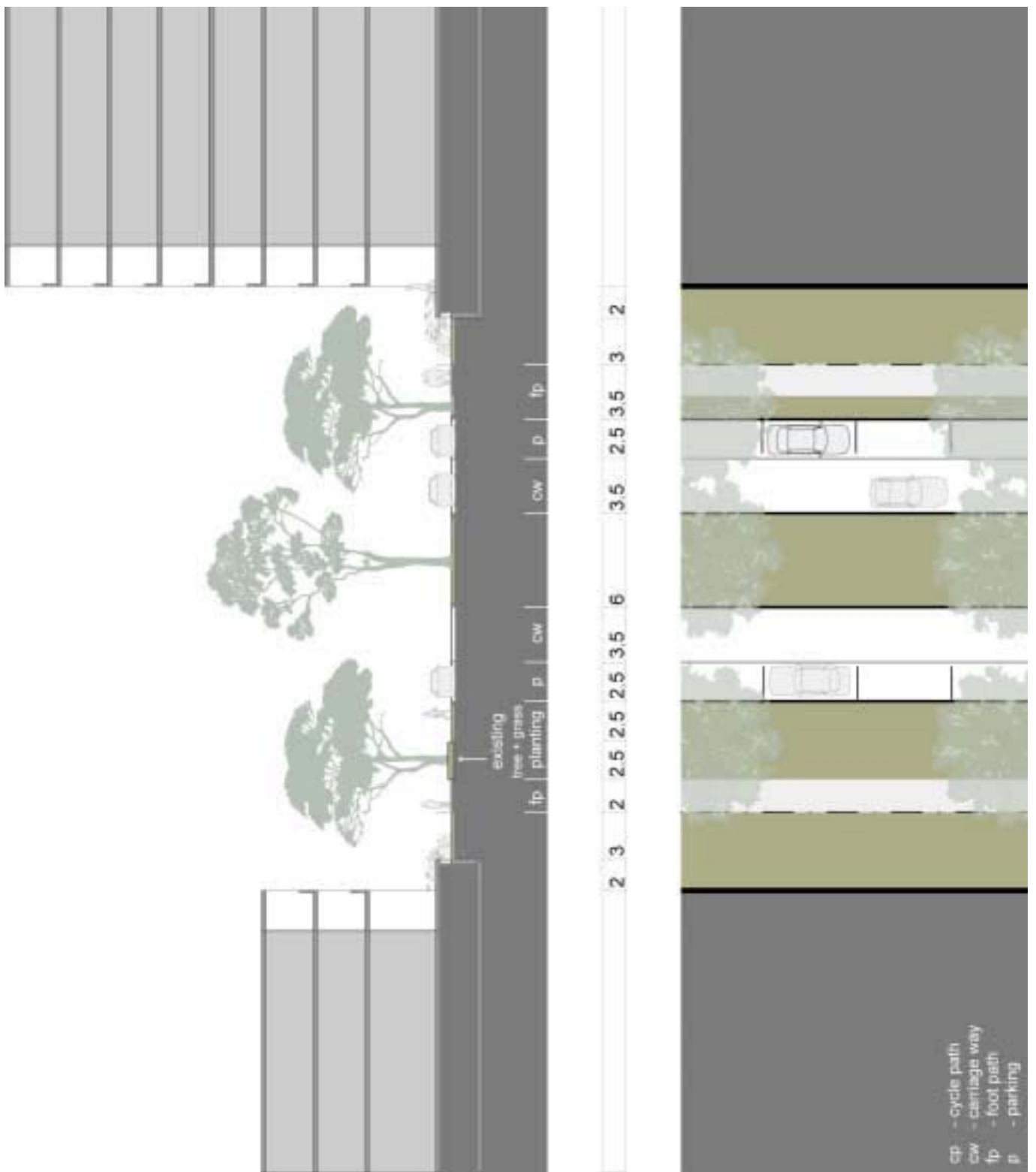


Figure 7.18 Burroway Road Street Section

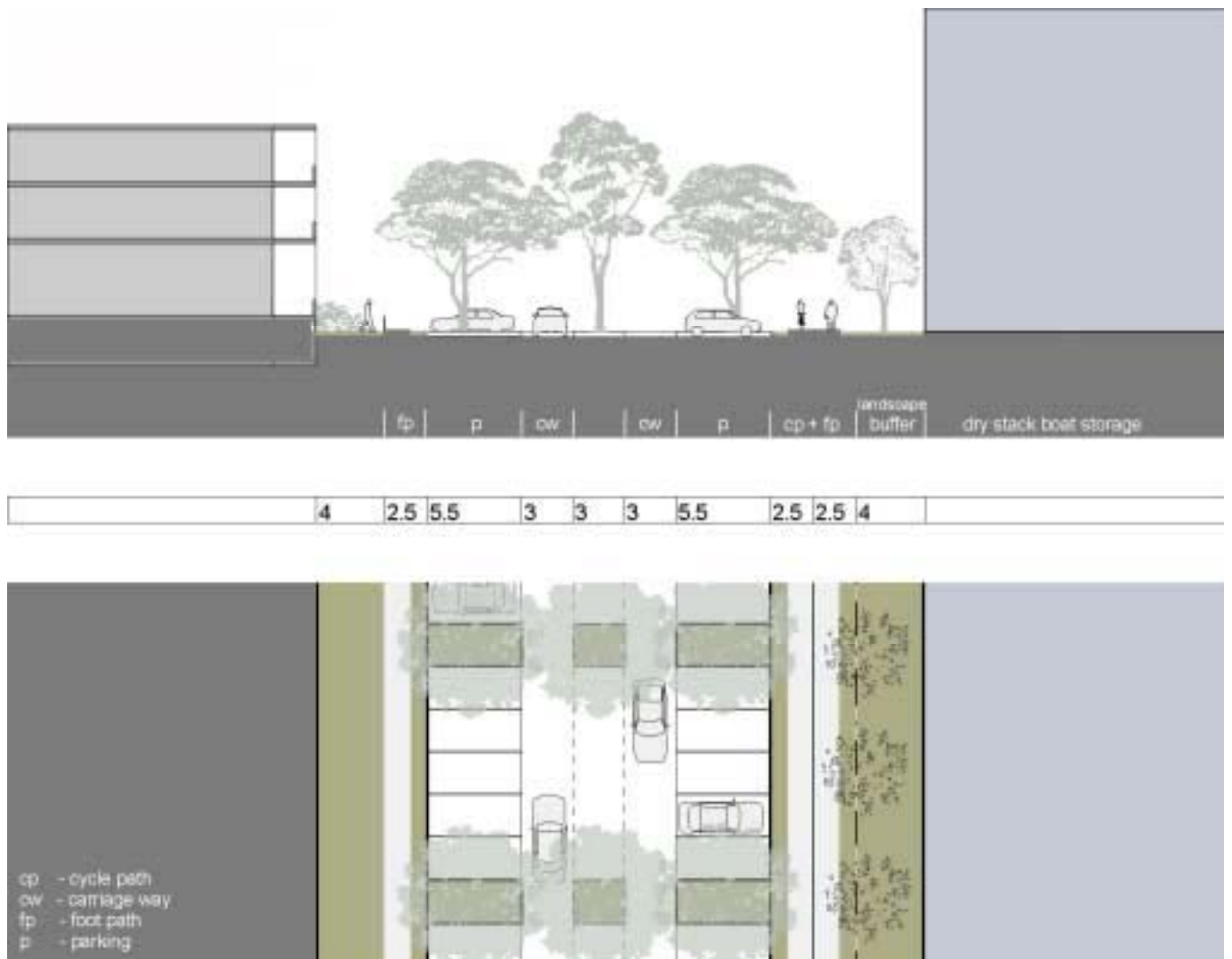


Figure 7.19 Major North-South Street Section

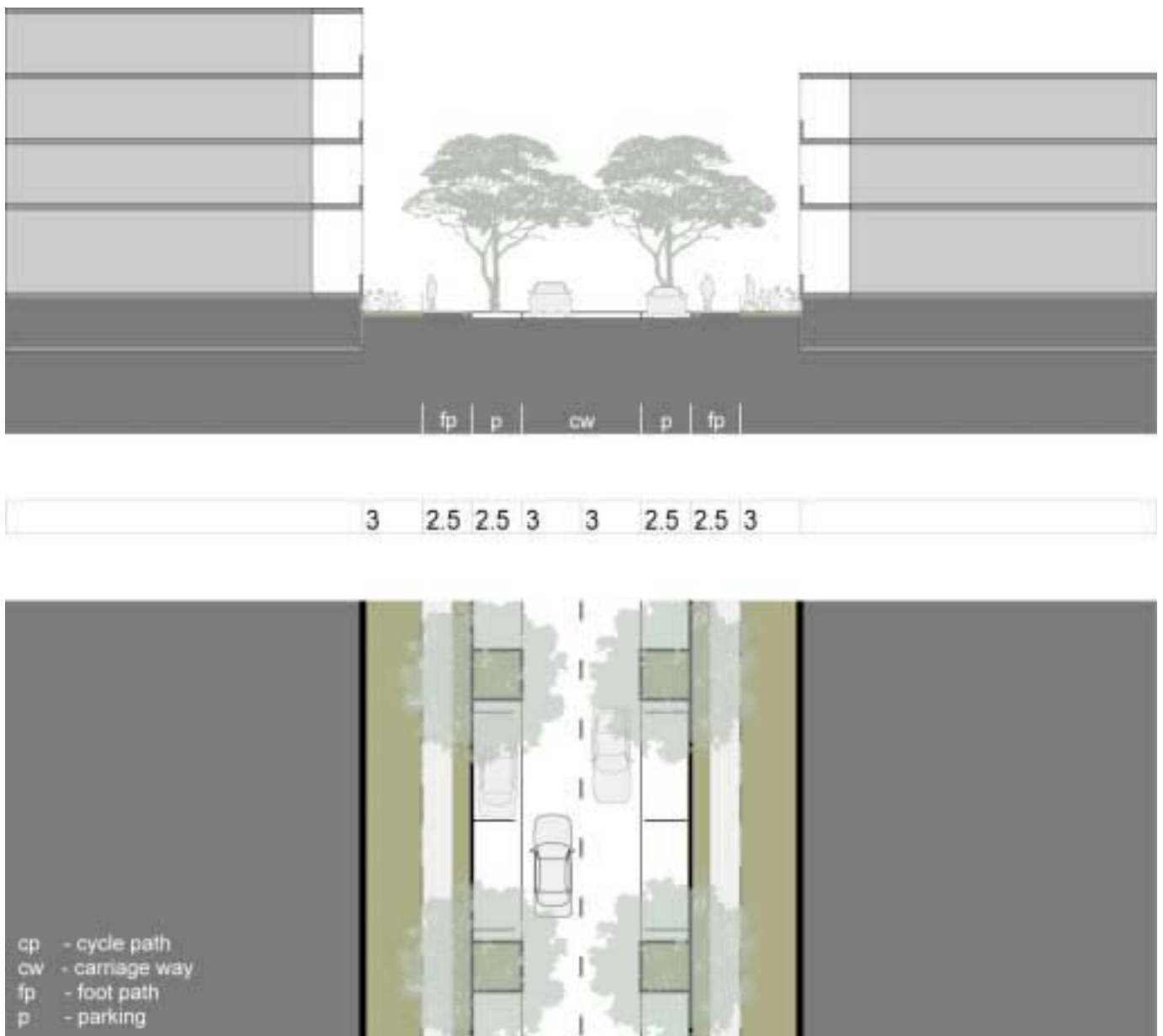


Figure 7.20 Secondary North-South Street Section

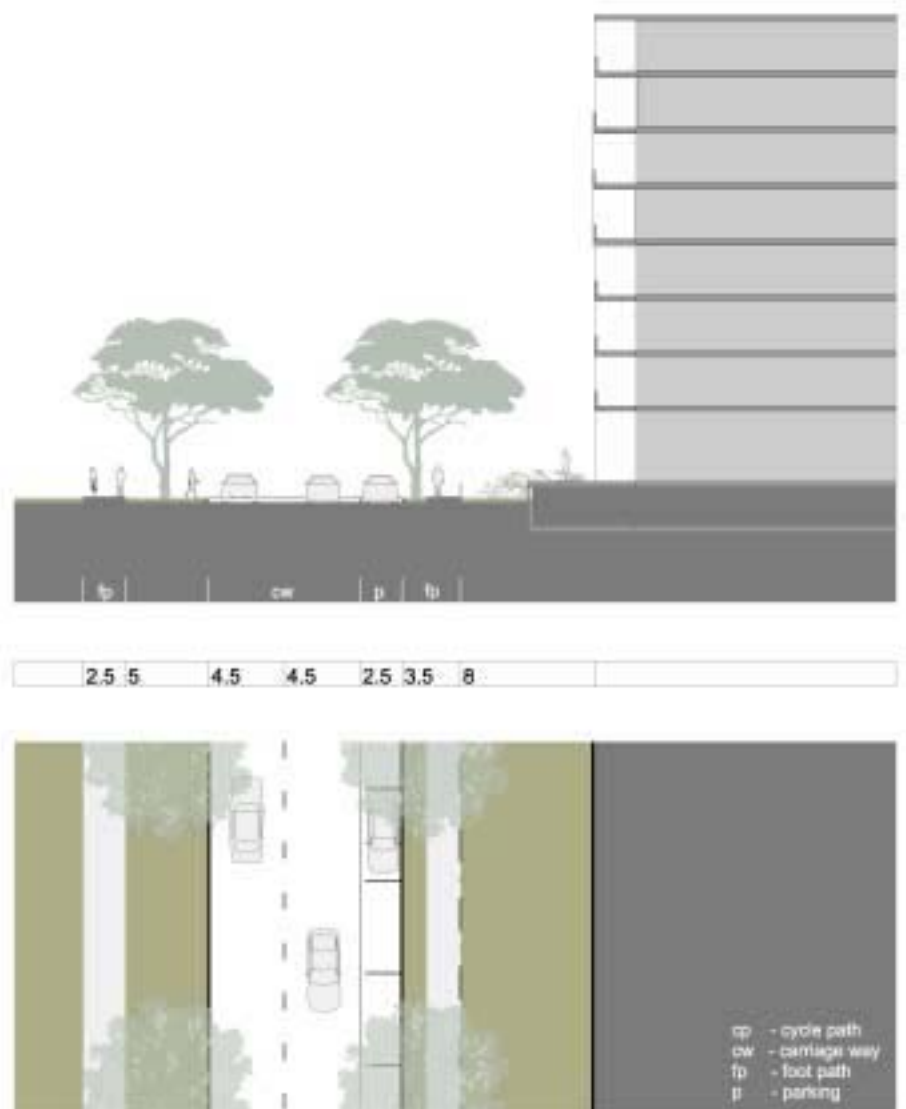


Figure 7.21 Hill Road Street Section

7.6.2 Access and Parking Provision

The provision of parking within the master plan has been planned as an integration of on-site, off-site and on-street parking in order to meet the mix of parking demand generated from the proposed diversity of activities. The location and form of parking is illustrated within figure 7.22 and consists of the following elements:

- Car parking provision is to be consistent with the final Homebush Bay West DCP.
- 90 degrees on-street parking (approximately 125 spaces)
- Parallel on-street parking (approximately 155 spaces)
- Maritime Precinct car park (approximately 80 spaces)
- Boat and trailer parking (approximately 50 spaces)
- Potential retail/commercial centre sub-basement/basement parking (approximately 140 spaces)

The following standards will apply to the provision of parking on the master plan site. The dedicated car parks identified within the maritime precinct may contribute toward the total requirement:

- Retail/Commercial/Office – 1 space per 40m² floor space
- Residential – 1.2 spaces per dwelling
- Dry stack storage – 0.2 spaces per berth
- Education – 1 space per 6 students + 1 space per 2 staff.

Parking and vehicle access should comply with the following principles:

- All residential and commercial parking is to be provided within a basement. Due to the high water table level, basement car parks may protrude above ground level for a maximum of 1.2 metres (to finished floor level).
- Additional parking above basement level may also be provided only where it is located to avoid exposed parking to the street frontage through measures such as:
 - “wrapping” car parks with development
 - locating on the side or rear of an allotment, away from any primary street frontage
 - screening from view of streets and buildings
- No car park or service entry should be greater than 6 metres width and should be located on secondary roadways wherever this potential exists.
- Vehicular and pedestrian building entrances should be separated.
- Bicycle parking should be provided within all development.
- On-street parking is prohibited within 10 metres of any cross street that may accommodate buses (see Section 7.6.3).



Figure 7.22 Potential Parking Location

7.6.3 Public Transport Access

The master plan site is served by both ferry and bus public transport services. Additionally, there exists some potential for the development of a pedestrian bridge connecting the Homebush Bay West Peninsula with Rhodes, which will result in pedestrian accessibility to the Sydney rail network at Rhodes station.

Figure 7.23 illustrates the potential public transport network accessing the site.

Principles for the bus transport system in general are as follows:

- There is to be a minimum lane width of 3.5 metres to all streets that carry STA buses.
- The curve radii of intersections that accommodate buses are to accommodate an Austroads standard 12.5 metre bus.
- Parking is prohibited within 10 metres of any cross street that will accommodate buses.
- The principle bus pick-up and set-down zone is to be immediately adjacent to the Ferry stop and is to be clearly visible.
- The principle bus-pick up and set-down zone is to accommodate 2 buses.
- Driver facilities (eg. toilet, lunch room etc.) are to be provided directly adjacent to the principle bus-pick up and set-down zone.

The design of the principle bus set-down/pick-up zone is to be finalised in consultation with the State Transit Authority, to ensure that it meets STA requirements. This is to be resolved prior to any development application being submitted for the master plan site.

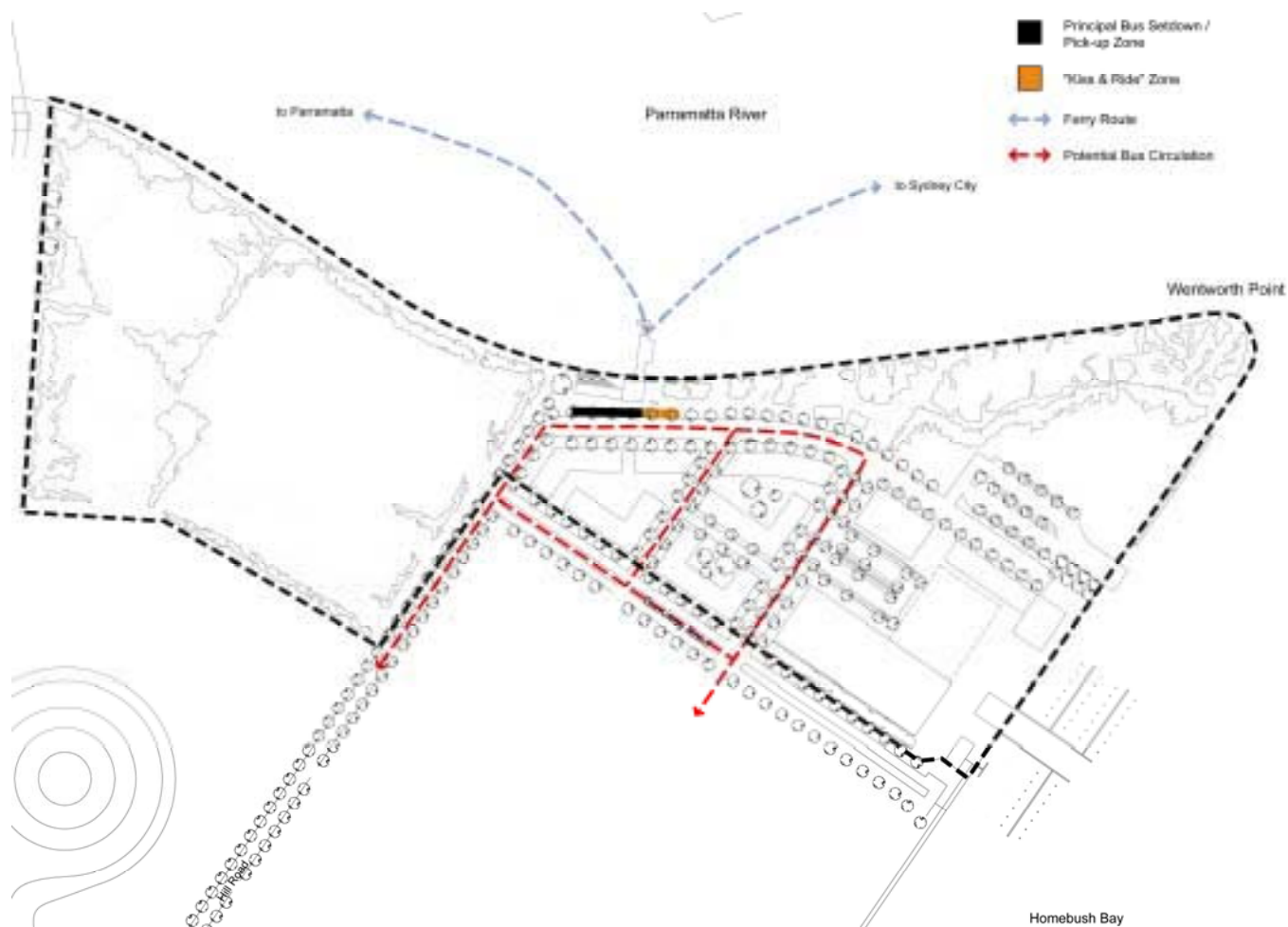


Figure 7.23 Public Transport Network

7.6.4 Maritime Access

While affected by the limiting factors of potential conflict with ferry traffic in Parramatta River and a shallow water depth in Homebush Bay (approximately 2 metres), maritime access to the master plan site is significant. This consists of the following:

- Continuing use of the ferry terminal currently located at the end of Hill Road.
- Provision of day berthing facilities within Wentworth Point Park. This facility will provide public boating access directly to the facilities of Wentworth Point Park and to the maritime precinct.
- Provision of a trailer boat launching area. This facility is located between the maritime precinct and Wentworth Point Park. The facility will have a double width launching area and parking for approximately 50 cars and trailers.
- The maritime precinct will incorporate a boat well for launching/decanting and pontoon berthing for a maximum of 50 vessels directly associated with maritime precinct activities (eg dry stack, servicing and brokerage). A rowing club (with launching pontoon and small boat hire) will also be provided within the maritime precinct to the south of the boat well and berthing pontoon.

7.6.5 Pedestrian and Cycle System

In line with State Government policies for promoting alternative means of transport, the pedestrian and cycle system proposed for the master plan site is extensive, and consists of a connected network of footpaths, major pedestrian/cycle links and continuous foreshore pedestrian/cycle access. Figure 7.21 illustrates the proposed pedestrian and cycle system. The following principles also apply:

- A continuous foreshore pedestrian and cycle path of an average 6 metres width is to be provided for the entire frontage of Parramatta River and Homebush Bay (6m width may include planting, seating and other landscape works)
- Where the foreshore pedestrian/cycle path crosses the maritime precinct, the following apply:
 - The width of the path may be reduced to a minimum of 2.5 metres.
 - An opening or rotating pedestrian/cycle bridge will be provided over the boat well in order to provide boat access to and from Homebush Bay.
 - There must be clear signage regarding the use and operation of the area
 - Pedestrian and cycle access will be managed in order to allow for boat movements and to create a secure maritime area, whilst providing pedestrian priority at all times except where (limited) boat access is required to or from the boat wet well.
 - An alternative and additional pedestrian/cycle path is to be provided along Burroway Road and the major north-south boulevard, connecting the foreshore south of the maritime precinct with Wentworth Point Park.
 - An appropriate Management Strategy for pedestrian foreshore access in line with these principles, and which incorporates appropriate proposals for clear signage, minimisation of pedestrian waiting times, pedestrian safety and security and efficient maritime operations will be required as a component of a DA for the maritime precinct.
- The dimensions and location of on-street footpaths is provided within the street sections appearing within Section 7.5.1. The character and dimensions of the foreshore promenade is illustrated within Figure 7.24
- The location and form of buildings and landscape is to ensure maximum casual surveillance for adjacent pedestrian and cycle paths.
- All pedestrian and cycle paths should be well lit during hours of darkness.



Figure 7.24 Pedestrian and Cycle System



Figure 7.25 Foreshore Promenade Section

7.7 Safety and Security

Principles of Crime Prevention Through Environmental Design (CPTED) have been incorporated within the master planning process and should be reflected in future development of the site. CPTED seeks to influence the design of buildings and spaces by:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- Increasing the effort required to commit crime by increasing the time, energy and resources which need to be expended;
- Reducing the potential rewards of crime by minimising, removing or concealing “crime benefits”;
- Removing conditions that create confusion about required norms of behaviour.

CPTED utilises Passive Surveillance, Access Control, Territorial Reinforcement and Space Management to improve the safety and security of public spaces.

Objectives

- Encourage design of all public areas to reduce opportunities for crime.
- Incorporate the principles of Crime Prevention through Environmental Design (CPTED) within all future development within Homebush Bay West – Wentworth Point.

Surveillance

- Development proposals should promote the following measures:
 - Unimpeded sightlines, particularly along pedestrian routes
 - Natural surveillance from buildings
 - Natural surveillance through increased legitimate use of space
- Streets and pedestrian routes should be well lit
- Maintain consistent setbacks along streets and provide landscape in frontage areas that provides adequate surveillance.

Access Control

- Areas of open and controlled access should be distinct and obvious.
- Locate pedestrian and vehicle access points to benefit from informal surveillance.
- All points of access should be clearly defined both by their physical form and through the location of appropriate signage.
- Public spaces should be designed to attract, rather than discourage, people to gather and interact.

Territorial Reinforcement

- Public and private space areas should be clear, distinct and well marked through their design and location.
- All buildings and public spaces should be constructed of long lasting, robust materials and maintained to a consistently high standard.

Space Management

- All public spaces, street furniture and should be well maintained to a consistently high standard, in a manner that conveys stewardship and management.
- Street furniture and landscape planting within the site should be coordinated in appearance and presentation.

7.8 Contamination and Remediation

Preliminary contamination assessments undertaken for this master plan indicate that the site has potential to be contaminated, though does not appear to experience the significant contamination levels of many other sites in and around Homebush Bay, and therefore may be economically remediated. A key recommendation of the preliminary assessment is that a more comprehensive contamination assessment is needed prior to redevelopment.

- It is a requirement of a development application that an assessment of contamination be carried out in accordance with DEC (formerly EPA) guidelines, in order to satisfy the Minister of the suitability of the land for the proposed uses.
- Where contamination is demonstrated to exist and has the potential to pose a risk to health and the environment, the Minister may only grant consent where land may be made suitable through appropriate remediation.
- Remediation is to be carried out in accordance with SEPP 55 – Contaminated land and the Contaminated Land Management Act 1997.

Additionally, if any disturbance of the site is to have an impact on the areas of acid sulphate potential, then an Acid Sulphate Soil Management Plan should be prepared in accordance with the Acid Sulphate Soil Manual (1998).

7.9 Infrastructure Provision

All basic infrastructure services are available to the master plan site. It is a requirement that on submission of a development application, an Infrastructure Plan be prepared that demonstrates the availability of infrastructure and the suitability of proposals with respect to the requirements of the development and the relevant authorities. The Plan is to address water supply, drainage, electricity, communications, sewerage and wastewater recycling.

7.10 Waste Management

Given the master plan site's sensitive waterside location and focus on maritime activities, the effective management of waste is critical for the appropriate development of the site. In this respect, the following principles apply:

- The approval of any development application for the site is predicated on the submission and approval of a waste management plan that identifies all potential waste products, establishes mechanisms for appropriate management and establishes a monitoring and auditing process.
- Mechanisms are to be put in place that control and limit the potential for pollutants to enter surrounding water bodies or infiltrate the soil.
- All new development should provide on-site storage for waste and recycling facilities in accordance with Council and State Government requirements.
- All public spaces are to be provided with suitable waste and recycling facilities.
- Proponents are to ensure that all relevant State Government licenses and permits are to be appropriately obtained.

7.11 Building Services

All building services such as lift shafts and overruns, aerials, risers, plant equipment and the like are to be concealed from casual public view and integrated into the design of individual buildings. Any roof top plant is to be integrated into the design of the roof.

7.12 Indicative Phasing

Implementation of the master plan is presently constrained by existing leases that apply to activities currently occupying the site. The most significant of these is the AM radio transmission tower utilised by 2GB. Due to the potential health and environmental impacts caused by proximity to the tower, only minor activity may be appropriate in the short term (pre 2008).

The following highlights an indicative phasing schedule, which take into account these issues.

1. Construct temporary trailer boat launch providing access to Homebush Bay, subject to safety and operational requirements (radio tower, water depth, traffic)
2. Remove Radio Transmission aerial following discontinuation of transmission activities and commence initial site works (roads and infrastructure) in accordance with final master plan requirements.
3. Complete site works (roads and infrastructure). Construct Wentworth Point Park and foreshore pedestrian links. Establish permanent trailer boat launch.
4. Establish the maritime precinct & commence initial retail and commercial development adjacent to the Ferry terminal and within maritime precinct
5. Complete build out of master plan proposals

7.13 Affordable Housing

All new residential development within the master plan area will be required to contribute to the provision of affordable housing in the Homebush Bay West area. In this respect, 3% of all dwelling units created within the master plan site are to be provided for affordable housing.

Appendix 1:

Key Issues Analysis

Visual Character

The site is an important gateway from the Parramatta River to The Parklands and Sydney Olympic Park. It occupies a visually prominent location at the end of Wentworth Point.

The lack of topography on the site emphasises the few prominent vertical elements there are. These include the Silverwater Marker, within the Parklands, and the 2GB radio mast and associated iconic planting. While the mast may be regarded as temporary in nature (depending on lease conditions), the Marker is a more permanent element that will continue to influence the landscape and visual character of the area. In this respect, the Marker is recognised in the current DCP and other documents as an important structural element in terms of view corridors and appropriate location of built form.

The substantial water frontage of the site provides opportunities for exemplary medium and long range views across water. This is particularly the case in relation to the Wentworth Point area, which protrudes into the Parramatta River, allowing views along the River to both the east and west. The shape of the site and its location at the end of the Homebush Bay Peninsula also provides opportunities for unobstructed views in a variety of directions, particularly the north and east. As such, the site represents a significant development opportunity, though the massing of built form will also need to be cognisant of view sharing issues for properties located to the south.



Figure 1. The Parramatta River Frontage.

Landscape and Open Space

The entire master plan site is flat in topography, having been created from fill taken from the Bay earlier this century. The use of the site for various industrial purposes throughout its history has also done little to contribute to its landscape or open space value.

Recent created landscapes do however hold significance for the site. The most notable of these is The Parklands. This space of 430 hectares lies to the south and west of the master plan site and provides extensive habitat areas (including wetlands along the Parramatta River frontage), regional recreation facilities and a network of cycle and walking trails. The Silverwater Marker, created during the construction program for the 2000 Olympics is highly prominent in the visual and landscape character of the peninsula and provides a reference for the alignment of streets and the potential height of new buildings

Within the master plan site itself, there are a number of landscape elements of particular note. The 2GB site exhibits the open space qualities evident on the majority of peninsulas within the Harbour and Parramatta River. Additionally, the existing radio mast and plantings of palms provide an iconic element and character to this space.

The ferry terminal space provides the only existing area of public open space within the site. Open grassed areas and extensive plantings of natives including figs and mangroves along the waterfront establish a unique and valuable landscape character for the space.

Waterfront planting also extends eastwards from the ferry terminal site and includes reinstated mangroves and various buffer plantings, which have combined with mounding to establish a strong green edge to this part of the site, extending toward the wetlands within The Parklands. These features are considered significant and should be retained within any redevelopment.



Figure 2. View of Wentworth Point and Homebush Bay from the north showing existing significant vegetation

Additional existing characteristics of the Wentworth Point area's landscape include:

- The site of the proposed Wentworth Point Park consists of reclaimed land. It currently supports a radio tower and a range of temporary uses.
- Ecological objectives for Homebush Bay West are focused on restoration of riparian areas at Wentworth Point Park.
- Some erosion behind the seawall at the point has altered the tidal inundation characteristics of the immediate area. The plant species present reflect a zonation of tidal influence.
- Isolated saltmarsh plants have established reflecting species consistent with an Endangered Ecological Community under the TSC Act. Consideration should be given to the restoration and interpretation of this community.
- The Point provides expansive views to both the bay and river (refer to Figure 1 attached). Consider the provision of appropriately managed access into this sensitive ecological area to provide for views and interpretation.
- A line of mature Cabbage Palms have been planted on the site. No heritage significance was known for these plantings. Consider incorporating these trees as part of an 'avenue'.
- Two port beacons are located on the site (one west of the existing radio tower site and one on the foreshore on the eastern side of the park associated with the ferry terminal). It is understood that a clear line of sight is needed between them.
- Mangroves have established within the 'rock rubble' seawall at a number of locations.

Biodiversity connectivity is to be provided for lands to the west and to the south.

Street tree planting is well established and significant along Burroway Road, with mature species helping to emphasise the beginnings of a "green finger" extending from the ferry terminal and Parklands toward Homebush Bay. These features should also be retained.

Perhaps the greatest landscape significance of the site lies not in its present condition, but its potential. In this respect, the site can play an important role in the establishment of a foreshore pedestrian promenade linking The Parklands to the Olympic Core, Powells Creek Corridor and Rhodes on the other side of the Bay. A Landscape Design Framework for the Powells Creek Corridor has recently been completed and emphasises the link through to Wentworth Point as a significant visual and physical element in the orientation and appreciation of the space. Likewise, the Sydney Olympic Park Master Plan (among other planning documents) clearly establishes the importance of a continuous foreshore link around Homebush Bay West. Additionally, these documents clearly establish the potential of Wentworth Point as a major open space in the sequence of spaces in the area, and underlie the importance of the adoption of a dominant characteristic of point parks throughout the Harbour.



Figure 3. Existing Vegetation within the Master Plan area

Current Activities

The following table describes current leases and activities existing on the master plan site. Figure 3 illustrates the location of current leaseholdings. There are no structures of heritage significance located within the site. Given the imminent change of use, there are therefore no impediments to demolition of existing buildings. The existing ferry terminal structures are however sound and are of high quality. These should therefore be retained.

Table 1. Current activities

Leaseholder	Activity	Current Lease
De Martin & Gasparini	Industrial Offices and warehouses	2018
Triangle Transport Pty Ltd	Transport and storage	2002/2004
Daracom	Industrial	Monthly
Lindsay Bros Transport Pty Ltd	Transport and storage	2003
Subakette Pty Ltd	Works depot	Monthly
Access Timbers	Timber processing and storage	Monthly
Pacific Waste	Waste processing	Monthly
Harbour Radio Pty Ltd	AM radio transmissions	2008

With the exception of De Martin and Gasparini and Harbour Radio Pty Ltd sites, all leases over land within the master plan site are short term. Both Lindsay Bros. leases may be extended at the request of the lessee, while the Harbour Radio site has a 10 year option at the discretion of the NSW Maritime Authority. It has been indicated however that the NSW Maritime Authority will not be renewing the current lease following its completion in 2008.

The current disposition of leases has a limiting effect on potential development in the short term, although most areas of the site may be developed within the timeframe that may be presented following preparation and approval of a master plan. The EMR implications of AM radio transmissions will however be a limiting factor for development till 2008.



Figure 4 Location of Current Leaseholdings

Traffic and Transport

Transport facilities in the general area of Homebush Bay were considerably enhanced to cater for the 2000 Sydney Olympics and therefore most of the present infrastructure is only a few years old.

Pedestrian and Cyclist Infrastructure

Following the 2000 Olympics, an emphasis has been placed on improving access to the Homebush Bay area. Much of this infrastructure has been developed in line with sustainable transport principles, providing public transport services and non-car mode infrastructure.

Pedestrian facilities are now fairly extensive through local parks, with plans to extend the network to include a waterfront link around the Homebush Bay peninsula. The level of pedestrian amenity surrounding the site is high with relatively wide, good quality footpaths located on both sides of all roads adjoining the site.

On-road cycle routes are located on the following roads in the vicinity of the master plan site:

- Holker Street between Newington Road and Hill Road;
- Hill Road between Holker Street and Bennelong Road;
- Bennelong Road between Hill Road and Australia Avenue; and
- Australia Avenue between Bennelong Road and Homebush Bay Drive.

In addition, off-road shared use routes are located on the following links nearby:

- Hill Road between Bennelong Road and Parramatta Road; and
- Newington Road between Holker Street and Silverwater Road.

A plan showing the location of cycle routes in the Homebush Bay area is provided at Figure4. In general it is considered that the site currently has a fairly high level of pedestrian and cyclist amenity.

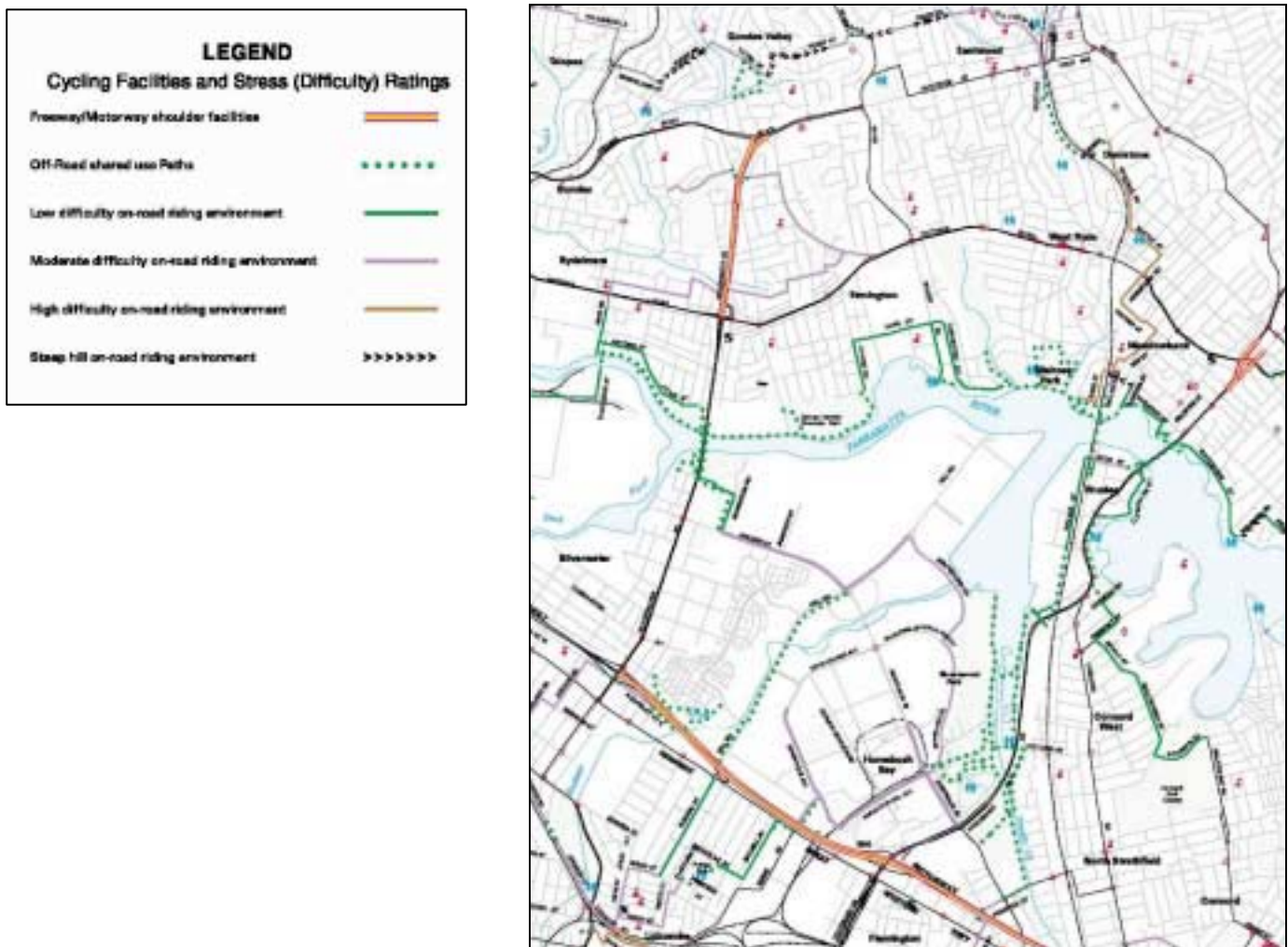


Figure 5. Location of Cyclist Facilities

Public Transport Infrastructure

Bus Services

The following bus services operate in the vicinity of the Homebush Bay West site:

- Service 401 – Homebush Bay Wharf to Lidcombe Station via Olympic Park Station; and
- Service 404 – Olympic Park Station to Lidcombe Station via Australian Sports Centre.

Service 401 operates from Monday to Sunday with an average frequency of approximately 40 minutes and a total journey time between Homebush Bay Wharf and Lidcombe Station of approximately 25 minutes. Between Monday and Friday the first complete Service 401 from Homebush Bay Wharf to Lidcombe Station leaves the wharf at 6.45am arriving at 7.02am, while the last complete service of the day leaves the wharf at 6.35pm arriving at 6.52pm.

In the opposite direction, the first Service 401 from Lidcombe Station to Homebush Bay Wharf leaves the station at 6.36am arriving at 6.59am, while the last service of the day leaves the station at 7.00pm arriving at 7.23pm. At weekends Service 401 becomes less frequent, with complete services from Homebush Bay Wharf and Lidcombe Station running at approximately hourly intervals between 9am and 6pm. A copy of the Sydney Buses route map for the 401 service is included at Figure 5.

Service 404 operates very infrequently from Monday to Friday, with two morning services from Lidcombe Station to Olympic Park Station and two evening services in the opposite direction. There are no weekend 404 services.



Figure 6. Sydney Buses Route 401 Map

Ferry Services

Homebush Bay wharf is served by an hourly ferry service operating between Circular Quay and Rydalmere with a typical journey time of around 50 minutes from Homebush Bay Wharf to Circular Quay. A route map of Sydney Ferries services is provided at Figure 6

Express 'RiverCat' services link Rydalmere to Circular Quay with a journey time of around 30 minutes, but these services do not stop at the Homebush Bay West Wharf.

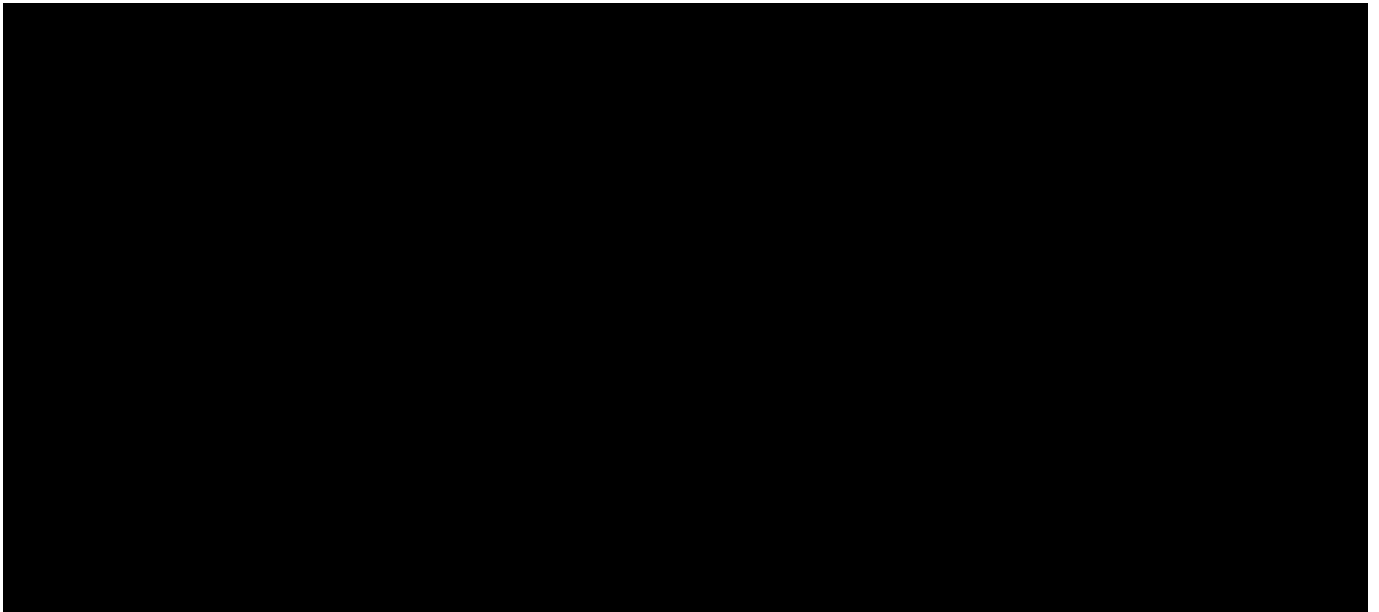


Figure 7. Sydney Ferries Route Map

Rail Services

The nearest railway station to Homebush Bay West is Olympic Park station. There is a frequent service to Strathfield and Redfern on Friday evenings and throughout the weekend from early morning until late evening running at approximately 15 minute intervals with a journey time of 20 minutes calling at Strathfield and Redfern only. There are also services through to Central but only late mornings on weekdays.

To the west, there is service every 10 minutes on all days between Olympic Park and Lidcombe railway stations. This operates from about 6.30am until 11.30pm and the journey time is 5 minutes. Buses on routes 401 and 403 call at Olympic Park station. Both buses take rather indirect routes in getting to Lidcombe and Strathfield and hence journey times are relatively long. Service 401 takes 25 minutes to travel from Homebush to Lidcombe and service 403 takes 20 minutes to reach Strathfield. Both services take around 10 minutes to travel between Olympic Park station and Homebush Bay.

Transitways

A rapid, bus only transitway system is being planned between Parramatta and Strathfield that will pass in the vicinity of Homebush Bay, although the preferred route has not yet been defined. The transitway system will provide a fast and frequent public transport service with dedicated lanes and bus priority at intersections to optimise services.

It is likely that a feeder service will be provided from the Homebush Bay West area to the transitway system once the route has been confirmed.

Road Infrastructure

Hill Road provides immediate vehicular access to the site, before connecting to the arterial road network via:

- Holker Street and Silverwater Road to the west;
- Hill Road and Parramatta Road/M4 Motorway to the south; and
- Bennelong Road and Homebush Bay Drive to the east.

In terms of classification, Hill Road, Holker Street and Bennelong Road are considered to be local roads controlled and maintained by Council.

All connections between the local road network and the arterial road network are signalised. Access to the M4 motorway can be gained via intersections on Homebush Bay Drive and Silverwater Road, and slip roads to Hill Road.

Services Infrastructure

While no detailed investigation of current capacity has been undertaken, it is understood that all basic infrastructure services are available to the master plan site. As such, it should be a requirement that on submission of a development application, an Infrastructure Plan be prepared that demonstrates the availability of infrastructure and the suitability of proposals with respect to the requirements of the development and the relevant authorities. Such a plan should address water supply, drainage, electricity, communications, sewerage and wastewater recycling.

Contamination and Remediation

Based on the available information and a site inspection the following can be concluded:

Geo-technical

- The site and immediate surrounds have been discontinuously filled over a prolonged period of time. At least four phases of filling has been undertaken as follows:
 - Radio tower site filled (prior to first aerial photograph)
 - Area south of site filled (ongoing from prior to 1930)
 - Period of dredged filling (observed in 1956 aerial photograph)
 - Final gradings of individual sites (ie. Sita site or landscaping)
- The geotechnical quality of the fill has not been quantified.
- Cement washing has been undertaken on site. Cement washing activities if not adequately contained can degrade the geotechnical qualities of soils. The extent of the cement washings is unknown.

- There is visual evidence of geotechnical failure at locations as follows:
 - Asphalt and concrete cracked at several locations across the site
 - Sections of Burroway Road show signs of failure
 - Concrete has been poured across areas of cracked asphalt
- There is anecdotal evidence of geotechnical failure as follows
 - Maunsell informed of drilling results on site. Generally soft ground.
 - Heavy loading can cause the surface to crack and water to bleed from the cracks or to flex.
- SKM representatives informed Maunsell staff that the area is regarded as a potential acid sulphate risk area.
- The site has been mapped as “disturbed terrain” on the Prospect/Parramatta River Acid Sulphate Risk Maps (DLWC 1997, 2nd edition), meaning acid sulphate soils may be present if the acid sulphate soil material has been placed on the site as landfill. As such, the following will apply:
 - Soil investigations are required to assess the area for acid sulphate potential. This should be undertaken and demonstrated prior to a development approval subsequent to this master plan.
 - If any disturbance of a site is to have an impact on areas of acid sulphate soil potential, then an Acid Sulphate Soil Management Plan is to be prepared in accordance with the Acid Sulphate Soil Manual (1998)

Environmental – General

- The radio transmission tower area has not been inspected and its quality is unknown.
- The quality of fill used to construct graded landscaped areas is unknown.
- Land use information indicates that historically uses were unknown or Industry/Business.
- The western half of site was occupied in 1965 and was used for storing stockpiles. The majority of structures have since been removed.
- South of the eastern portion of the site subject to review is a treated wood industry premises. This was established prior to the occupation of the eastern portion of the site subject to review.
- South of the western portion of the site subject to review the land use was Special Uses – Armaments from approximately 1930 to approximately 1988.
- Construction and demolition waste containing masonry, glass and minor fibre cement sheeting was identified on site.
- Construction and demolition waste is stored on site.
- Heavy equipment is operated across the site.
- Illegal dumping has occurred on site early in the reclamation of the site and more recently at one particular occupier’s premises.
- Chemical, fuel and waste product drums are stored across the site.
- Materials blasting has been undertaken on site and slag blasting powder has been dispersed across the south western portion of the site.

- A site to the south of the site subject to review has been used for the thermal desorption and base catalysed destruction of chlorinated hydrocarbons. The site is currently subject to post removal validation of the sites and storage areas. As part of the validation a NSW Environment Protection Authority accredited site auditor will certify the site.
- SKM identified the key contaminant in the bay sediments as 2,3,7,8-tetrachlorodibenzo-p-dioxin (commonly known as dioxin or 2,3,7,8-TCDD).
- Dioxins may be associated with the treated wood industry premises south of the eastern portion of the site.
- Anecdotally, coal tar and timberol were said to have been used on site of the plywood manufactures operations/treated wood industry premises.
- Herbicides are commonly used on industrial premises for the control of weeds.
- Sinclair Knight Merz (SKM) representatives informed Maunsell staff that the area is regarded as a potential acid sulphate risk area.

Environmental – Specific

- Approximately 9 million cubic metres of geotechnically unsuitable, surplus and contaminated materials have been consolidated in artificial hills. One hill is south of the western portion of the site.
- The former Olympic Coordination Authority (OCA) web site provides a brief reference to unauthorised and uncontrolled dumping at Homebush Bay of wastes, some of which were industrial chemical waste.
- Areas of Homebush Bay have been remediated to a level suitable for its intended use.
- The former OCA recognised that, “the completed works will be continually monitored and maintained to ensure their long term effectiveness”
- Across the site the following potentially contaminating or actual contamination has been identified:
 - Chemical, fuel and waste product drums are stored across the site
 - 10 fuel tanks (2 below ground) and waste oil tanks some of which have clear evidence of spillage surrounding them
 - Perma-pine wood storage and trimming
 - Fuel and or oil spill
- Area of what appears to be decomposed heavy hydrocarbon or residual from the burning of plastics or similar.

Conclusions

On the basis of currently available information the sites potentially contain contaminated materials as a result of previous uses and reclamation activities. Based on the types of potential contaminants, anecdotal evidence and the existing and proposed development of the Homebush Bay West Peninsula, it is possible to say that the extent of these contaminants is not of a significance to limit the development potential of the site, subject to an appropriate testing and rehabilitation regime.

To assess the degree and extent of contamination, soil investigations should be undertaken. Soil and groundwater investigations should be conducted in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999.

The following issues would need to be considered when further investigating the sites:

1. Adequate sampling locations and analytical testing to address the requirements of Waterways' proposed development.
2. Appropriate analytical testing to address potentially contaminating activities, or specific contaminants identified on site such as follows:
 - Hydrocarbons
 - Contaminants associated with construction and demolition wastes including asbestos
 - Metals
 - Chlorinated hydrocarbons
 - Herbicides
3. Incorporation of preliminary geotechnical assessment with any environmental field investigations.
4. Remediation will need to be carried out in accordance with SEPP 55 – Contaminated land and the Contaminated Land Management Act 1997, and addressed in a Contamination Management Plan prepared at Development Application stage for each site.

AM Radio Transmissions

There are seven radio transmission aerials operating within a 2.7km radius of the 2GB antenna due to the favourable broadcasting and "salt marsh" earthing conditions over the Homebush Bay area. A medium wave (AM) radio antenna operated by Harbour Radio Pty Ltd (2GB) is located on Wentworth Point and was established in 1937. The antenna tower is approximately 100m high with a 1.5m web transmission aerial at the top as advised by 2GB radio engineers. Current maximum antenna output signal strength was stated as 5 kW.

The Interim AS 2772.1 states under Section 6 – EXPOSURE LIMITS – NON OCCUPATIONAL "Table 2 - Derived Non Occupational Exposure Levels to Time Varying Electric and Magnetic Field Limits" is 87 V/m electric field strength. This is based on a non-occupational exposure limit threshold of Specific Absorption Rate of 0.08W/kg whole body average mass. A lower exposure limit is recommended for safety. At this frequency range, effects on humans are likely to include common current effects creating sparks, similar to "static electricity" shocks between metal objects and individuals, and effects in consumer electronic appliances. In this respect, adverse effects on computers are observed with electromagnetic radiation strengths as low as 2-3V/m (Airline industry guidelines).

The EMR output for the 873 kHz carrier frequency at 5 kW signal strength was measured by 2GB as 150V/m at the base of the 2GB radio antenna tower (unverified). 2GB measured a spot test of field strength at one of the tower stays at 75V/m (unverified). Some additive effects may exist in line between the nearby 2UE / 2SM and 2GB antennae.

The current Australian Broadcast Commission license permits 2GB to operate at a maximum output signal strength of 10 kW. A submission on 10 Nov 2001 by Sydney Commercial Radio Broadcasters suggest increases in output signal strength to 20 kW will be required as future electronic interference and increased building development occurs. Based on AS2772.1 and the broadcasters' submission, an offset distance of around 200m is suggested from the nearest antenna under current conditions. This would suggest selected passive uses only for the eastern side of the Homebush Bay West site, and would limit the ability to provide a marina facility due to potential problems with electronic equipment or a fire or ignition risk from potential sparking. Under the proposed enhancement of signal strength, the broadcaster's submission suggests a need to be increase the offset distance to approximately 500m. This would clearly restrict the potential provision of a wide range of land uses on the entire eastern side of the site, including the ferry terminal.

A significant consideration in the context of EMR involves the current and potential future lease conditions applying to the 2GB site. The current lease expires in 2008. The Waterways Authority has indicated that this current lease will not be renewed. Relocation of transmission activities will open the site to the greatest potential range of development opportunities, although timing will be affected. If the lease is renewed and broadcasting activities remain on the site then further confirmation of the exposure footprint through specific EMR test is necessary before finalising the potential locations of future development. Clearly however, potential constraints on development will be significant under this scenario.



Figure 8. Potential EMR Buffer Areas
(based on Sydney Commercial Radio Broadcasters Submission)

Potential Activities

Boating Centre

The master plan site is ideally situated demographically and geographically to service the predominant powerboat market of the Central and Western regions of Sydney Metropolitan Area. Similar, self sustaining, successful, developments in Australia and the USA combine boat service centre, chandlers, brokerage, parts and accessories outlets, with the storage of vessels (both wet berth and dry stack). The developments are structured with a central administration, as a model city, with significant attention being paid to traffic circulation, waste management, security, site maintenance and building control. The developments are integrated with substantial areas of landscaping and passive recreation areas, boardwalks, public amenity. Areas within the development are passively “themed” with the use of signage, street furniture, architectural treatment and landscaping. Homebush Bay West has the opportunity to become the Maritime focal point of the surrounding residential developments (10,000 people within 1 km. radius), providing entertainment centres (Marine Club and Restaurant with maritime character) passive recreation (parklands, foreshore boardwalk) as well as the storage and servicing of boating population.

A further principal opportunity for the site relates to the progressive decline in boat servicing, maritime industry and other such activities throughout Sydney as a result of increasing pressure from incompatible surrounding uses, such as residential. These pressures are steadily increasing the value of sites such as Homebush Bay West for the location of maritime industries and large boat launching facilities in particular. Homebush Bay West is well positioned in this regard, due to its potential for direct access to the Parramatta River and Sydney Harbour and limited surrounding residential development. While the latter will change rapidly over the coming years, the form and contextual relationship of the site to surrounding development (residential focused east of Hill Road and open space to the south and west) provides an ability to separate maritime industrial uses from encroachment of new residential development from the east.

Retail/Commercial Centre

The identification of a retail/commercial centre on the end of the Homebush Bay West Peninsula within both the Framework Plan and the DCP underlies the fact that there will be a substantial local population in the area in the short to medium term. Current estimates place this additional local population at approximately 10,000 residents, estimated from existing approvals and the form of development anticipated for remaining sites.

Given the linear development form of the Homebush Bay West Peninsula, the total population envisaged and the presence of a transport terminus/ interchange at the northern end of the Peninsula, it seems logical that a retail/commercial centre be located adjacent to the ferry terminal. Such a location may maximise the positive relationships between land use and transport and would combine with a southern centre to most efficiently service the entire Homebush Bay West peninsula. Additionally, location of a centre in this area has the potential to develop symbiotically with any maritime precinct, thereby establishing a strong and unique character and differentiated market focus.

Foreshore and Peninsula Parkland

There is a public perception that there is a lack of physical access to and along Harbour and Parramatta River foreshores. As a result of this perception, a key principle of the Sharing Sydney Harbour Regional Action Plan is the expansion of both opportunities for waterfront access as well as increased provision of waterfront open space. These principles are further reflected within the stated objectives of SEPP 56.

In contrast to what has happened with substantial areas of the Harbour, Homebush Bay West, as a new development area exhibits significant potential to provide unobstructed public access to the waterfront, and demonstrate achievement of SEPP 56 objectives. Additionally, the peninsula form of the site creates an opportunity for the establishment of a parkland area at its northern extremity that provides a recreation focus to both Parramatta River and Homebush Bay in a single, defined location. The location of a park in this area also provides a suitable entry statement for Homebush Bay and reflects a pattern of green spaces on headlands extending into the Harbour already established elsewhere.

Marine Industry Education

Redevelopment of the NSW Maritime Authority site for maritime purposes presents a unique opportunity to provide for a range of education facilities focused on maritime activities, industries and trades. In this respect, a submission from the Boating Industry Association has included an allowance for a maritime college. Analysis has highlighted the particular suitability of the site for a significant concentration of education services, collocated with the development of a recreational boating centre at Homebush Bay West.

Research has determined that the makeup of a maritime college could include up to 4 educational areas:

- Boat and Shipbuilding
- Marine Mechanics
- Field Studies facility for the use of primary and secondary schools
- Maritime operations

The range of facilities that may be accommodated, and their potential floorspace areas is listed in Table 2.

Table 2. Maritime Education Facility Area Schedule

Facility	Area (m ²)
Shared Facilities	
Plant room	20 m ²
Male toilet	20 m ²
Female toilet	20 m ²
Disabled toilet	10 m ²
General store	40 m ²
Change rooms (male and female)	30 m ²
External covered area/hardstand	400 m ²
Boat and Ship building	
Timber boat building workshop	530 m ²
Store	30 m ²
Spray booth	50 m ²
Machine area	260 m ²
2 x lecture rooms	140 m ²
Staff amenities	30 m ²
Computer room	80 m ²
Teachers office x 8	60 m ²
Head teachers office x 2	30 m ²
Teaching aid store	15 m ²
Marine Mechanics	
Mechanical workshop	800 m ²
Tools store	30 m ²
Store	30 m ²
2 x lecture rooms	140 m ²
Staff amenities	30 m ²
Computer room	80 m ²
Teachers office x4	30 m ²
Head teachers office	15 m ²
Teaching aid store	15 m ²
Field Studies Facility	
Lecture room	70 m ²
Office	15 m ²
Storeroom	15 m ²
Maritime Operations	
4 x lecture rooms	280 m ²
Simulator area	140 m ²
Head teachers office x 2	30 m ²
Teachers office x 8	60 m ²
Staff amenities	30 m ²

Residential Development

While use of the site for maritime purposes is the principal objective for NSW Maritime Authority, substantial opportunities for residential development also exist. Key drivers for residential development include the following:

- The Homebush Bay West Development Control Plan attributes most of the area for residential development.
- Significant areas of the site are both waterfront and north facing, thereby potentially providing a high amenity value for residential development.
- The potential for significant open space on the peninsula has a symbiotic relationship with a resident population.
- Significant areas to the south of the NSW Maritime/SOPA site are presently being developed or are programmed for development. In this respect, a court approved master plan applies to the site immediately to the south (across Burroway Road).

Opportunities for residential development incorporate constraints, in terms of the form of development appropriate. These are highlighted within the current DCP and are currently being further developed within the current DCP revision. Specifically, heights are limited to 12 metres except where areas of high amenity are adjacent. Additionally, strong recognition is made of maintaining view corridors between Silverwater Marker and the waterfront.

Cultural Activities

In September 2001 the Sydney Harbour Executive formally supported the development of the Sydney Harbour Dreaming 'Gateways' project - that project is a revised form of the overall Sydney Harbour Dreaming Project of the Sharing Sydney Harbour Regional Action Plan. The Sydney Harbour Dreaming Project identifies that "one or more Aboriginal cultural and interpretive centres" should be developed in the Harbour region.

A clearly described element of the Gateways project is the Cultural Centre Facility Planning and Management Development Program. This program involves three elements as follows:

- The designation and initial site preparation of the proposed future Cultural and Interpretative Centre on state owned land (NSW Maritime Authority and/or SOPA) at Homebush Bay, and consideration of alternate site locations;
- Investigating the feasibility of, and undertaking facility and business planning of the proposed cultural/interpretative centre as appropriate; and
- The development of an appropriate management structure to manage the future Aboriginal Cultural and Interpretative Centre facility.

Prior to the Sydney Olympics, the Metropolitan Local Aboriginal Land Council (Metro LALC) had conducted negotiations with the OCA (now SOPA) regarding the reservation of an area of land within the former Newington Armaments Depot site for the development of a Sydney wide Aboriginal Cultural Centre facility. Metro LALC also contracted the Merrima Unit of DPWS to prepare concept plans for the site. No distinct outcomes were achieved at that time.

The Sharing Sydney Harbour Regional Action Plan identified the Homebush Bay West site (owned by NSW Maritime Authority) of strategic importance. Subsequently PlanningNSW (now DEPARTMENT OF PLANNING) prepared a Framework Plan for the site, which identified a potential site use option as being the development of a cultural facility.

The spatial requirements for the development of a cultural centre are outlined below. They are primarily based on the prior work done for Metro LALC by the Merrima Unit of DPWS for the Newington Armaments Depot proposal some time before the 2000 Olympics, and is considered as “indicative”.

building floor area	5,000 to 7,000 sq m
hard landscape area	2,500 to 3,000 sq m
soft landscape area	20,000 to 25,000 sq m
public foreshore zone	7,500 to 10,000 sq m
Total	35,000 to 45,000 sq m or 3.5 to 4.5 ha

A minimum site area is 3.5ha is required, to which would be added a riverside public open space and access area of approximately 7,500 m² to 1.0ha. This area would generally fit in the western portion of the site adjacent to the Parklands.

Appendix 2:

Precinct Development

The Retail/Commercial Centre Precinct

The purpose of this precinct is to provide for the development of a mixed use commercial/retail centre that will meet the needs of future residents in the area and visitors to Homebush Bay.

The mixed use retail/commercial centre is located adjacent to the Ferry Terminal, Hill and Burroway Roads, and extends along the Foreshore Drive toward Wentworth Point Park and the Trailer Boat launching area.

The principal retail and commercial uses are proposed to be located in a linear fashion, along the Foreshore Drive. This provides such activities with a northerly aspect and allows a progression of activity type from typical retail and commercial uses associated with typical residential areas adjacent to Hill Road, to a more maritime focus within and adjacent to the Maritime Precinct.

Buildings are proposed to be comprised of retail and commercial activities at ground floor, some additional commercial activities at first floor level, where demand allows, and residential apartments at upper floors. Buildings of 3 storeys are proposed along Foreshore Drive, increasing to 4 and potentially 5 storeys adjacent to Burroway Road.



Figure 1 Retail/commercial centre form and location

The Maritime Precinct

The purpose of this precinct is to provide for a range of maritime and maritime related activities, of both a public and private nature. These include activities such as boat storage, maintenance and repair, boat hire, boating retail and recreational boating activities. Club and restaurant uses are also appropriate.

The maritime precinct also incorporates the two blocks west of the dry stack storage and hardstand area. This additional area will allow the provision of a substantial maritime education facility (if required) and provide the flexibility to provide a mix of additional maritime focused activities.

The layout of the maritime precinct is conceived as an integrated component of the Homebush Bay West Wentworth Point area. While it is recognised that controlled access is required to hardstand, dry stack, servicing and other such areas, the entire precinct will contribute to the character of Homebush Bay West through provision of through site public access and a strong integration with the surrounding area. In this way, the precinct is comprised of three distinct blocks, defined by the public street system, providing connection to, through and within the site.

The maritime precinct is focused on the recreational boating market, with the scope of facilities proposed cognisant of those proposed for other nearby facilities. The following are proposed:

- A 200 berth dry stack storage is located adjacent to Burroway Road, with an expansion area of 100 dry stack located immediately to the north. In the short term, this may be utilised as hardstand area. The dry-stack facility will be set back from Burroway Road, behind a landscaped area, providing buffering to residential properties proposed across Burroway Road. The building itself should be designed and detailed in a manner that provides a high quality, pleasing architectural statement. The large “tin shed” appearance will be avoided.
- Boat decanting will be via a boat well, with the dry stack and hardstand areas serviced by forklift or gantry structure. The arrangement of the site also allows for the provision of boat crane and travel lift facilities.
- A car parking area for 80 cars is located centrally on the site and may be expanded to a multi-level structure at some time in the future, if required. The location of the car park has been set back from the dry stack storage by several metres in order to allow the movement of machinery/boats etc between the hardstand/waterfront areas and any adjacent maritime activities that may eventuate.
- A trailer boat launching and parking area adjacent to Wentworth Point Park. This facility allows parking for 50 car and trailers and is of a width that allows launching or decanting of 2 boats at any one time.
- A clubhouse/restaurant facility located adjacent to Homebush Bay.
- Chandlers, servicing and other such uses are located at the northern side of the site with a shopfront face to the street and trailer park at the north, and a service frontage to the hardstand area located on their southern side.
- A boat brokerage is also located along the northern edge of the hardstand area and will have direct access across the precinct to a reserved berthing area.

- A Rowing shed, clubhouse and launching facility is located adjacent to Burroway Road, while a facility for the launching and storage of small boats for hire is located adjacent to the proposed clubhouse.
- A Maritime Educational Facility may be appropriately located on the southwestern block of the Eastern Maritime Precinct. This facility would incorporate the activities and space schedule defined previously in this report and is structured over 3-4 storeys. If no educational facility eventuates, the site is also suitable for further maritime uses.
- The north-western block is proposed for a mix of retail, maritime focused businesses addressing the Foreshore Drive.
- Servicing of the dry stack, hardstand and servicing site is proposed from Burroway Road, while the trailer boat launching area is accessed from the Foreshore Drive. A major north south spine through the Homebush Bay West peninsula penetrates the Maritime Precinct providing a connection to the Foreshore Drive. This street provides access to the car park, the rear of the dry stack and hardstand area and to the educational facility and additional maritime activities site.
- Continuous public access is provided to the waterfront with the extension of the Homebush Bay foreshore walk through the site. Security and safety issues do however require that access to the hardstand and boat well area be able to be restricted by way of boom gates etc when the need arises from the movement and operation of vessels and machinery.



Figure 2 Maritime precinct form and location

The Foreshore Open Space Precinct

The purpose of this precinct is to provide for the development of both a new parkland at Wentworth Point, as well as a substantial foreshore open space area along the banks of the Parramatta River. All existing significant vegetation within this area will be conserved and enhanced.

Wentworth Point Park extends from a 30 metre depth foreshore park adjacent to the Ferry Terminal, through to a significant space at the peninsula of Wentworth Point. The Park is proposed as a passive recreation area that reflects a pattern of point parks elsewhere in the Harbour. To activate the space and increase its utility, a number of activities are proposed. These include:

- Casual day berthing facilities for recreational boats along the Homebush Bay water frontage of the Park. This simple pontoon structure oriented parallel with the bank provides direct water access to the Park and maritime precinct facilities.
- A small restaurant area is located adjacent to the Foreshore Drive, opposite the retail and residential strip. The location of this facility provides enclosure of the street space and defines an entry point to the core of the Eastern Maritime Precinct. The buildings will front and be serviced from the Foreshore Drive and incorporate terrace areas on their northern, park side.
- There is potential for small boat and sailing clubs to also be located within the Park, however this will need to be reconciled with the potential allocation of facilities throughout the whole of Homebush Bay.

Wentworth Point Park will eventually become a major element within a foreshore parkland extending around the whole of Homebush Bay. The positioning of roads within the master plan site accommodates this proposal along the Parramatta River frontage. Along the Homebush Bay frontage however, the functionality of maritime activities predicates that the foreshore parkland will be discontinuous in this area. Pedestrian access will remain continuous, though must be managed in line with the operational and security requirements of maritime activities. Additionally, a major alternative pedestrian/cycle access should be provided around the perimeter of the secured maritime area.



Figure 3 Wentworth Park and Foreshore Open Space

The Future Development Precinct

Analyses of existing demand and priorities of the NSW Maritime Authority has led to a conclusion that a staged approach to the development of the Homebush Bay West-Wentworth Point site is most appropriate. In this respect, the master plan is focused on development east of Hill Road, while the western side of Hill Road is to be retained for the future.

For the short to medium term, present activities located to the west of Hill Road are expected to continue. There is also potential that land in this area may be allocated for the development of an Aboriginal Cultural Centre, in line with previous proposals for the site. If such a development proceeds, it is most appropriately located at the western part of the site, adjacent to Sydney Olympic Parklands. The eventuality of such a facility is however predicated on inter-governmental discussions outside the scope of this master plan.

Within the area proposed for future development, a range of maritime oriented activities are appropriate. This area has the advantage of being separated from residential development spread throughout the eastern side of the Homebush Bay West Peninsula. The site may therefore potentially provide opportunities for the location of maritime industries that have a lower compatibility with residential development than the recreational boating centre proposed adjacent to Homebush Bay. While the relatively shallow depth of water in Parramatta River and potential conflicts with ferry operations may temper proposals, future investigations of both site potential and demand will define the development of this site.



Figure 4 Future Development Area

Ferry Terminal

The master plan proposes no changes to the operation of the ferry terminal. All existing structures and significant landscape elements are intended to be retained in their present locations. Development of the surrounding area however, results in some changes in regard to the relationship between this facility and its surrounding context. These include:

- Redevelopment of the present open space area fronting the ferry terminal as the site for the retail and commercial centre
- Removal of the dedicated car park area
- Relocation of the off-street bus set down area to the proposed Foreshore Drive that passes in front of the site.

Potential Floorspace

An assessment has been made of potential floorspace, based on the broad building envelopes and building height specified within the master plan. These are net totals and assume 85% efficiency. It should also be recognised that these estimated potential yields represent a theoretical maximum, developed for analysis purposes only. A range of detailed site and building design criteria will temper the actual floorspace that may result on any particular site within the master plan area.

Precinct	Potential Use	Potential Floorspace (net m2)
Retail/Commercial Centre	Retail/Commercial	2,725
	Residential	15,680
Eastern Maritime Precinct	Retail/Commercial/Office	16,625
	Workshop	1,105
	Club facilities	1,860
	Boat Storage (inc rowing & hire craft)	6,720
	<i>Potential Optional Educational Facility – replaces space allocated to office / commercial/ retail</i>	5,865
Foreshore Parklands	Restaurant	300

Feasibility Assessment

Method

The proposed use for each building in the eastern precinct was adopted for the economic analysis. These uses comprised:

- Residential – SOPA site only
- Maritime Commercial – NSW Maritime Authority site
- Retail/Commercial – both sites
- Miscellaneous – Club & recreational facilities on the Waterways site

The demand for such facilities at Homebush Bay West was assumed to be adequate, however, the main uses were checked via individual feasibility studies.

Tenure

The wide range of proposed accommodation on site indicates that different forms of land tenure could be appropriate. The general approach taken was as follows:

- Residential – Strata Leasehold (99 year)
- Retail/Commercial – Strata Leasehold (99 year)
- Maritime Commercial – 30 to 40 year Ground Lease
- Clubs etc – 30-40 year Head Lease with 10+10 year sublease to tenants

Assumptions for Future Development

For the purposes of the economic analysis the following assumptions were made with respect to future development.

- A NSW Government Entity (e.g. SOPA and/or Waterways) would act as “Master Developer” for the site and tender sub-divided sites to the private sector market.
- The Master Developer would be responsible for designing and constructing the necessary infrastructure and services to permit sub-division.
- Private sector developers who win tenders would construct, sell, lease or occupy the respective buildings.
- From previous work undertaken by the consultants in the Homebush area there would appear to be adequate demand from developers for retail, commercial and residential sites. Maritime commercial development demand by developers/tenants has been difficult to ascertain at this point due to the very limited market. Nevertheless, NSW Maritime Authority experience at Rozelle would indicate that demand for maritime commercial is best ascertained via an expression of interest process.

Infrastructure Works

The infrastructure works required on the combined sites to enable development to proceed in accordance with the master plan, would be in two categories as follows:

- Works undertaken by the Master Developer (ie. Government entity) or,
- Works undertaken by site lessee as part of its development construction (ie. Dry Stack lessee).

Estimates of infrastructure work costs were prepared for the SOPA site; the NSW Maritime Authority site and the Dry Stack Precinct. These totals are as follows:

- | | |
|--------------------------------|----------|
| • SOPA Site: | \$3.65m |
| • NSW Maritime Authority Site: | \$17.65m |
| • Dry Stack Area: | \$1.67m |

The estimate of infrastructure costs are preliminary only and do not represent a commitment to pay by each landowner. Additional costing work and level of infrastructure implementation are still to be resolved between the relevant landowners and Government agencies.

Individual Component Feasibilities

The feasibility of the individual building developments both from the viewpoint of a Developer and/or Business Operator was undertaken in relation to the preferred master plan. The individual analyses are discussed below.

Residential Development

It was assumed that apartments would be developed in the locations identified for sale into the private market. Commercial assessments were made of typical apartment developments located either on the harbour frontage (eg. CC1 or CC2) or behind (e.g. CC3). Based on current selling prices and construction costs the site values, as represented by a lease premium, were calculated as follows:

Apartment Type	\$ per m2 of GFA	\$ per Avg Apartment
Water front	\$860	\$107,000
Rear	\$780	\$93,000

These values represent what developers would be prepared to pay, at tender, for the 99 year leasehold strata title. There is a strong level of demand, in the Homebush Bay – Canada Bay area for waterfront apartments as demonstrated by Cape Cabarita and Breakfast Point. It is anticipated that such development at Homebush Bay West – Wentworth Point would be most attractive to the market

Commercial and Retail Development

Approximately 16,600 m2 of Commercial/Retail space is proposed in the preferred master plan. This would be a significant extra component at Homebush Bay, however, demand would appear to be present based on the occupancy and commercial proposals within SOPA’s main area. Provided the commercial/retail buildings are carefully staged, demand and take-up should be maintained.

Based on Commercial Assessment, it has been estimated that Commercial/Retail space would yield a 99 year leasehold strata value of around \$211 per m2 of GFA.

Dry Stack Boat Storage Feasibility

The preferred master plan identifies a building of 6,500 m2. in area providing dry storage for 200 boats. The facilities attached to the dry stack building would include a hard stand area and access to a launch well on the western river wall.

The master plan shows a building approximately 130m. by 50m running east west from the river wall. The building would be of portal form construction (single span) capable of accommodating three levels of stored boats in racking. The structure would comprise a steel frame and steel cladding, concrete floor, offices, tenant storage and change rooms and services. Racking would be freestanding for forklift access. Boats would use the launch well for access/removal to water.

A broad indication of costs for the “Dry Stack” operation is approximately \$8.53m.

Demand

Demand for dry boat storage on the southern river area of Homebush Bay would be in the order of 250 boats. This conclusion was reached in part from BIA's submission and in recognition of the large population increase at Homebush Bay and adjacent Canada Bay. With 3,000 dwellings proposed for Rhodes Peninsula and the large, new projects at Breakfast Point and three former residential sites in Canada Bay, the area population will expand by at least 10,000 people in the next 5 years.

Storage Operations

The boat storage facilities would accommodate vessels in the range 7 metres to 10 metres. They would be available for lease on a monthly basis.

Given the amenity provided which is proposed to include boat owner storage for marina gear and change/shower areas, the average monthly rental has been assumed to be \$675. This is slightly above Akuna Bay but Homebush Bay West would offer easier access and more modern facilities.

Commercial Assessment

Based on the above Capital Costs and Net Income projection at the assumed monthly rate, the feasibility of the 200 boat storage facility would be marginal if the developer was required to acquire the land required. Further, in accordance with Waterways preference to provide leasehold land it is suggested that a 40 year ground lease be offered with rent linked to the sites land value. This arrangement would provide the operation with an ongoing cost base that could be accommodated with the forecast net revenue.

Maritime Commercial

Two buildings within the maritime precinct have been designated to provide 9,285m² of space for maritime commercial usage. A review of likely tenants has indicated that the following types of businesses could be interested:

- *Vessel Brokerage* – particularly for trailer vessels.
- *Maritime Chandlery*.
- *Boat Builders* – with potential tourism linkages.
- *Service Centre*.

Typically these types of businesses operate at low profit levels and would require competitive rentals to support their operations. Building owners would therefore reflect this in the value placed maritime commercial strata space. A commercial assessment of these typical operations indicated that owners could support a ground rent calculated at 8% of land value within the likely sub-rental revenue. The proposed GFA of 9,285m² would accommodate a considerable range of commercial activities, which in the short term may exceed maritime requirements. Accordingly, some tenant flexibility may need to be exercised.

Other Maritime related business

Several other types of marine related business have been suggested in the preferred master plan including:

- Workshop
- Boat Hire

It is anticipated that these premises may be leased on medium term leases such as 5 years + 5 year option. To build suitable premises an underlying ground lease of say 30-40 years could be offered.

Miscellaneous Space

Two restaurants have been proposed within the parklands. It is anticipated that the sites will be offered for development under a 40 year ground lease. An opening ground rent at 8% of UCV would seem reasonable.

The two club building sites would probably be offered on “peppercorn” ground rent in order to stimulate recreational activity at the site.

Overall Economic Feasibility

A comprehensive model of the development of the master plan area from NSW Maritime Authority – SOPA viewpoint has been prepared. Capital costs for infrastructure and servicing were allocated as detailed in this section. Income by way of site sales to developers or ground leases were then included to provide an overall view of revenue generation. A residual ground lease valuation was included at the end of the modelling period.

The assessment concludes that development of the site in line with the master plan has the potential to deliver a positive development outcome for the owners of the site. Despite clear demand/returns from residential development, estimated returns for maritime oriented activities (in line with the master plan) are of such a level that commencement is economically feasible where both the SOPA and NSW Maritime Authority sites are considered as a combined entity.

When separated, development of the retail/commercial centre has the potential to, provide a significant economic return. The significant development costs associated with the maritime precinct results in a negative economic position and highlights a need for a significant government commitment to the provision of maritime facilities. This commitment appears to be present on the part of NSW Maritime Authority.

Appendix 3:

**Policies, Strategies and Guidelines Applying to the
Master Plan Site**

The following documents are applicable to the Master Plan site, in the manner described within this master plan:

- State Environmental Planning Policy 56 – Sydney Harbour Foreshores and Tributaries
- Sydney Regional Environmental Plan 24 – Homebush Bay Area
- Homebush Bay West Development Control Plan and Public Domain Strategy
- Sydney Harbour and Parramatta River Development Control Plan
- Sydney Olympic Park Authority Act
- Sydney Olympic Park Master Plan
- Sydney Olympic Parklands Plan of Management
- SOPA's "Parklands 2020" strategy
- Sydney Olympic Parklands Urban Elements Design Manual
- The Powells Creek Landscape Framework

Appendix 4:

Amendments to the Sydney Olympic Park Master Plan

The Sydney Olympic Park Master Plan is amended as follows:

(c) In section 3.3 delete the words:

“The gross floor area (GFA) estimates for Sydney Olympic Park are shown below;”

and insert:

“The gross floor area (GFA) estimates for Sydney Olympic Park (excluding the Ferry Wharf area) are shown below:”

(d) Insert in the Glossary in alphabetical order the following:

*“**Ferry Wharf area** means that area identified as Ferry Wharf in figure 5.1.1.”*