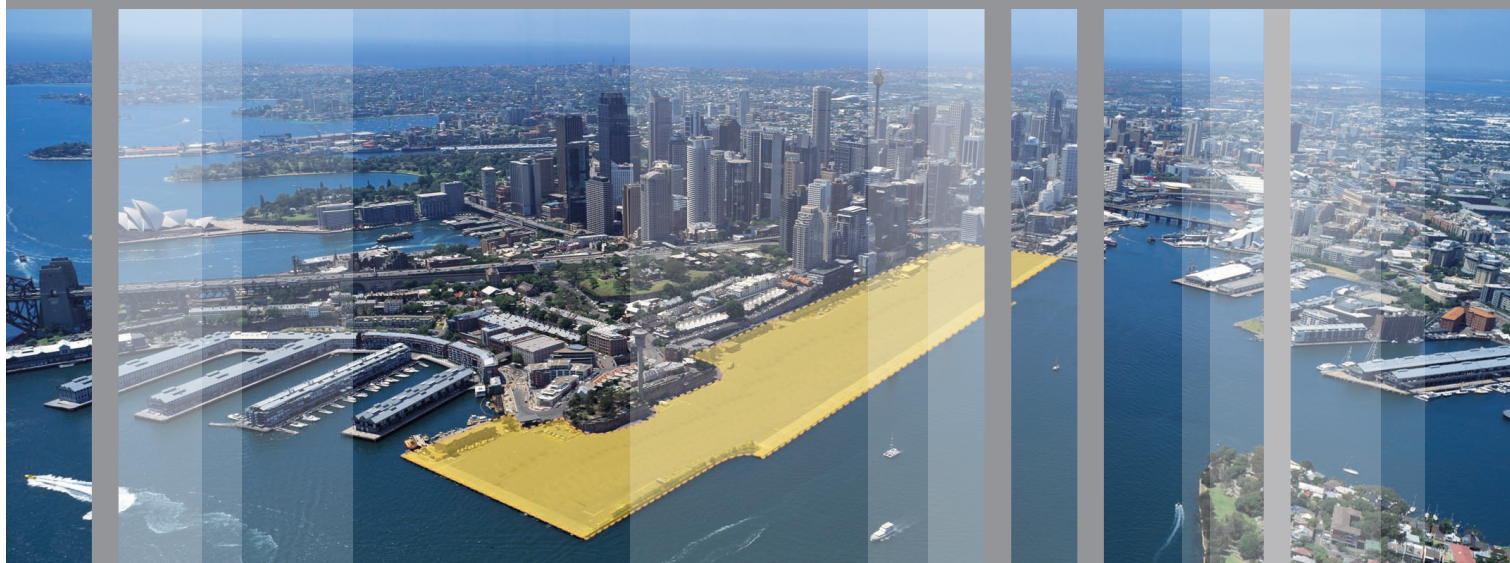


October
2008

Barangaroo Part 3A Modification – Commercial FS



PREFERRED PROJECT REPORT



Harbour Foreshore Authority



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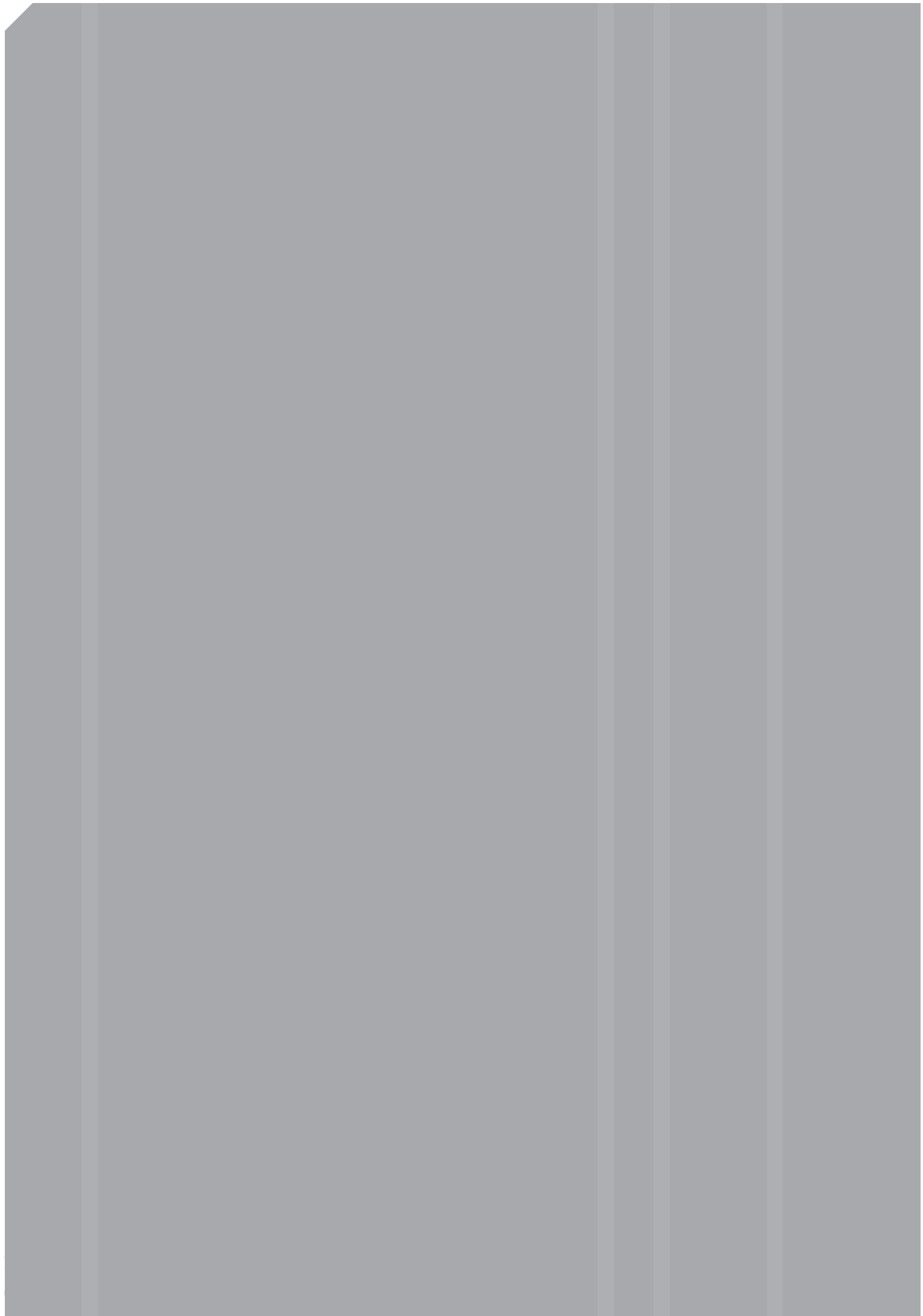
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GLOSSARY

CCP	Consolidated Concept Plan
DGR's	Director-General's Environmental Assessment Requirements
EA	Environmental Assessment
EDH	East Darling Harbour (now Barangaroo)
EOI	Expression of Interest
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
ESD	Ecologically Sustainable Development
Foreshore Authority	Sydney Harbour Foreshore Authority
GFA	Gross Floor Area
LEP	Local Environmental Plan
m2	square metres
Major Projects SEPP	State Environmental Planning Policy (Major Projects) 2005
The Minister	The Minister for Planning
Modification	The modification proposed to the Approved Concept Plan pursuant to Section 75W of the EP&A Act
MR	Modification Report dated June 2008
MoT	Ministry of Transport
SEPP	State Environmental Planning Policy
Terms of Approval	The terms of approval issued by the Minister for the Approved Consolidated Concept Plan
RTA	Roads and Traffic Authority
TAWG	Barangaroo Transport and Access Working Group
TMAP	Transport Management and Accessibility Plan



1. INTRODUCTION

This Preferred Project Report has been prepared on behalf of the Sydney Harbour Foreshore Authority (the Authority) following the exhibition of the Modification Report and supporting documentation for the proposed modification to the Barangaroo Consolidated Concept Plan. The proposed modification seeks to modify the approved Concept Plan for Barangaroo by increasing the allowable commercial floor space for Blocks 2, 3, 4 and 5 by 50,000m² to 120,000m² GFA. The additional commercial floor space is being sought to enhance the growth and availability of commercial floor space in the CBD, to augment Sydney's CBD as a premier commercial centre in the Asia Pacific Region and in response to transport initiatives outlined in the 2006 Urban Transport Statement, Metropolitan Strategy and Draft Sub-Regional Strategy for Sydney City.

The Project was exhibited from 16 July to 15 August 2008. A total of 64 submissions were received during the exhibition period.

1.1 Summary of Submissions

Submissions were received from government agencies and authorities, community groups and members of the general public, as summarised below:

Authorities and agencies	10
Public submissions/community interest groups	52
Development industry	2

Submissions were received from the following government authorities or agencies:

- City of Sydney
- Sydney Water
- Sydney Regional Development Advisory Committee
- Sydney Buses
- NSW Department of Housing
- Heritage Council of NSW
- Sydney Ferries
- NSW Rural Fire Service
- Ministry of Transport
- Sydney Ports

With the exception of two submissions, from the Property Council of Australia and the Urban Taskforce which supported the proposal, all public submissions or community interest groups raised issues about the proposal.

The matters raised in submissions can be summarised under the following key issues:

- Urban design and built form impacts (including impact of large floor plate buildings, view loss and view impacts, increased density, heritage impacts, relationship with CBD and Harbour and land use mix);
- Amenity impacts (including privacy, impacts during construction, light spill, noise, wind and solar access);
- Traffic, public transport and parking impacts;
- Public domain and public access to the foreshore;
- ESD and the effect of the proposed modification on the site's ability to achieve ESD standards;
- Economic considerations including the demand for commercial floor space and the impact of the proposed modifications on property values;
- Impacts of Services and Infrastructure and in particular the lack of capacity within existing infrastructure servicing the site; and
- Concerns regarding consultation and the assessment and approval process.

In addition to submissions received by the Department of Planning and forwarded for the Authority's consideration, six additional submissions were made to the Authority direct via the Barangaroo website. These submissions have also been considered in the preparation of this Preferred Project Report.

The Authority's response to the key issues raised in submissions is addressed in Section 2 of this report. Section 3 deals with proposed changes to the project following consideration of the submissions and other relevant matters and Section 4 outlines proposed changes to the Statement of Commitments.

This report should be read in conjunction with the Modification Report dated June 2008 and supporting documentation.

2. RESPONSE TO KEY ISSUES

A summary of all submissions has been prepared and is included at Appendix 1. As noted in the introduction issues raised in submissions can generally be categorised under a number of key issues. These issues are addressed below.

2.1 Urban Design and Built Form

2.1.1 Built form

The most commonly raised concerns regarding the proposed modification to the Consolidated Concept Plan relate to the impact of the proposed additional commercial floor space on the built form. Concerns were expressed specifically in relation to the indicative building model that was illustrated in the submitted photomontages (section 7.3.2 of the Modification Report) as follows:

- buildings are too high and bulky,
- will result in a “bulking up” of the previous design
- will create a wall of buildings separating the Harbour from the City and vice versa,
- are out of scale with surrounding development,
- will result in a dominance of tall buildings along the harbour frontage in a location where the public domain should be dominant not tall commercial office towers,
- there is a need for detailed urban design controls,
- limits should be applied to the size of the floor plate of buildings over a certain height to ensure tapering built form and consistency with existing CBD skyline.

Concern was also expressed from a number of parties, including the City of Sydney and the winning design competition team regarding large floor plate buildings. The view was put that these may be acceptable where they are the exception within the context of a fine grained CBD urban form with a diversity of building types but that a series of large floor plate buildings will result in an unacceptable built form.

The Modification Report attempted to explain that the indicative building model had been created and modelled to illustrate how the additional GFA could be incorporated into future building designs within the approved block envelopes and to consider any potential environmental impacts. It was stated that the model represented just one example of how this could be achieved and was not intended to be viewed as a potential design solution given that detailed architectural design and modelling have not been undertaken.

It appears from the submissions that the perception of the indicative building model was that this was the form that any future buildings on the site would take and hence many of the submissions raised issues about the lack of articulation and detailing, the length of the building walls, etc. The intent of the model was to show how the maximum additional floor space sought, 120,000m² could readily be accommodated within the existing approved block envelopes with significant scope for varying the form given that the model does not “build out” the block envelope box. Accordingly even with the additional 120,000m² of GFA proposed in the modification there still remains significant scope for the ultimate built form to be varied and thereby achieve design excellence.

To address this misconception additional 3D modelling has been undertaken to further illustrate how any future buildings on the site could readily accommodate the proposed additional GFA while at the same time achieving design excellence. 3D models were developed of the following:

Option 1 CCP Indicative Building	the Design Competition Scheme CCP
Option 2 Modification Report	the Indicative Building Model illustrated in the Modification Report (representing Option B for Block 2 and Option 3 for Blocks 3, 4 and 5 as prepared by DEGW and described in Figure 12 of the Modification Report)
Option 3 Modification Report	an alternate scheme (representing Option 2 for Blocks 2, 3, 4 and 5 as prepared by DEGW and described in Figure 12 of the Modification Report).

The alternate indicative building models/floorplate configurations were developed as detailed in Section 5.1 of the Modification Report to respond to modern floor plate design requirements. The generic floorplate design principles incorporated into the alternate models were:

- large, contiguous spaces for teams (minimal barriers),
- quality of space (light, air, aspect),
- accessible hub and services (convenience),
- central services (allows sub-divisibility),
- vertical connections to other places (physical and visual),
- legible address and identity (a direct front door to public space), and
- horizontal links to other plates (physical and visual).

Two dimensional plans and sections further illustrating the options are included at Appendix 2.

The floorplate configurations of the three options are shown opposite in Figures 1 to 3 relative to the surrounding Barangaroo site.

In addition façade wrapping has been applied to provide a more realistic representation of what these floorplate configurations would look like as buildings rather than block massing as previously shown in the Modification Report. This exercise has been undertaken to make it easier to visualise the potential ultimate built form of the various options and to illustrate that many options exist for buildings that comprise the proposed GFA.

Appendix 3 provides three dimensional representations of the three different models from various viewpoints to enable comparison. From the models it is clearly evident that while the Option 1 CCP Indicative Building represents a built form that is consistent with the form of the existing Sydney CBD, so too do the two alternate options which include large floorplate buildings. All three options provide for a built form which is consistent with the key built form principles adopted for the site.

Figure 1. Option 1 CCP Indicative Building



Figure 2. Option 2 Modification Report

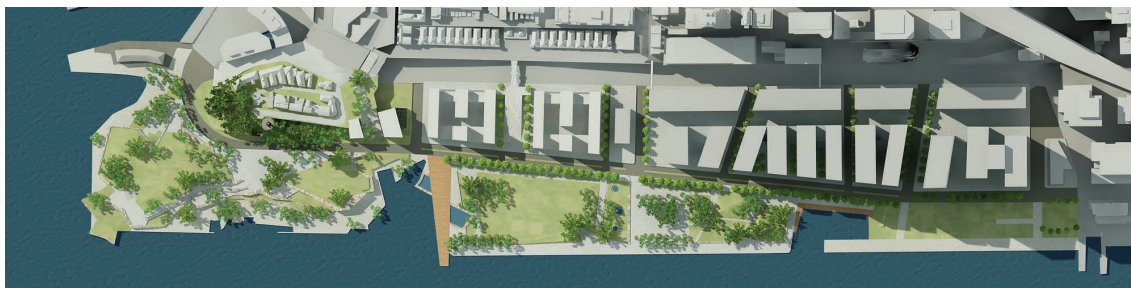
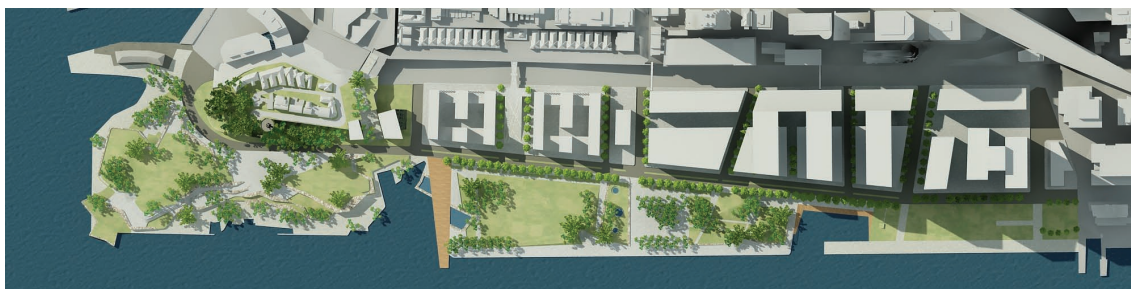


Figure 3. Option 3 Modification Report



In addition a physical model has been prepared to enable the indicative building models to be able to be viewed in the context of the CBD and the surrounding built form. The physical model demonstrates that the overall visual impact of the indicative models is not dissimilar from the approved scheme and the overall height and scale is comparable.

To give further consideration to concerns raised about the built form and urban design that will result from the proposed modification the Authority engaged Conybeare Morrison Design to undertake an urban design review of the proposed modification options as compared to the design competition scheme. Conybeare Morrison's review is provided in full at Appendix 4.

In summary the Conybeare Morrison report identifies the key design principles adopted in Option 1 CCP Indicative Building and the two alternate model options (Options 2 and 3 Modification Report) put forward. These principles have been identified under the following headings:

- general description
- image
- shoreside massing
- Hickson Road massing
- Building orientation
- Western façade to the City

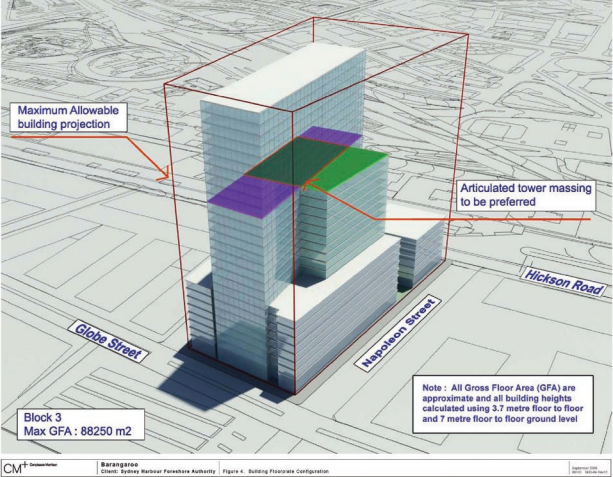
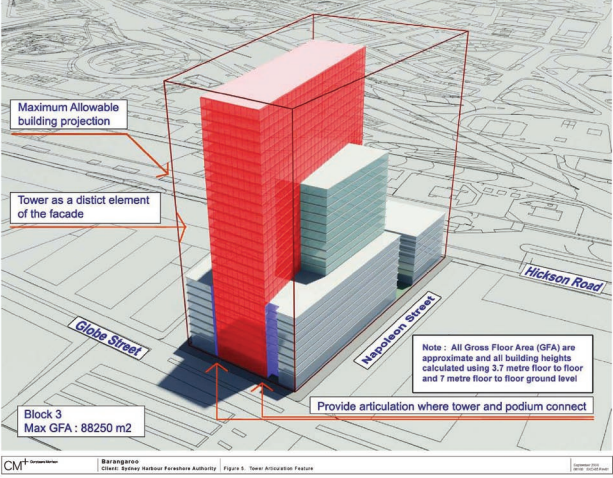
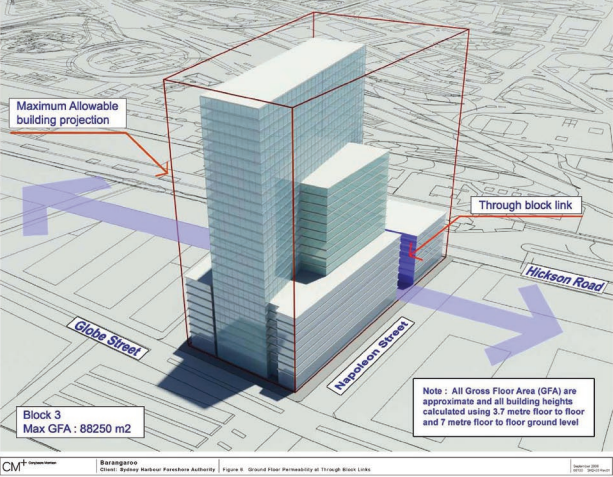
The assessment outlines the differences between the schemes although noting that Option 1 CCP Indicative Building is a detail design scheme where the two modification options provide a guideline for built form rather than a description of an actual design.

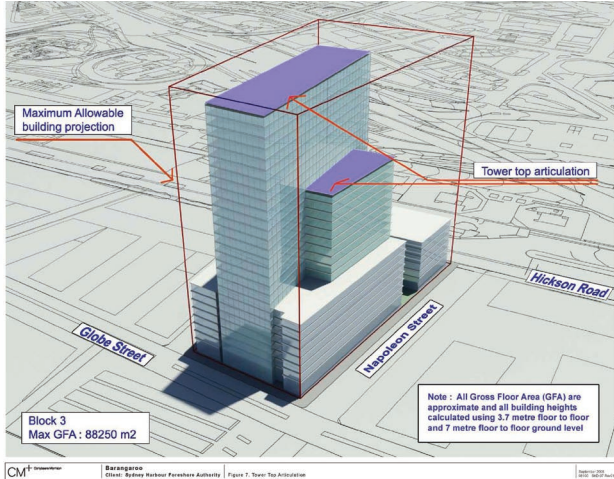
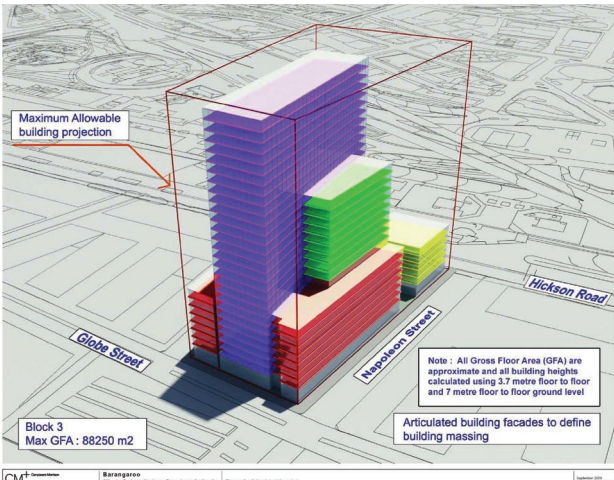
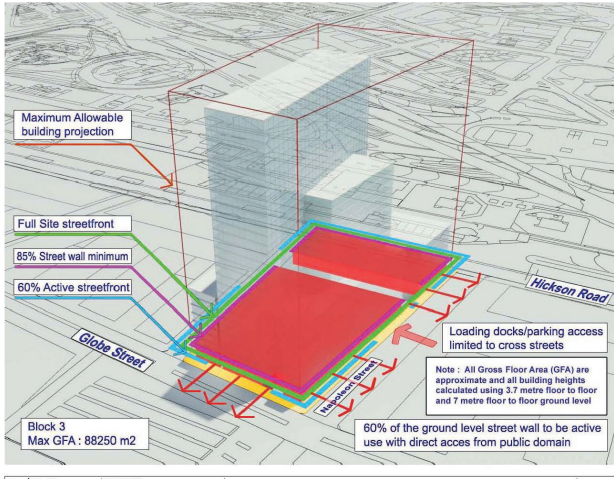
The assessment assesses whether the three options are consistent with the Built Form Principles (refer section 7.3.3 of Modification Report) established in the CCP and reviewed in the Modification Report. It concludes that generally key principles can be achieved with either Option 1 CCP Indicative Building or under the proposed modification options (Options 2 and 3 Modification Report) but that a series of secondary design controls could be included to supplement the overall bulk controls. This would provide a middle ground between the detailed design developed in the CCP Indicative Building scheme and the overall bulk controls that were established with that design.

Accordingly additional performance based urban design controls have been prepared by Conybeare Morrison to further guide the ultimate built form on site (refer Table 1 below). All future project applications will be assessed for compliance with these controls (refer Statement of Commitments at Section 4). It should be noted in this regard that the proposed standard listed for each control is one way of achieving the stated objective for that control. However if it can be demonstrated that the objective can be achieved through another approach this should also be able to be considered. This approach will allow for innovation and flexibility while at the same time ensuring the primary urban design objectives and design excellence are achieved. The figures shown illustrate how the standards could be applied to one block (Block 3) for illustrative purposes only.

Table 1. Proposed Performance Based Urban Design Controls

Control	Objective	Standard
<p>Control 1 — Building Mass Setback Planes</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 1: Building Mass Setback Planes</p>	<p>To ensure the majority of the bulk of buildings is located toward the western edge of each block.</p>	<ul style="list-style-type: none"> ■ Adopt building control planes from the SW corner of Block 3 at 88m and 75m from Globe Street. ■ 80% of the building mass above podium level to be to the west of the 75m plane for Blocks 3, 4 and 5.
<p>Control 2 — Building Streetwall Establishment Plan</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 2: Building Streetwall Establishment Plan</p>	<p>To ensure an active streetwall is established around each block.</p>	<ul style="list-style-type: none"> ■ The building mass at the podium is to form a continuous street wall around the site with a 4 storey minimum and 8 storey maximum for a minimum of 85% of the site perimeter. ■ Colonnades are to be provided along Hickson Road and Globe Street.
<p>Control 3 — Tower/Streetwall Relationship Plane</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 3: Tower / Streetwall Relationship Plane</p>	<p>To reinforce the streetwall in the form of the tower and therefore in the skyplane of the development.</p>	<ul style="list-style-type: none"> ■ At least a portion of each side of the tower above podium level is to be parallel to the street walls.

Control	Objective	Standard
<p>Control 4 – Building Floorplate Articulation</p>  <p>Maximum Allowable building projection</p> <p>Articulated tower massing to be preferred</p> <p>Globe Street</p> <p>Napoleone Street</p> <p>Hickson Road</p> <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>CM+ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 4. Building Floorplate Articulation</p>	<p>To establish an articulated form for each high-rise tower and to limit the bulky appearance of the larger floorplates.</p>	<ul style="list-style-type: none"> Each tower floor plate is to provide for plan articulation. This may take the form of overlapping smaller floorplates, curved floorplates etc. Tower form is to express sustainability features such as access to natural light and ventilation. Tower form is to follow a general north/south orientation to ensure sustainability goals can be met.
<p>Control 5 – Tower Articulation Feature</p>  <p>Maximum Allowable building projection</p> <p>Tower as a distinct element of the facade</p> <p>Globe Street</p> <p>Napoleone Street</p> <p>Hickson Road</p> <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>Provide articulation where tower and podium connect</p> <p>CM+ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 5. Tower Articulation Feature</p>	<p>To provide a distinction between towers and podiums so that the built form of each block will read as a series of separate buildings.</p>	<ul style="list-style-type: none"> Articulation should be provided where the tower and podium connect to establish different identities for each element.
<p>Control 6 – Ground Floor Permeability at Through Block Links</p>  <p>Maximum Allowable building projection</p> <p>Through block link</p> <p>Globe Street</p> <p>Napoleone Street</p> <p>Hickson Road</p> <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>CM+ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 6. Ground Floor Permeability at Through Block Links</p>	<p>To ensure that the north south connection reads as a public link and is apparent from the public domain of Barangaroo.</p>	<ul style="list-style-type: none"> Building form may cover no more than 50% the length of the through block link and only occur from the fourth floor upward (that is, Levels G, 1, 2, 3 are to remain open). The area of the through block link not covered by built form should be left open to the sky except for glass canopies. The streetwall should be broken at the area of the through block link. This may include a screening device, but no habitable or service spaces should block sightlines into the through block link or sky above.

Control	Objective	Standard
<p>Control 7 – Tower Top Stepped Profile Articulation</p>  <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 7: Tower Top Articulation</p>	<p>To ensure articulated tower volumes in the cityscape.</p>	<ul style="list-style-type: none"> Floorplates are to provide an articulated skyline. The building massing should step up from larger floorplates to smaller floorplates. The stepping should be implemented so that a significant portion of the building is stepped.
<p>Control 8 – Articulated Facades</p>  <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>Articulated building facades to define building massing</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 8: Articulated Facades</p>	<p>To ensure that building facades are articulated to define building massing.</p>	<ul style="list-style-type: none"> The façade treatment should reinforce the volumetric configuration of the building. Façade treatments should be composed of a family of elements.
<p>Control 9 – Active Streetfronts</p>  <p>Block 3 Max GFA: 88250 m2</p> <p>Note: All Gross Floor Area (GFA) are approximate and all building heights calculated using 3.7 metre floor to floor and 7 metre floor to floor ground level</p> <p>60% of the ground level street wall to be active use with direct access from public domain</p> <p>Loading docks/parking access limited to cross streets</p> <p>CM⁺ Barangaroo Client: Sydney Harbour Foreshore Authority Figure 9: Active streetfronts</p>	<p>To ensure that a vital public domain will be created at street level.</p>	<ul style="list-style-type: none"> At least 60% of ground level street wall to be active uses with direct access from public domain. Building entrances to internal areas such as office lobbies, exit ways, and service areas or loading docks shall not count toward the 60% requirement. Main building entrances to internal lobby areas may be included provided that the lobby is internal to the façade. Building service areas, parking entrances and loading docks may not be located on Hickson Road or Globe Street.

As noted in the Modification Report it is proposed that the overarching Built Form Principles (refer section 7.3.3 of the Modification Report) contained within the Consolidated Concept Plan would be, for the most part, retained as part of the modification. These principles encapsulate the main principles that will guide any future proposals for actual buildings on the Barangaroo site. The indicative building models clearly illustrate that these principles can readily be achieved through a range of designs which accommodate the additional GFA.

The only principle proposed to be amended as part of the modification is Principle 4 — Low Scale Valley. This principle sought to:

promote built form of a human scale along pedestrian lanes, to encourage diversity in open spaces and to allow midday sun penetration within more dense blocks, mid-block buildings are to be limited to 4-5 storeys in height and are to provide accessible roof top open space. This enables the formation of an accessible roof valley.

The proposed modification seeks to amend this as follows:

*Built Form Principle 4 — North south pedestrian connection:
to promote pedestrian connectivity and to encourage diversity in open space uses and to allow midday sun penetration within more dense blocks. On Blocks 2 to 5 a continuous mid block pedestrian connections at ground level which is not less than 20m wide and is a minimum of 7 storeys high (not less than 50% open to the sky).*

This changed principle will still enable achievement of the overall objectives of providing a high quality pedestrian connection with good access to sunlight and which provides a visual connection through the blocks, but also allows for large floor plate buildings which meet tenant requirements and thereby will assist to position Sydney as a premier commercial centre in the Asia-Pacific Region.

The Indicative Built Form Envelopes outlined in Appendix H of the CCP are superceded by the proposed Performance Based Urban Design Controls. This level of control is subsidiary to the Built Form Principles referred to above and included at Section 7.3.3 of the Modification Report.

In terms of the concerns raised about the potential to accommodate large floor plate buildings and the visual impact of a conglomeration of these on the subject site, pressing arguments have been put that the development at Barangaroo should provide for large floor plate buildings in order to meet the demand for premium office space in the Sydney CBD. This demand cannot readily be met by other sites given issues with site consolidation and multiple ownership.

2.1.2 Views

The second most commonly raised concern regarding the proposed modification relates to the potential that the change to the Consolidated Concept Plan will result in additional view loss and will impact on views of the Millers Point area from the water and beyond (addressed under section 2.1.1 above).

In terms of loss of private views particular objections were received from buildings to the east including:

- Stamford Marque at 161 Kent Street,
- Stamford on Kent at 183 Kent Street,
- The Highgate Building at 127 Kent Street,
- The Bond Apartments at 38 Hickson Road.

As noted in the Modification Report the indicative building model, incorporating the additional floorspace, would see a slight narrowing of views from the east at ground level with the addition of podiums to Blocks 3 – 5. However this is just one option for how the ultimate buildings may be designed and an alternate design option may in fact widen these views. In any case the urban structure provides that the width and location of the east–west streets cannot be altered therefore important views towards the Harbour will still be available.

However, in response to these comments additional view analysis using a 3D computer model has been undertaken by Conybeare Morrison to determine the extent of impact that may result from the proposed modification (Refer Section 7 of Appendix 4). A view analysis was undertaken of the CCP Indicative Building and MR Option 3 looking south west, west and north west showing a high view, mid view and low view from within each of the buildings identified above.

The visual analysis provides as follows:

Three major aspects of the visual environment have been assessed:

Proximity of Commercial Buildings — *When comparing the two schemes it becomes evident that portions of the towers in the MR scheme will be closer to Hickson Road and buildings to the east of the site. This is partially mitigated by the east/west orientation of the buildings.*

Sky Exposure Plain — *The sky exposure plain is the edge of the built form against the sky. It is essentially a plane connecting the tops of the buildings. When comparing the CCP Indicative Building with the MR from most viewpoints the sky exposure plain is in approximately the same relationship to the viewer.*

Views through to the Water – *A key aspect of the study is the review of impacts on views through to the water. This has been studied by generating a series of views to the west perpendicular to the subject building facades.*

- *From the Highgate Building there does not appear to be a substantial difference in the openness.*
- *From the Stamford Marque at the upper and mid view levels the CCP Indicative Building appears to offer greater transparency, but only if the tower forms are not joined by a connecting core.*
- *From the Stamford on Kent at the mid view level the CCP Indicative Building appears to offer greater transparency, but only if the tower forms are not joined by a connecting core.*
- *From the Bond Apartments, due to its limited height, the views west across either scheme are not significantly different. At the lower levels no views can be retained with either scheme and at the high view point the CCP Indicative Building may offer more frequent views but the MR may offer wider views.*

The visual analysis is limited in its scope to the models that have been prepared for this study. It should be noted that the MR is subject to further detailed design development and a more accurate assessment of views should be undertaken as the Project Application is assessed.

In summary then it is considered that the view impact of the proposed modification are minor and are highly dependent on the detailed design of the buildings proposed on site. The modification can be accommodated without resulting in significant view impacts and it is therefore considered that further assessment should be undertaken at the Project Application stage.

The Department of Housing has raised concerns regarding view impacts from the front of terraces on High Street and from the rear of terraces in Kent Street. The Department of Housing terraces are located to the north east of Blocks 2 to 5 therefore the proposed changes will not result in any change to views directly to the west or to the north west from these properties. The proposed modifications will result in some changes to views to the south west from these premises however it is considered that given the available western and north western views this impact is not significant and will not be significantly different from the current impact of the Consolidated Concept Plan.

2.1.3 Change to Design Competition Scheme

A number of submissions raised concerns regarding the proposed changes to the winning design competition scheme and in particular indicated that the proposed modification will result in an erosion of the principles on which that scheme was founded. It is acknowledged that changes are proposed to the overall concept provided for in the design competition scheme indicative building however it is considered that the overarching objectives and principles of the scheme are to be retained (refer urban design analysis at Section 2.1.1 above). Specifically the Authority has prepared the proposed modification following expert review of the competition scheme (refer section 5.1 of Modification Report) which concluded that:

- The approved concept provides for buildings with relatively small and disconnected floorplates. These configurations do not meet commercial tenant demand for large contiguous spaces;
- Fundamental site and block dimensions limit the potential for large floorplate building configurations (i.e. limiting dimensions);
- Large floorplate buildings can still be achieved within the general parameters of the urban design principles set for the site; and
- Expansion of the southern cove can still be achieved with larger floorplate buildings and without breaking the height limits.

These conclusions have been supported by submissions made by the Property Council of Australia and the Urban Task Force. These submissions indicate that:

- In January 2008 there was an 18 year low vacancy rate of 3.7% for office space in the Sydney CBD with a 4.3% vacancy rate over the past 6 months which represents the third lowest rate since 1980;
- 106,559m² of office space was added to the market in the past 6 months and demand will be the main driver in the immediate future building on strong employment growth and office demand;
- There is a need to leverage and build upon the State's economic strengths such as financial services (which are targeted by the proposed modification);
- There is a need to facilitate the Sydney CBDs sustainable development and growth capacity including the commercial development capacity of Barangaroo.

The approved concept for Barangaroo does not optimise the site's potential to meet the CBD's demand for premium office space and can clearly accommodate additional commercial space and provide for large floor plate buildings without prejudicing the fundamental elements of the concept. These include design excellence, high quality and active public domain, the foreshore promenade and parklands, water interventions, pedestrian connectivity and ESD.

2.1.4 Density

Concerns have been raised that the proposed modification will result in an unacceptable density on the site. In this regard it is noted that the modification seeks an increase in GFA of 50,000m² to 120,000m² on Blocks 2 — 5 only. The maximum GFA across the whole of the Barangaroo site is proposed to be 508,300m² where currently a maximum of 388,300m² applies. The Barangaroo site has an area of 22 hectares. Accordingly the proposed increase in GFA represents an FSR across the site of 2.31:1 as compared with an approved FSR of 1.77:1 an increase of 0.54:1. This provides for a very low density across the Barangaroo site especially when compared with a permissible FSR of 12.5 — 14:1 in much of the CBD as allowed for under the City of Sydney planning controls.

Development densities on each of the development blocks affected by the proposed modifications are shown in Table 2 below:

Table 2. Maximum FSRs on Blocks 2 to 5

Development Block	Approved Max. FSR	Modification Max. FSR
Block 2	13.87:1	15.89:1
Block 3	8.28:1	13.05:1
Block 4	6.8:1	11.05:1
Block 5	3.36:1	5.09:1

It should be noted that the FSRs set out above for each block are maximums only and include all floor space on each block: business, residential, retail, tourist and community uses. The achievement of these maximums is dependent on compliance with relevant conditions of consent, commitments as outlined in the Consolidated Concept Plan, best practice measures and design excellence provisions.

The Consolidated Concept Plan for Barangaroo concentrates development in the southern part of the site to enable the delivery of an 11hectare foreshore promenade and public domain including a new Headland Park at the northern end of Barangaroo. In this regard it is considered that the principle of concentrating development to the south of the site continues to be appropriate and will result in significant benefits to the local and broader community. Accordingly the higher development density proposed in the southern area of the site is considered appropriate.

2.1.5 Heritage

A number of submissions raised concerns that the proposed modifications will result in adverse impacts on the historic Millers Point Precinct which is listed on the State Heritage Register. Particular concern was raised about impacts on views of the Precinct from the Harbour. The Consolidated Concept Plan provides significant protection to the Millers Point Precinct through the urban structure with the concentration of development to the south and the lower built form at the northern end of the site. As noted in the Modification Report the main impacts on the Conservation Area will be visual. View corridors along streets will be maintained and will therefore preserve views both to and from the Precinct in the southern areas of the site. There is no change proposed to the built form in the northern part of the site where key views have been identified.

Statements of Commitment 50, 51 and 52 provide requirements in relation to the retention of views to the Millers Point Conservation Area. They provide as follows:

50. *Future development within the Barangaroo site is to retain views to Observatory Hill Park from public spaces on opposite foreshores; and to retain a panorama from Pyrmont Park around to the Harbour Bridge as seen from Observatory Hill Park.....*
51. *Future development within the Barangaroo site is to provide adequate view corridors over and between new built form to maintain the key attributes of views from Millers Point. The key attributes to be retained are:*
- *views to significant tracts of the water;*
 - *the junction of Darling Harbour and the Harbour proper;*
 - *the opposite foreshores,*
 - *panoramic qualities of existing views,*
 - *and the most distinctive views to landmark structures*

All the above are shown within the Concept Plan and illustrated by the photomontage impacts included in the Heritage impact Statement prepared by City Plan Heritage.

52. *Future development within the Barangaroo site is to retain the ability to appreciate the Millers Point headland and the roofscape of terrace houses throughout Millers Point when viewed from public spaces on opposite foreshores. The detailed design of future development within Barangaroo should ensure a relationship between new built form and existing structures and design detailed within Millers point Conservation Area. Consultation is to be undertaken with NSW Heritage as part of the detailed project Application Stage.*

Compliance with these Commitments is to be demonstrated /assessed as part of any relevant development/project application.

In addition it should be noted that project applications for individual buildings within proximity of a heritage item will need to have regard to the potential impact on that item and will need to include a Heritage Impact Statement. Accordingly while it is considered that the urban structure minimises potential heritage impacts as a result of new development on the Barangaroo site, further detailed consideration of the impact of individual buildings on nearby heritage items, including the Millers Point Conservation Area, will be undertaken prior to any approvals which would allow construction to occur.

2.1.6 Relationship with Harbour

Concerns have been raised that the buildings to be located on Blocks 2 — 5 as amended by the proposed modification are too tall and located too close to the Harbour foreshore. Further comments have been made that the development will result in a wall of buildings separating the City from the Harbour.

The urban structure for Barangaroo provides that Development Blocks 2 — 5 are located a significant distance from the foreshore increasing to the north. These setbacks are not proposed to change as a result of the proposed modification. The existing urban structure also provides for the tallest buildings to be located to the south with a tapering of the height towards the north. It is considered that these setbacks in addition to the inclusion of podiums on Blocks 3-5 will ensure an appropriate transition between the water, foreshore, public domain, podium and tower built forms on the development sites.

While it is not possible to assess the exact relationship of the future buildings with the Harbour until such time as each building is designed, it is considered that the urban structure established under the Consolidated Concept Plan provides for an appropriate relationship between development sites and the Harbour. A foreshore promenade will be developed along the water's edge with urban parklands immediately adjacent. This public domain treatment will provide public access to the foreshore and ensure a high quality public domain which will transition to the development blocks further to the east. The future buildings on development blocks will be read when viewed from the water or to the west of the site in the context of the City as the backdrop. Accordingly they will not be dominant but rather be seen within the context of the City skyline which accommodates numerous towers of varied height and form. From the east view corridors along east west streets will provide for the visual permeability of the site providing views to the water and beyond.

2.1.7 Land Use Mix

Some submissions raised the issue that the proposed increase in commercial floor space is not accompanied by a commensurate increase in other land uses such as residential, retail, community uses etc. By increasing the commercial component of the development concerns have been raised that the development will not be truly mixed use but rather will be dominated by office uses which will not provide for activity out of normal office hours. The view has been put that more residential development will ensure the vibrancy and vitality of the precinct and the additional commercial space will merely increase the chance that the area will be vacant and desolate out of hours.

Conditions 1A and B4 of the Terms of Approval for the Barangaroo Concept Plan stipulate Gross Floor Area by land use mix and development block. For Blocks 2 to 5, which are affected by the proposed modification, this includes maximums for commercial floor space and both minimum and maximums for residential, retail and tourist uses. The requisite, minimum and maximum amount of residential, retail and tourist gross floor area is not proposed to be changed as part of the proposed modification.

It is considered that notwithstanding the proposed increase in commercial floor space, the Modified Concept Plan still provides for a mix of land uses on Blocks 2 to 5 as originally envisaged under the Consolidated Concept Plan. The benefits of a mix of uses such as casual surveillance, out of hour activity etc would still therefore be achievable. Of particular importance in this regard is the requirement to provide active uses at ground level to enhance activity within the public domain.

While it is agreed that there is value in providing mixed use development to provide out of hours activity and to ensure casual surveillance of the public domain, these benefits come primarily from active uses including entertainment uses such as restaurants, cafes and the like. These uses encourage activity on the street and will attract visitors to Barangaroo throughout the day and night time period. However where such uses are co-located with significant residential development land use conflicts may arise. This is evidenced throughout Sydney but of particular relevance are issues that have arisen recently with the advent of entertainment uses in close proximity to residential development at Walsh Bay and at King Street Wharf. Accordingly it is considered appropriate that some residential development be incorporated into the Barangaroo site but that this not be excessive.

2.2 Amenity Impacts

A number of potential amenity impacts have been identified in submissions on the proposed modification and have been considered in sections 2.2.1 to 2.2.6.

2.2.1 Privacy

Concerns have been raised that the proposed modifications will result in negative impacts in terms of privacy to existing residential development in the vicinity to the east. In this regard it is considered that a number of measures can be designed into the proposed buildings to minimise privacy impacts. These measures typically include offsetting of windows, screening, obscure glazing, setback distances etc. It is considered that this matter can appropriately be addressed as part of the project application for each building once detailed design has been undertaken and likely impacts can be determined.

2.2.2 Construction impacts

Concern has been expressed that the proposed modification will lead to additional construction impacts given the additional floor space and likely additional construction time. It is considered that this comment is valid however that the benefits that will result from the proposed modification in terms of economic benefits to Sydney and the State of New South Wales will outweigh additional impacts experienced by nearby residents during construction. In any event appropriate conditions of consent will be applied to any development consent to minimise any such impacts.

2.2.3 Light spill

One submission raised concern that the proposed modification will result in additional impacts to local residents in terms of light spill. The impact of any additional light as a result of the modification will be minimal. The issue of light spill can be assessed as part of the project applications for individual buildings and appropriate measures put in place to ameliorate impacts.

2.2.4 Noise impacts

A number of submissions raised concerns that the additional commercial floorspace proposed under the modification will result in additional noise impacts both during construction and during operation. It is agreed that the additional floor space will lead to additional construction time and that this will result in additional noise impacts. However as noted under 2.2.2 above it is considered that the benefits of the additional floor space to the economy of Sydney and New South Wales will outweigh any short term negative noise impacts. In addition conditions of consent will be imposed on any project application approval to minimise such impacts.

In terms of noise during operation office development is not likely to result in any noise impacts other than those associated with equipment plant. Any such plant will be assessed for noise impacts during assessment of the project application for each building and appropriate conditions of consent applied to mitigate potential impacts.

2.2.5 Wind impacts

Concern has been raised that the proposed built form will result in a change to the wind environment in the area and that Hickson Road will become a wind tunnel as a result. As noted in the Modification Report a revised preliminary wind assessment of the existing and future wind conditions likely to arise from the proposed modification has been undertaken by Windtech (refer Appendix 8 of the Modification Report). The assessment notes that the site is subject to strong southerly and westerly winds but concludes that the proposed modifications are not expected to result in a worsening of the existing conditions. However the report does note that the design of any major buildings and areas for outdoor use should be subject to wind tunnel modelling to confirm the effectiveness of any proposed ameliorative measures for wind effects. To this end commitment 71, as contained in the Modification Report, requires as follows:

- 71. Wind tunnel modelling and verification of proposed treatments will be carried out at the building design application stage due to the significant exposure of the site to the southerly and westerly winds. Any development proposed for the southern portion of the site should be subjected to a wind tunnel study carried out in accordance with the procedures outlined in industry recognised guidelines such as the Australasian Wind Engineering Society Quality Assurance Manual.*

In terms of timing the commitment requires that such a wind report be lodged with each development application/project application. In this regard it should be noted that it is not possible to adequately predict the wind impacts of the proposed development until such time as the detailed design of the buildings has been undertaken. Accordingly it is considered appropriate that this issue be further assessed at the project application stage.

2.2.6 Solar access

It has been suggested that the proposed modification will result in additional overshadowing and loss of access to sunlight for buildings to the east and to the south. In particular concern has been raised about additional overshadowing of buildings to the east from 3pm to 8pm in summer. In this regard it should be noted that the proposed modification to increase commercial floor space would not result in any change to the approved block envelopes, that is to say, the maximum height and footprint of potential buildings on Blocks 2 to 5 will not change as a result of the modifications.

The issue of overshadowing and solar access was considered in the preparation of the Modification Report and plans of shadowing effects prepared and submitted with the proposed modification (refer Appendix 7 of the Modification Report). The shadowing plans show the impact of the indicative building model including the additional commercial floorspace in comparison to the shadow impact from the indicative built form referred to in the Consolidated Concept Plan. As with the Approved Concept Plan it should be noted that the maximum potential extent of overshadowing can never be realised even with the additional commercial floor space, as the maximum GFA for each development block contained within the Consolidated Concept Plan does not allow for an end building design to fill the maximum permitted envelopes.

Although the ultimate building forms within blocks may differ from those shown in the shadowing plans, the overshadowing analysis demonstrates that a high level of solar access will be achieved to all public open spaces within the site.

In terms of shadow impacts off site, the shadowing analysis indicates that the shadow impacts of the proposed additional GFA will be minor when compared to the Consolidated Concept Plan. There will be some overshadowing impacts most notable to the south and within the King Street Wharf area however as these buildings are primarily commercial no significant adverse impacts will result. In any event these impacts will be limited to the morning period and no overshadowing of the King Street Wharf area will occur by midday in midwinter (the worst case situation). For other times of the year this impact will be less.

In regard to shadowing impacts to buildings to the east of Barangaroo, the analysis illustrates that the impacts of the indicative building form including the additional commercial GFA will result in a significant reduction in shadow impacts as a result of the deletion of the tower on Block 2 (within the indicative building model in the approved Concept Plan) set adjacent to the Hickson Road frontage. This includes a reduction of impact to properties in Kent Street south of the Western Distributor and properties further east. In relation to shadows after 3pm in summer it is agreed that some loss of sunlight may occur although shadow analysis has not been undertaken for this period. However this impact is likely to be minor given that sunlight will be available for the remainder of the day and that the sunlight in question is westerly sun in summer which is generally considered undesirable from a glare and heat view point.

As noted above the overshadowing analysis is currently limited to indicative building forms and the ultimate shadow impacts may be reduced following the detailed designing of individual buildings. Accordingly it is considered appropriate that detailed analysis of the overshadowing impacts of individual buildings and of solar access achieved within the development be provided at subsequent approval stages for the development.

2.3 Traffic, Public Transport and Parking

2.3.1 Traffic

The third most frequently identified issue from submissions is the interrelated issues of traffic and public transport. Concerns were expressed that the existing road system in the locality is already at gridlock and cannot accommodate any additional traffic particularly in the afternoon peak period.

Masson Wilson and Twiney has undertaken an assessment of the impact of the proposed additional commercial floor space having regard to the restrictive parking supply policy to be applied to the development of the site (refer Appendix 5 of the Modification Report). Their modelling indicates that with the additional commercial floor space the development will result in an estimated 708 to 750 vehicles/hour (in + out) in peak periods. This represents an increase of 206 to 234 vehicles/hour (in + out) in peak periods from the Consolidated Concept Plan. Modelling of local traffic at key intersections indicates that these would not witness significant changes in operation apart from the Hickson Road – Napoleon Street intersection which would need to be signalised to provide a reasonable level of traffic operation. Accordingly it is considered that the proposed increase in commercial floor space will not result in adverse traffic impacts.

Sydney Buses also advised that additional modelling of intersections outside of those already modelled by the Masson Wilson and Twiney should be undertaken as the impact of the proposed additional floor space will extend beyond those intersections identified. As noted in Appendix 5 of the Modification Report “the wider traffic implications of the Barangaroo development have been tested in the RTA’s PARAMICS micro-simulation model of the CBD”.

Masson Wilson and Twiney completed PARAMICS micro simulation traffic modelling to determine traffic effects of the proposed Barangaroo development (refer Appendix 5). Initially, base models were developed to represent AM and PM peak periods in 2007 but were subsequently modified to represent the Barangaroo development as proposed in the Modified Concept Plan, with 4% mode share to car for office components. The modeling included amended bus routes as proposed by the Barangaroo Bus Service Strategy.

The modelling concluded that the road network can cope with the additional traffic generated without obvious new traffic operational issues. There are some additional queues and average network speeds are lower, but except for the queuing issues the network operation is not markedly different from at present. This indicates that the proposed modification to the Consolidated Concept Plan to allow the additional 120,000m² of commercial floor space could occur without overloading the local road network.

In addition to the above Masson Wilson and Twiney has provided a response to specific issues raised by both the City of Sydney and Sydney Buses. This response is included at Appendix 6.

2.3.2 Public Transport

Concerns were raised that the proposal relies on public transport initiatives to justify the additional commercial floor space but that it does not include any firm commitments to public transport initiatives such as the proposed light rail, the North West Metro, the proposed ferry terminal and pedestrian connections to Wynyard and the CBD. The view was also put that the proposed mode split to public transport is not realistic given that the existing split is 50% and 62% is proposed.

Appendix 5 to the Modification Report identifies that the existing mode split to public transport in the CBD is as follows:

■ Train	48%
■ Bus	22%
■ Ferry	2%
■ Car (Driver + Passenger)	19%
■ Other (walk/cycle/ferry etc)	9%

It is proposed under both the approved Consolidated Concept Plan and the proposed modification that the following mode split target be applied to the site:

■ 83% by public transport (63% rail, 20% bus)
■ 12% pedestrian/other
■ 4% car
■ 1% ferry

This proposed mode split is based on proposed public transport initiatives, high volume and quality pedestrian connections and the restrictive parking policy to be applied to the site. With these initiatives and having regard to the existing mode split within the Sydney CBD it is considered that the proposed target mode split is reasonable.

2.3.3 Car parking

A number of submitters indicated that the types of businesses that the development is trying to attract will demand additional car parking. As outlined in the Revised Transport Concept Plan (at Appendix 5 of the Modification Report) both the approved Consolidated Concept Plan and the proposed modified Consolidated Concept Plan apply a restrictive car parking policy for commercial development of 1 space per 600m². This policy is a fundamental premise applying to development on site and will ensure that the development limits traffic impacts and supports the use of public transport.

Concerns have also been raised about the loss of long term on street car parking in Hickson Road particularly given that many residents within the Millers Point area do not have off street parking. The Revised Transport Concept Plan notes that the existing 270 ninety degree long stay parking spaces along Hickson Road are proposed to be converted to parallel spaces providing about 125 on-street spaces. Further as noted “the resulting reduction in parking numbers along Hickson Road would be off set by higher turnover per space such that there would be no change in on-street traffic generation”.

2.4 Public Domain and Access

2.4.1 Use of Public Land/Public Interest

Submissions have raised the matter of whether the proposed modification is in the public interest and whether the overall Barangaroo development is an appropriate use of public land. It is noted that the Barangaroo Consolidated Concept Plan has been approved following extended community consultation and environmental assessment and provides for significant community benefits. The proposed modification to the Consolidated Concept Plan relates solely to an increase in the amount of commercial floor space to ensure the development maximises the site's potential and caters to the demand for premium quality commercial office space in a highly accessible CBD location. The proposed modification is considered to be in the public interest given that it will enhance the growth and availability of commercial floor space in the CBD, will augment Sydney CBD as a premier commercial centre in the Asia-Pacific Region and capitalise on planned public transport initiatives.

2.4.2 Public domain and public access to the waterfront

Concerns have been raised about the public domain treatment and public access to the waterfront on the Barangaroo site. The proposed modification will not result in any changes to the urban structure, public domain or arrangements for public access to the waterfront. The modifications relate solely to the amount of commercial floor space on Blocks 2 to 5. Accordingly it is considered that this matter is not relevant to the proposed modification.

2.5 ESD

The issue of ESD has been raised in a number of submissions and the view put that the proposed modification is not consistent with the principles of ESD resulting in an unacceptable built form and impacts on nearby buildings. Commitments 64 - 70 contained in the Statement of Commitments outline commitments to be incorporated into the project in this regard. Specifically they provide as follows:

64. *There is to be an environmental focus on strategies for Water, Energy, Micro-Climate, Environmental Quality/Amenity, Landscape, Transport, Waste and Materials for the development. Each building on site will achieve the primary benchmark of a "5 star" standard of Commercial: Green Star 5 star and Residential: Green Star Residential score > 60, and each development will be required to demonstrate how it satisfies each of the following key performance indicators for each of the ESD focus areas referred to below.*
65. *There is to be a 35% reduction in Potable Water Consumption compared to a standard practice development and a 40% reduction in flow to sewer compared to a standard practice development.*
66. *There is to be a 35% reduction in Greenhouse Gas Emissions compared to standard practice development. 20% of power is to be purchased from low impact, renewable sources or alternatively therefore should be a 20% reduction in GHG emissions through carbon offsets. The purchase of renewable energy should be at world Best Practice level.*
67. *Key public open spaces (parks and squares) are to receive direct sunlight in mid-winter.*
68. *Primarily non-invasive plant species are to be used on the site.*
69. *Ensure that there is sufficient public transport to achieve point under public transport credit for Green Star Rating Tools for commercial buildings and a future Green Star Tool for residential buildings.*
70. *Centralised recycling areas are to be provided in all buildings and 100% of waste bins for public use are to allow for waste separation.*

Having regard to the above commitments, compliance with which will be assessed at the project application stage for individual buildings/public domain works, it is considered that the proposed development is consistent with the principles of ESD.

2.6 Economic Considerations

2.6.1 Property values

Some nearby property owners have raised concerns that the proposed modification will result in a loss of property values particularly having regard to view loss. The matter of loss of views has been addressed in detail in section 2.1.2 above. While it is considered that the proposed modification to the approved Consolidated Concept Plan will not result in any adverse impacts in terms of loss of property value, this matter is not a valid planning consideration and hence no comment can be made in this respect.

2.6.2 Demand for Commercial Floor Space

A number of submitters have raised questions regarding whether the demand truly exists for the additional commercial floor space. In particular anecdotal evidence was provided that there are large numbers of commercial office buildings in the city which are vacant and which have been so for an extended period.

The Sydney CBD plays a significant role in the economic well-being of not only the Greater Metropolitan region but also the State and national economy. Whilst the City of Sydney has reported there is sufficient additional commercial capacity in the CBD to reasonably accommodate between 15 and 20 years of demand (City of Sydney, 2008), it is generally acknowledged that office space in the Sydney CBD is becoming increasingly constrained, particularly for offices offering larger floor plates.

CB Richard Ellis (CBRE) has been providing ongoing advice to the Barangaroo project including estimated demand and take up rates for commercial development. CBRE have provided expert advice that the proposed Barangaroo development capacity is essential to meet the expected demand in the short and medium term and indeed for the growth of Sydney's CBD and the health of the city's economy (refer advice at Appendix 7).

The net new supply of commercial space in the CBD has been limited since the late 1990s resulting in very low occupancy rates due to a number of factors including the physical limits of the CBD and highly fragmented land ownership patterns. In turn, this has resulted in rental growth that has placed Sydney as one of the most expensive global cities, reducing its competitiveness in the Asia Pacific region.

CBRE has provide advice that that existing CBD tenants representing some 450,000m² of space have leases which will expire over the next five years and that a significant proportion of these have an interest in relocation. This represents approximately 90,000m² per annum of potential new/refurbished space for existing businesses in addition to new space demand of some 50,000 to 100,000m² per year to accommodate tenant demand.

The Barangaroo project is therefore essential in meeting occupier demand through relocation and attraction of new business to the Sydney CBD. Barangaroo provides flexibility in addressing the current and future accommodation requirements for the commercial sector. Barangaroo will therefore play a critical role in shaping Sydney's future in retaining companies and attracting new business and underpin the city's economy.

Section 5.1 of the Modification Report sets out the rationale for the additional commercial floor space in further detail. It concludes that there is substantial demand for premium office space in the Sydney CBD and that Barangaroo's role in meeting this demand is pivotal given the lack of large consolidated sites within the CBD. This view has been supported by submissions made by both the Property Council of Australia and the Urban Taskforce and in the advice provided by CBRE as outlined above.

2.7 Impact on Services/Infrastructure

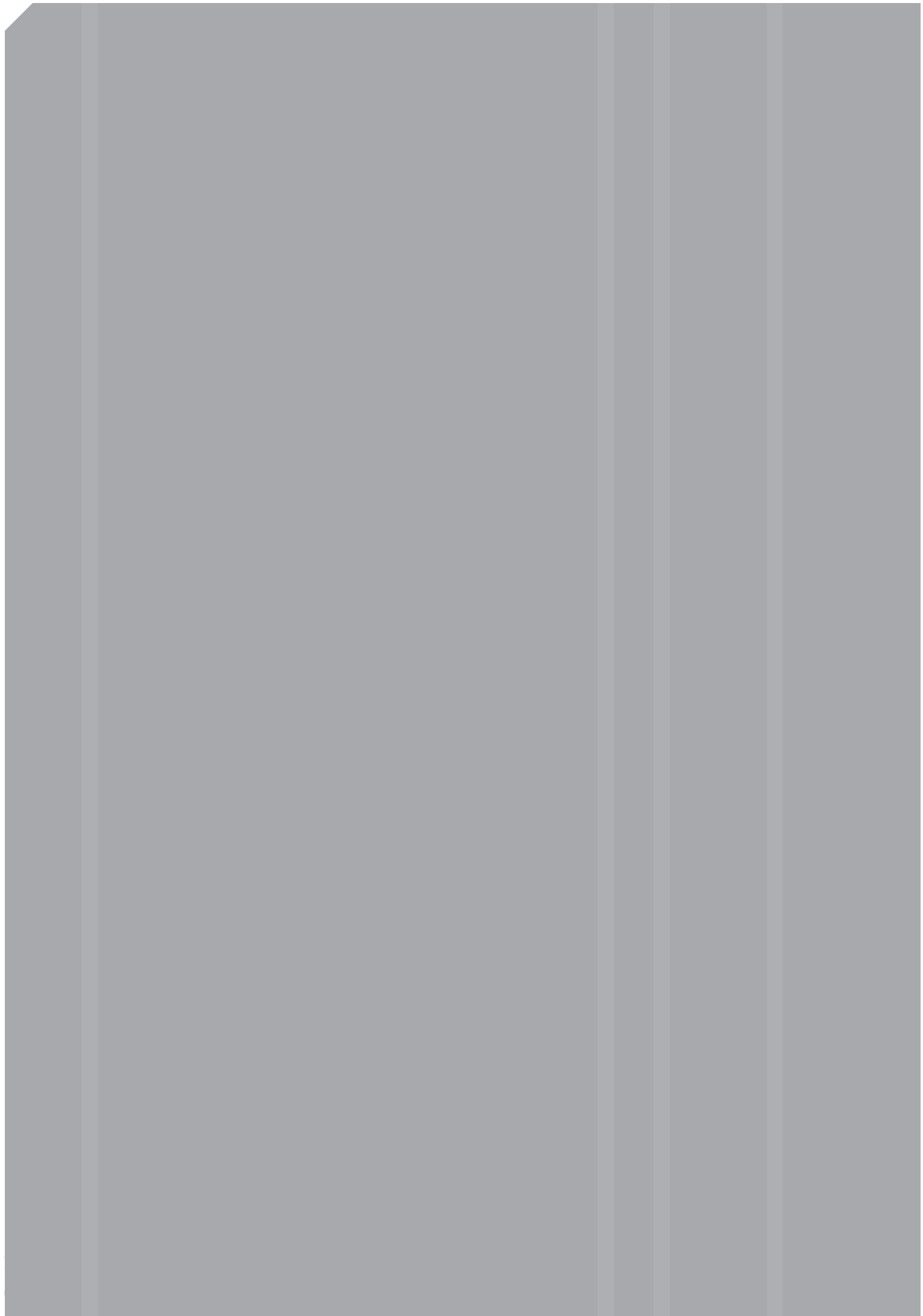
Various submissions have raised concerns that the existing services/infrastructure on site cannot accommodate the proposed development. As noted in the Modification Report the current availability of services to the site and the need for upgrading or extension to accommodate the future development was considered in detail in the approved Consolidated Concept Plan. These investigations indicate that:

- Water — the existing main should have sufficient capacity to service the site however if water requirements are in excess of the available capacity then amplification and extension of the feeder mains may be required.
- Sewer — There is no capacity in either the sewer pump stations or receiving sewer carriers. To service the Barangaroo site either a new sewer pump station or on site wastewater re-use plant would be required.
- Electricity — the current electrical infrastructure is inadequate in capacity and configuration and will require upgrading.
- Gas — the existing infrastructure has capacity to service the development.
- Communications — existing services exist but will require upgrading.

Significant upgrading of services will be required to provide for the proposed development. This will be undertaken prior to any development occurring on site and will be subject to a Utilities Services Infrastructure Plan and Integrated Water Management Plan (refer Statement of Commitments) which are intended to minimise the need for amplification and extension and to provide for both water and energy conservation.

2.8 Consultation/Process

Finally concerns have been raised regarding the approval process and the lack of consultation with local communities prior to submission of the modification application. As noted in the Modification Report given the extent of previous consultation it was considered that public exhibition of the Modification Application provided sufficient opportunity for stakeholders to provide input.



3. PREFERRED PROJECT

On the basis of the submissions received and in consultation with the Department of Planning, the following changes have been made to the Project to minimise the environmental impacts. Accordingly the Modification Report (as exhibited) together with these changes comprise the Preferred Project.

1. Include additional statement of commitment in relation to proposed performance based urban design controls to ensure any future project applications which incorporate the additional 120,000m² of commercial floor space on Lots 2–5 (inclusive) will result in an appropriate built form in terms of massing, design, articulation etc. Proposed controls are included at Statement of Commitment 91A. In this regard it should be noted that the proposed controls are performance based therefore if an alternate design which does not comply with the stated standard can demonstrate that it will achieve the objective of the control, this alternate approach may be approved.

No other changes are proposed to the Project as described in the Modification Report dated June 2008.



4. STATEMENT OF COMMITMENTS

In accordance with Part 3A of the *Environmental Planning and Assessment Act 1979*, the following additional commitment is made by the Authority to ameliorate potential impacts arising from the proposed modification to the Consolidated Concept Plan approval for Barangaroo. This commitment should be read in conjunction with the Statement of Commitments contained with the Modification Report and are in addition to those contained therein.

Subject	Commitments	Timing
Built Form	91A. The built form of development blocks 2 to 5 inclusive shall comply with the performance based urban design controls contained in Table 1 to Section 2.1.1 of the Barangaroo Part 3A Modification Report – Commercial Floor Space Preferred Project Report prepared by MG Planning dated October 2008.	To be demonstrated/ assessed as part of any development application/project application for Blocks 2 – 5 inclusive.

In addition following further consultation with the Ministry of Transport it is proposed to delete the change to Commitment 17 proposed in the Modification Report and instead to revert to the original Commitment as follows:

Subject	Commitments	Timing
The Transport Management and Access Plan	<p>17. The Transport Management & Access Plan is to consider and address the following matters:</p> <ul style="list-style-type: none"> ■ Design and construction of a traffic signal controlled intersection at Sussex Street/Napoleon Street, to facilitate the main point of vehicular entry into the development site intersection (to RTA requirements). ■ The feasibility of future specialist transport services to the site (including light rail, boutique tourist bus services, river metro route) and the need to protect possible future alignments for these services. This is to include a possible future light rail system with appropriate reservation of road space on Hickson Road. ■ Off-site improvements that will facilitate pedestrian and cycle access between the site, Wynyard Railway Station, Millers Point, the Rocks, Circular Quay and Dawes Point. This is to include consideration of pedestrian links to existing bus services and the potential for grade separated connections between the site/Hickson Road and Wynyard Station, which will meet pedestrian desire lines and provide physical linkages to the adjoining residential area of Millers Point, which will facilitate easy access to and regular use of services, facilities and public spaces at Barangaroo by existing local communities. Consideration of off-site pedestrian improvements is only where those improvements can be demonstrated to positively improve the amenities of the proposed development and its connections to surrounding developments. Consideration of more general public domain improvements for the benefit of the wider CBD is not required. 	To be submitted to the Barangaroo Taskforce prior to the lodgement of any development application/project application other than for demolition or early/site preparation work.

Subject	Commitments	Timing
The Transport Management and Access Plan...continued	<ul style="list-style-type: none"> Options for the extension/amendment of bus services. Initial options include extensions to services from QVB, and east-west bus link (Erskine Street, Wynyard Street and Regimental Square) and services which currently terminate at Wynyard. This is to include consideration of the need for any off-site traffic works to provide for improved east –west bus movements relating to servicing of the site. Any options for extended bus services to the site will be subject to endorsement by the Ministry of Transport (MOT), State Transit Authority (STA) Services will be progressively provided in line with the staged development of Barangaroo. Bus stops and access, including the location of bus stops along Hickson Road, and any relocation of existing stops. Provision of off-road layover facilities for buses and for coach drop off and parking, including the need for on-street tourist coach parking facilities at the northern end of the site (in Hickson Road and Munn Street). Provision of passenger wharf facilities, including at least one public ferry wharf with appropriate landside facilities adjacent to the site. The role of this commuter/tourist/recreational wharf, and possible adjustments to ferry services is to be the subject of consultation with Sydney Ferries/MOT/NSW Maritime/Sydney Ports Corporation. Feasibility of creating a westward extension of Grosvenor Street to Kent Street and provision of two way vehicular access on Kent Street. Re-alignment and/or retention of Margaret Street along the southern boundary of the site and land use implications of such changes. Desirability of replacing existing all day (10 hour) on-street parking in Hickson Road by parallel shorter term parking 	.

A complete revised statement of commitments is included at Appendix 8.



Harbour Foreshore Authority