



MAJOR PROJECT ASSESSMENT: *Barangaroo*



Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

February, 2007

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1 EXECUTIVE SUMMARY

This is a report from the Director-General to the Minister in relation to Project MP 06_0162 on East Darling Harbour (EDH) to the Minister for the purposes of determining the concept plan pursuant to Section 75O(2)(a) of the Act and considering the future rezoning EDH site pursuant to clause 8 of the Major Projects SEPP.

EDH is a roughly rectangular site with a total area of 220,000 square metres. It is located on the north western edge of the Sydney Central Business District. The site has a 1.4 kilometre harbour foreshore frontage to the west and north and an eastern street frontage to Hickson Road. The historic precincts of Millers Point and the Rocks are located to the east and Darling Harbour to the South.

The Government's vision for EDH is to create a new city precinct, which effects the regional and global position, economy and culture of Sydney. The Concept Plan was lodged under Part 3A of the Environmental Planning & Assessment Act 1979 and has a capital investment value of **\$1.5 billion**.

The Sydney Harbour Foreshore Authority is the Proponent and they are seeking Concept Plan approval for the renewal of EDH as a new harbour precinct of Sydney, providing an extension of the city's commercial centre and a significant new public headland park as described below:

- **A mixed use development** of commercial, residential, tourist, retail and community uses;
- **Building envelopes** with a distribution of GFA between the development blocks within the mixed use zone;
- **New public open space**, comprising 50% of the site, with a range of formal and informal open spaces serving separate recreational functions and including a 1.4km public foreshore promenade;
- **A passenger terminal** and a maximum of 3000m² GFA for active uses that support the public domain within the public recreation zone;
- **Public domain** landscape concept, including parks, streets and pedestrian connections;
- **Creation** of a partial new shoreline to the harbour and alteration of the existing sea walls; and
- **Retention** of the existing Sydney Ports Corporation Port Safety Operations and Harbour Tower Control Operations including employee parking.

Approximately **11 hectares of public domain and public open space** will be provided. The public open space will incorporate a Headland Park at the northern end of the site. In addition, public domain space between buildings and new streets is provided.

The renewal of the 22 hectare site is **expected to generate over 500 construction jobs, up to 15,000 operational jobs post completion**, as well as multiplier effects associated with attracting and supporting complimentary services and facilities within the Sydney CBD.

On 22 March 2006, the Minister formed the opinion pursuant to Clause 6 of State Environmental Planning Policy (Major Projects) 2005 that the proposal is a Major Project and Part 3A applies. The project was placed on formal exhibition from **19 October 2006 until 17 November 2006**. The Department received a total of **91 submissions** from Government agencies and the public.

Key issues raised from the exhibition process related to bulk and scale, open space, design competition, built form, loss of views, traffic generation, public transport, pedestrian access and connections, impact on heritage items and conservation area, infrastructure requirements and developer contributions. The Proponent lodged a response to issues, and a revised statement of commitments on **12 January 2007**.

The Department recommends that the **Concept Plan application be approved** subject to a number of modifications as specified in Appendix A. These include:

- **Northern Headland and Cove:** Design changes to create a more naturalised and raised headland and an enlarged and more naturalised form of the northern cove and a connection from Clyne Reserve to the new reformed headland.
- **Southern Cove:** Expansion of southern cove.
- **Built Form:** Ensuring appropriate street edges are provided to Hickson Road and 'Globe Street'.
- **Design Competition:** Design excellence conditions imposed to promote vibrant spaces, places and interesting and innovative architecture.

This Report also recommends to the Minister that the rezoning of the **EDH site be pursued** to give effect to the Concept Plan, because it is a matter of significance for the environmental planning of the State. This rezoning can proceed separately, given the proposal is not wholly prohibited in the current zone.

The NSW Government held a State-wide naming competition in 2006. Over 1600 entries were submitted to the New Harbour Headland Naming Competition and the Government. A Competition Jury was appointed to cull the submissions down to a shortlist for public discussion. This Competition Jury consisted of The Hon Paul Keating, Ms Elizabeth Anne Macgregor and Ms Margy Osmond. On 18 October 2006 the Minister announced that the name **Barangaroo** was the new name for East Darling Harbour. The name was to "*honour of the wife of Bennelong*".

2 BACKGROUND

2.1 Introduction

Barangaroo is located on the north western edge of the Sydney CBD. The site is bounded by the Sydney Harbour foreshore to the west and north, Hickson Road and Millers Point to the east and Kings Street Wharf / Cockle Bay / Darling Harbour to the south (see **Figure 1**). Barangaroo has an area of 22 hectares and a 1.4 kilometre harbour foreshore frontage.



Figure 1 - Location Map of the Site

The site currently comprises 5 wharves (wharves 3,4,5,7 and 8). These wharves are currently used for commercial shipping for berthing and unloading of container ships, as well as international and domestic overseas passenger terminal.

The site is owned by the NSW Government. The majority of the land is owned by the Sydney Ports Corporation and small areas owned by the Marine Ministerial Holding Corporation, Maritime Services Board of NSW and the Crown.

Sydney Harbour Foreshore Authority is the proponent for the Concept Plan for Barangaroo. The Concept Plan proposes the renewal of Barangaroo as a new harbour precinct of Sydney that includes an expansion of the

City's commercial centre, provides new residential housing, and provides a significant new headland park and public domain.

On 22 March 2006 the Minister for Planning agreed to consider Barangaroo as a potential State significant site under the provisions of the Major Projects SEPP. The Minister formed the opinion pursuant to Clause 6 that the proposal is a Major Project and subject to Part 3A of the Environmental Planning and Assessment Act, and authorised the submission of a concept plan for the site. Consequently, the Minister is the approval authority for the project.

2.2 The Site and Surrounding Area

Barangaroo is located on the north western edge of the Sydney CBD. It has a 1.4 kilometre harbour foreshore frontage, with an eastern street frontage to Hickson Road. The Site comprises 5 wharves (wharves 3, 4, 5, 7 and 8) in a single rectangular concrete apron mostly over reclaimed land. Several large warehouses are located on the site.

There is a transition in urban form along the adjoining eastern edge of the site from the taller predominantly commercial multi storey city buildings to the south, to the smaller scaled residential terraces in the north. Further north are the bold Twentieth Century forms of the pier and shore shed structures in Walsh Bay. To the east of the site lies residential, commercial, community and tourism uses and parkland, including Observatory Hill (see **Figure 2**).

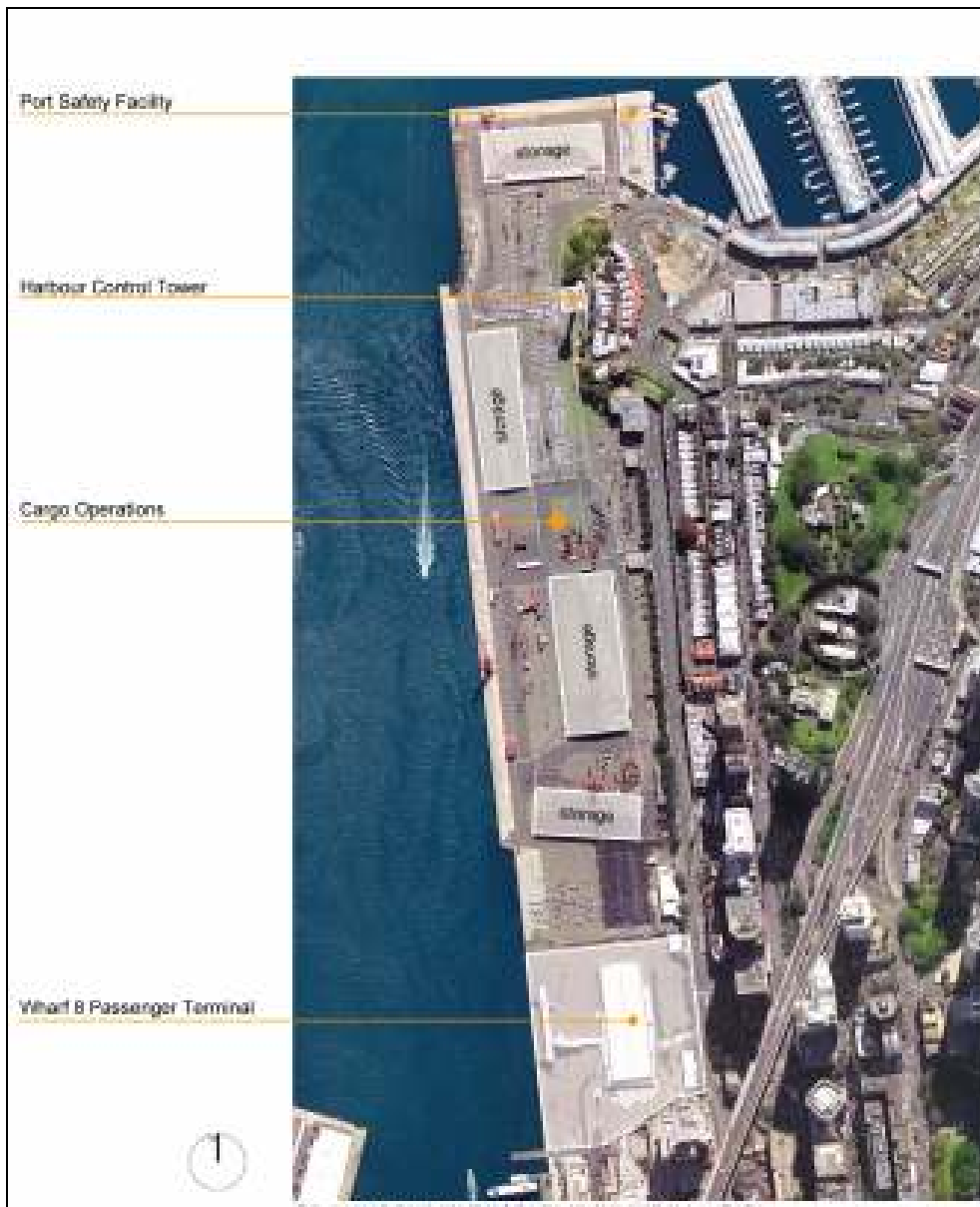


Figure 2 - Existing site functions and surrounding area

The northern most part of the shoreline originally jutted into the harbour to the west forming a headland with a large hill on the point. However, today the northern headland has been largely removed. Nearby Balls Head and Berry Island Reserve are comparable to the topography of the original shoreline.

Historically the site was linked through industrial, social, physical and visual connections to its surrounds. However, major civic works including the Bradfield Highway and Hickson Road have since physically separated The Rocks, Millers Point and the CBD from the site. Despite the separation caused by these works, some less-evident connections prevail, including laneways, pathways and steps down from the upper levels to the lower levels, and in the case of Walsh Bay, to the harbour's edge.

Due to its development as a port facility Barangaroo has no internal street network. The important street connections are those that are found adjoining the site including Argyle Street, Hickson Road, High Street, Margaret Street, Shelley Street, King Street Wharf and Lime Street.

The site has views across the water to Darling Harbour to the south, Pyrmont to the south-west, Balmain to the west, Goat Island to the north-west and Berrys Bay and Lavender Bay to the north.

The site contains only one landscaped area (Munn Street Park) located to the north of Dalgety's Bond Store.

2.3 Existing Land Use

Barangaroo is currently used for port operations. These involve commercial shipping for berthing and unloading of container ships. The site also serves as international and domestic overseas passenger terminal for passenger ships.

2.4 Strategic context

Barangaroo is identified as a strategic foreshore site within *SREP (Sydney Harbour Catchment) 2005*. It is also identified as an important part of the "Global Sydney" Strategic Centre within the NSW Government's Metropolitan Strategy, *City of Cities, A Plan for Sydney's Future*.

Regionally, there are limited sites which can provide significant new foreshore open spaces and linkages within the CBD that could deliver significant amounts of new commercial and residential floor space. Barangaroo's waterfront location, size, and location on the western edge of the CBD means it presents an opportunity to deliver significant new commercial floor space and recreational opportunities. Coupled with significant infrastructure improvements and recreational and cultural activities, the redevelopment of Barangaroo can contribute to the sustained growth and enhance the position of Sydney within the Asia-Pacific region and the Global market more generally.

The redevelopment of Barangaroo provides an opportunity to build a new waterfront city park that will complete an important missing component in a continuous waterfront walkway linking Woolloomooloo Bay to the ANZAC Bridge, substantially greening the western edge of the City. The establishment of a waterfront park meets a long term commitment of making Sydney Harbour a publicly accessible place. This will also boost the image of the City internationally, as well as providing a valuable new recreational resource to the city's workers and residents, day-trippers and tourists.

This expansion in the City's open space and public domain will help satisfy demands of the City's growing residential population and workforce. Both the metropolitan strategy and CBD-Airport corridor strategy are aiming to enhance the quality and accessibility of open space, public domain and recreational trails. Establishing new open spaces that can provide a variety of active and passive functions is also necessary to meet current and future recreation demand.

2.5 Site History

Barangaroo has been used continuously for commercial shipping from the Nineteenth Century until the present day.

The physical form of Barangaroo has been modified over time to meet the changing requirements of shipping and trade, as well as the commercial requirements of the City. Originally, Barangaroo's form comprised piers and wharves that jutted into the Harbour and which increased over time. The international shift in commercial shipping to containerisation from the 1960s led to the removal of the piers and wharves and the construction of the current concrete apron and the shore sheds that visually define the site.

The modification of Barangaroo to accommodate containerisation significantly altered the Millers Point headland. The site today therefore provides little physical connection to the natural form of this part of the harbour and the shift to containerisation has removed much of the site's part industrial and port operations.

2.6 International Urban Design Competition

Following the announcement of the Ports Growth Plan in October 2003 and the establishment of project principles, the Government proceeded with an international urban design competition for the site. The competition sought to explore urban form on the site, the relationship of the site to its surrounds and propose an agenda of renewal that supported the global and local aspirations of Sydney. Importantly, the competition brought the site to the awareness of the wider community.

In order to respond to the local and global agenda the brief suggested a range of development activity and significant open space on the site, but also provided the opportunity to explore alternative ideas.

The Competition was a two stage process that commenced in 2005 and was finalised in 2006.

The Stage 2 Jury comprised the following representatives:

- Chris Johnson, Executive Director of Urban Renewal, DoP (Stage 2 Jury Chair)
- The Hon Paul Keating
- Philippe Robert, Principal of Riechen et Robert, Paris
- Prof Edward J. Blakely, Chair of Urban and Regional Planning at the University of Sydney
- Neil Bird, Deputy Chairman of Landcom Corporation
- Dr Deborah Dearing, President of the NSW Chapter of the RAIA
- Helen Lockhead, Executive Director, Sustainability, SOPA
- Jack Munday, Former Chair of the Historic Houses Trust
- Dr Tim Entwisle, Executive Director Botanic Gardens Trust

Stage 1 commenced in February 2005. This stage involved an open and anonymous competition that included a brief to entrants to explore urban design issues such as built form, streetscape, landscape, activation and programming in a broader context.

A total of 137 entries were received from across Australia and around the World. The submissions received were predominately conceptual.

In August 2005, 5 finalists from the 137 entries were chosen and invited to participate in Stage 2.

Following the Stage 1 competition process, a public exhibition of the finalists and short-listed entries were held both at the Museum of Contemporary Art, Sydney, the Sydney Opera House, and on-line. The exhibition was publicised in newspapers and sought comments from the public. In addition, briefing sessions were held with stakeholder groups that included Councils, the NSW Government, and cultural and community groups.

Feedback from Stage 1 of the Competition was used to inform the Stage 2 brief, resulting in a greater emphasis on issues of community interest such as transport, connectivity and sensitivity to surrounding heritage.

Stage 2 was released in November 2005 after the public exhibition and feedback process in Stage 1. Particular emphasis in the Stage 2 Brief was placed on issues such as transport, connectivity, sustainability and heritage.

The aim of the Stage 2 process was to produce built form and open space design principles for the future renewal of Barangaroo. The designs were intended to articulate the relationship of built form and the public domain, the mix of uses and methods of activation, the social and cultural positioning and opportunities for access and connectivity. The designs were also required to provide an insight into the culture and values of the people using the site in order to illustrate what Barangaroo and its new community could bring to the City and the adjacent suburbs.

In March 2006, a winner was selected from the 5 finalists invited to participate in the Stage 2 process.

The Jury unanimously selected as the winner of the Competition the proposal by design team of Hill Thalys Architecture + Urban Projects, Paul Berkemeier Architect and Jane Irwin Landscape Architecture (see **Figure 3**).



Figure 3- International design competition winner (Hill Thalys Architecture +Urban Projects, Paul Berkemeier Architect and Jane Irwin Landscape Architecture)

In relation to the winning teams design, the Jury's made the following comments:

The scheme is grounded in a unique vision for completing the western edge of the city by creating:

- *a new civic boulevard connecting Barangaroo to Walsh Bay and King Street Wharf;*
- *a grand harbourside park along the entire length of the waterfront; and*
- *a vibrant new commercial quarter integrated with the CBD*

The parklands celebrate a diverse range of experiences including a headland park at the northern tip of the site, neighbourhood parklands relating to the scale of the adjoining communities and an urban waterfront park anchoring the new commercial precinct. The new parklands incorporate innovative sustainability measures whilst providing a variety of spaces for a diverse range of uses.

Another key feature of the scheme is the way it reflects Sydney's existing urban pattern by proposing built forms and massing for the site with a rich mixture of living and commercial spaces supported by a vibrant network of streets, squares, promenades and lanes.

In developing the scheme beyond its current concept the Jury recommends that the following elements be integrated in the next phase of the project:

- *A natural headland form which touches the water at the northern end of the site.*
- *A large northern cove located directly behind the headland to further define the headland.*
- *A larger intervention of the southern cove, located north of Napoleon Street.*

3 PROPOSED DEVELOPMENT

3.1 Background

On 24 February 2006, the Proponents lodged a Preliminary Assessment Report. On 22 March 2006, the Minister formed the opinion that the site was Major Project pursuant to Clause 6 of the Major Projects SEP and instructed that the site be investigated as a potential State significant site.

The Preliminary Assessment Report provided information for the preparation of Director-General's Requirements. The Director-General's Requirements were prepared in accordance with Section 75F of the Act and were issued on 30 June 2006. On 13 October 2006, the Proponents lodged a State significant site Study proposing the redevelopment of Barangaroo and lodged an EA for the Concept Plan for Barangaroo.

3.2 State Significant Site Study

The SSS Study seeks to establish new land use zones and development controls across Barangaroo. The SSS Study recommends that Barangaroo be listed in Schedule 3 of the Major Projects SEPP in order to facilitate the Concept Plan.

The SSS Study has been prepared in accordance with clause 8 of the Major Projects SEPP.

3.3 Concept Plan

The Concept Plan (see **Figures 4, 5 & 6**) seeks approval for the following:

- Urban structure, including the public domain, street pattern and the development block pattern within the mixed use zone.
- A maximum of 388,300m² of gross floor area (GFA) within the mixed use zone including:
 - a maximum of 100,000m² (or 25%) and a minimum of 60,000m² (or 15%) residential GFA;
 - a minimum of 30,800m² GFA for tourist uses;
 - a maximum of 39,000m² GFA for retail uses; and
 - a minimum of 2,000m² GFA for community uses.
- Approximately 11 hectares of new public open space / public domain, with a range of formal and informal open spaces serving separate recreational functions and including a 1.4km public foreshore promenade.
- A maximum of 8,500 m² GFA for a passenger terminal and a maximum of 3,000 m² GFA for active uses that support the public domain within the public recreation zone.
- Maximum building envelopes and distribution of GFA between the development blocks within the mixed use zone.
- Maximum height within each street block.
- Public domain landscape concept, including parks, streets and pedestrian connections.
- Alteration of the existing sea walls and creation of a partial new shoreline to the harbour.
- Retention of the existing Sydney Ports Corporation Port Safety Operations and Harbour Tower Control Operations including employee parking.

To demonstrate how the renewal of the site will be supported, the Concept Plan also identifies infrastructure requirements for the following:

- Public transport;
- Bicycle routes;
- Public parking;
- Water cycle management;
- Utility and infrastructure services;
- Passenger ship terminal facilities; and
- Sydney Ports Corporation harbour control tower and safety operations.

3.4 Amendments to the Proposal

A detailed report and a revised Statement of Commitments, responding to the issues raised in submissions was prepared jointly by JBA and SHFA and submitted to the Department on 12 January 2007 (included in Appendix D).

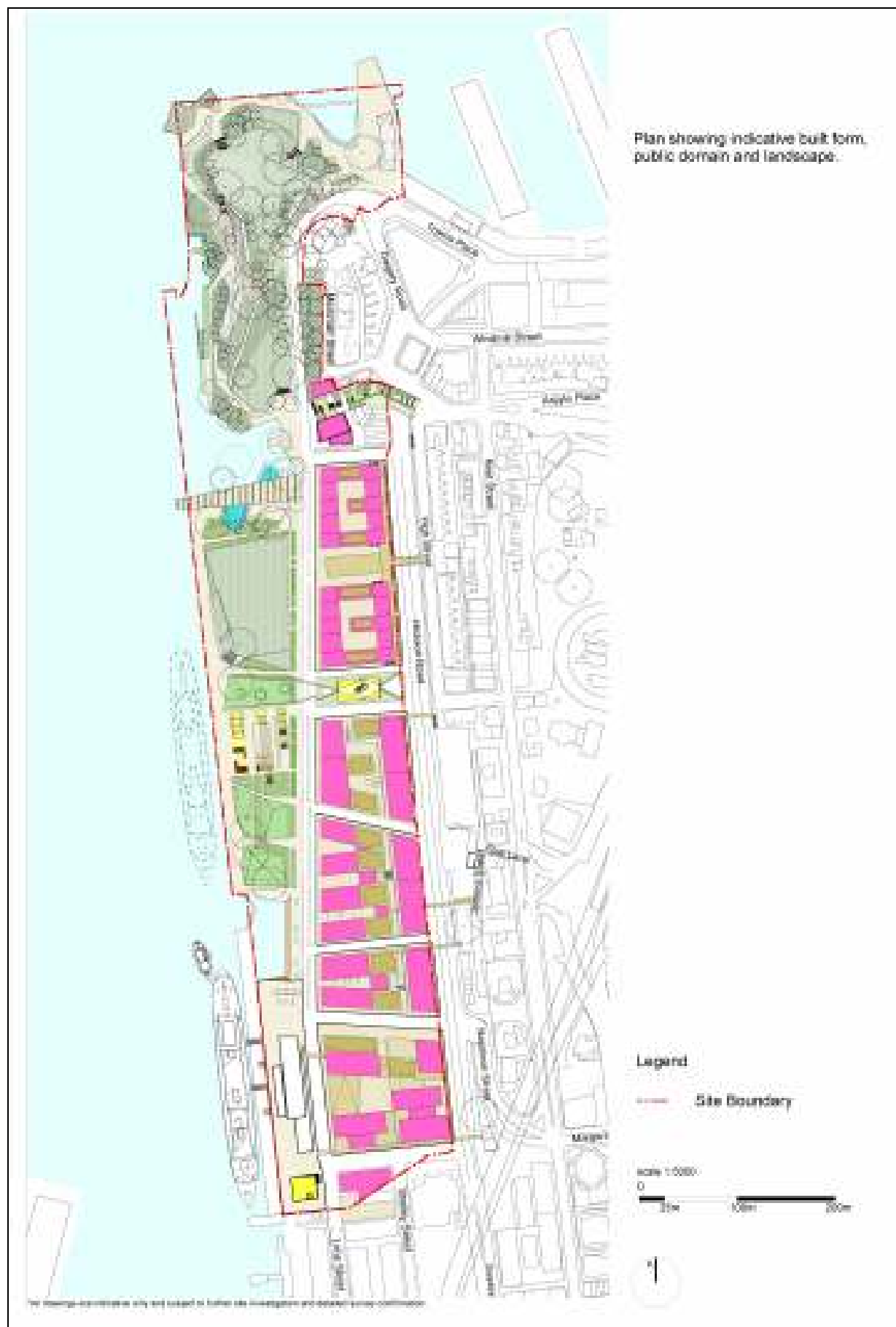


Figure 4 - Concept plan and site layout

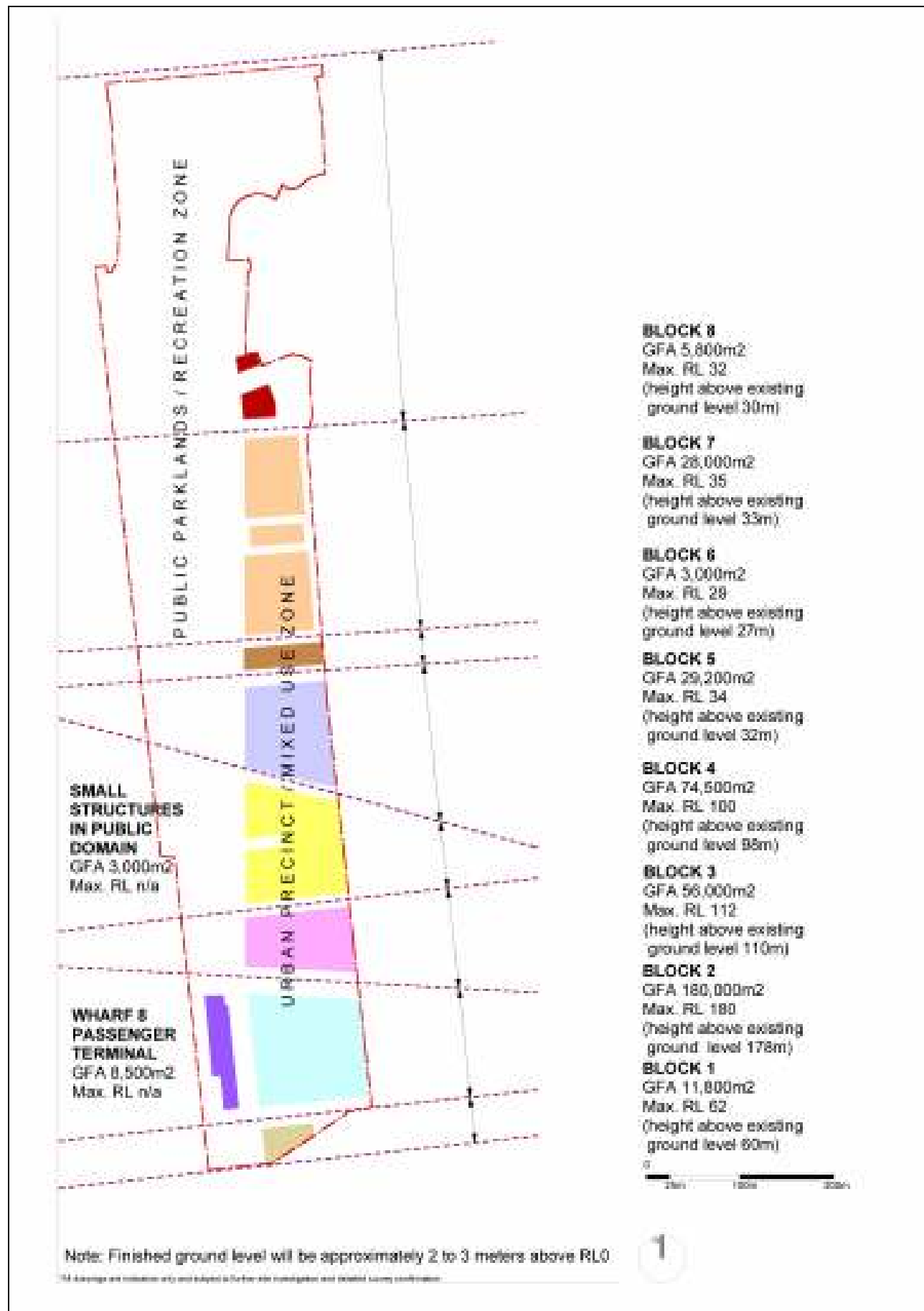


Figure 5 - Concept plan development blocks

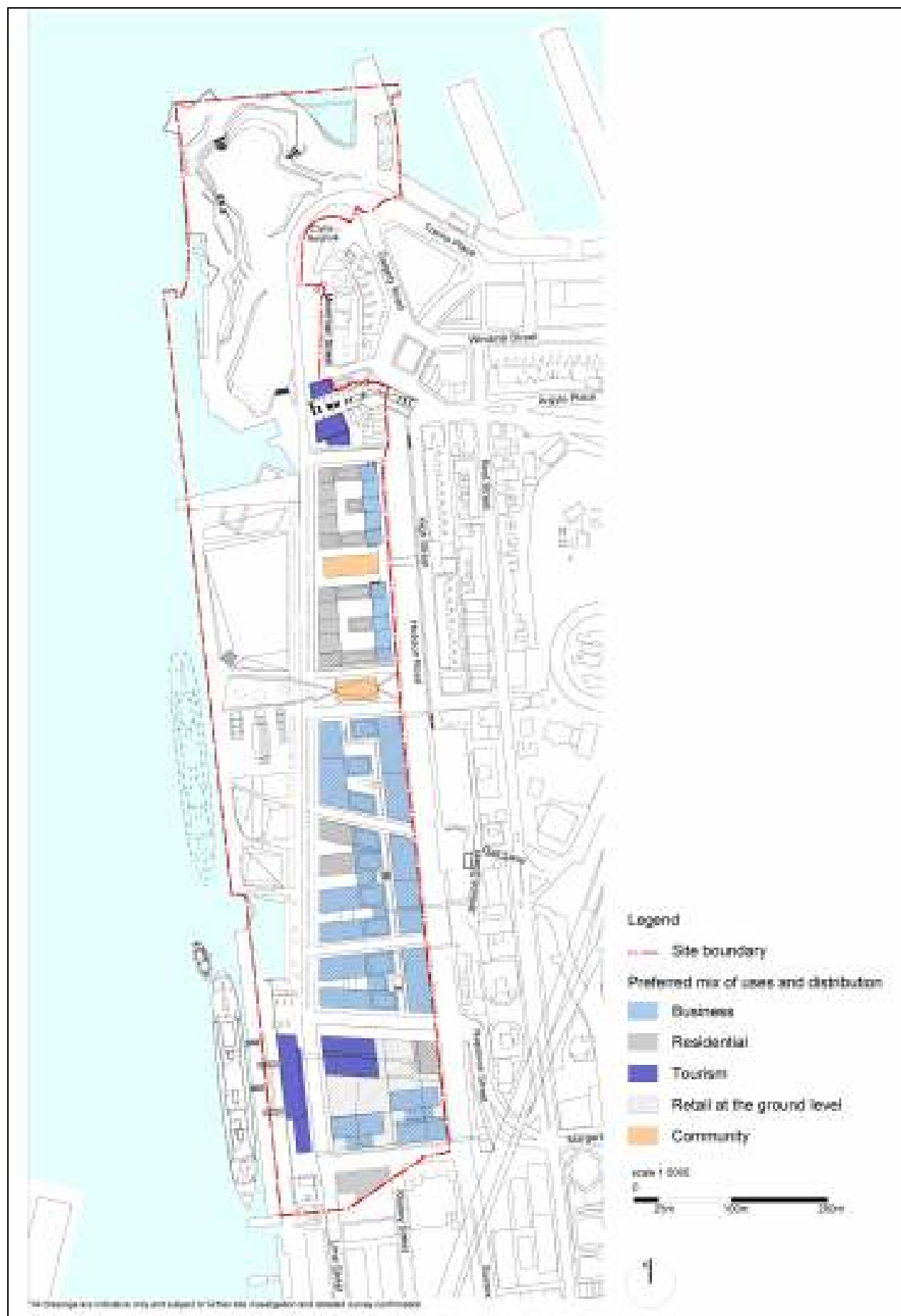


Figure 6 - Concept plan and land use mix

4 STATUTORY FRAMEWORK

4.1 Part 3A, *Environmental Planning and Assessment Act 1979*

Part 3A of the Act commenced operation on 1 August 2005. Part 3A consolidates the assessment and approval regime of all major projects where the Minister was the consent or approval authority under Part 4 (Development Assessment) or Part 5 (Environmental Assessment).

Under the provisions of Section 75B of the Act development may be declared to be a Major Project by virtue of a SEPP or by order of the Minister published in the Government Gazette.

Section 75M of the Act permits a proponent to lodge a Concept Plan either upon their request to or at the request of the Minister. The purpose of the Concept Plan is to provide a broad overview of a proposed development and seeks to establish the framework for more detailed development of the proposal subject to future approvals.

The Concept Plan process will enable the complex strategic issues and the general parameters of the project to be determined upfront, whilst still retaining the necessary level of flexibility for the more detailed design phase of the project. Retaining some flexibility in the later stages of the redevelopment will be important to ensure future development opportunities on the site remain innovative and responsive to staging over time.

On 22 March 2006, the Minister for Planning, Hon Frank Sartor MP, formed the opinion that Part 3A of the Act applied to the proposed development and, pursuant to Section 75M of the Act, authorised the Proponents to submit a Concept Plan for Barangaroo.

4.2 State Environmental Planning Policy (Major Projects) 2005

State Environmental Planning Policy (Major Projects) 2005 (Major Projects SEPP) outlines the types of development declared a Major Project for the purposes of Part 3A of the Act. For the purposes of the Major Projects SEPP certain forms of development may be considered a Major Project if the Minister (or his delegate) forms the opinion that the development meets criteria within the SEPP.

Clause 6 of the Major Projects SEPP provides that development that in the opinion of the Minister is development of a kind referred to in Schedule 2 (specified sites) is declared to be a project to which Part 3A of the Act applies. Clause 10 (d) of Schedule 2 of the Major Projects SEPP identifies that development with a capital value of more than \$5 million within Barangaroo Wharfs 3-8 is a specified site (as identified on Map 9 of the SEPP).

Clause 8 of the Major Projects SEPP includes provisions that allow the Minister to determine that a site is State significant and to add it to the list of State significant sites that appear in Schedule 3 of the Major Project SEPP. Prior to listing a site, a SSS Study was required to assess the State or regional planning significance of the site and the suitability and implications of any proposed land use. When making a site a State significant site on Schedule 3 of the Major Projects SEPP, the Minister may establish the planning regime for the site, including any zoning changes.

The purpose of listing Barangaroo in Schedule 3 of the Major Projects SEPP will be to enable the Minister to set the planning parameters for future land use, type and scale of development consistent with achieving State and regional planning objectives taking into account the local planning context of the site. Future arrangements for development control can also be imposed, including the nomination of development that is considered State significant and development that would be more appropriately dealt with by the Council or through exempt and complying development controls.

On 22 March 2006, the Minister formed the opinion that Barangaroo was a Major Project subject to Part 3A.

On 22 March 2006, the Minister also agreed to commence the process of investigating whether to add the site to Schedule 3 of the MP SEPP.

On 27 March 2006, the Proponents were advised to prepare a SSS Study on behalf of the Department that would address specific criteria.

4.3 Permissibility

Barangaroo is currently zoned *Residential* and *Maritime and Transport* in SLEP 2005 (see **Figure 7**). Barangaroo is identified in SREP (Sydney Harbour Catchment 2005) as a Strategic Foreshore Site and the adjacent waterway is zoned *W1 Maritime Waters*.

Section 75O(3) under Part 3A of the Act provides that the Minister cannot grant approval for the concept plan for a project that would be wholly prohibited under an environmental planning instrument.

Section 75O(3) does not apply in this instance as the concept plan proposal is not wholly prohibited on this site due to its zoning under SLEP 2005. Consequently, the concept plan proposal can be approved by the Minister under Part 3A of the Act without needing to rezone the site beforehand.

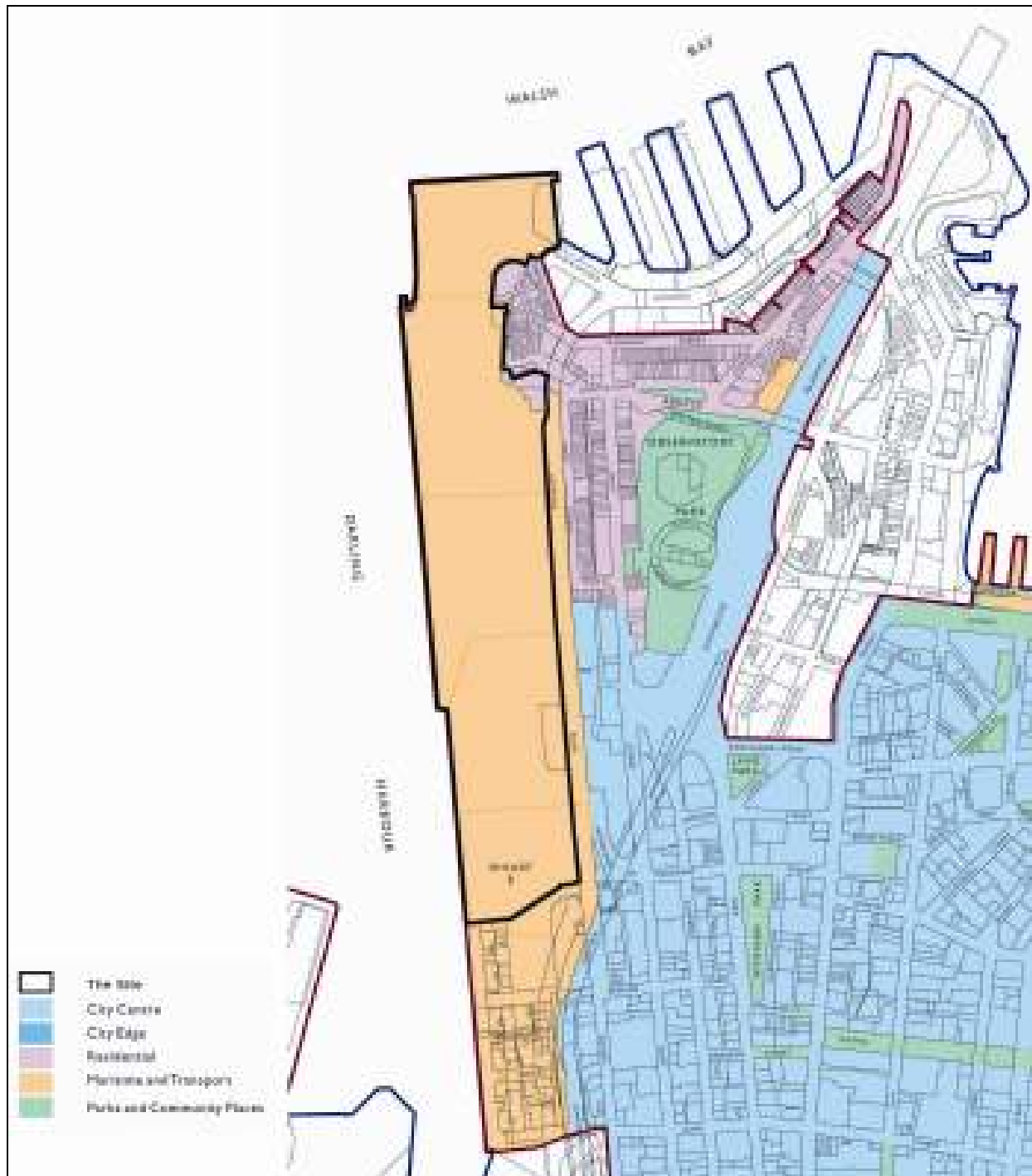


Figure 7 - Current zoning under Sydney Local Environmental Plan 2005

4.4 Director General's Environmental Assessment Requirements

On 30 June 2006 the Director General issued environmental assessment requirements (DGRs) pursuant to Section 75F of the Act. The key issues to be addressed in the DGRs issued related to:

- urban design, development controls and land uses;
- transport and access;
- Sydney Ports Corporation requirements;
- streetscape and public domain;
- heritage;
- social and community needs and impacts;
- soil contamination;
- drainage and stormwater management;
- utilities infrastructure;
- development staging; and
- planning agreements/developer contributions.

4.5 Other Relevant Legislation and Environmental Planning Instruments

Section 6 and **Appendix F** both set out the approval process, relevant consideration of legislation, environmental planning instruments and planning strategies as required under Part 3A of the Act.

5 CONSULTATION AND ISSUES RAISED

5.1 Lodgement

On 13 October 2006, the Proponent submitted an EA for the Concept Plan and a separate SSS Study. The lodgement of a separate EA and SSS Study was consistent with the DGRs.

5.2 Test of Adequacy

Section 75H of the Act specifies that, prior to exhibition, the Department is to conduct a "test of adequacy" to determine if the EA satisfies the DGRs.

A "Test of Adequacy" was undertaken by the Department which determined that the matters contained in the DGRs were adequately addressed in the Environmental Assessment prior to public exhibition.

5.3 Exhibition

Section 75H(3) of the Act requires that after the EA has been accepted by the Director General, the Director General must, in accordance with any guidelines published in the Gazette, make the EA publicly available for at least 30 days. The Director-General has not published any specific guidelines in relation to the public exhibition of EA for projects or Concept Plans.

The EA was publicly exhibited in accordance with Section 75H of the Act for 32 days from **19 October 2006 to 17 November 2006** at the following locations:

- **Department of Planning (Head Office)** Information Centre – 23-33 Bridge Street, Sydney.

The EA was placed on the Department's and SHFA's websites during the course of the exhibition period.

5.4 Notification

Notification of the exhibition of the EA and SSS Study was conducted in accordance with the requirements of Section 75H(3). The notification process was conducted in a manner generally consistent with the City of Sydney's notification policy, although the notification area greatly exceeded Council's requirements in its policy.

On 16 October 2006, the Department sent letters to 21 public agencies advising them of the exhibition of the EA and SSS Study.

On 16 October 2006, the Department sent letters to over 2,000 owners and occupiers of land surrounding Barangaroo informing them of the exhibition of the EA and SSS Study. These letters included details on the proposed development and how to make a submission.

The Department placed a notice in the public notices section of the *Sydney Morning Herald* and *The Daily Telegraph* on 18 October 2006. The advertisement provided details of the proposal, exhibition locations and dates, and how interested parties could make a submission.

5.5 Submissions Received and Issues Raised

In response to the exhibition period, the Department received:

- a total of 11 submissions from public agencies, namely Sydney Ports Corporation, NSW Maritime Authority, City of Sydney Council, Department of Housing, RailCorp, RTA, Ministry of Transport, Sydney Water, STA, NSW Heritage Office and the NSW Fire Brigades; and
- a total of 80 submissions from the public, of which 6 generally supported the proposed development, with the remainder being objections.

The issues have been broadly categorised as follows:

- Public Domain.
- Building Form – building heights, bulk and scale, and GFA.
- Overshadowing.
- Traffic and Public Transport.
- Heritage buildings/items.
- Views.
- Pedestrian Access and connections to surrounding areas.
- Contributions/Developer Agreements.
- Delivery of Infrastructure.

- Affordable Housing.
- Wind and obstruction of sea breezes.
- Soil Contamination.
- Air pollution.
- Accuracy of documentation.
- Social sustainability.
- Climate change/sea level rise.

A summary of submissions received is included at **Appendix D** (see **Tag D**).

5.6 Response to Submissions and Preferred Project Report

The Proponent was provided with copies of all agency submissions and a summary of public submissions. In certain cases where the information contained within the submission was too detailed to accurately summarise the Proponent was provided with a full copy of public submissions.

The Proponent was requested to respond to submissions in accordance with Section 75H of the Act and invited to submit a revised Statement of Commitments and preferred project report. On 12 January 2007, the Proponent submitted a Response to Submissions and a revised Statement of Commitments (**Appendix B**).

To fulfil the requirements of Section 75I Clause 2(b) this report includes advice provided by public authorities regarding the issues to be addressed by the proponent in the EA. These issues formed part of the key issues raised in the DGEARs. The Department has reviewed the EA, submissions to the preparation of the EA by public authorities, the submissions received from public authorities during the EA exhibition period and additional information provided by the proponent. Unless noted to the contrary below, the Department is satisfied that the responses provided by the proponent in their EA and the additional response to issues raised in submissions are reasonable.

6 ASSESSMENT

The Department has reviewed the EA and the Revised Statement of Commitments and considered advice from public authorities as well as issues raised in general submissions in accordance with Section 75I(2) of the Act. Consideration of each of the issues as they relate to the concept plan proposal is provided in **Section 6.2**.

Each relevant issue has been identified and duly considered followed by an explanation of how the proponent has sought to address the issue. Each subsection concludes with a statement on whether the issue is resolved or whether amendments are necessary by either modifying the Concept Plan or introducing new planning provisions in an environmental planning instrument.

6.1 Director General's Report

The Director-General is required under Part 3A to provide a report to the Minister for the purposes of deciding whether or not to grant approval of the concept plan pursuant to Section 75O(2)(a) of the Act. Section 75N of the Act provides that the scope of the Director-General's Report for a concept plan is the same as with respect to approvals to carry out a project pursuant to Section 75I(2) under Part 3A of the Act. The Act further stipulates that matters that the Director-General's Report is to address.

The Director-General's Report as it relates to Barangaroo has been prepared to satisfy these requirements. It has been prepared after reviewing the EA, SSS Study, and Response to Submissions, as well as additional information provided by the Proponents in conjunction with advice from public authorities and the issues raised in public submissions. Table 1 identifies how this Director-General's Report satisfies the criteria set out in Section 75I(2) of the Act.

Table 1 - Section 75I(2) requirements for Director-General's Report

Section 75I(2) criteria	Response
Copy of the proponent's environmental assessment and any preferred project report	The proponent's EA is included at Appendix E (see Tag E) while the preferred project report is set out for the Minister's consideration at Appendix C (see Tag C) along with the Statement of Commitments at Appendix B (see Tag B).
Any advice provided by public authorities on the project	All advice provided by public authorities on the project for the Minister's consideration is set out at Appendix D (see Tag D).
Copy of any report of a panel constituted under Section 75G in respect of the project	No independent hearing and assessment panel was undertaken in respect of this project.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project	A copy and brief assessment of each State Environmental Planning Policies that substantially govern the carrying out of the project is set out in Appendix F (see Tag F).
Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	An assessment of the development relative to the relevant environmental planning instruments is provided in Appendix F .
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The environmental assessment of the project is this report in its entirety.

While the principle of redeveloping Barangaroo and the public benefit it will offer the City was generally acknowledged, the majority of submissions raised issues with the proposal. The matters raised were similar in nature and revolved around the following key issues:

- Public Domain;

- Built form and design excellence;
- Traffic generation and management, including impact on local intersections and the surrounding local and regional road network;
- Public Transport;
- The bulk and scale of development and associated impact on views to and from historic areas and surrounding residential development;
- Pedestrian connections to and physical integration with the neighbouring Millers Point community and pedestrian links to Wynyard Station;
- Impact on neighbouring heritage items and areas of heritage significance; and
- Detailed requirements for and implementation/delivery of infrastructure to support the proposed development.

Unless noted to the contrary, the Department is satisfied that the responses provided by the Proponent in their EA and the additional response to issues raised in submissions are reasonable.

6.2 Key Issues

6.2.1 Public Domain

Raised By

Public submissions and the Department.

Consideration

The report handed down by the Jury for the design competition made three recommendations to improve or modify the winning design by Hill Thalys Architecture and Urban Projects P/L, Paul Berkemeier Architect and Jane Irwin Landscape Architect. The Jury considered that these recommendations were critical to the success of the project and are as follows:

- **Recommendation 1** - A natural headland form which touches the water at the northern end of the site;
- **Recommendation 2** - A large northern cove located directly behind the headland to further define the headland; and
- **Recommendation 3** - A larger intervention of the southern cove, located north of Napoleon Street.

While a number of changes have been made to the concept plan in an attempt to reflect the Jury recommendations, particularly to the form of the northern headland, the Department considers the concept plan still does not satisfactorily address the jury's recommendations. The Department concludes that the following further modifications are necessary:

- **Northern Headland:** Introduce a more naturalised shape and form of the northern headland, including a built-up height and the provision of a generous landscaped connection to physically link Clyne Reserve to the newly reformed headland;
- **Northern Cove:** Enlargement of the northern cove located directly behind the headland (located opposite Munn Street) and a greater naturalised shape and form.
- **Southern Cove:** Provision of a larger intervention of water (located to the north of Napoleon Street opposite Bull Street) and the promotion of appropriate ground floor uses to activate the foreshore area.

Modification to the Southern Cove will affect the distribution of GFA at the southern end of the site. This is discussed in **Section 6.2.2** below.

Resolution

The Department recommends that the Concept Plan be modified to ensure that jury recommendations in relation to the Northern Headland, Northern Cove, and Southern Cove are implemented.

The Department considers that the rezoning of Barangaroo should reflect the modified mixed use / public domain zone boundary to accommodate the enlargement of the southern cove.

6.2.2 Built Form

Raised by

Council, the Department and public submissions.

Consideration

Issue 1 – Blocks 2, 3 and 4

As discussed in **Section 6.2.1** the Department has responded to the jury's recommendations by including a number of modifications to the public domain. The modifications will result in the enlargement of the southern cove in to Building Blocks 3 and 4 (see **Figure 5**). This in turn may displace the GFA within these blocks. In response to this issue the Department recommends that the concept plan be further modified to allow for the redistribution of the displaced GFA across Building Blocks 2, 3 and 4.

Issue 2 – Building Controls

The Department's view is that the built form controls for each development block identified in *Section 13.3 – Development Block Controls* (pages 120-137) of the EA, should not be approved, although the overall floor space, height and uses should. The indicative built forms, particularly to the north, do not provide appropriate street edges to Hickson Road or the west. Not approving building forms allows for evolution of design excellence and the creation of more appropriate street edges and urban forms to Hickson Road and 'Globe Street'.

The Department recommends that modifications be incorporated that ensures future project applications comply with the following:

- Buildings are not to exceed the heights and GFA's identified in *Figure 12.1 – Development Blocks* (page 107) of the EA.
- Building designs are to address the principles outlined in *Section 13.0 – Built Form* (pages 112-116) of the EA and the following new design principle which requires buildings to provide a consistent street wall and form to Hickson Road and "Globe Street" and use a palette of consistent and natural materials that are complementary to the sandstone nature of the headland.
- Provide a comparison, and outline any variations from, the block controls outlined in *Section 13.0 – Built Form* (pages 120 - 137) of the EA.
- Be subject to design competitions and a policy of design excellence.

Council raised a number of issues that relate to the future design of the buildings, including:

- The removal of the requirement for colonnades along Hickson Road and replacement with a requirement for awnings, or an amendment to include detailed provisions controlling, the depth, height, location of columns and junction between colonnades and awnings (as required on the side streets).
- The inclusion of development block controls for Blocks 2, 3 and 4 to include a street wall with towers setback from it to create a buffer between high rise towers and a pedestrian's perception of the built form when walking along the street.

The Proponent has indicated that the provision of a colonnade or awning and other detailed provisions can be best detailed at subsequent stages of development. The Department's view is that the treatment of colonnades, awnings and podium heights needs to be consistent to ensure that the overall integrity of the precinct is retained, although this is best addressed in future project applications.

Issue 3 – Concept Plan Modifications

A number of submissions recommended specific modifications to the concept plan, in response to potential impacts (blocking views, overshadowing, curtilage and views to and from the AGL building, sunlight and privacy) of the proposed Barangaroo development on the neighbouring or nearby Bond Building, former gasworks (AGL) building, the building at 189 Kent Street and the Westpac Building at 275 Kent Street. The modifications recommended in the submissions include:

- a) A reduction of building heights at the southern end of the site.
- b) A break in the buildings along Hickson Road and the creation of a large southern cove to the north of Napoleon Street that extends to Hickson Road.
- c) A break in the buildings along Hickson Road and the connection of the extension of the waterfront to Hickson Road to provide an open space in front of the former Gasworks (AGL) building.
- d) provision of a flexible zone boundary to accommodate and foster innovative design responses for the future built form and public domain of the site and allow for flexibility in the Concept Plan, without undermining the design integrity of the southern end of the Barangaroo Precinct.

The Department's recommended modifications in **Section 6.2.1** include an expansion of the southern cove to the north of Napoleon Street. The Department's view is that the modifications suggested in submissions represents

too significant a diversion from the winning scheme and creates uncertainty in planning controls, and should therefore not be adopted.

Issue 4 – Design Excellence

Council raised concern about the potential for the future development to deliver a monotonous architecture across the site and recommended that a provision be included to require each individual building be designed by a differing architectural firm or alternatively set up a process for major sites to be subject to a design competition.

In response to these recommendations, the Proponent has committed to the preparation of a Design Excellence Strategy, which will be prepared and implemented in accordance with the arrangements outlined in **Section 6.2.14** and will include the following:

- the preparation of site specific design guidelines, and
- articulation of a process(es) for the conduct of design competition(s) for major developments and the design of public open spaces.

In addition to the above, the Department recommends that the concept plan be modified to incorporate the following design excellence criteria:

- Carrying out of design competition(s) for the following components of the development;
 - all buildings greater than 55 metres in height,
 - any development of land exceeding 1,500m² in area,
 - each block that is not covered by the above criteria, and
 - any significant changes to the concept plan.
- Establishment of a design review panel for the design excellence competition(s).

The Department recommends that the above design excellence modifications be incorporated for future development on the site to help promote vibrant spaces, places and interesting and innovative architecture.

Resolution

The Department is satisfied that the built form issues have been addressed through the modifications imposed to the concept plan.

The Department considers that the rezoning of Barangaroo should:

- reflect the modified mixed use / public domain zone boundary to accommodate the displacement of the GFA as a result of the enlargement of the southern cove; and
- include design excellence provisions.

6.2.3 Tourist/Community Uses and Residential Floorspace

Raised by

The Department.

Consideration

The Department acknowledges that one of the primary objectives of the proposal is to provide a majority of commercial uses across the site, which will have wider benefits to the CBD. The Department is concerned that this objective will be compromised if the proposal to provide for a minimum of 30,800m² of 'tourist uses' is retained without a cap. Therefore, the Department recommends that a maximum rate of 50,000m² for tourist uses be applied.

The Department considers that the concept plan should be modified to specify that 'tourist uses' not include serviced apartments, unless they are in single ownership and title (no strata titling). If they do meet these criteria they will be considered residential uses. Further, serviced apartments shall not exceed 12,500m² and are to have equivalent amenity standards to residential buildings.

Further, the minimum of 2000 m² allocated for community uses of a type acceptable to the Department and should be provided for in Block 6 or 7 or another block if approved by the Department.

The Proponent is permitted by the design competition parameters to allocate 25% of the total GFA on site to residential uses. This equates to 97,075m², while the Proponent has rounded this figure up to 100,000m² in the proposed concept plan. The Department has therefore recommended a modification to the concept plan reducing the maximum residential GFA in Block 3 to 9,575m².

Resolution

The Department is satisfied that these land uses issues have been addressed through the modifications imposed to the concept plan.

6.2.4 Traffic and Public Transport**Raised by**

Council, RTA, MoT, State Transit Authority, RailCorp, the Department and a number of public submissions.

Consideration

Concern is raised by a number of agencies and in many public submissions with regard to the cumulative effects of the Barangaroo development on the surrounding local and regional road and public transport system.

Issue 1 - Traffic

The principal vehicular access roads for the Barangaroo development are Sussex Street-Hickson Rd and Kent/York Streets. Hickson Rd currently carries some 700 to 800 vehicles per hour during peak periods of a weekday. This equates to approximately 7000 to 8000 vehicles per weekday on Hickson Rd.

Including the restrictive parking policy proposed in the concept plan (see *section 6.2.5* below), the total weekday peak hour traffic generation generated by the development is estimated to be 470 to 540 vehicles/hour (in + out), based on a Transport Report compiled by Masson Wilson Twiney (MWT). This equates to approximately 4500 to 5500 vehicles per day. Therefore, the combined (current and after) vehicle load on Hickson Rd totals approximately 12,000 to 14,000 vehicles per weekday. Local traffic modelling indicates that key intersections would not witness significant changes in levels of operation apart from Hickson Rd–Napoleon St intersection. Traffic modelling indicates that this intersection would need to be signalised to provide a reasonable level of traffic operation.

It is considered the street network around the site is able to accommodate the proposed development.

The Proponent's original Statement of Commitments specified the preparation of a Transport Management and Access Plan (TMAP) or equivalent at the development application stage/project application. The RTA and the Department's view is that the preparation of the TMAP at the project application stage is too late in the planning process. The RTA recommends, therefore, that it be undertaken at an earlier stage in the process.

The TMAP process is to provide further detail of mitigative measures to accommodate the increases in traffic. This is also appropriate as the floorspace approved allows for some flexibility between uses within the approved total, which may slightly alter the traffic movements.

The Proponent has revised the Statements of Commitments to specify that the TMAP be submitted to the Barangaroo Taskforce prior to the lodgement of any development application or project application on the site, other than for demolition or early site preparation works.

The Department recommends that this issue be reinforced by modifying the concept plan to specify that the TMAP be provided prior to or concurrently with the lodgement of the first major project application.

In terms of the preparation of the TMAP, the RTA note that the RTA's PARAMICS micro-simulation model of the CBD will need to be applied to build on the initial findings of the Traffic Study prepared by Masson Wilson Twiney, by investigating the following:

- a) A cohesive street network connecting land use components and local roads within and to external local and regional roads;
- b) Calculation of traffic generation;
- c) Identification of public transport service opportunities and constraints with a view to providing a high level mode of travel to public transport, walking and cycling;
- d) Likely traffic impacts on local and regional intersections;
- e) Identification of local and regional infrastructure improvements;
- f) The timing of traffic and public transport infrastructure improvements in line with the staged development of Barangaroo;
- g) The likely cost of infrastructure improvements and the identification of a funding mechanism.

The Proponent has responded to this request by agreeing to undertake an assessment of the area wide traffic impacts of the development on the CBD road network by applying the RTA's PARAMICS traffic model and investigating the above listed items. This assessment will be used in an iterative manner to identify specific measures to be implemented to appropriately regulate traffic.

Issue 2 - Public Transport

The proposal aims to provide a high level of non-car mode use to and from the site through the provision of a mix of uses including;

- pedestrian connections between the site and surrounding movement network (including to Wynyard Station);
- implementation of a restrictive car parking policy;
- analysis of opportunities for bus services;
- provision for facilities to support light rail on Hickson Road, should such a scheme eventuate.

A bicycle route will be created along Napoleon Street, Globe Street, the headland park and Hickson Road, as well as shared bike/pedestrian route along the foreshore promenade.

However, concern was raised in a number of submissions from Council, Sydney Buses, RailCorp, and the public that the Barangaroo proposal would generate significant transport requirements and adversely impact on existing public transport services during peak periods. These submissions state that the Proponent has not adequately assessed these requirements or impacts.

A number of specific issues were raised in relation to buses, ferries and rail, which are discussed below.

1. Buses

a) Extension of bus services and the location of bus stops along Hickson Rd.

In response to comments made by Sydney Buses and the Ministry of Transport (MoT), the Proponent has committed to Transport Management Plan and Access Plan addressing options for extension and amendment of bus services and the location of bus stops along Hickson Rd. The public transport strategy covers a wide range of potential changes/extensions to existing bus services which could provide a direct service to Barangaroo. Key likely changes are the extension of eastern/southern services from the QVB to Barangaroo, plus extension of northern bus services from Wynyard to Barangaroo.

b) Intersections

Sydney Buses raised particular concern about the potential impacts that the Barangaroo development will have on the Napoleon Street and Margaret Street intersections as these intersections are identified as one of the main access routes for Barangaroo and are already at saturation point during the morning and afternoon peak. Sydney Buses also noted that the traffic assessment does not include the key junctions for buses of Clarence and Margaret Streets and York and Margaret Streets.

In response, the Proponent has agreed through the revised statement of commitments for the TMAP to investigate the likely traffic impacts on the local and regional intersections, including the key junctions for buses on Clarence and Market.

c) Off-road layover facilities

The MoT and Sydney Buses requested that off-road layover facilities be provided within the development for up to 20 buses, which should preferably be an out-of-sight drive-through at-grade or basement arrangement, preferably integrated into a multi-deck car park. In response to this issue, the Proponent has specifically agreed to consider the provision of off road layover facilities.

2. Ferries

In response to a request from the MoT, the Proponent has committed to the TMAP considering and addressing the provision of at least one public ferry wharf. The commitments also specify that the future role of this wharf and any necessary adjustments to the ferry timetable are to be determined through further consultation with relevant agencies.

3. Rail

The State is currently investigating a further CBD heavy rail link to augment rail facilities in the CBD, which is taking into account expected increases in CBD growth, including at Barangaroo.

Railcorp and Council have raised concern about the proposed high rise towers obstructing future construction of the most likely alignment of the Proposed River Metro Line, which was previously identified as a possible corridor location in the Long Term Strategic Plan for Rail (OCGR 2001). Council and Railcorp have requested that the Proponent investigate the preservation of the possible future alignment of the design of building foundations. In response to this issue, the Proponent has revised the Statement of Commitments to ensure that the TMAP will consider and address the feasibility of the river metro route and the need to protect the possible future alignment.

Railcorp has also requested the imposition of two requirements which relate to service searches and entering into a deed with Railcorp. The Department recommends that these requirements be included as modifications to the concept plan.

Resolution

The Department is satisfied that the traffic and public transport issues have been addressed through the revised statement of commitments and the modifications imposed to the concept plan.

6.2.5 Car Parking

Raised by

The Department and Council.

Consideration

The Department is concerned that the proposed parking rates for Barangaroo should not allow greater parking spaces for residential and commercial buildings than would otherwise be allowed by the City of Sydney's parking code.

The concept plan proposes a restrictive parking policy as follows:

- 2,233 on-site parking spaces for all uses
- 460 parking spaces for commercial; 771 for residential; 146 for hotel; 300 public spaces under headland; 400 on-street spaces; 16 public buildings; 140 Ports parking (retained)

Council's DCP would normally allow:

- 2,682 on-site parking spaces for all uses
- 1,065 parking spaces for commercial (even allowing for a reduction for site area after the development); 771 for residential; 146 for hotel; 300 public spaces under headland; 400 on-street spaces; public buildings n/a; Ports parking (retained) – n/a

Therefore the concept plan rates for commercial parking are significantly stricter than Council's parking rates, allowing **605 less commercial spaces**.

Resolution

A satisfactory car parking rate is proposed in the concept plan.

6.2.6 Views

Raised by

Council, the Department and public submissions.

Consideration

Council, the Department and a number of public submissions raised concern about the impact the proposed development will have on the views. In particular, the potential impact on views from residential units in Kent Street (Stamford on Kent) and the Bond Building on Hickson Road.

Many comments indicated that the view impact analysis undertaken by the Proponent takes insufficient account of views to and from anywhere within Millers Point except Observatory Hill (the highest point). Important views and vistas include panoramic views from Hickson Road and Merriman Street, as well as views down Argyle Street/Argyle Place.

Many submissions highlighted that the view corridors presented in the concept plan are primarily north-south at the southern end of the site. These submissions recommended that further consideration should be given to the preservation of east-west view corridors between buildings.

In response to the issues raised in relation to views, on 22 December 2006 the Proponent lodged a *Supplementary View Impact Analysis* (prepared by JBA Urban Planning Consultants, January 2007). This analysis concludes that the concept plan provides:

- Public access for the first time on a major section of city harbour foreshore, which will create many new views from the site thereby providing a new appreciation of the harbour and Millers Point.
- Improved views to the site by the removal of the existing warehouse structures, and the appreciation of the Millers Point headland cutting will be increased by establishing immediate views from the proposed parklands.
- Views across the site from the harbour to Millers Point or Observatory Hill Park, or from Observatory Hill Park and Millers Point to the opposite harbour foreshores, by the removal of the existing sheds and the location of new buildings to the south of the site or buildings of a low scale towards the northern end.
- A new road and pedestrian path network, which connects into the existing street pattern extending and interpreting the planned and lost street alignments. Access into the site via historic paths such as Munn Street and the High Street pedestrian bridge. Views and vistas will be retained, enhanced and established throughout this public domain network.

The Proponent argues that the planning and urban design approach for the urban renewal of Barangaroo has been one that seeks, first and foremost, to ensure that future development retains, enhances and / or creates significant views to and from the site from the public domain.

While the concept plan represents significant private view loss to some buildings, the enhancement and establishment of public views, view corridors and vistas along streets and pedestrian connections, and from other existing public open spaces have been protected. Private views cannot be guaranteed or protected, but need to be considered in determining the public benefits of a proposal.

It is worth noting that the concept plan represents the maximum potential building mass that can be achieved on the site and view impacts are likely to be less in net terms.

There is also an opportunity for future applications to design buildings in a manner that considers views and accommodate view corridors to the west.

The *Supplementary View Impact Analysis* (prepared by JBA Planning, January 2007) provides a sound rationale for the precedence of public good of the development over private good. Whilst it acknowledged that the proposed Barangaroo redevelopment will result in substantial view loss, on this occasion the Department accepts the impacts.

Resolution

The Department is satisfied that this issue has been adequately addressed by the Proponent.

6.2.7 Pedestrian Access

Raised by

The Department, Council, Railcorp and a number of public submissions.

Consideration

Three issues have been raised that relate to pedestrian access. These issues are discussed below and include: pedestrian connections, pedestrian circulation and integration with surrounding areas and the use of pedestrian bridges.

Issue 1 - Pedestrian Connections

Council and Railcorp have indicated that pedestrian access between Wynyard Station and Barangaroo by footpath and the existing Kent St pedestrian tunnel are unlikely to be sufficient for the expected weekday pedestrian volumes associated with the development, and are very unlikely to be adequate for special events.

The existing major constraints of the surface and tunnel access between Wynyard Station and Barangaroo are summarised as follows:

Surface route

- The climb from Kent St to Wynyard Station along Margaret St is a significant deterrent for many people due to the steepness of the climb, especially for those with a low to moderate mobility limitation.
- For those people who do not know the escalator/lift options via buildings to pedestrian bridges over Hickson Rd, the alternative street options are via Napoleon St and the Hickson Rd staircases, which are quite steep.
- Pedestrian safety is an issue at the signalised intersections, given that pedestrians tend to walk illegally against red lights rather than waiting for the signals to change.
- High traffic volumes (and speeding) to/from the Harbour Bridge can also create significant conflict points with large pedestrians' volumes trying to cross these streets.
- Crossing Kent St involves at least one signalised intersection resulting in both delay to pedestrians and the potential for road accidents with pedestrians illegally walking against red lights.

Existing Wynyard - Kent St Tunnel

- The capacity of the existing pedestrian tunnel is constrained in locations where it gets very narrow.

In order to address the pedestrian access issue between Barangaroo and Wynyard station, further consideration needs to be given to:

- the engineering feasibility of widening the pedestrian tunnel, particularly given its proximity to adjacent buildings;
- The potential for a high capacity grade separated pedestrian connection between Wynyard Station and Hickson Road to supplement the existing low capacity link from Wynyard Station to Kent Street;
- The provision of a new pedestrian tunnel from Wynyard Station concourse, under Margaret St through to Barangaroo; and
- improving the surface access.

In response to this issue the Proponent has revised the commitments to ensure that off-site improvements will facilitate pedestrian access between the site and Wynyard Station will be considered and addressed (where relevant) as part of the Transport Management and Access Implementation Plan and Utility Services Infrastructure Plan.

Issue 2 - Pedestrian Circulation and Integration with Surrounding Areas

The proposal identifies at-grade pedestrian connections along 'Globe Street' to link the site to existing development at the north end of Millers Point and Walsh Bay and also to the south and King Street Wharf and onto the CBD and Darling Harbour. However, Council highlighted the need for pedestrian connections to ensure circulation and integration between the existing and new fabric. In particular, the connections between the existing built fabric of Millers Point and the CBD.

In response to this issue the Proponent has revised the commitments to ensure that off-site improvements will facilitate pedestrian access between the site and neighbouring precincts, including Millers Point, the Rocks, Circular Quay and Dawes Point will be considered and addressed (where relevant) as part of the Transport Management and Access Implementation Plan and Utility Services Infrastructure Plan.

The Department also recommends that the concept plan be modified to provide a "land bridge" that physically links Clyne Reserve to a newly formed northern headland, to allow direct pedestrian access from Argyle Place. This pedestrian link will help minimise the physical barrier created by the dramatic cliff topography on the eastern side of Hickson Road at the edge of the site and encourage pedestrian circulation between the northern end of the site and the surrounding areas.

Issue 3 - Pedestrian Bridges

The proposal identifies five new upper level pedestrian connections across Hickson Road between Munn and Merriman Street, 'Globe Street' and High Street and 'Globe Street' and Dalgety Road. The Proponent argues that these pedestrian connections will integrate and link the new Barangaroo urban precinct and public domain to Millers Point and surrounding areas by minimising the physical barrier created by the dramatic cliff topography on the eastern side of Hickson Road.

However, the Department is concerned that upper level pedestrian connections across Hickson Road may have a negative impact on streetscape quality, views and vistas along Hickson Road and may remove pedestrians from the street, which in turn would reduce street activation and public safety.

In addition, if pedestrians are forced into privately owned buildings where the owner potentially controls their path of travel and without provisions managing the detail of these "private" paths, they often result in circuitous routes which are closed after business hours (rendering the footway as an unsafe dead-end). This would be contrary to the principles in the winning design entry.

The Department recommends that the concept approval not approve pedestrian bridges and the assessment of east-west connections be considered with the public domain works. The issues raised in submissions will need to be addressed when preparing the public domain plan.

Resolution

The Department is satisfied that the Proponent has adequately addressed this issue through the revised Statement of Commitments and modifications imposed to the concept plan.

6.2.8 Heritage

Raised by

Council, public submissions, Department of Housing, National Trust of Australia (NSW)

Consideration

Submissions received from Council, the Department of Housing, the National Trust of Australia (NSW) and the public have raised issues in relation to five identified heritage items, including items of State heritage significance and the adjoining State Heritage Register (SHR) listed precincts of Millers Point and Walsh Bay.

These issues are discussed below and include: the sewage pumping station; former gasworks (AGL) building; Hickson Road; proposed pedestrian access bridge through Moreton's Hotel; and the impact of the proposal on views and the adequacy of the Heritage Impact Statement (HIS).

Issue 1 - Sewage Pumping Station

Council and the Heritage Council have raised concern in their submission that the concept plan proposes the demolition or relocation of a heritage listed sewage pumping station located at 1A Dalgety Road to facilitate the construction of the park at the northern end of the precinct.

In response to a request from the Heritage Council regarding this issue, the Department recommends that the concept plan be modified to ensure that the plans prepared for the northern headland public domain works consider the impact on and the treatment of the sewage pumping station in future plans to the satisfaction of the Department.

Issue 2 – Former Gasworks (AGL) Building

The National Trust and a public submission raised concern about the concept plan and accompanying HIS having not assessed the impact of the proposal on the five-storey sandstone building which was the headquarters of the former gasworks (AGL) due to this building being listed as a heritage item on the State Heritage Register.

In response to this issue the Department recommends that a modification be imposed on the concept plan that ensures the Proponent provide the Department with a consolidated concept plan that includes the heritage listed former gasworks AGL building.

The primary concern raised in the above submissions is the impact on the views from the AGL building to the harbour and from the harbour to the building. As discussed in **Section 6.2.6**, the Proponent lodged a supplementary View Impact Analysis which includes an analysis of the view impacts affecting the AGL building. The analysis explains the existing views down Gas Lane have been preserved by the proposed concept plan, which incorporates a new street (Healy Street), which aligns with Gas Lane providing an uninterrupted public domain view to the water. Whilst it is acknowledged that the proposed concept plan will inevitably result in an impact on views to and from the AGL building, on this occasion the Department accepts the impact.

Issue 3 – Hickson Road

A number of submissions raised concern about the proposal to line the western side of Hickson Road with a wall of tall buildings separating Hickson Road from the water and creating an adverse impact on several heritage buildings along Hickson Road and the sandstone wall at its northern end.

In order to address this issue the Heritage Council recommends that:

- a) building heights along Hickson Road be kept modulated to manage the relationship between the new precinct and the old; and
- b) the concept plan keep the heights of the new buildings below that of the lowest part of High Street (near Kindergarten) so that the tiered and tightly textured landscape of the precinct is respected.

In response to issue a) above, a modification to the concept plan is recommended detailing that specific built forms are not approved as part of the concept plan. This is due to concern that appropriate street edges and forms are not provided to Hickson Road and 'Globe Street'.

With regards to point b) above, the Department's view is that the reduction in building heights recommended by Heritage Council would be a significant diversion from the winning scheme, and should therefore not be adopted.

.Issue 4 – Pedestrian Access Bridge to Moreton's Hotel

Council has raised concern about the proposed pedestrian access through Moreton's hotel, which may have adverse affects on the heritage significance of the State Heritage Register listed hotel.

The Department recommends that the concept approval not approve any pedestrian bridges across Hickson Road (including the pedestrian bridge proposed to pass through Moreton Hotel) and the assessment of east-west connections be considered as part of the planning for the public domain works. The issues raised in submissions will need to be addressed by the Proponent when preparing the public domain plan.

Issue 5 – Concept plan Heritage Impact Statement

Council has stated that the HIS submitted with the concept plan does not take into account the *Millers Point & Walsh Bay Heritage Review* undertaken by Paul Davies Pty Ltd for the City (public exhibition 6 September 2006 to 25 October 2006), which includes a new Heritage Inventory sheet for the Millers Point/Walsh Bay Heritage Conservation Area and should be referred to as part of any preparation of any project/ development applications for the Barangaroo site.

In response to this issue the Proponent has clarified that the HIS had not been completed at the time of exhibition. The updated HIS was provided with the Proponent's Response to Submissions and consists of a number of heritage assessments of Millers Point which include State Heritage Register listings, Sydney Local Environmental Plan 2005 – Special Character Area Statement and the Department of Housing Millers Point Conservation Area Guidelines.

To address this issue the Department recommends that a modification be imposed on the concept plan that ensures the Proponent provide the Department with a consolidated concept plan that includes the correct version of the Heritage Impact Statement (HIS) (*East Darling Harbour History*, by Sydney Harbour Foreshore Authority, unpublished document, July 2006).

Resolution

The Department is satisfied that the Proponent has adequately addressed this issue through the revised Statement of Commitments and modifications imposed on the concept plan.

6.2.9 Overshadowing

Raised by

Public submissions.

Consideration

A number of public submissions raised concern about the overshadowing impacts of the high rise commercial buildings at the southern end of Barangaroo on neighbouring properties to the south at King Street Wharf (which include commercial and residential development).

Concern was also raised about the proposed buildings at the southern end of the Barangaroo site casting a shadow over Westpac Place (to the south-east) and the proposed overseas passenger terminal (located at the southern end of the Barangaroo site, on the western foreshore).

An overshadowing analysis for the concept plan has been undertaken as part of the Environmental Assessment. The overshadowing analysis identifies the maximum area within which shadows may potentially be cast by buildings within the block control envelopes included in the concept plan. However, the maximum potential extent of overshadowing can not be fully realised at this stage of the assessment as the development controls contained within the concept plan do not allow for an end buildings design to fill the maximum permitted envelopes.

The overshadowing analysis demonstrates that the most significant impacts are to the south and south-east, primarily on commercial buildings in King Street Wharf and on Sussex and Kent streets. Residential buildings in King Street Wharf will generally only be overshadowed in the morning (up until 1pm) in mid-winter. The Westpac building will only be overshadowed from 2pm onwards by development on Barangaroo.

The Department acknowledges that there will be some overshadowing impact on surrounding properties as a consequence of the Barangaroo concept plan, however considering the CBD locality these impacts are deemed to be acceptable. More detailed analysis of the overshadowing impacts of individual buildings, and of solar access achieved within the Barangaroo site, will be provided at subsequent stages of the development through the assessment of individual project applications. The Proponent's Statement of Commitments incorporates recommendations with respect to future solar access criteria for the project.

Resolution

The detailed analysis of the overshadowing impacts of individual buildings, and of solar access achieved within the development will be provided at subsequent stages of the development. It is inevitable that some additional overshadowing will occur to the south and south-east, however a key feature of the winning design for Barangaroo was the concentration of high-rise commercial buildings at the southern end of the site. The overshadowing impacts are considered acceptable.

6.2.10 Wind

Raised by

Public submissions.

Consideration

Some public submissions raised concern regarding the impact of wind effects as a result of the proposed concept plan. In particular, the impact of the proposed building mass on the wind environment within Barangaroo is of concern to the public.

In summary the following concerns were raised from the public submissions:

- Concept plan does not adequately address wind funnelling;
- Concern is raised for buildings greater than 19 levels that are prone to extreme gusts from the west;
- High velocity winds are a problem at this end of the city – mostly in August and September;
- The bulk and height of building envelopes (particularly those greater than 100 metres) are likely to cause wind tunnel effects;
- The proposal is inconsistent with the Central Sydney Strategy Principle 21 which seeks to avoid the creation of walls of high buildings around the edge of the CBD which would obstruct sea breezes and concentrate high winds in the parklands and Darling Harbour.

The Proponent submitted with the Environmental Assessment a report on Wind Effects by Windtech dated September 2006. The Wind Effects report presents a preliminary assessment of the existing wind environment within the Barangaroo precinct. The report has highlighted potential areas of concern and made some general suggestions to assist in the future design process.

The Proponent has committed to undertaking wind tunnel modelling and verification of proposed treatments at the building design stage. In addition the Statement of Commitments requires any development proposal for the southern portion of the site to undertake a wind tunnel study carried out in accordance with the procedures outlined in the recognised industry guidelines and submit a report with their application.

Resolution

The Department is satisfied that the Proponent has adequately addressed this issue.

6.2.11 Affordable Housing**Raised by**

Department of Housing

Consideration

The Department of Housing explain in their submission that they own approximately 300 properties in the suburb of Millers Point, which directly adjoins Barangaroo. These properties represent 94% of the housing stock in the Millers Point community and comprise a mix of houses terraces, rooming houses, shops and offices.

The Millers Point area directly adjoins the proposed residential component of the Barangaroo proposal, and this has the potential to create a social divide.

Since the exhibition of the Barangaroo Concept Plan, the NSW Government has released A New Direction for NSW - State Plan (November 2006), which will guide the delivery of government services over the next 10 years. Housing Affordability is identified as a priority (Priority A6) in the NSW State Plan and the NSW Government has specifically agreed to "consider the potential for a significantly expanded role for the community housing sector in the provision of stable and affordable housing. Future growth in this sector could see it developing new, affordable stock for households who are experiencing *housing stress*. *It is intended that growth in this sector will rely principally on long term private investment*".

Resolution

The proposal is predominantly for non-residential development. Public housing is provided for in the locality. The provision of any public or subsidised housing is a matter between SHFA and the Department of Housing.

6.2.12 Ecologically Sustainable Development**Raised by**

The Department, Council and a number of public submissions.

Consideration

While this report generally represents an assessment of ecologically sustainable development, it is considered appropriate to consider the Concept Plan in light of the DGRs requirements that the EA should demonstrate the Concept Plan for Barangaroo address issues of sustainable development, drainage and stormwater issues (inclusive of WSUDs).

The Proponent in the EA proposes that the Concept Plan will achieve the following sustainable development principles and has made commitments to this effect in the Statement of Commitments.

- Ensure potable water, stormwater and wastewater infrastructure is leading edge.
- Ensure development incorporates best practice environmental methods and criteria.

The Commitments require an ESD report to be lodged with each project application that demonstrates how it satisfies each of the following key performance indicators:

- Green Star Office Design and Office As Built Ratings, including 5 star +20% predicted ABGR rating for commercial buildings (energy use).
- 10% improvement on BASIX requirements and at least 60 weighted points on the City of Sydney DCP rating tool (5 Star equivalent) for residential buildings.
- A 35% reduction in potable water consumption compared to standard practice.
- A 35% reduction in Greenhouse Gas Emissions compared to standard practice.
- A 20% of power purchased from low impact, renewable sources or 20% reduction in GHG emissions through carbon offsets. The purchase of renewable energy should be at worlds best practice level.
- Ensure that there is sufficient public transport to achieve points under the public transport credit for Green Star rating tools for commercial buildings and future Green Star tool for residential buildings.

The Proponent includes a WSUD for Barangaroo that seeks to integrate the management of the three urban water streams of potable water, wastewater and stormwater. It is based in the following principles as outlined in the EA:

- Demand for potable mains water will be reduced within the development the use of water efficient appliances and fixtures throughout the development, and using alternative sources of water based on matching water quality to uses on a "fit-for-purpose" basis.
- An investigation of schemes to manage wastewater from the residential and commercial buildings as a resource, with wastewater treated and recycled as an alternative source of non-potable water for irrigation of public open space.
- Investigation of on-site treatment of stormwater from external catchments to Millers Point to national best practice standards.
- Investigation into the opportunities to integrate the design of WSUD elements into the public domain.

The Department has considered these points and notes that the Proponent has made commitments to ensuring that these targets and measures are implemented on Barangaroo. Consequently the Department is satisfied that the proposal is consistent with ESD principles and WSUD objectives for Barangaroo.

Resolution

The Department considers the concept plan has adequately addressed ecologically sustainable development principles.

6.2.13 Infrastructure Plan, Contributions/Developer Agreements

Raised by

Council, NSW Maritime, Sydney Water, Sydney Ports Corporation, Railcorp, the Department of Housing State Transit.

Consideration

Most agencies raised concern that the Infrastructure Plan identified in the Proponent's original Statement of Commitment's did not adequately address relevant agency issues including funding arrangements and requested ongoing consultation and involvement in the redevelopment of Barangaroo. The Department and Council also raised concern with regards to the extent of the Infrastructure Plan being limited to within the site.

Issue 1 - Adequacy

The Department and a number of agencies have identified that further consideration needs to be given the delivery of:

- Road/rail/pedestrian infrastructure;
- Public transport issues;
- Pedestrian connections;
- Carparking;
- Utilities and infrastructure;
- Social facilities;
- Affordable housing;
- Future development/management of the ports facility; and
- Affordable housing.

In response, the Proponent has committed to preparing the following implementation plans;

1. Public Domain Plan;
2. Transport and Access Plan;
3. Community and Social Plan; and
4. Utility Services Infrastructure Plan.

The purpose of the four above implementation plans are to:

- Verify the scope and accurately cost all of the social and physical infrastructure needed to support the proposed development ,

- Identify the relevant requirements for timing / staging of provision of that social and physical infrastructure,
- Identify any relevant Government agency policy initiatives that will be required to be in place to deliver specific outcomes,
- Provide details with respect to the funding mechanism(s) for delivery of the identified infrastructure; and
- Provide sufficient detail to enable the Sydney Harbour Foreshore Authority to enter into planning agreements with developers, relevant Government agencies, the City of Sydney and the Minister for Planning if required, to obtain contributions towards the provision of infrastructure either through a cash contribution or works-in-kind or both.

In terms of developer contributions/funding mechanisms, the Department is satisfied that the level of detail required for the proponent to enter into a planning agreement will be determined as part of the preparation of the infrastructure plans, which will be finalised prior to the lodgement of any application relating to buildings or establishment of public domain works.

The principle should be that development provides for infrastructure needed directly attributable to it. It is noted however, that major public benefit is being provided by the redevelopment in the form of an 11ha public park.

Issue 2 - Ongoing Agency Consultation

In terms of future agency consultation, Council and a number of agencies requested that further consideration be given to a more formal and effective consultation mechanism that ensures all the relevant units of Council and relevant agencies are able to contribute to the evolution of aspects of the development.

In response to this issue the Proponent has established the implementation arrangements outlined in **Section 6.2.14**, which are to be put in place to ensure the appropriate involvement of Government agencies and infrastructure providers. In summary, the arrangements involve the establishment of a working group made up of relevant agencies for the preparation and implementation of the four implementation plans listed above. In addition, the Proponent has specifically committed to ongoing consultation and information sessions with relevant agencies.

Issue 3 – Off-Site Works

The Department and Council raised concern regarding the extent of the proposed Infrastructure Plan being limited to within the site and the lack of commitment to consider the provision and financing of off-site infrastructure required as a result of the redevelopment of the subject site. For example, the major public domain improvements that would be necessary to improve access between Barangaroo and Wynyard Station.

In response to this issue the Proponent has revised the commitments to ensure that the need for off-site infrastructure improvements relating to vehicular and pedestrian movement will be considered (where relevant) as part of the Transport Management and Access Implementation Plan and Utility Services Infrastructure Plan

Resolution

The Department is satisfied that this issue has been adequately resolved through the revised Statement of Commitments.

6.2.14 Implementation/Delivery of Infrastructure

Raised By

The Department, Council, the Department of Housing, RTA

Consideration

Council, the Department, the Department of Housing and the RTA raised concern about the establishment of a mechanism for the delivery of infrastructure that addresses the timing, establishes terms of reference and identifies relevant agencies that will be consulted with for relevant components of the project as it progresses.

The Proponent has responded to this issue by revising the Statement of Commitments to incorporate governance arrangements for the preparation and execution of the Implementation Plans. The arrangements are identified in **Figure 8** and involve the establishment of Technical Working Groups, which report to the Barangaroo Taskforce, to prepare the four implementation plans listed in **Section 6.2.13**.

The Governance arrangements will also be adopted for the implementation of the following policies:

1. Geotechnical and Environmental Site Remediation;

2. Design Excellence Strategy;
3. Integrated Water Management Plan/WSUD Guidelines;
4. Housing Strategy;
5. Marketing and Promotions Strategy; and
6. Retail Management Plan.

Resolution

The Department is satisfied that the mechanism for the delivery of infrastructure has been adequately established through the revised set of Commitments.

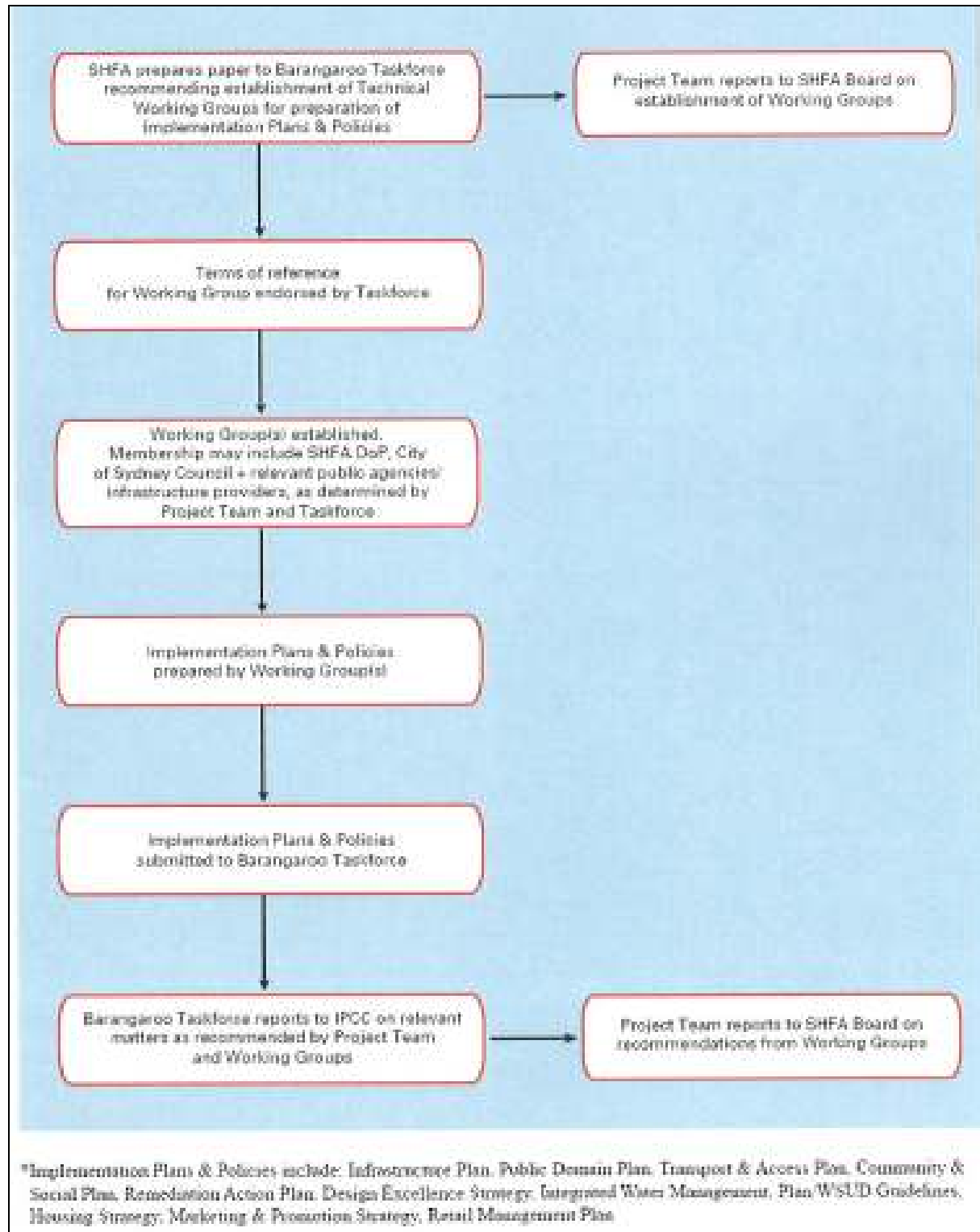


Figure 8 - Governance arrangements for implementation plans and policies

7 CONCLUSION

- 7.1 The Department has reviewed the environmental assessment and the preferred project report and duly considered advice from public authorities as well as issues raised in general submissions in accordance with Section 75I(2) of the Act.
- 7.2 Key issues raised in submissions related to bulk and scale, public park, built form, loss of views, traffic generation, public transport, pedestrian access and connections, impact on heritage items and conservation area, infrastructure requirements and developer contributions.
- 7.3 On 12 January 2007 the Proponent lodged a response to the issues, which included a revised statement of commitments to a number of measures to ensure the development proceeds smoothly and does not adversely impact on local amenity and landscapes adjacent on the site.
- 7.4 All the relevant environmental issues associated with the proposal have been extensively assessed. In balancing the State significant planning outcomes with the issues raised in the body of this report, the Department is of the view that the proponent has satisfactorily mitigated the environmental impacts arising from the scheme.
- 7.5 In assessing the proposal, the Department has resolved any outstanding environmental issues through recommended modifications to the Concept Plan. The recommended key modifications include:
1. **Northern Headland and Cove:** Design changes to create a more naturalised and raised headland and an enlarged and more naturalised form of the northern cove and a pedestrian link from Clyne Reserve to the new reformed headland.
 2. **Southern Cove:** Expansion of southern cove.
 3. **Built Form:** Ensuring appropriate street edges are provided to Hickson Road and 'Globe Street'.
 4. **Design Competition:** Design excellence conditions imposed to promote vibrant spaces, places and interesting and innovative architecture.
- 7.6 Recommended modifications to the Concept Plan are provided at **Appendix A**. The reasons for the imposition of modification are to encourage good urban design, maintain the amenity of the local area and adequately mitigate the environmental impact of the development.

8 RECOMMENDATION

It is recommended that the Minister for Planning:

- a) **consider** the findings and recommendations of this report in regards to the Concept Plan.
- b) **grant** approval for the concept plan pursuant to s.75O(1), subject to modifications by signing the Instrument of Approval at **Appendix A** (see **Tag A**).
- c) **determine**, that approval to carry out the remainder of the project or stages of the projects with a capital investment value:
 - (i) of \$5 million or more is, pursuant to section 75P(1)(a), to be subject to Part 3A of the Act;
 - (ii) less than \$5 million is, pursuant to section 75P(1)(b), to be subject to Part 4 or Part 5 of the Act ;
- d) **Note** that the proposed listing of the site within Schedule 3 of the Major Projects SEPP will be pursued separately; however this does not preclude the Minister from approving the concept plan for subdivision prior to the SEPP amendment.