

View Impact Analysis Report Concept Plan Modification 4 and State Significant Site Amendment Preferred Project Report

Barangaroo

Submitted to
Department of Planning
On Behalf of Lend Lease Development (Millers Point Pty Limited)

November 2010 ■ 10051

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1.0 Introduction

An Environmental Assessment Report (EAR) for Concept Plan Modification No. 4 MP 06_0162 was publicly exhibited for a period of four weeks between 11 August 2010 and 10 September 2010.

In total, 213 submissions were received in response to the public exhibition of the Concept Plan Modification. The proponent Lend Lease (Millers Point) Pty Ltd (Lend Lease) and its specialist consultant team have reviewed and considered the Department's comments, the agencies submissions, the City of Sydney's submission and the public submissions and, in accordance with clause 75H(6) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), respond to the issues raised.

The technical specifications and methodology adopted by the exhibited View Impact Analysis have been scrutinised. Both the City of Sydney and the Department of Planning requested Lend Lease to provide a revised view impact assessment.

In addition, a more detailed view impact analysis has been requested to assess the potential impacts arising from the proposed Blocks 4(A-C) building envelopes, and to specifically consider the impacts to Kent Street residents associated with Concept Plan Modification's proposal to increase Block 4 building heights above the approved RL 100 controls.

Agency and public submissions also raised concern in relation to visual impacts and view loss associated with:

- the landmark hotel building generally interrupting foreshore views from all directions;
- view impacts upon existing corridors at Kent Street, Lime Street and Shelley Street and existing nearby commercial properties;
- the potential impacts to existing Margaret Street West views; and
- the potential impacts to existing Grosvenor Street views.

This View Impact Analysis Report has therefore been prepared for the Preferred Project Report (PPR), in response to the issues raised surrounding views, and the Department of Planning's request that Lend Lease submit a revised view analysis. This View Impact Analysis report supersedes the exhibited Visual Impact Analysis prepared by JBA dated August 2010. It should be read in conjunction with the PPR prepared by JBA Planning dated November 2010, as well as the exhibited Concept Plan Modification EAR prepared by JBA Planning dated August 2010.

2.0 Director-General's Requirements

The Director-General's Requirements (DGRs) of 2 July 2010 for the Concept Plan Modification require, amongst other things, that the following be addressed with respect to views and visual impacts:

- *Relevant EPIs, policies and guidelines (including amongst others, Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 and its accompanying 'Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005';*
- *Consideration of issues relating to and proposed development controls for ...view corridors, ...; and*
- *View Impacts, where the proponent is to:*
 - *Assess the visual impacts of the landmark hotel building, office towers and any other proposed building height and/or density increases on Sydney Harbour and surrounding areas.*
 - *(Provide) a view analysis undertaken inclusive of photomontages and perspectives of:*
 - *Key elements and views of the development from key locations (including, but not limited to, from Hickson Road, Kent Street, Shelley Street, Lime Street, Gas Lane, Jenkins Street, Pyrmont, East Balmain, Darling Harbour, Blues Point, and Millers Point; and*
 - *Impacts on key views from within the Barangaroo site, including north-south view along the foreshore walk. These requirements are addressed in detail in Section 5 of this report.*

These requirements are addressed in detail in Section 5 of this report.

3.0 Planning Principles for Views, View Sharing, and Outlook

3.1 Planning Principles in the Established Planning Framework

It has been a long standing strategic position of the City of Sydney Council that views, and view sharing, is a matter of specific and particular importance with respect to the potential impact of development on key views and vistas. In particular, views and vistas are to be available at the street level, and generally from or within the public domain.

Section 2.8 of the Central Sydney Development Control Plan 1996 (DCP 1996) acknowledges that:

- it is important that views to Sydney Harbour and parks be maintained from as many points as possible at street level;
- in the redevelopment of some sites, consideration should be given to opening up new significant views;
- views are regarded as significant when they terminate at Sydney Harbour, parklands, low level sky, or a publicly significant object;
- vistas are views along streets that are terminated by buildings, and can be emphasised with sensitive design of the visually prominent buildings that terminate them; and
- the siting and design of new buildings should maintain existing vistas along streets to places of architectural, landscape, or cultural significance.

The DCP objectives and provisions identify significant views in the Sydney CBD that are to be protected from encroachment and / or enhanced by building design. The provisions of the DCP also encourage the siting and design of new buildings that maintain and open up significant views from the public domain, to Sydney Harbour, parklands and significant objects as well as protecting silhouettes of the tops of major heritage buildings as seen against the sky.

It is noted that the Barangaroo site has not been identified as a contributory element to existing or desirable future significant public domain views (refer Figure 2-40 from the DCP reproduced at **Figure 1**).

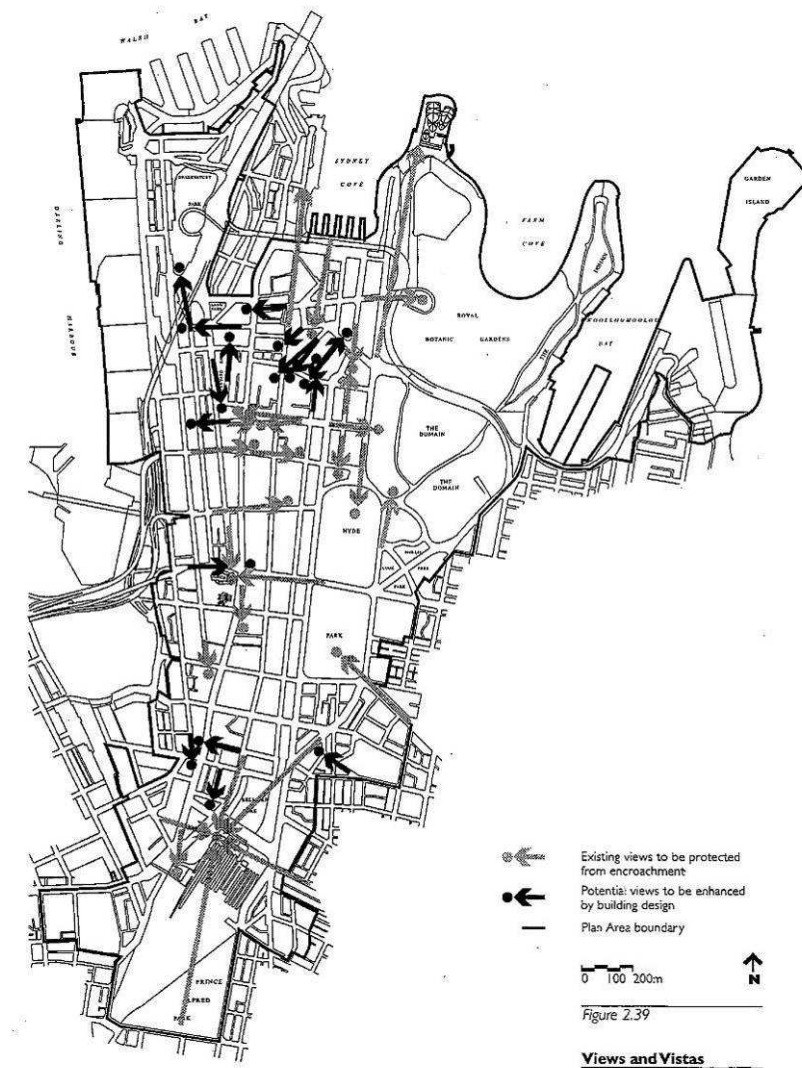


Figure 1 - Central Sydney DCP 1996 – Figure 2-40

The current planning objectives, strategies, principles and development controls for the Sydney CBD have also long recognised that ‘outlook’, as distinct from ‘views’, is the appropriate measure of residential amenity within a global CBD context. Sections 6.1.11 and 6.1.12 of DCP 1996 clearly articulate the following with respect to outlook and views in relation to the impact of development on existing and future residential amenity:

*“6.1.11 The design of residential buildings and serviced apartments should ensure the **provision of outlook, as distinct from views**, from all dwelling units. **Outlook is considered to be a short range prospect**, such as building to building, while views are more extensive or long range to particular objects or geographic features.*

6.1.12 There is no guarantee that views or outlooks from existing development will be maintained.” (our emphasis)

It is considered entirely appropriate that the Barangaroo site be treated consistently with other development sites within the Sydney CBD in relation to this issue.

In addition to Central Sydney DCP 1996, Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 adopts the following principles for the purpose of achieving its aims for the Foreshores and Waterways Area:

*“(a) Sydney Harbour is to be recognised as a public resource, owned by the public, to be protected for the public good,
 (b) **The public good has precedence over the private good whenever and whatever change is proposed for Sydney Harbour or its foreshores,**
 (c) Protection of the natural assets of Sydney Harbour has precedence over all other interests.” (our emphasis)*

The planning principle in respect of view sharing articulated by the NSW Land and Environment Court (Tenacity Consulting v Warringah Council [2004] NSWLEC 140) can be broadly summarised as follows:

- the notion of view sharing is invoked when a property enjoys existing views and a proposed development would share that view by taking some of it away for its own enjoyment;
- taking a view away in its entirety cannot be called view sharing, although it may, in some circumstances, be quite reasonable; and
- to decide whether or not view sharing is reasonable involves a 4 step assessment:
 - an assessment of the view that is to be affected;
 - consideration from what part of the property the views are obtained;
 - an assessment of the extent of the impact; and
 - an assessment of the reasonableness of the proposal that is causing the impact.

It is important to note that the NSW Land and Environment Court planning principle relating to view sharing in the above case was one derived from the consideration of an environmental planning instrument that required development to allow for the reasonable sharing of views.

These principles must be read in the context of the:

- clear statements contained within the existing planning controls that apply to Barangaroo South and to all immediately adjoining land as to how private domain views are to be treated in any environmental impact assessment, and in the context of the value placed on protection and enhancement of public domain views; and
- State Government’s strategic policy context for the urban renewal of Barangaroo as a new mixed use precinct with a significant public waterfront park on the western harbour’s edge of the Sydney CBD;
- outcomes of the Stage 1 and Stage 2 international urban design competition for the site; and
- planning and urban design principles for redevelopment of the site that have been endorsed as part of that process, as part of the approved Concept Plan (as modified) and the provisions in Part 12, Schedule 3 of State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP).

3.2 Established Barangaroo Views and Planning Principles

3.2.1 Initial Principles

In 2005, the City of Sydney Council engaged Hill Thalys Architecture + Urban Projects Pty Ltd to undertake a contextual analysis of the then East Darling Harbour (now Barangaroo) site, and to work with the Council to develop principles to guide its future redevelopment.

The *Darling Harbour Wharves Site Study* prepared by Hill Thalys Architecture + Urban Projects Pty Ltd on behalf of the Council identified significant local views to, within and across the Barangaroo site.

This analysis was undertaken independently of the involvement of Hill Thalys Architecture in the then East Darling Harbour Competition process. The analysis culminated in the derivation of a set of planning principles for redevelopment of the site, which were endorsed by the Council on 27 July 2005.

Copies of the Hill Thalys Architecture + Urban Projects contextual analysis relating to views, and the Council-endorsed Site Potential and Principles diagram are reproduced at **Figures 2 and 3** below.

Of key importance to the consideration of appropriate planning and urban design principles for the site, the Study identifies that the **important views** are those local views available from the **public domain spaces** around the Barangaroo site, including from areas within Millers Point, Towns Place, Dalgety Road, Hickson Road, High Street, Munn Street, Argyle Street, Bettington Street and Napoleon Street.

The Study articulated the following planning principles relating to views and view sharing as being appropriate to guide the future redevelopment opportunities for the overall Barangaroo site, which are also applicable to Barangaroo South:

- retain significant views across the site to the waterfront;
- allow for public views across the Harbour from Millers Point (the northernmost part of the site) and Observatory Hill;
- consider the high visibility of the site from public places including the waterway, harbour edge parks, Sydney Harbour Bridge and Anzac Bridge;
- protect local views to the site and adjoining waterway from public domain areas in Millers Point and the western side of the city;
- place highest importance on axial views along streets to the waterfront; and
- allow views from the site and adjoining waterway to natural features including the High Street / Hickson Road cliff faces and retaining walls.

3.2.2 Consideration of Public Views in the Barangaroo Concept Plan

The original Concept Plan prepared by Hill Thalys Architecture + Urban Projects Pty Ltd (in conjunction with others) fundamentally reflected this analysis and delivers an urban form outcome for the wider Barangaroo site that translated the above planning principles into a specific urban design outcome.

The recognition of significant views is illustrated on the site characteristics diagram prepared by the Hill Thalys Architecture + Urban Projects, Paul Berkemeier Architect and Jane Irwin Landscape Architecture winning team (IBT)

reproduced at **Figure 4** below and is dealt with in further detail in the following sections of this report.

3.2.3 Consideration of Public Views in Concept Plan Modification No. 2

The Barangaroo Concept Plan has been modified on three separate occasions. Modification 1 (approved 25 September 2007) sought to correct minor typographical errors in the Concept Plan Instrument of Approval as well as provide modification to design excellence requirements.

Modification 2 (approved 16 February 2009) resulted in an additional 120,000m² of commercial floorspace on the site distributed across Blocks 2, 3, 4 and 5, whilst Modification 3 (approved 11 November 2009) provided for the amended design for the Headland Park and Northern Cove, removal of Block 8 and part Block 7, reduction of floorspace by 18,800m² and removal of the Sydney Ports Corporation Harbour Control tower.

Accordingly, Modification No. 2 is to date the only approved modification that has revisited and reassessed the impact of the proposal on views and visual impacts. The following is a synopsis of the key issues and conclusions drawn from that planning process including the report prepared by MG Planning (pages 67-72), and other supporting reports and studies with a reference to view impacts, for the Sydney Harbour Foreshore Authority in support of Modification No. 2.

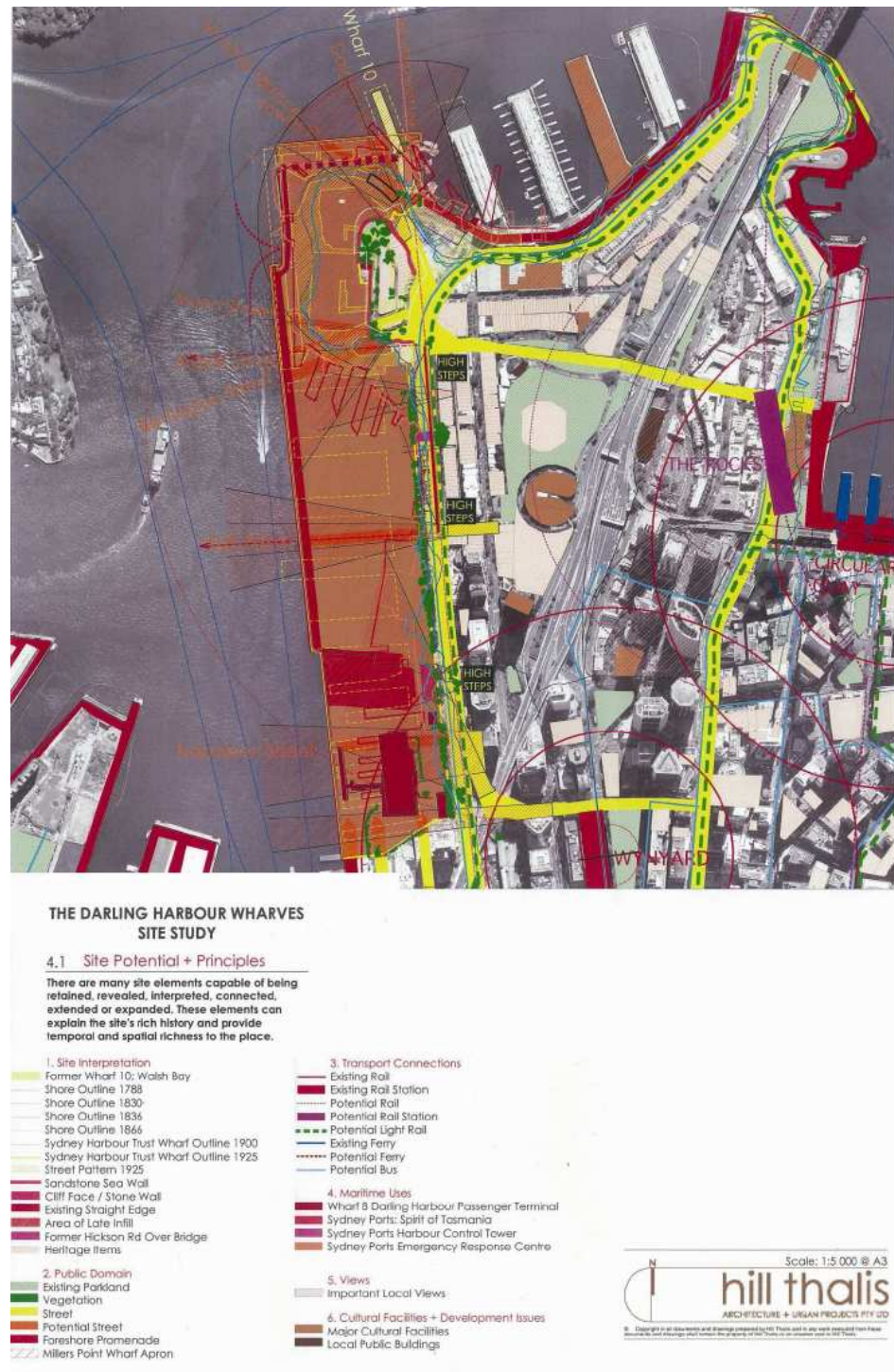


Figure 2 – Site Potential & Principles Diagram (Source: Darling Harbour Wharves Site Study)

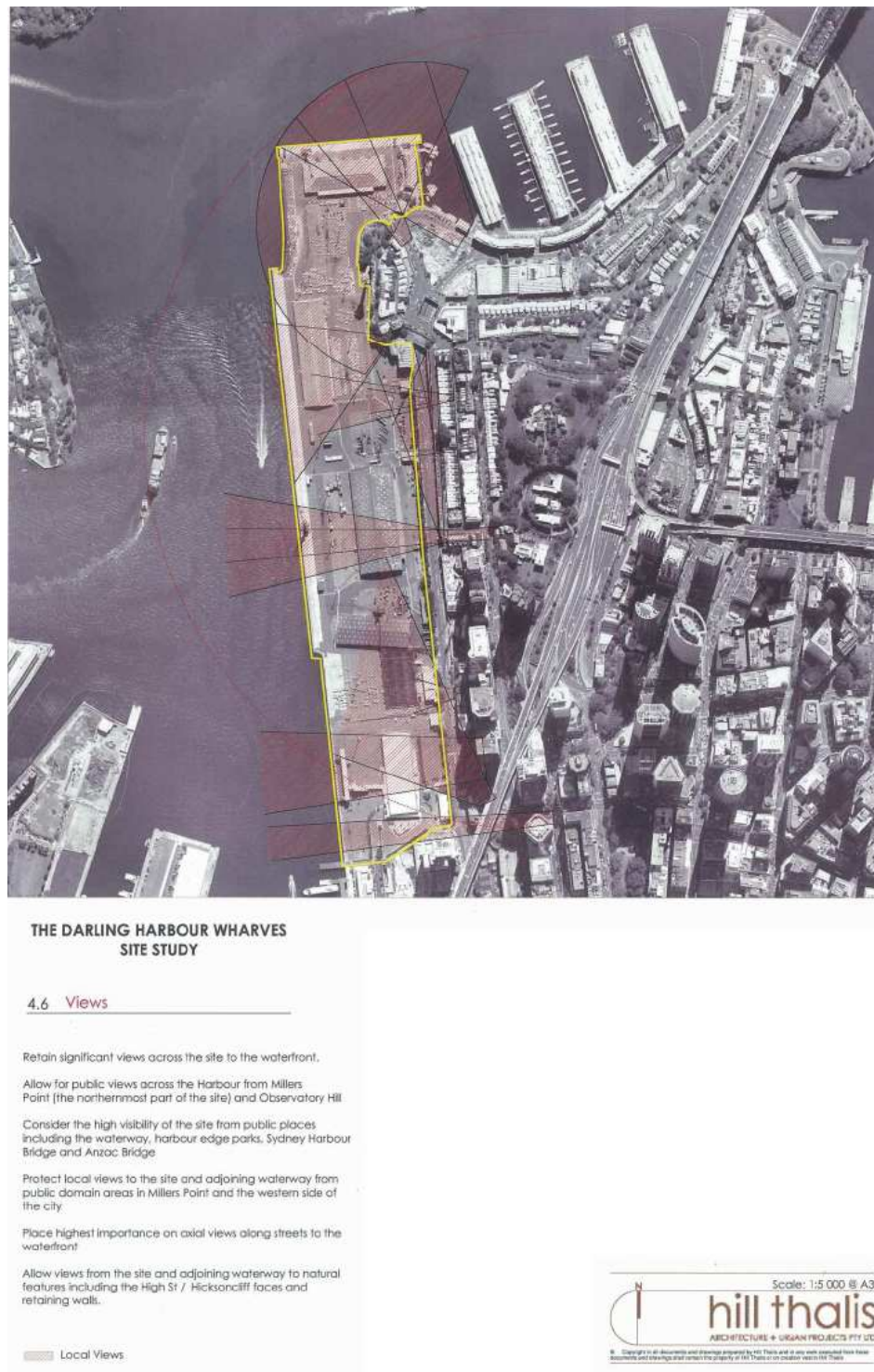


Figure 3 – View Analysis Diagram (Source: Darling Harbour Wharves Site Study)

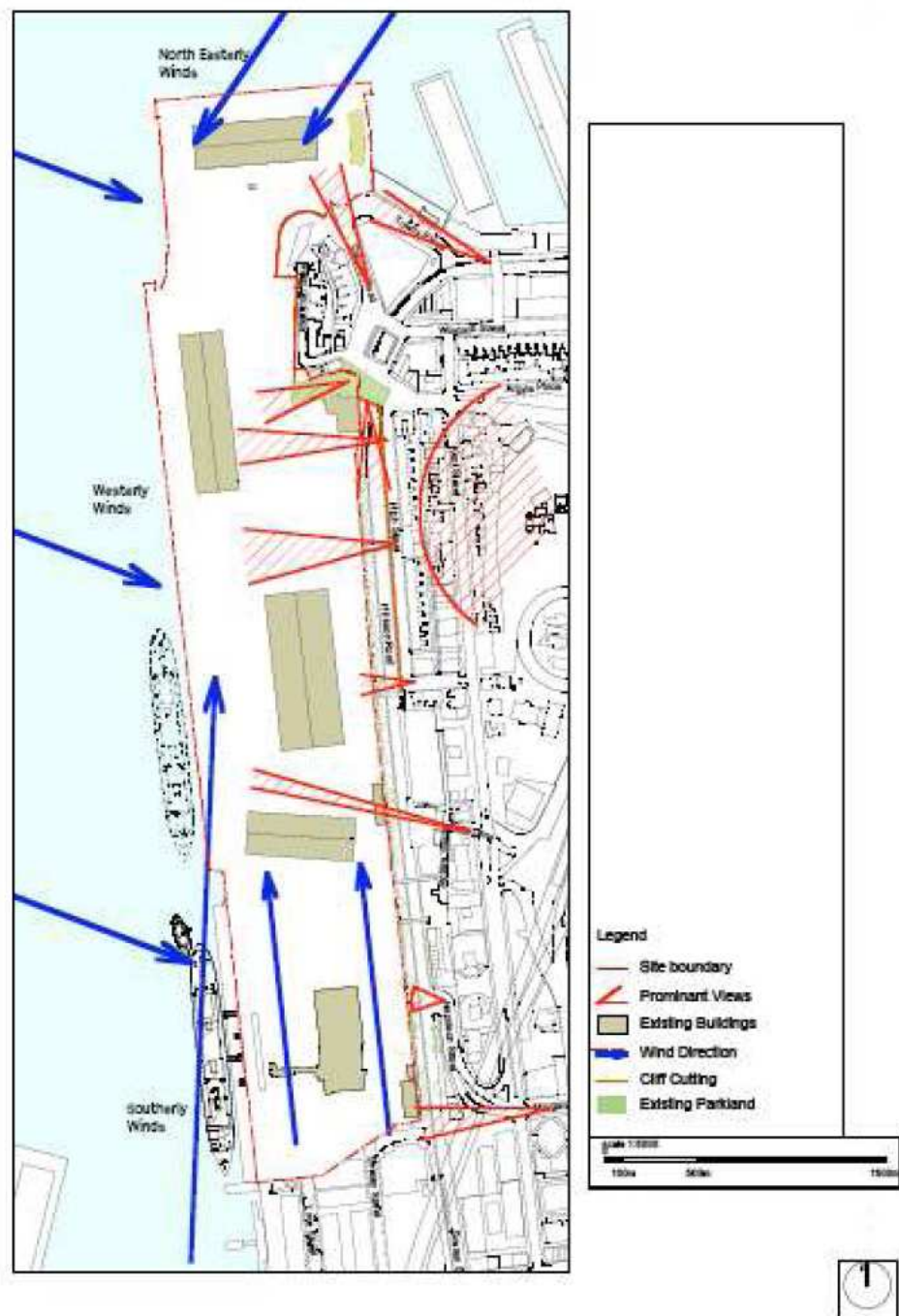


Figure 4 – Site characteristics diagram (Source: IBT)

3.2.4 Impact on Distant Views

Under the changes sought by Modification 2, the impact on eastern views towards the CBD were considered to generally be negligible as the Barangaroo development would largely sit in front of existing CBD buildings. In some cases the proposal would fill gaps between buildings but would not result in any major changes to the CBD skyline.

Despite a change in floorspace and floorplate configuration, when viewed from the south-west, west and north-west, the proposal would still remain a group of buildings providing a new western face to the CBD and would be seen within the context of the backdrop of the existing high-rise CBD profile. It was concluded

that there were no significant adverse view impacts as a result of the increase in floor space.

3.2.5 Impact on Local Views

The impact of Modification No. 2 on local views was likely to remain similar to that under the originally approved Concept Plan, as the Development Blocks were to be retained. There would be no change to views, to and from Millers Point or Observatory Hill Park.

A slight narrowing of views (south of Block 5) from the east was anticipated to occur due to the creation of podiums for Blocks 3 to 5. However, proposed east-west oriented streets would remain, ensuring important views to the Harbour would be maintained or be made available.

The MG report also noted earlier commentary made by JBA Urban Planning for the originally-approved Concept Plan, including:

- many new views would be created due to the creation of new public access along the foreshore;
- improved views would be created due to the removal of structures along the foreshore, including new appreciation of the Millers Point sandstone cutting;
- improved views to and from Millers Point and Observatory Hill and the opposite harbour foreshores would be created as a result of no or low-rise development to the north of the site and new buildings predominantly to the south of the site; and
- new planned connections and extensions of the existing or lost road network allows for views and vistas would be retained, protected, and established through the future public domain.

All these important view elements were not expected to be impacted by the proposed increase in floorspace under Modification No. 2.

3.2.6 Impact on Heritage Views

Important heritage views to the site were established by City Plan Heritage in its report (March 2007) in support of the initially approved Concept Plan. These views included those to the Millers Point headland through the northern part of the Barangaroo site as well as:

- the panorama from Observatory Hill to the west and over the Barangaroo site;
- the view south along Hickson Road from Munn Street;
- a view west from the northern end of High Street over the Munn Street alignment;
- the view west from the centre of High Street; and
- the view from the southern end of High Street.

It was concluded that none of these views would be affected by Concept Plan Modification No. 2. Additionally, other views from around the Harbour's foreshores to the Millers Point area would continue due to the proposed urban structure of the Barangaroo Concept Plan and Modification No. 2.

MG Planning noted that the existing Statement of Commitments and Conditions of Approval with respect to view corridor impacts did not need to be reviewed or changed as a result of Modification No. 2.

3.2.7 Consideration of Private Views in Concept Plan Modification No. 2

Conybeare Morrison (CM +) undertook an analysis of the view impacts upon a selection of residential apartment towers located along Kent Street and Hickson Road in support of Modification No. 2. The buildings considered were Highgate, Stamford Marquee, Stamford on Kent, and The Bond Apartments. The analysis undertaken focussed on a range of westerly views, to and over, the proposed urban form at the wider Barangaroo site, and included Barangaroo South.

Key considerations of the visual environment that were assessed were:

- proximity of the proposed commercial towers;
- the sky exposure plain; and
- views through to the water when looking west.

The conclusions that were drawn from the CM + report were that the change in view impacts between the approved Concept Plan and Modification No. 2 were minor and highly dependent upon the future detailed design of the buildings on the site. Further assessment would be warranted at subsequent Project Application stage.

Additionally, views from NSW Housing accommodation from High and Kent Streets were deemed to be generally unaffected by the Modification No. 2 scheme given the unaltered protection of wider views to the west and north-west, despite some changes to views to the south-west from these premises.

3.2.8 Conclusions

The proposed indicative building envelopes and urban structure under Modification No. 2 would continue to maintain the principle of view sharing by maintaining the established street corridors which provided for sharing of views across and through the site (to the Harbour) from the east.

The proposed urban structure, continued the approved Concept Plan's notion of Development Blocks and envelopes, indicative street locations and widths, and provided for the protection of views through the site from the east by way of framed street views to the foreshore and beyond.

Distant views would not be altered by Modification No. 2, whilst local views and key principles underpinning the retention of existing, and creation of new, views would not be impacted adversely.

No heritage views would be affected and no changes to the approval or the approved Statements of Commitment were warranted as a result of Modification No. 2.

4.0 Urban Design Principles

4.1 Established Urban Design Principles

The Barangaroo project is a significant urban renewal project for Sydney. It is the Government's intention that the renewal will leverage and strengthen the Sydney CBD, and hence the State's economy, well into the 21st Century.

The urban form principles established for the site to date are based on the outcomes of the 2005/2006 Government staged international urban design competition, which examined multiple urban form options and urban design / architectural ideas and solutions to help underpin the Government's vision for the renewal of the site and the original Hill Thalys scheme. The urban pattern of that winning competition scheme, and specifically the built form and massing of development within the site, were unanimously endorsed by the Competition Jury.

There are a number of fundamental principles embodied within the winning competition scheme which direct the location, height, scale, bulk, massing and general configuration of the future floor space predominantly within Barangaroo South.

These fundamental urban design principles are:

- the urban design structure, which creates major new parklands on the Harbour's edge, and defines an eastern 'wedge' that is the mixed use or urban development precinct. The public domain is the clear unifying structure that acts as the framework for the development form and integrates the site into the fabric of the surrounding city;
- higher density development is to be focussed towards the southern end of the site, linking into existing higher density development at King Street Wharf and the western edge of the CBD. To continue a built form dialogue with the adjoining city, building heights across the site generally taper towards the north, with the highest forms concentrated in the block in front of Napoleon Street;
- the street layout is integral to the physical ordering principles of the site as a whole, integrating with existing streets within Walsh Bay, Millers Point, King Street Wharf and the western grid of the city. It provides a framework for the built form, and determines the configuration and massing of the future development; and
- to promote equitable access to views towards the harbour, built forms have been arranged to define the street corridors, and to allow view corridors from the existing private buildings to the east.

The redevelopment of Barangaroo in accordance with the above principles and in the manner proposed by the approved Concept Plan (as modified) will significantly alter existing views that are available to the west, north-west and south west from surrounding development, including from Westpac Place, King Street Wharf, Stamford on Kent, Highgate, and Observatory Tower. Currently, these existing residential and commercial developments experience largely unobstructed views to the Harbour and beyond due to the absence of built form within Barangaroo South.

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, and creates significant views to and from the site from the public domain. This includes the protection and establishment of views, view corridors and vistas along streets and pedestrian connections, and from other existing public open

spaces. This approach is sound in terms of planning and urban design within a global CBD context.

4.2 Proposed Urban Design Principles

The urban design philosophy underpinning Lend Lease's Concept Plan Modification is consistent with that articulated by the approved Concept Plan (as modified). Overall the Concept Plan Modification seeks to:

- place-make and create a sense of place;
- establish communities;
- promote and emphasise connections to the water;
- implement sustainable design; and
- create a dynamic and vibrant waterfront precinct.

The design philosophy is supported by:

- completing the City frame to book-end the City's western edge;
- creating the 'fan' – a radial arrangement of buildings that optimises solar access and emphasises view corridors;
- creating gateways, markers and place-making by establishing gateway buildings and spaces at strategic locations throughout the CBD and its edges;
- extending the City's natural north-west oriented grid into the site to reinforce already established east-west linkages; and
- connecting and extending the existing CBD into the Barangaroo South site with landmark buildings and markers along the foreshore through a series of street characters, widths, and proportions.

The protection, emphasis and creation of views is predominantly achieved by the proposed urban structure at its ground plane. The Built Form Principles of the proposed Concept Plan Modification are as follows:

- City's new western façade – integrated new frontage to the CBD centre with slender buildings orientated to the waterfront to provide a defined open silhouette;
- Hickson Road as a boulevard – promote the scale of Hickson Road as a grand boulevard, with a consistent street wall and form to Hickson Road;
- buildings to define streets – facades to be set to the street alignment;
- north-south pedestrian connection – provide greater pedestrian permeability through blocks which relate to pedestrian desire lines, which are not less than 4m wide and at least 50% open to the sky;
- tapering built form – continuing the built form dialogue with the adjoining city (highest to the south in front of Napoleon Street);
- open space within Blocks – hollow blocks permeated with open space, walkways, gardens, courtyards;
- view sharing – to promote equitable access to views towards the harbour, the built form is to be arranged to define the street corridors and to allow view corridors from the existing private buildings to the east; and
- orientation of buildings – optimum orientation and transparency across the site to create a silhouette of slender towers to the waterfront and Globe Street. Long façades are oriented to the north and on and along Hickson Road, to the east.

Outlook from the private domain (eg from surrounding residential and commercial development) has been taken into consideration in the formulation of the public domain framework and built form controls for the future development blocks within the site. Consideration of maximising opportunities for view sharing from adjoining development will continue to be an influence as the detailed design phase of the project progresses. Detailed design will be in accordance with the planning and urban design context established by the Concept Plan and Part 12, Schedule 3 of the Major Development SEPP.

Notwithstanding this, the planning outcomes that should take primary importance beyond the protection of local private domain views include:

- the creation of a public domain that is of significant amenity;
- the creation of a commercial precinct that integrates positively with the existing CBD; and
- the establishment of a vibrant new mixed use precinct with a critical mass that is capable of providing significant economic impetus to Sydney as Australia's trade gateway.

The CBD is characterised by a series of grids, high-rise towers along its spines and focused towards its core, and lower-rise development towards the edges with various landmark buildings and towers, often at the fringe. Barangaroo South offers an opportunity to complete and reinforce the grid and the City frame at its western edge as well as provide new locational markers.

The proposed fanning of the built form allows for optimal solar access and light penetration into public spaces, increased opportunity for more slender tower and built forms, and the development to open out towards the foreshore and the water. These openings will form the extension of existing east-west linkages towards the southern end of the site. From a view impact perspective, the urban design philosophy provides not only reinforcement of existing view corridors along the extended grid, but new wider more generous views at and from existing and new vantage points.

The changes proposed by the Concept Plan Modification build on existing view corridors and connections from east to west, and new (or changed) south to north connections and views. The Development Blocks significantly retain the established and recognised views and vistas to, through and over the site. The principle of slender towers and buildings adjacent to public streets in order to frame their view corridors is therefore upheld and reinforced. The original design principles of equitable access to views towards the Harbour, built forms to define street corridors, and view corridors from existing private buildings to the east are all maintained and reinforced. This is discussed in the context of the DGRs in Section 5.

5.0 Response to the DGRs and View Impact Analysis

5.1 Relevant EPIs, Policies and Guidelines

With respect to view impacts and preparation of a view impact analysis the only relevant EPIs, policies or guidelines of relevance are:

- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 – now a deemed SEPP; and
- its accompanying DCP, the Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005.

These two documents are addressed in detail below.

5.1.1 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The Barangaroo site sits within the Foreshores and Waterways Area as identified in Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (the Sydney Harbour REP). The clauses relevant to consideration of visual or view impacts follow.

Clause 2(2)(b) – Aims of Plan – The principle of precedence of public good over private good

With respect to views, the Sydney Harbour REP articulates that amongst other things, the public good (such as public views) will have precedence over private good (private views) where change is proposed on the Harbour or within its foreshores.

Whilst the genesis of this principle is largely rooted in ensuring continuous and unobstructed foreshore access to the public, the principle of views corridors tied to access to the foreshore is primary as compared to the secondary issue of private views. As articulated below, key public views from east to west are to be maintained, and access tied to those views which allows or promotes passage to the foreshore will be maintained. Impacts on private views (being those that may not or do not align with existing or proposed public view corridors over streets will require further consideration when detailed building designs are resolved.

Clause 14(d) – Foreshores and Waterways Area

This sub-clause seeks to ensure “development along the foreshore and waterways should maintain, protect and emphasise the unique visual qualities of Sydney Harbour and its islands and foreshores”.

The Concept Plan Modification generally retains the approved urban structure and is consistent with the principles employed to ensure unique visual qualities are not undermined, eroded or lost.

As established by the approved Concept Plan (as modified), the view to the Barangaroo site will be one where the development will blend with its CBD backdrop and which will positively contribute a new layer with its own unique visual qualities.

Similarly, views to, through and over the site will not diminish the ability to enjoy the visual qualities of the Harbour and its foreshores. This is particularly true of public views from open and/or elevated areas such as Observatory Hill Park.

Clause 15(d) – Heritage Conservation

This sub-clause seeks to ensure heritage conservation protection of “the natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area”.

The boundary of the Foreshores and Waterways Area at and in the vicinity of Barangaroo South sits at the western edge of Hickson Road / Sussex Street. Under the Sydney Harbour REP there are no heritage items within the Foreshores and Waterways Area at Barangaroo.

Nonetheless, the impact on the scenic, environmental and cultural qualities of the area and its adjacent Millers Point Conservation Area and individual heritage items is not diminished by the proposal as the most significant heritage and conservation values are to be found towards the north of the Barangaroo site (ie outside of Barangaroo South). It is from this northern part of the site and from the Millers Point area and Observatory Hill that the most significant views to and of heritage and conservation areas are able to be enjoyed. The current proposal will largely preserve heritage views and views to heritage precincts.

Important heritage views to the site were established by City Plan Heritage in its report (March 2007) in support of the initially approved Concept Plan. These views included those to the Millers Point headland through the northern part of the Barangaroo site as well as:

- the panorama from Observatory Hill to the west and over the Barangaroo site;
- the view south along Hickson Road from Munn Street;
- a view west from the northern end of High Street over the Munn Street alignment;
- the view west from the centre of High Street; and
- the view from the southern end of High Street.

Consistent with Section 3.2.6, heritage views will not be affected by the proposed Concept Plan Modification. Other views from around the Harbour’s foreshores to the Millers Point area would continue due to the proposed urban structure of the Concept Plan Modification, as considered throughout this report.

Division 2 – Matters for Consideration for development - Clause 25 – Foreshores and waterways scenic quality

This requires consideration in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways including the scale, form, design and siting of any building. This should be based on an analysis of:

- the land on which it is to be erected;
- the adjoining land; and
- the likely future character of the locality.

The pre-existing decisions taken on the redevelopment of the Barangaroo site and the general form and spatial structure of the development has continued to inform the process of refining the development options for the site. The redevelopment of now redundant maritime foreshore land and the site’s CBD context and backdrop has determined the scale and function of the development parcels and envelopes in the Concept Plan Modification.

Accordingly, the impact of the proposal on the scenic qualities of the Harbour and its foreshores must be seen in the balanced context of approvals already granted, the site’s CBD location, and the consistency of the proposed Concept Plan Modification when compared to the established planning framework.

Division 2 – Matters for Consideration for development - Clause 26 – Maintenance, protection and enhancement of views

The matters to be taken into consideration in relation to the maintenance, and protection of views include:

- development should maintain and protect views (including night views) to and from Sydney Harbour;
- development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items; and
- the cumulative impact of development on views should be minimised.

These matters are each individually addressed in the following sections of this report.

5.1.2 Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005

The Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (DCP) was prepared as a revision to the earlier DCP that supported the Parramatta River REP (SREP No.22) and the Sydney and Middle Harbours REP (SREP No.23). The controls and provisions within the DCP are the same as those that were in place for both these SREPs in the 1990s with the exception of minor updates and cross-referencing to ensure consistency with the Sydney Harbour REP, which replaced both SREPs No.22 and No.23. The Introduction to the DCP indicates that “a fuller, more comprehensive revision of the DCP is proposed in the future”. To date this revision has not been drafted.

Accordingly, the DCP (unlike its parent REP which was drafted at the time of initial decision-making about the future of East Darling Harbour) does not contemplate the redevelopment of Barangaroo. The controls are largely reflective of consistency of planning and outcomes of Sydney Harbour’s foreshores away from the CBD context and are generally anachronistic in the context of planning for Barangaroo. The controls themselves are chiefly focussed on water-based and land-water interface developments, ensuring consideration of ecological and landscape attributes at the land/water interface. Design Guidelines of the DCP provide guidance for new development at the foreshore, but these are largely based on ensuring consistency in design and decision-making for smaller, more domestic, developments than those in or at the edge of the CBD.

The Barangaroo site falls within the area covered by Map 8 of the DCP, which indicates that there are no terrestrial or aquatic ecological communities or any foreshore landscape character areas that require further consideration of the DCPs provisions or requirements. The requirement for a Visual Impact Assessment (as opposed to consideration of visual impact in its generic sense) is only relevant to new or enlarged marina developments.

With respect to view impacts, Section 3 of the DCP requires consideration of the visual impact of the proposal from the waterway and the foreshores. Whilst the site is not subject to a Landscape Character Type under the DCP, this report addresses and fulfils the requirements of the DCP with respect to views and visual impacts, as far as relevant.

5.2 Consideration of Issues Relating to View Corridors

The Concept Plan Modification relates to the allocation of increased GFA and building and envelope heights across Blocks 1 to 4 (A to C), creation of new

Development Blocks X and Y (which includes the new landmark hotel building at the foreshore), as well as a redistribution of public domain.

The exhibited Concept Plan Modification proposed amendments to the Development Blocks to accommodate additional GFA that resulted in additional height as opposed to a general “fattening” of envelopes. Lend Lease has taken the opportunity through the PPR process to reconfigure the Urban Design Controls (as set out in Section 1 of the PPR prepared by JBA Planning dated November 2010). Notwithstanding the PPR amendments, the result is one where originally conceived and supported principles relating to permeability, movement and connections can be maintained and emphasised.

In general, the proposed urban structure at the ground plane (emphasised by the radial fanning coupled with additional GFA in additional height), will not significantly or adversely impact upon the established view corridors. As the fanning is towards the water’s edge the ability to create wider opening views and visual transparency from within Barangaroo South and further east to the west is reinforced. Established view corridors, are listed below, and are further discussed in later sections of this report:

- Hickson Road;
- Kent Street;
- Shelley Street;
- Lime Street;
- Gas Lane;
- Jenkins Street;
- Pyrmont;
- East Balmain;
- Darling Harbour;
- Blues Point;
- Millers Point (Observatory Hill);
- Margaret Street;
- Foreshore Walk and King Street Wharf;
- Pyrmont Park Pier;
- Balmain Wharf;
- Harbour Bridge Walkway; and
- Opera House Western Forecourt.

5.3 View Impacts

This section examines the various key view impacts and visual impacts of the proposed form as identified by the DGRs.

5.3.1 Methodology

As outlined in the introduction of this report, a number of public and agency submissions raised concerns with the previously exhibited visual impact analysis methodology. Accordingly, both the City of Sydney and the Department of Planning requested Lend Lease provide a revised view impact assessment based on an “acceptable visual assessment methodology”.

In addition, a more detailed view impact analysis has been requested to assess the potential impacts arising from the proposed Blocks 4(A-C) building envelopes, and to specifically consider the impacts to Kent Street residents associated with Concept Plan Modification's proposal to increase Block 4 building heights above the approved RL 100 controls.

Agency and public submissions also raised concern in relation to visual impacts and view loss associated with:

- the landmark hotel building generally interrupting foreshore views from all directions;
- view impacts from existing corridors at Kent Street, Lime Street and Shelley Street and existing nearby commercial properties;
- the potential impacts to existing Margaret Street West views; and
- the potential impacts to existing Grosvenor Street views.

The revised visual impact photomontage methodology prepared for the Concept Plan Modification PPR is detailed in the report at **Appendix A**, prepared by Visual Ideas. The analysis concludes that the methodology adopted during the preparation of the exhibited photomontages is considered acceptable practice for the reasons summarised below.

The Field of View of the Human Eye

There is varying opinions as to the accepted field of view of the eye, ranging from 17 – 24 mm, depending on the source of information referenced.

Notwithstanding, the human eye has quite a wide field of view and is influenced by proximity to the subject being viewed. That is, when standing close to a item (eg: a building), vision is focussed towards the top, sides and bottom of the item. In addition, the human eye changes focus and target direction regularly and quickly, allowing large structures to be viewed in very short periods of time, effectively making the perceived field of view even larger.

The Perspective of the Human Eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. As the back of the human eye is curved and the sensors on cameras are flat, the perspective of a photograph can look quite different to how items are seen in the real world, especially with a larger field of view, or wider lens.

The use of longer lenses (approx 50mm) reduces the amount of perspective in images and therefore replicates what the human eye would see in reality more closely. However, longer lenses' do not consider the field of view of the eye (discussed above). This means that if a photo taken with a 50mm lens was compared to a real view in the same location that the photo was taken from, it would become very clear that the human eye can see much more of the surrounding information than what is captured by the photo.

Changing the FOV on a Digital Camera

The main distinction between using longer rather than wider lenses is the amount of information that is displayed at the edges of the subject. Changing lenses to a smaller FOV produces the same result as cropping a wide angle image, providing that the position and the angle of the camera remains constant while taking the photographs. In short, a lens with a wider FOV does not create an image that has incorrect perspective, rather it simply means that the perspective is extended at the edges of the image showing more of the surrounds in the images.

In the context of the above, it is clear that there is no accepted "one size fits all approach" for lens selection. Longer lenses produce images closer to the perspective of the human eye; however the entirety of subjects as large as entire

buildings and contextual surrounding may not be able to be shown. Using only 17mm lenses would result in the subject being further away and small in the image, but with greater context, which is not always appropriate to assess visual impact.

For these reasons, Lend Lease's consultant Virtual Ideas considers that lens selection for the purposes of undertaking visual impact assessment for Barangaroo South needs to strike a balance between the field of the human eye and perspective, whilst also accurately displaying the built form in its surroundings.

In addition to the revised methodology, orthogonal and oblique analysis has been undertaken by Rogers Stirk Harbour + Partners to determine view impacts on Kent Street residential buildings from Lend Lease's proposed Block 4 envelopes (refer to **Appendix B** of this report). In summary:

- Orthogonal – the projection of uninterrupted views were taken from the west looking east as orthogonal to the residential buildings to establish which views would be affected; and
- Oblique – the orthogonal assessment methodology is a simplistic method of assessing the views, and as such, a more comprehensive assessment of view sharing has been considered, utilising an oblique methodology.

Two heights were taken as a source for views from each of the residential buildings at levels of RL59 and RL90. To measure a reasonable level of uninterrupted views and no loss of amenity from the residential buildings, an angle that matched the view angles of the Approved Concept Plan (as modified) were used, which is an angle of 54° or greater than.

5.3.2 Visual Impacts of the Landmark Hotel Building

The visual impacts of the proposed landmark hotel building vary dependent upon the direction of the view.

From east to west, the landmark hotel building balances the need for a directional marker and landmark statement which attracts movement to the foreshore from the east while retaining an open vista and views. The proposed alignment of the footprint of the building is slightly within the established east-west view corridor that emerges from the Margaret and Napoleon Streets access to the foreshore. However, the design intent is to draw the eye to the marker and the foreshore at its base.

The landmark hotel building is a key response to the approved Concept Plan's requirements to "celebrate the water theme" and is located to assist in a sense of arrival and to locate the approach to the destination. It is proposed that it will frame the main approach view at one edge without impeding the more significant views that open to the north-west and north upon arrival.

The building is a proposed slender form and envelope with its narrow edge generally to the east-west alignment along the southern edge of the east-west view corridor to allow continuous / unbroken views to the west and north-west. Its long-sided orientation facilitates and optimises ESD principles for the building in terms of solar access, and limits a large western façade from being exposed to the western sun.

It is deemed that the impact of the building upon the proposed City Walk link views will be minor, particularly given that this view is not available as the bridge does not presently exist. There are no other existing at-grade views to the west from Hickson Road or Margaret Street that will be affected by the landmark hotel building, in isolation.

From the north, west and south, the landmark hotel building will not be out of context with its CBD setting and/or its backdrop of tall buildings, buildings climbing the CBD's western hill from the foreshore, taller towers along the CBD's spine and ridges, and various taller buildings and towers scattered throughout the southern half of the CBD, such as the Market City Tower in Haymarket or the UTS Broadway tower. The building will integrate with the silhouette of the CBD and its new / proposed Barangaroo context, particularly the north and the west where it will act to complete the built form of the western edge of the CBD which is presently terminated by the wall of towers along Kent Street. Distant views (where it may be seen) through the CBD from the east are also not impacted. The visual impact of the building upon near and distant views (even at ground level) will generally be minor given its existing and future context.

From the south and north, the building's location will assist in creating the new edge of the new grid to the CBD that completes the CBD framework in this location. There will be key views past the building in both directions as a suitable separation will be achieved. There will be ample sky and view corridor space to allow visual access to other directional and place-markers in either direction along the foreshore and beyond. The proposed building will also be a place marker for south-north and east-west views as it sits at the intersection of these key connections and view corridors.

The impact of the landmark hotel building on private views is further considered in Section 5.4 of this report.

5.3.3 Visual Impacts of Office Towers and other Building Height or Density Increases

As with the proposed landmark hotel building, the proposed commercial towers (C3, C4, and C5) which will sit between Shelley Lane and Globe Street in Blocks 2 and 3, will largely form an extension to the CBD in both plan and in silhouette from the east and the west. Similarly, the residential towers (R3, R5, R7) located in Blocks 4A, 4B and 4C and Block X will also blend into the city skyline. The buildings will be viewed as a new addition to the existing CBD tower context and backdrop. As previously concluded in previous studies, there will be no significant change to the visual impacts of the CBD with the addition of these building envelopes.

The additional height proposed will still generally fall within the existing silhouette of the CBD when viewed from both the east and west. The buildings will be no taller than the tallest development in the CBD. The proposed built form over the entire Concept Plan site will generally read as a tapering of slender and taller towers (as an extension and part of the CBD context) to lower buildings and structures towards the foreshores (as an extension and part of the of western CBD context). The commercial towers will accordingly visually connect with other commercial CBD towers. It is this layering of heights from the foreshore with those behind that sit on the slope leading to the ridge, as well as those buildings on the ridge itself, which will ameliorate the visual impacts.

Whilst there is the long-held principle (from at least the early 1970s as part of the City of Sydney Strategic Plan) of higher building heights upon ridges and elevated positions, and lower rise development towards the foreshore, this principle may be viewed as somewhat anachronistic given the scarcity of suitable CBD land for ongoing renewal of the northern CBD, and the relatively minor overshadowing impacts of the approved scheme and current Concept Plan Modification. In addition, the economic stimulus offered by the Concept Plan Modification, as outlined in Section 3.5 of the PPR, provides for further impetus for departing from that principle. The ability to emphasise the topography of the CBD will be maintained with other newer development within the core of the CBD, but this

should not act as a priority over the ability to create new activity centres and new built form and character in their own right.

The proposed fanned form of these buildings provides more generous spaces than previously envisaged and articulates a contiguous CBD form from the west and other views. Views will be enhanced by:

- additional articulation requirements to modulate the massing and to elongate the tower forms including the requirement for architectural components such as prows, corner redents, expressed structure and lift cores and vertical villages;
- introduction of an additional control which requires that above RL 160, one of the towers must be reduced in height and/or the floor area;
- introduction of a minimum 40m separation between the tower forms in Block 4B and Block 4C;
- introduction of a minimum 15m separation between individual buildings fronting Hickson Road in Block 4C to contribute to an improved view sharing outcome;
- amendments to the street and pedestrian network, as outlined in the PPR to provide greater permeability through the site;
- offer wider views to the sky when viewed from the ground plane;
- greater building modulation and articulation through new controls which ensure:
 - each of the proposed commercial towers will be legible when viewed from their respective bases;
 - the built form and the tower elements in particular continue to read as individual towers and maintain an appropriate relationship within the Development Blocks themselves and to the human scale; and
 - a strong cohesive environment to enhance the pedestrian experience, to ensure a high level of articulation to the street frontages, and to ensure an armature of masonry elements that give definition and substance to the future architecture;
- promotion of different architectural treatments, detailing of facades and strategic selection of materials to create visual interest and break up expanses of building walls with modulation of form and to create a balance between public and private spaces;
- retention of existing view corridors and framing of new major view corridors to the water between the commercial towers and over the Southern Cove, allowing visual permeability and view sharing to and from the water; and
- orientation and placement of the buildings for optimal solar penetration and view sharing.

It is noted that the proposed buildings are indicative only, and demonstrate how built form can be realised within the Development Blocks when considering the various setback, density and built form and modulation controls proposed by the Supplementary Urban Design Statement (refer to Appendix C of the Concept Plan Modification PPR Report).

The indicative layout will not create a new wall of development but rather a new edge with views through to other taller buildings within the CBD and accordingly is not expected to have significantly adverse view impacts beyond those already expected under the approved Concept Plan (as modified).

The impact of the office towers and other building height and density increases on private views is further considered in Section 5.4 and **Appendices A** and **B** of this report.

5.3.4 Grosvenor Street

The Grosvenor Street view corridor does not exist, and would necessitate the partial demolition of 189 Kent Street to be realised. If and when the Grosvenor Street view corridor is created, Lend Lease will consider the opportunities for enhancing this view.

5.3.5 View Impacts within the Barangaroo Site

The view impacts of the proposal from within the Barangaroo site will be essentially the same. Blocks 1-4 (A – C), X and Y continue to coincide with the centre line of the proposed extensions of roads and public domain. Accordingly views through the site will be maintained, along the east-west and north-south street connections, at a minimum. Internal views are not expected to have significantly adverse view impacts beyond those already expected under the approved Concept Plan (as modified).

Views, view corridors, and vistas internal to the site as established by the approved Concept Plan (as modified) and the gazetted SEPP, will not be removed or compromised. Indeed, the proposed revised envelopes and potential built form will emphasise many views as shown in **Figures 5 – 10**, as a result of:

- more slender tower forms;
- inverted podium forms (the landmark hotel building at and over the foreshore);
- views or vistas terminating at hubs and open spaces where other views and vistas open-up; and
- framing of view corridors.

It should be noted that **Figures 5 – 10** are illustrative of possible design outcomes and for technical assessment purposes only, and do not form part of the Concept Plan Modification for which approval is sought.



Figure 5 – Hickson Road view corridor

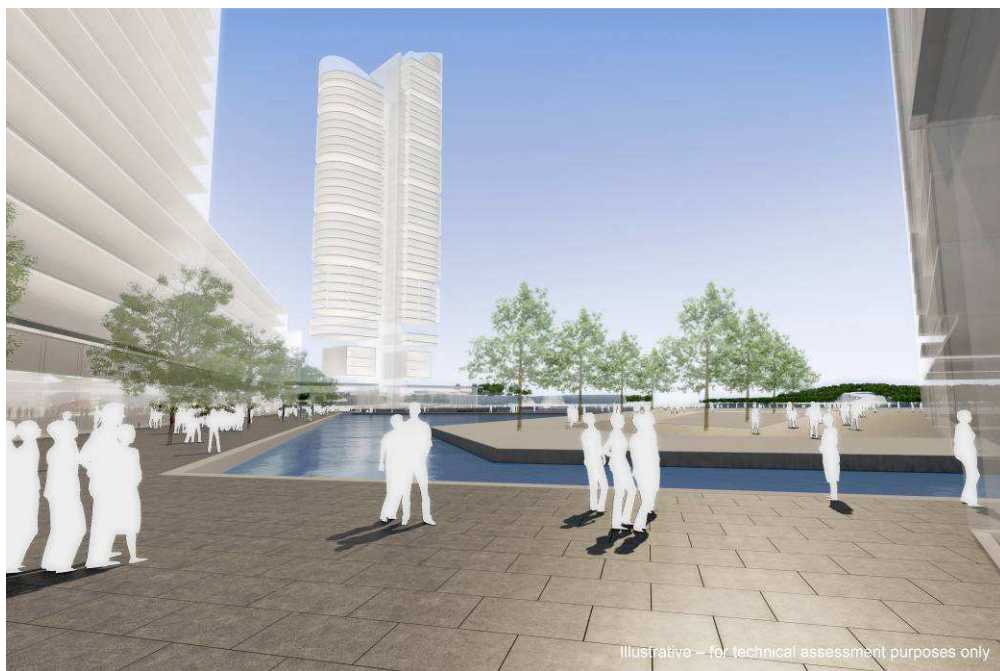


Figure 6 – Views across the Southern Cove are opened to the sky



Figure 7 – Views from waterfront promenade to landmark hotel building



Figure 8 – Globe Street view corridor is framed by a consistent street wall



Figure 9 – City Walk (at ground level) enjoys visual access to the foreshore

Public domain views across and within Barangaroo

In relation to the public domain specifically, the Concept Plan Modification:

- does not impact the form and function of the Headland Park which will have a high point opposite Clyne Reserve and which will emphasise the green backdrop when viewed across the Harbour. Gathering spaces in this elevated area will allow distant vistas to other harbour foreshores and facilitate viewing of harbour events such as the New Year's fireworks. The design principles for the Headland Park establish elevated panorama views to the water from the park, and framed street views to the park and water as illustrated on original Concept Plan's Figure 11.6 – Design Principles – Headland Park, and superseded by Concept Plan Modification No. 3 reproduced at **Figure 10** below. This position is unaltered by the current Modification proposal;

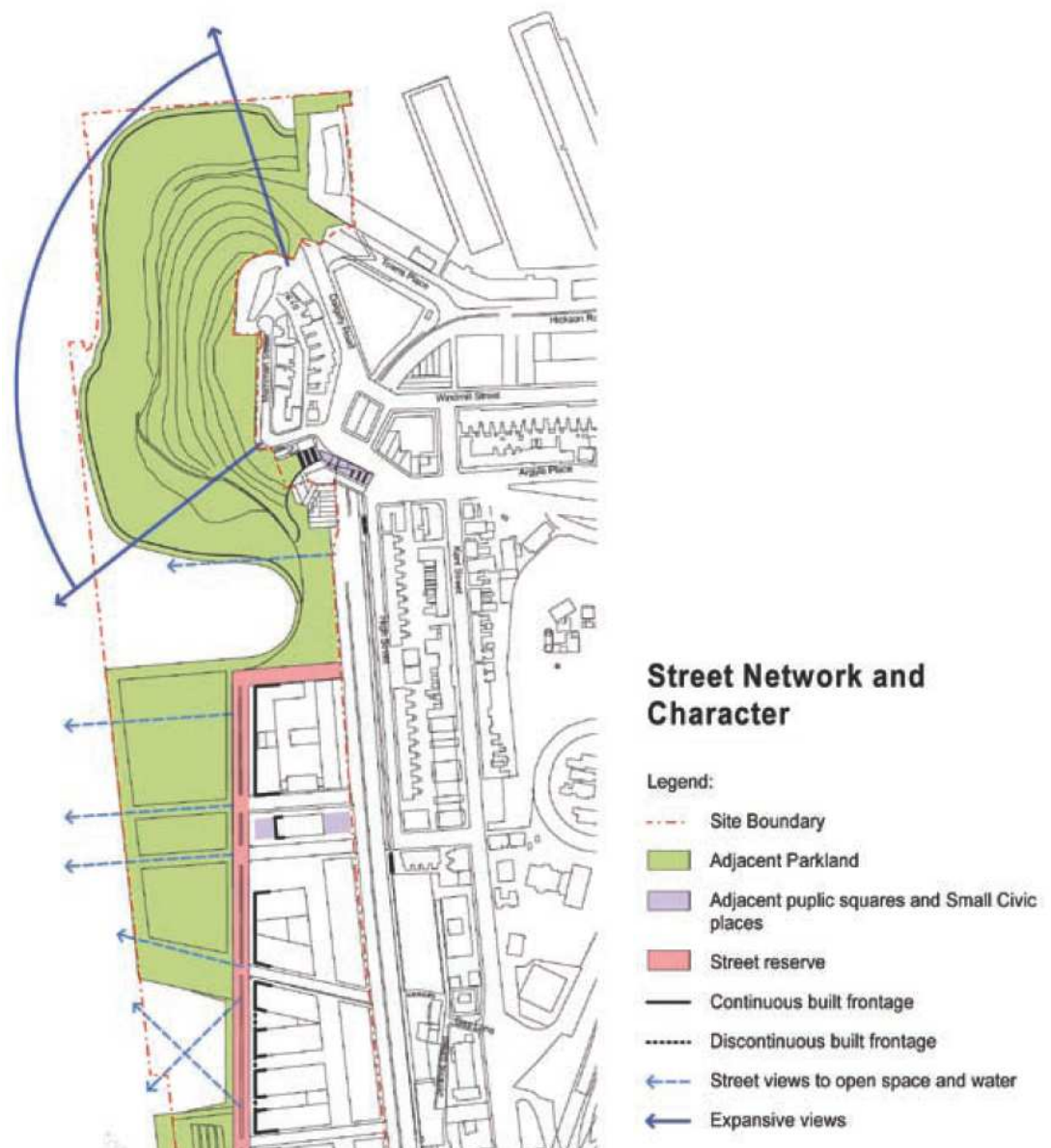


Figure 10 – Headland Park – framed street views to the water

- provides pedestrian connections back to the city including 2 new proposed elevated pedestrian bridges over Hickson Road to Millers Point and the CBD and beyond. As a result, significant new public domain views to the Harbour,

and foreshore, will become available. This position is unaltered by the current Modification proposal;

- aligns the street and pedestrian connections with Barangaroo South to provide water vistas, and bring the surrounding network of city streets and the harbour together. The principles relating to visual connectivity between existing areas to the east and the Harbour are illustrated on the original Concept Plan's Figure 9.2 – Connectivity, which is reproduced at **Figure 11** below; and
- will generally retain established views as envisaged by the approved Concept Plan (as modified) whilst also maintaining the approved Concept Plan's principle of providing view corridors down the new street network. The current Modification's connectivity is demonstrated in **Figure 12** below;
- retains established views and vistas from Hickson Road and High Street, and from the elevated pedestrian bridges along Munn Street, Little Clyde Street, Agar Street, Healy Street, Bull Street, Napoleon Street and Margaret Street West. Refer to original Concept Plan Figures 11.8 & 11.11 reproduced respectively in **Figure 13** (showing views and vistas along Munn Street, Little Clyde Street and Agar Street through Barangaroo Central) and **Figure 14** (showing views and vistas along Healy Street, Bull Street, Napoleon Street and Margaret Street West through Barangaroo South and Barangaroo Central);
- the key view principles identified in **Figures 15** and **16** are maintained, albeit in a refined manner for the current Modification. The northern views to the west and north-west are unaffected by the Concept Plan Modification, whilst some views to the south-west from Millers Point will be altered when compared to the original scheme, principally due to the proposed location of the landmark hotel building; and
- existing views down Gas Lane will be preserved, and public domain views to the water and beyond will generally remain uninterrupted.



Figure 11 - Concept Plan Figure 9.2 – Retention, enhancement and creation of significant views and vistas along streets

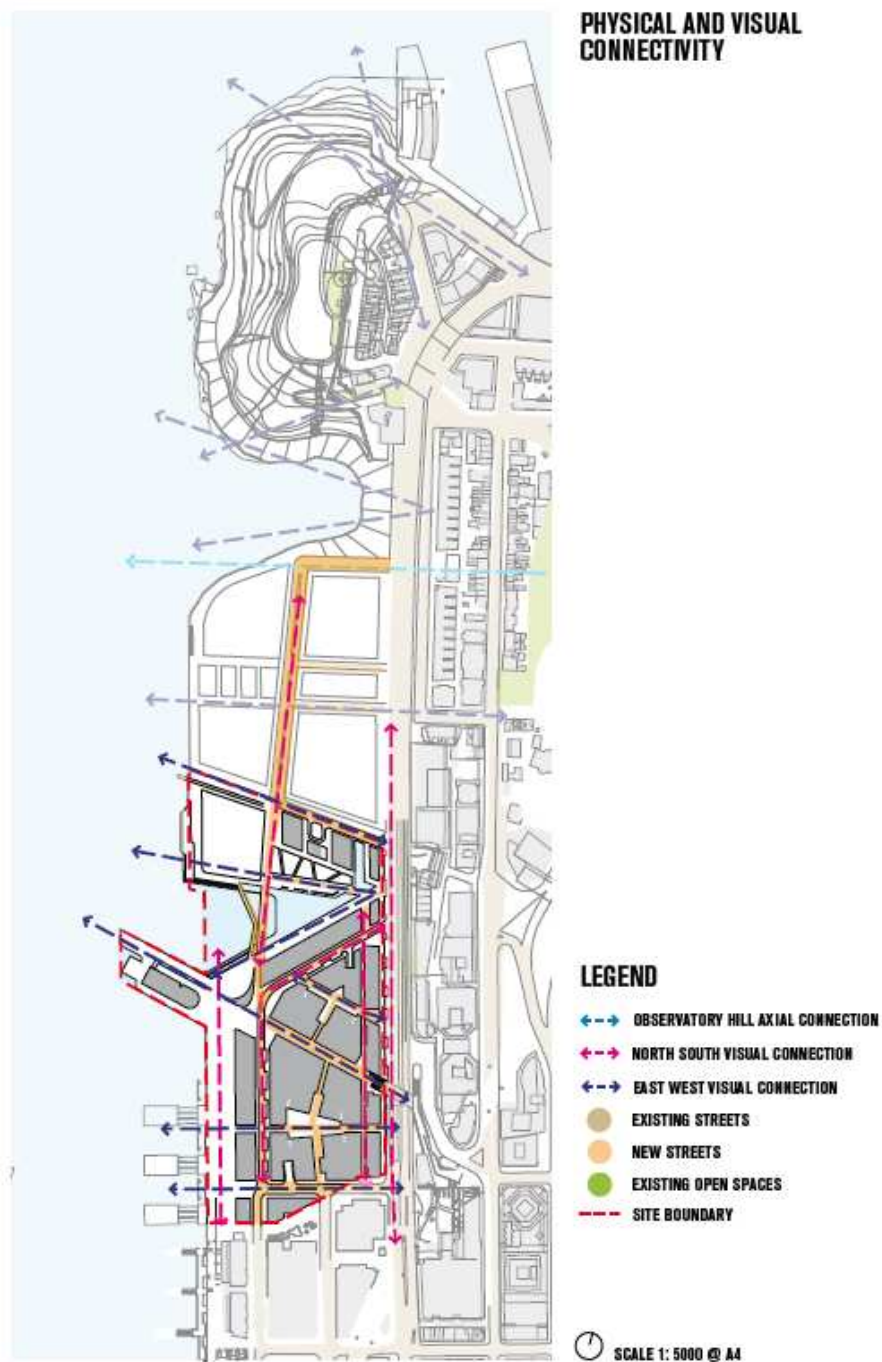


Figure 12 – Physical and Visual Connectivity – Barangaroo South Concept Plan Modification

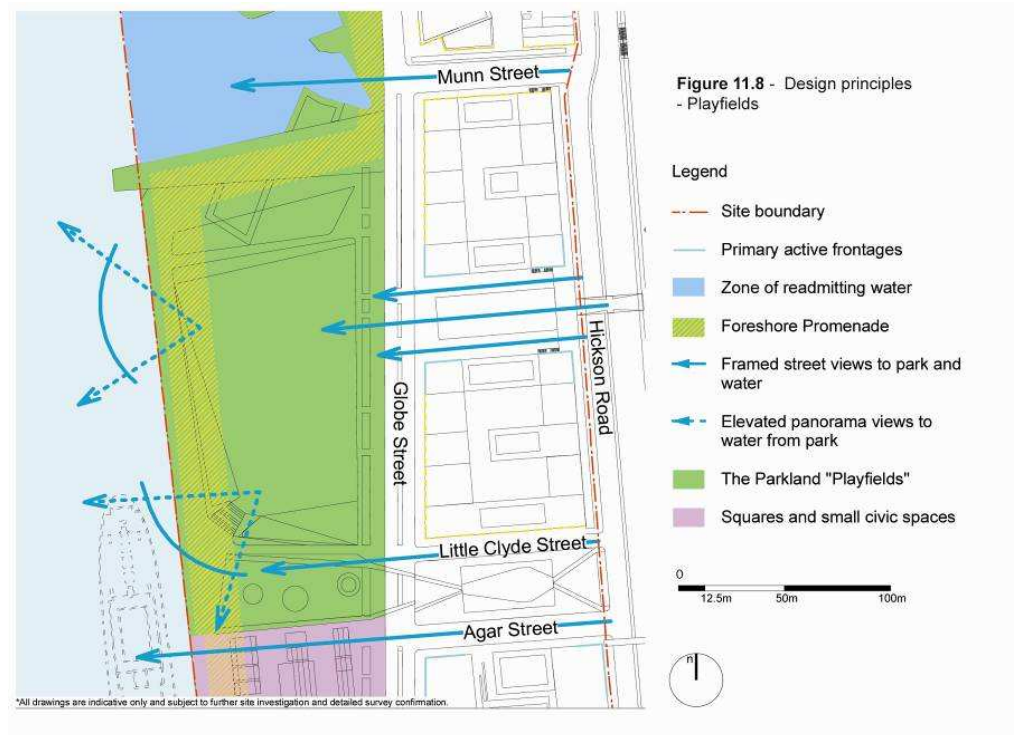


Figure 13– Approved Concept Plan Figure 11.8– Views and vistas along Munn Street, Little Clyde Street and Agar Street

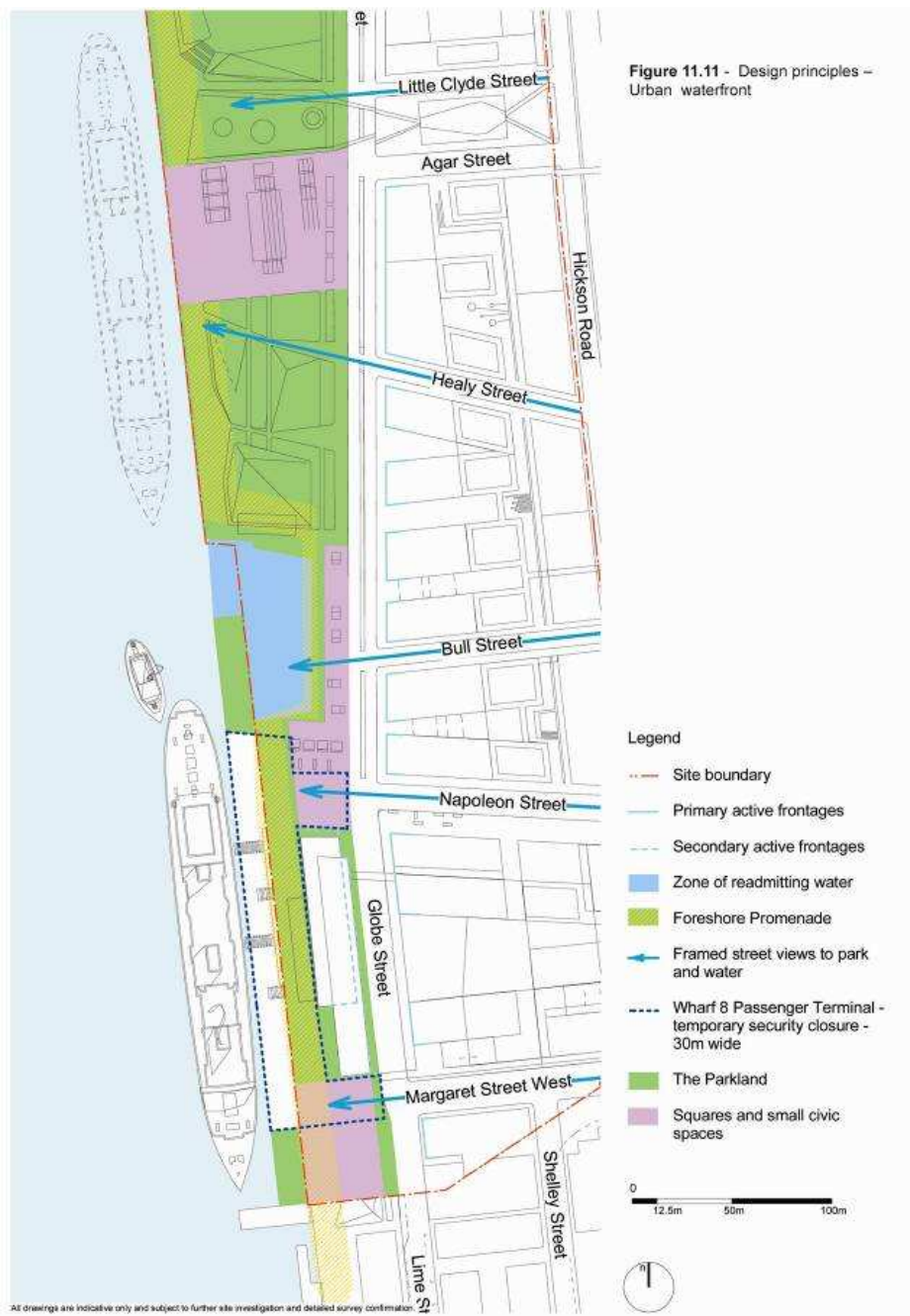


Figure 14 – Approved Concept Plan Figure 11.11 – Views and vistas along Healy Street, Bull Street, Napoleon Street and Margaret Street West

In addition to these matters, the Concept Plan Modification as proposed by the PPR continues to maintain vistas through tapering of the scale of the proposed development and a vista through or past the landmark hotel building.

Currently, a view from Pyrmont Bridge to Millers Point is only available from the western extremity of the Bridge due to existing development. The Millers Point Conservation Area is only perceptible through the difference in scale compared to development immediately to the south and not through the ability to appreciate the physical fabric. Due to the alignment of the view, Observatory Hill and the significant roofscape are not prominent, even pre-development of Barangaroo.

Specific elements such as Millers Point Headland proper, Dalgety Bond Store and the Palisade Hotel may in part be visible. Due to their location and the scale of

proposed development in the immediate vicinity, adverse impact upon the ability to appreciate the significance of the items is likely to occur only in part.

Further, the issue of loss of views from the water and communities to the west of Darling Harbour to the CBD and city skyline has been identified as an important issue for consideration. It is considered that no adverse impact to the city skyline or CBD views will result from the proposal. To the contrary, the proposed development will contribute to and make a bold statement with respect to the skyline along the western edge of the CBD. The building form integrates with the existing high density development to the west and south, as further discussed in Section 5.4 and **Appendices A and B**.

The proposed Concept Plan Modification's views and vistas are demonstrated in **Figure 15** below. Most significantly, the footprint of development, density at the ground plane, and overall FSR by block is less than that found in the centre of the CBD, as outlined in Rogers Stirk Harbour + Partners Urban Design Statement at Appendix A of the exhibited Concept Plan Modification EAR. Accordingly, the opportunity to create visual access through the site is greater than that found elsewhere in a similar context in the centre of the city. The design of the site is therefore a response to the opportunities to create views through and out of the site.

In consideration of views through the site, Rogers Stirk Harbour + Partners has addressed the perception of scale and space in relation to views as a factor of the initial storeys of building height adjacent to the public realm (refer to Appendix A of the exhibited Concept Plan Modification EAR). The first 25m (or 5 levels) of height in a city (or a dense urban environment) has the greatest impact on a pedestrian's experience of amenity, openness, and direction. The design of the first 25m determines the human scale of buildings at ground level. Upper level setbacks and slender towers above allow for increased solar access into and through the public realm and a higher amenity. This also provides for wider openings at the upper levels to allow for sky views, diversity, and locational perception.

The consequence of wider openings from ground level to the sky and for views between buildings to the water and the middle distance from existing elevated vantage points is taller towers framing these views. The heights however from within the site and when viewed from a distance back to the CBD with the CBD as its backdrop, generally remains consistent with other CBD heights.

The design of envelopes and possible built form is one of a balancing act where views are to be maintained, scale and massing of development is to be both feasible and marketable, and sustainable envelopes with appropriate orientation that maximises the development's energy efficiency credentials need to be reinforced. At the same time the proposal must demonstrate a high degree of visual permeability and physical connection to other places. The proposed Concept Plan Modification as proposed by this exhibited Concept Plan Modification EAR and the PPR achieves all these key design principles.

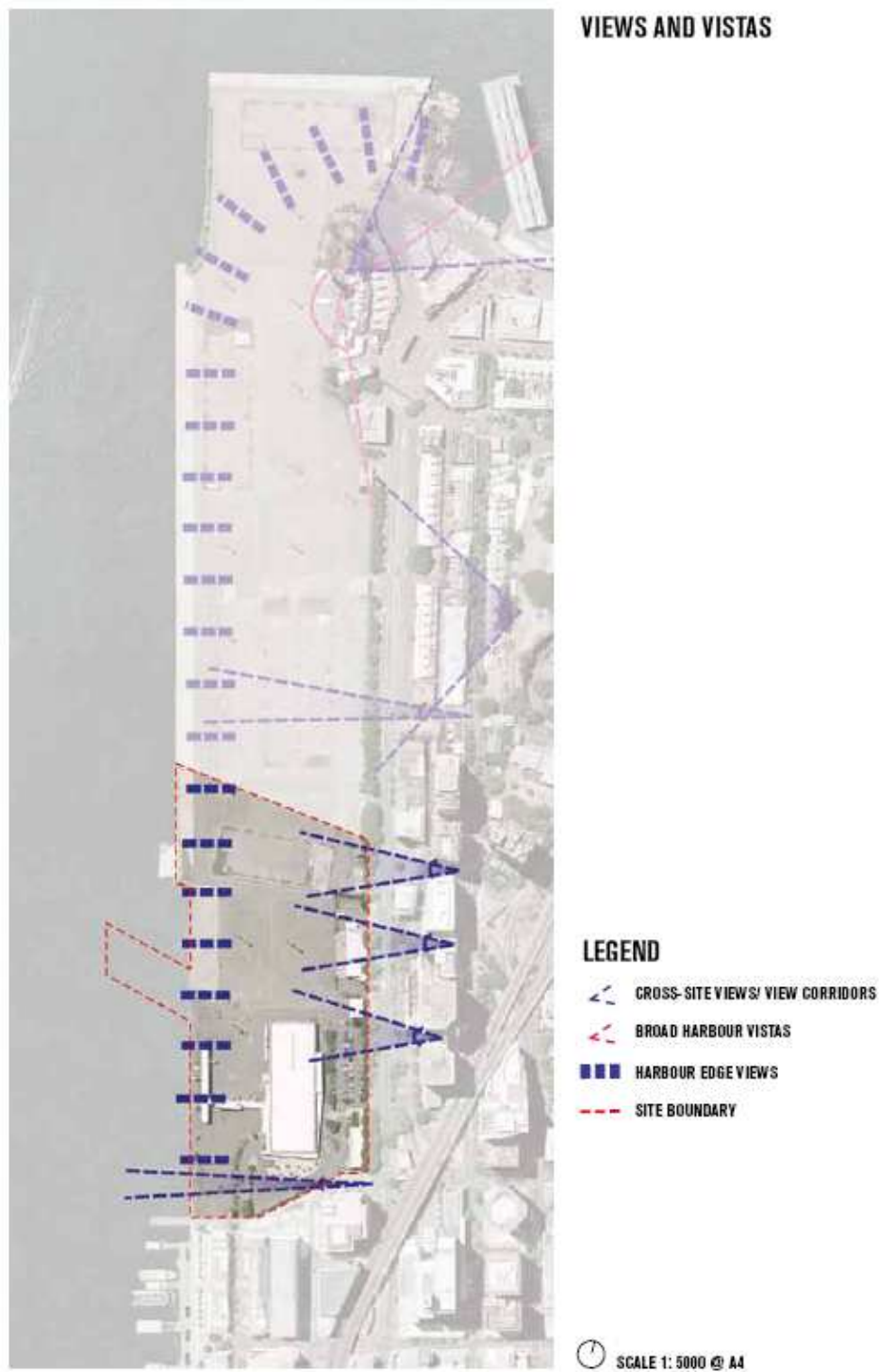


Figure 15 – Views and Vistas – Barangaroo South Concept Plan Modification

5.4 View Analysis

The following provides a view analysis as required by the DGRs from key nominated locations as follows:

- Hickson Road;
- Kent Street;
- Shelley Street;
- Lime Street;
- Gas Lane;
- Jenkins Street;
- Pyrmont;
- East Balmain;
- Darling Harbour;
- Blues Point;
- Millers Point (Observatory Hill);
- Margaret Street;
- Foreshore Walk and King Street Wharf;
- Pyrmont Park Pier;
- Balmain Wharf;
- Harbour Bridge Walkway; and
- Opera House Western Forecourt.

The views across and within Barangaroo are also considered, including more significant private views. A full set of photomontages as described in Section 5.3.1 have been prepared by Virtual Ideas and are included at **Appendix A** of this Report.

In addition, an orthogonal and oblique view analysis has been undertaken by Rogers Stirk Harbour + Partners (refer to **Appendix B** of this report) to determine the extent of the Kent Street residential buildings (Georgia, Stamford Marque, Highgate and Stamford on Kent) which may:

- lose views compared to the approved Concept Plan (as modified);
- retain the same views as established in the approved Concept Plan (as modified); and
- gain views compared to the approved Concept Plan (as modified).

The oblique view analysis also demonstrates view sharing will be achieved from the majority of levels of the adjacent residential buildings rather than maximising views from the upper levels (refer to **Appendix B**).

5.4.1 Hickson Road

Views along Hickson Road are presently framed only to the east by the sandstone cutting at and along the High Street alignment and a generally continuous wall or urban form along Kent Street or lower-rise developments along the eastern edge of Hickson Road. The western edge is an open view only in part obstructed by various permanent and temporary structures and plantings.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 16 - Hickson Road view corridor

The Concept Plan Modification maintains a framed edge to Hickson Road particularly at the southern end of Barangaroo South. **Figure 16** above compares the approved scheme to that of the Concept Plan Modification. It should be noted that **Figure 16** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.

The scale of development along Hickson Road seeks to moderate height to be responsive to views over and through the development from the east to the west, tapering of heights in both a west-east view, and in profile from north-south. Views through the site will be provided via the circulation network including the Margaret Street West extension, City Walk, Napoleon Street and across the enlarged Southern Cove. No. 38 Hickson Road (the Residential Bond building) will enjoy views directly across the Southern Cove.

In general, the proposal will not alter at-grade views along Hickson Road which will be created to the south-west to Pyrmont, Darling Harbour or Ultimo through to Balmain East and to the north-west and north. All views along Hickson Road through to the south CBD and the Darling Park development, which terminates this view, will be retained.

5.4.2 Kent Street

There are currently only limited views to or over the Barangaroo site from Kent Street given the existing form of development along its western edge and the limited openings created by streets intersecting it at a perpendicular angle. The most significant views to or through Barangaroo South occur at Margaret Street and at Gas Lane. This sub-section addresses the Margaret Street view while Gas Lane is addressed at sub-section 5.4.4.

The existing view westwards at the intersection of Kent Street and Margaret Street is one dominated by the Western Distributor viaduct which sits high within the view corridor. The experience of a sky view is cluttered and partially framed only by development both beneath and surrounding the viaduct. There are no major existing views of any significance to water or nearby foreshores from this location. There are some wider views to the ridgelines of Pyrmont and Balmain.

The proposed commercial tower envelopes within Blocks 2 and 3 will sit within the view corridor and act to terminate the present view westwards from Kent Street. At the Kent Street intersection the view of the development will be tempered with views of sky through and between the potential buildings - see **Figure 17** below for a comparison of the approved scheme with the Concept Plan Modification. The view to sky will vary dependent upon location along Kent Street due to the “fanned” footprint of the proposal.

It should be noted that **Figure 17** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 17 – Kent Street view (at Margaret Street)

This view impact is considered acceptable in this context as the development principles for the entire Barangaroo site envisage the highest and densest development at and in front of Napoleon Street (which commences under the viaduct). Further the existing views from this location are not considered significant. The framed sky views in the location are typical of the majority of views found in the CBD in a similar context.

Additional height as proposed by the Modification (that is, comparatively taller and more slender towers rather than shorter squatter buildings) allows views to be improved at lower levels within this location. The rationale for this approach and the relationship to views is further considered within the Supplementary Urban Design Statement prepared by Rogers Stirk Harbour + Partners at Appendix C of the Concept Plan Modification PPR Report. This is best articulated by new views to the foreshores as pedestrians move from Kent Street through Napoleon Street to the proposed City Walk (bridge over Hickson Road into Barangaroo).

Private Domain Views, View Sharing and Outlook

Previous view studies have addressed impacts upon private views, view sharing and outlook. This has focused on the most significant and most-densely occupied buildings along Kent Street which presently enjoy largely unobstructed views. A review of anticipated impacts upon these buildings is again addressed below, with reference to Lend Lease's Concept Plan Modification, as proposed by the exhibited Concept Plan modification EAR and PPR.

Observatory Tower

- The zone of potential view impact from Observatory Tower at 168 Kent Street is restricted to the north-west and south-west facing elevations of that building only, and to views from those elevations to the west and south west only. Views to the north-west, north, east and south will be unaffected by the proposal. The change in height proposed has the increased potential of affecting additional floors of Observatory Tower.
- With respect to the north-west facing elevations, views north of the alignment of Gas Lane will remain largely unaffected by the proposed development. The elevated position of Observatory Tower means that views from the mid and

upper levels will remain substantially unaffected across the top of the new buildings proposed for Barangaroo Central (not part of the current proposal).

- Views from the south-western elevation of Observatory Tower across proposed Development Blocks 4A, 4B, 4C, X and Y towards Darling Harbour will be interrupted by the proposed development. These views are, however, already interrupted by the existing development along Kent Street and Jenkins Street, including Highgate and the Stamford on Kent. Further to the south these views are interrupted by the Maritime Trade buildings, and the high rise development along the western edge of the CBD.
- The proposed 40m building separation between tower forms in Blocks 4B and 4C, will retain and enlarge approved views from the north-western and south-western elevations of Observatory Tower to the west over RL 34.

Westpac Place

- The zone of potential view impact from Westpac Place principally affects the north facing elevations of that building only, relating to views to the north-west. Views to the north, east, west and south from Westpac Place will be unaffected by the proposal.
- Westpac Place is located south of the alignment of the Western Distributor. The development on Blocks 1 – 4(A – C) will substantially interrupt north-westerly views from this building. Nevertheless, given that Westpac Place will continue to enjoy significant westerly views across Darling Harbour, this impact is not considered to be such that a significant loss in amenity to this commercial development will result.

Views from Residential Apartment Buildings

In response to the Department of Planning's submission, Rogers Stirk Harbour + Partners' have prepared a View Analysis Report (refer to **Appendix B** of this report) to specifically assess the impacts of the building envelopes proposed within Block 4, on views from residential units on Kent Street.

The visual analysis consisted of the scheme being orthogonally projected onto the residential elevation of four apartment buildings on Kent Street (Highgate, Stamford Marque, Georgia and Stamford on Kent) to compare the visual impact of the approved Concept Plan as modified (Options 1, 2 and 3), with the proposed Concept Plan Modification. For each of these three options, an image has been produced to demonstrate the units where views would not change, the units which would gain views and the units which would lose views under the Concept Plan Modification (refer to View Analysis Report at **Appendix B** of this report). The images demonstrate that the number of units losing direct views under the proposed Concept Plan Modification is greater than the number of units with increased view corridors, however this approach does not assess oblique views, and so disregards the improved view sharing outcomes achieved by the proposed Concept Plan Modification. As such, an oblique view analysis has also been undertaken from the residential units on Kent Street.

The oblique view analysis demonstrates that view sharing will be achieved under the proposed Concept Plan Modification, whereby view corridors are available to a greater number of adjacent properties, rather than maximising views from the top levels of the apartment buildings. This outcome is achieved by having taller buildings than the approved Concept Plan (as modified), with larger spaces between them, thereby enabling more generous oblique views and view corridors. As a result, residents in the lower levels have significantly increased views.

Table 1 provides a comparison of the total view angle achieved by the approved Concept Plan (as modified) and the Concept Plan Modification.

Table 1 – Comparison of existing and approved view angles

Level	Highgate	Georgia	Stamford Marque	Stamford on Kent
Lower Levels – Level 15 (RL 59.699)				
Total View Angle under approved Concept Plan (as modified)	91°	84°	77°	54°
Total View Angle under proposed Concept Plan Modification	94°	88°	87°	62°
Upper Levels – Level 25 (RL90.187)				
Total View Angle under approved Concept Plan (as modified)	129°	125°	120°	102°
Total View Angle under proposed Concept Plan Modification	94°	88°	87°	66°

Whilst the proposed Concept Plan Modification will reduce views at the upper levels of the residential apartments on Kent Street, the figures in **Table 1** demonstrate the additional views achieved at the lower levels of the apartment buildings. The view impact on each of the apartment buildings is described in detail below.

Highgate

- The zone of potential view impact from Highgate at 127 Kent Street principally affects the west facing elevation of that building only, relating solely to views to the south-west. Views to the west, north-west, north, east and south from Highgate will be unaffected by the Concept Plan Modification.
- The analysis in **Table 1** shows that the total view angles for Highgate, the most northerly building, are largely unchanged as it is parallel to the edge of the site, and accordingly will not lose views to the north as the modification does not alter the maximum height of Barangaroo Central.
- Highgate is located north of the alignment of Gas Lane, and therefore north of proposed development Blocks 4(A – C). With the development on Barangaroo Central restricted to a maximum height of RL 34, and development further to the north on Block 5 restricted to a maximum height of RL 29, significant northerly, north westerly and westerly views will be retained by the proposed development from the medium and upper levels of this building.
- Direct westerly and south-westerly views from the western elevation of Highgate across proposed development Blocks 4 and 5 towards Darling Harbour will be those most significantly effected by the proposed development. It is acknowledged that views back towards the south-west were substantially interrupted from all levels of Highgate under the original Concept Plan scheme. This position will remain, with some sky views further reduced by the proposed height increases.

Georgia

- The zone of potential view impact from Georgia at 155 Kent Street principally affects the west facing elevation of that building only, and is related solely to views to the west. Views to the north, north-west, east and south from Georgia will be unaffected by the Concept Plan Modification.
- The analysis in **Table 1** shows that the total view angles for Georgia are largely maintained, with minor increases achieved at the lower levels. Views to the north are maintained, with additional views expected to be gained over the Southern Cove to the south-west.

- Georgia is located north of the alignment of Gas Lane, and therefore north of proposed development Blocks 4(A – C). The development on Barangaroo Central is restricted to a maximum height of RL 34, and development further to the north on Block 5 is restricted to a maximum height of RL 29. Accordingly significant northerly and north westerly views will be retained by the proposed development from the lower and upper levels of this building.
- Direct westerly and south-westerly views from the western elevation of Georgia across proposed development Blocks 4(A – C) and 5 towards Darling Harbour will be those most significantly affected by the proposed development. It is acknowledged that views back towards the south-west were substantially interrupted from all levels of Georgia under the approved Concept Plan (as modified).

Stamford Marque

- The zone of potential view impact from Stamford Marque at 161 Kent Street affects the west facing elevations of that building, with the principal impact being to the western façade. Views to the north, east and south will be unaffected by the proposal.
- As shown in **Table 1**, the Stamford Marque benefits from additional low level views, maintaining most views to the north, whilst gaining views of the cove to the south-west.
- Stamford Marque is located north of the alignment of Gas Lane, and therefore north of proposed development Blocks 4(A – C). With the development on Barangaroo Central restricted to a maximum height of RL 34, and development further to the north on Block 5 restricted to a maximum height of RL 29, significant northerly and north westerly views will be retained by the proposed development from the lower and upper levels of this building.
- Direct westerly views from the western elevation of Stamford Marque across proposed development Blocks 4(A – C) towards Darling Harbour will be those most significantly affected by the proposal. Notwithstanding this, views over the Southern Cove will be available from residences.
- The Concept Plan Modification proposal, and the development block controls have sought to achieve a view sharing outcome for apartments with a western outlook from Stamford Marque.

Stamford on Kent

- The zone of potential view impact from Stamford on Kent at 183 Kent Street affects the north, south and west facing elevations of that building, with the principal impact being to the western façade. Views to the north, east and south will be unaffected by the proposal.
- As shown in **Table 1**, Stamford on Kent benefits the most in terms of low level views, as it enjoys the benefits of the “fanning” of the buildings around the southern cove. The Stamford on Kent achieves an additional 8° of views compared to Option 2 of the Concept Plan as modified.
- With respect to north-westerly views, as with Observatory Tower, significant views north of the alignment of Gas Lane will be largely retained given the restriction of maximum building height as part of Barangaroo Central. The Stamford is understood to have a maximum height of RL 102. Although views will be interrupted in part, and some direct views to the harbour’s edge to the north-west will be affected, the elevated position of Stamford on Kent means that views from the mid and upper levels in this direction will remain substantially unaffected across the top of the new buildings.

- Direct westerly views from the western elevation of Stamford on Kent across proposed development Blocks 4(A – C) towards Darling Harbour will be those most significantly affected by the proposal. Notwithstanding this, views over the Southern Cove will be available from residences.
- The Concept Plan Modification proposal, and the development block controls have sought to achieve a view sharing outcome for apartments with a western outlook from Stamford on Kent.

Other Kent Street Buildings

In addition to the above buildings, the view impacts on other Kent Street residential buildings (including, but not limited to, 115-125 Kent Street, 187 and 219 Kent Street) have also been considered and have been determined to be comparable to the impacts identified for the buildings listed above. The overall approach to views, vistas and view sharing embodied within the Concept Plan and the current Modification has been to preserve significant public and private view corridors to, from and within the site. The proposed Built Form Principles and Urban Design Controls as established in the Supplementary Urban Design Statement (refer to Appendix C of the Concept Plan Modification PPR Report) apply this approach. Ongoing assessment and the preparation of detailed Project Applications will continue to address the visual impacts of the development.

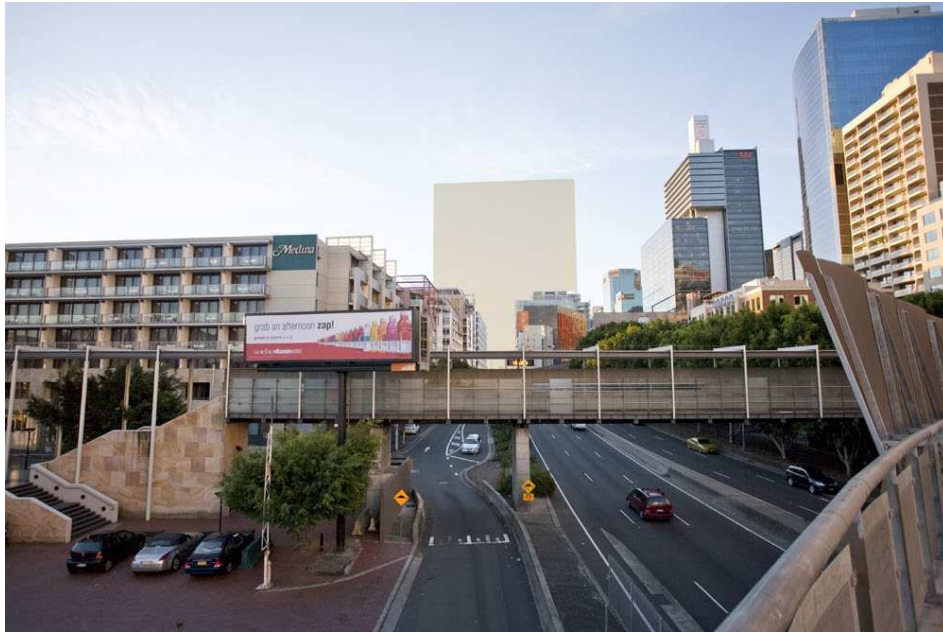
5.4.3 Shelley Street and Lime Street (King Street Wharf)

Shelley and Lime Streets are both located within the King Street Wharf precinct and principally run parallel in a north-south direction. At present these streets both allow for framed or open views to the north.

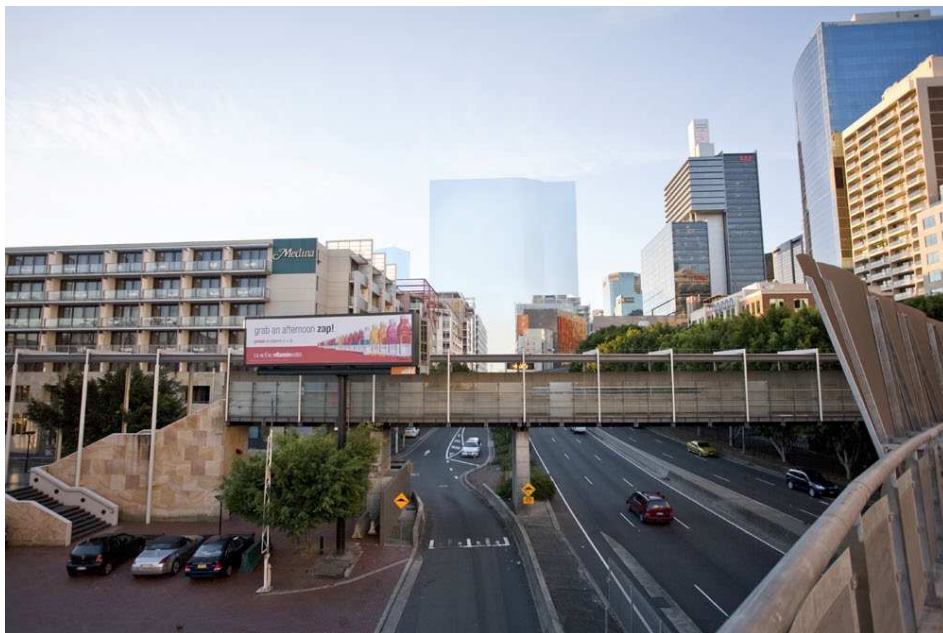
The Shelley Street view corridor is framed and generally aligned to a direct view to the Sydney Ports Harbour Control tower. Under the Concept Plan Modification, views along Shelley Street will be terminated at Building C5 - see **Figure 18** below. It should be noted that **Figure 18** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.

The termination of this view is largely compensated by the creation of a new east-west view that generally aligns with Margaret Street and which leads directly to the foreshore and completes the King Street Wharf grid within Barangaroo South.

Conversely, the existing views to the north along Lime Street will be largely maintained along its alignment through Barangaroo South. As demonstrated by **Figure 19** the view will be framed by the commercial development to the east and the landmark hotel building to the west. Distant views through to development proposed to flank Barangaroo Central will aid in directing passage to the north and beyond towards the Headland Park. It should be noted that **Figure 19** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 18 – Shelley Street view corridor (from King Street Bridge)



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 19 – Lime Street view corridor

Private Domain Views, View Sharing and Outlook

The main view impacts arising as a consequence of the proposed development are those related to the proposed built form within Blocks 1 and 2. These view impacts can be summarised as follows:

King Street Wharf

The zone of potential private view impacts to existing buildings within the King Street Wharf precinct principally affect the north facing elevations of those buildings only, relating to views to the north and partially to the north-west. Views to the east, west and south from King Street Wharf will be unaffected by the proposal.

King Street Wharf is located to the immediate south of Barangaroo. The development of the site to achieve significant urban renewal consistent with its global CBD context would result in a loss of direct northerly views from King Street Wharf regardless of the manner in which it was determined to distribute the floor space across the site. This is particularly the case given the principle of locating the majority of height and density to the south of Barangaroo. Whilst the impact on existing views from King Street Wharf is acknowledged, this impact is not considered to be unreasonable in the context of the established view impacts under the approved Concept Plan (as modified) following redevelopment of the subject site.

The overall approach to views, vistas and view sharing embodied within the Concept Plan and the current Modification is to preserve, enhance and create significant public domain view corridors to, from and within the site. The proposed development controls for Blocks 1 and 2 (being those blocks of key potential impact with respect to private domain views) have sought to address private domain view sharing through the Built Form Principles and Urban Design Controls established in the Supplementary Urban Design Statement attached to Appendix C of the Concept Plan Modification PPR Report.

During the detailed design phase of the proposed development, these principles and development controls would potentially allow for further opportunities to be explored with respect to view sharing from existing development to the west to the water. It is, however, important that any such opportunities are considered within a clear understanding of the maximum extent of impact that arises from the maximum building envelopes proposed in the Concept Plan.

Other Shelley Street and Lime Street Buildings

The view impacts on other Shelley Street and Lime Street residential buildings (including but not limited to Nos. 23, 29, 35, 45 and 49 Shelley Street) have also been considered and have been determined to be comparable to the impacts identified for the buildings listed above. The overall approach to views, vistas and view sharing embodied within the Concept Plan and the current Modification has been to preserve significant public and private view corridors to, from and within the site. The proposed Built Form Principles and Urban Design Controls as established in the Supplementary Urban Design Statement at Appendix C of the Concept Plan Modification PPR Report apply this approach. Ongoing assessment and the preparation of detailed Project Applications will continue to address the visual impacts of the development.

5.4.4 Gas Lane

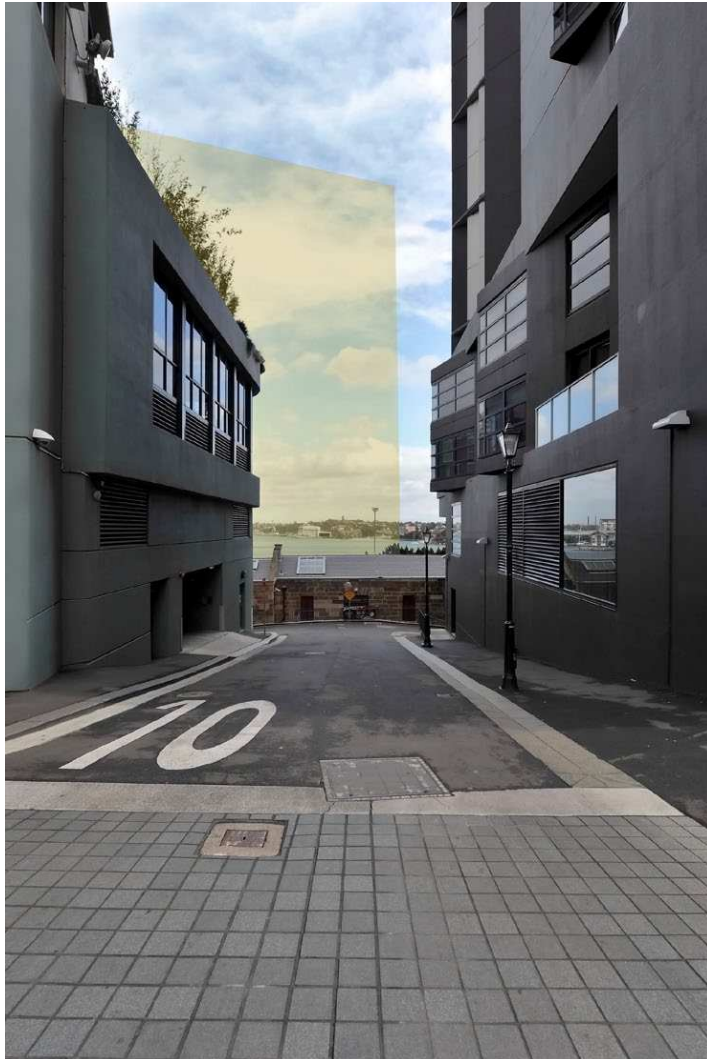
Gas Lane is a local street that runs in a north-westerly direction from Kent Street and which terminates at its lower level T-junction with Jenkins Street. The views enjoyed at Gas Lane change dependent upon the viewer's location. At its high point at the junction with Kent Street, existing views framed by buildings and are generally across the harbour's waters towards White Bay, Jones Bay Wharf at Pyrmont, and distant views through to Rozelle. There is also a high degree of sky view. There is no view to the Barangaroo site's foreshore.

Views at the lane's termination are reduced as the lane descends. At Jenkins Street, as a result of existing development enveloping the viewer, a sky view is largely what remains. There are no existing available vistas through development through to the foreshore or the water.

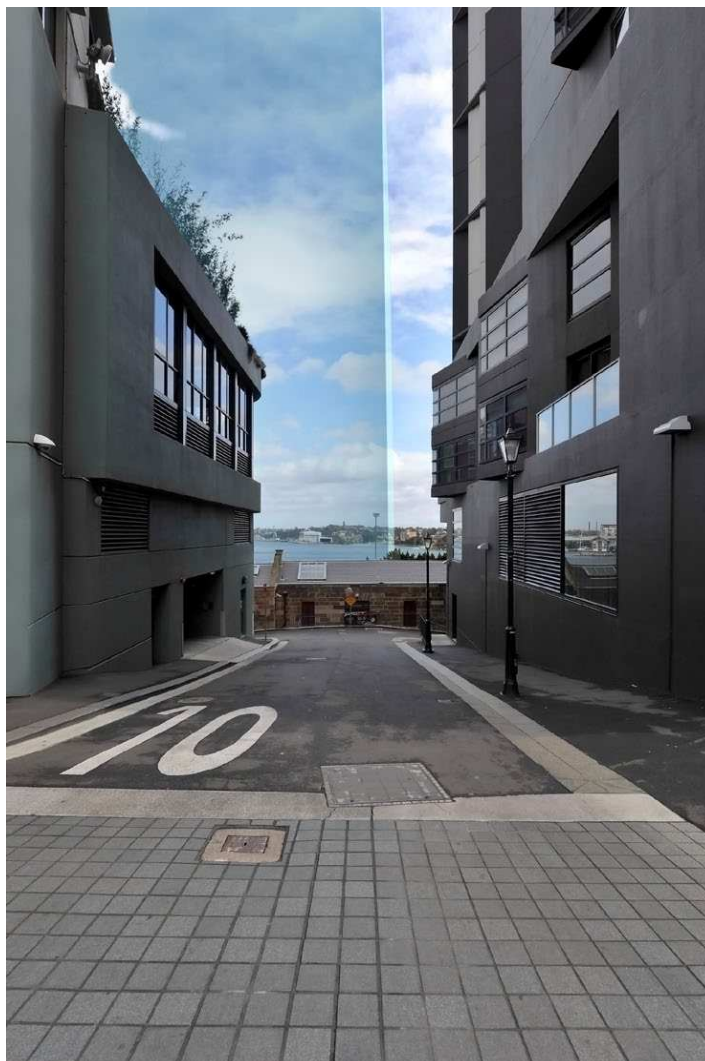
The proposal will generally maintain existing views as described above at the Gas Lane / Kent Street intersection as the Barangaroo South development blocks end at the southern alignment of Gas Lane. **Figure 20** compares the approved scheme to that of the Concept Plan Modification. Views over the harbour's waters to the north-west will be largely unaffected, whilst some views through to Pyrmont will

be impeded by potential development blocks. This minor impact is the greatest impact from the top of Gas Lane. As the viewer moves down Gas Lane, additional taller building will be perceived towards the south of its intersection with Jenkins Street, but only a portion of the currently impeded sky view will be impacted.

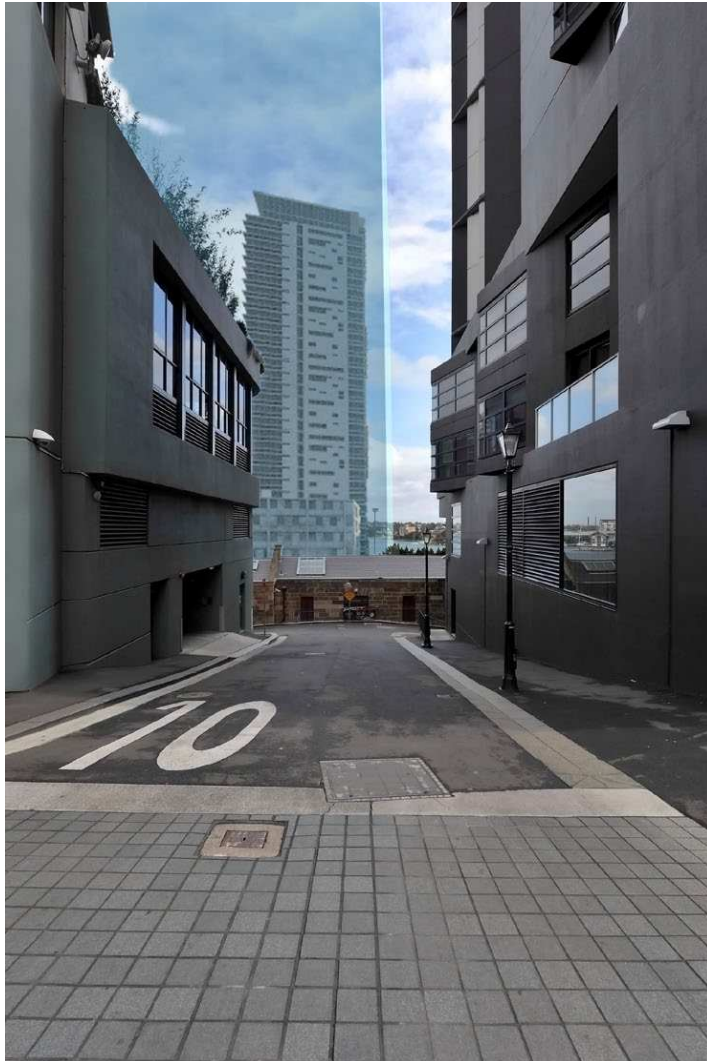
It should be noted that **Figure 20** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 10 – Gas Lane views

5.4.5 Jenkins Street

Jenkins Street is accessed from Gas Lane and runs in a north-south direction parallel with and between Hickson Road and Kent Street. It sits at a level between the two and is accessed from Hickson Road via The Bond steps. The northern half of Jenkins Street is enveloped by existing high-rise development to its east, and lower-rise development to its Hickson Road side. There are no views down or through development in this portion of the street.

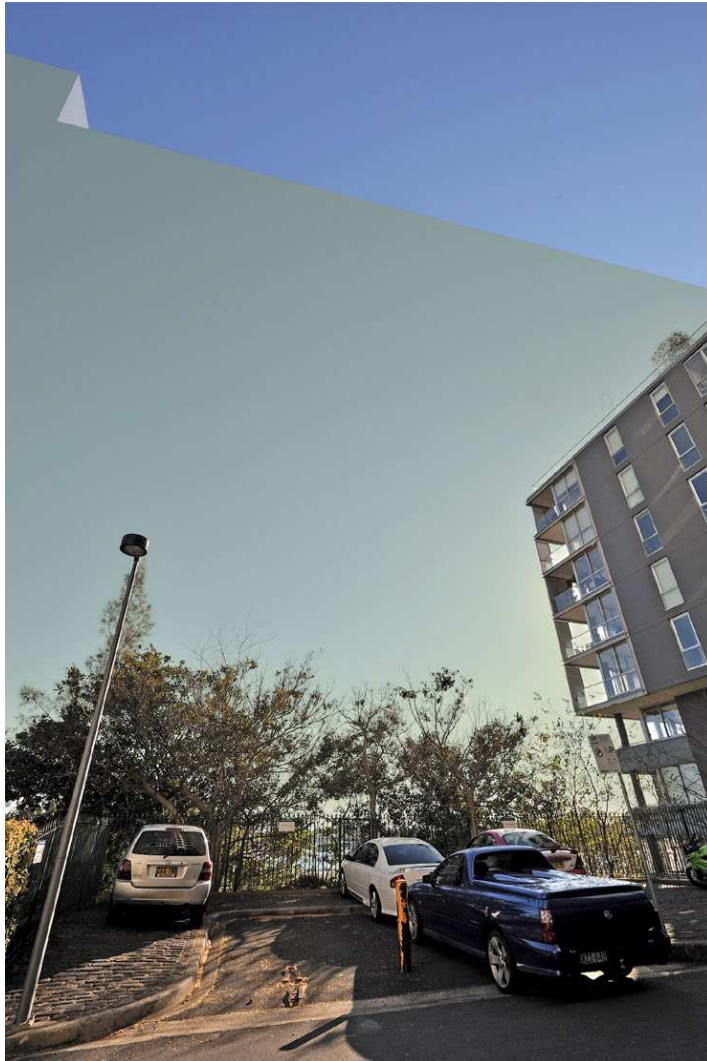
The best existing views to the Barangaroo Site down or through slots in development of vegetation are enjoyed from the southern half of Jenkins Street, however even in this location existing views are limited and are predominantly long distance glimpses, dominated by sky and are not to the immediate foreshore or water. This is largely due to the topography and changing grades between Kent Street, Jenkins Street and Hickson Road. There is currently a narrow view or vista available to pedestrians down The Bond steps to Hickson Road and Rozelle beyond. A small open private parking area (for 3 cars) offers the best existing views down to Hickson Road, but when fully occupied, access to views is greatly reduced.

Figure 21 illustrates the impacts of the proposed envelopes from the perspective of a pedestrian adjacent to the existing parking area, comparing the approved

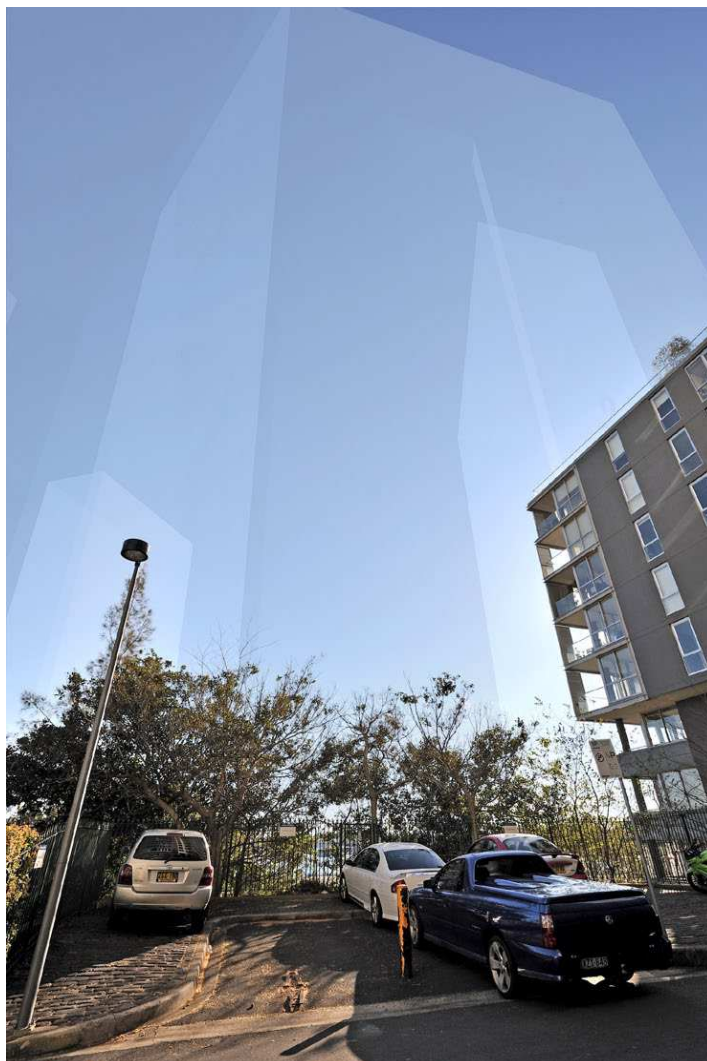
scheme to that of the Concept Plan Modification. It demonstrates that the existing vegetation in conjunction with the occupied private car park, presently obscures any long ranging views towards the west. At average human eye level, westerly views from the southern portion of Jenkins Street will be dominated by the existing foreground including the parking area, vegetation and existing low-rise development. It should also be noted that **Figure 21** shows a view line that is not currently a key public view, and it is unlikely that it will become a key public view. Generally this vista will be seen by residents of Stamford on Kent, and the view lines will be from a considerably higher level. Refer to Section 5.4.2 of this report for an analysis of view impacts from Stamford on Kent. It should be noted that **Figure 21** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.

The proposal will not alter the above views as the potential development parcels align with existing vistas through development or focus views through new framed corridors. This is the case from the top of The Bond steps where open access is created from the arrival point at Hickson Road through to the foreshore. Again, this view corridor at the northern extremity of the Barangaroo South area aligns with Gas Lane and offers a continuous view from a series of high points stepping down towards the harbour foreshore. This view corridor maintains the predominant Sydney design and access principle of being able to gain access to the foreshore where the foreshore can be seen from public vantage points.

The most significant contribution to views made by the proposal is that which will be enjoyed from the southern end of Jenkins Street where a vista through and view over lower-rise Hickson Road envelopes will open-up to the proposed Southern Cove and foreshore open space. This will bring the foreshore closer to the viewer at this point and again promote access and passage through the development to the foreshore at Darling Harbour. The stairway at Jenkins Street will become a key access point down to and through the middle of this view to Hickson Road, the Southern Cove and beyond.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 21 – Jenkins Street views

5.4.6 Pyrmont

Views from Pyrmont to the Barangaroo site vary dependent upon the viewer's location. Generally, the existing views to the CBD from Pyrmont are typified by the layers of development filling the CBD's silhouette, newer development at King Street Wharf and the western CBD expansion, Millers Point, and a significant void at Barangaroo. Views towards Millers Point, High Street's sandstone cutting, Observatory Hill, and North Sydney beyond vary depending on which part of Pyrmont the viewer is located. Further, the ability to discern detail and the cultural heritage attributes of the Millers Point and Observatory Hill precinct are greatly reduced as the viewer moves south through Pyrmont and the view becomes dominated by the urban form of the CBD proper.

As depicted in **Figure 22** below, the proposal's greatest impact on views will be upon ones that provide a view from the southern portion of Pyrmont. This view will highlight the site's contribution to the completion of the CBD frame and grid and emphasise the site's role in providing a new activity hub at the western fringe of the CBD through a new and extended silhouette.

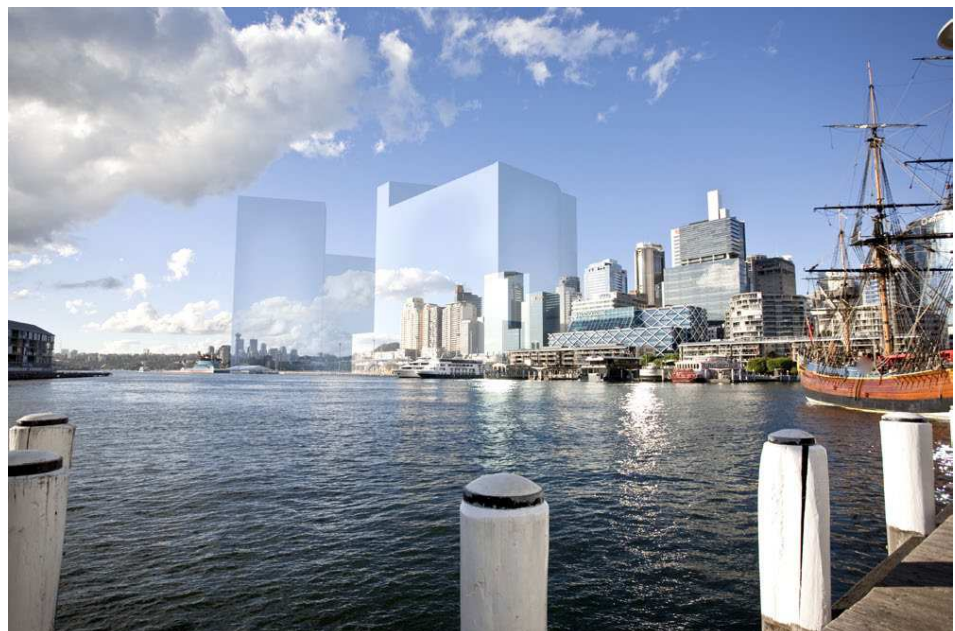
The ground plane of the proposal will nonetheless allow for views through the development from all directions, including the wide range of views available from Pyrmont back to and through to the rest of the CBD. Most importantly, the

development of Barangaroo South will not impact upon any significant heritage or cultural views over the waterways of Darling Harbour towards Millers Point from views where this area can be best seen and appreciated.

It should be noted that **Figure 22** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 22 – View from Pyrmont

5.4.7 East Balmain

As with views from Pyrmont, the site presently sits as an undeveloped void at the footsteps of the CBD, with newer development of the western CBD sitting at its southern edge. The Kent Street towers act as a significant wall to the north-western edge of the CBD with few gaps discernable. The key view from East Balmain is to Observatory Hill and Millers Point. The trees in Observatory Hill Park and the High Street terraces and sandstone cutting are all especially visible.

The proposal for Barangaroo South will not affect this view as seen in **Figure 23** below. Indeed, when compared to the approved scheme the current Modification compares favourably as not only are the above key views unaffected, but the arrangement and composition of the massing of potential development allows from greater views through the site. The fanning of the taller tower forms towards the south creates visual access through the Barangaroo South site and allows for relief to the potential for a wall-like appearance of the development. Overall, the proposal will redefine the western face of the CBD from East Balmain and present a new silhouette which signifies a new activity hub.

It should be noted that **Figure 23** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 23 – View from East Balmain

5.4.8 Darling Harbour

Views from Darling Harbour, like from Pyrmont, can vary greatly depending on the viewer's location. As an example, northerly and north-eastern views from Pyrmont Bridge are presently framed and dominated by developments in the CBD and cultural buildings at Pyrmont's foreshore. The CBD generally steps to the foreshore with its topography when viewed from certain locations. In part the view highlights a wall-like form to the CBD and amplifies underdeveloped reclaimed land as a key opportunity. Views may in part also be enjoyed through to the northern shore of Sydney Harbour and its silhouette and markers, such as North Sydney and Royal North Shore Hospital.

As seen in **Figure 24** below, the proposed development of Barangaroo South will transform the present void into a silhouette that articulates a high level of activity and interest. The presentation of the envelopes and potential built form from the south-west is one where the landmark hotel building serves as a marker. With its intended form it will maintain views through to the north shore at its base, whilst its separation from the remainder of the development site will continue to allow views through towards North Sydney. As with all key access corridors in Sydney these also translate as view corridors with a high degree of sky views through and beyond. The separation of the Barangaroo South site from the existing part of the CBD is highlighted in views from Darling Harbour as a result of the Hickson Road and Western Distributor alignments and widths.

Whilst there is the long-standing principle of development heights emphasising the change in topography, it should be remembered that the former East Darling Harbour is also reclaimed land that has been transformed on numerous occasions. The current scheme, along with the approved scheme, acts to further transform the site and provide for a new drama to the silhouette of the CBD's skyline and emphasise the new level and range of activities at the completion of the CBD grid.

It should be noted that **Figure 24** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.

King Street Wharf and Foreshore Walkway views are also considered in Section 5.4.12.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 24 – View from Pyrmont Bridge

5.4.9 Blues Point

The views presently enjoyed from Blues Point towards the site are generally the reciprocal of those from Darling Harbour, albeit the significant views of Walsh Bay and Observatory Hill are available, where they are presently only partially discernable or blocked from the south and south-west by existing development.

The effect of the new built form of Barangaroo South from Blues Point is solely to complete the east-west silhouette of the CBD. The proposal will not impact upon any views to (or the quality of those views) Millers Point, Walsh Bay or Observatory Hill. At present these landmarks and locations are already nestled into the form and fabric of the existing CBD silhouette.

The proposal will act to complete the CBD's form which is presently sharply punctuated by the row of towers along the northern end of Kent Street. It will mediate and moderate the form and silhouette of the CBD towards the higher landmarks and elements of Pyrmont as well as the southern CBD, such as the Market City tower in Haymarket and the UTS tower at Broadway. **Figure 25** demonstrates the potential impact of the approved scheme, compared to that of the Concept Plan Modification. It should be noted that **Figure 25** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 25 – View from Blues Point

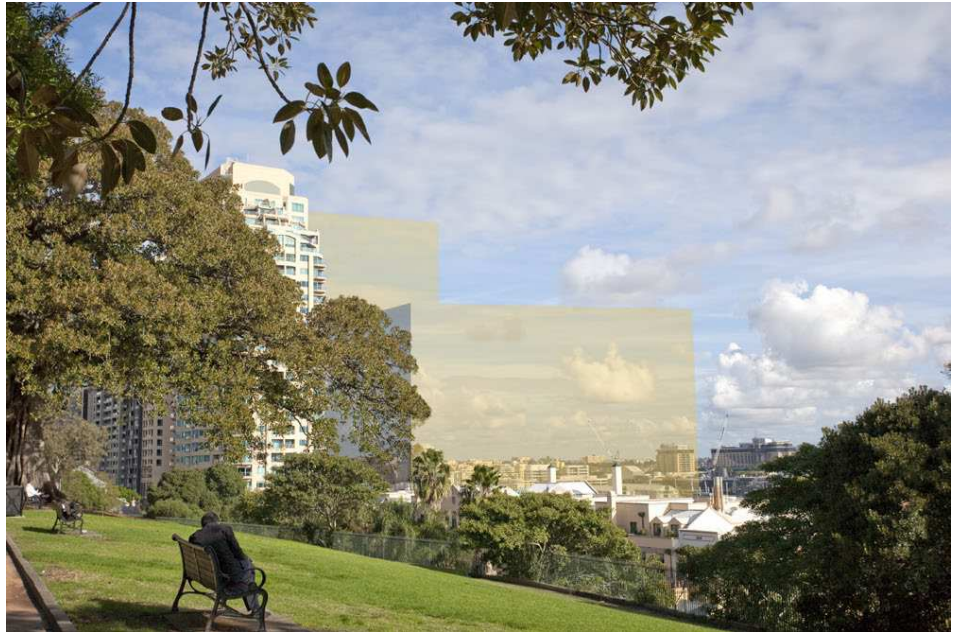
5.4.10 Millers Point (and Observatory Hill)

At present, the best views and vistas enjoyed at Millers Point are those from Observatory Hill Park. The park's size and height allows for panoramic views to the south-west from Pyrmont and White Bay around to East Balmain, Goat Island, and to the northern shores of Sydney Harbour. Much of this view includes water views, particularly from White Bay and to the north. There are only extremely minor glimpses to water in the vicinity of Pyrmont, where these views are dominated by that peninsula's new built form.

The effect of the proposal for Barangaroo South will be that significant water views and views from White Bay around to the north are not altered. The main impact will be upon views to Pyrmont and beyond, where the only locational views lost will be towards Ultimo. As seen in **Figure 26** below, the existing Kent Street towers act to provide a significant barrier to any existing and future views of the Barangaroo site, including where development is proposed at its southern extremity. The only potential impacts of the Barangaroo South proposal are the envelopes and potential buildings that sit at the site's northern extremity (aligned to Gas Lane). The landmark hotel building will be set behind these potential buildings.

The current scheme sits favourably when compared to the approved scheme as views from Star City Casino to the south-west and around to the north will be completely unaffected. The only key difference to the change in view will be the additional building heights framing the southern view. All other view attributes, such as exposure to a sky view, solar access to the north, and major water views are all unaffected.

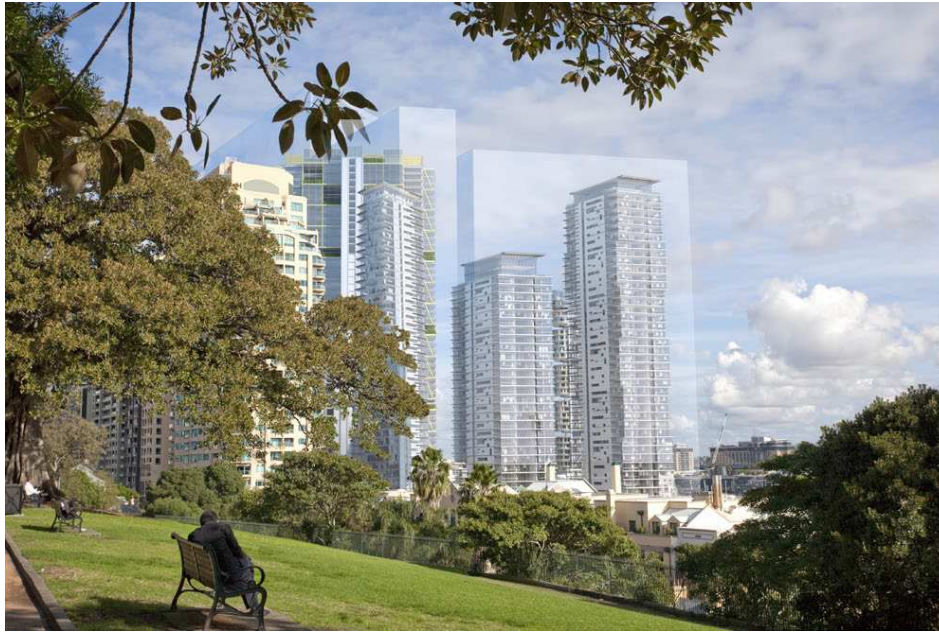
It should be noted that **Figure 26** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 26 – Observatory Hill view

5.4.11 Margaret Street

Margaret Street runs generally in an east-west direction between George Street and Hickson Road. Existing views are framed by high-rise buildings, with a high degree of sky views and limited views to the water or Barangaroo site's foreshore are achieved at this location.

Figure 27 illustrates the impacts of the proposed envelopes from the perspective of pedestrians facing west on Margaret Street, just west of the intersection of York Street, comparing the approved scheme to that of the Concept Plan Modification. At this location along Margaret Street it demonstrates that the existing vegetation and buildings currently obscure any long ranging views towards the west and at average human eye level, westerly views along Margaret Street will be largely dominated by the existing foreground including high-rise buildings and vegetation. Views down Margaret Street vary depending on the curve of the street and the location of the viewer. As pedestrians or motorists descend down Margaret Street view corridor opens up and is framed rather than obscured by the built form that will result from the Concept Plan Amendment. The principle of protecting and framing the Margaret Street view corridor has been a key consideration in the resolution of the Concept Plan Amendment scheme.

It should be noted that **Figure 27** is illustrative of possible design outcomes, and for technical purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 27 – Margaret Street

5.4.12 Foreshore Walk and King Street Wharf

Views from the foreshore walk and King Street Wharf to the Barangaroo site vary dependent upon the viewer's location. Views of the CBD and the Miller's Point and Observatory Hill precinct are obscured by existing development and vegetation at King Street Wharf.

As depicted in **Figure 28**, the proposal's greatest impact on views will be upon ones viewed from the northern portion of the Foreshore Walk and King Street Wharf precinct. This view will highlight the site's contribution to the completion to the CBD frame and grid, and will emphasise the site's role in providing a new activity hub at the western fringe of the CBD through a new extended silhouette.

It is noted that **Figure 28** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 28 – Foreshore Walk and King Street Wharf

5.4.13 Pyrmont Park Pier

As with the views from Pyrmont and East Balmain, the site presently sits as an undeveloped void at the footsteps of the CBD, with newer development of the western CBD sitting at its southern edge. The Kent Street towers as a significant wall to the north-western edge of the CBD with few gaps discernable. Some views of Observatory Hill Park and the terraces at Millers Point are available.

The proposal for Barangaroo South will not affect this view as seen in **Figure 29** below. Rather, when compared to the approved scheme the current Modification compares favourably as not only are the above key views unaffected, but the arrangement and composition of the massing of potential development allows from greater views through the site. The fanning of the taller tower forms towards the south creates visual access through the Barangaroo South site and allows for relief to the potential for a wall-like appearance of the development. Overall, the proposal will redefine the western face of the CBD from Pyrmont Park Pier and present a new silhouette which signifies a new activity hub.

It should be noted that **Figure 29** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 29 – Pyrmont Park Pier

5.4.14 Balmain Wharf

As with the views from Pyrmont and East Balmain, the site presently sits as an undeveloped void at the southern edge of the CBD. The north-western edge of the CBD dominates views back to the east and there are few discernable gaps. Views of Observatory Hill Park and the terraces at Millers Point are available.

The approved Concept Plan (as modified) envisages the introduction of building mass that would block current views to Sydney tower and mid and southern CBD buildings (**Figure 30**).

The Concept Plan Modification proposes a similar layout of built form and compares favorably to the approved scheme as the arrangement and composition of the massing of potential development allows for greater views through the site. Notably, views of Sydney Tower are expected to be available which are currently unlikely under the approved Concept Plan (as modified). The fanning of the taller tower forms creates visual access through the Barangaroo South site and allows for relief to the potential for a wall-like appearance of the development. Sky views are expected through to the east.

It should be noted that **Figure 30** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 30 – Balmain Wharf

5.4.15 Harbour Bridge Walkway

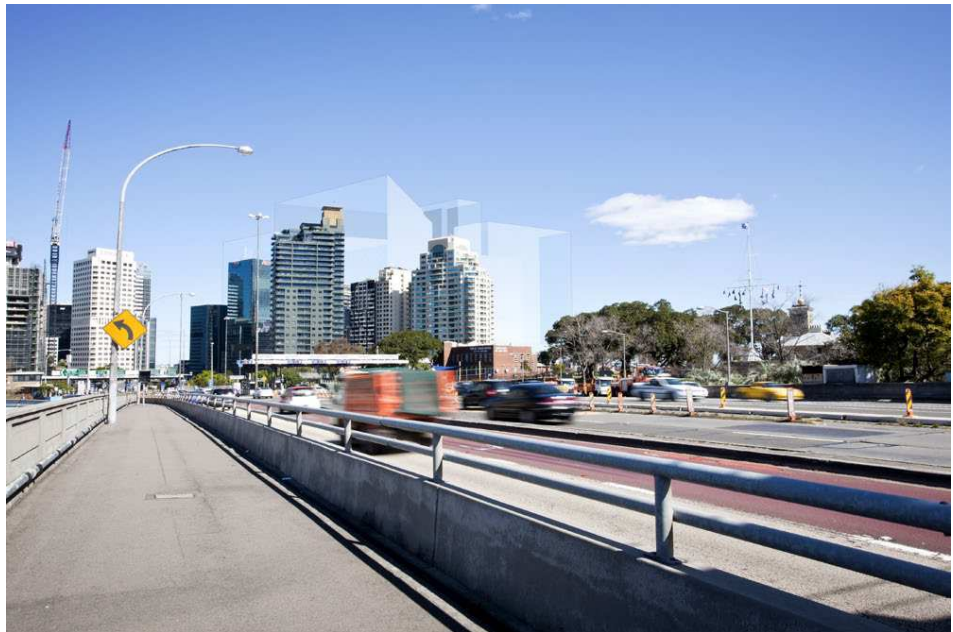
The approved Concept Plan (as modified) proposed additional built form south and north of the existing Kent Street commercial and residential buildings.

The Concept Plan Modification increases potential views to the south, past the AON Building (**Figure 31**). The tower forms will be largely screened by the existing Kent Street commercial and residential towers. The Concept Plan Modification's proposal to locate taller residential buildings in Block 4 will result in a taller building being viewed to the north, however in context it will read as a continuation of the Kent Street buildings. The Block 4 residential building bookends Barangaroo South and the cluster of buildings on the western side of the Harbour Bridge's southern approach. The concentration of the tallest buildings behind the CBD's existing western edge ensures sky views are generally retained to the west. In addition, the Concept Plan Modification continues to retain views across Observatory Hill, consistent with the approved Concept Plan (as modified).

It should be noted that **Figure 31** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 31 – Harbour Bridge Walkway

5.4.16 Opera House Western Forecourt

New photomontages have been prepared for Barangaroo South from the Opera House Western Forecourt. Under the approved Concept Plan (as modified), development at Barangaroo South, would generally be located behind existing northern and western CBD buildings. Circular Quay buildings such as the AMP buildings, Goldfields House and Grosvenor Place dominate views to the south and west. The low scale Rocks area and Harbour Bridge approach provide expansive sky views.

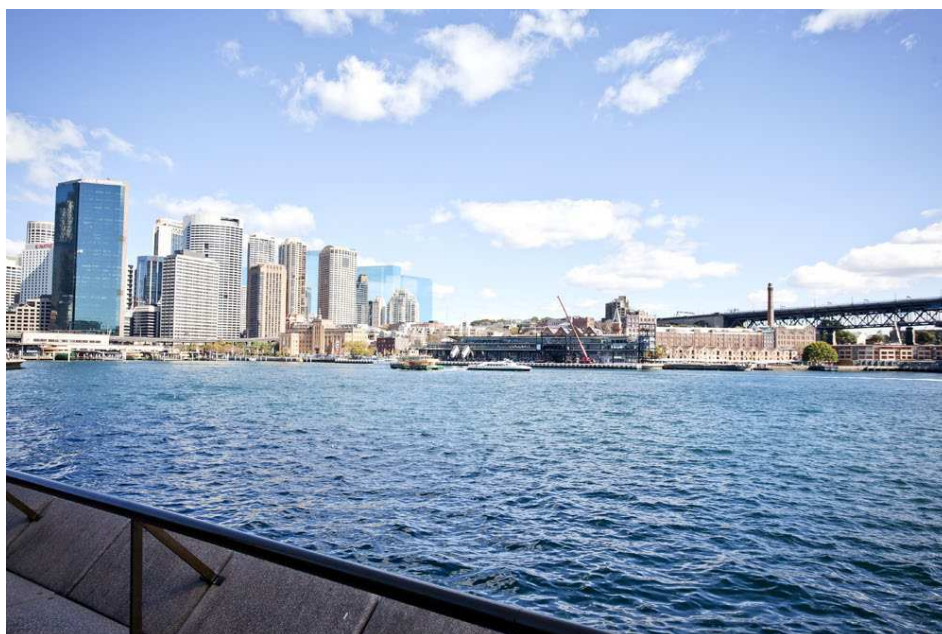
The proposal for Barangaroo South will not significantly affect this view as seen in **Figure 32** below. A comparison to the approved Concept Plan illustrates that the current Modification development block envelopes will extend further north marginally. However, when the indicative scheme is viewed, it is apparent that the new buildings within Block 4 will read as a continuation of the existing CBD's western edge. The majority of buildings, and the tower forms in particular will be located behind the existing CBD buildings, and will accordingly not be visible from the Opera House Forecourt.

The arrangement and composition of the massing of potential development and particularly the taller tower forms towards the south, protects the heritage listed Rocks and does not detract from the Harbour Bridge's southern approach. Overall, the proposal has minimal visual impact from the Opera House forecourt.

It should be noted that **Figure 32** is illustrative of possible design outcomes and for technical assessment purposes only, and does not form part of the Concept Plan Modification for which approval is sought.



Massing of approved Concept Plan



Concept Plan Modification showing proposed massing



Concept Plan Modification with indicative design

Figure 32 – Opera House Western Forecourt

6.0 Conclusion

The Concept Plan Modification will deliver a built form that is appropriate to the site's context and to the desired urban form and scale for the western part of the Sydney CBD. It is of an appropriate density and height to capitalise on the site's attributes and opportunities.

The urban design philosophy underpinning the current Concept Plan Modification is consistent with that articulated by the approved Concept Plan (as modified). Overall the Concept Plan Modification seeks to:

- place-make and create a sense of place;
- establish communities;
- promote and emphasise connections to the water;
- implement sustainable design; and
- create a dynamic and vibrant waterfront precinct.

The design philosophy is supported by:

- completing the City frame to book-end the City's western edge;
- creating the 'fan' – a radial arrangement of buildings that provides deep solar access and emphasises views;
- creating gateways, markers and place-making by establishing gateway buildings and spaces at strategic locations throughout the CBD and its edges;
- extending the City's natural north-west oriented grid into the site to reinforce already established east-west linkages; and
- connecting and extending the existing CBD into the Barangaroo South site with landmark buildings and markers along the foreshore through a series of street characters, widths, and proportions.

The Concept Plan Modification has been developed with a number of view principles in mind.

- views to Sydney Harbour and parks are to be maintained from as many points as possible at street level;
- new significant views should be opened-up where possible including those that terminate at Sydney Harbour, parklands, low level sky, or a publicly significant object;
- vistas along streets that are terminated by buildings, can be emphasised with sensitive design of the visually prominent buildings that terminate them;
- the siting and design of new buildings should maintain existing vistas along streets to places of architectural, landscape, or cultural significance; and
- support view sharing for buildings with a western outlook from Kent Street by proposing taller buildings than the Concept Plan as modified, with larger spaces between them, achieving oblique views and additional view corridors.

To support these principles, further consideration was given to:

- retaining significant views across the site to the waterfront;
- allowing for public views across the Harbour from Millers Point (the northernmost part of the site) and Observatory Hill;
- consideration of the high visibility of the site from public places including the waterway, harbour edge parks, Sydney Harbour Bridge and Anzac Bridge;

- protection of local views to the site and adjoining waterways from public domain areas in Millers Point and the western side of the city;
- the primacy of axial views along streets to the waterfront; and
- allowing views from the site and adjoining waterways and foreshores to natural features including the High Street / Hickson Road cliff faces and retaining walls and significant cultural or heritage items at Millers Point and Observatory Hill (where they are visible and discernable).

The proposed built form reinforces the landmark significance of the site, maintains significant view corridors within the site and from the public domain surrounding the site towards Sydney Harbour, and applies view sharing principles with respect to existing surrounding development. Future Project Applications will also need to consider the potential impacts on public and private views and apply the principles established within this report. The urban structure of the site, including the street layout and urban form, has been designed to reflect the surrounding street pattern and 'urban grain', and to preserve existing view corridors to the water from key vantage points and public domain.

The Concept Plan Modification seeks to meet a variety of planning and urban design objectives and can therefore be accommodated without resulting in significant view impacts beyond those recognised (and approved) under the approved Concept Plan (as modified). Furthermore, the Supplementary Urban Design Statement (refer to Appendix C of the Concept Plan Modification PPR) seeks to generally retain and strengthen the approved view sharing design principles and urban design controls to ensure the future built form appropriately responds to established views.

On balance, the proposal is able to achieve all relevant and appropriate view, vista, outlook and visual impact objectives.